



Interaction Design
Guidelines

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SECTION ONE - **Conceptual Model**

Conceptual Model

It starts with an issue...
A DBA might receive a notification via email, or a phone call, a ticket through the ticketing system, or during the course of monitoring a process, notice there an issue that needs to be investigated.



DBA in 'investigator' mode
The DBA goes into 'investigator' mode. How does he or she solve the problem? Where does he or she begin the investigation?



Visits many sources to investigate...
Written notes and stickies
Co-workers
Multiple apps



Over and over...



Evolution of the Mainframe

As part of modernizing the look and feel, and the nature of the Mainframe 2.0 experience, we want to consider

- **Information sharing**
- **Interoperability**
- **User-centered design**
- **Collaboration**

Examples include: web-based communities, hosted services, web applications, social-networking sites, video-sharing sites, wikis, blogs, mashups and folksonomies.

“Allows iusers to interact with other users or to change website content, in contrast to non-interactive websites where users are limited to the passive viewing of information that is provided to them.”

MAINFRAME 2.0 CHARACTERISTICS

The Mainframe 2.0 experience manifests Web 2.0 characteristics by:

Being an **open and malleable workspace** based on shared mashable information types, e.g., links, notes, charts, and workflows.

The Mainframe 2.0 Workspace also allows for **3rd party widgets or modules** to be added. which means that the APIs for common workspace modules need to be open and mashable.

The workspace facilitates greater productivity by **capturing group knowledge** and making it available to colleagues on the team as they work in the DB system.

The Mainframe workspace also exemplifies characteristics with more **usable graphical user interfaces**, which can often be **directly manipulated** or edited.

The Mainframe 2.0 experience **makes available the collective knowledge of the team** by allowing notes, and workflows etc. to be shared within the various contexts found in the investigator.



SECTION TWO - **Design Principles**

Design Principle: **Visual**

The Mainframe 2.0 experience offers information in a graphical way, as opposed to textual way, whenever possible. The user is invited to interact directly with the analog on the screen. The history is presented as thumbnails instead of URLs. Containers on the Workspace are modules which can be directly manipulated via drag and drop repositioning. A DBA can arrange the modules to suit their individual work style.

The ability to visualize database objects, and the relationships between them, is valuable. To simply see the relationships, but also to navigate between them on a visual/graphical basis, helps to construct and reinforce the user's mental model.

Similarly, to be able to see attributes graphically, and at-a-glance, makes awareness and understanding of the state of the system health much easier and more natural.

Charts, of course, allow the user quickly spot anomalies in data. Multiple simple charts available as a constant touchstone allows the user to “keep tabs” on system health.

Design Principle: **Learnable**

The Mainframe 2.0 experience allows the user to react to system alerts, to quickly see the source of a problem and then explore the source-location of an alert. While the DBA is in the system there is an opportunity to see Notes which have been posted by coworkers for the benefit of others, as well as their self.

Learnability is aided by primary elements which are easy to understand and act upon. These elements, links, charts, notes, paths are all simple units which allow the user to get a better understanding, and orientation within the big picture without being overwhelmed by cryptic screens, or lack of context.

The Mainframe 2.0 experience adopts many conventions, such as embedded menus and directly editable parameters, such as within the chart display.

Design Principle: **Efficient**

The Mainframe 2.0 experience supports greater personal and organizational efficiency, and therefore productivity. Having just the right contextual actions available educates and facilitates productivity. Shared paths collect the wisdom of experienced colleagues and enable those who are less knowledgeable to “get up to speed”.

Shared paths also illustrate the way ahead, guiding the user and offering suggestions on how to accomplish a task.

Design Principle: **Flexible**

The Mainframe 2.0 experience, because it is built on an open web platform, can be extended to include many more modules. Either as new containers for record types such as notes, links charts etc., but also as new widgets – small programs that inspired individuals may create, such as a “chart masher.”

The workspace is customizable. The user can add, and arrange modules, create and name separate tabs for how they manage their work. Multiple instances of modules should be allowed so that users can track and manage their alerts, tasks, and workflows in the fashion that they prefer.

The Mainframe 2.0 platform, should be as open as possible to facilitate broad interaction with colleagues but also users beyond the local sphere, such as 3rd party developers who may create alternative modules to fit as modules in the workspace.

This openness should also inspire innovation of individual users to enhance their own work arena.



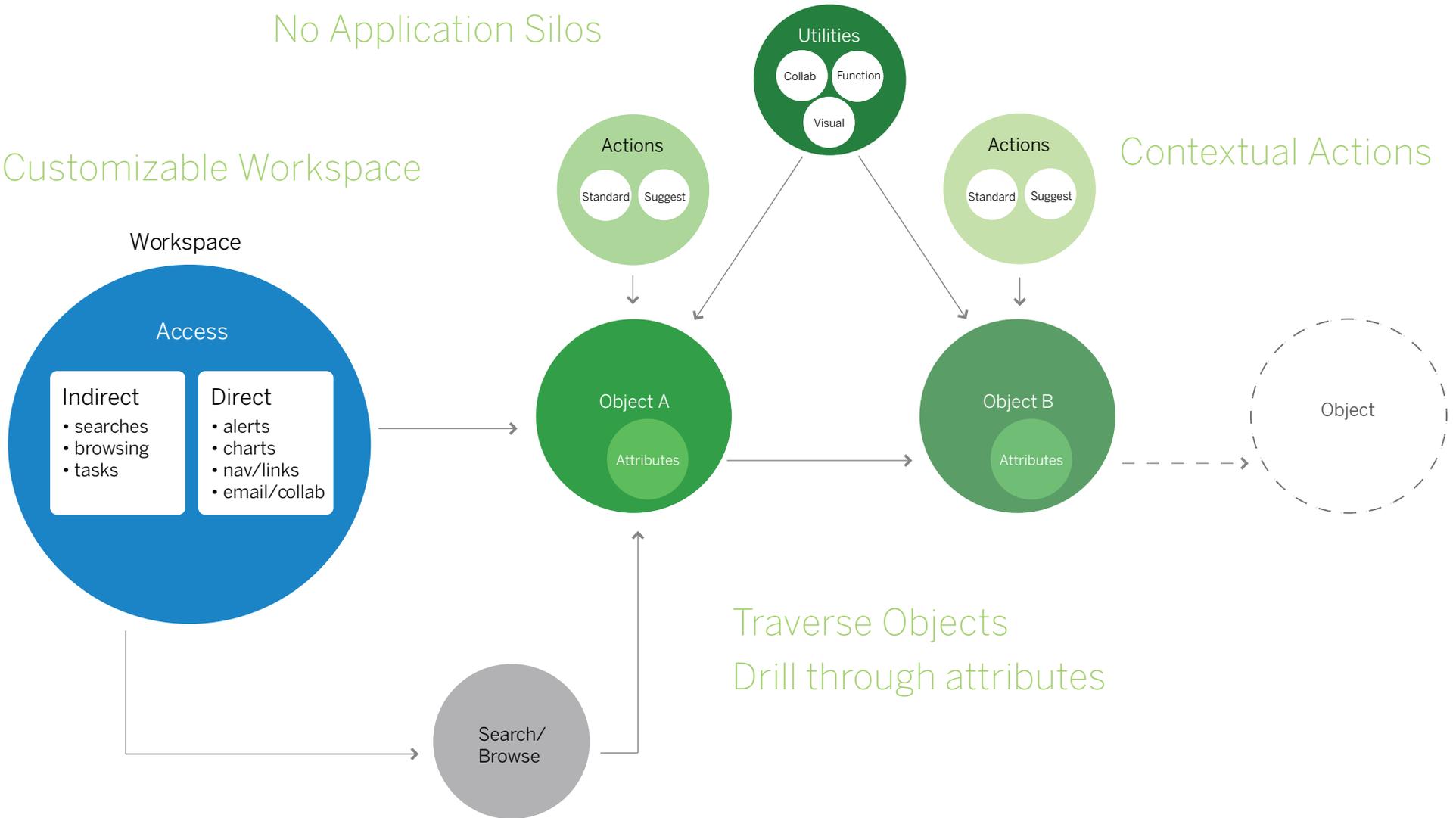
SECTION THREE - **Interaction Model**

Interaction Model: **Overview**

No Application Silos

Customizable Workspace

Contextual Actions



Interaction Model: **Customizable Workspace**

Customizable Workspace

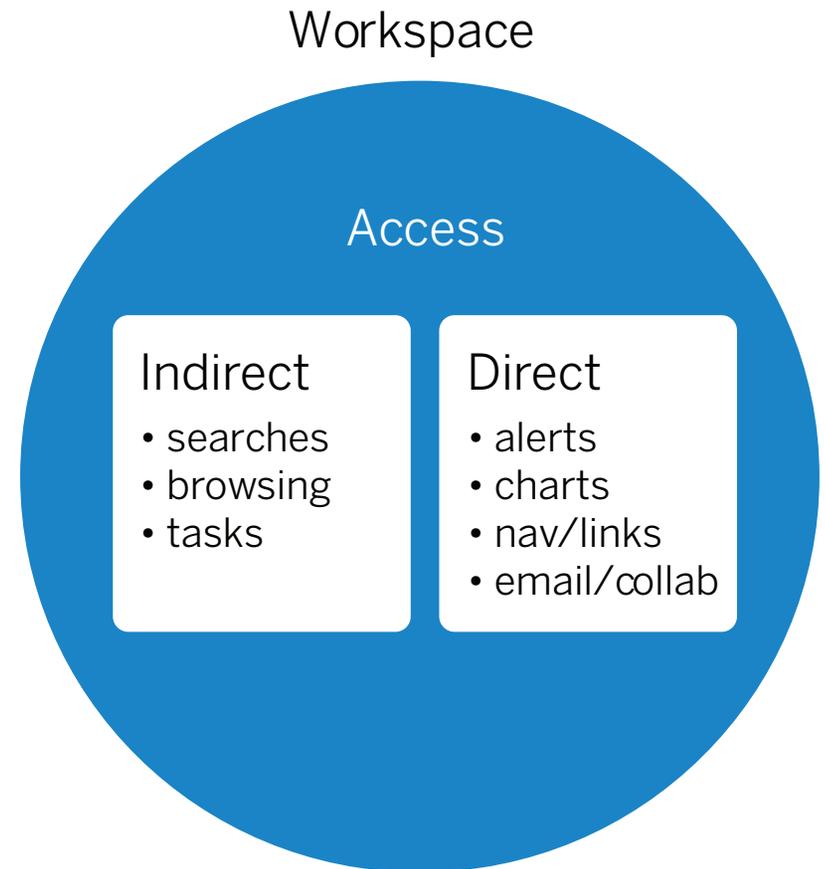
The **Workspace** represents the primary access and view into the system. It allows views into data, performance and overall health of the system, as well as navigation into tasks, objects, and session history.

Views represent various ways to organize and view information on the **Workspace**. It could be via a tabbed interface based on role or represent groups of widgets, a multi-paned screen, etc. - the **Workspace** should be flexible so that it represents and accommodates how DBAs work.

Within a **View**, there would be access to objects via **Direct** and **Indirect** functionality.

Direct access to objects could be through drilling through on an alert or chart, selecting a frequently used object in a list, etc.

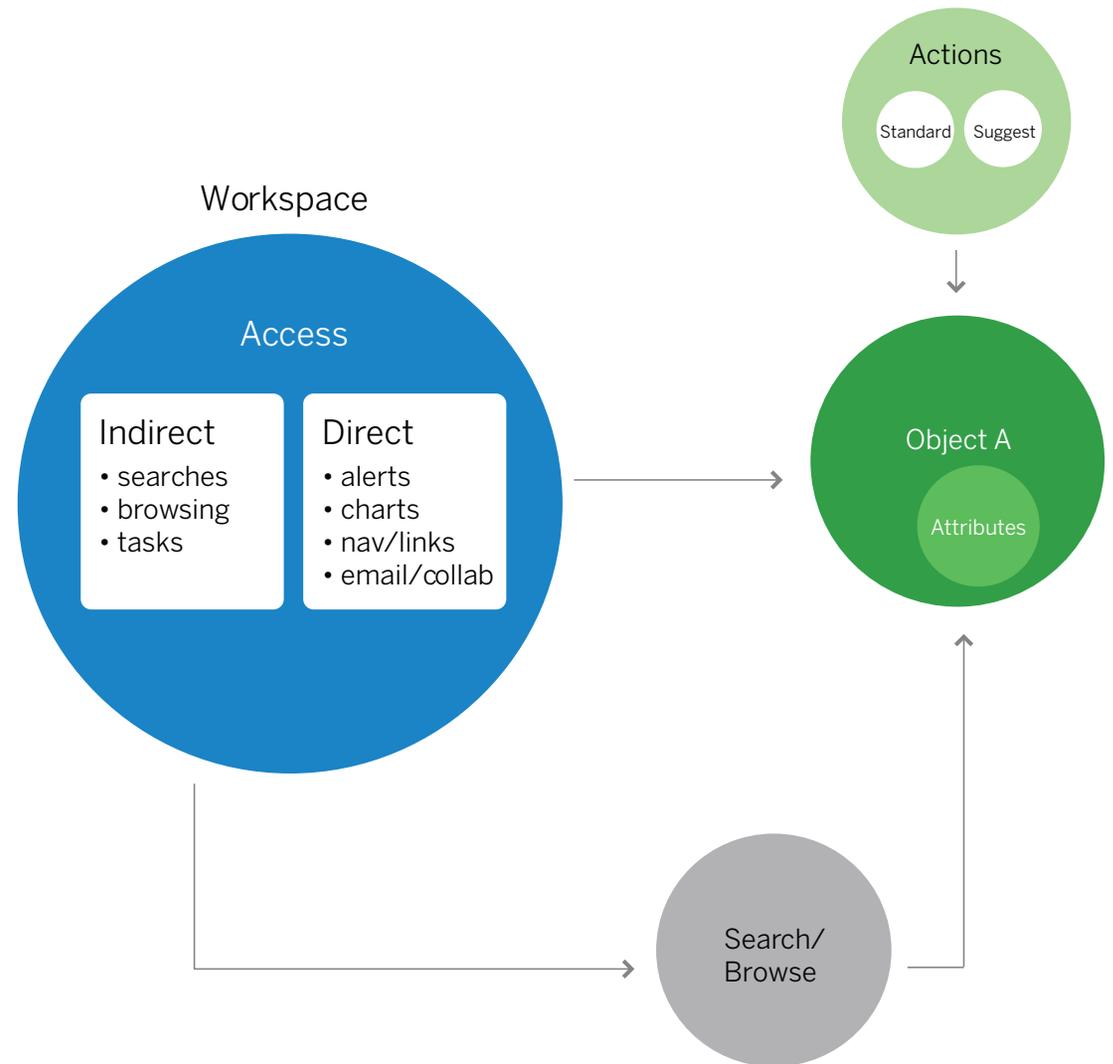
Indirect access to objects could be via a task, such as searching for an object or browsing to an object.



Interaction Model: **No Application Silos**

No Application Silos

Users will be able to traverse and drill into **Objects**, no matter in which application they currently live.



Interaction Model: **Contextual Actions**

Contextual Actions

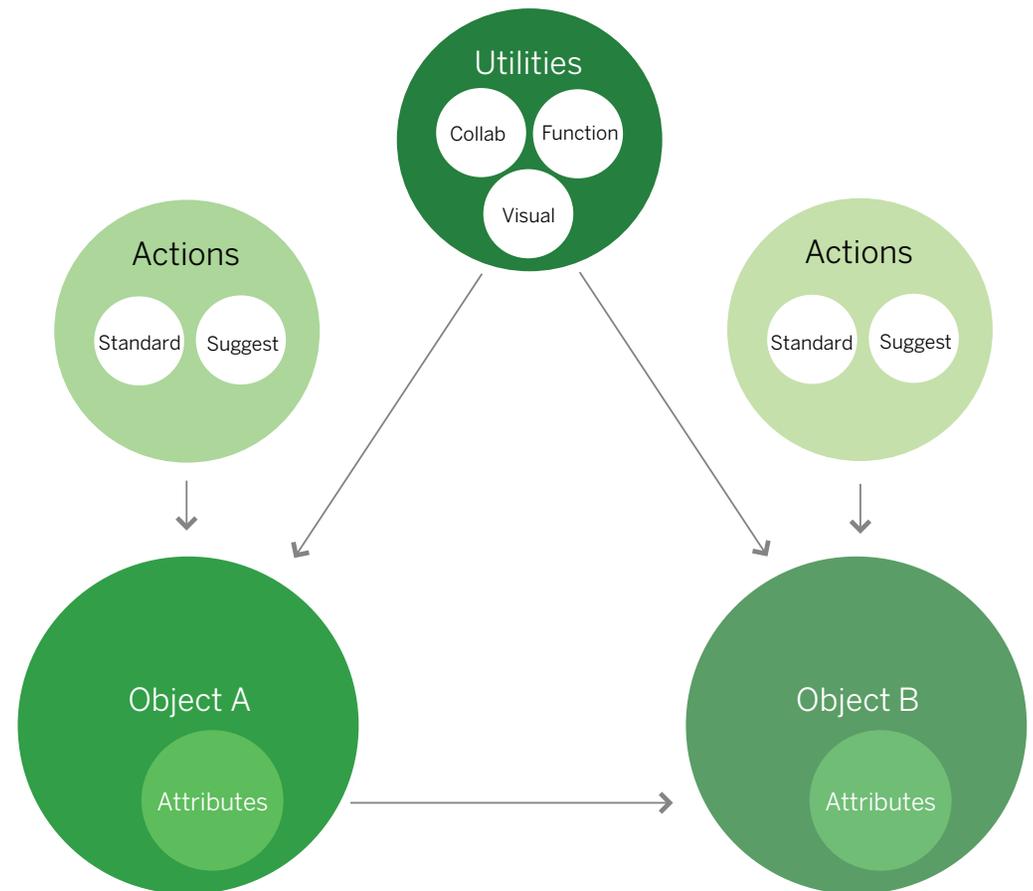
Tools are global actions users can take on an object or a set of objects, such as creating a chart from a dataset or emailing a chart.

Actions are anything a user can do with an **Object**, such as an 'object dependency' action when viewing a list of tables. The available **Actions** will be contextual per **Object**.

Traverse Objects Drill through attributes

Objects are things in the system a user can view and manipulate, such as a table, index, query, etc.

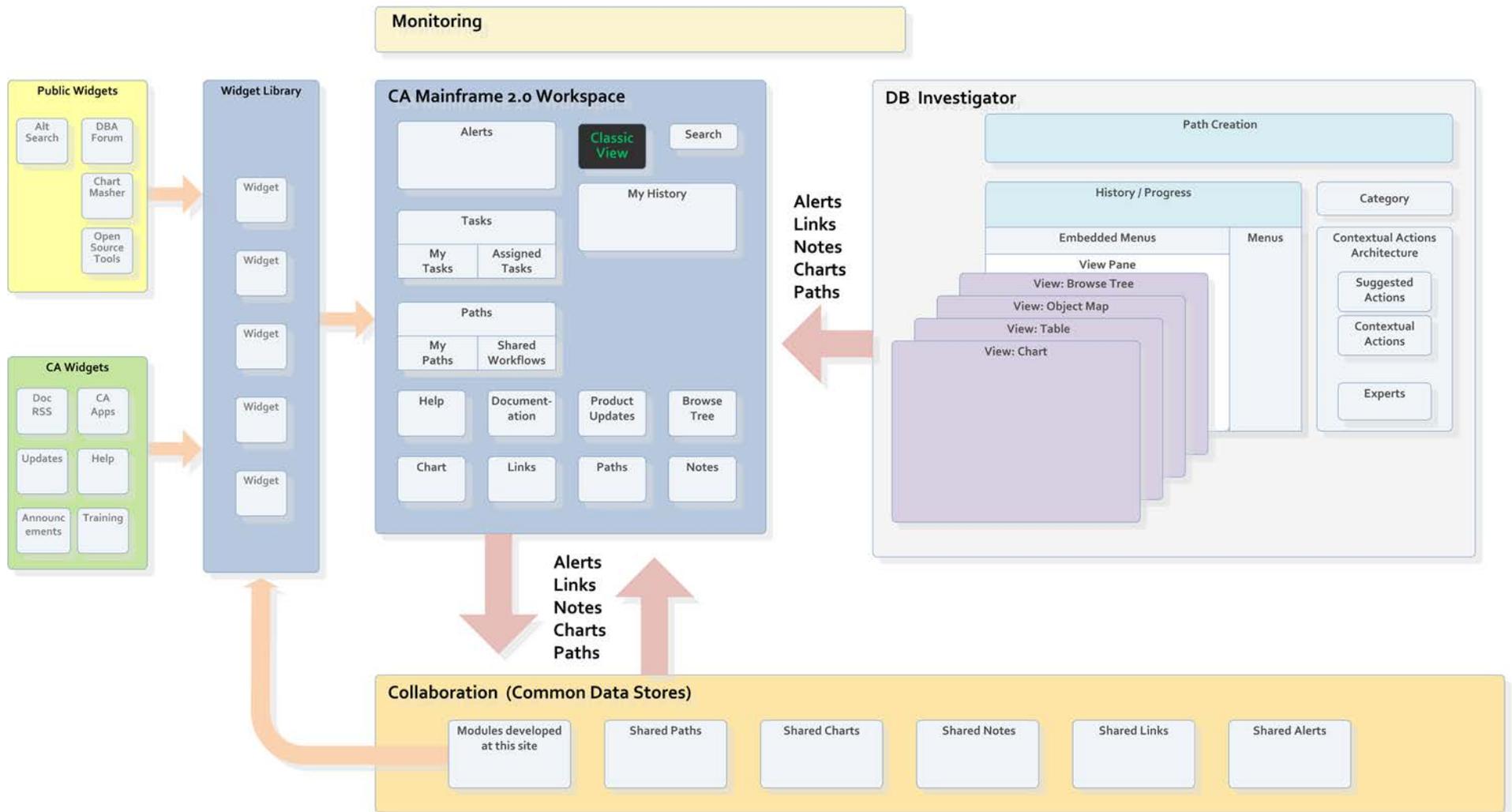
Attributes are properties of those objects. Users will have the ability to drill through **Attributes** and traverse from **Object** to **Object**.



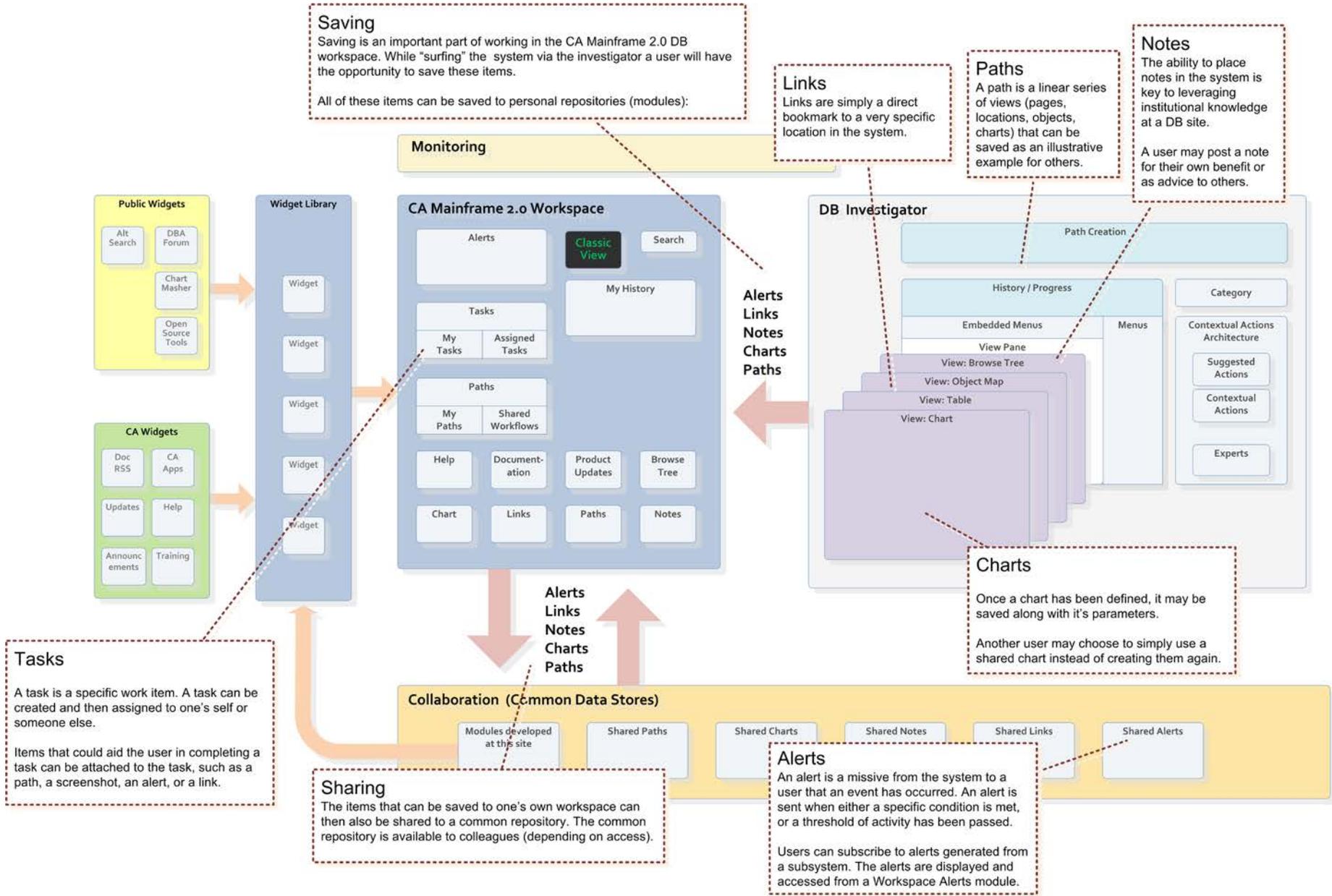


APPLICATION MAP

Application Map: Overview



Application Map: Key Elements Across the Model



Interaction Model: **Alerts**

An alert is a communication from system to user that something has happened in the system, either a specific event, or a threshold of activity has been passed.

