

## vsmStudio - Change Log and Version History

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### INTERNAL ONLY, until released by QA!

**NOTE:** Unless states otherwise, this version is to be considered a Release Candidate and should be used with care. Please, report any abnormalities and send any dump files via <http://www.vsmStudio.tv/upload.aspx>.

**NOTE:** Beginning with B1506, the Unicode builds are no longer backwards compatible with the non-Unicode builds. Common changes and fixes will continue to be listed together.

**FFC:** This indicates a "File Format Change", which means that the resulting configuration files are possibly not backwards compatible. Always backup storage folders before updating.

### B1932, 2014-06-12

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#### Release Fix 14.1.1

- Fixed: Keep-alive for Ember+ had been disabled (Regression in B1843).
- Changed: Protocols attached to virtual layers, now see "primary" and not "primary with internal" signals.

### B1931, 2014-06-05

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#### Release Version 14.1.0

### B1930, 2014-06-03

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#### Release Candidate for 14.1.0

- Fixed: pro-bel sw-p-08 with variable length labels would have offset when the last label did not fit into the message block and a block split had to be performed.
- Changed: Finalized support for nVision's "Crosspoint Status Message" aka spontaneous update message.

### B1927, 2014-05-27

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#### Release Candidate for 14.1.0

- Fixed: The persistent option for newly created GPIs would be randomly greyed out.
- Fixed: Gadget Parameters with Ember+ formulas would be recompiled every time.
- Added: Inserted formula calculation into parameter stream distribution path.
- Added: Show source only option for cross point buttons.

### B1926, 2014-05-22

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#### Release Candidate for 14.1.0

- Fixed: If a user configured overlapping GP-I/O ranges, e.g. by misplacing tally signalling areas, changes to one range could retrigger calculation of the other range. This could, in some cases result in endless recalculations.
- Fixed: K-Frame tally protocol: eDPM was not tallied correctly.
- Changed: K-Frame Tally protocol: No longer tally secondary (BNC\_K) on engineering sources.
- Changed: K-Frame Tally protocol: Added logical source tally (starts at base + "Physical Inputs").

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**NOTE:** Adjust Physical Inputs to next higher “round” number, e.g. 192 -> 200, to make calculation easier.

- Changed: K-Frame tally protocol: Changed authentication identifier to include L-S-B [...].
- Removed: K-Frame Tally protocol: Some legacy attributes that no longer are used were removed.

### B1923, 2014-05-19

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#### Release Candidate for 14.1.0

- Fixed: With some firmware versions of the nVision router, a packet loss would be incorrectly detected.

### B1921, 2014-05-15

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#### Release Candidate for 14.1.0

- CID#2014-12376: If an object e.g. a GPI is deleted while a component drop control is displaying this object, a crash would occur when moving the mouse over the control afterwards.
- QVS-41427: Rotate target buttons would not show selection when the button’s target is locked.
- Changed: Locking for panel button image resources.

### B1919, 2014-05-09

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#### Release Candidate for 14.1.0

- Added: Exclusive Signal Lock.
- Added: Display of the signals exclusive lock owner on target and cross point buttons.  
**NOTE:** Latest vsmPanel build required to display extended lock information on vsmPanel.
- QVS-41404: The “Find Next” button in the matrix view’s find dialog would not advance selection to the next found item (Regression in B1914).
- QVS-41418: Setting the “automatic” option on a target button would cause incorrect display with source.
- Fixed: Closing the application would cause crash (Regression in B1918).

### B1918, 2014-05-07

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#### Release Candidate for 14.1.0

- Fixed: Editing the port properties of a protocol would cause crash (Regression in B1917).
- Fixed: The “connect to blind” option in matrix header context menu never became enabled.
- Fixed: The option in the matrix header context menu, to see who has locked a target and unlock a lock by a specific origin had disappeared.

### B1917, 2014-05-05

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#### Release Candidate for 14.1.0

- QVS-41368: Buttons with format strings were not correctly displayed when, after e.g. a page change, the button would still have the same format string.
- QVS-41389: Limited the active area which triggers a re-evaluate of a GPO to the actual logic matrix.
- Fixed: Modified parameter enumerations might not work if no modified name is specified (Regression in B1899).
- Fixed: When GVG protocol reports contribution on MEs not previously reported by the protocol’s config command, this could cause a crash.
- Added: Option to ignore card status on pro-bel sw-p-08 protocol. This can be required if the 3<sup>rd</sup> party device incorrectly answers the “Dual Controller Status Request Message” (also used as a keep-alive message) with an incorrect “Dual Controller Status Response Message” (Devices that do not support dual controller cards should only ACK the message, but not send any response).
- Fixed: The OS might induce worker threads into the running system which might use read / write locks. The read / write locks cannot detect that these worker threads have terminated and therefore could not free the

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allocated management chain, eventually causing the whole system to slow down. Using system thread completion hooks, these entries are now marked abandoned and are removed when the read / write lock is next entered.

### B1914, 2014-04-28 (FFC)

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#### Release Candidate for 14.1.0

- CID#2014-12301: Potential race condition when accessing picture storage within the View Target button.
- QVS-41344: The disconnect operation, accessible e.g. via the “blind” button, is not correctly delegated.
- QVS-41369: The mimic enable GPI assigned to a panel was not correctly saved.
- QVS-41330: Manual bulk selection after using the find function in the matrix view did not work as intended.
- Migrated the Image Video UMD protocol to the generic UMD framework. This changes the refresh logic from bulk to message based.
- FFC – “Panels”

### B1911, 2014-04-16

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#### Release Candidate for 14.1.0

- CID#2014-12281: Possible race condition in gadget parameter registration.
- CID#2014-12290: When the OS does not return a DC, the button rendering might crash.
- QVS-41333: When connection which required pool signals and tie-lines is made, it was possible that the system would identify the tie-line only route as the more efficient path and therefore not insert the pooling.

### B1910, 2014-04-08

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#### Release Candidate for 14.1.0

- Fixed: In really improbable rare cases, a bug in MFC could cause a configuration file to become unreadable.
- Fixed: An unnecessary large amount of expired notification queues could acuminate over time. The clean-up threshold was lowered significantly.

### B1909, 2014-04-04

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#### Release Candidate for 14.1.0

- Added: After selecting multiple buttons in the panel editor, it is now possible to right click a button and to choose the menu entry “copy style”. This will open a dialog where it is possible to select which style elements should be copied from the button last selected to the buttons selected prior.

### B1908, 2014-04-03

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#### Release Candidate for 14.1.0

- QVS-41332: In some cases the interface to the vsmPanel would send e.g. colour information for a blank/empty button to the vsmPanel when returning from a page which contained a valid active button on that page, causing the vsmPanel to display e.g. a visible yet transparent button.
- Changed: While holding the shift key for multiple selection, the previous selected items are no longer deselected when accidentally clicking into empty space.

### B1907, 2014-04-02

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#### Release Candidate for 14.1.0

- Fixed: GVG Ethernet Tally protocol engineering source mapping.

### B1903, 2014-03-28

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#### Release Candidate for 14.1.0

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- Fixed: GVG Ethernet Tally protocol might crash if the source is unknown.

### B1900, 2014-03-24

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#### Release Candidate for 14.1.0

- Added: Inbound for Leitch “Pass-Through” protocol.
- Added: Inbound for Leitch “Terminal” protocol: XPOINT command only.

