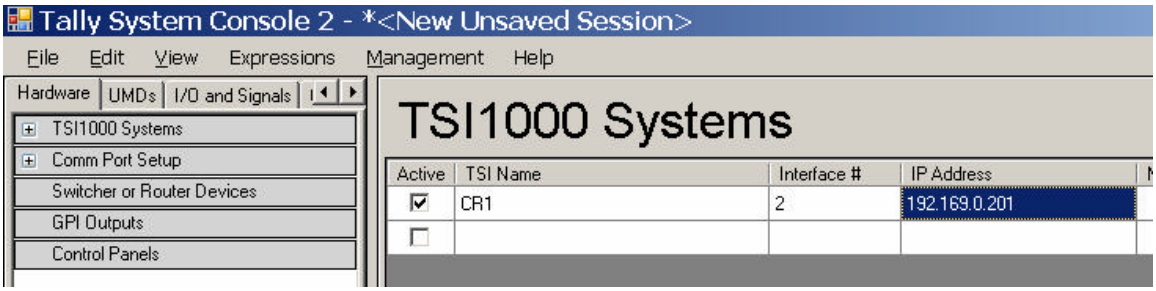
Typical Tally System Setup
Using Tally System Console 2

Image Video
1620 Midland Avenue
Scarborough, Ontario
M1P-3C2
(416) 750-8872
www.imagevideo.com
info@imagevideo.com

Typical Tally System Setup
Using Tally System Console 2



1. Define Tally Controller:

1.1. Click on Hardware > TSI1000 Systems.

1.2. In the “TSI1000 Systems” type an name for each controller into the Name column.

1.3. Type an interface number for each controller into the Interface # column.

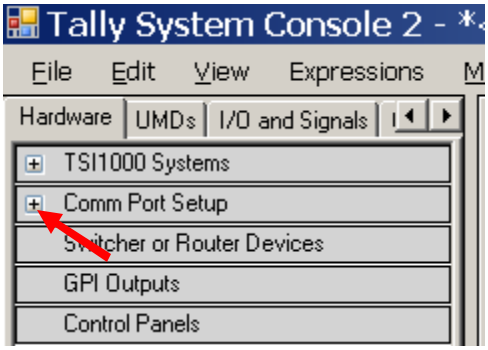
1.4. Type an IP Address for each controller into the IP address column.

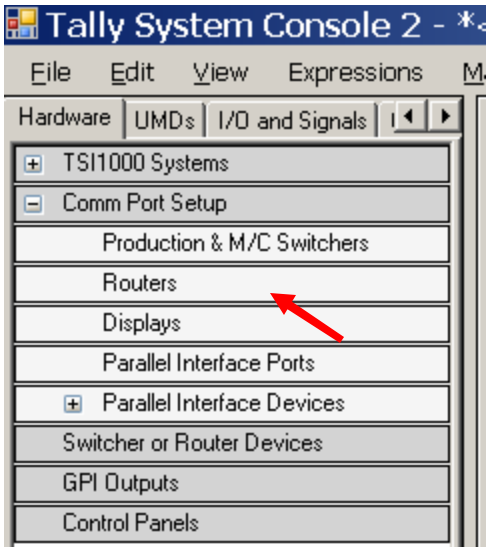
Background information:

The TSI Name is used in other parts of the configuration to assign a host TSI1000 to UMDs, GPI outputs and router / switcher devices. The host TSI1000 is the controller networked or wired to each of the assigned devices in order to communicate with them.

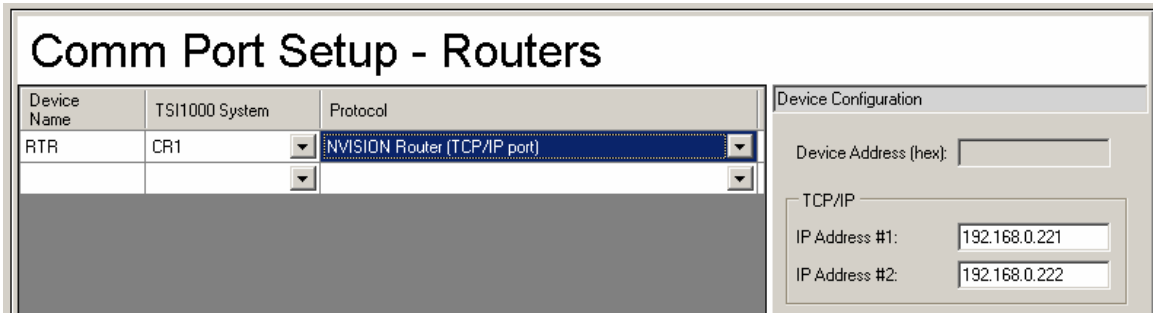
The Interface Number is an identifying number programmed into each TSI1000 in order to identify which UMDs, GPI outputs and router / switcher devices it controls. TSI1000s which are paired to operate with an Image Video ACO for redundancy have the same Interface number. The factory default value for the Interface Number is “2”. See Appendix A on how to program the TSI1000 interface number.

2. Define Routers:





2.1. Click on Hardware > Comm Port Setup "+" expansion icon, then click on "Routers" bar to open the Routers port setup menu.

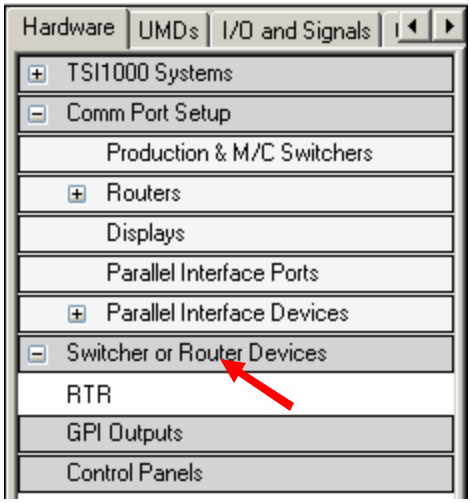


2.2. Type in a short name for the router device in the Device Name column (RTR, RTR1, RTRB, CR1, etc.).

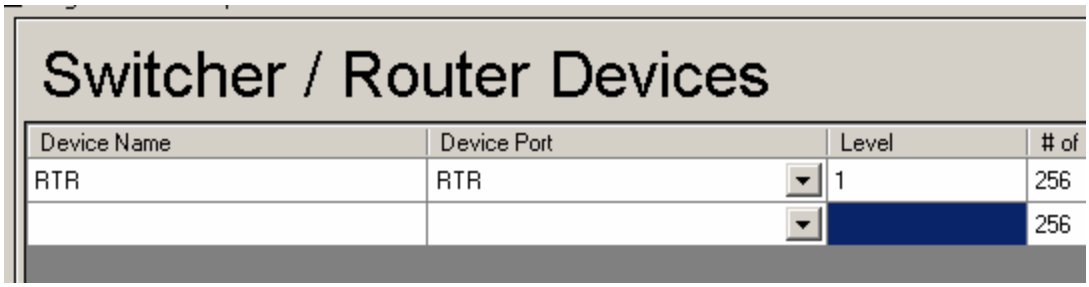
2.3. Select an item from the TSI1000 Systems dropdown.

