

### **Venus 7000 Custom RTD Overview**

The Venus 7000 Custom RTD application is used for receiving protocols on a serial port or over the network that do not comply with the Daktronics Standard RTD or Enhanced RTD protocols.

Custom RTD consists of two executable programs. The first is an application that is used to create and edit files that are used for capturing foreign protocols and executing commands when the protocols are received. It is also used for configuring communication ports and active files. The second program is a Windows NT service that does the actual work using the files setup by the configuration application.

The two programs work together to provide a powerful interface to the Venus 7000.

# Venus 7000 Custom RTD Help Index

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## Commands

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## **File menu commands**

The File menu offers the following commands:

|                           |   |
|---------------------------|---|
| <u>New</u>                | Creates a new document.   |
| <u>Open</u>               | Opens an existing document.                                     |
| <u>Close</u>              | Closes an opened document.                                      |
| <u>Save</u>               | Saves an opened document using the same file name.              |
| <u>Save As</u>            | Saves an opened document to a specified file name.              |
| <u>Print</u>              | Prints a document.  |
| <u>Print Preview</u>      | Displays the document on the screen as it would appear printed. |
| <u>Print Setup</u>        | Selects a printer and printer connection.                       |
| <u>Add Active File</u>    | Adds a capture file to the active file list.                    |
| <u>Remove Active File</u> | Removes a capture file from the active file list.               |
| <u>Start Service</u>      | Starts Venus 7000 Custom RTD service.                           |
| <u>Stop Service</u>       | Stops Venus 7000 Custom RTD service.                            |
| <u>Exit</u>               | Exits Venus 7000 Custom RTD.                                    |

## Edit menu commands

The Edit menu offers the following commands:

|   |   |
|---|---|
| <a href="#"><u>File Description</u></a> | Used to edit file description.                                |
| <a href="#"><u>Ports</u></a>            | Used to edit communication ports.                             |
| <a href="#"><u>Edit Trans</u></a>       | Used to edit the selected transmission.                       |
| <a href="#"><u>Add Trans</u></a>        | Adds a new transmission.                                      |
| <a href="#"><u>Insert Trans</u></a>     | Inserts a new transmission.                                   |
| <a href="#"><u>Cut</u></a>              | Deletes data from the document and moves it to the clipboard. |
| <a href="#"><u>Copy</u></a>             | Copies data from the document to the clipboard.               |
| <a href="#"><u>Paste</u></a>            | Pastes data from the clipboard into the document.             |
| <a href="#"><u>Delete</u></a>           | Deletes the currently selected transmission.                  |
| <a href="#"><u>Select All</u></a>       | Selects all transmissions.                                    |

## **View menu commands**

The View menu offers the following commands:

|                   |                                |
|-------------------|--------------------------------|
| <u>Toolbar</u>    | Shows or hides the toolbar.    |
| <u>Status Bar</u> | Shows or hides the status bar. |

## **Window menu commands**

The Window menu offers the following commands, which enable you to arrange multiple views of multiple documents in the application window:

|                         |  |
|-------------------------|--|
| <u>New Window</u>       | Creates a new window that views the same document. |
| <u>Cascade</u>          | Arranges windows in an overlapped fashion.         |
| <u>Tile</u>             | Arranges windows in non-overlapped tiles.          |
| <u>Arrange Icons</u>    | Arranges icons of closed windows.                  |
| <u>Window 1, 2, ...</u> | Goes to specified window.                          |

## Help menu commands

The Help menu offers the following commands, which provide you assistance with this application:

|                |  |
|----------------|--|
| <u>H</u> elp   | Offers you an index to topics on which you can get help. |
| <u>T</u> opics |  |
| <u>A</u> bout  | Displays the “About” dialog for this application.        |

### **New command (File menu)**

Use this command to create a new document in Venus 7000 Custom RTD.

You can open an existing document with the Open command.

In custom RTD a document is called a “capture file”. A capture file is used to configure how transmissions will be captured, what commands will be executed when a transmission is captured, and to configure communications ports.