An alert can be triggered in one of two ways. When a particular metric has a threshold of activity that has been exceeded, an alert is triggered. When a specific event occurs, an alert is triggered.

Users can subscribe to alert streams generated from a subsystem. The alerts are displayed and accessed from a Workspace Alerts module.

An alert can be open and investigated. It can be associated with a task, and then assigned to another user, tracked, and resolved.

Interaction Model: **Tasks**

A task is a container for a work item. A task can be created and then assigned to yourself or someone else. Levels of importance can be assigned to a task. (high, med, or low)

Any item or object that could aid the user in completing a task could be attached to the task, such as a path, a screenshot, an alert, a link, etc.

Interaction Model: **Paths**

A path is a series of pages views (pages, locations, objects, etc.) that can be saved as an illustrative example for others. This path is created automatically by beginning a work session and traversing pages and actions in the system.

Each step of the path can be commented with text annotation.

This path can be attached to a task. It can be saved to one's own workspace and can also be saved to a common repository of shared paths.

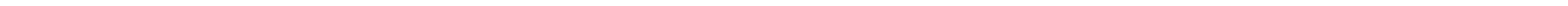
Interaction Model: **Saving**

Saving is an important part of using the Mainframe 2.0 DB workspace.

While “surfing” the mainframes system(s) via the investigator, a user will have the opportunity to save various items.

All of these items can be saved to personal and common repositories (modules):

- Links
- Charts
- Tasks
- Paths
- Notes



Interaction Model: **Sharing**

Many of the items that can be saved to one's own workspace can then also be shared to a common repository. The common repository is available to colleagues (depending on access control, etc).

Considering that the platform is intended to be open and aspires to encourage community and information sharing, should consider whether to encourage or even host shared items such as paths which may have broader applicability - as opposed to the local sites' idiosyncracies.

Sharing is one of the most important dimensions of the Mainframe 2.0 experience. It will make an organization more efficient by leveraging particular expertise train and utilize newer less experienced DBAs.

Interaction Model: **Customization**

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Interaction Model: **Notes**

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Interaction Model: **Experts**

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Interaction Model: **Monitoring**

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Interaction Model: **The Investigator**

While the Workspace is the more general foundation for Mainframe 2.0, the Investigator is the focused database navigation, exploration and action enabling tool.

The investigator framework consists of 3 main elements:

The History/Progress Pane
The View Pane
Contextual Menus

The History/Progress Pane

In its simplest state, this pane is only recording history. But the embedded commands in the history structure allows for commenting pages, therefore creating an illustrative tutorial-like sequence of navigation and recommended actions.

The View Pane

The View Pane is a swiss army knife of viewers allowing the user to navigate data structures and view data metrics (charts).

The viewpane also houses the common actions of bookmark, save chart, create notes, etc., and a minimal view switcher set of icons.

The Contextual Menus

The Contextual Menus are a list of all available actions for the object or dataset, displayed based upon the context from which user accessed the item(s) or the category the user has chosen.

The investigator can be spawned within minimal chrome. Multiple instances can be supported so that perhaps a series of large charts can be set up and monitored, especially to take advantage of very large displays.

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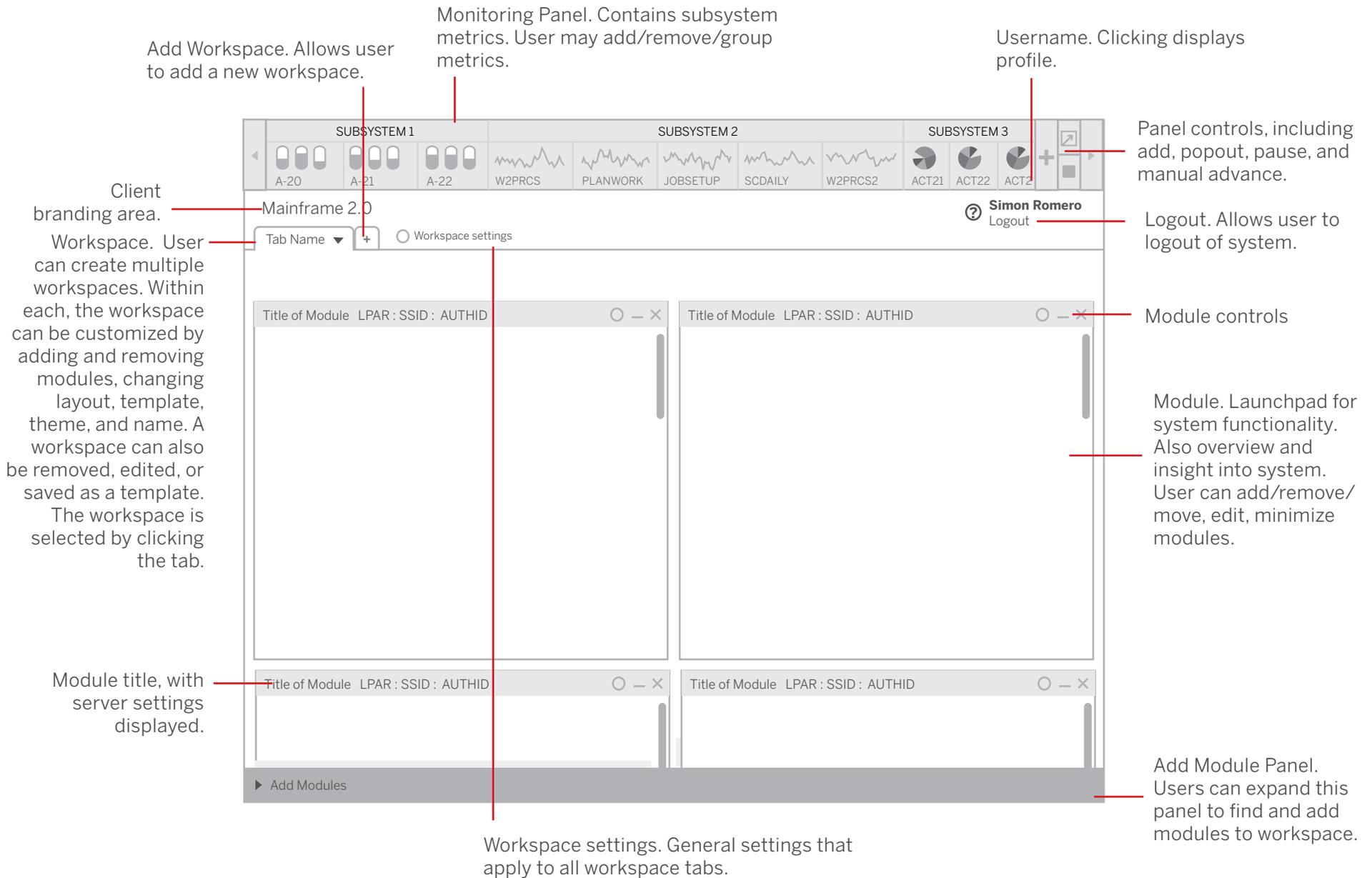


SECTION FIVE - **Components**



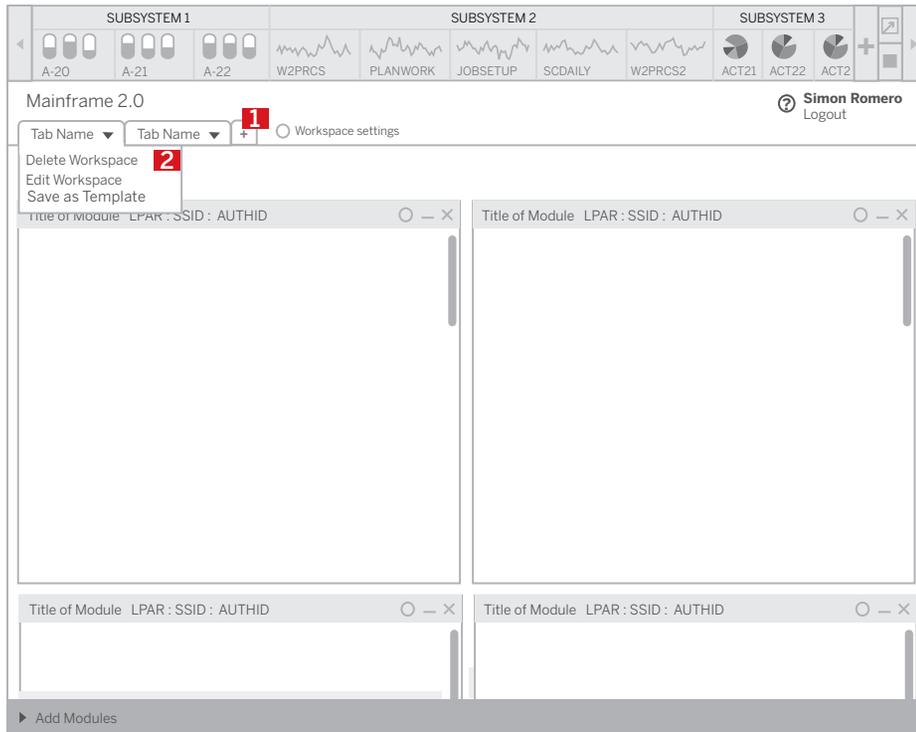
THE WORKSPACE

Component: **Workspace (Overview)**

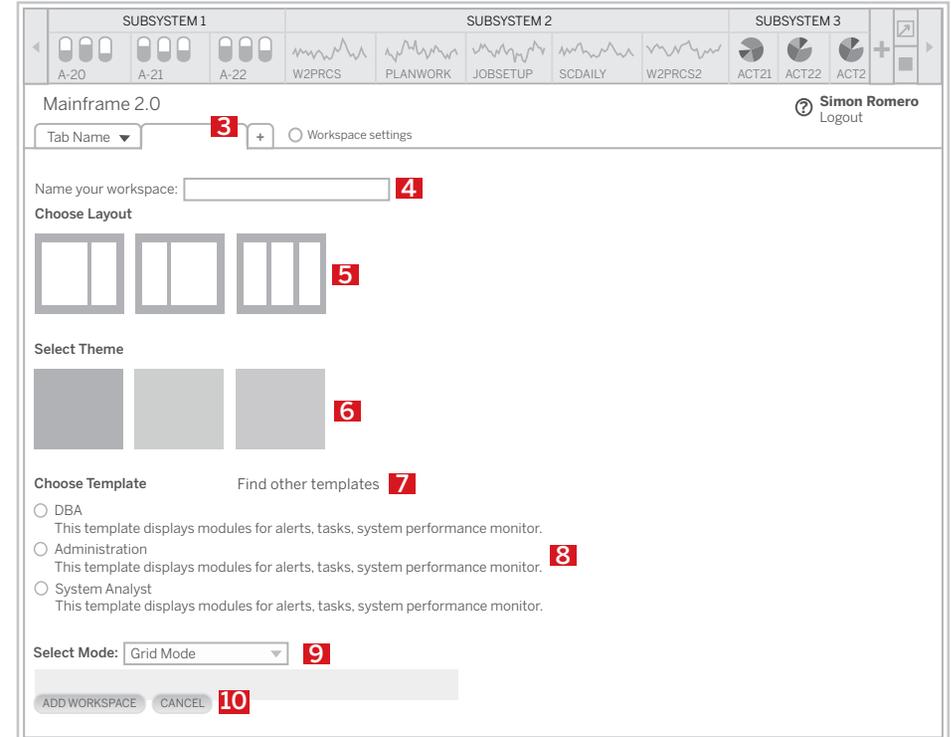


Component: Workspace (Adding/Editing Workspace)

W-1 WORKSPACE: EDITING/CREATING A WORKSPACE



W-2 WORKSPACE: ADDING A WORKSPACE



Component: **Workspace (Adding/Editing Workspace)**

- 1.** Tabs are added to the workspace by selecting the 'add tab' button. Users may add an unlimited number of tabs. Once the number of tabs is greater than can be seen on screen, a horizontal scrollbar appears (above the add module panel) to allow users to scroll the tabs. Upon clicking the 'add tab' button, a new workspace tab is displayed with configuration options. (See screen W-2)
 - 2.** An existing tab can be edited by selecting 'Edit Workspace' option from the menu, which is accessed by clicking the arrow next to the tab name when the tab is in focus. (The arrow cannot be selected when the tab is not in focus). If there are at least two workspaces present, the menu options will be 'Edit Workspace' and 'Delete Workspace'. Upon clicking 'edit workspace', the workspace screen in focus is replaced with the edit workspace screen (See screen W-2). Users can change any options on this screen.
 - 3.** The create/edit workspace screen contains all of the general configuration options for the workspace. It does not contain any module specific configuration options. If user has selected the 'add tab' icon, a new 'unnamed' tab appears with all the workspace configuration options. If the user had selected 'Edit Workspace', the current workspace in focused would have been replaced with the Edit screen. (Note that the tab name at top would not be blank as in the create new screen; it would contain the current name of the workspace.
 - 4.** Users can name the workspace. The name is what appears on the workspace tab. There is no default name given to the workspace. This is a required field. If in edit mode, the workspace name can be changed, and the name change will be reflected on the tab. There is an [X] maximum character limit on the name of the workspace tab.
 - 5.** Layout is selected by clicking one of the layout images. User may choose only one layout. Layout determines how many columns and size of columns that will be displayed in grid mode, if/when grid mode is turned on for the tab. What is represented in the wireframe are some suggested/sample layouts, the actual layouts implemented may vary.
 - 6.** Theme is selected by clicking one of the theme images. Theme determines the color palette used in the workspace tab. User may choose only one theme
 - 7.** Clicking 'Find Another Template' would open a layer which would allow user to search for or see a list of publicly available templates, as well as templates they had themselves created. Users can create a template by selecting 'Save This as Template' from the tab menu. Saving captures all of the modules present on the current tab.
 - 8.** The templates listed are a few chosen by an admin to be most used or useful for the user to select from. User can always search for different templates via the 'Find Another Template' link. A template is selected by selecting a radiobutton. The template determines the default modules that will appear on the newly created workspace. User may add to or remove these once the workspace has been created.
 - 9.** The mode dropdown allows users to select whether or not the workspace modules will be displayed in 'grid' or 'freeform' mode. Grid mode means the modules will 'snap to' a grid (much like a standard portal). Freeform mode means the modules can be placed anywhere on the workspace by the user -- overlapping, underneath other modules, etc.
 - 10.** Clicking 'Add Workspace' saves the settings and displays the new workspace. Clicking 'Cancel' returns user to previous tab displayed without creating a new workspace.
-

Component: Workspace (Workspace Tabs)

W-3 WORKSPACE: MORE TABS THAN SCREEN CAN ACCOMODATE

The screenshot shows a workspace interface with three subsystems: SUBSYSTEM 1 (A-20, A-21, A-22), SUBSYSTEM 2 (W2PRCS, PLANWORK, JOBSETUP, SCDAILY, W2PRCS2), and SUBSYSTEM 3 (ACT21, ACT22, ACT2). Below the subsystems is a mainframe area labeled 'Mainframe 2.0' with the user 'Simon Romero' and a 'Logout' button. A row of 10 tabs is shown, each labeled 'Tab Name'. A red box with the number '1' highlights the 5th tab.

W-4 WORKSPACE: TAB MENU (ONE TAB)

The screenshot shows the same workspace interface as W-3. The 5th tab is selected, and a dropdown menu is open. The menu contains the following options: 'Edit Workspace' (with a red box containing the number '2'), 'Save as Template', and 'Workspace settings' (with a radio button). The 'Mainframe 2.0' and user information are also visible.

W-5 WORKSPACE: TAB MENU (TWO OR MORE TABS)

The screenshot shows the same workspace interface as W-4. The 5th tab is selected, and a dropdown menu is open. The menu contains the following options: 'Delete Workspace', 'Edit Workspace' (with a red box containing the number '2'), and 'Save as Template'. The 'Mainframe 2.0' and user information are also visible.

Component: **Workspace (Workspace Tabs)**

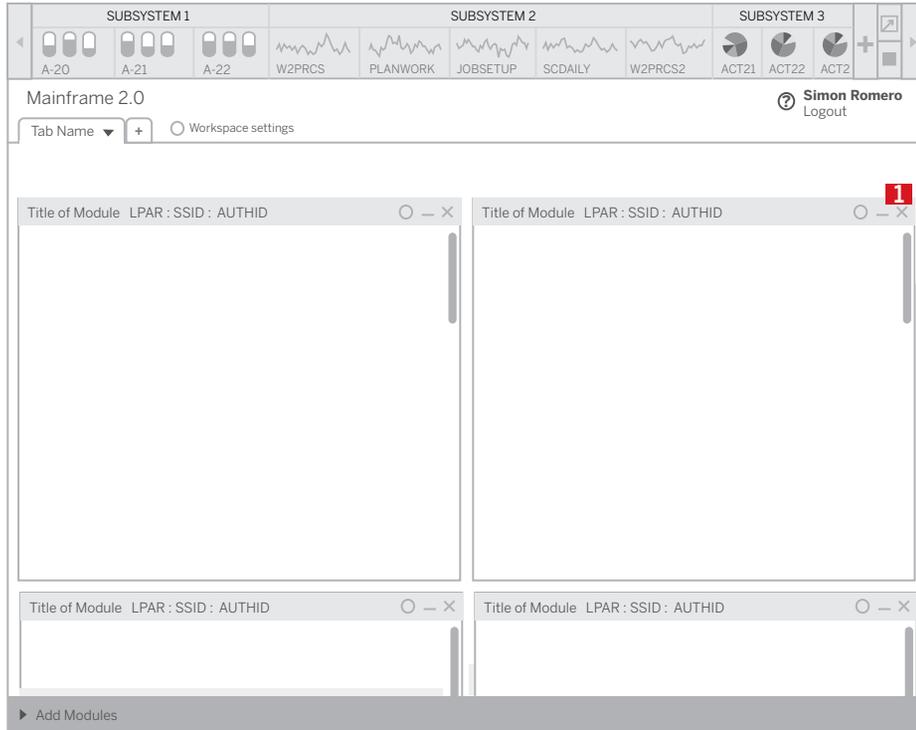
1. The workspace should be able to accommodate an unlimited number of tabs. If there are more tabs than can be visible on screen, the workspace will scroll horizontally in order to accommodate all of the tabs.

2. By default, there will be one tab on the workspace. This tab cannot be removed. For each tab a menu containing tab options is accessed by clicking the arrow next to the tab name when the tab is in focus. (The arrow cannot be selected when the tab is not in focus). If there is only one tab present on the workspace, the options available in the menu are 'Edit Workspace' and 'Save as Template'. 'Edit Workspace' opens the Edit Workspace screen (See screen W-2). 'Save as Template' opens a layer which allows the user to save the current configuration on modules as a template (See screen W-2).

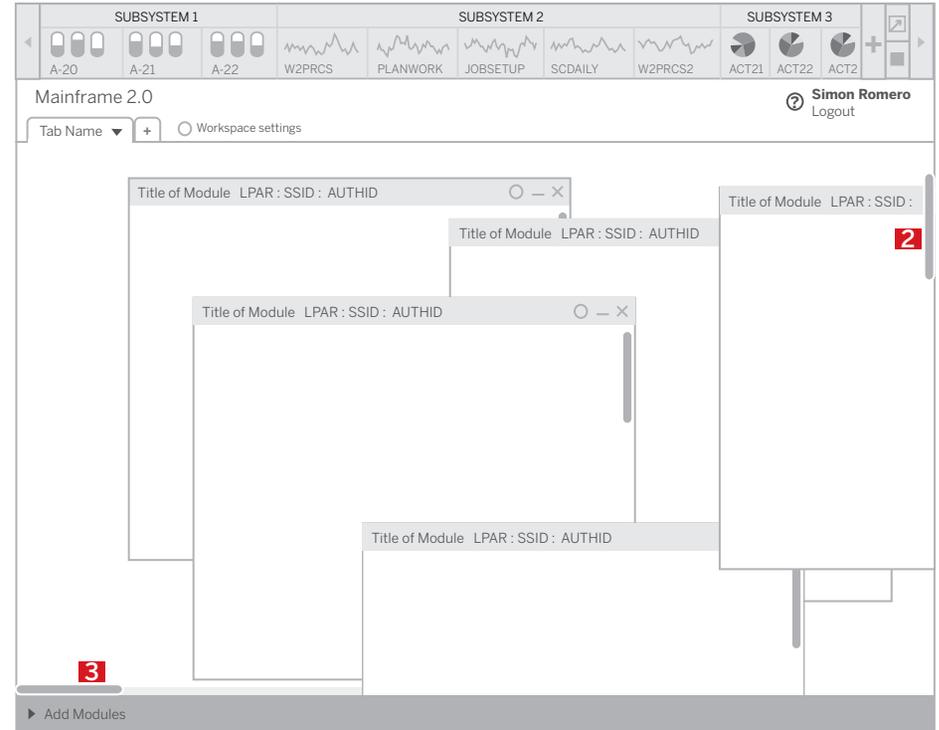
3. If there are two or more tabs on the workspace, additional options appear in the menu. For each tab a menu containing tab options is accessed by clicking the arrow next to the tab name when the tab is in focus. (The arrow cannot be selected when the tab is not in focus) If there are two or more tabs present on the workspace, the options available in the menu are 'Edit Workspace', 'Delete Workspace', and 'Save as Template'. 'Edit Workspace' opens the Edit Workspace screen (See screen W-2). 'Save as Template' opens a layer which allows the user to save the current configuration on modules as a template (See screen W-2). 'Delete Workspace' prompts the user, and then removes the tab (See screen W-12).

Component: Workspace (Scrolling workspace)

W-6 WORKSPACE: SCROLLING WORKSPACE IN GRID MODE



W-7 WORKSPACE: SCROLLING WORKSPACE IN FREEFORM MODE



Component: **Workspace (Scrolling workspace)**

1. In 'grid' mode, if more modules are present than can be viewed on screen, a vertical scrollbar appears to allow the user to scroll the workspace vertically. The control functions according to the standard browser control, so content scrolls accordingly. The metrics panel, branding, login, and tabs areas are locked and will never scroll. The Add Modules panel is locked as well, and never scrolls.

If the browser is resized smaller than the minimum width/height of the workspace, both vertical and horizontal scrollbars will appear.

2. In 'freeform' mode, if more modules are present than can be viewed on screen, browser scrollbars appear to allow the user to scroll the workspace vertically and horizontally, depending on the placement of the modules.

