

# [MS-SSMDSWS]: Master Data Services Web Service Specification

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## Revision Summary

Date	Revision History	Revision Class	Comments
11/06/2009	0.1	Major	First release.

Preliminary

# Contents

<b>1 Introduction</b> .....	<b>17</b>
1.1 Glossary.....	17
1.2 References.....	18
1.2.1 Normative References .....	18
1.2.2 Informative References .....	18
1.3 Protocol Overview (Synopsis) .....	19
1.4 Relationship to Other Protocols.....	19
1.5 Prerequisites/Preconditions.....	20
1.6 Applicability Statement.....	20
1.7 Versioning and Capability Negotiation.....	20
1.8 Vendor-Extensible Fields .....	20
1.9 Standards Assignments .....	20
<b>2 Messages</b> .....	<b>21</b>
2.1 Transport.....	21
2.2 Common Message Syntax.....	21
2.2.1 Namespaces.....	21
2.2.2 Messages .....	21
2.2.2.1 MessageResponse .....	21
2.2.2.2 SecurityPrincipalsRequest.....	22
2.2.3 Elements.....	22
2.2.4 Complex Types.....	22
2.2.4.1 Annotation .....	27
2.2.4.2 ArrayOfAnnotation.....	27
2.2.4.3 ArrayOfAttribute.....	28
2.2.4.4 ArrayOfAttributeDataType .....	28
2.2.4.5 ArrayOfAttributeGroup .....	28
2.2.4.6 ArrayOfBRAction .....	29
2.2.4.7 ArrayOfBRActionComponent.....	29
2.2.4.8 ArrayOfBRActionGroup .....	29
2.2.4.9 ArrayOfBRAttributeTypeInfo .....	30
2.2.4.10 ArrayOfBRCondition.....	30
2.2.4.11 ArrayOfBRConditionComponent .....	30
2.2.4.12 ArrayOfBRConditionGroup .....	30
2.2.4.13 ArrayOfBRConditionTreeNode .....	31
2.2.4.14 ArrayOfBRFreeformArgument .....	31
2.2.4.15 ArrayOfBusinessRule .....	31
2.2.4.16 ArrayOfDerivedHierarchy.....	32
2.2.4.17 ArrayOfDerivedHierarchyLevel.....	32
2.2.4.18 ArrayOfEntity .....	32
2.2.4.19 ArrayOfEntityMembers.....	33
2.2.4.20 ArrayOfEntityMemberType.....	33
2.2.4.21 ArrayOfExplicitHierarchy.....	33
2.2.4.22 ArrayOfExportView .....	34
2.2.4.23 ArrayOfFunctionPrivilege .....	34
2.2.4.24 ArrayOfGroup.....	34
2.2.4.25 ArrayOfHierarchyMemberPrivilege.....	34
2.2.4.26 ArrayOfIdentifier .....	35
2.2.4.27 ArrayOfMasterDataCollection .....	35
2.2.4.28 ArrayOfMDMError.....	35

2.2.4.29	ArrayOfMember.....	36
2.2.4.30	ArrayOfMemberIdentifier.....	36
2.2.4.31	ArrayOfMemberType.....	36
2.2.4.32	ArrayOfModel.....	37
2.2.4.33	ArrayOfModelPrivilege.....	37
2.2.4.34	ArrayOfParent.....	37
2.2.4.35	ArrayOfParentChild.....	38
2.2.4.36	ArrayOfStagingBatch.....	38
2.2.4.37	ArrayOfStagingBatchError.....	38
2.2.4.38	ArrayOfStagingUnbatchedInformation.....	38
2.2.4.39	ArrayOfSystemSetting.....	39
2.2.4.40	ArrayOfSystemSettingGroup.....	39
2.2.4.41	ArrayOfTransaction.....	39
2.2.4.42	ArrayOfUser.....	40
2.2.4.43	ArrayOfValidationIssue.....	40
2.2.4.44	ArrayOfVersion.....	40
2.2.4.45	ArrayOfVersionFlag.....	41
2.2.4.46	Attribute.....	41
2.2.4.47	AttributeGroup.....	41
2.2.4.48	AuditInfo.....	42
2.2.4.49	BRAction.....	43
2.2.4.50	BRActionComponent.....	43
2.2.4.51	BRActionGroup.....	43
2.2.4.52	BRArgument.....	44
2.2.4.53	BRAttributeArgument.....	44
2.2.4.54	BRAttributeArgumentBase.....	44
2.2.4.55	BRAttributeTypeInfo.....	45
2.2.4.56	BRAttributeValueArgument.....	45
2.2.4.57	BRBlankArgument.....	45
2.2.4.58	BRCondition.....	46
2.2.4.59	BRConditionComponent.....	46
2.2.4.60	BRConditionGroup.....	47
2.2.4.61	BRConditionTreeNode.....	47
2.2.4.62	BRDomainBasedAttributeArgument.....	48
2.2.4.63	BRFreeformArgument.....	48
2.2.4.64	BRHierarchyArgument.....	48
2.2.4.65	BRItem.....	49
2.2.4.66	BRItemTypeComponent.....	50
2.2.4.67	BusinessRule.....	50
2.2.4.68	BusinessRules.....	51
2.2.4.69	BusinessRulesPalette.....	51
2.2.4.70	DerivedHierarchy.....	52
2.2.4.71	DerivedHierarchyContextIdentifier.....	52
2.2.4.72	DerivedHierarchyLevel.....	53
2.2.4.73	Entity.....	53
2.2.4.74	EntityContextIdentifier.....	54
2.2.4.75	EntityMembers.....	54
2.2.4.76	EntityMemberType.....	55
2.2.4.77	ExplicitHierarchy.....	55
2.2.4.78	ExportView.....	56
2.2.4.79	FunctionPrivilege.....	57
2.2.4.80	Group.....	57
2.2.4.81	HierarchyMemberPrivilege.....	58

2.2.4.82	Identifier.....	59
2.2.4.83	MasterDataCollection.....	59
2.2.4.84	MDMErrorContext.....	60
2.2.4.85	MdmDataContractOfDerivedHierarchyContextIdentifier .....	60
2.2.4.86	MdmDataContractOfEntityContextIdentifier.....	61
2.2.4.87	MdmDataContractOfIdentifier.....	62
2.2.4.88	MdmDataContractOfMemberTypeContextIdentifier .....	62
2.2.4.89	MdmDataContractOfModelContextIdentifier.....	63
2.2.4.90	MDMError.....	63
2.2.4.91	Member .....	64
2.2.4.92	MemberIdentifier.....	65
2.2.4.93	Metadata.....	65
2.2.4.94	MemberTypeContextIdentifier.....	66
2.2.4.95	Model.....	66
2.2.4.96	ModelContextIdentifier .....	67
2.2.4.97	ModelPrivilege .....	67
2.2.4.98	ModelsResultCriteria.....	68
2.2.4.99	ModelsGetCriteria.....	69
2.2.4.100	OperationResult.....	69
2.2.4.101	Parent.....	69
2.2.4.102	ParentChild .....	70
2.2.4.103	ResultOptions.....	71
2.2.4.104	SecurityPrincipalCriteria.....	71
2.2.4.105	SecurityPrincipals .....	72
2.2.4.106	SecurityPrivileges .....	72
2.2.4.107	StagingBatch.....	73
2.2.4.108	StagingBatchError.....	73
2.2.4.109	StagingBatchInformation.....	74
2.2.4.110	StagingUnbatchedInformation .....	75
2.2.4.111	SystemSetting.....	75
2.2.4.112	SystemSettingGroup .....	76
2.2.4.113	Transaction .....	76
2.2.4.114	User.....	77
2.2.4.115	ValidationIssue.....	78
2.2.4.116	Version.....	79
2.2.4.117	VersionFlag .....	80
2.2.5	Simple Types .....	81
2.2.5.1	AttributeType .....	82
2.2.5.2	AttributeValueType.....	83
2.2.5.3	BREntityMemberType .....	83
2.2.5.4	BRItemType .....	84
2.2.5.5	BRPropertyName.....	86
2.2.5.6	BRStatus.....	87
2.2.5.7	DisplayType .....	88
2.2.5.8	EmailFormat.....	89
2.2.5.9	ExportViewFormat.....	89
2.2.5.10	FunctionalArea .....	90
2.2.5.11	GroupType .....	91
2.2.5.12	HierarchyItemType.....	91
2.2.5.13	HierarchyType.....	92
2.2.5.14	LogicalOperator.....	93
2.2.5.15	MemberKeyLookupType.....	93
2.2.5.16	MemberReturnOptions.....	93

2.2.5.17	MemberType	94
2.2.5.18	ModelObjectType	95
2.2.5.19	ObjectType	96
2.2.5.20	Permission	98
2.2.5.21	PermissionType	98
2.2.5.22	PrincipalType	100
2.2.5.23	RelationshipType	100
2.2.5.24	ResultType	101
2.2.5.25	SearchOption	101
2.2.5.26	SecurityPermission	102
2.2.5.27	SecurityResolutionType	103
2.2.5.28	SortDirection	103
2.2.5.29	StagingBatchStatus	103
2.2.5.30	StagingDataStatus	104
2.2.5.31	SystemPropertyType	105
2.2.5.32	TransactionType	105
2.2.5.33	ValidationStatus	106
2.2.5.34	VersionStatus	107
2.2.5.35	VersionValidationStatus	108
2.2.6	Attributes	108
2.2.7	Groups	108
2.2.8	Attribute Groups	108
2.3	Directory Service Schema Elements	108
<b>3</b>	<b>Protocol Details</b>	<b>109</b>
3.1	Server Details	109
3.1.1	Abstract Data Model	109
3.1.2	Timers	109
3.1.3	Initialization	109
3.1.4	Message Processing Events and Sequencing Rules	109
3.1.4.1	EntityMembersGet	112
3.1.4.1.1	Messages	112
3.1.4.1.1.1	EntityMembersGetRequest	112
3.1.4.1.1.2	EntityMembersGetResponse	112
3.1.4.1.2	Elements	112
3.1.4.1.2.1	EntityMembersGetRequest	112
3.1.4.1.2.2	EntityMembersGetResponse	113
3.1.4.1.3	Complex Types	113
3.1.4.1.3.1	EntityMembersGetCriteria	113
3.1.4.1.3.2	EntityMembersInformation	115
3.1.4.1.4	Simple Types	115
3.1.4.2	EntityMemberAttributesGet	115
3.1.4.2.1	Messages	116
3.1.4.2.1.1	EntityMembersAttributesGetRequest	116
3.1.4.2.1.2	EntityMembersAttributesGetResponse	116
3.1.4.2.2	Elements	116
3.1.4.2.2.1	EntityMembersAttributesGetRequest	116
3.1.4.2.2.2	EntityMembersAttributesGetResponse	116
3.1.4.2.3	Complex Types	117
3.1.4.2.4	Simple Types	117
3.1.4.3	HierarchyMembersGet	117
3.1.4.3.1	Messages	117
3.1.4.3.1.1	HierarchyMembersGetRequest	117

3.1.4.3.1.2	HierarchyMembersGetResponse.....	117
3.1.4.3.2	Elements.....	118
3.1.4.3.2.1	HierarchyMembersGetRequest.....	118
3.1.4.3.2.2	HierarchyMembersGetResponse.....	118
3.1.4.3.3	Complex Types.....	118
3.1.4.3.3.1	HierarchyGetCriteria.....	118
3.1.4.3.3.2	HierarchyData.....	119
3.1.4.3.4	Simple Types.....	120
3.1.4.4	ModelMembersGet.....	120
3.1.4.4.1	Messages.....	120
3.1.4.4.1.1	ModelMembersGetRequest.....	120
3.1.4.4.1.2	ModelMembersGetResponse.....	121
3.1.4.4.2	Elements.....	121
3.1.4.4.2.1	ModelMembersGetRequest.....	121
3.1.4.4.2.2	ModelMembersGetResponse.....	121
3.1.4.4.3	Complex Types.....	122
3.1.4.4.4	Simple Types.....	122
3.1.4.5	EntityMembersCreate.....	122
3.1.4.5.1	Messages.....	122
3.1.4.5.1.1	EntityMembersCreateRequest.....	122
3.1.4.5.1.2	EntityMembersCreateResponse.....	122
3.1.4.5.2	Elements.....	122
3.1.4.5.2.1	EntityMembersCreateRequest.....	122
3.1.4.5.2.2	EntityMembersCreateResponse.....	123
3.1.4.5.3	Complex Types.....	123
3.1.4.5.4	Simple Types.....	123
3.1.4.6	EntityMembersDelete.....	123
3.1.4.6.1	Messages.....	124
3.1.4.6.1.1	EntityMembersDeleteRequest.....	124
3.1.4.6.1.2	EntityMembersDeleteResponse.....	124
3.1.4.6.2	Elements.....	124
3.1.4.6.2.1	EntityMembersDeleteRequest.....	124
3.1.4.6.2.2	EntityMembersDeleteResponse.....	124
3.1.4.6.3	Complex Types.....	125
3.1.4.6.4	Simple Types.....	125
3.1.4.7	EntityMembersUpdate.....	125
3.1.4.7.1	Messages.....	125
3.1.4.7.1.1	EntityMembersUpdateRequest.....	125
3.1.4.7.1.2	EntityMembersUpdateResponse.....	125
3.1.4.7.2	Elements.....	125
3.1.4.7.2.1	EntityMembersUpdateRequest.....	125
3.1.4.7.2.2	EntityMembersUpdateResponse.....	126
3.1.4.7.3	Complex Types.....	126
3.1.4.7.4	Simple Types.....	126
3.1.4.8	EntityMembersCopy.....	126
3.1.4.8.1	Messages.....	127
3.1.4.8.1.1	EntityMembersCopyRequest.....	127
3.1.4.8.1.2	EntityMembersCopyResponse.....	127
3.1.4.8.2	Elements.....	127
3.1.4.8.2.1	EntityMembersCopyRequest.....	127
3.1.4.8.2.2	EntityMembersCopyResponse.....	128
3.1.4.8.3	Complex Types.....	128
3.1.4.8.3.1	MembersCopyCriteria.....	128

3.1.4.8.3.2	ArrayOfMemberSourceTarget.....	129
3.1.4.8.3.3	MemberSourceTarget.....	129
3.1.4.8.4	Simple Types.....	129
3.1.4.9	EntityMembersMerge.....	129
3.1.4.9.1	Messages.....	130
3.1.4.9.1.1	EntityMembersMergeRequest.....	130
3.1.4.9.1.2	EntityMembersMergeResponse.....	130
3.1.4.9.2	Elements.....	130
3.1.4.9.2.1	EntityMembersMergeRequest.....	130
3.1.4.9.2.2	EntityMembersMergeResponse.....	130
3.1.4.9.3	Complex Types.....	131
3.1.4.9.4	Simple Types.....	131
3.1.4.10	ModelMembersBulkDelete.....	131
3.1.4.10.1	Messages.....	131
3.1.4.10.1.1	ModelMembersBulkDeleteRequest.....	131
3.1.4.10.1.2	ModelMembersBulkDeleteResponse.....	132
3.1.4.10.2	Elements.....	132
3.1.4.10.2.1	ModelMembersBulkDeleteRequest.....	132
3.1.4.10.2.2	ModelMembersBulkDeleteResponse.....	132
3.1.4.10.3	Complex Types.....	132
3.1.4.10.4	Simple Types.....	133
3.1.4.11	ModelMembersBulkUpdate.....	133
3.1.4.11.1	Messages.....	133
3.1.4.11.1.1	ModelMembersBulkUpdateRequest.....	133
3.1.4.11.1.2	ModelMembersBulkUpdateResponse.....	133
3.1.4.11.2	Elements.....	133
3.1.4.11.2.1	ModelMembersBulkUpdateRequest.....	134
3.1.4.11.2.2	ModelMembersBulkUpdateResponse.....	134
3.1.4.11.3	Complex Types.....	134
3.1.4.11.4	Simple Types.....	134
3.1.4.12	ModelMembersBulkMerge.....	134
3.1.4.12.1	Messages.....	135
3.1.4.12.1.1	ModelMembersBulkMergeRequest.....	135
3.1.4.12.1.2	ModelMembersBulkMergeResponse.....	135
3.1.4.12.2	Elements.....	135
3.1.4.12.2.1	ModelMembersBulkMergeRequest.....	135
3.1.4.12.2.2	ModelMembersBulkMergeResponse.....	136
3.1.4.12.3	Complex Types.....	136
3.1.4.12.4	Simple Types.....	136
3.1.4.13	StagingGet.....	136
3.1.4.13.1	Messages.....	137
3.1.4.13.1.1	StagingGetRequest.....	137
3.1.4.13.1.2	StagingGetResponse.....	137
3.1.4.13.2	Elements.....	137
3.1.4.13.2.1	StagingGetRequest.....	137
3.1.4.13.2.2	StagingGetResponse.....	138
3.1.4.13.3	Complex Types.....	138
3.1.4.13.3.1	StagingResultCriteria.....	138
3.1.4.13.3.2	StagingSearchCriteria.....	139
3.1.4.13.4	Simple Types.....	139
3.1.4.14	StagingClear.....	139
3.1.4.14.1	Messages.....	140
3.1.4.14.1.1	StagingClearRequest.....	140



3.1.4.14.1.2	StagingClearResponse.....	140
3.1.4.14.2	Elements.....	140
3.1.4.14.2.1	StagingClearRequest.....	140
3.1.4.14.2.2	StagingClearResponse.....	140
3.1.4.14.3	Complex Types.....	141
3.1.4.14.4	Simple Types.....	141
3.1.4.15	TransactionsGet.....	141
3.1.4.15.1	Messages.....	141
3.1.4.15.1.1	TransactionsGetRequest.....	141
3.1.4.15.1.2	TransactionsGetResponse.....	141
3.1.4.15.2	Elements.....	141
3.1.4.15.2.1	TransactionsGetRequest.....	141
3.1.4.15.2.2	TransactionsGetResponse.....	142
3.1.4.15.3	Complex Types.....	142
3.1.4.15.3.1	TransactionSearchCriteria.....	142
3.1.4.15.4	Simple Types.....	143
3.1.4.16	TransactionsReverse.....	144
3.1.4.16.1	Messages.....	144
3.1.4.16.1.1	TransactionsReverseRequest.....	144
3.1.4.16.1.2	TransactionsReverseResponse.....	144
3.1.4.16.2	Elements.....	144
3.1.4.16.2.1	TransactionsReverseRequest.....	144
3.1.4.16.2.2	TransactionsReverseResponse.....	145
3.1.4.16.3	Complex Types.....	145
3.1.4.16.3.1	ArrayOfReplacementId.....	145
3.1.4.16.3.2	ReplacementId.....	145
3.1.4.16.4	Simple Types.....	146
3.1.4.17	ValidationGet.....	146
3.1.4.17.1	Messages.....	146
3.1.4.17.1.1	ValidationGetRequest.....	146
3.1.4.17.1.2	ValidationGetResponse.....	146
3.1.4.17.2	Elements.....	146
3.1.4.17.2.1	ValidationGetRequest.....	146
3.1.4.17.2.2	ValidationGetResponse.....	147
3.1.4.17.3	Complex Types.....	147
3.1.4.17.3.1	ValidationSearchCriteria.....	147
3.1.4.17.3.2	ArrayOfValidationSummaryItem.....	148
3.1.4.17.3.3	ValidationSummaryItem.....	148
3.1.4.17.4	Simple Types.....	148
3.1.4.18	ValidationProcess.....	148
3.1.4.18.1	Messages.....	149
3.1.4.18.1.1	ValidationProcessRequest.....	149
3.1.4.18.1.2	ValidationProcessResponse.....	149
3.1.4.18.2	Elements.....	149
3.1.4.18.2.1	ValidationProcessRequest.....	149
3.1.4.18.2.2	ValidationProcessResponse.....	150
3.1.4.18.3	Complex Types.....	150
3.1.4.18.3.1	ValidationProcessCriteria.....	150
3.1.4.18.3.2	ValidationProcessOptions.....	151
3.1.4.18.3.3	ValidationProcessResult.....	151
3.1.4.18.4	Simple Types.....	151
3.1.4.19	EntityMemberAnnotationsCreate.....	152
3.1.4.19.1	Messages.....	152

3.1.4.19.1.1	EntityMemberAnnotationsCreateRequest.....	152
3.1.4.19.1.2	EntityMemberAnnotationsCreateResponse .....	152
3.1.4.19.2	Elements.....	152
3.1.4.19.2.1	EntityMemberAnnotationsCreateRequest.....	152
3.1.4.19.2.2	EntityMemberAnnotationsCreateResponse .....	153
3.1.4.19.3	Complex Types.....	154
3.1.4.19.4	Simple Types .....	154
3.1.4.20	TransactionAnnotationsCreate .....	154
3.1.4.20.1	Messages .....	154
3.1.4.20.1.1	TransactionAnnotationsCreateRequest .....	154
3.1.4.20.2	Elements.....	154
3.1.4.20.2.1	TransactionAnnotationsCreateRequest .....	155
3.1.4.20.3	Complex Types.....	155
3.1.4.20.4	Simple Types .....	155
3.1.4.21	EntityMemberAnnotationsGet .....	155
3.1.4.21.1	Messages.....	156
3.1.4.21.1.1	EntityMemberAnnotationsGetRequest .....	156
3.1.4.21.1.2	EntityMemberAnnotationsGetResponse .....	156
3.1.4.21.2	Elements.....	156
3.1.4.21.2.1	EntityMemberAnnotationsGetRequest .....	156
3.1.4.21.2.2	EntityMemberAnnotationsGetResponse .....	157
3.1.4.21.3	Complex Types.....	157
3.1.4.21.4	Simple Types .....	157
3.1.4.22	TransactionAnnotationsGet.....	157
3.1.4.22.1	Messages .....	158
3.1.4.22.1.1	TransactionAnnotationGetRequest .....	158
3.1.4.22.1.2	TransactionAnnotationGetResponse .....	158
3.1.4.22.2	Elements.....	158
3.1.4.22.2.1	TransactionAnnotationGetRequest .....	158
3.1.4.22.2.2	TransactionAnnotationGetResponse .....	159
3.1.4.22.3	Complex Types.....	159
3.1.4.22.4	Simple Types .....	159
3.1.4.23	AnnotationsUpdate.....	159
3.1.4.23.1	Messages.....	160
3.1.4.23.1.1	AnnotationsUpdateRequest.....	160
3.1.4.23.1.2	AnnotationsUpdateResponse.....	160
3.1.4.23.2	Elements.....	160
3.1.4.23.2.1	AnnotationsUpdateRequest.....	160
3.1.4.23.2.2	AnnotationsUpdateResponse.....	160
3.1.4.23.3	Complex Types.....	161
3.1.4.23.4	Simple Types .....	161
3.1.4.24	AnnotationsDelete .....	161
3.1.4.24.1	Messages.....	161
3.1.4.24.1.1	AnnotationsDeleteRequest.....	161
3.1.4.24.1.2	AnnotationsDeleteResponse.....	161
3.1.4.24.2	Elements.....	161
3.1.4.24.2.1	AnnotationsDeleteRequest.....	161
3.1.4.24.2.2	AnnotationsDeleteResponse.....	162
3.1.4.24.3	Complex Types.....	162
3.1.4.24.4	Simple Types .....	162
3.1.4.25	EntityMemberKeyLookup .....	162
3.1.4.25.1	Messages.....	162
3.1.4.25.1.1	EntityMemberKeyGetRequest.....	163

3.1.4.25.1.2	EntityMemberKeyGetResponse .....	163
3.1.4.25.2	Elements.....	163
3.1.4.25.2.1	EntityMemberKeyGetRequest.....	163
3.1.4.25.2.2	EntityMemberKeyGetResponse .....	164
3.1.4.25.3	Complex Types.....	164
3.1.4.25.3.1	MemberKey.....	164
3.1.4.25.3.2	ArrayOfMemberKey.....	164
3.1.4.25.4	Simple Types .....	165
3.1.4.26	StagingProcess.....	165
3.1.4.26.1	Messages.....	165
3.1.4.26.1.1	StagingProcessRequest.....	165
3.1.4.26.1.2	StagingProcessResponse .....	165
3.1.4.26.2	Elements.....	165
3.1.4.26.2.1	StagingProcessRequest.....	165
3.1.4.26.2.2	StagingProcessResponse .....	166
3.1.4.26.3	Complex Types.....	166
3.1.4.26.3.1	StagingUnbatchedCriteria.....	166
3.1.4.26.4	Simple Types .....	167
3.1.4.27	ExportViewCreate.....	167
3.1.4.27.1	Messages.....	167
3.1.4.27.1.1	ExportViewCreateRequest.....	167
3.1.4.27.1.2	ExportViewCreateResponse .....	167
3.1.4.27.2	Elements.....	167
3.1.4.27.2.1	ExportViewCreateRequest.....	167
3.1.4.27.2.2	ExportViewCreateResponse .....	168
3.1.4.27.3	Complex Types.....	168
3.1.4.27.4	Simple Types .....	168
3.1.4.28	ExportViewUpdate.....	168
3.1.4.28.1	Messages.....	169
3.1.4.28.1.1	ExportViewUpdateRequest.....	169
3.1.4.28.1.2	ExportViewUpdateResponse.....	169
3.1.4.28.2	Elements.....	169
3.1.4.28.2.1	ExportViewUpdateRequest.....	169
3.1.4.28.2.2	ExportViewUpdateResponse.....	169
3.1.4.28.3	Complex Types.....	170
3.1.4.28.4	Simple Types .....	170
3.1.4.29	ExportViewDelete.....	170
3.1.4.29.1	Messages.....	170
3.1.4.29.1.1	ExportViewDeleteRequest.....	170
3.1.4.29.1.2	ExportViewDeleteResponse.....	170
3.1.4.29.2	Elements.....	170
3.1.4.29.2.1	ExportViewDeleteRequest.....	170
3.1.4.29.2.2	ExportViewDeleteResponse.....	171
3.1.4.29.3	Complex Types.....	171
3.1.4.29.4	Simple Types .....	171
3.1.4.30	ExportViewListGet.....	171
3.1.4.30.1	Messages.....	172
3.1.4.30.1.1	ExportViewListGetRequest.....	172
3.1.4.30.1.2	ExportViewListGetResponse.....	172
3.1.4.30.2	Elements.....	172
3.1.4.30.2.1	ExportViewListGetRequest.....	172
3.1.4.30.2.2	ExportViewListGetResponse.....	172
3.1.4.30.3	Complex Types.....	173

3.1.4.30.4	Simple Types .....	173
3.1.4.31	SecurityPrincipalsClone.....	173
3.1.4.31.1	Messages .....	173
3.1.4.31.1.1	SecurityPrincipalsRequest.....	173
3.1.4.31.1.2	MessageResponse .....	173
3.1.4.31.2	Elements.....	174
3.1.4.31.2.1	SecurityPrincipalsRequest.....	174
3.1.4.31.2.2	MessageResponse .....	174
3.1.4.31.3	Complex Types.....	174
3.1.4.31.4	Simple Types .....	174
3.1.4.32	SecurityPrincipalsCreate .....	175
3.1.4.32.1	Messages .....	175
3.1.4.32.1.1	SecurityPrincipalsRequest.....	175
3.1.4.32.1.2	SecurityCreateResponse.....	175
3.1.4.32.2	Elements.....	175
3.1.4.32.2.1	SecurityPrincipalsRequest.....	175
3.1.4.32.2.2	SecurityCreateResponse.....	176
3.1.4.32.3	Complex Types.....	176
3.1.4.32.4	Simple Types .....	176
3.1.4.33	SecurityPrincipalsGet.....	176
3.1.4.33.1	Messages .....	176
3.1.4.33.1.1	SecurityPrincipalsGetRequest.....	176
3.1.4.33.1.2	SecurityPrincipalsGetResponse .....	177
3.1.4.33.2	Elements.....	177
3.1.4.33.2.1	SecurityPrincipalsGetRequest.....	177
3.1.4.33.2.2	SecurityPrincipalsGetResponse .....	177
3.1.4.33.3	Complex Types.....	177
3.1.4.33.4	Simple Types .....	177
3.1.4.34	SecurityPrincipalsDelete .....	177
3.1.4.34.1	Messages .....	178
3.1.4.34.1.1	SecurityPrincipalsDeleteRequest.....	178
3.1.4.34.1.2	SecurityPrincipalsDeleteResponse.....	178
3.1.4.34.2	Elements.....	178
3.1.4.34.2.1	SecurityPrincipalsDeleteRequest.....	178
3.1.4.34.2.2	SecurityPrincipalsDeleteResponse.....	178
3.1.4.34.3	Complex Types.....	179
3.1.4.34.3.1	SecurityPrincipalsDeleteCriteria .....	179
3.1.4.34.4	Simple Types .....	179
3.1.4.35	SecurityPrivilegesClone.....	179
3.1.4.35.1	Messages .....	179
3.1.4.35.1.1	SecurityPrivilegesRequest.....	180
3.1.4.35.2	Elements.....	180
3.1.4.35.2.1	SecurityPrivilegesRequest.....	180
3.1.4.35.3	Complex Types.....	180
3.1.4.35.4	Simple Types .....	180
3.1.4.36	SecurityPrivilegesGet.....	180
3.1.4.36.1	Messages .....	181
3.1.4.36.1.1	SecurityPrivilegesGetRequest .....	181
3.1.4.36.1.2	SecurityPrivilegesGetResponse .....	181
3.1.4.36.2	Elements.....	181
3.1.4.36.2.1	SecurityPrivilegesGetRequest .....	181
3.1.4.36.2.2	SecurityPrivilegesGetResponse .....	181
3.1.4.36.3	Complex Types.....	182

3.1.4.36.3.1	SecurityPrivilegesGetCriteria.....	182
3.1.4.36.3.2	FunctionPrivilegesCriteria .....	182
3.1.4.36.3.3	HierarchyMemberPrivilegesCriteria.....	183
3.1.4.36.3.4	ModelPrivilegesCriteria .....	184
3.1.4.36.4	Simple Types .....	184
3.1.4.37	SecurityPrivilegesDelete .....	184
3.1.4.37.1	Messages .....	185
3.1.4.37.1.1	SecurityPrivilegesDeleteRequest .....	185
3.1.4.37.2	Elements.....	185
3.1.4.37.2.1	SecurityPrivilegesDeleteRequest .....	185
3.1.4.37.3	Complex Types.....	185
3.1.4.37.3.1	SecurityPrivilegesDeleteCriteria .....	185
3.1.4.37.4	Simple Types .....	186
3.1.4.38	MetadataClone .....	186
3.1.4.38.1	Messages.....	186
3.1.4.38.1.1	MetadataCloneRequest .....	186
3.1.4.38.1.2	MetadataCloneResponse.....	187
3.1.4.38.2	Elements.....	187
3.1.4.38.2.1	MetadataCloneRequest .....	187
3.1.4.38.2.2	MetadataCloneResponse.....	187
3.1.4.39	MetadataGet .....	187
3.1.4.39.1	Messages.....	188
3.1.4.39.1.1	MetadataGetRequest.....	188
3.1.4.39.1.2	MetadataGetResponse .....	188
3.1.4.39.2	Elements.....	188
3.1.4.39.2.1	MetadataGetRequest .....	189
3.1.4.39.2.2	MetadataGetResponse .....	189
3.1.4.39.3	Complex Types.....	189
3.1.4.39.3.1	SearchCriteria .....	189
3.1.4.39.3.2	ResultOptions.....	190
3.1.4.39.4	Simple Types .....	191
3.1.4.40	MetadataUpdate.....	191
3.1.4.40.1	Messages.....	191
3.1.4.40.1.1	MetadataUpdateRequest.....	191
3.1.4.40.1.2	MetadataUpdateResponse.....	191
3.1.4.40.2	Elements.....	191
3.1.4.40.2.1	MetadataUpdateRequest.....	191
3.1.4.40.2.2	MetadataUpdateResponse.....	192
3.1.4.40.3	Complex Types.....	192
3.1.4.40.4	Simple Types .....	192
3.1.4.41	MetadataCreate.....	192
3.1.4.41.1	Messages.....	193
3.1.4.41.1.1	MetadataCreateRequest.....	193
3.1.4.41.1.2	MetadataCreateResponse .....	193
3.1.4.41.2	Elements.....	193
3.1.4.41.2.1	MetadataCreateRequest.....	193
3.1.4.41.2.2	MetadataCreateResponse .....	194
3.1.4.41.3	Complex Types.....	194
3.1.4.41.4	Simple Types .....	194
3.1.4.42	MetadataDelete.....	194
3.1.4.42.1	Messages.....	195
3.1.4.42.1.1	MetadataDeleteRequest.....	195
3.1.4.42.1.2	MetadataDeleteResponse.....	196

3.1.4.42.2	Elements.....	196
3.1.4.42.2.1	MetadataDeleteRequest.....	196
3.1.4.42.2.2	MetadataDeleteResponse.....	196
3.1.4.42.3	Complex Types.....	196
3.1.4.42.4	Simple Types.....	196
3.1.4.43	SystemSettingsGet.....	197
3.1.4.43.1	Messages.....	197
3.1.4.43.1.1	SystemSettingsGetRequest.....	197
3.1.4.43.1.2	SystemSettingsGetResponse.....	197
3.1.4.43.2	Elements.....	197
3.1.4.43.2.1	SystemSettingsGetRequest.....	197
3.1.4.43.2.2	SystemSettingsGetResponse.....	198
3.1.4.43.3	Complex Types.....	198
3.1.4.43.3.1	SystemSettingsGetCriteria.....	198
3.1.4.43.4	Simple Types.....	198
3.1.4.44	SystemSettingsUpdate.....	198
3.1.4.44.1	Messages.....	199
3.1.4.44.1.1	SystemSettingsUpdateRequest.....	199
3.1.4.44.1.2	SystemSettingsUpdateResponse.....	199
3.1.4.44.2	Elements.....	199
3.1.4.44.2.1	SystemSettingsUpdateRequest.....	199
3.1.4.44.2.2	SystemSettingsUpdateResponse.....	200
3.1.4.44.3	Complex Types.....	200
3.1.4.44.4	Simple Types.....	200
3.1.4.45	SystemDomainListGet.....	200
3.1.4.45.1	Messages.....	201
3.1.4.45.1.1	SystemDomainListGetRequest.....	201
3.1.4.45.1.2	SystemDomainListGetResponse.....	201
3.1.4.45.2	Elements.....	201
3.1.4.45.2.1	SystemDomainListGetRequest.....	201
3.1.4.45.2.2	SystemDomainListGetResponse.....	201
3.1.4.45.3	Complex Types.....	202
3.1.4.45.3.1	SystemDomainListGetCriteria.....	202
3.1.4.45.4	Simple Types.....	202
3.1.4.46	SystemPropertiesGet.....	202
3.1.4.46.1	Messages.....	203
3.1.4.46.1.1	SystemPropertiesGetRequest.....	203
3.1.4.46.1.2	SystemPropertiesGetResponse.....	203
3.1.4.46.2	Elements.....	203
3.1.4.46.2.1	SystemPropertiesGetRequest.....	203
3.1.4.46.2.2	SystemPropertiesGetResponse.....	204
3.1.4.46.3	Complex Types.....	204
3.1.4.46.3.1	ArrayOfSystemPropertyValue.....	204
3.1.4.46.3.2	SystemPropertyValue.....	204
3.1.4.46.4	Simple Types.....	205
3.1.4.46.4.1	SystemPropertyType.....	205
3.1.4.47	VersionCopy.....	205
3.1.4.47.1	Messages.....	206
3.1.4.47.1.1	VersionCopyRequest.....	206
3.1.4.47.1.2	VersionCopyResponse.....	206
3.1.4.47.2	Elements.....	206
3.1.4.47.2.1	VersionCopyRequest.....	206
3.1.4.47.2.2	VersionCopyResponse.....	207

3.1.4.47.3	Complex Types.....	207
3.1.4.47.4	Simple Types .....	207
3.1.4.48	UserPreferencesGet.....	207
3.1.4.48.1	Messages .....	207
3.1.4.48.1.1	UserPreferencesGetRequest.....	207
3.1.4.48.1.2	UserPreferencesGetResponse.....	208
3.1.4.48.2	Elements.....	208
3.1.4.48.2.1	UserPreferencesGetRequest.....	208
3.1.4.48.2.2	UserPreferencesGetResponse.....	208
3.1.4.48.3	Complex Types.....	208
3.1.4.48.4	Simple Types .....	208
3.1.4.49	UserPreferencesUpdate .....	209
3.1.4.49.1	Messages .....	209
3.1.4.49.1.1	UserPreferencesUpdateRequest .....	209
3.1.4.49.1.2	UserPreferencesUpdateResponse .....	209
3.1.4.49.2	Elements.....	209
3.1.4.49.2.1	UserPreferencesUpdateRequest .....	209
3.1.4.49.2.2	UserPreferencesUpdateResponse .....	210
3.1.4.49.3	Complex Types.....	210
3.1.4.49.4	Simple Types .....	210
3.1.4.50	UserPreferencesDelete.....	210
3.1.4.50.1	Messages .....	211
3.1.4.50.1.1	UserPreferencesDeleteRequest .....	211
3.1.4.50.1.2	UserPreferencesDeleteResponse .....	211
3.1.4.50.2	Elements.....	211
3.1.4.50.2.1	UserPreferencesDeleteRequest .....	211
3.1.4.50.2.2	UserPreferencesDeleteResponse .....	211
3.1.4.50.3	Complex Types.....	212
3.1.4.50.4	Simple Types .....	212
3.1.4.51	BusinessRulesPaletteGet.....	212
3.1.4.51.1	Messages .....	212
3.1.4.51.1.1	BusinessRulesPaletteGetRequest .....	213
3.1.4.51.1.2	BusinessRulesPaletteGetResponse .....	213
3.1.4.51.2	Elements.....	213
3.1.4.51.2.1	BusinessRulesPaletteGetRequest .....	213
3.1.4.51.2.2	BusinessRulesPaletteGetResponse .....	213
3.1.4.52	BusinessRulesClone.....	214
3.1.4.52.1	Messages .....	214
3.1.4.52.1.1	BusinessRulesCloneRequest.....	214
3.1.4.52.2	Elements.....	214
3.1.4.52.2.1	BusinessRulesCloneRequest.....	214
3.1.4.53	BusinessRulesCreate .....	215
3.1.4.53.1	Messages.....	215
3.1.4.53.1.1	BusinessRulesCreateRequest .....	215
3.1.4.53.1.2	BusinessRulesCreateResponse .....	215
3.1.4.53.2	Elements.....	216
3.1.4.53.2.1	BusinessRulesCreateRequest .....	216
3.1.4.53.2.2	BusinessRulesCreateResponse .....	216
3.1.4.54	BusinessRulesDelete.....	216
3.1.4.54.1	Messages .....	217
3.1.4.54.1.1	BusinessRulesDeleteRequest .....	217
3.1.4.54.2	Elements.....	217
3.1.4.54.2.1	BusinessRulesDeleteRequest .....	217

3.1.4.54.3	Complex Types.....	218
3.1.4.54.3.1	BRDeleteCriteria.....	218
3.1.4.55	BusinessRulesGet.....	218
3.1.4.55.1	Messages.....	219
3.1.4.55.1.1	BusinessRulesGetRequest.....	219
3.1.4.55.1.2	BusinessRulesGetResponse.....	219
3.1.4.55.2	Elements.....	219
3.1.4.55.2.1	BusinessRulesGetRequest.....	219
3.1.4.55.2.2	BusinessRulesGetResponse.....	219
3.1.4.55.3	Complex Types.....	220
3.1.4.55.3.1	BRGetCriteria.....	220
3.1.4.55.3.2	BRResultOptions.....	220
3.1.4.56	BusinessRulesPublish.....	221
3.1.4.56.1	Messages.....	221
3.1.4.56.1.1	BusinessRulesPublishRequest.....	221
3.1.4.56.2	Elements.....	221
3.1.4.56.2.1	BusinessRulesPublishRequest.....	221
3.1.4.56.3	Complex Types.....	222
3.1.4.56.3.1	BRPublishCriteria.....	222
3.1.4.57	BusinessRulesUpdate.....	222
3.1.4.57.1	Messages.....	223
3.1.4.57.1.1	BusinessRulesUpdateRequest.....	223
3.1.4.57.2	Elements.....	223
3.1.4.57.2.1	BusinessRulesUpdateRequest.....	223
3.1.5	Timer Events.....	224
3.1.6	Other Local Events.....	224
<b>4</b>	<b>Protocol Examples.....</b>	<b>225</b>
4.1	MetaData Example.....	225
4.1.1	Create Model using MetaDataCreate.....	225
4.1.1.1	Client Sends Request.....	225
4.1.1.2	Server Response.....	225
4.2	Business Rule Example.....	226
4.2.1	Create Business Rule using BusinessRulesCreate.....	226
4.2.1.1	Client Sends Request.....	226
4.2.1.2	Server Response.....	230
<b>5</b>	<b>Security.....</b>	<b>236</b>
5.1	Security Considerations for Implementers.....	236
5.2	Index of Security Parameters.....	236
<b>6</b>	<b>Appendix A: Full WSDL.....</b>	<b>237</b>
<b>7</b>	<b>Appendix B: Product Behavior.....</b>	<b>315</b>
<b>8</b>	<b>Change Tracking.....</b>	<b>316</b>
<b>9</b>	<b>Index.....</b>	<b>317</b>



# 1 Introduction

The SQL Server Master Data Services Web Service Specification document specifies the SOAP protocol for all functions within Master Data Services.

## 1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

**globally unique identifier (GUID)**  
**SOAP**  
**Web Services Description Language (WSDL)**  
**WSDL message**  
**WSDL port type**  
**XML namespace**  
**XML schema**

The following terms are specific to this document:

**action:** A **business rule** argument that determines what occurs when the business rule is run at validation time.

**business rule:** A user-defined process that can proactively manage data within the Master Data Services database.

**child:** A data item within the Master Data Services system that has a superior data item. A child in Master Data Services can be a **leaf member** or a **consolidated member**.

**collection:** A user-defined group of data items from the same **entity**.

**condition:** A **business rule** argument that determines when to apply the actions of the business rule. Conditions can be parsed together by using the logical operators AND and OR.

**consolidated member:** A container **member** within the Master Data Services system. Consolidated members can be superior to **leaf members** or to other consolidated members.

**entity:** Tabular data that is stored within the Master Data Services system.

**hierarchy:** An arrangement of data items within the Master Data Services system in a ranked or graduated series.

**leaf member:** A standard **member** of any **entity** within the Master Data Services system.

**master data:** The nouns of the business, master data are non-transactional data sets that provide context to the organization.

**member:** A single **master data** record that is stored in the Master Data Services system.

**parent:** A data item within the Master Data Services system that can contain **child members**.

**publish:** An operation that makes **business rules** available for use within the Master Data Services system.

**version:** A snapshot of data **members** within a model that may correspond to a specific period of time.

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as described in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 1.2 References

### 1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MS-ADA1] Microsoft Corporation, "[Active Directory Schema Attributes A-L](#)", June 2007.

[MS-ADA2] Microsoft Corporation, "[Active Directory Schema Attributes M](#)", June 2007.

[MS-ADA3] Microsoft Corporation, "[Active Directory Schema Attributes N-Z](#)", June 2007.

[MS-ADLS] Microsoft Corporation, "[Active Directory Lightweight Directory Services Schema](#)", June 2007.

[MS-ADSC] Microsoft Corporation, "[Active Directory Schema Classes](#)", June 2007.

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)", March 2007.

[MSDN-SQLXML] Microsoft Corporation, "SQLXML", <http://msdn.microsoft.com/en-us/library/aa286527.aspx>

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.ietf.org/rfc/rfc2119.txt>

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., Layman, A., Mendelsohn, N., Nielsen, H. F., Thatte, S., and Winer, D., "Simple Object Access Protocol (SOAP) 1.1", May 2000, <http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>

[WSDL] Christensen, E., Curbera, F., Meredith, G., and Weerawarana, S., "Web Services Description Language (WSDL) 1.1", W3C Note, March 2001, <http://www.w3.org/TR/2001/NOTE-wsdl-20010315>

[WSDLSOAP] Angelov, D., Ballinger, K., Butek, R., et al., "WSDL 1.1 Binding Extension for SOAP 1.2", W3c Member Submission, April 2006, <http://www.w3.org/Submission/wsdl11soap12/>

[XMLNS] World Wide Web Consortium, "Namespaces in XML 1.0 (Second Edition)", August 2006, <http://www.w3.org/TR/REC-xml-names/>

[XMLSCHEMA1] Thompson, H.S., Ed., Beech, D., Ed., Maloney, M., Ed., and Mendelsohn, N., Ed., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

### 1.2.2 Informative References

None.

### 1.3 Protocol Overview (Synopsis)

The SQL Server Master Data Services service and API provide two main functions:

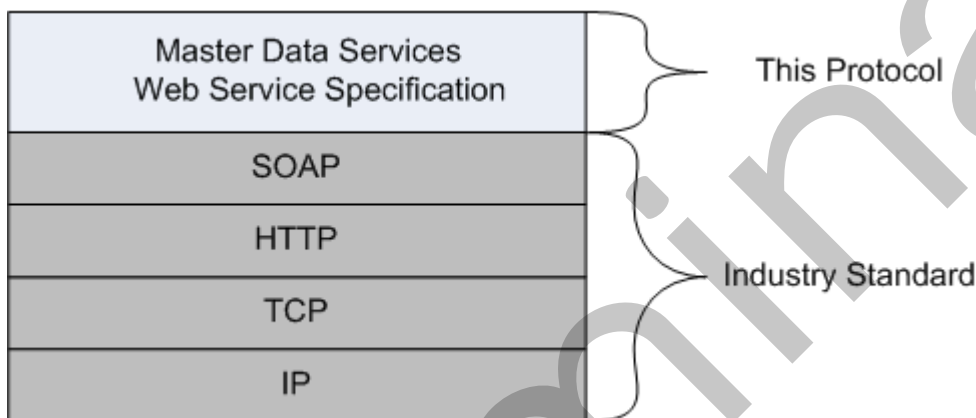
- Adoption of a service-oriented design architecture (SOA) that encapsulates and modularizes the internal workings of the product
- Creation of a standard API to interact and integrate with SQL Server Master Data Services

The SQL Server Master Data Services framework ensures that the internal functions of the product are better modularized to support both an API and a modular component development.

In this document, the term "services" includes but is not necessarily limited to Web services. "Services" means a modular architecture based on the Windows Communication Foundation (WCF).

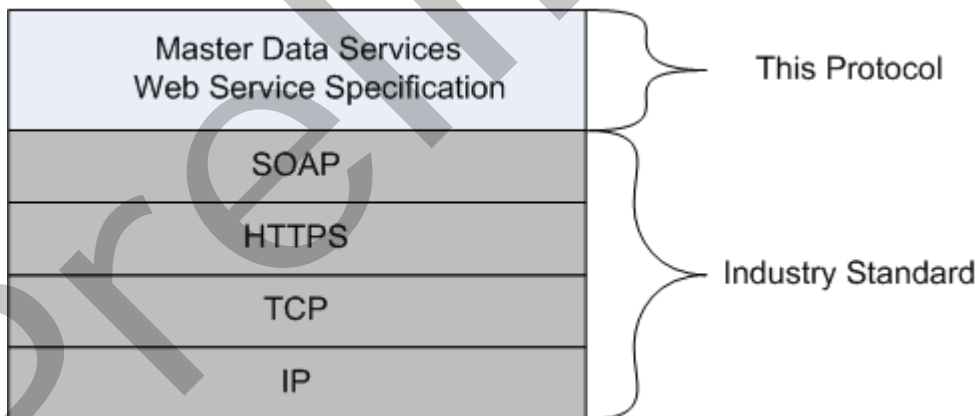
### 1.4 Relationship to Other Protocols

The Master Data Services Web Services Specification uses SOAP over HTTP as shown in the following layering diagram:



**Figure 1: SOAP over HTTP**

The Master Data Services Web Services Specification uses SOAP over HTTPS as shown in the following layering diagram:



**Figure 2: SOAP over HTTPS**

## 1.5 Prerequisites/Preconditions

None.

## 1.6 Applicability Statement

The Master Data Services Web Service Specification should be used in all instances when automating interactions with the Master Data Services (MDS) system. This protocol encapsulates all the MDS functionality that is exposed to the user.

## 1.7 Versioning and Capability Negotiation

This document covers versioning issues for the Master Data Services Web Service Specification in the following areas:

- **Supported Transports:** This protocol uses multiple transports with SOAP as specified in section [2.1](#).
- **Protocol Versions:** This protocol has a separate **Web Services Description Language (WSDL)** port type for each version. These versions are defined in section [3.1](#).
- **Protocol Versions:** This protocol has only one **WSDL port type** version, but that WSDL port type has been extended by adding new operations. The use of these operations is specified in section 3.1.
- **Protocol Versions:** This protocol has only one WSDL port type version with a single set of operations, but the format of the messages used in the operations has been extended. The use of these operations is specified in section 3.1.
- **Security and Authentication Methods:** This protocol supports the following authentication methods: LANMAN, NTLM, and Kerberos. These authentication methods are defined in section [3.1.4](#).
- **Localization:** This protocol includes text strings in various messages. Localization considerations for such strings are specified in sections [2.2](#) and 3.1.4.
- **Capability Negotiation:** The Ethernet protocol does not support negotiation of the interface version to use. Instead, an implementation must be configured with the interface version to use, as described below in this section.

## 1.8 Vendor-Extensible Fields

None.

## 1.9 Standards Assignments

None.

## 2 Messages

### 2.1 Transport

The SOAP 1.1 Web service message protocol (as specified in [\[SOAP1.1\]](#)) and SOAP 1.2 (as specified in [\[WSDLSOAP\]](#)) are supported.

### 2.2 Common Message Syntax

This section contains common definitions that are used by this protocol. The syntax of the definitions uses XML schema as defined in [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#), and it uses Web Services Description Language (WSDL) as defined in [\[WSDL\]](#).

#### 2.2.1 Namespaces

This specification defines and references various **XML namespaces** by using the mechanisms that are specified in [\[XMLNS\]](#). Although this specification associates a specific XML namespace prefix for each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and not significant for interoperability.

Prefix	Namespace URI	Reference
xsd	<a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>	<a href="#">[XMLSCHEMA1]</a> <a href="#">[XMLSCHEMA2]</a>
xsi	<a href="http://www.w3.org/2001/XMLSchema-instance">http://www.w3.org/2001/XMLSchema-instance</a>	<a href="#">[XMLSCHEMA1]</a> <a href="#">[XMLSCHEMA2]</a>
Sql	urn:schemas-microsoft-com:xml-sql	<a href="#">[MSDN-SQLXML]</a>
mds	urn:schemas-microsoft-com:xml-mds	

#### 2.2.2 Messages

Message	Description
<a href="#">MessageResponse</a>	A standard response message.
<a href="#">SecurityPrincipalsRequest</a>	The parameters that are used to filter the list that is returned from a principals request.

##### 2.2.2.1 MessageResponse

The **MessageResponse** is a standard message that is returned when security is updated successfully.

The following is the WSDL definition of the **MessageResponse** message.

```
<wsdl:message name="MessageResponse">
  <wsdl:part name="parameters" element="tns:MessageResponse" />
</wsdl:message>
```

### 2.2.2.2 SecurityPrincipalsRequest

The **SecurityPrincipalsRequest** message is a list of parameters used to filter the list of returned **SecurityPrincipals**.

The following is the WSDL definition of the **SecurityPrincipalsRequest** message.

```
<wsdl:message name="SecurityPrincipalsGetRequest">
  <wsdl:part name="parameters" element="tns:SecurityPrincipalsGetRequest"/>
</wsdl:message>
```

### 2.2.3 Elements

This specification does not define any common XML schema element definitions.

### 2.2.4 Complex Types

The following table summarizes the set of common XML schema complex type definitions that are defined by this specification. XML schema complex type definitions that are specific to a particular operation are described with the operation.

Complex type	Description
<a href="#">Annotation</a>	The <b>member</b> transaction metadata.
<a href="#">ArrayOfAnnotation</a>	A <b>collection</b> of <b>Annotation</b> complex types.
<a href="#">ArrayOfAttribute</a>	A collection of <b>Attribute</b> complex types.
<a href="#">ArrayOfAttributeDataType</a>	A collection of <b>AttributeDataType</b> complex types.
<a href="#">ArrayOfAttributeGroup</a>	A collection of <b>AttributeGroup</b> complex types.
<a href="#">ArrayOfBRActionComponent</a>	A collection of <b>BRActionComponent</b> complex types.
<a href="#">ArrayOfBRActionGroup</a>	A collection of <b>BRActionGroup</b> complex types.
<a href="#">ArrayOfBRAttributeTypeInfo</a>	A collection of <b>BRAttributeTypeInfo</b> complex types.
<a href="#">ArrayOfBRCondition</a>	A collection of <b>BRCondition</b> complex types.
<a href="#">ArrayOfBRConditionComponent</a>	A collection of <b>BRConditionComponent</b> complex types.
<a href="#">ArrayOfBRConditionGroup</a>	A collection of <b>BRConditionGroup</b> complex types.
<a href="#">ArrayOfBRConditionTreeNode</a>	A collection of <b>BRConditionTreeNode</b> complex types.
<a href="#">ArrayOfBRFreeformArgument</a>	A collection of <b>BRFreeformArgument</b> complex types.

<b>Complex type</b>	<b>Description</b>
<a href="#">ArrayOfBusinessRule</a>	A collection of <b>BusinessRule</b> complex types.
<a href="#">ArrayOfDerivedHierarchy</a>	A collection of <b>DerivedHierarchy</b> complex types.
<a href="#">ArrayOfEntity</a>	A collection of <b>Entity</b> complex types.
<a href="#">ArrayOfEntityMembers</a>	A collection of <b>EntityMember</b> complex types.
<a href="#">ArrayOfEntityMemberType</a>	A collection of <b>EntityMemberType</b> complex types.
<a href="#">ArrayOfExplicitHierarchy</a>	A collection of <b>ExplicitHierarchy</b> complex types.
<a href="#">ArrayOfExportView</a>	A collection of <b>ExportView</b> complex types.
<a href="#">ArrayOfFunctionPrivilege</a>	A collection of <b>FunctionPrivilege</b> complex types.
<a href="#">ArrayOfGroup</a>	A collection of <b>Group</b> complex types.
<a href="#">ArrayOfHierarchyMemberPrivilege</a>	A collection of <b>HierarchyMemberPrivilege</b> complex types.
<a href="#">ArrayOfIdentifier</a>	A collection of <b>Identifier</b> complex types.
<a href="#">ArrayOfMasterDataCollection</a>	A collection of <b>MasterDataCollection</b> complex types.
<a href="#">ArrayOfMDMError</a>	A collection of <b>MDMError</b> complex types.
<a href="#">ArrayOfMember</a>	A collection of <b>Member</b> complex types.
<a href="#">ArrayOfMemberIdentifier</a>	A collection of <b>MemberIdentifier</b> complex types.
<a href="#">ArrayOfMemberType</a>	A collection of <b>MemberType</b> complex types.
<a href="#">ArrayOfModel</a>	A collection of <b>Model</b> complex types.
<a href="#">ArrayOfModelPrivilege</a>	A collection of <b>ModelPrivilege</b> complex types.
<a href="#">ArrayOfParent</a>	A collection of <b>Parent</b> complex types.
<a href="#">ArrayOfParentChild</a>	A collection of <b>ParentChild</b> complex types.
<a href="#">ArrayOfStagingBatch</a>	A collection of <b>StagingBatch</b> complex types.
<a href="#">ArrayOfStagingBatchError</a>	A collection of <b>StagingBatchError</b> complex types.
<a href="#">ArrayOfStagingUnbatchedInformation</a>	A collection of <b>StagingUnbatchedInformation</b> complex types.
<a href="#">ArrayOfSystemSetting</a>	A collection of <b>SystemSetting</b> complex types.
<a href="#">ArrayOfSystemSettingGroup</a>	A collection of <b>SystemSettingGroup</b> complex types.
<a href="#">ArrayOfTransaction</a>	A collection of <b>Transaction</b> complex types.

Complex type	Description
<a href="#">ArrayOfUser</a>	A collection of <b>User</b> complex types.
<a href="#">ArrayOfValidationIssue</a>	A collection of <b>ValidationIssue</b> complex types.
<a href="#">ArrayOfVersion</a>	A collection of <b>Version</b> complex types.
<a href="#">ArrayOfVersionFlag</a>	A collection of <b>VersionFlag</b> complex types.
<a href="#">Attribute</a>	An <b>entity</b> attribute complex type.
<a href="#">AttributeGroup</a>	A custom-defined group of attributes to provide organization to large amounts of entity attributes.
<a href="#">AuditInfo</a>	The audit information that is appended to numerous complex types.
<a href="#">BRAction</a>	A value to be set or a validation to occur when certain <b>conditions</b> of the <b>business rule</b> are met.
<a href="#">BRActionComponent</a>	<b>Action</b> components within business rules.
<a href="#">BRActionGroup</a>	A collection of all <b>BRAction</b> complex types that are available within MDS, grouped into similar types.
<a href="#">BRArgument</a>	An argument base for business rules.
<a href="#">BRAttributeArgument</a>	An argument that references attributes instead of values.
<a href="#">BRAttributeArgumentBase</a>	A base for all <b>BRAttributeArgument</b> types.
<a href="#">BRAttributeTypeInfo</a>	The attribute type information for business rule components.
<a href="#">BRAttributeValueArgument</a>	A domain-based attribute value argument.
<a href="#">BRBlankArgument</a>	A blank business rule argument.
<a href="#">BRCondition</a>	A logical equation that turns the <b>BRAction</b> validation and creation processes on and off.
<a href="#">BRConditionComponent</a>	The condition components within business rules.
<a href="#">BRConditionGroup</a>	A group of similar conditions that are available for creation of business rules.
<a href="#">BRConditionTreeNode</a>	A complex condition node by which to define a complex logical structure.
<a href="#">BRDomainBasedAttributeArgument</a>	An inherited domain-based attribute argument (for example, color.hue).
<a href="#">BRFreeformArgument</a>	A business rule for string, number, link, and date arguments.



