#### Core Drawing Object Information

Within DrawingML, there is the notion of core drawing elements. These are elements that both are vital to and common across the DrawingML framework. These elements denote the most integral pieces of the DrawingML document structure and thus are among the most widely used.

[Note: Measurement Units - Length units shall be expressed in device-independent physical units: English Metric units (EMUs), points, picas, and inches. Device-dependent units such as pixels shall not be used. [end](end.docx) note]

##### bldChart (Build Chart)

This element specifies how to build the animation for a diagram.

[Example: Consider the following example where a chart is specified to be animated by category rather than as one entity. Thus, the bldChart element should be used as follows:

<p:bdldLst>  
 <p:bldGraphic spid="4" grpId="0">  
 <p:bldSub>  
 <a:bldChart bld="category"/>  
 </p:bldSub>  
 </p:bldGraphic>  
</p:bldLst>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| bldSub (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| animBg (Animate Background) | Specifies whether or not the chart background elements should be animated as well. An example of background elements are grid lines and the chart legend.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| bld (Build) | Specifies how the chart will be built. The animation will animate the sub-elements in the container in the particular [order](order.docx) defined by this attribute.  The possible values for this attribute are defined by the [ST\_AnimationChartBuildType](ST_AnimationChartBuildType.docx) simple type (§). |

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

<complexType [name](name.docx)="CT\_AnimationChartBuildProperties">

<attribute name="bld" type="[ST\_AnimationChartBuildType](ST_AnimationChartBuildType.docx)" use="optional" default="allAtOnce"/>

<attribute name="animBg" type="xsd:boolean" use="optional" default="true"/>

</complexType>

##### bldDgm (Build Diagram)

This element specifies how to build the animation for a diagram.

[Example: Consider having a diagram appear as on entity as opposed to by section. The bldDgm element should be used as follows:

<p:bdldLst>  
 <p:bldGraphic spid="4" grpId="0">  
 <p:bldSub>  
 <a:bldDgm bld="one"/>  
 </p:bldSub>  
 </p:bldGraphic>  
</p:bldLst>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| bldSub (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| bld (Build) | Specifies how the chart will be built. The animation will animate the sub-elements in the container in the particular [order](order.docx) defined by this attribute.  The possible values for this attribute are defined by the [ST\_AnimationDgmBuildType](ST_AnimationDgmBuildType.docx) simple type (§). |
| rev (Reverse Animation) | Specifies whether the animation of the objects in this diagram should be reversed or not. If this attribute is not specified, a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_AnimationDgmBuildProperties">

<attribute name="bld" type="[ST\_AnimationDgmBuildType](ST_AnimationDgmBuildType.docx)" use="optional" default="allAtOnce"/>

<attribute name="rev" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [chart](chart.docx) (Chart [to](to.docx) Animate)

This element specifies a reference to a chart that should be animated within a sequence of slide animations. In addition to simply acting as a reference to a chart there is also animation build steps defined.

|  |
| --- |
| Parent Elements |
| graphicEl (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| bldStep (Animation Build Step) | Specifies which step this part of the chart should be built using. For instance the chart can be built as one object meaning it will be animated as a single graphic. Alternatively the chart can be animated, or built as separate pieces.  The possible values for this attribute are defined by the [ST\_ChartBuildStep](ST_ChartBuildStep.docx) simple type (§). |
| categoryIdx (Category Index) | Specifies the index of the category within the corresponding chart that should be animated.  The possible values for this attribute are defined by the XML Schema int datatype. |
| seriesIdx (Series Index) | Specifies the index of the series within the corresponding chart that should be animated.  The possible values for this attribute are defined by the XML Schema int datatype. |

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

<complexType [name](name.docx)="CT\_AnimationChartElement">

<attribute name="seriesIdx" type="xsd:int" use="optional" default="-1"/>

<attribute name="categoryIdx" type="xsd:int" use="optional" default="-1"/>

<attribute [name](name.docx)="bldStep" type="[ST\_ChartBuildStep](ST_ChartBuildStep.docx)" use="required"/>

</complexType>

##### [cNvCxnSpPr](cNvCxnSpPr.docx) (Non-Visual Connector Shape Drawing Properties)

This element specifies the non-visual drawing properties for a connector shape. These non-visual properties are properties that the generating application would utilize when rendering the slide surface.

|  |
| --- |
| Parent Elements |
| [nvCxnSpPr](nvCxnSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| cxnSpLocks (Connection Shape Locks) | § |
| endCxn (Connection End) | § |
| [extLst](extLst.docx) (Extension List) | § |
| stCxn (Connection Start) | § |

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

<complexType [name](name.docx)="CT\_NonVisualConnectorProperties">

<sequence>

<element name="cxnSpLocks" type="CT\_ConnectorLocking" minOccurs="0" maxOccurs="1"/>

<element name="stCxn" type="CT\_Connection" minOccurs="0" maxOccurs="1"/>

<element name="endCxn" type="CT\_Connection" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### [cNvGraphicFramePr](cNvGraphicFramePr.docx) (Non-Visual Graphic Frame Drawing Properties)

This element specifies the non-visual drawing properties for a graphic frame. These non-visual properties are properties that the generating application would utilize when rendering the slide surface.

|  |
| --- |
| Parent Elements |
| [nvGraphicFramePr](nvGraphicFramePr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| graphicFrameLocks (Graphic Frame Locks) | § |

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

<complexType [name](name.docx)="CT\_NonVisualGraphicFrameProperties">

<sequence>

<element name="graphicFrameLocks" type="CT\_GraphicalObjectFrameLocking" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### [cNvGrpSpPr](cNvGrpSpPr.docx) (Non-Visual Group Shape Drawing Properties)

This element specifies the non-visual drawing properties for a group shape. These non-visual properties are properties that the generating application would utilize when rendering the slide surface.

|  |
| --- |
| Parent Elements |
| [nvGrpSpPr](nvGrpSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| grpSpLocks (Group Shape Locks) | § |

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

<complexType [name](name.docx)="CT\_NonVisualGroupDrawingShapeProps">

<sequence>

<element name="grpSpLocks" type="CT\_GroupLocking" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### [cNvPicPr](cNvPicPr.docx) (Non-Visual Picture Drawing Properties)

This element specifies the non-visual properties for the picture canvas. These properties are to be used by the generating application to determine how certain properties are to be changed for the picture object in question.

[Example: Consider the following DrawingML.

<p:pic>  
 …  
 <p:nvPicPr>  
 <p:cNvPr id="4" name="Lilly\_by\_Lisher.jpg"/>  
 <p:cNvPicPr>  
 <a:picLocks noChangeAspect="1"/>  
 </p:cNvPicPr>  
 <p:nvPr/>  
 </p:nvPicPr>  
 …  
</p:pic>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [nvPicPr](nvPicPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| picLocks (Picture Locks) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| preferRelativeResize (Relative Resize Preferred) | Specifies if the user interface should show the resizing of the picture based on the picture's current size or its original size. If this attribute is set to true, then [scaling](scaling.docx) will be relative to the original picture size as opposed to the current picture size.  [Example: Consider the case where a picture has been resized within a document and is now 50% of the originally inserted picture size. Now if the user chooses to make a later adjustment to the size of this picture within the generating application, then the value of this attribute should be checked.  If this attribute is set to true then a value of 50% will be shown. Similarly, if this attribute is set to false, then a value of 100% should be shown because the picture has not yet been resized from its current (smaller) size. [end](end.docx) example]  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_NonVisualPictureProperties">

<sequence>

<element name="picLocks" type="CT\_PictureLocking" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute name="preferRelativeResize" type="xsd:boolean" use="optional" default="true"/>

</complexType>

##### [cNvPr](cNvPr.docx) (Non-Visual Drawing Properties)

This element specifies non-visual canvas properties. This allows for additional information that does not affect the appearance of the picture to be stored.