2.4. Select a router protocol from the Protocol dropdown.

2.5. Select a serial (COM) port or an IP address for the router from the Device Configuration pane on the right.



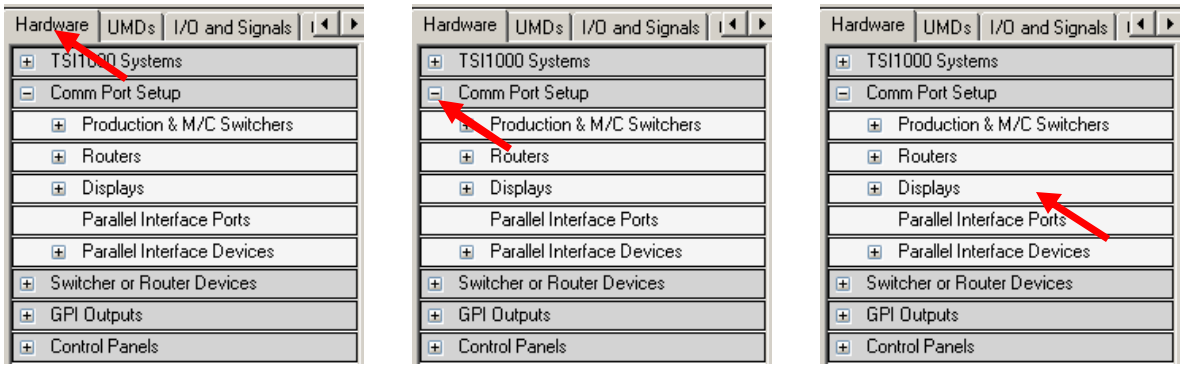
2.6. Click on the Hardware > Switcher or Router Devices bar to open the router and switcher device editor.



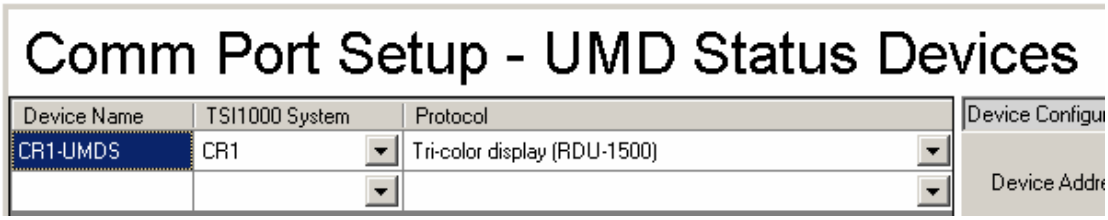
2.7. Enter a level number in the Level column. This can be a single number or a list of numbers separated by commas.

Background: The level number relates to levels in the router that are typically used to transport various types of signals though the router(SD, HD, embedded audio, etc.). The Image Video tally system can assign and track router inputs and outputs on multiple levels. The router levels to be tracked are assigned here in order to define level columns in other parts of the configuration.

3. Define Display Port:



3.1. Click on the Hardware tab, Comm Port Setup "+" icon and the "Display" menu bar to bring up the "Displays" port editor.

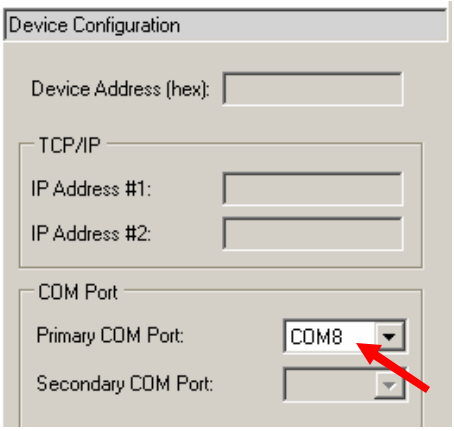


3.2. In the editor in the right pane type in a name for the UMD port.

3.3. In the "TSI1000 System" column select the host TSI1000 controller for the port.

Background: the host TSI1000 controller is the controller to which UMD display assigned to this port hardware will be connected.

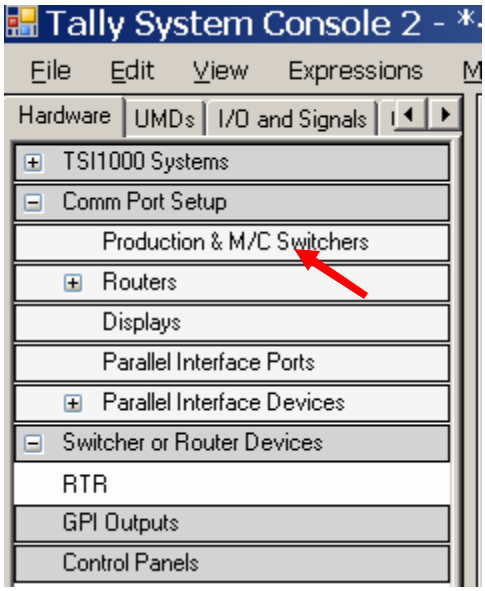
3.4. In the "Protocol" column select the display type / protocol.



3.5. Also in the "Displays" editor, select the physical port of the host TSI1000 to which UMDs assigned to this port will be wired.

Note: for network-interfaced UMDs an IP address entry field rather than a serial port selection will be automatically made available if an IP-based UMD protocol is selected.

4. Define Production Switcher:



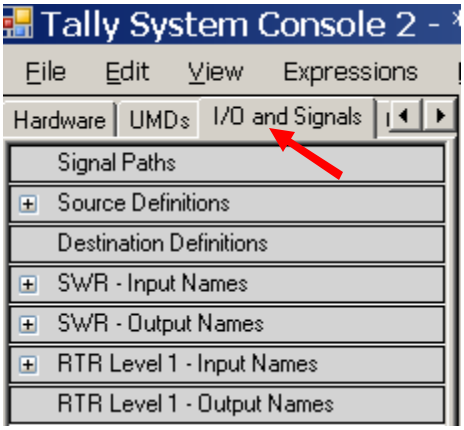
4.1. Click on Hardware > Comm Port Setup > Production & M/C switchers.

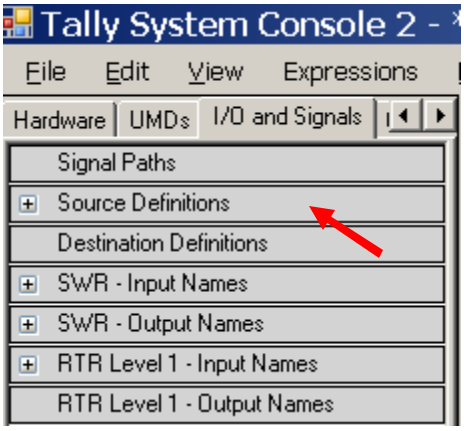
4.2. Select a TSI1000 from the TSI1000 Systems dropdown.

4.3. Select a router protocol from the Protocol dropdown.

4.4. Select a serial (COM) port or an IP address for the router from the Device Configuration pane on the right.

5. Define Sources:





5.1. Click on I/O and Signals tab.

5.2. Click on Source Definitions bar.

Source Definitions

Source Name	Short Name	Long Name	Device Input SWR	Device Input RTR Level 1
CAM1	CAM 1	CAM 1 - BILL	1	101
CAM2	CAM 2	CAM 2 - JOE	2	102
CAM3	CAM 3	CAM 3 - FRANK	3	103
CAM4	CAM 4	CAM 4	4	104
CAM5	CAM 5	CAM 5	5	105
EVS 1	EVS 1	BLUE	6	056
EVS 2	EVS 2	RED	7	057
EVS 3	EVS 3	GREEN	8	058
REM 61	REM 61	WASHINGTON	9	048
REM 62	REM 62	NEW YORK	10	049
REM 63	REM 63	ATLANTA	11	050
REM 64	REM 64	BEIJING	12	051

5.3. In the source definitions editor in the right pane, enter the names of signal sources in the “Source Name” column. These names are for identification purposes rather than display and should be kept mnemonically short and descriptive.