Complex type	Description
<a href="#">BRHierarchyArgument</a>	Explicit <b>parent</b> business rule arguments.
<a href="#">BRItem</a>	The complete <b>BRAction</b> or <b>BRCondition</b> item with the attached logical operator.
<a href="#">BRItemTypeComponent</a>	A business rule component.
<a href="#">BRPropertyName</a>	The property name of a business rule component.
<a href="#">BusinessRule</a>	A logical construct for data management.
<a href="#">BusinessRules</a>	A container for conditions and actions.
<a href="#">BusinessRulesPalette</a>	A collection of all potential conditions and actions for building business rules in MDS.
<a href="#">DerivedHierarchy</a>	The synthesized parent- <b>child hierarchy</b> from cascading pre-existing data relationships.
<a href="#">DerivedHierarchyContextIdentifier</a>	The contextual identifier for the <b>DerivedHierarchy</b> complex type.
<a href="#">Entity</a>	A tabular grouping of members in MDS.
<a href="#">EntityContextIdentifier</a>	A group of identifiers that provide entity context to hierarchies.
<a href="#">EntityMembers</a>	A collection of <b>EntityMembers</b> complex types.
<a href="#">EntityMemberType</a>	The structure of an entity in MDS.
<a href="#">ExplicitHierarchy</a>	The consolidated leaf hierarchical groupings in MDS.
<a href="#">ExportView</a>	The creation of a subscription view for MDS.
<a href="#">ExportViewFormat</a>	The formats that are available for export views.
<a href="#">FunctionPrivilege</a>	The functional level access to MDS.
<a href="#">Group</a>	An internal system object that refers to one or more users that can be granted security privileges within MDS.
<a href="#">HierarchyMemberPrivilege</a>	Data value-based access to MDS for a user or group.
<a href="#">Identifier</a>	A <b>globally unique identifier (GUID)</b> that is attached to all system tables within the MDS database.
<a href="#">MdmDataContractOfDerivedHierarchyContextIdentifier</a>	The data contract for the <b>DerivedHierarchyContextIdentifier</b> complex type.
<a href="#">MdmDataContractOfEntityContextIdentifier</a>	The data contract for the <b>EntityContextIdentifier</b> complex type.

Complex type	Description
<a href="#">MdmDataContractOfIdentifier</a>	The data contract of an entity.
<a href="#">MdmDataContractOfMemberTypeContextIdentifier</a>	A data contract for the <b>MemberTypeContextIdentifier</b> complex type.
<a href="#">MDMError</a>	A complex type of Master Data Management errors.
<a href="#">MDMErrorContext</a>	The context for the <b>MDMError</b> complex type.
<a href="#">Member</a>	An <b>EntityMember</b> complex type.
<a href="#">MemberIdentifier</a>	A set of identifiers for a <b>master data</b> member including the code and name of the member and the member type.
<a href="#">MemberTypeContextIdentifier</a>	A set of identifiers for a master data model object that exists in the context of an entity and member type.
<a href="#">Metadata</a>	The objects in the MDS system, such as <b>Model</b> and <b>Entity</b> .
<a href="#">Model</a>	The highest grouping of entities in MDS.
<a href="#">ModelContextIdentifier</a>	A set of identifiers for a master data model object that exists in the context of a model.
<a href="#">ModelPrivilege</a>	A model/object level privilege within the MDS system.
<a href="#">ModelsGetCriteria</a>	The criteria with which to configure <b>ModelsGet</b> operations.
<a href="#">ModelsResultCriteria</a>	The criteria with which to configure <b>ModelsResults</b> responses.
<a href="#">OperationResult</a>	The results from metadata operations.
<a href="#">Parent</a>	A <b>consolidated member</b> node in a hierarchy.
<a href="#">ParentChild</a>	An explicit hierarchy relationship.
<a href="#">ResultOptions</a>	The result type enumeration for each metadata object within the MDS system. This complex type is used to customize results that are returned by the system.
<a href="#">SecurityPrincipalCriteria</a>	The criteria for access to users and groups.
<a href="#">SecurityPrincipals</a>	User and group objects in MDS.
<a href="#">SecurityPrivileges</a>	The privilege levels in MDS.
<a href="#">StagingBatch</a>	The context for a staging batch.
<a href="#">StagingBatchError</a>	The errors in the staging batch process.

Complex type	Description
<a href="#">StagingBatchInformation</a>	The information for the staging batch.
<a href="#">StagingUnbatchedInformation</a>	The records in the <b>tblStgMember</b> , <b>tblStgMemberAttribute</b> , and <b>tblStgRelationship</b> tables that are not already in a specific batch.
<a href="#">SystemSetting</a>	The administrative level setting in MDS.
<a href="#">SystemSettingGroup</a>	A collection of related system settings that have related MDS functionality
<a href="#">Transaction</a>	Any master data changes together with the user and time information that is associated with the change.
<a href="#">User</a>	An Active Directory user that is added in MDS.
<a href="#">ValidationIssue</a>	A business rule validation error.
<a href="#">Version</a>	A snapshot of all members within a model.
<a href="#">VersionFlag</a>	A custom label for an MDS <b>version</b> to aid in integration automation.

#### 2.2.4.1 Annotation

The **Annotation** complex type specifies an annotation (comment) on a transaction or member.

The following is the XSD schema definition of the **Annotation** complex type.

```
<xs:complexType name="Annotation">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Comment" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="Id" type="xs:int" />
  </xs:sequence>
</xs:complexType>
```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Comment**: Specifies the comment text.

**Id**: Specifies the unique integer ID of the annotation.

#### 2.2.4.2 ArrayOfAnnotation

The **ArrayOfAnnotation** complex type specifies a collection of [Annotation](#) complex types.

The following is the XSD schema definition of the **ArrayOfAnnotation** complex type.

```
<xs:complexType name="ArrayOfAnnotation">
  <xs:sequence>
```

```

    <xs:element minOccurs="0" maxOccurs="unbounded" name="Annotation" nillable="true"
type="tns:Annotation" />
  </xs:sequence>
</xs:complexType>

```

**Annotation:** Specifies the **Annotation** complex type.

### 2.2.4.3 ArrayOfAttribute

The **ArrayOfAttribute** complex type is a collection of [Attribute](#) complex types.

The following is the XSD schema definition of the **ArrayOfAttribute** complex type.

```

<xs:complexType name="ArrayOfAttribute">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Attribute" nillable="true"
type="tns:Attribute" />
  </xs:sequence>
</xs:complexType>

```

**Attribute:** Specifies the **Attribute** complex type.

### 2.2.4.4 ArrayOfAttributeDataType

The **ArrayOfAttributeDataType** complex type specifies a collection of **AttributeDataType** complex types.

The following is the XSD schema definition of the **ArrayOfAttributeDataType** complex type.

```

<xs:complexType name="ArrayOfAttributeDataType">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AttributeDataType"
type="tns:AttributeDataType" />
  </xs:sequence>
</xs:complexType>

```

**AttributeDataType:** Specifies the **AttributeDataType** complex type.

### 2.2.4.5 ArrayOfAttributeGroup

The **ArrayOfAttributeGroup** complex type specifies a collection of [AttributeGroup](#) complex types.

The following is the XSD schema definition of the **ArrayOfAttributeGroup** complex type.

```

<xs:complexType name="ArrayOfAttributeGroup">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AttributeGroup" nillable="true"
type="tns:AttributeGroup" />
  </xs:sequence>
</xs:complexType>

```

**AttributeGroup**: Specifies the **AttributeGroup** complex type.

#### 2.2.4.6 ArrayOfBAction

The **ArrayOfBAction** complex type specifies a collection of [BAction](#) complex types.

The following is the XSD schema definition of the **ArrayOfBAction** complex type.

```
<xs:complexType name="ArrayOfBAction">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BAction" nillable="true"
type="tns:BAction" />
  </xs:sequence>
</xs:complexType>
```

**BAction**: Specifies the **BAction** complex type.

#### 2.2.4.7 ArrayOfBActionComponent

The **ArrayOfBActionComponent** complex type specifies a collection of [BActionComponent](#) complex types.

The following is the XSD schema definition of the **ArrayOfBActionComponent** complex type.

```
<xs:complexType name="ArrayOfBActionComponent">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BActionComponent"
nillable="true" type="tns:BActionComponent" />
  </xs:sequence>
</xs:complexType>
```

**BActionComponent**: Specifies the **BActionComponent** complex type.

#### 2.2.4.8 ArrayOfBActionGroup

The **ArrayOfBActionGroup** complex type specifies a collection of [BActionGroup](#) complex types.

The following is the XSD schema definition of the **ArrayOfBActionGroup** complex type.

```
<xs:complexType name="ArrayOfBActionGroup">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BActionGroup" nillable="true"
type="tns:BActionGroup" />
  </xs:sequence>
</xs:complexType>
```

**BActionGroup**: Specifies the **BActionGroup** complex type.

#### 2.2.4.9 ArrayOfBRAttributeTypeInfo

The **ArrayOfBRAttributeTypeInfo** complex type specifies a collection of [BRAttributeTypeInfo](#) complex types.

The following is the XSD schema definition of the **ArrayOfBRAttributeTypeInfo** complex type.

```
<xs:complexType name="ArrayOfBRAttributeTypeInfo">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BRAttributeTypeInfo"
      nillable="true" type="tns:BRAttributeTypeInfo" />
  </xs:sequence>
</xs:complexType>
```

**BRAttributeTypeInfo:** Specifies the **BRAttributeTypeInfo** complex type.

#### 2.2.4.10 ArrayOfBRCondition

The **ArrayOfBRCondition** complex type specifies a collection of [BRCondition](#) complex types.

The following is the XSD schema definition of the **ArrayOfBRCondition** complex type.

```
<xs:complexType name="ArrayOfBRCondition">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BRCondition" nillable="true"
      type="tns:BRCondition" />
  </xs:sequence>
</xs:complexType>
```

**BRCondition:** Specifies the **BRCondition** complex type.

#### 2.2.4.11 ArrayOfBRConditionComponent

The **ArrayOfBRConditionComponent** complex type specifies a collection of [BRConditionComponent](#) complex types.

The following is the XSD schema definition of the **ArrayOfBRConditionComponent** complex type.

```
<xs:complexType name="ArrayOfBRConditionComponent">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BRConditionComponent"
      nillable="true" type="tns:BRConditionComponent" />
  </xs:sequence>
</xs:complexType>
```

**BRConditionComponent:** Specifies the **BRConditionComponent** complex type.

#### 2.2.4.12 ArrayOfBRConditionGroup

The **ArrayOfBRConditionGroup** complex type specifies a collection of [BRConditionGroup](#) complex types.

The following is the XSD schema definition of the **ArrayOfBRConditionGroup** complex type.

```
<xs:complexType name="ArrayOfBRConditionGroup">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BRConditionGroup" nillable="true"
type="tns:BRConditionGroup" />
  </xs:sequence>
</xs:complexType>
```

**BRConditionGroup:** Specifies the **BRConditionGroup** complex type.

#### 2.2.4.13 ArrayOfBRConditionTreeNode

The **ArrayOfBRConditionTreeNode** complex type specifies a collection of [BRConditionTreeNode](#) complex types.

The following is the XSD schema definition of the **ArrayOfBRConditionTreeNode** complex type.

```
<xs:complexType name="ArrayOfBRConditionTreeNode">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BRConditionTreeNode"
nillable="true" type="tns:BRConditionTreeNode" />
  </xs:sequence>
</xs:complexType>
```

**BRConditionTreeNode:** Specifies the **BRConditionTreeNode** complex type.

#### 2.2.4.14 ArrayOfBRFreeformArgument

The **ArrayOfBRFreeformArgument** complex type specifies a collection of [BRFreeformArgument](#) complex types.

The following is the XSD schema definition of the **ArrayOfBRFreeformArgument** complex type.

```
<xs:complexType name="ArrayOfBRFreeformArgument">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="BRFreeformArgument"
nillable="true" type="tns:BRFreeformArgument" />
  </xs:sequence>
</xs:complexType>
```

**BRFreeformArgument:** Specifies the **BRFreeformArgument** complex type.

#### 2.2.4.15 ArrayOfBusinessRule

The **ArrayOfBusinessRule** complex type specifies a collection of [BusinessRule](#) complex types.

The following is the XSD schema definition of the **ArrayOfBusinessRule** complex type.

```
<xs:complexType name="ArrayOfBusinessRule">
```

```

    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="BusinessRule" nillable="true"
type="tns:BusinessRule" />
    </xs:sequence>
  </xs:complexType>

```

**BusinessRule:** Specifies the **BusinessRule** complex type.

#### 2.2.4.16 ArrayOfDerivedHierarchy

The **ArrayOfDerivedHierarchy** complex type specifies a collection of [DerivedHierarchy](#) complex types.

The following is the XSD schema definition of the **ArrayOfDerivedHierarchy** complex type.

```

<xs:complexType name="ArrayOfDerivedHierarchy">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="DerivedHierarchy" nillable="true"
type="tns:DerivedHierarchy" />
  </xs:sequence>
</xs:complexType>

```

**DerivedHierarchy:** Specifies the **DerivedHierarchy** complex type.

#### 2.2.4.17 ArrayOfDerivedHierarchyLevel

The **ArrayOfDerivedHierarchyLevel** complex type specifies a collection of [DerivedHierarchyLevel](#) complex types.

The following is the XSD schema definition of the **ArrayOfDerivedHierarchyLevel** complex type.

```

<xs:complexType name="ArrayOfDerivedHierarchyLevel">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="DerivedHierarchyLevel"
nillable="true" type="tns:DerivedHierarchyLevel" />
  </xs:sequence>
</xs:complexType>

```

**DerivedHierarchyLevels:** Specifies the **DerivedHierarchyLevel** complex type.

#### 2.2.4.18 ArrayOfEntity

The **ArrayOfEntity** complex type specifies a collection of [Entity](#) complex types.

The following is the XSD schema definition of the **ArrayOfEntity** complex type.

```

<xs:complexType name="ArrayOfEntity">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Entity" nillable="true"
type="tns:Entity" />
  </xs:sequence>

```



```
</xs:complexType>
```

**Entity:** Specifies the **Entity** complex type.

#### 2.2.4.19 ArrayOfEntityMembers

The **ArrayOfEntityMembers** complex type specifies a collection of [EntityMembers](#).

The following is the XSD schema definition of the **ArrayOfEntityMembers** complex type.

```
<xs:complexType name="ArrayOfEntityMembers">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EntityMembers" nillable="true"
type="tns:EntityMembers" />
  </xs:sequence>
</xs:complexType>
```

**EntityMembers:** Specifies the **EntityMembers** complex type.

#### 2.2.4.20 ArrayOfEntityMemberType

The **ArrayOfEntityMemberType** complex type specifies a collection of [EntityMemberType](#) complex types.

The following is the XSD schema definition of the **ArrayOfEntityMemberType** complex type.

```
<xs:complexType name="ArrayOfEntityMemberType">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EntityMemberType" nillable="true"
type="tns:EntityMemberType" />
  </xs:sequence>
</xs:complexType>
```

**EntityMemberType:** Specifies the **EntityMemberType** complex type.

#### 2.2.4.21 ArrayOfExplicitHierarchy

The **ArrayOfExplicitHierarchy** complex type specifies a collection of [ExplicitHierarchy](#) complex types.

The following is the XSD schema definition of the **ArrayOfExplicitHierarchy** complex type.

```
<xs:complexType name="ArrayOfExplicitHierarchy">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ExplicitHierarchy"
nillable="true" type="tns:ExplicitHierarchy" />
  </xs:sequence>
</xs:complexType>
```

**ExplicitHierarchy:** Specifies the **ExplicitHierarchy** complex type.

#### 2.2.4.22 ArrayOfExportView

The **ArrayOfExportView** complex type specifies a collection of [ExportView](#) complex types.

The following is the XSD schema definition of the **ArrayOfExportView** complex type.

```
<xs:complexType name="ArrayOfExportView">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ExportView" nillable="true"
type="tns:ExportView" />
  </xs:sequence>
</xs:complexType>
```

**ExportView**: Specifies the **ExportView** complex type.

#### 2.2.4.23 ArrayOfFunctionPrivilege

The **ArrayOfFunctionPrivilege** complex type specifies a collection of [FunctionPrivilege](#) complex types.

The following is the XSD schema definition of the **ArrayOfFunctionPrivilege** complex type.

```
<xs:complexType name="ArrayOfFunctionPrivilege">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="FunctionPrivilege"
nillable="true" type="tns:FunctionPrivilege" />
  </xs:sequence>
</xs:complexType>
```

**FunctionPrivilege**: Specifies the **FunctionPrivilege** complex type.

#### 2.2.4.24 ArrayOfGroup

The **ArrayOfGroup** complex type specifies a collection of [Group](#) complex types.

The following is the XSD schema definition of the **ArrayOfGroup** complex type.

```
<xs:complexType name="ArrayOfGroup">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Group" nillable="true"
type="tns:Group" />
  </xs:sequence>
</xs:complexType>
```

**Group**: Specifies the **Group** complex type.

#### 2.2.4.25 ArrayOfHierarchyMemberPrivilege

The **ArrayOfHierarchyMemberPrivilege** complex type specifies a collection of [HierarchyMemberPrivilege](#) complex types.

The following is the XSD schema definition of the **ArrayOfHierarchyMemberPrivilege** complex type.

```
<xs:complexType name="ArrayOfHierarchyMemberPrivilege">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="HierarchyMemberPrivilege"
      nillable="true" type="tns:HierarchyMemberPrivilege" />
  </xs:sequence>
</xs:complexType>
```

**HierarchyMemberPrivilege**: Specifies the **HierarchyMemberPrivilege** complex type.

#### 2.2.4.26 ArrayOfIdentifier

The **ArrayOfIdentifier** complex type is a collection of [Identifier](#) complex types.

The following is the XSD schema definition of the **ArrayOfIdentifier** complex type.

```
<xs:complexType name="ArrayOfIdentifier">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Identifier" nillable="true"
      type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**Identifier**: Specifies the **Identifier** complex type.

#### 2.2.4.27 ArrayOfMasterDataCollection

The **ArrayOfMasterDataCollection** complex type specifies a collection of [MasterDataCollection](#) complex types.

The following is the XSD schema definition of the **ArrayOfMasterDataCollection** complex type.

```
<xs:complexType name="ArrayOfMasterDataCollection">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="MasterDataCollection"
      nillable="true" type="tns:MasterDataCollection" />
  </xs:sequence>
</xs:complexType>
```

**MasterDataCollection**: Specifies the **MasterDataCollection** complex type.

#### 2.2.4.28 ArrayOfMDMError

The **ArrayOfMDMError** complex type specifies a collection of [MDMError](#) complex types.

The following is the XSD schema definition of the **ArrayOfMDMError** complex type.

```
<xs:complexType name="ArrayOfMDMError">
```

```

    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="MDMError" nillable="true"
type="tns:MDMError" />
    </xs:sequence>
  </xs:complexType>

```

**MDMError**: Specifies the **MDMError** complex type.

#### 2.2.4.29 ArrayOfMember

The **ArrayOfMember** complex type is a collection of [Member](#) complex types.

The following is the XSD schema definition of the **ArrayOfMember** complex type.

```

<xs:complexType name="ArrayOfMember">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Member" nillable="true"
type="tns:Member" />
  </xs:sequence>
</xs:complexType>

```

**Member**: Specifies the **Member** complex type.

#### 2.2.4.30 ArrayOfMemberIdentifier

The **ArrayOfMemberIdentifier** complex type specifies a collection of [MemberIdentifier](#) complex types.

The following is the XSD schema definition of the **ArrayOfMemberIdentifier** complex type.

```

<xs:complexType name="ArrayOfMemberIdentifier">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="MemberIdentifier" nillable="true"
type="tns:MemberIdentifier" />
  </xs:sequence>
</xs:complexType>

```

**MemberIdentifier**: Specifies the **MemberIdentifier** complex type.

#### 2.2.4.31 ArrayOfMemberType

The **ArrayOfMemberType** complex type specifies a collection of [MemberType](#) complex types.

The following is the XSD schema definition of the **ArrayOfMemberType** complex type.

```

<xs:complexType name="ArrayOfMemberType">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="MemberType" type="tns:MemberType"
/>
  </xs:sequence>

```

```
</xs:complexType>
```

**MemberType:** Specifies the **MemberType** complex type.

#### 2.2.4.32 ArrayOfModel

The **ArrayOfModel** complex type specifies a collection of [Model](#) complex types.

The following is the XSD schema definition of the **ArrayOfModel** complex type.

```
<xs:complexType name="ArrayOfModel">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Model" nillable="true"
type="tns:Model" />
  </xs:sequence>
</xs:complexType>
```

**Model:** Specifies the **Model** complex type.

#### 2.2.4.33 ArrayOfModelPrivilege

The **ArrayOfModelPrivilege** complex type specifies a collection of [ModelPrivilege](#) complex types.

The following is the XSD schema definition of the **ArrayOfModelPrivilege** complex type.

```
<xs:complexType name="ArrayOfModelPrivilege">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ModelPrivilege" nillable="true"
type="tns:ModelPrivilege" />
  </xs:sequence>
</xs:complexType>
```

**ModelPrivilege:** Specifies the **ModelPrivilege** complex type.

#### 2.2.4.34 ArrayOfParent

The **ArrayOfParent** complex type specifies a collection of [Parent](#) complex types.

The following is the XSD schema definition of the **ArrayOfParent** complex type.

```
<xs:complexType name="ArrayOfParent">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Parent" nillable="true"
type="tns:Parent" />
  </xs:sequence>
</xs:complexType>
```

**Parent:** Specifies the **Parent** complex type.

### 2.2.4.35 ArrayOfParentChild

The **ArrayOfParentChild** complex type specifies a collection of [ParentChild](#) complex types.

The following is the XSD schema definition of the **ArrayOfParentChild** complex type.

```
<xs:complexType name="ArrayOfParentChild">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ParentChild" nillable="true"
type="tns:ParentChild" />
  </xs:sequence>
</xs:complexType>
```

**ParentChild:** Specifies the **ParentChild** complex type.

### 2.2.4.36 ArrayOfStagingBatch

The **ArrayOfStagingBatch** complex type specifies a collection of [StagingBatch](#) complex types.

The following is the XSD schema definition of the **ArrayOfStagingBatch** complex type.

```
<xs:complexType name="ArrayOfStagingBatchError">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="StagingBatchError"
nillable="true" type="tns:StagingBatchError" />
  </xs:sequence>
</xs:complexType>
```

**StagingBatch:** Specifies the **StagingBatch** complex type.

### 2.2.4.37 ArrayOfStagingBatchError

The **ArrayOfStagingBatchError** complex type specifies a collection of [StagingBatchError](#) complex types.

The following is the XSD schema definition of the **ArrayOfStagingBatchError** complex type.

```
<xs:complexType name="ArrayOfStagingBatchError">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="StagingBatchError"
nillable="true" type="tns:StagingBatchError" />
  </xs:sequence>
</xs:complexType>
```

**StagingBatchError:** Specifies the **StagingBatchError** complex type.

### 2.2.4.38 ArrayOfStagingUnbatchedInformation

The **ArrayOfStagingUnbatchedInformation** complex type specifies a collection of [StagingUnbatchedInformation](#) complex types.

The following is the XSD schema definition of the **ArrayOfStagingUnbatchedInformation** complex type.

```
<xs:complexType name="ArrayOfStagingUnbatchedInformation">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="StagingUnbatchedInformation"
      nillable="true" type="tns:StagingUnbatchedInformation" />
  </xs:sequence>
</xs:complexType>
```

**StagingUnbatchedInformation**: Specifies the **StagingUnbatchedInformation** complex type.

#### 2.2.4.39 ArrayOfSystemSetting

The **ArrayOfSystemSetting** complex type specifies a collection of [SystemSetting](#) complex types.

The following is the XSD schema definition of the **ArrayOfSystemSetting** complex type.

```
<xs:complexType name="ArrayOfSystemSetting">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="SystemSetting" nillable="true"
      type="tns:SystemSetting" />
  </xs:sequence>
</xs:complexType>
```

**SystemSetting**: Specifies the **SystemSetting** complex type.

#### 2.2.4.40 ArrayOfSystemSettingGroup

The **ArrayOfSystemSettingGroup** complex type specifies a collection of [SystemSettingGroup](#) complex types.

The following is the XSD schema definition of the **ArrayOfSystemSettingGroup** complex type.

```
<xs:complexType name="ArrayOfSystemSettingGroup">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="SystemSettingGroup"
      nillable="true" type="tns:SystemSettingGroup" />
  </xs:sequence>
</xs:complexType>
```

**SystemSettingGroup**: Specifies the **SystemSettingGroup** complex type.

#### 2.2.4.41 ArrayOfTransaction

The **ArrayOfTransaction** complex type specifies a collection of [Transaction](#) complex types.

The following is the XSD schema definition of the **ArrayOfTransaction** complex type.

```
<xs:complexType name="ArrayOfTransaction">
```

```

    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="Transaction" nillable="true"
type="tns:Transaction" />
    </xs:sequence>
  </xs:complexType>

```

**Transaction:** Specifies the **Transaction** complex type.

#### 2.2.4.42 ArrayOfUser

The **ArrayOfUser** complex type specifies a collection of [User](#) complex types.

The following is the XSD schema definition of the **ArrayOfUser** complex type.

```

<xs:complexType name="ArrayOfUser">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="User" nillable="true"
type="tns:User" />
  </xs:sequence>
</xs:complexType>

```

**User:** Specifies the **User** complex type.

#### 2.2.4.43 ArrayOfValidationIssue

The **ArrayOfValidationIssue** complex type specifies a collection of [ValidationIssue](#) complex types.

The following is the XSD schema definition of the **ArrayOfValidationIssue** complex type.

```

<xs:complexType name="ArrayOfValidationIssue">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ValidationIssue" nillable="true"
type="tns:ValidationIssue" />
  </xs:sequence>
</xs:complexType>

```

**ValidationIssue:** Specifies the **ValidationIssue** complex type.

#### 2.2.4.44 ArrayOfVersion

The **ArrayOfVersion** complex type specifies a collection of [Version](#) complex types.

The following is the XSD schema definition of the **ArrayOfVersion** complex type.

```

<xs:complexType name="ArrayOfVersion">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Version" nillable="true"
type="tns:Version" />
  </xs:sequence>
</xs:complexType>

```



**Version:** Specifies the **Version** complex type.

#### 2.2.4.45 ArrayOfVersionFlag

The **ArrayOfVersionFlag** complex type specifies a collection of [VersionFlag](#) complex types.

The following is the XSD schema definition of the **ArrayOfVersionFlag** complex type.

```
<xs:complexType name="ArrayOfVersionFlag">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="VersionFlag" nillable="true"
type="tns:VersionFlag" />
  </xs:sequence>
</xs:complexType>
```

**VersionFlag:** Specifies the **VersionFlag** complex type.

#### 2.2.4.46 Attribute

The **Attribute** complex type specifies a master data attribute, including its identification and data value.

The following is the XSD schema definition of the **Attribute** complex type.

```
<xs:complexType name="Attribute">
  <xs:sequence>
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Type" type="tns:AttributeValueType" />
    <xs:element minOccurs="0" name="Value" nillable="true" type="xs:anyType" />
  </xs:sequence>
</xs:complexType>
```

**Identifier:** Specifies the [Identifier](#) of the attribute metadata object.

**Type:** Specifies the **AttributeTypeValue** or the type of value that is stored by the attribute.

**Value:** Specifies the value that is assigned to the master data attribute as a variant data type.

#### 2.2.4.47 AttributeGroup

The **AttributeGroup** complex type specifies a custom grouping of attributes that can contain a subset of the entity attributes and that can set a display order of these attributes. The attributes can be in multiple attribute groups.

The following is the XSD schema definition of the **AttributeGroup** complex type.

```
<xs:complexType name="AttributeGroup">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfMemberTypeContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="Attributes" nillable="true"
type="tns:ArrayOfMetaDataAttribute" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

    <xs:element minOccurs="0" name="FullName" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="IsNameCodeFrozen" type="xs:boolean" />
    <xs:element minOccurs="0" name="IsSystem" type="xs:boolean" />
    <xs:element minOccurs="0" name="SortOrder" type="xs:int" />
  </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**Attributes:** Specifies the **ArrayOfMetaDataAttribute** complex type.

**FullName:** Specifies a string that specifies the full name of the attribute group.

**IsNameCodeFrozen:** Specifies a **Boolean** that specifies whether the **Name** and **Code** fields should be static in the user interface.

**IsSystem:** Specifies a **Boolean** that specifies whether the attribute group is created by the MDS system.

**SortOrder:** Specifies an **Integer** value that specifies the sort order of attribute groups.

#### 2.2.4.48 AuditInfo

The **AuditInfo** complex type specifies a common complex type that is used to store object modification history. This complex type **MUST** be used for read-only data.

The following is the XSD schema definition of the **AuditInfo** complex type.

```

<xs:complexType name="AuditInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="CreatedDateTime" type="xs:dateTime" />
    <xs:element minOccurs="0" name="CreatedUserId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="CreatedVersionId" nillable="true" type="tns:Identifier" />
  />
  <xs:element minOccurs="0" name="UpdatedDateTime" type="xs:dateTime" />
  <xs:element minOccurs="0" name="UpdatedUserId" nillable="true" type="tns:Identifier" />
  <xs:element minOccurs="0" name="UpdatedVersionId" nillable="true" type="tns:Identifier" />
</xs:sequence>
</xs:complexType>

```

**CreatedDateTime:** Specifies the date and time at which the associated object was created.

**CreatedUserId:** Specifies the [Identifier](#) of the user who created the associated object.

**CreatedVersionId:** Specifies the **Identifier** of the version in which the associated object was created.

**UpdatedDateTime:** Specifies the date and time at which the associated object was last updated.

**UpdatedUserId:** Specifies the **Identifier** of the user who last updated the object.

**UpdatedVersionId:** Specifies the **Identifier** of the version in which the associated object was last updated.

#### 2.2.4.49 BRAction

The **BRAction** complex type specifies a value creation or validation action within a created business rule.

The following is the XSD schema definition of the **BRAction** complex type.

```
<xs:complexType name="BRAction">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRItem">
      <xs:sequence>
        <xs:element minOccurs="0" name="PrefixArgument" nillable="true"
type="tns:BRAttributeArgument" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**PrefixArgument:** The [BRAttributeArgument](#) complex type.

#### 2.2.4.50 BRActionComponent

The **BRActionComponent** complex type specifies the action components of business rules. **BRActionComponent** extends the [BRItemTypeComponent](#) complex type.

The following is the XSD schema definition of the **BRActionComponent** complex type.

```
<xs:complexType name="BRActionComponent">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRItemTypeComponent">
      <xs:sequence />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

#### 2.2.4.51 BRActionGroup

The **BRActionGroup** complex type specifies a grouping of related business rule action components that are currently available for use in MDS.

The following is the XSD schema definition of the **BRActionGroup** complex type.

```
<xs:complexType name="BRActionGroup">
  <xs:sequence>
    <xs:element minOccurs="0" name="BRActionComponents" nillable="true"
type="tns:ArrayOfBRActionComponent" />
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
```

**BRActionComponents:** The [ArrayOfBRActionComponent](#) complex type.

**Name:** A string identifier for the business rule action group.

#### 2.2.4.52 BRArgument

The **BRArgument** complex type specifies the base type for all business rule arguments.

The following is the XSD schema definition of the **BRAction** complex type.

```
<xs:complexType name="BRArgument">
  <xs:sequence>
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="PropertyName" type="tns:BRPropertyName" />
  </xs:sequence>
</xs:complexType>
```

**Identifier:** The [Identifier](#) complex type.

**PropertyName:** The [BRPropertyName](#) simple type.

#### 2.2.4.53 BRAttributeArgument

The **BRAttributeArgument** complex type specifies the argument type for comparing attributes within a business rule. This is the values that are set for each member as opposed to a specific value against all members. **BRAttributeArgument** extends the [BRAttributeArgumentBase](#) complex type.

The following is the XSD schema definition of the **BRAttributeArgument** complex type.

```
<xs:complexType name="BRAttributeArgument">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRAttributeArgumentBase">
      <xs:sequence>
        <xs:element minOccurs="0" name="ChildArguments" nillable="true"
type="tns:ArrayOfBRFreeformArgument" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**ChildArguments:** Specifies the [ArrayOfBRFreeformArgument](#) complex type.

#### 2.2.4.54 BRAttributeArgumentBase

The **BRAttributeArgumentBase** complex type specifies a base complex type for business rule attribute arguments. **BRAttributeArgumentBase** extends the [BRArgument](#) complex type.

The following is the XSD schema definition of the **BRAttributeArgumentBase** complex type.

```
<xs:complexType name="BRAttributeArgumentBase">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRArgument">
      <xs:sequence>
```

```

        <xs:element minOccurs="0" name="AttributeId" nillable="true" type="tns:Identifier"
    />
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**AttributeId:** The [Identifier](#) complex type.

#### 2.2.4.55 BRAttributeTypeInfo

The **BRAttributeTypeInfo** complex type specifies the attribute type information for business rule attributes.

The following is the XSD schema definition of the **BRAttributeTypeInfo** complex type.

```

<xs:complexType name="BRAttributeTypeInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeDataTypes" nillable="true"
type="tns:ArrayOfAttributeDataType" />
    <xs:element minOccurs="0" name="AttributeType" type="tns:AttributeType" />
  </xs:sequence>
</xs:complexType>

```

**AttributeDataTypes:** The [ArrayOfAttributeDataType](#) complex type.

**AttributeType:** The [AttributeType](#) simple type.

#### 2.2.4.56 BRAttributeValueArgument

The **BRAttributeValueArgument** complex type specifies the **BRAttribute** freeform value set in conditions and validation actions.

The following is the XSD schema definition of the **BRAttributeValueArgument** complex type.

```

<xs:complexType name="BRAttributeValueArgument">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRArgument">
      <xs:sequence>
        <xs:element minOccurs="0" name="AttributeCode" nillable="true" type="xs:string" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

**AttributeCode:** A string value to be compared in an argument.

#### 2.2.4.57 BRBlankArgument

The **BRBlankArgument** complex type specifies a specialized argument for providing "blank" as a value in conditions and validation actions. **BRBlankArgument** extends the [BRArgument](#) complex type.

The following is the XSD schema definition of the **BRBlankArgument** complex type.

```
<xs:complexType name="BRBlankArgument">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRArgument">
      <xs:sequence />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

#### 2.2.4.58 BRCondition

The **BRCondition** complex type specifies a container for conditions to be evaluated to trigger actions that are defined in a created business rule.

The following is the XSD schema definition of the **BRCondition** complex type.

```
<xs:complexType name="BRCondition">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRItem">
      <xs:sequence>
        <xs:element minOccurs="0" name="ConditionTreeNodeId" nillable="true"
type="tns:Identifier" />
        <xs:element minOccurs="0" name="PrefixArgument" nillable="true" type="xs:anyType"
/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**ConditionTreeNodeId**: Specifies the [Identifier](#) complex type.

**PrefixArgument**: Specifies a prefix argument to define the logic of a business rule.

#### 2.2.4.59 BRConditionComponent

The **BRConditionComponent** complex type specifies condition components of business rules. **BRConditionComponent** extends the [BRItemTypeComponent](#) complex type.

The following is the XSD schema definition of the **BRConditionComponent** complex type.

```
<xs:complexType name="BRConditionComponent">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRItemTypeComponent">
      <xs:sequence />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

### 2.2.4.60 BRConditionGroup

The **BRConditionGroup** complex type specifies a group of conditions that have a similar type of logical evaluator.

The following is the XSD schema definition of the **BRConditionGroup** complex type.

```
<xs:complexType name="BRConditionGroup">
  <xs:sequence>
    <xs:element minOccurs="0" name="BRConditionComponents" nillable="true"
type="tns:ArrayOfBRConditionComponent" />
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
```

**BRConditionComponents:** The [ArrayOfBRConditionComponent](#) complex type.

**Name:** A grouping of condition components.

### 2.2.4.61 BRConditionTreeNode

The **BRConditionTreeNode** complex type specifies a node within a possible complex logic tree in a business rule in MDS. A **BRConditionTreeNode** must exist for each business rule condition that is created.

The following is the XSD schema definition of the **BRConditionTreeNode** complex type.

```
<xs:complexType name="BRConditionTreeNode">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="BRConditions" nillable="true"
type="tns:ArrayOfBRCondition" />
    <xs:element minOccurs="0" name="BusinessRuleId" nillable="true"
type="tns:MemberTypeContextIdentifier" />
    <xs:element minOccurs="0" name="ConditionTreeChildNodes" nillable="true"
type="tns:ArrayOfBRConditionTreeNode" />
    <xs:element minOccurs="0" name="ConditionTreeParentNode" nillable="true"
type="tns:Identifier" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="LogicalOperator" type="tns:LogicalOperator" />
    <xs:element minOccurs="0" name="Sequence" type="xs:int" />
  </xs:sequence>
</xs:complexType>
```

**AuditInfo:** Specifies the [AuditInfo](#) complex type.

**BRConditions:** Specifies the [ArrayOfBRCondition](#) complex type.

**BusinessRuleId:** Specifies the [MemberTypeContextIdentifier](#) complex type.

**ConditionTreeChildNodes:** Specifies the [ArrayOfBRConditionTreeNode](#) complex type.

**ConditionTreeParentNode:** Specifies the [Identifier](#) complex type.

**Identifier:** Specifies the **Identifier** complex type.

**LogicalOperator:** Specifies the [LogicalOperator](#) simple type.

**Sequence:** Specifies an integer value that represents the order in which the tree node should be displayed and evaluated.

#### 2.2.4.62 BRDomainBasedAttributeArgument

The **BRDomainBasedAttributeArgument** complex type specifies the container for defining arguments based on values in related entity attributes. **BRDomainBasedAttributeArgument** extends the [BRAttributeArgumentBase](#) complex type.

The following is the WSDL definition of the **BRDomainBasedAttributeArgument** complex type.

```
<xs:complexType name="BRDomainBasedAttributeArgument">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRAttributeArgumentBase">
      <xs:sequence>
        <xs:element minOccurs="0" name="ChildArgument" nillable="true"
type="tns:BRAttributeArgument" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**ChildArgument:** The [BRAttributeArgument](#) complex type.

#### 2.2.4.63 BRFreeformArgument

The **BRFreeformArgument** complex type specifies the freeform argument type for business rule arguments. **BRFreeformArgument** extends the [BRArgument](#) complex type.

The following is the XSD schema definition of the **BRFreeformArgument** complex type.

```
<xs:complexType name="BRFreeformArgument">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRArgument">
      <xs:sequence>
        <xs:element minOccurs="0" name="Value" nillable="true" type="xs:string" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**Value:** Specifies a string that represents the business rule freeform argument.

#### 2.2.4.64 BRHierarchyArgument

The **BRHierarchyArgument** complex type specifies the business rule argument that is specific to parent-child relationship arguments. **BRHierarchyArgument** extends the [BRArgument](#) complex type.

The following is the XSD schema definition of the **BRHierarchyArgument** complex type.



```

<xs:complexType name="BRHierarchyArgument">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:BRArgument">
      <xs:sequence>
        <xs:element minOccurs="0" name="ChildArgument" nillable="true"
type="tns:BRAttributeArgument" />
        <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier"
/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

**ChildArgument:** The [BRAttributeArgument](#) complex type.

**HierarchyId:** The [Identifier](#) complex type.

### 2.2.4.65 BRItem

The **BRItem** complex type specifies a logical part of a complete business rule.

The following is the XSD schema definition of the **BRItem** complex type.

```

<xs:complexType name="BRItem">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="BusinessRuleId" nillable="true"
type="tns:MemberTypeContextIdentifier" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Operator" type="tns:BRItemType" />
    <xs:element xmlns:q49="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="PostfixArguments" nillable="true" type="q49:ArrayOfanyType" />
    <xs:element minOccurs="0" name="Sequence" type="xs:int" />
    <xs:element minOccurs="0" name="Text" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>

```

**AuditInfo:** Specifies the [AuditInfo](#) complex type.

**BusinessRuleID:** Specifies the [MemberTypeContextIdentifier](#) complex type.

**Identifier:** Specifies the [Identifier](#) complex type.

**Operator:** Specifies the [BRItemType](#) simple type.

**PostFixArguments:** Specifies an **ArrayOfAnyType**.

**Sequence:** Specifies an integer value that represents the order in which business rule items should be displayed and evaluated.

**Text:**

## 2.2.4.66 BRItemTypeComponent

The **BRItemTypeComponent** complex type specifies the base-level components type of business rules.

The following is the XSD schema definition of the **BRItemTypeComponent** complex type.

```
<xs:complexType name="BRItemTypeComponent">
  <xs:sequence>
    <xs:element minOccurs="0" name="CompatibleAttributeTypes" nillable="true"
type="tns:ArrayOfBRAttributeTypeInfo" />
    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="ItemType" type="tns:BRItemType" />
  </xs:sequence>
</xs:complexType>
```

**CompatibleAttributeTypes**: Specifies the [ArrayOfBRAttributeTypeInfo](#) complex type.

**Description**: Specifies a description of the component.

**ItemType**: Specifies the [BRItemType](#) simple type.

## 2.2.4.67 BusinessRule

The **BusinessRule** complex type specifies a business rule container object.

The following is the XSD schema definition of the **BusinessRule** complex type.

```
<xs:complexType name="BusinessRule">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="BRActions" nillable="true" type="tns:ArrayOfBRAction"
/>
    <xs:element minOccurs="0" name="BRConditionTree" nillable="true"
type="tns:BRConditionTreeNode" />
    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="Identifier" nillable="true"
type="tns:MemberTypeContextIdentifier" />
    <xs:element minOccurs="0" name="IsSystemRule" type="xs:boolean" />
    <xs:element minOccurs="0" name="RuleActionText" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="RuleConditionText" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="Status" type="tns:BRStatus" />
  </xs:sequence>
</xs:complexType>
```

**AuditInfo**: The [AuditInfo](#) complex type.

**BRActions**: The [ArrayOfBRAction](#) complex type.

**BRConditionTree**: The [BRConditionTreeNode](#) complex type.

**Description**: A description of the business rule.

**Identifier**: The business rule identifier.

**IsSystemRule:** A **Boolean** value that indicates whether the rule has been created by the MDS system.

**RuleActionText:** A string representation of business rule actions that are included in the current business rule.

**RuleConditionText:** A string representation of business rule conditions that are included in the current business rule.

**Status:** The [BRStatus](#) simple type.

#### 2.2.4.68 BusinessRules

The **BusinessRules** complex type specifies containers for conditions and actions.

The following is the XSD schema definition of the **BusinessRules** complex type.

```
<xs:complexType name="BusinessRules">
  <xs:sequence>
    <xs:element minOccurs="0" name="BRActions" nillable="true" type="tns:ArrayOfBRAction"
  />
    <xs:element minOccurs="0" name="BRConditionTreeNodes" nillable="true"
  type="tns:ArrayOfBRConditionTreeNode" />
    <xs:element minOccurs="0" name="BRConditions" nillable="true"
  type="tns:ArrayOfBRCondition" />
    <xs:element minOccurs="0" name="BusinessRules" nillable="true"
  type="tns:ArrayOfBusinessRule" />
  </xs:sequence>
</xs:complexType>
```

**BRActions:** Specifies the [ArrayOfBRAction](#) complex type.

**BRConditionTreeNodes:** Specifies the [ArrayOfBRConditionTreeNode](#) complex type.

**BRConditions:** Specifies the [ArrayOfBRCondition](#) complex type.

**BusinessRules:** Specifies the [ArrayOfBusinessRule](#) complex type.

#### 2.2.4.69 BusinessRulesPalette

The **BusinessRulesPalette** complex type is a collection of all possible actions and conditions that are used for building business rules within the MDS system.

The following is the XSD schema definition of the **BusinessRulesPalette** complex type.

```
<xs:complexType name="BusinessRulesPalette">
  <xs:sequence>
    <xs:element minOccurs="0" name="BRActionGroups" nillable="true"
  type="tns:ArrayOfBRActionGroup" />
    <xs:element minOccurs="0" name="BRConditionGroups" nillable="true"
  type="tns:ArrayOfBRConditionGroup" />
  </xs:sequence>
</xs:complexType>
```

**BRActionGroups:** The [ArrayOfBRActionGroup](#) complex type.

**BRConditionGroups:** The [ArrayOfBRConditionGroup](#) complex type.

#### 2.2.4.70 DerivedHierarchy

The **DerivedHierarchy** complex type specifies an already defined data relationship and prepares that relationship to be displayed in a hierarchical fashion.

The following is the XSD schema definition of the **DerivedHierarchy** complex type.

```
<xs:complexType name="DerivedHierarchy">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfModelContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="FullyQualifiedName" nillable="true"
type="xs:string" />
        <xs:element minOccurs="0" name="Levels" nillable="true"
type="tns:ArrayOfDerivedHierarchyLevel" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**FullyQualifiedName:** Specifies the string value of the fully qualified name of the entity.

**Levels:** Specifies the [ArrayOfDerivedHierarchyLevel](#) complex type.

#### 2.2.4.71 DerivedHierarchyContextIdentifier

The **DerivedHierarchyContextIdentifier** complex type specifies a set of IDs for a master data model object that exists in the context of a derived hierarchy. This complex type includes identifiers for the context of the object, including the parent derived hierarchy and model. This complex type is used by derived hierarchy levels and is an extension of the base type [ModelContextIdentifier](#).

The following is the XSD schema definition of the **DerivedHierarchyContextIdentifier** complex type.

```
<xs:complexType name="DerivedHierarchyContextIdentifier">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:ModelContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="DerivedHierarchyId" nillable="true"
type="tns:Identifier" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**DerivedHierarchyId:** Specifies the [Identifier](#) of the parent derived hierarchy of the object.

## 2.2.4.72 DerivedHierarchyLevel

The **DerivedHierarchyLevel** complex type specifies a single level within the derived hierarchy data relationship tree. **DerivedHierarchyLevel** extends the [MdmDataContractOfDerivedHierarchyContextIdentifier](#) complex type.

The following is the XSD schema definition of the **DerivedHierarchyLevel** complex type.

```
<xs:complexType name="DerivedHierarchyLevel">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfDerivedHierarchyContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="DisplayName" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="ForeignEntityId" nillable="true"
type="tns:Identifier" />
        <xs:element minOccurs="0" name="ForeignId" nillable="true" type="tns:Identifier" />
        <xs:element
xmlns:q41="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="ForeignType" type="q41:HierarchyItemType" />
        <xs:element minOccurs="0" name="IsVisible" type="xs:boolean" />
        <xs:element minOccurs="0" name="LevelNumber" type="xs:int" />
        <xs:element minOccurs="0" name="MemberType" type="tns:MemberType" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**DisplayName**: Specifies the string name to be displayed.

**ForeignEntityID**: Specifies the [Identifier](#) complex type.

**ForeignId**: Specifies the **Identifier** complex type.

**ForeignType**: Specifies the [HierarchyItemType](#) simple type.

**IsVisible**: Specifies a **Boolean** value to express the visibility of the level.

**LevelNumber**: Specifies an integer that represents the depth of the level.

**MemberType**: Specifies the [MemberType](#) simple type.

## 2.2.4.73 Entity

The **Entity** complex type specifies a container for members and their attribute values and explicit hierarchies. **Entity** extends the [MdmDataContractOfModelContextIdentifier](#) complex type.

The following is the XSD schema definition of the **Entity** complex type.

```
<xs:complexType name="Entity">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfModelContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="ExplicitHierarchies" nillable="true"
type="tns:ArrayOfExplicitHierarchy" />
        <xs:element minOccurs="0" name="IsBase" type="xs:boolean" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

        <xs:element minOccurs="0" name="IsFlat" type="xs:boolean" />
        <xs:element minOccurs="0" name="IsSystem" type="xs:boolean" />
        <xs:element minOccurs="0" name="MemberTypes" nillable="true"
type="tns:ArrayOfEntityMemberType" />
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**ExplicitHierarchies:** Specifies the [ArrayOfExplicitHierarchy](#) complex type.

**IsBase:** Specifies a flag that determines whether an entity shows on a model explorer initial screen as a main entity.

**IsFlat:** Specifies a flag that determines whether an entity supports explicit hierarchies.

**IsSystem:** Specifies a flag that indicates whether an entity was created by the MDS system. System entities cannot be deleted.

**MemberType:** Specifies the [ArrayOfEntityMemberType](#) complex type.

#### 2.2.4.74 EntityContextIdentifier

The **EntityContextIdentifier** complex type specifies a set of IDs for a master data model object that exists in the context of an entity. This type includes identifiers for the context of the object, including parent entity and model. An example of an object that has an entity context is an explicit hierarchy.

This complex type is an extension of the [ModelContextIdentifier](#) base type.

The following is the XSD schema definition of the **EntityContextIdentifier** complex type.

```

<xs:complexType name="EntityContextIdentifier">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:ModelContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

**EntityId:** Specifies the [Identifier](#) of the parent entity of the object.

#### 2.2.4.75 EntityMembers

The **EntityMembers** complex type contains a collection of members from a single entity and member type along with their context.

The following is the XSD schema definition of the **EntityMembers** complex type.

```

<xs:complexType name="EntityMembers">
  <xs:sequence>

```

```

    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberType" nillable="true" type="tns:MemberType" />
    <xs:element minOccurs="0" name="Members" nillable="true" type="tns:ArrayOfMember" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**EntityId:** Specifies the [Identifier](#) of the entity for the contained members.

**MemberType:** Specifies the [MemberType](#) simple type.

**Members:** Specifies an [ArrayOfMember](#) that contains a list of members for the identified entity and member type.

**ModelId:** Specifies the **Identifier** of the model for the contained members.

**VersionId:** Specifies the **Identifier** of the version for the contained members.

#### 2.2.4.76 EntityMemberType

The **EntityMemberType** complex type specifies the structure of an entity within MDS, including attributes and attribute groups. **EntityMemberType** extends the [MdmDataContractOfIdentifier](#) complex type.

The following is the XSD schema definition for the **EntityMemberType** complex type.

```

<xs:complexType name="EntityMemberType">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="AttributeGroups" nillable="true"
type="tns:ArrayOfAttributeGroup" />
        <xs:element minOccurs="0" name="Attributes" nillable="true"
type="tns:ArrayOfMetaDataAttribute" />
        <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
        <xs:element minOccurs="0" name="Type" type="tns:MemberType" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

**AttributeGroups:** Specifies the [ArrayOfAttributeGroup](#) complex type.

**Attributes:** Specifies the **ArrayOfMetaDataAttribute** complex type.

**EntityId:** Specifies the [Identifier](#) complex type.

**Type:** Specifies the [MemberType](#) simple type.

#### 2.2.4.77 ExplicitHierarchy

The **ExplicitHierarchy** complex type specifies a parent-child representation that requires that all leaf members be expressed exactly one time.

The following is the XSD schema definition of the **ExplicitHierarchy** complex type.

```
<xs:complexType name="ExplicitHierarchy">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfEntityContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="FullyQualifiedName" nillable="true"
type="xs:string" />
        <xs:element minOccurs="0" name="IsMandatory" type="xs:boolean" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**FullyQualifiedName:** Specifies the fully qualified name for the hierarchy.

**IsMandatory:** Specifies a **Boolean** flag that indicates whether all leaf members are required in the hierarchy. Non-mandatory entities create a special parent member called "unused" that initially holds all leaf members.

#### 2.2.4.78 ExportView

The **ExportView** complex type specifies information that is related to a user-created view within the MDS system. These views are created to provide simplified SQL access to the data that is stored in the MDS system in a number of common formats.

The following is the XSD schema definition of the **ExportView** complex type.

```
<xs:complexType name="ExportView">
  <xs:sequence>
    <xs:element minOccurs="0" name="DerivedHierarchyId" nillable="true"
type="tns:Identifier" />
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="IsDirty" type="xs:boolean" />
    <xs:element minOccurs="0" name="Levels" type="xs:int" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionFlagId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="ViewFormat" type="tns:ExportViewFormat" />
  </xs:sequence>
</xs:complexType>
```

**DerivedHierarchyId:** Specifies the [Identifier](#) of the derived hierarchy that is queried by the export view. This value is populated only for view formats that are specific to derived hierarchies.

**EntityId:** Specifies the **Identifier** of the entity that is queried by the export view.

**Identifier:** Specifies the **Identifier** of the export view.

**IsDirty:** Specifies a **Boolean** that is set to true if the view needs to be re-created due to underlying metadata changes.



**Levels:** Specifies the number of hierarchy levels in the view if the view is a level-based hierarchy view.

**ModelId:** Specifies the **Identifier** of the model that is queried by the export view.

**VersionFlagId:** Specifies the **Identifier** of the version flag that is queried by the export view.

**VersionId:** Specifies the **Identifier** of the version that is queried by the export view.

**ViewFormat:** Specifies the [ExportViewFormat](#) simple type of the export view.

#### 2.2.4.79 FunctionPrivilege

The **FunctionPrivilege** complex type specifies a function privilege security assignment for a user or group.

The following is the XSD schema definition of the **FunctionPrivilege** complex type.

```
<xs:complexType name="FunctionPrivilege">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element
      xmlns:q21="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts"
      minOccurs="0" name="Function" type="q21:FunctionalArea" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="IsAuthorized" type="xs:boolean" />
    <xs:element minOccurs="0" name="PrincipalId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q22="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts"
      minOccurs="0" name="PrincipalType" type="q22:PrincipalType" />
  </xs:sequence>
</xs:complexType>
```

**AuditInfo:** Specifies the [AuditInfo](#) complex type.

**Function:** Specifies the [FunctionalArea](#) that is assigned to the security principal.

**Identifier:** Specifies the [Identifier](#) of the function privilege assignment.

**IsAuthorized:** Specifies a **Boolean** that is set to true if the function is assigned to the principal. Function privileges are either on or off (authorized or not authorized).

**PrincipalId:** Specifies the **Identifier** of the principal in the function privilege assignment.

**PrincipalType:** Specifies the [PrincipalType](#) of the principal in the function privilege assignment.

#### 2.2.4.80 Group

The **Group** complex type specifies a security group that is associated with MDS.

The following is the XSD schema definition of the **Group** complex type.

```
<xs:complexType name="Group">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
  </xs:sequence>
</xs:complexType>
```

```

    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
    <xs:element
      xmlns:q20="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="GroupType" type="q20:GroupType" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="SID" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="SecurityPrivilege" nillable="true"
      type="tns:SecurityPrivileges" />
    <xs:element minOccurs="0" name="UserAssignments" nillable="true"
      type="tns:ArrayOfIdentifier" />
  </xs:sequence>
</xs:complexType>

```

**AuditInfo:** Specifies [AuditInfo](#) complex types.

**Description:** Specifies a description of the security group that is sourced from an Active Directory directory or a local security account manager (SAM).

**GroupType:** Specifies the [GroupType](#) of the security group (Active Directory group or local group).

**Identifier:** Specifies the [Identifier](#) of the security group.

**SID:** Specifies the security identifier (SID) of the group from Windows.

**SecurityPrivilege:** Specifies a [SecurityPrivileges](#) complex type that contains the set of MDS privileges that are assigned to the group.

**UserAssignments:** Specifies an [ArrayOfIdentifier](#) complex type that contains the set of user identifiers that are assigned to the security group.

#### 2.2.4.81 HierarchyMemberPrivilege

The **HierarchyMemberPrivilege** complex type specifies a hierarchy member privilege security assignment for a user or group.

The following is the XSD schema definition of the **HierarchyMemberPrivilege** complex type.

```

<xs:complexType name="HierarchyMemberPrivilege">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q23="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="HierarchyType" type="q23:HierarchyType" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="IsModelAdministrator" type="xs:boolean" />
    <xs:element minOccurs="0" name="MemberId" nillable="true" type="tns:MemberIdentifier"
  />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q24="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="Permission" type="q24:Permission" />
    <xs:element minOccurs="0" name="PrincipalId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q25="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="PrincipalType" type="q25:PrincipalType" />
  </xs:sequence>
</xs:complexType>

```

```

    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**AuditInfo:** Specifies the [AuditInfo](#) complex type.

**EntityId:** Specifies the [Identifier](#) of the entity that is associated with the security privilege of the hierarchy member.

**HierarchyId:** Specifies the **Identifier** of the hierarchy that is associated with the security privilege of the hierarchy member.

**HierarchyType:** Specifies the [HierarchyType](#) (explicit or derived) of the hierarchy that is associated with the security privilege of the hierarchy member.

**Identifier:** Specifies the **Identifier** of the privilege assignment of the hierarchy member.

**IsModelAdministrator:** Specifies a **Boolean** that is set to true if the user's effective permission for the model is model administrator.

**MemberId:** Specifies the **Identifier** of the master data member that is associated with the security privilege of the hierarchy member.

**ModelId:** Specifies the **Identifier** of the model that is associated with the security privilege of the hierarchy member.

**Permission:** Specifies the [Permission](#) that is assigned for the member and security principal.

#### 2.2.4.82 Identifier

The **Identifier** complex type specifies a set of IDs for a master data model object, including a globally unique ID (GUID) and unique name within context.

The following is the XSD schema definition of the **Identifier** complex type.

```

<xs:complexType name="Identifier">
  <xs:sequence>
    <xs:element minOccurs="0" name="Id" type="ser:guid" />
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="InternalId" type="xs:int" />
  </xs:sequence>
</xs:complexType>

```

**Id:** Specifies a GUID that uniquely identifies the object across all instances and contexts.

**Name:** Specifies a descriptive name that uniquely identifies the object within its context only.

**InternalId:** Specifies an integer ID that uniquely identifies an object within an MDS instance. This value **MUST NOT** be used. **Id** **SHOULD** be used instead of **InternalId**.

#### 2.2.4.83 MasterDataCollection

The **MasterDataCollection** complex type specifies a collection member that is a parent of another master data member.

The following is the XSD schema definition of the **MasterDataCollection** complex type.

```
<xs:complexType name="MasterDataCollection">
  <xs:sequence>
    <xs:element minOccurs="0" name="CollectionId" nillable="true"
type="tns:MemberIdentifier" />
    <xs:element minOccurs="0" name="Remove" type="xs:boolean" />
  </xs:sequence>
</xs:complexType>
```

**CollectionId**: Specifies the [MemberIdentifier](#) of the parent collection member.

**Remove**: Specifies a **Boolean** value that is set to true in Update operations to remove a member from the identified parent collection.

#### 2.2.4.84 MDMErrContext

The **MDMErrContext** complex type specifies the context of a particular error. This type identifies the object that was operated on when the error occurred.

The following is the XSD schema definition of the **MDMErrContext** complex type.

```
<xs:complexType name="MDMErrContext">
  <xs:sequence>
    <xs:element minOccurs="0" name="FullyQualifiedName" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Type" type="tns:ObjectType" />
  </xs:sequence>
</xs:complexType>
```

**FullyQualifiedName**: Specifies the fully qualified name of an object (for example, sufficient context to uniquely identify the object).

**Identifier**: Specifies the [Identifier](#) of the object that is involved in the error.

**Type**: Specifies the [ObjectType](#) of the object that is involved in the error.

#### 2.2.4.85 MdmDataContractOfDerivedHierarchyContextIdentifier

The **MdmDataContractOfDerivedHierarchyContextIdentifier** complex type is the specific context that identifies a derived hierarchy in the MDS system.

The following is the XSD schema definition of the **MdmDataContractOfDerivedHierarchyContextIdentifier** complex type.

```
<xs:complexType name="MdmDataContractOfDerivedHierarchyContextIdentifier">
  <xs:annotation>
    <xs:appinfo>
      <GenericType Name="MdmDataContractOf{0}"
Namespace="http://schemas.microsoft.com/office/mdm/2007/11"
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
      <GenericParameter Name="DerivedHierarchyContextIdentifier"
Namespace="http://schemas.microsoft.com/office/mdm/2007/11" />
    </xs:appinfo>
  </xs:annotation>
</xs:complexType>
```

```

        </GenericType>
    </xs:appinfo>
</xs:annotation>
<xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Identifier" nillable="true"
type="tns:DerivedHierarchyContextIdentifier" />
    <xs:element
xmlns:q42="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="Permission" type="q42:PermissionType" />
</xs:sequence>
</xs:complexType>

```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Identifier**: Specifies the [DerivedHierarchyContextIdentifier](#) complex type.

