#### lin (Linear Gradient Fill)

This element specifies a linear gradient.

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| Parent Elements |
| [gradFill](gradFill.docx) (§) |

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| Attributes | Description |
| ang (Angle) | Specifies the direction of color change for the gradient. To define this angle, let its value be x measured clockwise. Then ( -sin x, cos x ) is a vector parallel to the line of constant color in the gradient fill.  The possible values for this attribute are defined by the [ST\_PositiveFixedAngle](ST_PositiveFixedAngle.docx) simple type (§). |
| scaled (Scaled) | Whether the gradient angle scales with the [fill](fill.docx) region. Mathematically, if this flag is true, then we scale the gradient vector ( cos x , sin x ) by the width (w) and height (h) of the [fill](fill.docx) region, so that the vector becomes ( [w](w.docx) cos x, [h](h.docx) sin x ) (before normalization). Observe that now if the gradient angle is 45 degrees, the gradient vector is ( [w](w.docx), [h](h.docx) ), which goes from top-left to bottom-right of the [fill](fill.docx) region. If this flag is false, the gradient angle is independent of the [fill](fill.docx) region and will not be scaled using the manipulation described above. So a 45-degree gradient angle always give a gradient band whose line of constant color is parallel to the vector (1, -1).  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\_LinearShadeProperties">

<attribute [name](name.docx)="ang" type="[ST\_PositiveFixedAngle](ST_PositiveFixedAngle.docx)" use="optional"/>

<attribute [name](name.docx)="scaled" type="xsd:boolean" use="optional"/>

</complexType>