Editing Tips: Names and numbers can be pasted into the editor columns from a spreadsheet. Pressing Ctrl-Enter copies the name from the cell above and copies it into current cell with an increment applied (e.g. CAM1 is copied down as CAM2). Pressing F1 opens a command window into which a list of names can be created

using dashes and comma. For example typing CAM1-10 into the command window automatically enters a list of names CAM1 through CAM10 into the current column, starting at the current cell).

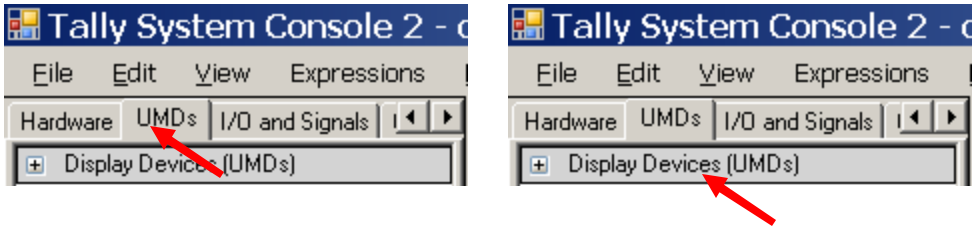
5.4. In the Short Name and Long Name columns enter names for the sources as they are required to be displayed on monitor walls.

5.5. Under the remaining columns, named for the router levels and production switchers defined in the previous steps, enter the input names or numbers that identify the various router and switcher inputs fed by each source.

Background: The following is a list of router types that require the use of mnemonic name in the device input assignment columns. All other types of routers and all production switchers use numbered inputs.

Sony DVS Series Router (S-BUS port)
GVG Encore Router (TCP/IP port)
GVG SMS-7000 Router (TCP/IP or COM port)

6. Define UMDs:



6.1. Click on UMDs tab.

6.2. Click on Display Devices Menu Bar.

Editing Tips: Names and numbers can be pasted into the editor columns from a spreadsheet. Pressing Ctrl-Enter copies the name from the cell above and copies it into current cell with an increment applied (e.g. CAM1 is copied down as CAM2). Pressing F1 opens a command window into which a list of names can be created using dashes and comma. For example typing CAM1-10 into the command window automatically enters a list of names CAM1 through CAM10 into the current column, starting at the current cell).

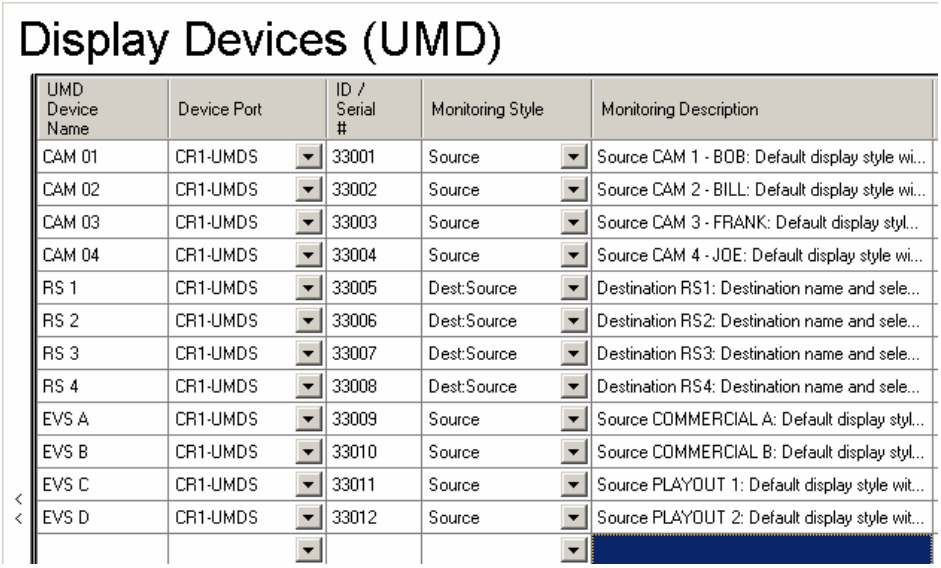
Display Devices (UMD)

UMD Device Name	Device Port	ID / Serial #
CAM 01	CR1-UMDS	33001
CAM 02	CR1-UMDS	33002
CAM 03	CR1-UMDS	33003
CAM 04	CR1-UMDS	33004
RS 1	CR1-UMDS	33005
RS 2	CR1-UMDS	33006
RS 3	CR1-UMDS	33007
RS 4	CR1-UMDS	33008
EVS A	CR1-UMDS	33009
EVS B	CR1-UMDS	33010
EVS C	CR1-UMDS	33011
EVS D	CR1-UMDS	33012

6.3. For each UMD enter a name and a serial number. Also select the port to which the UMD will be connected.

Background: Any UMD name up to 16 characters in length is allowed. The serial number is a UMD identifier used in the communications with each particular

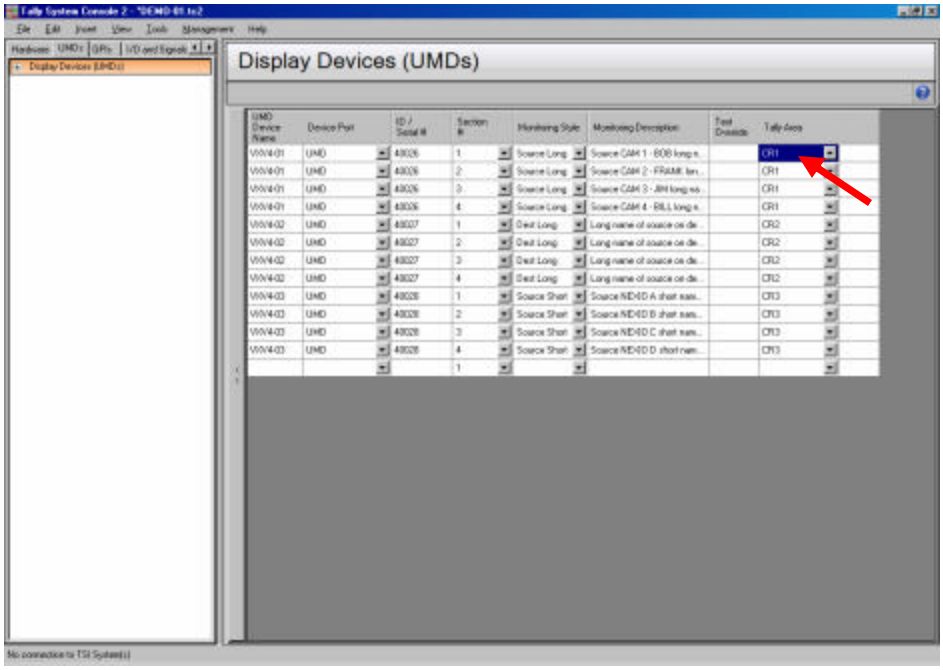
UMD, and needs to match similar information in the UMD hardware or UMD setup. The device port is created the Hardware > Displays menu.