### B1899, 2014-03-21

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#### Release Candidate for 14.1.0

- CID#2014-12166: Potential race condition in the event trigger map could cause crash.
- Fixed: Typo in gadget parameter (Regression in B1893).
- Fixed: If an Ember provider sends a falsely formatted enumeration string containing a trailing newline, this would be interpreted as a valid possibility (Regression in B1883).
- Fixed: The parameter information in configuration files pre B1834 would be converted incorrectly and would effectively change any regular parameter values into a (incomplete) enumeration (Regression in B1834).
- Fixed: Potential deadlock when storing reporting events during start-up.
- Fixed: Possible race condition in stage nexus 5 protocol.
- Added: State change detection in Toggle Module, which prevents double toggles when the e.g. the server synchronization is delayed.

### B1894, 2014-03-18 (FFC)

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#### Release Candidate for 14.1.0

- Fixed: Bug in Trace subsystem, which could under certain conditions cause serialization of overall execution.
- Added: Additional debug information to analyse self-monitoring dumps.

### B1893, 2014-03-17 (FFC)

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#### Release Candidate for 14.1.0

- Fixed: K-Frame Tally protocol was not detecting some changes correctly.
- QVS-41300: Added nVision asynchronous notifications.
- Added: Direct group transition option for the toggle logic module. This will trigger the connection to the associated source (field above) when the current source is none of the sources in the associated row of sources (row above).
- Added: output to log and CommTrace when there are EmBER+ framing errors.
- FFC – “Toggle Logic Module”

### B1891, 2014-03-04 (FFC)

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#### Release Candidate for 14.1.0

- QVS-41273: The drag action, out of the module view, does not drag the expected item.
- QVS-31154: Possible fix for broken linkage when routing complex pooling via tie-lines.
- CID#2014-12090: Resizing a frame could cause a crash when resized to the “remove” size.
- CID#2014-12086: Selecting sources and targets for diagonal connect in matrix might cause freeze if the target size was smaller than the source size and none of the selected sources are numerically within the target size.
- Fixed: Events which contained references to storage discs would not serialize these to other servers as reference but as actual storage disks. This could cause a crash when both event and storage information arrived at the server at the same time (this might also have also applied to storage disks containing storage discs, but has not been reported as to date).
- Fixed: Parameter Split module did not convert back to user format before applying to other parameters.

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- Fixed: In target-to-target mode, the targets were only checked if they have a source, not if the source was connectable to the selected target. Also, it did not highlight the current connected “source”.
- Fixed: When editing the channels on the scheduler page item, the list would jump to beginning when changed.
- Fixed: When a remove host repeatedly allows a connection and then immediately closes it, it was not possible to correctly delete a communication port.
- Fixed: Race condition within enumeration parameters.
- Fixed: Loss of modified enumerations information when refreshing parameter tree.
- Changed: Image page item will load old configuration files as DPI adjusted to account for backward compatibility with latest vsmPanel version.
- Fixed: Trace output for DAS did not correctly grey inactive if/else phrases.
- Fixed: Race condition in text page item DAS handling.
- Added: Extra timing information to server status window.
- Fixed: Typo in getPicture function that could cause memory corruption.
- Fixed: Typo in DAS Parser, which caused commands following “if” blocks to not execute (Regression in B1890).
- FFC – “Image Page Item”
- FFC – “Gadget Parameter”

### B1883, 2014-02-13

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#### Internal Only!

- Fixed: General clean-up of the Ember+ and Ember+ matrix handling path, to resolve “lost layer association” and other e.g. enumeration related problems issue

### B1882, 2014-02-12

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#### Internal Only!

- Added: Mimic Enable option in the panel properties. This allows control of the mimic button functionality on a panel scope. The mimic buttons are assignable when the field is empty or the specified GP-I/O is set.
- Fixed: Using both the generic Axon protocol and the Axon HQW09 protocol at the same time, would cause crash when the ports are reset or closed.

### B1881, 2014-02-11

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#### Internal Only!

- Fixed: Bug in observer acquire function. This could result in e.g. GPOs not seeing changes to parameters.

### B1880, 2014-02-11 (FFC)

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#### Internal Only!

- Fixed: Timer with “Timer Stops at Timeout” not checked would not display correctly on panels when the timeout was 00:00:00.
- Fixed: On AM/PM systems, the time entry fields were using the wrong time format.
- Fixed: In some cases the observer list overwrote the referencing list (Regression in B1869).
- Added: Support for “flow layout” on vsmPanel.  
**NOTE:** updated version of vsmPanel required for this to work.
- Added: Send information for signals with “no loopback” to vsmPanel.  
**NOTE:** updated version of vsmPanel required for this to work.
- QVS-41274: “Target of Source” buttons were not displaying the target name when using “render by panel”.
- QVS-41206: Added target lock/unlock indication to Quartz native [outbound] protocol.  
**REMINDER:** While not a new effect, please remember that attempting to connect an invalid or out of range target does not result in any response from the router and therefore stalls the communication. Therefore care must be taken to only have targets (and source) configured that actually exist on the router and are

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switchable. As, as an extra twist, the router might return a seemingly valid source when interrogated about an invalid target.

**NOTE:** The quartz lock works across layers, e.g. locking video target 5 will also lock audio target 5 and so on – there is no distinction on the router side. As the actual behaviour is as to date unknown, locking will only be communicated on the video layer.

- Added: Support for dedicated disconnect (D/C) signals.

**NOTE:** Only relevant for router protocols with dedicated disconnect support. Also the protocol implementation must support it (currently only the Ember+ matrix).

- FFC – “Signal”

### B1877, 2014-01-30

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#### Internal Only!

- Fixed: Routing signals with multiple source layers could fail when routing via a virtual signal without matching multiple source layers.
  - Fixed: Record mode would end and restart when pressing the record button.
  - Added: Escape button will also abort record mode.
  - QVS-31141: Inconsistent state colouring of storage buttons.
  - QVS-41219: Command parameters might differ between text state and colour state in rare cases.
  - QVS-41254: Added missing numeric support for value edit fields.
- NOTE:** updated version of vsmPanel required for this to work.

### B1876, 2014-01-29

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#### Internal Only!

- Fixed: Additional fix for signal/state deadlock (Regression in B1869).
- Fixed: Typo in name for Harris LRC mapping file.
- QVS-41204: Added redundant card support for pro-bel / snell sw-p-08 protocol.
- QVS-41205: Added option to switch between normal and coherent take command for the nVision protocol.
- QVS-31115: Changed the “Source Label” option to “Preferred Label” and fixed label usage inconsistencies when using the “Display Source Only” option.

### B1874, 2014-01-24

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#### Internal Only!

- Fixed: It was possible to crash the Sony gain control module by supping illegal values to it.
- Possible fix for race condition within a parameters enumeration handling.
- Possible fix for various deadlocks resulting from the changes made to fix the performance issues (B1869).
- CID#2014-11844 - Fixed: Race condition when the root connectors of a gadget changed.
- Changed: The Harris LRC protocol has been changed to a map to signal names schema, as the index logic in the Harris is subject to spontaneous changes e.g. when cards in the router are added or removed.
- QVS-41214: The signal hard lock state was not aggregated into the lock state displayed on panels.
- QVS-41191: The URL of a browser page item was not copied when a panel was copied.
- QVS-31163: Use the parameter’s alias as name display on vsmPanels.
- QVS-31137: The lock state on target buttons using the display source attribute was not visible. Also on vsmPanels the button did not dim.
- Added: Show referring components (used by) in CommTrace when executing the “prune” command.

### B1869, 2014-01-16

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#### Internal Only!

- Increased self-monitoring timeouts for the I/O lanes.

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- Fixed: Performance issue on large dependency clusters.
- Fixed: Some component interaction issues.
- Added: Mimic buttons with an auto target button assigned to it will automatically select the target.
- QVS-31143: Support for passing real values though “parameter split” module.

### B1865, 2014-01-07

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#### Internal Only!

