Virtual Panels IIII

Administrator Manual

Written for Virtual Panels III – Initial Release

Overview

What is Virtual Panels IIII?

Virtual Panels IIII is an add-on software package for VersaCall's VT2000 Web Interface System. It allows for real-time visibility on the production floor by providing ways to display captured information as well as messages and images.

Panels vs. Displays

What is a Panel?

A *Panel* is an individual screen that can later be added to a display. You can create multiple panels and later add them to a single display. VersaCall limits the number of Panels you can create with the product key. To order more *Panels*, please contact your VersaCall Sales Representative.

What is a Display?

A display is where you add panels after creating them. You can add single or multiple panels to each display. A display rotates through all the panels you have added to that display. When creating a display, you can specify how long you want each panel to show before flipping to the next. You can have one display run on multiple monitors or you can have a different display run on each monitor. VersaCall does not limit the number of *Displays* you can create.

Types of Panels

What is a Messaging Panel?

Messaging is a term applied to panels that do not require displaying captured data. Messaging panels and displays are limited to displaying static images and messages.

What is Performance Panel?

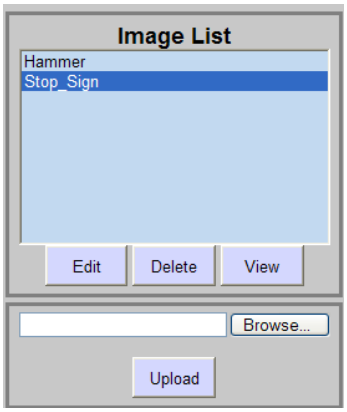
Performance is a term applied to panels that require displaying captured data. For example, you may want to display the duration of active supervisor calls or the day's total production counts. Performance panels provide a method to show information captured by your Call Stations, Data Input Modules, Reason Code Modules or any other module purchased from VersaCall.

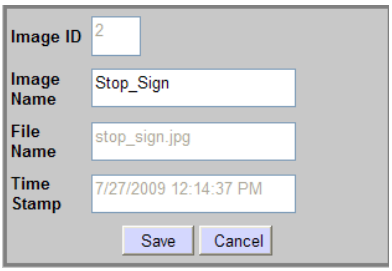
What is Communication Panel?

Communication panel is a specific type of Performance Panel. A communication panel is designed to easily display active alarm status and duration information in a tabular format. For example, you may want to show all active alarms in your facility on supervisor's terminal. Communication Panels provide a useful method of displaying Alarm information.

Adding Images

In order to include an image on a panel, you first have to upload and configure that image. Follow these steps to include an image in your panel:





1. From the Main Virtual Panels III page, click **Manage Images**.
2. From the **Manage Images** page, click **Browse** and locate your image.
3. Select your image and click **Open**.
4. Click **Upload**.
5. For **Image Name,** enter any meaningful name for your image.

> **NOTE**: A descriptive and easy to remember name makes it easier to select the appropriate image later when creating your panels.

6. Click **Save**.
7. Repeat these steps to add multiple images.
8. Click **Done** when complete.

Your images will now be available to include in your panels.

*See **Adding Information to Cells** for more information on adding an image to your panel.*

Configuring Shifts

NOTE: Shifts configured in Virtual Panels III are independent of shifts configured in the VT2000 system and other add-on packages. Shifts configured in the Virtual Panels III package are used for Virtual Panels III purposes only.

1. From the Main Virtual Panels III page, click **Shifts**.
2. From the **Edit Shifts** page, click **Add** to add a new shift or **Edit** to modify an existing one.
3. Enter a **Shift Name**. For example, 1st Shift, 2nd Shift, 3rd Shift, Day Shift, Night Shift, etc.
4. Choose a shift **Start Time** and **End Time**.

TIP: Check your "AM/PM" selections.

5. If your shift starts and ends on the same day, select **None**. If your shift crosses midnight select either **Previous Day** or **Following Day**.

Option	Function	Example
None	Your shift starts and ends on the same day.	Your shift starts at 9:00 am and ends at 5:00 pm.
Previous Day	Your shift starts on Day 1 and ends on the Day 2. Day 1 is considered the Previous Day. Day 2 is considered the Current Day. Events on report are attributed to the Current Day (Day 2).	Your shift starts at 5:00 pm and ends at 1:30 am. When you run a report, events appear on Day 2 of the shift.
Following Day	Your shift starts on Day 1 and ends on Day 2. Day 1 is considered the Current Day. Day 2 is considered the Following Day. Events on report appear on Current Day (Day 1).	Your shift starts at 5:00 pm and ends at 1:30 am. When you run a report, events appear on Day 1 of the shift.

6. Click **Save**
7. Repeat these steps to add more shifts.

NOTE: Configuring shifts allows you to later display information that pertains to the current shift.

Configuring Groups

NOTE: Groups configured in Virtual Panels III are independent of groups configured in the VT2000 system and other add-on packages. Groups configured in the Virtual Panels III package are used for Virtual Panels III purposes only.

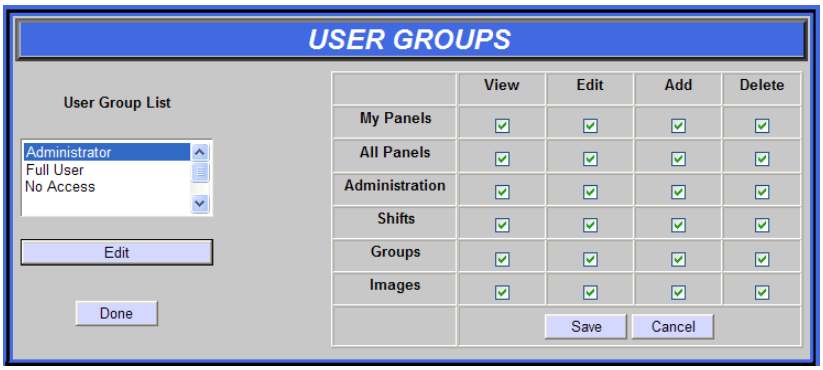
1. From the Main Virtual Panels III page, click **Groups**.
2. From the **Edit Groups** page, click **Add**.
3. Enter a **Group Name**.
4. From the list to the right, check the information types you want to include in this group. You can choose one or more of the following:

Option	Description	Applies To
Alarms	Communication alarms such as Machine Down, Maintenance Call, Supervisor Call	All Modules
Information Fields	Fields that require user input such as Employee ID, Scrap Count, Order Number	Data Input Modules Only
Processes	Production processes such as Shifts, Set-Ups, Orders	Data Input Modules Only

5. From the drop down list on the right side of the screen, select the name of the module from which you would like to include information.
6. From the list to the right of the screen, select the alarm(s) you want to add to the group.
7. Click **Add.** Alarm(s) added to the group appear on left.
8. Repeat these steps until all desired alarms and/or information fields and/or process have been added to the group.
9. Click **Save**.
10. Click **Done** to return to the main Virtual Panels III page.

Setting User Group Permissions

User Groups created in the main VT2000 Web Interface are available for configuration within Virtual Panels III. User Group configuration within the Virtual Panels III add-on package determines user access levels *within* Virtual Panels III.



1. From the Main Virtual Panels III page, click **Administration.**
2. From the Panel Administration page, click **Edit User Groups**
3. From the **Edit User Groups** page, select the name of the user group to edit and click **Edit**.
4. You may give **View**, **Add**, **Edit**, and **Delete** privileges to the selected user by checking the corresponding box next the desired permission.

NOTE: My Panels refers to panels created by the logged in user.

5. Click **Save** when complete.
6. Repeat these steps to set access levels for other user groups
7. Click **Done** to return to main Virtual Panels III page.

Administration

On the Administration page, you can make administrative changes to the Virtual Panels III system.

NOTE: Once you have made all desired changes, click **Save** at the bottom of the page.

Starting and Stopping Service

Certain upgrades and changes to the system may require that you stop and re-start the Windows service that runs Virtual Panels III.

To start and stop the service, follow these steps:

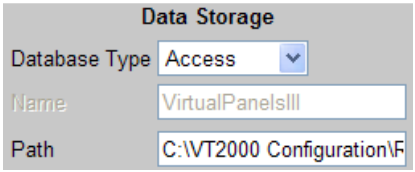
1. From the Main Virtual Panels III page, click **Administration**
2. Locate **Service Status**
3. To stop the service, click **Stop** then **Refresh**
4. To start the service, click **Start** then **Refresh**

NOTE: You can also start and stop the service through Windows XP by going to **Start → Control Panel →Administrative Tools**. The service is named **Panel Service.**

Configuring a Database

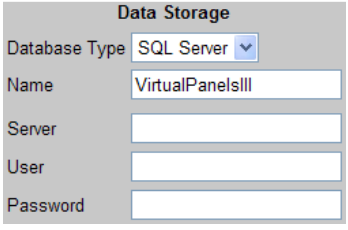
Virtual Panels III supports Microsoft Access and SQL Server databases. To configure a database for Virtual Panels III follow these steps:

Microsoft Access Database



1. Locate **Database Type** and select Access from the list
2. For **Path**, enter the path to the Virtual Panels III database. In most cases it is, C:\VT2000 Configuration\ReportPackage\VirtualPanelsII.mdb

SQL Server Database



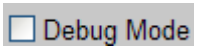
1. Locate **Database Type** and select **SQL Server** from the list.
2. Fill in the fields as follows:

Name	Enter the name of the database
Server	Name of server that hosts the named database
User	Name of user with read and write permissions to the named database
Password	Type in a password

Things to Check for when Configuring SQL Server Database for Virtual Panels III

- ✔ Set-up a Virtual Panels III database in SQL Server before beginning configuration
- ✔ Use SQL Server Authentication
- ✔ Allow remote logins to the Server
- ✔ Make sure the database size is large enough

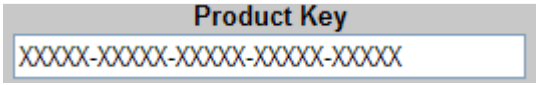
Setting Debug Mode



In certain cases, a VersaCall technical staff member may ask you to put your Virtual Panels III system in debug mode. To do this, check **Debug Mode**. This will generate log files that may help in determining the cause of certain issues.