If modules are moved below the visible screen area, vertical scrollbar will appear. The control functions according to the standard browser control, so content scrolls accordingly. The metrics panel, branding, login, and tabs areas are locked and will never scroll. The Add Modules panel is locked as well, and never scrolls.

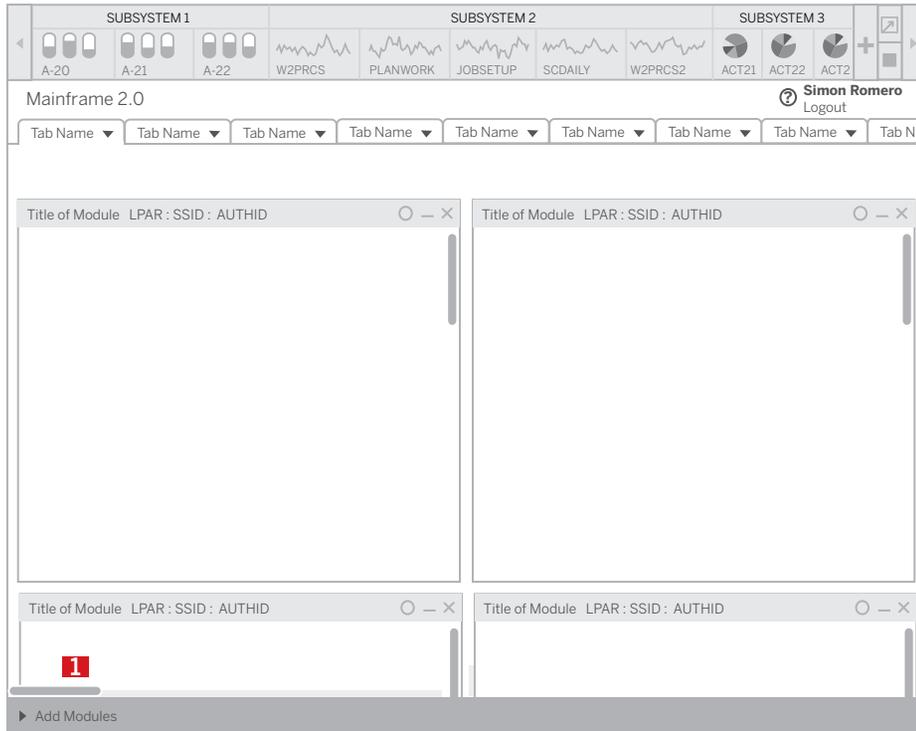
If the browser is resized smaller than the minimum width/height of the workspace, both vertical and horizontal scrollbars will appear, regardless of module placement.

3. If modules are moved to the left or right, out of the visible area of the screen, a horizontal scrollbar will appear. This scrollbar will appear ABOVE the Add Modules panel. The control functions according to the standard browser control, so content scrolls accordingly. The metrics panel, branding, login, and tabs areas are locked and will never scroll. The Add Modules panel is locked as well, and never scrolls.

If the browser is resized smaller than the minimum width/height of the workspace, both vertical and horizontal scrollbars will appear, regardless of module placement.

Component: **Workspace (Scrolling workspace)**

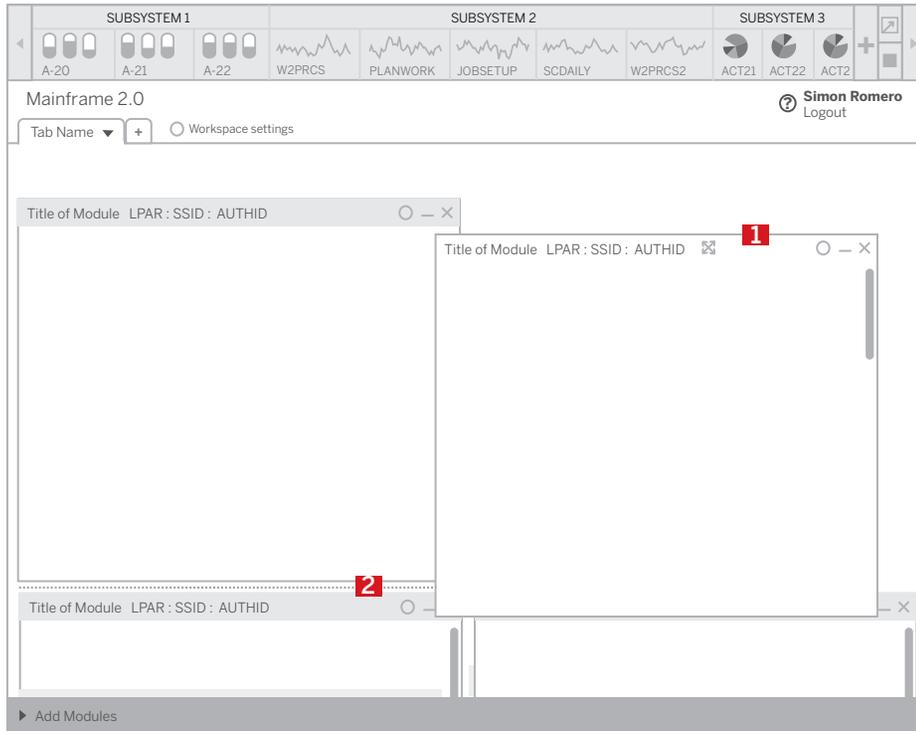
W-8 WORKSPACE: SCROLLING WORKSPACE WITH MANY TABS



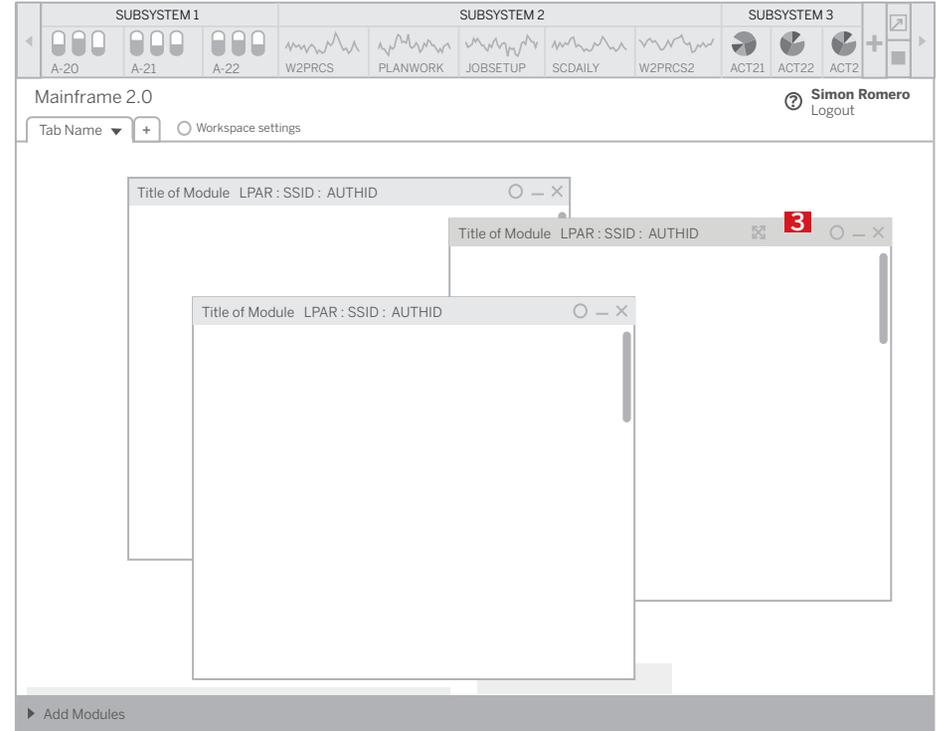
- 1.** In either grid or freeform mode, if more workspace tabs than can be viewed on screen are present, a browser scrollbar appears to allow the user to scroll the workspace horizontally. The horizontal scrollbar should appear ABOVE the Add Module panel. The 'add tab' button and 'workspace settings' link remain at the end of the tab list, and can be accessed by scrolling to the end of the tab list.

Component: Workspace (Moving modules)

W-9 WORKSPACE: MOVING MODULES IN GRID MODE



W-10 WORKSPACE: MOVING MODULES IN FREEFORM MODE



Component: **Workspace (Moving modules)**

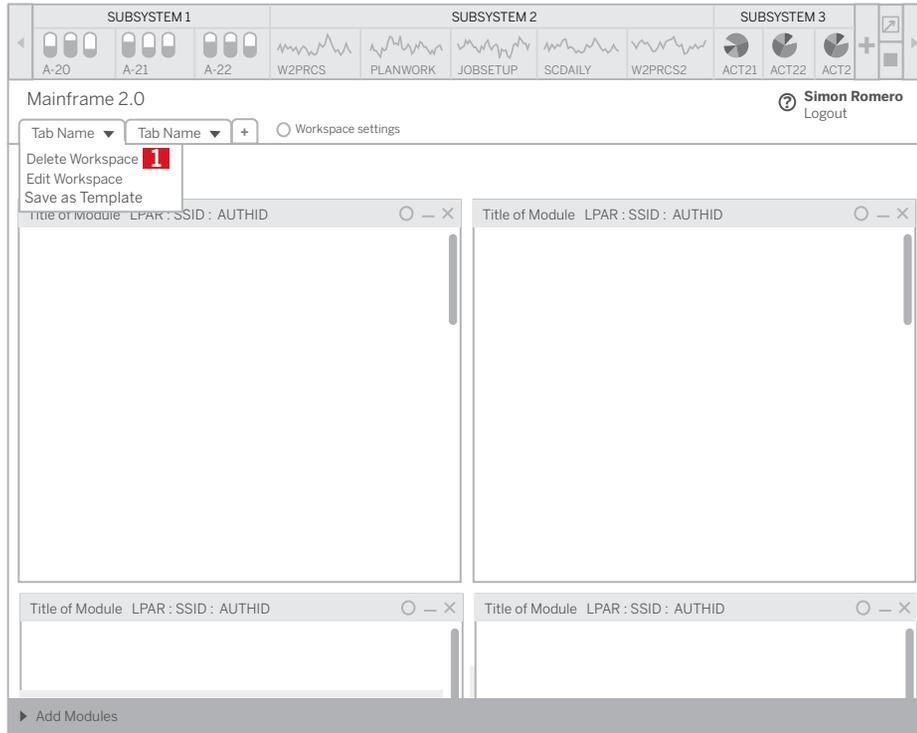
1. In 'grid' mode, modules may be moved to any position in any column. The module placement is retained from one session to the next. Placing the cursor over the title bar of the module changes the color of the title bar, as well as changing the cursor to move mode. Clicking and holding the title bar 'activates' the module so it can be repositioned.

2. As the user moves the module around the workspace, valid 'drop zones' are indicated/activated by moving the module in proximity of the location. The drop zone is indicated by a dotted line. Holding the module at the top or bottom of the screen scrolls the workspace in that direction. When a 'drop zone' indicator appears, the user is able to place the module in that location by releasing the cursor. When the user releases the cursor, the module appears in the new location. If the user tries to drop the module in an invalid 'drop zone', the module returns to its original location.

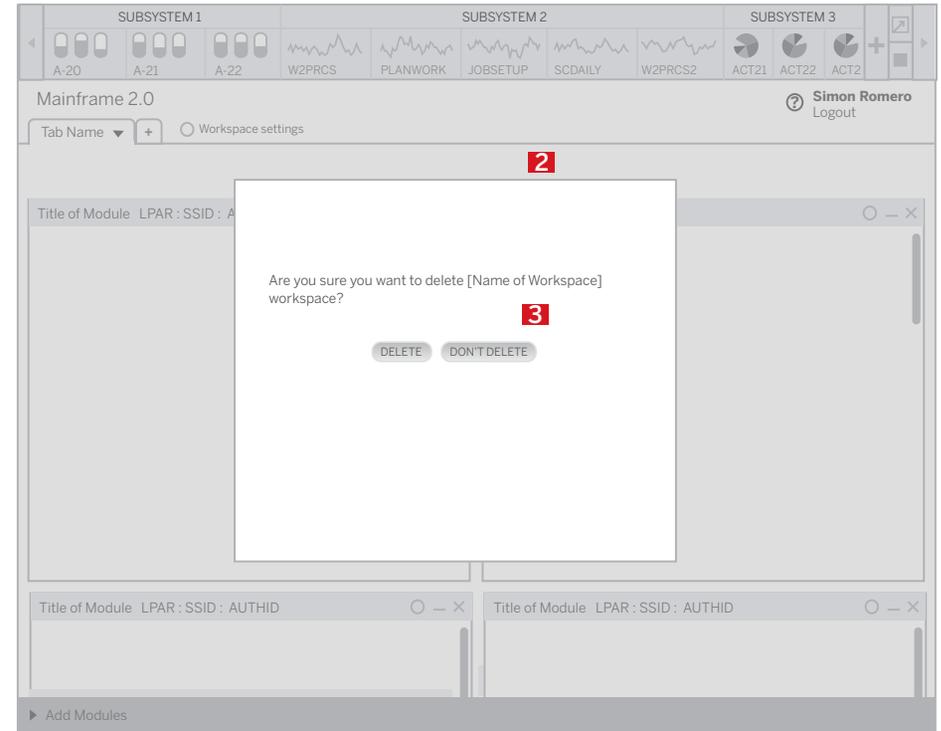
3. In 'freeform' mode, modules may be moved to any position on the page, including on top of or overlapping other modules. The module placement is retained from one session to the next. Placing the cursor over the title bar of the module changes the color of the title bar, as well as changing the cursor to move mode. Clicking and holding the title bar 'activates' the module so it can be repositioned. The module can be moved anywhere on the workspace. Holding the module at the top, bottom, left or right of the screen scrolls the workspace in that direction. The module is placed in the desired location by releasing the cursor.

Component: Workspace (Deleting a workspace)

W-11 WORKSPACE: DELETING A WORKSPACE



W-12 WORKSPACE: DELETING WORKSPACE DIALOG



Component: **Workspace (Deleting a workspace)**

1. When a tab is in focus, selecting the arrow next to the tab name displays the menu. Selecting 'Delete Workspace' displays the Delete Workspace confirmation dialog. When there are two or more workspaces present, the user has the option to delete a workspace. If there is only one workspace, the 'Delete Workspace' option is not displayed.

2. The Delete Confirmation dialog is displayed as a modal layer. The background page (workspace) should be dimmed and disabled until the dialog is dismissed.

3. The dialog is displayed with text 'Are you sure you want to delete [name of workspace] workspace?' and two actions: 'Delete' and 'Don't Delete'. Selecting 'Delete' closes the dialog, removes the workspace, and displays the workspace to the left of the deleted workspace. Selecting 'Don't Delete' closes the dialog and returns the user to the current workspace.



A MODULE

Component: Module (Overview)

All modules have a title, settings, min/max, and remove control. The action button row at bottom is optional. If there is an action button available for the module (e.g. 'create'), it should be placed here.

M-1 MODULE: BASIC MODULE



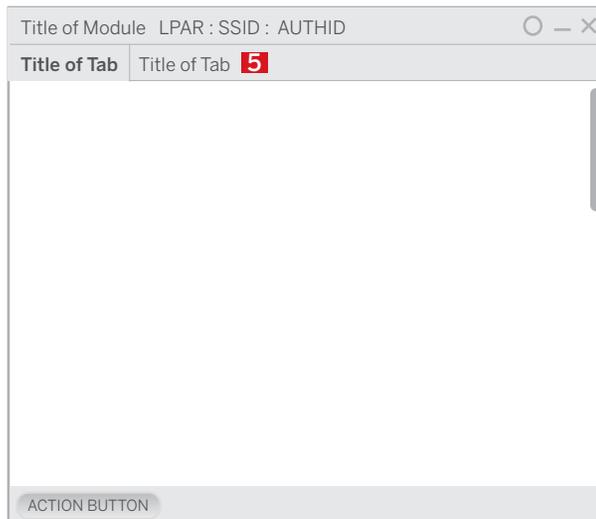
M-3 MODULE: MODULE WITH FILTER



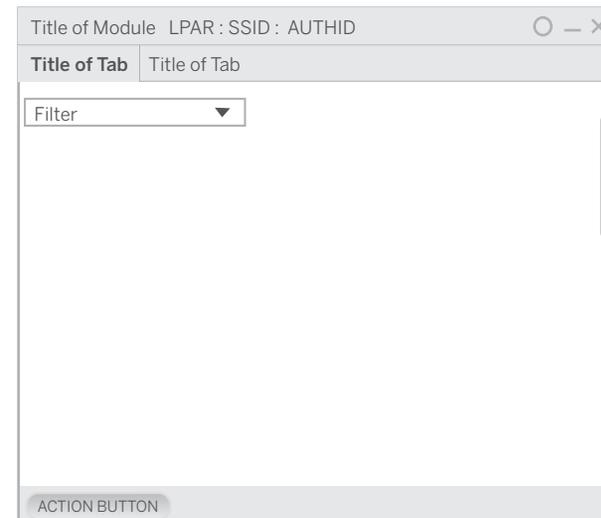
Some modules will contain tabular data which can be filtered. If the module contains one or more filters, they should be placed below the title bar.

Some modules will contain tabbed data (e.g. my tasks & assigned tasks). If module contains tabs, they should be placed below the title bar.

M-2 MODULE: MODULE WITH TABS



M-4 MODULE: MODULE WITH FILTER AND TABS



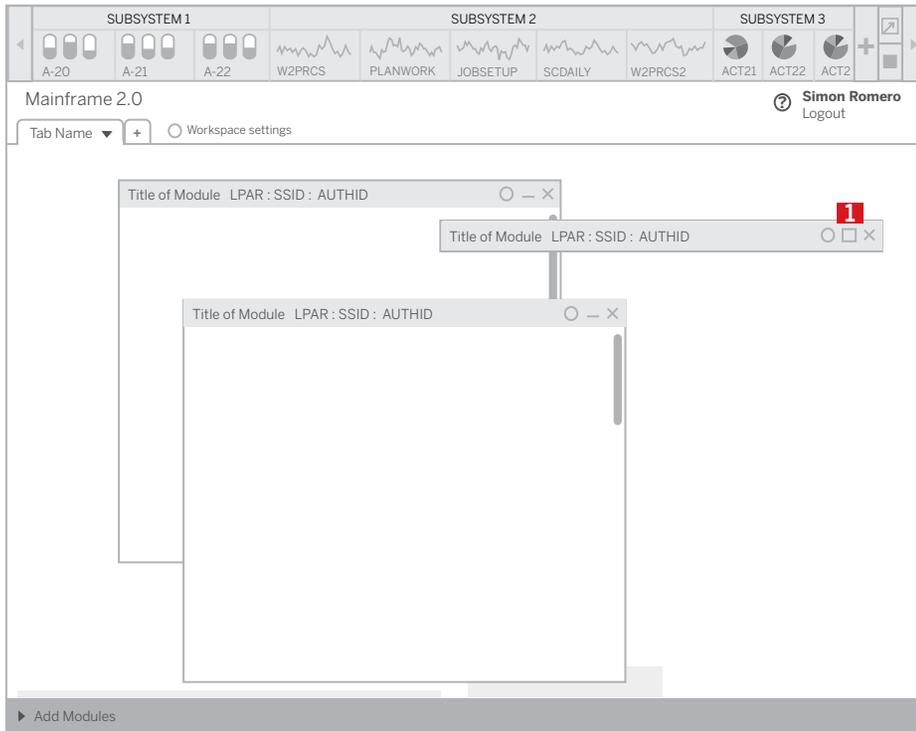
In the event the module contains both tabs and filters, the elements should be displayed in the order of title bar, tabs, filter. The filter should apply to the tab under which it appears.

Component: **Module (Overview)**

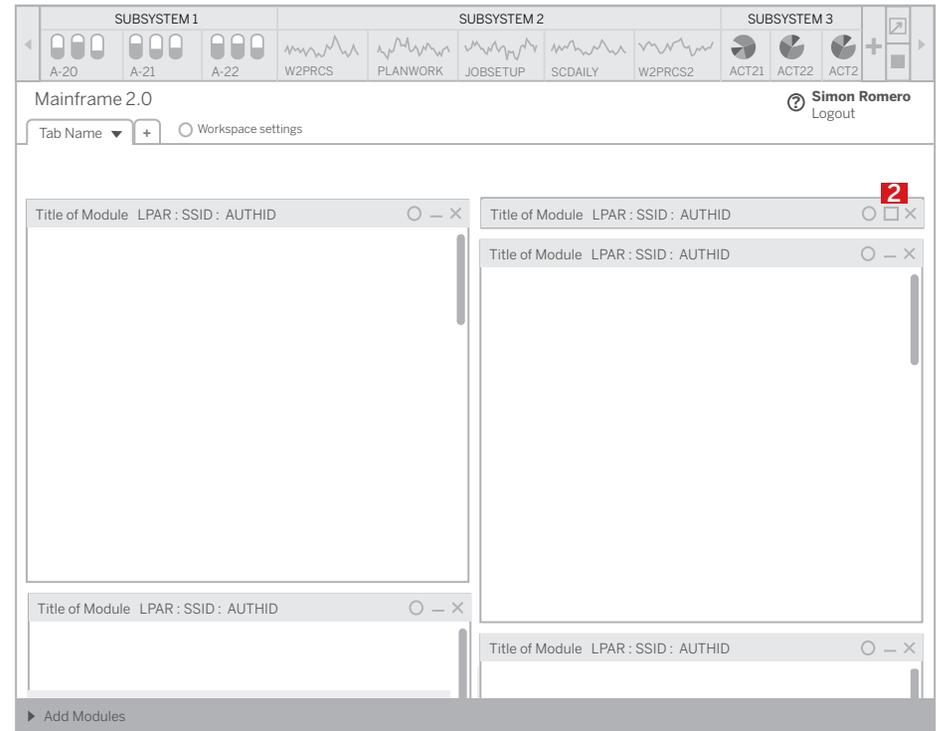
- 1.** The module should have a descriptive title, yet be as concise as possible. A module title is not optional. It is also possible that we set a max character length for the title. In the event the module and server are too long, they may have to wrap, thus doubling the height of the title bar. For any module for which there are server settings (those settings are set up on the settings screen), the server settings should also be displayed next to the title in the title bar in the following way, LPAR: SSID: AUTHID. The AUTHID may be optional.
 - 2.** Every module will have a set of module controls, which are displayed in the upper right corner of the title bar. The module controls are not optional. Every module will have an minimize/maximize control. By default, the module is maximized. Module settings should be retained from session to session, until the user modifies them. When the module is maximized, a 'minimize' icon is displayed. When the module is minimized, a 'maximize' icon is displayed. Every module will also contain a settings control. For modules for which connection to a server are required to populate data, LPAR, SSID, and AUTHID settings will be present. Dependent upon the module, other settings may also be available. A link to help/documentation is always required for every module, whether or not there are other settings available. Some modules may contain a remove control. There may be some clients who wish to require certain modules to be present on a workspace, thus not allowing the user to remove the module. If this is the case, the remove icon should not be displayed.
 - 3.** A module may contain optional scrollbars which scroll just content within the module, in the event there is more data displayed than can be accommodated within the module. Both the title bar and the action bar (if present) are locked, and cannot be scrolled.
 - 4.** If there are additional actions users can perform within a module, such as 'viewing all data' or 'create new [x]', the action bar should be displayed with the appropriate buttons at the bottom of the module. If there are no actions available, this bar should not be displayed.
 - 5.** Some modules may contain tabs. The first tab should be open/displayed by default. Clicking another tab will open that tab to display data contained within it. Having more than three tabs in a module should be avoided. In the event there are more tabs than can be displayed in the module, a horizontal scrollbar should be displayed, above the action bar (if present). As with the title bar, tab names should be descriptive, yet as concise as possible.
 - 6.** Some modules may optionally contain filters, usually present with tabular data. The filters are used to change/constrain the view of data. There may be multiple filters present. Having more than two filters in a module should be avoided. In the event there are many filters, the filters should wrap to the next line in the module, and not scroll off the screen, as with tabs.
-

Component: Module (Minimizing/Maximizing)

M-5 MODULE: MODULE MINIMIZED IN FREEFORM MODE



M-6 MODULE: MODULE MINIMIZED IN GRID MODE



Component: **Module (Minimizing/Maximizing)**

1. Every module can be minimized or maximized (maximized meaning to full default size - though modules can be expanded to larger than maximum default size (See Module Resizing section). By default, the module is maximized. Module settings should be retained from session to session, until the user modifies them. When the module is maximized, a 'minimize' icon is displayed. When the module is minimized, a 'maximize' icon is displayed. In freeform mode, clicking minimize displays just the module title bar, in the current module location on the workspace. When the module is maximized again, the full module should be displayed in the current location. If there is new data (module is refreshed automatically), the title bar should change color or otherwise indicate there has been a change to the data within the module. Whether minimizing or maximizing, the placement/arrangement of the other modules on the page does not change.