[Example: Consider the following DrawingML.

<p:pic>  
 …  
 <p:nvPicPr>  
 <p:cNvPr id="4" name="Lilly\_by\_Lisher.jpg"/>  
 </p:nvPicPr>  
 …  
</p:pic>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [nvCxnSpPr](nvCxnSpPr.docx) (§); [nvGraphicFramePr](nvGraphicFramePr.docx) (§); [nvGrpSpPr](nvGrpSpPr.docx) (§); [nvPicPr](nvPicPr.docx) (§); [nvSpPr](nvSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| hlinkClick (Click Hyperlink) | § |
| hlinkHover (Hyperlink for Hover) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| descr (Alternative Text for Object) | Specifies alternative text for the current DrawingML object, for use by assistive technologies or applications which will not display the current object.  If this element is omitted, then no alternative text is present for the parent object.  [Example: Consider a DrawingML object defined as follows:  <… descr="A picture of a bowl of fruit">  The descr attribute contains alternative text which may be used in place of the actual DrawingML object. [end](end.docx) example]  The possible values for this attribute are defined by the XML Schema string datatype. |
| hidden (Hidden) | Specifies whether this DrawingML object shall be displayed. When a DrawingML object is displayed within a document, that object may be hidden (i.e., present, but not visible). This attribute shall determine whether the object shall be rendered or made hidden. [Note: An application may have settings which allow this object to be viewed. [end](end.docx) note]  If this attribute is omitted, then the parent DrawingML object shall be displayed (i.e., not hidden).  [Example: Consider an [inline](inline.docx) DrawingML object which shall be hidden within the document's content. This setting would be specified as follows:  <… hidden="true" />  The hidden attribute has a value of true, which specifies that the DrawingML object is hidden and not displayed when the document is displayed. [end](end.docx) example]  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| id (Unique Identifier) | Specifies a unique identifier for the current DrawingML object within the current document. This ID may be used to assist in uniquely identifying this object so that it can be referred to by other parts of the document.  If multiple objects within the same document share the same id attribute value, then the document shall be considered non-conformant.  [Example: Consider a DrawingML object defined as follows:  <… id="10" … >  The id attribute has a value of 10, which is the unique identifier for this DrawingML object. [end](end.docx) example]  The possible values for this attribute are defined by the [ST\_DrawingElementId](ST_DrawingElementId.docx) simple type (§). |
| [name](name.docx) (Name) | Specifies the name of the object. [Note: Typically, this will be used to store the original file name of a picture object. [end](end.docx) note]  [Example: Consider a DrawingML object defined as follows:  < … [name](name.docx)="foo.jpg" >  The name attribute has a value of foo.jpg, which is the name of this DrawingML object. [end](end.docx) example]  The possible values for this attribute are defined by the XML Schema string datatype. |

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

<complexType [name](name.docx)="CT\_NonVisualDrawingProps">

<sequence>

<element name="hlinkClick" type="CT\_Hyperlink" minOccurs="0" maxOccurs="1"/>

<element name="hlinkHover" type="CT\_Hyperlink" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute [name](name.docx)="id" type="[ST\_DrawingElementId](ST_DrawingElementId.docx)" use="required"/>

<attribute [name](name.docx)="[name](name.docx)" type="xsd:string" use="required"/>

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

<attribute name="hidden" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [cNvSpPr](cNvSpPr.docx) (Non-Visual Shape Drawing Properties)

This element specifies the non-visual drawing properties for a shape. These properties are to be used by the generating application to determine how the shape should be dealt with

[Example: Consider the shape that has a shape lock applied to it.

<p:sp>  
 <p:nvSpPr>  
 <p:cNvPr id="2" name="Rectangle 1"/>  
 <p:cNvSpPr>  
 <a:spLocks noGrp="1"/>  
 </p:cNvSpPr>  
 </p:nvSpPr>  
…  
</p:sp>

This shape lock is stored within the non-visual drawing properties for this shape. [end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [nvSpPr](nvSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| spLocks (Shape Locks) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| txBox (Text Box) | Specifies that the corresponding shape is a text box and thus should be treated as such by the generating application. If this attribute is omitted then it is assumed that the corresponding shape is not specifically a text box.  [Note: Because a shape is not specified to be a text box does not mean that it cannot have text attached to it. A text box is merely a specialized shape with specific properties. [end](end.docx) note]  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_NonVisualDrawingShapeProps">

<sequence>

<element name="spLocks" type="CT\_ShapeLocking" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute name="txBox" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [cxnSp](cxnSp.docx) (Connection Shape)

This element specifies a connection shape that is used to connect two [sp](sp.docx) elements. Once a connection is specified using a [cxnSp](cxnSp.docx), it is left to the generating application to determine the exact [path](path.docx) the connector will take. That is the connector routing algorithm is left [up](up.docx) to the generating application as the desired [path](path.docx) might be different depending on the specific needs of the application.



[Example: Consider the following connector shape that connects two regular shapes.

<p:spTree>

…  
 <p:sp>  
 <p:nvSpPr>  
 <p:cNvPr id="1" name="Rectangle 1"/>  
 <p:cNvSpPr/>  
 <p:nvPr/>  
 </p:nvSpPr>  
 …  
 </p:sp>  
 <p:sp>

<p:nvSpPr>  
 <p:cNvPr id="2" name="Rectangle 2"/>  
 <p:cNvSpPr/>  
 <p:nvPr/>  
 </p:nvSpPr>  
 …  
 </p:sp>  
 <p:cxnSp>

<p:nvCxnSpPr>  
 <p:cNvPr id="3" name="Elbow Connector 3"/>  
 <p:cNvCxnSpPr>  
 <a:stCxn id="1" [idx](idx.docx)="3"/>  
 <a:endCxn id="2" [idx](idx.docx)="1"/>  
 </p:cNvCxnSpPr>  
 <p:nvPr/>  
 </p:nvCxnSpPr>  
 …  
 </p:cxnSp>  
</p:spTree>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| [nvCxnSpPr](nvCxnSpPr.docx) (Non-Visual Properties for a Connection Shape) | § |
| [spPr](spPr.docx) (Shape Properties) | § |
| [style](style.docx) (Shape Style) | § |

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

<complexType [name](name.docx)="CT\_GvmlConnector">

<sequence>

<element name="[nvCxnSpPr](nvCxnSpPr.docx)" type="CT\_GvmlConnectorNonVisual" minOccurs="1" maxOccurs="1"/>

<element name="[spPr](spPr.docx)" type="CT\_ShapeProperties" minOccurs="1" maxOccurs="1"/>

<element name="style" type="CT\_ShapeStyle" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### cxnSpLocks (Connection Shape Locks)

This element specifies all locking properties for a connection shape. These properties inform the generating application about specific properties that have been previously locked and thus should not be changed.

