

# Essbase<sup>®</sup> XTD Integration Services 7.1 XML Import/Export

OLAP Model Document Type Definition (DTD)



# OLAP Model DTD Table

**Version:** <?xml version="1.0" encoding=UTF-8"?>  
 <!--edited with XML Spy v3.0b2 NT (http://www.xmlspy.com)-->

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<!ELEMENT Model (FactView?, ModelDim*, ModelUnreferencedView* ModelLogicalJoin*, ModelProperty*)>	Indicates that the OLAP model contains a fact table, dimensions, logical joins, and some unreferenced views.	The Model element consists of the following child elements: <ul style="list-style-type: none"> <li>• FactView—Fact view.</li> <li>• ModelDim—Dimensions.</li> <li>• ModelUnreferencedView—A view that is not linked to a fact view.</li> <li>• ModelLogicalJoin—Logical joins.</li> <li>• ModelProperty—The properties of the OLAP model component.</li> </ul>
<!--Values for accessCode: 0 = No access for non-owners, 1 = Read access for non-owners, 2 = Read/Write access for non-owners.-->		
<ATTLIST Model name CDATA #REQUIRED desc CDATA #IMPLIED accessCode (0   1   2) "2" owner CDATA #IMPLIED datasource CDATA #IMPLIED version (1.9.0.0.0   2.0.0.0.0   6.1.0.0.0   6.2.0   6.5.0   6.5.1   6.5.2   6.5.3   6.5.4   7.0   7.1 ) #REQUIRED>	Provides high-level information about an OLAP model, including security and ownership information.	The attributes of the Model element are: <ul style="list-style-type: none"> <li>• name—Each OLAP model must be saved with a valid name.</li> <li>• desc (description)—OLAP model descriptions are optional.</li> <li>• accessCode—Defines access to the OLAP model:                0 = Exclusive Access for the model creator                1 = Read-only access for users other than the creator                2 = Read/Write access for users other than the creator (default)</li> <li>• owner (creator)—The owner of the model.</li> <li>• datasource—The name of the data source for the OLAP model.</li> <li>• version—Indicates Essbase XTD Integration Services Release 1.9, 2.0, 6.1, 6.2, 6.5, 6.5.1, 6.5.2, 6.5.3, 6.5.4, or 7.0 OLAP Metadata Catalog.</li> </ul>

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<!ELEMENT FactView (ModelViewMember*, ModelPhysicalJoin*)>	Indicates the fact view for the OLAP model.	The FactView element consists of the following child elements: <ul style="list-style-type: none"> <li>• ModelViewMember—Member of the fact view.</li> <li>• ModelPhysicalJoin—Physical join for the fact view.</li> </ul>
<!--xCord and yCord are used by EIS Console to identify the location of these views on screens.-->		
<!ATTLIST FactView name CDATA #REQUIRED xCord CDATA #IMPLIED yCord CDATA #IMPLIED>	Provides OLAP model fact view properties and screen location in Integration Services Console.	The attributes of the OLAP model Fact table are: <ul style="list-style-type: none"> <li>• name—Fact view must be named.</li> <li>• xCord, yCord—These coordinates define the current vertical and horizontal position of the fact view in Integration Services Console.</li> </ul>
<!ELEMENT ModelLogicalJoin (ModelLogicalJoinDetail*)>	Indicates logical join information among the views.	The ModelLogicalJoin element contains the ModelLogicalJoinDetail element.
<!ATTLIST ModelLogicalJoin view1Name CDATA #REQUIRED view2Name CDATA #REQUIRED>	Provides information about logical joins between fact view and other views.	The attributes of the ModelLogicalJoin are: <ul style="list-style-type: none"> <li>• view1Name—Name of the view in an OLAP model.</li> <li>• view2Name—Name of the view to which the first view is joined.</li> </ul>
<!ELEMENT ModelLogicalJoinDetail EMPTY>		The ModelLogicalJoinDetail element has no child elements.
<!--member1Name corresponds to member of view1Name, and member2Name corresponds to view2Name.-->		
<!ATTLIST ModelLogicalJoinDetail member1Name CDATA #REQUIRED member2Name CDATA #REQUIRED>	Provides information about logical joins between view1Name and view2Name of the ModelLogicalJoin.	The attributes of the ModelLogicalJoinDetail are: <ul style="list-style-type: none"> <li>• member1Name—The name of the first member that corresponds to the view1Name of the ModelLogicalJoin.</li> <li>• member2Name—The name of the second member that corresponds to the view2Name of the ModelLogicalJoin.</li> </ul>