- Fixed: When updating from old configuration with old scheduled events files, the storage files would not be updated if no changes to the contained events were made, thereby rendering the file unreadable on restart.

### B1864, 2013-12-13

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#### Internal Only!

- Fixed: The Axon connection would show “unknown state” when only connected to TCP/IP able Axon frames.

### B1862, 2013-12-09

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#### Internal Only!

- Changed: Grass Valley Ethernet Tally – Polling Frequency.

### B1861, 2013-11-28

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#### Internal Only!

- Added: Grass Valley Ethernet Tally.
  - Added: Changes to tie-line / virtual signal interaction.
  - Added: Server isolation
  - QVS-31153: Rotate source button did not render correctly, when a panel was set to “render by vsmPanel”.
  - QVS-31159: Some button updates were not correctly passed to the buttons (Regression in B1852).
  - Added: Display source option for rotate target buttons.
  - Added: Streaming of byte arrays with stream identifiers.
- NOTE: Required vsmPanel version 3.0.111 or higher to operate correctly.

### B1857, 2013-11-07

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#### Release Candidate for 14.1.0

- Changed: Sony tally via editor port: Retrieval behaviour after communication problems and timeout timings.
- Fixed: The vsmStudio was sending page updates due to signal connection changes too fast, effectively overrunning the vsmPanel.

### B1856, 2013-10-30

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#### Release Candidate for 14.1.0

- QVS-30876: Added support for new axon frames which support TCP/IP.  
**NOTE:** When a frame is recognized as TCP able, the vsmStudio adds this frame as TCP able to its list of known frames. UDP only devices are not automatically added, as this would cause extra stress on these devices during start-up. The list of known frames can be edited via the port properties dialog.
- QVS-31139: One of the panel layouts would no enable the OK button.
- Added: Disconnect option for Harris LRC protocol. Settable via protocol attribute “Disconnect Source”. Default is -1 (disabled).
- Fixed: Removed crossover between the attributes for pro-bel sw-p-02 and pro-bel sw-p-08.
- Fixed: Race condition which could lead to wrong pictures on buttons for gadget parameters.
- Fixed: Possible fix for race condition when resolving referring components.

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- Fixed: In specific situations an operations that replaced / deleted a storage bin could cause a crash.

### B1852, 2013-10-24

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#### Release Candidate for 14.1.0

- FRQ-31100: Add the hardware's IP address to the button press and release log information.
- Fixed: Race condition between DAS parser destruction and component notification manager.
- Fixed: Crash if boxed storage is loaded into a non-existing or deleted space.
- Fixed: Possible race condition when creating internal signals.
- Added: Compensate for the strange behaviour of the Harris LRC protocol.
- Added: "dump events" telnet command.

### B1850, 2013-10-18

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#### Release Candidate for 14.1.0

- Added: Label Name transfer for vsmPanel.
- Added: Unicode and UTF-8 support for TSL 5.0.
- Added: Joined Panels.  
**NOTE:** Requires LBPxx Firmware 2.23 or higher.  
**WARNING:** Using the panel link button on joined panels will lead to split panels and is therefore not supported.
- QVS-31130 – Parameters with Enums were not correctly displayed when loading configuration files written by older builds (Regression in B1834).
- QVS-31117 – Storage disk content in storage disk view was not updated when record was completed.
- QVS-31117 – Modified or rerecorded storage disks were not synced between servers.
- QVS-31132 – Crash when a Parameter Split Module is added without any parameters.

### B1844, 2013-09-30

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#### Release Candidate for 14.1.0

- Added: Option to enable support for dual or 2 x 8 character UMDs using the TSL 3.1 tally protocol.
- QVS-31098 - The panel editor did not display the description of a Visual Link page item when a page item of a different type was placed on the same panel.
- Test: Value changes on Ember+ streams are not induced as core value changes.

### B1843, 2013-09-20

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#### Release Candidate for 14.1.0

- Added: Option to enable support for dual or 2 x 8 character UMDs using the TSL 4.0 tally protocol.
- QVS-31082 – The opacity slider, value field and color picker did not interact well in the image page item dialog.

### B1842, 2013-09-17

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#### Release Candidate for 14.1.0

- Fixed: DAS keywords "selectedGadget" and "selectedComponent" would return true.
- Fixed: Deleting an event would cause crash.
- Added: The mimic buttons (all) on a panel can now be saved in a storage group.
- Added: Show inbound checksum errors for inbound TSL 4.0.

### B1841, 2013-09-10

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#### Release Candidate for 14.1.0



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- Fixed: Large delay when loading storage groups due to internal duplicate switching via pseudo rule filter. This could trigger self-monitoring.
- Fixed: Text page items and edit page items would lose information when panel was copied or imported.
- Added: Support for inbound salvos in pro-bel sw-p-08 protocol.
- Added: DAS support to text page item.
- Added: Server sync for alarm stack nuisance.

### B1834, 2013-09-09

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#### Release Candidate for 14.1.0

- Fixed: Dropping Timers and gadgets into UMD fields was no longer possible (Regression in B1597).
- Fixed: Re-queued request items, e.g. the item from a storage load request, had strange queue times.
- Fixed: Rare case where the iterator lib could crash when entering an iterator.
- Fixed: The target buttons selection state was not sent to vsmPanel when target was locked.
- Fixed: Excessive storage groups could trigger self-monitoring while loading.
- Fixed: Parameters without identifier strings could not have identifier string added late, causing double entries.
- Fixed: Image page item did not register its attachment.
- Changed: The Z order for buttons and page items in the editor is now more like what is seen on the vsmPanel.
- Added: Text panel page item.
- Added: Ember+ support for “functions”.
- Added: Option to hide the “set label” header on the induce label button in order to make more label space.
- Added: When pressing the ALT key while in the panel editor, the borders of all items is shown and the items can be selected by clicking on the border only. This enables the user to select items that are hidden behind others.

### B1829, 2013-08-29

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#### Release Candidate for 14.1.0

- Fixed: The property dialog for the view page item did not display the view assigned to the page item.
- Fixed: The property dialog for the escape button would allow changing the, in case of the escape button, redundant “deselect active target or component” option.
- Fixed: Possible race condition when configuration is reloaded due to a push from other server while request and report queues are still active.
- Changed: Using the tally offset scheme from the original ImageVideo protocol for the Penta version.
- Added: Pass blink attribute for panel’s encoder bank LEDs.
- Added: New renderer for button images which supports Unicode characters (Japanese, Chinese, Arabic...).
- Added: New “frameless” flat button style.
- Added: Option to control if a button overlay picture get stretched or not.

### B1826, 2013-08-23

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#### Release Candidate for 14.1.0

- Fixed: Resolved the remaining mapping issues with inbound protocol attributes (Regression in B1751).  
**Warning:** While not a new behaviour, just a reminder: Mislabeled attributes which have been manually entered in the configuration GUID section will be read, but changes will be written back to the protocols top section. This might result in the impression that the value is not stored. Remove the misplaced attribute from the protocols’ configuration GUID section to solve this.
- QVS-31064: Some objects were shown as droppable when dragged over the secondary command list even when not droppable.

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### B1825, 2013-08-21

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#### Release Candidate for 14.1.0

- Added: Ember+ added support for parameters of type byte array.
- Added: The image page item can now have a gadget parameter (Requires vsmPanel 3.0.105).
- Changed: Gadget parameter subscription will be processed even when only the parameter identifier is known. Previously, subscriptions required at least a description, formatting, min / max or value.
- Fixed: PESA P2: All cards of a PESA EDXE/DRS Frame should now be visible.