|  |
| --- |
| Parent Elements |
| [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| noAdjustHandles (Disallow Showing Adjust Handles) | Specifies that the generating application should not show adjust handles for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeArrowheads (Disallow Arrowhead Changes) | Specifies that the generating application should not allow arrowhead changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeAspect (Disallow Aspect Ratio Change) | Specifies that the generating application should not allow aspect ratio changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeShapeType (Disallow Shape Type Change) | Specifies that the generating application should not allow shape type changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noEditPoints (Disallow Shape Point Editing) | Specifies that the generating application should not allow shape point changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noGrp (Disallow Shape Grouping) | Specifies that the generating application should not allow shape [grouping](grouping.docx) for the corresponding connection shape. That is it cannot be combined within other shapes to form a group of shapes. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noMove (Disallow Shape Movement) | Specifies that the generating application should not allow position changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noResize (Disallow Shape Resize) | Specifies that the generating application should not allow size changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noRot (Disallow Shape Rotation) | Specifies that the generating application should not allow shape rotation changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noSelect (Disallow Shape Selection) | Specifies that the generating application should not allow selecting of the corresponding connection shape. That means also that no picture, shapes or text attached to this connection shape can be selected if this attribute has been specified. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_ConnectorLocking">

<sequence>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attributeGroup ref="AG\_Locking"/>

</complexType>

##### dgm (Diagram [to](to.docx) Animate)

This element specifies a reference to a diagram that should be animated within a sequence of slide animations. In addition to simply acting as a reference to a diagram there is also animation build steps defined.

|  |
| --- |
| Parent Elements |
| graphicEl (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| bldStep (Animation Build Step) | Specifies which step this part of the diagram should be built using. For instance the diagram can be built as one object meaning it will be animated as a single graphic. Alternatively the diagram can be animated, or built as separate pieces.  The possible values for this attribute are defined by the [ST\_DgmBuildStep](ST_DgmBuildStep.docx) simple type (§). |
| id (Identifier) | Specifies the GUID of the shape for this build step in the animation.  The possible values for this attribute are defined by the [ST\_Guid](ST_Guid.docx) simple type (§). |

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

<complexType [name](name.docx)="CT\_AnimationDgmElement">

<attribute name="id" type="[ST\_Guid](ST_Guid.docx)" use="optional" default="{00000000-0000-0000-0000-000000000000}"/>

<attribute name="bldStep" type="[ST\_DgmBuildStep](ST_DgmBuildStep.docx)" use="optional" default="[sp](sp.docx)"/>

</complexType>

##### endCxn (Connection End)

This element specifies the ending connection that should be made by the corresponding connector shape. This connects the [end](end.docx) tail of the connector to the final destination shape.

|  |
| --- |
| Parent Elements |
| [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| id (Identifier) | Specifies the id of the shape to make the final connection to.  The possible values for this attribute are defined by the [ST\_DrawingElementId](ST_DrawingElementId.docx) simple type (§). |
| [idx](idx.docx) (Index) | Specifies the index into the connection site table of the final connection shape. That is there are many connection sites on a shape and it must be specified which connection site the corresponding connector shape should connect to.  The possible values for this attribute are defined by the XML Schema unsignedInt datatype. |

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

<complexType [name](name.docx)="CT\_Connection">

<attribute [name](name.docx)="id" type="[ST\_DrawingElementId](ST_DrawingElementId.docx)" use="required"/>

<attribute [name](name.docx)="[idx](idx.docx)" type="xsd:unsignedInt" use="required"/>

</complexType>

##### [ext](ext.docx) (Extension)

This element specifies an extension that is used for future extensions to the current version of DrawingML. This allows for the specifying of currently unknown elements in the future that will be used for later versions of generating applications.

|  |
| --- |
| Parent Elements |
| [extLst](extLst.docx) (§); [extLst](extLst.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| Any element from any namespace | n/a |

|  |  |
| --- | --- |
| Attributes | Description |
| uri (Uniform Resource Identifier) | Specifies the URI, or uniform resource identifier that represents the data stored under this tag. The URI is used to identify the correct 'server' that can process the contents of this tag.  The possible values for this attribute are defined by the XML Schema token datatype. |

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

<complexType [name](name.docx)="CT\_OfficeArtExtension">

<sequence>

<any processContents="lax"/>

</sequence>

<attribute [name](name.docx)="uri" type="xsd:token"/>

</complexType>

##### [extLst](extLst.docx) (Extension List)

This element specifies the extension list within which all future extensions of type [ext](ext.docx) will be defined. The extension list along with corresponding future extensions is used to extend the storage capabilities of the DrawingML framework. This allows for various new types of data to be stored natively within the framework.

|  |
| --- |
| Parent Elements |
| [audioCd](audioCd.docx) (§); [audioFile](audioFile.docx) (§); [backdrop](backdrop.docx) (§); [blip](blip.docx) (§); bodyPr (§); bodyStyle (§); [cell3D](cell3D.docx) (§); [clrMap](clrMap.docx) (§); [clrMap](clrMap.docx) (§); [clrMapOvr](clrMapOvr.docx) (§); [clrScheme](clrScheme.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§); [cxnSp](cxnSp.docx) (§); cxnSpLocks (§); defaultTextStyle (§); defPPr (§); defRPr (§); [docPr](docPr.docx) (§); endParaRPr (§); font (§); fontScheme (§); [graphicFrame](graphicFrame.docx) (§); graphicFrameLocks (§); [gridCol](gridCol.docx) (§); [grpSp](grpSp.docx) (§); grpSpLocks (§); [grpSpPr](grpSpPr.docx) (§); [grpSpPr](grpSpPr.docx) (§); [grpSpPr](grpSpPr.docx) (§); [grpSpPr](grpSpPr.docx) (§); hlinkClick (§); hlinkHover (§); hlinkMouseOver (§); ln (§); [lnB](lnB.docx) (§); [lnBlToTr](lnBlToTr.docx) (§); lnDef (§); [lnL](lnL.docx) (§); [lnR](lnR.docx) (§); [lnT](lnT.docx) (§); [lnTlToBr](lnTlToBr.docx) (§); [lockedCanvas](lockedCanvas.docx) (§); lstStyle (§); lvl1pPr (§); lvl2pPr (§); lvl3pPr (§); lvl4pPr (§); lvl5pPr (§); lvl6pPr (§); lvl7pPr (§); lvl8pPr (§); lvl9pPr (§); majorFont (§); minorFont (§); notesStyle (§); [objectDefaults](objectDefaults.docx) (§); otherStyle (§); [overrideClrMapping](overrideClrMapping.docx) (§); [pic](pic.docx) (§); picLocks (§); pPr (§); [quickTimeFile](quickTimeFile.docx) (§); rPr (§); [scene3d](scene3d.docx) (§); [scene3d](scene3d.docx) (§); [sp](sp.docx) (§); [sp3d](sp3d.docx) (§); [sp3d](sp3d.docx) (§); spDef (§); spLocks (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [tableStyle](tableStyle.docx) (§); [tblPr](tblPr.docx) (§); tblStyle (§); [tc](tc.docx) (§); tcBdr (§); [tcPr](tcPr.docx) (§); tcTxStyle (§); [theme](theme.docx) (§); [themeElements](themeElements.docx) (§); titleStyle (§); [tr](tr.docx) (§); txDef (§); txSp (§); uLn (§); [videoFile](videoFile.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [ext](ext.docx) (Extension) | § |

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

<complexType [name](name.docx)="CT\_OfficeArtExtensionList">

<sequence>

<group ref="EG\_OfficeArtExtensionList" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### graphic (Graphic Object)

This element specifies the existence of a single graphic object. Document authors should refer to this element when they wish to persist a graphical object of some kind. The specification for this graphical object will be provided entirely by the document author and referenced within the graphicData child element.

|  |
| --- |
| Parent Elements |
| anchor (§); [graphicFrame](graphicFrame.docx) (§); [graphicFrame](graphicFrame.docx) (§); [graphicFrame](graphicFrame.docx) (§); [graphicFrame](graphicFrame.docx) (§); [inline](inline.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| graphicData (Graphic Object Data) | § |

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

<complexType [name](name.docx)="CT\_GraphicalObject">

<sequence>

<element [name](name.docx)="graphicData" type="CT\_GraphicalObjectData"/>

</sequence>

</complexType>

##### graphicData (Graphic Object Data)

This element specifies the reference to a graphic object within the document. This graphic object is provided entirely by the document authors who [choose](choose.docx) to persist this data within the document.

