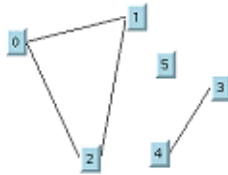


Glossary

affine	Affine transforms are commonly used in coordinate transformation. An affine transform is simply defined by a 4x4 double values matrix, and are applied to coordinates by multiplying them as if they were one 1x4 matrix.
animation	Animation is the process of displaying quickly a series of images. Each image is slightly different from the last one to give the illusion of a moving scene.
animation engine	Allows you to control and monitor animations at the application level. In most cases, users do not have to access the animation engine.
automatic layout	A layout process where the layout algorithm does everything without any user intervention
Bezier	In the mathematical field of numerical analysis, a Bézier curve is a parametric curve important in computer graphics. Generalizations of Bézier curves to higher dimensions are called Bézier surfaces, of which the Bézier triangle is a special case.
clipping path	A clipping path on a graphic object restricts the region to which the graphic object can be painted. All the drawings that are outside the region bounded by the currently active clipping path are not drawn.
CLR	Common Language Runtime
connected component	A connected graph or subgraph. A connected component of a flat graph G is a maximal connected subgraph of G.
connection	Another name for an edge of a graph. See also edge.
container object	Graphic objects containing other objects.

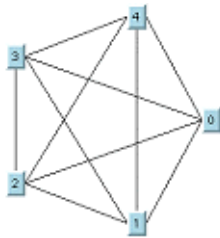
CSS	Cascading Style Sheets. A mechanism for adding style, such as fonts, colors, spacing, to Web documents. The CSS language is specified by World Wide Web Consortium (W3C) Recommendations.
cycle	A path of a graph that begins and ends on the same node. Also called a loop.
cyclic graph	A graph that contains cycles.
deserialize	Is the process of reading an object from a storage medium (such as a file, or a memory buffer) identical in its internal state to the original object. See also serialize.
Diagram Designer	Point-and-click editor that allows you to design diagrams and new graphic objects (user symbols) by dragging graphic objects to the Design view.
disconnected graph	A graph containing at least two nodes that are not linked by a path. In the following illustration, node 5 is not linked by a path to any other node. Nodes 3 and 4 are not linked by a path to any nodes other than nodes 3 and 4.



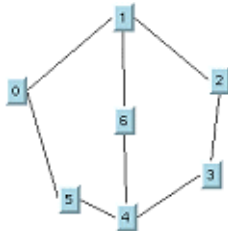
DOM	Document Object Model
edge	A line connecting two vertices in a graph. An edge is also called a link or a connection.
filter	A filter consists of a sequence of filter operations on an image, such as blur or lighting effect, and produces an image that can be used as the input for the next operation.
fixed link	A link which remains in the same position during graph layout or link layout. If the user specifies a link as fixed, layout algorithms are not allowed to reshape this link.
fixed node	A node which remains in the same position during graph layout or link layout. If the user specifies a node as fixed, layout algorithms are not allowed to move this node.
flat graph	The converse of a nested graph: a graph of which no node is itself a graph. See nested graph.

graph	A finite set of nodes (also called vertices) connected by a finite set of links (also called edges or connections).
graph layout	The process that applies a layout algorithm to a graph. Also the graph drawing that results from the layout process.
grid drawing	A drawing where nodes and link bends have discrete (integer) coordinates.
image map	Images on the client side with an attached map that points out certain hot spots or clickable areas. They are typically used for displaying tooltips.
incremental layout	A layout process where the result of a previous layout is used as the starting point for applying the layout algorithm a second time to a modified graph in order to minimize the changes.
incident	A link-node connection. A link is incident to a node if the node is at one end of the link. A node is incident to a link if that link is incident to the node.
interactor	A class that handles user interactions involving a simple or complex combination of events in a diagram view
intergraph link	In a nested graph, a link whose end nodes are contained in different subgraphs.
label	Label is a text or decoration that is placed close to some graphic object.
layout algorithm	The process that computes new coordinates for nodes and/or new shapes for links in order to obtain a suitable representation of a graph.
layout region	In the context of graph layout, the rectangle where the graph drawing will be placed when the graph is laid out.
link	Graphic object used to draw a connection between two other graphic objects. Links are useful to build graphs, for example flow chart diagrams, business process diagrams.
link bundle	A set of links (edges) between a given pair of nodes in a graph, drawn as a set of parallel lines. See also, multiple link.
link crossing	Link crossings occur when links intersect at places other than an incident node. Also called edge crossings. Often, layout algorithms are used to minimize the number of link crossings.
listener	An interface allowing you to connect events that occur in the manager view with actions to be performed.