Display Devices (UMD)

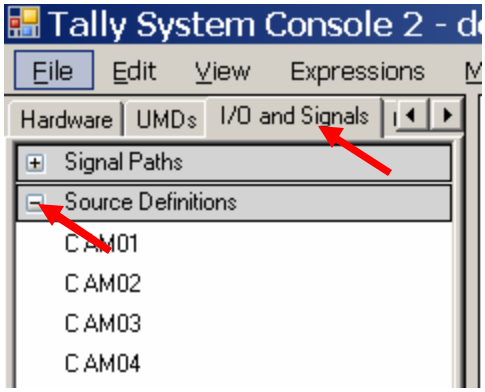
UMD Device Name	Device Port	ID / Serial #	Monitoring Style	Monitoring Description
CAM 01	CR1-UMDS	33001	Source	Source CAM 1 - BOB: Default display style wi...
CAM 02	CR1-UMDS	33002	Source	Source CAM 2 - BILL: Default display style wi...
CAM 03	CR1-UMDS	33003	Source	Source CAM 3 - FRANK: Default display styl...
CAM 04	CR1-UMDS	33004	Source	Source CAM 4 - JOE: Default display style wi...
RS 1	CR1-UMDS	33005	Dest:Source	Destination RS1: Destination name and sele...
RS 2	CR1-UMDS	33006	Dest:Source	Destination RS2: Destination name and sele...
RS 3	CR1-UMDS	33007	Dest:Source	Destination RS3: Destination name and sele...
RS 4	CR1-UMDS	33008	Dest:Source	Destination RS4: Destination name and sele...
EVS A	CR1-UMDS	33009	Source	Source COMMERCIAL A: Default display styl...
EVS B	CR1-UMDS	33010	Source	Source COMMERCIAL B: Default display styl...
EVS C	CR1-UMDS	33011	Source	Source PLAYOUT 1: Default display style wit...
EVS D	CR1-UMDS	33012	Source	Source PLAYOUT 2: Default display style wit...

6.4. For each display select a monitoring style. The monitoring style sets the functionality of a UMD, for example whether the UMD is displaying the name of a fixed source, or the source selected by a given signal output.

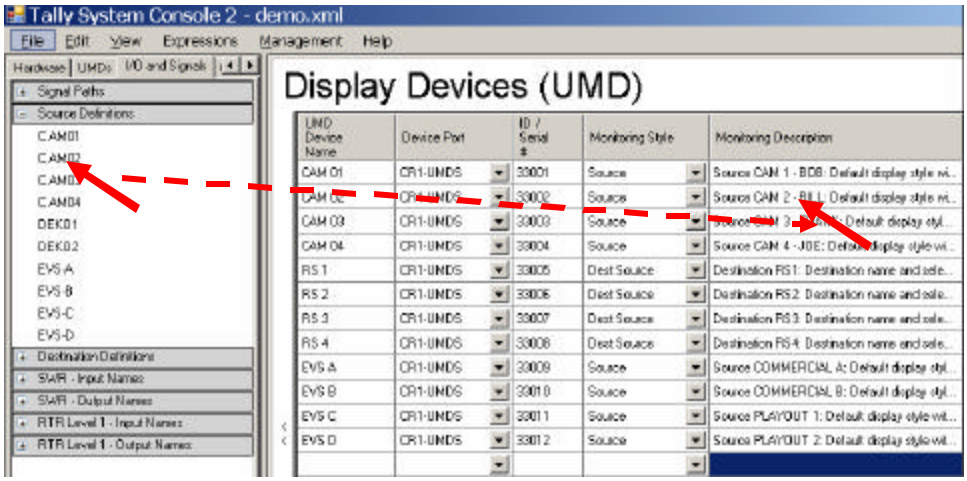


6.5. For each display select the tally area. The tally area determines which control room will control the on-air and next-to-air tally for this UMD.

Background: Tally areas are defined under Plant Layout > Tally Areas. A tally area is set up automatically when a production switcher is created in Hardware > Comm Port Setup > Production & M/C Switchers.



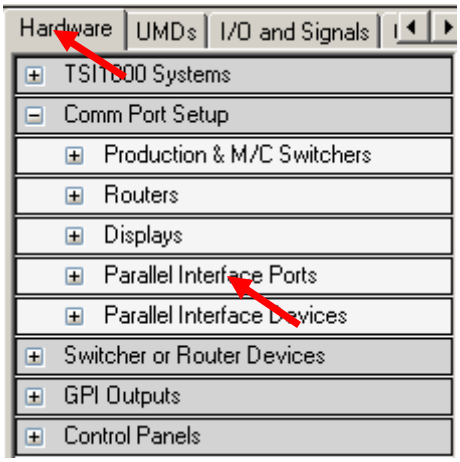
6.6. Click on the “I/O and Signals” tab, then click on the “Source Definitions” “+” icon to expand the “Source Definitions” list.



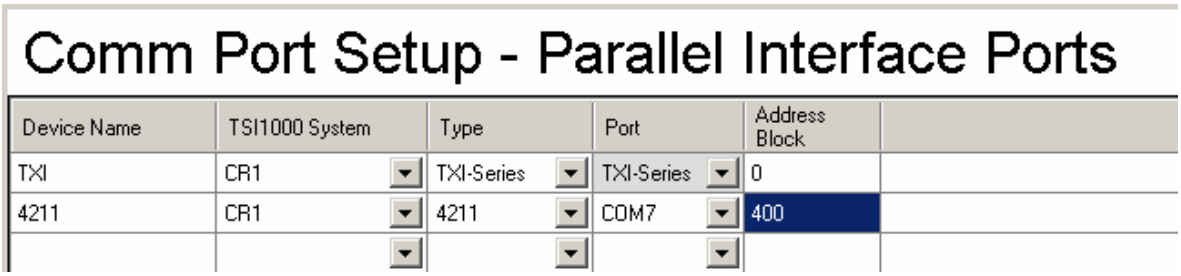
6.7. Drag a source from the Source Definitions pane into the Monitoring Description column. This assigns the source monitored by the UMD. The monitoring description will automatically change to reflect the assigned source.

7. Define GPI interface ports:

GPI interface ports interface parallel I/O devices such as relay closure inputs and outputs and parallel-like devices such as control panels. To define these ports:



7.1. Click on the "Hardware" tab and on the "Parallel Interface Ports" menu bar to open the "Parallel Interface Ports" editor.



7.2. Type a name for a parallel interface port.

The port name is arbitrary and used in other parts of the configuration to identify this port.

7.3. Select a TSI1000 from the TSI1000 Systems dropdown column.

This is the TSI1000 to which the parallel interface hardware on this port will be connected.

7.4. Select a parallel interface type from the Type dropdown column.

The types of GPI ports are:

- *4211-series - For serial-interfaced relay-based GPI input and output closures.*

- *TXI-series - For IP-interfaced relay-based GPI input and output closures.*
- *RCP - For serial-interfaced control panels, which are treated as GPI inputs for button presses and GPI outputs for button LED states.*

7.5. For 4211 or RCP port types, select a serial (COM) port. For TXI-series parallel interfaces, which are IP based, no port is selected (IP addresses for these are defined in the Parallel Device setup menu).

