FREEPLANE NEW

NEW SERIES ON BUILDING MINDMAPS
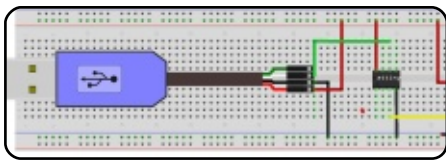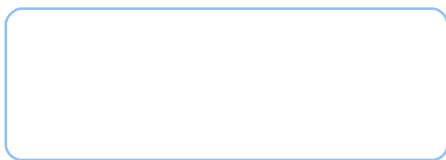
contents ^

Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

HowTo

Graphics

`#An alias to make the ls command more detailed alias ls = "ls -la --color=always --classify"`
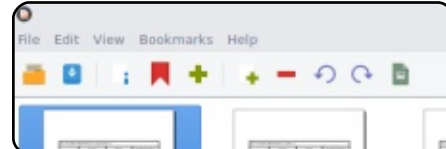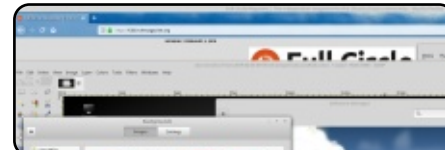
Freeplane is a program for creating mind maps. The program is versatile enough to fit anyone's mapping style. You can make the maps as simple or as complex as you need for your application. Freeplane is available in the Ubuntu Software Center or online at their web page, https://www.freeplane.org/wiki/index.php/Main_Page.

What Is a Mind Map?

A mind map is a visual diagram for organizing ideas and information. Use a mind map to brainstorm a new idea, create a process, or organize your thoughts. A mind map can help you keep notes during a lecture and see patterns you might otherwise miss. I've used mind maps through the years to write stories and articles, and create the processes for programs. I also used mind maps to create teaching and training curricula. Yes, I know other tools exist for doing these things, but a mind map gives me something other tools don't. With a mind map, I can see the entire program structure and functions. Other tools don't give me this broad overview. Being able to see the entire thought process allows me to see connections I would otherwise miss.

The basic structure of a mind map starts with a central topic. This is the idea, class, process, or topic you are mapping. From the central topic, the map branches into several subtopics related to the topic. The subtopics can branch out to other child topics, and those child topics out to other child topics. The branches can go as deep as needed for the topic.

Installation

You can download Freeplane from the Ubuntu Software Center. I'm starting with the latest download version, 1.6.10. While you can follow along with the version available in the Software Center, I will discuss new features found in 1.6. You can download version 1.6 from the Freeplane home page, https://www.Freeplane.org/wiki/index.php/Main_Page. Freeplane is a Java program. If you are running the latest Java runtime, you should have no problems running Freeplane.

Program Workspace

The program has a standard layout with the menus and toolbars at the top, and a workspace at the bottom. On the left-hand side, you can pull out an Icons toolbar, and on the right-hand side, you can pull out the Tool Panel. By default, you can pop up the Note panel at the bottom. In the Preferences, you can change where the Note panel docks.

The menu bar sits below the
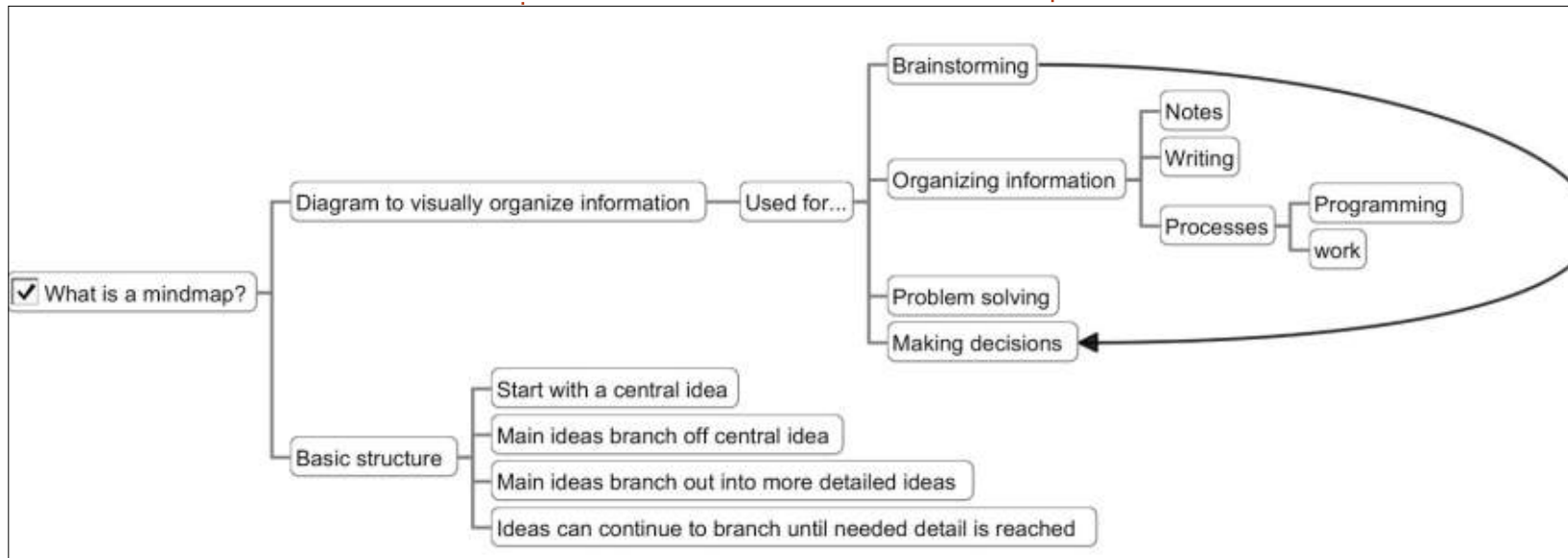
title bar. The menus give you access to the program's commands.

The program has several toolbars. The main toolbar shows by default. The main toolbar gives you access to save options and common formatting actions. The Filter toolbar allows you to filter what nodes of the map show,

making it a handy search tool. The F-Bar shows the actions assigned to the F-Keys. You can customize the actions assigned to the F-Keys. The Icon toolbar gives you a set of icons for marking nodes in your maps. And the status bar sits at the bottom of the window. The status bar displays information about the current map or selected node. The Filter, F-Bar, Icon, and status bars

hide by default, but you can activate them through the menu View > Controls.

The workspace in the middle is where you will build your map. You can have many maps open at one time, and each one displays a tab at the top of the workspace. Scrollbars hide by default, but you can show them using the View >

Controls menus. You can click and drag on a blank space in the map area to move the map around. The wheel on your mouse will scroll the map up and down. Hold the SHIFT key and scroll the mouse wheel to move the map left and right.

Your First Mind Map

Enough talk! Let's make our first map. If you haven't already done so, install and open Freeplane. Create a new map by selecting File > New Map from the menus. In the template dialog, select the standard template. In the 1.6 version, the name is standard-1.6.mm. This creates a new map with a root topic in the center of the screen. Type in a name for your topic like "My First Map." Press the Enter key to save the name.

To create subtopics for your main topic, press the Insert key on the keyboard. Nodes that are one level deeper than the current node are called child nodes of the current node. Type the text for the subtopic, and press the Enter key. Create more subtopics by pressing the Enter key. Nodes on the same level are called siblings in
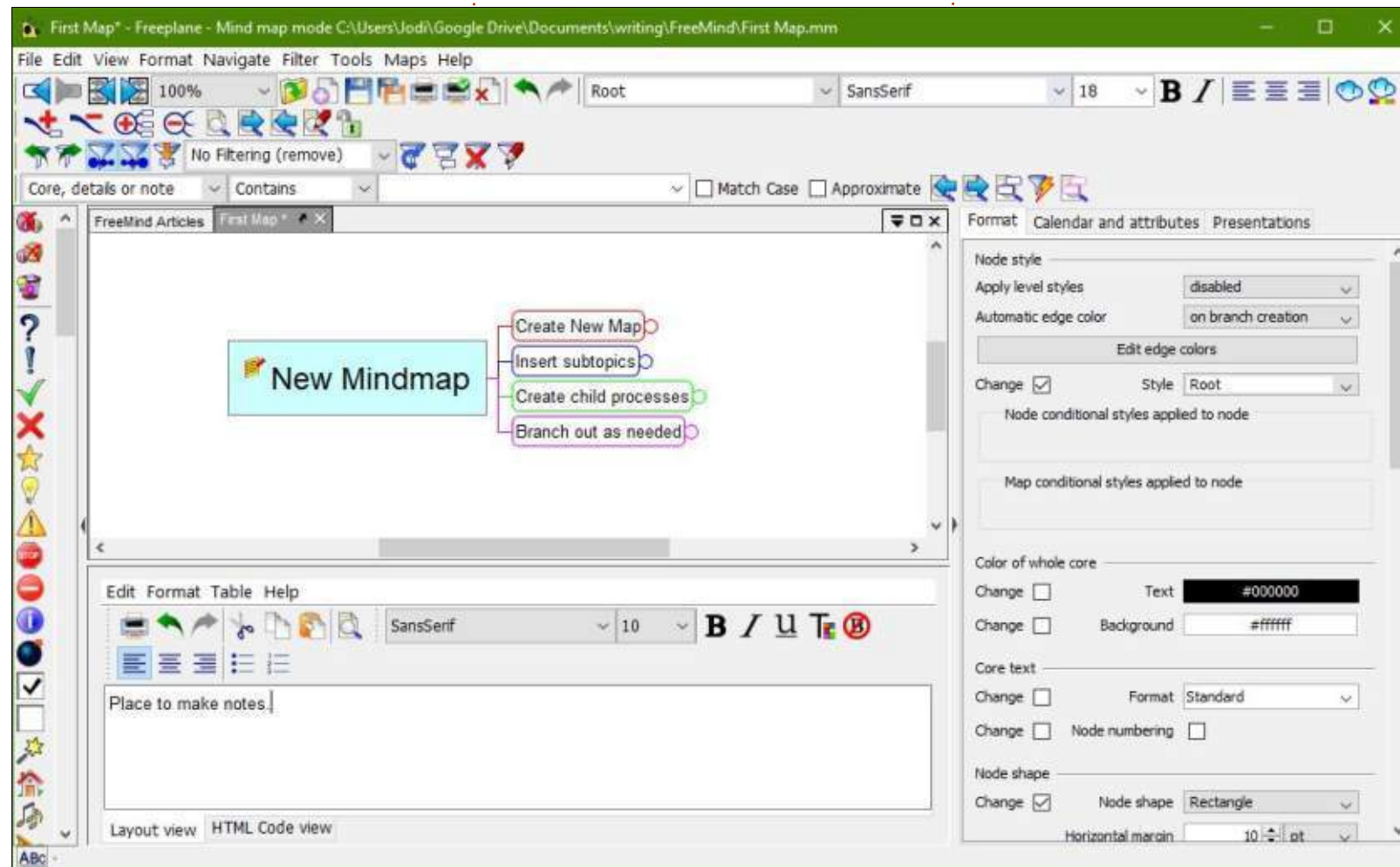
Freeplane. Create several subtopics by pressing Enter and typing in some text.

Now, let's create child nodes of a subtopic. Select one of the subtopics and press the Insert key. Type a name for the new node. Press Enter to create siblings of the new node or Insert to create a child of the new node.

Branch out as far and using as many nodes as you need. The depth of your map is only limited by the needs of your mind and topic.

Next time we will look at some of the core elements of Freeplane, and do more with our map.
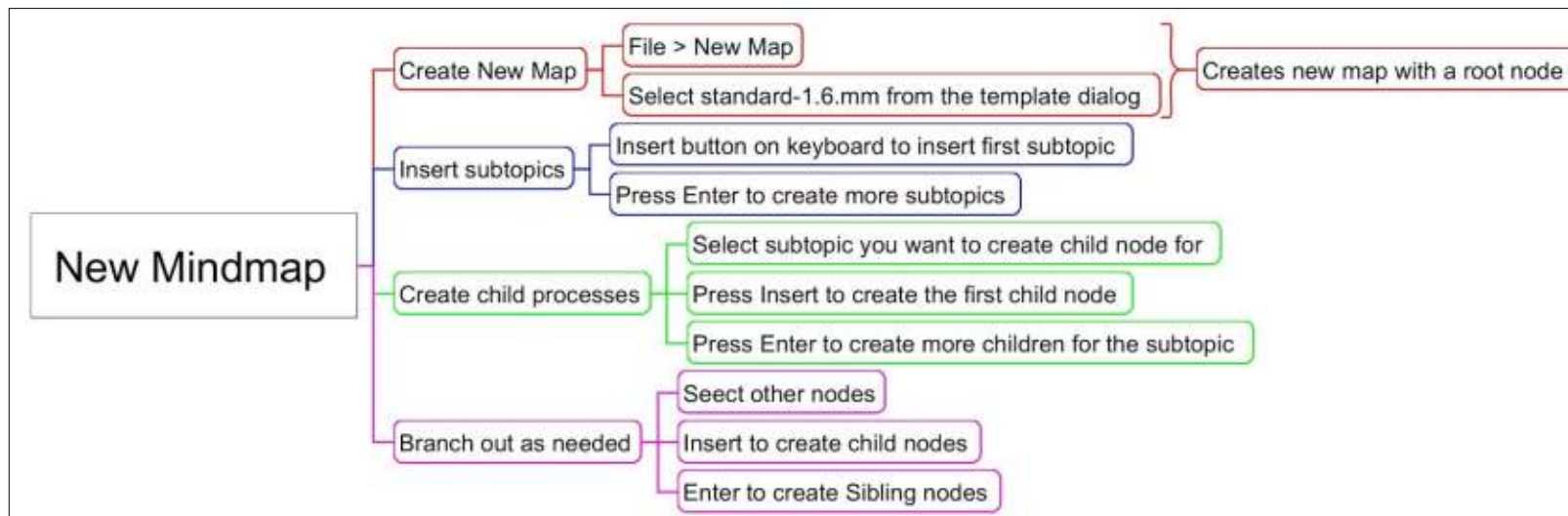
As I go through this series, I will explore the capabilities of Freeplane and the world of mind mapping. I will look at the possibilities and benefits of mind mapping. If you've never used mind maps before, I encourage you to join us for this series. It may change the way you process information.
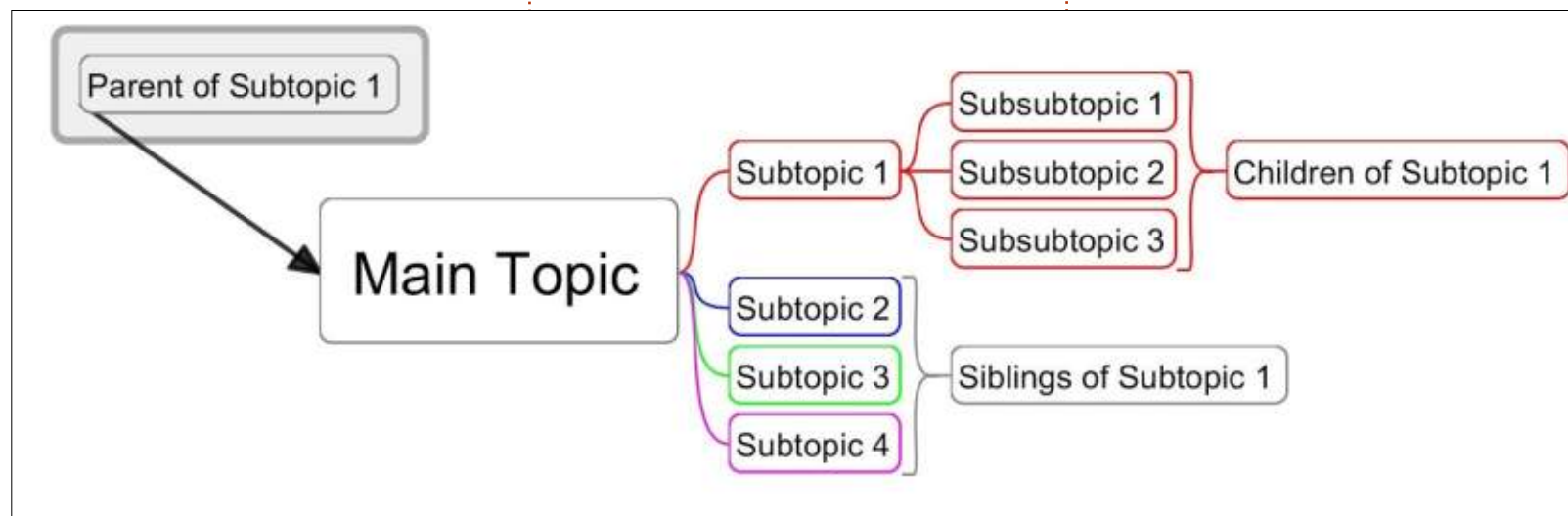
Elmer Perry is a technical support rep for an international keyless access company. He enjoys writing, woodworking, and technology. He lives in Leicester, NC with his wife.

One of my favorite uses for mind maps is brainstorming. The idea behind brainstorming is to write my ideas down on paper or screen. I start with the subject as the root topic, create the first subtopic, and then I'm off. I type in the idea and press enter twice to create the next. I will create branches off the subtopic, but I don't branch often. My goal is to get all the ideas down, not develop them. Usually, I brainstorm with a stop time in mind. Whether the time is 5 minutes or 15 minutes, the clock forces me to focus on writing my ideas down. I don't have time for distraction. Once the time is up, I can look at the big picture of ideas. I will see relationships between ideas or notice one idea is actually the child of another. An order or process begins to develop. If I did this on paper, I'd have to redraw the whole map. With Freeplane, I'm able to move the nodes around and reorder them. This is a great time saver. Today, we'll look at how Freeplane lets us organize and manipulate nodes.

Scrolling

As your map grows, you will want to zoom in on different sections of your map. Once you zoom in, scrolling the map becomes important. Click and drag a blank spot in the workspace to move the map around. If you have a scroll wheel on your mouse, spin the wheel to move up and down. The SHIFT key + the mouse wheel moves left and right. If the scrollbars are visible, you can scroll with them. From the menu bar, View > Controls > Scrollbars hides and shows the scrollbars.

Zooming

To zoom in and out on your map, hold CTRL + the mouse wheel. From the keyboard, ALT + up arrow zooms in, and ALT + down arrow zooms out. When you need to view the whole map, you can use the menu bar View > Zoom > Zoom to fit to page. You can also select the zoom percentage from the drop-down box in the main toolbar.

Selecting Nodes

To select a node, hover over it for a few seconds. Once you have the node you want, you can hold the SHIFT key to lock the selection. The selection of the node by hovering requires you to pause over the node. After the selection, you can move across other nodes as long as you don't pause. The selection only changes when you pause over another node. The selected node is highlighted in your systems default highlight color.

You can select many nodes on the same level and branch using the SHIFT key. Select the first node, then, while holding the SHIFT key, select the second node. This selects all the nodes between the two nodes. You select non-sequential nodes and nodes in different branches using the CTRL key. Hold the CTRL key while clicking the nodes.

Use the arrow keys to move around the map without having to grab the mouse. The up, down, left, and right keys work in the way you would expect them to. Holding down the SHIFT key allows you to select many nodes as you move around the map. CTRL + A selects all the nodes in the map. Press the ESC key to jump to the root node.

Moving Nodes

Ideas rarely comes in the correct order, and you need to move and rearrange the nodes in a map. Freeplane lets you move nodes through the mouse and the keyboard.
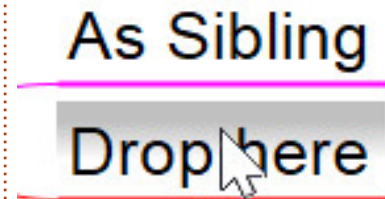
You can move a node by the drag and drop method. When you drag and drop a node onto another node, you get gray highlights at

the top or on the child end of the node. To insert as a sibling above the node, drop the node on the top gray highlight. If you drop on the end gray highlight, Freeplane adds the node as the last child of the node. Hold down the CTRL key to make a copy of the node instead of moving it. You can drag and drop to the left and right side of the root node. This allows you to balance the two sides of the map when needed.
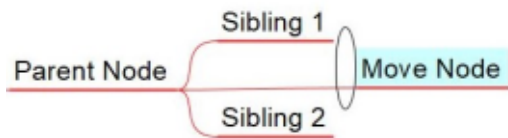
Sometimes, you want to set a node off by itself. You can move a node away from its siblings by hovering over the parent connector end. An oval will appear. This oval is the move handle. Click and drag to move the node to a new location.

From the keyboard, CTRL + the up/down arrows move the nodes up and down among its siblings. CTRL + the left/right arrows promote and demote the node by one level.

FOLDING/UNFOLDING NODES

When working on sections of the map, it helps to collapse or fold the children of other nodes. To fold the children of a node, hover over the connection point for the nodes. A circle with a minus (-) will appear. Click on the circle to fold (or hide) the nodes. When a node's children are folded, Freeplane marks the node with a small circle on the child side. This shows the node has hidden children. You can expand or unfold the node by hovering over the circle. A larger circle with a plus (+) will appear. Click this circle to unfold or show the child nodes. With a node selected, you can use the spacebar to fold and unfold

the children. For more refined control, buttons on the toolbar allow you to fold/unfold one level or all levels. These options are also available in menu Navigate > Fold.