2. Every module can be minimized or maximized (maximized meaning to full default size - though modules can be expanded to larger than maximum default size (See Module Resizing section). By default, the module is maximized. Module settings should be retained from session to session, until the user modifies them. When the module is maximized, a 'minimize' icon is displayed. When the module is minimized, a 'maximize' icon is displayed. In grid mode, clicking minimize displays just the module title bar, in the current module location on the workspace. When the module is maximized again, the full module should be displayed in the current location. If there is new data (module is refreshed automatically), the title bar should change color or otherwise indicate there has been a change to the data within the module. When minimizing the module, the modules below it should move up to take up the whitespace left by the minimized module. When maximizing the module, the modules below it should move back down to their original locations.

Component: **Module (Scrolling & Viewing More Data)**

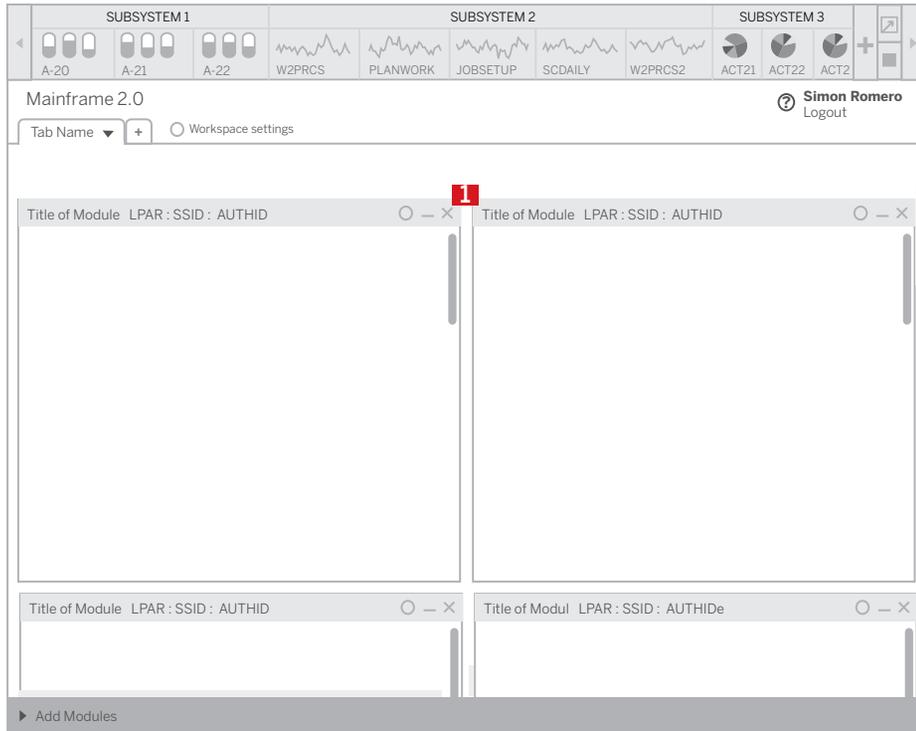
1. The purpose of a module is to provide a launch point into functionality, an overview of a system component, or information about the health/status of the system. As such, data presented in the modules should be as 'fresh' as possible, meaning that the data displayed in the module should be restricted to a certain amount of time (e.g. 1 month) to be displayed within the module. In order to prevent overloading the module with a historical list of data, certain modules will contain a 'See All' button. Clicking this button opens a modified Investigator window, which can better contain a large amount of data. That being said, the fresh data that is in the module can be scrolled. It should not be paginated. Once the user gets to the end of the list of data in the module, he can access data further back in history by clicking the 'See All' button.

2. The modified Investigator window should contain the entire list of historical data for that module. In the case of tasks, for instance, this window should display every task created by/assigned to the user. This list should be scrolled versus paginated as well.

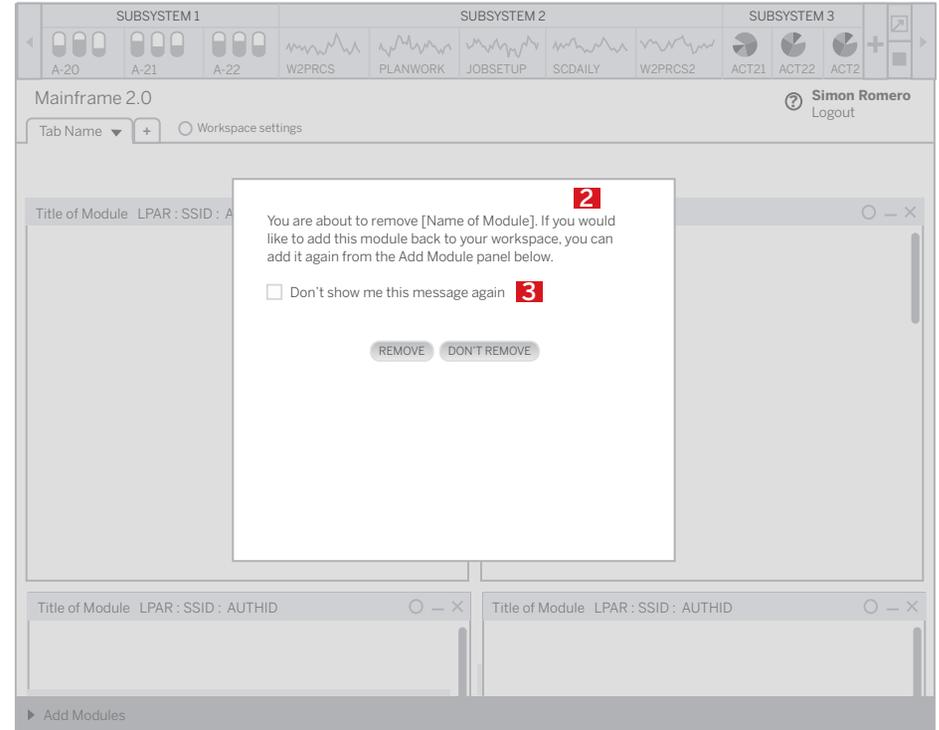
3. As can be seen in the modified Investigator window, certain elements have been stripped away from the standard Investigator window. The History component is not included, neither is the contextual menu. However, the tools have been retained so that users can better manipulate the potentially large amount of data via search, or can export and save the data, etc. This wouldn't be possible in the current model via a module.

Component: Module (Removing)

M-9 MODULE: REMOVING A MODULE



M-10 MODULE: REMOVE MODULE DIALOG



Component: **Module (Removing)**

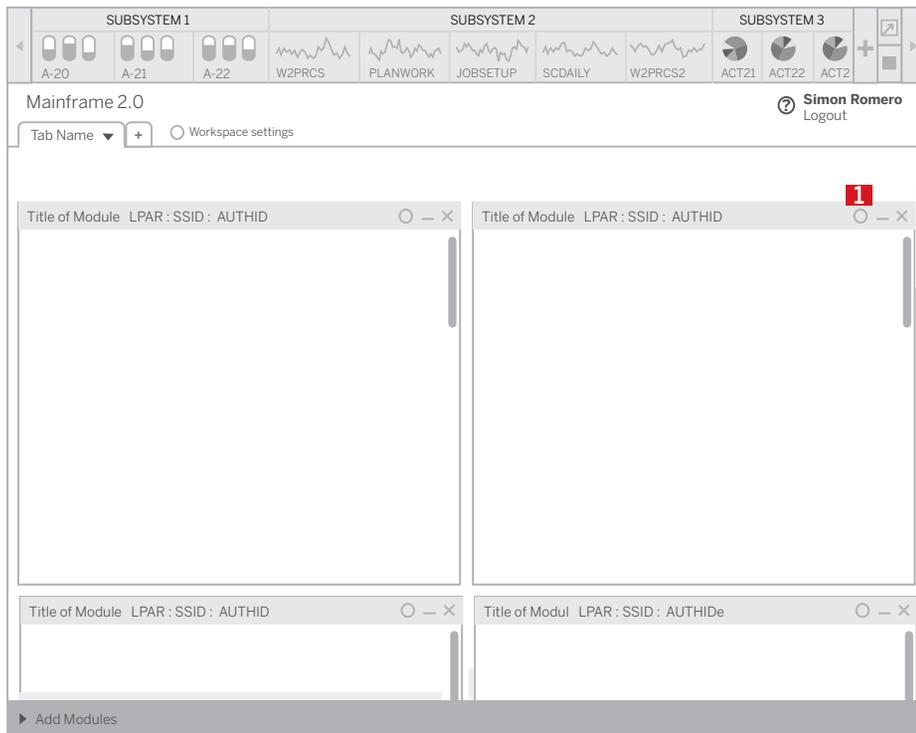
1. Most modules can be removed by the user. There may be some modules that , clients, or administrators do not want users to remove. In that case, the remove icon would not be present on the module. If a module can be removed, clicking the remove icon displays a remove confirmation dialog displayed as a modal layer, with the background page (workspace) dimmed and disabled until the dialog is dismissed.

2. The remove dialog is displayed with text 'You are about to remove [Name of Module]. If you would like to add this module back to your workspace, you can add it again from the Add Module panel below.' and two actions: 'Remove' and 'Don't Remove'. Selecting 'Remove' closes the dialog, removes the module, and in the case of freeform mode, does not affect the placement of the other modules. In the case of gridd mode, removing the module will cause the modules below it to move up to occupy the space of the deleted module. Selecting 'Don't Remove' closes the dialog and undims the workspace.

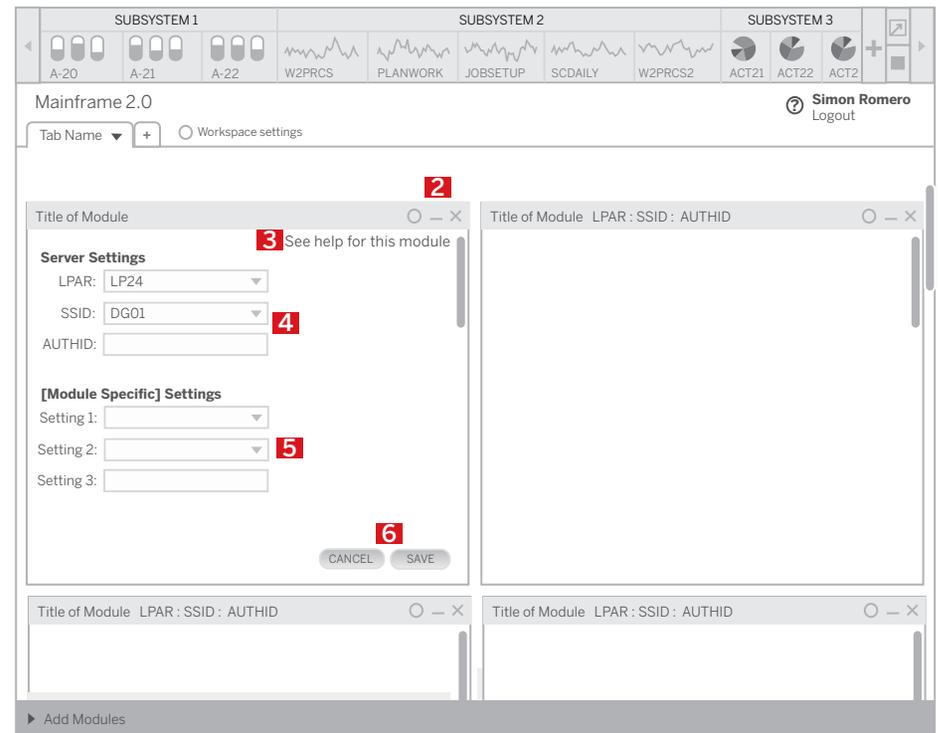
3. Because removing a module is not a permanent action, the user can opt out of seeing this message every time a module is removed. On the dialog a checkbox option is displayed with the following text: 'Don't show me this message again.' If the user selects this option, the next time a module is removed, the dialog will not be displayed.

Component: Module (Settings)

M-11 MODULE: EDITING MODULE SETTINGS



M-12 MODULE: MODULE SETTINGS OPTIONS

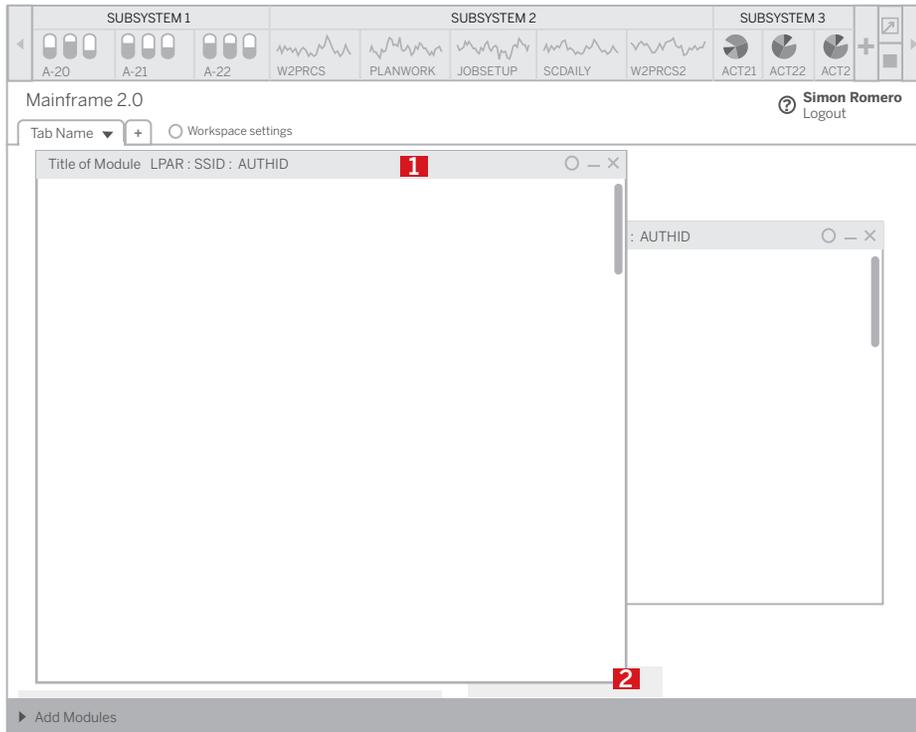


Component: **Module (Settings)**

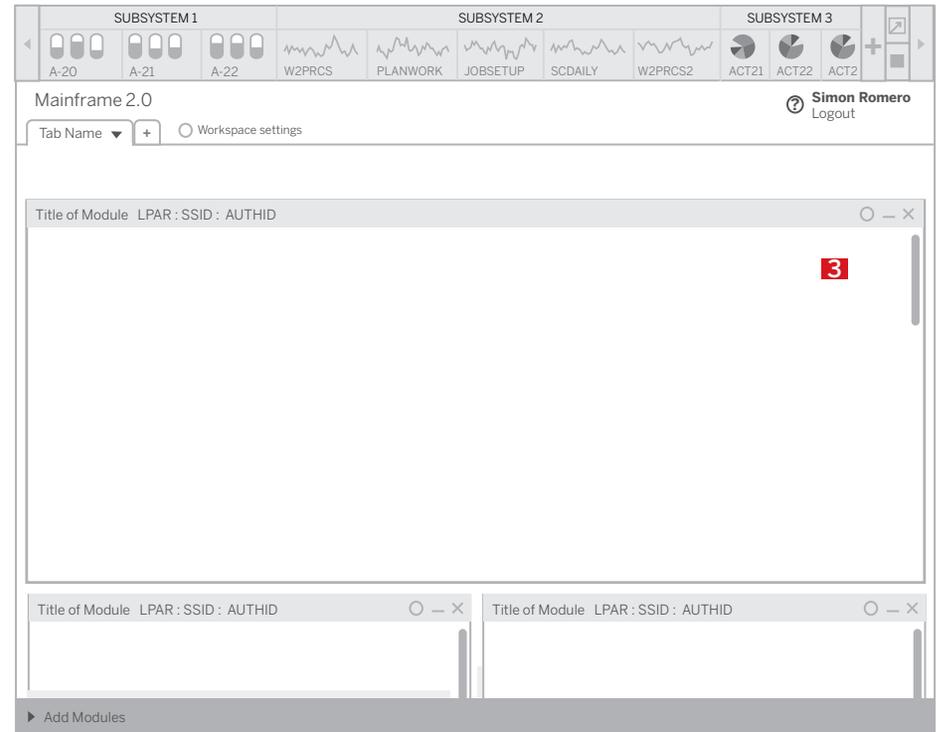
- 1.** Every module will have a settings control displayed. At a minimum, the settings control screen will provide a link to 'See help for this module'. Clicking the module settings icon replaces the content within the module with the settings content.
 - 2.** When in settings view in the module, the settings icon will be visible, but disabled. Clicking the minimize icon will minimize the module. When maximized again, the settings content will be displayed. Clicking the remove icon will remove the module as described in the 'Removing a Module' section. If this is the first time a module is being set up (e.g. the module has just been added to the workspace, only the title of the module is displayed in the title bar. The server settings are not displayed because they have not yet been set up. If the module settings are being edited (e.g. the module has already been set up) the LPAR:SSID:AUTHID would appear in the title bar.
 - 3.** A help link with the following text: 'See help for this module' is displayed on the settings screen. Clicking this link will open the relevant help documentation for the module in a new window.
 - 4.** Some modules will require the user to select server settings (e.g. Alerts). In the case of modules where server settings are not required (e.g. Paths), these settings will not be displayed. The LPAR dropdown contains a list of all available LPARs. The SSID dropdown contains a list of all available SSIDS. The AUTHID is text field in which the user types an AUTHID.
 - 5.** Depending upon the module, there may be additional settings available for the user to set. Again, these are optional, and would not be displayed if there are no additional settings available. If there are more settings than can be displayed within the module space, the module will scroll.
 - 6.** Clicking 'Save' saves the settings, and displays the module populated with content. If there are server settings, those are also displayed in the title bar. Clicking 'Cancel' clears the settings the user has chosen, but the module remains on the page, displaying the settings options.
-

Component: Module (Resizing)

M-13 MODULE: RESIZING A MODULE IN FREEFORM MODE



M-14 MODULE: RESIZING A MODULE IN GRID MODE



Component: **Module (Resizing)**

1. Any module on the workspace, in either grid or freeform mode, can be resized. When a module is resized, the content will scale/expand/contract to fit the new size of the module. The title in the title bar is fixed aligned to the left and the module settings are fixed aligned to the right, no matter the size of the module.

2. When resizing the module in freeform mode, the user hovers over a corner of the module and cursor changes to a resize cursor. The user then clicks and drags the module to the desired dimensions. In this mode, the user can make the module any dimension desired. The header area (from metrics panel to tabs) and the Add Metrics panel are fixed, so the module cannot be resized over these areas. If the module is in resize mode and the cursor is held below or above these fixed areas, the module can be made bigger than the viewable area, and the browser should scroll accordingly. Letting go of the cursor defines the end size of the module.

3. When resizing a module in grid mode, the user hovers over a corner of the module and the cursor changes to a resize cursor. The user then clicks and drags the module across the grid either to the right/left or up/down. In this mode, if there are, for instance, two columns and a user drags a module on the left across to the right column, the module occupying the right column will move down below the resized module into the next space in the right column. If the user resizes the column in a down direction, the module below it moves down in the same column to accommodate the newly sized module. In grid mode, resizing modules cannot result in 'breaking the grid'. For example, in two column mode, a module can be resized to the right to take up two columns. It can be resized down to take up two spaces in one column. It can be resized to the right and down to take up four spaces and two columns. Etc.

The header area (from metrics panel to tabs) and the Add Metrics panel are fixed, so the module cannot be resized over these areas. If the module is in resize mode and the cursor is held below or above these fixed areas, the module can be made bigger than the viewable area, and the browser should scroll accordingly. Letting go of the cursor defines the end size of the module.



METRICS PANEL

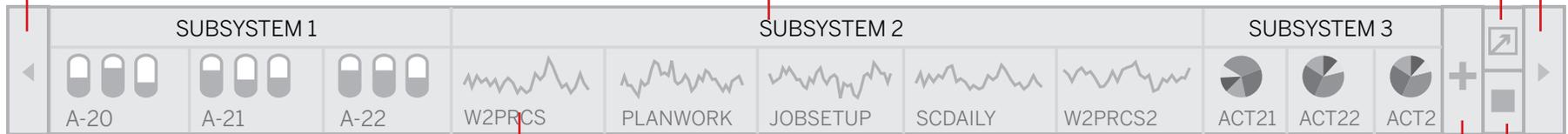
Component: Metrics Panel (Overview)

Left scroll control. Allows user to manually scroll panel to the left.

Name of group.

Right scroll control. Allows user to manually scroll panel to the right.

Popout control. Allows user to pop metrics panel out of the workspace.



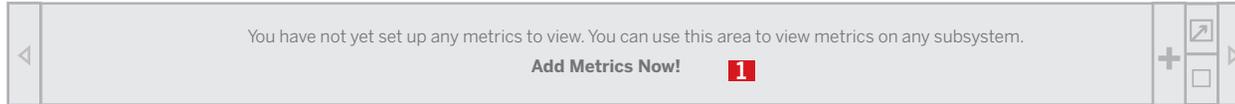
Add control. Allows user to add another group.

Metric from subsystem chosen by user to be included in group.

Play/Pause control. Allows user to start and stop animation.

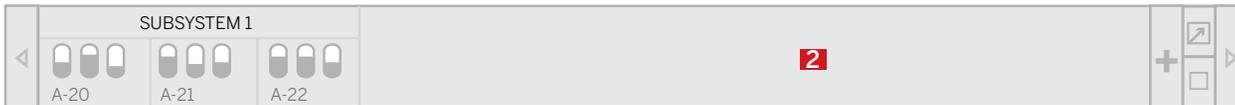
Component: Metrics Panel (States of the Metrics Panel)

MP1 METRIC PANEL: DEFAULT STATE OF METRICS PANEL (NO METRICS)



1. By default, the metrics panel will contain no groups with metrics. It will contain the following text: 'You have not yet set up any metrics to view. You can use this area to view metrics on any subsystem.' It will also contain a link with the following text: 'Add Metrics Now!'. Clicking this link will open the Add Group screen (See screen MP8). Most controls will be visible, but disabled: left/right scroll, popout, and pause/play. The Add control will be enabled.

MP2 METRIC PANEL: PARTIALLY FULL METRICS PANEL (REQUIRES NO SCROLLING)



2. If there are fewer groups/metrics in the panel then will require scrolling, the left/right scroll and play/pause controls will be visible, but disabled. Popout and Add controls will be enabled.

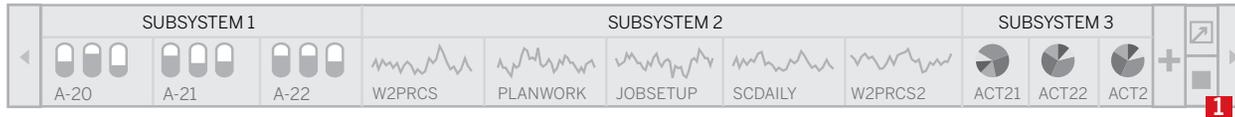
MP3 METRIC PANEL: FULL METRICS PANEL (REQUIRES SCROLLING)



3. If there are more groups/metrics in the panel then can be visible on screen and thus require scrolling, all controls will be visible and enabled.