NOTE: Check **Debug Mode** only when necessary. While in **Debug Mode** the system generates log files that may slow down your system if the files become too large.

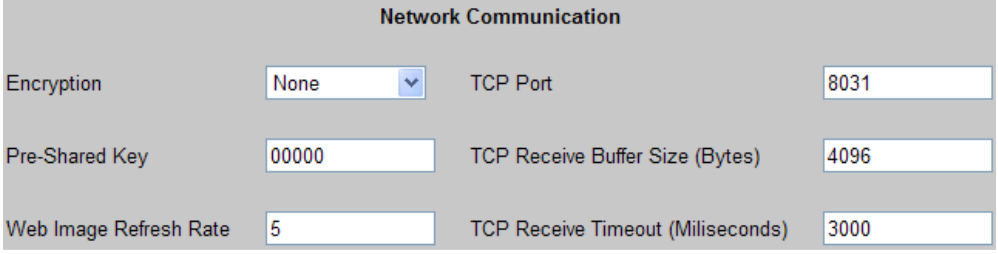
Product Key



A VersaCall technical staff member will assign you a product key that corresponds to your purchase. Upgrades to your Virtual Panels III software may require a new product key.

Network Communication

The following settings may require adjustments to function properly within your company's network. You may need to consult with your IT Department.



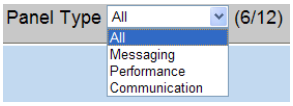
Encryption	This setting specifies the data encryption setting of the network communication. This is useful if Windows Clients are outside of a local network. Encryption options are 128bit or 256bit.
Pre-Shared Key	This value must be the same as entered into the VPIII Windows Clients in order for proper authentication / encryption operation. The default value is "00000" (five zeros).
Web Image Refresh Rate	This is the rate in minutes at which Images on Web Displays are reloaded. **NOTE**: The default Image Refresh Rate is 5 minutes. Speeding up the refresh rate could slow down performance of your system depending on how much data you are pulling. If your image does not change frequently, we recommend keep the Image Refresh Rate at five minutes or even slowing down the rate for the best possible performance.
TCP Port	This is the TCP port used to communicate with VPIII Web and Windows Clients. This Port defaults to 8031. **NOTE**: If there is Firewall on the VPIII Server the TCP Port must have an exemption for proper operation.
TCP Receive Buffer Size (Bytes)	This is the memory buffer size used for receiving network data. 4096 Bytes (4KB) is normally sufficient.
TCP Receive Timeout (Milliseconds)	This is the period of time that the server will wait for data from a client after an initial connection. The default value, 3000 milliseconds (3 seconds), is normally sufficient.

Creating a Panel

The heart of Virtual Panels III lies in the composition of panels. A user can create multiple panels that can display various types of data captured by the VT2000 System.

Getting Started

1. From the main Virtual Panels III page, click **Panels**.
2. On the Edit Panels page, select a **Panel Type.** *See **Types of Panels** for more information.*



3. Click **Add** to create a new panel or **Edit** to modify an existing one. To copy a panel, select the panel to copy and click **Copy**.

   The **Edit Panel** page opens.

4. Next to **Panel Name**, enter any meaningful name for your panel.

Saving Your Work

Creating a panel requires repeated saving in multiple locations. Please guard the time invested in your panels by remembering to save **each** the following:

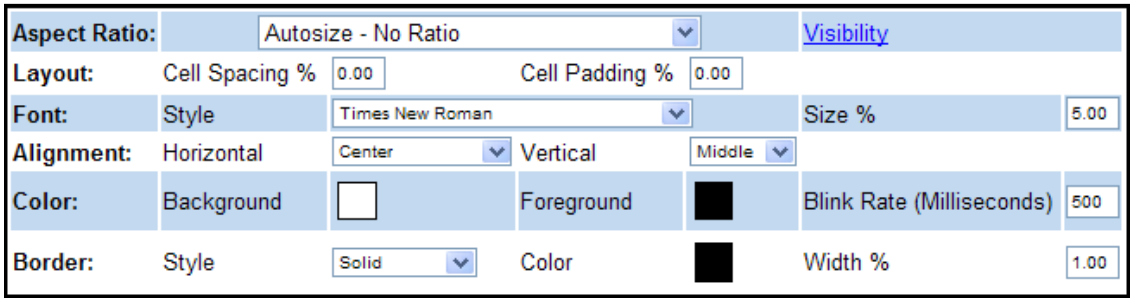
- Tag
- Condition within a Tag
- Condition within the layout configuration of a cell
- Entire panel – Use the **Save** button located at the top of page

Remember to save early and save often!

NOTE: VPII users may remember having to click **Save** each time a change was made to a cell in the Layout. VPIII has implemented auto-saving in this area. When a change is made in the cell layout, it is automatically saved when you click away from the cell. The save is temporary until save the entire panel by clicking Save at the top of the page.

Performance and Messaging Panels

Panel Options



The **Panel Options** section allows you to configure the overall layout of the panel. You can later configure the layout for individual cells. *See **Layout** for more information.*

NOTE: Configurations made in the **Layout** section for an individual cell override the layout options set in **Panel Options**. Configurations made in the **Panel Options** section are considered default settings.

To configure **Panel Options**, click next to **Panel Options** to expand the menu.

See **Panel Options** under the **Common Options** section for further instructions.

Tags [Performance Panels Only]

Tags provide the power and flexibility behind each dynamic web display. They make it possible to pull and display real-time information that comes from the VT2000 System and displays onto the panels.

IMPORTANT: **Messaging** panels do not have the tag functionality. If you require use of tags, please inquire about **Performance** panels and displays.

Creating a Tag

To configure **Tags**, click next to **Tags** to expand the menu and follow these steps:

1. Under the Tags list box, click **Add** to add a new tag or **Edit** to modify an existing one. To copy a tag, select the tag to duplicate and click **Copy**.

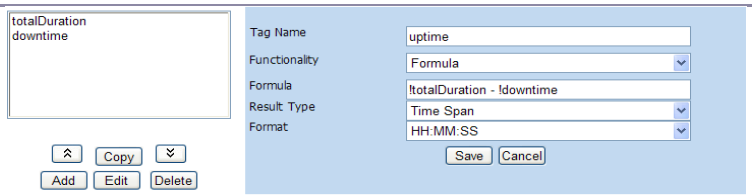
   When a tag is in edit mode, the right side of the tag menu becomes enabled.
2. Next to **Tag Name**, enter a meaningful name for your tag.

   NOTE: Tag names **CANNOT** have spaces. They are limited to letters, numbers and underscores.

3. From the **Functionality** list, choose one of these:

Functionality	Description
Preset Value	Constant value that for the most part never changes. It is a good idea to use a Preset Value when you are using a constant value in several places. If the value ever changes, you only have to change it once.

	Example *You have a goal of 100 that is used for several calculations*
Duration*	Pulls the duration of a specified alarm, process or group. *See below for more information on grabbing data from groups.*
Quantity*	Captures the *number of incidents* (not to be confused with counts) associated with a specified alarm, process, information field or group. *See below for more information on grabbing data from groups.*
State*	Returns one of the following: 0 Non-active state *Alarms and Processes* 1 Active state *Alarms and Processes* 2 T2 active state (i.e., acknowledged state) *Alarms Only* *3* T3 active state (i.e., second acknowledged state) *Alarms Only* *Most commonly used with an Active Time Period*
Count* **(RCMs and DIs Only)**	Grabs an actual count, Target Cycle Time, Average Cycle Time, or Goal (as specified) from a specified data source.
Data* **(DIs Only)**	Grabs specified input data from a specified Information Field. Handles text, integers, decimals and time spans.
Properties*	Gets the specified property information from the specified data source *Example* *Alarm Name, Module Name, Alarm Start Time, Alarm End Time, etc.* **NOTE:** If more than one property exists for a given tag, the display lists each property separated by a comma.
Formula	Create your own formula using values and tags. Precede all tag names with an exclamation point (!). *Example* *[uptime] !totalDuration – !downtime*



Condition	Create a conditional statement using values and tags. Precede all tag names with an exclamation point (!). *Example:* *if !stateTag = 0 then value = 100* *if !stateTag = 1 then value = 200* *See **Creating a Condition** for more information on creating conditions*
Lookup	Uses **Data Lookup Manager** to get specified information from a look up table. **NOTE: Data Lookup Manager** is a separately sold add-on package. Please contact a VersaCall Representative for more information.
System Properties	Gets the specified property from the Virtual Panels III System.