[Note: Depending on the type of graphical object used not every generating application that supports the OOXML framework will have the ability to render the graphical object. [end](end.docx) note]

|  |
| --- |
| Parent Elements |
| graphic (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| Any element from any namespace | n/a |

|  |  |
| --- | --- |
| Attributes | Description |
| uri (Uniform Resource Identifier) | Specifies the URI, or uniform resource identifier that represents the data stored under this tag. The URI is used to identify the correct 'server' that can process the contents of this tag.  The possible values for this attribute are defined by the XML Schema token datatype. |

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

<complexType [name](name.docx)="CT\_GraphicalObjectData">

<sequence>

<any minOccurs="0" maxOccurs="unbounded" processContents="strict"/>

</sequence>

<attribute [name](name.docx)="uri" type="xsd:token"/>

</complexType>

##### [graphicFrame](graphicFrame.docx) (Graphic Frame)

This element specifies the existence of a graphics frame. This frame contains a graphic that was generated by an external source and needs a container in which to be displayed on the slide surface.

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| graphic (Graphic Object) | § |
| [nvGraphicFramePr](nvGraphicFramePr.docx) (Non-Visual Properties for a Graphic Frame) | § |
| [xfrm](xfrm.docx) (2D Transform for Individual Objects) | § |

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

<complexType [name](name.docx)="CT\_GvmlGraphicalObjectFrame">

<sequence>

<element name="[nvGraphicFramePr](nvGraphicFramePr.docx)" type="CT\_GvmlGraphicFrameNonVisual" minOccurs="1" maxOccurs="1"/>

<element ref="graphic" minOccurs="1" maxOccurs="1"/>

<element name="[xfrm](xfrm.docx)" type="CT\_Transform2D" minOccurs="1" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### graphicFrameLocks (Graphic Frame Locks)

This element specifies all locking properties for a graphic frame. These properties inform the generating application about specific properties that have been previously locked and thus should not be changed.

|  |
| --- |
| Parent Elements |
| [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§); [cNvGraphicFramePr](cNvGraphicFramePr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| noChangeAspect (Disallow Aspect Ratio Change) | Specifies that the generating application should not allow aspect ratio changes for the corresponding graphic frame. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noDrilldown (Disallow Selection of Child Shapes) | Specifies that the generating application should not allow selecting of objects within the corresponding graphic frame but allow selecting of the graphic frame itself. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noGrp (Disallow Shape Grouping) | Specifies that the generating application should not allow shape [grouping](grouping.docx) for the corresponding graphic frame. That is it cannot be combined within other shapes to form a group of shapes. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noMove (Disallow Shape Movement) | Specifies that the corresponding graphic frame cannot be moved. Objects that reside within the graphic frame can still be moved unless they also have been locked. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noResize (Disallow Shape Resize) | Specifies that the generating application should not allow size changes for the corresponding graphic frame. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noSelect (Disallow Shape Selection) | Specifies that the generating application should not allow selecting of the corresponding picture. That means also that no picture, shapes or text attached to this picture can be selected if this attribute has been specified. If this attribute is not specified, then a value of false is assumed.  [Note: If this attribute is specified to be true then the graphic frame cannot be selected and the objects within the graphic frame cannot be selected as well. That is the entire graphic frame including all sub-parts are considered un-selectable. [end](end.docx) note]  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_GraphicalObjectFrameLocking">

<sequence>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute name="noGrp" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noDrilldown" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noSelect" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noChangeAspect" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noMove" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noResize" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [grpSp](grpSp.docx) (Group shape)

This element specifies a group shape that represents many shapes grouped together. This shape is to be treated just as if it were a regular shape but instead of being described by a single geometry it is made [up](up.docx) of all the shape geometries encompassed within it. Within a group shape each of the shapes that make [up](up.docx) the group are specified just as they normally would. The idea behind [grouping](grouping.docx) elements however is that a single transform can apply to many shapes at the same time.

[Example: Consider the following group shape.

<p:grpSp>  
 <p:nvGrpSpPr>  
 <p:cNvPr id="10" name="Group 9"/>  
 <p:cNvGrpSpPr/>  
 <p:nvPr/>  
 </p:nvGrpSpPr>

<p:grpSpPr>  
 <a:xfrm>  
 <a:off x="838200" [y](y.docx)="990600"/>  
 <a:ext cx="2426208" cy="978408"/>  
 <a:chOff x="838200" [y](y.docx)="990600"/>  
 <a:chExt cx="2426208" cy="978408"/>  
 </a:xfrm>  
 </p:grpSpPr>

<p:sp>  
 …  
 </p:sp>  
 <p:sp>  
 …  
 </p:sp>

<p:sp>  
 …  
 </p:sp>  
</p:grpSp>

In the above example we see three shapes specified within a single group. These three shapes have their position and sizes specified just as they normally would within the shape tree. The generating application should apply the transformation after the bounding box for the group shape has been calculated. [end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cxnSp](cxnSp.docx) (Connection Shape) | § |
| [extLst](extLst.docx) (Extension List) | § |
| [graphicFrame](graphicFrame.docx) (Graphic Frame) | § |
| [grpSp](grpSp.docx) (Group shape) | § |
| [grpSpPr](grpSpPr.docx) (Visual Group Shape Properties) | § |
| [nvGrpSpPr](nvGrpSpPr.docx) (Non-Visual Properties for a Group Shape) | § |
| [pic](pic.docx) (Picture) | § |
| [sp](sp.docx) (Shape) | § |
| txSp (Text Shape) | § |

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

<complexType [name](name.docx)="CT\_GvmlGroupShape">

<sequence>

<element name="[nvGrpSpPr](nvGrpSpPr.docx)" type="CT\_GvmlGroupShapeNonVisual" minOccurs="1" maxOccurs="1"/>

<element name="[grpSpPr](grpSpPr.docx)" type="CT\_GroupShapeProperties" minOccurs="1" maxOccurs="1"/>

<choice minOccurs="0" maxOccurs="unbounded">

<element [name](name.docx)="txSp" type="CT\_GvmlTextShape"/>

<element [name](name.docx)="[sp](sp.docx)" type="CT\_GvmlShape"/>

<element [name](name.docx)="[cxnSp](cxnSp.docx)" type="CT\_GvmlConnector"/>

<element [name](name.docx)="[pic](pic.docx)" type="CT\_GvmlPicture"/>

<element [name](name.docx)="[graphicFrame](graphicFrame.docx)" type="CT\_GvmlGraphicalObjectFrame"/>

<element [name](name.docx)="[grpSp](grpSp.docx)" type="CT\_GvmlGroupShape"/>

</choice>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### grpSpLocks (Group Shape Locks)

This element specifies all locking properties for a connection shape. These properties inform the generating application about specific properties that have been previously locked and thus should not be changed.

