#### diagram (VML Diagram)

This element specifies semantic information for a limited set of structured diagrams that have [VML](VML.docx) representations. Note that diagrams should be defined using DrawingML; this representation is included for compatibility with applications that rely on VML. The following diagram types have [VML](VML.docx) representations:

|  |  |
| --- | --- |
| Diagram Type | Example (non-normative) |
| Organization chart |  |
| Radial |  |
| Cycle |  |
| Pyramid |  |
| Venn |  |
| Bulls-eye |  |

Each of these types of diagrams contains shapes that are positioned relative to one another. Each shape also has optional associated text.

|  |
| --- |
| Parent Elements |
| [background](background.docx) (§); [group](group.docx) (§); hdrShapeDefaults (§); object (§); pict (§); pict (§); shapeDefaults (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [relationtable](relationtable.docx) (Diagram Relationship Table) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| autoformat (Diagram Automatic Format) | Specifies whether the diagram is formatted automatically by the application and user overrides are locked. [Default](Default.docx) is false.  [Example:  <o:diagram ... autoformat="true">  </o:diagram>  end example]  The possible values for this attribute are defined by the [ST\_TrueFalse](ST_TrueFalse.docx) simple type (§). |
| autolayout (Diagram Automatic Layout) | Specifies whether the diagram elements are laid out automatically by the application and user overrides are locked. [Default](Default.docx) is true.  [Example:  <o:diagram ... autolayout="false">  </o:diagram>  end example]  The possible values for this attribute are defined by the [ST\_TrueFalse](ST_TrueFalse.docx) simple type (§). |
| constrainbounds (Diagram Layout Extents) | Specifies an optional, application-specific parameter related to the diagram's extents intended to be used by the application to assist laying out the diagram.  [Example:  <o:diagram ... constrainbounds="2910,2696,9773,9558">  </o:diagram>  end example]  The possible values for this attribute are defined by the XML Schema string datatype. |
| dgmbasetextscale (Diagram Base Font Size) | Specifies the diagram's original font size. This is used in subsequent font size recalculations. If the most recent diagram font size is used to calculate the font size after a rescale, the font size would be wrong after non-isometric diagram rescalings.  [Example:  <o:diagram ... dgmbasetextscale="12">  </o:diagram>  end example]  The possible values for this attribute are defined by the XML Schema integer datatype. |
| dgmfontsize (Diagram Font Size) | Specifies the font size for attached text when a new diagram node is added.  [Example:  <o:diagram ... dgmfontsize="12">  </o:diagram>  end example]  The possible values for this attribute are defined by the XML Schema integer datatype. |
| dgmscalex (Diagram Layout X Scale) | Specifies an optional, application-specific parameter related to the horizontal scaling of the diagram that is intended to be used by the application to assist laying out the diagram.  [Example:  <o:diagram ... dgmscalex="50000">  </o:diagram>  end example]  The possible values for this attribute are defined by the XML Schema integer datatype. |
| dgmscaley (Diagram Layout Y Scale) | Specifies an optional, application-specific parameter related to the vertical scaling of the diagram that is intended to be used by the application to assist laying out the diagram.  [Example:  <o:diagram ... dgmscaley="75000">  </o:diagram>  end example]  The possible values for this attribute are defined by the XML Schema integer datatype. |
| dgmstyle (Diagram Style Options) | Specifies an optional, application-specific parameter related to the styling of the diagram that is intended to be used by the application to assist in formatting the diagram.  [Example:  <o:diagram ... dgmstyle="1">  </o:diagram>  end example]  The possible values for this attribute are defined by the XML Schema integer datatype. |
| ext (VML Extension Handling Behavior)  Namespace: urn:schemas-microsoft-com:vml | Specifies an optional value that indicates how applications that implement [VML](VML.docx) should interpret extensions not defined as part of the original specification of core VML.  [Rationale: This part of the original [VML](VML.docx) specification is included to assist applications that leverage existing [VML](VML.docx) support in implementing the Office Open XML Format. end rationale]  The possible values for this attribute are defined by the [ST\_Ext](ST_Ext.docx) simple type (§). |
| reverse (Diagram Reverse Direction) | Specifies whether the order of the diagram nodes is reversed. This is only relevant to diagrams that have linear ordering.  [Example:  <o:diagram ... reverse="true">  </o:diagram>  reverse="false"  reverse="true"  end example  The possible values for this attribute are defined by the [ST\_TrueFalse](ST_TrueFalse.docx) simple type (§). |

The following XML Schema fragment defines the contents of this element:

<complexType name="CT\_Diagram">

<sequence>

<element name="[relationtable](relationtable.docx)" type="CT\_RelationTable" minOccurs="0"/>

</sequence>

<attributeGroup ref="v:AG\_Ext"/>

<attribute name="dgmstyle" type="xsd:integer" use="optional"/>

<attribute name="autoformat" type="[ST\_TrueFalse](ST_TrueFalse.docx)" use="optional"/>

<attribute name="reverse" type="[ST\_TrueFalse](ST_TrueFalse.docx)" use="optional"/>

<attribute name="autolayout" type="[ST\_TrueFalse](ST_TrueFalse.docx)" use="optional"/>

<attribute name="dgmscalex" type="xsd:integer" use="optional"/>

<attribute name="dgmscaley" type="xsd:integer" use="optional"/>

<attribute name="dgmfontsize" type="xsd:integer" use="optional"/>

<attribute name="constrainbounds" type="xsd:string" use="optional"/>

<attribute name="dgmbasetextscale" type="xsd:integer" use="optional"/>

</complexType>