***You can later specify whether you want the tag to include the active information or total/all information for the current shift, day or week. *See below for more information*

NOTE: Many of the following fields depend on the tag you have selected. Not all of the following steps will apply to the tag you are editing.

4. Fill in any fields that apply specifically to the tag functionality. For example, if you chose Preset Value functionality, fill in the Preset Value field.
5. For **Data Filter**, select which data to add.

All Data	Grabs both active and non-active data
Active Data Only	Grabs active data only

6. For **Time Range**, select a time period from which to grab information.

None	Does not filter data based on any time range
Full Day	Grabs information for the 24-Hour time period specified in your Full Day Shift *See **Configuring Shifts** for more information*
Current Shift	Grabs information from the specified data source for the current shift

7. For **Date Range**, select a date range from which to grab data

None	Does not filter data based on any time period
Current Day	Grabs information from the specified data source for the current day
Current Week	Grabs information from the specified data source for the current week

8. For **Data Source**, select the data piece type you wish to grab

None	Default selection. You must choose one of the options below to save the tag.
Alarm	The term Alarm refers to any alarm or event configured for your input modules, such as Machine Down, Supervisor, Maintenance, etc.
Process (DIs Only)	The term Process refers to any process configured for the DI, such as a Job, an Order, Setup, a Shift, etc.
Information Field (DIs Only)	The term Information Field describes any data put into a DI, such as an Employee Number, a Part Number, a Sales Order Number, Scrap, etc.
Group	A group of alarms, processes or groups configured within Virtual Panels III. *See **Configuring Groups** for more information*

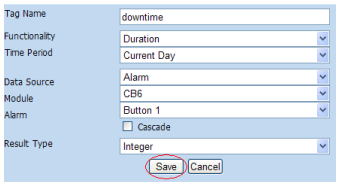
9. For **Module**, select a module from which to grab data
10. Select the **Alarm**, **Process**, **Info. Field**, or **Group** from which to grab data

NOTE: For the **Group** option, Virtual Panels III will only read either alarms or processes for each tag. In other words, you need separate groups for alarms and processes. For groups consisting of alarms, if you include alarms that belong to a process you must still include that process in the group.

11. Check **Cascade** if you selected a level 1 alarm from which to grab data and you want to include all level 2 and 3 alarms belonging to that alarm in the result.
12. For **Result Type**, choose the data type result you want to use or display.

NOTE: You may be particularly concerned with a result type if you are constructing a formula with the result of the tag.

13. For **Format**, choose the format in which to display your result.
14. To save the tag, click **Save** located beneath the tag's configuration.



The tag name then appears on the left side of the screen.

IMPORTANT: Configured tags become available for layout purposes in the **Layout** section below. After creating a tag, you can then add the tag to the display. See **Adding Information to Cells** below for more information.

Important Notes on Tags

Other things to note about tags:

- **Tag names cannot have spaces.** They are limited to letters, numbers and underscores.
- An **exclamation point (!) precedes a tag** when creating a formula or including a tag in text

  Example *[Tag]* *!totalDuration - !downtime*
  [Text] *Today's downtime is !downtime.*

- **Tags execute from top to bottom.** Keep this in mind when creating formulas that use the result of another tag.
- If you change the name of a tag and you've used it in the **Layout** section, make sure to adjust the tag in the **Layout** section as well. The name will not always update automatically and may cause errors if not adjusted.

Layout

The **Layout** section of the **Edit Panels** page is where you can add columns, rows and content to your panel. You can configure the layout of each individual cell and change the font, color and border styles based on certain conditions. All layout configurations made here override the layout options configured in the **Panel Options** section.

Adding and Deleting Rows and Columns

To add a row, click  next to **Row**. To add a column, click  next to **Column.**

To delete a row, click  next to **Row**. To delete a column, click  next to **Column**.

IMPORTANT: Rows and columns are always added and deleted at the end of the table *regardless* of the row or cell that is currently selected.

If you are adding rows and columns you can move the column or row to the desired location after it has been added.

If you are deleting a row or column, move the row or column you want to delete to the end of the table before clicking  . If you accidently delete a row or column, simply re-add the row or column by clicking  next to either row or column and it reappears.

See **Moving Cells, Rows and Columns** for more information

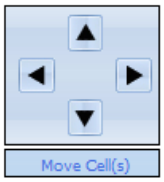
Moving Cells, Rows and Columns

Cells

1. To move a single cell, click on the cell you would like to move.

	1	2	3
1	Test	1	5
2	!uptime	2	6
3	!systemP	3	7
4	!downtim	4	8

2. Click the arrow for the direction in which you would like to move the cell.



3. Cell moves to the desired location

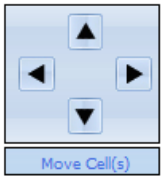
	1	2	3
1	Test	5	1
2	!uptime	2	6
3	!systemP	3	7
4	!downtim	4	8

Rows and Columns

1. To move an entire row or column, highlight the row or column you want to move by clicking the row or column header (cell with turquoise border).

	1	2	3
1	Test	5	1
2	!uptime	6	2
3	!systemP	7	3
4	!downtim	8	4

2. Select the arrow for the direction in which you would like to move the row or column.



3. Column moves to the desired location

	1	2	3
1	Test	1	5
2	!uptime	2	6
3	!systemP	3	7
4	!downtim	4	8

Merging Cells, Rows and Columns

Merging Cells

You can merge a cell with one or more cells located to the right or below the selected cell.

1. To merge a cell, select a cell.

	1	2	3
1	Test	1	5
2	!uptime	2	6
3	!systemP	3	7
4	!downtim	4	8

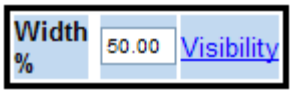
2. Click M→ to merge the cell with a cell to the right or M↓ to merge the cell with a cell below.
3. To merge multiple cells, repeat step 2.
4. Cells merge

	1	2	3
1	Test	1	5
2	!uptime	2	6
3	!systemP	3	7
4	!downtim	4	

Un-Merging Cells

1. To un-merge a cell, click on the merged cell and click U← to un-merge horizontally aligned cells or U↑ to un-merge vertically aligned cells.
2. To un-merge multiple cells, repeat step 1.

Setting Column Width & Visibility



To set column width:

1. Click the column header (cell with turquoise border). A tool box appears below.
2. Enter a width as a percentage (relative to the size of the entire panel)

You may create a Visibility Condition to show or not show a column when certain conditions are met or not met.

To create a Visibility Condition on a column

1. Click the column header (cell with turquoise border)
2. Click Visibility
3. *See **Creating a Condition** for further instructions*

Setting Row Height & Visiblity

To set row height column:

1. Click the row header (cell with turquoise border). A tool box appears below.
2. Enter a width as a percentage (relative to the size of the entire panel)

You may create a Visibility Condition to show or not show a row when certain conditions are met or not met.

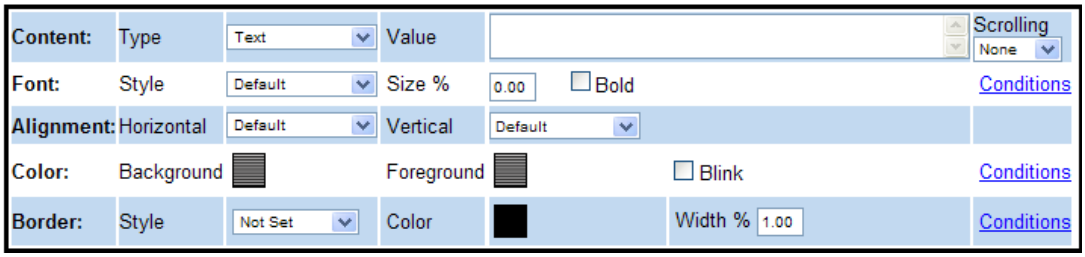
To create a Visibility Condition on a row:

4. Click the column header (cell with turquoise border)
5. Click Visibility
6. *See **Creating a Condition** for further instructions*

Adding Information to Cells

Getting Started

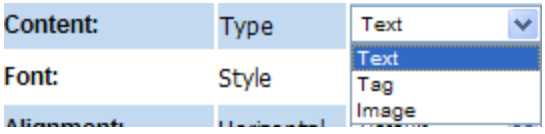
1. Click on the cell to edit. When a cell is in edit mode, it is grayed out and the layout configuration box appears below the table.



Content

You can add an image, tag, text or a combination of tags and text to any single cell. To add content to a cell, follow these steps:

1. Select the type of content to add from the **Type** list.



Text Add text to your panel

Tag Add the result of a configured tag to your message
*See **Tags** for more information*

Image Add a previously uploaded and configured image to your message
*See **Adding Images** for more information*

Text & Tag Combo Select **Text** as the content **Type**

2. For **Value**, follow one of these steps

Text If **Text** is the content **Type**, type in any text

Tag If **Tag** is the content **Type**, **Value** populates with list of saved tags. Select a tag from the list.