|  |
| --- |
| Parent Elements |
| [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§); [cNvGrpSpPr](cNvGrpSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| noChangeAspect (Disallow Aspect Ratio Change) | Specifies that the generating application should not allow aspect ratio changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noGrp (Disallow Shape Grouping) | Specifies that the corresponding group shape cannot be grouped. That is it cannot be combined within other shapes to form a group of shapes. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noMove (Disallow Moving Shape) | Specifies that the corresponding graphic frame cannot be moved. Objects that reside within the graphic frame can still be moved unless they also have been locked. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noResize (Disallow Shape Resizing) | Specifies that the corresponding group shape cannot be resized. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noRot (Disallow Shape Rotation) | Specifies that the corresponding group shape cannot be rotated Objects that reside within the group can still be rotated unless they also have been locked. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noSelect (Disallow Shape Selection) | Specifies that the corresponding group shape cannot have any part of it be selected. That means that no picture, shapes or attached text can be selected either if this attribute has been specified. If this attribute is not specified, then a value of false is assumed.  [Note: This property is inherited by sub-elements and thus all shapes within the group shape cannot be selected when this attribute is set to a value of true. [end](end.docx) note]  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noUngrp (Disallow Shape Ungrouping) | Specifies that the generating application should not show adjust handles for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_GroupLocking">

<sequence>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute name="noGrp" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noUngrp" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noSelect" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noRot" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noChangeAspect" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noMove" type="xsd:boolean" use="optional" default="false"/>

<attribute name="noResize" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [grpSpPr](grpSpPr.docx) (Visual Group Shape Properties)

This element specifies the properties that are to be common across all of the shapes within the corresponding group. If there are any conflicting properties within the group shape properties and the individual shape properties then the individual shape properties should take precedence.

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [blipFill](blipFill.docx) (Picture Fill) | § |
| [effectDag](effectDag.docx) (Effect Container) | § |
| [effectLst](effectLst.docx) (Effect Container) | § |
| [extLst](extLst.docx) (Extension List) | § |
| [gradFill](gradFill.docx) (Gradient Fill) | § |
| [grpFill](grpFill.docx) (Group Fill) | § |
| [noFill](noFill.docx) (No Fill) | § |
| [pattFill](pattFill.docx) (Pattern Fill) | § |
| [scene3d](scene3d.docx) (3D Scene Properties) | § |
| [solidFill](solidFill.docx) (Solid Fill) | § |
| [xfrm](xfrm.docx) (2D Transform for Grouped Objects) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| bwMode (Black and White Mode) | Specifies that the group shape should be rendered using only black and white coloring. That is the coloring information for the group shape should be converted to either black or white when rendering the corresponding shapes.  No gray is to be used in rendering this image, only stark black and stark white.  [Note: This does not mean that the group shapes themselves are stored with only black and white color information. This attribute instead sets the rendering mode that the shapes will use when rendering. [end](end.docx) note]  The possible values for this attribute are defined by the [ST\_BlackWhiteMode](ST_BlackWhiteMode.docx) simple type (§). |

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

<complexType [name](name.docx)="CT\_GroupShapeProperties">

<sequence>

<element name="[xfrm](xfrm.docx)" type="CT\_GroupTransform2D" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_FillProperties" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_EffectProperties" minOccurs="0" maxOccurs="1"/>

<element name="[scene3d](scene3d.docx)" type="CT\_Scene3D" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute [name](name.docx)="bwMode" type="[ST\_BlackWhiteMode](ST_BlackWhiteMode.docx)" use="optional"/>

</complexType>

##### hlinkHover (Hyperlink for Hover)

This element specifies the hyperlink information to be activated when the user's mouse is hovered over the corresponding object. The operation of the hyperlink is to have the specified action be activated when the mouse of the user hovers over the object. When this action is activated then additional attributes can be used to specify other tasks that should be performed along with the action.

|  |
| --- |
| Parent Elements |
| [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [cNvPr](cNvPr.docx) (§); [docPr](docPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| snd (Hyperlink Sound) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| action (Action Setting) | Specifies an action that is to be taken when this hyperlink is activated. This may be used to specify a slide to be navigated to or a script of code to be run.  The possible values for this attribute are defined by the XML Schema string datatype. |
| endSnd (End Sounds) | Specifies if the URL in question should stop all sounds that are playing when it is clicked.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| highlightClick (Highlight Click) | Specifies if this attribute has already been used within this document. That is when a hyperlink has already been visited that this attribute would be utilized so the generating application may determine the color of this text. If this attribute is omitted, then a value of 0 or false is implied.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| history (Add Hyperlink to Page History) | Specifies whether to add this URI to the history when navigating to it. This allows for the viewing of this presentation without the storing of history information on the viewing machine. If this attribute is omitted, then a value of 1, or true is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| id (Drawing Object Hyperlink Target)  Namespace: .../officeDocument/2006/relationships | Specifies the relationship id that when looked [up](up.docx) in this slides relationship file will contain the target of this hyperlink. This attribute cannot be omitted.  The possible values for this attribute are defined by the ST\_RelationshipId simple type (§). |
| invalidUrl (Invalid URL) | Specifies the URL when it has been determined by the generating application that the URL is invalid. That is the generating application may still store the URL but it is known that this URL is not correct.  The possible values for this attribute are defined by the XML Schema string datatype. |
| tgtFrame (Target Frame) | Specifies the target frame that is to be used when opening this hyperlink. When the hyperlink is activated this attribute will be used to determine if a new window must be launched for viewing or if an existing one may be used. If this attribute is omitted, than a new window will be opened.  The possible values for this attribute are defined by the XML Schema string datatype. |
| tooltip (Hyperlink Tooltip) | Specifies the tooltip that should be displayed when the hyperlink text is hovered over with the mouse. If this attribute is omitted, than the hyperlink text itself may be displayed.  The possible values for this attribute are defined by the XML Schema string datatype. |

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

<complexType [name](name.docx)="CT\_Hyperlink">

<sequence>

<element name="snd" type="CT\_EmbeddedWAVAudioFile" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute ref="r:id" use="optional"/>

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

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

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

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

<attribute name="history" type="xsd:boolean" use="optional" default="true"/>

<attribute name="highlightClick" type="xsd:boolean" use="optional" default="false"/>

<attribute name="endSnd" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### ln (Outline)

This element specifies an outline style that can be applied to a number of different objects such as shapes and text. The line allows for the specifying of many different types of outlines including even line dashes and bevels.

|  |
| --- |
| Parent Elements |
| bottom (§); defRPr (§); endParaRPr (§); insideH (§); insideV (§); left (§); lnStyleLst (§); right (§); rPr (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); [spPr](spPr.docx) (§); tl2br (§); top (§); tr2bl (§); [whole](whole.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [bevel](bevel.docx) (Line Join Bevel) | § |
| [custDash](custDash.docx) (Custom Dash) | § |
| [extLst](extLst.docx) (Extension List) | § |
| [gradFill](gradFill.docx) (Gradient Fill) | § |
| [headEnd](headEnd.docx) (Line Head/End Style) | § |
| [miter](miter.docx) (Miter Line Join) | § |
| [noFill](noFill.docx) (No Fill) | § |
| [pattFill](pattFill.docx) (Pattern Fill) | § |
| [prstDash](prstDash.docx) (Preset Dash) | § |
| [round](round.docx) (Round Line Join) | § |
| [solidFill](solidFill.docx) (Solid Fill) | § |
| [tailEnd](tailEnd.docx) (Tail line [end](end.docx) style) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| algn (Stroke Alignment) | Specifies the alignment to be used for the underline stroke.  The possible values for this attribute are defined by the [ST\_PenAlignment](ST_PenAlignment.docx) simple type (§). |
| cap (Line Ending Cap Type) | Specifies the ending caps that should be used for this line. Examples of cap types are rounded, flat, etc. If this attribute is omitted, than a value of square is assumed.  The possible values for this attribute are defined by the [ST\_LineCap](ST_LineCap.docx) simple type (§). |
| cmpd (Compound Line Type) | Specifies the compound line type to be used for the underline stroke. If this attribute is omitted, then a value of sng is assumed.  The possible values for this attribute are defined by the [ST\_CompoundLine](ST_CompoundLine.docx) simple type (§). |
| [w](w.docx) (Line Width) | Specifies the width to be used for the underline stroke. If this attribute is omitted, then a value of 0 is assumed.  The possible values for this attribute are defined by the [ST\_LineWidth](ST_LineWidth.docx) simple type (§). |