**Permission**: Specifies the [PermissionType](#) simple type.

#### 2.2.4.86 MdmDataContractOfEntityContextIdentifier

The **MdmDataContractOfEntityContextIdentifier** specifies a data contract for the [EntityContextIdentifier](#) complex type.

The following is the XSD schema definition of the **MdmDataContractOfEntityContextIdentifier** complex type.

```

<xs:complexType name="MdmDataContractOfEntityContextIdentifier">
  <xs:annotation>
    <xs:appinfo>
      <GenericType Name="MdmDataContractOf{0}"
Namespace="http://schemas.microsoft.com/office/mdm/2007/11"
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
        <GenericParameter Name="EntityContextIdentifier"
Namespace="http://schemas.microsoft.com/office/mdm/2007/11" />
      </GenericType>
    </xs:appinfo>
  </xs:annotation>
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Identifier" nillable="true"
type="tns:EntityContextIdentifier" />
    <xs:element
xmlns:q43="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="Permission" type="q43:PermissionType" />
  </xs:sequence>
</xs:complexType>

```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Identifier**: Specifies the **EntityContextIdentifier** complex type.

**Permission**: Specifies the [PermissionType](#) simple type.

### 2.2.4.87 MdmDataContractOfIdentifier

The **MdmDataContractOfIdentifier** complex type specifies the data contract for identifiers, including helper types such as [AuditInfo](#) and [Permission](#).

The following is the XSD schema definition for the **MdmDataContractOfIdentifier** complex type.

```
<xs:complexType name="MdmDataContractOfIdentifier">
  <xs:annotation>
    <xs:appinfo>
      <GenericType Name="MdmDataContractOf{0}"
        Namespace="http://schemas.microsoft.com/office/mdm/2007/11"
        xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
        <GenericParameter Name="Identifier"
          Namespace="http://schemas.microsoft.com/office/mdm/2007/11" />
        </GenericType>
      </xs:appinfo>
    </xs:annotation>
    <xs:sequence>
      <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
      <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
      <xs:element
        xmlns:q44="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
          s" minOccurs="0" name="Permission" type="q44:PermissionType" />
    </xs:sequence>
  </xs:complexType>
```

**AuditInfo**: The **AuditInfo** complex type.

**Identifier**: The [Identifier](#) complex type.

**Permission**: The [PermissionType](#) simple type.

### 2.2.4.88 MdmDataContractOfMemberTypeContextIdentifier

The **MdmDataContractOfMemberTypeContextIdentifier** complex type specifies a data contract for the [MemberTypeContextIdentifier](#) complex type.

The following is the XSD schema definition of the **MdmDataContractOfMemberTypeContextIdentifier** complex type.

```
<xs:complexType name="MdmDataContractOfMemberTypeContextIdentifier">
  <xs:annotation>
    <xs:appinfo>
      <GenericType Name="MdmDataContractOf{0}"
        Namespace="http://schemas.microsoft.com/office/mdm/2007/11"
        xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
        <GenericParameter Name="MemberTypeContextIdentifier"
          Namespace="http://schemas.microsoft.com/office/mdm/2007/11" />
        </GenericType>
      </xs:appinfo>
    </xs:annotation>
    <xs:sequence>
      <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
      <xs:element minOccurs="0" name="Identifier" nillable="true"
        type="tns:MemberTypeContextIdentifier" />
    </xs:sequence>
  </xs:complexType>
```

```

    <xs:element
      xmlns:q38="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="Permission" type="q38:PermissionType" />
    </xs:sequence>
  </xs:complexType>

```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Identifier**: Specifies the [Identifier](#) complex type.

**Permission**: Specifies the [Permission](#) simple type.

#### 2.2.4.89 MdmDataContractOfModelContextIdentifier

The **MdmDataContractOfModelContextIdentifier** complex type specifies the context identifier for a specific model in the MDS system.

The following is the XSD schema definition of the **MdmDataContractOfModelContextIdentifier** complex type.

```

<xs:complexType name="MdmDataContractOfModelContextIdentifier">
  <xs:annotation>
    <xs:appinfo>
      <GenericType Name="MdmDataContractOf{0}"
        Namespace="http://schemas.microsoft.com/office/mdm/2007/11"
        xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
        <GenericParameter Name="ModelContextIdentifier"
          Namespace="http://schemas.microsoft.com/office/mdm/2007/11" />
        </GenericType>
      </xs:appinfo>
    </xs:annotation>
    <xs:sequence>
      <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
      <xs:element minOccurs="0" name="Identifier" nillable="true"
        type="tns:ModelContextIdentifier" />
      <xs:element
        xmlns:q40="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
        s" minOccurs="0" name="Permission" type="q40:PermissionType" />
    </xs:sequence>
  </xs:complexType>

```

**ModelContextIdentifier**: The [ModelContextIdentifier](#) complex type.

**AuditInfo**: The [AuditInfo](#) complex type.

**Identifier**: The [Identifier](#) complex type.

**Permission**: The [Permission](#) simple type.

#### 2.2.4.90 MDMErrror

The **MDMErrror** complex type specifies an information container for an error that occurred during the processing of a request.

The following is the XSD schema definition of the **MDMErrror** complex type.

```

<xs:complexType name="MDMError">
  <xs:sequence>
    <xs:element minOccurs="0" name="Code" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="Context" nillable="true" type="tns:MDMErrorContext" />
    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>

```

**Code:** Specifies the error code.

**Context:** Specifies the context of the error as an [MDMErrorContext](#) complex type.

**Description:** Specifies the localized description of the error.

#### 2.2.4.91 Member

The **Member** complex type specifies a master data member or row of data.

The following is the XSD schema definition of the **Member** complex type.

```

<xs:complexType name="Member">
  <xs:sequence>
    <xs:element minOccurs="0" name="Attributes" nillable="true" type="tns:ArrayOfAttribute" />
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Collections" nillable="true" type="tns:ArrayOfMasterDataCollection" />
    <xs:element minOccurs="0" name="MemberId" nillable="true" type="tns:MemberIdentifier" />
    <xs:element minOccurs="0" name="Parents" nillable="true" type="tns:ArrayOfParent" />
    <xs:element xmlns:q5="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts" minOccurs="0" name="SecurityPermission" nillable="true" type="q5:SecurityPermission" />
    <xs:element xmlns:q6="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts" minOccurs="0" name="ValidationStatus" type="q6:ValidationStatus" />
  </xs:sequence>
</xs:complexType>

```

**AuditInfo:** Specifies the [AuditInfo](#) complex type. This property is always read-only.

**Collections:** Specifies an [ArrayOfMasterDataCollection](#) that includes collection type parent members.

**MemberID:** Specifies the [MemberIdentifier](#) of the member.

**Parents:** Specifies an [ArrayOfParent](#) that includes parents of the member from explicit hierarchies.

**SecurityPermission:** Specifies the authorization of the user for the member. This property is always read-only.

**ValidationStatus:** Specifies the [ValidationStatus](#) complex type. This property is always read-only.



### 2.2.4.92 MemberIdentifier

The **MemberIdentifier** complex type specifies a set of IDs for a master data member, including the code and name of the member and the member type.

This complex type is an extension of the base type [Identifier](#). In this case, the inherited ID property MUST NOT be used.

The following is the XSD schema definition of the **MemberIdentifier** complex type.

```
<xs:complexType name="MemberIdentifier">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:Identifier">
      <xs:sequence>
        <xs:element name="Code" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="MemberType" type="tns:MemberType" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**Code:** Specifies the user key of the master data member that is unique within the context of the entity.

**MemberType:** Specifies the [MemberType](#) simple type.

### 2.2.4.93 Metadata

The **Metadata** complex type specifies a superset of all container objects within the MDS system.

The following is the XSD schema definition of the **Metadata** complex type.

```
<xs:complexType name="Metadata">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeGroups" nillable="true"
type="tns:ArrayOfAttributeGroup" />
    <xs:element minOccurs="0" name="Attributes" nillable="true"
type="tns:ArrayOfMetaDataAttribute" />
    <xs:element minOccurs="0" name="DerivedHierarchies" nillable="true"
type="tns:ArrayOfDerivedHierarchy" />
    <xs:element minOccurs="0" name="DerivedHierarchyLevels" nillable="true"
type="tns:ArrayOfDerivedHierarchyLevel" />
    <xs:element minOccurs="0" name="Entities" nillable="true" type="tns:ArrayOfEntity" />
    <xs:element minOccurs="0" name="ExplicitHierarchies" nillable="true"
type="tns:ArrayOfExplicitHierarchy" />
    <xs:element minOccurs="0" name="Models" nillable="true" type="tns:ArrayOfModel" />
    <xs:element minOccurs="0" name="VersionFlags" nillable="true"
type="tns:ArrayOfVersionFlag" />
    <xs:element minOccurs="0" name="Versions" nillable="true" type="tns:ArrayOfVersion" />
  </xs:sequence>
</xs:complexType>
```

**AttributeGroups:** Specifies the [ArrayOfAttributeGroup](#) complex type.

**Attributes:** Specifies the [ArrayOfMetaDataAttribute](#) complex type.

**DerivedHierarchies:** Specifies the [ArrayOfDerivedHierarchy](#) complex type.

**DerivedHierarchyLevels:** Specifies the [ArrayOfDerivedHierarchyLevel](#) complex type.

**Entities:** Specifies the [ArrayOfEntity](#) complex type.

**ExplicitHierarchies:** Specifies the [ArrayOfExplicitHierarchy](#) complex type.

**Models:** Specifies the [ArrayOfModel](#) complex type.

**VersionFlags:** Specifies the [ArrayOfVersionFlag](#) complex type.

**Versions:** Specifies the [ArrayOfVersion](#) complex type.

#### 2.2.4.94 MemberTypeContextIdentifier

The **MemberTypeContextIdentifier** complex type specifies a set of IDs for a master data model object that exists in the context of an entity and member type. This type includes identifiers for the context of the object, including parent entity, member type, and model. Examples of objects that have an entity and member type context are attributes, attribute groups, and business rules.

This complex type is an extension of the base type [EntityContextIdentifier](#).

The following is the XSD schema definition of the **MemberTypeContextIdentifier** complex type.

```
<xs:complexType name="MemberTypeContextIdentifier">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:EntityContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="MemberType" type="tns:MemberType" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

**MemberType:** Specifies the [MemberType](#) simple type.

#### 2.2.4.95 Model

The **Model** complex type specifies the highest level of data organization. **Model** contains all the members, entities, attributes, hierarchy relationships, collections, business rules, and versions that describe an aspect of the business. **Model** extends the [MdmDataContractOfIdentifier](#) complex type.

The following is the XSD schema definition of the **Model** complex type.

```
<xs:complexType name="Model">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="DerivedHierarchies" nillable="true"
          type="tns:ArrayOfDerivedHierarchy" />
        <xs:element minOccurs="0" name="Entities" nillable="true" type="tns:ArrayOfEntity"
          />
        <xs:element minOccurs="0" name="ExplicitHierarchies" nillable="true"
          type="tns:ArrayOfExplicitHierarchy" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

        <xs:element minOccurs="0" name="IsAdministrator" type="xs:boolean" />
        <xs:element minOccurs="0" name="IsSystem" type="xs:boolean" />
        <xs:element minOccurs="0" name="VersionFlags" nillable="true"
type="tns:ArrayOfVersionFlag" />
        <xs:element minOccurs="0" name="Versions" nillable="true" type="tns:ArrayOfVersion"
/>
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**DerivedHierarchies:** Specifies the [ArrayOfDerivedHierarchy](#) complex type.

**Entities:** Specifies the [ArrayOfEntity](#) complex type.

**ExplicitHierarchies:** Specifies the [ArrayOfExplicitHierarchy](#) complex type.

**IsAdministrator:** Specifies whether the calling user is an administrator of the model.

**IsSystem:** Specifies a **Boolean** to determine whether this model a system-generated model.

**VersionFlags:** Specifies the [ArrayOfVersionFlag](#) complex type.

**Versions:** Specifies the [ArrayOfVersion](#) complex type.

#### 2.2.4.96 ModelContextIdentifier

The **ModelContextIdentifier** complex type specifies a set of IDs for a master data model object that exists in the context of a model. This type includes identifiers for the context of the object (the parent model). Examples of objects that have a model context are entities, versions, version flags, and derived hierarchies.

This complex type is an extension of the base type [Identifier](#).

The following is the XSD schema definition of the **ModelContextIdentifier** complex type.

```

<xs:complexType name="ModelContextIdentifier">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:Identifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

**ModelId:** Specifies the **Identifier** of the parent entity of the object.

#### 2.2.4.97 ModelPrivilege

The **ModelPrivilege** complex type specifies a model/object level privilege within the MDS system.

The following is the XSD schema definition of the **ModelPrivilege** complex type.

```

<xs:complexType name="ModelPrivilege">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="IsModelAdministrator" type="xs:boolean" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="ObjectId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q26="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="ObjectType" type="q26:ModelObjectTypes" />
    <xs:element
      xmlns:q27="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="Permission" type="q27:Permission" />
    <xs:element minOccurs="0" name="PrincipalId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q28="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="PrincipalType" type="q28:PrincipalType" />
  </xs:sequence>
</xs:complexType>

```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Identifier**: Specifies the [Identifier](#) complex type.

**IsModelAdministrator**: Specifies a **Boolean** value that indicates model administrator status.

**ModelId**: Specifies the model to be the privileged **Identifier** complex type.

**ObjectId**: Specifies the **Identifier** complex type.

**ObjectType**: Specifies the [ModelObjectTypes](#) simple type.

**Permission**: Specifies the [Permission](#) simple type.

**PrincipalId**: Specifies the **Identifier** complex type.

**PrincipalType**: Specifies the [PrincipalType](#) simple type.

#### 2.2.4.98 ModelsResultCriteria

The **ModelsResultCriteria** complex type MUST NOT be used.

This complex type specifies the criteria with which to configure **ModelsResults** responses.

The following is the XSD schema definition of the **ModelsResultCriteria** complex type.

```

<xs:complexType name="ModelsResultCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="IncludeCollectionMembers" type="xs:boolean" />
    <xs:element minOccurs="0" name="IncludeConsolidatedMembers" type="xs:boolean" />
    <xs:element minOccurs="0" name="IncludeLeafMembers" type="xs:boolean" />
  </xs:sequence>
</xs:complexType>

```

### 2.2.4.99 ModelsGetCriteria

The **ModelsGetCriteria** complex type MUST NOT be used.

This complex type specifies the selection criteria for a [ModelMembersGet](#) operation.

The following is the XSD schema definition of the **ModelsGetCriteria** complex type.

```
<xs:complexType name="ModelsGetCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Entities" nillable="true" type="tns:ArrayOfIdentifier"
  />
    <xs:element minOccurs="0" name="Models" nillable="true" type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="Versions" nillable="true" type="tns:ArrayOfIdentifier"
  />
  </xs:sequence>
</xs:complexType>
```

### 2.2.4.100 OperationResult

The **OperationResult** complex type specifies a standard container for all operation responses that includes a list of errors.

The following is the XSD schema definition of the **OperationResult** complex type.

```
<xs:complexType name="OperationResult">
  <xs:sequence>
    <xs:element minOccurs="0" name="Errors" nillable="true" type="tns:ArrayOfMDMError" />
    <xs:element minOccurs="0" name="RequestId" type="ser:guid" />
  </xs:sequence>
</xs:complexType>
```

**Errors:** Specifies an [ArrayOfMDMError](#) complex type that contains any and all errors that occurred during the operation request.

**RequestId:** This value MUST NOT be used.

### 2.2.4.101 Parent

The **Parent** complex type specifies a member that is a parent (or sometimes a prior sibling) of another master data member within an explicit hierarchy.

The following is the XSD schema definition of the **Parent** complex type.

```
<xs:complexType name="Parent">
  <xs:sequence>
    <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="ParentId" nillable="true" type="tns:MemberIdentifier"
  />
    <xs:element
      xmlns:q7="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts"
      minOccurs="0" name="RelationshipType" nillable="true" type="q7:RelationshipType" />
  </xs:sequence>
```

</xs:complexType>

**HierarchyId**: Specifies the [Identifier](#) of the parent member's explicit hierarchy.

**ParentId**: Specifies the [MemberIdentifier](#) of the parent member in a hierarchy.

**RelationshipType**: Specifies the [RelationshipType](#) of the member that is represented by **Parent**. The relationship can be a sibling relationship and a parent relationship when **Parent** is used in a Create operation or an Update operation.

#### 2.2.4.102 ParentChild

The **ParentChild** complex type specifies a parent-child relationship record from a hierarchy.

The following is the XSD schema definition of the **ParentChild** complex type.

```
<xs:complexType name="ParentChild">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Child" nillable="true" type="tns:MemberIdentifier" />
    <xs:element minOccurs="0" name="ChildEntityId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q10="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="ChildPermission" type="q10:SecurityPermission" />
    <xs:element minOccurs="0" name="Parent" nillable="true" type="tns:MemberIdentifier" />
    <xs:element minOccurs="0" name="ParentEntityId" nillable="true" type="tns:Identifier"
    />
    <xs:element
      xmlns:q11="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="ParentPermission" type="q11:SecurityPermission" />
    <xs:element minOccurs="0" name="RelationshipId" nillable="true" type="tns:Identifier"
    />
    <xs:element
      xmlns:q12="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="RelationshipType" type="q12:HierarchyItemType" />
    <xs:element minOccurs="0" name="SortOrder" type="xs:int" />
  </xs:sequence>
</xs:complexType>
```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Child**: Specifies the [MemberIdentifier](#) of the child member in the relationship.

**ChildEntityId**: Specifies the [Identifier](#) of the child member's entity.

**Parent**: Specifies the **MemberIdentifier** of the parent member in the relationship.

**ParentEntityId**: Specifies the **Identifier** of the parent member's entity.

**ParentPermission**: Specifies the [SecurityPermission](#) of the user for the parent member.

**RelationshipId**: Specifies the **Identifier** of the object (attribute or hierarchy) that associates one node with another.

**SortOrder**: Specifies an integer that represents the order of the child member among its siblings, relative to the parent.

### 2.2.4.103 ResultOptions

The **ResultOptions** complex type specifies a collection of objects and specifies the types of result to return for each object.

The following is the XSD schema definition of the **ResultOptions** complex type.

```
<xs:complexType name="ResultOptions">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeGroups" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Attributes" type="tns:ResultType" />
    <xs:element minOccurs="0" name="DerivedHierarchies" type="tns:ResultType" />
    <xs:element minOccurs="0" name="DerivedHierarchyLevels" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Entities" type="tns:ResultType" />
    <xs:element minOccurs="0" name="ExplicitHierarchies" type="tns:ResultType" />
    <xs:element minOccurs="0" name="MemberTypes" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Models" type="tns:ResultType" />
    <xs:element minOccurs="0" name="VersionFlags" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Versions" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>
```

**AttributeGroups:** Specifies the [ResultType](#) simple type.

**Attributes:** Specifies the **ResultType** simple type.

**DerivedHierarchies:** Specifies the **ResultType** simple type.

**DerivedHierarchyLevels:** Specifies the **ResultType** simple type.

**Entities:** Specifies the **ResultType** simple type.

**ExplicitHierarchies:** Specifies the **ResultType** simple type.

**MemberTypes:** Specifies the **ResultType** simple type.

**Models:** Specifies the **ResultType** simple type.

**VersionFlags:** Specifies the **ResultType** simple type.

**Versions:** Specifies the **ResultType** simple type.

### 2.2.4.104 SecurityPrincipalCriteria

The **SecurityPrincipalCriteria** complex type specifies security information to provide in the responses to the MDS system.

The following is the XSD schema definition of the **SecurityPrincipalCriteria** complex type.

```
<xs:complexType name="SecurityPrincipalCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="All" type="xs:boolean" />
    <xs:element minOccurs="0" name="FuntionPrivilege" type="tns:ResultType" />
    <xs:element minOccurs="0" name="HierarchyMemberPrivilege" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>
```

```

    <xs:element minOccurs="0" name="Identifiers" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="ModelPrivilege" type="tns:ResultType" />
    <xs:element minOccurs="0" name="ResultType" type="tns:ResultType" />
    <xs:element
xmlns:q30="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="SecurityResolutionType" type="q30:SecurityResolutionType" />
    <xs:element
xmlns:q31="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="Type" type="q31:PrincipalType" />
  </xs:sequence>
</xs:complexType>

```

**All:** Specifies a **Boolean** value that is used to return all principal items in a response.

**FunctionPrivilege:** Specifies the [ResultType](#) simple type.

**HierarchyMemberPrivilege:** Specifies the **ResultType** simple type.

**Identifiers:** Specifies the [ArrayOfIdentifier](#) complex type.

**ModelPrivilege:** Specifies the **ResultType** simple type.

**ResultType:** Specifies the **ResultType** simple type.

**SecurityResolutionType:** Specifies the [SecurityResolutionType](#) simple type.

**Type:** Specifies the [PrincipalType](#) simple type.

#### 2.2.4.105 SecurityPrincipals

The **SecurityPrincipals** complex type specifies a set of users and user groups.

The following is the XSD schema definition of the **SecurityPrincipals** complex type.

```

<xs:complexType name="SecurityPrincipals">
  <xs:sequence>
    <xs:element minOccurs="0" name="Groups" nillable="true" type="tns:ArrayOfGroup" />
    <xs:element minOccurs="0" name="Users" nillable="true" type="tns:ArrayOfUser" />
  </xs:sequence>
</xs:complexType>

```

**Groups:** Specifies an [ArrayOfGroup](#) complex type that contains security groups.

**Users:** Specifies an [ArrayOfUser](#) complex type that contains security users.

#### 2.2.4.106 SecurityPrivileges

The **SecurityPrivileges** complex type specifies a set of security privilege assignments at the function, model object, and member levels.

The following is the XSD schema definition of the **SecurityPrivileges** complex type.

```

<xs:complexType name="SecurityPrivileges">

```



```

    <xs:sequence>
      <xs:element minOccurs="0" name="FunctionPrivileges" nillable="true"
        type="tns:ArrayOfFunctionPrivilege" />
      <xs:element minOccurs="0" name="HierarchyMemberPrivileges" nillable="true"
        type="tns:ArrayOfHierarchyMemberPrivilege" />
      <xs:element minOccurs="0" name="ModelPrivileges" nillable="true"
        type="tns:ArrayOfModelPrivilege" />
    </xs:sequence>
  </xs:complexType>

```

**FunctionPrivileges:** Specifies an [ArrayOfFunctionPrivilege](#) complex type.

**HierarchyMemberPrivileges:** Specifies an [ArrayOfHierarchyMemberPrivilege](#) complex type.

**ModelPrivileges:** Specifies an [ArrayOfModelPrivilege](#) complex type.

#### 2.2.4.107 StagingBatch

The **StagingBatch** complex type specifies a container for a staging batch, including the batch identification, errors, statistics, and members.

The following is the XSD schema definition of the **StagingBatch** complex type.

```

<xs:complexType name="StagingBatch">
  <xs:sequence>
    <xs:element minOccurs="0" name="BatchId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Errors" nillable="true"
      type="tns:ArrayOfStagingBatchError" />
    <xs:element minOccurs="0" name="Information" nillable="true"
      type="tns:StagingBatchInformation" />
    <xs:element minOccurs="0" name="Members" nillable="true"
      type="tns:ArrayOfEntityMembers" />
  </xs:sequence>
</xs:complexType>

```

**BatchId:** Specifies an [Identifier](#) that uniquely identifies the batch.

**Errors:** Specifies the [ArrayOfStagingBatchError](#) complex type.

**Information:** Specifies the [StagingBatchInformation](#) complex type.

**Members:** Specifies the [ArrayOfEntityMembers](#) complex type.

#### 2.2.4.108 StagingBatchError

The **StagingBatchError** complex type specifies a process error that is associated with a member in a staging batch.

The following is the XSD schema definition of the **StagingBatchError** complex type.

```

<xs:complexType name="StagingBatchError">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

```

    <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberId" nillable="true" type="tns:MemberIdentifier"
  />
    <xs:element minOccurs="0" name="Message" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**AttributeId:** Specifies the [Identifier](#) of the attribute that is being updated. This property is applicable only for attribute value updates.

**EntityId:** Specifies the **Identifier** of the entity that is being updated.

**HierarchyId:** Specifies the **Identifier** of the hierarchy that is being updated. This property is applicable only for hierarchy parent or sibling updates.

**MemberId:** Specifies the [MemberIdentifier](#) of the attribute that is being updated.

**Message:** Specifies the description of the error.

**VersionId:** Specifies the **Identifier** of the version that is being updated.

#### 2.2.4.109 StagingBatchInformation

The **StagingBatchInformation** complex type specifies a read-only container for statistical information about a staging batch, including row counts, data source, and prior batch.

The following is the XSD schema definition of the **StagingBatchInformation** complex type.

```

<xs:complexType name="StagingBatchInformation">
  <xs:sequence>
    <xs:element minOccurs="0" name="BatchId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberAttributeErrorCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberAttributeTotalCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberErrorCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberRelationshipErrorCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberRelationshipTotalCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberTotalCount" type="xs:int" />
    <xs:element minOccurs="0" name="PriorBatchId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="SourceId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**BatchId:** Specifies the [Identifier](#) of the staging batch.

**MemberAttributeErrorCount:** Specifies the number of attribute updates that resulted in errors.

**MemberAttributeTotalCount:** Specifies the number of attribute updates that were attempted.

**MemberErrorCount:** Specifies the number of member Create operations that resulted in errors.

**MemberTotalCount:** Specifies the number of member Create operations that were attempted.

**MemberRelationshipErrorCount:** Specifies the number of hierarchy moves that resulted in errors.

**MemberRelationshipTotalCount:** Specifies the number of hierarchy moves that were attempted.

**PriorBatchId:** Specifies the **Identifier** of a prior attempted batch if the current batch is a reload of the prior batch's corrected error records.

**SourceId:** Specifies an optional **Identifier** to associate the batch with a source system.

#### 2.2.4.110 StagingUnbatchedInformation

The **StagingUnbatchedInformation** complex type specifies a read-only container for counts of unbatched staging records for a model.

The following is the XSD schema definition of the **StagingUnbatchedInformation** complex type.

```
<xs:complexType name="StagingUnbatchedInformation">
  <xs:sequence>
    <xs:element minOccurs="0" name="MemberAttributeCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberCount" type="xs:int" />
    <xs:element minOccurs="0" name="MemberRelationshipCount" type="xs:int" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**MemberAttributeCount:** Specifies the number of unbatched staging records for attribute updates.

**MemberCount:** Specifies the number of unbatched staging records for member creations.

**MemberRelationshipCount:** Specifies the number of unbatched staging records for hierarchy moves.

**ModelId:** Specifies the [Identifier](#) of the target model for the unbatched staging records.

#### 2.2.4.111 SystemSetting

The **SystemSetting** complex type specifies a single setting within the MDM system. These settings SHOULD be a member of a [SystemSettingGroup](#).

The following is the XSD schema definition of the **SystemSetting** complex type.

```
<xs:complexType name="SystemSetting">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="DataType" type="tns:AttributeDataType" />
        <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="DisplayName" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="DisplaySequence" type="xs:int" />
        <xs:element minOccurs="0" name="IsVisible" type="xs:boolean" />
        <xs:element minOccurs="0" name="MaxValue" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="MinValue" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="SettingType" type="tns:AttributeType" />
        <xs:element minOccurs="0" name="SettingValue" nillable="true" type="xs:string" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```

        <xs:element minOccurs="0" name="SystemDomainList" nillable="true"
type="tns:SystemDomainList" />
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**DataType:** The **AttributeDataType** simple type.

**Description:** A string that represents the long description of the setting.

**IsVisible:** A **Boolean** flag that determines whether the setting is visible in the MDS configuration screen.

**MaxValue:** A string that constrains the maximum possible value for the setting.

**MinValue:** A string that constrains the minimum possible value for the setting.

**SettingType:** The [AttributeType](#) simple type.

**SettingValue:** The string value of the setting.

**SystemDomainList:** The system domain list.

#### 2.2.4.112 SystemSettingGroup

The **SystemSettingGroup** complex type specifies a group of related system settings that manage system level functionality within MDS.

The following is the XSD schema definition of the **SystemSettingGroup** complex type.

```

<xs:complexType name="SystemSettingGroup">
  <xs:sequence>
    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="DisplayName" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="DisplaySequence" type="xs:int" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="SystemSettings" nillable="true"
type="tns:ArrayOfSystemSetting" />
  </xs:sequence>
</xs:complexType>

```

**Description:** Specifies a string description for the setting group.

**DisplayName:** Specifies a string display name for the group.

**DisplaySequence:** Specifies the sequence in which the setting groups are most logically displayed.

**Identifier:** Specifies the [Identifier](#) complex type.

**SystemSettings:** Specifies the [ArrayOfSystemSetting](#) complex type.

#### 2.2.4.113 Transaction

The **Transaction** complex type specifies a master data change transaction.

The following is the XSD schema definition of the **Transaction** complex type.

```
<xs:complexType name="Transaction">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Date" type="xs:dateTime" />
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="ExplicitHierarchyId" nillable="true"
type="tns:Identifier" />
    <xs:element minOccurs="0" name="Id" type="xs:int" />
    <xs:element minOccurs="0" name="MemberId" nillable="true" type="tns:MemberIdentifier"
/>
    <xs:element minOccurs="0" name="MemberType" type="tns:MemberType" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="NewValue" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="PriorValue" nillable="true" type="xs:string" />
    <xs:element
xmlns:q18="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="TransactionType" type="q18:TransactionType" />
    <xs:element minOccurs="0" name="UserId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**AttributeId:** Specifies the [Identifier](#) of the attribute that is updated in the transaction (if applicable).

**Date:** Specifies the **DateTime** of the transaction.

**EntityId:** Specifies the **Identifier** of the entity that is updated in the transaction.

**ExplicitHierarchyId:** Specifies the **Identifier** of the explicit hierarchy that is updated in the transaction (if applicable).

**Id:** Specifies the integer ID of the transaction.

**MemberId:** Specifies the **Identifier** of the master data member that is updated in the transaction.

**MemberType:** Specifies the [MemberType](#) simple type.

**ModelId:** Specifies the **Identifier** of the model that is updated in the transaction.

**NewValue:** Specifies the new value that is created by the transaction.

**PriorValue:** Specifies the old value that is replaced by the transaction.

**TransactionType:** Specifies the [TransactionType](#) of the transaction.

**UserId:** Specifies the **Identifier** of the user who created the transaction.

**VersionId:** Specifies the **Identifier** of the version that is updated in the transaction.

#### 2.2.4.114 User

The **User** complex type specifies an Active Directory user who has specific privileges assigned. These privileges were either inherited from an Active Directory group or directly assigned.

The following is the XSD schema definition of the **User** complex type.

```
<xs:complexType name="User">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="DisplayName" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="EmailAddress" nillable="true" type="xs:string" />
    <xs:element
      xmlns:q29="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="EmailFormat" type="q29:EmailFormat" />
    <xs:element minOccurs="0" name="GroupPrivileges" nillable="true"
      type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="Identifier" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="LastLogOn" type="xs:dateTime" />
    <xs:element minOccurs="0" name="LoggedIn" type="xs:boolean" />
    <xs:element minOccurs="0" name="SID" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="SecurityPrivilege" nillable="true"
      type="tns:SecurityPrivileges" />
  </xs:sequence>
</xs:complexType>
```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**Description**: Specifies the description of the user.

**DisplayName**: Specifies the display name of the user.

**EmailAddress**: Specifies a valid e-mail address that is associated with the user.

**EmailFormat**: Specifies the [EmailFormat](#) simple type.

**GroupPrivileges**: Specifies the [ArrayOfIdentifier](#) complex type.

**Identifier**: Specifies the [Identifier](#) complex type.

**LastLogOn**: Specifies the date and time of the last logon.

**SID**: Specifies the internal security ID.

**SecurityPrivilege**: Specifies the [SecurityPrivileges](#) complex type.

#### 2.2.4.115 ValidationIssue

The **ValidationIssue** complex type specifies a validation issue that is recorded against a master data member and attribute based on a validation business rule.

The following is the XSD schema definition of the **ValidationIssue** complex type.

```
<xs:complexType name="ValidationIssue">
  <xs:sequence>
    <xs:element minOccurs="0" name="AuditInfo" nillable="true" type="tns:AuditInfo" />
    <xs:element minOccurs="0" name="BusinessRuleId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
  <xs:element minOccurs="0" name="BusinessRuleItemId" nillable="true"
    type="tns:Identifier" />
</xs:complexType>
```

```

<xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
<xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
<xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
<xs:element minOccurs="0" name="Id" type="xs:int" />
<xs:element minOccurs="0" name="MemberId" nillable="true" type="tns:MemberIdentifier"
/>

<xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
<xs:element minOccurs="0" name="NotificationSent" type="xs:boolean" />
<xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
</xs:sequence>
</xs:complexType>

```

**AuditInfo**: Specifies the [AuditInfo](#) complex type.

**BusinessRuleId**: Specifies the [Identifier](#) of the business rule that created the validation issue.

**BusinessRuleItemId**: Specifies the **Identifier** of the action in the business rule that created the validation issue.

**Description**: Specifies the description of the business rule issue.

**EntityId**: Specifies the **Identifier** of the entity that is associated with the validation issue.

**HierarchyId**: Specifies the **Identifier** of the hierarchy that is associated with the validation issue (if applicable).

**Id**: Specifies the **Identifier** of the validation issue.

**MemberId**: Specifies the [MemberIdentifier](#) of the master data member that is associated with the validation issue.

**ModelId**: Specifies the **Identifier** of the model that is associated with the validation issue.

**NotificationSent**: Specifies a **Boolean** that is set to true if a notification has been sent for the validation issue.

**VersionId**: Specifies the **Identifier** of the version that is associated with the validation issue.

#### 2.2.4.116 Version

The **Version** complex type specifies a snapshot that contains all model members, attributes, hierarchies, and collections for a model, usually denoting a specific time period. **Version** extends the [MdmDataContractOfModelContextIdentifier](#) complex type.

The following is the XSD schema definition of the **Version** complex type.

```

<xs:complexType name="Version">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfModelContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="CopiedFromVersionId" nillable="true"
type="tns:Identifier" />
        <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
        <xs:element
xmlns:q45="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="ValidationStatus" type="q45:VersionValidationStatus" />

```

```

        <xs:element minOccurs="0" name="VersionFlagId" nillable="true"
type="tns:Identifier" />
        <xs:element minOccurs="0" name="VersionNumber" type="xs:int" />
        <xs:element
xmlns:q46="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="VersionStatus" type="q46:VersionStatus" />
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**CopiedFromVersionId:** Specifies the [Identifier](#) complex type.

**Description:** Specifies a string description of the version.

**ValidationStatus:** Specifies the cumulative business rule evaluation status of the version.

**VersionFlagId:** Specifies the **Identifier** complex type.

**VersionNumber:** Specifies the integer identifier for the version. This value is set by the system.

**VersionStatus:** Specifies the [VersionStatus](#) simple type.

#### 2.2.4.117 VersionFlag

The **VersionFlag** complex type specifies tags that provide a standard identifier that can be attached to a version to reduce integration rework. These identifiers can be limited to only committed versions or can be available to all versions based on a **Boolean** setting.

The following is the XSD schema definition of the **VersionFlag** complex type.

```

<xs:complexType name="VersionFlag">
  <xs:complexContent mixed="false">
    <xs:extension base="tns:MdmDataContractOfModelContextIdentifier">
      <xs:sequence>
        <xs:element minOccurs="0" name="AssignedVersionId" nillable="true"
type="tns:Identifier" />
        <xs:element minOccurs="0" name="Description" nillable="true" type="xs:string" />
        <xs:element minOccurs="0" name="IsCommittedOnly" type="xs:boolean" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

**AssignedVersionId:** Specifies the [Identifier](#) complex type.

**Description:** Specifies a string description of the version flag.

**IsCommittedOnly:** Specifies a **Boolean** flag that indicates the type of version that this flag can identify.



## 2.2.5 Simple Types

The following table summarizes the set of common XML schema simple type definitions that are defined by this specification. XML schema simple type definitions that are specific to a particular operation are described with the operation.

Simple type	Description
<b>AttributeDataType</b>	This type MUST NOT be used.
<a href="#">AttributeType</a>	Specifies the type of an attribute.
<a href="#">AttributeValueType</a>	Specifies the data type of an attribute.
<a href="#">BREntityMemberType</a>	Specifies the type of entity member that is associated with a business rule.
<a href="#">BRItemType</a>	Specifies the selected business rule condition or action.
<a href="#">BRPropertyName</a>	Specifies the name that identifies a property within a business rule component.
<a href="#">BRStatus</a>	Specifies the update and publication status of a business rule.
<a href="#">DisplayType</a>	Specifies the chosen display format for domain-based attribute (DBA) columns [Code, Code {Name}, Name {Code}].
<a href="#">EmailFormat</a>	Specifies the preferred e-mail delivery format that is associated with a user.
<a href="#">ExportViewFormat</a>	Specifies the type of export view format. Export views are available in a known set of standard formats.
<a href="#">FunctionalArea</a>	Specifies the MDS application functional area. Functional areas are used for assigning functional security authorizations.
<a href="#">GroupType</a>	Specifies the type (source) of a security group.
<a href="#">HierarchyItemType</a>	Specifies the type of component that is used by a level of a derived hierarchy.
<a href="#">HierarchyType</a>	Specifies the type of hierarchy construct.
<a href="#">LogicalOperator</a>	Specifies the logical operator that is used to join multiple business rule conditions.
<a href="#">MemberKeyLookupType</a>	Specifies the type of key that is supplied in a member lookup: the member code or internal integer ID.
<a href="#">MemberReturnOptions</a>	Specifies which member data is returned when querying master data members: the data, the row counts, or both.
<a href="#">MemberType</a>	Specifies the type of member record within an entity.
<a href="#">ModelObjectTypes</a>	Specifies the type of master data model object (metadata only).
<a href="#">ObjectType</a>	Specifies the type of master data model object.
<a href="#">Permission</a>	Specifies the permission that is assigned to a principal for accessing an MDS function, object, or data member.
<a href="#">PermissionType</a>	Specifies the effective permission that is assigned to a principal for accessing an MDS object.

Simple type	Description
<a href="#">PrincipalType</a>	Specifies the type of security principal (user or group).
<a href="#">RelationshipType</a>	Specifies the type of hierarchy relationship between members.
<a href="#">ResultType</a>	Specifies the level of detail to return for model object queries. The result type is used in association with a particular object type.
<a href="#">SearchOption</a>	Specifies the scope of metadata objects to be searched. The <b>SearchOption</b> simple type allows the exclusion or inclusion of user-created objects and system objects.
<a href="#">SecurityPermission</a>	Specifies the effective security permission for a user of an MDS object.
<a href="#">SecurityResolutionType</a>	Specifies the resolution specification when returning security permissions. Permissions may be retrieved as they were assigned or in a net-effective list of permissions.
<a href="#">SortDirection</a>	Specifies the sort direction of a sorted column.
<a href="#">StagingBatchStatus</a>	Specifies the processing status of a staging (import) batch.
<a href="#">StagingDataStatus</a>	Specifies a status that indicates the success or failure of staging records.
<a href="#">SystemPropertyType</a>	Specifies the identifying name of one of the available system properties.
<a href="#">TransactionType</a>	Specifies the type of member change that is identified in a transaction.
<a href="#">ValidationStatus</a>	Specifies the validation status of a master data member.
<a href="#">VersionStatus</a>	Specifies the status of a version.
<a href="#">VersionValidationStatus</a>	Specifies the validation status of a version.

### 2.2.5.1 AttributeType

The **AttributeType** simple type specifies the type of an attribute.

The following is the XSD schema definition of the **AttributeType** simple type.

```
<xs:simpleType name="AttributeType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="FreeForm" />
    <xs:enumeration value="Domain" />
    <xs:enumeration value="System" />
    <xs:enumeration value="File" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The type of attribute is unspecified.

Value	Meaning
FreeForm	The type is a free-form attribute (text, numeric, or date).
Domain	The type is a domain-based attribute (reference to an entity member).
System	The type is a standard system attribute.
File	The type is a file storage attribute.

### 2.2.5.2 AttributeValueType

The **AttributeValueType** simple type specifies the data type of an attribute.

The following is the XSD schema definition of the **AttributeValueType** simple type.

```
<xs:simpleType name="AttributeValueType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="String" />
    <xs:enumeration value="Number" />
    <xs:enumeration value="DateTime" />
    <xs:enumeration value="Domain" />
    <xs:enumeration value="File" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The type of attribute value is unspecified.
String	The type is a text string value.
Number	The type is a number value.
DateTime	The type is a date and time value.
Domain	The type is a domain-based value.
File	The type is a file (BLOB) value.

### 2.2.5.3 BREntityMemberType

The **BREntityMemberType** simple type specifies the type of entity member that is associated with a business rule.

The following is the XSD schema definition of the **BREntityMemberType** simple type.

```
<xs:simpleType name="BREntityMemberType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="Leaf" />
  </xs:restriction>
</xs:simpleType>
```

```

    <xs:enumeration value="Consolidated" />
    <xs:enumeration value="Collection" />
  </xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The member type is unspecified.
Leaf	The members are leaf members. These members do not have children in explicit hierarchies.
Consolidated	The members are consolidated members that participate in explicit hierarchies. These members may have children in explicit hierarchies.
Collection	The members are collection members.

#### 2.2.5.4 BRItem Type

The **BRItem** simple type specifies the selected business rule condition or action.

The following is the XSD schema definition of the **BRItem** simple type.

```

<xs:simpleType name="BRItem" base="xs:string">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="IsEqual" />
    <xs:enumeration value="IsNotEqual" />
    <xs:enumeration value="Contains" />
    <xs:enumeration value="StartsWith" />
    <xs:enumeration value="EndsWith" />
    <xs:enumeration value="ContainsSubset" />
    <xs:enumeration value="IsGreaterThan" />
    <xs:enumeration value="IsGreaterThanOrEqual" />
    <xs:enumeration value="IsLessThan" />
    <xs:enumeration value="IsLessThanOrEqual" />
    <xs:enumeration value="IsBetween" />
    <xs:enumeration value="DefaultsToValue" />
    <xs:enumeration value="DefaultsToGeneratedValue" />
    <xs:enumeration value="EqualsValue" />
    <xs:enumeration value="EqualsGeneratedValue" />
    <xs:enumeration value="EqualsConcatenatedValue" />
    <xs:enumeration value="MustBeGreaterThan" />
    <xs:enumeration value="MustBeGreaterThanOrEqual" />
    <xs:enumeration value="MustBeLessThan" />
    <xs:enumeration value="MustBeLessThanOrEqual" />
    <xs:enumeration value="MustBeBetween" />
    <xs:enumeration value="MinimumLength" />
    <xs:enumeration value="MaximumLength" />
    <xs:enumeration value="AllowableValues" />
    <xs:enumeration value="Unique" />
    <xs:enumeration value="Mandatory" />
    <xs:enumeration value="ReadOnly" />
    <xs:enumeration value="Invalid" />
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="DefaultsToConcatenatedValue" />
<xs:enumeration value="MustBeEqual" />
<xs:enumeration value="ContainsPattern" />
<xs:enumeration value="MustContainPattern" />
<xs:enumeration value="StartSiteWorkflow" />
</xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The business rule item type is not specified.
IsEqual	Condition: "is equal to" (=).
IsNotEqual	Condition: "is not equal to" (<>).
Contains	Condition: The attribute contains one of the following values.
StartsWith	Condition: The attribute value starts with a value.
EndsWith	Condition: The attribute value ends with a value.
ContainsSubset	Condition: The attribute value contains a substring.
IsGreaterThan	Condition: "is greater than" (>).
IsGreaterThanOrEqual	Condition: "is greater than or equal to" (>=).
IsLessThan	Condition: "is less than" (<).
IsLessThanOrEqual	Condition: "is less than or equal to" (<=).
IsBetween	Condition: The attribute value is between two values.
DefaultsToValue	Data Generation Action: Set the attribute to a value when it is blank.
DefaultsToGeneratedValue	Data Generation Action: Set the attribute to a generated (incremental) value when it is blank.
EqualsValue	Data Generation Action: Set the attribute to a value.
EqualsGeneratedValue	Data Generation Action: Set the attribute to a generated (incremental) value.
EqualsConcatenatedValue	Data Generation Action: Set the attribute to a value that is concatenated from multiple other attributes/values.
MustBeGreaterThan	Validation Action: An attribute is invalid if not greater than a value.
MustBeGreaterThanOrEqual	Validation Action: An attribute is invalid if not greater than or equal to a value.
MustBeLessThan	Validation Action: An attribute is invalid if not less than a value.
MustBeLessThanOrEqual	Validation Action: An attribute is invalid if not less than or equal to a value.

Value	Meaning
MustBeBetween	Validation Action: An attribute is invalid if not between two values.
MinimumLength	Validation Action: An attribute is invalid if not greater than or equal to a minimum length.
MaximumLength	Validation Action: An attribute is invalid if not less than or equal to a maximum length.
AllowableValues	Validation Action: An attribute is invalid if not equal to one of the allowed values.
Unique	Validation Action: An attribute is invalid if not unique across all entity members.
Mandatory	Validation Action: An attribute is invalid if blank.
ReadOnly	Action: The attribute is read-only.
Invalid	Validation Action: An attribute is invalid.
DefaultsToConcatenatedValue	Data Generation Action: Set the attribute to a value that is concatenated from multiple other attributes/values if the attribute is blank.
MustBeEqual	Validation Action: An attribute is invalid if not equal to a value.
ContainsPattern	Condition: The attribute contains a specified pattern.
MustContainPattern	Validation Action: An attribute is invalid if it does not contain a specified pattern.
StartSiteWorkflow	Action: Launch a SharePoint workflow.

### 2.2.5.5 BRPropertyName

The **BRPropertyName** simple type specifies the name that identifies a property within a business rule component.

The following is the XSD schema definition of the **BRPropertyName** simple type.

```
<xs:simpleType name="BRPropertyName">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="Value" />
    <xs:enumeration value="StartPosition" />
    <xs:enumeration value="RangeLow" />
    <xs:enumeration value="RangeHigh" />
    <xs:enumeration value="StartingValue" />
    <xs:enumeration value="IncrementValue" />
    <xs:enumeration value="Length" />
    <xs:enumeration value="Substring" />
    <xs:enumeration value="Anchor" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The property is not specified.
Value	An argument value is specified.
StartPosition	The starting position of a substring is specified.
RangeLow	The low end of a range is specified.
RangeHigh	The high end of a range is specified.
StartingValue	The starting value of an incremented value is specified.
IncrementValue	The value by which to increment is specified.
Length	The length of a string is specified.
Substring	A substring value is specified.
Anchor	The attribute that is associated with the business rule is specified.

### 2.2.5.6 BRStatus

The **BRStatus** simple type specifies the update and publication status of a business rule.

The following is the XSD schema definition of the **BRStatus** simple type.

```
<xs:simpleType name="BRStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="New" />
    <xs:enumeration value="Active" />
    <xs:enumeration value="Excluded" />
    <xs:enumeration value="PendingActivation" />
    <xs:enumeration value="PendingChanges" />
    <xs:enumeration value="PendingExclusion" />
    <xs:enumeration value="PendingDeletion" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
New	The rule is created.
Active	The rule is published.
Excluded	The rule is explicitly excluded from the published set of rules.
PendingActivation	The rule has been created and will be published with the next publish request for the related entity and member type.
PendingChanges	The rule has been updated, and the new rule will be published with the next publish request for the related entity and member type. Until then, the prior version of the rule is active.

Value	Meaning
PendingExclusion	The rule has been marked for exclusion and will be excluded with the next publish request for the related entity and member type. Until then, the prior version of the rule is active.
PendingDeletion	The rule has been marked for deletion and will be deleted with the next publish request for the related entity and member type. Until then, the prior version of the rule is active.

### 2.2.5.7 DisplayType

The **DisplayType** simple type specifies the chosen display format for domain-based attribute (DBA) columns [Code, Code {Name}, Name {Code}].

The following is the XSD schema definition of the **DisplayType** simple type.

```

<xs:simpleType name="DisplayType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Code">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">1</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="CodeName">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">2</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="NameCode">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">3</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
1	<b>Code:</b> Displays the member code only.
2	<b>CodeName:</b> Displays the member code followed by the name in parentheses.
3	<b>NameCode:</b> Displays the member name followed by the code in parentheses.



### 2.2.5.8 EmailFormat

The **EmailFormat** simple type specifies the preferred e-mail delivery format that is associated with a user.

The following is the XSD schema definition of the **EmailFormat** simple type.

```
<xs:simpleType name="EmailFormat">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="HTML" />
    <xs:enumeration value="Text" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The e-mail format is unspecified.
HTML	The e-mail format is HTML that may include hyperlink references.
Text	The e-mail format is plain text.

### 2.2.5.9 ExportViewFormat

The **ExportViewFormat** simple type specifies the type of export view format. Export views are available in a known set of standard formats.

The following is the XSD schema definition of the **ExportViewFormat** simple type.

```
<xs:simpleType name="ExportViewFormat">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="LeafAttributes" />
    <xs:enumeration value="ConsolidatedAttributes" />
    <xs:enumeration value="CollectionAttributes" />
    <xs:enumeration value="Collections" />
    <xs:enumeration value="ExplicitParentChild" />
    <xs:enumeration value="ExplicitLevels" />
    <xs:enumeration value="DerivedParentChild" />
    <xs:enumeration value="DerivedLevels" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The type of export view is unspecified.
LeafAttributes	This is a view that contains leaf members and their attributes.

Value	Meaning
ConsolidatedAttributes	This is a view that contains consolidated members and their attributes.
CollectionAttributes	This is a view that contains collection entity members and their attributes.
Collections	This is a view that contains the contents of collections (relationships).
ExplicitParentChild	This is a view that contains explicit hierarchy relationships for an entity in parent-child format.
ExplicitLevels	This is a view that contains explicit hierarchy relationships for an entity in level-based format.
DerivedParentChild	This is a view that contains derived hierarchy relationships for a selected hierarchy in parent-child format.
DerivedLevels	This is a view that contains derived hierarchy relationships for a selected hierarchy in level-based format.

### 2.2.5.10 FunctionalArea

The **FunctionalArea** simple type specifies the MDS application functional area. Functional areas are used for assigning functional security authorizations.

The following is the XSD schema definition of the **FunctionalArea** simple type.

```
<xs:simpleType name="FunctionalArea">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None" />
    <xs:enumeration value="Explorer" />
    <xs:enumeration value="Versions" />
    <xs:enumeration value="ImportExport" />
    <xs:enumeration value="Reporting" />
    <xs:enumeration value="Security" />
    <xs:enumeration value="SystemAdministration" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
None	The function is not specified.
Explorer	This value specifies the <b>Explorer</b> functional area for viewing and updating master data.
Versions	This value specifies the <b>Versions</b> functional area for managing model versions and validation processing.
ImportExport	This value specifies the <b>Import and Export</b> functional area for bulk importing and exporting of master data.
Reporting	This value specifies the <b>Reporting</b> functional area for running reports.

Value	Meaning
Security	This value specifies the <b>Security</b> functional area for managing MDS permission assignments.
SystemAdministration	This value specifies the <b>System Administration</b> functional area for managing model structure, business rules, and system settings.

### 2.2.5.11 GroupType

The **GroupType** simple type specifies the type (source) of a security group.

The following is the XSD schema definition of the **GroupType** simple type.

```

<xs:simpleType name="GroupType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None" />
    <xs:enumeration value="MDMInternalGroup" />
    <xs:enumeration value="ActiveDirectoryGroup" />
    <xs:enumeration value="SharepointGroup" />
    <xs:enumeration value="SharepointAudience" />
    <xs:enumeration value="OtherGroup">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">99</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
None	The group type is unspecified.
MDMInternalGroup	This value MUST NOT be used.
ActiveDirectoryGroup	The group is a Windows Active Directory group.
SharePointGroup	This value MUST NOT be used.
SharePointAudience	This value MUST NOT be used.
OtherGroup	The group is other than a Windows group.
LocalGroup	The group is a local Windows group.

### 2.2.5.12 HierarchyItemType

The **HierarchyItemType** simple type specifies the type of component that is used by a level of a derived hierarchy.

The following is the XSD schema definition of the **HierarchyItemType** simple type.

```
<xs:simpleType name="HierarchyItemType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Entity" />
    <xs:enumeration value="DBA" />
    <xs:enumeration value="Hierarchy" />
    <xs:enumeration value="ConsolidatedDBA" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
<b>Entity</b>	A bottom-level entity.
<b>DBA</b>	A domain-based attribute link to another entity.
<b>Hierarchy</b>	A link to an explicit hierarchy.
<b>ConsolidatedDBA</b>	A domain-based attribute link to another entity from consolidation members.

### 2.2.5.13 HierarchyType

The **HierarchyType** simple type specifies the type of hierarchy construct.

The following is the XSD schema definition of the **HierarchyType** simple type.

```
<xs:simpleType name="HierarchyType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Explicit" />
    <xs:enumeration value="Derived" />
    <xs:enumeration value="Collection" />
    <xs:enumeration value="All" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
<b>Explicit</b>	Standard parent-child hierarchy for the specified entity or entities.
<b>Derived</b>	All attribute-based derived hierarchies for the specified entity or entities.
<b>Collection</b>	All collections for the specified entity or entities.
<b>All</b>	All types of hierarchies for the specified entity or entities.

#### 2.2.5.14 LogicalOperator

The **LogicalOperator** simple type specifies the logical operator that is used to join multiple business rule conditions.

The following is the XSD schema definition of the **LogicalOperator** simple type.

```
<xs:simpleType name="LogicalOperator">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="And" />
    <xs:enumeration value="Or" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The operator is not specified.
And	The operator is the logical AND operator.
Or	The operator is the logical OR operator.

#### 2.2.5.15 MemberKeyLookupType

The **MemberKeyLookupType** simple type specifies the type of key that is supplied in a member lookup: the member code or the internal integer ID.

The following is the XSD schema definition of the **MemberKeyLookupType** simple type.

```
<xs:simpleType name="MemberKeyLookupType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="MemberCode" />
    <xs:enumeration value="MemberId" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
MemberCode	The code of the member.
MemberID	The internal integer ID of the member.

#### 2.2.5.16 MemberReturnOptions

The **MemberReturnOptions** simple type specifies which member data is returned when querying master data members: the data, the row counts, or both.

The following is the XSD schema definition of the **MemberReturnOptions** simple type.

```
<xs:simpleType name="MemberReturnOptions">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Data" />
    <xs:enumeration value="Counts" />
    <xs:enumeration value="DataAndCounts" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
Data	Only data rows are returned, no row counts.
Counts	No data rows are returned, only row counts.
DataAndCounts	Both data rows and row counts are returned.

### 2.2.5.17 MemberType

The **MemberType** simple type specifies the type of member record within an entity.

The following is the XML schema definition of the **MemberType** simple type.

```
<xs:simpleType name="MemberType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="Leaf" />
    <xs:enumeration value="Consolidated" />
    <xs:enumeration value="Collection" />
    <xs:enumeration value="Hierarchy" />
    <xs:enumeration value="CollectionMember" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The member type is unspecified.
Leaf	The members are leaf members. These members do not have children in explicit hierarchies.
Consolidated	The members are consolidated members that participate in explicit hierarchies. These members may have children in explicit hierarchies.
Collection	The members are collection members.
Hierarchy	The member record is an explicit hierarchy relationship record.

Value	Meaning
CollectionMember	The member record is a collection hierarchy relationship record.

### 2.2.5.18 ModelObjectType

The **ModelObjectType** simple type specifies the type of master data model object (for metadata only).

The following is the XSD schema definition of the **ModelObjectType** simple type.

```

<xs:simpleType name="ModelObjectTypes">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None" />
    <xs:enumeration value="Model" />
    <xs:enumeration value="Entity">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">3</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="Attribute">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">4</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="AttributeGroup">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">5</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ExplicitHierarchy">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">6</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="DerivedHierarchy">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">7</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="LeafMemberType">
      <xs:annotation>

```

```

    <xs:appinfo>
      <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">8</EnumerationValue>
    </xs:appinfo>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ConsolidatedMemberType">
  <xs:annotation>
    <xs:appinfo>
      <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">9</EnumerationValue>
    </xs:appinfo>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="CollectionMemberType">
  <xs:annotation>
    <xs:appinfo>
      <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">10</EnumerationValue>
    </xs:appinfo>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
None=0	The type of model object is unspecified.
Model=1	The model object is a model.
Entity=3	The model object is an entity.
Attribute=4	The model object is an attribute.
AttributeGroup=5	The model object is an attribute group.
ExplicitHierarchy=6	The model object is an explicit hierarchy.
DerivedHierarchy=7	The model object is a derived hierarchy.
LeafMemberType=8	The model object is a leaf type of entity member.
ConsolidatedMemberType=9	The model object is a consolidated type of entity member.
CollectionMemberType=10	The model object is a collection type of entity member.

### 2.2.5.19 ObjectType

The **ObjectType** simple type specifies the type of master data model object.

The following is the XSD schema definition of the **ObjectType** simple type.

```
<xs:simpleType name="ObjectType">
```



```

<xs:restriction base="xs:string">
  <xs:enumeration value="Unknown" />
  <xs:enumeration value="Model" />
  <xs:enumeration value="DerivedHierarchy" />
  <xs:enumeration value="DerivedHierarchyLevel" />
  <xs:enumeration value="Version" />
  <xs:enumeration value="Entity" />
  <xs:enumeration value="Hierarchy" />
  <xs:enumeration value="Attribute" />
  <xs:enumeration value="AttributeGroup" />
  <xs:enumeration value="StagingBatch" />
  <xs:enumeration value="VersionFlag" />
  <xs:enumeration value="User" />
  <xs:enumeration value="MemberCode" />
  <xs:enumeration value="Annotation" />
  <xs:enumeration value="BusinessRule" />
  <xs:enumeration value="BusinessRuleConditionTreeNode" />
  <xs:enumeration value="BusinessRuleItem" />
  <xs:enumeration value="BusinessRuleArgument" />
  <xs:enumeration value="Transaction" />
  <xs:enumeration value="MemberId" />
</xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
Unknown	Not one of the standard object types.
Model	An MDS model.
DerivedHierarchy	A derived hierarchy.
DerivedHierarchyLevel	A level of a derived hierarchy.
Version	A model version.
Entity	An entity.
Hierarchy	A hierarchy.
Level	This value is not used.
Attribute	An attribute.
AttributeGroup	An attribute group.
StagingBatch	A batch of staging records.
VersionFlag	A version flag.
User	An MDS user.
MemberCode	A code (business key) of a member.
Annotation	An annotation.

Value	Meaning
BusinessRule	A business rule.
BusinessRuleConditionTreeNode	A node in the condition tree of a business rule.
BusinessRuleItem	A business rule item such as a condition or action.
BusinessRuleArgument	An argument within a condition or action of a business rule.
Transaction	A transaction record.
MemberID	An integer ID key for a member.

### 2.2.5.20 Permission

The **Permission** simple type specifies the permission that is assigned to a principal for accessing an MDS function, object, or data member.

The following is the XSD schema definition of the **Permission** simple type.