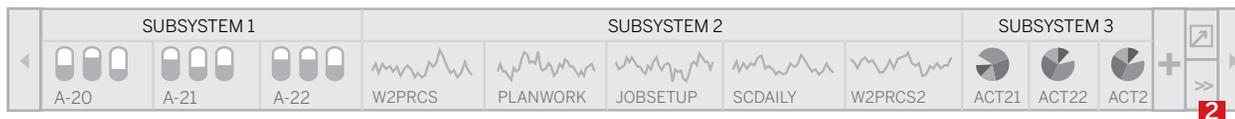
Component: Metrics Panel (Metrics Panel Motion Controls)

MP4 METRIC PANEL: METRICS PANEL IN MOTION



1. If there are more groups/metrics in the panel then can be visible on screen and thus require scrolling, the panel will default be in motion by animated motion from right to left, carouseling through all of the metrics contained in the panel. The motion will be continuous. The pause control is displayed when the panel is in this state. Clicking the pause control stops the animation. The user can use the left and right arrows to advance the metrics in the panel in either direction. This motion also carousel (meaning there is no 'end' or 'beginning' of the panel. If the panel is in motion and the user clicks either of the left or right controls, the panel automatically goes into 'stopped' state. It can be restarted by clicking the Play control.

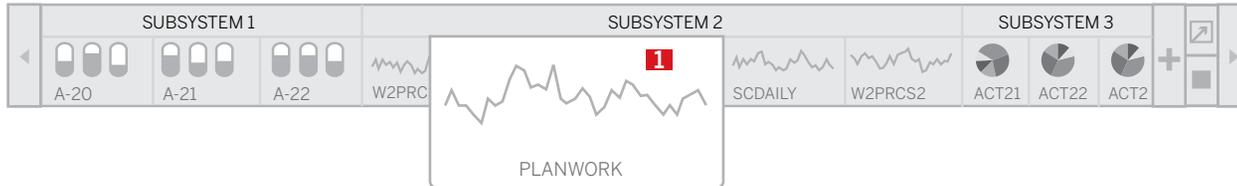
MP5 METRIC PANEL: METRICS PANEL STOPPED



2. If the panel is in 'stopped state, the play control is displayed. Clicking the play control will start the animation from the point which is currently displayed. In this mode, the user can also use the left and right controls to advance the metrics panel in either direction.

Component: Metrics Panel (Viewing Details of a Metric)

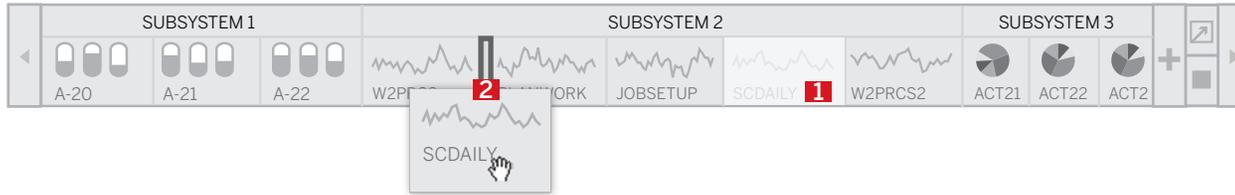
MP6 METRIC PANEL: METRIC DETAIL



1. Hovering over a metric displays a larger view of the metric, along with the metric name. Clicking the metric in the panel, or clicking on the larger view will open the full Investigator with the metric in the content area.

Component: Metrics Panel (Moving Metric within a Group)

MP7 METRIC PANEL: METRIC BEING MOVED

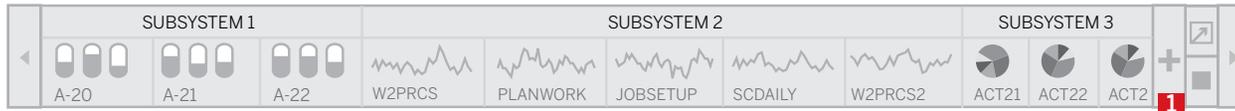


1. Metrics can be moved/rearranged within their group. They cannot be moved to other groups. Clicking and holding the metric activates it; altering the visual and putting it into 'move' mode.

2. As the metric is moved along the group, an indicator appears when an allowed drop zone is hovered over. User can move the metric anywhere within its group. Once the cursor is released, the metric appears in its new location. If the user hovers over an invalid drop zone, this indicator does not appear. If the metric is dropped in an invalid drop zone, it returns to its original location.

Component: Metrics Panel (Adding a New Group)

MP8 METRIC PANEL: ADDING A NEW PANEL



MP9 METRIC PANEL: ADD GROUP STEP 1

Add a Subsystem to Monitor **2**

Step 1 of 3: Select your server

LPAR:

SSID:

MP10 METRIC PANEL: ADD GROUP STEP 2

Add a Subsystem to Monitor

Step 2 of 3: Select the metrics you would like to monitor. **3**

- W2PRCS
- PLANWORK
- JOBSETUP
- SCDAILY
- W2PCRS2
- W2PCRS3
- W2PCRS4

MP11 METRIC PANEL: ADD GROUP STEP 3

Add a Subsystem to Monitor

Step 3 of 3: Give your group a name **4**

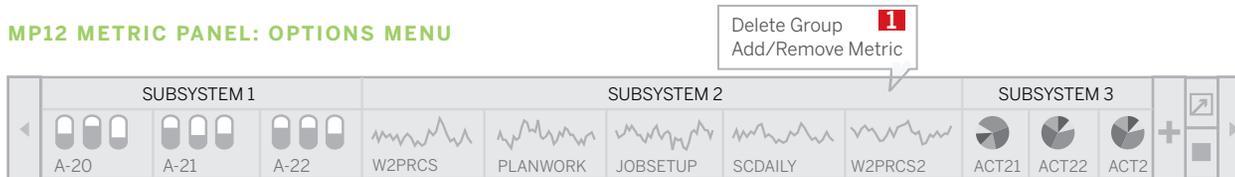
Name:

Component: Metrics Panel (Adding a New Group)

- 1.** Clicking the Add control opens the Add Group Step 1 screen in a new window/layer. This control can be used in any state of the metrics panel.
 - 2.** Adding a group and populating it with metrics is comprised of three steps: selecting a server, selecting metrics, and naming the group. In each of the screens are the title of the window/layer: 'Add a Subsystem to Monitor'. The current step the user is on, along with a description of the step and instructional text are also displayed.
In step one, the user chooses an LPAR and SSID from the dropdowns. Selecting the 'Next' button displays step 2 in the same window/layer. Selecting the 'Cancel' button closes the window/layer and returns user to the screen from which they clicked the Add control.
 - 3.** Step 2 of adding a group allows the user to choose the metrics with which to populate the group. These are the metrics that will be displayed in the metrics panel. The metrics displayed are based on the metrics available for the server settings chosen in step 1. The user may choose as many or as few metrics as they wish via checkbox next to the metric name. If the list is longer than can be accommodated in the window/layer, the list should scroll, but the text at top and buttons should be locked. Clicking 'Previous' button allows the user to go back to Step 1 to choose a different server. Clicking 'Next' displays Step 3 in the same window/layer. Selecting the 'Cancel' button closes the window/layer and returns user to the screen from which they clicked the Add control.
 - 4.** Step 3 of adding a group allows the user to name the group. A text field is displayed in which the user can enter any name they choose for the group. Clicking 'Previous' button allows the user to go back to Step 2 to modify the metrics they have chosen to be displayed. Clicking 'Finish' adds the group and metrics to the end of the metrics panel -- in last position. Selecting the 'Cancel' button closes the window/layer and returns user to the screen from which they clicked the Add control.
-

Component: Metrics Panel (Editing/Removing Existing Group)

MP12 METRIC PANEL: OPTIONS MENU



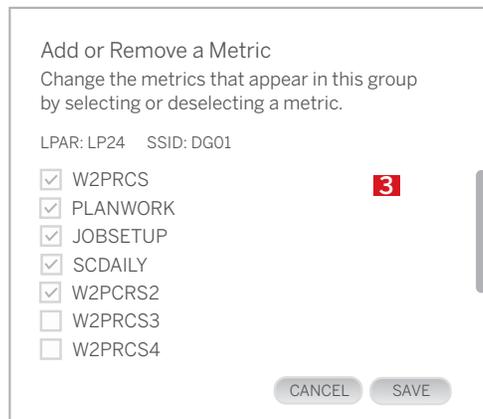
1. Once a group is on the metrics panel, it can be deleted, and the metrics can be edited. The menu layer is invoked by clicking anywhere on the group name bar. Selecting 'Delete Group' removes the group from the metrics panel.

MP13 METRIC PANEL: RENAMING A GROUP



2. The group name can also be edited. The group is renamed by clicking directly on the current name, which turns the name into an editable text field. The user types a new name, and then clicks the Enter key to save.

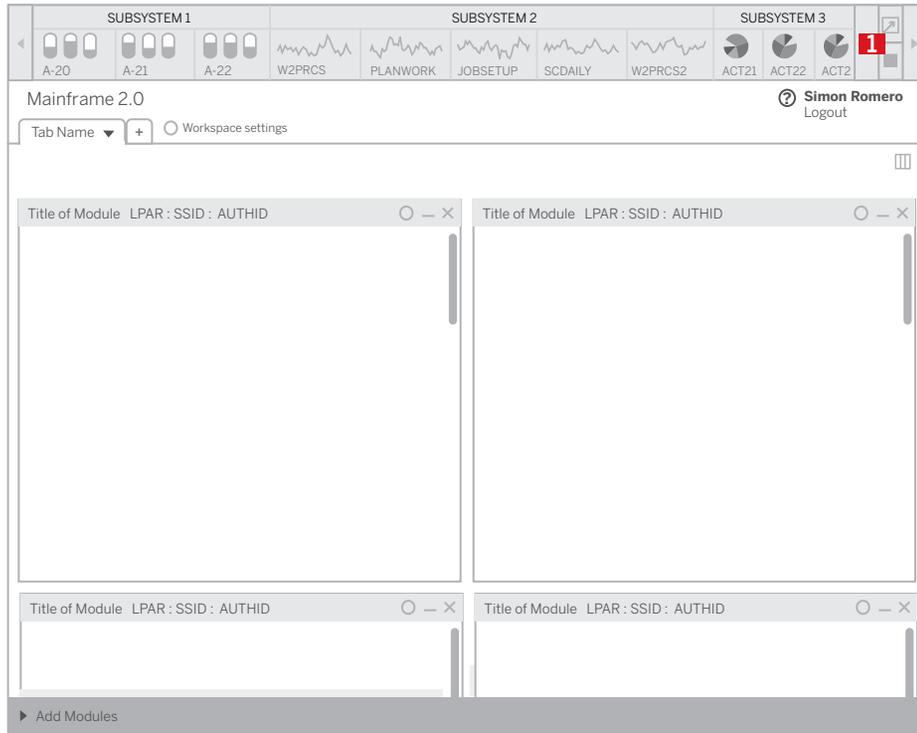
MP14 METRIC PANEL: EDITING METRICS IN A GROUP



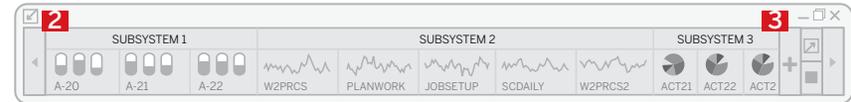
3. Selecting 'Add/Remove Metric' displays a window/layer containing the list of all metrics available for the system selected when first adding the group. The screen displays the title of the window/layer: 'Add or Remove a Metric', as well as instructional text. All of the metrics currently displayed are checked. The user can modify what is displayed by checking or unchecking the checkbox next to the metric name. Clicking 'Save' closes the window/layer and updates the group with the selected metrics. Clicking 'Cancel' closes the window/layer and does not change the metrics currently displayed.

Component: Metrics Panel (Popping Panel into New Window)

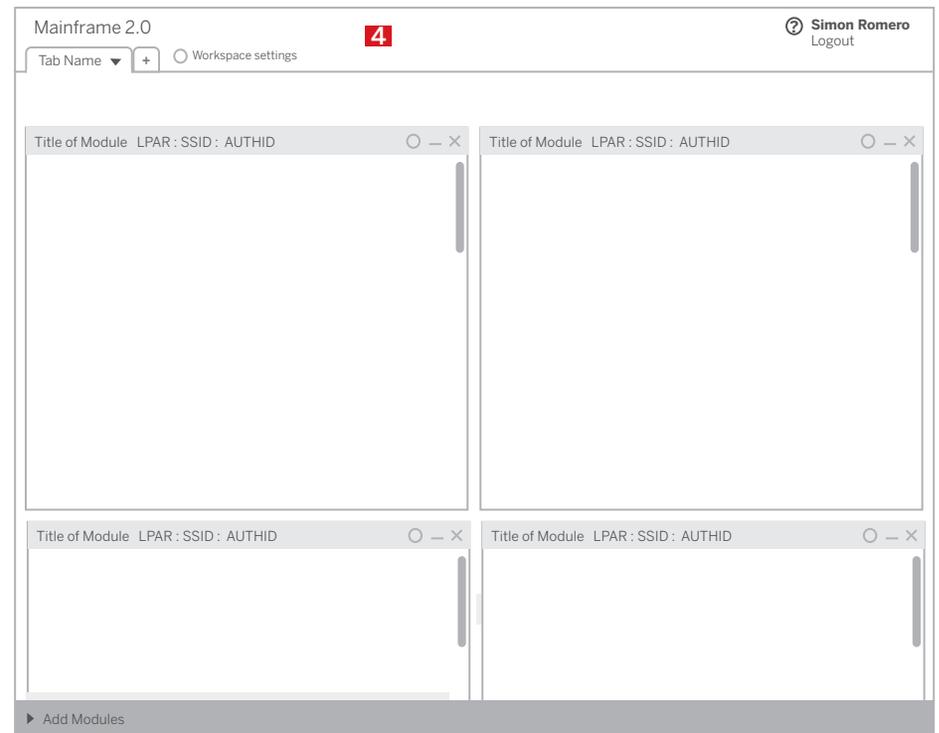
MP15 METRIC PANEL: POPPING OUT METRICS PANEL



MP16 METRIC PANEL: POPPED OUT METRICS PANEL



MP17 METRIC PANEL: WORKSPACE WITHOUT METRICS PANEL



Component: **Metrics Panel (Popping Panel into New Window)**

1. By default, the metrics panel is attached/popped into the workspace. Clicking the popout control moves the metrics panel out of the workspace and into its own browser window.

2. A Pop In control is displayed in the upper left which, when selected, puts the metrics panel back into the workspace.

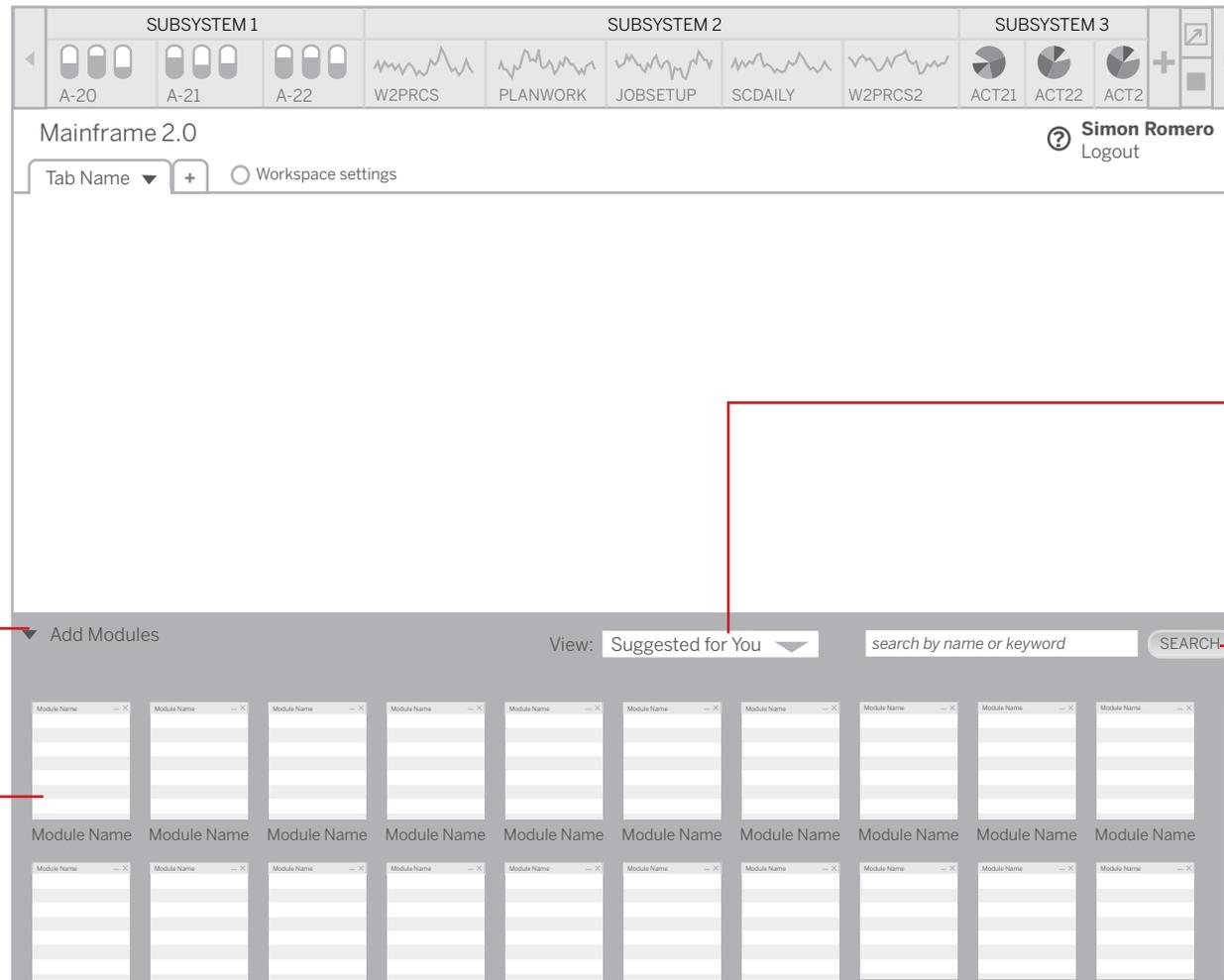
3. Once in its own window, the metrics panel contains all of its usual functionality. There are standard window controls available for the user to min/max/delete the window. If the user clicks delete on the browser control, the panel should automatically pop back into the workspace. The metrics panel should stay open even if the user closes the workspace.

4. When the metrics panel is not present on the workspace, all of the content on the page moves up to take up the real estate left by the metrics panel.



MODULE LIBRARY

Component: Module Library (Overview)



Panel title bar.
Clicking opens and
closes the library.

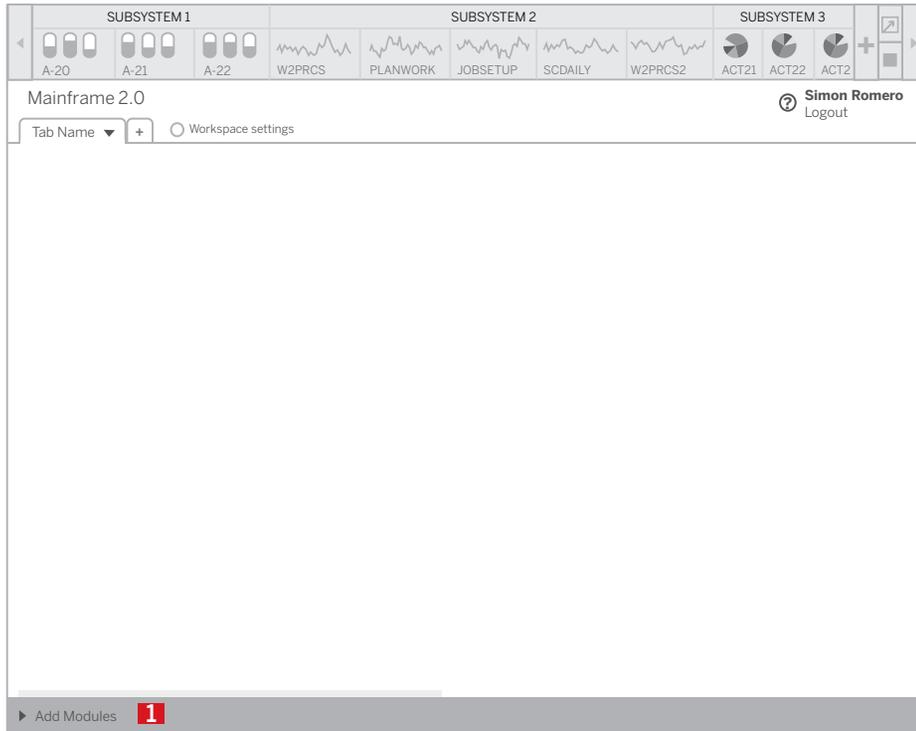
List of all modules
in category,
with name and
thumbnail.

Category switcher.
Allows user to view
different categories
of modules.

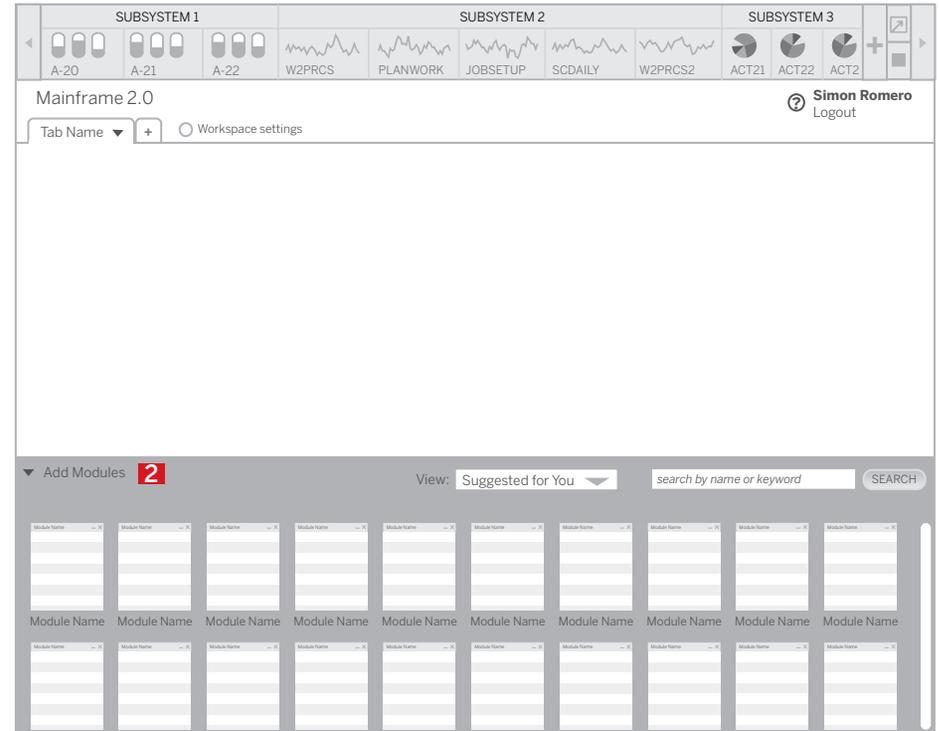
Module search.
Allows user to
search by module
name or keyword.

Component: Module Library (Opening & Closing)

ML1 MODULE LIBRARY: LIBRARY CLOSED



ML2 MODULE LIBRARY: LIBRARY OPEN

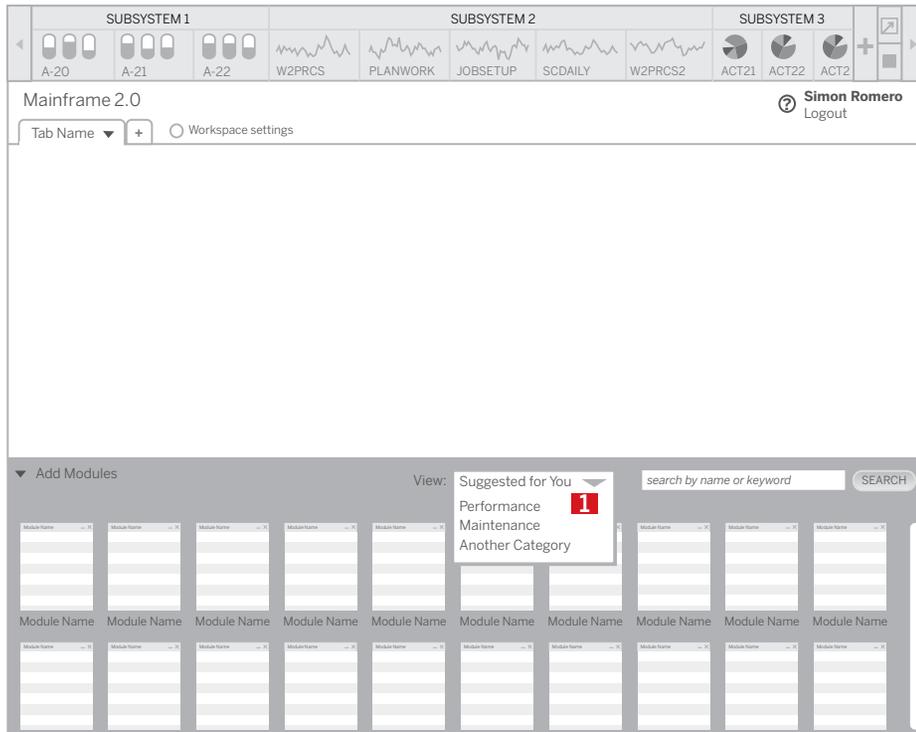


1. By default, the module library is in closed state on the workspace. User opens the library by clicking anywhere on the panel title bar.

