

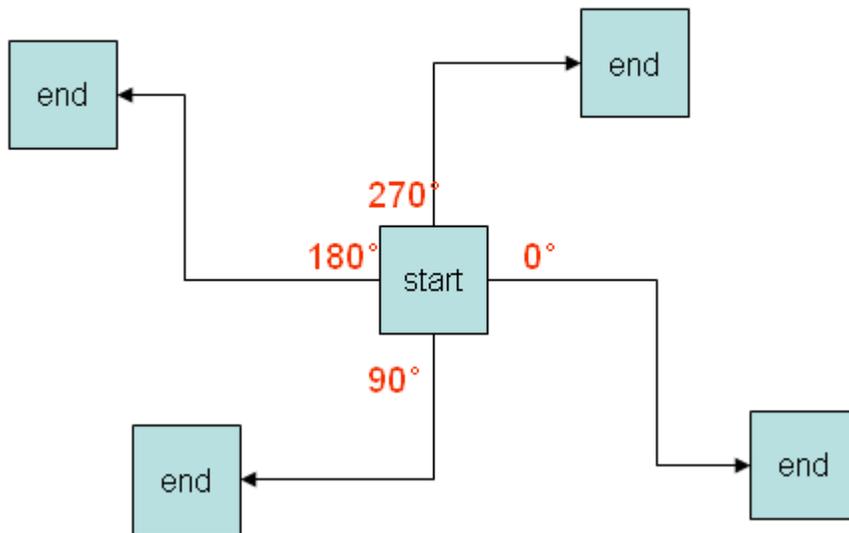
## Solution

AOO use polygon[] to describe the bent connector. MS use angle, flip, adjust value and connector type to describe the bent connector. So It is necessary to calculate the above four factor by polygon[]. Convert in function EscherPropertyContainer::CreateConnectorProperties() in file “\main\filter\source\msfilter\escherex.cxx”.

Convert detail:

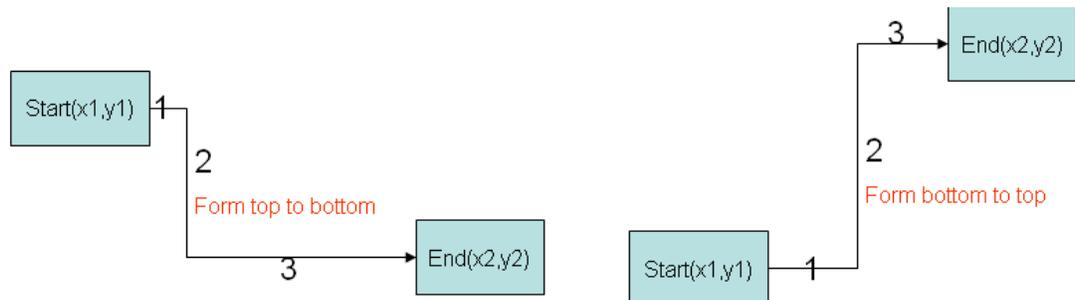
### 1) Angle

#### Four angle



### 2) Flip

This attribute defines that the shape will be flipped vertically about the center of its bounding box. Generally, draw the connector from top to bottom, from left to right when meet the adjust value, but when  $(X1 > X2$  or  $Y1 > Y2$ ), then draw director must be reverse.

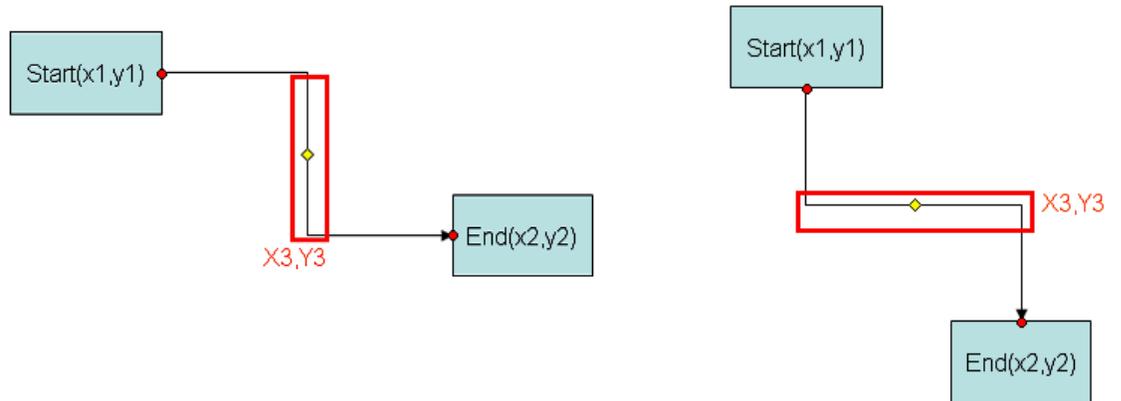


### 3) Adjust value

- Definition: Adjust value decide the position which connector should turn a corner.
- Formula:

Vertical adjust value  $= (X3 - X1) / (X2 - X1)$

Horizontal adjust value  $= (Y3 - Y1) / (Y2 - Y1)$

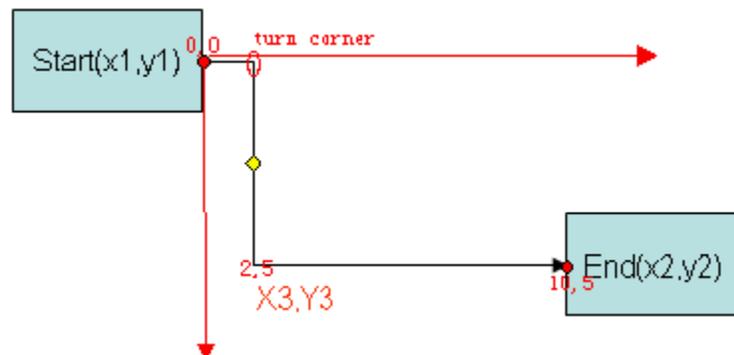


- example:

Suppose:

$X1=0, X2=10, X3=2$

$Adj = (2-0)/(10-0) = 1/5$



4) bentconnector type

connector type in MS, describe in ECMA page 4627:

"straightConnector1"

"bentConnector2"

"bentConnector3"

"bentConnector4"

"bentConnector5"

<p>bentConnector2 (Bent Connector 2 Shape)</p>	<p>Specifies a preset shape geometry. This geometry shall be designed to match the normative image below.</p> <p>[<i>Note</i>: An example of DrawingML which may be used to generate this preset shape definition is contained in the bentConnector2 element in the preset shape geometries electronic addenda of Annex D. The constants used in that markup are guides that are described in further detail above. <i>end note</i>]</p> 
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