CORE TEXT AND NODE DETAILS

The core text of the node is the main text you enter when you create the node. To see the area for the core text, select the menu Format > Node Core > Bubble. This places a bubble around the core text. To edit the core text, press the F2 key. To replace all the content of the node with new information, start typing with the node selected. If you need to break the core text into many lines, you can use the SHIFT + ENTER key combination. You can edit the core text in an editor dialog using the ALT + ENTER key combination. We will discuss the editor in a later article.

The node details is extra information about the node. The text is placed below the node with a triangle to the left side. Clicking on this triangle shows and hides the node details. From the keyboard, ALT + F2 hide/show the details. Press F3 to edit the node details. You can change the details text in an editor dialog by pressing CTRL + F3.

Freeplane doesn't expect you to get things perfect the first time. In fact, it allows you to drag the nodes around as needed. Whether you prefer the mouse or the keyboard, Freeplane allows you to quickly change your map. In my next article, I will present the 7 guidelines for mind maps from Tony Buzan, and we will explore the Tool Panel.

Elmer Perry is a technical support rep for an international keyless access company. He enjoys writing, woodworking, and technology. He lives in Leicester, NC with his wife.

Tony Buzan introduced the term "mind map" during his BBC TV series Use Your Head in the 1970's. Buzan was a popular psychology author. Yet, the use of radial diagrams to display information had been around for centuries. Buzan introduced the world to his approach and set rules for the creation of mind maps. In his book Mind Map Handbook (https://www.goodreads.com/book/show/3118034-mind-map-handbook), Tony outlines 7 steps to making a mind map:

• Start in the center of a blank page.
• Use an image or picture for your central idea.
• Use colors throughout.
• Connect your main branches to your central image, and connect your second and third-level branches to the first and second levels, etc.
• Make your branches curved rather than straight-lined.
• Use one key word per line.
• Use images throughout.

I would add an eighth rule:

customize the map to meet your needs. When using other diagramming methods, strict rules confine how you can build your map. With mind mapping, you are free to give your own meaning to symbols, codes, and groups.

Freeplane takes care of the connections between nodes by default. But, let's look at how you can modify the nodes and lines to make them mean something more to you. In particular, how you can change the colors, shape, and text of the nodes and lines to develop your coding system.

THE TOOL PANEL

The Tool Panel gives you access to the properties of the individual nodes. To open the panel, press ALT+P on your keyboard, or from the menu bar, View > Controls > Tool Panel. You can also select the arrow on the right edge of the window. The Tool Panel docks to the right side of the window. The Tool Panel divides into sections related to the different properties.
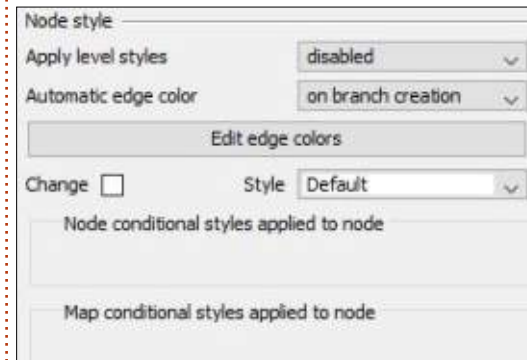
NODE STYLE

The node styles allow you to set the node to a predetermined style. We will discuss styles in a later article. These settings are disabled by default.

The first drop-down box applies the level styles. Levels are how far the node is from the root node. The 'for non leaf nodes' sets the level style on all nodes that are not at the end of a branch. You can think of nodes at the end of a branch like leaves on a tree. These are the leaf nodes. The other choice is for all nodes. This option includes the leaf nodes.

The Automatic edge color drop-down box sets the edge coloring for the nodes. When you select for

branches, each branch uses a different color of lines. Select for levels to make each step away from the root node a different color. When you select for columns, you get an effect like for levels, but the column is the position rather than the level. You can grab a node and move it into a new column without affecting its level. If you select on branch creation, each new branch from the root node gets a new color.

The Edit edge colors button activates when you select an Automatic edge color other than Disabled. Clicking the button opens a dialog window displaying the different color levels. Click the level swatch to open a color selection dialog. Select a new color for the level and click the OK button to change the color for the selected level. Use the up and down arrow buttons to move the levels up and down in the hierarchy. The X button removes the selected level color, and the + button inserts a new level color. The default number of levels is 11, but I have added 50 without the

program complaining. In most cases, you will rarely go more than 11 levels deep in your mind maps, except for the rare case of a very large map. But, if you are creating a different color for each branch, you could soon need more than 11.

The Style drop-down box lets you select a predefined node style for the node(s). We will talk more about predefined styles in a later article. For now, know that you can select them here. The conditional styles are also another topic of another article.

COLOR OF WHOLE CORE
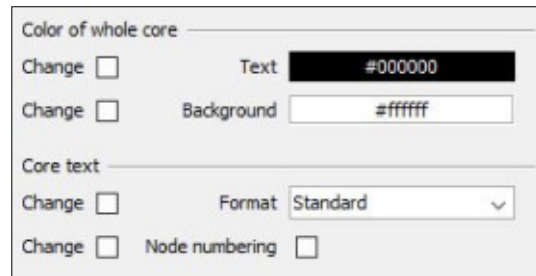
The color section gives you two swatches. One for the text and the other for the background. Clicking the swatches brings up a color dialog where you can select the color you want. These colors affect only the currently selected nodes. Always make sure you select contrasting colors.

NOTE: The Core text section will be an article on its own.

NODE SHAPE

The Node shape section is where you manipulate the geometry of the node. Most of the shapes are self-explanatory. The fork shape is the traditional mind map underlined node style. Most child nodes in the default template are fork nodes by default.

When you select the as parent shape, the node will follow the shape of its parent node.
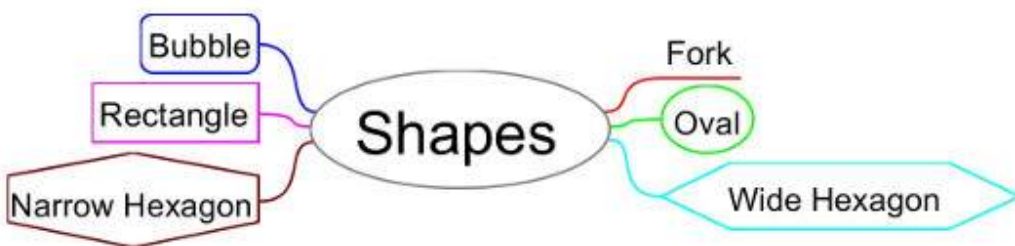
Combined is a special node. When you expand the children of a combined node, the node takes the shape of a fork. When you collapse the children, the node takes the bubble shape.
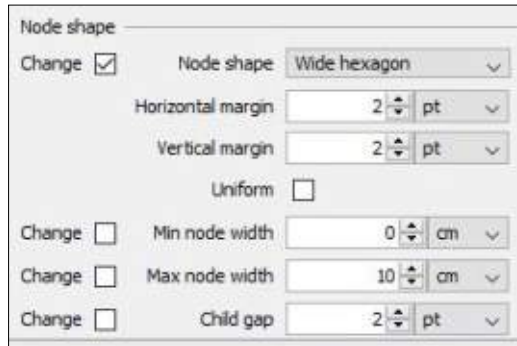
The Horizontal margin and Vertical margin set the distance from the core text to the node border. You can select a unit of measure of pixels (px), inches (in), millimeters (mm), centimeters (cm), and points (pt). These units are available for any settings using measurements.

The Uniform checkbox adjusts the height of the node to match the width of the node.

The Min node width and Max node width are the minimum and maximum widths of the node. The widths do not include the margins. The margins add to these settings. The default max width is 10 cm.

The Child gap sets the distance between the parent and its children.

NODE BORDER
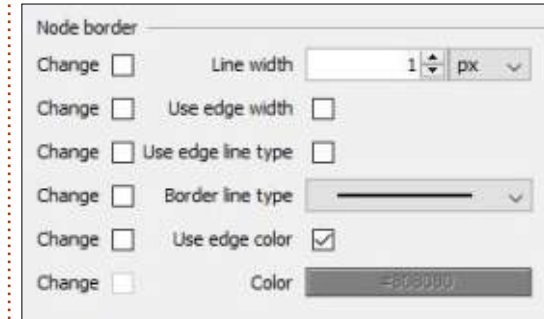
The Node border section allows you to change the width, style, and color of the border around the core text.

You can define a width using the Line width spinner control and the drop-down list to select the measurement type. If you want the border the same as the edge coming from its parent node, check the box Use edge width.

Select the Use edge line type to make the border line the same type as the line leading up to the node. The Border line type drop-down list lets you select a different line style. Your choices are solid, short dash, long dash, dots, and dot-dash.

For the border color, you can check Use edge color. Otherwise, you can click on the Color swatch and select a color from the color dialog.

FONT OF WHOLE CORE

The Font of whole core section allows you to change the family, size, and styling of the core text font. Remember this affects only the core text and not the details

text. To change the details text, you edit it in the editor dialog.
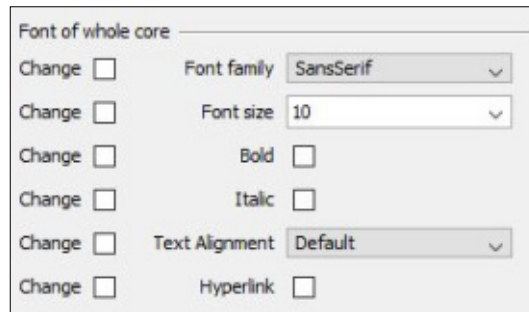

From the Font family drop-down list, you can select the font family you want. The list shows the fonts installed on your computer.

Select the size of the font from the Font size drop-down list. The size list box is a combination list/text box. You can select the size from the default sizes in the

list, or type in a nonstandard size.

Check the boxes for Bold or Italic to apply those styles to the text.

The Text alignment drop-down list sets the alignment for the text. By default, the nodes are the width of the text they contain, hiding the alignments' effect. The alignments appear when you have a fixed-width node, or the node contains multiple lines of text. To create a fixed-width node, set the minimum and maximum width to the same value.

The Hyperlink checkbox underlines the node text like a hyperlink. This works only when you have a hyperlink set to the

node. We will cover hyperlinks in a later article.

ICONS

In the Icons section, you can change the size of the icons in the node. Use the spinner box to set the numeric size, and the drop-down list to select the measurement type. Icons add visual clues to the nodes. Increasing or decreasing the size can influence the prominence of the clue. Often the icon itself is more important than the size. Yet, if you want to use an icon as the image for your central node, increasing the size is a must.
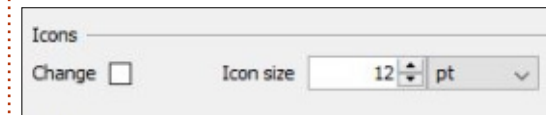
EDGES

Edges are the lines connecting child nodes to their parent. You can change the width, line type, style, and color of a node's edge. By modifying the edges, you can create a visual clue to the level, meaning, or branch of a node. In the default template, each branch has a different color edge. As you
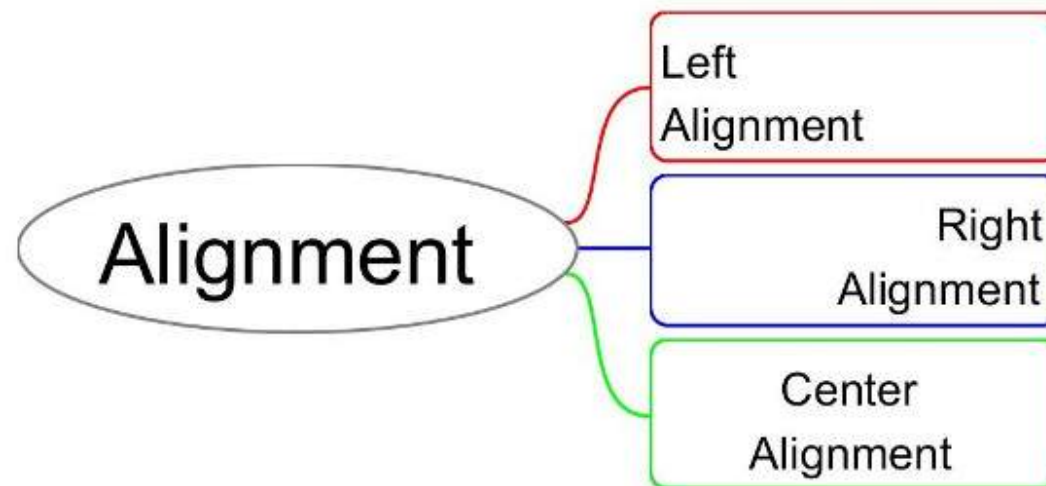
read earlier, you can change this to give a different color for each level, branch, or column. You can also disable automatic colors.
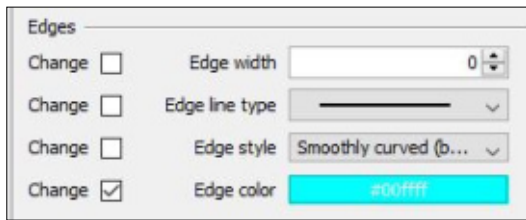
The Edge width is set using the spinner box. The number here is a scale rather than a measurement amount.

To change the type of line used, select from the Edge line type drop-down list. The types are a solid, short dash, long dash, dot, or dot-dash line. You can use the line types as a code for different

relationships between the node and its parent. For example, use a dashed line to show a hidden or temporary relationship. The choice is yours.

The Edge style controls the way the line is created. There are 6 different edge styles. The default style is the Smoothly curved (bezier). This best fits the suggestion of a curved rather than a straight line, but you can make a case for straight lines too. If a straight line makes sense to you, then the Linear style gives you a straight line from the parent to the node. Another form of a straight line is the Horizontal style. This style creates edges with sharp 90 degree angles. Hide edge does not display an edge between the
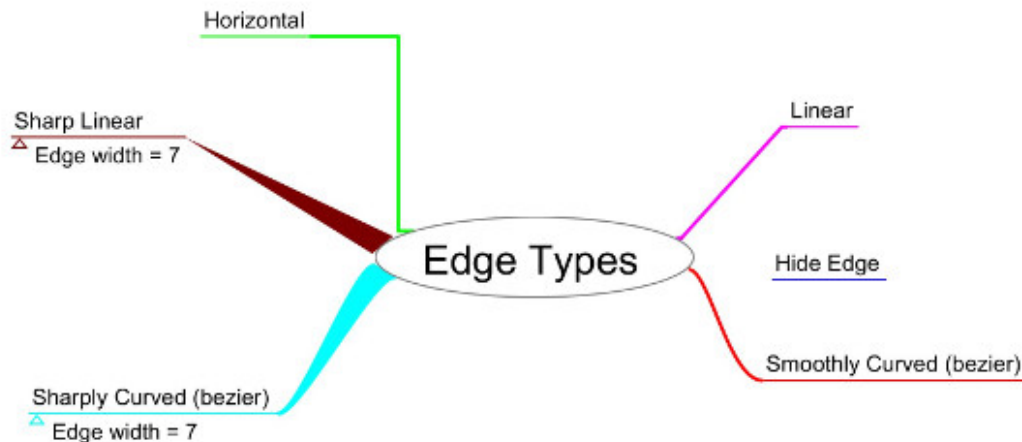
parent and child node. For a unique touch, use the Sharply curved (bezier) or Sharp linear styles. The Sharply curved (bezier) is like the smoothly curved except the curves are tighter. If you increase the width, the edge becomes tapered from parent to child. For the Sharp linear style, you need a width greater than 0. The style creates a straight line tapered at the parent end and comes to a point at the child end.

Clicking the swatch for Edge color displays a color dialog. Select the new color for the node's edge and click OK. The new color will override automatic color settings.

CLOUDS

I will cover clouds and what they are in an article on grouping. For now, know you can change the Cloud color and Cloud shape here. The four shapes are Arc, Star, Rectangle, and Rounded Rectangle.

Tony Buzan gave us 7 guidelines for creating mind maps. Freeplane allows you to apply these guidelines as well as break them. The flexibility lets you create your

own unique style of mind mapping. For me, mind mapping is not about following guidelines but finding what works for you. Tony's guidelines are a starting point. Mind maps allow you to create associations between objects and ideas. As we continue learning about Freeplane, we'll discover more ways to create associations.
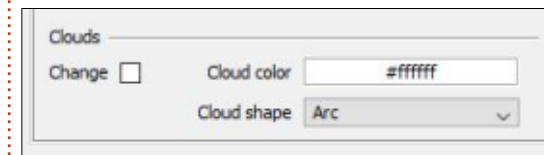
Elmer Perry is a technical support rep for an international keyless access company. He enjoys writing, woodworking, and technology. He lives in Leicester, NC with his wife.

When you learn or create, associations speed up the process. By associating something known with something new, you fix the idea in your mind. You can take the new idea and associate it with another idea, creating a chain of ideas. Many of the great thinkers of history used association in their work. One most people are familiar with is Leonardo da Vinci. In his work, he created pictures, codes, and lines. These "doodles" created associations between ideas.

Mind maps let you develop associations through their connections between nodes. But connections are not always direct. An idea in one branch could associate with an idea in another branch. Or a portion of a branch is more important than the rest. You could find a group of sibling ideas that lead to another idea by their association. In Freeplane, you can create these connections through clouds, connectors, and summary nodes.

CLOUDS

Clouds group a node and its children, grandchildren, etc. You can use the cloud to emphasize a certain section of a branch by creating a border around the nodes. The cloud surrounds the node and those attached to it down the branch until it reaches the leaves. The cloud will enclose any nodes added to the cloud's nodes.

To create a cloud, you select the node where you want the cloud to begin. On the keyboard, you use the keyboard combination CTRL + SHIFT + B. The cloud will surround all the nodes connected to the selected node. You can add a cloud through the menus using Edit >

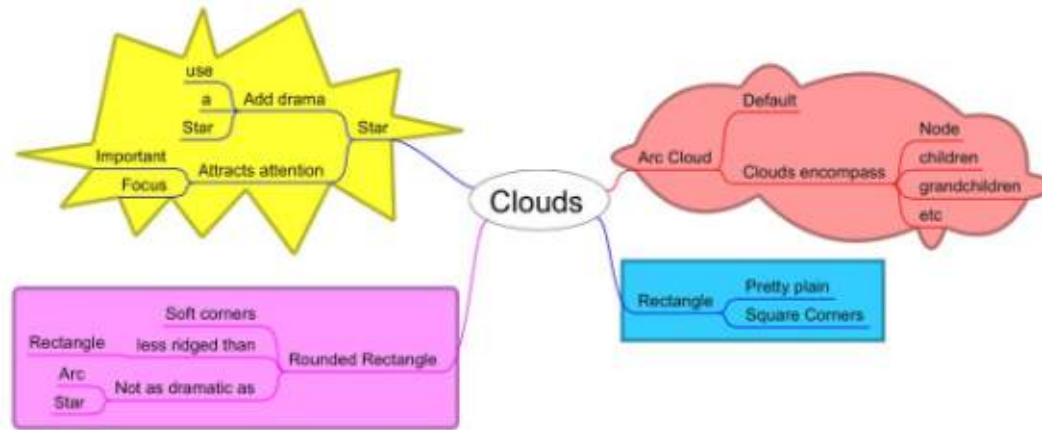Add/Remove Cloud. The menu item is also available in the right-click context menu. The main toolbar has a Cloud button, too. Repeating the action on the node will remove the cloud. If you select a node inside a cloud, you can create a cloud inside a cloud.

By default the shape of the cloud is the Arc style, creating the classical idea of a cloud. You have other options for the cloud shape. You can select from Arc, Star, Rectangle, and Rounded rectangle. In your code, the different shapes can have different meanings. Star for something exciting, or rectangle for something serious. To change the shape, use the drop-down list in the Cloud section of

the Tool Panel. From the menu, you select Format > Cloud shape.

Color is another way to code your maps, and Freeplane lets you change the color of the clouds. The cloud color changes the background and outline color of the cloud. As you have seen in previous articles, you select colors from a color dialog. To open the cloud color dialog, you can click on the color swatch in the Cloud section of the Tool Panel. You can access the cloud color through the menus, too, at Format > Cloud shape > Cloud color. Finally, the main toolbar has an icon for the cloud color. From the color picker dialog, you select the color you want for your cloud background. You click the OK button to accept the color.

CONNECTORS

Connectors associate nodes with relationships other than parent-child. Connectors are good for connections between siblings or nodes in different branches. As an example, a group of siblings
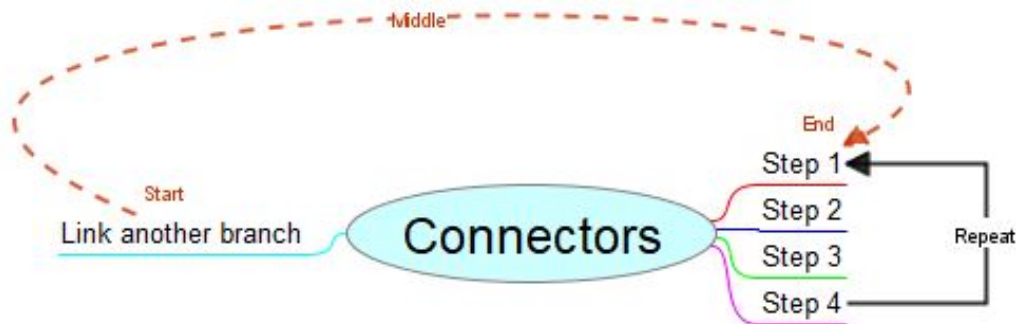
defining a repeatable process. A connector would allow you to loop the last process back to the first one. The connector can contain text to explain the relationship. Arrows can show the direction of the connection. You can edit the line style, color, and thickness to match your coding system.