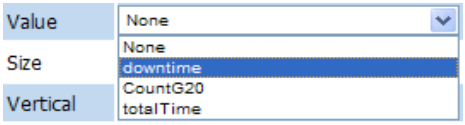
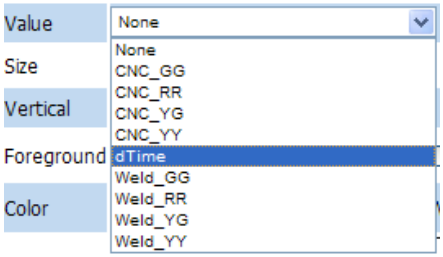


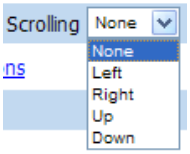
Image If **Image** is the content **Type**, **Value** populates with saved images. Select an image from the list.



NOTE: You must first add an image for it to appear in this list. See **Adding Images** for more information.

Text & Tag Combo Type in text and tag name directly. Precede any tag names with an exclamation point (!)

3. If you want the content in the cell to scroll, select an option from the **Scrolling** list.



Font

NOTE: The **Default** option for any of the properties below refers to the settings made for that property in the **Panel Options** section above.

1. From the **Style** list, select **Default**, **Times New Roman** (serif) or **Arial** (sans-serif)
2. For **Size %**, enter a percentage (relative to the size of the panel) for your font size
3. Check **Bold** if you want bold font in the selected cell
4. If you want the font in the selected cell to change based on some condition, click **Condition**. *See **Creating a Condition** for more information.*

Alignment

NOTE: The **Default** option for any of the properties below refers to the settings made for that property in the **Panel Options** section above.

1. From the **Horizontal** list, select the desired horizontal alignment for the content in the cell.
2. From the **Vertical** list, select the desired vertical alignment for the content in the cell.

Color

1. Click next to **Background** and select a color. *See **Selecting a Color** for more information*.
2. Click next to **Foreground** and select a color. *See **Selecting a Color** for more information.*

NOTE: indicates the default background color chosen in **Panel Options**.

3. Check **Blink** if you want the content in the cell to blink.
4. If you want the color of the cell or cell content to change based on some condition, click **Condition** to create a Color Condition. *See **Creating a Condition** for more information.*

Border

1. For **Style**, choose a style for the cell's border
2. To change default border color from Black, click and choose a color. *See **Selecting a Color** for more information*.
3. For **Width**, enter the desired width as a percentage (relative to the size of the entire panel)

Saving Cell Content and Layout

Cell content is temporarily saved when you click away from the cell you are currently editing. The final and permanent save occurs when you click **Save** at the top of the **Edit Panel** page.

NOTE: This automatic save feature is new to Virtual Panels III. Users who have upgraded from Virtual Panels II may remember having to click save after editing each cell.

Communication Panels

VPIII Communication displays show active event issues and their durations as they occur. This panel format provides accessible real-time information that can be instantly processed to enhance situational awareness. The panel displays the name of the event and the text as given in the main configuration of the module.

Panel Options

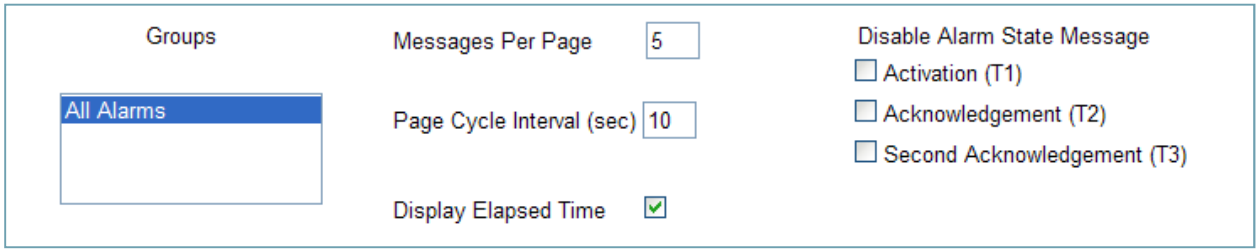
The **Panel Options** section allows you to configure the overall layout of the panel. See **Panel Options** under the **Common Options** section for further instructions.

Communication Options

The Communication Options section allows you to make configuration settings specific to how events are displayed on the screen.

Configuring Screen Behavior

The first sub-section allows you to configure screen behavior settings.



Below is a description for configuring these settings:

Option	Description
Groups	Select "All Alarms" (default) or select an existing Group to specify which Alarms / Information Fields / Processes are eligible for display on the Communication Panel See ***Configuring Groups*** for further instructions
Messages Per Page	Sets how many messages are displayed per page at any one time. ***NOTE:*** This setting does not check against the font size set in Panel Options. If the font size % is greater than the allocated space for a given page, the page may not display correctly.
Page Cycle Interval	If there are more active events than Messages Per Page, the Panel will add a page and switch between pages at this value in seconds. Enter the amount of time (in seconds) to show each page before flipping to the next.
Display Elapsed Time	If checked, the display shows the total elapsed time the event has been active.
Disable Alarm State Message	Disables the display of a message at a particular event state

Activation(T1)	This state is activated when an event is first triggered. (initial button press)
Acknowledgement (T2)	This optional state is reached when a triggered event is acknowledged. (second button press)
Second Acknowledgement(T3)	This optional state is reached when an acknowledged event is acknowledged for the second time. (third button press) ***NOTE***: This setting is infrequently used for alarm events.

Configuring Colors

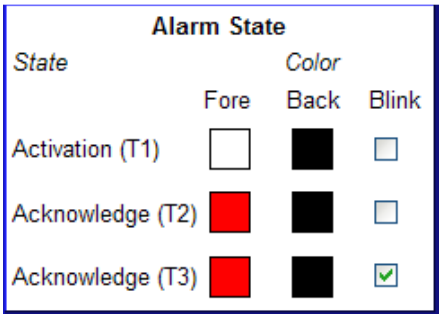
This sub-section allows you to set colors for the Event Names and Messages on your screen. Colors can change based on the elapsed time of the event or the state of the event. If you want colors to change based on the *elapsed time of the event*, select **Time Threshold** to enable these options. If you want colors to change based on the *state of an event*, choose the **Alarm State** button to enable these options. See below for more information on Time Threshold and Alarm State.

Time Threshold

If you choose Time Threshold, fill in the options as follows:

Time Threshold The time threshold creates three separate zones of conditions based on time thresholds	
Lower Threshold (min)	The lower threshold in minutes for acceptable response times
Upper Threshold (min)	The upper threshold in minutes for acceptable response times
Above Threshold	The display message will be in this selected color if the duration time is greater than the Upper Threshold
Within Threshold	The display message will be in this selected color if the duration time is greater than the Lower Threshold but also less than the Upper Threshold
Below Threshold	The display message will be in this selected color if the duration time is less than the Lower Threshold
*See **Selecting a Color** in the **Common Options** section for more information on Colors*	

Alarm State

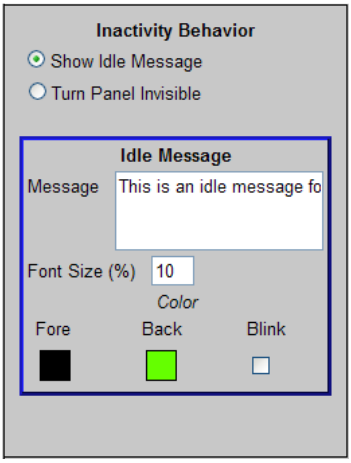


If you choose Alarm State, fill in the options as follows:

Alarm State This setting changes the color for the Event Name / Messages based on the current state of the event.	
Activation (T1)	This state is activated when an event is first triggered. (initial button press)
Acknowledgement (T2)	This optional state is reached when a triggered event is acknowledged. (second button press)
Second Acknowledgement (T3)	This optional state is reached when an acknowledged event is acknowledged for the second time. (third button press) ***NOTE***: This setting is infrequently used for alarm events.
*See **Selecting a Color** in the **Common Options** section for more information on Colors*	

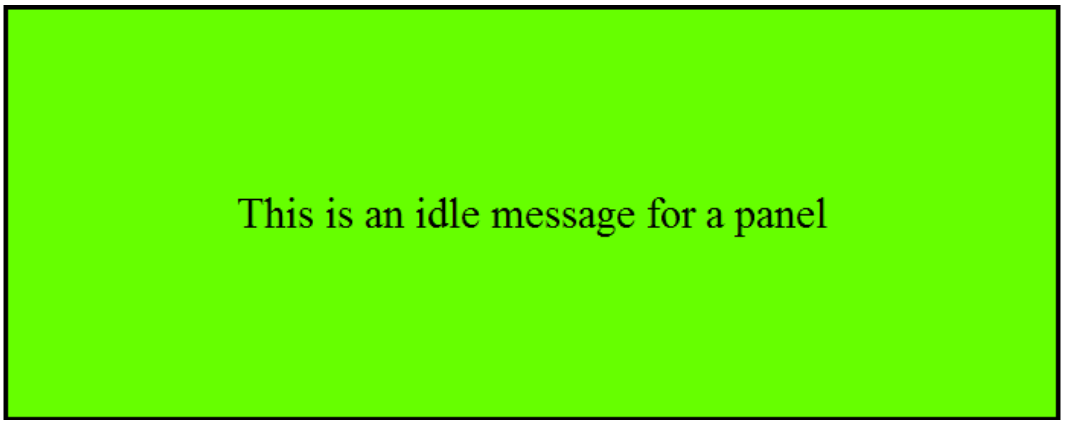
Inactivity Behavior

This sub-section allows you to configure the behavior of your screen when there are no active events to display in the panel. You can choose to either show an idle message or make the panel invisible. If you want to configure a message for inactivity, select **Show Idle Message** to enable the Idle Message to enable these options. If you want to hide the panel during inactivity, select **Turn Panel Invisible**.