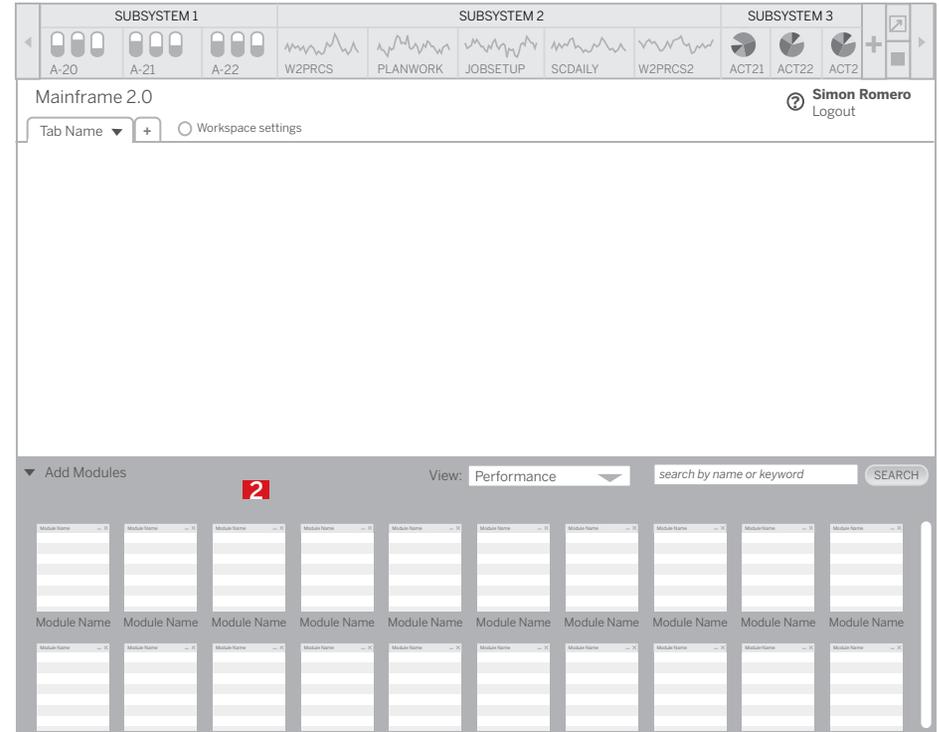
2. The library is closed via clicking anywhere on the panel title bar. The panel stays open, even after adding a module, until the user clicks the panel title bar.

Component: Module Library (Selecting a Category)

ML3 MODULE LIBRARY: MODULE CATEGORY SWITCHER



ML4 MODULE LIBRARY: MODULE CATEGORY DISPLAYED

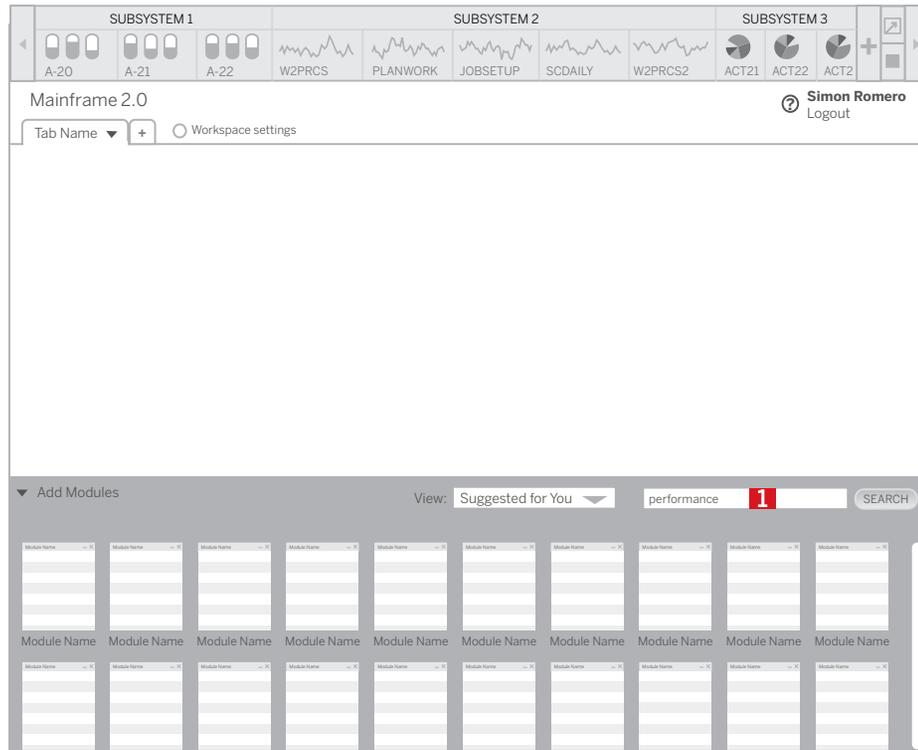


1. Every module in the library should be tagged with a category. 'Suggested for You' modules are those that are automatically populated in the category based on user role, what the user has added previously, what is popular, etc. The default category displayed is 'Suggested for You'. All of the categories are contained in the category dropdown. Users switch categories by selecting an option from the dropdown.

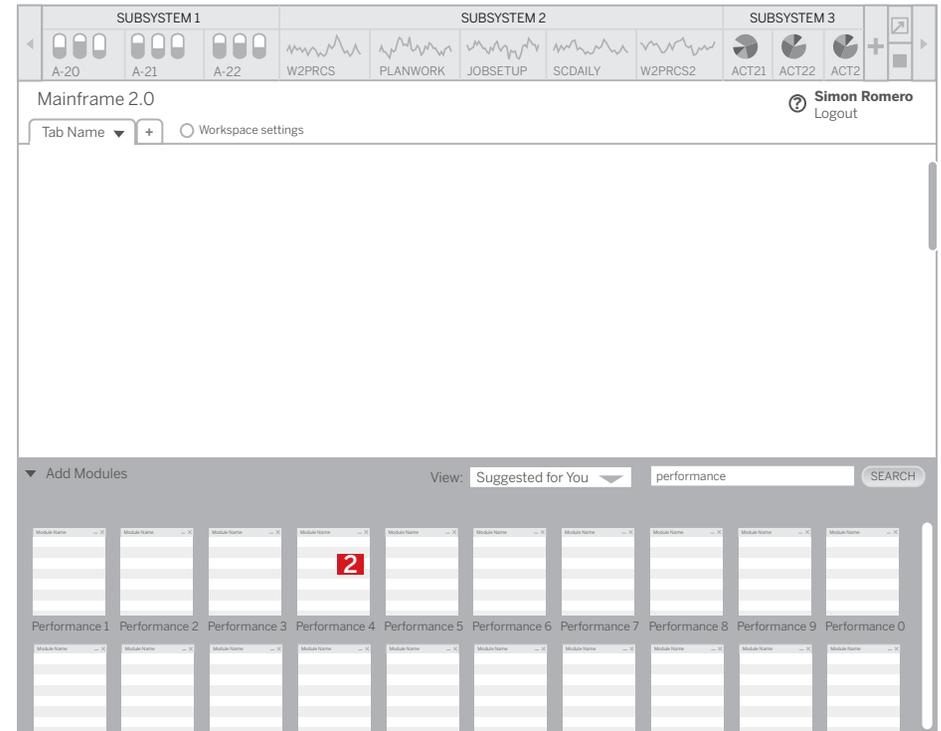
2. When a new category is chosen, the module list below changes to display all of the modules contained within that category.

Component: Module Library (Searching)

ML5 MODULE LIBRARY: MODULE SEARCH



ML6 MODULE LIBRARY: MODULE SEARCH RESULTS

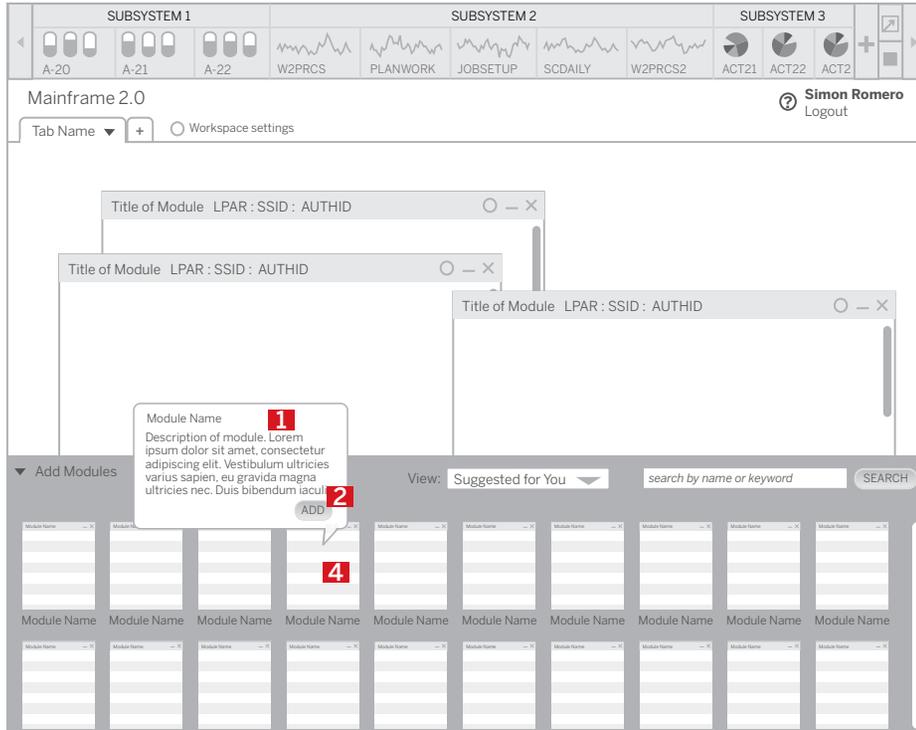


1. Users can also search for modules based on name, keyword, or description. The search should search across all categories. The search term is entered in the search field, and then the search button is selected.

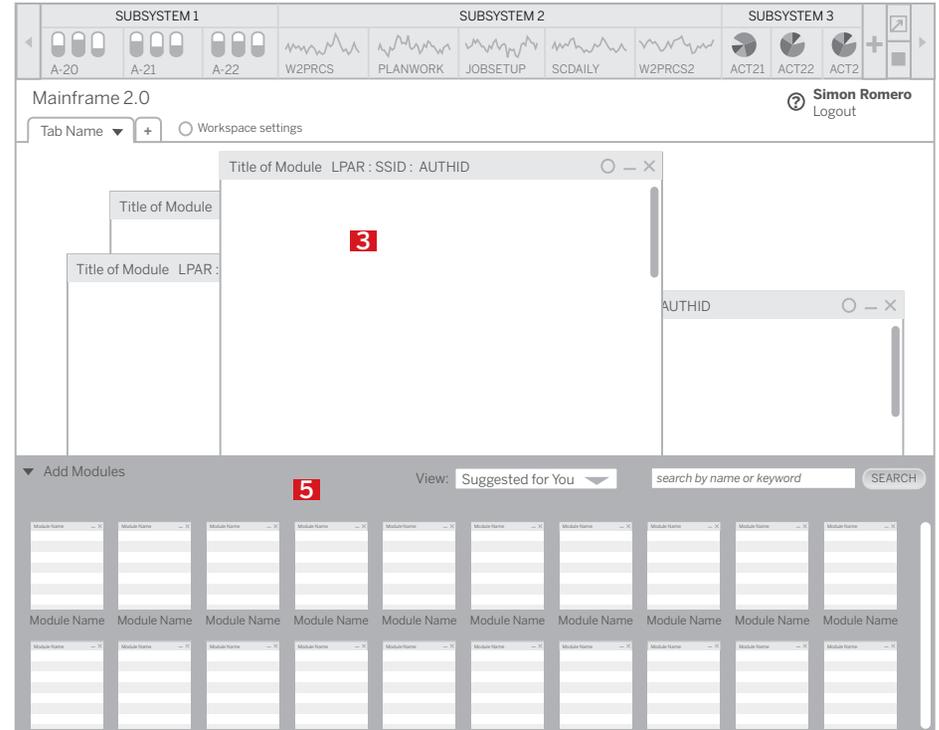
2. The results list is displayed in the list below. If no results are found, a message should be displayed in place of the list: 'No modules were found matching your search. Try entering a different term or locating a module with the category dropdown.'

Component: Module Library (Details & Add in Freeform Mode)

ML7 MODULE LIBRARY: MODULE DETAILS



ML8 MODULE LIBRARY: MODULE ADDED IN DEFAULT POSITION

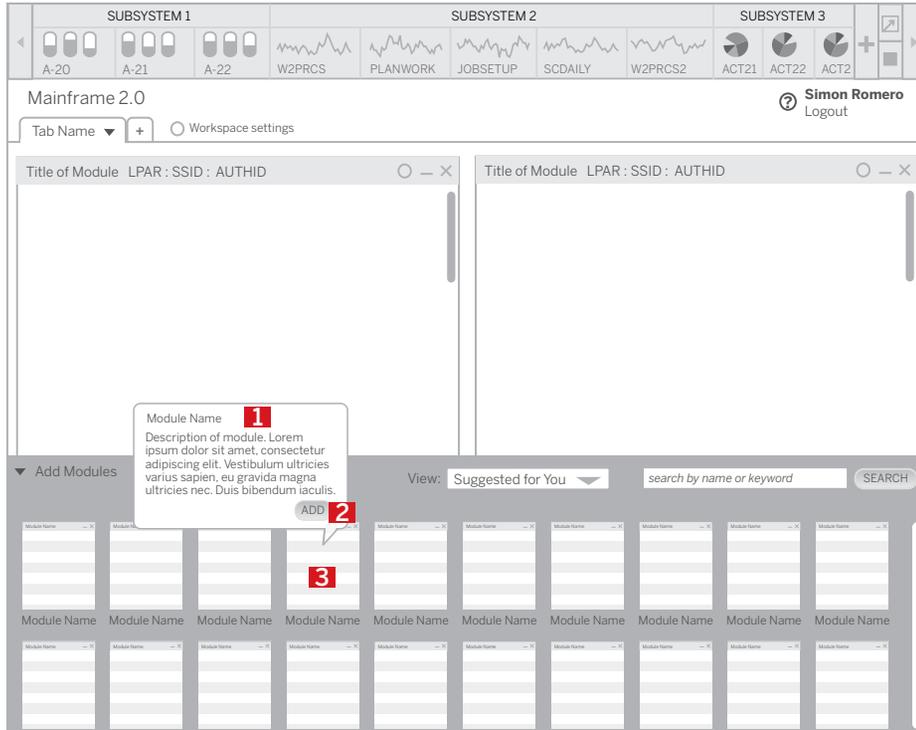


Component: **Module Library (Details & Add in Freeform Mode)**

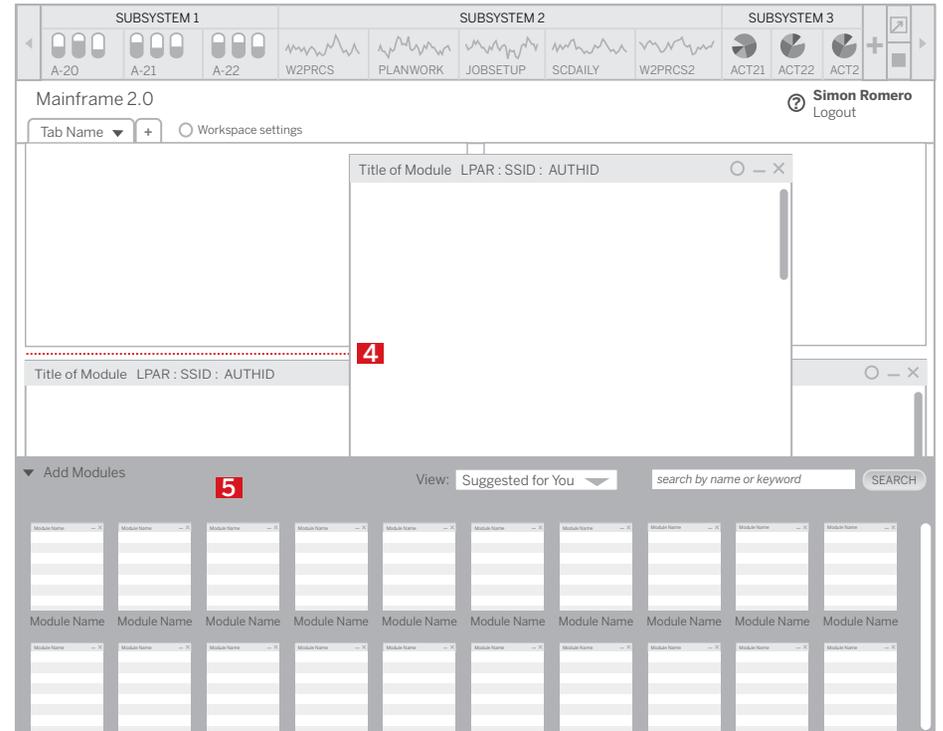
- 1.** Hovering over a module displays the module title and a long description of the module.
 - 2.** The module detail overlay also contains an Add button. Clicking 'Add' in freeform mode adds the module to the workspace. It is placed in the middle of the workspace screen by default. Of course, the user may reposition it.
 - 3.** The module is placed in the middle of the workspace screen by default. Of course, the user may reposition it.
 - 4.** Users may also add modules to the workspace by dragging and dropping them. Clicking and holding 'activates' the module. Once the module has been 'activated', the user can drag the module from the library to the workspace. In freeform mode, the user can drop the module anywhere on the workspace (on top of other modules, etc.) by letting go of the mouse.
 - 5.** The module library remains open until the user clicks the add module panel title bar to close it.
-

Component: Module Library (Details & Add in Grid Mode)

ML9 MODULE LIBRARY: MODULE DETAILS



ML10 MODULE LIBRARY: POSITIONING AFTER ADD



Component: **Module Library (Details & Add in Grid Mode)**

1. Hovering over a module displays the module title and a long description of the module.

2. The module detail overlay also contains an Add button. Clicking 'Add' in grid mode adds the module to the workspace. It is placed in the top left position in the first column of the grid by default. Of course, the user may reposition it.

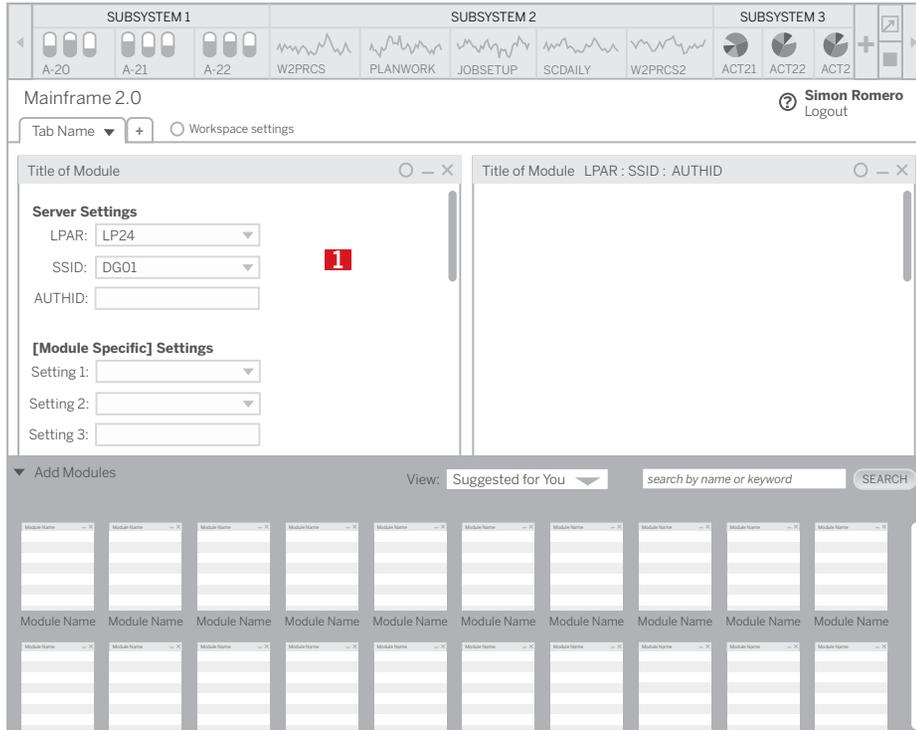
3. Users may also add modules to the workspace by dragging and dropping them. Clicking and holding 'activates' the module. Once the module has been 'activated', the user can drag the module from the library to the workspace.

4. In grid mode, as the user moves the module around the workspace, valid 'drop zones' are indicated/activated by moving the module in proximity of the location. The drop zone is indicated by a dotted line. When a 'drop zone' indicator appears, the user is able to place the module in that location by releasing the cursor. When the user releases the cursor, the module appears in the new location.
If the user tries to drop the module in an invalid 'drop zone', the module is not added to the workspace.

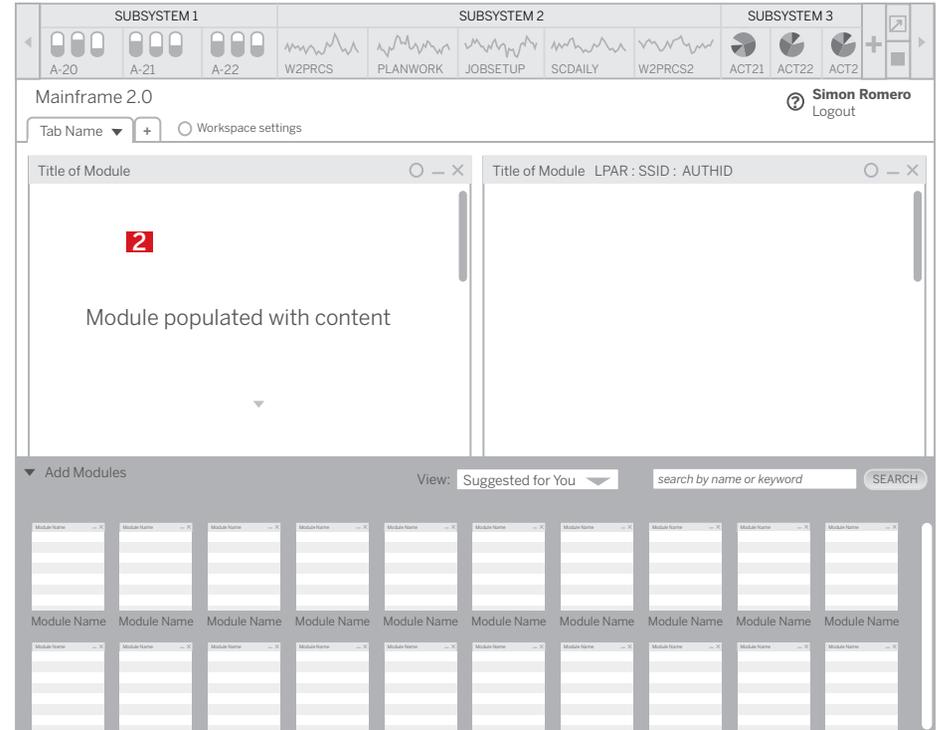
5. The module library remains open until the user clicks the add module panel title bar to close it.