```
<xs:simpleType name="Permission">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None" />
    <xs:enumeration value="Deny" />
    <xs:enumeration value="Update" />
    <xs:enumeration value="ReadOnly" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
None	No access is specified.
Deny	Access is denied.
Update	Access to read and update is assigned.
ReadOnly	Access to read is assigned.

### 2.2.5.21 PermissionType

The **PermissionType** simple type specifies the effective permission that is assigned to a principal for accessing an MDS object.

The following is the XSD schema definition of the **PermissionType** simple type.

```
<xs:simpleType name="PermissionType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Unknown" />
    <xs:enumeration value="NotSpecified">
      <xs:annotation>
```

```

        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">99</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="DenyAccess">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">1</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="Update">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">2</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ReadOnly">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">3</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="Delete">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">4</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="Execute">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">5</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="Control">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">6</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
Unknown=0	The permission is unknown.
NotSpecified=99	The permission is not specified.
DenyAccess=1	Access is denied.
Update=2	Permission to read and update is assigned.
ReadOnly=3	Permission to read is assigned.
Delete=4	Permission to delete contents is assigned.
Execute=5	This value is not used.
Control=6	This value is not used.

### 2.2.5.22 PrincipalType

The **PrincipalType** simple type specifies the type of security principal (user or group).

The following is the XSD schema definition of the **PrincipalType** simple type.

```
<xs:simpleType name="PrincipalType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="None" />
    <xs:enumeration value="UserAccount" />
    <xs:enumeration value="Group" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
None	The principal type is not specified.
UserAccount	This is a user account that is assigned to MDS.
Group	This is a group account that is assigned to MDS.

### 2.2.5.23 RelationshipType

The **RelationshipType** simple type specifies the type of hierarchy relationship between members.

The following is the XSD schema definition of the **RelationshipType** simple type.

```
<xs:simpleType name="RelationshipType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="All" />
    <xs:enumeration value="Parent" />
    <xs:enumeration value="Sibling" />
  </xs:restriction>
</xs:simpleType>
```

```
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
All	All relationship types are returned.
Parent	Specifies a parent relationship.
Sibling	Specifies a sibling or peer relationship.

#### 2.2.5.24 ResultType

The **ResultType** simple type specifies the level of detail to return for model object queries. The result type is used in association with a particular object type.

The following is the XSD schema definition of the **ResultType** simple type.

```
<xs:simpleType name="ResultType">  
  <xs:restriction base="xs:string">  
    <xs:enumeration value="None" />  
    <xs:enumeration value="Identifiers" />  
    <xs:enumeration value="Details" />  
  </xs:restriction>  
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
None	No data should be returned for the specified type of object.
Identifiers	Only identifier information and attributes of each object should be returned for a specified type of object.
Details	All details, including child objects, should be returned for a specified type of object.

#### 2.2.5.25 SearchOption

The **SearchOption** simple type specifies the scope of metadata objects to be searched. **SearchOption** allows the exclusion or inclusion of user-created objects and system objects.

The following is the XSD schema definition of the **SearchOption** simple type.

```
<xs:simpleType name="SearchOption">  
  <xs:restriction base="xs:string">  
    <xs:enumeration value="UserDefinedObjectsOnly" />  
    <xs:enumeration value="SystemObjectsOnly" />  
    <xs:enumeration value="BothUserDefinedAndSystemObjects" />  
  </xs:restriction>  
</xs:simpleType>
```

```
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
UserDefinedObjectsOnly	Return only user-defined objects. Exclude system objects.
SystemObjectsOnly	Return only system objects. Exclude user-defined objects.
BothUserDefinedAndSystemObjects	Return both user-defined and system objects.

### 2.2.5.26 SecurityPermission

The **SecurityPermission** simple type specifies the effective security permission for a user of an MDS object.

The following is the XSD schema definition of the **SecurityPermission** simple type.

```
<xs:simpleType name="SecurityPermission">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="Read">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">3</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="Update" />
    <xs:enumeration value="Inferred">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">99</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	Security permission has not been specified in any way.
Read	Permission to view the element is provided, but the value cannot be changed.
Deny	All permissions are withheld, including knowledge of existence.
Inferred	Permission has been provided by a parent entity bestowing rights.

### 2.2.5.27 SecurityResolutionType

The **SecurityResolutionType** simple type specifies the resolution specification when returning security permissions. Permissions may be retrieved as they were assigned or in a net effective list of permissions.

The following is the XSD schema definition of the **SecurityResolutionType** simple type.

```
<xs:simpleType name="SecurityResolutionType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="UserAndGroup" />
    <xs:enumeration value="Users" />
    <xs:enumeration value="Effective" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
UserAndGroup	Return permissions that are assigned directly to the user and those that are assigned to groups to which the user belongs.
Users	Return permissions that are assigned directly to the user.
Effective	Return the effective set of permissions for the user, resolving the effects of overlaps.

### 2.2.5.28 SortDirection

The **SortDirection** simple type specifies the sort direction of a sorted column.

The following is the XSD schema definition of the **TransactionType** simple type.

```
<xs:simpleType name="SortDirection">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Asc" />
    <xs:enumeration value="Desc" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
Asc	Sort results in ascending order.
Desc	Sort results in descending order.

### 2.2.5.29 StagingBatchStatus

The **StagingBatchStatus** simple type specifies the processing status of a staging (import) batch.

The following is the XSD schema definition of the **StagingBatchStatus** simple type.

```
<xs:simpleType name="StagingBatchStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="All" />
    <xs:enumeration value="QueuedToRun" />
    <xs:enumeration value="NotRunning" />
    <xs:enumeration value="Running" />
    <xs:enumeration value="QueuedToClear" />
    <xs:enumeration value="Cleared" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
All	This value indicates all statuses.
QueuedToRun	The batch is queued for processing.
NotRunning	The batch is not running and is not queued for processing.
Running	The batch is being processed.
QueuedToClear	The batch is queued for deletion.
Cleared	The batch records have been deleted.

### 2.2.5.30 StagingDataStatus

The **StagingDataStatus** simple type specifies a status that indicates the success or failure of staging records.

The following is the XSD schema definition of the **StagingDataStatus** simple type.

```
<xs:simpleType name="StagingDataStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="All" />
    <xs:enumeration value="Successful" />
    <xs:enumeration value="Error" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
All	The status is inclusive of successful records and error records.
Successful	The status indicates staging records that were loaded successfully.
Error	The status indicates staging records that did not load.



### 2.2.5.31 SystemPropertyType

The **SystemPropertyType** simple type specifies the identifying name of one of the available system properties.

The following is the XSD schema definition of the **SystemPropertyType** simple type.

```
<xs:simpleType name="SystemPropertyType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="DatabaseMaxSizeMB" />
    <xs:enumeration value="DatabaseUsedSizeMB" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
DatabaseMaxSizeMB	This is the maximum size, in MB, that is allocated to the master data database in SQL Server. This property is relevant only when the database size is constrained.
DatabaseUsedSizeMB	This is the currently used space, in MB, of the master data database in SQL Server.

### 2.2.5.32 TransactionType

The **TransactionType** simple type specifies the type of member change that is identified in a transaction.

The following is the XSD schema definition of the **TransactionType** simple type.

```
<xs:simpleType name="TransactionType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="CreateMember">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">1</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ChangeMemberStatus">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">2</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="SetAttributeValue">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">3</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```

```

    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="MoveMemberToParent">
    <xs:annotation>
      <xs:appinfo>
        <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">4</EnumerationValue>
        </xs:appinfo>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="MoveMemberToSibling">
      <xs:annotation>
        <xs:appinfo>
          <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">5</EnumerationValue>
          </xs:appinfo>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="AnnotateMember">
        <xs:annotation>
          <xs:appinfo>
            <EnumerationValue
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">6</EnumerationValue>
            </xs:appinfo>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
CreateMember=1	A member was created.
ChangeMemberStatus=2	A member was deleted (deactivated) or undeleted (reactivated).
SetAttributeValue=3	An attribute value of a member was changed.
MoveMemberToParent=4	A member was moved under a new parent in an explicit hierarchy.
MoveMemberToSibling=5	A member was moved behind a new sibling in an explicit hierarchy.
AnnotateMember=6	An annotation was added to a member.

### 2.2.5.33 ValidationStatus

The **ValidationStatus** simple type specifies the validation status of a master data member.

The following is the XSD schema definition of the **ValidationStatus** simple type.

```

<xs:simpleType name="ValidationStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NewAwaitingValidation" />
    <xs:enumeration value="Validating" />
    <xs:enumeration value="AwaitingRevalidation" />
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="ValidationSucceeded" />
<xs:enumeration value="ValidationFailed" />
<xs:enumeration value="AwaitingDependentMemberRevalidation" />
<xs:enumeration value="AwaitingLevelRecalculation" />
</xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
NewAwaitingValidation	The member has not been validated yet. Typically, this condition occurs after a new business rule is added or members are staged into the system.
Validating	This member is currently being validated.
ValidationSucceeded	This member has passed all active business rules.
ValidationFailed	This member has failed at least one active business rule.
AwaitingDependentMemberRevalidation	?
AwaitingLevelRecalculation	?

#### 2.2.5.34 VersionStatus

The **VersionStatus** simple type specifies the status of a version.

The following is the XSD schema definition of the **VersionStatus** simple type.

```

<xs:simpleType name="VersionStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NotSpecified" />
    <xs:enumeration value="Open" />
    <xs:enumeration value="Locked" />
    <xs:enumeration value="Committed" />
  </xs:restriction>
</xs:simpleType>

```

The values of the enumeration are described in the following table.

Value	Meaning
NotSpecified	The version status is not specified.
Open	The version is an open version, meaning that users may make updates (security permitting).
Locked	The version is a locked version, meaning that users may not make updates and that version administrators can perform final validations or revisions prior to committing.
Committed	The version is a committed version, meaning that no changes may be made.

### 2.2.5.35 VersionValidationStatus

The **VersionValidationStatus** simple type specifies the validation status of a version.

The following is the XSD schema definition of the **VersionValidationStatus** simple type.

```
<xs:simpleType name="VersionValidationStatus">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Unknown" />
    <xs:enumeration value="NotValidated" />
    <xs:enumeration value="Validated" />
  </xs:restriction>
</xs:simpleType>
```

The values of the enumeration are described in the following table.

Value	Meaning
Unknown	The validation status is unknown.
NotValidated	The version is not fully validated.
Validated	The version is fully validated.

### 2.2.6 Attributes

This specification does not define any common XML schema attribute definitions.

### 2.2.7 Groups

This specification does not define any common XML schema group definitions.

### 2.2.8 Attribute Groups

This specification does not define any common XML schema attribute group definitions.

## 2.3 Directory Service Schema Elements

None.

## 3 Protocol Details

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls made by the higher-layer protocol or application are passed directly to the transport, and the results returned by the transport are passed directly back to the higher-layer protocol or application.

### 3.1 Server Details

#### 3.1.1 Abstract Data Model

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this document.

The MDS model high-level features are as follows:

- A model is a collection of entities and derived hierarchies.
- An entity is a collection of leaf members, attributes, attribute groups, and (if explicit hierarchies are enabled) a collection of consolidated members and collections.
- A derived hierarchy is a collection of derived hierarchy levels.
- A derived hierarchy level is an entity that is connected by a domain-based attribute relationship.
- A business rule is a collection of business rule actions and business rule conditions.

#### 3.1.2 Timers

None.

#### 3.1.3 Initialization

The server MUST start and begin listening for requests. All connections are stateless, so no further initialization is required.

#### 3.1.4 Message Processing Events and Sequencing Rules

Operation	Description
<a href="#">EntityMembersGet</a>	Retrieves a filtered set of members and their data from an entity.
<a href="#">EntityMemberAttributesGet</a>	Retrieves a specified set of attribute values from a specified list of members.
<a href="#">HierarchyMembersGet</a>	Retrieves parent-child members from a hierarchy relative to a parent node.
<a href="#">ModelMembersGet</a>	Retrieves entire selected models, entities and/or hierarchies.
<a href="#">EntityMembersCreate</a>	Creates new members.
<a href="#">EntityMembersDelete</a>	Deletes (deactivates) selected members.

<b>Operation</b>	<b>Description</b>
<a href="#">EntityMembersUpdate</a>	Updates existing members.
<a href="#">EntityMembersCopy</a>	Copies selected members to new target members.
<a href="#">EntityMembersMerge</a>	Creates new members and updates existing members.
<a href="#">ModelMembersBulkDelete</a>	Begins the asynchronous deletion of members.
<a href="#">ModelMembersBulkUpdate</a>	Begins the asynchronous update of member data across one or more entities.
<a href="#">ModelMembersBulkMerge</a>	Begins the asynchronous creation and/or update of member data across one or more entities.
<a href="#">StagingGet</a>	Retrieves the contents of the bulk staging area.
<a href="#">StagingClear</a>	Clears the bulk staging area.
<a href="#">TransactionsGet</a>	Retrieves a filtered list of transactions from a model.
<a href="#">TransactionsReverse</a>	Reverses one or more existing transactions.
<a href="#">ValidationGet</a>	Retrieves filtered validation results from a model.
<a href="#">ValidationProcess</a>	Processes validations (business rules) for selected members within a model.
<a href="#">EntityMemberAnnotationsCreate</a>	Creates new annotations that are attached to a member.
<a href="#">TransactionAnnotationsCreate</a>	Creates new annotations that are attached to an existing transaction.
<a href="#">EntityMemberAnnotationsGet</a>	Retrieves annotations that are attached to a member.
<b>EntityMemberAnnotationsDelete</b>	Removes annotations that are attached to a member.
<a href="#">TransactionAnnotationsGet</a>	Retrieves a filtered list of transactions from a model.
<a href="#">AnnotationsUpdate</a>	Updates an existing annotation.
<a href="#">AnnotationsDelete</a>	Deletes an existing annotation.
<a href="#">EntityMemberKeyLookup</a>	Looks up either a member code or an internal ID based on the other member code or internal ID and the provided context.
<a href="#">StagingProcess</a>	Sweeps existing unbatched records in the staging tables into a batch for processing and launches execution of the staging queue on request.
<a href="#">ExportViewCreate</a>	Generates or regenerates desired subscription views.
<a href="#">ExportViewUpdate</a>	Updates an existing export view.
<a href="#">ExportViewDelete</a>	Removes an existing export view.
<a href="#">ExportViewListGet</a>	Retrieves a list of existing export views.
<a href="#">SecurityPrincipalsClone</a>	Creates exact copies of users, groups, and their permissions within the security model from another source, while retaining the GUIDs

<b>Operation</b>	<b>Description</b>
	of the original objects.
<a href="#">SecurityPrincipalsCreate</a>	Creates new users, groups, and their permissions within the security model.
<a href="#">SecurityPrincipalsGet</a>	Retrieves the security principals and their permissions.
<a href="#">SecurityPrincipalsDelete</a>	Deletes users and groups.
<a href="#">SecurityPrivilegesClone</a>	Creates exact copies of permissions within the security model from another source, while retaining the GUIDs of the original objects.
<a href="#">SecurityPrivilegesGet</a>	Retrieves security permissions for selected principals and/or models.
<a href="#">SecurityPrivilegesDelete</a>	Deletes permissions.
<a href="#">MetadataClone</a>	Creates exact copies of metadata components from another source, while retaining the GUIDs of the original objects.
<a href="#">MetadataCreate</a>	Creates new metadata components.
<a href="#">MetadataDelete</a>	Deletes metadata components.
<a href="#">SystemSettingsGet</a>	Retrieves a list of system settings.
<a href="#">SystemSettingsUpdate</a>	Updates system setting values.
<a href="#">SystemDomainListGet</a>	Retrieves a localized fixed list of choices based on a list code.
<a href="#">SystemPropertiesGet</a>	Retrieves immutable properties about the system.
<a href="#">VersionCopy</a>	Copies a model's version to a new version.
<a href="#">UserPreferencesGet</a>	Retrieves the current user's preferences.
<a href="#">UserPreferencesUpdate</a>	Updates the current user's preferences.
<a href="#">UserPreferencesDelete</a>	Deletes the current user's preferences.
<a href="#">BusinessRulesPaletteGet</a>	Retrieves available business rule components (the component palette).
<a href="#">BusinessRulesClone</a>	Creates new business rules that are exact copies of business rules from another source, while retaining the GUIDs of the original objects.
<a href="#">BusinessRulesCreate</a>	Creates new business rules.
<a href="#">BusinessRulesDelete</a>	Deletes a business rule or the components of rules.
<a href="#">BusinessRulesGet</a>	Retrieves business rules.
<a href="#">BusinessRulesPublish</a>	Publishes business rules for a model type, entity type, or member type.
<a href="#">BusinessRulesUpdate</a>	Updates existing business rules.

### 3.1.4.1 EntityMembersGet

The **EntityMembersGet** operation retrieves a filtered set of members and their data from an entity. This operation is specialized to tabular retrieval of members and their attributes, and it is optimized for retrieving small batches of members within a single entity. This operation does not return fileattribute file contents.

The **EntityMembersGet** operation is used to return member and hierarchy data as specified. This operation is optimized for retrieval of a select subset of members within an entity. This operation is used within the context of a single entity and single version. Results include member attributes and hierarchy parents from associated hierarchies.

The following is the WSDL of the **EntityMembersGet** operation.

```
<wsdl:operation name="EntityMembersGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersGet" name="EntityMembersGetRequest" message="tns:EntityMembersGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersGetResponse" name="EntityMembersGetResponse" message="tns:EntityMembersGetResponse" />
</wsdl:operation>
```

#### 3.1.4.1.1 Messages

The following WSDL message definitions are specific to the **EntityMembersGet** operation.

##### 3.1.4.1.1.1 EntityMembersGetRequest

The **EntityMembersGetRequest** message contains the **EntityMembersGetRequest** element.

##### 3.1.4.1.1.2 EntityMembersGetResponse

The **EntityMembersGetResponse** message contains the **EntityMembersGetResponse** element.

#### 3.1.4.1.2 Elements

The following XML schema element definitions are specific to the **EntityMembersGet** operation.

##### 3.1.4.1.2.1 EntityMembersGetRequest

The **EntityMembersGetRequest** element specifies the criteria in the [EntityMembersGetCriteria](#) complex type for the retrieval of entity members and their attributes.

The following is the XSD schema definition of the **EntityMembersGetRequest** element.

```
<xs:element name="EntityMembersGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:ql="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="MembersGetCriteria" nillable="true" type="ql:EntityMembersGetCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    
```



```

    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.1.2.2 EntityMembersGetResponse

The **EntityMembersGetResponse** element returns a response that contains NULL or one or more of the following complex types:

- [EntityMembers](#)
- [EntityMembersInformation](#)
- [OperationResult](#)

The following is the XSD schema definition of the **EntityMembersGetResponse** element.

```

<xs:element name="EntityMembersGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q2="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityMembers" nillable="true" type="q2:EntityMembers" />
      <xs:element xmlns:q3="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityMembersInformation" nillable="true" type="q3:EntityMembersInformation" />
      <xs:element xmlns:q4="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q4:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.1.3 Complex Types

The following XML schema complex type definitions are specific to the **EntityMembersGet** operation.

#### 3.1.4.1.3.1 EntityMembersGetCriteria

The **EntityMembersGetCriteria** request complex type specifies the [EntityMembers](#) criteria for the operations result set.

The following is the XSD schema definition of the **EntityMembersGetCriteria** complex type.

```

<xs:complexType name="EntityMembersGetCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeGroupId" nillable="true" type="tns:Identifier"
/>
    <xs:element minOccurs="0" name="Attributes" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element
xmlns:q1="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts"
minOccurs="0" name="DisplayType" nillable="true" type="q1:DisplayType" />
    <xs:element name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

```

    <xs:element
xmlns:q2="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts
" minOccurs="0" name="HierarchyType" type="q2:HierarchyType" />
    <xs:element
xmlns:q3="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts
" name="MemberReturnOption" type="q3:MemberReturnOptions" />
    <xs:element name="MemberType" nillable="true" type="tns:MemberType" />
    <xs:element name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element name="PageNumber" type="xs:int" />
    <xs:element name="PageSize" type="xs:int" />
    <xs:element minOccurs="0" name="ParentEntityId" nillable="true" type="tns:Identifier"
/>
    <xs:element minOccurs="0" name="ParentMember" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="SearchTerm" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="SortColumnId" nillable="true" type="tns:Identifier" />
    <xs:element
xmlns:q4="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts
" minOccurs="0" name="SortDirection" type="q4:SortDirection" />
    <xs:element name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**AttributeGroupId:** Specifies an attribute group as a method of identifying a desired column set. This value is optional.

**Attributes:** Specifies a list of desired attribute columns by GUID or name. If the [AttributeGroup](#) complex type is specified, only columns within the attribute group may be specified. This value is optional.

**EntityId:** Specifies the GUID or the exact name of the entity.

**HierarchyId:** Specifies the GUID or the exact name of the hierarchy.

**HierarchyType:** Specifies the type of hierarchy: explicit, derived, or collection.

**MemberReturnOption:** Specifies "Data", "Counts", or "DataAndCounts". The operation response includes member data only, member counts only, or both the data and the counts as specified.

**MemberType:** Specifies leaf, parent, or collection members. This value is optional if the GUID of the entity is specified.

**ModelId:** Specifies the GUID or the exact name of the model.

**PageNumber:** Specifies the page number to retrieve based on the **PageSize** value. The default value is 1.

**PageSize:** Specifies the number of records to include in a single retrieval.

**ParentEntityId:** Specifies the GUID or the exact name of the parent member's entity. This value is required for derived hierarchies only and is ignored for explicit hierarchies and collections.

**ParentMember:** Specifies the code of the parent member.

**SearchTerm:** Specifies a WHERE clause search criteria to filter records. This value is optional.

**SortColumnId:** Specifies the column on which the returned members are sorted. This value is optional.

**SortDirection:** Specifies an ascending or descending sort direction. This value is optional.

**VersionId:** Specifies the GUID or the exact name of the version.

### 3.1.4.1.3.2 EntityMembersInformation

The **EntityMembersInformation** response complex type is returned to describe the [EntityMembers](#) result set that is returned in the same response.

The following is the XSD schema definition of the **EntityMembersInformation** complex type.

```
<xs:complexType name="EntityMembersInformation">
  <xs:sequence>
    <xs:element minOccurs="0" name="MemberCount" type="xs:int" />
    <xs:element minOccurs="0" name="PageNumber" type="xs:int" />
    <xs:element minOccurs="0" name="TotalMemberCount" type="xs:int" />
    <xs:element minOccurs="0" name="TotalPages" type="xs:int" />
  </xs:sequence>
</xs:complexType>
```

**MemberCount:** Specifies the count of members based on the applied search term.

**PageNumber:** Specifies the number of the page that is provided.

**TotalMemberCount:** Specifies the total number of visible records based on security and hierarchy parent filter.

**TotalPages:** Specifies the total number of pages provided.

### 3.1.4.1.4 Simple Types

There are no XML schema simple definitions specific to the **EntityMembersGet** operation.

### 3.1.4.2 EntityMemberAttributesGet

The **EntityMemberAttributeGet** operation retrieves a specified set of attribute values from a specific list of members. This operation is useful for retrieving the file content from file attributes; [EntityMembersGet](#) does not return these contents.

The following is the WSDL definition of the **EntityMemberAttributeGet** operation.

```
<wsdl:operation name="EntityMemberAttributesGet">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAttributesGet"
    name="EntityMemberAttributesGetRequest"
    message="tns:EntityMemberAttributesGetRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAttributesGetResponse"
    name="EntityMemberAttributesGetResponse"
    message="tns:EntityMemberAttributesGetResponse" />
</wsdl:operation>
```

### 3.1.4.2.1 Messages

The following WSDL message definitions are specific to the **EntityMemberAttributeGet** operation.

#### 3.1.4.2.1.1 EntityMembersAttributesGetRequest

The **EntityMembersAttributesGetRequest** message contains the **EntityMembersAttributesGetRequest** element.

#### 3.1.4.2.1.2 EntityMembersAttributesGetResponse

The **EntityMembersAttributesGetResponse** message contains the **EntityMembersAttributesGetResponse** element.

### 3.1.4.2.2 Elements

The following XML schema element definitions are specific to the **EntityMemberAttributesGet** operation.

#### 3.1.4.2.2.1 EntityMembersAttributesGetRequest

The **EntityMembersAttributesGetRequest** element is a request that MAY take an [EntityMembers](#) complex type.

The following is the XSD schema definition of the **EntityMembersAttributesGetRequest** element.

```
<xs:element name="EntityMemberAttributesGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q5="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityMembers" nillable="true" type="q5:EntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.2.2.2 EntityMembersAttributesGetResponse

The **EntityMembersAttributesGetResponse** element is a response that returns NULL or one of the following complex types:

- [EntityMembers](#)
- [OperationResult](#)

The following is the XSD schema definition of the **EntityMembersAttributesGetResponse** element.

```
<xs:element name="EntityMemberAttributesGetResponse">
  <xs:complexType>
    <xs:sequence>
```

```

        <xs:element xmlns:q6="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityMembers" nillable="true" type="q6:EntityMembers" />
        <xs:element xmlns:q7="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q7:OperationResult" />
    </xs:sequence>
</xs:complexType>
</xs:element>

```

### 3.1.4.2.3 Complex Types

There are no XML schema complex type definitions specific to the **EntityMembersAttributeGet** operation.

### 3.1.4.2.4 Simple Types

There are no XML schema simple type definitions specific to the **EntityMemberAttributesGet** operation.

### 3.1.4.3 HierarchyMembersGet

The **HierarchyMembersGet** operation retrieves all hierarchy members, the immediate children of a specified hierarchy parent, or all descendants of a specified hierarchy parent.

This operation is optimized for hierarchy relationship retrieval and for walking the hierarchy path. **HierarchyMembersGet** works within the context of a single hierarchy and a single version.

The following is the WSDL definition of the **HierarchyMembersGet** operation.

```

<wsdl:operation name="HierarchyMembersGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/HierarchyMembersGet" name="HierarchyMembersGetRequest" message="tns:HierarchyMembersGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/HierarchyMembersGetResponse" name="HierarchyMembersGetResponse"
message="tns:HierarchyMembersGetResponse" />
</wsdl:operation>

```

#### 3.1.4.3.1 Messages

The following WSDL message definitions are specific to the **HierarchyMembersGet** operation.

##### 3.1.4.3.1.1 HierarchyMembersGetRequest

The **HierarchyMembersGetRequest** message contains the **HierarchyMembersGetRequest** element.

##### 3.1.4.3.1.2 HierarchyMembersGetResponse

The **HierarchyMembersGetResponse** message contains the **HierarchyMembersGetResponse** element.

### 3.1.4.3.2 Elements

The following XML schema element definitions are specific to the **HierarchyMembersGet** operation.

#### 3.1.4.3.2.1 HierarchyMembersGetRequest

The **HierarchyMembersGetRequest** element uses the [HierarchyGetCriteria](#) complex type to specify inputs to the request.

The following is the XSD schema definition of the **HierarchyMembersGetRequest** element.

```
<xs:element name="HierarchyMembersGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q8="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="HierarchyMembersGetCriteria" nillable="true" type="q8:HierarchyGetCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.3.2.2 HierarchyMembersGetResponse

The **HierarchyMembersGetResponse** element is a response that returns NULL or one of the following complex types:

- [HierarchyData](#)
- [OperationResult](#)

The following is the XSD schema definition of the **HierarchyMembersGetResponse** element.

```
<xs:element name="HierarchyMembersGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q9="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="HierarchyMembers" nillable="true" type="q9:HierarchyData" />
      <xs:element xmlns:q10="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q10:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.3.3 Complex Types

The following XML schema complex type definitions are specific to the **HierarchyMembersGet** operation.

#### 3.1.4.3.3.1 HierarchyGetCriteria

The **HierarchyGetCriteria** complex type specifies the hierarchy criteria for the result set that is returned in [HierarchyData](#).

The following is the XSD schema definition of the **HierarchyGetCriteria** complex type.

```
<xs:complexType name="HierarchyGetCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Ancestors" type="xs:boolean" />
    <xs:element minOccurs="0" name="ChildEntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q8="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts"
      minOccurs="0" name="HierarchyType" type="q8:HierarchyType" />
    <xs:element minOccurs="0" name="ParentEntityId" nillable="true" type="tns:Identifier"
  />
    <xs:element minOccurs="0" name="ParentMember" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="RowLimit" type="xs:int" />
    <xs:element minOccurs="0" name="SearchTerm" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="UserId" nillable="true" type="tns:Identifier" />
    <xs:element name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**Ancestors:** Specifies an optional value that retrieves the ancestors of a member if set to "true".

**ChildEntityId:** Specifies the GUID or the exact name of the child members' entity. This value is optional unless [DerivedHierarchy](#) has a repeated entity.

**HierarchyId:** Specifies the GUID or the exact name of the hierarchy.

**HierarchyType:** Specifies the type of hierarchy: explicit, derived, or collection.

**ModelId:** Specifies the GUID or the exact name of the model.

**ParentEntityId:** Specifies the GUID or the exact name of the parent member's entity. This value is required for derived hierarchies only and is ignored for explicit hierarchies and collections.

**ParentMember:** Specifies the code of the parent member.

**RowLimit:** Specifies the value to limit the number of child rows returned. This value defaults to the system setting for **HierarchyChildNodeLimit** when it is not specified in the request. This value is optional.

**SearchTerm:** Specifies a string to search for in member codes and in names. This value is optional.

**UserId:** Specifies the GUID or the exact name of the user.

**VersionId:** Specifies the GUID or the exact name of the version.

### 3.1.4.3.3.2 HierarchyData

The **HierarchyData** complex type response is returned to describe a hierarchy and its members in the result set that is returned in the response.

The following is the XSD schema definition of the **HierarchyData** complex type.

```
<xs:complexType name="HierarchyData">
```

```

<xs:sequence>
  <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
  <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
  <xs:element
xmlns:q9="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts
" minOccurs="0" name="HierarchyType" type="q9:HierarchyType" />
  <xs:element minOccurs="0" name="Members" nillable="true" type="tns:ArrayOfParentChild"
/>
  <xs:element name="ModelId" nillable="true" type="tns:Identifier" />
  <xs:element name="VersionId" nillable="true" type="tns:Identifier" />
</xs:sequence>
</xs:complexType>

```

**EntityId:** Specifies the [Identifier](#) for the entity that contains the GUID, name, and internal ID.

**HierarchyId:** Specifies the **Identifier** for the hierarchy that contains the GUID, name, and internal ID.

**HierarchyType:** Specifies the [HierarchyType](#) that identifies the type of hierarchy construct.

**Members:** Specifies the [ArrayOfParentChild](#) that contains the hierarchy members and parent-child relationships.

**ModelId:** Specifies the **Identifier** for the model that contains the GUID, name, and internal ID.

**VersionId:** Specifies the **Identifier** for the version that contains the GUID, name, and internal ID.

#### 3.1.4.3.4 Simple Types

There are no XML schema simple definitions specific to the **HierarchyMembersGet** operation.

#### 3.1.4.4 ModelMembersGet

The **ModelMembersGet** operation retrieves complete lists of entity members and/or hierarchies from one or more models.

The following is the WSDL definition of the **ModelMembersGet** operation.

```

<wsdl:operation name="ModelMembersGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersGet" name="ModelMembersGetRequest" message="tns:ModelMembersGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersGetResponse" name="ModelMembersGetResponse" message="tns:ModelMembersGetResponse" />
</wsdl:operation>

```

#### 3.1.4.4.1 Messages

The following WSDL message definitions are specific to the **ModelMembersGet** operation.

##### 3.1.4.4.1.1 ModelMembersGetRequest

The **ModelMembersGetRequest** message contains the **ModelMembersGetRequest** element.



### 3.1.4.4.1.2 ModelMembersGetResponse

The **ModelMembersGetResponse** message contains the **ModelMembersGetResponse** element.

### 3.1.4.4.2 Elements

The following XML schema element definitions are specific to the **ModelMembersGet** operation.

#### 3.1.4.4.2.1 ModelMembersGetRequest

The **ModelMembersGetRequest** element specifies the criteria in the [ModelsGetCriteria](#) complex type for the retrieval of the model. The **Models** and **Versions** parameters are required. The **Entities** parameter is optional. All entities are returned if criteria are not specified.

Criteria for specifying the contents of the result set are set in the **ModelsResultCriteria** complex type. Each setting in **ModelsResultCriteria** is assumed to be "false" unless specified. At least one **ModelsResultCriteria** parameter must be "true".

The following is the XSD schema definition of the **ModelMembersGetRequest** element.

```
<xs:element name="ModelMembersGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q11="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelsGetCriteria" nillable="true" type="q11:ModelsGetCriteria" />
      <xs:element xmlns:q12="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelsResultCriteria" nillable="true" type="q12:ModelsResultCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.4.2.2 ModelMembersGetResponse

The **ModelMembersGetResponse** element returns a response that contains NULL or one of the following complex types:

- [ArrayOfEntityMembers](#)
- [OperationResult](#)

The following is the XSD schema definition of the **ModelMembersGetResponse** element.

```
<xs:element name="ModelMembersGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q13="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelMembers" nillable="true" type="q13:ArrayOfEntityMembers" />
      <xs:element xmlns:q14="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q14:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.4.3 Complex Types

There are no XML schema complex type definitions specific to the **ModelMembersGet** operation.

### 3.1.4.4.4 Simple Types

There are no XML schema simple definitions specific to the **ModelMembersGet** operation.

### 3.1.4.5 EntityMembersCreate

The **EntityMembersCreate** operation creates one or more members within an entity. **EntityMembersCreate** operates synchronously, completing live transactions and responding with the results of those transactions.

The following is the WSDL definition of the **EntityMembersCreate** operation.

```
<wsdl:operation name="EntityMembersCreate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCreate" name="EntityMembersCreateRequest" message="tns:EntityMembersCreateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCreateResponse" name="EntityMembersCreateResponse"
    message="tns:EntityMembersCreateResponse" />
</wsdl:operation>
```

#### 3.1.4.5.1 Messages

The following WSDL message definitions are specific to the **EntityMembersCreate** operation.

##### 3.1.4.5.1.1 EntityMembersCreateRequest

The **EntityMembersCreateRequest** message contains the **EntityMembersCreateRequest** element.

##### 3.1.4.5.1.2 EntityMembersCreateResponse

The **EntityMembersCreateResponse** message contains the **EntityMembersCreateResponse** element.

#### 3.1.4.5.2 Elements

The following XML schema element definitions are specific to the **EntityMembersCreate** operation.

##### 3.1.4.5.2.1 EntityMembersCreateRequest

The **EntityMembersCreateRequest** element specifies the entity or entities to be created in the [EntityMembers](#) complex type.

The following is the XSD schema definition of the **EntityMembersCreateRequest** element.

```
<xs:element name="EntityMembersCreateRequest">
  <xs:complexType>
```

```

    <xs:sequence>
      <xs:element xmlns:q15="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Members" nillable="true" type="q15:EntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.5.2 EntityMembersCreateResponse

The **EntityMembersCreateResponse** element contains the results of the operation in the [OperationResult](#) complex type.

The following is the XSD schema definition of the **EntityMembersCreateResponse** element.

```

<xs:element name="EntityMembersCreateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q16="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q16:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.5.3 Complex Types

There are no XML schema complex type definitions specific to the **EntityMembersCreate** operation.

### 3.1.4.5.4 Simple Types

There are no XML schema simple definitions specific to the **EntityMembersCreate** operation.

### 3.1.4.6 EntityMembersDelete

The **EntityMembersDelete** operation deletes (deactivates) one or more members within an entity. To undelete (reactivate) members, the **Undelete** option is set to "true" in the operation request.

The following is the WSDL definition of the **EntityMembersDelete** operation.

```

<wsdl:operation name="EntityMembersDelete">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMembersDelete" name="EntityMembersDeleteRequest" message="tns:EntityMembersDeleteRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMembersDeleteResponse" name="EntityMembersDeleteResponse"
message="tns:EntityMembersDeleteResponse" />
</wsdl:operation>

```

### 3.1.4.6.1 Messages

The following XSD schema message definitions are specific to the **EntityMembersDeleteRequest** operation.

#### 3.1.4.6.1.1 EntityMembersDeleteRequest

The **EntityMembersDeleteRequest** request message contains the **EntityMembersDeleteRequest** element.

#### 3.1.4.6.1.2 EntityMembersDeleteResponse

The **EntityMembersDeleteResponse** response message contains the **EntityMembersDeleteResponse** element.

### 3.1.4.6.2 Elements

The following XML schema element definitions are specific to the **EntityMembersDelete** operation.

#### 3.1.4.6.2.1 EntityMembersDeleteRequest

The **EntityMembersDeleteRequest** request element provides an [EntityMembers](#) complex type.

The following is the XSD schema definition of the **EntityMembersDeleteRequest** element.

```
<xs:element name="EntityMembersDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q17="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Members" nillable="true" type="q17:EntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.6.2.2 EntityMembersDeleteResponse

The **EntityMembersDeleteResponse** response element returns an [OperationResult](#) complex type.

The following is the XSD schema definition of the **EntityMembersDeleteResponse** element.

```
<xs:element name="EntityMembersDeleteResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q18="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q18:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.6.3 Complex Types

There are no XML schema complex type definitions specific to the **EntityMembersDelete** operation.

### 3.1.4.6.4 Simple Types

There are no XML schema simple definitions specific to the **EntityMembersDelete** operation.

### 3.1.4.7 EntityMembersUpdate

The **EntityMembersUpdate** operation updates one or more existing members within an entity. Members are matched by model, version, entity, and member code.

**EntityMembersUpdate** operates synchronously, completing live transactions and responding with the results of those transactions. Alternatively, [ModelMembersBulkUpdate](#) may be used to process asynchronous updates.

**EntityMembersUpdate** can move members in a hierarchy based on parents or siblings. Note that the parent domain controller contains a relationship type that can be a parent or sibling.

The following is the WSDL definition of the **EntityMembersUpdate** operation.

```
<wsdl:operation name="EntityMembersUpdate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersUpdate" name="EntityMembersUpdateRequest" message="tns:EntityMembersUpdateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersUpdateResponse" name="EntityMembersUpdateResponse"
    message="tns:EntityMembersUpdateResponse" />
</wsdl:operation>
```

#### 3.1.4.7.1 Messages

The following WSDL message definitions are specific to the **EntityMembersUpdate** operation.

##### 3.1.4.7.1.1 EntityMembersUpdateRequest

The **EntityMembersUpdateRequest** message contains the **EntityMembersUpdateRequest** element.

##### 3.1.4.7.1.2 EntityMembersUpdateResponse

The **EntityMembersUpdateResponse** message contains the **EntityMembersUpdateResponse** element.

#### 3.1.4.7.2 Elements

The following XML schema element definitions are specific to the **EntityMembersUpdate** operation.

##### 3.1.4.7.2.1 EntityMembersUpdateRequest

The **EntityMembersUpdateRequest** element specifies the master entity or entities to be updated in the [EntityMembers](#) complex type.

The following is the XSD schema definition of the **EntityMembersUpdateRequest** element.

```
<xs:element name="EntityMembersUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q19="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Members" nillable="true" type="q19:EntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.7.2.2 EntityMembersUpdateResponse

The **EntityMembersUpdateResponse** element contains the results of the operation in the [OperationResult](#) complex type.

The following is the XSD schema definition of the **EntityMembersUpdateResponse** element.

```
<xs:element name="EntityMembersUpdateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q20="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q20:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.7.3 Complex Types

There are no XML schema complex type definitions specific to the **EntityMembersUpdate** operation.

### 3.1.4.7.4 Simple Types

There are no XML schema simple type definitions specific to the **EntityMembersUpdate** operation.

### 3.1.4.8 EntityMembersCopy

The **EntityMembersCopy** operation copies members and their associated data (for example, attributes and hierarchy parents) to new members with new member codes.

A members list is used for input. This list includes source and target member codes. Each item in the list includes a source (code of an existing member) and a target (code of a new member).

Source members are matched by model, version, entity, and member code. GUIDs and/or exact names are used to identify metadata component context.

Each source member that is not found results in an error. Each target code that already exists within the entity and version results in an error (this occurs because codes must be unique). All listed members are attempted regardless of individual record errors. The output includes a list of the members that were successfully copied.

To use this operation, users must have permission to create new members and to update the source members. For general information about members, see section [3.1.4.7](#). Any attributes and hierarchy parents that are associated with the source member for which update permission is granted are assigned to the target member.

Any hierarchy member permission assignments that are directly attached to source members (not inherited) are copied to target members.

The following is the WSDL definition of the **EntityMembersCopy** operation.

```
<wsdl:operation name="EntityMembersCopy">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCopy" name="EntityMembersCopyRequest" message="tns:EntityMembersCopyRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCopyResponse" name="EntityMembersCopyResponse"
    message="tns:EntityMembersCopyResponse" />
</wsdl:operation>
```

### 3.1.4.8.1 Messages

The following WSDL message definitions are specific to the **EntityMembersCopy** operation.

#### 3.1.4.8.1.1 EntityMembersCopy Request

The **EntityMembersCopyRequest** message contains the **EntityMembersCopyRequest** element.

#### 3.1.4.8.1.2 EntityMembersCopy Response

The **EntityMembersCopyResponse** message contains the **EntityMembersCopyResponse** element.

### 3.1.4.8.2 Elements

The following XML schema element definitions are specific to the **EntityMembersCopy** operation.

#### 3.1.4.8.2.1 EntityMembersCopy Request

The **EntityMembersCopyRequest** element specifies the entity member or members to be copied in the [MembersCopyCriteria](#) complex type.

The following is the XSD schema definition of the **EntityMembersCopyRequest** element.

```
<xs:element name="EntityMembersCopyRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="EntityMembersCopyCriteria" nillable="true" type="q21:MembersCopyCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
```

```
</xs:element>
```

### 3.1.4.8.2.2 EntityMembersCopyResponse

The **EntityMembersCopyResponse** element contains the results of the operation in the [OperationResult](#) complex type.

The following is the XSD schema definition of the **EntityMembersCopyResponse** element.

```
<xs:element name="EntityMembersCopyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q22="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q22:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.8.3 Complex Types

The following XML schema complex type definitions are specific to the **EntityMembersCopy** operation.

#### 3.1.4.8.3.1 MembersCopyCriteria

The **MembersCopyCriteria** request complex type specifies the member criteria for the copy operations.

The following is the XSD schema definition of the **MembersCopyCriteria** complex type.

```
<xs:complexType name="MembersCopyCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Members" nillable="true"
type="tns:ArrayOfMemberSourceTarget" />
    <xs:element name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element name="VersionId" nillable="true" type="tns:Identifier" />
    <xs:element name="EntityId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**Members:** Specifies the [ArrayOfMemberSourceTarget](#) complex type that contains the members to be copied.

**ModelID:** Specifies the GUID or the exact name of the model in the [Identifier](#) complex type.

**VersionID:** Specifies the GUID or the exact name of the version in the **Identifier** complex type.

**EntityID:** Specifies the GUID or the exact name of the entity in the **Identifier** complex type.



### 3.1.4.8.3.2 ArrayOfMemberSourceTarget

The **ArrayOfMemberSourceTarget** complex type specifies a collection of [MemberSourceTarget](#) complex types.

The following is the XSD schema definition of the **ArrayOfMemberSourceTarget** complex type.

```
<xs:complexType name="ArrayOfMemberSourceTarget">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="MemberSourceTarget"
      nillable="true" type="tns:MemberSourceTarget" />
  </xs:sequence>
</xs:complexType>
```

**MemberSourceTarget:** Specifies the **MemberSourceTarget** complex type that contains members to be copied.

### 3.1.4.8.3.3 MemberSourceTarget

The **MemberSourceTarget** complex type contains the member codes of the source and target members to be copied.

The following is the XSD schema definition of the **MemberSourceTarget** complex type.

```
<xs:complexType name="MemberSourceTarget">
  <xs:sequence>
    <xs:element minOccurs="0" name="SourceMemberCode" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="TargetMemberCode" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
```

**SourceMemberCode:** Specifies the member code of the existing source member to copy.

**TargetMemberCode:** Specifies the member code of the new target member to be created by the copy operation.

### 3.1.4.8.4 Simple Types

There are no XML schema simple type definitions specific to the **EntityMembersCopy** operation.

### 3.1.4.9 EntityMembersMerge

The **EntityMembersMerge** operation creates and/or updates members without regard to whether the member already exists.

If the member already exists (matched by context and member code), a member update is performed. If the member does not already exist, it is created. **EntityMembersMerge** is otherwise similar to [EntityMembersCreate](#) when creating members and [EntityMembersUpdate](#) when updating members.

The following is the WSDL definition of the **EntityMembersMerge** operation.

```

    <wsdl:operation name="EntityMembersMerge">
      <wsdl:input
        wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersMerge" name="EntityMembersMergeRequest" message="tns:EntityMembersMergeRequest" />
      <wsdl:output
        wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersMergeResponse" name="EntityMembersMergeResponse"
        message="tns:EntityMembersMergeResponse" />
    </wsdl:operation>

```

### 3.1.4.9.1 Messages

The following WSDL message definitions are specific to the **EntityMembersMerge** operation.

#### 3.1.4.9.1.1 EntityMembersMergeRequest

The **EntityMembersMergeRequest** message contains the **EntityMembersMergeRequest** element.

#### 3.1.4.9.1.2 EntityMembersMergeResponse

The **EntityMembersMergeResponse** message contains the **EntityMembersMergeResponse** element.

### 3.1.4.9.2 Elements

The following XML schema element definitions are specific to the **EntityMembersMerge** operation.

#### 3.1.4.9.2.1 EntityMembersMergeRequest

The **EntityMembersMergeRequest** element specifies the entity member or members to be created or updated.

The following is the XSD schema definition of the **EntityMembersMergeRequest** element.

```

<xs:element name="EntityMembersMergeRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q23="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="Members" nillable="true" type="q23:EntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

#### 3.1.4.9.2.2 EntityMembersMergeResponse

The **EntityMembersMergeResponse** element is a common [MessageResponse](#) element.

The following is the XSD schema definition of the **EntityMembersMergeResponse** element.

```

<xs:element name="EntityMembersMergeResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q24="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q24:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.9.3 Complex Types

There are no complex type definitions specific to the **EntityMembersMerge** operation.

### 3.1.4.9.4 Simple Types

There are no simple type definitions specific to the **EntityMembersMerge** operation.

### 3.1.4.10 ModelMembersBulkDelete

The **ModelMembersBulkDelete** operation provides asynchronous batch deleting of members within a model. This operation is similar to [EntityMembersDelete](#) and has the same input/request format.

This bulk operation proceeds as follows:

- All Delete operations are translated into staging batch records.
- Batch processing is initiated.
- The operation returns the batch IDs for the staging records, not the results of the deletion.

The following is the WSDL definition of the **ModelMembersBulkDelete** operation.

```

<wsdl:operation name="ModelMembersBulkDelete">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkDelete" name="ModelMembersBulkDeleteRequest"
message="tns:ModelMembersBulkDeleteRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkDeleteResponse" name="ModelMembersBulkDeleteResponse"
message="tns:ModelMembersBulkDeleteResponse" />
</wsdl:operation>

```

### 3.1.4.10.1 Messages

The following WSDL message definitions are specific to the **ModelMembersBulkDelete** operation.

#### 3.1.4.10.1.1 ModelMembersBulkDeleteRequest

The **ModelMembersBulkDeleteRequest** message contains the **ModelMembersBulkDeleteRequest** element.

### 3.1.4.10.1.2 ModelMembersBulkDeleteResponse

The **ModelMembersBulkDeleteResponse** message contains the **ModelMembersBulkDeleteResponse** element.

### 3.1.4.10.2 Elements

The following XML schema element definitions are specific to the **ModelMembersBulkDelete** operation.

#### 3.1.4.10.2.1 ModelMembersBulkDeleteRequest

The **ModelMembersBulkDeleteRequest** element MUST contain existing members from a single model to be deleted.

The following is the XSD schema definition of the **ModelMembersBulkDeleteRequest** element.

```
<xs:element name="ModelMembersBulkDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q25="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelMembers" nillable="true" type="q25:ArrayOfEntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.10.2.2 ModelMembersBulkDeleteResponse

The **ModelMembersBulkDeleteResponse** element returns one or more staging batch identifiers for the staging batches that were created to process the member deletes.

The following is the XSD schema definition of the **ModelMembersBulkDeleteResponse** element.

```
<xs:element name="ModelMembersBulkDeleteResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q26="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q26:OperationResult" />
      <xs:element xmlns:q27="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingBatches" nillable="true" type="q27:ArrayOfIdentifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.10.3 Complex Types

There are no XML schema complex type definitions specific to the **ModelMembersBulkDelete** operation.

#### 3.1.4.10.4 Simple Types

There are no XML schema simple definitions specific to the **ModelMembersBulkDelete** operation.

#### 3.1.4.11 ModelMembersBulkUpdate

The **ModelMembersBulkUpdate** operation provides asynchronous batch updating of members within an entity.

This operation is similar to [EntityMembersUpdate](#) and has the same input/request format.

This bulk operation proceeds as follows:

- All data changes are translated into staging batch records (attribute and relationship staging only).
- Batch processing is initiated.
- The operation returns the batch ID for the staging records, not the results of the update.

The following is the WSDL definition of the **ModelMembersBulkUpdate** operation.

```
<wsdl:operation name="ModelMembersBulkUpdate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelMembersBulkUpdate" name="ModelMembersBulkUpdateRequest"
    message="tns:ModelMembersBulkUpdateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelMembersBulkUpdateResponse" name="ModelMembersBulkUpdateResponse"
    message="tns:ModelMembersBulkUpdateResponse" />
</wsdl:operation>
```

##### 3.1.4.11.1 Messages

The following WSDL message definitions are specific to the **ModelMembersBulkUpdate** operation.

###### 3.1.4.11.1.1 ModelMembersBulkUpdateRequest

The **ModelMembersBulkUpdateRequest** message contains the **ModelMembersBulkUpdateRequest** element.

###### 3.1.4.11.1.2 ModelMembersBulkUpdateResponse

The **ModelMembersBulkUpdateResponse** message contains the **ModelMembersBulkUpdateResponse** element.

##### 3.1.4.11.2 Elements

The following XML schema element definitions are specific to the **ModelMembersBulkUpdate** operation.

### 3.1.4.11.2.1 ModelMembersBulkUpdateRequest

The **ModelMembersBulkUpdateRequest** element MAY contain members from a single model to be either created or updated.

The following is the XSD schema definition of the **ModelMembersBulkUpdateRequest** element.

```
<xs:element name="ModelMembersBulkUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q28="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelMembers" nillable="true" type="q28:ArrayOfEntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.11.2.2 ModelMembersBulkUpdateResponse

The **ModelMembersBulkUpdateResponse** element returns one or more staging batch identifiers for the staging batches that were created to process the member merge.

The following is the XSD schema definition of the **ModelMembersBulkUpdateResponse** element.

```
<xs:element name="ModelMembersBulkUpdateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q29="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q29:OperationResult" />
      <xs:element xmlns:q30="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingBatches" nillable="true" type="q30:ArrayOfIdentifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.11.3 Complex Types

There are no XML schema complex type definitions specific to the **ModelMembersBulkUpdate** operation.

### 3.1.4.11.4 Simple Types

There are no XML schema simple definitions specific to the **ModelMembersBulkUpdate** operation.

### 3.1.4.12 ModelMembersBulkMerge

The **ModelMembersBulkMerge** operation provides asynchronous batch updating or creating of members within an entity. This operation is similar to [EntityMembersMerge](#) and has the same input/request format.

This bulk operation proceeds as follows:

- All data changes are translated into staging batch records, including member Create operations.
- Batch processing is initiated.
- The operation returns the batch IDs for the staging records, not the results of the Create or Update operation.

The following is the WSDL definition of the **ModelMembersBulkMerge** operation.

```
<wsdl:operation name="ModelMembersBulkMerge">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelMembersBulkMerge" name="ModelMembersBulkMergeRequest"
    message="tns:ModelMembersBulkMergeRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelMembersBulkMergeResponse" name="ModelMembersBulkMergeResponse"
    message="tns:ModelMembersBulkMergeResponse" />
</wsdl:operation>
```

### 3.1.4.12.1 Messages

The following WSDL message definitions are specific to the **ModelMembersBulkMerge** operation.

#### 3.1.4.12.1.1 ModelMembersBulkMergeRequest

The **ModelMembersBulkMergeRequest** message contains the **ModelMembersBulkMergeRequest** element.

#### 3.1.4.12.1.2 ModelMembersBulkMergeResponse

The **ModelMembersBulkMergeResponse** message contains the **ModelMembersBulkMergeResponse** element.

### 3.1.4.12.2 Elements

The following XML schema element definitions are specific to the **ModelMembersBulkMerge** operation.

#### 3.1.4.12.2.1 ModelMembersBulkMergeRequest

The **ModelMembersBulkMergeRequest** element provides a collection of model members to be bulk merged into the MDS system.

The following is the XSD schema definition of the **ModelMembersBulkMergeRequest** element.

```
<xs:element name="ModelMembersBulkMergeRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q31="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="ModelMembers" nillable="true" type="q31:ArrayOfEntityMembers" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:complexType>
</xs:element>
```

### 3.1.4.12.2 ModelMembersBulkMergeResponse

The **ModelMembersBulkMergeResponse** element provides results from the [ModelMembersBulkMerge](#) operation.

The following is the XSD schema definition of the **ModelMembersBulkMergeRequest** element.

```
<xs:element name="ModelMembersBulkMergeResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q32="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q32:OperationResult" />
      <xs:element xmlns:q33="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingBatches" nillable="true" type="q33:ArrayOfIdentifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.12.3 Complex Types

There are no XML schema complex type definitions specific to the **ModelMembersBulkMerge** operation.

### 3.1.4.12.4 Simple Types

There are no XML schema simple definitions specific to the **ModelMembersBulkMerge** operation.

### 3.1.4.13 StagingGet

The **StagingGet** operation retrieves a staging record set by using batch IDs. This operation can be used to retrieve the following:

- Information about the batch.
- Information about the batch and the data that is contained in the batch.

The following is the WSDL definition of the **StagingGet** operation.

```
<wsdl:operation name="StagingGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingGet"
name="StagingGetRequest" message="tns:StagingGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingGetResponse"
name="StagingGetResponse" message="tns:StagingGetResponse" />
</wsdl:operation>
```



### 3.1.4.13.1 Messages

The following XSD schema message definitions are specific to the **StagingGet** operation.

#### 3.1.4.13.1.1 StagingGetRequest

The **StagingGetRequest** message specifies the criteria in the [StagingResultCriteria](#) complex type for the retrieval of staging information.

The following is the XSD schema definition of the **StagingGetRequest** message.

```
<xs:element name="StagingGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="IncludeUnbatchedInformation" type="xs:boolean" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q34="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingResultCriteria" nillable="true" type="q34:StagingResultCriteria" />
      <xs:element xmlns:q35="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingSearchCriteria" nillable="true" type="q35:StagingSearchCriteria" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.13.1.2 StagingGetResponse

The **StagingGetResponse** message returns a response that contains an operation result and an [ArrayOfStagingBatch](#) instance that contains staging batch information.

The following is the XSD schema definition of the **StagingGetResponse** message.

```
<xs:element name="StagingGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q36="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Batches" nillable="true" type="q36:ArrayOfStagingBatch" />
      <xs:element xmlns:q37="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q37:OperationResult" />
      <xs:element xmlns:q38="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="UnbatchedInformation" nillable="true" type="q38:ArrayOfStagingUnbatchedInformation" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.13.2 Elements

The following XML schema element definitions are specific to the **StagingGet** operation.

#### 3.1.4.13.2.1 StagingGetRequest

The **StagingGetRequest** element specifies the criteria in the [StagingResultCriteria](#) complex type for the retrieval of staging information.

The following is the XSD schema definition of the **StagingGetRequest** element.

```
<xs:element name="StagingGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="IncludeUnbatchedInformation" type="xs:boolean" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q34="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingResultCriteria" nillable="true" type="q34:StagingResultCriteria" />
      <xs:element xmlns:q35="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="StagingSearchCriteria" nillable="true" type="q35:StagingSearchCriteria" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.13.2.2 StagingGetResponse

The **StagingGetResponse** element returns a response that contains an operation result and an [ArrayOfStagingBatch](#) instance that contains staging batch information.

The following is the XSD schema definition of the **StagingGetResponse** element.

```
<xs:element name="StagingGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q36="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Batches" nillable="true" type="q36:ArrayOfStagingBatch" />
      <xs:element xmlns:q37="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q37:OperationResult" />
      <xs:element xmlns:q38="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="UnbatchedInformation" nillable="true" type="q38:ArrayOfStagingUnbatchedInformation" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.13.3 Complex Types

The following XML schema complex type definitions are specific to the **StagingGet** operation.

#### 3.1.4.13.3.1 StagingResultCriteria

The **StagingResultCriteria** request complex type specifies the criteria for staging batch categories.

The following is the XSD schema definition of the **StagingResultCriteria** complex type.

```
<xs:complexType name="StagingResultCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="All" type="xs:boolean" />
    <xs:element minOccurs="0" name="Attributes" type="xs:boolean" />
    <xs:element minOccurs="0" name="Members" type="xs:boolean" />
    <xs:element minOccurs="0" name="Relationships" type="xs:boolean" />
  </xs:sequence>
```

```
</xs:complexType>
```

**All:** Specifies whether all batches should be returned.

**Attributes:** Specifies whether attribute batches should be returned.

**Members:** Specifies whether member batches should be returned.

**Relationships:** Specifies whether relationship batches should be returned.

### 3.1.4.13.3.2 StagingSearchCriteria

The **StagingSearchCriteria** request complex type specifies the criteria for staging batch types.

The following is the XSD schema definition of the **StagingSearchCriteria** complex type.

```
<xs:complexType name="StagingSearchCriteria">
  <xs:sequence>
    <xs:element
      xmlns:q13="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="StagingBatchStatus" type="q13:StagingBatchStatus" />
    <xs:element minOccurs="0" name="StagingBatches" nillable="true"
      type="tns:ArrayOfIdentifier" />
    <xs:element
      xmlns:q14="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="StagingDataStatus" type="q14:StagingDataStatus" />
  </xs:sequence>
</xs:complexType>
```

**StagingBatchStatus:** Specifies the staging batch status that indicates the processing status of a staging batch.

**StagingBatches:** Specifies an [ArrayOfIdentifier](#) instance that contains the staging batch identifiers.

**StagingDataStatus:** Specifies the staging data status that indicates the success or failure of staging records.

### 3.1.4.13.4 Simple Types

There are no XML schema simple definitions specific to the **StagingGet** operation.

### 3.1.4.14 StagingClear

The **StagingClear** operation removes records from an existing staging batch. This operation is asynchronous. The request to clear a batch is queued up for processing along with all other batch requests. This process prevents batches that are in process from being cleared.

The following is the WSDL definition of the **StagingClear** operation.