If you have chosen to Show Idle Message, fill in these options:

Show Idle Message When no event is active in the selected group, the panel will display a configurable idle message.	
Message	This is the text that displays when there is inactivity
Font Size	The font size as a percentage (relative to the size of the panel) for the Idle Message
Color	Choose colors for idle messages *See **Selecting a Color** in the **Common Options** section for more information on Colors*
Blink	Check if you want idle messages to blink



Where Do I Set Text for My Communication Panels?

Messages and Event Names for Communication Panels are set in the main VT2000 Web Interface in the Alarm Configuration section of each individual input.

Getting to the Alarm Configuration Page

To get to the Alarm Configuration page, follow the steps below based on the type of module you are working with:

Call Stations

From the main VT2000 Web Interface, GOTO: Configuration → Inputs → Select a Callbox, Click Edit → Select an Alarm Name, Click Edit

Reason Code Modules (RCM) & Data Input (DI) Modules

From the main VT2000 Web Interface, GOTO: Configuration → Inputs → Select an RCM , Click Edit → Click Edit Alarms → Select an Alarm Name, Click Edit

NOTE: Communication Panels are primarily designed for Call Stations. They will still function for RCM and DI Modules, but each level of multi-level alarm appears as an individual alarm.

Setting Event Names and Messages

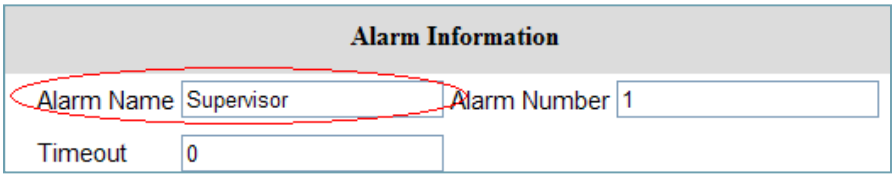
Once you arrive at the Alarm Configuration page you can view and/or modify alarm names and messages. *See below for more information.*

Names

NOTE: The Alarm Name is used in several ways throughout the VT2000 System, changing the name not only affects the name of the event on your panel, but also reports, the input module interface, etc.

To view or modify an Alarm Name, note the text in the Alarm Name field and/or enter a new name

Proceed to the Messages section below.



Messages

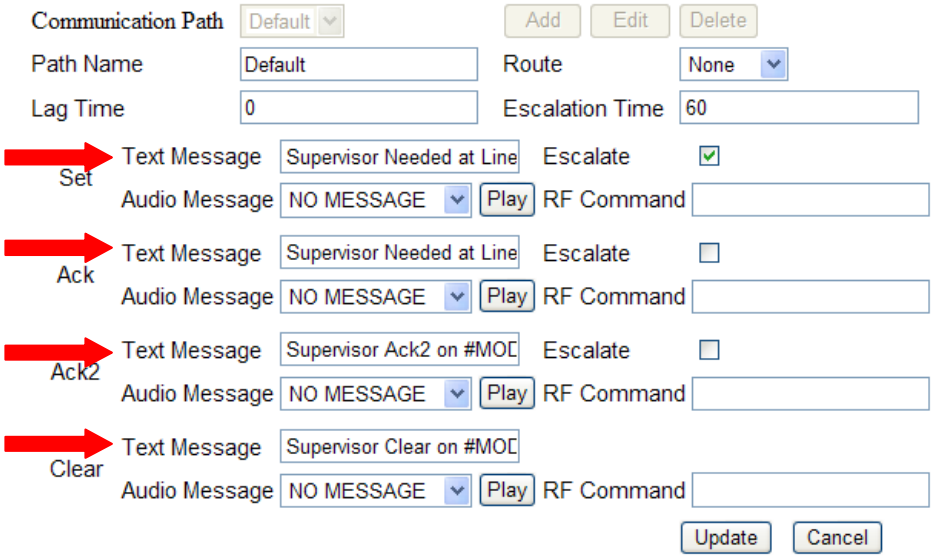
To set the messages for this event:

1. Expand the Communications section

2. The Communication Panel works off the Default communication path, so make sure this is selected in the **Communication Path** field
3. Click **Edit**, to the right of the Communication Path Field

This enables the menu below

4. Type in the messages you want to see next to the corresponding alarm state. These are the messages that will appear on your panel when the corresponding alarm is active.



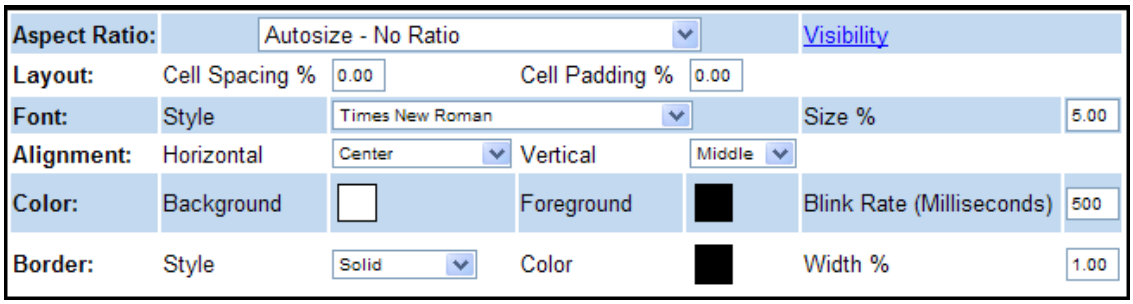
5. Click **Update** near the bottom of the Communication Path section when complete to save the Communication settings for this alarm.
6. Click **Save** at the bottom of the page.
7. Click Commit at the top of the page to save to database.

Repeat these steps to configure multiple alarms.

Common Options

This section refers to configuration options common to all panels.

Panel Options



The **Panel Options** section allows you to configure the overall layout of the panel.

You may configure these **Panel Options:**

Aspect Ratio	*Screen Size*	Select the size of the display on which you are viewing web-based panels for the best panel size formatting.
	Visibility	Create a Visibility Condition to show or not show a panel when certain conditions are met or not met. *See **Creating a Condition** for further instructions*
Layout	*Cell Spacing*	Specifies the space (in pixels) between cells in pixels
	Cell Padding	Specifies the space (in pixels) between the cell wall and its contents
Font	*Style*	Times New Roman (serif) or Arial (sans-serif)
	Size	Font size
Alignment	*Horizontal*	Sets the default Horizontal alignment for content within an individual cell
	Vertical	Sets the default Vertical alignment for content within an individual cell
Color	*Background*	Click the box to select a Background color for the panel *See **Selecting a Color** for more information*

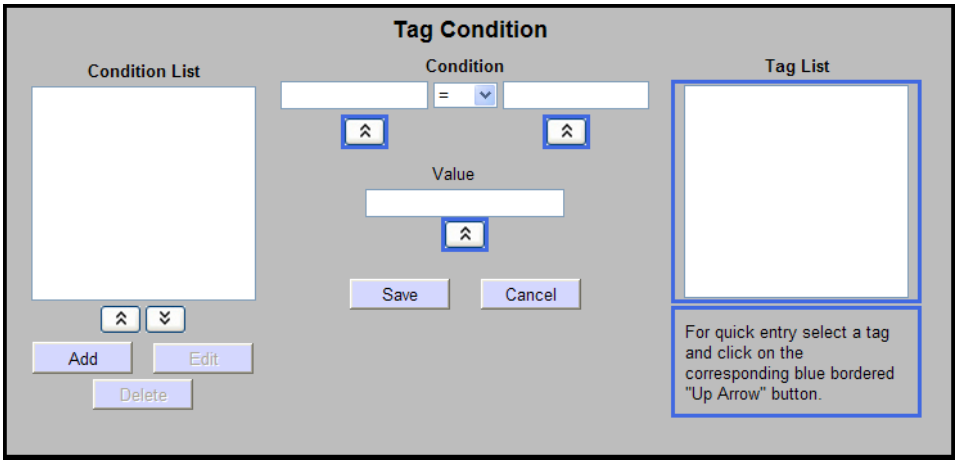
	Foreground	Click the box to select a color for text in the panel *See **Selecting a Color** for more information*
	Blink Rate	The rate at which a cell blinks (in milliseconds) if the Blink option is selected in the Layout for that cell. ***Example*** 1 second = 1000 milliseconds 0.5 seconds = 500 milliseconds
Border	*Style*	Panel border style
	Color	Panel border color
	Width	Panel border width

Creating a Condition

A condition allows for flexibility in the result of a tag or layout option. You can base the result of a tag or layout option based on another result.