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<!ELEMENT ModelDim (ModelView + ModelHierarchy*, ModelProperty*)>	Indicates information about dimensions within an OLAP model.	<p>The ModelDim (dimension) element consists of the following child elements:</p> <ul style="list-style-type: none"> <li>• ModelView—Identifies a view within an OLAP model.</li> <li>• ModelHierarchy—Identifies a hierarchy within an OLAP model dimension.</li> <li>• ModelProperty—Identifies properties of the OLAP model dimension component.</li> </ul>
<!--Values for modelDimType: 0 = Regular, 1 = Time, 2 = Accounts. There can be only 1 Accounts and 1 Time dimension in an OLAP model.-->		
<!ATTLIST ModelDim name CDATA #REQUIRED modelDimType ( 0   1   2 ) #REQUIRED>	Provides the name and type of a dimension.	<p>The attributes of the ModelDim (dimension) are:</p> <ul style="list-style-type: none"> <li>• name—Each dimension must have a valid name.</li> <li>• modelDimType—the type of dimension. Valid values are: 0 = General (Regular, or Standard dimension, any quantity) 1 = Time dimension (one only) 2 = Accounts dimension (one only)</li> </ul>
<!ELEMENT ModelView (ModelViewMember*, ModelPhysicalJoin*)>	Identifies a view within an OLAP model.	<p>The ModelView element consists of the following child elements:</p> <ul style="list-style-type: none"> <li>• ModelViewMember—Identification of a member within a model view.</li> <li>• ModelPhysicalJoin—Information about physical joins within a view.</li> </ul>
<!--If a dimension consists of only one view, parentViewName will be equal to FactView.-->		
<!--In case of snowflake schemas, one of the views of dimension will have FactView as its parent and it is called the primary view for that dimension.-->		

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<!ATTLIST ModelView name CDATA #REQUIRED xCord CDATA #REQUIRED yCord CDATA #REQUIRED parentViewName CDATA #REQUIRED>	Provides the physical join in the source database on which a dimension view is displayed in an OLAP model.	The attributes of the ModelView are: <ul style="list-style-type: none"> <li>• name—Each dimension must have a valid name.</li> <li>• xCord, yCord—These coordinates define the current vertical and horizontal position of the view in the Integration Services Console.</li> <li>• parentViewName—Name of the primary view for the model view.</li> </ul>
<!ELEMENT ModelUnreferencedView (ModelViewMember*, ModelPhysicalJoin*, ModelProperty*)>	Identifies an unreferenced view within an OLAP model. Unreferenced views are views that are not joined to the fact view.	The ModelUnreferencedView element consists of the following child elements: <ul style="list-style-type: none"> <li>• ModelViewMember—Identifies a member within a model view.</li> <li>• ModelPhysicalJoin—Information about physical joins within a view.</li> <li>• ModelProperty—The properties of the OLAP model view component.</li> </ul>
<!ATTLIST ModelUnreferencedView name CDATA #REQUIRED xCord CDATA #IMPLIED yCord CDATA #IMPLIED>	Provides the name and location of an unreferenced OLAP view.	The attributes of the ModelUnreferencedView are: <ul style="list-style-type: none"> <li>• name—The unreferenced view must have a valid name.</li> <li>• xCord, yCord—These coordinates define the current vertical and horizontal position of the view in the Essbase XTD Integration Services Console.</li> </ul>
<!ELEMENT ModelPhysicalJoin (ModelPhysicalJoinDetail*)>	Indicates physical join information.	The ModelPhysicalJoin element contains the ModelPhysicalJoinDetail element.
<!ATTLIST ModelPhysicalJoin table1Name CDATA #REQUIRED table2Name CDATA #REQUIRED>	Provides information about physical joins in the source tables.	The attributes of the ModelPhysicalJoin are: <ul style="list-style-type: none"> <li>• table1Name—Name of the first source table.</li> <li>• table2Name—Name of the source table to which the first source table is joined.</li> </ul>
<!ELEMENT ModelPhysicalJoinDetail EMPTY>	Indicates physical join detail information.	The ModelPhysicalJoinDetail element has no child elements.