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

<complexType [name](name.docx)="CT\_LineProperties">

<sequence>

<group ref="EG\_LineFillProperties" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_LineDashProperties" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_LineJoinProperties" minOccurs="0" maxOccurs="1"/>

<element name="[headEnd](headEnd.docx)" type="CT\_LineEndProperties" minOccurs="0" maxOccurs="1"/>

<element name="[tailEnd](tailEnd.docx)" type="CT\_LineEndProperties" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute [name](name.docx)="[w](w.docx)" type="[ST\_LineWidth](ST_LineWidth.docx)" use="optional"/>

<attribute [name](name.docx)="cap" type="[ST\_LineCap](ST_LineCap.docx)" use="optional"/>

<attribute [name](name.docx)="cmpd" type="[ST\_CompoundLine](ST_CompoundLine.docx)" use="optional"/>

<attribute [name](name.docx)="algn" type="[ST\_PenAlignment](ST_PenAlignment.docx)" use="optional"/>

</complexType>

##### [nvCxnSpPr](nvCxnSpPr.docx) (Non-Visual Properties for a Connection Shape)

This element specifies all non-visual properties for a connection shape. This element is a container for the non-visual identification properties, shape properties and application properties that are to be associated with a connection shape. This allows for additional information that does not affect the appearance of the connection shape to be stored.

|  |
| --- |
| Parent Elements |
| [cxnSp](cxnSp.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cNvCxnSpPr](cNvCxnSpPr.docx) (Non-Visual Connector Shape Drawing Properties) | § |
| [cNvPr](cNvPr.docx) (Non-Visual Drawing Properties) | § |

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

<complexType [name](name.docx)="CT\_GvmlConnectorNonVisual">

<sequence>

<element name="[cNvPr](cNvPr.docx)" type="CT\_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>

<element name="[cNvCxnSpPr](cNvCxnSpPr.docx)" type="CT\_NonVisualConnectorProperties" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### [nvGraphicFramePr](nvGraphicFramePr.docx) (Non-Visual Properties for a Graphic Frame)

This element specifies all non-visual properties for a graphic frame. This element is a container for the non-visual identification properties, shape properties and application properties that are to be associated with a graphic frame. This allows for additional information that does not affect the appearance of the graphic frame to be stored.

|  |
| --- |
| Parent Elements |
| [graphicFrame](graphicFrame.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cNvGraphicFramePr](cNvGraphicFramePr.docx) (Non-Visual Graphic Frame Drawing Properties) | § |
| [cNvPr](cNvPr.docx) (Non-Visual Drawing Properties) | § |

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

<complexType [name](name.docx)="CT\_GvmlGraphicFrameNonVisual">

<sequence>

<element name="[cNvPr](cNvPr.docx)" type="CT\_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>

<element name="[cNvGraphicFramePr](cNvGraphicFramePr.docx)" type="CT\_NonVisualGraphicFrameProperties" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### [nvGrpSpPr](nvGrpSpPr.docx) (Non-Visual Properties for a Group Shape)

This element specifies all non-visual properties for a group shape. This element is a container for the non-visual identification properties, shape properties and application properties that are to be associated with a group shape. This allows for additional information that does not affect the appearance of the group shape to be stored.

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cNvGrpSpPr](cNvGrpSpPr.docx) (Non-Visual Group Shape Drawing Properties) | § |
| [cNvPr](cNvPr.docx) (Non-Visual Drawing Properties) | § |

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

<complexType [name](name.docx)="CT\_GvmlGroupShapeNonVisual">

<sequence>

<element name="[cNvPr](cNvPr.docx)" type="CT\_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>

<element name="[cNvGrpSpPr](cNvGrpSpPr.docx)" type="CT\_NonVisualGroupDrawingShapeProps" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### [nvPicPr](nvPicPr.docx) (Non-Visual Properties for a Picture)

This element specifies all non-visual properties for a picture. This element is a container for the non-visual identification properties, shape properties and application properties that are to be associated with a picture. This allows for additional information that does not affect the appearance of the picture to be stored.

[Example: Consider the following PresentationML.

<p:pic>  
 …  
 <p:nvPicPr>  
 …  
 </p:nvPicPr>  
 …  
</p:pic>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [pic](pic.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cNvPicPr](cNvPicPr.docx) (Non-Visual Picture Drawing Properties) | § |
| [cNvPr](cNvPr.docx) (Non-Visual Drawing Properties) | § |

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

<complexType [name](name.docx)="CT\_GvmlPictureNonVisual">

<sequence>

<element name="[cNvPr](cNvPr.docx)" type="CT\_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>

<element name="[cNvPicPr](cNvPicPr.docx)" type="CT\_NonVisualPictureProperties" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### [nvSpPr](nvSpPr.docx) (Non-Visual Properties for a Shape)

This element specifies all non-visual properties for a shape. This element is a container for the non-visual identification properties, shape properties and application properties that are to be associated with a shape. This allows for additional information that does not affect the appearance of the shape to be stored.

|  |
| --- |
| Parent Elements |
| [sp](sp.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [cNvPr](cNvPr.docx) (Non-Visual Drawing Properties) | § |
| [cNvSpPr](cNvSpPr.docx) (Non-Visual Shape Drawing Properties) | § |

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

<complexType [name](name.docx)="CT\_GvmlShapeNonVisual">

<sequence>

<element name="[cNvPr](cNvPr.docx)" type="CT\_NonVisualDrawingProps" minOccurs="1" maxOccurs="1"/>

<element name="[cNvSpPr](cNvSpPr.docx)" type="CT\_NonVisualDrawingShapeProps" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### [pic](pic.docx) (Picture)

This element specifies the existence of a picture object within the document.

[Example: Consider the following PresentationML that specifies the existence of a picture within a document. This picture can have non-visual properties, a picture [fill](fill.docx) as well as shape properties attached to it.