### B1824, 2013-08-21

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#### Release Candidate for 14.1.0

- Fixed: Resolved some of the mapping issues with protocol attributes (Regression in B1751).
- Fixed: Possible fix for a potential deadlock between connection lifecycle management and timer lockout which may occur when removing a protocol.
- Fixed: Possible fix for a crash when attempting to overwrite a write protected file in conjunction with older Windows OS versions.
- Added: Penta specific version of ImageVideo protocol.
- QVS-31056: Enhance visibility of a target's lock state in the matrix view.
- QVS-31051: UMD protocols (e.g. TSL) would not refresh all changed targets when a message delay is specified.

### B1823, 2013-08-13

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#### Release Candidate for 14.1.0

- Possible fix for rare race condition when deleting a panel page group.
- QVS-31045: Some updates to e.g. the gadget parameter list are lost due to design oddity in MFC/windows.

### B1822, 2013-08-09

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#### Release Candidate

- QVS-31014: Default values missing for some attributes of the "Sony S-Bus via ROT 16" protocol.
- QVS-31043: The signal property sheet and new signal wizard would no longer warn if signals were to overlap or were assigned outside the routers signal range.
- Fixed: PESA panels can no longer trigger a panel lock.

### B1821, 2013-08-08

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#### Release Candidate

- Added: "Memory Flood" debug option.

### B1820, 2013-08-07 (FFC)

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#### Release Candidate

- Added: PESA: Added support for 256 channels per audio board and 24 boards.
- Added: PESA: Made some attributes global.
- QVS-31042: Single "Target of Source" Button displays an arrow and no longer works as expected.
- QVS-30973: Added colour mapping for new PBPxx panels.
- QVS-30975: Added support for the Encoder LEDs.  
NOTE: Panel Firmware 2.23 (contained in vsmGear Firmware Pack build 13) or newer required.
- Added offset for buttons controlling the Encoder LEDs.
- FFC – "Panel"

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### B1816, 2013-07-23

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#### Release Candidate

- Added: PESA-Proxy: Panel type: “panel-rcp-128x” for panel with more than 127 buttons.
- Added: PESA Direct Router Control: Added support for EDRS devices.
- Fixed: When the “last caller” status changed while the last caller button is still pressed, it was possible that the last return call was not canceled when the button was released.

### B1815, 2013-07-19

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#### Release Candidate

- Added: Extended the limit for PESA panels on PESA proxy to 32.
- Added: Grass Valley Group, Ethernet Tally protocol.
- QVS-30945: Enforce unique channel names when creating new channels.
- QVS-31006: DAS phrase “{signal} / connected to blind” which results in the connected blind signal or {null} if the source is not the blind signal.
- Added: Support for the new PBP44 push button panel.
- Fixed: The backspace did not work correctly when using the telnet command line history buffer.
- Fixed: It was possible to manually select a tie-line as a signal’s source in the matrix view.
- QVS-30951: The multi-target buttons would incorrectly overload the status button (Regression in B1811).
- QVS-30974: German Tooltip for timeline.
- Fixed: The MX34 module might crash when the resource view is modified.
- QVS-30953: Fixed: Possibility that a cross point button would not display a connection after system restart where the cross point was established via tie-lines and the router happens to report the targets in the, subjectively, wrong order.

### B1814, 2013-07-08

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#### Release Candidate

- Fixed: Possible crash when multiple signals with asymmetric source layer assignments, e.g. previously set and removed assignment, are selected while accessing the advanced popup menu in signal path list view.
- Fixed: Possible crash when using the “blind return” feature with a mismatched pseudo rule layout.
- Fixed: Possible crash when using the “master” attribute on a lock button (Regression in B1811).
- Fixed: Possible crash when clearing the assignment of a mimic button (Regression in B1804).

### B1813, 2013-07-04

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#### Release Candidate

- Added: Persistent GPOs.  
**WARNING: Persistent GPOs are purely intended for memorizing states for visualization and other state based usages.** Do not use persistent GPOs to perform event based operations like setting cross points, as a server might load its latest known state before receiving the current latest state from the other servers in to zone. Though the state, in the end, will always reflect the correct current state in the zone, the server might trigger a state change when transiting from its last state to the zones last state.
- Added: Ember+ support for basic matrix operations.
- Fixed: Crash when entering a protocol’s attributes property page when a protocol did not have any attributes.
- Fixed: The image video protocol might lose the “VGPI-Offset” setting (Regression in B1751).

### B1812, 2013-07-01

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#### INTERNAL ONLY

- Added: Pesa Perc2 protocol – added output of protocol messages when trace is enabled.
- Pending: Persistent GPOs.

## vsmStudio - Change Log and Version History

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### B1811, 2013-06-26 (FFC)

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#### INTERNAL ONLY

- Added: Additional shutdown warnings for live servers.
- Added: "Rotate through sources or targets" button function. This allows to rotate through a list of signals defined by a view.
- Added: The use of page items and other vsmPanel specific buttons must be enabled by user i.e. when creating the panel ("Allow vsmPanel specific buttons and items").
- Added: Internal change that i.e. will allow DAS assignments for the "queue" button.
- Added: DAS keywords "queue" and "next" for access to a target's queue. E.g. "SelectedTarget / Queue : next". The queue should be qualified by the keyword "next" or with a number identifying the position in the queue, where "1" is equivalent to the keyword "next".
- Added: The "persistent" and "set to true on start-up" GP-I/Os attributes are now protected against drag and drop resetting the attribute.
- Fixed: Copying a panel would not copy the 3<sup>rd</sup> party panel layout identifier.
- Fixed: Possible race condition when opening a panel with pending update notifications.
- FFC – "Panel"
- FFC – "GP-I/Os"

### B1807, 2013-06-24

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#### INTERNAL ONLY

- Added: The location information in the name of dump files is now normalized against ASLR.
- Added: "Only others" lock option on panels. This locks the e.g. target for everybody but the panel from which the lock was issued.  
**NOTE:** The "only others" lock is not supported for locked pooling and tie-lines signals.
- Added: Added the possibility to configure the "Strobe" value and the "Sync" flag for the PESA Perc2 protocol. Both parameters are required by the switch command.
- Added: TAKE button option "Automatically Select Previous Source". This will automatically select the previous source of a target whenever the take button is pressed and the take operation was successful. This enables building a manual chop functionality.
- Possible fix for the "express on updated event" problem.

### B1804, 2013-06-07

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#### INTERNAL ONLY

- Added: After importing a panel into a configuration that is missing e.g. signals contained in the imported panel, the panel editor now will maintain the visual properties of the button when an object of the same type is dropped onto the button.
- Possible fix for the crashes caused by the "express on updated event" problem.
- Fixed: MPK proxy was overwriting settings.

### B1802, 2013-05-24

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#### INTERNAL ONLY

- QVS-1056: The attribute "Use Axon Frame Names" was not correctly retrieved and editable.
- Fixed: The n:n connections on a virtual signal acting as a port group were not correctly synchronized.
- Modified: Changed the storage group load and save execution to be in-line with the execution queue.
- Modified: Changed the storage group synchronization between servers.
- Added: Storage Group Load, Save and Sync are now logged and delegated when needed.

## vsmStudio - Change Log and Version History

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- Added: Display n:n in the info signal list view's info column for n:n targets.
- Added: Display n:n in the matrix header for n:n targets.

### B1801, 2013-04-30 (FFC)

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#### INTERNAL ONLY

- Changed: Removed superfluous calls to MapObject during archiving.
- Fixed: The assignment remove field was missing in the signal's connection tab, if there were more than 50 possible ports.
- Fixed: The unified UMD protocols would strip the mask component of the tally map entries.
- Added: The MNOPL protocol can now override that only the active of a linked pair will handle outbound connects.

### B1473, 2013-04-29

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- Added: option to repair Danish characters when modified by vsmPanel running with false code page.

