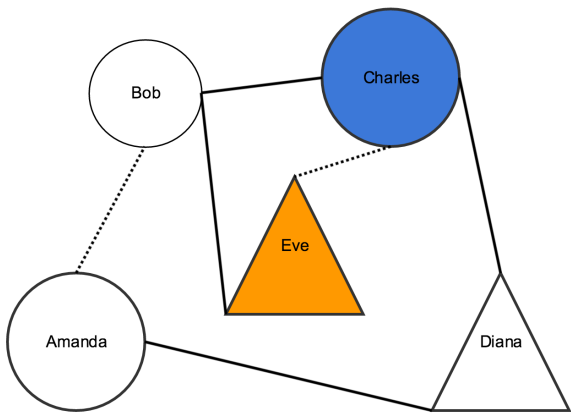


# Chord

You build network visualizations using network graphs. Here's a visual representation of a network graph:



Network graphs are a series of *nodes* connected by edges or *links*.

In the example above, the shapes are all nodes. The lines that connect two shapes are links. Nodes and links are components of the graph.

In our example, links and nodes also have different styling. For example, some links are dotted lines, and some are solid lines. Some nodes are circles and some are triangles. In Visualizations, the styling is also a component of your network graph.

Each row in the Network spreadsheet represents a graph component. Row formatting depends on the component type. You can have as many components as you like, as long as they are in one of these categories:

- "node" – places a node
- "link" – places a link
- "class" – styles a node or link by creating a specific styling class, or styling type

You can add components in any order.

To add nodes, make a row with the following data:

	Column 1	Column 2	Column 3	Column 4	Column 5
Data Types	plain text	plain text	plain text	plain text	plain text

<b>Contents</b>	"node"  <b>Note:</b> <ul style="list-style-type: none"> <li>• This sets the component type.</li> <li>• "node" must be included in the first column of every row that defines a node</li> </ul>	The id for the node  <b>Note:</b> <ul style="list-style-type: none"> <li>• Makeidsunique and specific to each node</li> <li>• Idsdonotappearonth egraph, but are used to create links between nodes</li> </ul>	The label for the node  <b>Note:</b> <ul style="list-style-type: none"> <li>• Labels appear on the node in visualizati on</li> </ul>	The name of the node's class type.  <b>Note:</b> <ul style="list-style-type: none"> <li>• To define class types, create a "node-class" row (see the <a href="#">n ode class table</a>)</li> <li>• This determines the node's style</li> </ul>	Tooltip text for the node  <b>Note:</b> <ul style="list-style-type: none"> <li>• This text will appear when a user hovers over a node.</li> </ul>
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To add links that connect two nodes, make a row with the following data:

	Column 1	Column 2	Column 3	Column 4
<b>Data Types</b>	plain text	plain text	plain text	plain text
<b>Contents</b>	"link"  <b>Note:</b> <ul style="list-style-type: none"> <li>• This sets the component type.</li> <li>• "link" must be included in the first column of every row that places a link</li> </ul>	The id for the first node in the relationship  <b>Note:</b> <ul style="list-style-type: none"> <li>• Define node ids when you create nodes</li> <li>• Learn more about node ids in Column 2 of the "add nodes" section of this guide</li> </ul>	The class type for the link  <b>Note:</b> <ul style="list-style-type: none"> <li>◦ To define class types, create a "link-class" row (see the <a href="#">link class table</a>)</li> <li>◦ This determines the link's style</li> <li>◦ The class type describes how the nodes are related</li> </ul>	The id for the second node in the relationship  <b>Note:</b> <ul style="list-style-type: none"> <li>• Define node ids when you create nodes</li> <li>• Learn more about node ids in</li> <li>• Column 2 of the "add nodes" section of this guide</li> </ul>

To style nodes, make a row with the following data:

	Column 1	Column 2	Column 3	Column 4
<b>Data Types</b>	plain text	plain text	plain text	plain text

<b>Contents</b>	"class"  <b>Note:</b> <ul style="list-style-type: none"> <li>• This sets the component type.</li> <li>• "class" must be included in the first column of every row that defines a style</li> </ul>	The name of the class type  <b>Note:</b> <ul style="list-style-type: none"> <li>• This lets you quickly reference the node styling when you create a node</li> <li>• Learn more at Column 4 of the "add nodes" section</li> </ul>	The property name  <b>Note:</b> <ul style="list-style-type: none"> <li>◦ This defines what node style element the class will affect (for example, color or shape)</li> <li>◦ Find a full list of property names you can use in the <a href="#">Appendix below</a></li> </ul>	The value for the property in Column 3  <b>Note:</b> <ul style="list-style-type: none"> <li>◦ This defines what style the node will have, depending on the property. For example, if Column 3 was "color", this Column might be "blue"</li> <li>◦ Find full list of property names you can use in the <a href="#">Appendix below</a></li> </ul>
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To style links, make a row with the following data:

	Column 1	Column 2	Column 3	Column 4
<a href="#">Data Types</a>	plain text	plain text	plain text	plain text
<b>Contents</b>	"class"  <b>Note:</b> <ul style="list-style-type: none"> <li>• This sets the component type.</li> <li>• "class" must be included in the first column of every row that defines a style</li> </ul>	The name of the class type  <b>Note:</b> <ul style="list-style-type: none"> <li>• This lets you quickly reference the link styling when you create a link</li> <li>• Learn more at Column 4 of the "add links" section</li> </ul>	The property name  <b>Note:</b> <ul style="list-style-type: none"> <li>◦ This defines what link style element the class will affect (for example, color or shape)</li> <li>◦ Find a full list of property names you can use in the <a href="#">Appendix below</a></li> </ul>	The value for the property in Column 3  <b>Note:</b> <ul style="list-style-type: none"> <li>◦ This defines what style the link will have, depending on the property. For example, if Column 3 was "color", this Column might be "blue"</li> <li>◦ Find full list of property names you can use in the <a href="#">Appendix below</a></li> </ul>

## Customization Options

Go to [Common Customization Options](#) to see the rest of the options

Background color

sets the background color of your chord graph

- Click the colored square to choose a color
- Learn more about [choosing colors](#)

Space for labels

sets the space between chord labels

- Type in a higher number to have less space between labels and a smaller overall graph
- Type in a lower number to have more space between labels and a larger overall graph

#### Width of group band

sets the width of the outer rim of the graph

- Type in a lower number for a thinner band
- Type in a higher number for a thicker band

#### Link line width

sets the thickness of the chords

- Type in a higher number for a thicker outline
- Type in a lower number for a thinner outline

#### Link colors

sets the color of the links throughout the graph

- Click the colored square to show the ColorPicker tool
- Choose a color for each section of the graph by clicking the squares at the top of the ColorPicker tool

#### Fill links

sets whether the chords are filled or outlined in color

- "True" fills the chords with color
- "False" outlines the chords in color

## Appendix

Node property names and allowed values:

property name	definition	allowed values
color	The color of the node	Either an RGB color expressed in hexadecimal numbers prefixed with a '#' or one of these color names: blue, red, green
alpha	The transparency of the node	A number between 0 and 1, where 1 is maximally opaque

Link property names and allowed values:

property name	definition	allowed values
color	The color of the link	Either an RGB color expressed in hexadecimal numbers prefixed with a '#' or one of these color names: blue, red, green
alpha	The transparency of the link	A number between 0 and 1, where 1 is maximally opaque