```
<wsdl:operation name="StagingClear">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngClear" name="StagingClearRequest" message="tns:StagingClearRequest" />
</wsdl:operation>
```

```

    <wsdl:output
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingClearResponse" name="StagingClearResponse" message="tns:StagingClearResponse" />
    </wsdl:operation>

```

### 3.1.4.14.1 Messages

The following WSDL message definitions are specific to the **StagingClear** operation.

#### 3.1.4.14.1.1 StagingClearRequest

The **StagingClearRequest** message contains the **StagingClearRequest** element.

#### 3.1.4.14.1.2 StagingClearResponse

The **StagingClearResponse** message contains the **StagingClearResponse** element.

### 3.1.4.14.2 Elements

The following XML schema element definitions are specific to the **StagingClear** operation.

#### 3.1.4.14.2.1 StagingClearRequest

The **StagingClearRequest** element specifies the array of batches to clear.

The following is the XSD schema definition of the **StagingClearRequest** element.

```

<xs:element name="StagingClearRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q39="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="Batches" nillable="true" type="q39:ArrayOfIdentifier" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

#### 3.1.4.14.2.2 StagingClearResponse

The **StagingClearResponse** element specifies counts for the batches and the attribute, member, and relationship records that are cleared.

The following is the XSD schema definition of the **StagingClearResponse** element.

```

<xs:element name="StagingClearResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="AttributesRecordsClearedCount" type="xs:int" />
      <xs:element minOccurs="0" name="BatchesClearedCount" type="xs:int" />
      <xs:element minOccurs="0" name="MemberRecordsClearedCount" type="xs:int" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

    <xs:element xmlns:q40="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q40:OperationResult" />
    <xs:element minOccurs="0" name="RelationshipRecordsClearedCount" type="xs:int" />
  </xs:sequence>
</xs:complexType>
</xs:element>

```

### 3.1.4.14.3 Complex Types

There are no XML schema complex type definitions specific to the **StagingClear** operation.

### 3.1.4.14.4 Simple Types

There are no XML schema simple type definitions specific to the **StagingClear** operation.

### 3.1.4.15 TransactionsGet

The **TransactionsGet** operation retrieves all transactions for a model version or queries specific transactions by using specified criteria.

The following is the WSDL definition of the **TransactionsGet** operation.

```

<wsdl:operation name="TransactionsGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionsGet" name="TransactionsGetRequest" message="tns:TransactionsGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionsGetResponse" name="TransactionsGetResponse" message="tns:TransactionsGetResponse" />
</wsdl:operation>

```

#### 3.1.4.15.1 Messages

The following XSD schema message definitions are specific to the **TransactionsGet** operation.

##### 3.1.4.15.1.1 TransactionsGetRequest

The **TransactionsGetRequest** message contains the **TransactionsGetRequest** element.

##### 3.1.4.15.1.2 TransactionsGetResponse

The **TransactionsGetResponse** message contains the **TransactionsGetResponse** element.

#### 3.1.4.15.2 Elements

The following XML schema element definitions are specific to the **TransactionsGet** operation.

##### 3.1.4.15.2.1 TransactionsGetRequest

The **TransactionsGetRequest** element specifies the criteria in the [TransactionSearchCriteria](#) complex type for the retrieval of transactions.

The following is the XSD schema definition of the **TransactionsGetRequest** element.

```

<xs:element name="TransactionsGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q41="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="TransactionSearchCriteria" nillable="true" type="q41:TransactionSearchCriteria" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.15.2 TransactionsGetResponse

The **TransactionsGetResponse** element returns an operation result, the total number of transaction records returned, and an [ArrayOfTransaction](#) instance that contains the returned transactions.

The following is the XSD schema definition of the **TransactionsGetResponse** element.

```

<xs:element name="TransactionsGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q42="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q42:OperationResult" />
      <xs:element minOccurs="0" name="TotalRecordCount" type="xs:int" />
      <xs:element xmlns:q43="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="TransactionList" nillable="true" type="q43:ArrayOfTransaction" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.15.3 Complex Types

The following XML schema complex type definitions are specific to the **TransactionsGet** operation.

#### 3.1.4.15.3.1 TransactionSearchCriteria

The **TransactionSearchCriteria** request complex type specifies the [Transaction](#) criteria for the operations result set.

The following is the XSD schema definition of the **TransactionSearchCriteria** complex type.

```

<xs:complexType name="TransactionSearchCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="DateTimeBeginRange" nillable="true" type="xs:dateTime" />
    <xs:element minOccurs="0" name="DateTimeEndRange" nillable="true" type="xs:dateTime" />
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="ExplicitHierarchyId" nillable="true"
type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberId" nillable="true" type="tns:MemberIdentifier" />
  </xs:sequence>
</xs:complexType>

```

```

<xs:element minOccurs="0" name="MemberType" nillable="true" type="tns:MemberType" />
<xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
<xs:element minOccurs="0" name="NewValue" nillable="true" type="xs:string" />
<xs:element minOccurs="0" name="PageNumber" type="xs:int" />
<xs:element minOccurs="0" name="PageSize" nillable="true" type="xs:int" />
<xs:element minOccurs="0" name="PriorValue" nillable="true" type="xs:string" />
<xs:element minOccurs="0" name="SortColumn" nillable="true" type="xs:string" />
<xs:element
xmlns:q16="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="SortDirection" nillable="true" type="q16:SortDirection" />
  <xs:element minOccurs="0" name="TransactionId" nillable="true" type="xs:int" />
  <xs:element
xmlns:q17="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="TransactionType" nillable="true" type="q17:TransactionType" />
    <xs:element minOccurs="0" name="UserId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**AttributeId:** Specifies an attribute ID.

**DateTimeBeginRange:** Specifies a beginning date/time filter.

**DateTimeEndRange:** Specifies an ending date/time filter.

**EntityId:** Specifies the GUID or the name of an entity to further restrict output.

**ExplicitHierarchyId:** Specifies an explicit hierarchy (for Move transactions).

**MemberId:** Specifies a member ID.

**MemberType:** Specifies a member type.

**ModelId:** Specifies the [TransactionsGet](#) operation to retrieve all transactions for a model version or to query specific transactions by using specified criteria.

**NewValue:** Specifies the new value after the transaction.

**PageNumber:** Specifies a page number.

**PageSize:** Specifies a page size.

**PriorValue:** Specifies a prior transaction value.

**SortColumn:** Specifies a sort column.

**TransactionId:** Specifies a transaction ID.

**TransactionType:** Specifies a transaction type.

**UserId:** Specifies a user ID.

**VersionId:** Specifies the GUID or the exact name of a version.

### 3.1.4.15.4 Simple Types

There are no XML schema simple definitions specific to the **TransactionsGet** operation.

### 3.1.4.16 TransactionsReverse

The **TransactionsReverse** operation reverses one or more transactions, in the order specified. When a transaction is reversed, it is set to its prior value. The transactions to reverse are specified by their transaction ID. Transactions and their IDs are retrieved by using [TransactionsGet](#).

The following is the WSDL definition of the **TransactionsReverse** operation.

```
<wsdl:operation name="TransactionsReverse">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionsReverse" name="TransactionsReverseRequest" message="tns:TransactionsReverseRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionsReverseResponse" name="TransactionsReverseResponse"
    message="tns:TransactionsReverseResponse" />
</wsdl:operation>
```

#### 3.1.4.16.1 Messages

The following WSDL message definitions are specific to the **TransactionsReverse** operation.

##### 3.1.4.16.1.1 TransactionsReverseRequest

The **TransactionsReverseRequest** message contains the **TransactionsReverseRequest** element.

##### 3.1.4.16.1.2 TransactionsReverseResponse

The **TransactionsReverseResponse** message contains the **TransactionsReverseResponse** element.

#### 3.1.4.16.2 Elements

The following XML schema element definitions are specific to the **TransactionsReverse** operation.

##### 3.1.4.16.2.1 TransactionsReverseRequest

The **TransactionsReverseRequest** element specifies the transactions to reverse by using their transaction ID.

The following is the XSD schema definition of the **TransactionsReverseRequest** element.

```
<xs:element name="TransactionsReverseRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
      <xs:element xmlns:q44="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
        minOccurs="0" name="Transactions" nillable="true" type="q44:ArrayOfint" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```



### 3.1.4.16.2.2 TransactionsReverseResponse

The **TransactionsReverseResponse** element returns an operation result and an [ArrayOfReplacementId](#) instance that contains the reversed transactions.

The following is the XSD schema definition of the **TransactionsReverseResponse** element.

```
<xs:element name="TransactionsReverseResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q45="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q45:OperationResult" />
      <xs:element xmlns:q46="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="TransactionsReversed" nillable="true" type="q46:ArrayOfReplacementId" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.16.3 Complex Types

The following XML schema complex type definitions are specific to the **TransactionsReverse** operation.

#### 3.1.4.16.3.1 ArrayOfReplacementId

The **ArrayOfReplacementId** response complex type contains the array of transaction IDs that were replaced during the replacement operation.

The following is the XSD schema definition of the **ArrayOfReplacementId** complex type.

```
<xs:complexType name="ArrayOfReplacementId">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ReplacementId" nillable="true"
type="tns:ReplacementId" />
  </xs:sequence>
</xs:complexType>
```

**ReplacementId**: Specifies the instance of the [ReplacementId](#) complex type that provides information about a reversed transaction.

#### 3.1.4.16.3.2 ReplacementId

The **ReplacementId** response complex type specifies an individual transaction that was replaced during the replacement operation, including prior and new identifiers.

The following is the XSD schema definition of the **ReplacementId** complex type.

```
<xs:complexType name="ReplacementId">
  <xs:sequence>
    <xs:element minOccurs="0" name="NewId" type="xs:int" />
    <xs:element minOccurs="0" name="PriorId" type="xs:int" />
  </xs:sequence>
```

```
</xs:complexType>
```

**NewId:** Specifies the new ID of the transaction that was reversed.

**PriorId:** Specifies the prior ID of the transaction that was reversed.

#### 3.1.4.16.4 Simple Types

There are no XML schema simple definitions specific to the **TransactionsReverse** operation.

#### 3.1.4.17 ValidationGet

The **ValidationGet** operation retrieves validation issues for an entire model version's members or selected members by using specified criteria.

The following is the WSDL definition of the **ValidationGet** operation.

```
<wsdl:operation name="ValidationGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ValidationGet" name="ValidationGetRequest" message="tns:ValidationGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ValidationGetResponse" name="ValidationGetResponse" message="tns:ValidationGetResponse" />
</wsdl:operation>
```

#### 3.1.4.17.1 Messages

The following WSDL message definitions are specific to the **ValidationGet** operation.

##### 3.1.4.17.1.1 ValidationGetRequest

The **ValidationGetRequest** message contains the **ValidationGetRequest** element.

##### 3.1.4.17.1.2 ValidationGetResponse

The **ValidationGetResponse** message contains the **ValidationGetResponse** element.

#### 3.1.4.17.2 Elements

The following XML schema element definitions are specific to the **ValidationGet** operation.

##### 3.1.4.17.2.1 ValidationGetRequest

The **ValidationGetRequest** element describes what validation information is requested.

The following is the XSD schema definition of the **ValidationGetRequest** element.

```
<xs:element name="ValidationGetRequest">
  <xs:complexType>
    <xs:sequence>
```

```

    <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    <xs:element xmlns:q47="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ValidationSearchCriteria" nillable="true" type="q47:ValidationSearchCriteria" />
  </xs:sequence>
</xs:complexType>
</xs:element>

```

### 3.1.4.17.2.2 ValidationGetResponse

The **ValidationGetResponse** element holds the response values for the **ValidationGetRequest**.

The following is the XSD schema definition of the **ValidationGetResponse** element.

```

<xs:element name="ValidationGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="IsRunning" type="xs:boolean" />
      <xs:element xmlns:q48="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q48:OperationResult" />
      <xs:element xmlns:q49="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="SummaryItems" nillable="true" type="q49:ArrayOfValidationSummaryItem" />
      <xs:element xmlns:q50="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ValidationIssueList" nillable="true" type="q50:ArrayOfValidationIssue" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.17.3 Complex Types

The following XML schema complex type definitions are specific to the **ValidationGet** operation.

#### 3.1.4.17.3.1 ValidationSearchCriteria

The **ValidationSearchCriteria** complex type specifies the search criteria for [ValidationGetRequest](#).

The following is the XSD schema definition of the **ValidationSearchCriteria** complex type.

```

<xs:complexType name="ValidationSearchCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberTypeId" nillable="true" type="tns:MemberType" />
    <xs:element minOccurs="0" name="Members" nillable="true"
type="tns:ArrayOfMemberIdentifier" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="UserId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**EntityId**: Specifies the GUID or the name of an entity to further restrict output.

**MemberTypeId**: Specifies a [MemberType](#): Leaf, consolidation, or collection.

**Members:** Specifies member codes (in combination with [Entity](#)) to retrieve transactions for one or more specific members.

**ModelId:** Specifies the GUID or the exact name of a model.

**UserId:** Specifies the user. Issues are assigned to all users who can correct them.

**VersionId:** Specifies the GUID or the exact name of a version.

### 3.1.4.17.3.2 ArrayOfValidationSummaryItem

The **ArrayOfValidationSummaryItem** complex type specifies a collection of [ValidationSummaryItem](#) complex types.

The following is the XSD schema definition of the **ArrayOfValidationSummaryItem** complex type.

```
<xs:complexType name="ArrayOfValidationSummaryItem">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ValidationSummaryItem"
      nillable="true" type="tns:ValidationSummaryItem" />
  </xs:sequence>
</xs:complexType>
```

**ValidationSummaryItem:** Specifies the **ValidationSummaryItem** complex type.

### 3.1.4.17.3.3 ValidationSummaryItem

The **ValidationSummaryItem** complex type describes the validation summary information.

The following is the XSD schema definition of the **ValidationSummaryItem** complex type.

```
<xs:complexType name="ValidationSummaryItem">
  <xs:sequence>
    <xs:element minOccurs="0" name="MemberCount" type="xs:int" />
    <xs:element
      xmlns:q19="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContracts"
      minOccurs="0" name="Status" type="q19:ValidationStatus" />
  </xs:sequence>
</xs:complexType>
```

**MemberCount:** Specifies the count of the members that were validated.

**Status:** Specifies the status of the validation process at any given moment during the validation process.

### 3.1.4.17.4 Simple Types

There are no XML schema simple definitions specific to the **ValidationGet** operation.

### 3.1.4.18 ValidationProcess

The **ValidationProcess** operation is used to process validations (business rules) for selected members within a model.

The following is the WSDL definition of the **ValidationProcess** operation.

```
<wsdl:operation name="ValidationProcess">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ValidationProcess" name="ValidationProcessRequest" message="tns:ValidationProcessRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ValidationProcessResponse" name="ValidationProcessResponse"
    message="tns:ValidationProcessResponse" />
</wsdl:operation>
```

### 3.1.4.18.1 Messages

The following WSDL message definitions are specific to the **ValidationProcess** operation.

#### 3.1.4.18.1.1 ValidationProcessRequest

The **ValidationProcessRequest** message contains the **ValidationProcessRequest** element.

#### 3.1.4.18.1.2 ValidationProcessResponse

The **ValidationProcessResponse** message contains the **ValidationProcessResponse** element.

### 3.1.4.18.2 Elements

The following XML schema element definitions are specific to the **ValidationProcess** operation.

#### 3.1.4.18.2.1 ValidationProcessRequest

The **ValidationProcessRequest** element specifies the validation process criteria and options.

The following is the XSD schema definition of the **ValidationProcessRequest** element.

```
<xs:element name="ValidationProcessRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
      <xs:element xmlns:q51="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="ValidationProcessCriteria" nillable="true" type="q51:ValidationProcessCriteria" />
      <xs:element xmlns:q52="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="ValidationProcessOptions" nillable="true" type="q52:ValidationProcessOptions" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**ServiceConnectionName:** Specifies the service connection name.

**ValidationProcessCriteria:** Specifies the [ValidationProcessCriteria](#) complex type.

**ValidationProcessOptions:** Specifies the [ValidationProcessOptions](#) complex type.

### 3.1.4.18.2.2 ValidationProcessResponse

The **ValidationProcessResponse** element holds the response values back from the validation process.

The following is the XSD schema definition of the **ValidationProcessResponse** element.

```
<xs:element name="ValidationProcessResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q53="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q53:OperationResult" />
      <xs:element xmlns:q54="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ValidationIssueList" nillable="true" type="q54:ArrayOfValidationIssue" />
      <xs:element xmlns:q55="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ValidationProcessResult" nillable="true" type="q55:ValidationProcessResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**OperationResult:** Specifies the [OperationResult](#) complex type.

**ArrayOfValidationIssue:** Specifies the [ArrayOfValidationIssue](#) complex type.

**ValidationProcessResult:** Specifies the [ValidationProcessResult](#) complex type.

### 3.1.4.18.3 Complex Types

The following XML schema complex type definitions are specific to the **ValidationProcess** operation.

#### 3.1.4.18.3.1 ValidationProcessCriteria

The **ValidationProcessCriteria** complex type specifies validation process criteria, such as members, to be validated.

The following is the XSD schema definition of the **ValidationProcessCriteria** complex type.

```
<xs:complexType name="ValidationProcessCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="Members" nillable="true"
type="tns:ArrayOfMemberIdentifier" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**EntityId:** Specifies the GUID or the name of an entity to further restrict output.

**Members:** Specifies member codes (together with [Entity](#)) to retrieve transactions for one or more specific members.

**ModelId:** Specifies the GUID or the exact name of a model.

**VersionId:** Specifies the GUID or the exact name of a version.

### 3.1.4.18.3.2 ValidationProcessOptions

The **ValidationProcessOptions** complex type specifies the following validation process options:

- Whether to commit the version after validation
- Whether to return the validation results

The following is the XSD schema definition of the **ValidationProcessOptions** complex type.

```
<xs:complexType name="ValidationProcessOptions">
  <xs:sequence>
    <xs:element minOccurs="0" name="CommitVersion" type="xs:boolean" />
    <xs:element minOccurs="0" name="ReturnValidationResults" type="xs:boolean" />
  </xs:sequence>
</xs:complexType>
```

**CommitVersion:** Specifies whether the version being validated is committed after validation.

**ReturnValidationResults:** Specifies whether the validation results are returned after validation.

### 3.1.4.18.3.3 ValidationProcessResult

The **ValidationProcessResult** complex type holds the validation process results.

The following is the XSD schema definition of the **ValidationProcessResult** complex type.

```
<xs:complexType name="ValidationProcessResult">
  <xs:sequence>
    <xs:element minOccurs="0" name="MembersInvalidCount" type="xs:int" />
    <xs:element minOccurs="0" name="MembersValidCount" type="xs:int" />
    <xs:element minOccurs="0" name="MembersValidatedCount" type="xs:int" />
  </xs:sequence>
</xs:complexType>
```

**MembersInvalidCount:** Specifies the number of members that are found to be invalid during validation.

**MembersValidCount:** Specifies the number of members that are found to be valid during validation.

**MembersValidatedCount:** Specifies the number of members that are validated as part of the validation process.

### 3.1.4.18.4 Simple Types

There are no XML schema simple type definitions specific to the **ValidationProcess** operation.

### 3.1.4.19 EntityMemberAnnotationsCreate

The **EntityMemberAnnotationsCreate** operation adds annotations to a member that are not associated with a transaction.

The following inputs are required to specify the contents:

- Model ID
- Version ID
- Entity ID
- Member ID

Additionally, one or more annotation comments must be included in a collection of annotations.

The following is the WSDL definition of the **EntityMemberAnnotationsCreate** operation.

```
<wsdl:operation name="EntityMemberAnnotationsCreate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAnnotationsCreate" name="EntityMemberAnnotationsCreateRequest"
    message="tns:EntityMemberAnnotationsCreateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAnnotationsCreateResponse" name="AnnotationsCreateResponse"
    message="tns:AnnotationsCreateResponse" />
</wsdl:operation>
```

#### 3.1.4.19.1 Messages

The following WSDL message definitions are specific to the **EntityMemberAnnotationsCreate** operation.

##### 3.1.4.19.1.1 EntityMemberAnnotationsCreateRequest

The **EntityMemberAnnotationsCreateRequest** message contains the **EntityMemberAnnotationsCreateRequest** element.

##### 3.1.4.19.1.2 EntityMemberAnnotationsCreateResponse

The **EntityMemberAnnotationsCreateResponse** message contains the **EntityMemberAnnotationsCreateResponse** element.

#### 3.1.4.19.2 Elements

The following XML schema element definitions are specific to the **EntityMemberAnnotationsCreate** operation.

##### 3.1.4.19.2.1 EntityMemberAnnotationsCreateRequest

The **EntityMemberAnnotationsCreateRequest** element specifies the details of what is requested when creating entity member annotations.



The following is the XSD schema definition of the **EntityMemberAnnotationsCreateRequest** element.

```
<xs:element name="EntityMemberAnnotationsCreateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q56="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Annotations" nillable="true" type="q56:ArrayOfAnnotation" />
      <xs:element xmlns:q57="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityId" nillable="true" type="q57:Identifier" />
      <xs:element xmlns:q58="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="MemberId" nillable="true" type="q58:MemberIdentifier" />
      <xs:element xmlns:q59="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelId" nillable="true" type="q59:Identifier" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q60="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="VersionId" nillable="true" type="q60:Identifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Annotations:** Specifies an array of annotations to create that is represented by the [ArrayOfAnnotation](#) complex type.

**EntityId:** Specifies the GUID or the exact name of the entity.

**MemberId:** Specifies the [MemberIdentifier](#) of the member.

**ModelId:** Specifies the GUID or the exact name of the model.

**ServiceConnectionName:** Specifies the service connection name.

**VersionId:** Specifies the GUID or the exact name of the model version.

### 3.1.4.19.2.2 EntityMemberAnnotationsCreateResponse

The **EntityMemberAnnotationsCreateResponse** element holds the details of the response.

The following is the XSD schema definition of the **EntityMemberAnnotationsCreateResponse** element.

```
<xs:element name="AnnotationsCreateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q61="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q61:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.19.3 Complex Types

There are no XML schema complex type definitions specific to the **EntityMemberAnnotationsCreate** operation.

### 3.1.4.19.4 Simple Types

There are no XML schema simple type definitions specific to the **EntityMemberAnnotationsCreate** operation.

### 3.1.4.20 TransactionAnnotationsCreate

The **TransactionAnnotationsCreate** operation creates annotations on an existing transaction. This operation creates annotations that are bound only to prior transactions.

[EntityMemberAnnotationsCreate](#) is used to create a stand-alone transaction (meaning a transaction that is attached directly to a member and not a transaction).

A user may annotate only his or her own transactions. Model administrators can annotate all transactions.

This operation requires a single transaction ID input together with one or more annotation comments.

The following is the WSDL definition of the **TransactionAnnotationsCreate** operation.

```
<wsdl:operation name="TransactionAnnotationsCreate">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionAnnotationsCreate" name="TransactionAnnotationsCreateRequest"
message="tns:TransactionAnnotationsCreateRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionAnnotationsCreateResponse" name="AnnotationsCreateResponse"
message="tns:AnnotationsCreateResponse" />
</wsdl:operation>
```

#### 3.1.4.20.1 Messages

The following WSDL message definitions are specific to the **TransactionAnnotationsCreate** operation.

##### 3.1.4.20.1.1 TransactionAnnotationsCreateRequest

The **TransactionAnnotationsCreateRequest** message contains the **TransactionAnnotationsCreateRequest** element.

##### 3.1.4.20.2 Elements

The following XML schema element definitions are specific to the **TransactionAnnotationsCreate** operation.

### 3.1.4.20.2.1 TransactionAnnotationsCreateRequest

The **TransactionAnnotationsCreateRequest** element specifies the details of what is requested in the operation.

The following is the XSD schema definition of the **TransactionAnnotationsCreateRequest** element.

```
<xs:element name="TransactionAnnotationsCreateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q62="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Annotations" nillable="true" type="q62:ArrayOfAnnotation" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element minOccurs="0" name="TransactionId" type="xs:int" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Annotations:** Specifies a collection of annotations by using the [ArrayOfAnnotation](#) complex type.

**ServiceConnectionName:** Specifies the service connection name.

**TransactionId:** Specifies the ID of an existing transaction.

### 3.1.4.20.3 Complex Types

There are no XML schema complex type definitions specific to the **TransactionAnnotationsCreate** operation.

### 3.1.4.20.4 Simple Types

There are no XML schema simple type definitions specific to the **TransactionAnnotationsCreate** operation.

### 3.1.4.21 EntityMemberAnnotationsGet

The **EntityMemberAnnotationsGet** operation retrieves annotations that are associated directly with a member (but not associated with a transaction).

The following inputs are required:

- Model ID
- Version ID
- Entity ID
- Member ID

The following is the WSDL definition of the **EntityMemberAnnotationsGet** operation.

```
<wsdl:operation name="EntityMemberAnnotationsGet">
```

```

    <wsdl:input
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAnnotationsGet" name="EntityMemberAnnotationsGetRequest"
      message="tns:EntityMemberAnnotationsGetRequest" />
    <wsdl:output
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAnnotationsGetResponse" name="EntityMemberAnnotationsGetResponse"
      message="tns:EntityMemberAnnotationsGetResponse" />
  </wsdl:operation>

```

### 3.1.4.21.1 Messages

The following WSDL message definitions are specific to the **EntityMemberAnnotationsGet** operation.

#### 3.1.4.21.1.1 EntityMemberAnnotationsGetRequest

The **EntityMemberAnnotationsGetRequest** message contains the **EntityMemberAnnotationsGetRequest** element.

#### 3.1.4.21.1.2 EntityMemberAnnotationsGetResponse

The **EntityMemberAnnotationsGetResponse** message contains the **EntityMemberAnnotationsGetResponse** element.

### 3.1.4.21.2 Elements

The following XML schema element definitions are specific to the **EntityMemberAnnotationsGet** operation.

#### 3.1.4.21.2.1 EntityMemberAnnotationsGetRequest

The **EntityMemberAnnotationsGetRequest** element specifies the details of what is requested.

The following is the XSD schema definition of the **EntityMemberAnnotationsGetRequest** element.

```

<xs:element name="EntityMemberAnnotationsGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q63="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="EntityId" nillable="true" type="q63:Identifier" />
      <xs:element xmlns:q64="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="MemberId" nillable="true" type="q64:MemberIdentifier" />
      <xs:element xmlns:q65="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="ModelId" nillable="true" type="q65:Identifier" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
      <xs:element xmlns:q66="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="VersionId" nillable="true" type="q66:Identifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**EntityId:** Specifies the GUID or the exact name of an entity.

**MemberId**: Specifies the [MemberIdentifier](#) of the member whose annotations are requested.

**ModelId**: Specifies the GUID or the exact name of a model.

**VersionId**: Specifies the GUID or the exact name of a model version.

### 3.1.4.21.2.2 EntityMemberAnnotationsGetResponse

The **EntityMemberAnnotationsGetResponse** element holds the details of the response.

The following is the XSD schema definition of the **EntityMemberAnnotationsGetResponse** element.

```
<xs:element name="EntityMemberAnnotationsGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q67="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityId" nillable="true" type="q67:Identifier" />
      <xs:element xmlns:q68="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="MemberId" nillable="true" type="q68:MemberIdentifier" />
      <xs:element xmlns:q69="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelId" nillable="true" type="q69:Identifier" />
      <xs:element xmlns:q70="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q70:OperationResult" />
      <xs:element xmlns:q71="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="VersionId" nillable="true" type="q71:Identifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**EntityId**: Specifies the GUID of the entity.

**MemberId**: Specifies the [MemberIdentifier](#) of the member whose annotations were retrieved.

**ModelId**: Specifies the GUID of the model.

**OperationResult**: Specifies the [OperationResult](#) complex type.

**VersionId**: Specifies the GUID of the model version.

### 3.1.4.21.3 Complex Types

There are no XML schema complex type definitions specific to the **EntityMemberAnnotationsGet** operation.

### 3.1.4.21.4 Simple Types

There are no XML schema simple type definitions specific to the **EntityMemberAnnotationsGet** operation.

### 3.1.4.22 TransactionAnnotationsGet

The **TransactionAnnotationsGet** operation retrieves annotations that are associated with a transaction. This operation has one required input, which is the transaction ID.

The following is the WSDL definition of the **TransactionAnnotationsGet** operation.

```

    <wsdl:operation name="TransactionAnnotationsGet">
      <wsdl:input
        wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionAnnotationsGet" name="TransactionAnnotationsGetRequest"
        message="tns:TransactionAnnotationsGetRequest" />
      <wsdl:output
        wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionAnnotationsGetResponse" name="TransactionAnnotationsGetResponse"
        message="tns:TransactionAnnotationsGetResponse" />
    </wsdl:operation>

```

### 3.1.4.22.1 Messages

The following WSDL message definitions are specific to the **TransactionAnnotationsGet** operation.

#### 3.1.4.22.1.1 TransactionAnnotationGetRequest

The **TransactionAnnotationGetRequest** message contains the **TransactionAnnotationGetRequest** element.

#### 3.1.4.22.1.2 TransactionAnnotationGetResponse

The **TransactionAnnotationGetResponse** message contains the **TransactionAnnotationGetResponse** element.

### 3.1.4.22.2 Elements

The following XML schema element definitions are specific to the **TransactionAnnotationsGet** operation.

#### 3.1.4.22.2.1 TransactionAnnotationGetRequest

The **TransactionAnnotationGetRequest** element specifies the details of what is requested.

The following is the XSD schema definition of the **TransactionAnnotationGetRequest** element.

```

<xs:element name="TransactionAnnotationsGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
      <xs:element minOccurs="0" name="TransactionId" type="xs:int" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**ServiceConnectionName**: Specifies the service connection name.

**TransactionId**: Specifies the ID of the transaction to which the annotations belong.

### 3.1.4.22.2 TransactionAnnotationGetResponse

The **TransactionAnnotationGetResponse** element holds the details of the response.

The following is the XSD schema definition of the **TransactionAnnotationGetResponse** element.

```
<xs:element name="TransactionAnnotationsGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q72="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Annotations" nillable="true" type="q72:ArrayOfAnnotation" />
      <xs:element xmlns:q73="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q73:OperationResult" />
      <xs:element minOccurs="0" name="TransactionId" type="xs:int" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Annotations:** Specifies a collection of annotations that are returned by using the [ArrayOfAnnotation](#) complex type.

**OperationResult:** Specifies the [OperationResult](#) complex type.

**TransactionId:** Specifies the ID of the transaction whose annotations were returned.

### 3.1.4.22.3 Complex Types

There are no XML schema complex type definitions specific to the **TransactionAnnotationsGet** operation.

### 3.1.4.22.4 Simple Types

There are no XML schema simple type definitions specific to the **TransactionAnnotationsGet** operation.

### 3.1.4.23 AnnotationsUpdate

The **AnnotationsUpdate** operation updates the comment text of an existing annotation. Only the user who created the annotation or a model administrator can update an annotation. The annotations are found by ID. The annotation's text is replaced with the supplied **Comment** property.

The following is the WSDL definition of the **AnnotationsUpdate** operation.

```
<wsdl:operation name="AnnotationsUpdate">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/AnnotationsUpdate" name="AnnotationsUpdateRequest" message="tns:AnnotationsUpdateRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/AnnotationsUpdateResponse" name="AnnotationsUpdateResponse"
message="tns:AnnotationsUpdateResponse" />
</wsdl:operation>
```

### 3.1.4.23.1 Messages

The following WSDL message definitions are specific to the **AnnotationsUpdate** operation.

#### 3.1.4.23.1.1 AnnotationsUpdateRequest

The **AnnotationsUpdateRequest** message contains the **AnnotationsUpdateRequest** element.

#### 3.1.4.23.1.2 AnnotationsUpdateResponse

The **AnnotationsUpdateResponse** message contains the **AnnotationsUpdateResponse** element.

### 3.1.4.23.2 Elements

The following XML schema element definitions are specific to the **AnnotationsUpdate** operation.

#### 3.1.4.23.2.1 AnnotationsUpdateRequest

The **AnnotationsUpdateRequest** element specifies the details of the annotations update request.

The following is the XSD schema definition of the **AnnotationsUpdateRequest** element.

```
<xs:element name="AnnotationsUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**ServiceConnectionName:** Specifies the service connection name.

#### 3.1.4.23.2.2 AnnotationsUpdateResponse

The **AnnotationsUpdateResponse** element holds the details of the response from [AnnotationsUpdateRequest](#).

The following is the XSD schema definition of the **AnnotationsUpdateResponse** element.

```
<xs:element name="AnnotationsUpdateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q74="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q74:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**OperationResult:** Specifies the [OperationResult](#) complex type.



### 3.1.4.23.3 Complex Types

There are no XML schema complex type definitions specific to the **AnnotationsUpdate** operation.

### 3.1.4.23.4 Simple Types

There are no XML schema simple type definitions specific to the **AnnotationsUpdate** operation.

### 3.1.4.24 AnnotationsDelete

The **AnnotationsDelete** operation deletes an existing annotation by annotation ID. Only the user who created the annotation or a model administrator can delete an annotation. The annotations are found by ID.

The following is the WSDL definition of the **AnnotationsDelete** operation.

```
<wsdl:operation name="AnnotationsDelete">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/AnnotationsDelete" name="AnnotationsDeleteRequest" message="tns:AnnotationsDeleteRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/AnnotationsDeleteResponse" name="AnnotationsDeleteResponse"
message="tns:AnnotationsDeleteResponse" />
</wsdl:operation>
```

#### 3.1.4.24.1 Messages

The following WSDL message definitions are specific to the **AnnotationsDelete** operation.

##### 3.1.4.24.1.1 AnnotationsDeleteRequest

The **AnnotationsDeleteRequest** message contains the **AnnotationsDeleteRequest** element.

##### 3.1.4.24.1.2 AnnotationsDeleteResponse

The **AnnotationsDeleteResponse** message contains the **AnnotationsDeleteResponse** element.

#### 3.1.4.24.2 Elements

The following XML schema element definitions are specific to the **AnnotationsDelete** operation.

##### 3.1.4.24.2.1 AnnotationsDeleteRequest

The **AnnotationsDeleteRequest** element specifies the details of the request.

The following is the XSD schema definition of the **AnnotationsDeleteRequest** element.

```
<xs:element name="AnnotationsDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**ServiceConnectionName:** Specifies the service connection name.

### 3.1.4.24.2.2 AnnotationsDeleteResponse

The **AnnotationsDeleteResponse** element holds the details of the response.

The following is the XSD schema definition of the **AnnotationsDeleteResponse** element.

```

<xs:element name="AnnotationsDeleteResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q75="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q75:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.24.3 Complex Types

There are no XML schema complex type definitions specific to the **AnnotationsDelete** operation.

### 3.1.4.24.4 Simple Types

There are no XML schema simple type definitions specific to the **AnnotationsDelete** operation.

### 3.1.4.25 EntityMemberKeyLookup

The **EntityMemberKeyLookup** operation looks up either a member code or an internal ID based on the other member code or internal ID and the provided context. This operation SHOULD NOT be used.

The following is the WSDL definition of the **EntityMemberKeyLookup** operation.

```

<wsdl:operation name="EntityMemberKeyLookup">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberKeyLookup" name="EntityMemberKeyGetRequest" message="tns:EntityMemberKeyGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberKeyLookupResponse" name="EntityMemberKeyGetResponse"
message="tns:EntityMemberKeyGetResponse" />
  </wsdl:operation>

```

### 3.1.4.25.1 Messages

The following WSDL message definitions are specific to the **EntityMemberKeyLookup** operation.

### 3.1.4.25.1.1 Entity MemberKeyGetRequest

The **EntityMemberKeyGetRequest** message contains the **EntityMemberKeyGetRequest** element.

### 3.1.4.25.1.2 Entity MemberKeyGetResponse

The **EntityMemberKeyGetResponse** message contains the **EntityMemberKeyGetResponse** element.

### 3.1.4.25.2 Elements

The following XML schema element definitions are specific to the **EntityMemberKeyLookup** operation.

#### 3.1.4.25.2.1 Entity MemberKeyGetRequest

The **EntityMemberKeyGetRequest** element specifies the details of what is requested.

The following is the XSD schema definition of the **Entity MemberKeyGetRequest** element.

```
<xs:element name="EntityMemberKeyGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q76="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="EntityId" nillable="true" type="q76:Identifier" />
      <xs:element
xmlns:q77="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="LookupType" type="q77:MemberKeyLookupType" />
      <xs:element xmlns:q78="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="MemberKeys" nillable="true" type="q78:ArrayOfMemberKey" />
      <xs:element xmlns:q79="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="MemberType" type="q79:MemberType" />
      <xs:element xmlns:q80="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ModelId" nillable="true" type="q80:Identifier" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q81="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="VersionId" nillable="true" type="q81:Identifier" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**EntityId:** Specifies the GUID or the exact name of the entity.

**LookupType:** Specifies the lookup type by using the [MemberKeyLookupType](#) complex type.

**MemberKeys:** Specifies a collection of member keys, either code or internal ID, by using the [ArrayOfMemberKey](#) complex type.

**MemberType:** Specifies the [MemberType](#).

**ModelId:** Specifies the GUID or the exact name of the model.

**VersionId:** Specifies the GUID or the exact name of the model version.

### 3.1.4.25.2.2 EntityMemberKeyGetResponse

The **EntityMemberKeyGetResponse** element holds the response details.

The following is the XSD schema definition of the **EntityMemberKeyGetResponse** element.

```
<xs:element name="EntityMemberKeyGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q82="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="MemberKeys" nillable="true" type="q82:ArrayOfMemberKey" />
      <xs:element xmlns:q83="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q83:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**MemberKeys:** Specifies a collection of member keys that contain member codes (if the internal ID is provided) or the internal ID (if member codes are provided) by using the [ArrayOfMemberKey](#) complex type.

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.25.3 Complex Types

The following XML schema complex type definitions are specific to the **EntityMemberKeyLookup** operation.

#### 3.1.4.25.3.1 MemberKey

The **MemberKey** complex type holds the member code, the internal ID, or both for a member.

The following is the XSD schema definition of the **MemberKey** complex type.

```
<xs:complexType name="MemberKey">
  <xs:sequence>
    <xs:element minOccurs="0" name="MemberCode" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="MemberId" type="xs:int" />
  </xs:sequence>
</xs:complexType>
```

**MemberCode:** Specifies the code value of a member.

**MemberId:** Specifies the internal ID of member.

#### 3.1.4.25.3.2 ArrayOfMemberKey

The **ArrayOfMemberKey** complex type represents a collection of entity member keys.

The following is the XSD schema definition of the **ArrayOfMemberKey** complex type.

```
<xs:complexType name="ArrayOfMemberKey">
```

```

    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="MemberKey" nillable="true"
        type="tns:MemberKey" />
    </xs:sequence>
  </xs:complexType>

```

**MemberKey:** Specifies the member code and/or internal ID as specified by the [MemberKey](#) complex type.

#### 3.1.4.25.4 Simple Types

There are no XML schema simple type definitions specific to the **EntityMemberKeyLookup** operation.

#### 3.1.4.26 StagingProcess

The **StagingProcess** operation retrieves a staging record set by using batch IDs. This operation can be used to retrieve the following:

- Information about the batch.
- Information about the batch and the data that is contained in the batch.

The following is the WSDL definition of the **StagingProcess** operation.

```

<wsdl:operation name="StagingProcess">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingProcess"
    name="StagingProcessRequest" message="tns:StagingProcessRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingProcessResponse"
    name="StagingProcessResponse" message="tns:StagingProcessResponse" />
</wsdl:operation>

```

#### 3.1.4.26.1 Messages

The following WSDL message definitions are specific to the **StagingProcess** operation.

##### 3.1.4.26.1.1 StagingProcessRequest

The **StagingProcessRequest** message contains the **StagingProcessRequest** element.

##### 3.1.4.26.1.2 StagingProcessResponse

The **StagingProcessResponse** message contains the **StagingProcessResponse** element.

#### 3.1.4.26.2 Elements

The following XML schema element definitions are specific to the **StagingProcess** operation.

##### 3.1.4.26.2.1 StagingProcessRequest

The **StagingProcessRequest** element specifies the details of the staging process request.

The following is the XSD schema definition of the **StagingProcessRequest** element.

```
<xs:element name="StagingProcessRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="Process" type="xs:boolean" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q84="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="UnbatchedCriteria" nillable="true" type="q84:StagingUnbatchedCriteria" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Process:** Specifies whether to perform the staging process.

**ServiceConnectionName:** Specifies the service connection name.

**UnbatchedCriteria:** Specifies unbatched criteria by using the [StagingUnbatchedCriteria](#) complex type.

### 3.1.4.26.2.2 StagingProcessResponse

The **StagingProcessResponse** element holds the details of the staging process response.

The following is the XSD schema definition of the **StagingProcessResponse** element.

```
<xs:element name="StagingProcessResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q85="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="BatchId" nillable="true" type="q85:StagingBatch" />
      <xs:element xmlns:q86="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q86:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**BatchId:** Specifies the batch ID by using the [StagingBatch](#) complex type.

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.26.3 Complex Types

The following XML schema complex type definitions are specific to the **StagingProcess** operation.

#### 3.1.4.26.3.1 StagingUnbatchedCriteria

The **StagingUnbatchedCriteria** complex type specifies the staging unbatched criteria.

The following is the XSD schema definition of the **StagingUnbatchedCriteria** complex type.

```
<xs:complexType name="StagingUnbatchedCriteria">
```

```

<xs:sequence>
  <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
  <xs:element minOccurs="0" name="SourceSystemId" nillable="true" type="tns:Identifier" />
/>
  <xs:element minOccurs="0" name="VersionId" nillable="true" type="tns:Identifier" />
</xs:sequence>
</xs:complexType>

```

**ModelId:** Specifies the GUID or the exact name of a model.

**SourceSystemId:** Specifies the GUID or the exact name of the source system.

**VersionId:** Specifies the GUID or the exact name of the version.

### 3.1.4.26.4 Simple Types

There are no XML schema simple type definitions specific to the **StagingProcess** operation.

### 3.1.4.27 ExportViewCreate

The **ExportViewCreate** operation generates or regenerates a desired subscription view based on a specified configuration and view name.

The following is the WSDL definition of the **ExportViewCreate** operation.

```

<wsdl:operation name="ExportViewCreate">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewCreate" name="ExportViewCreateRequest" message="tns:ExportViewCreateRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewCreateResponse" name="ExportViewCreateResponse" message="tns:ExportViewCreateResponse" />
</wsdl:operation>

```

### 3.1.4.27.1 Messages

The following WSDL message definitions are specific to the **ExportViewCreate** operation.

#### 3.1.4.27.1.1 ExportViewCreateRequest

The **ExportViewCreateRequest** message contains the **ExportViewCreateRequest** element.

#### 3.1.4.27.1.2 ExportViewCreateResponse

The **ExportViewCreateResponse** message contains the **ExportViewCreateResponse** element.

### 3.1.4.27.2 Elements

The following XML schema element definitions are specific to the **ExportViewCreate** operation.

#### 3.1.4.27.2.1 ExportViewCreateRequest

The **ExportViewCreateRequest** element specifies the details of what is requested.

The following is the XSD schema definition of the **ExportViewCreateRequest** element.

```
<xs:element name="ExportViewCreateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q87="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="ExportView" nillable="true" type="q87:ExportView" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**ExportView:** Specifies the export view by using the [ExportView](#) complex type.

**ServiceConnectionName:** Specifies the service connection name.

### 3.1.4.27.2 ExportViewCreateResponse

The **ExportViewCreateResponse** element holds the details of the response.

The following is the XSD schema definition of the **ExportViewCreateResponse** element.

```
<xs:element name="ExportViewCreateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q88="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q88:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.27.3 Complex Types

There are no XML schema complex type definitions specific to the **ExportViewCreate** operation.

### 3.1.4.27.4 Simple Types

There are no XML schema simple type definitions specific to the **ExportViewCreate** operation.

### 3.1.4.28 ExportViewUpdate

The **ExportViewUpdate** operation updates a desired subscription view based on a specified configuration and view name.

The following is the WSDL definition of the **ExportViewUpdate** operation.

```
<wsdl:operation name="ExportViewUpdate">
```



```

    <wsdl:input
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewUpdate" name="ExportViewUpdateRequest" message="tns:ExportViewUpdateRequest" />
    <wsdl:output
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewUpdateResponse" name="ExportViewUpdateResponse" message="tns:ExportViewUpdateResponse" />
  </wsdl:operation>

```

### 3.1.4.28.1 Messages

The following WSDL message definitions are specific to the **ExportViewUpdate** operation.

#### 3.1.4.28.1.1 ExportViewUpdateRequest

The **ExportViewUpdateRequest** message contains the **ExportViewUpdateRequest** element.

#### 3.1.4.28.1.2 ExportViewUpdateResponse

The **ExportViewUpdateResponse** message contains the **ExportViewUpdateResponse** element.

### 3.1.4.28.2 Elements

The following XML schema element definitions are specific to the **ExportViewUpdate** operation.

#### 3.1.4.28.2.1 ExportViewUpdateRequest

The **ExportViewUpdateRequest** element specifies the details of the export view update request.

The following is the XSD schema definition of the **ExportViewUpdateRequest** element.

```

<xs:element name="ExportViewUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q89="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="ExportView" nillable="true" type="q89:ExportView" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**ExportView:** Specifies the export view by using the [ExportView](#) complex type.

**ServiceConnectionName:** Specifies the service connection name.

#### 3.1.4.28.2.2 ExportViewUpdateResponse

The **ExportViewUpdateResponse** element holds the details of the response.

The following is the XSD schema definition of the **ExportViewUpdateResponse** element.

```

<xs:element name="ExportViewUpdateResponse">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element xmlns:q90="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
      name="OperationResult" nillable="true" type="q90:OperationResult" />
  </xs:sequence>
</xs:complexType>
</xs:element>

```

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.28.3 Complex Types

There are no XML schema complex type definitions specific to the **ExportViewUpdate** operation.

### 3.1.4.28.4 Simple Types

There are no XML schema simple type definitions specific to the **ExportViewUpdate** operation.

### 3.1.4.29 ExportViewDelete

The **ExportViewDelete** operation removes an existing export view from the master data database.

The following is the WSDL definition of the **ExportViewDelete** operation.

```

<wsdl:operation name="ExportViewDelete">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewDelete"
    name="ExportViewDeleteRequest" message="tns:ExportViewDeleteRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewDeleteResponse"
    name="ExportViewDeleteResponse" message="tns:ExportViewDeleteResponse" />
</wsdl:operation>

```

#### 3.1.4.29.1 Messages

The following WSDL message definitions are specific to the **ExportViewDelete** operation.

##### 3.1.4.29.1.1 ExportViewDeleteRequest

The **ExportViewDeleteRequest** message contains the **ExportViewDeleteRequest** element.

##### 3.1.4.29.1.2 ExportViewDeleteResponse

The **ExportViewDeleteResponse** message contains the **ExportViewDeleteResponse** element.

#### 3.1.4.29.2 Elements

The following XML schema element definitions are specific to the **ExportViewDelete** operation.

##### 3.1.4.29.2.1 ExportViewDeleteRequest

The **ExportViewDeleteRequest** element specifies the details of the export view delete request.

The following is the XSD schema definition of the **ExportViewDeleteRequest** element.

```
<xs:element name="ExportViewDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q91="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Identifier" nillable="true" type="q91:Identifier" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Identifier**: Specifies the internal identifier for the export view to delete.

**ServiceConnectionName**: Specifies the service connection name.

### 3.1.4.29.2 ExportViewDeleteResponse

The **ExportViewDeleteResponse** element holds the details of the response.

The following is the XSD schema definition of the **ExportViewDeleteResponse** element.

```
<xs:element name="ExportViewDeleteResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q92="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q92:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**OperationResult**: Specifies the [OperationResult](#) complex type.

### 3.1.4.29.3 Complex Types

There are no XML schema complex type definitions specific to the **ExportViewDelete** operation.

### 3.1.4.29.4 Simple Types

There are no XML schema simple type definitions specific to the **ExportViewDelete** operation.

### 3.1.4.30 ExportViewListGet

The **ExportViewListGet** operation retrieves a list of existing export views.

The following is the WSDL definition of the **ExportViewListGet** operation.

```
<wsdl:operation name="ExportViewListGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewListGet" name="ExportViewListGetRequest" message="tns:ExportViewListGetRequest" />
```

```

    <wsdl:output
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewListGetResponse" name="ExportViewListGetResponse"
      message="tns:ExportViewListGetResponse" />
    </wsdl:operation>

```

### 3.1.4.30.1 Messages

The following WSDL message definitions are specific to the **ExportViewListGet** operation.

#### 3.1.4.30.1.1 ExportViewListGetRequest

The **ExportViewListGetRequest** message contains the **ExportViewListGetRequest** element.

#### 3.1.4.30.1.2 ExportViewListGetResponse

The **ExportViewListGetResponse** message contains the **ExportViewListGetResponse** element.

### 3.1.4.30.2 Elements

The following XML schema element definitions are specific to the **ExportViewListGet** operation.

#### 3.1.4.30.2.1 ExportViewListGetRequest

The **ExportViewListGetRequest** element specifies the details of the request to get the export view list.

The following is the XSD schema definition of the **ExportViewListGetRequest** element.

```

<xs:element name="ExportViewListGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**ServiceConnectionName:** Specifies the service connection name.

#### 3.1.4.30.2.2 ExportViewListGetResponse

The **ExportViewListGetResponse** element holds the details of the response.

The following is the XSD schema definition of the **ExportViewListGetResponse** element.

```

<xs:element name="ExportViewListGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q93="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="ExportViews" nillable="true" type="q93:ArrayOfExportView" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

        <xs:element xmlns:q94="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q94:OperationResult" />
    </xs:sequence>
</xs:complexType>
</xs:element>

```

**ExportViews:** Specifies a collection of export views that are returned by using the [ArrayOfExportView](#) complex type.

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.30.3 Complex Types

There are no XML schema complex type definitions specific to the **ExportViewListGet** operation.

### 3.1.4.30.4 Simple Types

There are no XML schema simple type definitions specific to the **ExportViewListGet** operation.

### 3.1.4.31 SecurityPrincipalsClone

The **SecurityPrincipalsClone** operation creates or updates copies of security principals and/or permissions in the MDM repository.

The following is the WSDL definition of the **SecurityPrincipalsClone** operation.

```

<wsdl:operation name="SecurityPrincipalsClone">
  <soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsClone" style="document"/>
  <wsdl:input name="SecurityPrincipalsRequest">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsClone_Input_policy"/>
    <soap12:header message="tns:SecurityPrincipalsRequest_Headers" part="International"
use="literal"/>
    <soap12:body use="literal"/>
  </wsdl:input>
  <wsdl:output name="MessageResponse">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsClone_output_policy"/>
    <soap12:body use="literal"/>
  </wsdl:output>
</wsdl:operation>

```

#### 3.1.4.31.1 Messages

The following WSDL message definitions are specific to the **SecurityPrincipalsClone** operation.

##### 3.1.4.31.1.1 SecurityPrincipalsRequest

The **SecurityPrincipalsRequest** message contains the **SecurityPrincipalsRequest** element.

##### 3.1.4.31.1.2 MessageResponse

The **MessageResponse** message contains the **MessageResponse** element.

### 3.1.4.31.2 Elements

The following XML schema element definitions are specific to the **SecurityPrincipalsClone** operation.

#### 3.1.4.31.2.1 SecurityPrincipalsRequest

The **SecurityPrincipalsRequest** element contains security principals, properties and permissions for creation or update.

The following is the XSD schema definition of the **SecurityPrincipalsRequest** element.

```
<xs:element name="SecurityPrincipalsRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q95="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Principals" nillable="true" type="q95:SecurityPrincipals" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Principals:** Specifies the [SecurityPrincipals](#) complex type.

#### 3.1.4.31.2.2 MessageResponse

The **MessageResponse** element contains any resulting error messages for the operation within an [OperationResult](#) complex type.

The following is the XSD schema definition of the **MessageResponse** element.

```
<xs:element name="MessageResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q98="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q98:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**OperationResult:** Specifies the **OperationResult** complex type.

### 3.1.4.31.3 Complex Types

There are no XML schema complex type definitions specific to the **SecurityPrincipalsClone** operation.

#### 3.1.4.31.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrincipalsClone** operation.

### 3.1.4.32 SecurityPrincipalsCreate

The **SecurityPrincipalsCreate** operation creates a security principal object in the MDM repository.

The following is the WSDL definition of the **SecurityPrincipalsCreate** operation.

```
<wsdl:operation name="SecurityPrincipalsCreate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsCreate" name="SecurityPrincipalsRequest"
    message="tns:SecurityPrincipalsRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsCreateResponse" name="SecurityCreateResponse"
    message="tns:SecurityCreateResponse"/>
</wsdl:operation>
```

#### 3.1.4.32.1 Messages

The following WSDL message definitions are specific to the **SecurityPrincipalsCreate** operation.

##### 3.1.4.32.1.1 SecurityPrincipalsRequest

The **SecurityPrincipalsRequest** message contains a **SecurityPrincipalsRequest** element.

##### 3.1.4.32.1.2 SecurityCreateResponse

The **SecurityCreateResponse** message contains a **SecurityCreateResponse** element.

#### 3.1.4.32.2 Elements

The following XML schema element definitions are specific to the **SecurityPrincipalsCreate** operation.

##### 3.1.4.32.2.1 SecurityPrincipalsRequest

The **SecurityPrincipalsRequest** element contains security principals, properties, and permissions for creation.

The following is the XSD schema definition of the **SecurityPrincipalsRequest** element.

```
<xs:element name="SecurityPrincipalsRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q95="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
        name="Principals" nillable="true" type="q95:SecurityPrincipals" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Principals:** The **Principals** complex type.

### 3.1.4.32.2 SecurityCreateResponse

The **SecurityCreateResponse** element may contain a set of identifiers for newly created principals and/or permissions.

The following is the XSD schema definition of the **SecurityCreateResponse** element.

```
<xs:element name="SecurityCreateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q96="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="OperationResult" nillable="true" type="q96:OperationResult" />
      <xs:element xmlns:q97="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="SecuritySet" nillable="true" type="q97:SecuritySet" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.32.3 Complex Types

There are no XML schema complex type definitions specific to the **SecurityPrincipalsCreate** operation.

### 3.1.4.32.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrincipalsCreate** operation.

### 3.1.4.33 SecurityPrincipalsGet

The **SecurityPrincipalsGet** operation gets the security principals data in whole or in parts.

The following is the WSDL definition of the **SecurityPrincipalsGet** operation.

```
<wsdl:operation name="SecurityPrincipalsGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsGet" name="SecurityPrincipalsGetRequest"
message="tns:SecurityPrincipalsGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsGetResponse" name="SecurityPrincipalsGetResponse"
message="tns:SecurityPrincipalsGetResponse" />
</wsdl:operation>
```

#### 3.1.4.33.1 Messages

The following XSD schema message definitions are specific to the **SecurityPrincipalsGet** operation.

##### 3.1.4.33.1.1 SecurityPrincipalsGetRequest

The **SecurityPrincipalsGetRequest** message contains the **SecurityPrincipalsGetRequest** element.



### 3.1.4.33.1.2 SecurityPrincipalsGetResponse

The **SecurityPrincipalsGetResponse** message contains the **SecurityPrincipalsGetResponse** element.

### 3.1.4.33.2 Elements

The following XML schema element definitions are specific to the **SecurityPrincipalsGet** operation.

#### 3.1.4.33.2.1 SecurityPrincipalsGetRequest

The following is the XSD schema definition of the **SecurityPrincipalsGetRequest** element.

```
<xs:element name="SecurityPrincipalsGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q99="http://schemas.microsoft.com/office/mdm/2007/11" minOccurs="0"
name="Criteria" nillable="true" type="q99:SecurityPrincipalCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.33.2.2 SecurityPrincipalsGetResponse

The following is the XSD schema definition of the **SecurityPrincipalsGetResponse** element.

```
<xs:element name="SecurityPrincipalsGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q100="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q100:OperationResult" />
      <xs:element xmlns:q101="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Principals" nillable="true" type="q101:SecurityPrincipals" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.33.3 Complex Types

There are no XML schema complex type definitions specific to the **SecurityPrincipalsGet** operation.

### 3.1.4.33.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrincipalsGet** operation.

### 3.1.4.34 SecurityPrincipalsDelete

The **SecurityPrincipalsDelete** operation deletes components of the security principal.

The following is the WSDL definition of the **SecurityPrincipalsDelete** operation.

```

<wsdl:operation name="SecurityPrincipalsDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsDelete" name="SecurityPrincipalsDeleteRequest"
message="tns:SecurityPrincipalsDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsDeleteResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>

```

### 3.1.4.34.1 Messages

The following XSD schema message definitions are specific to the **SecurityPrincipalsDelete** operation.

#### 3.1.4.34.1.1 SecurityPrincipalsDeleteRequest

The **SecurityPrincipalsDeleteRequest** message contains the **SecurityPrincipalsDeleteRequest** element.

#### 3.1.4.34.1.2 SecurityPrincipalsDeleteResponse

The **SecurityPrincipalsDeleteResponse** message contains the **SecurityPrincipalsDeleteResponse** element.

### 3.1.4.34.2 Elements

The following XML schema element definitions are specific to the **SecurityPrincipalsDelete** operation.

#### 3.1.4.34.2.1 SecurityPrincipalsDeleteRequest

The **SecurityPrincipalsDeleteRequest** element specifies the criteria in the [SecurityPrincipalsDeleteCriteria](#) complex type for the retrieval of security principals.

The following is the XSD schema definition of the **SecurityPrincipalsDeleteRequest** element.

```

<xs:element name="SecurityPrincipalsDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q102="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Criteria" nillable="true" type="q102:SecurityPrincipalsDeleteCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

#### 3.1.4.34.2.2 SecurityPrincipalsDeleteResponse

The **SecurityPrincipalsDeleteResponse** element specifies the results of a [SecurityPrincipalsDelete](#) operation.

### 3.1.4.34.3 Complex Types

The following XML schema complex type definitions are specific to the **SecurityPrincipalsDelete** operation.

#### 3.1.4.34.3.1 SecurityPrincipalsDeleteCriteria

The **SecurityPrincipalsDeleteCriteria** complex type provides a list of groups or users to be removed from the MDS system. This does not affect these groups or users in Active Directory.

The following is the WSDL definition of the **SecurityPrincipalsDeleteCriteria** complex type.

```
<xs:complexType name="SecurityPrincipalsDeleteCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Groups" nillable="true" type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="Users" nillable="true" type="tns:ArrayOfIdentifier" />
  </xs:sequence>
</xs:complexType>
```

**Groups:** Specifies an [ArrayOfIdentifier](#) instance that contains a set of groups to delete.

**Users:** Specifies an **ArrayOfIdentifier** instance that contains a set of users to delete.

#### 3.1.4.34.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrincipalsDelete** operation.

#### 3.1.4.35 SecurityPrivilegesClone

The **SecurityPrivilegesClone** operation creates exact copies of permissions within the security model from in the MDM repository.