The easiest way to create a node is to right-click on the start node and drag to the end node. By default, an arrow points toward the end node. You can change this, but it's worth thinking about before you create the connector. You can also select the start node and hold down SHIFT + CTRL while you drag with the left mouse button to the end node. Finally, you can select the start and end nodes, right-click, and select Connect from the menu. With two nodes selected, you can use the CTRL + L combination to connect

the nodes.
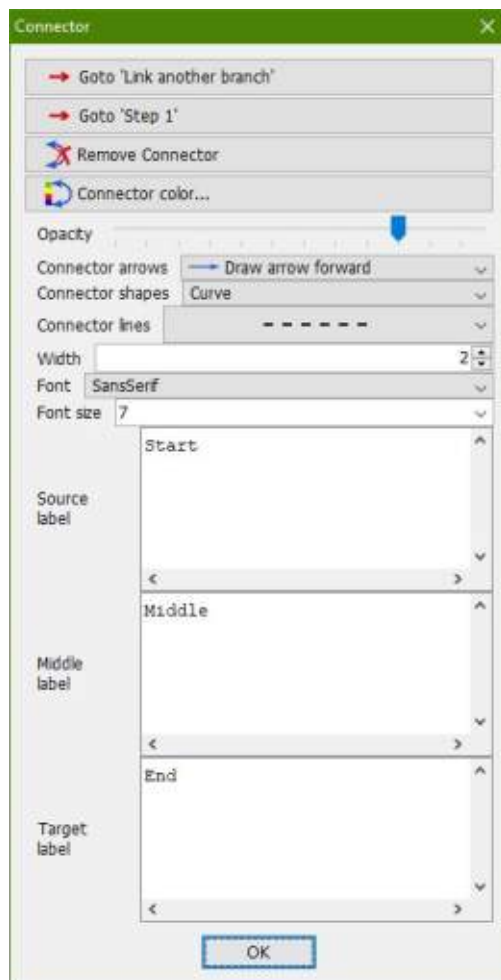
You can connect many nodes at once. Select the nodes you want to connect. The last node selected becomes the focus node. All the other nodes will point to the focus node. With the nodes selected, you right-click and select Connect from the menu. You can use the CTRL + L combination, too. All the selected nodes will connect to the focus node (last selected).

You can edit a connector by right-clicking it. A Connector dialog will open. The dialog lets you change the style, color, shape, thickness, and opacity of the connector. You can add text to the connect to define the reason for the connection.

The two Goto buttons let you select which node is active. You can switch between the two nodes at the connectors endpoints.

The Remove Connector button removes the connector and closes the connector dialog.

Use the Opacity slider to increase or decrease the visibility of the connector. Move the slider to the left to decrease the visibility, and move it to the right

to increase the visibility. By default, the slider is 75% to the right.

The Connector arrow drop-down list lets you select the arrows on the connector. You select None to create a relationship without direction. Draw arrow forward points the arrow at the endpoint. To point the arrow at the start point, you select Draw arrow back. You show a back and forth relationship by selecting Draw arrow forward and back. One of the ways I have used the arrows is when creating a repeating process. The process is outlined as a series of sibling nodes, then the last sibling points back to the first sibling. Using this method, I create a looping or repeating process.

By default, the connector is drawn as a looping curve. The Connector shape drop-down list changes the shape. You select line to create a straight point-to-point line. Linear path draws a line with sharp corners. Finally, you can Simulate edge. This choice will create a line that simulates the edge of the endpoint.

The Connector line drop-down list sets the type of line. As always,

you have a choice between solid, long dash, short dash, dot, and dot-dash. The line types can become a part of your code. A dotted line can show two nodes that are similar but have no direct relationship. But a solid line can show a direct relationship, such as a node that is a child of two different nodes. The Width spinner box sets the width of the line. The width is a scale value rather than a unit measurement.

The font setting controls the font and size of the text used on the connector. The Font drop-down list selects the font from the fonts installed on your PC. The Font size spinner box sets the size in points.

With the font set, the connector has three label positions. The top text box is for the Source label. The source label is the start node of the connector. The Middle label places text in the middle of the connector. To place a label at the endpoint node, enter your text in the Target label text box. If you use the source and target label, you need to set the connector to show in front of the nodes. The setting is in the preferences, Tools > Preferences.

Click on the Appearance tab. In the Connectors section, you uncheck the box for Paint connectors behind nodes.

Click the OK button to close the Connector dialog.

When you left-click the connector, you see two adjustment handles. You drag the handles to adjust the shape and location of the connector. Moving the handles moves the location of the arrows and labels. This is another method to prevent the label and node's core from blocking each other.

SUMMARY NODES

What do you do when you need a node that pertains to several sibling nodes? For example, say you have a list of fruits and vegetables as siblings to a node. You would like to label which ones are fruits and which ones are vegetables. You could create a

child node for each of the nodes stating its food category. But this seems redundant and time-consuming.

Enter the summary node. A summary node groups together a series of sibling nodes using a curly bracket. The summary node allows you to group your fruits and vegetables using one node for each group.

To create a summary node, select the series of sibling nodes. With the nodes selected, press the keyboard combination SHIFT + ALT + INSERT. The summary node created looks like any node except its edge is a curly bracket. Enter the text of the node and press ENTER. You can press ENTER again to create a sibling of the node, or you can press INSERT to create a child node. From the summary node, your map can continue as you would with any other node.

There are a couple of alternate methods for creating summary nodes. After selecting the node series, you can right-click and choose New summary node. From the menus, Edit > New Node > New summary node creates a summary node of the selected sibling nodes.

When you create and learn, associations allow you to build on previous knowledge. While the parent-child relationship handles most associations, sometimes you need to create others. Freeplane gives you the tools you need to create those associations. With the cloud, you can encompass a group of nodes, creating a section set off from the others. You can use connectors to associate two nodes that are not parent-child. Finally, summary nodes allow you to group sibling nodes together.
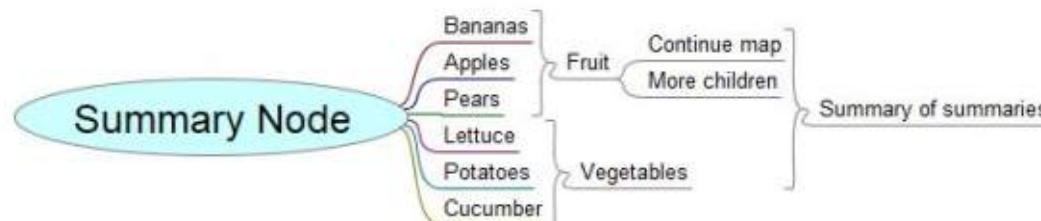
Elmer Perry is a technical support rep for an international keyless access company. He enjoys writing, woodworking, and technology. He lives in Leicester, NC with his wife.

As the saying goes, a picture paints a thousand words. Icons and images in your mind map create a link between the visual and the language centers of your brain. This promotes learning and imagination. When you see the word fruit, you don't see the letters in your mind, but you see images of what fruit are. By using icons and images in your mind map, you link to your mind's natural tendency.

Freeplane includes a set of useful icons. Although the icons have recommended meanings, you can use them in a way that makes sense to you. Is an exclamation point a warning or emphasis? It's up to you and what it triggers in your mind. As with most things in mind mapping, the choice is yours.

Freeplane provides a way to insert your own images into your maps. To have the images display in the map, freeplane requires you save the image to the local hard drive. The recommended practice is to have them in the same folder as your map.

ICONS

Freeplane provides over 90 icons in 13 categories and some specialized progress icons. You should think about the power of using icons in your maps. We use emojis, a special type of icon, every day to convey emotion in our messages. Icons can do the same thing in your maps. Use them as keys to trigger your mind to know at a glance what the node is about. You can display the icon in several ways, but the most complete options are through the menu.

The quickest access to the icons is through the icon side panel. Click on the expand arrow on the left-hand side of the Freeplane window to expand the icon sidebar. From the sidebar, you can select any icon to add it to the currently selected node(s). Using the keyboard, CTRL + F2 displays a table of all the standard icons.
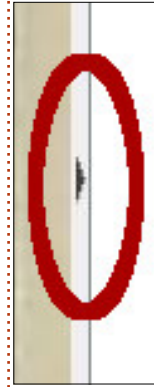
In the sidebar, table, and menus, there are three special icons, the remove icons. The first icon is the remove first icon, the second is the remove last icon, and the third is the remove all icons. In the sidebar and the table, they are the first

three icons. In the menus, they are the last menu in Edit > Icons.

The menus under Edit > Icons gives you the most options and control of your icons.

Icons from table gives you the same table the CTRL + F2 keyboard shortcut does.

Icons by category breaks the icons into predefined categories. Keep in mind these categories are only suggestions. You can let the icons mean anything you want as long as it makes sense to you. The categories follow the same order as the icons in the sidebar and table.

The Progress icon (%) menu contains a special group of icons.
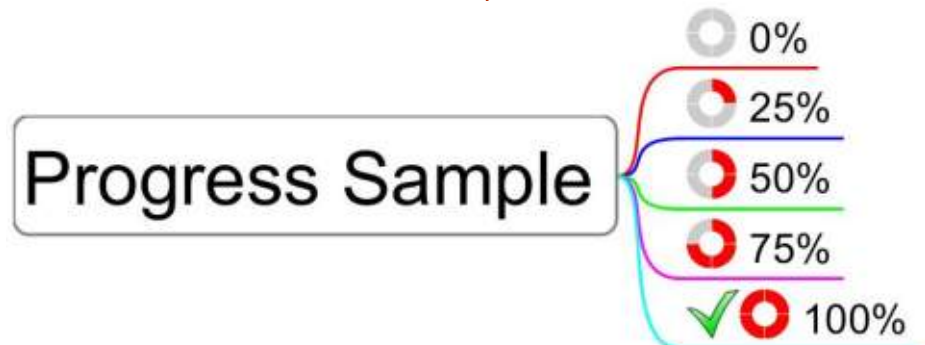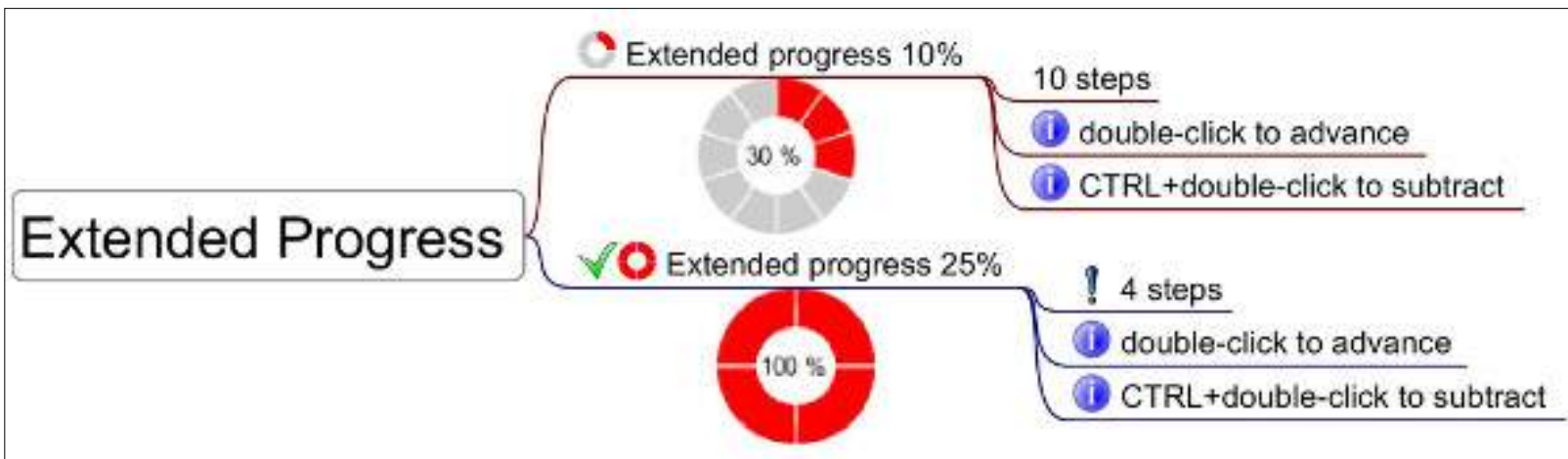
While you will find progress donuts in the icon table, the menu gives you the ability to automate your progress. These icons are great for tasks lists. I use them when outlining and writing.

The Progress up and Progress down change the progress icon in the node. When either is first selected, the empty donut is added. If you select Progress up, the donut increases by 25% until the progress donut is full. If you select Progress down, the donut decreases by 25% until the progress donut is empty. Once the progress donut is full, a green checkmark icon is added to the node.

The Extended progress options add a larger progress donut below

the node. The Extended progress comes in two types, 10% and 25%. The 10 % allows for a 10 step process while the 25% only 4. Selecting the 10% or 25% option adds the process donut below the node. Once created, you increase the value by double-clicking the large progress donut. To decrease the value CTRL + double-click. The green checkmark icon will show in the node when the progress donut reaches 100%. The node will also show a small progress icon in the node.

The Show icon hierarchy shows what icons are attached to any nodes below it. If the nodes underneath the node have icons, the node will display a smaller version of each of the icons. With a folded node, you can still know

what icons are being used on the branch. Should you be looking for a certain icon based on your code, you can know you need to unfold
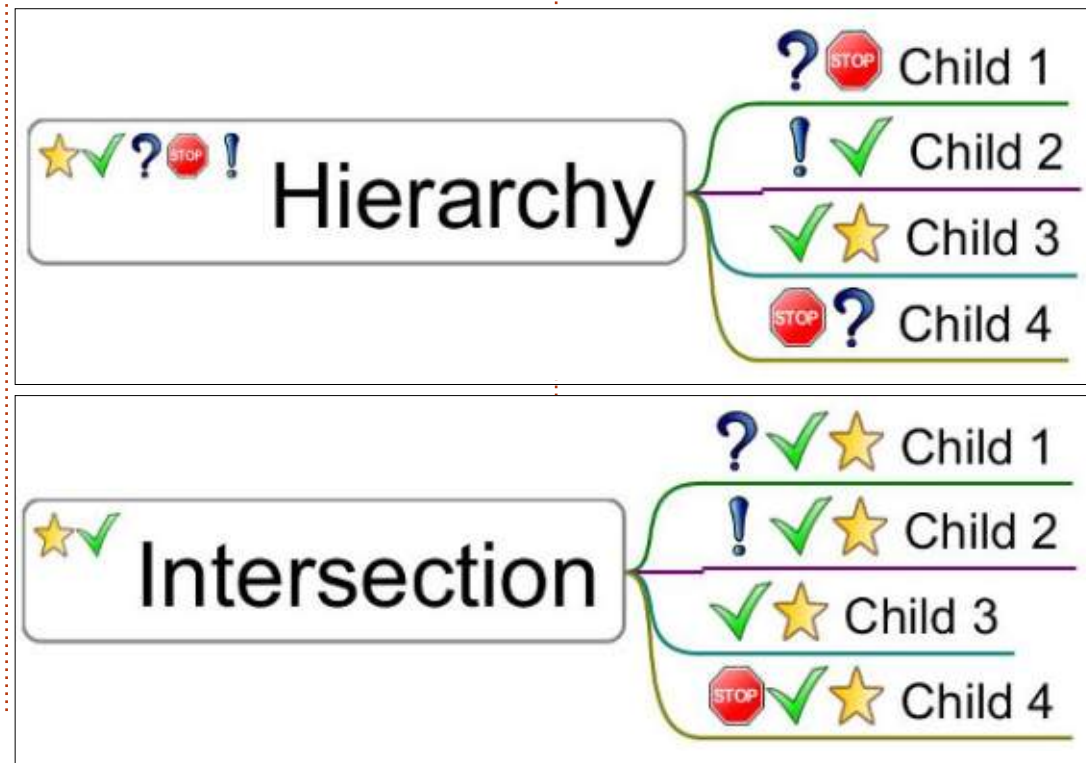
the node.

The Show intersection of child icons is like Show icon hierarchy with a twist. The setting only applies to children of the node. If all the children have a certain icon, a smaller version of the icon will show in the node. This would allow you to see whether a folded node's children all contain a certain icon.

The remove icons menu gives you the Remove first icon, Remove last icon, and Remove all icons options.

IMAGES

Freeplane lets you insert your own icons and images, too. You can insert the images as internal or external to the node. In order for the images to show in the map, you must save the images to the local disk. The accepted formats are GIF, JPEG/JPG, PNG, and SVG. In most cases, you will want to edit your image in an editor and scale it down to a useful size in your map.

INTERNAL IMAGE

When you insert an internal image, the image becomes the node core. The image within the node core is not scalable, so if you want a smaller size, you will need to edit it in advance. To create an internal image follow the menus Edit > Node core > Image by choice or link. Use the folders to browse to the image location and select it.
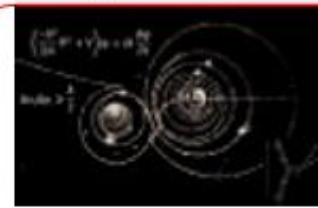
Click Open to create the image as the node core.

EXTERNAL IMAGE

You can add images to the node details by drag and drop, copy and paste, and through the menus. In most cases, your need determines your method.

When you add an external image by drag and drop, the release point determines where the image is added. Release the image at the top of the node core, and the image becomes an external, scalable image in a new

sibling. But, if you drop the image with the end highlighted, the image becomes an external image of a new child node.

When you use the copy and paste method, the image becomes an external image to a new child node.

To add an image as an external image of the currently selected node use the menus Edit > Node extensions > Add image. Browse to the image you want to add, select the image, and click Open.

To scale the external images hover over the edges of the image. A box will surround the image. Click and drag to scale the image to size. You can only scale the external images. Internal images are not scalable.

Icons and images create a connection between the visual and the language centers of your brain. Using icons and images in your mind maps creates association and clues about the content of a node. You can use the existing icon set to create your own coding system as well as adding other images as visual clues.

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I've mentioned in past articles about developing a coding system for your mind maps. Implementing a coding system can seem like an arduous effort. But Freeplane allows you to create styles in your maps. Using styles, you create the style once and use it as often as needed. You can take a few minutes to think about and create the styles you need for your coding system of colors and icons.

Once you make the styles, you select them from a dropdown list to apply them to the nodes.

THE STYLE EDITOR

The style editor is where you create the styles. It looks like a scaled-down version of the main window. To open the editor through the menus, select Format > Manage styles > Edit styles. You can also use the keyboard shortcut CTRL + F11.

DEFAULT STYLES

The default template comes with a set of default styles in 3 categories.

PREDEFINED STYLES

The predefined styles are the system styles. You can't add to or delete any of the styles in this list. You can change the appearance of the styles:
• Default is the style assigned to new nodes when not using an automatic layout.
• Details is the styling for the node details.
• Attributes are user-defined tags. I'll explain attributes in a future article.
• Note is the style for the note pop-up that shows when you hover over a node with notes.
• Floating node is the style for any floating nodes.

USER DEFINED STYLES

The user defined styles are where you would add your own styles. You can add and remove styles from this list. The default template has a few styles defined for you. You can change these or remove them. The trick is to add new ones that work in your coding system.

APPLY LEVEL STYLES

The level styles are a special group. You can automate the level styles by selecting one of the automatic layouts. The first level style is Root. You can change the Root style, but you cannot remove it. The Root is the center node of all maps. By default, you have 11 levels. You can add and remove levels as fits your needs. You can change the nodes to fit your coding system.