### **Shortcuts**

Toolbar:



Keys:     CTRL+N

### Open command (File menu)

Use this command to open an existing document in a new window. You can open multiple documents at once. Use the Window menu to switch among the multiple open documents. See [Window 1, 2, ... command](#).

You can create new documents with the [New command](#).

In custom RTD a document is called a “capture file”. A capture file is used to configure how transmissions will be captured, what commands will be executed when a transmission is captured, and to configure communications ports.

### Shortcuts

Toolbar:



Keys: CTRL+O



## **File Open dialog box**

The following options allow you to specify which file to open:

### **File Name**

Type or select the filename you want to open. This box lists files with the extension you select in the List Files of Type box.

### **List Files of Type**

Select the type of file you want to open. There is only one file type in Venus 7000 custom RTD.

### **Drives**

Select the drive in which Venus 7000 Custom RTD stores the file that you want to open.

### **Directories**

Select the directory in which Venus 7000 Custom RTD stores the file that you want to open.

### **Network...**

Choose this button to connect to a network location, assigning it a new drive letter.

### Close command (File menu)

Use this command to close all windows containing the active document. Venus 7000 Custom RTD suggests that you save changes to your document before you close it. If you close a document without saving, you lose all changes made since the last time you saved it. Before closing an untitled document, Venus 7000 Custom RTD displays the Save As dialog box and suggests that you name and save the document.

You can also close a document by using the Close icon on the document's window, as shown below:



### Save command (File menu)

Use this command to save the active document to its current name and directory. When you save a document for the first time, Venus 7000 Custom RTD displays the Save As dialog box so you can name your document. If you want to change the name and directory of an existing document before you save it, choose the Save As command.

### Shortcuts

Toolbar:



Keys: CTRL+S

**Save As command (File menu)**

Use this command to save and name the active document. Venus 7000 Custom RTD displays the Save As dialog box so you can name your document.

To save a document with its existing name and directory, use the Save command.

Use this command to send the active document through electronic mail. This command presents a mail window with the active document attached to it. You may then fill out the To: field, Subject: field, etc., and add text to the body of the message if you wish. When you are finished you may click the "Send" button to send the message.

## **File Save As dialog box**

The following options allow you to specify the name and location of the file you're about to save:

### **File Name**

Type a new filename to save a document with a different name. A filename can contain up to eight characters and an extension of up to three characters. Venus 7000 Custom RTD adds the extension you specify in the Save File As Type box.

### **Drives**

Select the drive in which you want to store the document.

### **Directories**

Select the directory in which you want to store the document.

### **Network...**

Choose this button to connect to a network location, assigning it a new drive letter.

### **Add Active File (File menu)**

Adds a capture file to the active file list. The active file list is the list of capture files that the Venus 7000 Custom RTD Service uses to capture transmissions and execute commands.

### **Shortcuts**

Button:



**Remove Active File**

Removes a capture file from the active file list. The active file list is the list of capture files that the Venus 7000 Custom RTD Service uses to capture transmissions and execute commands.

**Shortcuts**

Button:



**Start Service**

Starts the Venus 7000 Custom RTD service. This option is disabled if the service is already running.

**Shortcuts**

Button:





### **Stop Service**

Stops the Venus 7000 Custom RTD service. This option is disabled if the service is already stopped.

### **Shortcuts**

Button:



### **1, 2, 3, 4 command (File menu)**

Use the numbers and filenames listed at the bottom of the File menu to open the recent documents you closed. Choose the number that corresponds with the document you want to open.

### **Exit command (File menu)**

Use this command to end your Venus 7000 Custom RTD session. You can also use the Close command on the application Control menu. Venus 7000 Custom RTD prompts you to save documents with unsaved changes.

### **Shortcuts**

Mouse: Double-click the application's Control menu button.



Keys: ALT+F4

**File Description (Edit menu)**

Used to enter a more detailed description of the capture file. Works with the active file.

**Ports (Edit menu)**

Used to configure the input and output ports for a capture file. Works with the document that currently has focus.