<p:pic>  
 <p:nvPicPr>  
 <p:cNvPr id="4" name="lake.JPG" descr="Picture of a Lake" />  
 <p:cNvPicPr>  
 <a:picLocks noChangeAspect="1"/>  
 </p:cNvPicPr>  
 <p:nvPr/>  
 </p:nvPicPr>

<p:blipFill>  
 …  
 </p:blipFill>

<p:spPr>  
 …  
 </p:spPr>  
</p:pic>

[end](end.docx) example]

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [blipFill](blipFill.docx) (Picture Fill) | § |
| [extLst](extLst.docx) (Extension List) | § |
| [nvPicPr](nvPicPr.docx) (Non-Visual Properties for a Picture) | § |
| [spPr](spPr.docx) (Shape Properties) | § |
| [style](style.docx) (Shape Style) | § |

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

<complexType [name](name.docx)="CT\_GvmlPicture">

<sequence>

<element name="[nvPicPr](nvPicPr.docx)" type="CT\_GvmlPictureNonVisual" minOccurs="1" maxOccurs="1"/>

<element name="[blipFill](blipFill.docx)" type="CT\_BlipFillProperties" minOccurs="1" maxOccurs="1"/>

<element name="[spPr](spPr.docx)" type="CT\_ShapeProperties" minOccurs="1" maxOccurs="1"/>

<element name="style" type="CT\_ShapeStyle" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### picLocks (Picture Locks)

This element specifies all locking properties for a graphic frame. These properties inform the generating application about specific properties that have been previously locked and thus should not be changed.

|  |
| --- |
| Parent Elements |
| [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§); [cNvPicPr](cNvPicPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| noAdjustHandles (Disallow Showing Adjust Handles) | Specifies that the generating application should not show adjust handles for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeArrowheads (Disallow Arrowhead Changes) | Specifies that the generating application should not allow arrowhead changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeAspect (Disallow Aspect Ratio Change) | Specifies that the generating application should not allow aspect ratio changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeShapeType (Disallow Shape Type Change) | Specifies that the generating application should not allow shape type changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noCrop (Disallow Crop Changes) | Specifies that the generating application should not allow cropping for the corresponding picture. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noEditPoints (Disallow Shape Point Editing) | Specifies that the generating application should not allow shape point changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noGrp (Disallow Shape Grouping) | Specifies that the generating application should not allow shape [grouping](grouping.docx) for the corresponding connection shape. That is it cannot be combined within other shapes to form a group of shapes. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noMove (Disallow Shape Movement) | Specifies that the generating application should not allow position changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noResize (Disallow Shape Resize) | Specifies that the generating application should not allow size changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noRot (Disallow Shape Rotation) | Specifies that the generating application should not allow shape rotation changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noSelect (Disallow Shape Selection) | Specifies that the generating application should not allow selecting of the corresponding connection shape. That means also that no picture, shapes or text attached to this connection shape can be selected if this attribute has been specified. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_PictureLocking">

<sequence>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attributeGroup ref="AG\_Locking"/>

<attribute name="noCrop" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### snd (Hyperlink Sound)

This element specifies a sound to be played when a hyperlink within the document is activated. This sound is specified from within the parent hyperlink element.

|  |
| --- |
| Parent Elements |
| hlinkClick (§); hlinkHover (§); hlinkMouseOver (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| builtIn (Recognized Built-In Sound) | Specifies whether or not this sound is a built-in sound. If this attribute is set to true then the generating application is alerted to check the name attribute specified for this sound in it's list of built-in sounds and can then surface a custom name or UI as needed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| embed (Embedded Audio File Relationship ID)  Namespace: .../officeDocument/2006/relationships | Specifies the identification information for an embedded audio file. This attribute is used to specify the location of an object that resides locally within the file.  The possible values for this attribute are defined by the ST\_RelationshipId simple type (§). |
| [name](name.docx) (Sound Name) | Specifies the original name or given short name for the corresponding sound. This is used to distinguish this sound from others by providing a human readable name for the attached sound should the user need to identify the sound among others within the UI.  The possible values for this attribute are defined by the XML Schema string datatype. |

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

<complexType [name](name.docx)="CT\_EmbeddedWAVAudioFile">

<attribute ref="r:embed" use="required"/>

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

<attribute name="builtIn" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [sp](sp.docx) (Shape)

This element specifies the existence of a single shape. A shape can either be a preset or a custom geometry, defined using the DrawingML framework. In addition to a geometry each shape can have both visual and non-visual properties attached. Text and corresponding styling information can also be attached to a shape. This shape is specified along with all other shapes within either the shape tree or group shape elements.

[Note: Shapes are the preferred mechanism for specifying text on a slide. [end](end.docx) note]

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| [nvSpPr](nvSpPr.docx) (Non-Visual Properties for a Shape) | § |
| [spPr](spPr.docx) (Shape Properties) | § |
| [style](style.docx) (Shape Style) | § |
| txSp (Text Shape) | § |

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

<complexType [name](name.docx)="CT\_GvmlShape">

<sequence>

<element name="[nvSpPr](nvSpPr.docx)" type="CT\_GvmlShapeNonVisual" minOccurs="1" maxOccurs="1"/>

<element name="[spPr](spPr.docx)" type="CT\_ShapeProperties" minOccurs="1" maxOccurs="1"/>

<element name="txSp" type="CT\_GvmlTextShape" minOccurs="0" maxOccurs="1"/>

<element name="style" type="CT\_ShapeStyle" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### spLocks (Shape Locks)

This element specifies all locking properties for a shape. These properties inform the generating application about specific properties that have been previously locked and thus should not be changed.

|  |
| --- |
| Parent Elements |
| [cNvSpPr](cNvSpPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§); [cNvSpPr](cNvSpPr.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| noAdjustHandles (Disallow Showing Adjust Handles) | Specifies that the generating application should not show adjust handles for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeArrowheads (Disallow Arrowhead Changes) | Specifies that the generating application should not allow arrowhead changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeAspect (Disallow Aspect Ratio Change) | Specifies that the generating application should not allow aspect ratio changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noChangeShapeType (Disallow Shape Type Change) | Specifies that the generating application should not allow shape type changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noEditPoints (Disallow Shape Point Editing) | Specifies that the generating application should not allow shape point changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noGrp (Disallow Shape Grouping) | Specifies that the generating application should not allow shape [grouping](grouping.docx) for the corresponding connection shape. That is it cannot be combined within other shapes to form a group of shapes. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noMove (Disallow Shape Movement) | Specifies that the generating application should not allow position changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noResize (Disallow Shape Resize) | Specifies that the generating application should not allow size changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noRot (Disallow Shape Rotation) | Specifies that the generating application should not allow shape rotation changes for the corresponding connection shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noSelect (Disallow Shape Selection) | Specifies that the generating application should not allow selecting of the corresponding connection shape. That means also that no picture, shapes or text attached to this connection shape can be selected if this attribute has been specified. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |
| noTextEdit (Disallow Shape Text Editing) | Specifies that the generating application should not allow editing of the shape text for the corresponding shape. If this attribute is not specified, then a value of false is assumed.  The possible values for this attribute are defined by the XML Schema boolean datatype. |

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

<complexType [name](name.docx)="CT\_ShapeLocking">

<sequence>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attributeGroup ref="AG\_Locking"/>

<attribute name="noTextEdit" type="xsd:boolean" use="optional" default="false"/>

</complexType>

##### [spPr](spPr.docx) (Shape Properties)

This element specifies the visual shape properties that can be applied to a shape.

|  |
| --- |
| Parent Elements |
| [cxnSp](cxnSp.docx) (§); lnDef (§); [pic](pic.docx) (§); [sp](sp.docx) (§); spDef (§); txDef (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [blipFill](blipFill.docx) (Picture Fill) | § |
| [custGeom](custGeom.docx) (Custom Geometry) | § |
| [effectDag](effectDag.docx) (Effect Container) | § |
| [effectLst](effectLst.docx) (Effect Container) | § |
| [extLst](extLst.docx) (Extension List) | § |
| [gradFill](gradFill.docx) (Gradient Fill) | § |
| [grpFill](grpFill.docx) (Group Fill) | § |
| ln (Outline) | § |
| [noFill](noFill.docx) (No Fill) | § |
| [pattFill](pattFill.docx) (Pattern Fill) | § |
| [prstGeom](prstGeom.docx) (Preset geometry) | § |
| [scene3d](scene3d.docx) (3D Scene Properties) | § |
| [solidFill](solidFill.docx) (Solid Fill) | § |
| [sp3d](sp3d.docx) (Apply [3D](3D.docx) shape properties) | § |
| [xfrm](xfrm.docx) (2D Transform for Individual Objects) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| bwMode (Black and White Mode) | Specifies that the picture should be rendered using only black and white coloring. That is the coloring information for the picture should be converted to either black or white when rendering the picture.  No gray is to be used in rendering this image, only stark black and stark white.  [Note: This does not mean that the picture itself that is stored within the file is necessarily a black and white picture. This attribute instead sets the rendering mode that the picture will have applied to when rendering. [end](end.docx) note]  The possible values for this attribute are defined by the [ST\_BlackWhiteMode](ST_BlackWhiteMode.docx) simple type (§). |