MODIFYING STYLES

To change a style, select the style and use the tool panel on the right-hand side of the window. This panel is the same as the panel in
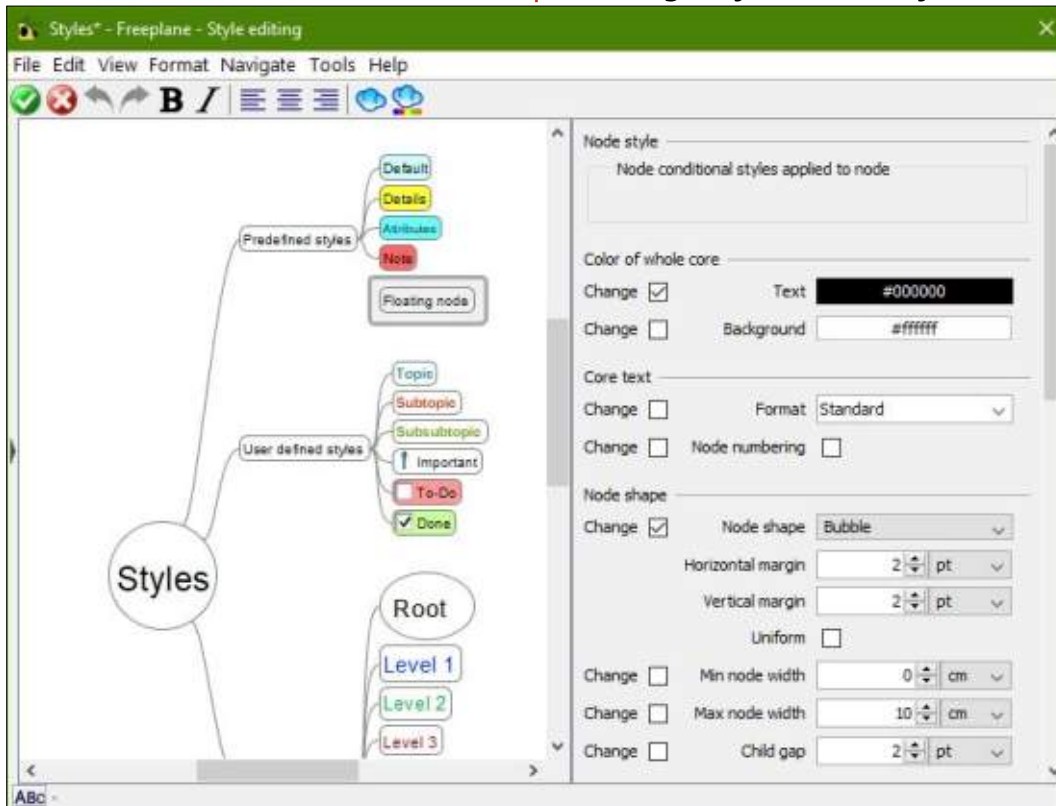
the main program. You can set the colors, edge style, and even create a style with a cloud. The default floating node has a rectangular cloud around it. You can add icons to the styles as well. Open the icon toolbar by clicking on the sidebar arrow on the left side of the window. Or you can open it through the menus View > Controls > Icon toolbar. Click an icon to add it to the selected style.

The display of the styles is a map itself, but you can't create any children. You can add and remove siblings to the user styles and the level styles. The siblings are not added in the same way as in the main window – as detailed below.

ADDING STYLES

When adding a new user defined style, the style starts as a copy of an existing style. You can create a new user defined style from any of the styles, including the predefined and the levels. After selecting the style you want as your start point, use the menus Format > Manage styles > New style from selection. You can also right-click the style and select New style from selection. A dialog

prompts you for a name for the new style. Enter the name and click the OK button. The new style will display in the User defined styles group.

The level styles work a little differently. When you add a level, it adds to the end of the levels list. To add a new level, right-click any style and select Add level style. You can add levels through the menus at Format > Manage styles > Add level style. When you add a level by right-clicking, the format of the right-clicked style is not copied to the new level. New levels get the formatting of the default style.

REMOVE STYLES

You can remove a user defined style that is no longer needed. Any nodes the style is applied to will have the formatting of the style removed. To remove a user defined style, right-click the style and select Remove user defined style. You can also remove a style by selecting it and using the menus Format > Manage styles > Remove user defined style.

When you remove a level style,

Freeplane removes the highest numbered level. As with the user defined styles, any nodes the style is applied to will have the style formatting removed. To remove a level style, use the menus Format > Manage styles > Remove level style. Or you can right-click any style and select Remove level style.

Once you have finished changing the styles, click on the checkmark button to save your settings. If you want to exit the edit without saving your changes, click the X button.

APPLYING STYLES TO NODES

The easiest way to apply a style is using the drop-down list on the main toolbar. The styles display in the same order as in the style editor. You can get the same list using the menus Format > Apply styles. After selecting the style, Freeplane applies the style to all selected nodes. If you select another style, you remove the current style and apply the selected style. It is possible to apply more than one style through conditional styles. I will cover

conditional styles in my next article.

Using level styles works a little differently. Level styles are applied by the node's position on the branch. To apply level styles, use the menu Format > Automatic layout. You can apply the levels to all nodes by selecting for all nodes. Apply the levels to all nodes but the ones at the end by selecting for all non-leaf nodes. By default, disabled is selected. Disabled removes all level style formatting.

OTHER STYLE OPTIONS

Sometimes, you will change a node that has a style applied to it, and you want to apply those changes to the style. Use the menus Format > Manage styles > Redefine style. This adds the changes to the style and updates all nodes with the style. You can also use the keyboard shortcut ALT + R.

At other times, you change a node and decide you want to revert back to the formatting of the style. Use the menus Format > Manage styles > Remove format to remove the changes.

Did you create the best set of styles ever and want to use it in a new map? In the new map, use Format > Manage styles > Copy map style from... to import the style from another map. You can do this with the keyboard shortcut CTRL + SHIFT + O as well.

STYLE EXAMPLE

When I create a map for brainstorming a writing project, I end up with list or outline. Sometimes, I get started but can't get back to it for days or weeks. To keep track of where I'm at in the project, I create a TODO and Done style.

The TODO style has a light red background and an empty checkbox icon. I apply this style to any sections that are not done. For the Done style, I apply a light green background and a checked checkbox icon. When a section is complete, I switch the style from TODO to Done.

Styles allow you to design your coding system by creating a style once and using it many times. Through the use of styles, you can develop and change your coding

system. Next time, I will show you how to create conditional styles that allow you to apply more than one style to a node. I will also show you how to save a template with all your styles, so you can use them over and over again.
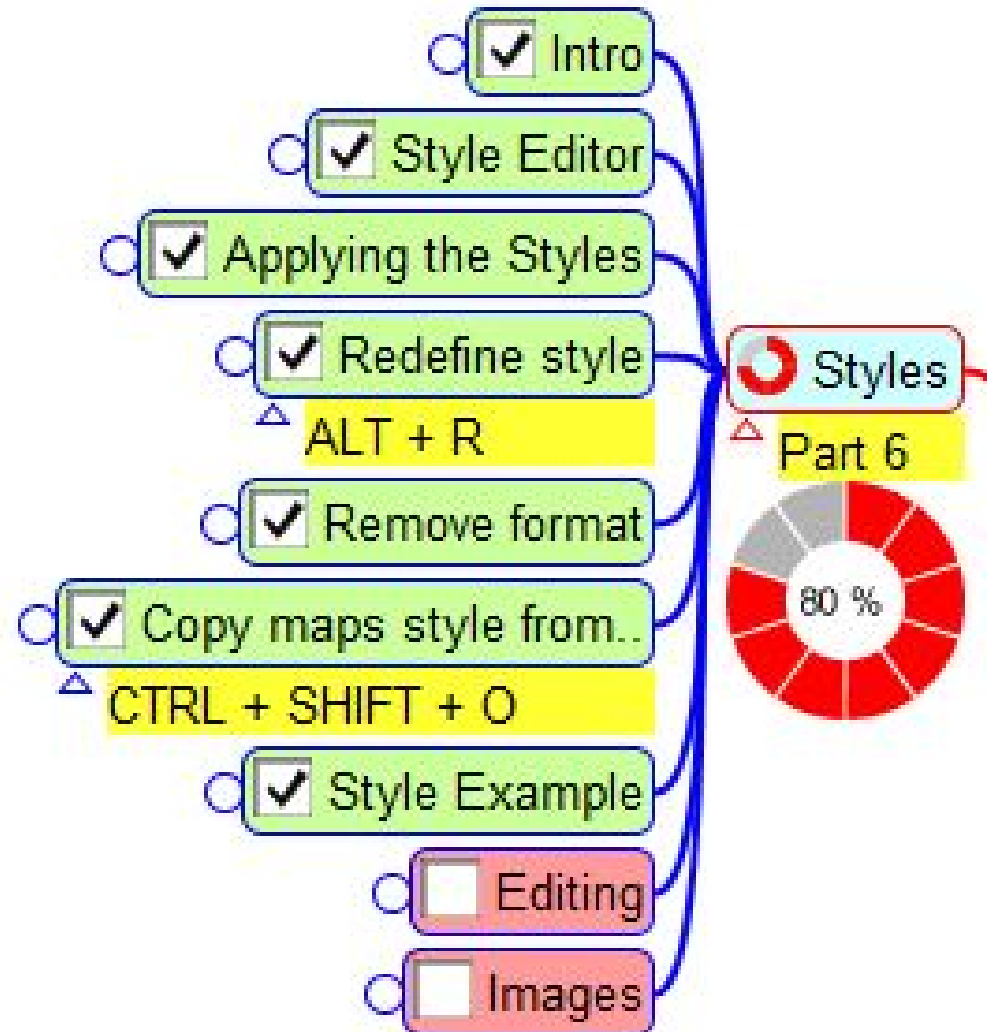
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When creating mind maps, you don't want to spend all your time formatting individual nodes. As I showed in part 6, styles let you format once and use many times. Sometimes, it's handy to apply more than one style to a node. Or you want to apply a style according to the content, date created, or the icon applied. Rather than applying styles manually, conditional styles apply styles under predefined conditions. Conditional style can apply to an individual node or to an entire map.

Once you have all you styles created, you can save them in a template to use again. While there is no Save as Template option, it is possible to save a map in a template folder.

CREATING CONDITIONAL STYLES

The first step is to create a style for the condition to apply. Part 6 of this series discusses creating styles. When creating the

conditional style, all the styles are available to you. For example, you could create a style that bolds the text and makes the font bigger than the default.

There are conditional styles for individual nodes and the entire map. The dialogs work and display the same for both. To open the 'Manage conditional styles' dialog, use the menus Format > Manage styles > Manage conditional styles for map (or for node). When you select 'Manage conditional styles for node', the rules apply to the selected nodes. 'Manage conditional styles for map' applies to all nodes in the map.

The dialog shows any defined conditional styles. If you have not defined any styles, the list is blank. There are five buttons down the

right-hand side, two at the bottom, and four columns.

The New button creates a new conditional style. It has a filter of always and the default style. You can double-click the style to select another style. The always condition is unnecessary in the map conditional styles. But the always condition allows you to apply many styles to an individual node or selected nodes.

The Edit button opens the Filter Composer dialog. The Filter Composer allows you to edit the currently selected condition's filter. I'll cover the Filter Composer below.

Clicking the Delete button will remove the selected conditional style.

The Up and Down buttons allow you to reorder the conditional styles in the order you want them to trigger. The order can change the effect the conditional style has on the node(s).

Each conditional style has f, without deleting it, uncheck the box. The Condition is the filter selected from the Filter Composer. To change the filter, click the Edit button to open the Filter Composer. The Style is the style to apply when the condition is met. You can change the style by double-clicking the style for a dropdown list of all the styles. The last column is the Stop checkbox. If you check the box, the program will not apply the conditions after it in the list. This is one more way to hold on to a conditional style without deleting it.

At the bottom of the dialog are the OK and Cancel buttons. Click the OK button to accept the changes and close the dialog. The Cancel button discards any changes and closes the dialog.
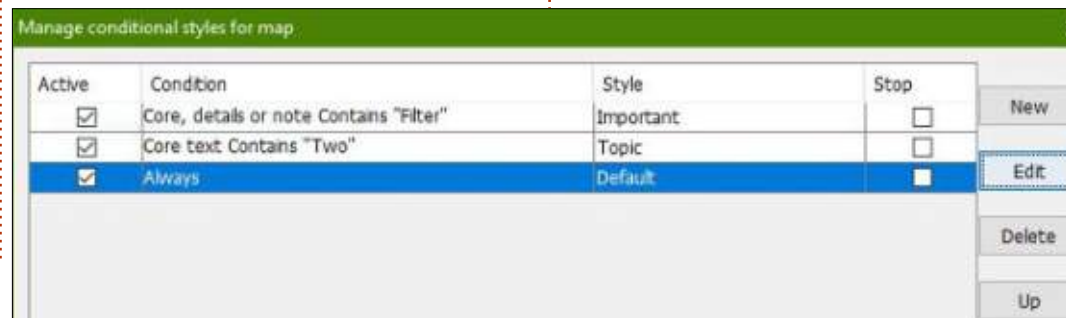
THE FILTER COMPOSER

Open the Filter Composer by clicking on the Edit button. You build your conditions (or filters) in the composer. The filters become the criteria for the conditional style. The options for creating these filters are many, and I will not attempt to cover them all. I will give examples to show how the composer works.

At the top of the dialog, you have three dropdown boxes. These boxes build a single filter. I like to think of it as building a sentence. The first box is the subject of the filter. From this dropdown, you can select the different elements of a node, i.e. core text, details text, notes. The middle dropdown is the action of the filter, i.e. equal to, contains, greater than, less than. The last dropdown is the qualifier.

This is the text or object, like an icon, to match. Together the three button create a complete filter. There are two checkboxes under the boxes. Checking Match Case forces the filter to match the case of the text in the qualifier box. Checking Approximate matches text that is close to the entered text, e.g. "files" will match with "flies".

The buttons down the right side perform actions on the filters created. The first button is the add button. It adds the filter created by the boxes to the list. The second button will negate the selected filter. The next two buttons are activated by selecting more than one filter. The third button will combine the selected filters with an AND command. An AND will activate the condition only when both filters are true. The fourth button combines the two filters

into an OR command. In this case, the condition will activate when either filter is true. The fifth button, split, breaks filters combined with AND or OR into individual filters. The sixth button deletes the selected filters. You use the seventh button to name a filter. The last two buttons are used to move the selected filter up and down in the list.

There are four command buttons across the bottom. The OK button makes the selected filter the condition of the edited conditional style. To ignore your changes click the Cancel button. You can write the list of filters to a file using the Save button. After clicking Save, browse to the location where you want to save the file. In the File name text box

enter a name for the file and click Save. The Open button lets you open a previously saved filter file. Browse to the location where the file was saved, select the file, and click Open.

EXAMPLES

EXAMPLE 1

The simplest conditional style is setting a node to have more than one style. In our example, we will assign the Topic and Important styles to a node. Select a node to apply the styles to. From the style dropdown in the main toolbar select the Topic style. Follow the menus Format > Manage Styles > Manage conditional styles for

node. Click the New button. This creates the default Always condition. Double-click the Default style and select the Important style. Click on OK, and you will see both styles have been applied to the node.

EXAMPLE 2

The real power of the conditional styles is applying a style under defined conditions. Create four nodes named One, Two, Three, and Two More. Follow the menus Format > Manage Styles > Manage conditional styles for map. Click on New. With the new condition selected, click Edit. In the first box select Core Text, leave the second at Contains, and type "Two" into the third. Click the add button. With the newly created filter selected click on the OK button. From the style dropdown on the new conditional style, select the Topic style. Click OK. You will see the Topic style has

been applied to the nodes with Two in the core text.

TEMPLATES

Once you have created your styles and conditional styles, you will want to save them in a template. Freeplane doesn't have a menu option for saving a map as a template so you will have to manually save them.

First, you need to know where the user directory is for your copy of Freeplane. Use the menus Tools > Open user directory. Make a note of the location of the directory. When you are ready to save your map as a template, save it in the Template folder under the user directory.

The next time you create a new map, your new template will show in the dropdown list of the templates.

Styles, conditional styles, and
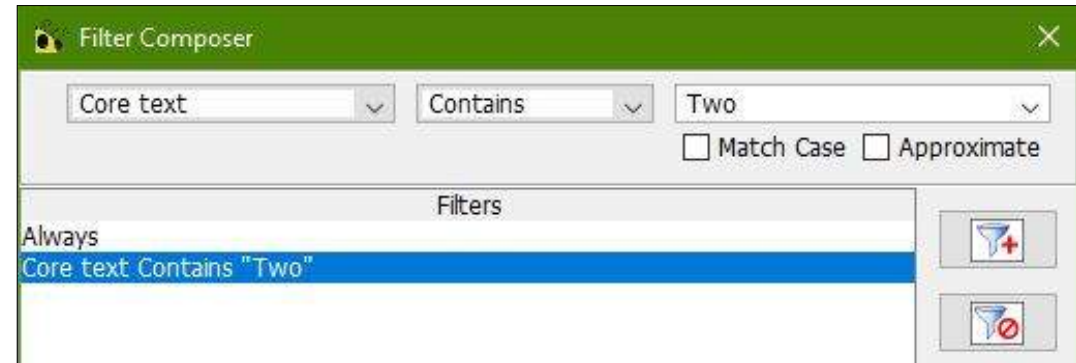
templates let you create maps using your coding system. They speed up the process of creating new maps. You may want to create different templates for different map types.
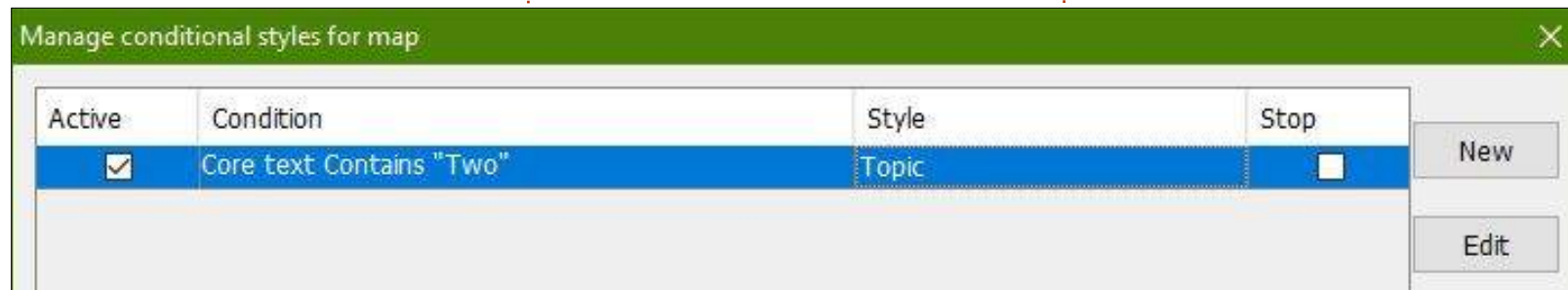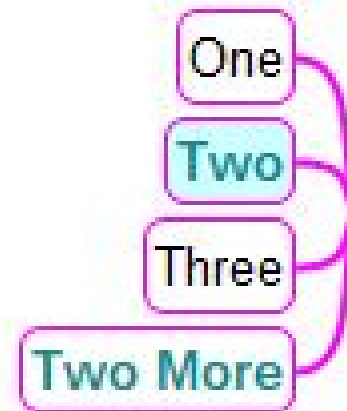
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The node core is the focal point of a node. It's what you see at first glance. While colors, images, and icons do a good job of setting your mapping code, you may need more than plain text. You could need it formatted in a certain way. With the help of the Core Text section of the Tool Panel, we can format the core text. We can display the text as numbers, dates and times, or mathematical or chemical formulas. As a bonus, we can format nodes to create links between other nodes, files, and websites.

As a refresher, you find the Tool Panel on the right side of the main window. To open it, click View > Controls > Tool Panel. We will work with the drop-down box under the Core Text section.

CORE TEXT FORMATS

The core text formats fall into three categories, text, numbers, and dates. By selecting the different formats, you can force the core text into a certain format.

TEXT FORMATS
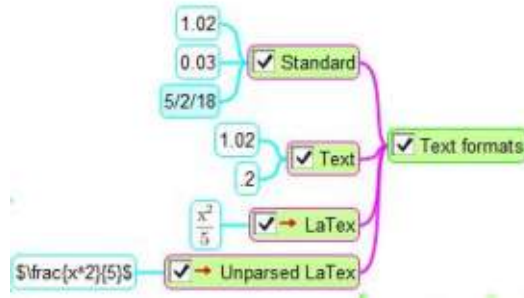
Standard

Standard is the default format. If you enter a number or a date, it tries to format the text. For numbers, Standard defaults to the #0.#### format (explained below). If you enter a date, Standard will format it as M/d/yy (explained below).

Text

If you don't want the autoformatting of standard, you can select Text. Text displays the characters as you type them without any formatting.

LaTex

LaTex is a markup language used for typesetting technical documents. LaTex allows you to create and display mathematical and chemical formulas. While the topic of LaTex is beyond the scope of this article, I will give you an example and some references.

After setting a node's format to LaTex, you can use the LaTex markup in the core text. If you enter \frac{x^2}{5}, you get the fraction shown in the image. When you start typing, a new window appears. This is the LaTex editor. The checkbox 'Enter confirms' will cause the window to close when checked. If unchecked, you need to click OK to save your formula.

Unparsed LaTex

Freeplane uses JLaTexMath to render the LaTex markup. This module does not recognize all LaTex markup. But, you may want to export an entire LaTex document. The unparsed LaTex format will mark the node as LaTex, but will not attempt to render it. Once you export your map, Freeplane will pass the markup to the export engine to render. If the export engine can render the LaTex, it will.

For more details on using LaTex in Freeplane:
http://freeplane.sourceforge.net/wiki/index.php/LaTeX_in_Freeplane

For a short beginner guide to LaTex:
http://www.docs.is.ed.ac.uk/skills/documents/3722/3722-2014.pdf
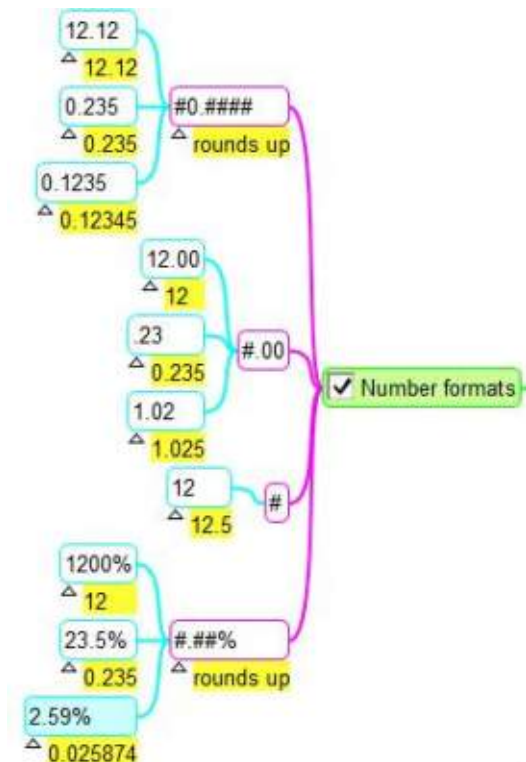
NUMBER FORMATS

The number formats are patterns for creating numbers. The # symbol is a placeholder for a digit should one exist in that position. A 0 is a placeholder for a digit, and if no digit exists, a zero. In the sample image, the entered number is show in the core details.