**Shortcuts**

Toolbar:



### **Edit Trans (Edit menu)**

Used for editing the currently selected transmission. Same as double clicking on the transmission line.

### **Shortcuts**

Mouse: Double-click the transmission line.

Toolbar:



**Add Trans (Edit menu)**

Used to add a new transmission configuration object to the current capture file.

**Shortcuts**

Toolbar:



**Insert Trans (Edit menu)**

Used to insert a new transmission configuration object into the current file at the current cursor location.

**Shortcuts**

Toolbar:





### **Cut command (Edit menu)**

Use this command to remove the currently selected transmissions from the capture file and put them on the clipboard. This command is unavailable if there are no transmissions currently selected.

Cutting data to the clipboard replaces the contents previously stored there.

### **Shortcuts**

Toolbar:



Keys:    CTRL+X

### **Copy command (Edit menu)**

Use this command to copy selected transmissions onto the clipboard. This command is unavailable if there are no transmissions currently selected.

Copying data to the clipboard replaces the contents previously stored there.

### **Shortcuts**

Toolbar:



Keys:    CTRL+C

### **Paste command (Edit menu)**

Use this command to insert a copy of the clipboard contents at the insertion point. This command is unavailable if the clipboard is empty.

### **Shortcuts**

Toolbar:



Keys: CTRL+V

**Delete (Edit menu)**

Used to delete a transmission configuration object.

**Shortcuts**

Toolbar:



**Select All**

Selects all transmissions in the list for the current file. This is useful for cutting, copying, and drag & drop.

**Toolbar command (View menu)**

Use this command to display and hide the Toolbar, which includes buttons for some of the most common commands in Venus 7000 Custom RTD, such as File Open. A check mark appears next to the menu item when the Toolbar is displayed.

See [Toolbar](#) for help on using the toolbar.

## Toolbar



The toolbar is displayed across the top of the application window, below the menu bar. The toolbar provides quick mouse access to many tools used in Venus 7000 Custom RTD,

To hide or display the Toolbar, choose Toolbar from the View menu (ALT, V, T).

| Click | To |
|-------|----|
|-------|----|



Open a new document.



Open an existing document. Venus 7000 Custom RTD displays the Open dialog box, in which you can locate and open the desired file.



Save the active document with its current name. If you have not named the document, Venus 7000 Custom RTD displays the Save As dialog box.



Edit the input and output ports for the current document.



Edit the currently selected transmission.



Add a new transmission configuration object to the list.



Insert a new transmission configuration object into the list at the current cursor location.



Removes selected transmission(s) from the document and stores it on the clipboard.



Copy the selected transmission(s) to the clipboard.



Insert the contents of the clipboard at the insertion point.



Delete the selected transmission.



Print the active document.



Brings up the “About” dialog box for the Venus 7000 Custom RTD application.



Starts the context help mode.

**Status Bar command (View menu)**

Use this command to display and hide the Status Bar, which describes the action to be executed by the selected menu item or depressed toolbar button, and keyboard latch state. A check mark appears next to the menu item when the Status Bar is displayed.

See [Status Bar](#) for help on using the status bar.



## Status Bar



The status bar is displayed at the bottom of the Venus 7000 Custom RTD window. To display or hide the status bar, use the Status Bar command in the View menu.

The left area of the status bar describes actions of menu items as you use the arrow keys to navigate through menus. This area similarly shows messages that describe the actions of toolbar buttons as you depress them, before releasing them. If after viewing the description of the toolbar button command you wish not to execute the command, then release the mouse button while the pointer is off the toolbar button.

The right areas of the status bar indicate which of the following keys are latched down:

| Indicator | Description                          |
|-----------|--------------------------------------|
| CAP       | The Caps Lock key is latched down.   |
| NUM       | The Num Lock key is latched down.    |
| SCRL      | The Scroll Lock key is latched down. |

**New command (Window menu)**

Use this command to open a new window with the same contents as the active window. You can open multiple document windows to display different parts or views of a document at the same time. If you change the contents in one window, all other windows containing the same document reflect those changes. When you open a new window, it becomes the active window and is displayed on top of all other open windows.