This is the port to which the parallel interface hardware will be connected.

7.6. Type a GPI address block value for the port.

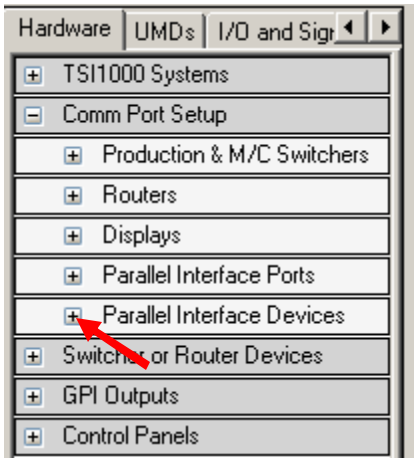
Background: For each TSI1000 each GPI input and output has an address. Each parallel interface port is allocated a contiguous block of these addresses.

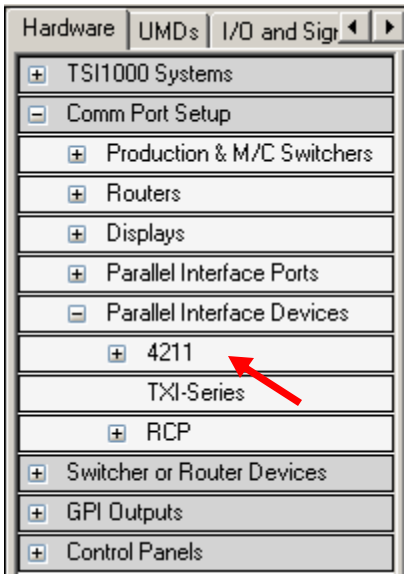
The value typed into the address block column sets the GPI address of the first GPI input and output on the first parallel interface device connected to this port.

The address block value should be selected to leave remove room for the anticipated maximum number of GPI inputs or outputs on each port.

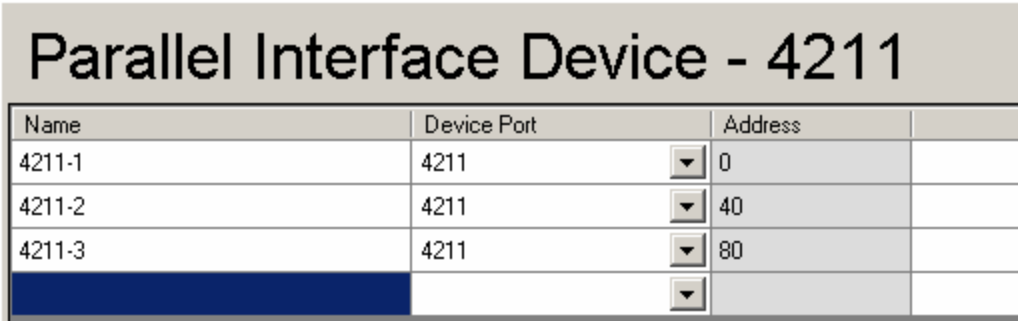
Valid addresses are in the range 0-8195, in multiples of 8.

8. Define GPI units:





8.1. Click on the Parallel Interface Devices "+" menu expansion icon and click on the "4211" menu bar.

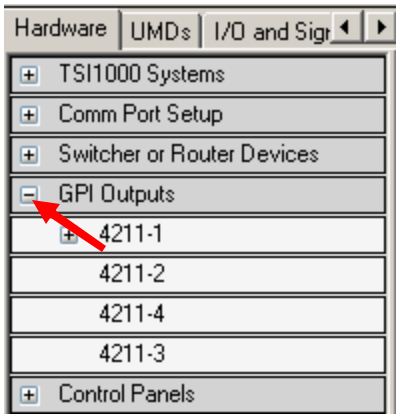


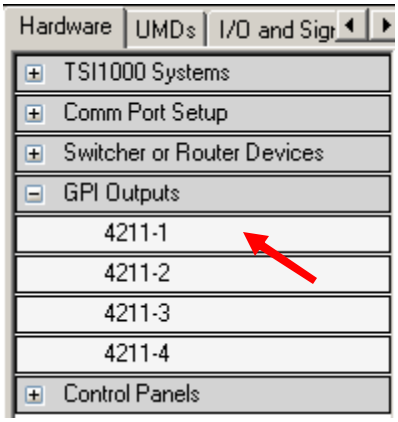
8.2. Type a name for each 4211 unit.

8.3. Select a port for each 4211 unit.

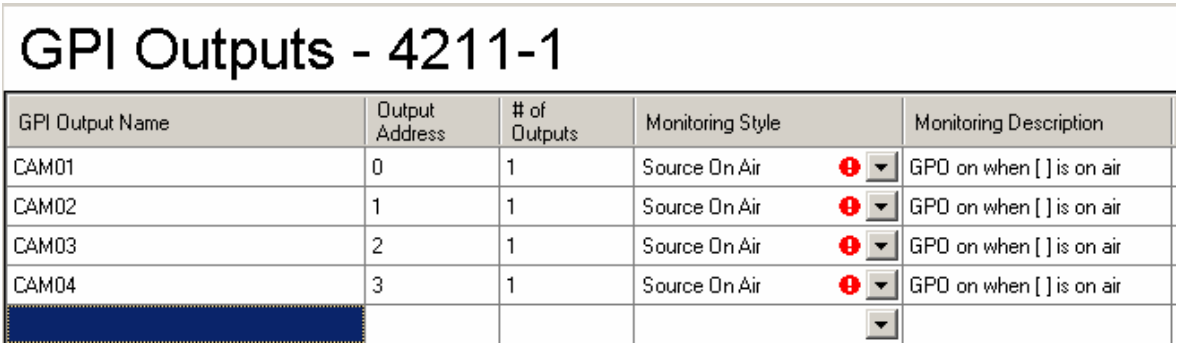
8.4. The GPI address of each 4211 unit is automatically displayed in the Address column.

9. Define GPI outputs:



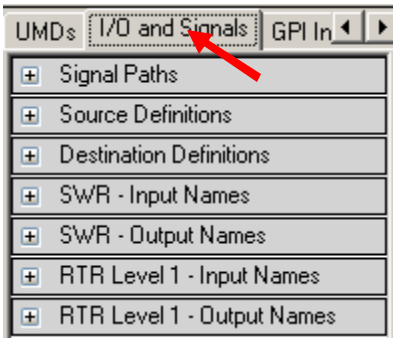


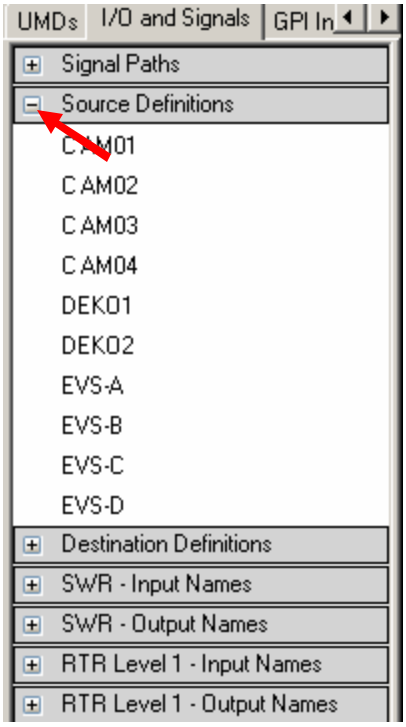
9.1. Click on the GPI Output "+" menu expansion icon and click on a sub-menu bar to pick one of the previously defined GPI units. This will open the GPI unit editor.