#0.####

This pattern will place a zero before the decimal point when no whole number exists. If the fifth digit after the decimal is 5 or greater, the fourth digit is rounded up.

#.00

This pattern will always have two digits after the decimal point. If the number does not have the two digits after the decimal, it adds two zeros. The pattern truncates any numbers more than three digits past the decimal.

#

This pattern is for whole numbers. Any decimal part of the number is truncated.

#.##%

This pattern will convert the number to a percentage, multiplied by 100. If the third position past the decimal is greater than 5, it rounds up the number at the second position.

DATE/TIME FORMATS

The date/time formats allow you to display the date and time in various formats. Of course, you can always enter the date and time as you want. But using the date/time formats creates consistency between all your dates in the map.

M/d/yy

Also known as a short date, this format displays the month number, day, and two digit year. It is the simplest of the date formats. 8/2/18

MMM d, yyyy

This format shows the month abbreviation, the day, and a four digit year. Aug 2, 2018.

M/d/yy HH:mm a

This format shows the short date and the time in 12-hour clock format. 8/2/18 1:59 PM.

yyyy-MM-dd

This format shows the four digit year, two digit month, and two digit day. 2018-08-02.

yyyy-MM-dd HH:mm

This format displays the date as above and the time in a 24-hour format. 2018-08-02 13:59.

yyyy-MM-dd'T' HH:mmZ

This format shows the date and time as per the previous format, but with the time zone offset from GMT. 2018-08-02T13:59-0400. NOTE: The time zone offset for the U.S. Eastern Standard Time is GMT - 4 hours.

HH:mm

Shows the time in a 24-hour clock format. 13:59.

HYPERLINKS IN FREEPLANE

Hyperlinks in Freeplane let you link nodes to other nodes, files, folders, web pages, and menu items. Hyperlinks are another way to show a relationship between two nodes. When doing research, links can help by linking to documents, project folders, or web pages. Links become digital references to more information.

Link to Another Node
The first method is the anchor method. Right-click on the first node, then Link > Set link anchor.
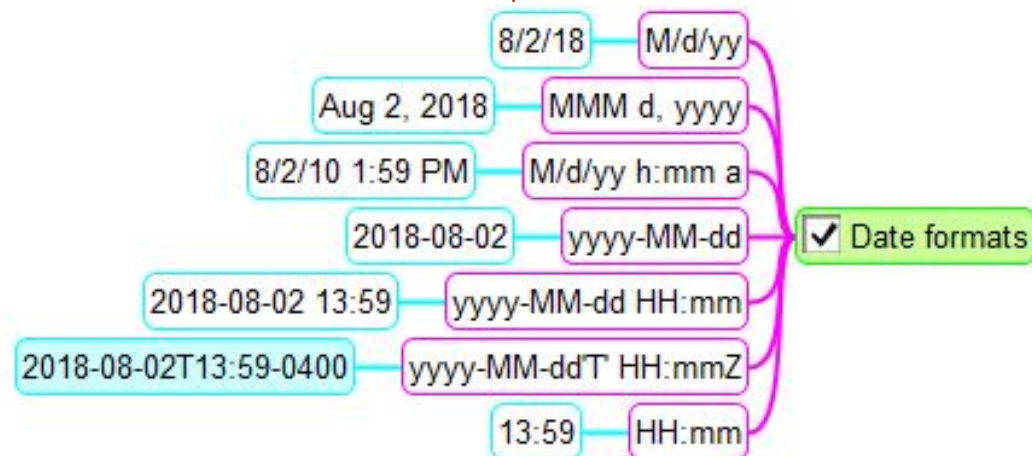
Right-click the second node, then Link > Make link to anchor or Make link from anchor. To put the link on the anchor node, select Make link from anchor. Make link to anchor puts the link on the second node. This method works best for nodes that are far apart on a large map.

The second method is the local hyperlink method. Select the nodes you want to link. Right-click and select Link > Add local hyperlink. When you link two nodes this way, the link is from the first node selected to the second.

External Links

The quickest way to add an external link is through the drag-and-drop method. When you drag and drop on a node, the link to the external object is added as a child of the node. You can drag and drop files, folders, and web URLs. The name of the file, folder, or URL becomes the nodes core text. You can change the core text without affecting the link.

When you want the link added to the selected node, use the menu method. Right-click the node, then Link > Add hyperlink (choose). An Open dialog pops up. Browse to the file or folder you

want to link. Select the file and click the Open button. You can use the shortcut keys CTRL + SHIFT + K. To add a URL to the selected node, right-click, then Link > Add or modify hyperlink (type). Paste the URL into the text box and click the OK button. You can use the shortcut CTRL + K, too.

Email Links

To add an email link, right-click the node, then Link > Add or modify hyperlink (type). In the text box, type mailto: and the person's email address, as in mailto:person@domain.com. Click the OK button to save. An envelope icon is added to the node. Click on the icon to create a new email with the email address in the To: field.

Link to Menu Item

Right-click the node, then Link > Add hyperlink to menu item. Select the menu item from the list and click OK. The icon for the menu item is added to the node. Clicking on the icon activates the menu item.

Edit/Remove Hyperlinks

To edit or remove the hyperlink on a node, right-click then Link > Add or modify hyperlink (type). To

remove the link erase the text from the text box and click the OK button. If you need to change the link, change the text in the text box to make the link correct. Click the OK button to save.

FINAL THOUGHT ON URLS

One last note on web links. You can enter the URL as the core text. Right-click the node, then Link > Convert link from within the text. This will use any URL in the text to create a link. If there are many URLs in the text, it will convert only the first one.

The core text formatting lets you control the way the text displays in a node. You can use text options including LaTex for creating formulas. The number formats let you control how numbers display, including rounding numbers. You can format dates with the many date/time formats. Hyperlinks let you connect nodes, files, folders, menu items, and web pages.

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When building a map, I often find it useful to tag or mark a node. This is especially helpful when my map is about a project or a group of projects. Freeplane's attributes feature does the trick as it lets you create a property/value pair. Freeplane keeps track of these attributes and the values you assign to them. You can even lock the list of possible values for certain attributes. In this article, I will explore the use of attributes.

ADDING AND EDITING ATTRIBUTES
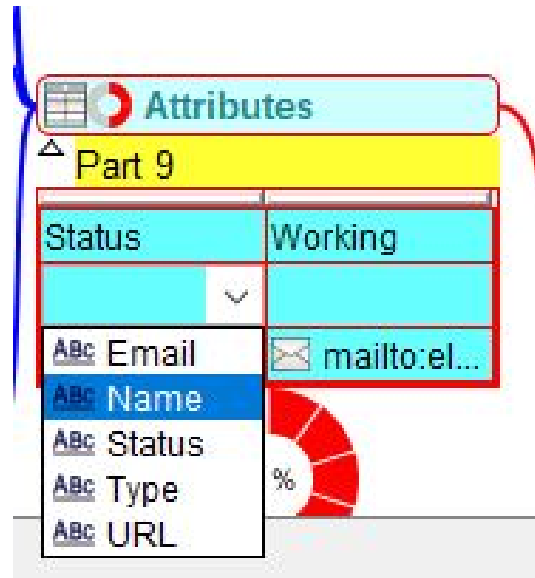
There are several methods for adding and editing attributes. The most useful being Edit > Node extensions > Edit attribute in-line. You can also find Edit attribute in-line in the right-click menu. Lastly, you can use the shortcut keys ALT + F9. If the selected node doesn't have any attributes, Freeplane adds a blank pair. The left blank is for the attribute, and the right blank is for the value. You can type in a new attribute name or use the dropdown arrow to select an existing one. You can type in a value in the right blank or press the ENTER key to get a dropdown list. The list includes values already assigned to the attribute.

If there are attributes assigned to the selected node, you can use the arrow keys to move around in the table. You can change the attribute by using the dropdown list or by typing a new attribute name. When editing the value, you press the ENTER key to get a dropdown list of assigned values, or type in a new value.

If you right-click in the table,

you get a context menu. 'Optimal width' scales the width of the table columns to fit the longest text in the column. 'New attribute' creates a row for you to add an attribute to the node. 'Delete' removes the selected attribute from the node. Up and Down moves you up and down the rows of attributes. (You can do the same things with the up and down arrow keys.) If you right-click on a value in the table, you get a context menu that includes the ability to add hyperlinks. You can add a link by choosing the file or typing in the URL/path. You can add a link to a node, too. You can use the mailto method as outlined in Part 8.

Press the ESC (Escape) key to exit the edit mode or select a different node.

When you add an attribute to a node, the menus View > Node attributes determine whether it shows. 'Show selected attributes' will display only the attributes tagged as selected. Later, I will show you how to set the select tag. To display all attributes below the node, select 'Show all attributes'. 'Hide all attributes' will show no attributes. Use the Show icon for attributes to display the attributes icon on the node core. If you hover over a node with attributes, all the attributes will show in a pop-up.

Another way to add attributes is through a dialog. Use the menus Edit > Node extensions > Add attribute in dialog. The dialog has two dropdown lists and two buttons. From the Attribute Name
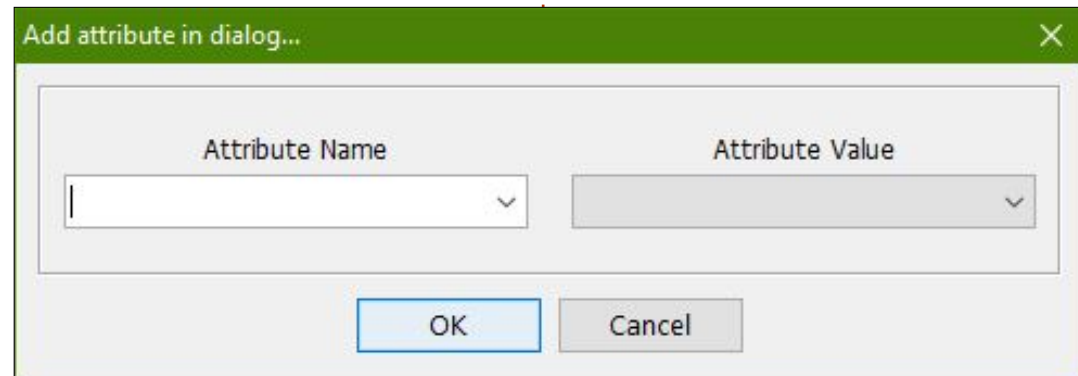
dropdown list, you can select an existing attribute, or you can type in a new name. The Attribute Value dropdown list lets you select an existing value, or you can type in a new one. Click the OK button to assign the attribute to the selected node, or the Cancel button to discard.

To copy the attributes on a selected node, use the menus Edit > Node extensions > Copy attributes. Select the node you want to copy the attributes to. To paste the attributes use the menus Edit > Node extensions > Pastes attributes. It is not possible to copy selected attributes. You are copying all the attributes of the node.

ATTRIBUTE MANAGER

The Attribute Manager lets you add, remove, and edit the attributes and values for the map. The manager dialog is a one-stop/do it all for managing the attributes in a map. You can specify which attributes are selected and which are not. To open the Attribute Manager, use the menus Edit > Node extensions > Attribute manager.

There are four columns across the top of the dialog: Attributes, Selected Visible, Restricted Set, and Edit. The Attribute column lists the active attributes in the map. You can check the Selected Visible column to change how the attribute shows in the node. If checked, the attribute will display below the node. If unchecked, the attribute shows only when you hover over the node. This is dependant on the attribute's view settings. Restricted Set locks the values for that attribute to those already in the map. Use the Edit button to change the list of values.
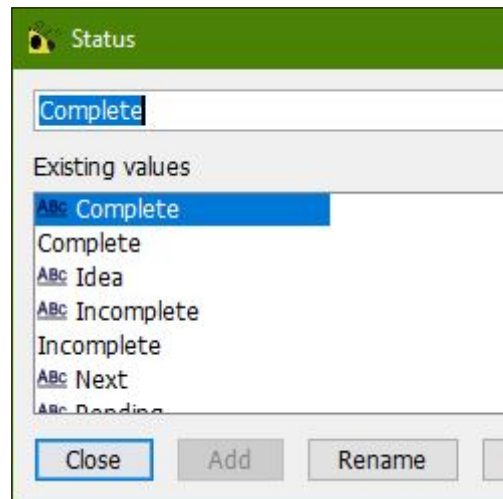
The Edit dialog has a list of the current values, a text box, and buttons to add, rename, and delete. To add a value, type the new value in the text box and click the Add button. To rename a value select the value to change, make the change, and click the Rename button. You delete a value by selecting the value and clicking the Delete button. Click the Close button to return to the Attribute Manager dialog.

Four buttons line the bottom of the Attribute Manager dialog. The OK button saves your changes and closes the dialog. Click the Apply button to save your settings without closing the dialog. The Cancel button closes the dialog and discards any changes. The Import Map button opens a dialog that allows you to import attributes and values from any open maps. Select the attributes and values you want to import and click the OK button. Click the Cancel button to close the dialog without importing any attributes.

The first entry in the manager is All Attributes. This entry is used to make changes related to all attribute names. The other rows allow you to edit values of specific attributes. Checking the Selected Visible makes all attributes visible under the node. Unchecking makes all the attributes show only when the mouse hovers over a node. The Restricted Set locks the addition of any attributes except in the manager. The Edit lets you add and remove attributes from the current map. It works the same as the values dialog, but you are adding and removing attributes instead of values.
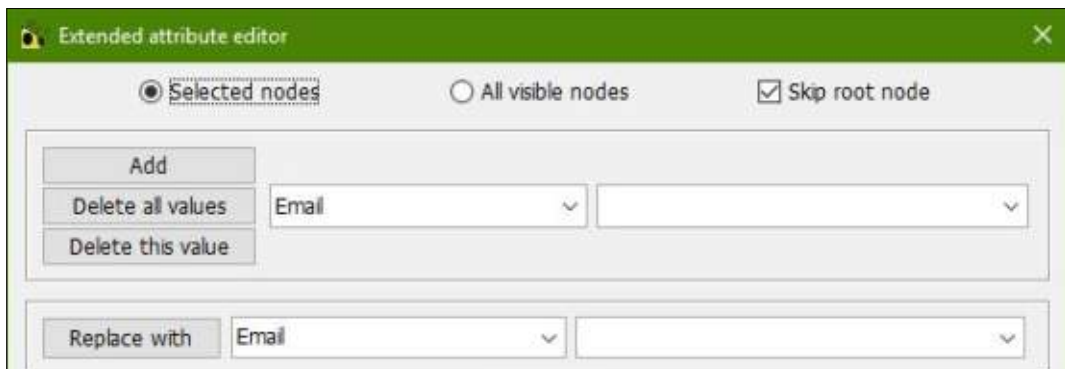
FIND AND REPLACE ATTRIBUTE

In the menus, Edit > Node extensions > Find and replace attribute brings up the Extended attribute editor. The two radio buttons at the top determine the nodes affected by your search and replace queries. You can pick from Selected nodes and All visible nodes. The checkbox Skip root node determines whether to include the root node in the search. Two sets of combo boxes allow you to select or enter attribute/value pairs. The Add button applies the top attribute pair to the indicated nodes. To remove a certain attribute from the node, select it in the top pair and click Remove all values button. The Remove this value button will remove only the attribute/value from the top pair. The Replace with button will replace the top pair with the bottom pair. The Close button closes the dialog.
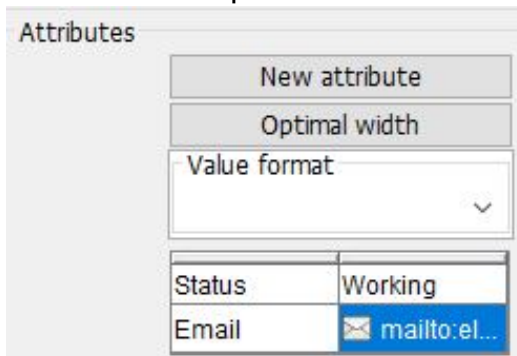
ATTRIBUTE FROM STYLE

In the style editor, you can add attributes to a style. When you assign a node to the style, the attributes aren't added to the node. You apply the style attributes through the menus Edit > Node extensions > Attribute from style. This assumes the node is assigned to a style and the style has attributes. In the style editor, you find the attribute options in the Edit > Node extensions menu.
Remove Attributes

In the menus, Edit > Node extensions > Remove attributes, you have options to Remove first, Remove last, and Remove all attributes.

TOOL PANEL

In the Tool Panel on the Calendar and Attributes tab, you find one more place to add attributes to nodes. But in the panel, you get a feature not found elsewhere, the ability to format the values of the attributes.

The attribute section is at the bottom of the tab. The New attribute button adds an attribute to the selected node. The Optimal width works in the same way as it does in other places. The Value format will open a list of formats. You will recognize many of these from the article on core text formatting (Part 8). Select a format to apply to the attribute value. The format is applied only to the currently selected value.

The right-click menus are the same as those when editing the attributes in-line.

FILTERING AND SEARCHING NODES BY ATTRIBUTES

In the filter toolbar or the filter composer, the attribute names display in the left-hand dropdown list. The right-hand dropdown list is available for selecting defined values. Select the comparison operator from the middle dropdown list. All comparison operations consider the data type of the values (text, date, time, number). The status bar shows the type of the selected value.

Attributes are a great way to tag and identify nodes for a certain purpose. You can add attributes in-line or through the Attribute manager. In the Tool Panel, you have an option to format the values on the Calendar and Attributes tab.

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I find myself using Freeplane to track my writing, tasks, and projects. Once a map gets to a certain size, it's hard to see the whole map at once. I could zoom out until I can see the entire mindmap, but I can't read the text or identify the icons. I need the ability to remind myself about that node on the other side of the map. You know, the one about the article that has a deadline tomorrow. Lucky for me, Freeplane has a time management feature that lets me add dates and reminders. Now, I get things done on time.

TIME MANAGEMENT

The time management features create reminders and add dates to nodes and attributes. To access the main time management dialog, use the menus Tools > Manage time. The Manage time dialog will appear on the screen. The dialog allows you to have it open and still work on your map. This means you can leave the dialog open when you need to access it often.

Three monthly calendars line the top of the dialog. The center calendar controls the other two. The first time you open the dialog,

it defaults to the current date. The clock at the bottom defaults to the present time. You can use the month dropdown list to select another month, and the year number box to change the year. The left calendar is the month before the center calendar, and the right calendar is the month after the center calendar. The left and right calendars are for reference only. You can't change or select within them. The numbers to the left of each calendar are the weeks of the year.

There are three controls related to the date. The Reset calendar

button changes the middle calendar and the clock to the computer date and time. The clock works off a 24-hour clock, no AM or PM. The next two controls deal with inserting the date/time into the map. The dropdown list selects the format you want for your date/time. The 'Insert date in Selection' button places the date/time using the selected format into the map. You can insert the date/time to the core text or an attribute value. I will show you later the quickest way I've found for adding the date into an attribute value.

The last button on the first row is 'Edit script'. Clicking this button brings up the script editor window. After writing the code, click the OK button to attach the script to the reminder. The commands execute when the reminder activates. Creating scripts is a topic for another article. For now, know this is the place where you can attach a script to a reminder.

The next row of buttons deals with reminders. Reminders are the
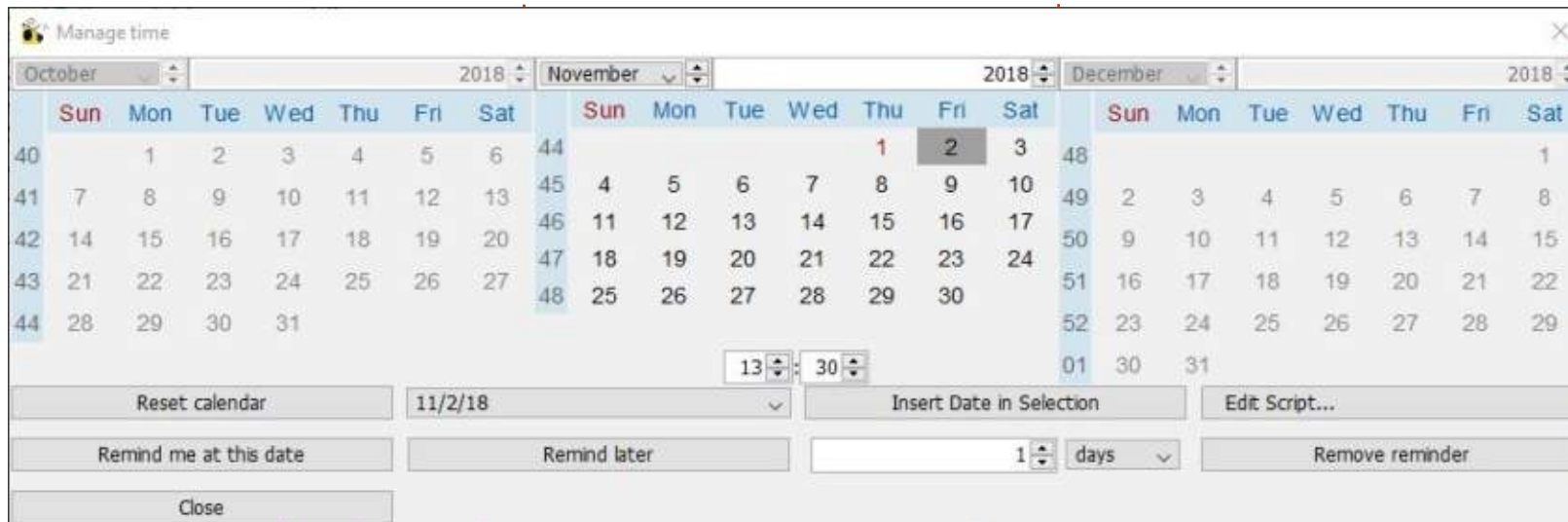
key to the time management system. When a reminder is set to a node, you get an alert when the reminder becomes active. How it alerts you depends on the settings in the preferences.