The following is the WSDL definition of the **SecurityPrivilegesClone** operation.

```
<wsdl:operation name="SecurityPrivilegesClone">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesClone" name="SecurityPrivilegesRequest"
    message="tns:SecurityPrivilegesRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesCloneResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
```

#### 3.1.4.35.1 Messages

The following XSD schema message definitions are specific to the **SecurityPrivilegesClone** operation.

### 3.1.4.35.1.1 SecurityPrivilegesRequest

The **SecurityPrivilegesRequest** request message contains the **SecurityPrivilegesRequest** element.

### 3.1.4.35.2 Elements

The following XML schema element definitions are specific to the **SecurityPrivilegesClone** operation.

#### 3.1.4.35.2.1 SecurityPrivilegesRequest

The **SecurityPrivilegesRequest** request element specifies the security privileges for the [SecurityPrivilegesClone](#) operation.

The following is the XSD schema definition of the **SecurityPrivilegesRequest** element.

```
<xs:element name="SecurityPrivilegesRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q103="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Privileges" nillable="true" type="q103:SecurityPrivileges" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.35.3 Complex Types

There are no XML schema complex type definitions specific to the **SecurityPrivilegesClone** operation.

### 3.1.4.35.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrivilegesClone** operation.

### 3.1.4.36 SecurityPrivilegesGet

The **SecurityPrivilegesGet** operation retrieves security privilege information from the MDM repository.

The following is the WSDL definition of the **SecurityPrivilegesGet** operation.

```
<wsdl:operation name="SecurityPrivilegesGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesGet" name="SecurityPrivilegesGetRequest"
message="tns:SecurityPrivilegesGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesGetResponse" name="SecurityPrivilegesGetResponse"
message="tns:SecurityPrivilegesGetResponse"/>
```

```
</wsdl:operation>
```

### 3.1.4.36.1 Messages

The following XSD schema message definitions are specific to the **SecurityPrivilegesGet** operation.

#### 3.1.4.36.1.1 SecurityPrivilegesGetRequest

The **SecurityPrivilegesGetRequest** request message contains the **SecurityPrivilegesGetRequest** element.

#### 3.1.4.36.1.2 SecurityPrivilegesGetResponse

The **SecurityPrivilegesGetResponse** response message contains the **SecurityPrivilegesGetResponse** element.

### 3.1.4.36.2 Elements

The following XML schema element definitions are specific to the **SecurityPrivilegesGet** operation.

#### 3.1.4.36.2.1 SecurityPrivilegesGetRequest

The **SecurityPrivilegesGetRequest** request element specifies the criteria in the [SecurityPrivilegesGetCriteria](#) complex type for the retrieval of security privileges.

The following is the XSD schema definition of the **SecurityPrivilegesGetRequest** element.

```
<xs:element name="SecurityPrivilegesGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q104="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Criteria" nillable="true" type="q104:SecurityPrivilegesGetCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.36.2.2 SecurityPrivilegesGetResponse

The **SecurityPrivilegesGetResponse** response element returns an operation result and a [SecurityPrivileges](#) instance that contains the returned security privileges.

The following is the WSDL definition of the **SecurityPrivilegesGetResponse** element.

```
<xs:element name="SecurityPrivilegesGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q105="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q105:OperationResult" />
      <xs:element xmlns:q106="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Privileges" nillable="true" type="q106:SecurityPrivileges" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.36.3 Complex Types

The following XML schema complex type definitions are specific to the **SecurityPrivilegesGet** operation.

#### 3.1.4.36.3.1 SecurityPrivilegesGetCriteria

The **SecurityPrivilegesGetCriteria** complex type specifies the criteria for specifying the types of security privileges to return.

The following is the XSD schema definition of the **SecurityPrivilegesGetCriteria** complex type.

```

<xs:complexType name="SecurityPrivilegesGetCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="FunctionPrivilegesCriteria" nillable="true"
type="tns:FunctionPrivilegesCriteria" />
    <xs:element minOccurs="0" name="HierarchyMemberPrivilegesCriteria" nillable="true"
type="tns:HierarchyMemberPrivilegesCriteria" />
    <xs:element minOccurs="0" name="ModelPrivilegesCriteria" nillable="true"
type="tns:ModelPrivilegesCriteria" />
  </xs:sequence>
</xs:complexType>

```

**FunctionPrivilegesCriteria:** Specifies an instance of the [FunctionPrivilegesCriteria](#) complex type that is used to specify function privilege criteria.

**HierarchyMemberPrivilegesCriteria:** Specifies an instance of the [HierarchyMemberPrivilegesCriteria](#) complex type that is used to specify hierarchy member privilege criteria.

**ModelPrivilegesCriteria:** Specifies an instance of the [ModelPrivilegesCriteria](#) complex type that is used to specify model privilege criteria.

#### 3.1.4.36.3.2 FunctionPrivilegesCriteria

The **FunctionPrivilegesCriteria** complex type specifies the criteria for function privileges.

The following is the XSD schema definition of the **FunctionPrivilegesCriteria** complex type.

```

<xs:complexType name="FunctionPrivilegesCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Identifiers" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="IsAuthorized" type="xs:boolean" />
    <xs:element minOccurs="0" name="PrincipalId" nillable="true" type="tns:Identifier" />
    <xs:element
xmlns:q32="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="PrincipalType" type="q32:PrincipalType" />
    <xs:element minOccurs="0" name="ResultType" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>

```

```
</xs:sequence>
</xs:complexType>
```

**Identifiers**: Specifies an [ArrayOfIdentifier](#) instance that specifies the function privilege identifiers.

**IsAuthorized**: Specifies the **IsAuthorized** flag.

**PrincipalId**: Specifies the principal ID.

**PrincipalType**: Specifies the principal type.

**ResultType**: Specifies the result type.

### 3.1.4.36.3.3 HierarchyMemberPrivilegesCriteria

The **HierarchyMemberPrivilegesCriteria** complex type specifies criteria for hierarchy member privileges.

The following is the XSD schema definition of the **HierarchyMemberPrivilegesCriteria** complex type.

```
<xs:complexType name="HierarchyMemberPrivilegesCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="HierarchyId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q33="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="HierarchyType" type="q33:HierarchyType" />
    <xs:element minOccurs="0" name="Identifiers" nillable="true"
      type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="MemberCode" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q34="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="Permission" type="q34:Permission" />
    <xs:element minOccurs="0" name="PrincipalId" nillable="true" type="tns:Identifier" />
    <xs:element
      xmlns:q35="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
      s" minOccurs="0" name="PrincipalType" type="q35:PrincipalType" />
    <xs:element minOccurs="0" name="ResultType" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>
```

**EntityId**: Specifies an entity ID.

**HierarchyId**: Specifies a hierarchy ID.

**HierarchyType**: Specifies a hierarchy type.

**Identifiers**: Specifies an [ArrayOfIdentifier](#) instance that specifies the hierarchy member privilege identifiers.

**MemberCode**: Specifies a member code.

**ModelId**: Specifies a model ID.

**Permission:** Specifies a permission level.

**PrincipalId:** Specifies a principal ID.

**PrincipalType:** Specifies a principal type.

**ResultType:** Specifies a result type.

### 3.1.4.36.3.4 ModelPrivilegesCriteria

The **ModelPrivilegesCriteria** complex type specifies criteria for model privileges.

The following is the XSD schema definition of the **ModelPrivilegesCriteria** complex type.

```
<xs:complexType name="ModelPrivilegesCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Identifiers" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="ObjectId" nillable="true" type="tns:Identifier" />
    <xs:element
xmlns:q36="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="Permission" type="q36:Permission" />
    <xs:element minOccurs="0" name="PrincipalId" nillable="true" type="tns:Identifier" />
    <xs:element
xmlns:q37="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="PrincipalType" type="q37:PrincipalType" />
    <xs:element minOccurs="0" name="ResultType" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>
```

**Identifiers:** Specifies an [ArrayOfIdentifier](#) instance that specifies the model privilege identifiers.

**ModelId:** Specifies a model ID.

**ObjectId:** Specifies an object ID.

**PrincipalId:** Specifies a principal ID.

**PrincipalType:** Specifies a principal type.

**ResultType:** Specifies a result type.

### 3.1.4.36.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrivilegesGet** operation.

### 3.1.4.37 SecurityPrivilegesDelete

The **SecurityPrivilegesDelete** operation deletes security privilege information from the MDM repository.

The following is the WSDL definition of the **SecurityPrivilegesDelete** operation.

```
<wsdl:operation name="SecurityPrivilegesDelete">
```



```

<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesDelete" name="SecurityPrivilegesDeleteRequest"
message="tns:SecurityPrivilegesDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesDeleteResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>

```

### 3.1.4.37.1 Messages

The following XSD schema message definitions are specific to the **SecurityPrivilegesDelete** operation.

#### 3.1.4.37.1.1 SecurityPrivilegesDeleteRequest

The **SecurityPrivilegesDeleteRequest** request message contains the **SecurityPrivilegesDeleteRequest** element.

#### 3.1.4.37.2 Elements

The following XML schema element definitions are specific to the **SecurityPrivilegesDelete** operation.

##### 3.1.4.37.2.1 SecurityPrivilegesDeleteRequest

The **SecurityPrivilegesDeleteRequest** request element specifies the criteria in the [SecurityPrivilegesDeleteCriteria](#) complex type for the deletion of security privileges.

The following is the XSD schema definition of the **SecurityPrivilegesDeleteRequest** element.

```

<xs:element name="SecurityPrivilegesDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q107="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Criteria" nillable="true" type="q107:SecurityPrivilegesDeleteCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.37.3 Complex Types

The following XML schema complex type definitions are specific to the **SecurityPrivilegesDelete** operation.

#### 3.1.4.37.3.1 SecurityPrivilegesDeleteCriteria

The **SecurityPrivilegesDeleteCriteria** complex type specifies the criteria for deleting security privileges.

The following is the XSD schema definition of the **SecurityPrivilegesDeleteCriteria** complex type.

```

<xs:complexType name="SecurityPrivilegesDeleteCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="FunctionPrivileges" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="HierarchyMemberPrivileges" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="ModelPrivileges" nillable="true"
type="tns:ArrayOfIdentifier" />
  </xs:sequence>
</xs:complexType>

```

**FunctionPrivileges:** Specifies whether function privileges should be deleted.

**HierarchyMemberPrivileges:** Specifies whether hierarchy member privileges should be deleted.

**ModelPrivileges:** Specifies whether model privileges should be deleted.

### 3.1.4.37.4 Simple Types

There are no XML schema simple type definitions specific to the **SecurityPrivilegesDelete** operation.

### 3.1.4.38 MetadataClone

The **MetadataClone** operation creates a copy of a metadata item that is linked to the original via the shared GUID. This operation is similar to [MetadataCreate](#) except as specified here.

The **MetadataClone** operation requires both the GUID and the name of new items in the request. The GUID is inserted rather than generated. If the request contains a GUID that matches an existing object in the hub of the same type, that object is updated.

The identifiers of each new item MUST include the GUID and the name. The name MUST NOT exist within the specified context for an item with another GUID.

The following is the WSDL definition of the **MetadataClone** operation.

```

<wsdl:operation name="MetadataClone">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataClone" name="MetadataCloneRequest" message="tns:MetadataCloneRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataCloneResponse" name="MetadataCloneResponse" message="tns:MetadataCloneResponse" />
</wsdl:operation>

```

#### 3.1.4.38.1 Messages

The following WSDL message definitions are specific to the **MetadataClone** operation.

##### 3.1.4.38.1.1 MetadataCloneRequest

The **MetadataCloneRequest** request message contains the **MetadataCloneRequest** element.

### 3.1.4.38.1.2 MetadataCloneResponse

The **MetadataCloneResponse** response message contains the **MetadataCloneResponse** element.

### 3.1.4.38.2 Elements

The following XML schema element definitions are specific to the **MetadataClone** operation.

#### 3.1.4.38.2.1 MetadataCloneRequest

The **MetadataCloneRequest** request element MUST include a [Metadata](#) complex type that contains objects to be applied to the MDS repository.

The following is the XSD schema definition of the **MetadataCloneRequest** element.

```
<xs:element name="MetadataCloneRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q108="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="Metadata" nillable="true" type="q108:Metadata" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Metadata**: Specifies a **Metadata** complex type.

#### 3.1.4.38.2.2 MetadataCloneResponse

The **MetadataCloneResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **MetadataCloneResponse** element.

```
<xs:element name="MetadataCloneResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q109="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="OperationResult" nillable="true" type="q109:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.39 MetadataGet

The **MetadataGet** operation searches for and returns metadata from an MDS repository. The request is comprised of [SearchCriteria](#) and [ResultOptions](#). The response contains the results of the search (such as items that match the search criteria) and returns the metadata in a format and to a level of detail as specified in **ResultOptions**.

About the search criteria:

- Various metadata components can be searched, including models, entities, attributes, derived hierarchies, hierarchies, member types, versions, and attribute groups. Each metadata component has a corresponding list of identifiers within the search criteria. To find objects by GUIDs and/or names, the identifiers are populated.
- The GUIDs and names from each list are combined with AND logic. For example, providing the criteria Model.ID=some-guid1 and the criteria Entity.ID=some-guid2 filters for objects where (Model.ID=some-guid1 AND Entity.ID=some-guid2).
- Providing multiple IDs or names within the same criteria list looks for all items in the set. For example, providing the criteria Model.ID(1)=some-guid1 and Model.ID(2)=some-guid2 and the criteria Entity.ID=some-guid3 filters for objects where (Model.ID IN [some-guid1, some-guid2] AND Entity.ID=some-guid3).

About the result options:

- For each property of the [Metadata](#) complex type, the **ResultOptions** type specifies the inclusion and level of detail to return in the response.
- The information that is retrieved for each component is based on the following possible result type settings:
  - **None:** No data is returned for this component (this is the default value).
  - **Identifiers:** Identifiers (GUIDs and names) and other properties are retrieved for this component.
  - **Details:** Full data is populated for this component, including child objects.

The following is the WSDL definition of the **MetadataGet** operation.

```
<wsdl:operation name="MetadataGet">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataGet" name="MetadataGetRequest" message="tns:MetadataGetRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataGetResponse" name="MetadataGetResponse" message="tns:MetadataGetResponse"/>
</wsdl:operation>
```

### 3.1.4.39.1 Messages

The following WSDL message definitions are specific to the **MetadataGet** operation.

#### 3.1.4.39.1.1 MetadataGetRequest

The **MetadataGetRequest** request message contains the **MetadataGetRequest** element.

#### 3.1.4.39.1.2 MetadataGetResponse

The **MetadataGetResponse** response message contains the **MetadataGetResponse** element.

### 3.1.4.39.2 Elements

The following XML schema element definitions are specific to the **MetadataGet** operation.

### 3.1.4.39.2.1 MetadataGetRequest

The **MetadataGetRequest** request element includes [SearchCriteria](#) and [ResultOptions](#) to select the desired metadata objects at the desired level of detail.

The following is the XSD schema definition of the **MetadataGetRequest** element.

```
<xs:element name="MetadataGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q115="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="ResultOptions" nillable="true" type="q115:ResultOptions" />
      <xs:element xmlns:q116="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="SearchCriteria" nillable="true" type="q116:SearchCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**SearchCriteria:** Specifies a **SearchCriteria** complex type.

**ResultOptions:** Specifies a **ResultOptions** complex type.

### 3.1.4.39.2.2 MetadataGetResponse

The **MetadataGetResponse** response element includes a [Metadata](#) type as a container for any requested metadata information.

The following is the XSD schema definition of the **MetadataGetResponse** element.

```
<xs:element name="MetadataGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q117="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Metadata" nillable="true" type="q117:Metadata" />
      <xs:element xmlns:q118="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q118:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Metadata:** Specifies a **Metadata** complex type.

### 3.1.4.39.3 Complex Types

The following XML schema complex type definitions are specific to the **MetadataGet** operation.

#### 3.1.4.39.3.1 SearchCriteria

The **SearchCriteria** complex type allows specification of identifiers that are associated with each type of metadata object.

The following is the XSD schema definition of the **SearchCriteria** complex type.

```

<xs:complexType name="SearchCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeGroups" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="Attributes" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="DerivedHierarchies" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="DerivedHierarchyLevels" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="Entities" nillable="true" type="tns:ArrayOfIdentifier"
/>
    <xs:element minOccurs="0" name="ExplicitHierarchies" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="MemberTypes" nillable="true"
type="tns:ArrayOfMemberType" />
    <xs:element minOccurs="0" name="Models" nillable="true" type="tns:ArrayOfIdentifier" />
    <xs:element
xmlns:q47="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="SearchOption" type="q47:SearchOption" />
    <xs:element minOccurs="0" name="VersionFlags" nillable="true"
type="tns:ArrayOfIdentifier" />
    <xs:element minOccurs="0" name="Versions" nillable="true" type="tns:ArrayOfIdentifier"
/>
  </xs:sequence>
</xs:complexType>

```

**Note** Each property is an array of identifiers.

### 3.1.4.39.3.2 ResultOptions

The **ResultOptions** complex type allows specification of a [ResultType](#) that is associated with each type of metadata object.

The following is the XSD schema definition of the **ResultOptions** complex type.

```

<xs:complexType name="ResultOptions">
  <xs:sequence>
    <xs:element minOccurs="0" name="AttributeGroups" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Attributes" type="tns:ResultType" />
    <xs:element minOccurs="0" name="DerivedHierarchies" type="tns:ResultType" />
    <xs:element minOccurs="0" name="DerivedHierarchyLevels" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Entities" type="tns:ResultType" />
    <xs:element minOccurs="0" name="ExplicitHierarchies" type="tns:ResultType" />
    <xs:element minOccurs="0" name="MemberTypes" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Models" type="tns:ResultType" />
    <xs:element minOccurs="0" name="VersionFlags" type="tns:ResultType" />
    <xs:element minOccurs="0" name="Versions" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>

```

**Note** Each property is a **ResultType** complex type.

### 3.1.4.39.4 Simple Types

There are no XML schema simple type definitions specific to the **MetadataGet** operation.

### 3.1.4.40 MetadataUpdate

The **MetadataUpdate** operation updates existing metadata objects within an MDS repository.

Items in the request are matched to the existing objects based only on the GUID. Like any other property, an object's name is updated if the name of the item in the request is different than in the MDS repository. Each GUID that is not found is returned as a separate error. Each object's update is attempted and individually committed regardless of the failure of other items.

Only one property of "Metadata" may be populated in the request message. An error is returned if there is more than one. This eliminates the possibility that a request message contains conflicting information about the same object in different parts of the Metadata type.

The following is the WSDL definition of the **MetadataUpdate** operation.

```
<wsdl:operation name="MetadataUpdate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataUpdate" name="MetadataUpdateRequest" message="tns:MetadataUpdateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataUpdateResponse" name="MetadataUpdateResponse" message="tns:MetadataUpdateResponse" />
</wsdl:operation>
```

#### 3.1.4.40.1 Messages

The following WSDL message definitions are specific to the **MetadataUpdate** operation.

##### 3.1.4.40.1.1 Metadata Update Request

The **MetadataUpdateRequest** request message contains the **MetadataUpdateRequest** element.

##### 3.1.4.40.1.2 Metadata Update Response

The **MetadataUpdateResponse** response message contains the **MetadataUpdateResponse** element.

#### 3.1.4.40.2 Elements

The following XML schema element definitions are specific to the **MetadataUpdate** operation.

##### 3.1.4.40.2.1 Metadata Update Request

The **MetadataUpdateRequest** request element MUST include a [Metadata](#) complex type that contains objects to be updated in the MDS repository.

The following is the XSD schema definition of the **MetadataUpdateRequest** element.

```
<xs:element name="MetadataUpdateRequest">
```

```

<xs:complexType>
  <xs:sequence>
    <xs:element xmlns:q119="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="Metadata" nillable="true" type="q119:Metadata" />
    <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
  </xs:sequence>
</xs:complexType>
</xs:element>

```

**Metadata:** Specifies a **Metadata** complex type.

### 3.1.4.40.2 Metadata Update Response

The **MetadataUpdateResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **MetadataUpdateResponse** element.

```

<xs:element name="MetadataUpdateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q120="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q120:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.40.3 Complex Types

There are no XML schema complex type definitions specific to the **MetadataUpdate** operation.

### 3.1.4.40.4 Simple Types

There are no XML schema simple type definitions specific to the **MetadataUpdate** operation.

### 3.1.4.41 Metadata Create

The **MetadataCreate** operation creates new metadata objects. The operation creates new objects with the names that are provided and generates a new GUID for each new object.

GUIDs MAY be included in the request; however, they are ignored. For more information about assigning GUIDs to newly created objects, see section [3.1.4.38](#).

Names for new objects MUST be unique within their context. A name that conflicts with an existing name in the assigned context results in an error.

Newly created objects and their GUIDs are returned in the response if the value of **EchoCreatedObjects** is true.

For each of the following objects, a minimum context MUST be specified as listed in the following table.



Object type	Minimum required context
Entity	<a href="#">Model</a> , <a href="#">MemberType</a>
Attribute	<b>Model</b> , <a href="#">Entity</a> , <b>MemberType</b>
Attribute group	<b>Model</b> , <b>Entity</b> , <b>MemberType</b>
Derived hierarchy	<b>Model</b>
Explicit hierarchy	<b>Model</b> , <b>Entity</b>
Version flag	<b>Model</b>

The following is the WSDL definition of the **MetadataCreate** operation.

```
<wsdl:operation name="MetadataCreate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataCreate" name="MetadataCreateRequest" message="tns:MetadataCreateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataCreateResponse" name="MetadataCreateResponse" message="tns:MetadataCreateResponse" />
</wsdl:operation>
```

### 3.1.4.41.1 Messages

The following WSDL message definitions are specific to the **MetadataCreate** operation.

#### 3.1.4.41.1.1 MetadataCreateRequest

The **MetadataCreateRequest** request message contains the **MetadataCreateRequest** element.

#### 3.1.4.41.1.2 MetadataCreateResponse

The **MetadataCreateResponse** response message contains the **MetadataCreateResponse** element.

### 3.1.4.41.2 Elements

The following XML schema element definitions are specific to the **MetadataCreate** operation.

#### 3.1.4.41.2.1 MetadataCreateRequest

The **MetadataCreateRequest** request element MUST include a [Metadata](#) complex type that contains objects to be created in the MDS repository.

The following is the XSD schema definition of the **MetadataCreateRequest** element.

```
<xs:element name="MetadataCreateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q110="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="Metadata" nillable="true" type="q110:Metadata" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

        <xs:element minOccurs="0" name="ReturnCreatedIdentifiers" type="xs:boolean" />
        <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
</xs:complexType>
</xs:element>

```

**Metadata:** Specifies a **Metadata** complex type.

**ReturnCreatedIdentifiers:** Specifies a **Boolean** that, when set to true, populates the **MetadataCreated** property in the response message.

### 3.1.4.41.2.2 MetadataCreateResponse

The **MetadataCreateResponse** response element MAY echo the created metadata objects in a [Metadata](#) complex type if requested.

The following is the XSD schema definition of the **MetadataCreateResponse** element.

```

<xs:element name="MetadataCreateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q111="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="MetadataCreated" nillable="true" type="q111:Metadata" />
      <xs:element xmlns:q112="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q112:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**MetadataCreated:** Specifies a **Metadata** complex type that contains the objects that are created, including their assigned GUIDs.

### 3.1.4.41.3 Complex Types

There are no XML schema complex type definitions specific to the **MetadataCreate** operation.

### 3.1.4.41.4 Simple Types

There are no XML schema simple type definitions specific to the **MetadataCreate** operation.

### 3.1.4.42 Metadata Delete

The **MetadataDelete** operation deletes metadata objects from an MDS repository. The request's **Metadata** element identifies objects to be deleted. One or more objects may be specified within a single request. The objects that are specified may be of the same or multiple object types. Objects are located by GUIDs only; names are ignored.

This operation issues individual Delete operations for each item. The failure or inability to delete one item does not affect the attempt to delete or the successful deletion of other items that are explicitly included in the request. Multiple calls for individual items may be implemented if alternative error-handling is required.

Deletions of some metadata components are cascading and automatically delete their child components. This occurs in cases in which the components are fully dependent on the deleted component and therefore have no further usefulness without the deleted component.

The following events occur during a model Delete operation:

- All related metadata subcomponents (such as entities, attributes, hierarchies, and versions) are deleted.
- Associated business rules are deleted.
- Associated model and hierarchy member security permissions are deleted.

The following events occur during an entity Delete operation:

- The related metadata sub-components (such as attributes, attribute groups, and explicit hierarchies) are deleted.
- Associated business rules are deleted.
- Associated model and hierarchy member security permissions (such as model security permissions assigned at the entity component or below) are deleted.

An error occurs when an attempt is made to delete a component when one or more of the following conditions are true:

- An entity, attribute, or explicit hierarchy is deleted when used by a derived hierarchy.
- An attribute is deleted when a related business rule exists.
- An explicit hierarchy is deleted when a business rule references parents within the hierarchy.
- A version flag that is assigned to a version is deleted.

The following is the WSDL definition of the **MetadataDelete** operation.

```
<wsdl:operation name="MetadataDelete">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataDelete" name="MetadataDeleteRequest" message="tns:MetadataDeleteRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataDeleteResponse" name="MetadataDeleteResponse" message="tns:MetadataDeleteResponse" />
</wsdl:operation>
```

### 3.1.4.42.1 Messages

The following WSDL message definitions are specific to the **MetadataDelete** operation.

#### 3.1.4.42.1.1 Metadata Delete Request

The **MetadataDeleteRequest** request message contains the **MetadataDeleteRequest** element.

### 3.1.4.42.1.2 Metadata Delete Response

The **MetadataDeleteResponse** response message contains the **MetadataDeleteResponse** element.

### 3.1.4.42.2 Elements

The following XML schema element definitions are specific to the **MetadataDelete** operation.

#### 3.1.4.42.2.1 Metadata Delete Request

The **MetadataDeleteRequest** request element MUST include a [Metadata](#) complex type that contains objects to be deleted from the MDS repository. The object identifiers MUST include GUIDs.

The following is the XSD schema definition of the **MetadataDeleteRequest** element.

```
<xs:element name="MetadataDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q113="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="Metadata" nillable="true" type="q113:Metadata" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**Metadata:** Specifies a **Metadata** complex type.

#### 3.1.4.42.2.2 Metadata Delete Response

The **MetadataDeleteResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **MetadataDeleteResponse** element.

```
<xs:element name="MetadataDeleteResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q114="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="OperationResult" nillable="true" type="q114:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.42.3 Complex Types

There are no XML schema complex type definitions specific to the **MetadataDelete** operation.

### 3.1.4.42.4 Simple Types

There are no XML schema simple type definitions specific to the **MetadataDelete** operation.

### 3.1.4.43 SystemSettingsGet

The **SystemSettingsGet** operation retrieves system configuration settings. One selected group of system configuration settings can be retrieved. The setting group to retrieve is specified by [Identifier](#) in [SystemSettingsGetCriteria](#).

The following is the WSDL definition of the **SystemSettingsGet** operation.

```
<wsdl:operation name="SystemSettingsGet">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemSettingsGet" name="SystemSettingsGetRequest" message="tns:SystemSettingsGetRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemSettingsGetResponse" name="SystemSettingsGetResponse"
    message="tns:SystemSettingsGetResponse" />
</wsdl:operation>
```

#### 3.1.4.43.1 Messages

The following WSDL message definitions are specific to the **SystemSettingsGet** operation.

##### 3.1.4.43.1.1 SystemSettingsGetRequest

The **SystemSettingsGetRequest** request message contains the **SystemSettingsGetRequest** element.

##### 3.1.4.43.1.2 SystemSettingsGetResponse

The **SystemSettingsGetResponse** response message contains the **SystemSettingsGetResponse** element.

#### 3.1.4.43.2 Elements

The following XML schema element definitions are specific to the **SystemSettingsGet** operation.

##### 3.1.4.43.2.1 SystemSettingsGetRequest

The **SystemSettingsGetRequest** request element MUST include a [SystemSettingsGetCriteria](#) complex type.

The following is the XSD schema definition of the **SystemSettingsGetRequest** request element.

```
<xs:element name="SystemSettingsGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q121="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="SearchCriteria" nillable="true" type="q121:SystemSettingsGetCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**SearchCriteria**: Specifies a **SystemSettingsGetCriteria** complex type.

### 3.1.4.43.2.2 SystemSettingsGetResponse

The **SystemSettingsGetResponse** response element provides system settings within a **SystemSettingsGroup** complex type.

The following is the XSD schema definition of the **SystemSettingsGetResponse** element.

```
<xs:element name="SystemSettingsGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q122="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q122:OperationResult" />
      <xs:element xmlns:q123="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="SystemSettingsGroups" nillable="true"
type="q123:ArrayOfSystemSettingGroup" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**SystemSettingsGroups**: Specifies an array of **SystemSettingsGroup** complex types.

### 3.1.4.43.3 Complex Types

The following XML schema complex type definitions are specific to the **SystemSettingsGet** operation.

#### 3.1.4.43.3.1 SystemSettingsGetCriteria

The **SystemSettingsGetCriteria** complex type identifies a system settings group for retrieval.

The following is the XSD schema definition of the **SystemSettingsGetCriteria** complex type.

```
<xs:complexType name="SystemSettingsGetCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="Group" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**Group**: Specifies an identifier of a system settings group.

#### 3.1.4.43.4 Simple Types

There are no XML schema simple type definitions specific to the **SystemSettingsGet** operation.

### 3.1.4.44 SystemSettingsUpdate

The **SystemSettingsUpdate** operation changes system configuration settings. One or more settings can be updated in one request.

System settings are specified by a keyword string. An error occurs when a setting that does not exist is specified.

The following is the WSDL definition of the **SystemSettingsUpdate** operation.

```
<wsdl:operation name="SystemSettingsUpdate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemSettingsUpdate" name="SystemSettingsUpdateRequest" message="tns:SystemSettingsUpdateRequest"
  />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemSettingsUpdateResponse" name="SystemSettingsUpdateResponse"
    message="tns:SystemSettingsUpdateResponse" />
</wsdl:operation>
```

### 3.1.4.44.1 Messages

The following WSDL message definitions are specific to the **SystemSettingsUpdate** operation.

#### 3.1.4.44.1.1 SystemSettingsUpdateRequest

The **SystemSettingsUpdateRequest** request message contains the **SystemSettingsUpdateRequest** element.

#### 3.1.4.44.1.2 SystemSettingsUpdateResponse

The **SystemSettingsUpdateResponse** response message contains the **SystemSettingsUpdateResponse** element.

### 3.1.4.44.2 Elements

The following XML schema element definitions are specific to the **SystemSettingsUpdate** operation.

#### 3.1.4.44.2.1 SystemSettingsUpdateRequest

The **SystemSettingsUpdateRequest** request element includes an [ArrayOfSystemSettingGroup](#) as a container for one or more groups of one or more system settings to be updated.

The following is the XSD schema definition of the **SystemSettingsUpdateRequest** element.

```
<xs:element name="SystemSettingsUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
      <xs:element xmlns:q124="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="SystemSettingGroups" nillable="true"
        type="q124:ArrayOfSystemSettingGroup" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**SystemSettingGroups**: An **ArrayOfSystemSettingGroup** complex type.

### 3.1.4.44.2.2 SystemSettingsUpdateResponse

The **SystemSettingsUpdateResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **SystemSettingsUpdateResponse** element.

```
<xs:element name="SystemSettingsUpdateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q125="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q125:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.44.3 Complex Types

There are no XML schema complex type definitions specific to the **SystemSettingsUpdate** operation.

### 3.1.4.44.4 Simple Types

There are no XML schema simple type definitions specific to the **SystemSettingsUpdate** operation.

### 3.1.4.45 SystemDomainListGet

The **SystemDomainListGet** operation retrieves a standard list of text choices that are associated with the MDS application. The returned list is localized based on the user's locale.

The request is filtered by using the [SystemDomainListGetCriteria](#) complex type.

- **ListCode:** Specifies the unique code of the list to retrieve.
- **ListOption:** Specifies an individual list option on which to filter within the list where applicable. If a list option is not specified, all list options are returned.
- **ListGroup:** Specifies a list group ID on which to filter where applicable. If a list group is not specified, all list groups are returned.

An error occurs if one or more of these criteria are not found.

The following is the WSDL definition of the **SystemDomainListGet** operation.

```
<wsdl:operation name="SystemDomainListGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemDomainListGet" name="SystemDomainListGetRequest" message="tns:SystemDomainListGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemDomainListGetResponse" name="SystemDomainListGetResponse"
message="tns:SystemDomainListGetResponse" />
</wsdl:operation>
```



### 3.1.4.45.1 Messages

The following WSDL message definitions are specific to the **SystemDomainListGet** operation.

#### 3.1.4.45.1.1 SystemDomainListGetRequest

The **SystemDomainListGetRequest** request message contains the **SystemDomainListGetRequest** element.

#### 3.1.4.45.1.2 SystemDomainListGetResponse

The **SystemDomainListGetResponse** response message contains the **SystemDomainListGetResponse** element.

### 3.1.4.45.2 Elements

The following XML schema element definitions are specific to the **SystemDomainListGet** operation.

#### 3.1.4.45.2.1 SystemDomainListGetRequest

The **SystemDomainListGetRequest** request element MUST include a [SystemDomainListGetCriteria](#) complex type.

The following is the XSD schema definition of the **SystemDomainListGetRequest** request element.

```
<xs:element name="SystemDomainListGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q126="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="SearchCriteria" nillable="true" type="q126:SystemDomainListGetCriteria"
        />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**SearchCriteria:** Specifies a **SystemDomainListGetCriteria** complex type.

#### 3.1.4.45.2.2 SystemDomainListGetResponse

The **SystemDomainListGetResponse** response element provides a **SystemDomainLists** property that contains the domain list results.

The following is the XSD schema definition of the **SystemDomainListGetResponse** element.

```
<xs:element name="SystemDomainListGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q127="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="OperationResult" nillable="true" type="q127:OperationResult" />
      <xs:element xmlns:q128="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="SystemDomainLists" nillable="true" type="q128:ArrayOfSystemDomainList" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:sequence>
</xs:complexType>
</xs:element>
```

**SystemDomainLists**: Specifies an array of **SystemDomainList** complex types.

### 3.1.4.45.3 Complex Types

The following XML schema complex type definitions are specific to the **SystemDomainListGet** operation.

#### 3.1.4.45.3.1 SystemDomainListGetCriteria

The **SystemDomainListGetCriteria** complex type captures query criteria for system domain lists.

The following is the XSD schema definition of the **SystemDomainListGetCriteria** complex type.

```
<xs:complexType name="SystemDomainListGetCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="ListCode" nillable="true" type="xs:string" />
    <xs:element minOccurs="0" name="ListGroup" nillable="true" type="xs:int" />
    <xs:element minOccurs="0" name="ListOption" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>
```

**ListCode**: Specifies the name of the domain list on which to filter. If this value is not specified, all domain lists are returned.

**ListGroup**: Specifies the integer code of the individual list grouping, or category, on which to filter. If this value is not specified, all list groups are returned.

**ListOption**: Specifies the individual list option on which to filter. If this value is not specified, all list options are returned.

#### 3.1.4.45.4 Simple Types

There are no XML schema simple type definitions specific to the **SystemDomainListGet** operation.

#### 3.1.4.46 SystemPropertiesGet

The **SystemPropertiesGet** operation retrieves available read-only properties about the system. This operation has no request parameters and responds with all available system properties. This operation currently provides database disk size information, but this operation could be extended to include other values in the future.

System properties include the following:

- **DatabaseMaxSizeMB**: The maximum size of the data (MDF) database files in MB.
- **DatabaseUsedSizeMB**: The unallocated space in the database in MB.

About database size calculations:

- The returned database sizes are for data files only; log files are not included. This feature supports a hosting scenario in which the host is likely to set restricted file growth to a maximum size of the data file, and the tenant periodically has to determine how much of his or her total allocated size has been used.
- Calculations are based on the output of **sp\_spaceused**. This procedure produces two result sets. The first result set includes "unallocated space" in MB, and the second result set includes "reserved" in KB.
- **DatabaseMaxSizeMB = unallocated space + reserved / 1024**
- **DatabaseUsedSizeMB = reserved / 1024**

The following is the WSDL definition of the **SystemPropertiesGet** operation.

```
<wsdl:operation name="SystemPropertiesGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemPropertiesGet" name="SystemPropertiesGetRequest" message="tns:SystemPropertiesGetRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SystemPropertiesGetResponse" name="SystemPropertiesGetResponse" message="tns:SystemPropertiesGetResponse" />
</wsdl:operation>
```

### 3.1.4.46.1 Messages

The following XSD schema message definitions are specific to the **SystemPropertiesGet** operation.

#### 3.1.4.46.1.1 SystemPropertiesGetRequest

The **SystemPropertiesGetRequest** request message contains the **SystemPropertiesGetRequest** element.

#### 3.1.4.46.1.2 SystemPropertiesGetResponse

The **SystemPropertiesGetResponse** response message contains the **SystemPropertiesGetResponse** element.

### 3.1.4.46.2 Elements

The following XML schema element definitions are specific to the **SystemPropertiesGet** operation.

#### 3.1.4.46.2.1 SystemPropertiesGetRequest

The **SystemPropertiesGetRequest** request element contains no input parameters.

The following is the XSD schema definition of the **SystemPropertiesGetRequest** element.

```
<xs:element name="SystemPropertiesGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.46.2.2 SystemPropertiesGetResponse

The **SystemPropertiesGetResponse** response element includes retrieved system property values in an array of [SystemPropertyValue](#) complex types.

The following is the XSD schema definition of the **SystemPropertiesGetResponse** element.

```

<xs:element name="SystemPropertiesGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q129="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q129:OperationResult" />
      <xs:element xmlns:q130="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="SystemProperties" nillable="true" type="q130:ArrayOfSystemPropertyValue"
/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**SystemProperties:** Specifies an [ArrayOfSystemPropertyValue](#) complex type.

### 3.1.4.46.3 Complex Types

The following XML schema complex type definitions are specific to the **SystemPropertiesGet** operation.

#### 3.1.4.46.3.1 ArrayOfSystemPropertyValue

The **ArrayOfSystemPropertyValue** complex type is an array of [SystemPropertyValue](#) complex types.

The following is the XSD schema definition of the **ArrayOfSystemPropertyValue** complex type.

```

<xs:complexType name="ArrayOfSystemPropertyValue">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="SystemPropertyValue"
nillable="true" type="tns:SystemPropertyValue" />
  </xs:sequence>
</xs:complexType>

```

**SystemPropertyValue:** Specifies a [SystemPropertyValue](#) complex type.

#### 3.1.4.46.3.2 SystemPropertyValue

The **SystemPropertyValue** complex type contains a system property and its value.

The following is the XSD schema definition of the **SystemPropertyValue** complex type.

```

<xs:complexType name="SystemPropertyValue">
  <xs:sequence>
    <xs:element
xmlns:q48="http://schemas.datacontract.org/2004/07/Microsoft.Office.MDM.Services.DataContract
s" minOccurs="0" name="SystemPropertyType" type="q48:SystemPropertyType" />
    <xs:element minOccurs="0" name="Value" nillable="true" type="xs:string" />
  </xs:sequence>
</xs:complexType>

```

**SystemPropertyType:** Specifies a [SystemPropertyType](#) simple type that uniquely identifies the system property.

**Value:** Specifies a string that contains the value of the system property.

### 3.1.4.46.4 Simple Types

The following XML schema simple definitions are specific to the **SystemPropertiesGet** operation.

#### 3.1.4.46.4.1 SystemPropertyType

The **SystemPropertyType** simple type lists the unique names of the available system properties as strings. For descriptions of the properties, see section [3.1.4.46](#).

The following is the XSD schema definition of the **SystemPropertyType** simple type.

```

<xs:simpleType name="SystemPropertyType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="DatabaseMaxSizeMB" />
    <xs:enumeration value="DatabaseUsedSizeMB" />
  </xs:restriction>
</xs:simpleType>

```

### 3.1.4.47 VersionCopy

The **VersionCopy** operation copies an existing version to a new version, including all data.

The version to be copied must be specified by version GUID (by using the **FromVersionGUID** parameter). Optional parameters for the target version can be specified, including name (**ToVersionName**) and description (**ToVersionDescription**). If a name is not specified, the default name "Copy [n] of <old version name>" is applied.

The target name must not exist. A pre-existing target name results in an error and no copy.

The operation checks the **CopyOnlyCommittedVersion** system setting and does not copy an uncommitted version if not allowed.

The following is the WSDL definition of the **VersionCopy** operation.

```

<wsdl:operation name="VersionCopy">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/VersionCopy" name="VersionCopyRequest" message="tns:VersionCopyRequest" />

```

```

    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/VersionCopyResponse" name="VersionCopyResponse" message="tns:VersionCopyResponse" />
    </wsdl:operation>

```

### 3.1.4.47.1 Messages

The following WSDL message definitions are specific to the **VersionCopy** operation.

#### 3.1.4.47.1.1 VersionCopyRequest

The **VersionCopyRequest** request message contains the **VersionCopyRequest** element.

#### 3.1.4.47.1.2 VersionCopyResponse

The **VersionCopyResponse** response message contains the **VersionCopyResponse** element.

### 3.1.4.47.2 Elements

The following XML schema element definitions are specific to the **VersionCopy** operation.

#### 3.1.4.47.2.1 VersionCopyRequest

The **VersionCopyRequest** request element MUST include the **FromVersionId** property as a GUID. It MAY also include the following string properties:

- **ToVersionName**
- **ToVersionDescription**

The following is the XSD schema definition of the **VersionCopyRequest** element.

```

<xs:element name="VersionCopyRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q131="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="FromVersionId" type="q131:guid" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element minOccurs="0" name="ToVersionDescription" nillable="true"
type="xs:string" />
      <xs:element minOccurs="0" name="ToVersionName" nillable="true" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**FromVersionId:** Specifies a GUID that identifies the version to be copied.

**ToVersionName:** Specifies an optional string that contains the name of the new version.

**ToVersionDescription:** Specifies an optional string that contains the description of the new version.

### 3.1.4.47.2.2 VersionCopyResponse

The **VersionCopyResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **VersionCopyResponse** element.

```
<xs:element name="VersionCopyResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q132="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="OperationResult" nillable="true" type="q132:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.47.3 Complex Types

There are no XML schema complex type definitions specific to the **VersionCopy** operation.

### 3.1.4.47.4 Simple Types

There are no XML schema simple type definitions specific to the **VersionCopy** operation.

### 3.1.4.48 UserPreferencesGet

The **UserPreferencesGet** operation retrieves the current user's preferences that were previously saved within the MDS repository. User preferences support persistent storage of user state properties where appropriate. This operation requires no input criteria and retrieves all preference settings that are available for the current user.

The following is the WSDL definition of the **UserPreferencesGet** operation.

```
<wsdl:operation name="UserPreferencesGet">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
    referencesGet" name="UserPreferencesGetRequest" message="tns:UserPreferencesGetRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
    referencesGetResponse" name="UserPreferencesGetResponse"
    message="tns:UserPreferencesGetResponse" />
</wsdl:operation>
```

#### 3.1.4.48.1 Messages

The following XSD schema message definitions are specific to the **UserPreferencesUpdate** operation.

##### 3.1.4.48.1.1 UserPreferencesGetRequest

The **UserPreferencesGetRequest** request message contains the **UserPreferencesGetRequest** element.

### 3.1.4.48.1.2 UserPreferencesGetResponse

The **UserPreferencesGetResponse** response message contains the **UserPreferencesGetResponse** element.

### 3.1.4.48.2 Elements

The following XML schema element definitions are specific to the **UserPreferencesGet** operation.

#### 3.1.4.48.2.1 UserPreferencesGetRequest

The **UserPreferencesGetRequest** request element contains no input parameters.

The following is the XSD schema definition of the **UserPreferencesGetRequest** element.

```
<xs:element name="UserPreferencesGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

#### 3.1.4.48.2.2 UserPreferencesGetResponse

The **UserPreferencesGetResponse** response element returns an array of key/value pairs that represent the user preference settings and their current values.

The following is the XSD schema definition of the **UserPreferencesGetResponse** element.

```
<xs:element name="UserPreferencesGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q133="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q133:OperationResult" />
      <xs:element xmlns:q134="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="UserPreferences" nillable="true"
type="q134:ArrayOfKeyValueOfstringstring" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**UserPreferences:** Specifies an **ArrayOfKeyValueOfstringstring** complex type that contains key/value pairs.

### 3.1.4.48.3 Complex Types

There are no XML schema complex type definitions specific to the **UserPreferencesGet** operation.

### 3.1.4.48.4 Simple Types

There are no XML schema simple type definitions specific to the **UserPreferencesGet** operation.



### 3.1.4.49 UserPreferencesUpdate

The **UserPreferencesUpdate** operation updates or saves the current user's preferences within the MDS repository. User preferences support persistent storage of user state properties where appropriate.

The following is the WSDL definition of the **UserPreferencesUpdate** operation.

```
<wsdl:operation name="UserPreferencesUpdate">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesUpdate" name="UserPreferencesUpdateRequest"
message="tns:UserPreferencesUpdateRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesUpdateResponse" name="UserPreferencesUpdateResponse"
message="tns:UserPreferencesUpdateResponse" />
</wsdl:operation>
```

#### 3.1.4.49.1 Messages

The following XSD schema message definitions are specific to the **UserPreferencesDelete** operation.

##### 3.1.4.49.1.1 UserPreferencesUpdateRequest

The **UserPreferencesUpdateRequest** request message contains the **UserPreferencesUpdateRequest** element.

##### 3.1.4.49.1.2 UserPreferencesUpdateResponse

The **UserPreferencesUpdateResponse** response message contains the **UserPreferencesUpdateResponse** element.

#### 3.1.4.49.2 Elements

The following XML schema element definitions are specific to the **UserPreferencesUpdate** operation.

##### 3.1.4.49.2.1 UserPreferencesUpdateRequest

The **UserPreferencesUpdateRequest** request element MUST include a **UserPreferences** property that has one or more preference settings as key/value pairs.

The following is the XSD schema definition of the **UserPreferencesUpdateRequest** element.

```
<xs:element name="UserPreferencesUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q135="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="UserPreferences" nillable="true"
type="q135:ArrayOfKeyValueOfstringstring" />
    
```

```

    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**UserPreferences:** Specifies an **ArrayOfKeyValueOfstringstring** complex type that contains key/value pairs.

### 3.1.4.49.2 UserPreferencesUpdateResponse

The **UserPreferencesUpdateResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **UserPreferencesUpdateResponse** element.

```

<xs:element name="UserPreferencesUpdateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q136="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="OperationResult" nillable="true" type="q136:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 3.1.4.49.3 Complex Types

There are no XML schema complex type definitions specific to the **UserPreferencesUpdate** operation.

### 3.1.4.49.4 Simple Types

There are no XML schema simple type definitions specific to the **UserPreferencesGet** operation.

### 3.1.4.50 UserPreferencesDelete

The **UserPreferencesDelete** operation deletes the current user's selected preferences within the MDS repository. One or more preferences can be specified for deletion by submitting a dictionary list. Or, all saved preferences can be deleted by setting **DeleteAllUserPreferences** to true.

For a general description of user preferences, see [UserPreferencesUpdate](#).

The following is the WSDL definition of the **UserPreferencesDelete** operation.

```

<wsdl:operation name="UserPreferencesDelete">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
    referencesDelete" name="UserPreferencesDeleteRequest"
    message="tns:UserPreferencesDeleteRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
    referencesDeleteResponse" name="UserPreferencesDeleteResponse"
    message="tns:UserPreferencesDeleteResponse" />
</wsdl:operation>

```

### 3.1.4.50.1 Messages

The following XSD schema message definitions are specific to the **BusinessRulesPaletteGet** operation.

#### 3.1.4.50.1.1 UserPreferencesDeleteRequest

The **UserPreferencesDeleteRequest** request message contains the **UserPreferencesDeleteRequest** element.

#### 3.1.4.50.1.2 UserPreferencesDeleteResponse

The **UserPreferencesDeleteResponse** response message contains the **UserPreferencesDeleteResponse** element.

### 3.1.4.50.2 Elements

The following XML schema element definitions are specific to the **UserPreferencesDelete** operation.

#### 3.1.4.50.2.1 UserPreferencesDeleteRequest

The **UserPreferencesDeleteRequest** request element MAY include one of the following:

- A **UserPreferences** property that contains one or more preference keys.
- The **DeleteAllUserPreferences** property, set to true.

The following is the XSD schema definition of the **UserPreferencesDeleteRequest** element.

```
<xs:element name="UserPreferencesDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="DeleteAllUserPreferences" type="xs:boolean" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
      <xs:element xmlns:q137="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="UserPreferences" nillable="true"
type="q137:ArrayOfKeyValueOfstringstring" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**DeleteAllUserPreferences**: Specifies a **Boolean** that causes the deletion of all preferences for the current user when it is set to true.

**UserPreferences**: Specifies an **ArrayOfKeyValueOfstringstring** complex type that contains key/value pairs.

#### 3.1.4.50.2.2 UserPreferencesDeleteResponse

The **UserPreferencesDeleteResponse** response element provides only standard operation results.

The following is the XSD schema definition of the **UserPreferencesDeleteResponse** element.

```

<xs:element name="UserPreferencesDeleteResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q138="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q138:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**OperationResult:** Specifies the [OperationResult](#) complex type.

### 3.1.4.50.3 Complex Types

There are no XML schema complex type definitions specific to the **UserPreferencesUpdate** operation.

### 3.1.4.50.4 Simple Types

There are no XML schema simple type definitions specific to the **UserPreferencesUpdate** operation.

### 3.1.4.51 BusinessRulesPaletteGet

The **BusinessRulesPaletteGet** operation retrieves a palette of available rule components within the system. Obtaining the desired, valid component ID is essential in building a new rule or adding a new rule component. The rule components list includes available actions and available conditions. The available actions are grouped into the following action groups:

- Default value
- Change value
- Validation

The following is the WSDL definition of the **BusinessRulesPaletteGet** operation.

```

<wsdl:operation name="BusinessRulesPaletteGet">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesPaletteGet" name="BusinessRulesPaletteGetRequest"
message="tns:BusinessRulesPaletteGetRequest"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesPaletteGetResponse" name="BusinessRulesPaletteGetResponse"
message="tns:BusinessRulesPaletteGetResponse"/>
</wsdl:operation>

```

#### 3.1.4.51.1 Messages

The following XSD schema message definitions are specific to the [BusinessRulesPaletteGet](#) operation.

### 3.1.4.51.1.1 BusinessRulesPaletteGetRequest

The **BusinessRulesPaletteGetRequest** request message contains the **BusinessRulesPaletteGetRequest** element.

### 3.1.4.51.1.2 BusinessRulesPaletteGetResponse

The **BusinessRulesPaletteGetResponse** response message contains the **BusinessRulesCreateRequest** element.

### 3.1.4.51.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesPaletteGet** operation.

#### 3.1.4.51.2.1 BusinessRulesPaletteGetRequest

The **BusinessRulesPaletteGetRequest** request element MUST include a [MemberType](#) input. The allowable business rule components may be limited based on the member type that is specified.

The following is the XSD schema definition of the **BusinessRulesPaletteGetRequest** element.

```
<xs:element name="BusinessRulesPaletteGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q139="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="MemberType" type="q139:BREntityMemberType" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**MemberType:** A [BREntityMemberType](#) simple type.

#### 3.1.4.51.2.2 BusinessRulesPaletteGetResponse

The **BusinessRulesPaletteGetResponse** response element includes available conditions and actions for use in business rules.

The following is the XSD schema definition of the **BusinessRulesPaletteGetResponse** response element.

```
<xs:element name="BusinessRulesPaletteGetResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q140="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="BusinessRulesPalette" nillable="true" type="q140:BusinessRulesPalette" />
      <xs:element xmlns:q141="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q141:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**BusinessRulesPalette:** A [BusinessRulesPalette](#) complex type that contains available conditions and actions for use in business rules.

### 3.1.4.52 BusinessRulesClone

The **BusinessRulesClone** operation creates new business rule objects as exact copies of objects in another MDM hub instance. This operation is similar to [BusinessRulesCreate](#) except as specified here.

The GUID of each item (and the name for business rules) is required in the request. Rules have names, but actions, conditions, and condition tree nodes do not. The GUID is inserted rather than generated (as in a Create operation). If the request contains a GUID that matches an existing object in the hub of the same type, that object is updated.

This operation returns a standard [MessageResponse](#) message.

The following is the WSDL definition of the **BusinessRulesClone** operation.

```
<wsdl:operation name="BusinessRulesClone">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesClone" name="BusinessRulesCloneRequest" message="tns:BusinessRulesCloneRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesCloneResponse" name="MessageResponse" message="tns:MessageResponse" />
</wsdl:operation>
```

#### 3.1.4.52.1 Messages

The following XSD schema message definitions are specific to the [BusinessRulesClone](#) operation.

##### 3.1.4.52.1.1 BusinessRulesCloneRequest

The **BusinessRulesCloneRequest** request message contains the **BusinessRulesCloneRequest** element.

#### 3.1.4.52.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesClone** operation.

##### 3.1.4.52.2.1 BusinessRulesCloneRequest

The **BusinessRulesCloneRequest** request element MUST include a [BusinessRules](#) type that contains business rules and/or business rule components for creation in the MDS repository.

The following is the XSD schema definition of the **BusinessRulesCloneRequest** request element.

```
<xs:element name="BusinessRulesCloneRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q142="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="BusinessRuleSet" nillable="true" type="q142:BusinessRules" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    
```

```
</xs:sequence>
</xs:complexType>
</xs:element>
```

**BusinessRuleSet**: A **BusinessRules** complex type.

### 3.1.4.53 BusinessRulesCreate

The **BusinessRulesCreate** operation creates new business rules and business rule components within the MDS repository. Each new business rule or component is created with the names that are provided, and a new GUID is generated for each item. Any components in the request that already exist in the model, matched by name and parent context (**EntityId** and [MemberType](#)), result in errors.

The [BusinessRules](#) data type in the request includes placeholders for all information about a business rule, including its descriptive and state information and its component conditions and actions.

GUIDs may be included in a request (for example, the business rule definition was sourced from another MDM hub instance). However, the GUIDs are ignored. For more information about the preservation of GUIDs, see section [3.1.4.52](#).

Newly created objects and their GUIDs are returned in the response as a **BusinessRules** type if **ReturnCreatedIdentifiers** is set to true in the request.

Specified domain-based attribute values in arguments of conditions or actions are validated against all open versions. Attribute values that are not found result in errors.

The following is the WSDL definition of the **BusinessRulesCreate** operation.

```
<wsdl:operation name="BusinessRulesCreate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesCreate" name="BusinessRulesCreateRequest" message="tns:BusinessRulesCreateRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesCreateResponse" name="BusinessRulesCreateResponse"
    message="tns:BusinessRulesCreateResponse" />
</wsdl:operation>
```

#### 3.1.4.53.1 Messages

The following XSD schema message definitions are specific to the [BusinessRulesCreate](#) operation.

##### 3.1.4.53.1.1 BusinessRulesCreateRequest

The **BusinessRulesCreateRequest** request message contains the **BusinessRulesCreateRequest** element.

##### 3.1.4.53.1.2 BusinessRulesCreateResponse

The **BusinessRulesCreateResponse** message contains the **BusinessRulesCreateResponse** element.

### 3.1.4.53.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesCreate** operation.

#### 3.1.4.53.2.1 BusinessRulesCreateRequest

The **BusinessRulesCreateRequest** request element MUST include a [BusinessRules](#) type that contains new business rules or business rule components for creation.

The following is the XSD schema definition of the **BusinessRulesCreateRequest** element.

```
<xs:element name="BusinessRulesCreateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q143="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="BusinessRuleSet" nillable="true" type="q143:BusinessRules" />
      <xs:element minOccurs="0" name="ReturnCreatedIdentifiers" type="xs:boolean" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**BusinessRuleSet:** A **BusinessRules** complex type that contains items to be created.

**ReturnCreatedIdentifiers:** A **Boolean** that is set to true to request the return of created items, including their assigned GUIDs.

#### 3.1.4.53.2.2 BusinessRulesCreateResponse

The following is the XSD schema definition of the **BusinessRulesCreateResponse** element.

```
<xs:element name="BusinessRulesCreateResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q144="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="BusinessRuleSet" nillable="true" type="q144:BusinessRules" />
      <xs:element xmlns:q145="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="OperationResult" nillable="true" type="q145:OperationResult" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**BusinessRuleSet:** A [BusinessRules](#) complex type that echoes the created items if **ReturnCreatedItems** is set to true in the request.

### 3.1.4.54 BusinessRulesDelete

The **BusinessRulesDelete** operation deletes one or more business rules or deletes conditions or actions from business rules. This operation issues individual Delete transactions for each item. An error is reported for each item that is not found.



The failure or inability to delete one item does not affect the attempt to delete or the successful deletion of other items. Multiple granular calls for individual items can be implemented if alternative error handling is required.

With the input from [BRDeleteCriteria](#), one of the following sets of GUIDs is specified:

- The GUIDs of one or more business rules.
- The GUIDs of the conditions, actions, or condition tree nodes (ANDs, ORs) of the business rules.

Delete transactions cascade to dependent objects. For example, when a business rule is deleted, all components that are attached to that business rule are deleted.

This operation returns a standard [MessageResponse](#) message.

The following is the WSDL definition of the **BusinessRulesDelete** operation.

```
<wsdl:operation name="BusinessRulesDelete">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesDelete" name="BusinessRulesDeleteRequest" message="tns:BusinessRulesDeleteRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesDeleteResponse" name="MessageResponse" message="tns:MessageResponse" />
</wsdl:operation>
```

### 3.1.4.54.1 Messages

The following XSD schema message definitions are specific to the [BusinessRulesDelete](#) operation.

#### 3.1.4.54.1.1 BusinessRulesDeleteRequest

The **BusinessRulesDeleteRequest** request message contains the **BusinessRulesDeleteRequest** element.

#### 3.1.4.54.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesDelete** operation.

##### 3.1.4.54.2.1 BusinessRulesDeleteRequest

The **BusinessRulesDeleteRequest** request element MUST include a [BRDeleteCriteria](#) that contains business rule GUIDs and/or business rule component GUIDs for deletion.

The following is the XSD schema definition of the **BusinessRulesDeleteRequest** element.

```
<xs:element name="BusinessRulesDeleteRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q146="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="DeleteCriteria" nillable="true" type="q146:BRDeleteCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:complexType>
</xs:element>
```

### 3.1.4.54.3 Complex Types

The following XML schema complex type definitions are specific to the [BusinessRulesDelete](#) operation.

#### 3.1.4.54.3.1 BRDeleteCriteria

The **BRDeleteCriteria** complex type specifies lists of GUIDs for business rule items to be deleted.