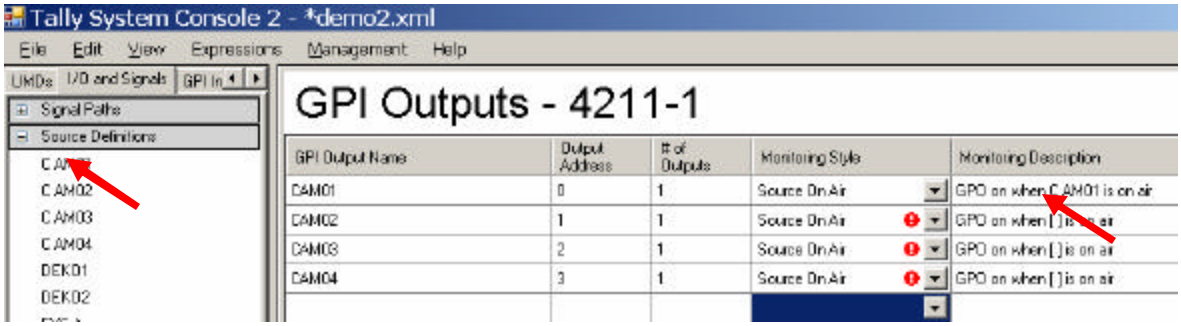
9.2. For each GPI output enter a name, a zero-based GPI output address number, and "1" for the number of outputs.

9.3. For each GPI output select a monitoring style. The monitoring style selects the logical behavior of the GPI outputs. Typically the "Source on air" monitoring style is used to fire the GPI output when a source associated with the GPI output goes on air.

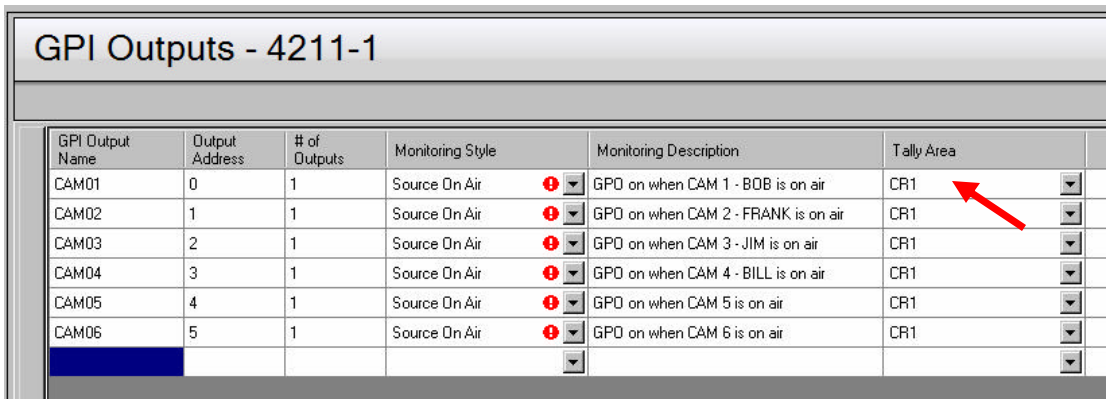




9.4. Click on the “I/O and Signals” tab, the “Source Definitions” “+” menu expansion icon to open the list of sources.



9.5. Drag a source from the Source Definitions list to the Monitoring Description column of the GPI output editor. Monitoring Description column will automatically change to reflect the source that is now associated with it.

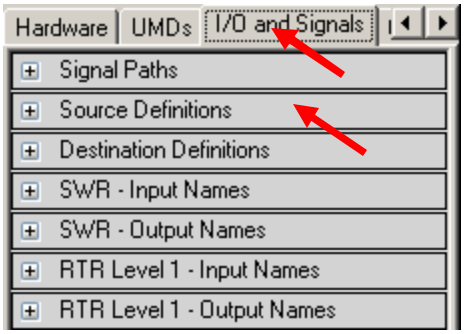


9.6. For each GPI output select the tally area. The tally area determines which control room will control this GPI output; when the control room in this tally area takes the source assigned to the GPI to air, the GPI output is turned on.

Background: The tally areas are defined under Plant Layout > Tally Areas. A tally area is set up automatically when a production switcher is created in Hardware > Comm Port Setup > Production & M/C Switchers.

10. Changing Source Names:

Each source has an identifying name which is not normally displayed on UMDs, and a long and a short name which are displayed on UMDs. Changing a long or short name changes the appearance of the source name wherever it appears on any UMD. Whether the long or short name is displayed in a given UMD depends on the monitoring style selected for the given UMD.



10.1. Click on the "I/O and Signals" tab, and click on the "Source Definitions" menu to open the Source Definitions editor.

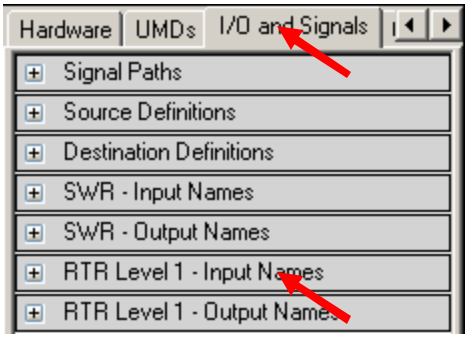
Background: Signal sources that more than one router or switcher inputs are required to be in the Source Definitions table. Other signals (feeding only one router or switcher input) may be entered into this table for consistency, which, for the purpose of making name changes, has the advantage of having all sources in one table.

Source Definitions

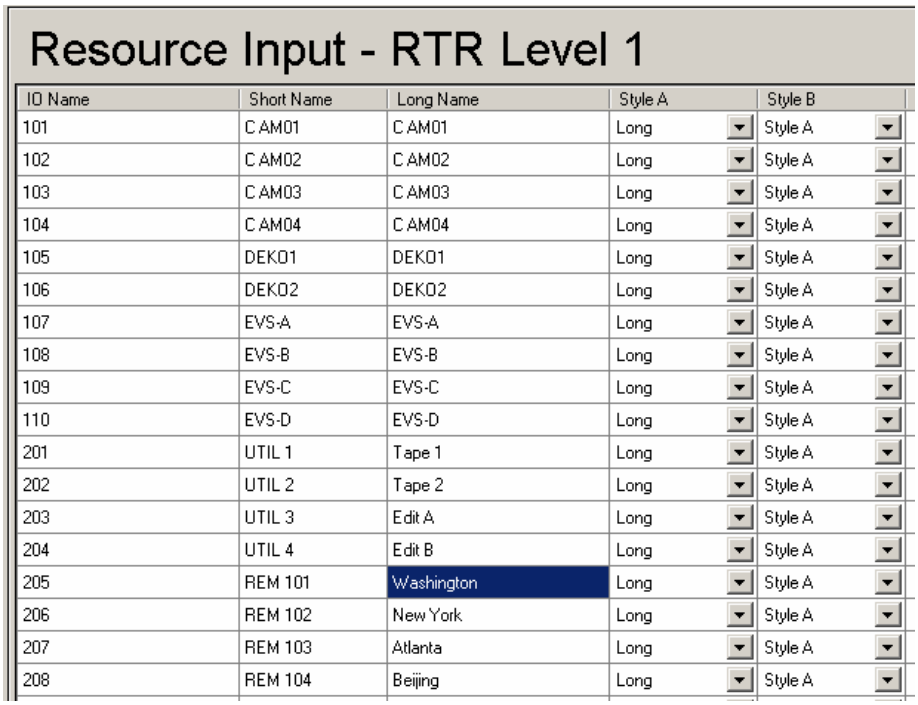
Source Name	Short Name	Long Name	SWR Inputs	RTR Level 1 Inputs
CAM01	CAM 1	CAM 1 - BOB	1	101
CAM02	CAM 2	CAM 2 - BILL	2	102
CAM03	CAM 3	CAM 3 - FRANK	3	103
CAM04	CAM 4	CAM 4 - JOE	4	104
DEKO1	DEKO 1	RED	5	105
DEKO2	DEKO 2	GREEN	6	106
EVS-A	SERVER A	COMMERCIAL A	7	107
EVS-B	SERVER B	COMMERCIAL B	8	108
EVS-C	SERVER C	PLAYOUT 1	9	109
EVS-D	SERVER D	PLAYOUT 2	10	110