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

<complexType [name](name.docx)="CT\_ShapeProperties">

<sequence>

<element name="[xfrm](xfrm.docx)" type="CT\_Transform2D" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_Geometry" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_FillProperties" minOccurs="0" maxOccurs="1"/>

<element name="ln" type="CT\_LineProperties" minOccurs="0" maxOccurs="1"/>

<group ref="EG\_EffectProperties" minOccurs="0" maxOccurs="1"/>

<element name="[scene3d](scene3d.docx)" type="CT\_Scene3D" minOccurs="0" maxOccurs="1"/>

<element name="[sp3d](sp3d.docx)" type="CT\_Shape3D" minOccurs="0" maxOccurs="1"/>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

<attribute [name](name.docx)="bwMode" type="[ST\_BlackWhiteMode](ST_BlackWhiteMode.docx)" use="optional"/>

</complexType>

##### stCxn (Connection Start)

This element specifies the starting connection that should be made by the corresponding connector shape. This connects the head of the connector to the first shape.

|  |
| --- |
| Parent Elements |
| [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§); [cNvCxnSpPr](cNvCxnSpPr.docx) (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| id (Identifier) | Specifies the id of the shape to make the final connection to.  The possible values for this attribute are defined by the [ST\_DrawingElementId](ST_DrawingElementId.docx) simple type (§). |
| [idx](idx.docx) (Index) | Specifies the index into the connection site table of the final connection shape. That is there are many connection sites on a shape and it must be specified which connection site the corresponding connector shape should connect to.  The possible values for this attribute are defined by the XML Schema unsignedInt datatype. |

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

<complexType [name](name.docx)="CT\_Connection">

<attribute [name](name.docx)="id" type="[ST\_DrawingElementId](ST_DrawingElementId.docx)" use="required"/>

<attribute [name](name.docx)="[idx](idx.docx)" type="xsd:unsignedInt" use="required"/>

</complexType>

##### [style](style.docx) (Shape Style)

This element specifies the style information for a shape.

|  |
| --- |
| Parent Elements |
| [cxnSp](cxnSp.docx) (§); lnDef (§); [pic](pic.docx) (§); [sp](sp.docx) (§); spDef (§); txDef (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| effectRef (Effect Reference) | § |
| fillRef (Fill Reference) | § |
| fontRef (Font Reference) | § |
| lnRef (Line Reference) | § |

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

<complexType [name](name.docx)="CT\_ShapeStyle">

<sequence>

<element name="lnRef" type="CT\_StyleMatrixReference" minOccurs="1" maxOccurs="1"/>

<element name="fillRef" type="CT\_StyleMatrixReference" minOccurs="1" maxOccurs="1"/>

<element name="effectRef" type="CT\_StyleMatrixReference" minOccurs="1" maxOccurs="1"/>

<element name="fontRef" type="CT\_FontReference" minOccurs="1" maxOccurs="1"/>

</sequence>

</complexType>

##### sx (Horizontal Ratio)

This element specifies the horizontal ratio for use within a [scaling](scaling.docx) calculation.

|  |
| --- |
| Parent Elements |
| scale (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| d (Denominator) | Specifies the denominator to be used within the equation.  The possible values for this attribute are defined by the XML Schema long datatype. |
| n (Numerator) | Specifies the numerator to be used within the equation.  The possible values for this attribute are defined by the XML Schema long datatype. |

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

<complexType [name](name.docx)="CT\_Ratio">

<attribute [name](name.docx)="n" type="xsd:long" use="required"/>

<attribute [name](name.docx)="d" type="xsd:long" use="required"/>

</complexType>

##### sy (Vertical Ratio)

This element specifies the vertical ratio for use within a [scaling](scaling.docx) calculation.

|  |
| --- |
| Parent Elements |
| scale (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| d (Denominator) | Specifies the denominator to be used within the equation.  The possible values for this attribute are defined by the XML Schema long datatype. |
| n (Numerator) | Specifies the numerator to be used within the equation.  The possible values for this attribute are defined by the XML Schema long datatype. |

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

<complexType [name](name.docx)="CT\_Ratio">

<attribute [name](name.docx)="n" type="xsd:long" use="required"/>

<attribute [name](name.docx)="d" type="xsd:long" use="required"/>

</complexType>

##### [txBody](txBody.docx) (Shape Text Body)

This element specifies the existence of text to be contained within the corresponding shape. All visible text and visible text related properties are contained within this element. There can be multiple paragraphs and within paragraphs multiple runs of text.

|  |
| --- |
| Parent Elements |
| [tc](tc.docx) (§); txSp (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| bodyPr (Body Properties) | § |
| lstStyle (Text List Styles) | § |
| p (Text Paragraphs) | § |

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

<complexType [name](name.docx)="CT\_TextBody">

<sequence>

<element name="bodyPr" type="CT\_TextBodyProperties" minOccurs="1" maxOccurs="1"/>

<element name="lstStyle" type="CT\_TextListStyle" minOccurs="0" maxOccurs="1"/>

<element name="p" type="CT\_TextParagraph" minOccurs="1" maxOccurs="unbounded"/>

</sequence>

</complexType>

##### txSp (Text Shape)

This element specifies the existence of a text shape within a parent shape. This text shape is specifically used for displaying text as it has only text related child elements.

|  |
| --- |
| Parent Elements |
| [grpSp](grpSp.docx) (§); [lockedCanvas](lockedCanvas.docx) (§); [sp](sp.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Extension List) | § |
| [txBody](txBody.docx) (Shape Text Body) | § |
| useSpRect (Use Shape Text Rectangle) | § |
| [xfrm](xfrm.docx) (2D Transform for Individual Objects) | § |

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

<complexType [name](name.docx)="CT\_GvmlTextShape">

<sequence>

<element name="[txBody](txBody.docx)" type="CT\_TextBody" minOccurs="1" maxOccurs="1"/>

<choice>

<element name="useSpRect" type="CT\_GvmlUseShapeRectangle" minOccurs="1" maxOccurs="1"/>

<element name="[xfrm](xfrm.docx)" type="CT\_Transform2D" minOccurs="1" maxOccurs="1"/>

</choice>

<element name="[extLst](extLst.docx)" type="CT\_OfficeArtExtensionList" minOccurs="0" maxOccurs="1"/>

</sequence>

</complexType>

##### useSpRect (Use Shape Text Rectangle)

This element specifies that the text rectangle from the parent shape should be used for this text shape. If this attribute is specified then the text rectangle, or text bounding box as it is also called should have the same dimensions as the text bounding box of the parent shape within which this text shape resides.

|  |
| --- |
| Parent Elements |
| txSp (§) |

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

<complexType [name](name.docx)="CT\_GvmlUseShapeRectangle"/>