**Cascade command (Window menu)**

Use this command to arrange multiple opened windows in an overlapped fashion.

**Tile command (Window menu)**

Use this command to arrange multiple opened windows in a non-overlapped fashion.

**Tile Horizontal command (Window menu)**

Use this command to vertically arrange multiple opened windows in a non-overlapped fashion.

**Tile Vertical command (Window menu)**

Use this command to arrange multiple opened windows side by side.

### **Window Arrange Icons Command**

Use this command to arrange the icons for minimized windows at the bottom of the main window. If there is an open document window at the bottom of the main window, then some or all of the icons may not be visible because they will be underneath this document window.

### **1, 2, ... command (Window menu)**

Venus 7000 Custom RTD displays a list of currently open document windows at the bottom of the Window menu. A check mark appears in front of the document name of the active window. Choose a document from this list to make its window active.



**Index command (Help menu)**

Use this command to display the opening screen of Help. From the opening screen, you can jump to step-by-step instructions for using Venus 7000 Custom RTD and various types of reference information.

Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

### **Using Help command (Help menu)**

Use this command for instructions about using Help.

**About command (Help menu)**

Use this command to display the copyright notice and version number of your copy of Venus 7000 Custom RTD.

**Shortcut**

Toolbar:



### Context Help command



Use the Context Help command to obtain help on some portion of Venus 7000 Custom RTD. When you choose the Toolbar's Context Help button, the mouse pointer will change to an arrow and question mark. Then click somewhere in the Venus 7000 Custom RTD window, such as another Toolbar button. The Help topic will be shown for the item you clicked.

### Shortcut



Toolbar:

Keys: SHIFT+F1

## **Title Bar**

The title bar is located along the top of a window. It contains the name of the application and document.

To move the window, drag the title bar. Note: You can also move dialog boxes by dragging their title bars.

A title bar may contain the following elements:

- Application Control-menu button
- Document Control-menu button
- Maximize button
- Minimize button
- Name of the application
- Name of the document
- Restore button

**Scroll bars**

Displayed at the right and bottom edges of the document window. The scroll boxes inside the scroll bars indicate your vertical and horizontal location in the document. You can use the mouse to scroll to other parts of the document.

### Size command (System menu)

Use this command to display a four-headed arrow so you can size the active window with the arrow keys.



After the pointer changes to the four-headed arrow:

1. Press one of the DIRECTION keys (left, right, up, or down arrow key) to move the pointer to the border you want to move.
2. Press a DIRECTION key to move the border.
3. Press ENTER when the window is the size you want.

Note: This command is unavailable if you maximize the window.

### Shortcut

Mouse: Drag the size bars at the corners or edges of the window.

### **Move command (Control menu)**

Use this command to display a four-headed arrow so you can move the active window or dialog box with the arrow keys.



Note: This command is unavailable if you maximize the window.

### **Shortcut**


Keys:           CTRL+F7



### **Minimize command (application Control menu)**

Use this command to reduce the Venus 7000 Custom RTD window to an icon.

### **Shortcut**

Mouse: Click the minimize icon  on the title bar.

Keys: ALT+F9

### **Maximize command (System menu)**

Use this command to enlarge the active window to fill the available space.

### **Shortcut**

Mouse: Click the maximize icon  on the title bar; or double-click the title bar.

Keys: CTRL+F10 enlarges a document window.

**Next Window command (document Control menu)**

Use this command to switch to the next open document window. Venus 7000 Custom RTD determines which window is next according to the order in which you opened the windows.

**Shortcut**

Keys:           CTRL+F6

### **Previous Window command (document Control menu)**

Use this command to switch to the previous open document window. Venus 7000 Custom RTD determines which window is previous according to the order in which you opened the windows.

### **Shortcut**

Keys:       SHIFT+CTRL+F6

### **Close command (Control menus)**

Use this command to close the active window or dialog box.

Double-clicking a Control-menu box is the same as choosing the Close command.



Note: If you have multiple windows open for a single document, the Close command on the document Control menu closes only one window at a time. You can close all windows at once with the Close command on the File menu.