10.2. Check that the device input to be renamed is in one of the router or switcher input columns. If so edit the long and short names for that input.

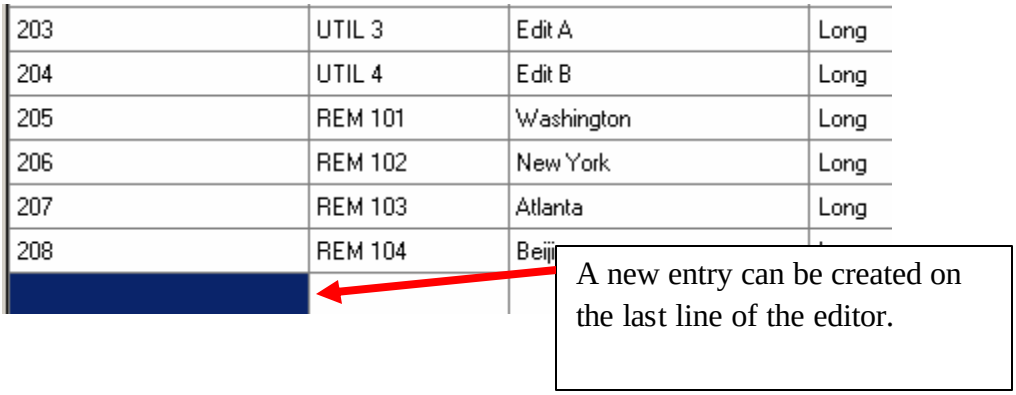
Background: The router and or switcher input columns are created dynamically as different routing and switching devices are defined in the system (in the Hardware > Switcher or Router Devices menu). The values in these columns specify the particular device inputs that a signal source is feeding.

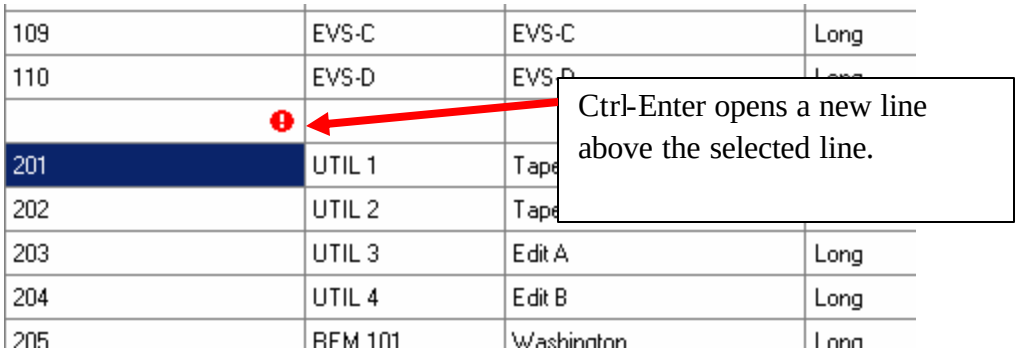


10.3. If the input is not in the Source Definitions table, click on the "I/O and Signals" tab, then click on the menu bar for the router or switcher to which the input belongs. This will open an editor for the router or switcher inputs.



10.4. If the input already exists in the table, edit the long and short name.





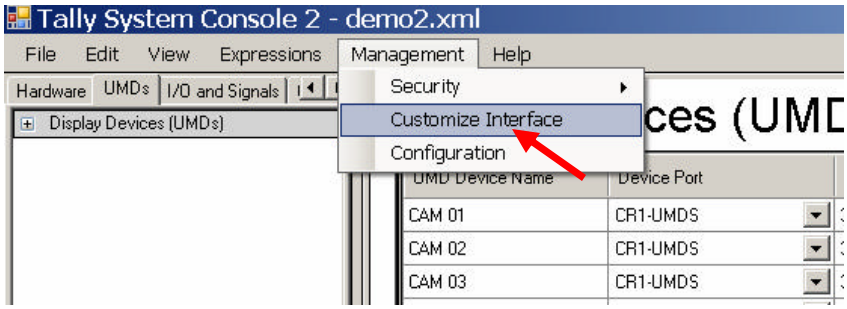
10.5. If the input is not in the table, type a new input name or number into the "IO Name" column on the last row of the editor, or press Ctrl-insert to create a new line, then enter the number IO name.

10.6. For the new input, type in a new short and long name. The style A and Style B setting can usually be left at the respective default settings of Long and Style A.

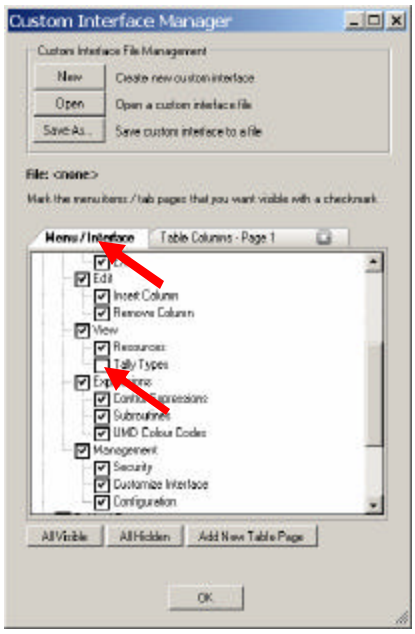
11. Customizing the Interface:

The Tally System Console deals with many details of configuring a tally system, but a lot of these details are unnecessary for the many day-to-day operations or for some common engineering tasks. To give different facility departments access to only the tools needed for their application, the Tally System Console can customized to delete unused menus, editors and editor columns. For example production personnel may need to change source names but may not need to edit UMD monitoring styles.