For example, if a downtime alarm has been active for less than five minutes, you may want the cell background to be green, but if the alarm is over five minutes you may want the background to turn red and the text to blink.

To create a condition tag, you will need to arrive at a screen similar to this one:



1. You can arrive at this screen from one of the following ways:

   Panel Options If you want to set a panel to be visible or invisible based on some condition, you can arrive at this page by clicking Visibility in **Panel Options**

   Condition Tag If you are creating a condition tag, this screen appears once you select **Condition** from the **Functionality** list.
   *See **Creating a Tag** for more information*

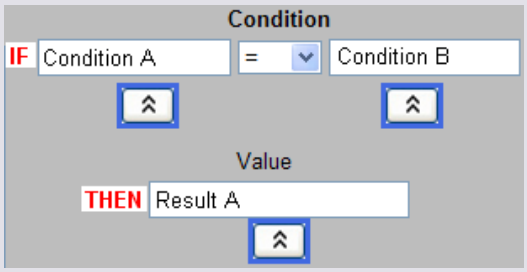
Layout Condition	If you are creating a layout condition, arrive at this screen by clicking next to the variable layout option (Font, Color or Border) *See **Layout** for more information*	Conditions

2. Click **Add** to add a condition or **Edit** to modify an existing one

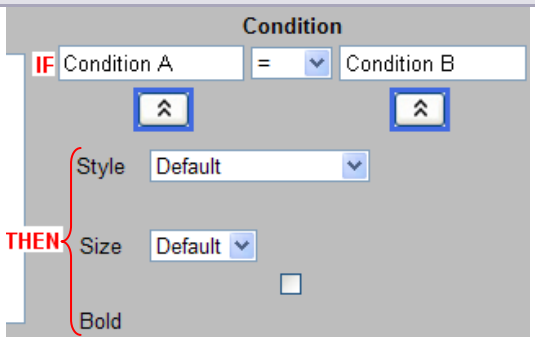
The **Condition** menu to the right becomes enabled. You can then create a condition.

Condition Format

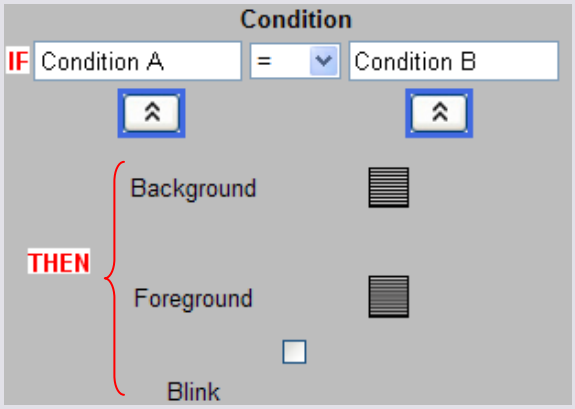
Condition Tag

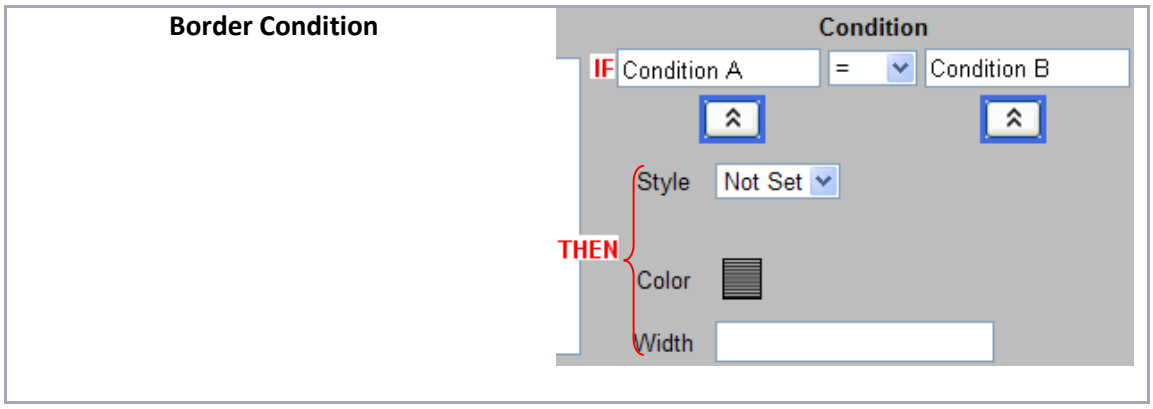


Font Condition



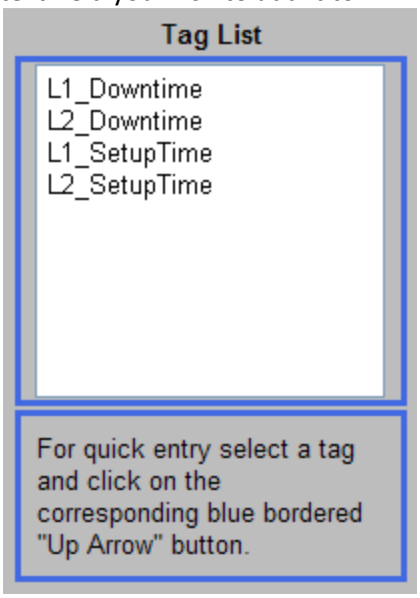
Color Condition





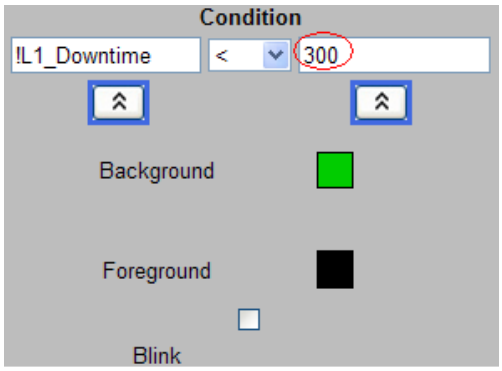
3. In any of the text fields you can add either a tag value or a value that you type in.

Tag Value All your tags are available in the tag list to the right. You can click on a tag from the list and add it to any of text fields in your condition by clicking on the arrows below the text field you wish to add it to.



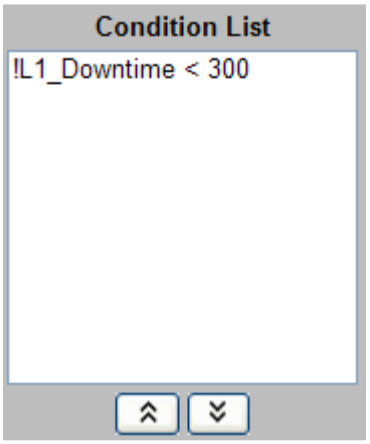
Hard Value You can also add a value that you type in.

NOTE: When you use a time value, use the time in seconds.



4. When you complete the condition, click **Save.**

   The tag name then appears on the list to the left.



5. Repeat these steps to add multiple conditions.

IMPORTANT: Conditions execute from top to bottom. The first true condition is the one that executes. Please keep the order in mind when creating your conditions. To change the order of the condition, select the condition you want to move from the **Conditions** list and click either ⌃ or ⌄ to move the condition

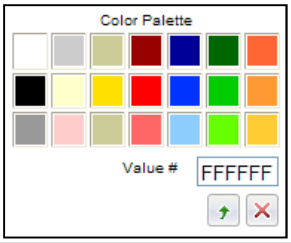
6. When complete with conditions,

Condition Tag	If you are creating a condition tag, click continue with tag configuration
Layout Condition	If you are in the **Layout** section, click **Done** to return to **Layout** editing.