### **Shortcuts**

Keys:           CTRL+F4 closes a document window  
                  ALT+F4 closes a window or dialog box

**Restore command (Control menu)**

Use this command to return the active window to its size and position before you chose the Maximize or Minimize command.

## **Modifying the Document**

Venus 7000 Custom RTD document files or “capture files” are setup by simply adding and editing transmission configurations. When a transmission is added, inserted, or deleted, a property sheet is presented with 3 different pages used for configuring the transmission. The first page is just general information. The second page is used for configuring how the transmission will be captured. The third page is used for configuring the commands that will be executed when the transmission is received.

Transmissions can be transferred to and from the clipboard using the cut, copy, paste edit menu options or the toolbar buttons. They can also be copied using the drag and drop method.

The last part of configuring a capture file is setting up the communication port(s). The ports are configured by selecting the “Ports” option from the edit menu, or by clicking on the “I/O” toolbar button.

**No Help Available**

No help is available for this area of the window.



**No Help Available**

No help is available for this message box.



### **Print command (File menu)**

Use this command to print a document. This command presents a Print dialog box, where you may specify the range of pages to be printed, the number of copies, the destination printer, and other printer setup options.

### **Shortcuts**

Toolbar:



Keys: CTRL+P

## **Print dialog box**

The following options allow you to specify how the document should be printed:

### **Printer**

This is the active printer and printer connection. Choose the Setup option to change the printer and printer connection.

### **Setup**

Displays a Print Setup dialog box, so you can select a printer and printer connection.

### **Print Range**

Specify the pages you want to print:

- |                  |   |
|------------------|---|
| <b>All</b>       | Prints the entire document.                                     |
| <b>Selection</b> | Prints the currently selected text.                             |
| <b>Pages</b>     | Prints the range of pages you specify in the From and To boxes. |

### **Copies**

Specify the number of copies you want to print for the above page range.

### **Collate Copies**

Prints copies in page number order, instead of separated multiple copies of each page.

### **Print Quality**

Select the quality of the printing. Generally, lower quality printing takes less time to produce.

### **Print Progress Dialog**

The Printing dialog box is shown during the time that <<YourApp>> is sending output to the printer. The page number indicates the progress of the printing.

To abort printing, choose Cancel.

**Print Preview command (File menu)**

Use this command to display the active document as it would appear when printed. When you choose this command, the main window will be replaced with a print preview window in which one or two pages will be displayed in their printed format. The print preview toolbar offers you options to view either one or two pages at a time; move back and forth through the document; zoom in and out of pages; and initiate a print job.

## **Print Preview toolbar**

The print preview toolbar offers you the following options:

### **Print**

Bring up the print dialog box, to start a print job.

### **Next Page**

Preview the next printed page.

### **Prev Page**

Preview the previous printed page.

### **One Page / Two Page**

Preview one or two printed pages at a time.

### **Zoom In**

Take a closer look at the printed page.

### **Zoom Out**

Take a larger look at the printed page.

### **Close**

Return from print preview to the editing window.

**Print Setup command (File menu)**

Use this command to select a printer and a printer connection. This command presents a Print Setup dialog box, where you specify the printer and its connection.



## **Print Setup dialog box**

The following options allow you to select the destination printer and its connection.

### **Printer**

Select the printer you want to use. Choose the Default Printer; or choose the Specific Printer option and select one of the current installed printers shown in the box. You install printers and configure ports using the Windows Control Panel.

### **Orientation**

Choose Portrait or Landscape.

### **Paper Size**

Select the size of paper that the document is to be printed on.

### **Paper Source**

Some printers offer multiple trays for different paper sources. Specify the tray here.

### **Options**

Displays a dialog box where you can make additional choices about printing, specific to the type of printer you have selected.


### **Network...**


Choose this button to connect to a network location, assigning it a new drive letter.

**Page Setup command (File menu)**


<< Write application-specific help here. >>



### Creating and editing capture files.

To create a new capture file, select the [New](#) option from the file menu or click the  button in the [toolbar](#).