The following is the XSD schema definition of the **BRDeleteCriteria** complex type.

```
<xs:complexType name="BRDeleteCriteria">
  <xs:sequence>
    <xs:element xmlns:q50="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="BRConditionTreeNodes" nillable="true" type="q50:ArrayOfguid" />
    <xs:element xmlns:q51="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="BRItems" nillable="true" type="q51:ArrayOfguid" />
    <xs:element xmlns:q52="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="BusinessRules" nillable="true" type="q52:ArrayOfguid" />
  </xs:sequence>
</xs:complexType>
```

**BRConditionTreeNodes:** An **ArrayOfGuid** that contains GUIDs of condition tree nodes to be deleted.

**BRItems:** An **ArrayOfGuid** that contains GUIDs of conditions or actions to be deleted.

**BusinessRules:** An **ArrayOfGuid** that contains GUIDs of business rules to be deleted.

#### 3.1.4.55 BusinessRulesGet

The **BusinessRulesGet** operation queries the existing business rules from an MDS repository. The operation returns a representative data model of the business rule structure and content.

The [BRGetCriteria](#) complex type specifies the desired filters. Each parameter is optional, and those that are specified are combined with AND logic.

The [BRResultOptions](#) complex type specifies the details that are desired in the output model. [ResultType](#) defaults to "none" in each case. The returned [BusinessRules](#) type may contain collections of business rules, condition tree nodes, conditions, and/or actions. Each property of the resulting **BusinessRules** type is populated or not, according to the corresponding **ResultType**. A request that does not specify at least one **BRResultOption** other than "none" results in an error, as this does not provide any data.

The following is the WSDL definition of the **BusinessRulesGet** operation.

```
<wsdl:operation name="BusinessRulesGet">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesGet"
    name="BusinessRulesGetRequest" message="tns:BusinessRulesGetRequest" />
```

```

    <wsdl:output
      wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesGetResponse" name="BusinessRulesGetResponse" message="tns:BusinessRulesGetResponse"
    />
  </wsdl:operation>

```

### 3.1.4.55.1 Messages

The following XSD schema message definitions are specific to the [BusinessRulesGet](#) operation.

#### 3.1.4.55.1.1 BusinessRulesGetRequest

The **BusinessRulesGetRequest** request message contains the **BusinessRulesGetRequest** element.

#### 3.1.4.55.1.2 BusinessRulesGetResponse

The **BusinessRulesGetResponse** response message contains the **BusinessRulesGetResponse** element.

### 3.1.4.55.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesGet** operation.

#### 3.1.4.55.2.1 BusinessRulesGetRequest

The **BusinessRulesGetRequest** request message MUST have a populated [BRGetCriteria](#) complex type.

The following is the XSD schema definition of the **BusinessRulesGetRequest** message.

```

<xs:element name="BusinessRulesGetRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q147="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="GetCriteria" nillable="true" type="q147:BRGetCriteria" />
      <xs:element xmlns:q148="http://schemas.microsoft.com/office/mdm/2007/11"
        minOccurs="0" name="ResultOptions" nillable="true" type="q148:BRResultOptions" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
        type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

#### 3.1.4.55.2.2 BusinessRulesGetResponse

The **BusinessRulesGetResponse** response message returns a [BusinessRules](#) type that contains requested business rules or rule components.

The following is the XSD schema definition of the **BusinessRulesGetResponse** message.

```

<xs:element name="BusinessRulesGetResponse">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element xmlns:q149="http://schemas.microsoft.com/office/mdm/2007/11"
      minOccurs="0" name="BusinessRuleSet" nillable="true" type="q149:BusinessRules" />
    <xs:element xmlns:q150="http://schemas.microsoft.com/office/mdm/2007/11"
      minOccurs="0" name="OperationResult" nillable="true" type="q150:OperationResult" />
  </xs:sequence>
</xs:complexType>
</xs:element>

```

### 3.1.4.55.3 Complex Types

The following XML schema complex type definitions are specific to the **BusinessRulesGet** operation.

#### 3.1.4.55.3.1 BRGetCriteria

The **BRGetCriteria** complex type specifies GUIDs or names of the desired model, entity, or member type.

The following is the XSD schema definition of the **BRGetCriteria** complex type.

```

<xs:complexType name="BRPublishCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberType" type="tns:BREntityMemberType" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>

```

**ModelId:** Specifies an identifier that specifies the GUID or the exact name of the model.

**EntityId:** Specifies an identifier that specifies the GUID or the exact name of the entity.

**MemberType:** Specifies a [BREntityMemberType](#) that specifies leaf, parent, or collection members.

#### 3.1.4.55.3.2 BRResultOptions

The **BRResultOptions** complex type specifies the desired format of the returned [BusinessRules](#) type.

The following is the XSD schema definition of the **BRResultOptions** complex type.

```

<xs:complexType name="BRResultOptions">
  <xs:sequence>
    <xs:element minOccurs="0" name="BRActions" type="tns:ResultType" />
    <xs:element minOccurs="0" name="BRConditionTreeNodes" type="tns:ResultType" />
    <xs:element minOccurs="0" name="BRConditions" type="tns:ResultType" />
    <xs:element minOccurs="0" name="BusinessRules" type="tns:ResultType" />
  </xs:sequence>
</xs:complexType>

```

**BRActions:** Specifies a [ResultType](#) that controls the population of the **BRActions** property in **BusinessRules**.

**BRConditionTreeNodes:** Specifies a **ResultType** that controls the population of the **BRConditionTreeNodes** property in **BusinessRules**.

**BRConditions:** Specifies a **ResultType** that controls the population of the **BRConditions** property in **BusinessRules**.

**BusinessRules:** Specifies a **ResultType** that controls the population of the **BusinessRules** property in **BusinessRules**.

### 3.1.4.56 BusinessRulesPublish

The **BusinessRulesPublish** operation publishes business rule updates for a particular model, entity, and member type.

The business rules are identified by [Model](#), [Entity](#), and [MemberType](#) using the [BRPublishCriteria](#) complex type. Each parameter is optional, and multiple specified parameters are combined with an AND to select business rules for publication. If no parameters are specified, all rules are published.

This operation returns a standard [MessageResponse](#) message.

The following is the WSDL definition of the **BusinessRulesPublish** operation.

```
<wsdl:operation name="BusinessRulesPublish">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesPublish" name="BusinessRulesPublishRequest" message="tns:BusinessRulesPublishRequest" />
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesPublishResponse" name="MessageResponse" message="tns:MessageResponse" />
</wsdl:operation>
```

#### 3.1.4.56.1 Messages

The following XSD schema message definitions are specific to the **BusinessRulesPublish** operation.

##### 3.1.4.56.1.1 BusinessRulesPublishRequest

The **BusinessRulesPublishRequest** request message contains the **BusinessRulesPublishRequest** element.

##### 3.1.4.56.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesPublish** operation.

##### 3.1.4.56.2.1 BusinessRulesPublishRequest

The **BusinessRulesPublishRequest** element MAY include a [BRPublishCriteria](#) to limit which business rules are published. Otherwise, all business rules for all models, entities, and member types are published.

The following is the XSD schema definition of the **BusinessRulesPublishRequest** element.

```
<xs:element name="BusinessRulesPublishRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q151="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="BRPublishCriteria" nillable="true" type="q151:BRPublishCriteria" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

### 3.1.4.56.3 Complex Types

The following XML schema complex type definitions are specific to the **BusinessRulesPublish** operation.

#### 3.1.4.56.3.1 BRPublishCriteria

The **BRPublishCriteria** complex type sets the scope of rules to be published.

The following is the XSD schema definition of the **BRPublishCriteria** complex type.

```
<xs:complexType name="BRPublishCriteria">
  <xs:sequence>
    <xs:element minOccurs="0" name="EntityId" nillable="true" type="tns:Identifier" />
    <xs:element minOccurs="0" name="MemberType" type="tns:BREntityMemberType" />
    <xs:element minOccurs="0" name="ModelId" nillable="true" type="tns:Identifier" />
  </xs:sequence>
</xs:complexType>
```

**ModelId:** Specifies an identifier for the model of the business rules to be published.

**EntityId:** Specifies an identifier for the entity of the business rules to be published.

**MemberType:** Specifies a member type within the entity of the business rules to be published.

All parameters are optional with the following exceptions:

- Specification of a member type requires the specification of an entity.
- Specification of an entity by name requires the specification of a model.

### 3.1.4.57 BusinessRulesUpdate

The **BusinessRulesUpdate** operation updates existing business rules, conditions, or actions within the MDS repository.

Business rule items in the request are matched to existing repository items by GUID only. Existing GUIDs **MUST** be specified for items to be updated. Each GUID that is not found is returned as a separate error.

Each item's update is attempted and committed as an individual transaction regardless of the failure of other items. The operation does not complete a business rule name change that results in a duplicate name within the same context.

A model of business rules or components for update is created by using the **BRModel** that contains one or more [BusinessRule](#) data types. The [BusinessRules](#) data type includes placeholders for all information about a business rule, including its descriptive and state information and its component conditions and actions.

A version MUST be specified and is used to validate specified domain-based attribute values in arguments of conditions or actions. Attribute values that are not found result in errors.

The **BusinessRulesUpdate** operation returns a standard [MessageResponse](#) message.

The following is the WSDL definition of the **BusinessRulesUpdate** operation.

```
<wsdl:operation name="BusinessRulesUpdate">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesUpdate" name="BusinessRulesUpdateRequest" message="tns:BusinessRulesUpdateRequest" />
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/BusinessRulesUpdateResponse" name="MessageResponse" message="tns:MessageResponse" />
</wsdl:operation>
```

### 3.1.4.57.1 Messages

The following XSD schema message definitions are specific to the **BusinessRulesUpdate** operation.

#### 3.1.4.57.1.1 BusinessRulesUpdateRequest

The **BusinessRulesUpdateRequest** request message contains the **BusinessRulesUpdateRequest** element.

#### 3.1.4.57.2 Elements

The following XML schema element definitions are specific to the **BusinessRulesUpdate** operation.

#### 3.1.4.57.2.1 BusinessRulesUpdateRequest

The **BusinessRulesUpdateRequest** request message MUST include a [BusinessRules](#) type that contains business rules or business rule components and their updated properties.

The following is the XSD schema definition of the **BusinessRulesUpdateRequest** message.

```
<xs:element name="BusinessRulesUpdateRequest">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q152="http://schemas.microsoft.com/office/mdm/2007/11"
minOccurs="0" name="BusinessRuleSet" nillable="true" type="q152:BusinessRules" />
      <xs:element minOccurs="0" name="ServiceConnectionName" nillable="true"
type="xs:string" />
    </xs:sequence>
  </xs:complexType>
```

</xs:element>

**BusinessRuleSet:** Specifies a **BusinessRules** complex type.

### 3.1.5 Timer Events

None.

### 3.1.6 Other Local Events

None.

Preliminary



## 4 Protocol Examples

### 4.1 MetaData Example

#### 4.1.1 Create Model using MetadataCreate

In the following example, a client sends a [MetadataCreate](#) request message that is populated with a model. This request could also contain the following:

- Entity
- Attributes
- Explicit hierarchies
- Derived hierarchy
- Attribute groups

##### 4.1.1.1 Client Sends Request

```
<HttpRequest>
<headers>
<httpheader>
<name>Content-Type</name>
<value>text/xml; charset=utf-8</value>
</httpheader>
<httpheader>
<name>SOAPAction</name>
<value>http://tempuri.org/IService/MetadataCreate</value>
</httpheader>
</headers>
<body>
<a:Model>
<a:Identifier>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:Identifier>
</a:Model>
</body>
<method>POST</method>
<code>0</code>
</HttpRequest>
```

##### 4.1.1.2 Server Response

```
<HttpResponse>
<headers>
<httpheader>
<name>Content-Type</name>
<value>text/xml; charset=utf-8</value>
</httpheader>
<httpheader>
```

```

        <name>SOAPAction</name>
        <value>http://tempuri.org/IService/MetadataCreate</value>
    </httpheader>
</headers>
<body><a:Model>
<a:Identifier>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:Identifier>
</a:Model>
</body>
<code>0</code>
</httpResponse>

```

## 4.2 Business Rule Example

### 4.2.1 Create Business Rule using BusinessRulesCreate

In the following example, the client sends a [BusinessRulesCreate](#) request to create a new business rule with the MDS system.

#### 4.2.1.1 Client Sends Request

The client sends the following request.

```

<operation>BusinessRulesCreate</operation>
<message>BusinessRulesCreateRequest</message>
- <httpRequest>
- <headers>
- <httpheader>
  <name>Content-Type</name>
  <value>text/xml; charset=utf-8</value>
</httpheader>
- <httpheader>
  <name>SOAPAction</name>
  <value>http://tempuri.org/IService/BusinessRulesCreate</value>
</httpheader>
</headers>
<body><?xml version="1.0" encoding="utf-8"?><soap:Envelope
xmlns: xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns: xsd="http://www.w3.org/2001/XMLSchema"
xmlns: soap="http://schemas.xmlsoap.org/soap/envelope/"><soap:Header><International
xmlns="http://www.w3.org/2005/09/ws-i18n"><Locale>
1101</Locale><Tz><Tz></International></soap:Header><soap:Body><BusinessRulesCreateRequest
xmlns="http://tempuri.org/"> <businessRuleSet
xmlns:a="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09">
<a:BRActions/>
<a:BRConditionTreeNodes/>
<a:BRConditions/>
<a:BusinessRules>
<a:BusinessRule>
<a:AuditInfo i:nil="true"/>
<a:BRActions>
<a:BRAction>
<a:AuditInfo i:nil="true"/>

```

```

<a:BusinessRuleId>
<a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
<a:Name>InvalidateAllMembers</a:Name>
<a:InternalId>1</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>d92aee50-ec66-4b0f-bfce-990df7fa60c9</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>31</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
<a:Identifier>
<a:Id>34698d50-fe15-4316-963d-728729a08c4c</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>1</a:InternalId>
</a:Identifier>
<a:Operator>Invalid</a:Operator>
<a:PostfixArguments xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
<a:Sequence>1</a:Sequence>
<a:Text>Name is not valid </a:Text>
<a:PrefixArgument>
<a:Identifier>
<a:Id>f6f9966a-0178-42ea-b500-615a58993a8e</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>1</a:InternalId>
</a:Identifier>
<a:PropertyName>Anchor</a:PropertyName>
<a:AttributeId>
<a:Id>9aee1007-501f-4911-a49e-c66514727a9d</a:Id>
<a:Name>Name</a:Name>
<a:InternalId>1202</a:InternalId>
</a:AttributeId>
<a:ChildArguments/>
</a:PrefixArgument>
</a:BRAction>
</a:BRActions>
<a:BRConditionTree>
<a:AuditInfo i:nil="true"/>
<a:BRConditions>
<a:BRCondition>
<a:AuditInfo i:nil="true"/>
<a:BusinessRuleId>
<a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
<a:Name>InvalidateAllMembers</a:Name>
<a:InternalId>1</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>d92aee50-ec66-4b0f-bfce-990df7fa60c9</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>31</a:InternalId>

```

```
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
<a:Identifier>
<a:Id>1d3c2c1f-f5e6-4915-8a5b-d982a7d22986</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>2</a:InternalId>
</a:Identifier>
<a:Operator>IsEqual</a:Operator>
<a:PostfixArguments xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
<b:anyType i:type="a:BRFreeformArgument">
<a:Identifier>
<a:Id>50f17e5c-fc6c-42b7-a29c-bdaab20aca96</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>3</a:InternalId>
</a:Identifier>
<a:PropertyName>Value</a:PropertyName>
<a:Value>Test</a:Value>
</b:anyType>
</a:PostfixArguments>
<a:Sequence>1</a:Sequence>
<a:Text>Name is equal to Test</a:Text>
<a:ConditionTreeNodeId>
<a:Id>a0027764-6879-42ba-b4c4-50da4617d170</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>3</a:InternalId>
</a:ConditionTreeNodeId>
<a:PrefixArgument i:type="a:BRAttributeArgument">
<a:Identifier>
<a:Id>4d69bae4-d580-4d26-a7e5-fe3a5c17f9a9</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>2</a:InternalId>
</a:Identifier>
<a:PropertyName>Anchor</a:PropertyName>
<a:AttributeId>
<a:Id>9aee1007-501f-4911-a49e-c66514727a9d</a:Id>
<a:Name>Name</a:Name>
<a:InternalId>1202</a:InternalId>
</a:AttributeId>
<a:ChildArguments/>
</a:PrefixArgument>
</a:BRCondition>
</a:BRConditions>
<a:BusinessRuleId>
<a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
<a:Name>InvalidAllMembers</a:Name>
<a:InternalId>1</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>d92aee50-ec66-4b0f-bfce-990df7fa60c9</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>31</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
```

```

<a:ConditionTreeChildNodes/>
<a:ConditionTreeParentNode>
<a:Id>00000000-0000-0000-0000-000000000000</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>0</a:InternalId>
</a:ConditionTreeParentNode>
<a:Identifier>
<a:Id>a0027764-6879-42ba-b4c4-50da4617d170</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>3</a:InternalId>
</a:Identifier>
<a:LogicalOperator>And</a:LogicalOperator>
<a:Sequence>1</a:Sequence>
</a:BRConditionTree>
<a:Description/>
<a:Identifier>
<a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
<a:Name>InvalidateAllMembers</a:Name>
<a:InternalId>1</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>d92aee50-ec66-4b0f-bfce-990df7fa60c9</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>31</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:Identifier>
<a:NotificationGroup i:nil="true"/>
<a:NotificationUser i:nil="true"/>
<a:Priority>10</a:Priority>
<a:RuleActionText>
Name is not valid &#xD;
</a:RuleActionText>
<a:RuleConditionText>Name is equal to Test</a:RuleConditionText>
<a:Status>PendingChanges</a:Status>
</a:BusinessRule>
<a:BusinessRule>
<a:AuditInfo i:nil="true"/>
<a:BRActions/>
<a:BRConditionTree>
<a:AuditInfo i:nil="true"/>
<a:BRConditions/>
<a:BusinessRuleId>
<a:Id>35005d23-7dfb-4e91-9e3a-85495e77f86a</a:Id>
<a:Name>New rule (1)</a:Name>
<a:InternalId>2</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>5c8ab307-1420-453d-a7d0-d85f8fe3f83a</a:Id>
<a:Name>Country</a:Name>
<a:InternalId>39</a:InternalId>

```

```

</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
<a:ConditionTreeChildNodes/>
<a:ConditionTreeParentNode>
<a:Id>00000000-0000-0000-0000-000000000000</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>0</a:InternalId>
</a:ConditionTreeParentNode>
<a:Identifier>
<a:Id>6d15692b-a5b8-479e-95ec-b7b2d3a16f05</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>2</a:InternalId>
</a:Identifier>
<a:LogicalOperator>And</a:LogicalOperator>
<a:Sequence>1</a:Sequence>
</a:BRConditionTree>
<a:Description/>
<a:Identifier>
<a:Id>35005d23-7dfb-4e91-9e3a-85495e77f86a</a:Id>
<a:Name>New rule (1)</a:Name>
<a:InternalId>2</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>5c8ab307-1420-453d-a7d0-d85f8fe3f83a</a:Id>
<a:Name>Country</a:Name>
<a:InternalId>39</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:Identifier>
<a:NotificationGroup i:nil="true"/>
<a:NotificationUser i:nil="true"/>
<a:Priority>10</a:Priority>
<a:RuleActionText/>
<a:RuleConditionText>None</a:RuleConditionText>
<a:Status>Undefined</a:Status>
</a:BusinessRule>
</a:BusinessRules>
</businessRuleSet></BusinessRulesCreateRequest></soap:Body></soap:Envelope></body>
<method>POST</method>
<code>0</code>
</httpRequest>

```

#### 4.2.1.2 Server Response

If the business rule is successfully created, the server responds with the following message.

```

<httpResponse>
  <headers>
    <httpheader>
      <name>Content-Type</name>
      <value>text/xml; charset=utf-8</value>

```

```

    </httpheader>
    <httpheader>
      <name>SOAPAction</name>
      <value>http://tempuri.org/IService/MetadataCreate</value>
    </httpheader>
  </headers>
  <body>&lt;?xml version="1.0" encoding="utf-8"?><soap:Envelope
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"><soap:Header><International
xmlns="http://www.w3.org/2005/09/ws-i18n"><Locale>
1101</Locale><Tz><Tz></International></soap:Header><soap:Body><BusinessRulesCreateRequest
xmlns="http://tempuri.org/"> <businessRuleSet
xmlns:a="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09">
  <a:BRActions/>
  <a:BRConditionTreeNodes/>
  <a:BRConditions/>
  <a:BusinessRules>
  <a:BusinessRule>
  <a:AuditInfo i:nil="true"/>
  <a:BRActions>
  <a:BRAction>
  <a:AuditInfo i:nil="true"/>
  <a:BusinessRuleId>
  <a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
  <a:Name>InvalidateAllMembers</a:Name>
  <a:InternalId>1</a:InternalId>
  <a:ModelId>
  <a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
  <a:Name>Product</a:Name>
  <a:InternalId>7</a:InternalId>
  </a:ModelId>
  <a:EntityId>
  <a:Id>d92aee50-ec66-4b0f-bfce-990df7fa60c9</a:Id>
  <a:Name>Product</a:Name>
  <a:InternalId>31</a:InternalId>
  </a:EntityId>
  <a:MemberType>Leaf</a:MemberType>
  </a:BusinessRuleId>
  <a:Identifier>
  <a:Id>34698d50-fe15-4316-963d-728729a08c4c</a:Id>
  <a:Name i:nil="true"/>
  <a:InternalId>1</a:InternalId>
  </a:Identifier>
  <a:Operator>Invalid</a:Operator>
  <a:PostfixArguments xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
  <a:Sequence>1</a:Sequence>
  <a:Text>Name is not valid </a:Text>
  <a:PrefixArgument>
  <a:Identifier>
  <a:Id>f6f9966a-0178-42ea-b500-615a58993a8e</a:Id>
  <a:Name i:nil="true"/>
  <a:InternalId>1</a:InternalId>
  </a:Identifier>
  <a:PropertyName>Anchor</a:PropertyName>
  <a:AttributeId>
  <a:Id>9aee1007-501f-4911-a49e-c66514727a9d</a:Id>
  <a:Name>Name</a:Name>
  <a:InternalId>1202</a:InternalId>

```

```

</a:AttributeId>
<a:ChildArguments/>
</a:PrefixArgument>
</a:BRAction>
</a:BRActions>
<a:BRConditionTree>
<a:AuditInfo i:nil="true"/>
<a:BRConditions>
<a:BRCondition>
<a:AuditInfo i:nil="true"/>
<a:BusinessRuleId>
<a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
<a:Name>InvalidateAllMembers</a:Name>
<a:InternalId>1</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>d92aee50-ec66-4b0f-bfce-990df7fa60c9</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>31</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
<a:Identifier>
<a:Id>1d3c2c1f-f5e6-4915-8a5b-d982a7d22986</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>2</a:InternalId>
</a:Identifier>
<a:Operator>IsEqual</a:Operator>
<a:PostfixArguments xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
<b:anyType i:type="a:BRFreeformArgument">
<a:Identifier>
<a:Id>50f17e5c-fc6c-42b7-a29c-bdaab20aca96</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>3</a:InternalId>
</a:Identifier>
<a:PropertyName>Value</a:PropertyName>
<a:Value>Test</a:Value>
</b:anyType>
</a:PostfixArguments>
<a:Sequence>1</a:Sequence>
<a:Text>Name is equal to Test</a:Text>
<a:ConditionTreeNodeId>
<a:Id>a0027764-6879-42ba-b4c4-50da4617d170</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>3</a:InternalId>
</a:ConditionTreeNodeId>
<a:PrefixArgument i:type="a:BRAttributeArgument">
<a:Identifier>
<a:Id>4d69bae4-d580-4d26-a7e5-fe3a5c17f9a9</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>2</a:InternalId>
</a:Identifier>
<a:PropertyName>Anchor</a:PropertyName>
<a:AttributeId>
<a:Id>9aee1007-501f-4911-a49e-c66514727a9d</a:Id>

```



```
<a:Name>Name</a:Name>
<a:InternalId>1202</a:InternalId>
</a:AttributeId>
<a:ChildArguments/>
</a:PrefixArgument>
</a:BRCondition>
</a:BRConditions>
<a:BusinessRuleId>
<a:Id>236ed0eb-fc18-4e7e-a851-ebad9b5b63f4</a:Id>
<a:Name>InvalidateAllMembers</a:Name>
<a:InternalId>1</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>d92aee50-ec66-4b0f-bf9e-990df7fa60c9</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>31</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
<a:ConditionTreeChildNodes/>
<a:ConditionTreeParentNode>
<a:Id>00000000-0000-0000-0000-000000000000</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>0</a:InternalId>
</a:ConditionTreeParentNode>
<a:Identifier>
<a:Id>a0027764-6879-42ba-b4c4-50da4617d170</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>3</a:InternalId>
</a:Identifier>
<a:LogicalOperator>And</a:LogicalOperator>
<a:Sequence>1</a:Sequence>
</a:BRConditionTree>
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</a:ModelId>
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<a:MemberType>Leaf</a:MemberType>
</a:Identifier>
<a:NotificationGroup i:nil="true"/>
<a:NotificationUser i:nil="true"/>
<a:Priority>10</a:Priority>
<a:RuleActionText>
Name is not valid &#xD;
```

```
</a:RuleActionText>
<a:RuleConditionText>Name is equal to Test</a:RuleConditionText>
<a:Status>PendingChanges</a:Status>
</a:BusinessRule>
<a:BusinessRule>
<a:AuditInfo i:nil="true"/>
<a:BRActions/>
<a:BRConditionTree>
<a:AuditInfo i:nil="true"/>
<a:BRConditions/>
<a:BusinessRuleId>
<a:Id>35005d23-7dfb-4e91-9e3a-85495e77f86a</a:Id>
<a:Name>New rule (1)</a:Name>
<a:InternalId>2</a:InternalId>
<a:ModelId>
<a:Id>91356739-5271-4162-848d-03fe56549ea2</a:Id>
<a:Name>Product</a:Name>
<a:InternalId>7</a:InternalId>
</a:ModelId>
<a:EntityId>
<a:Id>5c8ab307-1420-453d-a7d0-d85f8fe3f83a</a:Id>
<a:Name>Country</a:Name>
<a:InternalId>39</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:BusinessRuleId>
<a:ConditionTreeChildNodes/>
<a:ConditionTreeParentNode>
<a:Id>00000000-0000-0000-0000-000000000000</a:Id>
<a:Name i:nil="true"/>
<a:InternalId>0</a:InternalId>
</a:ConditionTreeParentNode>
<a:Identifier>
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<a:Sequence>1</a:Sequence>
</a:BRConditionTree>
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<a:InternalId>2</a:InternalId>
<a:ModelId>
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</a:ModelId>
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<a:Name>Country</a:Name>
<a:InternalId>39</a:InternalId>
</a:EntityId>
<a:MemberType>Leaf</a:MemberType>
</a:Identifier>
<a:NotificationGroup i:nil="true"/>
<a:NotificationUser i:nil="true"/>
```

```
<a:Priority>10</a:Priority>
<a:RuleActionText/>
<a:RuleConditionText>None</a:RuleConditionText>
<a:Status>Undefined</a:Status>
</a:BusinessRule>
</a:BusinessRules>
</businessRuleSet></BusinessRulesCreateRequest></soap:Body></soap:Envelope>
<ReturnCreatedIdentifiers>1</ReturnCreatedIdentifiers>
</body>
  <code>0</code>
</httpResponse>
```

Preliminary

## 5 Security

### 5.1 Security Considerations for Implementers

The server might be returning potentially sensitive data in its responses. Therefore, it is strongly recommended that the server be configured to use GSS-API based encryption over TCP or Secure Sockets Layer (SSL) over HTTPS to ensure the integrity of the data and to prevent tampering and unauthorized access.

There are two strategies for reducing the impact of denial-of-service (DOS) attacks against the server. These strategies are as follows:

- Authentication is enabled, and access is denied to unauthenticated clients. This process allows a user to quickly disable access to rogue client machines. Authentication is always enabled for the MDS service.
- No single request takes too much processing time on the server. This ensures that any attacker must keep up a steady stream of requests to deny access to the server. Therefore, a simple network trace allows the attacking machine to be identified and shut down. This process applies to requests that are sent by "spoof clients" (for example, a virus that emulates a client. This virus might try to pass an unbounded request or a long-running MDX query).

### 5.2 Index of Security Parameters

None.

## 6 Appendix A: Full WSDL

For ease of implementation, the full WSDL is provided here.

```
<?xml version="1.0" encoding="utf-8"?>
<wsdl:definitions name="Service"
targetNamespace="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:wsa10="http://www.w3.org/2005/08/addressing"
xmlns:wsx="http://schemas.xmlsoap.org/ws/2004/09/mex"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsp="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:wsap="http://schemas.xmlsoap.org/ws/2004/08/addressing/policy"
xmlns:msc="http://schemas.microsoft.com/ws/2005/12/wsdl/contract"
xmlns:wsa="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:wsam="http://www.w3.org/2007/05/addressing/metadata"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
xmlns:tns="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/">
<wsp:Policy wsu:Id="WSHttpBinding IService_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SymmetricBinding xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<wsp:Policy>
<sp:ProtectionToken>
<wsp:Policy>
<sp:SecureConversationToken
sp:IncludeToken="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy/IncludeToken/AlwaysToRe
cipient">
<wsp:Policy>
<sp:RequireDerivedKeys/>
<sp:BootstrapPolicy>
<wsp:Policy>
<sp:SignedParts>
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts>
<sp:Body/>
</sp:EncryptedParts>
<sp:SymmetricBinding>
<wsp:Policy>
<sp:ProtectionToken>
<wsp:Policy>
<sp:SpnegoContextToken
sp:IncludeToken="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy/IncludeToken/AlwaysToRe
cipient">
<wsp:Policy>
<sp:RequireDerivedKeys/>
</wsp:Policy>

```

```

</sp:SpnegoContextToken>
</wsp:Policy>
</sp:ProtectionToken>
<sp:AlgorithmSuite>
<wsp:Policy>
<sp:Basic256/>
</wsp:Policy>
</sp:AlgorithmSuite>
<sp:Layout>
<wsp:Policy>
<sp:Strict/>
</wsp:Policy>
</sp:Layout>
<sp:IncludeTimestamp/>
<sp:EncryptSignature/>
<sp:OnlySignEntireHeadersAndBody/>
</wsp:Policy>
</sp:SymmetricBinding>
<sp:Wss11>
<wsp:Policy>
<sp:MustSupportRefKeyIdentifier/>
<sp:MustSupportRefIssuerSerial/>
<sp:MustSupportRefThumbprint/>
<sp:MustSupportRefEncryptedKey/>
</wsp:Policy>
</sp:Wss11>
<sp:Trust10>
<wsp:Policy>
<sp:MustSupportIssuedTokens/>
<sp:RequireClientEntropy/>
<sp:RequireServerEntropy/>
</wsp:Policy>
</sp:Trust10>
</wsp:Policy>
</sp:BootstrapPolicy>
</wsp:Policy>
</sp:SecureConversationToken>
</wsp:Policy>
</sp:ProtectionToken>
<sp:AlgorithmSuite>
<wsp:Policy>
<sp:Basic256/>
</wsp:Policy>
</sp:AlgorithmSuite>
<sp:Layout>
<wsp:Policy>
<sp:Strict/>
</wsp:Policy>
</sp:Layout>
<sp:IncludeTimestamp/>
<sp:EncryptSignature/>
<sp:OnlySignEntireHeadersAndBody/>
</wsp:Policy>
</sp:SymmetricBinding>
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<wsp:Policy>
<sp:MustSupportRefKeyIdentifier/>
<sp:MustSupportRefIssuerSerial/>
<sp:MustSupportRefThumbprint/>

```

```

<sp:MustSupportRefEncryptedKey/>
</wsp:Policy>
</sp:Wss11>
<sp:Trust10 xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<wsp:Policy>
<sp:MustSupportIssuedTokens/>
<sp:RequireClientEntropy/>
<sp:RequireServerEntropy/>
</wsp:Policy>
</sp:Trust10>
<wsaw:UsingAddressing/>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_TransactionsReverse_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Body/>

```

```

<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
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<wsp:Policy wsu:Id="WSHttpBinding_IService_EntityMemberAnnotationsCreate_input_policy">
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<wsp:Policy wsu:Id="WSHttpBinding_IService_TransactionAnnotationsCreate_input_policy">
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```

```

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</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_EntityMemberAnnotationsGet_output_policy">

```

```

<wsp:ExactlyOne>
  <wsp:All>
    <sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
      <sp:Body/>
      <sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
    </sp:SignedParts>
    <sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
      <sp:Body/>
    </sp:EncryptedParts>
  </wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_TransactionAnnotationsGet_Input_policy">
  <wsp:ExactlyOne>
    <wsp:All>
      <sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
        <sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
        <sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
      </sp:SignedParts>
      <sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
        <sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
      </sp:EncryptedParts>
    </wsp:All>
  </wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_TransactionAnnotationsGet_output_policy">
  <wsp:ExactlyOne>
    <wsp:All>
      <sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
        <sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
      </sp:SignedParts>
      <sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
      </sp:EncryptedParts>
    </wsp:All>
  </wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_AnnotationsUpdate_Input_policy">

```

```

<wsp:ExactlyOne>
  <wsp:All>
    <sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
      <sp:Body/>
      <sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
      <sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
      <sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
    </sp:SignedParts>
    <sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
      <sp:Body/>
      <sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
    </sp:EncryptedParts>
  </wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_AnnotationsUpdate_output_policy">
  <wsp:ExactlyOne>
    <wsp:All>
      <sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
        <sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
      </sp:SignedParts>
      <sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
      </sp:EncryptedParts>
    </wsp:All>
  </wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_AnnotationsDelete_Input_policy">
  <wsp:ExactlyOne>
    <wsp:All>
      <sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
        <sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
        <sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
        <sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
      </sp:SignedParts>
      <sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
        <sp:Body/>
        <sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
      </sp:EncryptedParts>
    </wsp:All>
  </wsp:ExactlyOne>

```

```

</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_AnnotationsDelete_output_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp>All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_EntityMemberKeyLookup_Input_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp>All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_EntityMemberKeyLookup_output_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp>All>
</wsp:ExactlyOne>

```

```

</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_StagingProcess_Input_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp>All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_StagingProcess_output_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp>All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ExportViewCreate_Input_policy">
<wsp:ExactlyOne>
<wsp>All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>

```

```

</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ExportViewCreate_output_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ExportViewUpdate_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
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<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
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<wsp:All>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>

```

```
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ExportViewDelete_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:Policy>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ExportViewListGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
```



```

<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
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</wsp:Policy>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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</sp:EncryptedParts>
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</wsp:Policy>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_MetadataDelete_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_MetadataDelete_output_policy">
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<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>

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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_MetadataGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<wsp:All>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_MetadataUpdate_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>

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<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
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</wsp:All>
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</wsp:Policy>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
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<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_SystemSettingsGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:All>
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</wsp:Policy>
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<wsp:All>
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```

```

<sp:Body/>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:All>
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</wsp:Policy>
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<wsp:All>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_SystemDomainListGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">

```

```

<sp:Body/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
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<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_SystemPropertiesGet_input_policy">
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<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
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</wsp:ExactlyOne>
</wsp:Policy>
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<wsp:ExactlyOne>

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<wsp:All>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ServiceCheck_Input_policy">
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<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:ExactlyOne>
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<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:Policy>
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<wsp:All>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
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```

<wsp:Policy wsu:Id="WSHttpBinding_IService_UserPreferencesGet_output_policy">
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<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>

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```
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_EntityMemberAttributesGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-ii18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:All>
</wsp:ExactlyOne>
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<wsp:All>
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<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_HierarchyMembersGet_Input_policy">
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<wsp:All>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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</sp:SignedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
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<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>

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</sp:SignedParts>
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</sp:EncryptedParts>
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<wsp:All>
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</sp:SignedParts>
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<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
```

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<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>

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</wsp:ExactlyOne>
</wsp:Policy>
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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
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</wsp:Policy>
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<wsp:All>
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```

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```

```

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<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ModelMembersBulkMerge_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>

```

```

<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_ModelMembersBulkMerge_output_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_StagingGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_StagingGet_output_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>

```

```
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_StagingClear_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_StagingClear_output_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_TransactionsGet_Input_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
```

```

<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="International" Namespace="http://www.w3.org/2005/09/ws-i18n"/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsp:Policy wsu:Id="WSHttpBinding_IService_TransactionsGet_output_policy">
<wsp:ExactlyOne>
<wsp:All>
<sp:SignedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
<sp:Header Name="To" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="From" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="FaultTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="ReplyTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="MessageID" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="RelatesTo" Namespace="http://www.w3.org/2005/08/addressing"/>
<sp:Header Name="Action" Namespace="http://www.w3.org/2005/08/addressing"/>
</sp:SignedParts>
<sp:EncryptedParts xmlns:sp="http://schemas.xmlsoap.org/ws/2005/07/securitypolicy">
<sp:Body/>
</sp:EncryptedParts>
</wsp:All>
</wsp:ExactlyOne>
</wsp:Policy>
<wsdl:types>
<xsd:schema
targetNamespace="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/Imports">
<xsd:import schemaLocation="http://mattande-
odl.northamerica.corp.microsoft.com/mds/service/Service.svc?xsd=xsd0"
namespace="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09"/>
<xsd:import schemaLocation="http://mattande-
odl.northamerica.corp.microsoft.com/mds/service/Service.svc?xsd=xsd3"
namespace="http://www.w3.org/2005/09/ws-i18n"/>
<xsd:import schemaLocation="http://mattande-
odl.northamerica.corp.microsoft.com/mds/service/Service.svc?xsd=xsd1"
namespace="http://schemas.microsoft.com/2003/10/Serialization"/>
<xsd:import schemaLocation="http://mattande-
odl.northamerica.corp.microsoft.com/mds/service/Service.svc?xsd=xsd2"
namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
<xsd:import schemaLocation="http://mattande-
odl.northamerica.corp.microsoft.com/mds/service/Service.svc?xsd=xsd4"
namespace="http://schemas.datacontract.org/2004/07/Microsoft.MasterDataServices.Services.Data
Contracts"/>
</xsd:schema>
</wsdl:types>
<wsdl:message name="TransactionsReverseRequest">
<wsdl:part name="parameters" element="tns:TransactionsReverseRequest"/>
</wsdl:message>
<wsdl:message name="TransactionsReverseRequest_Headers">

```



```

<wsdl:part name="International" element="q1:International"
xmlns:q1="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="TransactionsReverseResponse">
<wsdl:part name="parameters" element="tns:TransactionsReverseResponse"/>
</wsdl:message>
<wsdl:message name="ValidationGetRequest">
<wsdl:part name="parameters" element="tns:ValidationGetRequest"/>
</wsdl:message>
<wsdl:message name="ValidationGetRequest_Headers">
<wsdl:part name="International" element="q2:International"
xmlns:q2="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ValidationGetResponse">
<wsdl:part name="parameters" element="tns:ValidationGetResponse"/>
</wsdl:message>
<wsdl:message name="ValidationProcessRequest">
<wsdl:part name="parameters" element="tns:ValidationProcessRequest"/>
</wsdl:message>
<wsdl:message name="ValidationProcessRequest_Headers">
<wsdl:part name="International" element="q3:International"
xmlns:q3="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ValidationProcessResponse">
<wsdl:part name="parameters" element="tns:ValidationProcessResponse"/>
</wsdl:message>
<wsdl:message name="EntityMemberAnnotationsCreateRequest">
<wsdl:part name="parameters" element="tns:EntityMemberAnnotationsCreateRequest"/>
</wsdl:message>
<wsdl:message name="EntityMemberAnnotationsCreateRequest_Headers">
<wsdl:part name="International" element="q4:International"
xmlns:q4="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="AnnotationsCreateResponse">
<wsdl:part name="parameters" element="tns:AnnotationsCreateResponse"/>
</wsdl:message>
<wsdl:message name="TransactionAnnotationsCreateRequest">
<wsdl:part name="parameters" element="tns:TransactionAnnotationsCreateRequest"/>
</wsdl:message>
<wsdl:message name="TransactionAnnotationsCreateRequest_Headers">
<wsdl:part name="International" element="q5:International"
xmlns:q5="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMemberAnnotationsGetRequest">
<wsdl:part name="parameters" element="tns:EntityMemberAnnotationsGetRequest"/>
</wsdl:message>
<wsdl:message name="EntityMemberAnnotationsGetRequest_Headers">
<wsdl:part name="International" element="q6:International"
xmlns:q6="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMemberAnnotationsGetResponse">
<wsdl:part name="parameters" element="tns:EntityMemberAnnotationsGetResponse"/>
</wsdl:message>
<wsdl:message name="TransactionAnnotationsGetRequest">
<wsdl:part name="parameters" element="tns:TransactionAnnotationsGetRequest"/>
</wsdl:message>
<wsdl:message name="TransactionAnnotationsGetRequest_Headers">
<wsdl:part name="International" element="q7:International"
xmlns:q7="http://www.w3.org/2005/09/ws-i18n"/>

```

```

</wsdl:message>
<wsdl:message name="TransactionAnnotationsGetResponse">
<wsdl:part name="parameters" element="tns:TransactionAnnotationsGetResponse"/>
</wsdl:message>
<wsdl:message name="AnnotationsUpdateRequest">
<wsdl:part name="parameters" element="tns:AnnotationsUpdateRequest"/>
</wsdl:message>
<wsdl:message name="AnnotationsUpdateRequest_Headers">
<wsdl:part name="International" element="q8:International"
xmlns:q8="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="AnnotationsUpdateResponse">
<wsdl:part name="parameters" element="tns:AnnotationsUpdateResponse"/>
</wsdl:message>
<wsdl:message name="AnnotationsDeleteRequest">
<wsdl:part name="parameters" element="tns:AnnotationsDeleteRequest"/>
</wsdl:message>
<wsdl:message name="AnnotationsDeleteRequest_Headers">
<wsdl:part name="International" element="q9:International"
xmlns:q9="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="AnnotationsDeleteResponse">
<wsdl:part name="parameters" element="tns:AnnotationsDeleteResponse"/>
</wsdl:message>
<wsdl:message name="EntityMemberKeyGetRequest">
<wsdl:part name="parameters" element="tns:EntityMemberKeyGetRequest"/>
</wsdl:message>
<wsdl:message name="EntityMemberKeyGetRequest_Headers">
<wsdl:part name="International" element="q10:International"
xmlns:q10="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMemberKeyGetResponse">
<wsdl:part name="parameters" element="tns:EntityMemberKeyGetResponse"/>
</wsdl:message>
<wsdl:message name="StagingProcessRequest">
<wsdl:part name="parameters" element="tns:StagingProcessRequest"/>
</wsdl:message>
<wsdl:message name="StagingProcessRequest_Headers">
<wsdl:part name="International" element="q11:International"
xmlns:q11="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="StagingProcessResponse">
<wsdl:part name="parameters" element="tns:StagingProcessResponse"/>
</wsdl:message>
<wsdl:message name="ExportViewCreateRequest">
<wsdl:part name="parameters" element="tns:ExportViewCreateRequest"/>
</wsdl:message>
<wsdl:message name="ExportViewCreateRequest_Headers">
<wsdl:part name="International" element="q12:International"
xmlns:q12="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ExportViewCreateResponse">
<wsdl:part name="parameters" element="tns:ExportViewCreateResponse"/>
</wsdl:message>
<wsdl:message name="ExportViewUpdateRequest">
<wsdl:part name="parameters" element="tns:ExportViewUpdateRequest"/>
</wsdl:message>
<wsdl:message name="ExportViewUpdateRequest_Headers">