Selecting a Color

There are many places throughout the **Edit Panel** page where you may set a color. Once you arrive at the Color Palette screen, you may:

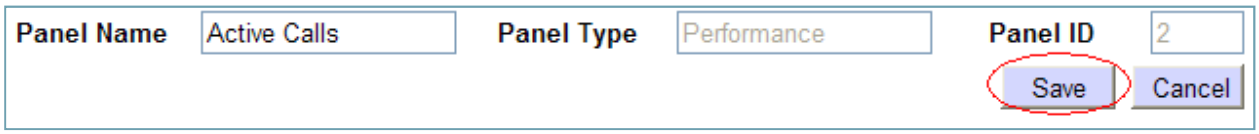
- Click on a color on the Color Palette, *OR*
- Enter an RGB value for an html color next to **Value #**, *THEN*
- Click  to accept the color, *OR*
- Click  to cancel out



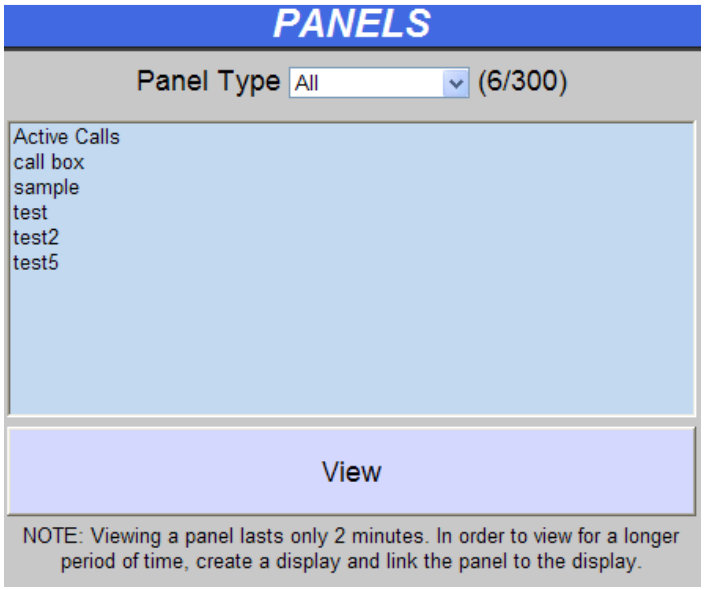
TIP: An internet search for "HTML Colors" produces multiple charts and lists of colors with corresponding values for you to choose from.

Saving Panel

To save a panel, click **Save** at the top of the page.



Viewing a Panel



During the panel editing process, you may want to see the results of your edits. You can pre-view the panel by following these steps:

1. From the main Virtual Panels III page, click **Panels**.
2. On the **Edit Panels** page, select the panel you wish to view from the list of panels
3. Click **View**

   A new window or tab appears with the contents of your panel. A few seconds may pass before your panel appears. If you make changes to a panel, it may take a few seconds for the changes to take effect. The panel times out after two minutes.

NOTE: Panels are limited to a display time of two minutes. If you want to view the panel for a longer period of time, you must first add the panel to a display and then view that display. See ***Creating a Display*** and ***Viewing a Display*** for more information.

Troubleshooting Panel Errors

Virtual Panels III has implemented a Panel Printout option that allows you to see your panel configuration in a table format. If you have a panel that is behaving irregularly, the Panel Printout option may provide you with some clues.

To view a panel in table format:

1. From the main Virtual Panels III page, click **Panels**.
2. Select a panel from the list
3. Click **Print**

Check for Warnings

Once in the Panel Printout page, your panel appears in table format. Scroll through the table and see if any portions of your panel are highlighted in yellow as this indicates a warning. If you see a warning, take note of the tag name. This tells us that something is wrong with this tag. Common mistakes include misspelled tag names due to deleted or re-named tags.

Send Panel Configuration to VersaCall Support

If the Panel Printout page does not provide you with any useful clues, you may send the configuration to VersaCall Support.

To send panel configuration to a VersaCall Support member:

1. From the Panel Printout page, scroll to the top
2. Click **Download XML**
3. Save the panel to your computer.
4. Email the panel to support@versacall.com and explain your issue.

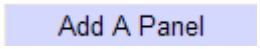
Creating a Display

Once you have created one or more panels, you can create a display. A display, once configured, is the finished product that can be launched onto monitors and desktops throughout the plant. To create a display, follow these steps:

1. On the main Virtual Panels III page, click **Displays**.
2. On the **Edit Displays** page, click **Add** to add a new display or select an existing display from the list and click **Edit** to modify
3. On the **Edit Display** page, configure the following:

Display Name	Enter any meaningful name for your display. *Example: Line 1 Display*
Display ID	Leave as is. Do not modify. This is for internal system usage.
Web Full Screen	If checked, the display opens in a full-screen browser window when launched. If not checked, the display opens a small browser window.

Next, you can add one or more panels to a single display. The panels added to the display rotate when the display is launched. Each panel displays for the desired duration before flipping to the next. To continue editing the display, follow these steps:

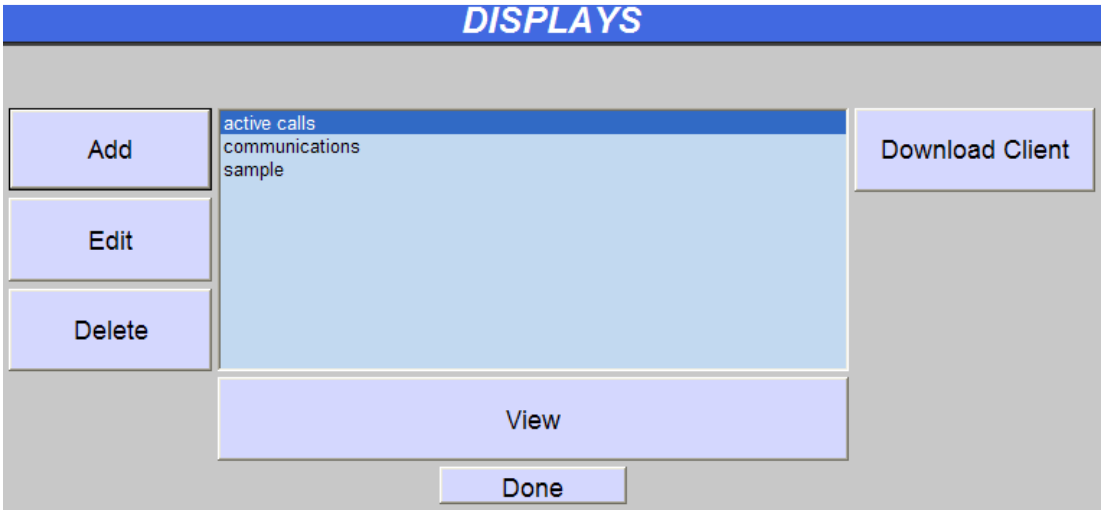
4. Click 

to add a panel to the display.
5. A grid appears with the following fields:

Index	Cannot be modified. This is for internal system usage
Key	Cannot be modified. This is for internal system usage.
Panel	Names of all previously configured panels appear in this list. Choose a panel to add to the display. You must add the panels in the order in which they are to display. **NOTE**: If you have not configured any panels, the list will be blank. *See **Creating a Panel** for more information.*
Duration	The length of time (in seconds) that the panel remains on the display before the next one appears. Enter a desired time (in seconds).
Refresh Rate	The amount of time (in seconds) before the screen refreshes with updated system information. Enter a desired time (in seconds) **IMPORTANT:** The refresh rate is the *desired* refresh rate. If you have an intense panel, it may take longer to gather, process and display all the data. In this case, your refresh rate may not occur as fast as desired.

6. Click Update to save the panel to the display.
7. Repeat these steps to add an additional panel to the display.
8. When you've completed adding all the desired panels, click **Save** located near the center of the page.

Viewing a Web Display



1. From the main Virtual Panels III page, click Displays
2. On the Edit Displays page, select the display you wish to view from the list
3. Click View

   A new window or tab appears with the contents of your display. A few seconds may pass before your display appears. If you've made changes to a panel in the display, it may take a few seconds for the changes to appear.

Launching a Web Display to Production Floor

To launch a display onto monitors on the production floor, follow these steps:

4. From your desktop, make note of the URL to the display which is as follows:
   http://*<IP Address>*/WebInterface/ReportPackages/VP3_WebInterface/viewDisplay.aspx?displayID=*<Display ID>*
   *IP Address and Display ID vary

5. Connect to the terminal for the monitor on the production floor.

   NOTE: Monitors on the production floor typically do not have a mouse and keyboard attached, so you will need to either attach a mouse and keyboard or log in remotely to each terminal.

6. Launch the browser (ideally, Internet Explorer) either
   a. Type in the URL noted above, or,
   b. Follow the instructions for **Viewing a Display**
7. To hide browser borders, press F11. To unhide browser borders, press F11 again.
8. To launch displays on multiple browsers, repeat these steps

Viewing a Windows Client Display

The VPIII Windows Client option allows you to run displays on your computer as a Windows application.

The Windows Client option has the following advantages:

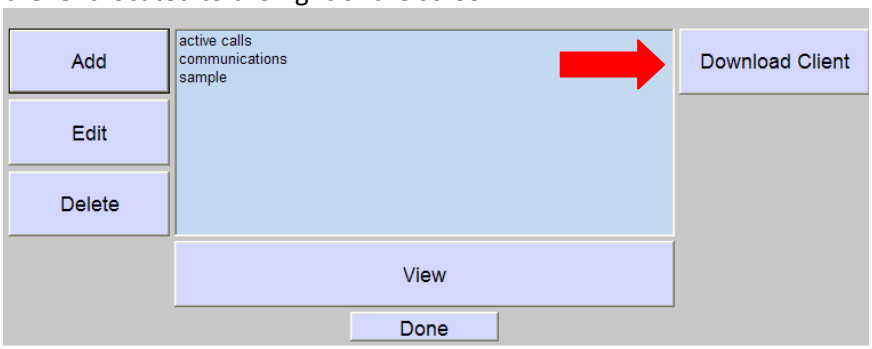
- Independent of any browser and are therefore not subject to unexpected or erratic behavior
- More memory efficient. Browsers tend to hog memory over time, consuming all available memory. The Windows Client application is memory conscious.
- Windows Client displays have an "Always on Top" property that allows you to always have your display in view on your desktop
- Smoother graphics
- More customizable options
- Viewable on any WIN XP / Vista machine. Vista versions need to be run in administrator mode.