### B1800, 2013-04-23

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#### INTERNAL ONLY

- Fixed: Typo in the Z-Protocol.
- Added: "MNOPL Proxy Router Change" message support and re requesting silence states when received.
- Added: Periodic status query as keep-alive to TSL Tally protocol.

### B1799, 2013-04-18

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#### INTERNAL ONLY

- Added a 50ms delay to the multi apology module when auto recovering on source change.

### B1798, 2013-04-18

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#### INTERNAL ONLY

- Fixed the support for redundant ember providers.

### B1797, 2013-04-15

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#### INTERNAL ONLY

- Fixed: Possible fix for false silence states if the monitored silences became active before the multi apology module goes online.

### B1796, 2013-04-12

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#### INTERNAL ONLY

- Added: "Recover on primary source change and suspend silence detection" option for the multi-source apology module.
- Fixed: Possible race condition between the reporting queue deleting queue entries, and functions using the "getReferringComponents" function.
- Fixed: Removed stale debug code that would lead to crash when adding new GP-I/Os (Regression in B1792).

### B1795, 2013-04-11

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#### INTERNAL ONLY

- Changed: Suppress the null messages in the Nexus 5 protocol when operating in UDP mode.
- Added: Linear Mode for Audio Monitor Module.

## vsmStudio - Change Log and Version History

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### B1794, 2013-04-09

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#### INTERNAL ONLY

- Added: Possible workaround for asynchronous alarm states.

### B1472, 2013-04-09

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- QVS-919: "Blind" panel button in combination with a "Take" button, will perform a connect operation ahead of the disconnect operation.

### B1793, 2013-04-04 (FFC)

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#### INTERNAL ONLY

- Added: Workaround for alarm monitoring initiation problem in the nova 73.

### B1792, 2013-04-03 (FFC)

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#### INTERNAL ONLY

- Fixed: It was possible that exported panels would store non panel related components, which would then be imported into other configurations without actually being part of the active structure. This might lead to strange effects and could potentially cause terminal damage to the configuration.
- Added: Option to add static component references for panels in the panel property dialog, which are accessible via DAS using the variables: \$panel.SR1, \$panel.SR2 and \$panel.SR3.
- FFC – "Panel"

### B1791, 2013-04-02

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#### INTERNAL ONLY

- Fixed: The pseudo device layer flags were not transferred correctly between systems for delegated execution.

### B1790, 2013-03-28

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#### INTERNAL ONLY

- Fixed: Formatting error in the Stagetec Matrix 5 protocol.

### B1788, 2013-03-26 (FFC)

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#### INTERNAL ONLY

- Added: Option to suppress execution of pseudo device rules when connect comes from a virtual layer.
- FFC – "Layer"

### B1787, 2013-03-25

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#### INTERNAL ONLY

- Added: UDP transport layer support for Stagetec Matrix 5 protocol.  
**WARNING:** Due to the way the Matrix 5 protocol works in UDP mode, enabling trace on this protocol will cause massive problems. If this protocol must be traced, minimize the CommTrace window when large amount of trace output regarding Matrix 5 is expected (or trace to file).

### B1786, 2013-03-23

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#### INTERNAL ONLY

- Fixed: Lawo MNOPL protocol - Synchronized stream IDs across multiple connections with same mapping file.

## vsmStudio - Change Log and Version History

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### B1785, 2013-03-21

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#### INTERNAL ONLY

- Fixed: Added native Boolean support for gadgets to implement support for Ember+'s Boolean type.

### B1784, 2013-03-19

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#### INTERNAL ONLY

- Fixed: Problem with real encoding in Ember+.
- Fixed: Inbound ports could no longer access configuration data (Regression in B1777).
- Fixed: Possible deadlock when deleting a panel.

### B1783, 2013-03-18

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#### INTERNAL ONLY

- Fixed: Lawo MNOPL – PPM/Correlation bandwidth reduction might cause switching between stream providers and loss of data if the streams only contain static information.
- Fixed: GPI terms with delayed inputs would not be evaluated if the previous input evaluated as false.

### B1779, 2013-03-14

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#### INTERNAL ONLY

- Added: Ross Furio Protocol – Option to refresh tally state every n seconds.
- Fixed: protocols - Attribute value was not stored when changing the radix and current radix was not displayed.
- Fixed: protocols - Added some forgotten "Inputs" and "Outputs" Attributes.
- Fixed: Ember+ - vsmStudio would re-request directory over and over if no online/offline state was sent.

### B1778, 2013-03-12

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#### INTERNAL ONLY

- Added: MNOPL Protocol - Log entries when connection changes active/passive state.
- Added: MNOPL Protocol - Log entry when subscriptions are renewed.
- Added: Module "Apology Multi Source" – extra de-bouncing.

### B1777, 2013-03-08

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#### INTERNAL ONLY

- Added: Toggle Logic Module. Can be used to simply building e.g. multiple toggle button functions.
- Added: Z-Protocol separated functionality into router and control modes.
- Added: Harris variant of Image Video Protocol (outbound).
- Fixed: Rare chance of layer inquiries from extern to cause crash during shutdown.
- Fixed: Multi apology module dialog would hide "orphaned" backup source.
- Fixed: parameters with fractions but without format string would display strange values.
- QVS-979: A timer button on a panel would not be updated correctly if settings were changed via gadgets.
- QVS-1045: DWORD value changes to connection attributes were not save correctly (Regression in B1751).
- QVS-1046: Registry entries for inbound port connection were not read correctly (Regression in B1751).

### B1775, 2013-02-27

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#### INTERNAL ONLY

- Fixed: "Is First Packet" was not set correctly in Ember+ protocol.
- QVS-1039: Layout bug in the Layer Assignment Dialog.

## vsmStudio - Change Log and Version History

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### B1774, 2013-02-22

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#### INTERNAL ONLY

- Added: Re-enabled use of nVision “Request Changes” command (Which is effectively still polling, yet faster).
- Fixed: Deleting the “Reporting” channel will cause crash when saving the configuration.
- Fixed: Protocol “Specific Attributes” were not displayed when no configuration was loaded.

### B1772, 2013-02-15 (FFC)

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#### INTERNAL ONLY

- FFC – “Panel Templates”, “Secondary Commands”, “Signals”, “Annotations”.
- Added: Ability to add virtual sources on regular signals.
- Added: Ability to add virtual bridges to different typed or unconnected signal Layers.
- Added: Advanced OCP Module (phase 1).
- Added: Klotz Router Protocol.
- Added: EmBER+, partial support and qualified nodes.
- Added: “Scroll to Source” in matrix view now shows the name of the source.
- Added: DAS command << to create a cross-point object from scratch (usage: *target << source*).
- Added: Ross Furio, camera head protocol (minimal tally implementation).
- Added: ZProtocol - option to set the label used for label transfer.
- Added: All protocol attributes can now be edited from within the vsmStudio.
- Added: Linked Lawo MNOPL protocols will only distribute PPM streams from one source.
- Fixed: Ember (old) should use ACP code page.
- Fixed: Mouse offset when grabbing the panel size in panel layout mode.
- Fixed: Possible crash on incomplete ports.
- Fixed: Scroll range problem in the GP-I/O view.
- Fixed: Moving pseudo devices into other groups via drag & drop.
- Fixed: Memory leak in ember loopback (Regression in B1761).
- Fixed: Pending outgoing TCP/IP connections to nonresponsive clients could stall application shutdown process.
- Fixed: Pending outgoing TCP/IP connections to nonresponsive clients could cause crash during shutdown.
- Fixed: Deleting a layout on a panel group item while the layout was in use, could cause crash.
- Fixed: Visualisation of “Target can only be switched to source when Blind” on panels.
- Fixed: DAS: Keyword pool (< qualifier >) would result in “unknown” (Regression in B1761).
- Fixed: CancellorEx could not be resolved on Windows XP machines (Regression in B1761).
- Fixed: If the Ember+ provider keep alive failed, vsmStudio became very “noisy”.
- Fixed: Receiving GPI status syncs during reloading, could cause crash, if the trace flag “GPIs” is active.
- Removed: Obsolete “Annotation” class.
- QVS-271: Added option to lock multiple targets using multi target selection.
- QVS-291: The tabs in the object property box would not activate when dragging an object over them.
- QVS-298: Add manual pulse GPO option in the GP-I/O list view.
- QVS-299: Modify the pulse mode for multiple GPOs within the list view.
- QVS-323: GPI term sources can now be moved up and down using <Shift-Up> and <Shift-Down> cursor keys.
- QVS-364: When exporting a panel, the secondary commands are lost.
- QVS-395: Only show the preview button when a target is selected.
- QVS-399: Add menu option to the matrix view’s target header to “connect to blind”.
- QVS-410: Add option to set the size of a panel in absolute pixels (right click menu in panel layout mode).
- QVS-499: The Zero GPI seems to be missing on new configurations.
- QVS-784: DAS Alias in secondary commands were not copied when copying a panel.
- QVS-826: With vsmPanel render mode, panels show the brackets when a virtual target is not connected.



