

### 1 5.8.6.1 Effects Lists

```

<p:sp>
  <p:nvSpPr>...
  <p:spPr>
    <a:xfrm>...
    <a:prstGeom prst="star5">...
    <a:effectLst>
      <a:glow rad="190500">
        <a:schemeClr val="accent5">
          <a:alpha val="80000"/>
        </a:schemeClr>
      </a:glow>
      <a:outerShdw blurRad="50800" dist="50800"
        dir="2700000" algn="tl"
        rotWithShape="0">
        <a:srgbClr val="000000">
          <a:alpha val="43137"/>
        </a:srgbClr>
      </a:outerShdw>
      <a:reflection stA="75000" endA="10000"
        dist="101600" dir="5400000"
        sy="-100000" algn="bl"
        rotWithShape="0"/>
      <a:softEdge rad="31750"/>
    </a:effectLst>
    <a:scene3d>...
    <a:sp3d>...
  </p:spPr>
  <p:style>...
  <p:txBody>...
</p:sp>

```

2

3 An effect list is made up of one or more primitive effects that can be applied one after another. The primitives  
4 are:

- 5 Blur
- 6 fillOverlay
- 7 glow
- 8 innerShdw
- 9 outerShdw
- 10 prstShdw
- 11 reflection
- 12 softEdge

### 13 5.8.6.2 Blur

14 Blur blurs all color channels, including alpha. Two attributes, rad (radius of blur) and grow (boolean), apply  
15 here. grow specifies if the bounds should grow as a result of the blurring.

### 1 5.8.6.3 Inner Shadow

```

1 <a:effectLst>
2   <a:innerShdw blurRad="317500"
3     dist="293171"
4     dir="13500000">
5     <a:srgbClr val="000000">
6       <a:alpha val="43000"/>
7     </a:srgbClr>
8   </a:innerShdw>
9 </a:effectLst>

```



3 Inner Shadows contain a color choice, as well as three attributes:

- 4 • blurRad: blur radius
- 5 • dist: how far to offset the shadow
- 6 • dir: direction to offset the shadow

### 7 5.8.6.4 Outer Shadow

```

1 <a:effectLst>
2   <a:outerShdw blurRad="50800" dist="50800"
3     dir="2700000"
4     sx="106000" sy="106000"
5     algn="t1" rotWithShape="0">
6     <a:srgbClr val="000000">
7       <a:alpha val="43137"/>
8     </a:srgbClr>
9   </a:outerShdw>
10 </a:effectLst>

```



10 Outer shadows contain a color choice as well as several attributes:

- 11 • blurRad: blur radius
- 12 • dist: how far to offset the shadow
- 13 • dir: direction to offset the shadow
- 14 • sx, sy: horizontal/vertical scale factors
- 15 • kx, ky: horizontal/vertical skew angles

- `algn`: shadow alignment. Alignment happens first and effectively sets the origin for scale, skew, and offset
- `rotWithShape`: (boolean) Rotate shadow with shape

#### 5.8.6.5 Preset Shadows

Preset shadows consist of a color choice, and a preset shadow:

```
shdw1
shdw2
shdw3
shdw4
shdw5
shdw6
shdw7
shdw8
shdw9
shdw10
shdw11
shdw12
shdw13
shdw14
shdw15
shdw16
shdw17
shdw18
shdw19
shdw20
```

The attributes for Preset Shadows are:

- `dist`: how far to offset the shadow
- `dir`: direction to offset the shadow

#### 5.8.6.6 Reflection Effects

```
<a:effectLst>
  <a:reflection blurRad="12700" stA="50000" endPos="75000"
    dist="12700" dir="5400000" sy="-100000"
    algn="bl" rotWithShape="0"/>
</a:effectLst>
```



Reflection Effect

Reflections are represented entirely through attributes:

- blurRad: Blur Radius
- stA: (Start Alpha) starting reflection opacity
- stPos: start position along gradient ramp of start alpha value
- endA: (End Alpha) ending reflection opacity
- endPos: end position along gradient, ramp of end alpha value
- dist: how far to offset reflection
- dir: Direction to offset reflection
- fadeDir: direction of alpha gradient, ramp relative to shape itself
- sx, sy: horizontal/vertical scale factors
- kx, ky: horizontal/vertical skew angles
- algn: reflection alignment
- rotWithShape: (boolean)
- rotate: reflection with shape

#### 5.8.6.7 Soft Edge Effects

```
<a:effectLst>
  <a:softEdge rad="127000"/>
</a:effectLst>
```



Soft Edge Effect

Soft Edge blurs the edges of the applied object subject to the specified blur radius rad.

#### 5.8.6.8 Glow Effects

```
<a:effectLst>
  <a:glow rad="101600">
    <a:schemeClr val="accent2">
      <a:alpha val="60000"/>
    </a:schemeClr>
  </a:glow>
</a:effectLst>
```

A glow effect is very similar to a soft edge effect, but differs in that it permits a color specification in addition to rad. Basically, a glow is a soft edge effect, except with the color specified used instead of the object's color.

## 5.9 Shape Definitions and Attributes

### 5.9.1 Introduction

This document provides a high-level overview of the content described in the dml-shapeGeometry.xsd schema.

This aspect of DrawingML deals mainly with the shapes and their attributes, and is broken down into two topics:

- Working with preset shapes