In order to view a display on any computer as a Windows application, you'll need to download and run the VP3_Client_Installer to install the Virtual Panels III Windows Client software.

NOTE: If you are launching Windows Client displays on multiple monitors and/or desktops, you will need to repeat the following steps on each machine.

To download the VPIII Windows Client Software:

1. From the VPIII Main Page, click **Displays**
2. Click **Download Client** located to the right of the screen.

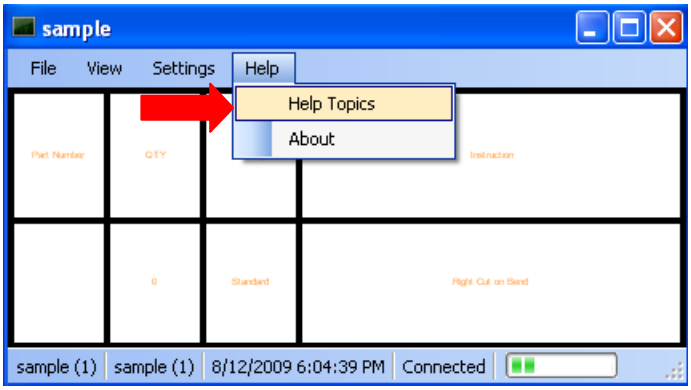


3. Either Save the installer or Run immediately
4. Follow the VPIII WinClient Wizard prompts
5. When the installation completes, a Virtual Panels III shortcut icon appears on your desktop

6. Double-click on the icon to launch the Virtual Panels III Windows Client software

For further instructions on running a display in the Windows Client, see the VP3 Windows Client documentation. You can access this document by going to Help → Help Topics in the Windows Client application.

NOTE: You will need Adobe Acrobat Reader to view Virtual Panels III Windows Client documentation.



Hardware and LCD Monitor Requirements

Overview

The display of information on a Plasma or LCD screen must be driven from a P/C that is LAN connected. The minimal P/C requirements are defined below. For multiple screens in a facility, depending upon the information that is displayed on the screens will determine the number of P/Cs required. There are some options when all of the screens are displaying the exact information that you can drive as many four (4) screens from one P/C. With current technology, the multiple screens are driven from a splitter box and depending upon the splitter technology selected there is distance limitation from the splitter box to the screen – either 75' or 320'. If there are multiple screens in a facility and each of the screens will be displaying different information, each screen will require a LAN connected P/C.

The selection of the size and the type of the display is the responsibility of the customer. It should be noted that Plasma Screens will ghost images- if the same information (image) is displayed on a constant basis. If it is planned that the image displayed on the screen will change continually, then a plasma screen may be a consideration. The LCD screens do not have this ghosting characteristic.

The selection of the screen, installation and cabling is the responsibility of the customer unless contracted otherwise.

NOTE: This is a not a wireless application. The P/C's must be LAN connected and there is cabling from the PC or splitter box to the screens. A wireless LAN can be implemented.

Minimum P/C Requirements

Minimum P/C system requirements for LCD/Plasma Displays

In order to have the correct resolution for your display, you will require a system with a video card that is 8x AGP with a minimum of 128mb of memory. Also since you may want to access the system remotely in order to set up the display it should have Windows XP or better installed.

Minimum Requirements for XP system

- PC with 300 megahertz or higher processor clock speed recommended; 233 MHz minimum required (single or dual processor system);* Intel Pentium/Celeron family, or AMD K6/Athlon/Duron family, or compatible processor recommended.

- 128 megabytes (MB) of RAM or higher recommended (64 MB minimum supported; may limit performance and some features).

- 1.5 gigabytes (GB) of available hard disk space.

Since the system will be used just as a display driver these minimum requirements are just fine.

Browser Requirements

The VT2000 System, including Virtual Panels III, works best with Internet Explorer. VT2000 web pages require JavaScript to be enabled.

Video Card Requirements

Most panels have a standard resolution of 1366x768 and most will also display, natively 1024x768. However, running in this mode will cut down the ability to utilize the displays full capabilities.

With this information in mind you should find a video card that is capable of displaying the standard resolution of the LCD/Plasma display.

Currently, both Nvidia and ATI have basic cards that are able to provide this standard.

Nvidia FX5200 is capable of not only the standard resolution but also has settings available to tilt the display 90 degrees at a time to allow the display to be used as a count/goal/actual board.

Driving Multiple Screens – Same Image

Below are some of the options for driving multiple screens from one P/C:

	Option #1	Option # 2	Option #3 Individual P/C
Hardware	Video & Audio Splitter/ Distribution Amplifier	4 Port Cat 5 VGA Video Splitter Plus Remote Receiver [Req. For Each Screen]	P/C
Estimated Cost	Cost of Splitter Box, Individual Monitor Cables, plus P/C [Approx 500.00 plus P/C]	Cost of Splitter Box [Approx. $600], Remote [Approx. 400.00 per location] plus P/C	Cost of Individual P/C at Each Location
Distance Limits	75’ from Splitter Box	Cat5 Cable -320’ from Splitter Box	Up to 75’ Cable from P/C

LCD Requirements

October 2006: Large LCD Panels is presently in the technology price curve where the prices are on a significant downward trend. From what we can understand this situation is expected to continue in the foreseeable future [Business Week Oct 4, 2006]. During this period of downward prices, you can expect to see model number changing rapidly so we are not recommending any specific model numbers. We will only outline required input/output standards. Although there are many brands on the market there are only six primary manufactures who have made the investment to produce large LCD screens; Samsung, LG Philips [Joint venture], Sharp, Sony, AU Optronics (Taiwan) and Chi Mei Optronics (Taiwan).

Required Interfaces:

To interface to the VersaCall system, either a DVI or a VGA interface is required.

DVI is Digital Visual Interface is a video interface standard designed to maximize the visual quality of flat panel LCD screens. LCD screen specifications will list the DVI Interface. The screen will have a DVI male connector on the back of the screen.

VGA is Visual Graphic Array has been the video pin out standard for the majority of computer monitors. It is a 15 pin connector. The LCD screen specification will list VGA interface.

Only a VGA Connector or a DVI Connector is the only Requirement for the VersaCall System

Screen Brands to Consider:

- Hyundai
- LG
- Olevia
- Samsung
- Sharp
- Sony
- Vizio

Other Consideration: The mounting hardware – ensure that the screen this purchased matches to the mounting hardware

Guidelines for Viewing Information on an LCD

The information below is intended to be for guidelines only. Each production floor environment is unique and the customer should determine what is appropriate for the requirements.

Selection of Screen Size

The selection of the LCD or Plasma size as well as the letter or number size for the displayed information is both driven by the distance at which the message is to be read.

Rule of Thumb for the Readability of Message:

	Readability
1” Lettering	25 Ft
2” Lettering	50Ft
3” Lettering	100Ft

A 32” LCD is 15” high by 27” wide. Going with the standard of 1” lettering for every 25 feet and at least 1.5” between lines for legible text. We can be safe to say, 6 lines of text would be visible at 25 feet. Now depending on the type of font being used we have a variable number of characters to be place per line. After playing with the display we have in house we have come to the conclusion that 5 characters per cell on a 5 column grid is about the most you can have without appearing too busy and distracting from the legibility of the display.

We can assume that a 40” display will be a couple of inches higher and wider so it might be possible to say that going with the same 1” letter per 25 feet. We should be able to get 7-8 lines of text by 6-7 columns.

Example 32" Display

Title of Display				
Cell 1	Cell 2	Cell 3	Cell 4	Cell 5
Maint	Maint	Maint	Maint	Maint
12345	12345	12345	12345	12345
Qual	Qual	Qual	Qual	Qual
09876	09876	09876	09876	09876

Text Type Guidelines

Guideline	**Sample Text**
Avoid using all uppercase for large text areas.	RESEARCH HAS SHOWN THAT PEOPLE CAN READ FASTER IF WORDS ARE WRITTEN USING MIXED CASE RATHER THAN ALL UPPER CASE. BLOCKS OF BOLD AND ITALICS TEXT ARE MORE DIFFICULT TO READ. BLACK IS EASIER TO READ THAN COLORED FONTS.
Avoid using bolded text for large text areas.	**Research has shown that people can read faster if words are written using mixed case rather than all upper case. Blocks of bold and italics text are more difficult to read. Black is easier to read than colored fonts.**
Be careful when using colored text. Use dark text on light backgrounds to provide the most contrast.	Research has shown that people can read faster if words are written using mixed case rather than all upper case. Blocks of bold and italics text are more difficult to read. Black is easier to read than colored fonts.
Mixed-case, black and unbolded is easier to read for large text areas. Use color and bold only to call attention to important items.	Research has shown that people can read faster if words are written using **mixed** case rather than all upper case. Blocks of bold and italics text are more difficult to read. Black is easier to read than colored fonts.