The 'Reminder at this date' button creates a reminder in the selected nodes for the date and time in the middle calendar. Select the date, adjust the time to when you want the reminder, and click the button. If you hover over a node with a reminder, the reminder will display in the popup text. Freeplane adds a clock icon to the node, too.

The 'Remind later' button, the numeric spinner box, and the dropdown list work together to create a reminder that is offset from the current date/time in the middle calendar. The dropdown list is a list of periods: minutes, hours, days, weeks, months, and years. Enter the count for the period in the numeric spinner box. When you click the 'Remind later' button, Freeplane adds a reminder offset for the period based on the date/time in the middle calendar.

'Remove reminder' erases the reminder from the current node.

Use this button to acknowledge a reminder alert, too.

The Close button closes the dialog.

TASKS MANAGEMENT

After creating many tasks, it's nice to have a place to organize and work with them. Freeplane provides you with a dialog where you can work with your reminders. Open the dialog through the menus Tools > Manage tasks.

The dialog shows a list of the tasks in the map. The dialog contains 7 columns:
• Date -- the day/time for the reminder.
• Text -- the core text of the reminder's node.
• Icons -- icons attached to the node.

• Created -- the day/time the node was created.
• Modified -- the last day/time the node was changed.
• Details -- the text of the node details.
• Notes -- the text of the node notes.

You can sort the list on any of the columns by clicking the column name. The first click will sort the list in ascending order. The second click will sort the list in descending order. Further clicks will toggle between ascending and descending.

The Find text box can help you narrow down a long list. As you type, the reminders will shrink to only those containing the text. If you check the Match case checkbox, Freeplane will take the upper and lower cases into account. The Regular expression

checkbox lets you include regular expressions in your search.

Replace lets you replace the text in the Find field with the version in the replace field. For example, you want to replace all occurrences of Menu with Menus. You would type Menu in the Find text box and Menus in the Replace text box. When you click the Replace all button, Freeplane will replace all occurrences of Menu with Menus. After selecting specific results, you can click the Replace selected button to do the replacement only in those nodes. The Replace text box also has a Regular expressions checkbox.

The Export selected nodes button will export the selected nodes to a new map. You can use this to create a new file based on specific reminders. The Goto button will close the dialog and

Actions					
Find	Match Case ☐	Regular expressions ☐			
Replace		Regular expressions ☐			

| Date	Text	Icons	Created	Modified	Details	Notes
Nov 2, 2018 1:30:31 PM	70th Ave SS EasyC...		Nov 1, 2018 1:39:43 PM	Nov 1, 2018 1:42:09 PM		
Nov 5, 2018 10:00:00 AM	Coolbox Follow-up		Oct 31, 2018 6:18:36 PM	Oct 31, 2018 6:20:02 PM		
Nov 5, 2018 10:30:31 AM	Caraway Boat & RV...		Nov 1, 2018 1:48:55 PM	Nov 1, 2018 1:55:13 PM		
Nov 8, 2018 10:00:31 AM	Twin City CORE only		Nov 1, 2018 1:57:50 PM	Nov 1, 2018 1:59:07 PM		

highlight the selected node. The Close button exits the dialog.

With the menus Tools > Remove reminder, you can remove a reminder without opening the Manage time dialog.
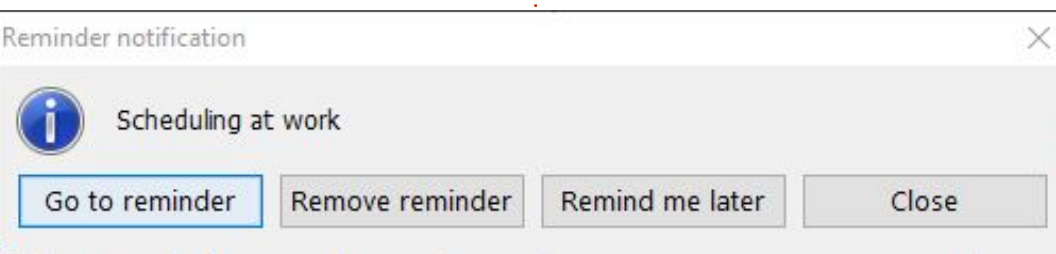
TOOL PANEL

In the tool panel, there is a tab for Calendar and Attributes. There you find a monthly calendar that behaves like the center calendar in the Manage time dialog. All the buttons and dropdowns work the same way as they do in the dialog. Having them in the tool panel makes for quick access when you need to add a date or set a reminder.
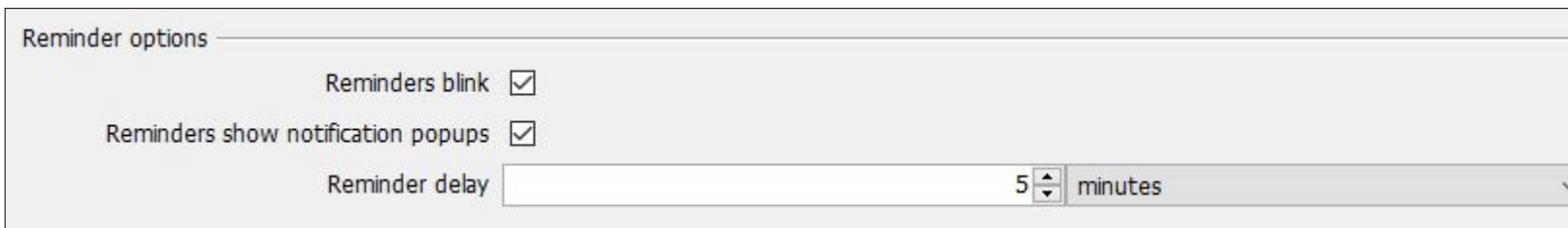
I find the tool panel as the quickest way to add a date to an attribute value. Open the Calendar and Attributes tab in the tool panel. Set the date and time and select the format. In the attribute section, click New attribute. Select an existing attribute name from the dropdown or type in a new name. Select the value cell and press Enter. Click the Insert Date in Selection button. Press the Enter key again to save the value.

PREFERENCES

In the Freeplane preferences are settings to control the behavior of reminders. The settings are located in the menus Tools > Preferences. You find the Reminder options on the Behavior tab. The Reminder blink checkbox blinks the reminder icon when the reminder activates. To show a reminder popup window, check the 'Reminders show notification popups' checkbox. The Reminder delay sets how long a reminder delays when you click the 'Reinder me later' button in the reminder popup. Set the number for the period and the period to delay. The time periods are ms (milliseconds), seconds, minutes, hours, days, and weeks.

If you have the setting checked for the notification popups, a popup window displays for a reminder when it activates. The popup gives you four options:
• 'Go to reminder' closes the popup and moves to the node with the reminder.

• 'Remove reminder' acknowledges the reminder and removes it. This is like a 'done' option.
• If you need to delay the reminder, click the Remind me later button. The reminder is suspended for the amount of time defined in the preferences.
• The Close button exits the popup and does nothing.

Through the date and reminder options, you can manage your projects in Freeplane. Along with the attributes, you can use Freeplane as a project management platform. In the next article, I will walk you through setting up a project template that you can expand.

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We have covered enough Freeplane features that we can build a useful template. For our example, I'm showing you a simple project management system. I've mentioned before I use Freeplane to outline and manage my projects. The template will allow for the management of many jobs. We will create a set of attributes and styles to make the system work for us. Once we finish the template, we will implement the model.

We'll build our model using the standard template file. Use the menus File > New Map and select the standard.mm file.

ATTRIBUTES

First, we will create the attributes. The attribute manager allows us to set up everything we need. You open the manager using the menus Edit > Node extensions

> Attribute manager. We'll create the attribute names by clicking on the edit icon for the 'All attributes' row. Add these attributes through the list dialog: Status, Start, and Due. When you add to the list, a row is created in the manager window. After adding all the names, click the Close button.
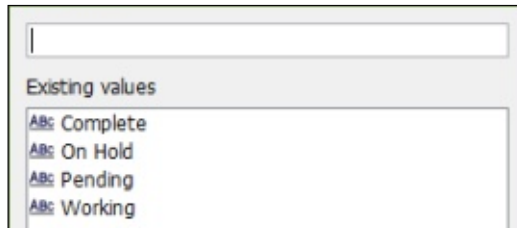
For the attribute Status, we will add default values. Select the edit icon for the Status row and add the values: On Hold, Working, Pending, and Complete. Click the Close button and check the Restrict set checkbox. Restricting the set prevents mistakes when entering the project's status.

Select the checkboxes to make all the attributes visible. Click the OK button to close the manager.

STYLES
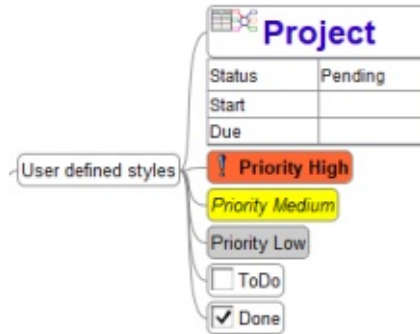
Styles are the visual character of the mind map. Through them, we assign colors, icons, and attributes to differentiate nodes. We will create six for our template. Each style defines a different purpose on the map.

GETTING STARTED

Use the shortcut keys CTRL + F11 to open the Style editor. Select the Default style and change the Node Shape to Bubble. Delete all the default User Defined Styles. To delete a style, right-click it and select 'Remove user defined style'.

PROJECT

The project is a to- level node defining the project title. We'll

assign the attributes Status, Start, and Due to the style. A node assigned to Project will become the parent node for each project. So, we want Project to stand out among the others.

Right-click the Default style and select New style from selection. In the text box that pops up, enter the name Project and click OK. The new Project node shows under in the User defined styles node.

Under the Color of whole core section of the Tool Panel, click on the Text swatch. From the color pallet, pick one of the darker blues for the text color. Scroll down to the Font for whole core section, and set the Font size to 18. Check the bold box. The Project style is big and bold and catches the eye.

We want to add some attributes to the Project style. To add the first attribute, use the menus Edit > Node extensions > Edit attributes in-line. A new attribute row is inserted into the node. Use the dropdown on the left to select Status. Double-click the value for

the Status and choose Pending, then add the Start and Due attributes using the right-click menu. Leave the values for the last two blank.

Finally, we'll crown it with the mind-map icon. When I think of a job, I think of all the things that go into it. Often, you can make a project a map on its own. For me, it's the best choice from an image. Select the icon from the Styles icon sidebar.

PRIORITY LEVELS

We'll create three priority styles, high, medium, and low. These styles are meant to show the importance of an item in the project. As we step down through each of the priorities, the visual impact decreases. Use the Default node as the starting point for each level by right-clicking Default and selecting New style from selection.

For Priority High, bold the font and make the background color red. Add the exclamation point for an icon. The Priority Medium is simpler than Priority High. Make the font italic and the background color yellow. For the Priority Low,

we just give it a dull gray background.

ToDo and Done

I can't create a template without my standard ToDo and Done. In this case, we will keep them simple. For ToDO, add the empty checkbox, and for Done, add the checked box. These two styles we'll use for tasks. By keeping the text plain, we can easily mix them with the priority styles. For both, use the Default style as the starting point.

Save Template

We are finished with the template. We need to save our work. Click the menus File > Save Map. At the top of the save dialog, you'll see a drop-down box. From the drop-down, select the option 'User templates' to move the location to your template folder. Name the file Projects.mm and click the Save button. Once the file is saved, you can close it.

Implementation

Now, we need to use our new
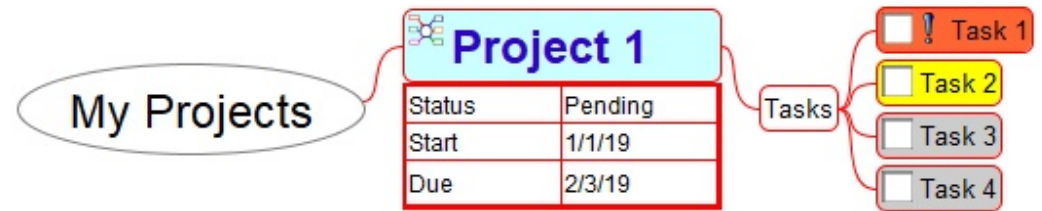
template. The menus File > New map brings up the Select template dialog. From the drop-down list, click on the Project.mm file and click the OK button. Freeplane creates a map using the template.

Rename the root node to My Projects. Pressing the Insert key will create a child node. Name the node Project 1. From the main toolbar, use the styles drop-down list to select the Project style. Use the menus Edit > Node extensions > Attributes from style to add the Status, Start, and Due fields below the node.

Use the Insert key to create a child node for the project and name it Tasks. Create several children for Tasks, naming them Task 1, Task 2, etc. Select all the tasks nodes and assign the ToDo style to them.

Now, let's make one of the tasks a high priority. After

selecting one of the nodes, follow the menus Format > Manage styles > Manage conditional styles for node. Click the new Button to create an Always condition. From the Style drop-down list, pick High Priority. Click the OK button, and the style's format is added to the node. Repeat these steps for the other tasks, assigning them different priorities.

You can click into the Start and Due attributes below the project node and type in dates according to your local format.

We created a simple template without many bells and whistles; however, it is a starting point for more advanced features. Using conditional formatting, you could tag currently active projects. Play with the template, expand it, and make it your own. After all, making it your own is the core principle of mind mapping.

Whenever possible in my tutorials, I give you the keyboard shortcuts for the commands. I do this because I'm lazy, and if a hotkey is available, I'm not going to follow the menus (frankly, it's a lot of typing too). You probably noticed most commands don't have a shortcut. My second choice is the right-click context menu. If there are no shortcut or context-menu options, you have to use the menus. Well, maybe not.

Freeplane lets you create shortcuts. Freeplane includes a special toolbar for managing the shortcuts assigned to the Function keys (F keys), and gives you a reference and buttons to click. The function keys sit across the top of your QWERTY keyboard, F1-F12. Hotkeys are key combinations, and they can include the F keys.

DEFAULT FUNCTION KEYS

The function keys let you activate a command quickly. By default, Freeplane assigns five of the twelve keys to frequently used

commands:
• F1 opens the Freeplane tutorial map. The map is read-only but contains a guide to most of the software's features. I have used it as a jump-off spot for many of my articles.
• F2 edits the node core inline. I use this key almost exclusively when creating a map. I like to keep my hands on the keyboard as much as possible without having to reach for the mouse. Reaching for the mouse could break my concentration just enough for me to forget what I was going to type. Yeah, I know, I'm old-school weird.
• F3 edits the node details inline. Again, my hands on the keyboard, broken concentration, old brain losing stuff faster than I can type it. Stop laughing. It's a severe problem.
• F5 runs a presentation. We haven't discussed presentations yet. I hope to write about this someday. I managed to get it on my to-do list before it floated off into the ether.

• F11 switches to full-screen mode. It's a way to avoid the distraction of the GUI. With all those buttons to push and menus to click and explore, one might forget what it was they wanted to type. F11 is especially great for brainstorming when you aren't worried about formatting but just getting ideas down.

THE F-BAR

Freeplane has a special toolbar called the F-Bar. To open the F-Bar, follow the menus View > Controls > F-Bar. The taskbar shows you what commands are assigned to the function keys, F1-F12.

If you want to run the

command, you can press the associated function key, or you can click the button. You can press the SHIFT key to see the hotkeys set for the SHIFT + F? combination. The same is true for the ALT, CTRL, and other command key combinations. In each case, you can click on the button or press the key combination.

Freeplane labels unassigned buttons as <no action>. Clicking any of these <no action> buttons gives you with a window asking you to select the menu you want to assign to the shortcut. Click through the menus to the item you want to attach to the hotkey. The text from the menu item becomes the text for the F-key button.
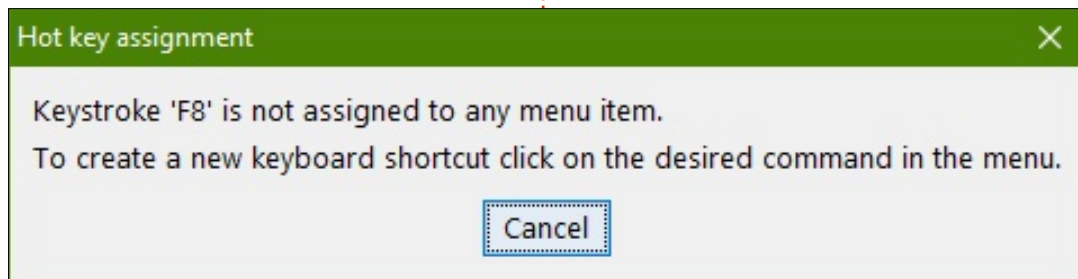
CREATE NEW HOTKEYS

You can create other hotkeys than those related to function keys. To assign a new combination, use the menus Tools > Assign hot key. You are prompted to select the menu for the hotkey, or you can click Cancel to stop the process. Once you choose the menu item, Freeplane prompts you to enter the key combination. Enter the keystroke using the keyboard and click OK. If the hotkey is assigned to another command, the program asks you to confirm replacement of the current assignment. Click Yes to change the shortcut, or click the No to leave the hotkey as previously assigned.

To remove a hotkey, select Tools > Assign hot key and use the Clear button to remove the shortcut assignment. Clicking OK will remove the hotkey, and clicking Cancel will leave things unchanged.

Once you have your shortcuts the way you want them, you
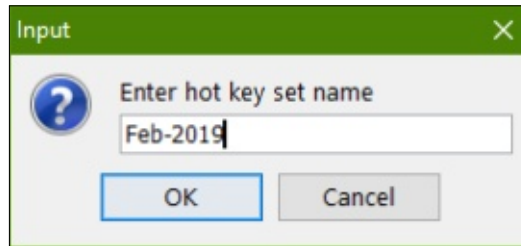
should save them. Use the menus Tools > Hot key presets > Save hot key set. Freeplane prompts you for a name. To save the current hotkeys, enter a name and click

OK, or click Cancel to stop the process.

To load a saved preset, use the menus Tools > Hot key presets > Load, and select the name of the preset set you want to use. Saving the presets allows you to have different sets of shortcuts for a variety of map types.

ICON HOTKEYS

You can assign shortcuts to icons. They work only in the Icon Table dialog. By default, the hotkey for the icon table is CTRL + F2. Once the table is open, pressing the key(s) for the icon adds the icon to the selected node(s).

To assign keys to the icons, press the CTRL + (comma) to open the Preferences dialog. You find the icon settings on the Keystrokes tab. You see many hotkeys already assigned. Assign the shortcut by clicking the box beside the icon. Enter the key combination and click OK. Be careful in here as the program will let you assign the same key to more than one image.