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<!ATTLIST ModelPhysicalJoinDetail column1Name CDATA #REQUIRED column2Name CDATA #REQUIRED>	Provides information about column physical joins in the source tables.	The attributes of the ModelPhysicalJoin detail are: <ul style="list-style-type: none"> <li>column1Name—Name of the column corresponding to the table1Name of the ModelPhysicalJoin.</li> <li>column2Name—Name of the column corresponding to the table2Name of the ModelPhysicalJoin.</li> </ul>
<!--Values for displayFlag: 0 = Hidden, 1 = Visible -->		
<!--aggregateType is valid only for FactView members. For other members it should be <NONE>.-->		
<!--The aggregateType value of <NONE> is specified as NONE in the attribute list, as <NONE> is not allowed and gives a syntax error.-->		
<!--extractionRule specifies any SQL transformation; for example, Date Transformations, concatenation, substrings etc.-->		
<!--Values for drillThroughType: 0 = Not used for drill through reports, 1 = Can be used for drill through reports.-->		
<!--dataType _T__Y mapped to <T>+Y and vice-versa. Same rule applies to DATETIME,NUMERIC and Y,Q,M all combinations.-->		
<!--drillThroughType: 0 = none, 1 = Drill-Through, 2 = Attribute-Dimension, 3 = both (1 and 2).-->		
<!ELEMENT ModelViewMember (ModelProperty*)>	Indicates member view information within an OLAP model.	The ModelViewMember element contains the ModelProperty element.
<!ATTLIST ModelViewMember name CDATA #REQUIRED desc CDATA #IMPLIED displayFlag (0   1) "1" dataType (CHAR   NUMERIC   DATETIME   _T__Y   _T__Q   _T__M   _T__W   _T__D   _C__Y   _C__Q   _C__M   _C__W   _C__D   _N__Y   _N__Q   _N__M   _N__W   _N__D) #REQUIRED aggregateType (SUM   AVG   MAX   MIN   COUNT   NONE) "NONE" physicalTableName CDATA #REQUIRED physicalColumnName CDATA #REQUIRED extractionRule CDATA #IMPLIED drillThroughType (0   1   2   3) "0">	Provides information about a member view within an OLAP model.	The attributes of the ModelViewMember are: <ul style="list-style-type: none"> <li>name—The member of the view must have a name.</li> <li>desc (description)—A view description is optional.</li> <li>displayFlag (0   1)—Hide or display the member. Valid values are:                0 = Hidden in the OLAP model and metaoutline                1 = Visible in the OLAP model and metaoutline</li> <li>dataType—_T__Y is mapped to &lt;T&gt;+Y and vice-versa. The same rule applies to DATETIME, NUMERIC and all combinations of Y,Q,M. Valid values are:               <ul style="list-style-type: none"> <li>Character = &lt;C&gt; [+Y   Q   M   W   D]</li> <li>Number = &lt;N&gt; [+ Y   Q   M   W   D]</li> <li>Datetime = &lt;T&gt;[+Y   Q   M   W   D]</li> </ul> </li> </ul>

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<!ATTLIST ModelViewMember (Continued)		<ul style="list-style-type: none"> <li>aggregateType—Used only for the Fact table on the Numeric field. It defines the aggregation type as SUM, AVG, COUNT, MIN or MAX. Define the other columns as &lt;NONE&gt;.</li> <li>physicalTableName—The name of the base physical table in the data source.</li> <li>physicalColumnName—The name of the base physical column in the data source.</li> <li>extractionRule—Specifies any SQL transformations, such as date transformations, concatenation, and substrings.</li> <li>drillThroughType (0   1   2   3)—Indicates whether the member is an attribute dimension or is exclusively for drill through. Valid values are:  0 = None—not used for drill-through  1 = Drill through—used for drill-through  2 = Attribute dimension—dimension is an attribute  3 = Both 1 and 2</li> </ul>
<!ELEMENT ModelHierarchy (ModelHierarchyMember*)>	Indicates information about hierarchies in the OLAP model.	The ModelHierarchy contains the ModelHierarchyMember element.
<!ATTLIST ModelHierarchy name CDATA #REQUIRED desc CDATA #IMPLIED>	Provides information about hierarchies in an OLAP model.	The attributes of the ModelHierarchy element are: <ul style="list-style-type: none"> <li>name—The name of the hierarchy.</li> <li>desc—Description of the hierarchy.</li> </ul>
<!ELEMENT ModelHierarchyMember (ModelProperty*)>	Indicates information about a hierarchy member.	The ModelHierarchyMember element contains the ModelProperty element.
<!--Values for buildOrder: 0 = None, 1 = Ascending, 2 = Descending.-->		

DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<pre>&lt;!ATTLIST ModelHierarchyMember   desc CDATA #IMPLIED   filterPredicate CDATA #IMPLIED   transformation CDATA #IMPLIED   buildOrder (0   1   2) "1"   levelNumber CDATA #REQUIRED   viewName CDATA #REQUIRED   viewMemberName CDATA #REQUIRED&gt;</pre>	<p>Provides information about a hierarchy member.</p>	<p>The attributes of the ModelHierarchyMember element are:</p> <ul style="list-style-type: none"> <li>• desc—Description of the hierarchy member.</li> <li>• filterPredicate—SQL filter for the hierarchy member.</li> <li>• transformation—Predicate for the hierarchy member.</li> <li>• buildOrder—Used by Analytic Services to store outline sort order information for a given level in the hierarchy. Valid values for build order are: <ul style="list-style-type: none"> <li>0 = None</li> <li>1 = Ascending</li> <li>2 = Descending</li> </ul> </li> <li>• levelNumber—The Attribute level within the hierarchy.</li> <li>• viewName—The model view to which the hierarchy component belongs.</li> <li>• viewMemberName—The model view member to which the hierarchy component belongs.</li> </ul>
<pre>&lt;ELEMENT ModelProperty EMPTY&gt;</pre>		<p>The ModelProperty element has no child elements.</p>
<pre>&lt;!--In the case of a static property, the staticValue will contain a valid value and viewName and memberName will be blank.--&gt;</pre>		
<pre>&lt;!--In the case of a dynamic property, the staticValue will be blank and viewName and memberName will contain valid values.--&gt;</pre>		
<pre>&lt;!--instanceNo specifies the sequence in which properties should be displayed in case a member has more than one property of same kind, such as a UDA.--&gt;</pre>		



DTD Element (!ELEMENT)/Comment (!--)	Description	Parameters, if Applicable
<pre> &lt;!ATTLIST ModelProperty   type (Sort_Ascending   Sort_Descending     Datasource   Dimension_Datasource     View_Datasource   Save_Password   Time_In_Ticks     Version_Identifier   User_Table_Definition_Primary     User_Table_Definition   Attribute_Precision     Attribute_Scale   Attribute_Nullable   External_Properties     Member_Default_Valid_Transform     SAPBW_Catalog_Name   SAPBW_Cube_Name)   #REQUIRED    staticValue CDATA #IMPLIED   viewName CDATA #IMPLIED   memberName CDATA #IMPLIED   instanceNo CDATA #REQUIRED&gt; </pre>	<p>Provides information about the property of the model component. The property may have a static or dynamic value.</p> <ul style="list-style-type: none"> <li>• If the property has a staticValue, viewName and memberName attributes are blank.</li> <li>• If the property does not have a static value, viewName and memberName values are dynamic. They are populated with values from the source database.</li> </ul>	<p>The attributes of the ModelProperty element are:</p> <ul style="list-style-type: none"> <li>• type—Specifies one of the following properties: <ul style="list-style-type: none"> <li>▪ Sort_Ascending</li> <li>▪ Sort_Descending</li> <li>▪ Datasource</li> <li>▪ Dimension_Datasource</li> <li>▪ View_Datasource</li> <li>▪ Save_Password</li> <li>▪ Time_In_Ticks</li> <li>▪ Version_Identifier</li> <li>▪ User_Table_Definition_Primary</li> <li>▪ User_Table_Definition</li> <li>▪ Attribute_Precision</li> <li>▪ Attribute_Scale</li> <li>▪ Attribute_Nullable</li> <li>▪ External_Properties</li> <li>▪ Member_Default_Valid_Transform</li> <li>▪ SABBW_Catalog_Name</li> <li>▪ SAPBW_Cube_Name</li> </ul> <p>The name of the SAP BW cube (also known as an InfoObject)</p> </li> <li>• staticValue—Value of the property.</li> <li>• viewName—View name from the OLAP model.</li> <li>• memberName—A name taken from the preceding viewName.</li> <li>• instanceNo—Specifies the sequence in which the properties should be displayed, in case a member has more than one property of the same kind, such as more than one UDA.</li> </ul>

**Legend:**

- \* Indicates that there can be more than one child element.
- ? Indicates that there can be zero or one child element.
- + Indicates that there can be one or more child elements.

**Note:**

Light-shaded areas indicate comments in the DTD.