Component: Module Library (Module Setup After Adding)

ML11 MODULE LIBRARY: MODULE WITH SETTINGS REQUIRED



ML12 MODULE LIBRARY: MODULE WITHOUT SETTINGS REQUIRED



1. If a module is placed on the workspace that requires some sort of customization and/or settings to be entered before the module can be used, those settings should be displayed within the module. (e.g. Alerts module)

2. If a module is placed on the workspace that does not require any customization before the module can be used, the module content is displayed. (e.g. Paths module)

Component: Module Library (Proposed Modules)

Mainframe 2.0 Workspace Modules						
Module	My	Shared	Create New	General Workspace	Subsystem Specific	Unique Settings
History				✓		Set auto-delete defaults.
Alerts	✓	✓		✓		Subscribe to shared alerts. Set auto-assignments; set auto-notification to text message, mobile, or pager.
Tasks	✓	✓	✓	✓		Column view controls.
Paths	✓	✓	✓	✓		
Notes	✓	✓		✓		See only my notes...in the Investigator.
Charts	✓	✓	✓	✓		
Links	✓	✓		✓		
Experts	✓	✓	✓			These are profile pages which concatenate views of objects related to the user, e.g. their paths, charts, alerts, notes, etc.
Threads	✓	✓	✓			Subscribe to a thread.
Metrics Panel			✓	✓		Set up LPARS and 3-6 choice metrics.
Documentation				✓		
Training				✓		
Subsystem Overview					✓	
Search				✓	✓	Multiple search parameters. Workspace items versus DB items. Define LPARs and object types, keywords, and core string numbers.
Access					✓	Some sort of Access Control List for security administrators.
Browse Tree					✓	Set to a specific subsystem or LPAR.
Software Updates					✓	Some integration with MSM.
System Messages					✓	Message history per subsystem.
Chart Masher				✓		Third party tool which enables drag and drop of a chart onto a chart to combine two metrics on a combined time axis.



ALERTS MODULE

Component: Alerts Module

Alerts are sorted by default based on severity, from highest to lowest. User can click on a column heading to change the sort.

For each alert there is displayed severity (1-5), the system from which the alert originated, error code, description, and date/time alert was triggered.

The screenshot shows a software interface with a top navigation bar containing several icons. Below the navigation bar, the main content area is titled "Mainframe 2.0" and includes a search bar and the user name "Simon Romero" with a "Logout" link. A secondary navigation bar contains tabs for "Performance", "DBA 1", "DBA 2", and "misc.". The primary content area is divided into two main sections: "Alerts" and "My Tasks".

The "Alerts" section contains a table with the following columns: "Sev", "System", "Error #", "Description", and "Time". The table lists several alerts, each with a radio button in the "Sev" column. A red line points to the "Sev" column header, and another red line points to the radio button in the first row.

The "My Tasks" section contains a table with the following columns: "Pri", "Due Date", "Status", and "Name". The table lists several tasks, each with a radio button in the "Pri" column. A red line points to the "Pri" column header, and another red line points to the radio button in the first row.

Below the "Alerts" and "My Tasks" sections, there are two smaller panels: "Workflows" and "History". The "Workflows" panel has tabs for "My Workflows" and "Workflows shared with me", a search bar, and a table with columns "Creator", "Name", "Shared", and "Created". The "History" panel is currently empty.

Module is scrollable.

Alerts module contains all alerts user has either subscribed to see, or sees automatically because of role.

Component: Alerts Module (Details)

Clicking on an alert expands the alert inline to display more detail and actions. Displayed are the description, a link to 'investigate alert' and a link to 'assign alert'.

Clicking 'investigate alert' opens the investigator displaying the relevant page. (chart, list, table, etc.)

Clicking 'assign alert' opens a page that allows the user to enter an email and text to assign the alert to someone.

Mainframe 2.0

Simon Romero
Logout

Performance DBA 1 DBA 2 misc. +

Sev	System	Error #	Description	Time
<input type="radio"/>	D91A	E24WD	Lorem ipsum dolor...	
<input type="radio"/>	D91D	E62534	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E53526	Lorem ipsum dolor...	
		Investigate Alert	Lorem ipsum dolor sit amet, consectetur adipiscing elit. sit amet, consectetur adipiscing elit.	
		Assign Alert		
<input type="radio"/>	D91A	E53526	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E24WD	Lorem ipsum dolor...	
<input type="radio"/>	D91C	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E3433	Lorem ipsum dolor...	

Pri	Due Date	Status	Name
Add a Task			
High	9/8/09	In Progress	Name of task displayed here...
High	9/8/09	In Progress	Name of task displayed here...
Med	9/8/09	In Progress	Name of task displayed here...
Med	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...

Workflows

My Workflows Workflows shared with me search all workflows

Creator	Name	Shared	Created
Create a workflow			
Simon R.	New workflow	No	Today

History

Add Modules

Clicking the alert row again closes the task.

Multiple alerts may be displayed in open state at the same time.

Opening an alert pushes down the alerts below it.



TASKS MODULE

Component: Task Module (My Tasks)

Module is tabbed into two views, my tasks and assigned tasks. My Tasks are those tasks I have created and assigned to myself, or tasks that others have assigned to me.

Filter allows user to restrict view of tasks to all or new or in progress or complete.

Clicking 'add a task' opens the add task panel.

Tasks are sorted by default based on priority, from highest to lowest. User can click on a column heading to change the sort.

Results list can be scrolled.

Each task is displayed with a priority, due date, status, and name. If that information was not entered when task was created, display is empty. Clicking the task row opens it to display full details.

Sev	System	Error #	Description	Time
○	D91A	E24WD	Lorem ipsum dolor...	
○	D91D	E62534	Lorem ipsum dolor...	
○	D91B	E53526	Lorem ipsum dolor...	
○	D91B	E3433	Lorem ipsum dolor...	
○	D91A	E4546	Lorem ipsum dolor...	
○	D91A	E4546	Lorem ipsum dolor...	
○	D91A	E53526	Lorem ipsum dolor...	
○	D91A	E24WD	Lorem ipsum dolor...	
○	D91C	E4546	Lorem ipsum dolor...	
○	D91B	E3433	Lorem ipsum dolor...	

Pri	Due Date	Status	Name
Add a Task			
High	9/8/09	In Progress	Name of task displayed here...
High	9/8/09	In Progress	Name of task displayed here...
Med	9/8/09	In Progress	Name of task displayed here...
Med	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...

Creator	Name	Shared	Created
Simon R.	New workflow	No	Today

Possible priorities are 'High', 'Medium' and 'Low'.

Possible statuses are 'New', 'In Progress' and 'Complete'.

Component: Task Module (Details)

Clicking the task row again closes the task. Multiple tasks may be displayed in an open state at the same time. Opening a task pushes down the tasks below it.

Mainframe 2.0

SEARCH Simon Romero Logout

Performance DBA 1 DBA 2 misc. +

Alerts

Sev	System	Error #	Description	Time
<input type="radio"/>	D91A	E24WD	Lorem ipsum dolor...	
<input type="radio"/>	D91D	E62534	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E53526	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E3433	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E53526	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E24WD	Lorem ipsum dolor...	
<input type="radio"/>	D91C	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E3433	Lorem ipsum dolor...	

My Tasks Assigned Tasks In Progress

Pri	Due Date	Status	Name
Add a Task			
High	9/8/09	In Progress	Name of task displayed here...
Description of task. Lorem ipsum dolor sit amet, consectetur adipiscing elit. sit amet, consectetur adipiscing elit.			<input type="radio"/> Name of attachment <input type="radio"/> Name of attachment Name of Workflow Name of Workflow
			Delete Edit
High	9/8/09	In Progress	Name of task displayed here...
Med	9/8/09	In Progress	Name of task displayed here...
Med	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...

Workflows

My Workflows Workflows shared with me search all workflows

Creator	Name	Shared	Created
Create a workflow			
Simon R.	New workflow	No	Today

History

Add Modules

Clicking on a task expands the task inline to display more detail and actions. Displayed are the description, any attached documents or workflows, a link to 'delete' and a link to 'edit'.

Clicking an attachment opens the document in its native viewer. Clicking a workflow opens that workflow in a new investigator window. Clicking 'delete' removes the task. Clicking 'edit' opens up the edit panel.

Component: Task Module (Create Task)

Mainframe 2.0

Simon Romero
Logout

Performance DBA 1 DBA 2 misc. +

Alerts

Sev	System	Error #	Description	Time
<input type="radio"/>	D91A	E24WD	Lorem ipsum dolor...	
<input type="radio"/>	D91D	E62534	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E53526	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E3433	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E53526	Lorem ipsum dolor...	
<input type="radio"/>	D91A	E24WD	Lorem ipsum dolor...	
<input type="radio"/>	D91C	E4546	Lorem ipsum dolor...	
<input type="radio"/>	D91B	E3433	Lorem ipsum dolor...	

My Tasks Assigned Tasks In Progress

◆ Pri ◆ Due Date ◆ Status Name

▶ Add a Task

Name

Description

Due Date

Priority High

Attachments

Assign To me

Workflow Select a Workflow

Low	9/8/09	In Progress	Name of task displayed here...
Low	9/8/09	In Progress	Name of task displayed here...

Workflows

My Workflows Workflows shared with me search all workflows

Creator	Name	Shared	Created
Simon R.	New workflow	No	Today

History

▶ Add Modules

User can create task with name, description, a due date, priority, document attachments (e.g. image, text doc, etc), and workflow attachments. The task is by default assigned to the user, but user may specify another user as assignee of task.

Clicking 'save' creates the task and closes the panel. The new task appears either in my tasks (if assigned to me) or assigned tasks (if assigned to someone else).
Clicking 'cancel' closes the panel without creating a task.

Component: Task Module (Assigned Tasks)

The screenshot displays a web application interface for a task module. At the top, there's a navigation bar with the text "Mainframe 2.0" and a search box. Below this, there are tabs for "Performance", "DBA 1", "DBA 2", and "misc.". The main content area is divided into several panels:

- Alerts:** A table with columns for Severity (Sev), System, Error #, Description, and Time. It contains 10 rows of data with placeholder text like "Lorem ipsum dolor...".
- My Tasks / Assigned Tasks:** A table with columns for Priority (Pri), Due Date, Status, Name, and Assigned To. It shows a list of tasks with various priorities (High, Med, Low) and statuses (In Progress). A red line highlights the "Assigned Tasks" tab.
- Workflows:** A panel with tabs for "My Workflows" and "Workflows shared with me". It includes a search box and a table with columns for Creator, Name, Shared, and Created. A red line points to a row in this table.
- History:** A panel with a search box and a table for viewing task history.

At the bottom, there's a button labeled "Add Modules".

Module is tabbed into two views, my tasks and assigned tasks. Assigned Tasks are a list of tasks I have assigned to others.

Each task is displayed with a priority, due date, status, name, and to whom the task was assigned. If that information was not entered when task was created, display is empty. Clicking the task row opens it to display full details.



NOTES

Component: Note (view all notes)

Alert: Title Save ▾

PayGRDTables

What kind of issue are you having?
Performance
Security
Maintenance

Name	Size	Date Created	Last Modified	Owner
PayGRDab15221	1005k	9/10/05	9/10/09	J Smith
PayGRDab15222	1005k	9/10/05	9/10/09	
PayGRDab15223	1005k	9/10/05	9/10/09	
PayGRDab15224	1005k	9/10/05	9/10/09	
PayGRDab15225	1005k	9/10/05	9/10/09	
PayGRDab15226	1005k	9/10/05	9/10/09	
PayGRDab15227	1005k	9/10/05	9/10/09	
PayGRDab15228	1005k	9/10/05	9/10/09	
PayGRDab15229	1005k	9/10/05	9/10/09	
PayGRDab15230	1005k	9/10/05	9/10/09	
PayGRDab15231	1005k	9/10/05	9/10/09	
PayGRDab15232	1005k	9/10/05	9/10/09	
PayGRDab15233	1005k	9/10/05	9/10/09	
PayGRDab15234	1005k	9/10/05	9/10/09	
PayGRDab15235	1005k	9/10/05	9/10/09	J Smith
PayGRDab15236	1005k	9/10/05	9/10/09	J Smith
PayGRDab15237	1005k	9/10/05	9/10/09	J Smith

Notes (123) for Table: Title

search

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vivamus mollis, tellus ac accumsan rhoncus, nisi nunc pretium eros.
Jim Smith 8-9-09

▼ Details
References: EMPLID column, rows 0-100
Privileges: Shared. Visible by all.
Shown Within: Employees tbl, DBPAYRO tbl.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vivamus mollis, tellus ac accumsan rhoncus, nisi nunc pretium eros.
Eric Andrews 8-8-09

► Details

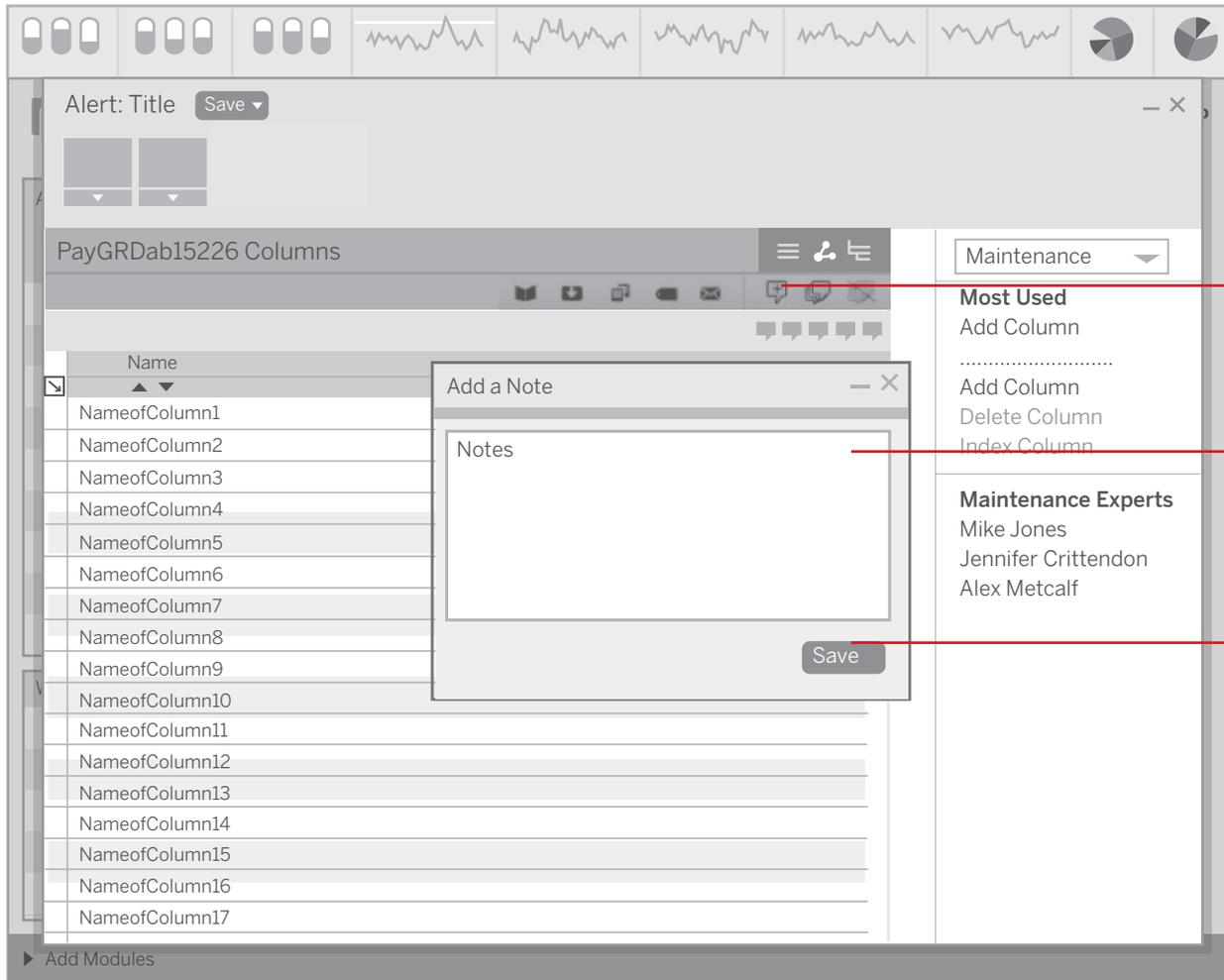
Clicking 'view all notes' icon displays all of the notes attached to this object in a new window.

Title displays total number of notes attached to this object.

User can search for notes by keyword, author, or date. The results are displayed in the same window.

For each note is displayed the text of the note, author, and date created.

Component: **Note (add note)**



Selecting a row or column and clicking the 'add note' icon displays the add a note screen.

Entry field for user to enter text of note.

Clicking 'save' saves the note, along with user who created it and the date it was created. The add a note screen closes, and a new icon will appear in the note row.



INVESTIGATOR

Component: Investigator

The title of an investigator window depends on how it was launched. An alert's title can be used if the investigator was launched from that alert.

The screenshot shows the Investigator tool interface. The window title is "Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm". The main content area displays a line graph titled "LP31 DG05 : PayGRD3 SQL Performance History" with a toolbar above it. Below the graph is a table titled "Contributors for LPAR:SSID: PayGRD3 SQL Performance" with columns for various components. A right-hand navigation pane contains sections for "Contextual Actions", "Suggested Actions", and "DBA Experts".

History/Paths Pane
This area keeps track of the pages a user has visited in this investigator window.

Content Pane
This area displays the data as the user navigates through different screens. The data can be viewed in tabular, visual, tree, or chart formats.

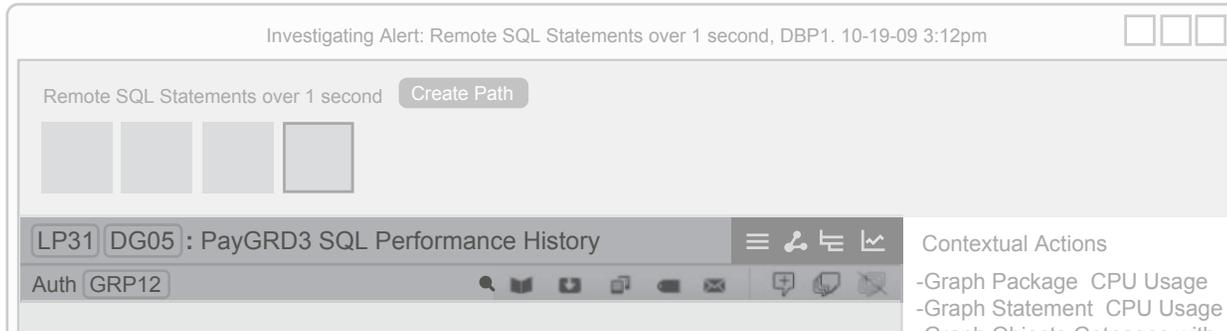
Navigation Pane
This right hand menu shows the user what actions can be taken on the data in the content pane. It separates these actions into two types: Regular, and Suggested.

An investigator instance is launched in a separate window, and can be closed without closing the workspace.



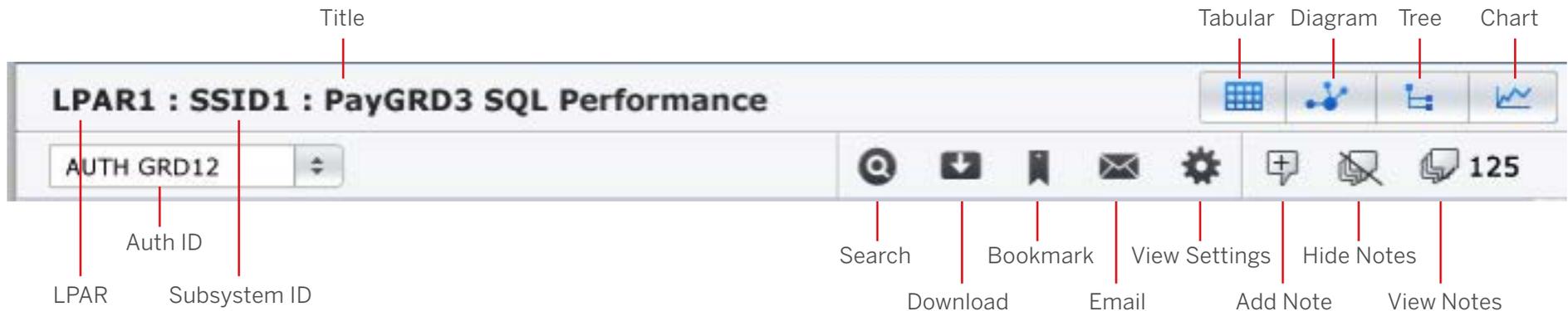
HEADER CONTENT

Component: Content Pane Header



VIEW CONTROLS

The view controls allow a user to view data within the content pane in different formats.



LPAR, SSID, and AUTH ID are editable. Click to select a different LPAR, SSID, or AUTH ID, or type in a new AUTH ID.

TOOLBAR

Download, and Email icons act on the current active selection, or on the entire set of data if nothing is selected.

Component: **Toolbar Icons**



SEARCH

Opens a new window that allows a user to search all data in the content pane.



DOWNLOAD

Provides options for downloading the data in the content pane. Tabular data can be downloaded in excel format, or plain text. Charts can Visualizer can be downloaded as static images.



BOOKMARK

Saves a shortcut to the current screen to a module on your workspace.



EMAIL

Opens a new email message using a user's preferred email client. The user can choose to include the data in the body of the email as either plain text or a static image, or provide a reference path.



SETTINGS

Opens a new window that allows a user to customize the current view.



ADD NOTE

Opens a new window that allows a user to add a note referencing the data currently in the content pane.



SHOW/HIDE NOTES

Toggles the presence of notes in the content pane on or off.



VIEW NOTES

Opens a new window that lets a user browse all the notes that have been added to the data currently in the content pane.



HISTORY

Component: History

Clicking the 'Create Path' button begins the process of saving the History as a Path.

Every page a user visits within one investigator session is represented by a page icon in the history.

The current page's icon is highlighted.

Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm

Remote SQL Statements over 1 second **Create Path**

LP31 DG05 : PayGRD3 SQL Performance History

Auth GRP12

Contextual Actions

- Graph Package CPU Usage
- Graph Statement CPU Usage
- Graph Objects Getpages with Buffer Pool Read Eff.

Suggested Actions

- Is this a new problem?
- Did something change?
- Did the work load increase?
- Is the buffer pool tuned?

Contributors for LPAR:SSID: PayGRD3 SQL Performance

<input type="checkbox"/>	PayLIST1				
<input type="checkbox"/>	PayLIST2				
<input type="checkbox"/>	PayLIST3				
<input type="checkbox"/>	PayLIST4				
<input type="checkbox"/>	PayLIST5				

DBA Experts

- Mike Barnes
- Adam Phillips

Clicking on a page icon brings the user to that page, and highlights that page's icon.

Page Icons should be thumbnail-sized screenshots of the content pane of the screen they represent. The name of the page should be shown in a tooltip upon mousing over a page's icon in the history.

Clicking the browser back button would cause the user to take one step back in the history, and the current page icon would no longer be shown.



PATH

Component: Path

Clicking the 'Create Path' button puts the user into a path creation mode. From here you can give the path a name, remove pages in the path, and add comments to specific pages.

The screenshot shows a path creation window titled "Remote SQL Statements over 1 second (from Alert)". It features a "Save Path" button and a "Cancel" button. Below the title bar is a row of page icons, with the rightmost one highlighted. A split button menu is open over the second icon, showing "Comment" and "Remove Breadcrumb" options. The main area displays a SQL statement: "LP31: DECLARE RMA@UFP1 CURSOR FOR SELECT BSHEMA , BNAME FROM SYSIBM.SYSSEQUENCESDEP WHERE DSHEMA = :H AND DNAME = :H AND DTYPE = 'F' FOR FETCH ONLY". A right-hand navigation pane is dimmed and contains "Contextual Actions" (View Runstats, View Tables/Indexes, Explain, View Detail), "Suggested Actions" (Clustering Index: To avoid high CPU and wait time on OPEN statements; When possible include the columns on the ORDER BY in the same sequence as the columns \are defined on the clustering index.), and "DBA Experts" (Mike Barnes, Adam Phillips, Will Becker).