KEY REFERENCE

In creating so many shortcuts, you might forget what you assigned to what. Help > Key reference displays a list of the menu items and the hotkeys associated with them. The list includes any shortcuts you have created.
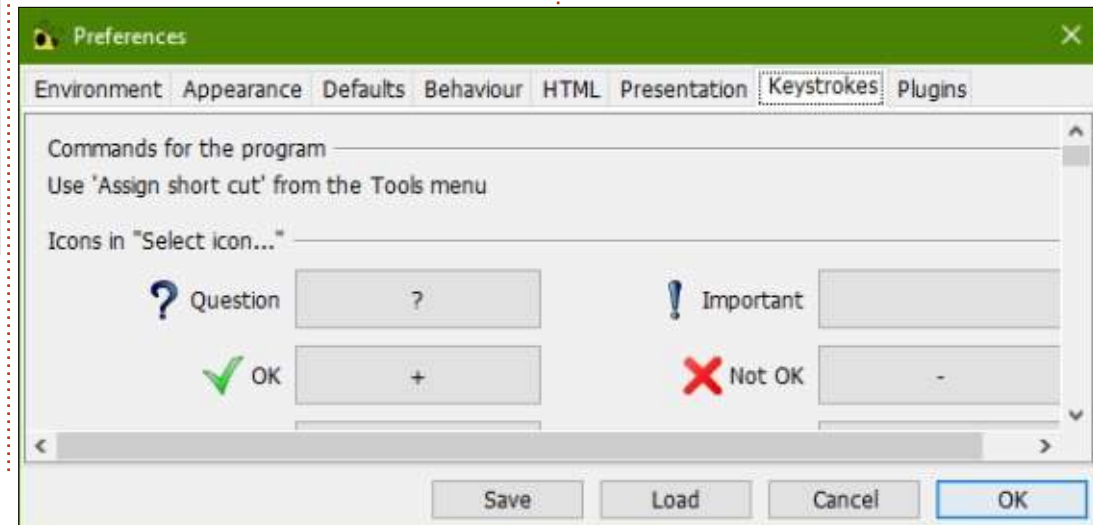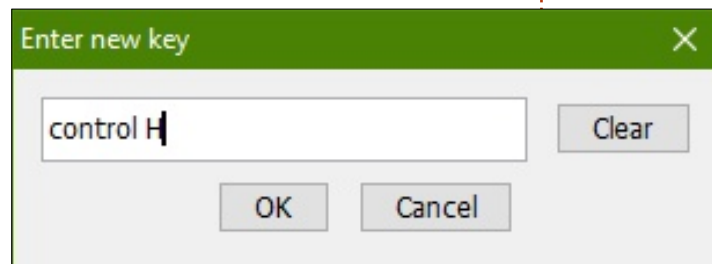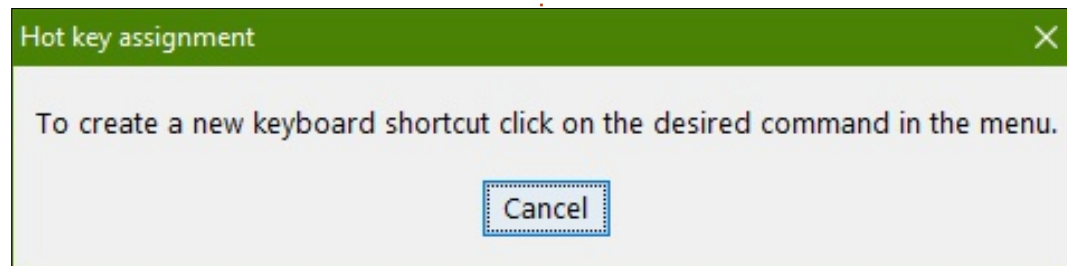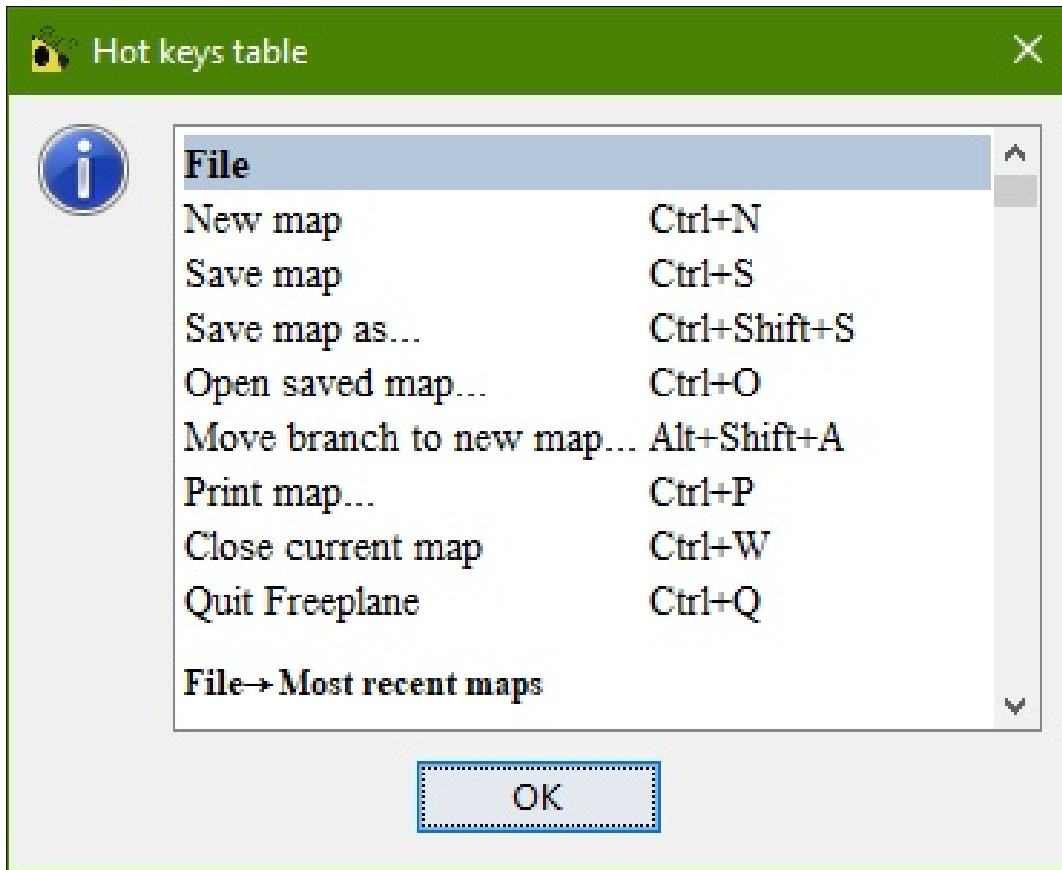
But What Should I Create Hotkeys for?

Well, it depends on you. If you find yourself using a menu item often and no hotkey is assigned, you should attach a hotkey to it. I like using the function keys for my most used commands. After that, use key combinations that make some sense to you. For example, if I were assigning a shortcut to Assign hot key, I would use the CTRL + H key combo. The choice is up to you. Like everything in mind mapping, make the program work for you and the way you do things.

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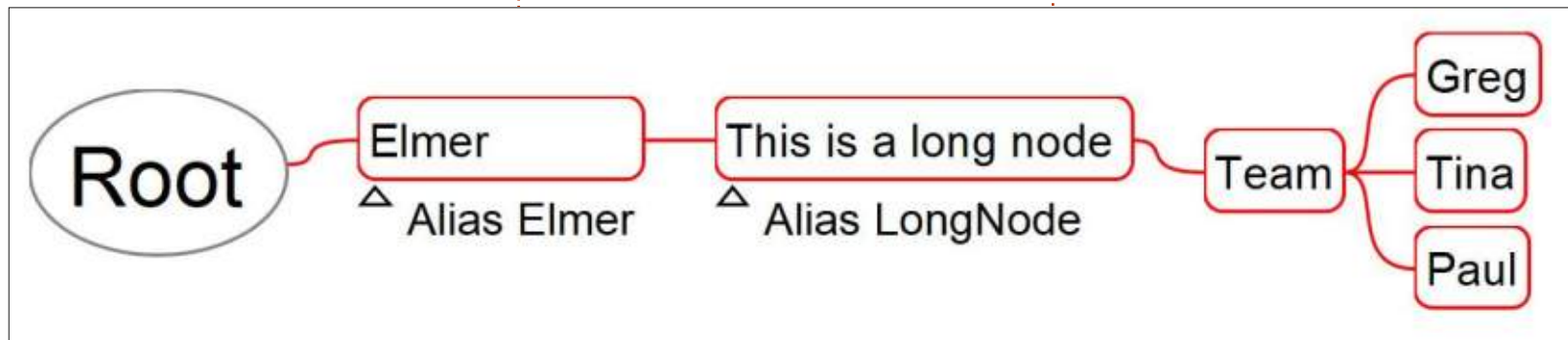
I recently took two months off from writing articles, and I focused on other things in my life. When I returned to writing again, I discovered Freeplane had gone through a couple of updates. When Freeplane went from 1.6 to 1.7, bug fixes and cosmetic changes were made, and the interface got new features added. This month, I'm looking at the editor changes made by the programmers. As of this writing, the latest stable version is 1.7.5, and you can download it at https://www.freeplane.org/wiki/index.php/Home.

The installation is pretty straightforward, and updates your current version of Freeplane. If you choose to stay with the 1.6 release, the features I discuss this month will not work.

Node Aliases

You can reference and link nodes together through features already in place, but when a node is on the other side of the map, making these links becomes cumbersome. Node aliases make referencing important nodes easier. Freeplane allows two types of aliases, regular and global. A global alias is directly accessible, while a regular one is not.

To create an alias, select the node you want and follow the menus Edit > Node properties > Set node alias. The Alias dialog pops up. In the text box, type a name for the alias. The name must contain at least one letter but can have numbers and underscores too. Spaces are not allowed. Check the Globally accessible checkbox to make the alias global. The OK button saves the settings, and Cancel closes the dialog without any changes.

Alias As A Filter

Now that you have an alias, you want to use it. You can filter a search or conditional style based on a filter. When creating a condition, you select "alias" from the "criteria" drop-down. The drop-down list for the "object" is a list of aliases in the current map.

Since aliases work as a tag for the node, you can have nodes with the same alias name. You can use this as a type descriptor to quickly filter a specific type of node. When filtering by an alias, Freeplane doesn't care whether the alias is global or not.

Node Paths

Now that you have a node alias, you will want to use it for something. In the new release of Freeplane, you can create a path to any node in the map, and the quickest path leads to a global alias. Aliases can help to make the path to a wordy node easier to compile.

For the examples, I'm using the branch shown top right.

My examples of paths are as internal links, but node paths work
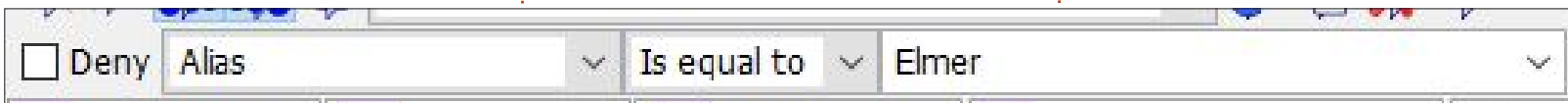
in scripts using the node.at function, too.

When using paths as links, the pattern is #at(path). To add a link to a node, use the quick keys CTRL+K. You enter the #at() path into the text box.

Example 1:
`#at(/'Elmer'/'This...'/'Team'/'Tina')`

The path in this example starts at the root node. The root is denoted by the backslash (/) at the beginning. The backslash also separates the individual nodes. Elmer in single quotes points to the first node from the root. The next node in the path looks for a node that starts with the word This. The ellipses (...) shows the node has more characters after the word quoted. The last two nodes in the path demonstrate referencing a node by text. If you click on the link for a node assigned this path, Tina becomes the active node.

Example 2:
`#at(:~Elmer)`

This example shows the power of global aliases. Since Elmer is a global alias, we can jump directly

to it. The tilde (~) is used to reference aliases, but when a global alias starts the path the colon (:) is added. This path jumps straight to the Elmer node.

Example 3a:
`#at(:~Elmer/'This...'/'Team')`

Here we use the global alias Elmer to start a path to another node. The path will activate the Team node. But there is a better way. The node "This is a long node" has an alias of LongNode. We can change the path to example 3b.

Example 3b:
`#at(:~Elmer/~LongNode/'Team')`

By directly addressing the alias, we don't take any chance on another node containing the text "This" getting in our way.

Example 4:
`#at(:~Elmer/~LongNode/'Team'/~3`

In the path, we continue the previous one a bit further. The ~3 at the end selects the third child of the node Team, Paul.

These are just a few examples of the use of aliases and node paths. For a more detailed

description of node paths, you can click on the link: https://sourceforge.net/p/freeplane/discussion/758437/thread/950530ab/. On the forum page, developer Dimitry Polivaev provides more details.

OTHER FEATURES

If you press an unassigned function key, Freeplane presents a dialog to create a shortcut to a menu. If you don't want this feature, you can check the box 'Don't ask me again', and Freeplane will ignore the pressing of unassigned function keys. Besides the checkbox, you can change this option in Tools > Preferences. The keystrokes tab has a checkbox labeled 'Ignore Unassigned F-keys'. Check the box to ignore the key presses, and uncheck it to get the assignment dialog.

Sometimes, when you create a filter, you want to flip the results, meaning you want everything that doesn't match the conditions. Now, you can. In both the search and the conditional formatting dialog, you have a checkbox tagged 'Deny'. Checking the box creates a filter with everything that doesn't match

the filter's condition.

In previous versions, if you wanted to export a branch, you had to copy it to a new map. Now, you can export without creating a new file. After activating the node, select the menus File > Export branch. A 'save file' dialog pops up. Browse to the location where you want to create the file. After you choose the file type and give it a name, click the Save button.

Finally, the documentation and tutorial maps have been updated to reflect the latest release. A big "Thank you" from me to the programmers for this one. The updated information makes my work a little easier.

And there you have it, These are just some of the features and updates found in Freeplane 1.7. For a full list, see the tutorial map included with the update.

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So far, I have demonstrated how Freeplane works as everything from a simple brainstorming tool to a project management tool. The software takes you beyond the basic idea of mind mapping and expands into a tool for many jobs.

Today, we will expand Freeplane a little further. Packaged with Freeplane is the note editing utility Simple HTML Editor. The developers Ulrich Hilger and Dimitry Polivaev designed the editor, and they made an editor that's easy to use. You can use the editor to change and create node text, node details, and node notes. The node notes seem the natural place to use the editor, but, sometimes, you will want to format your node text and node details more extensively.

To open the editor to edit the node text, you use the key combination ALT + ENTER. For the node details, use the combination CTRL + F3, and when using the editor for node notes, CTRL + >, which requires you to hold the shift key.
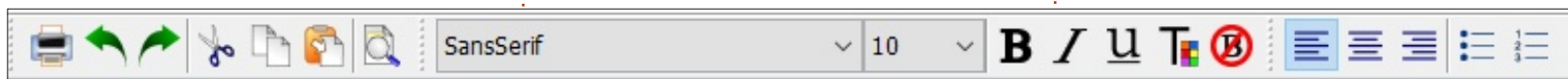
THE TOOLBAR

The toolbar for the Simple HTML Editor looks like many you'd see in any text editor. You have buttons for printing, undo and redo, cut, copy, paste, and search. You have dropdown boxes for the font and font size. You can change the format of the text with bold, italic, underline, and text color buttons, or remove all formatting with the click of a button. Format your paragraphs as left, right, or center aligned, and create bulleted or numbered lists. Most of what you need to do in the editor you can do from the toolbar.
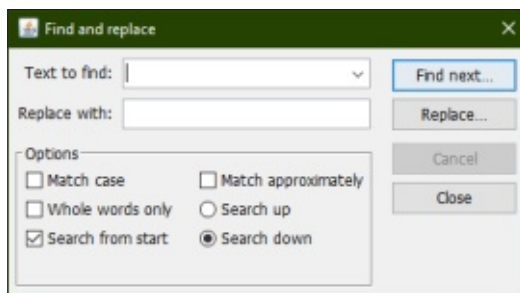
Two of the toolbar icons generate option dialogs, search,
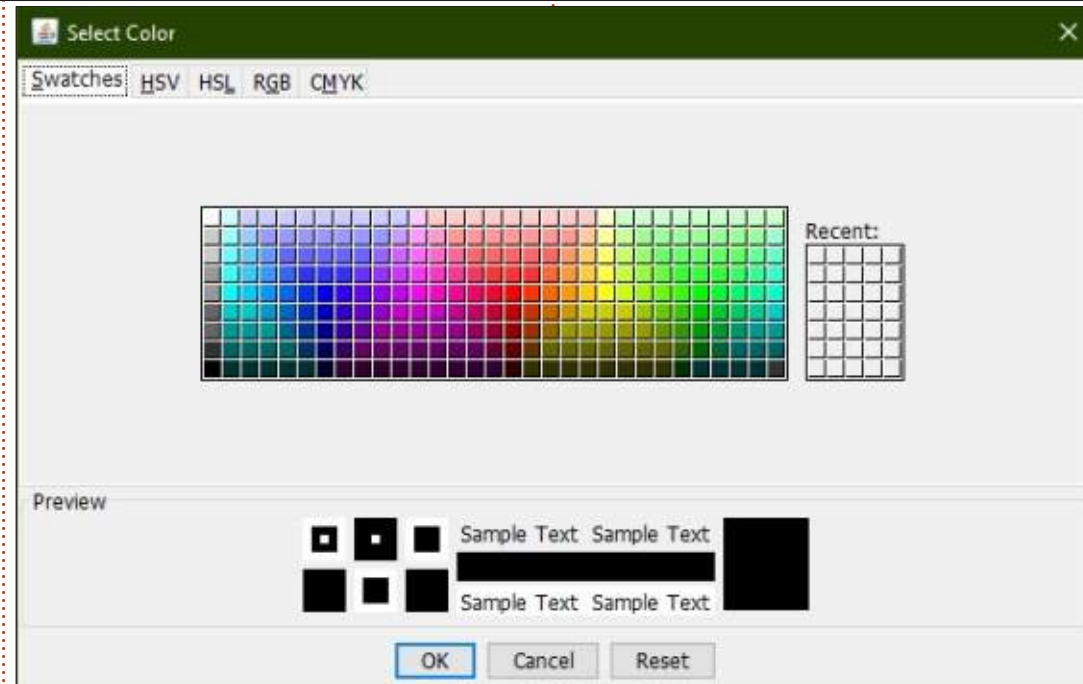
and text color. The search dialog allows you to search, or search and replace. The options let you match case, words, search from the start, and search up or down. The text color dialog enables you to select a color using swatches, HSV, HSL, RGB, or CMYK.

THE MENUS

EDIT MENU

The Edit menu has the usual copy, paste, print, and find and replace options. The dialog for find and replace is the same as the one on the toolbar.

The menu includes the ability to create underlined links like the ones you find on web pages. To

create an underlined link, highlight the text you want to turn into a hyperlink. From the menus, select Edit > Add or modify hyperlink (type). In the dialog, enter or paste the URL for the link and click OK. To link to a file on your PC's hard drive, use the Add hyperlink (choose) menu option, browse to the document, and click Open.

FORMAT MENU

The Format menu has options for styling the text you highlight in the editor. You will find all the standard character and paragraph style selections, but a few of the choices generate dialogs which allow you to fine-tune the look of your text.
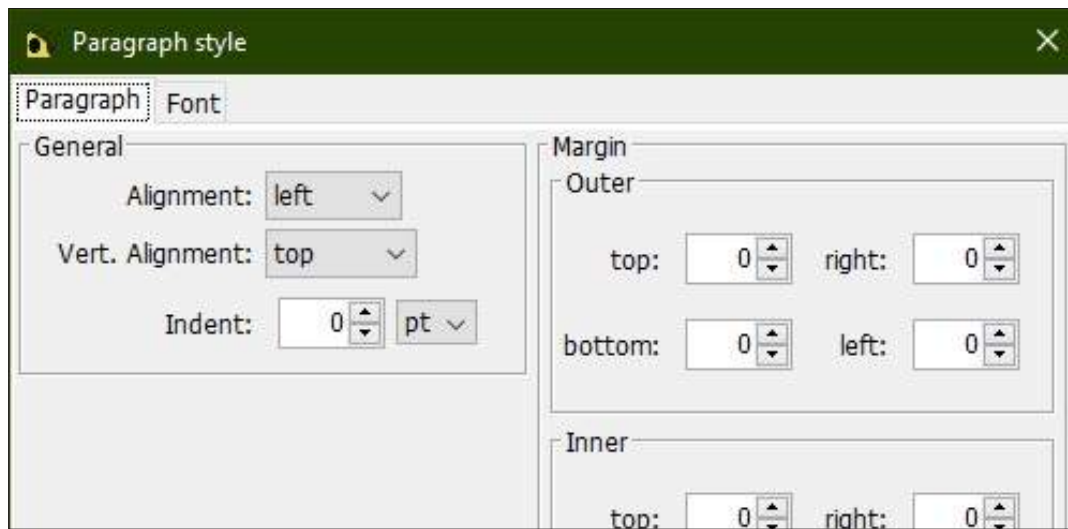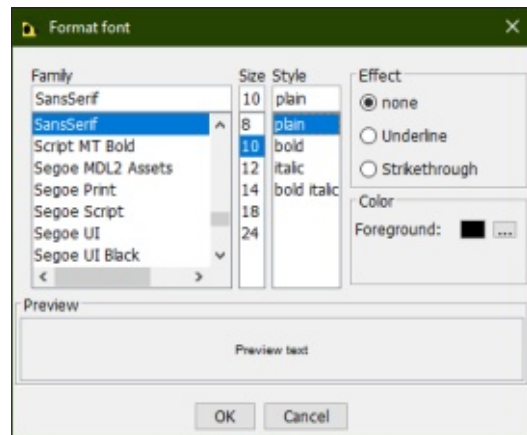
The Font option opens the Format Font dialog. You can select the font family you want to use, the size, the style, the effects, and the color. The preview text shows you how your selection will look. The dialog is your one-stop shop for character formatting.