To edit an existing capture file, select the [Open](#) option from the file menu or click the  button in the [toolbar](#).

Either of these two options brings up the main view of the file. The main view consists of a list of transmission configuration objects. If it is a new file, the list will be empty to start with.

New transmission configuration objects can be added to the list by using the [Add Trans](#) or [Insert Trans](#) options in the Edit menu or by clicking on the  or the

 buttons in the toolbar. Existing transmissions can be edited by using the [Edit Trans](#) option in the Edit menu or by clicking on the  button in the toolbar.

Each transmission configuration object represents a different transmission type that will be received. A transmission configuration object consists of some general configuration items, a capture configuration, and a list of commands to execute when the transmission is received.

The last major part of creating and editing a capture file is configuring the input and output ports. To bring up the dialog for editing the ports, select the [Ports](#) option from the edit menu or click on the  button in the toolbar.

**See also:** [Capture Configuration Property Page](#), [Output Commands Property Page](#), [Configuring Communication Ports](#)

### **General Configuration Property Page**

Transmissions can be enabled or disabled. Disabling them allows for them to not be used at certain times without deleting them and losing the configuration. If a check appears in the Enable/Disable Transmission check box, the transmission is enabled. If it is cleared, the transmission is disabled.

The transmission description simply allows the user to give the transmission a descriptive name so it can be better identified.

### Capture Configuration Property Page

The capture configuration property page is used to configure a list of synchronization objects for a transmission. These synchronization objects are used to capture the transmission. There are 3 types of synchronization objects:

- n Start - Identifies a start character.
- n End - Identifies an end character.
- n Offset - Allows entering an offset value for verifying a particular byte within the transmission.

To capture a transmission, first configure a unique start synchronization object by clicking on the Add button and selecting the Start Char option in the [sync options dialog](#). Configure the options for the start character. There can be only one start synchronization object for a transmission.

Next, click the Add button again, and configure an end synchronization object using the [sync options dialog](#). There can be only one end synchronization object for a transmission.

Then, configure as many offset synchronization objects as are needed to uniquely identify the transmission. Remember, there may be other transmissions coming in on the same port that are similar to the transmission you are trying to capture. The synchronization objects must somehow differentiate between all transmissions coming in on the port.

**IMPORTANT NOTE:** The start character must be unique. It cannot exist in any of the transmissions configured in a particular capture file except as a start character. This is because whenever the custom RTD service receives a character that matches any of the configured start characters, it assumes a new transmission is starting.

To edit an existing synchronization object, double-click on it or select it and click on the Edit button.

To delete a synchronization object, select it and click on the Remove button.

See [Edit Sync Options Dialog](#) for a description of configuring individual synchronization objects.

### Output Commands Property Page


The output commands property page is used for configuring a list of commands that will be executed when the transmission is received. New commands can be added or inserted into the list by clicking on the Add or Insert buttons. To edit an existing command, double-click on it or select it and click on the edit button. To delete a command, select it and click on the Remove button.

When the Add, Insert, or Delete buttons are clicked on, a command entry wizard is started. This wizard will guide the operator through configuring a command to be executed. Most commands are identical to Venus 7000 Scripting with the exception of the following three commands:

- n SendRealTimeData - Allows sending data that has been extracted from the received transmission to a Venus 7000 sign service.
- n OutputStandardRtd - Allows sending data that has been extracted from the received transmission out one of the configured [output ports](#) in Standard RTD format.
- n OutputEnhancedRtd - Allows sending data that has been extracted from the received transmission out one of the configured [output ports](#) in Enhanced RTD format. Also allows sending any other Enhanced RTD command out one of the output ports.

## Configuring Communication Ports

The Configure Ports dialog is used for configuring communication ports. The capture file that the ports are being configured for is shown in the title bar.

The Configure Ports dialog is started by selecting the [Ports](#) option from the edit menu or clicking the  button in the [toolbar](#).