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- QVS-851: Dragging a GPO from one tab onto the tab of another GPI-I/O View would not work.
- QVS-916: Sync GPO on panel button with “visibility” on page [visibility in the editor, not on the panel].
- QVS-944: Clicking the “new window” option of the Meta gadget view would open wrong window.
- QVS-949: Remove obsolete “Invisible” signal attribute.
- QVS-950: The page after the copied page on a panel would end up as the last page.
- QVS-952: The layout assignment of a group would not contain the copied page when copying a panel page.
- QVS-955: A “Next” button might be converted to a generic button when copying a panel page.
- QVS-965: When copying a panel or panel page, DAS alias names and clock page item settings were lost.
- QVS-967: Scrollbars on the matrix view might disappear when switching from a very small matrix to a large.
- QVS-984: Dynamic Attachments were no longer updated (Regression in B1743).
- QVS-990: Attribute storage is not loaded correctly in some protocols (Regression in B1751).
- QVS-991: Hardware UMDs might not display tally correctly when switched to source the first time.
- QVS-1002: “no 3<sup>rd</sup> party” layer mode, could cause double switching a virtual signal to block further switches.
- QVS-1017: “Target can only be switched to source when Blind” does not work with individual blind.
- QVS-1019: Newly created buttons would be shifted by 1pixel (Regression in B1761).
- QVS-1016: Concealed sources could confuse tie-line management. (Regression in B1598).
- QVS-1025: The Panel property dialog did not display a panel’s frame style when it was “default”.
- QVS-1028: Possible incomplete propagation of tag changes over multiple levels of inheritance.
- QVS-1033: UDP ports were no longer handled correctly (Regression in B1761).
- QVS-1034: MI3040 no longer loaded the correct ranges for the GP-I/Os (Regression in B1754).

### B1470, 2013-01-22

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- [0072bb2d] - Possible fix for crash due to lifetime issues with temporary connection objects.

### B1469, 2013-01-17

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- Added: Option to control if or if not a pre- or post-roll event is executed if the pre- or post-roll time is zero. The system default is, due to legacy behaviour, to execute any specified pre- or post-roll events even when the specified time is zero.

**NOTE:** This setting is stored in the registry and must be set on every machine individually!

### B1466, 2013-01-15

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- Fixed: Crash when loading storages or events with GPIs which have been deleted.

### B1465, 2013-01-11

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- QVS-1002: “no 3<sup>rd</sup> party” layer mode, could cause double switching a virtual signal to block further switches.

### B1464, 2012-12-12

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- QVS-991: Hardware UMDs might not display tally correctly when switched to source the first time.
- QVS-980: Both name and short name should be mandatory fields in family dialog.
- QVS-964: Peek Meter Streams might be subscribed before the device is listening and therefore are lost.
- Fixed: Dropping a single signal into the pseudo device list would not update the corresponding list item.

### B1751, 2012-11-09 (FFC)

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#### INTERNAL ONLY

- Added: Basic Push To Talk (1:n router style).
- QVS-973: Added support for the “Source Association Label” commands in pro-bel sw-p-08.

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- QVS-966: Dropping wrong types of objects in the wrongs columns in the pseudo device list, was not shown as invalid and also could lead to a hung system.
- Added: Read only option for “Scheduler” page item.
- Added: Colour and timing setting page for PTT (Matrix Properties).
- Added: “pad character” option for pro-bel sw-p-08 protocol.
- Changed: The “Matrix Properties” have now got the modern property sheet look.
- Fixed: Possible loss of reference cache which could lead to crash.
- Fixed: Missing opacity slider for “Timer” page item.
- Fixed: In the pseudo device list, not the selected entry would be deleted but the first in the list (Regression in B1736).
- Fixed: Bug where, limited to the German version, vsmStudio could not create or access the storage folder (Regression in B1736).
- Fixed: GPOs that were dependant from the same state could not be combined back into a dependent GPO.  
**NOTE: Further testing, e.g. with multiple servers, required.**
- Fixed: ACOS protocol might overwrite “Enable Labels” setting if the user changed the value while the protocol was active.
- Fixed: Removing a signal from a layer would leave a temporary but incorrect entry in the signal path list.
- Fixed: Moving a signal within a layer would fail to remove the signal from the old location (Regression in B1725).
- Changed: Consolidated the attribute management for all protocols (step 1).

### B1738, 2012-10-19 (FFC)

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- Added: Picture Management and Favourite feature.
- Added: Axon IP-Address parameter type.
- Added: Axon UMD Protocol: Support for HQW15.  
**NOTE:** The red tally frame, when set, will flicker when green or yellow tally changes.
- Verified support for the following Axon Splitter cards:
  - HQW15, HQW200, GMV220, GQW220
- FFC – “Pictures”, “Ports”.

### B1732, 2012-10-16

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- Added: Axon UMD Protocol: Support for renamed parameters.
- Added: Axon UMD Protocol: Force “ACP Menu” protocol option.  
**WARNING: Some cards require this flag to be active or the cards might crash!**  
**NOTE:** “UMD over ACP” or “ACP Menu” is not the recommended mode of operation for Axon Quad Split Cards. Use only if the other options, e.g. TSL, are inaccessible.
- Added: Axon UMD Protocol: Improved suppression of redundant messages.
- Fixed: Axon Gadget Connector: Some frames would not be shown in the gadget tree when the frames announce themselves.
- Pending: Ports  
**WARNING:** Please do not attempt to actually use or configure ports.

### B1726, 2012-10-02

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- Added: Priority Stack Module is useable in Meta Gadgets.
- Fixed: Deleting a signal which is used as part of a storage group might cause crash in some cases.
- Fixed: Bug in the Storage Group Synchronisation which could lead to a crash.

## vsmStudio - Change Log and Version History

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### B1725, 2012-09-28

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- Changed: No longer display layer indicator in layout mode.
- Fixed: Deleting a layer while the signal path list was open could crash the system. (Regression in B1722).

### B1463, 2012-09-27

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- Possible fix / workaround for Zero byte dump files.

### B1724, 2012-09-19

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- QVS-960, QVS-961: Some protocols used MultiByte instead of ANSI (which not always would cause a problem): i.e. Marshall, VTS, Zander, ZProtocol, Barco, Symphony, Jupiter, MultiDyne, Tango, VikinX, Pesa, GVG
- Fixed: System might stack overflow when deleting a signal (Regression in B1722).