The Paragraph option lets you format how paragraphs display. You can control the alignment, vertical alignment, and indentation. The indentation applies only to the first line. The paragraph has two sets of margins, inner and outer. Think about a rectangle surrounding the text of a paragraph. The outer margin is padding outside the box, and the inner margin is padding inside the

box. If you select a background color for the paragraph, you can see the edges of the rectangle, and the effect of the inner and outer margins. The Font tab of the Paragraph style dialog is the same as the font dialog with the addition of the background color.
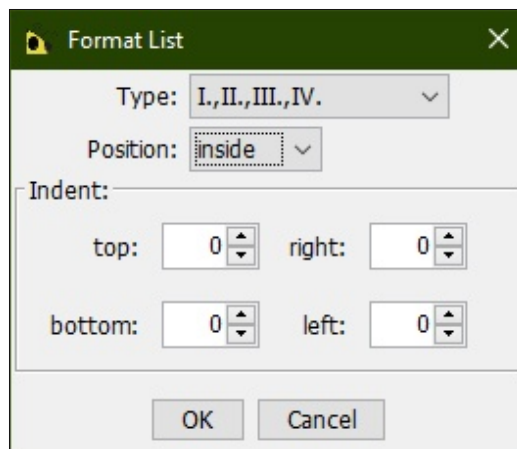
The Color options display the same dialog discussed in the toolbar section and gives you some default color choices, too. You can choose from red, green, blue, and black. The 'remove color' removes the color selection.

The List option lets you customize the display of lists. From the Type dropdown, you can select the numbering style or bullet type. You can position the numbers and bullets so that they are on the inside or outside of the paragraph margins. You can control the indentation of all four sides of the list item.

TABLE MENU
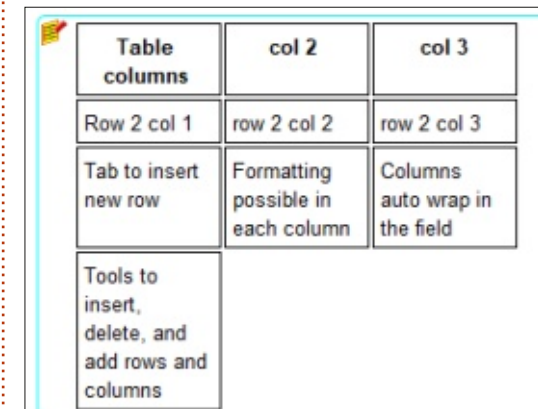
The table menu helps you create tables in your node text, details, or notes. When you click on

the Table item, you get prompted for the number of columns. Enter how many columns you want and click the OK button. You can edit and format each cell individually, moving between the cells using the tab key. If you press tab while in the last column, the editor creates a new row. The columns will autowrap as you type the text. In the menu, you have tools to insert, delete, and add rows and columns. All the formatting options work inside the table cells, allowing you to create a visually pleasing table.

Help Menu

The Help menu has an About simple HTML item that displays the GNU license for the utility.

View Tabs

At the bottom of the Simply HTML window are two tabs. The tabs give you a different view of the text in the editor, and depending on your knowledge of HTML, you can customize the information even further.

At its roots, the text in the editor is HTML. You can view the actual HTML using the HTML Code view. The editor uses an embedded stylesheet and inline styles to markup the text. Switching back and forth between the views, I got a sense for how it all worked. I did add some HTML to see that directly editing the HTML works. In HTML Code view, many of the formatting tools are disabled.

Most users will want to stick with the Layout view, which shows you the formatted text. In this view, you can use all the tools to format your text. You will work here most of the time. Save the HTML Code view for when you need to tweak something.

The Buttons

When you open the editor to write a node note, the Simple HTML opens docked to the bottom of the program window. However, when you edit node text or details, the editor opens in a window. You will see buttons at the bottom of the window. For the node details you see OK and Cancel buttons, but with the node text you also get a Split button.

The OK button saves the text as formatted and returns to the map. The Cancel button ignores any changes and returns to the map. The Split button divides the node into two nodes at the location of the cursor. With a node of "One Two," if you place the cursor between the two words and click on Split, Freeplane will create two nodes, "One" and "Two."

The Simple HTML Editor is a tool built into Freeplane for editing the text of node text, details, and notes. At its roots, the layout is HTML, but you don't have to know HTML to use it as the Layout view works like a mini word processor.

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With every article or story I write, I use Freeplane for my research and my outline. My last article on the Simple HTML editor prompted me to explore the possibility of creating the draft copy of a document in Freeplane. The node text becomes the header for each section, and the notes become the text body. I can then export the draft branch of the map to a document for editing. The advantage is having the Outline in front of me while I work. The draft of this article was written using this method, and in it, I'm sharing my experiment with you.

SETTING UP THE MAP

Everything started with setting up a mind map for my project. I wasn't overly concerned with the formatting of the map but concentrated more on the layout. I titled the root node the same as
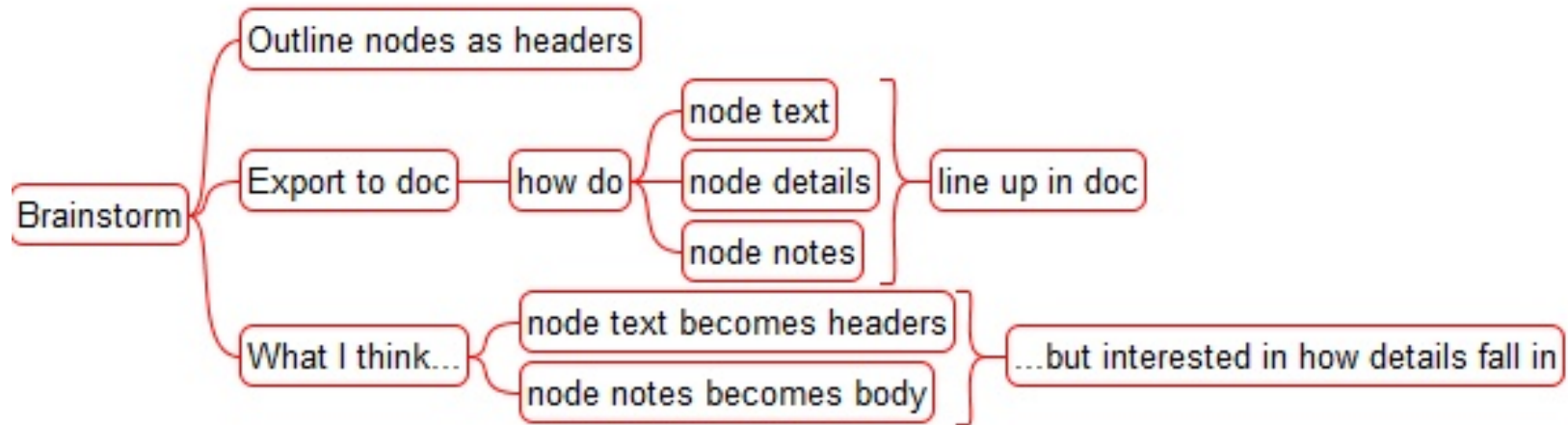
the planned title for the article, Freeplane Part 15. I know, attention-getting stuff. Fancy titles are saved for the fiction side of writing. I created four branches from the root, Brainstorming, Research, Outline, and Draft. Let me explain to you how I used each of the branches.

BRAINSTORM

Brainstorming is where the whole process began. I start by creating nodes of my ideas about the article. What did I want to accomplish? How did I think it would work? What didn't I know? Brainstorming is best done without holding yourself back and noting all the ideas even if you think you will never use them. I was mostly interested in how all the different parts would show in the final document. I had a good idea that the node text would show as headers and the notes as each section body. What I didn't know is how the node details would fall into the mix. I didn't plan to use

node details, but going beyond can result in something useful and is the main idea behind the brainstorm session.

RESEARCH

Research is where I gathered data for the article. I did look on the web for what I wanted to do, but I didn't find anything. So I went with the experimental method. Under the research node, I created three experiments to test my theories. I found the node text and notes worked as I had expected: the node text as a header with the notes text below. I discovered a

node with details gets the details sandwiched between the node text and notes. Any sub-nodes are placed in order under their parent's details and notes with their own details and notes. With my questions answered, I was ready to create an outline.

OUTLINE

The Outline (bottom right) is where I fleshed out the details of the information I want to use in the article. From this, I generated the draft nodes. I rarely remove things from a map. Instead, I will mark them out with an X icon or strikethrough font. I don't want to delete it should I decide to go back to it. The Outline grows and changes as I work on the draft. It's always in flux. If there are menus, shortcuts, or step-by-step instructions, they get detailed in the Outline. In some cases, the outline nodes have very little detail because not much is needed. I have a good idea of what needs saying, but I will always add nodes, details, and notes for things I don't want to forget.

DRAFT OUTLINE

I prepared the draft outline to write the article. Pulling from the Outline node, I selected the essential points and added them to the Draft branch. These become the headers, so I tried to not go too deep with the sublevels. Two or three levels should work in most cases. I rarely go beyond two levels because I feel anything beyond that creates excessive sectioning of the text. I want the article to become more than just an outline
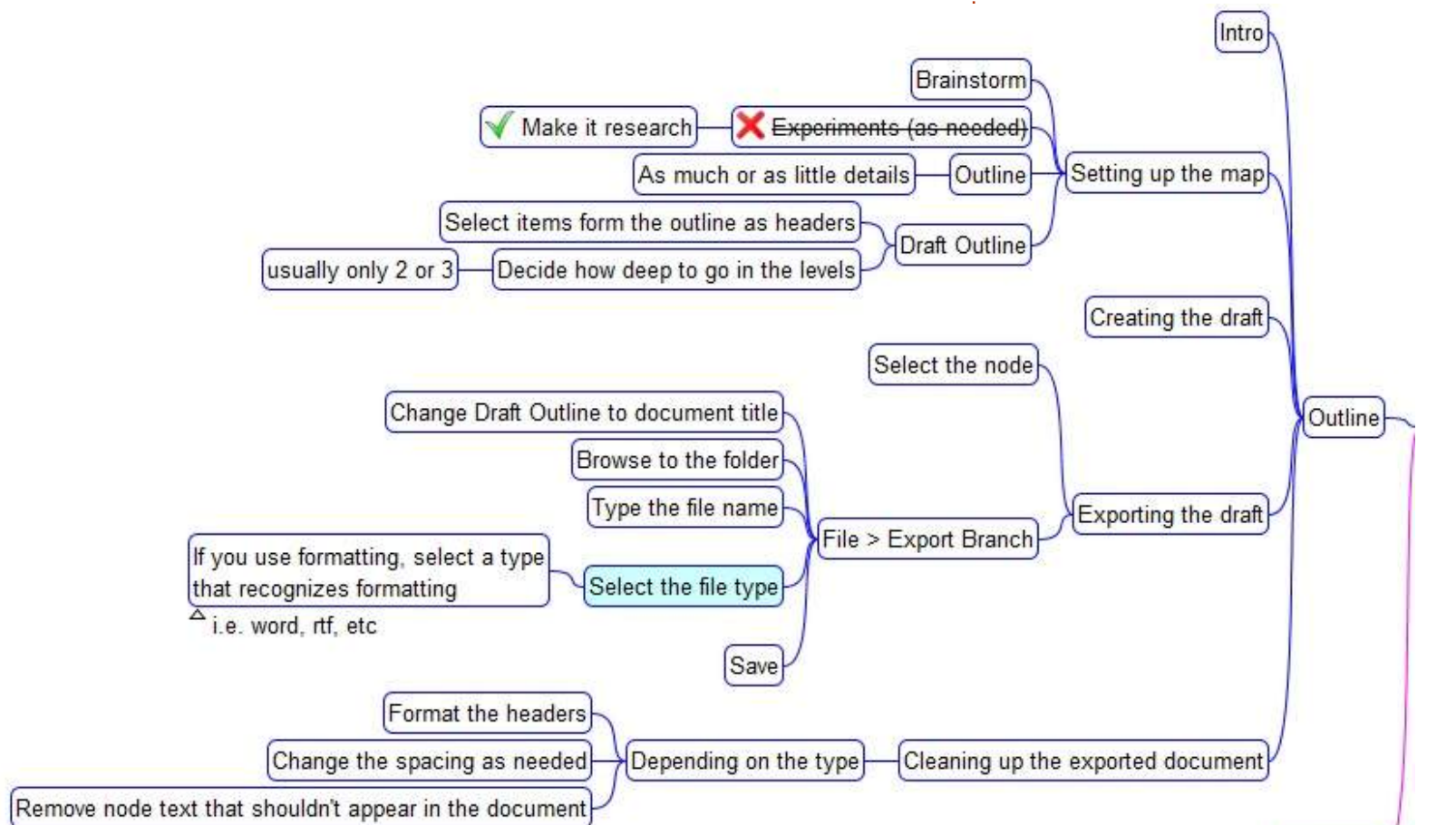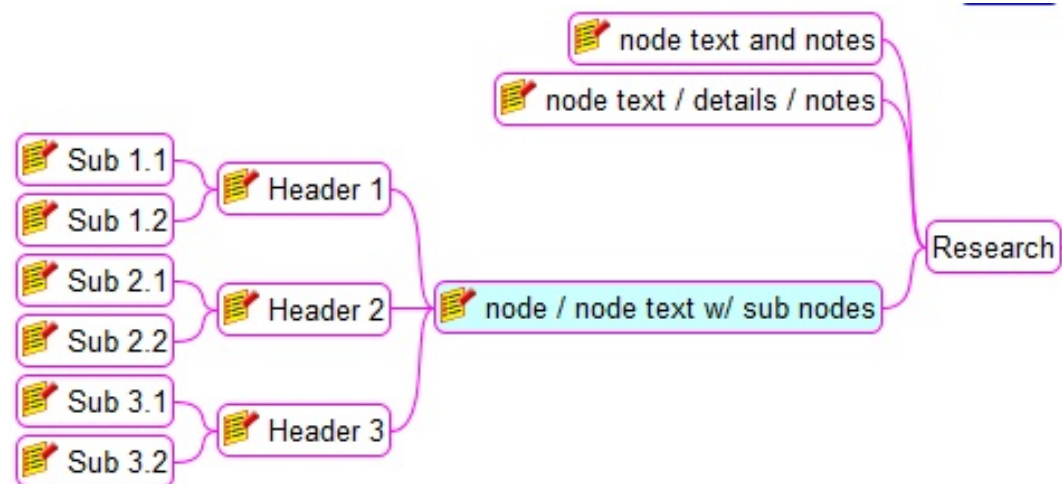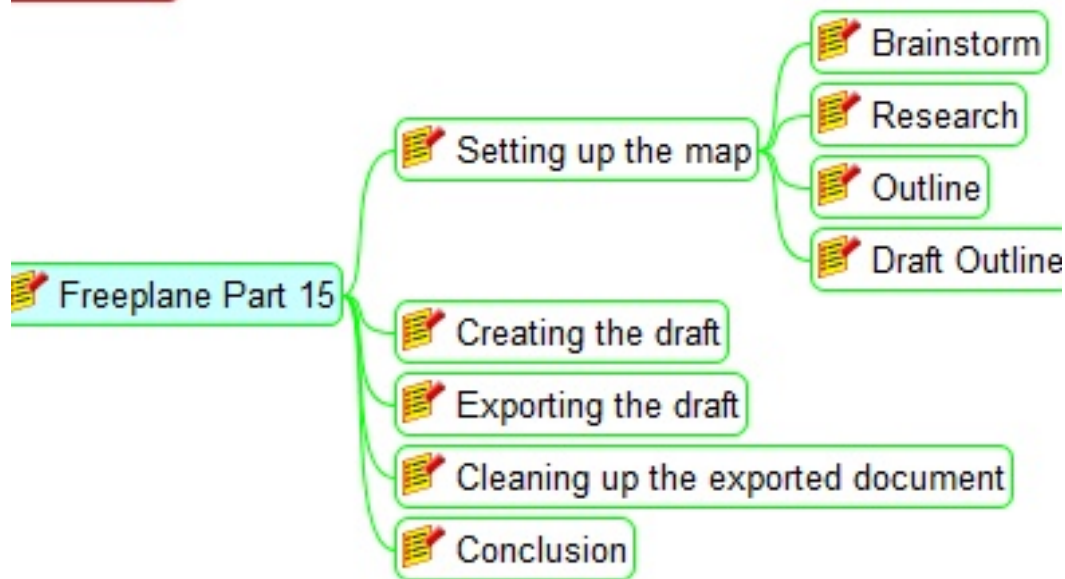
and comments about the content to include.

Another nice thing about writing in this manner is not having to write sections in order. If I wanted, I could start at the end. It's easy to jump from one node to the other to add, change, or remove text from that section. I found myself having an idea about one of the different parts while I was working, and I'd simply click on the node and make the change. The Simple HTML editor doesn't

have many distractions, so I wrote with very few stops because a grammar checker caught something in my sentence structure. I saved that for the editing process. The process also made it easy to move things around. If I moved one section before another, the text for that section moved with the node. I found this quicker than the old standard cut and paste of a traditional text editor.

While working in the editor, you can format your text as well. I usually don't. Most of the formatting is up to the magazine editor anyway. It's pretty easy to over-format a document. I try not to. However, if you are creating a manuscript for work or school, then you can't go wrong by editing as prescribed by your work style sheet or teachers guidelines.

with an explanation for each point. It's an article, not a bulleted presentation. Presentations in Freeplane are a subject for another day.

CREATING THE DRAFT

Now, the writing can begin. I started by selecting the draft outline node and opening the notes editor with the shortcut CTRL + >. I typed the introduction to this article. I moved on to each node under the draft outline, and, in the Simple HTML editor, wrote the text for that section. I liked being able to reference the Outline where I had made notes
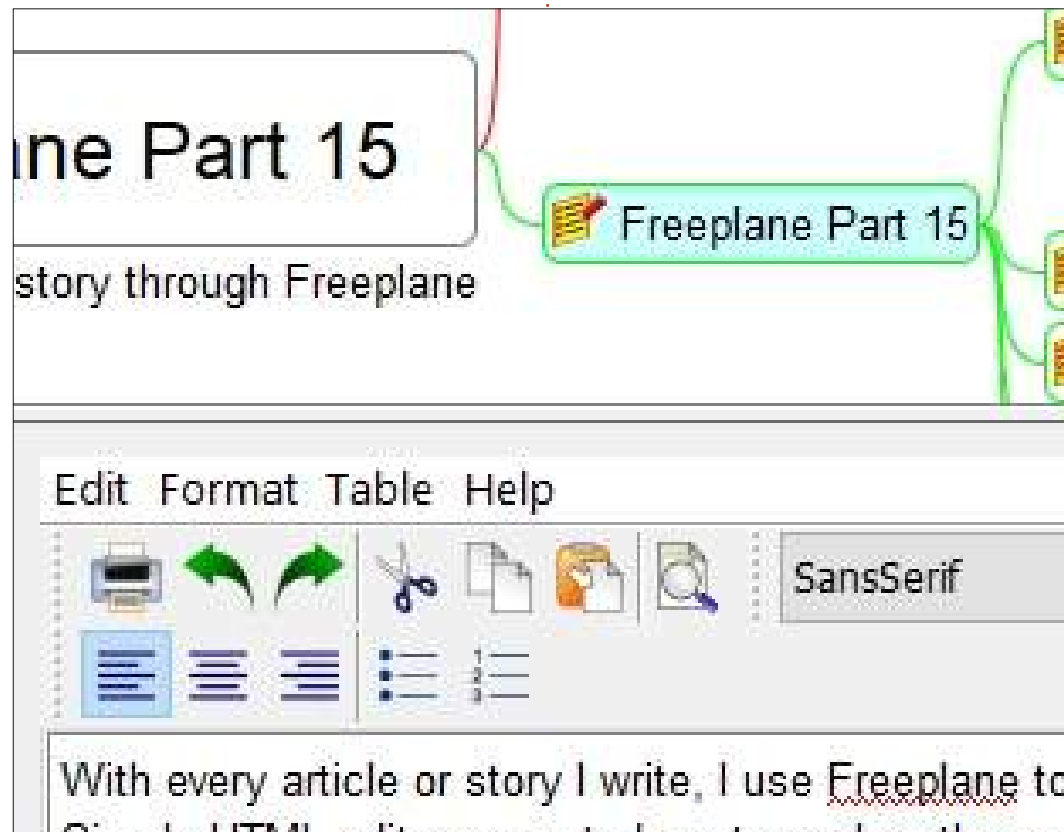
EXPORTING THE DRAFT

Once the writing is complete, I wanted to export the draft outline to a document. I changed the name of the Draft Outline node to the title I wanted for the article. I selected the draft outline node and used the menus File > Export

Branches. A Save File dialog popped up. I browsed to the folder where I wanted to save the document. By default, the root node text is used for the document name. You can type a new one in the name text box, but I decided the name was good enough. You will want to select the type of document you're exporting to. I used the plain text format so I could quickly move it from my editing software to Google Docs without too much fuss, but other types are available, including Microsoft Word and the Open Document Format.

CLEANING UP THE EXPORTED DOCUMENT

Depending on the format type you exported to, you might need to format the headers and change the spacing. When I did a text export to ODT, I found the 'before' spacing on the headers wasn't to my liking. I also removed the Conclusion node text as I find it a nuisance header, but it made sense for the draft outline. You might have other node text headers you want to remove. If I were writing a story rather than an article, I'd probably remove the node text headers unless they somehow fit the story.

For my plain text format, the export put numeric outline tags on all the header. I removed these. Also, before each note, I had to remove the text "NOTE:." Otherwise, once I imported the document into my Grammar editor, I was ready to begin my editing process.

Overall, I enjoyed writing my article draft in this manner. Usually, I'm distracted by grammar alerts, word counts, and other bells and whistles related to a full function editor. This method was a nice change. I worried the word count would fall short of my usual work but discovered I actually wrote more. For drafting a document, I found this method surprisingly refreshing. Will I use it again? I'll have to try it a couple more times to see whether it actually grows on me, but the prospects are good.

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