Path Name

Split Button

Clicking on a page icon brings the user to that page, and highlights that page's icon.

The Navigation pane dims and is unusable while in Path Creation mode.

In Path creation mode, every page icon provides options to Add a comment to it, or Remove it from the path. These are accessed through a split button menu.

During user testing it became clear that some users confuse the term "Path" with other meanings. A suggested alternative would be to call Paths "Strategies" and pages or breadcrumbs "Steps."

Component: Path (Annotating and removing pages)

Once a comment has been saved a comment icon shows up over the page thumbnail.

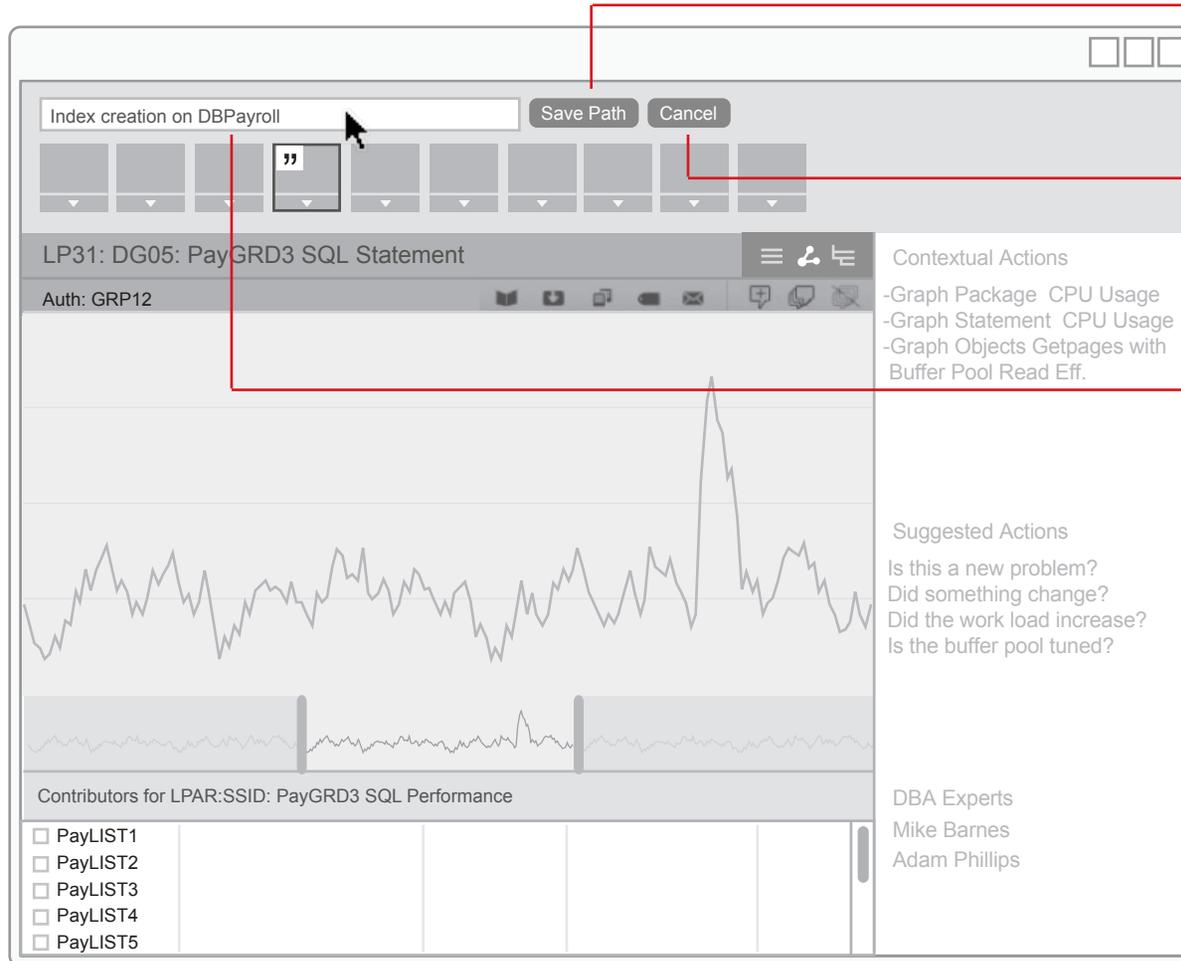
Clicking the comment icon would re-open the comment for viewing or editing.

The screenshot shows a monitoring interface titled "Remote SQL Statements over 1 second (from Alert)". At the top, there are "Save Path" and "Cancel" buttons. Below this is a row of thumbnails representing different SQL statements. One thumbnail has a comment icon (two speech marks) overlaid on it. A dropdown menu is open over this thumbnail, showing "Comment" and "Remove Breadcrumb" options. A mouse cursor is pointing at the "Comment" option. To the right of the thumbnails is a "Contextual Actions" panel with a list of actions: "-Graph Package CPU Usage", "-Graph Statement CPU Usage", and "-Graph Objects Getpages with Buffer Pool Read Eff.". Below this is a "Suggested Actions" section with questions: "Is this a new problem?", "Did something change?", "Did the work load increase?", and "Is the buffer pool tuned?". The main area of the interface displays a line graph showing performance metrics over time. At the bottom, there is a section titled "Contributors for LPAR:SSID: PayGRD3 SQL Performance" with a list of checkboxes for "PayLIST1" through "PayLIST5". A comment dialog window is open in the foreground, titled "Comment: LP31:DG05: PayGRD3 SQL Statement". The dialog contains the text "I realized the plan I was looking at wasn't the main problem. I made sure to note the.." and has "Save" and "Cancel" buttons at the bottom.

Removing a page from the path is done from a page's drop down menu. When "Remove" is clicked, that page's icon is removed and all pages to the right move left one spot.

Selecting "Comment" from a page's drop down menu opens a comment dialog window.

Component: Path (Naming and saving the path)



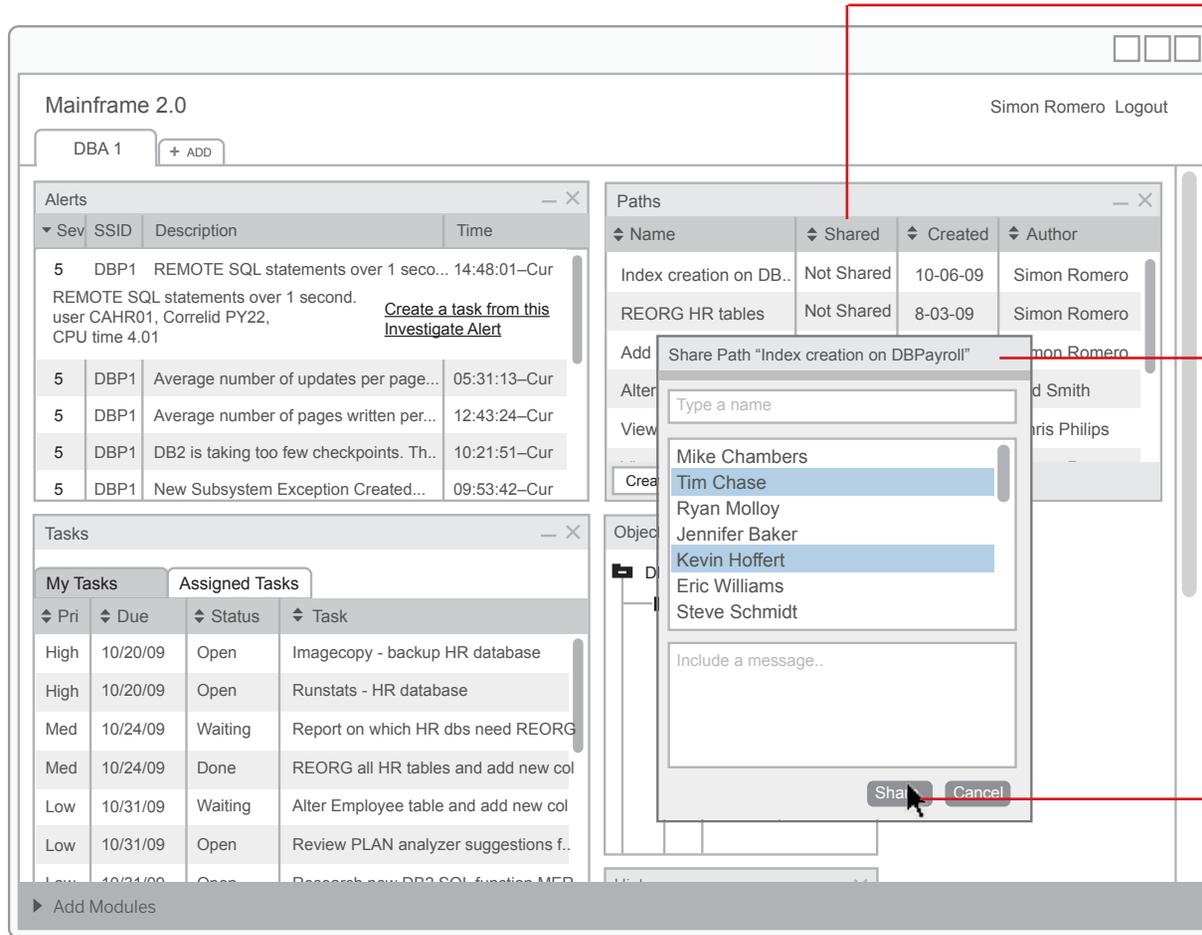
Saved paths are collected in a Paths module on the workspace. Rolling over this button should show the text field surrounding the path title, to indicate it has an editable state.

Clicking Cancel would take a user back to the investigator's regular state, without saving the path.

Mousing over the path title shows the text surrounded by a text field. Clicking the path title puts it into an editable state.

When a user is done editing the path's title, they can hit the enter key, or switch focus with the mouse or tab key. The escape key would cancel the edit state, and return the path to its previous title.

Component: Path (Sharing the path)



Saved paths are collected in a Paths module on the workspace. The shared column lets a user know whether or not this path has been shared with anyone.

Clicking on the "Shared" value for any path will open the share window. From this window a user can select co-workers to share the path with. Either by selecting a name from the listbox, or typing a name in the name field. A message can also be added be passed along with the shared path.

Clicking "Share" would share the path with the chosen co-workers. Whoever the path was shared with will now see the path in their paths module, with the message if you decided to include one.



CHART VIEW

Component: Chart View

Remote SQL Statements over 1 second Create Path

LP31 DG05 : PayGRD3 SQL Performance History

Auth GRP12

Contextual Actions

- Graph Package CPU Usage
- Graph Statement CPU Usage
- Graph Objects Getpages with Buffer Pool Read Eff.

Notes that have been made on the chart are collected in this notes bar.

Right clicking on a point on the graph provides a menu to drill into the data, or to add a note.

Chart data. User can directly manipulate the data by dragging and expanding the viewing area in the timeline.

Contributors for LPAR:SSID: PayGRD3 SQL Performance

- PayLIST1
- PayLIST2
- PayLIST3
- PayLIST4
- PayLIST5

DBA Experts

- Mike Barnes
- Adam Phillips

List of additional data sets that users can add on top of this chart to see correlations in data. Clicking a row displays that item's data in a different color.



TABULAR VIEW

Component: Tabular View

Clicking a column name selects the column. User may shift-click to select multiple columns.

Clicking the sort area on a column will toggle through three states: Unsorted(no arrow), Ascending(up arrow), and Descending(down arrow).

The screenshot shows a window titled "Remote SQL Statements over 1 second" with a "Create Path" button. Below this is a header bar for a table named "LP31 DG05 : PayGRD3 Active Plans" with an "Auth GRP12" dropdown. The table has 10 columns: Planname, Commit, Abort, SQL, TimePCT, CPUPCT, INDB2_TIME, INDB2_CPU, and Notes. The table contains 15 rows of data. To the right of the table is a "Contextual Actions" panel with a search field and a list of actions: Programs, SQL Statements, DB2 Object Errors, Suggested Actions, View SQL statement to find high CPU usage, View Buffer Pool Usage looking for high sync read, Explain the package or specific poor running statement to ensure correct index is being used, DBA Experts, Mike Barnes, Adam Phillips, and Will Becker. Red lines connect various parts of the interface to descriptive text annotations.

Title of table

Clicking icon selects all rows in the table.

Clicking white space selects the row. User may shift-click to select multiple rows.

Search fields allows the user to filter by any column

Notes that have been made on this table.

Table rows can be scrolled. There is no paging through rows. User should be able to scroll through the entire list.

If data is actionable (e.g. there is a drill-through), user will be able to click on the data to navigate to another page.

Planname	Commit	Abort	SQL	TimePCT	CPUPCT	INDB2_TIME	INDB2_CPU	Notes
SQAM140S	1	1	38	.84%	.16%	00:03.411818	00:00.094241	5
DSNESPCS	0	1	28	1.18%	.15%	00:04.811758	00:00.486174	3
MALMOI14	1	7	1012	.20%	.15%	00:00.847702	00:00.827674	9
RCUUP14B	5	9	625	.05%	.11%	00:00.237459	00:00.807687	0
DB2CI14	0	0	182	.01%	.11%	00:00.042430	00:00.260625	4
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20
RQPAI14	2	6	628	.04%	.07%	00:00.167268	00:00.566789	8
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20



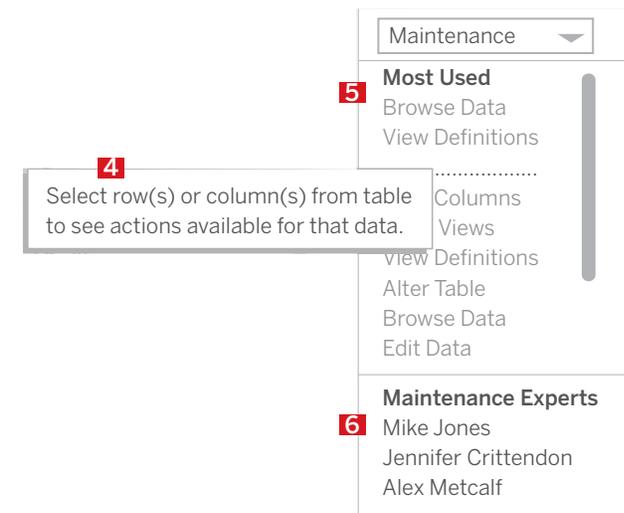
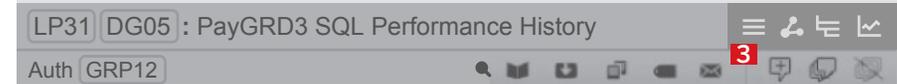
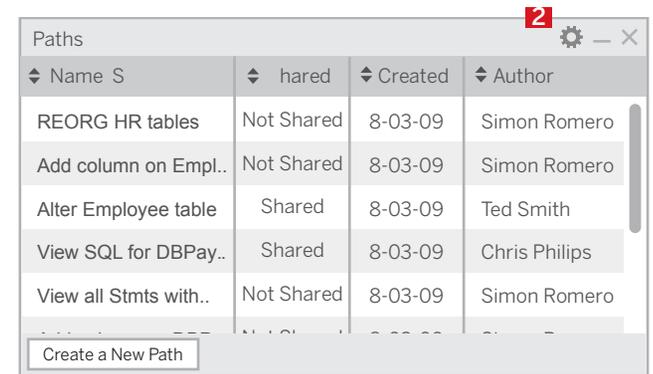
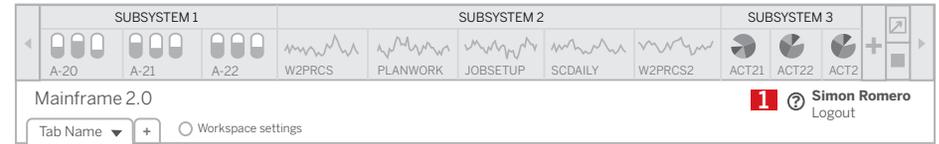
VISUALIZER VIEW



HELP

Component: Help

1. General Interface help can be accessed from the workspace window by clicking the question mark icon in the top right next to the users login information.
2. Help Information specific for each module can be accessed through a module's settings screen. The settings screen is shown by clicking on the settings icon in the header bar of any module.
3. Icons throughout the interface, like those in the toolbar and view switcher, should provide tooltip labels when the user mouses over them.
4. Hovering over actions in the navigation pane will show a pop-up that provides more information.
5. The contextual and suggested actions menus give users a set of possible "next steps" that will help them continue their work. The contextual actions are a set of the most common actions the application provides out-of-the-box. Suggested actions are provided by A or added by users.
6. A list of experts is shown in the investigator's navigation pane and is contextual to the content in the view pane. It provides quick access to others who may be more experienced with certain parts of the system. Clicking an expert would show their contact information.
7. Dialog Boxes that are used during operations like creating an index should provide access to documentation or other help.
8. Error notifications should provide a concise description of the problem, as well as the ability to view an in-depth description of the error, as well as a link to the appropriate help.





CONTEXTUAL MENU

Component: Investigator Contextual Menu

Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm

Remote SQL Statements over 1 second [Create Path](#)

LP31 DG05 : PayGRD3 Active Plans

Auth GRP12

Planname	Commit	Abort	SQL	TimePCT	CPUPCT	INDB2_TIME	INDB2_CPU	Notes
SQAM140S	1	1	38	.84%	.16%	00:03.411818	00:00.094241	5
DSNESPCS	0	1	28	1.18%	.15%	00:04.811758	00:00.486174	3
MALMOI14	1	7	1012	.20%	.15%	00:00.847702	00:00.827674	9
RCUUP14B	5	9	625	.05%	.11%	00:00.237459	00:00.807687	0
DB2CI14	0	0	182	.01%	.11%	00:00.042430	00:00.260625	4
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20
RQPAI14	2	6	628	.04%	.07%	00:00.167268	00:00.566789	8
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20

What kind of issue are you having?
Performance
Security
Administration
Maintenance
Recovery

When page is first displayed, all categories of navigation available are displayed in list format.

Clicking a category displays all of the navigation available under that category. User does not need to first select anything in the content area. These links are always enabled..

Component: Investigator Contextual Menu

Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm

Remote SQL Statements over 1 second [Create Path](#)

LP31 DG05 : PayGRD3 Active Plans

Auth GRP12

Planname	Commit	Abort	SQL	TimePCT	CPUPCT	INDB2_TIME	INDB2_CPU	Notes
SQAM140S	1	1	38	.84%	.16%	00:03.411818	00:00.094241	5
DSNESPCS	0	1	28	1.18%	.15%	00:04.811758	00:00.486174	3
MALMOI14	1	7	1012	.20%	.15%	00:00.847702	00:00.827674	9
RCUUP14B	5	9	625	.05%	.11%	00:00.237459	00:00.807687	0
DB2CI14	0	0	182	.01%	.11%	00:00.042430	00:00.260625	4
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20
RQPAI14	2	6	628	.04%	.07%	00:00.167268	00:00.566789	8
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20

Maintenance

Common Actions

- Browse Data
- View Definitions
- View Columns
- View Views
- View Definitions
- Alter Table
- Browse Data
- Edit Data

Suggested Actions

- View SQL for high CPU
- View buffer pool usage
- Explain the Package

Maintenance Experts

- Mike Jones
- Jennifer Crittendon
- Alex Metcalf

Categories on the previous screen are now contained in the dropdown. Selecting a different category from the dropdown will display the new category and the navigation contained within it.

Navigation is presented in three groups: Common Actions, Suggested Actions, and Category Experts. The common and suggested actions are enabled/disabled based on what the user has selected in the table. The Experts category is

Component: Investigator Contextual Menu

Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm

Remote SQL Statements over 1 second [Create Path](#)

LP31 DG05 : PayGRD3 Active Plans Maintenance

Auth GRP12

Planname	Commit	Abort	SQL	TimePCT	CPUPCT	INDB2_TIME	INDB2_CPU	Notes
SQAM140S	1	1	38	.84%	.16%			
DSNESPCS	0	1	28	1.18%	.15%			
MALMOI14	1	7	1012	.20%	.15%	00:00.847702	00:00.827674	9
RCUUP14B	5	9	625	.05%	.11%	00:00.237459	00:00.807687	0
DB2CI14	0	0	182	.01%	.11%	00:00.042430	00:00.260625	4
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
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RQPAI14	2	6	628	.04%	.07%	00:00.167268	00:00.566789	8
RCUUI14	3	6	470	.05%	.10%	00:00.233455	00:00.328471	0
PSAAI12	65	0	146	.06%	.09%	00:00.251801	00:00.603741	3
DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20

Common Actions

- Browse Data
- View Definitions
- View Columns
- Views
- Definitions
- Alter Table
- Browse Data
- Edit Data

Suggested Actions

- View SQL for high CPU
- View buffer pool usage
- Explain the Package

Maintenance Experts

- Mike Jones
- Jennifer Crittendon
- Alex Metcalf

Select row(s) or column(s) from table to see actions available for that data.

Hovering over disabled menu options provides user with guidance for how to enable those options.

Component: Investigator Contextual Menu

Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm

Remote SQL Statements over 1 second [Create Path](#)

LP31 DG05 : PayGRD3 Active Plans Maintenance

Auth GRP12

Planname	Commit	Abort	SQL	TimePCT	CPUPCT	INDB2_TIME	INDB2_CPU	Notes
SQAM140S	1	1	38	.84%	.16%	00:03.411818	00:00.094241	5
DSNESPCS	0	1	28	1.18%	.15%	00:04.811758	00:00.486174	3
MALMOI14	1	7	1012	.20%	.15%	00:00.847702	00:00.827674	9
RCUUP14B	5	9	625	.05%	.11%	00:00.237459	00:00.807687	0
DB2CI14	0	0	182	.01%	.11%	00:00.042430	00:00.260625	4
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DGL1R12	12	4	41	.09%	.09%	00:00.372213	00:00.019884	5
PLCAR14B	0	0	4776	.02%	.09%	00:00.082996	00:00.157920	20

Common Actions

- Browse Data
- View Definitions
- View Columns
- View Views
- View Definitions
- Alter Table
- Browse Data
- Edit Data

Suggested Actions

- View SQL for high CPU
- View buffer pool usage
- Explain the Package

Maintenance Experts

- Mike Jones
- Jennifer Crittendon
- Alex Metcalf

Once user selects a row by clicking on white space to left of row, the row is highlighted. The previously disabled items in the menu are now enabled. These are the items that are available/ actionable for the selected row. In the example, the user selects View Columns.

Component: Investigator Contextual Menu

The screenshot shows a software interface for investigating alerts. At the top, it displays the alert title: "Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm". Below this, there's a section titled "Remote SQL Statements over 1 second" with a "Create Path" button and five placeholder boxes. The main area is a table titled "LP31 DG05 : PayGRD3 – Column Listing" with a "Maintenance" dropdown menu. The table has a header row with "Column" and eight data rows labeled "ColumnName1" through "ColumnName8". A contextual menu is open on the right side of the table, showing "Common Actions" (Add Column, Delete Column, Index Column) and "Maintenance Experts" (Mike Jones, Jennifer Crittendon, Alex Metcalf). A red line points from the "Add Column" action to the explanatory text on the right.

Column							
ColumnName1							
ColumnName2							
ColumnName3							
ColumnName4							
ColumnName5							
ColumnName6							
ColumnName7							
ColumnName8							

Common Actions
Add Column
Delete Column
Index Column

Maintenance Experts
Mike Jones
Jennifer Crittendon
Alex Metcalf

A list of all the columns associated with the selected row are displayed. In this case, one of the actions on the right, Add Column, does not first require the user to select one of the rows, so that item is enabled without a selection. In this example, the user selects one of the columns.

Component: Investigator Contextual Menu

Investigating Alert: Remote SQL Statements over 1 second, DBP1. 10-19-09 3:12pm

Remote SQL Statements over 1 second [Create Path](#)

LP31 DG05 : PayGRD3 – Column Listing

Auth GRP12

Column					
ColumnName1					
ColumnName2					
ColumnName3					
ColumnName4					
ColumnName5					
ColumnName6					
ColumnName7					
ColumnName8					

Common Actions

- Add Column
- Delete Column
- Index Column

Maintenance Experts

- Mike Jones
- Jennifer Crittendon
- Alex Metcalf

The previously disabled items in the menu are now enabled. These are the items that are available/actionable for the selected row. The 'Add Column' item is disabled, as it is not an action that applies to any specific row.