- multiple link** More than one link between the same origin and destination nodes.
- nested graph** A graph that contains nodes that are graphs, that is, a graph that contains nested subgraphs.
- node** Another name for a vertex of a graph.
- nonplanar graph** A graph that cannot be drawn without any links crossing other links.



- NP-complete** A class of computational problems for which no efficient solution algorithm has been found. Many significant computer science problems, including many graph layout problems, belong to this class.
- orthogonal drawing** A drawing where each link is drawn as a polygonal chain of alternating horizontal and vertical segments.
- panel** A panel is a rectangular container in which children are laid out.
- path** A sequence of consecutive nodes leading from one node to another using the links of the graph. It is the route along the links through the nodes in a graph. The length of a path is the number of links traversed.
- planar graph** A graph that can be drawn with no links crossing other links.



- print document** Contains all the information needed to print a diagram. It describes settings related to the printer such as the printer name, the paper size, or the paper

orientation.

rich client

A way of deploying a client/server application such that the client performs most of the processing itself rather than depending on the server facilities. All users have to install and maintain their own copy of the program but may be able to do useful work when disconnected from the server. User response can be quicker and more intelligent due to application state existing locally ("model" as well as "view").

scale

A scale is a graphic object that draws a sequence of small lines (ticks) with labels along a base line. Scales are typically used to build symbols representing gauges and charts.

seed value

The value that is used for the initialization of a random number generator. Some layout algorithms use random numbers during the layout computation.

segment

Segments can be lines, arcs, Bezier or quadratic Bezier segments.

self-link

A link whose origin and destination nodes are the same node.

semiautomatic layout

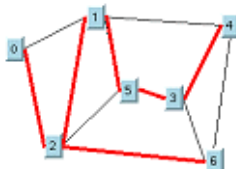
A layout process where the user makes manual improvements to the result of the automatic layout process.

serialize

Is the process of saving an object onto a storage medium (such as a file, or a memory buffer) or to transmit it across a network connection link, either in binary form, or in some human-readable text format such as XML. See also deserialize.

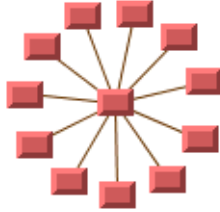
spanning tree

A minimal subgraph, defined as follows: A spanning tree S of a flat graph G is a subgraph of G containing all the nodes of the graph and whose links are a subset of the links of the graph. The number of links of G that are not present in S must be the minimum number for which there are no cycles in S. The spanning tree is shown by the red links in the following illustration.



star

A type of network topology where the nodes are arranged on a circle with each node being connected to a center node.



straight-line

Denotes a drawing where each link is drawn as a straight line segment.

subgraph

A graph that is contained in another graph. In flat graphs, G' is a subgraph of G if its node and link sets are included in the node and link sets of G .

swim lane

Swim lanes (also known as the Rummler-Brache approach) provide a way of imposing organizational structure on processes. The lanes, which are organizational bands representing different participants or departments in an organization, are placed around subsets of the process steps. The swim lane enclosing a set of steps delineates the ownership of those steps for process management purposes.

tick

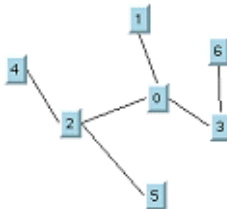
A sequence of small lines, orthogonal to the base line. There are two types of tick: major tick and minor tick.

topology

The structure of a graph. Two drawn graphs have the same topology if you can obtain one drawing from the other by moving the nodes and reshaping the links.

tree

An undirected tree is a connected undirected cyclic graph (that is, a graph that does not contain any cycles). A directed tree is a connected directed graph where each node has exactly one incoming link except the root node, which has no incoming links.



vertex

A 'dot' in a graph. A graph consists of a finite set of vertices connected by a finite set of edges (also called links or connections). A vertex is also called a

node. In this documentation, the term node is primarily used for the term vertex.