The following three items are configured with this dialog:

- n Maximum transmission length of any incoming transmission.
- n Input port - The input port is always required..
- n Output ports - Output ports are option. They are only needed if the OutputStandardRtd or OutputEnhancedRtd commands are used in the command list. (See [Output Commands Property Page](#))

To edit the input port, click the Edit Input button. To edit an output, select the output in the list box and click Edit Output. To clear an output, select the output in the list box and click the Clear Output button. Click the close button when done.

The Edit Input and Edit Output buttons bring up the Configure Port dialog box. (See [Configuring a Port](#))

The information entered in this dialog will be saved when the [Save](#) option is executed from the file menu or the save [toolbar](#) button is clicked.

## Configuring a Port

The Enter Port Parameters dialog is used for configuring input and output ports. (See [Configuring Communication Ports](#))

The Name option is simply for assigning the port a descriptive name so it can be easily identified.

The Port Type can be either COM port or IPX port. If COM port is selected, the baud rate, parity, and data bits must also be configured along with the port number. If IPX port is selected, the only thing that needs to be configured is the IPX socket number which is entered in the PORT combo box.

If the port is an input, and COM port is selected, there are 4 comm event options that can be configured. These options allow executing a selected transmissions command list when the comm event occurs. This is useful when something in the display system needs to be triggered by an external switch. An example of this is emergency messages. To enable a comm event, simply select the transmission whose commands are to be executed when the comm event occurs.



### **Configuring the Active File List**

The Active File List is the list of capture files that the Venus 7000 Custom RTD service will use for configuring ports, receiving data, and executing commands. There will be one file per input. For example, if there is only one input (COM1), there will be only one active file. If there are two inputs (COM1 AND COM2), there will be two active files in the list.

To add a file to the active file list, click the Add File button and select the capture file from the standard file selection dialog box. To remove a file from the active file list, click on the file name to select it and click on the Remove File button.

### **Starting and Stopping the Custom RTD Service**

The Venus 7000 Custom RTD service can be started and stopped from this application. The Start Service and Stop Service buttons are used for this purpose. If the service is already running, the Start Service button is disabled. If the service is not running, the Stop Service button is disabled. The current status of the service is shown to the right of the buttons.

Any time the active file list changes, or the configuration changes for any of the files in the active list, the Venus 7000 Custom RTD service must be restarted for those changes to take effect. A message asking if the service should be restarted is presented any time either of these changes.

## Edit Sync Options Dialog

The Edit Sync Options dialog is used for configuring a sync object. A list of sync objects is used to capture a transmission. There are 3 types of synchronization objects:

- n Start - Identifies a start character.
- n End - Identifies and end character.
- n Offset - Allows entering and offset value for verifying a particular byte within the transmission.

The type of sync object is selected with the radio buttons in the Sync Type group. For an end sync object an optional length can be entered. If a length is entered, the end of the transmission can be determined by its length. If the length is 0, it is not used. For an offset sync object, an offset value must be entered. The offset value determines which byte in the transmission is being validated.

For all sync object types, there are two types of validations that can be made on the byte. They are:

- n Range - Used to identify a range that the byte must fall into.
- n Individual Bytes - Used to configure a list of byte values. The selected byte must match at least one of these values. (OR logic is used)

If either the start value or the end value in the range is 0, the range is not used. If any individual byte is zero, it is not used. Either the Range or the Individual Bytes can be used by themselves, or they can both be used at the same time. If they are both used, OR logic is used.

Examples:

- n If a byte can be only digits 0 - 9, set the range to 48 to 57, and do not use the individual bytes. (Leave them all zeros)
- n If a byte can be digits 0 - 9 or a space, set the range to 48 to 57, and set one individual byte to 32. (Leave the rest of the Individual Bytes zeros)
- n If a byte can be digits 0 - 9, or a space, comma, colon, or decimal point, set the range to 48 to 57, and set the first four individual bytes to 32, 44, 58, and 46. (Leave the rest of the Individual Bytes zeros)
- n If a byte can only be letters S, I, R, or F, leave the range values set to zeros, and set the first four individual bytes to 83, 73, 82, and 70. (Leave the rest of the Individual Bytes zeros)

See Also: [Capture Configuration Property Page](#)