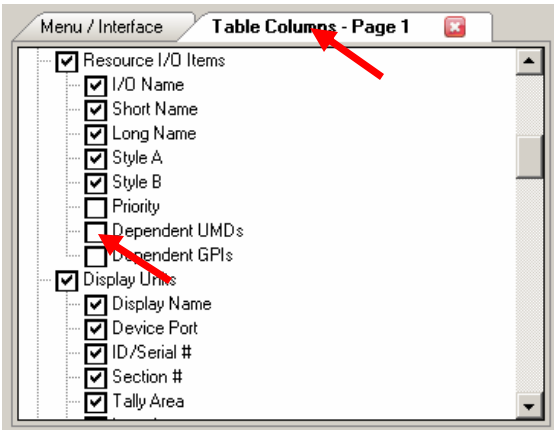
11.1. If an editor is going to be customized, navigate to the editor using the left pane menu tree.



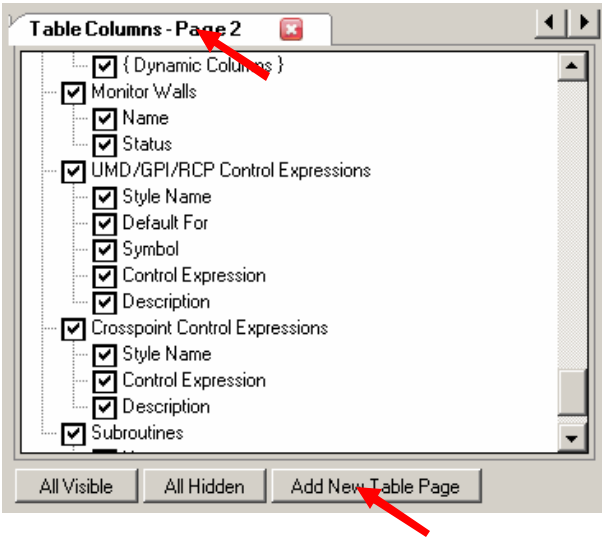
11.2. Click on Management > Customize Interface.



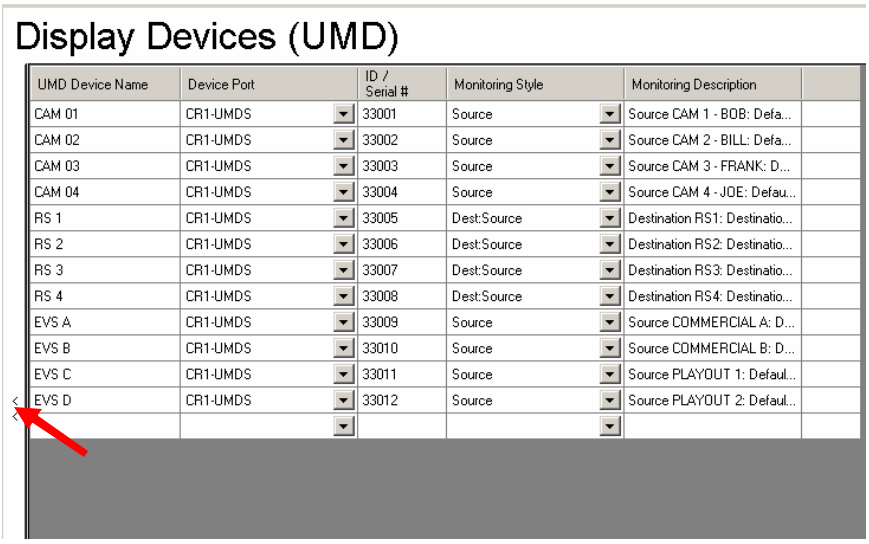
11.3. To remove menu items, click on the Menu Interface tab and uncheck the items that are not needed.



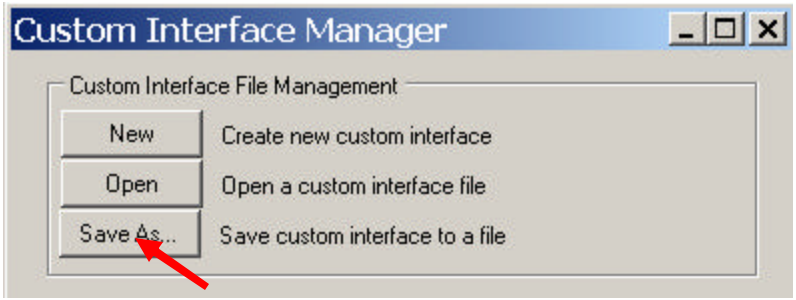
11.4. To remove an editor or to remove columns from an editor, click on the “Table Columns” tab then uncheck column items from the appropriate editor branch of the checkbox tree.



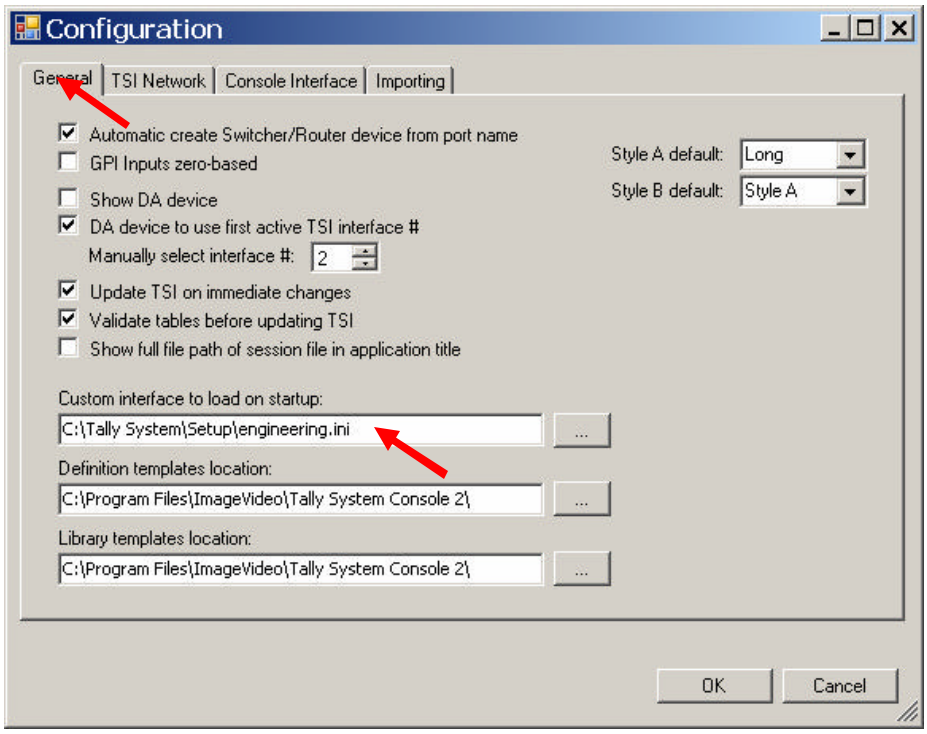
11.5. To create custom pages within the current an editor, click “Add New Table Page”, then edit the column checkboxes to add or remove columns within the page.



11.6. Later on when using the custom interface, added custom pages will be selected by clicking on the vertical control bar to the left of the editor.



11.7. When done customizing the interface, click “Save as…” to save the customization changes to a file, then click OK.



11.8. To assign the customization file to be used automatically next time the Tally System Console is opened, click Management > Configuration > General and enter the file path in the "Custom interface to load on startup" field and click OK.

11.9. Exit and restart the Tally System Console. The customization changes will take effect.

11.10. Customization files can be passed as command line parameter to the Tally System Console application, which allows different batch files to be used to easily invoke different customizations of the Tally System Console.