### B1462, 2012-09-18

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- Fixed: Problem with the initial synchronization between servers.
- QVS-919: "Blind" panel button will also perform a connect operation ahead of the disconnect operation.

### B1723, 2012-09-17

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- Fixed: An issue with the event lifetime which could cause a crash when synchronizing events between servers.

### B1722, 2012-09-13

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- QVS-958: The status of S101 GP-I/O Boxes or Panels was not updated when a configuration was unloaded and then reloaded without shutting down vsmStudio.
- Fixed: When reducing the size of a layer, signals outside the range would not automatically be removed from the layer. This could cause a crash in the case to the physical router actually reported targets outside the newly specified range.

### B1721, 2012-09-05

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- Added: It is now possible to drag and drop signals into pseudo device groups and have more than one rule entry created in one go, if the amount of signals dropped is more than the available columns in the group. Also, when dropping additional signals into existing rules, the columns will be populated while also wrapping into the next line, restarting with the column the entries were dropped into.

### B1720, 2012-08-30

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- Added: "n-Source Apology".

### B1715, 2012-08-24

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- QVS-879: Fix for superfluous tie-line allocations.

### B1460/B1714, 2012-06-23

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- Fixed: Internal locking schema.
- Fixed: Potential deadlock in connection management.
- Changed: Do not perform more than one Storage Folder operation per time slot.

### B1709, 2012-08-16

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- Added: "n-Source Apology" module (Pending).

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- Removed some superfluous debug output.
- Fixed: Crash when loading storages or events with GPIs which have been deleted.

### B1708, 2012-08-07

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- Added dedicated “priority stack logic” module for GP-I/O logic.
- Added picture stack to the “priority stack [visual]” module.
- Removed GP-I/O option from “priority stack [visual]” module.

### B1707, 2012-07-31

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- QVS-953: “Required Resource Unavailable” message when creating an “AutoDefault” Module.

### B1706, 2012-07-30

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- Fixed: The Jupiter Label-Transfer (Binary) protocol would falsely output the video label for the audio channels.

### B1705, 2012-07-26

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- Added: Signal Label Export/Import: Completed implementation (B1701).

### B1704, 2012-07-23

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- QVS-946: Using the DAS “activate” keyword would also set the “visibility”.
- QVS-947: Dropping a GP-I/O into a Meta Device via the Meta Device Tree View would not work correctly.
- QVS-927: When assigning a pooled source to a target, which has the “bypass pooling” flag set, could cause the pool devices to be lost if the original signal path contained tie-lines.
- Problem with the license management (Regression in B1703).

### B1455, 2012-07-12

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- Fixed: Problem where the shutdown of an I/O port could lockup the I/O sub system.
- Fixed: Double lock in the inbound connection execution path.

### B1703, 2012-07-10

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- QVS-933: License Management message was not displayed on all vsmPanels.
- QVS-186: Disengage panel (LBPxx) “screen saver” on “goto page by GPO” functions.

### B1453, 2012-07-10

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- Fixed: Problem with read locks (Regression in B1450).

### B1702, 2012-07-06

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- QVS-932: License Management could leak memory.
- Fixed: Inputs to GPOs modified by the assign GPI button were not synchronized across servers.

### B1701, 2012-07-04

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- Modified Reference Scheme  
**WARNING: For Internal Testing Only!**
- Fixed: Self-monitoring would trigger on ended I/O lanes which did not reset their watchdog.
- Fixed: Some protocols, e.g. pro-bel sw-p-08, would send UTF8 encoded strings/labels instead of ANSI encoded.
- Fixed: Problem with read locks (Regression in B1695).

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- QVS-843: "Suppress Take" was not reset when pressing "[multi] Targets" or "Targets from Source" Buttons.
- Added: Signal Label Export: Export all labels with names  
NOTE: Import implementation pending.

### B1696, 2012-06-21 (FFC)

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- Added: Second condition field, "reserved", for the conditional source replacement module.
- Added: "Priority Stack" Module. This module can be used to a) have one of many GPOs set, based on the highest priority source condition [work in progress: and b) display alternate colours and text on a panel button (drag module onto button)].
- FFC – "Conditional Source Replacement Module".

### B1450/B1695, 2012-06-18

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- Fixed: Problem with recursive read locks (Regression in B1449/B1687).

### B1695, 2012-06-15

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- QVS-912: Option to list all used Dynamic Attachment Scripts (DAS). Using the telnet access, enter "dump DAS".

### B1694, 2012-06-14 (FFC)

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- Added: Additional fields for traffic files and automation support.
- Added: Option to override any lock states for internal operations, e.g. for reroutes on device failure.
- FFC – "Events".

### B1692, 2012-06-13

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- Fixed: "Scroll to Current Source" did not work on pooled signal paths.
- Changed: The "alternative enumeration" for gadget parameters now allows for explicit override of individual enumeration values and also does not hide the value text if the user enters the same text already provides by the gadget parameter.

### B1691, 2012-06-12

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- QVS-919: "Blind" panel button will also perform a connect operation ahead of the disconnect operation. This can lead to the disconnect operation not being performed when complex, e.g. pooling, operations are involved.

### B1690, 2012-06-12 (FFC)

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- QVS-898: Tag does not always correctly show the signals default tag modifier.
- QVS-317: The signal attribute "Connecting the already connected source again returns to blind" did not function well in combination with virtual signals.
- QVS-836: The page number was unnecessarily displayed on the "next" panel button.
- QVS-860: a) Added "Master Lock" and "Master Unlock" secondary commands for signals.  
**NOTE:** This is event based; only when the controlling secondary command is triggered will the lock change.
- QVS-860: b) Added "Hard Lock" GPI for signals.  
**NOTE:** This is state based; when the GPI is set, the signal is [target] locked. There is no way to override this apart from clearing the GPI again.  
**NOTE:** Both above forms of locking have their particular applications, it is very important to consider the differences and choose the right one.
- FFC – "Signals".

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### B1688, 2012-06-08

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- QVS-901: Inherited tags do not correctly propagate down the signal path.

### B1449/B1687, 2012-06-08

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- Fixed: Problem in the system core which could lead to self-congestion on specific load situations in relation to the amount of processors and hyper threads.

### B1686, 2012-05-31

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- QVS-895: Newly created module might “short-circuit” in gadget tree with a previous deleted module, if the deleted module was the only module in the module group.
- QVS-605: Added gadget parameter subscribe / unsubscribe management.

### B1683, 2012-05-24

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- Fixed: Possibility where DAS scripts on panels could cause crash when opening the panel editor.
- Fixed: Possible deadlock between internal gadget handling and protocol life cycle management.
- QVS-827: Target Lock prohibits source of connected virtual signal to change.

NOTE: Testing required.

### B1681, 2012-05-23

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- Fixed: Possible race condition between pending delayed delete and getReferringComponents.
- QVS-905: Added import/export option for storage discs.

### B1680, 2012-05-16

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- Added: Usage Indicator Module can also be used to count tie-line usage.
- Added: Storage Disc load lock is automatically updated after 5 seconds. Reduced the gate time to 5 seconds.
- Added: Ability to set the desired Mute value in the Audio Monitor Module and extended the ranges for max and mute clip.

### B1679, 2012-05-15

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- Fixed: Problem when loading unknown or not boxed targets from boxed storage group.
- Fixed: Channels of event could not be removed by vsmPanel.
- Added: Priority field for automation/traffic file import and management.
- QVS-897: Added support for the Analogue Outputs of the GP-I/O-Box.  
NOTE: GP-I/O-Box Firmware 2.20 or newer required.