```

```

<wsdl:part name="International" element="q13:International"
xmlns:q13="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ExportViewUpdateResponse">
<wsdl:part name="parameters" element="tns:ExportViewUpdateResponse"/>
</wsdl:message>
<wsdl:message name="ExportViewDeleteRequest">
<wsdl:part name="parameters" element="tns:ExportViewDeleteRequest"/>
</wsdl:message>
<wsdl:message name="ExportViewDeleteRequest_Headers">
<wsdl:part name="International" element="q14:International"
xmlns:q14="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ExportViewDeleteResponse">
<wsdl:part name="parameters" element="tns:ExportViewDeleteResponse"/>
</wsdl:message>
<wsdl:message name="ExportViewListGetRequest">
<wsdl:part name="parameters" element="tns:ExportViewListGetRequest"/>
</wsdl:message>
<wsdl:message name="ExportViewListGetRequest_Headers">
<wsdl:part name="International" element="q15:International"
xmlns:q15="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ExportViewListGetResponse">
<wsdl:part name="parameters" element="tns:ExportViewListGetResponse"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsRequest">
<wsdl:part name="parameters" element="tns:SecurityPrincipalsRequest"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsRequest_Headers">
<wsdl:part name="International" element="q16:International"
xmlns:q16="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SecurityCreateResponse">
<wsdl:part name="parameters" element="tns:SecurityCreateResponse"/>
</wsdl:message>
<wsdl:message name="MessageResponse">
<wsdl:part name="parameters" element="tns:MessageResponse"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsGetRequest">
<wsdl:part name="parameters" element="tns:SecurityPrincipalsGetRequest"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsGetRequest_Headers">
<wsdl:part name="International" element="q17:International"
xmlns:q17="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsGetResponse">
<wsdl:part name="parameters" element="tns:SecurityPrincipalsGetResponse"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsDeleteRequest">
<wsdl:part name="parameters" element="tns:SecurityPrincipalsDeleteRequest"/>
</wsdl:message>
<wsdl:message name="SecurityPrincipalsDeleteRequest_Headers">
<wsdl:part name="International" element="q18:International"
xmlns:q18="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SecurityPrivilegesRequest">
<wsdl:part name="parameters" element="tns:SecurityPrivilegesRequest"/>
</wsdl:message>

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<wsdl:message name="SecurityPrivilegesRequest_Headers">
<wsdl:part name="International" element="q19:International"
xmlns:q19="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="SecurityPrivilegesGetRequest">
<wsdl:part name="parameters" element="tns:SecurityPrivilegesGetRequest"/>
</wsdl:message>
<wsdl:message name="SecurityPrivilegesGetRequest_Headers">
<wsdl:part name="International" element="q20:International"
xmlns:q20="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="SecurityPrivilegesGetResponse">
<wsdl:part name="parameters" element="tns:SecurityPrivilegesGetResponse"/>
</wsdl:message>
<wsdl:message name="SecurityPrivilegesDeleteRequest">
<wsdl:part name="parameters" element="tns:SecurityPrivilegesDeleteRequest"/>
</wsdl:message>
<wsdl:message name="SecurityPrivilegesDeleteRequest_Headers">
<wsdl:part name="International" element="q21:International"
xmlns:q21="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="MetadataCloneRequest">
<wsdl:part name="parameters" element="tns:MetadataCloneRequest"/>
</wsdl:message>
<wsdl:message name="MetadataCloneRequest_Headers">
<wsdl:part name="International" element="q22:International"
xmlns:q22="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="MetadataCloneResponse">
<wsdl:part name="parameters" element="tns:MetadataCloneResponse"/>
</wsdl:message>
<wsdl:message name="MetadataCreateRequest">
<wsdl:part name="parameters" element="tns:MetadataCreateRequest"/>
</wsdl:message>
<wsdl:message name="MetadataCreateRequest_Headers">
<wsdl:part name="International" element="q23:International"
xmlns:q23="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="MetadataCreateResponse">
<wsdl:part name="parameters" element="tns:MetadataCreateResponse"/>
</wsdl:message>
<wsdl:message name="MetadataDeleteRequest">
<wsdl:part name="parameters" element="tns:MetadataDeleteRequest"/>
</wsdl:message>
<wsdl:message name="MetadataDeleteRequest_Headers">
<wsdl:part name="International" element="q24:International"
xmlns:q24="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="MetadataDeleteResponse">
<wsdl:part name="parameters" element="tns:MetadataDeleteResponse"/>
</wsdl:message>
<wsdl:message name="MetadataGetRequest">
<wsdl:part name="parameters" element="tns:MetadataGetRequest"/>
</wsdl:message>
<wsdl:message name="MetadataGetRequest_Headers">
<wsdl:part name="International" element="q25:International"
xmlns:q25="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="MetadataGetResponse">

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<wsdl:part name="parameters" element="tns:MetadataGetResponse"/>
</wsdl:message>
<wsdl:message name="MetadataUpdateRequest">
<wsdl:part name="parameters" element="tns:MetadataUpdateRequest"/>
</wsdl:message>
<wsdl:message name="MetadataUpdateRequest_Headers">
<wsdl:part name="International" element="q26:International"
xmlns:q26="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="MetadataUpdateResponse">
<wsdl:part name="parameters" element="tns:MetadataUpdateResponse"/>
</wsdl:message>
<wsdl:message name="SystemSettingsGetRequest">
<wsdl:part name="parameters" element="tns:SystemSettingsGetRequest"/>
</wsdl:message>
<wsdl:message name="SystemSettingsGetRequest_Headers">
<wsdl:part name="International" element="q27:International"
xmlns:q27="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SystemSettingsGetResponse">
<wsdl:part name="parameters" element="tns:SystemSettingsGetResponse"/>
</wsdl:message>
<wsdl:message name="SystemSettingsUpdateRequest">
<wsdl:part name="parameters" element="tns:SystemSettingsUpdateRequest"/>
</wsdl:message>
<wsdl:message name="SystemSettingsUpdateRequest_Headers">
<wsdl:part name="International" element="q28:International"
xmlns:q28="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SystemSettingsUpdateResponse">
<wsdl:part name="parameters" element="tns:SystemSettingsUpdateResponse"/>
</wsdl:message>
<wsdl:message name="SystemDomainListGetRequest">
<wsdl:part name="parameters" element="tns:SystemDomainListGetRequest"/>
</wsdl:message>
<wsdl:message name="SystemDomainListGetRequest_Headers">
<wsdl:part name="International" element="q29:International"
xmlns:q29="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SystemDomainListGetResponse">
<wsdl:part name="parameters" element="tns:SystemDomainListGetResponse"/>
</wsdl:message>
<wsdl:message name="SystemPropertiesGetRequest">
<wsdl:part name="parameters" element="tns:SystemPropertiesGetRequest"/>
</wsdl:message>
<wsdl:message name="SystemPropertiesGetRequest_Headers">
<wsdl:part name="International" element="q30:International"
xmlns:q30="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="SystemPropertiesGetResponse">
<wsdl:part name="parameters" element="tns:SystemPropertiesGetResponse"/>
</wsdl:message>
<wsdl:message name="ServiceCheckGetRequest">
<wsdl:part name="parameters" element="tns:ServiceCheckGetRequest"/>
</wsdl:message>
<wsdl:message name="ServiceCheckGetRequest_Headers">
<wsdl:part name="International" element="q31:International"
xmlns:q31="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>

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<wsdl:message name="VersionCopyRequest">
<wsdl:part name="parameters" element="tns:VersionCopyRequest"/>
</wsdl:message>
<wsdl:message name="VersionCopyRequest_Headers">
<wsdl:part name="International" element="q32:International"
xmlns:q32="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="VersionCopyResponse">
<wsdl:part name="parameters" element="tns:VersionCopyResponse"/>
</wsdl:message>
<wsdl:message name="UserPreferencesGetRequest">
<wsdl:part name="parameters" element="tns:UserPreferencesGetRequest"/>
</wsdl:message>
<wsdl:message name="UserPreferencesGetRequest_Headers">
<wsdl:part name="International" element="q33:International"
xmlns:q33="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="UserPreferencesGetResponse">
<wsdl:part name="parameters" element="tns:UserPreferencesGetResponse"/>
</wsdl:message>
<wsdl:message name="UserPreferencesUpdateRequest">
<wsdl:part name="parameters" element="tns:UserPreferencesUpdateRequest"/>
</wsdl:message>
<wsdl:message name="UserPreferencesUpdateRequest_Headers">
<wsdl:part name="International" element="q34:International"
xmlns:q34="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="UserPreferencesUpdateResponse">
<wsdl:part name="parameters" element="tns:UserPreferencesUpdateResponse"/>
</wsdl:message>
<wsdl:message name="UserPreferencesDeleteRequest">
<wsdl:part name="parameters" element="tns:UserPreferencesDeleteRequest"/>
</wsdl:message>
<wsdl:message name="UserPreferencesDeleteRequest_Headers">
<wsdl:part name="International" element="q35:International"
xmlns:q35="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="UserPreferencesDeleteResponse">
<wsdl:part name="parameters" element="tns:UserPreferencesDeleteResponse"/>
</wsdl:message>
<wsdl:message name="BusinessRulesPaletteGetRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesPaletteGetRequest"/>
</wsdl:message>
<wsdl:message name="BusinessRulesPaletteGetRequest_Headers">
<wsdl:part name="International" element="q36:International"
xmlns:q36="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="BusinessRulesPaletteGetResponse">
<wsdl:part name="parameters" element="tns:BusinessRulesPaletteGetResponse"/>
</wsdl:message>
<wsdl:message name="BusinessRulesCloneRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesCloneRequest"/>
</wsdl:message>
<wsdl:message name="BusinessRulesCloneRequest_Headers">
<wsdl:part name="International" element="q37:International"
xmlns:q37="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="BusinessRulesCreateRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesCreateRequest"/>

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</wsdl:message>
<wsdl:message name="BusinessRulesCreateRequest_Headers">
<wsdl:part name="International" element="q38:International"
xmlns:q38="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="BusinessRulesCreateResponse">
<wsdl:part name="parameters" element="tns:BusinessRulesCreateResponse"/>
</wsdl:message>
<wsdl:message name="BusinessRulesDeleteRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesDeleteRequest"/>
</wsdl:message>
<wsdl:message name="BusinessRulesDeleteRequest_Headers">
<wsdl:part name="International" element="q39:International"
xmlns:q39="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="BusinessRulesGetRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesGetRequest"/>
</wsdl:message>
<wsdl:message name="BusinessRulesGetRequest_Headers">
<wsdl:part name="International" element="q40:International"
xmlns:q40="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="BusinessRulesGetResponse">
<wsdl:part name="parameters" element="tns:BusinessRulesGetResponse"/>
</wsdl:message>
<wsdl:message name="BusinessRulesPublishRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesPublishRequest"/>
</wsdl:message>
<wsdl:message name="BusinessRulesPublishRequest_Headers">
<wsdl:part name="International" element="q41:International"
xmlns:q41="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="BusinessRulesUpdateRequest">
<wsdl:part name="parameters" element="tns:BusinessRulesUpdateRequest"/>
</wsdl:message>
<wsdl:message name="BusinessRulesUpdateRequest_Headers">
<wsdl:part name="International" element="q42:International"
xmlns:q42="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMembersGetRequest">
<wsdl:part name="parameters" element="tns:EntityMembersGetRequest"/>
</wsdl:message>
<wsdl:message name="EntityMembersGetRequest_Headers">
<wsdl:part name="International" element="q43:International"
xmlns:q43="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMembersGetResponse">
<wsdl:part name="parameters" element="tns:EntityMembersGetResponse"/>
</wsdl:message>
<wsdl:message name="EntityMemberAttributesGetRequest">
<wsdl:part name="parameters" element="tns:EntityMemberAttributesGetRequest"/>
</wsdl:message>
<wsdl:message name="EntityMemberAttributesGetRequest_Headers">
<wsdl:part name="International" element="q44:International"
xmlns:q44="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMemberAttributesGetResponse">
<wsdl:part name="parameters" element="tns:EntityMemberAttributesGetResponse"/>
</wsdl:message>

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<wsdl:message name="HierarchyMembersGetRequest">
<wsdl:part name="parameters" element="tns:HierarchyMembersGetRequest"/>
</wsdl:message>
<wsdl:message name="HierarchyMembersGetRequest_Headers">
<wsdl:part name="International" element="q45:International"
xmlns:q45="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="HierarchyMembersGetResponse">
<wsdl:part name="parameters" element="tns:HierarchyMembersGetResponse"/>
</wsdl:message>
<wsdl:message name="ModelMembersGetRequest">
<wsdl:part name="parameters" element="tns:ModelMembersGetRequest"/>
</wsdl:message>
<wsdl:message name="ModelMembersGetRequest_Headers">
<wsdl:part name="International" element="q46:International"
xmlns:q46="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="ModelMembersGetResponse">
<wsdl:part name="parameters" element="tns:ModelMembersGetResponse"/>
</wsdl:message>
<wsdl:message name="EntityMembersCreateRequest">
<wsdl:part name="parameters" element="tns:EntityMembersCreateRequest"/>
</wsdl:message>
<wsdl:message name="EntityMembersCreateRequest_Headers">
<wsdl:part name="International" element="q47:International"
xmlns:q47="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="EntityMembersCreateResponse">
<wsdl:part name="parameters" element="tns:EntityMembersCreateResponse"/>
</wsdl:message>
<wsdl:message name="EntityMembersDeleteRequest">
<wsdl:part name="parameters" element="tns:EntityMembersDeleteRequest"/>
</wsdl:message>
<wsdl:message name="EntityMembersDeleteRequest_Headers">
<wsdl:part name="International" element="q48:International"
xmlns:q48="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="EntityMembersDeleteResponse">
<wsdl:part name="parameters" element="tns:EntityMembersDeleteResponse"/>
</wsdl:message>
<wsdl:message name="EntityMembersUpdateRequest">
<wsdl:part name="parameters" element="tns:EntityMembersUpdateRequest"/>
</wsdl:message>
<wsdl:message name="EntityMembersUpdateRequest_Headers">
<wsdl:part name="International" element="q49:International"
xmlns:q49="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="EntityMembersUpdateResponse">
<wsdl:part name="parameters" element="tns:EntityMembersUpdateResponse"/>
</wsdl:message>
<wsdl:message name="EntityMembersCopyRequest">
<wsdl:part name="parameters" element="tns:EntityMembersCopyRequest"/>
</wsdl:message>
<wsdl:message name="EntityMembersCopyRequest_Headers">
<wsdl:part name="International" element="q50:International"
xmlns:q50="http://www.w3.org/2005/09/ws-118n"/>
</wsdl:message>
<wsdl:message name="EntityMembersCopyResponse">
<wsdl:part name="parameters" element="tns:EntityMembersCopyResponse"/>

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</wsdl:message>
<wsdl:message name="EntityMembersMergeRequest">
<wsdl:part name="parameters" element="tns:EntityMembersMergeRequest"/>
</wsdl:message>
<wsdl:message name="EntityMembersMergeRequest_Headers">
<wsdl:part name="International" element="q51:International"
xmlns:q51="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="EntityMembersMergeResponse">
<wsdl:part name="parameters" element="tns:EntityMembersMergeResponse"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkDeleteRequest">
<wsdl:part name="parameters" element="tns:ModelMembersBulkDeleteRequest"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkDeleteRequest_Headers">
<wsdl:part name="International" element="q52:International"
xmlns:q52="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkDeleteResponse">
<wsdl:part name="parameters" element="tns:ModelMembersBulkDeleteResponse"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkUpdateRequest">
<wsdl:part name="parameters" element="tns:ModelMembersBulkUpdateRequest"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkUpdateRequest_Headers">
<wsdl:part name="International" element="q53:International"
xmlns:q53="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkUpdateResponse">
<wsdl:part name="parameters" element="tns:ModelMembersBulkUpdateResponse"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkMergeRequest">
<wsdl:part name="parameters" element="tns:ModelMembersBulkMergeRequest"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkMergeRequest_Headers">
<wsdl:part name="International" element="q54:International"
xmlns:q54="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="ModelMembersBulkMergeResponse">
<wsdl:part name="parameters" element="tns:ModelMembersBulkMergeResponse"/>
</wsdl:message>
<wsdl:message name="StagingGetRequest">
<wsdl:part name="parameters" element="tns:StagingGetRequest"/>
</wsdl:message>
<wsdl:message name="StagingGetRequest_Headers">
<wsdl:part name="International" element="q55:International"
xmlns:q55="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="StagingGetResponse">
<wsdl:part name="parameters" element="tns:StagingGetResponse"/>
</wsdl:message>
<wsdl:message name="StagingClearRequest">
<wsdl:part name="parameters" element="tns:StagingClearRequest"/>
</wsdl:message>
<wsdl:message name="StagingClearRequest_Headers">
<wsdl:part name="International" element="q56:International"
xmlns:q56="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="StagingClearResponse">

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<wsdl:part name="parameters" element="tns:StagingClearResponse"/>
</wsdl:message>
<wsdl:message name="TransactionsGetRequest">
<wsdl:part name="parameters" element="tns:TransactionsGetRequest"/>
</wsdl:message>
<wsdl:message name="TransactionsGetRequest_Headers">
<wsdl:part name="International" element="q57:International"
xmlns:q57="http://www.w3.org/2005/09/ws-i18n"/>
</wsdl:message>
<wsdl:message name="TransactionsGetResponse">
<wsdl:part name="parameters" element="tns:TransactionsGetResponse"/>
</wsdl:message>
<wsdl:portType name="IService">
<wsdl:operation name="TransactionsReverse">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionsReverse" name="TransactionsReverseRequest" message="tns:TransactionsReverseRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionsReverseResponse" name="TransactionsReverseResponse"
message="tns:TransactionsReverseResponse"/>
</wsdl:operation>
<wsdl:operation name="ValidationGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Valid
ationGet" name="ValidationGetRequest" message="tns:ValidationGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Valid
ationGetResponse" name="ValidationGetResponse" message="tns:ValidationGetResponse"/>
</wsdl:operation>
<wsdl:operation name="ValidationProcess">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Valid
ationProcess" name="ValidationProcessRequest" message="tns:ValidationProcessRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Valid
ationProcessResponse" name="ValidationProcessResponse"
message="tns:ValidationProcessResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMemberAnnotationsCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMemberAnnotationsCreate" name="EntityMemberAnnotationsCreateRequest"
message="tns:EntityMemberAnnotationsCreateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMemberAnnotationsCreateResponse" name="AnnotationsCreateResponse"
message="tns:AnnotationsCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="TransactionAnnotationsCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionAnnotationsCreate" name="TransactionAnnotationsCreateRequest"
message="tns:TransactionAnnotationsCreateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionAnnotationsCreateResponse" name="AnnotationsCreateResponse"
message="tns:AnnotationsCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMemberAnnotationsGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit

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yMemberAnnotationsGet" name="EntityMemberAnnotationsGetRequest"
message="tns:EntityMemberAnnotationsGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMemberAnnotationsGetResponse" name="EntityMemberAnnotationsGetResponse"
message="tns:EntityMemberAnnotationsGetResponse"/>
</wsdl:operation>
<wsdl:operation name="TransactionAnnotationsGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionAnnotationsGet" name="TransactionAnnotationsGetRequest"
message="tns:TransactionAnnotationsGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionAnnotationsGetResponse" name="TransactionAnnotationsGetResponse"
message="tns:TransactionAnnotationsGetResponse"/>
</wsdl:operation>
<wsdl:operation name="AnnotationsUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Annot
ationsUpdate" name="AnnotationsUpdateRequest" message="tns:AnnotationsUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Annot
ationsUpdateResponse" name="AnnotationsUpdateResponse"
message="tns:AnnotationsUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="AnnotationsDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Annot
ationsDelete" name="AnnotationsDeleteRequest" message="tns:AnnotationsDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Annot
ationsDeleteResponse" name="AnnotationsDeleteResponse"
message="tns:AnnotationsDeleteResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMemberKeyLookup">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMemberKeyLookup" name="EntityMemberKeyGetRequest" message="tns:EntityMemberKeyGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMemberKeyLookupResponse" name="EntityMemberKeyGetResponse"
message="tns:EntityMemberKeyGetResponse"/>
</wsdl:operation>
<wsdl:operation name="StagingProcess">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngProcess" name="StagingProcessRequest" message="tns:StagingProcessRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngProcessResponse" name="StagingProcessResponse" message="tns:StagingProcessResponse"/>
</wsdl:operation>
<wsdl:operation name="ExportViewCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Expor
tViewCreate" name="ExportViewCreateRequest" message="tns:ExportViewCreateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Expor
tViewCreateResponse" name="ExportViewCreateResponse" message="tns:ExportViewCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="ExportViewUpdate">

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<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewUpdate" name="ExportViewUpdateRequest" message="tns:ExportViewUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewUpdateResponse" name="ExportViewUpdateResponse" message="tns:ExportViewUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="ExportViewDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewDelete" name="ExportViewDeleteRequest" message="tns:ExportViewDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewDeleteResponse" name="ExportViewDeleteResponse" message="tns:ExportViewDeleteResponse"/>
</wsdl:operation>
<wsdl:operation name="ExportViewListGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewListGet" name="ExportViewListGetRequest" message="tns:ExportViewListGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ExportViewListGetResponse" name="ExportViewListGetResponse"
message="tns:ExportViewListGetResponse"/>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsCreate" name="SecurityPrincipalsRequest"
message="tns:SecurityPrincipalsRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsCreateResponse" name="SecurityCreateResponse"
message="tns:SecurityCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsClone">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsClone" name="SecurityPrincipalsRequest"
message="tns:SecurityPrincipalsRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsCloneResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsUpdate" name="SecurityPrincipalsRequest"
message="tns:SecurityPrincipalsRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsUpdateResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsGet" name="SecurityPrincipalsGetRequest"
message="tns:SecurityPrincipalsGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsGetResponse" name="SecurityPrincipalsGetResponse"
message="tns:SecurityPrincipalsGetResponse"/>
</wsdl:operation>

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<wsdl:operation name="SecurityPrincipalsDelete">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsDelete" name="SecurityPrincipalsDeleteRequest"
    message="tns:SecurityPrincipalsDeleteRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsDeleteResponse" name="MessageResponse" message="tns:MessageResponse"/>
  </wsdl:operation>
<wsdl:operation name="SecurityPrivilegesCreate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesCreate" name="SecurityPrivilegesRequest"
    message="tns:SecurityPrivilegesRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesCreateResponse" name="SecurityCreateResponse"
    message="tns:SecurityCreateResponse"/>
  </wsdl:operation>
<wsdl:operation name="SecurityPrivilegesClone">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesClone" name="SecurityPrivilegesRequest"
    message="tns:SecurityPrivilegesRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesCloneResponse" name="MessageResponse" message="tns:MessageResponse"/>
  </wsdl:operation>
<wsdl:operation name="SecurityPrivilegesUpdate">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesUpdate" name="SecurityPrivilegesRequest"
    message="tns:SecurityPrivilegesRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesUpdateResponse" name="MessageResponse" message="tns:MessageResponse"/>
  </wsdl:operation>
<wsdl:operation name="SecurityPrivilegesGet">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesGet" name="SecurityPrivilegesGetRequest"
    message="tns:SecurityPrivilegesGetRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesGetResponse" name="SecurityPrivilegesGetResponse"
    message="tns:SecurityPrivilegesGetResponse"/>
  </wsdl:operation>
<wsdl:operation name="SecurityPrivilegesDelete">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesDelete" name="SecurityPrivilegesDeleteRequest"
    message="tns:SecurityPrivilegesDeleteRequest"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesDeleteResponse" name="MessageResponse" message="tns:MessageResponse"/>
  </wsdl:operation>
<wsdl:operation name="MetadataClone">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataClone" name="MetadataCloneRequest" message="tns:MetadataCloneRequest"/>

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<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataCloneResponse" name="MetadataCloneResponse" message="tns:MetadataCloneResponse"/>
</wsdl:operation>
<wsdl:operation name="MetadataCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataCreate" name="MetadataCreateRequest" message="tns:MetadataCreateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataCreateResponse" name="MetadataCreateResponse" message="tns:MetadataCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="MetadataDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataDelete" name="MetadataDeleteRequest" message="tns:MetadataDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataDeleteResponse" name="MetadataDeleteResponse" message="tns:MetadataDeleteResponse"/>
</wsdl:operation>
<wsdl:operation name="MetadataGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataGet" name="MetadataGetRequest" message="tns:MetadataGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataGetResponse" name="MetadataGetResponse" message="tns:MetadataGetResponse"/>
</wsdl:operation>
<wsdl:operation name="MetadataUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataUpdate" name="MetadataUpdateRequest" message="tns:MetadataUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metad
ataUpdateResponse" name="MetadataUpdateResponse" message="tns:MetadataUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="SystemSettingsGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Syste
mSettingsGet" name="SystemSettingsGetRequest" message="tns:SystemSettingsGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Syste
mSettingsGetResponse" name="SystemSettingsGetResponse"
message="tns:SystemSettingsGetResponse"/>
</wsdl:operation>
<wsdl:operation name="SystemSettingsUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Syste
mSettingsUpdate" name="SystemSettingsUpdateRequest"
message="tns:SystemSettingsUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Syste
mSettingsUpdateResponse" name="SystemSettingsUpdateResponse"
message="tns:SystemSettingsUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="SystemDomainListGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Syste
mDomainListGet" name="SystemDomainListGetRequest" message="tns:SystemDomainListGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Syste

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mDomainListGetResponse" name="SystemDomainListGetResponse"
message="tns:SystemDomainListGetResponse"/>
</wsdl:operation>
<wsdl:operation name="SystemPropertiesGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/System
mPropertiesGet" name="SystemPropertiesGetRequest" message="tns:SystemPropertiesGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/System
mPropertiesGetResponse" name="SystemPropertiesGetResponse"
message="tns:SystemPropertiesGetResponse"/>
</wsdl:operation>
<wsdl:operation name="ServiceCheck">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Service
Check" name="ServiceCheckGetRequest" message="tns:ServiceCheckGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Service
CheckResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="VersionCopy">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Versi
onCopy" name="VersionCopyRequest" message="tns:VersionCopyRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Versi
onCopyResponse" name="VersionCopyResponse" message="tns:VersionCopyResponse"/>
</wsdl:operation>
<wsdl:operation name="UserPreferencesGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesGet" name="UserPreferencesGetRequest" message="tns:UserPreferencesGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesGetResponse" name="UserPreferencesGetResponse"
message="tns:UserPreferencesGetResponse"/>
</wsdl:operation>
<wsdl:operation name="UserPreferencesUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesUpdate" name="UserPreferencesUpdateRequest"
message="tns:UserPreferencesUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesUpdateResponse" name="UserPreferencesUpdateResponse"
message="tns:UserPreferencesUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="UserPreferencesDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesDelete" name="UserPreferencesDeleteRequest"
message="tns:UserPreferencesDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserP
referencesDeleteResponse" name="UserPreferencesDeleteResponse"
message="tns:UserPreferencesDeleteResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesPaletteGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesPaletteGet" name="BusinessRulesPaletteGetRequest"
message="tns:BusinessRulesPaletteGetRequest"/>

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<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Bu sin
essRulesPaletteGetResponse" name="BusinessRulesPaletteGetResponse"
message="tns:BusinessRulesPaletteGetResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesClone">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesClone" name="BusinessRulesCloneRequest" message="tns:BusinessRulesCloneRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesCloneResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesCreate" name="BusinessRulesCreateRequest" message="tns:BusinessRulesCreateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesCreateResponse" name="BusinessRulesCreateResponse"
message="tns:BusinessRulesCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesDelete" name="BusinessRulesDeleteRequest" message="tns:BusinessRulesDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesDeleteResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesGet" name="BusinessRulesGetRequest" message="tns:BusinessRulesGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesGetResponse" name="BusinessRulesGetResponse" message="tns:BusinessRulesGetResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesPublish">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesPublish" name="BusinessRulesPublishRequest"
message="tns:BusinessRulesPublishRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesPublishResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="BusinessRulesUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesUpdate" name="BusinessRulesUpdateRequest" message="tns:BusinessRulesUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busin
essRulesUpdateResponse" name="MessageResponse" message="tns:MessageResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMembersGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMembersGet" name="EntityMembersGetRequest" message="tns:EntityMembersGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMembersGetResponse" name="EntityMembersGetResponse" message="tns:EntityMembersGetResponse"/>

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</wsdl:operation>
<wsdl:operation name="EntityMemberAttributesGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAttributesGet" name="EntityMemberAttributesGetRequest"
message="tns:EntityMemberAttributesGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAttributesGetResponse" name="EntityMemberAttributesGetResponse"
message="tns:EntityMemberAttributesGetResponse"/>
</wsdl:operation>
<wsdl:operation name="HierarchyMembersGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/HierarchyMembersGet" name="HierarchyMembersGetRequest" message="tns:HierarchyMembersGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/HierarchyMembersGetResponse" name="HierarchyMembersGetResponse"
message="tns:HierarchyMembersGetResponse"/>
</wsdl:operation>
<wsdl:operation name="ModelMembersGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelMembersGet" name="ModelMembersGetRequest" message="tns:ModelMembersGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelMembersGetResponse" name="ModelMembersGetResponse" message="tns:ModelMembersGetResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMembersCreate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCreate" name="EntityMembersCreateRequest" message="tns:EntityMembersCreateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCreateResponse" name="EntityMembersCreateResponse"
message="tns:EntityMembersCreateResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMembersDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersDelete" name="EntityMembersDeleteRequest" message="tns:EntityMembersDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersDeleteResponse" name="EntityMembersDeleteResponse"
message="tns:EntityMembersDeleteResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMembersUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersUpdate" name="EntityMembersUpdateRequest" message="tns:EntityMembersUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersUpdateResponse" name="EntityMembersUpdateResponse"
message="tns:EntityMembersUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMembersCopy">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMembersCopy" name="EntityMembersCopyRequest" message="tns:EntityMembersCopyRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity

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yMembersCopyResponse" name="EntityMembersCopyResponse"
message="tns:EntityMembersCopyResponse"/>
</wsdl:operation>
<wsdl:operation name="EntityMembersMerge">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMembersMerge" name="EntityMembersMergeRequest" message="tns:EntityMembersMergeRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entit
yMembersMergeResponse" name="EntityMembersMergeResponse"
message="tns:EntityMembersMergeResponse"/>
</wsdl:operation>
<wsdl:operation name="ModelMembersBulkDelete">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkDelete" name="ModelMembersBulkDeleteRequest"
message="tns:ModelMembersBulkDeleteRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkDeleteResponse" name="ModelMembersBulkDeleteResponse"
message="tns:ModelMembersBulkDeleteResponse"/>
</wsdl:operation>
<wsdl:operation name="ModelMembersBulkUpdate">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkUpdate" name="ModelMembersBulkUpdateRequest"
message="tns:ModelMembersBulkUpdateRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkUpdateResponse" name="ModelMembersBulkUpdateResponse"
message="tns:ModelMembersBulkUpdateResponse"/>
</wsdl:operation>
<wsdl:operation name="ModelMembersBulkMerge">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkMerge" name="ModelMembersBulkMergeRequest"
message="tns:ModelMembersBulkMergeRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Model
MembersBulkMergeResponse" name="ModelMembersBulkMergeResponse"
message="tns:ModelMembersBulkMergeResponse"/>
</wsdl:operation>
<wsdl:operation name="StagingGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngGet" name="StagingGetRequest" message="tns:StagingGetRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngGetResponse" name="StagingGetResponse" message="tns:StagingGetResponse"/>
</wsdl:operation>
<wsdl:operation name="StagingClear">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngClear" name="StagingClearRequest" message="tns:StagingClearRequest"/>
<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagi
ngClearResponse" name="StagingClearResponse" message="tns:StagingClearResponse"/>
</wsdl:operation>
<wsdl:operation name="TransactionsGet">
<wsdl:input
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionsGet" name="TransactionsGetRequest" message="tns:TransactionsGetRequest"/>

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<wsdl:output
wsaw:Action="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Trans
actionsGetResponse" name="TransactionsGetResponse" message="tns:TransactionsGetResponse"/>
</wsdl:operation>
</wsdl:portType>
<wsdl:binding name="WSHttpBinding_IService" type="tns:IService">
<wsp:PolicyReference URI="#WSHttpBinding_IService_policy"/>
<soap12:binding transport="http://schemas.xmlsoap.org/soap/http"/>
<wsdl:operation name="TransactionsReverse">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Transa
ctionsReverse" style="document"/>
<wsdl:input name="TransactionsReverseRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_TransactionsReverse_Input_policy"/>
<soap12:header message="tns:TransactionsReverseRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="TransactionsReverseResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_TransactionsReverse_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ValidationGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Valida
tionGet" style="document"/>
<wsdl:input name="ValidationGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ValidationGet_Input_policy"/>
<soap12:header message="tns:ValidationGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ValidationGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ValidationGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ValidationProcess">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Valida
tionProcess" style="document"/>
<wsdl:input name="ValidationProcessRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ValidationProcess_Input_policy"/>
<soap12:header message="tns:ValidationProcessRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ValidationProcessResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ValidationProcess_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMemberAnnotationsCreate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MemberAnnotationsCreate" style="document"/>
<wsdl:input name="EntityMemberAnnotationsCreateRequest">
<wsp:PolicyReference
URI="#WSHttpBinding_IService_EntityMemberAnnotationsCreate_Input_policy"/>

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<soap12:header message="tns:EntityMemberAnnotationsCreateRequest_Headers"
part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="AnnotationsCreateResponse">
<wsp:PolicyReference
URI="#WSHttpBinding_IService_EntityMemberAnnotationsCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="TransactionAnnotationsCreate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionAnnotationsCreate" style="document"/>
<wsdl:input name="TransactionAnnotationsCreateRequest">
<wsp:PolicyReference
URI="#WSHttpBinding_IService_TransactionAnnotationsCreate_Input_policy"/>
<soap12:header message="tns:TransactionAnnotationsCreateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="AnnotationsCreateResponse">
<wsp:PolicyReference
URI="#WSHttpBinding_IService_TransactionAnnotationsCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMemberAnnotationsGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberAnnotationsGet" style="document"/>
<wsdl:input name="EntityMemberAnnotationsGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMemberAnnotationsGet_Input_policy"/>
<soap12:header message="tns:EntityMemberAnnotationsGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMemberAnnotationsGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMemberAnnotationsGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="TransactionAnnotationsGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionAnnotationsGet" style="document"/>
<wsdl:input name="TransactionAnnotationsGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_TransactionAnnotationsGet_Input_policy"/>
<soap12:header message="tns:TransactionAnnotationsGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="TransactionAnnotationsGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_TransactionAnnotationsGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="AnnotationsUpdate">

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<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/AnnotationsUpdate" style="document"/>
<wsdl:input name="AnnotationsUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_AnnotationsUpdate_Input_policy"/>
<soap12:header message="tns:AnnotationsUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="AnnotationsUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_AnnotationsUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="AnnotationsDelete">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/AnnotationsDelete" style="document"/>
<wsdl:input name="AnnotationsDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_AnnotationsDelete_Input_policy"/>
<soap12:header message="tns:AnnotationsDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="AnnotationsDeleteResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_AnnotationsDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMemberKeyLookup">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/EntityMemberKeyLookup" style="document"/>
<wsdl:input name="EntityMemberKeyGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMemberKeyLookup_Input_policy"/>
<soap12:header message="tns:EntityMemberKeyGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMemberKeyGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMemberKeyLookup_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="StagingProcess">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingProcess" style="document"/>
<wsdl:input name="StagingProcessRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_StagingProcess_Input_policy"/>
<soap12:header message="tns:StagingProcessRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="StagingProcessResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_StagingProcess_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ExportViewCreate">

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<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Export
ViewCreate" style="document"/>
<wsdl:input name="ExportViewCreateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewCreate_Input_policy"/>
<soap12:header message="tns:ExportViewCreateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ExportViewCreateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ExportViewUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Export
ViewUpdate" style="document"/>
<wsdl:input name="ExportViewUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewUpdate_Input_policy"/>
<soap12:header message="tns:ExportViewUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ExportViewUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ExportViewDelete">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Export
ViewDelete" style="document"/>
<wsdl:input name="ExportViewDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewDelete_Input_policy"/>
<soap12:header message="tns:ExportViewDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ExportViewDeleteResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ExportViewListGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Export
ViewListGet" style="document"/>
<wsdl:input name="ExportViewListGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewListGet_Input_policy"/>
<soap12:header message="tns:ExportViewListGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ExportViewListGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ExportViewListGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsCreate">

```

```

<soap12:operation
  soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsCreate" style="document"/>
<wsdl:input name="SecurityPrincipalsRequest">
  <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsCreate_Input_policy"/>
  <soap12:header message="tns:SecurityPrincipalsRequest_Headers" part="International"
    use="literal"/>
  <soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SecurityCreateResponse">
  <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsCreate_output_policy"/>
  <soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsClone">
  <soap12:operation
    soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsClone" style="document"/>
  <wsdl:input name="SecurityPrincipalsRequest">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsClone_Input_policy"/>
    <soap12:header message="tns:SecurityPrincipalsRequest_Headers" part="International"
      use="literal"/>
    <soap12:body use="literal"/>
  </wsdl:input>
  <wsdl:output name="MessageResponse">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsClone_output_policy"/>
    <soap12:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsUpdate">
  <soap12:operation
    soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsUpdate" style="document"/>
  <wsdl:input name="SecurityPrincipalsRequest">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsUpdate_Input_policy"/>
    <soap12:header message="tns:SecurityPrincipalsRequest_Headers" part="International"
      use="literal"/>
    <soap12:body use="literal"/>
  </wsdl:input>
  <wsdl:output name="MessageResponse">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsUpdate_output_policy"/>
    <soap12:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsGet">
  <soap12:operation
    soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsGet" style="document"/>
  <wsdl:input name="SecurityPrincipalsGetRequest">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsGet_Input_policy"/>
    <soap12:header message="tns:SecurityPrincipalsGetRequest_Headers" part="International"
      use="literal"/>
    <soap12:body use="literal"/>
  </wsdl:input>
  <wsdl:output name="SecurityPrincipalsGetResponse">
    <wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsGet_output_policy"/>
    <soap12:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrincipalsDelete">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrincipalsDelete" style="document"/>
<wsdl:input name="SecurityPrincipalsDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsDelete_Input_policy"/>
<soap12:header message="tns:SecurityPrincipalsDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrincipalsDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrivilegesCreate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesCreate" style="document"/>
<wsdl:input name="SecurityPrivilegesRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesCreate_Input_policy"/>
<soap12:header message="tns:SecurityPrivilegesRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SecurityCreateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrivilegesClone">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesClone" style="document"/>
<wsdl:input name="SecurityPrivilegesRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesClone_Input_policy"/>
<soap12:header message="tns:SecurityPrivilegesRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesClone_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrivilegesUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesUpdate" style="document"/>
<wsdl:input name="SecurityPrivilegesRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesUpdate_Input_policy"/>
<soap12:header message="tns:SecurityPrivilegesRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrivilegesGet">

```



```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesGet" style="document"/>
<wsdl:input name="SecurityPrivilegesGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesGet_Input_policy"/>
<soap12:header message="tns:SecurityPrivilegesGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SecurityPrivilegesGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SecurityPrivilegesDelete">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/SecurityPrivilegesDelete" style="document"/>
<wsdl:input name="SecurityPrivilegesDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesDelete_Input_policy"/>
<soap12:header message="tns:SecurityPrivilegesDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SecurityPrivilegesDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="MetadataClone">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataClone" style="document"/>
<wsdl:input name="MetadataCloneRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataClone_Input_policy"/>
<soap12:header message="tns:MetadataCloneRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MetadataCloneResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataClone_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="MetadataCreate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/MetadataCreate" style="document"/>
<wsdl:input name="MetadataCreateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataCreate_Input_policy"/>
<soap12:header message="tns:MetadataCreateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MetadataCreateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="MetadataDelete">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metada
taDelete" style="document"/>
<wsdl:input name="MetadataDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataDelete_Input_policy"/>
<soap12:header message="tns:MetadataDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MetadataDeleteResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="MetadataGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metada
taGet" style="document"/>
<wsdl:input name="MetadataGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataGet_Input_policy"/>
<soap12:header message="tns:MetadataGetRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MetadataGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="MetadataUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Metada
taUpdate" style="document"/>
<wsdl:input name="MetadataUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataUpdate_Input_policy"/>
<soap12:header message="tns:MetadataUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MetadataUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_MetadataUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SystemSettingsGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/System
SettingsGet" style="document"/>
<wsdl:input name="SystemSettingsGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemSettingsGet_Input_policy"/>
<soap12:header message="tns:SystemSettingsGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SystemSettingsGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemSettingsGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SystemSettingsUpdate">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/System
SettingsUpdate" style="document"/>
<wsdl:input name="SystemSettingsUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemSettingsUpdate_Input_policy"/>
<soap12:header message="tns:SystemSettingsUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SystemSettingsUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemSettingsUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SystemDomainListGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/System
DomainListGet" style="document"/>
<wsdl:input name="SystemDomainListGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemDomainListGet_Input_policy"/>
<soap12:header message="tns:SystemDomainListGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SystemDomainListGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemDomainListGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="SystemPropertiesGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/System
PropertiesGet" style="document"/>
<wsdl:input name="SystemPropertiesGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemPropertiesGet_Input_policy"/>
<soap12:header message="tns:SystemPropertiesGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="SystemPropertiesGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_SystemPropertiesGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ServiceCheck">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Service
Check" style="document"/>
<wsdl:input name="ServiceCheckGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ServiceCheck_Input_policy"/>
<soap12:header message="tns:ServiceCheckGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ServiceCheck_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="VersionCopy">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/VersionCopy" style="document"/>
<wsdl:input name="VersionCopyRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_VersionCopy_Input_policy"/>
<soap12:header message="tns:VersionCopyRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="VersionCopyResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_VersionCopy_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="UserPreferencesGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserPreferencesGet" style="document"/>
<wsdl:input name="UserPreferencesGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_UserPreferencesGet_Input_policy"/>
<soap12:header message="tns:UserPreferencesGetRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="UserPreferencesGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_UserPreferencesGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="UserPreferencesUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserPreferencesUpdate" style="document"/>
<wsdl:input name="UserPreferencesUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_UserPreferencesUpdate_Input_policy"/>
<soap12:header message="tns:UserPreferencesUpdateRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="UserPreferencesUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_UserPreferencesUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="UserPreferencesDelete">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/UserPreferencesDelete" style="document"/>
<wsdl:input name="UserPreferencesDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_UserPreferencesDelete_Input_policy"/>
<soap12:header message="tns:UserPreferencesDeleteRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="UserPreferencesDeleteResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_UserPreferencesDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesPaletteGet">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesPaletteGet" style="document"/>
<wsdl:input name="BusinessRulesPaletteGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesPaletteGet_Input_policy"/>
<soap12:header message="tns:BusinessRulesPaletteGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="BusinessRulesPaletteGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesPaletteGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesClone">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesClone" style="document"/>
<wsdl:input name="BusinessRulesCloneRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesClone_Input_policy"/>
<soap12:header message="tns:BusinessRulesCloneRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesClone_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesCreate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesCreate" style="document"/>
<wsdl:input name="BusinessRulesCreateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesCreate_Input_policy"/>
<soap12:header message="tns:BusinessRulesCreateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="BusinessRulesCreateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesDelete">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesDelete" style="document"/>
<wsdl:input name="BusinessRulesDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesDelete_Input_policy"/>
<soap12:header message="tns:BusinessRulesDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesGet">

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```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesGet" style="document"/>
<wsdl:input name="BusinessRulesGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesGet_Input_policy"/>
<soap12:header message="tns:BusinessRulesGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="BusinessRulesGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesPublish">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesPublish" style="document"/>
<wsdl:input name="BusinessRulesPublishRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesPublish_Input_policy"/>
<soap12:header message="tns:BusinessRulesPublishRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesPublish_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="BusinessRulesUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Busine
ssRulesUpdate" style="document"/>
<wsdl:input name="BusinessRulesUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesUpdate_Input_policy"/>
<soap12:header message="tns:BusinessRulesUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="MessageResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_BusinessRulesUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMembersGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MembersGet" style="document"/>
<wsdl:input name="EntityMembersGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersGet_Input_policy"/>
<soap12:header message="tns:EntityMembersGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMembersGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMemberAttributesGet">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MemberAttributesGet" style="document"/>
<wsdl:input name="EntityMemberAttributesGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMemberAttributesGet_Input_policy"/>
<soap12:header message="tns:EntityMemberAttributesGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMemberAttributesGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMemberAttributesGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="HierarchyMembersGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Hierar
chyMembersGet" style="document"/>
<wsdl:input name="HierarchyMembersGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_HierarchyMembersGet_Input_policy"/>
<soap12:header message="tns:HierarchyMembersGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="HierarchyMembersGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_HierarchyMembersGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ModelMembersGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelM
embersGet" style="document"/>
<wsdl:input name="ModelMembersGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersGet_Input_policy"/>
<soap12:header message="tns:ModelMembersGetRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ModelMembersGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMembersCreate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MembersCreate" style="document"/>
<wsdl:input name="EntityMembersCreateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersCreate_Input_policy"/>
<soap12:header message="tns:EntityMembersCreateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMembersCreateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersCreate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMembersDelete">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MembersDelete" style="document"/>
<wsdl:input name="EntityMembersDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersDelete_Input_policy"/>
<soap12:header message="tns:EntityMembersDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMembersDeleteResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMembersUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MembersUpdate" style="document"/>
<wsdl:input name="EntityMembersUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersUpdate_Input_policy"/>
<soap12:header message="tns:EntityMembersUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMembersUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMembersCopy">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MembersCopy" style="document"/>
<wsdl:input name="EntityMembersCopyRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersCopy_Input_policy"/>
<soap12:header message="tns:EntityMembersCopyRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMembersCopyResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersCopy_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="EntityMembersMerge">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Entity
MembersMerge" style="document"/>
<wsdl:input name="EntityMembersMergeRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersMerge_Input_policy"/>
<soap12:header message="tns:EntityMembersMergeRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="EntityMembersMergeResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_EntityMembersMerge_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ModelMembersBulkDelete">

```



```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelM
embersBulkDelete" style="document"/>
<wsdl:input name="ModelMembersBulkDeleteRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersBulkDelete_Input_policy"/>
<soap12:header message="tns:ModelMembersBulkDeleteRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ModelMembersBulkDeleteResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersBulkDelete_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ModelMembersBulkUpdate">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelM
embersBulkUpdate" style="document"/>
<wsdl:input name="ModelMembersBulkUpdateRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersBulkUpdate_Input_policy"/>
<soap12:header message="tns:ModelMembersBulkUpdateRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ModelMembersBulkUpdateResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersBulkUpdate_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="ModelMembersBulkMerge">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/ModelM
embersBulkMerge" style="document"/>
<wsdl:input name="ModelMembersBulkMergeRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersBulkMerge_Input_policy"/>
<soap12:header message="tns:ModelMembersBulkMergeRequest_Headers" part="International"
use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="ModelMembersBulkMergeResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_ModelMembersBulkMerge_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="StagingGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/Stagin
gGet" style="document"/>
<wsdl:input name="StagingGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_StagingGet_Input_policy"/>
<soap12:header message="tns:StagingGetRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="StagingGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_StagingGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="StagingClear">

```

```

<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/StagingClear" style="document"/>
<wsdl:input name="StagingClearRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_StagingClear_Input_policy"/>
<soap12:header message="tns:StagingClearRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="StagingClearResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_StagingClear_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="TransactionsGet">
<soap12:operation
soapAction="http://schemas.microsoft.com/sqlserver/masterdataservices/2009/09/IService/TransactionsGet" style="document"/>
<wsdl:input name="TransactionsGetRequest">
<wsp:PolicyReference URI="#WSHttpBinding_IService_TransactionsGet_Input_policy"/>
<soap12:header message="tns:TransactionsGetRequest_Headers" part="International" use="literal"/>
<soap12:body use="literal"/>
</wsdl:input>
<wsdl:output name="TransactionsGetResponse">
<wsp:PolicyReference URI="#WSHttpBinding_IService_TransactionsGet_output_policy"/>
<soap12:body use="literal"/>
</wsdl:output>
</wsdl:operation>
</wsdl:binding>
<wsdl:service name="Service">
<wsdl:port name="WSHttpBinding_IService" binding="tns:WSHttpBinding_IService">
<soap12:address location="http://mattand-odl.northamerica.corp.microsoft.com/mds/service/Service.svc"/>
<wsa10:EndpointReference>
<wsa10:Address>http://mattand-odl.northamerica.corp.microsoft.com/mds/service/Service.svc</wsa10:Address>
<Identity xmlns="http://schemas.xmlsoap.org/ws/2006/02/addressingidentity">
<Spn>host/MATTANDE-OD1.northamerica.corp.microsoft.com</Spn>
</Identity>
</wsa10:EndpointReference>
</wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

## 7 Appendix B: Product Behavior

The information in this specification is applicable to the following Microsoft products:

- Windows NT
- Windows 2000
- Windows XP
- Windows 2003
- Windows 2003 R2
- Windows 2003 SP1, SP2, and SP3
- Windows Vista
- Windows Server 2008
- Windows 7

Exceptions, if any, are noted below. Unless otherwise specified, any statement of optional behavior in this specification prescribed using the terms SHOULD or SHOULD NOT implies Windows behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that Windows does not follow the prescription.

## 8 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

Preliminary

## 9 Index

### A

[abstract data model](#) 109  
[Annotation type](#) 27  
[AnnotationsDelete operation](#) 161  
[AnnotationsDeleteRequest element](#) 161  
[AnnotationsDeleteRequest message](#) 161  
[AnnotationsDeleteResponse element](#) 162  
[AnnotationsDeleteResponse message](#) 161  
[AnnotationsUpdate operation](#) 159  
[AnnotationsUpdateRequest element](#) 160  
[AnnotationsUpdateRequest message](#) 160  
[AnnotationsUpdateResponse element](#) 160  
[AnnotationsUpdateResponse message](#) 160  
[Applicability statement](#) 20  
[ArrayOfAnnotation type](#) 27  
[ArrayOfAttribute type](#) 28  
[ArrayOfAttributeDataType type](#) 28  
[ArrayOfAttributeGroup type](#) 28  
[ArrayOfBRAAction type](#) 29  
[ArrayOfBRAActionComponent type](#) 29  
[ArrayOfBRAActionGroup type](#) 29  
[ArrayOfBRAAttributeTypeInfo type](#) 30  
[ArrayOfBRCondition type](#) 30  
[ArrayOfBRConditionComponent type](#) 30  
[ArrayOfBRConditionGroup type](#) 30  
[ArrayOfBRConditionTreeNode type](#) 31  
[ArrayOfBRFreeformArgument type](#) 31  
[ArrayOfBusinessRule type](#) 31  
[ArrayOfDerivedHierarchy type](#) 32  
[ArrayOfDerivedHierarchyLevel type](#) 32  
[ArrayOfEntity type](#) 32  
[ArrayOfEntityMembers type](#) 33  
[ArrayOfEntityMemberType type](#) 33  
[ArrayOfExplicitHierarchy type](#) 33  
[ArrayOfExportView type](#) 34  
[ArrayOfFunctionPrivilege type](#) 34  
[ArrayOfGroup type](#) 34  
[ArrayOfHierarchyMemberPrivilege type](#) 34  
[ArrayOfIdentifier type](#) 35  
[ArrayOfMasterDataCollection type](#) 35  
[ArrayOfMDMError type](#) 35  
[ArrayOfMember type](#) 36  
[ArrayOfMemberIdentifier type](#) 36  
[ArrayOfMemberKey type](#) 164  
[ArrayOfMembersSourceTarget type](#) 129  
[ArrayOfMemberType type](#) 36  
[ArrayOfModel type](#) 37  
[ArrayOfModelPrivilege type](#) 37  
[ArrayOfParent type](#) 37  
[ArrayOfParentChild type](#) 38  
[ArrayOfReplacementId type](#) 145  
[ArrayOfStagingBatch type](#) 38  
[ArrayOfStagingBatchError type](#) 38  
[ArrayOfStagingUnbatchedInformation type](#) 38  
[ArrayOfSystemPropertyValue type](#) 204  
[ArrayOfSystemSetting type](#) 39  
[ArrayOfSystemSettingGroup type](#) 39  
[ArrayOfTransaction type](#) 39

[ArrayOfUser type](#) 40  
[ArrayOfValidationIssue type](#) 40  
[ArrayOfValidationSummaryItem type](#) 148  
[ArrayOfVersion type](#) 40  
[ArrayOfVersionFlag type](#) 41  
[Attribute type](#) 41  
[AttributeGroup type](#) 41  
[AttributeType type](#) 82  
[AttributeValueType type](#) 83  
[AuditInfo type](#) 42  
authentication  
    [protocols](#) 20  
    [security strategies](#) 236

### B

[BRAction type](#) 43  
[BRActionComponent type](#) 43  
[BRActionGroup type](#) 43  
[BRArgument type](#) 44  
[BRAttributeArgument type](#) 44  
[BRAttributeArgumentBase type](#) 44  
[BRAttributeTypeInfo type](#) 45  
[BRAttributeValueArgument type](#) 45  
[BRBlankArgument type](#) 45  
[BRCondition type](#) 46  
[BRConditionComponent type](#) 46  
[BRConditionGroup type](#) 47  
[BRConditionTreeNode type](#) 47  
[BRDeleteCriteria type](#) 218  
[BRDomainBasedAttributeArgument type](#) 48  
[BREntityMemberType type](#) 83  
[BRFreeformArgument type](#) 48  
[BRGetCriteria type](#) 220  
[BRHierarchyArgument type](#) 48  
[BRItem type](#) 49  
[BRItemType type](#) 84  
[BRItemTypeComponent type](#) 50  
[BRPropertyName type](#) 86  
[BRPublishCriteria type](#) 222  
[BRResultOptions type](#) 220  
[BRStatus type](#) 87  
business rule  
    [defined](#) 109  
    [example of creating](#) 226  
[BusinessRule type](#) 50  
[BusinessRules type](#) 51  
[BusinessRulesClone operation](#) 214  
[BusinessRulesCloneRequest element](#) 214  
[BusinessRulesCloneRequest message](#) 214  
[BusinessRulesCreate operation](#) 215  
[BusinessRulesCreate request](#) 226  
[BusinessRulesCreateRequest element](#) 216  
[BusinessRulesCreateRequest message](#) 215  
[BusinessRulesCreateResponse element](#) 216  
[BusinessRulesCreateResponse message](#) 215  
[BusinessRulesDelete operation](#) 216  
[BusinessRulesDeleteRequest element](#) 217  
[BusinessRulesDeleteRequest message](#) 217

[BusinessRulesGet operation](#) 218  
[BusinessRulesGetRequest message](#) ([section 3.1.4.55.1.1](#) 219, [section 3.1.4.55.2.1](#) 219)  
[BusinessRulesGetResponse message](#) ([section 3.1.4.55.1.2](#) 219, [section 3.1.4.55.2.2](#) 219)  
[BusinessRulesPalette type](#) 51  
[BusinessRulesPaletteGet operation](#) 212  
[BusinessRulesPaletteGetRequest element](#) 213  
[BusinessRulesPaletteGetRequest message](#) 213  
[BusinessRulesPaletteGetResponse element](#) 213  
[BusinessRulesPaletteGetResponse message](#) 213  
[BusinessRulesPublish operation](#) 221  
[BusinessRulesPublishRequest element](#) 221  
[BusinessRulesPublishRequest message](#) 221  
[BusinessRulesUpdate operation](#) 222  
[BusinessRulesUpdateRequest message](#) ([section 3.1.4.57.1.1](#) 223, [section 3.1.4.57.2.1](#) 223)

## C

[Change tracking](#) 316  
[client side](#) 109  
[complex types](#) 22

## D

[data model](#) 109  
[denial-of-service attacks](#) 236  
[derived hierarchies](#) 109  
[DerivedHierarchy type](#) 52  
[DerivedHierarchyContextIdentifier type](#) 52  
[DerivedHierarchyLevel type](#) 53  
[DisplayType type](#) 88

## E

[EmailFormat type](#) 89  
[encryption](#) 236  
[entities](#) 109  
[Entity type](#) 53  
[EntityContextIdentifier type](#) 54  
[EntityMemberAnnotationsCreate operation](#) 152  
[EntityMemberAnnotationsCreateRequest message](#) 152  
[EntityMemberAnnotationsCreateRequest type](#) 152  
[EntityMemberAnnotationsCreateResponse message](#) 152  
[EntityMemberAnnotationsCreateResponse type](#) 153  
[EntityMemberAnnotationsGet operation](#) 155  
[EntityMemberAnnotationsGetRequest message](#) ([section 3.1.4.21.1.1](#) 156, [section 3.1.4.21.2.1](#) 156)  
[EntityMemberAnnotationsGetResponse element](#) 157  
[EntityMemberAnnotationsGetResponse message](#) 156  
[EntityMemberAttributesGet operation](#) 115  
[EntityMemberKeyGetRequest element](#) 163  
[EntityMemberKeyGetRequest message](#) 163  
[EntityMemberKeyGetResponse element](#) 164  
[EntityMemberKeyGetResponse message](#) 163  
[EntityMemberKeyLookup operation](#) 162  
[EntityMembers type](#) 54

[EntityMembersAttributesGetRequest message](#) ([section 3.1.4.2.1.1](#) 116, [section 3.1.4.2.2.1](#) 116)  
[EntityMembersAttributesGetResponse element](#) 116  
[EntityMembersAttributesGetResponse message](#) 116  
[EntityMembersCopy operation](#) 126  
[EntityMembersCopyRequest element](#) 127  
[EntityMembersCopyRequest message](#) 127  
[EntityMembersCopyResponse element](#) 128  
[EntityMembersCopyResponse message](#) 127  
[EntityMembersCreate operation](#) 122  
[EntityMembersCreateRequest element](#) 122  
[EntityMembersCreateRequest message](#) 122  
[EntityMembersCreateResponse element](#) 123  
[EntityMembersCreateResponse message](#) 122  
[EntityMembersDelete operation](#) 123  
[EntityMembersDeleteRequest element](#) 124  
[EntityMembersDeleteRequest message](#) 124  
[EntityMembersDeleteResponse element](#) 124  
[EntityMembersDeleteResponse message](#) 124  
[EntityMembersGet operation](#) 112  
[EntityMembersGetCriteria request](#) 113  
[EntityMembersGetRequest element](#) 112  
[EntityMembersGetRequest message](#) 112  
[EntityMembersGetResponse element](#) 113  
[EntityMembersGetResponse message](#) 112  
[EntityMembersInformation type](#) 115  
[EntityMembersMerge operation](#) 129  
[EntityMembersMergeRequest element](#) 130  
[EntityMembersMergeRequest message](#) 130  
[EntityMembersMergeResponse element](#) 130  
[EntityMembersMergeResponse message](#) 130  
[EntityMembersUpdate operation](#) 125  
[EntityMembersUpdateRequest element](#) 125  
[EntityMembersUpdateRequest message](#) 125  
[EntityMembersUpdateResponse element](#) 126  
[EntityMembersUpdateResponse message](#) 125  
[EntityMemberType type](#) 55  
[Ethernet protocol](#) 20  
[ExplicitHierarchy type](#) 55  
[ExportView type](#) 56  
[ExportViewCreate operation](#) 167  
[ExportViewCreateRequest element](#) 167  
[ExportViewCreateRequest message](#) 167  
[ExportViewCreateResponse element](#) 168  
[ExportViewCreateResponse message](#) 167  
[ExportViewDelete operation](#) 170  
[ExportViewDeleteRequest element](#) 170  
[ExportViewDeleteRequest message](#) 170  
[ExportViewDeleteResponse element](#) 171  
[ExportViewDeleteResponse message](#) 170  
[ExportViewFormat type](#) 89  
[ExportViewListGet operation](#) 171  
[ExportViewListGetRequest element](#) 172  
[ExportViewListGetRequest message](#) 172  
[ExportViewListGetResponse element](#) 172  
[ExportViewListGetResponse message](#) 172  
[ExportViewUpdate operation](#) 168  
[ExportViewUpdateRequest element](#) 169  
[ExportViewUpdateRequest message](#) 169  
[ExportViewUpdateResponse element](#) 169  
[ExportViewUpdateResponse message](#) 169

## F

[Full WSDL](#) 237  
[FunctionalArea type](#) 90  
[FunctionPrivilege type](#) 57  
[FunctionPrivilegesCriteria type](#) 182

## G

[Group type](#) 57  
[GroupType type](#) 91

## H

[HierarchyData type](#) 119  
[HierarchyGetCriteria message](#) 118  
[HierarchyItemType type](#) 91  
[HierarchyMemberPrivilege type](#) 58  
[HierarchyMemberPrivilegesCriteria type](#) 183  
[HierarchyMembersGet operation](#) 117  
[HierarchyMembersGetRequest element](#) 118  
[HierarchyMembersGetRequest message](#) 117  
[HierarchyMembersGetResponse element](#) 118  
[HierarchyMembersGetResponse message](#) 117  
[HierarchyType type](#) 92  
[HTTP](#) 19  
[HTTPS \(section 1.4 19, section 5.1 236\)](#)

## I

[Identifier type](#) 59  
[interface version](#) 20

## K

[Kerberos authentication](#) 20

## L

[LANMAN authentication](#) 20  
[LogicalOperator type](#) 93

## M

Master Data Services  
[about](#) 19  
[data model](#) 109  
[SOAP over HTTP](#) 19  
[SOAP over HTTPS](#) 19  
[versioning](#) 20  
[MasterDataCollection type](#) 59  
[MdmDataContractOfDerivedHierarchyContextIdentifier type](#) 60  
[MdmDataContractOfEntityContextIdentifier type](#) 61  
[MdmDataContractOfIdentifier type](#) 62  
[MdmDataContractOfMemberTypeContextIdentifier type](#) 62  
[MdmDataContractOfModelContextIdentifier type](#) 63  
[MDMError type](#) 63  
[MDMErrorContext type](#) 60  
[Member type](#) 64  
[MemberIdentifier type](#) 65

[MemberKey type](#) 164  
[MemberKeyLookupType type](#) 93  
[MemberReturnOptions type](#) 93  
[MembersCopyCriteria type](#) 128  
[MemberSourceTarget type](#) 129  
[MemberType type](#) 94  
[MemberTypeContextIdentifier type](#) 66  
[message processing events](#) 109  
[message syntax](#) 21  
[MessageResponse element](#) 174  
[MessageResponse message \(section 2.2.2.1 21, section 3.1.4.31.1.2 173\)](#)  
[Metadata type](#) 65  
[MetadataClone operation](#) 186  
[MetadataCloneRequest element](#) 187  
[MetadataCloneRequest message](#) 186  
[MetadataCloneResponse element](#) 187  
[MetadataCloneResponse message](#) 187  
[MetadataCreate operation](#) 192  
[MetadataCreate request](#) 225  
[MetadataCreateRequest element](#) 193  
[MetadataCreateRequest message](#) 193  
[MetadataCreateResponse element](#) 194  
[MetadataCreateResponse message](#) 193  
[MetadataDelete operation](#) 194  
[MetadataDeleteRequest element](#) 196  
[MetadataDeleteRequest message](#) 195  
[MetadataDeleteResponse](#) 196  
[MetadataDeleteResponse element](#) 196  
[MetadataGet operation](#) 187  
[MetadataGetRequest element](#) 189  
[MetadataGetRequest message](#) 188  
[MetadataGetResponse element](#) 189  
[MetadataGetResponse message](#) 188  
[MetadataUpdate operation](#) 191  
[MetadataUpdateRequest element](#) 191  
[MetadataUpdateRequest message](#) 191  
[MetadataUpdateResponse element](#) 192  
[MetadataUpdateResponse message](#) 191  
model  
[data organization](#) 109  
[example](#) 225  
[Model type](#) 66  
[ModelContextIdentifier type](#) 67  
[ModelMembersBulkDelete operation](#) 131  
[ModelMembersBulkDeleteRequest element](#) 132  
[ModelMembersBulkDeleteRequest message](#) 131  
[ModelMembersBulkDeleteResponse element](#) 132  
[ModelMembersBulkDeleteResponse message](#) 132  
[ModelMembersBulkMerge operation](#) 134  
[ModelMembersBulkMergeRequest element](#) 135  
[ModelMembersBulkMergeRequest message](#) 135  
[ModelMembersBulkMergeResponse element](#) 136  
[ModelMembersBulkMergeResponse message](#) 135  
[ModelMembersBulkUpdate operation](#) 133  
[ModelMembersBulkUpdateRequest element](#) 134  
[ModelMembersBulkUpdateRequest message](#) 133  
[ModelMembersBulkUpdateResponse element](#) 134  
[ModelMembersBulkUpdateResponse message](#) 133  
[ModelMembersGet operation](#) 120  
[ModelMembersGetRequest element](#) 121

[ModelMembersGetRequest message](#) 120  
[ModelMembersGetResponse element](#) 121  
[ModelMembersGetResponse message](#) 121  
[ModelObjectType type](#) 95  
[ModelPrivilege type](#) 67  
[ModelPrivilegesCriteria type](#) 184  
[ModelsGetCriteria type](#) 69  
[ModelsResultCriteria type](#) 68

## N

[namespaces](#) 21  
[NTLM authentication](#) 20

## O

[ObjectType type](#) 96  
[OperationResult complex type](#) 69

## P

[Parent type](#) 69  
[ParentChild type](#) 70  
[Permission type](#) 98  
[PermissionType type](#) 98  
[PrincipalType type](#) 100  
protocols  
  [client side calls](#) 109  
  [Ethernet](#) 20  
  [HTTP](#) 19  
  [HTTPS](#) 19  
  security ([section 1.7](#) 20, [section 5.1](#) 236)  
  [SOAP Web service message protocol](#) 21  
  [versions](#) 20

## R

references ([section 1.2.1](#) 18, [section 1.2.2](#) 18)  
[RelationshipType type](#) 100  
[ReplacementId type](#) 145  
ResultOptions type ([section 2.2.4.103](#) 71, [section 3.1.4.39.3.2](#) 190)  
[ResultType type](#) 101  
[rogue clients](#) 236

## S

[SearchCriteria type](#) 189  
[SearchOption type](#) 101  
security  
  [protocols](#) 20  
  [strategies](#) 236  
[SecurityCreateResponse element](#) 176  
[SecurityCreateResponse message](#) 175  
[SecurityPermission type](#) 102  
[SecurityPrincipalCriteria type](#) 71  
[SecurityPrincipals type](#) 72  
[SecurityPrincipalsClone operation](#) 173  
[SecurityPrincipalsCreate operation](#) 175  
[SecurityPrincipalsDelete operation](#) 177  
[SecurityPrincipalsDeleteCriteria type](#) 179  
[SecurityPrincipalsDeleteRequest element](#) 178

[SecurityPrincipalsDeleteRequest message](#) 178  
[SecurityPrincipalsDeleteResponse message](#) 178  
[SecurityPrincipalsGet operation](#) 176  
[SecurityPrincipalsGetRequest element](#) 177  
[SecurityPrincipalsGetRequest message](#) 176  
[SecurityPrincipalsGetResponse message](#) 177  
SecurityPrincipalsRequest element ([section 3.1.4.31.2.1](#) 174, [section 3.1.4.32.2.1](#) 175)  
SecurityPrincipalsRequest message ([section 2.2.2.2](#) 22, [section 3.1.4.31.1.1](#) 173, [section 3.1.4.32.1.1](#) 175)  
[SecurityPrincipalsGetResponse element](#) 177  
[SecurityPrivileges type](#) 72  
[SecurityPrivilegesClone operation](#) 179  
[SecurityPrivilegesDelete operation](#) 184  
[SecurityPrivilegesDeleteCriteria type](#) 185  
[SecurityPrivilegesDeleteRequest element](#) 185  
[SecurityPrivilegesDeleteRequest message](#) 185  
[SecurityPrivilegesGet operation](#) 180  
[SecurityPrivilegesGetCriteria type](#) 182  
[SecurityPrivilegesGetRequest element](#) 181  
[SecurityPrivilegesGetRequest message](#) 181  
[SecurityPrivilegesGetResponse element](#) 181  
[SecurityPrivilegesGetResponse message](#) 181  
[SecurityPrivilegesRequest element](#) 180  
[SecurityPrivilegesRequest message](#) 180  
[SecurityResolutionType type](#) 103  
[sequencing](#) 109  
[server initialization](#) 109  
[simple types](#) 81  
[SOAP over HTTP](#) 19  
[SOAP over HTTPS](#) 19  
[SOAP Web service message protocol](#) 21  
[SortDirection type](#) 103  
[spoof clients](#) 236  
[SSL over HTTPS](#) 236  
[StagingBatch type](#) 73  
[StagingBatchError type](#) 73  
[StagingBatchInformation type](#) 74  
[StagingBatchStatus type](#) 103  
[StagingClear operation](#) 139  
[StagingClearRequest element](#) 140  
[StagingClearRequest message](#) 140  
[StagingClearResponse element](#) 140  
[StagingClearResponse message](#) 140  
[StagingDataStatus type](#) 104  
[StagingGet operation](#) 136  
[StagingGetRequest element](#) 137  
[StagingGetRequest message](#) 137  
[StagingGetResponse element](#) 138  
[StagingGetResponse message](#) 137  
[StagingProcess operation](#) 165  
[StagingProcessRequest element](#) 165  
[StagingProcessRequest message](#) 165  
[StagingProcessResponse element](#) 166  
[StagingProcessResponse messages](#) 165  
[StagingResultCriteria type](#) 138  
[StagingSearchCriteria type](#) 139  
[StagingUnbatchedCriteria type](#) 166  
[StagingUnbatchedInformation type](#) 75  
[stateless connections](#) 109



[syntax](#) 21  
[SystemDomainListGet operation](#) 200  
[SystemDomainListGetCriteria type](#) 202  
[SystemDomainListGetRequest element](#) 201  
[SystemDomainListGetRequest message](#) 201  
[SystemDomainListGetResponse element](#) 201  
[SystemDomainListGetResponse message](#) 201  
[SystemPropertiesGet operation](#) 202  
[SystemPropertiesGetRequest element](#) 203  
[SystemPropertiesGetRequest message](#) 203  
[SystemPropertiesGetResponse element](#) 204  
[SystemPropertiesGetResponse message](#) 203  
SystemPropertyType type ([section 2.2.5.31](#) 105,  
[section 3.1.4.46.4.1](#) 205)  
[SystemPropertyValue type](#) 204  
[SystemSetting type](#) 75  
[SystemSettingGroup type](#) 76  
[SystemSettingsGet operation](#) 197  
[SystemSettingsGetCriteria type](#) 198  
[SystemSettingsGetRequest element](#) 197  
[SystemSettingsGetRequest message](#) 197  
[SystemSettingsGetResponse element](#) 198  
[SystemSettingsGetResponse message](#) 197  
[SystemSettingsUpdate operation](#) 198  
[SystemSettingsUpdateRequest element](#) 199  
[SystemSettingsUpdateRequest message](#) 199  
[SystemSettingsUpdateResponse element](#) 200  
[SystemSettingsUpdateResponse message](#) 199

## T

[timers](#) 109  
[Tracking changes](#) 316  
[Transaction type](#) 76  
[TransactionAnnotationGetRequest element](#) 158  
[TransactionAnnotationGetRequest message](#) 158  
[TransactionAnnotationGetResponse element](#) 159  
[TransactionAnnotationGetResponse message](#) 158  
[TransactionAnnotationsCreate operation](#) 154  
[TransactionAnnotationsCreateRequest element](#) 155  
[TransactionAnnotationsCreateRequest message](#) 154  
[TransactionAnnotationsGet operation](#) 157  
[TransactionSearchCriteria type](#) 142  
[TransactionsGet operation](#) 141  
[TransactionsGetRequest element](#) 141  
[TransactionsGetRequest message](#) 141  
[TransactionsGetResponse element](#) 142  
[TransactionsGetResponse message](#) 141  
[TransactionsReverse operation](#) 144  
[TransactionsReverseRequest element](#) 144  
[TransactionsReverseRequest message](#) 144  
[TransactionsReverseResponse message](#) ([section 3.1.4.16.1.2](#) 144, [section 3.1.4.16.2.2](#) 145)  
[TransactionType type](#) 105  
transports ([section 2.1](#) 21, [section 3](#) 109)  
types  
[complex](#) 22  
[simple](#) 81

## U

[User type](#) 77

[UserPreferencesDelete operation](#) 210  
[UserPreferencesDeleteRequest element](#) 211  
[UserPreferencesDeleteRequest message](#) 211  
[UserPreferencesDeleteResponse element](#) 211  
[UserPreferencesDeleteResponse message](#) 211  
[UserPreferencesGet operation](#) 207  
[UserPreferencesGetRequest element](#) 208  
[UserPreferencesGetRequest message](#) 207  
[UserPreferencesGetResponse element](#) 208  
[UserPreferencesGetResponse message](#) 208  
[UserPreferencesUpdate operation](#) 209  
[UserPreferencesUpdateRequest element](#) 209  
[UserPreferencesUpdateRequest message](#) 209  
[UserPreferencesUpdateResponse element](#) 210  
[UserPreferencesUpdateResponse message](#) 209

## V

[ValidationGet operation](#) 146  
[ValidationGetRequest element](#) 146  
[ValidationGetRequest message](#) 146  
[ValidationGetResponse element](#) 147  
[ValidationGetResponse message](#) 146  
[ValidationIssue type](#) 78  
[ValidationProcess operation](#) 148  
[ValidationProcessCriteria type](#) 150  
[ValidationProcessOptions type](#) 151  
[ValidationProcessRequest element](#) 149  
[ValidationProcessRequest message](#) 149  
[ValidationProcessResponse element](#) 150  
[ValidationProcessResponse message](#) 149  
[ValidationProcessResult type](#) 151  
[ValidationSearchCriteria type](#) 147  
[ValidationStatus type](#) 106  
[ValidationSummaryItem type](#) 148  
[Version type](#) 79  
[VersionCopy operation](#) 205  
[VersionCopyRequest element](#) 206  
[VersionCopyRequest message](#) 206  
[VersionCopyResponse element](#) 207  
[VersionCopyResponse message](#) 206  
[VersionFlag type](#) 80  
versioning 20  
[VersionStatus type](#) 107  
[VersionValidationStatus type](#) 108  
[viruses](#) 236

## X

[XML namespaces](#) 21  
XML schema types ([section 2.2.4](#) 22, [section 2.2.5](#) 81)