## 11.6.7 Rules for Line Join Rendering

The appearance of line joins is controlled by the **StrokeLineJoin** attribute. Valid values are Round, Bevel, and Miter.

## 11.6.7.1 Round Line Joins

A **StrokeLineJoin** attribute value of Round indicates that the outer corner of the joined lines should be filled by enclosing the rounded region with its center point at the point of intersection between the two lines and a radius of one-half the stroke thickness value.

Figure 11–14. Round line join with right angle

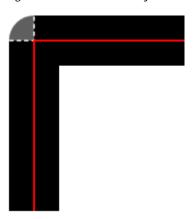
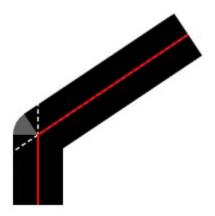


Figure 11-15. Round line join with acute angle



Figure 11–16. Round line join with obtuse angle



## 11.6.7.2 Beveled Line Joins

A **StrokeLineJoin** attribute value of Bevel indicates that the outer corner of the joined lines should be filled by enclosing the triangular region of the corner with a straight line between the outer corners of each stroke.

Figure 11–17. Beveled line join with right angle

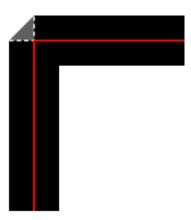
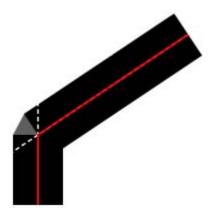


Figure 11-18. Beveled line join with acute angle



Figure 11–19. Beveled line join with obtuse angle



## 11.6.7.3 Mitered Line Joins

If the **StrokeLineJoin** attribute value is Miter, the value of the **StrokeMiterLimit** attribute value is also used for rendering these joins. A **StrokeLineJoin** value of Miter indicates that the region to be filled includes the intersection of the strokes projected to infinity, and then clipped at a specific distance. The intersection of the strokes is clipped at a line perpendicular to the bisector of the angle between the strokes, at the distance equal to the stroke miter limit value multiplied by half the stroke thickness value.

When drawing mitered line joins, the presence of one or more degenerate line segments between the non-degenerate line segments to be joined results in a mitered line join of only the two non-degenerate line segments with an implied **StrokeMiterLimit** attribute value of 1.0.

Figure 11–20. Mitered line join with right angle and miter limit of 1.0

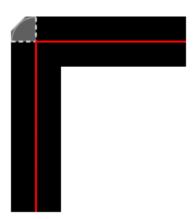


Figure 11–21. Mitered line join with acute angle and miter limit of 1.0



Figure 11–22. Mitered line join with obtuse angle and miter limit of 1.0

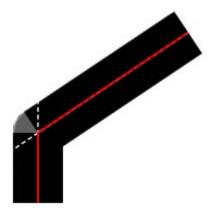


Figure 11–23. Mitered line join with right angle and miter limit of 2.0

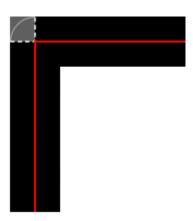


Figure 11–24. Mitered line join with acute angle and miter limit of 2.0

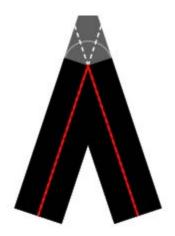


Figure 11–25. Mitered line join with acute angle and miter limit of 10.0