### B1677, 2012-05-10

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- Fixed: Rare “overflowing” picture garbage bin, which eventually would cause an out-of-memory situation.
- QVS-817: Don’t save tie-lines as source to into a storage disk.
- QVS-889: Dropping a Storage group into the storage drop field of the storage page item no longer worked.

### B1675, 2012-05-04

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- Added: Storage Disc content for vsmPanel.
- Added: Extra information fields for traffic file import.
- Added: Multi channel support for events.
- QVS-782: Added “Conditional Source Replacement” Module.

## vsmStudio - Change Log and Version History

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### B1448, 2012-04-30

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- Fixed: Potential race condition when retrieving overlaid labels.

### B1671, 2012-04-25

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- Fixed: Potential race condition when processing parameter links (CString issue).
- Fixed: Storage Group synchronization between servers and local storage.
- Added: Boxing for Meta Gadgets.

### B1447, 2012-04-11

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- **Special Internal Debug Build.**
- **Removed some debug version specific warning.**
- Fixed: Potential deadlock when recycling unused pictures.
- Fixed: Potential race condition when receiving alarm or timer events.
- **Preliminary Fix/Workaround: Potential race condition in Microsoft Foundation Class Library.**

### B1669, 2012-04-05

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- Fixed: Potential deadlock when recycling unused pictures.
- Fixed: Potential race condition when retrieving overlaid labels.
- Added: LBP84 layout option.

### B1668, 2012-04-04

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- Added: Possibility store and load labels for boxed signals.
- Added: Possibility to override a button's active state with the state of the attachment's state (if available).

### B1438, 2012-04-02

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- No longer pass exceptions to windows after writing vsm dump.

### B1666, 2012-03-29

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- Fixed: Variable sized target label update did not always work in "pro-bel sw-p-08" protocol.

### B1665, 2012-03-28

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- Fixed: Problem loading Lawo mapping files.
- Fixed: Potential race condition when closing configuration with frequent buttons status updates.
- Fixed: Added terminating null character to variable length label transfer in pro-bel sw-p-08.
- Fixed: Added "show selection always" attribute to panel list.

### B1664, 2012-03-26

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- QVS-857: Fixed "export storage discs" file format.
- QVS-611: Ability to specify multiple protocols or protocol instances for the same inbound port.

### B1663, 2012-03-22

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- QVS-690: Disconnect (Blind) operation would falsely be inherited by virtual dependencies.
- QVS-751: Mimic button would not jump to selection page without explicit group information when in group.
- QVS-810: Audio Monitor falsely provided a balance parameter.
- QVS-843: Disable "Supress Take" function while in multi target mode.

## vsmStudio - Change Log and Version History

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### B1662, 2012-03-21

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- Added support for longer labels between the Barco proxy and the vsmStudio.  
**NOTE:** Barco proxy 1.1.2 or newer required.

### B1661, 2012-03-20

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- Fixed: Tag server synchronization (Regression in B1635).
- Fixed: Tie-line server synchronization (QVS-842).
- Fixed: Delegation of internal signals.

### B1437, 2012-03-19

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- Fixed: Tie-line server synchronization.

### B1436, 2012-03-16

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- Fixed: Found potential race condition in overlapped I/O memory handling.

### B1657, 2012-03-16

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- **NOTE: This version contains many temporary debug outputs – INTERNAL use ONLY.**
- Fixed: Server synchronization of internal signals.  
**WARNING:** Possible loss of pool integrity while updating. Offline update with manual supervision required!
- Fixed: DAS: Accessing collections via index did not work.
- Added: PPM streams from Lawo MNOPL protocol will issue a “keep-alive” data strobe every 2 seconds when the PPM value is stable (**Testing required**).
- Fixed: An unknown owner on delegated connect could cause crash.
- Fixed: An ill formatted gadget parameter format string might cause crash.
- QVS-839: Attribute storage was saved one byte short, which could cause problem with some runtime library functions. As a side effect the e.g. reflect identifier would be reset.

### B1435, 2012-03-09

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- Fixed: Stability problem with string management (CString by reference).

### B1434, 2012-03-06

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- Fixed: Interconnect/initial sync problem.
- Added possible fix for “incoherent” dump files.

### B1653, 2012-03-01

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- Added: Registry entry “Pad with Spaces” (REG\_SZ) for pro-bel sw-p-08 protocol. Default is “false”. If set to true the protocol will send label messages padded with spaces instead with null characters.
- Added: Server synchronization for “modified” signal tags.

### B1652, 2012-02-24

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- QVS-813: On a panel, the Blind button in combination with a Take button does not work correctly when the panel property “connect when button pressed” is active.
- QVS-814: The scheduler page item’s channel property page does not update correctly when switching between multiple schedule page items.
- Added: Support for protocols with multiple levels of “online”.
- Fixed: Offset error in the ACOS protocol label transfer.



## vsmStudio - Change Log and Version History

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### B1651, 2012-02-22

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- QVS-802: The text label for buttons which were not used or have not got a displayable text was not processed and therefore not sent to text only panels, leaving the previous text visible.
- Panels: Group Layouts would not copy.

### B1431, 2012-02-21

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- Added additional log information for interconnect/sync problem.
- Changed log information for readability.
- Changed order of connection establishing call backs.

### B1650, 2012-02-17

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- QVS-799: Added PFL Parameter for DSPs in Lawo MNOPL protocol.
- QVS-800: Added option to nVision protocol to import bypass status to GPI range.
- QVS-559: The "Label Exchange" protocol can be used to exchange labels in both directions.
- QVS-559: The "Label Exchange" protocol can be used to exchange GP-I/Os in both directions.

### B1428/B1648, 2012-02-14

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- QVS-798: The transmitter queue on Miranda Compact Router protocol (via UDP) stalls if UDP loses packets.

### B1648, 2012-02-14

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- QVS-797: Indexed parameters were not displayed for the Lawo 3G SDI cards.

### B1647, 2012-02-13

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- Fixed: If the Axon parameter synchronization is slow, e.g. due to network problems, it could happen that a rescan was issued before the last rescan was complete, resulting in endless rescans.
- Fixed: During the initial, post load, synchronization, the Axon protocol would only report parameter description information the first time. On any subsequent configuration loads the parameter information would be missing.

### B1427/B1645, 2012-02-06

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- Fixed: When locks are synchronized between servers with different configurations, the system could crash.

### B1644, 2012-02-01

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- Fixed: "Always bypass instrumented pool signals" did not always get honoured.  
**Warning: Possible side-effects.**
- QVS-777: Support for new Snell Kahuna 360 Tally Protocol.  
**NOTE:** This protocol is not as flexible as the tally contribution protocol. Only use where necessary, e.g. where the source range of the contribution protocol is insufficient.
- Added: The "delete" on Parameters effectively resets the complete parameter information. The parameter is invalid and usable until the device refreshes the parameter information. This does not remove any references to the parameter.

### B1426/B1642, 2012-01-31

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- Fixed: When unloading a large configuration, internal housekeeping could cause a crash. (Mostly seen on servers receiving a new configuration via server sync).

## vsmStudio - Change Log and Version History

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### B1641, 2012-01-30

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- Fixed: The delete “cross” icon in the drop zones had gone missing. (Regression in B1602)
- QVS-774: “Usage” Module did not count “used by pool” as used.
- QVS-773: “Show Previous” buttons should not show or use internal signals.  
**NOTE:** Depending on the situation, it might not be possible to restore exactly the previous connection.
- Fixed: When switching virtual signals with a pooled source, it might be possible that the original virtual assignment gets overruled.

### B1639, 2012-01-27

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- Changed the tag modifiers module to display the associated signals default target Tags in angled brackets: e.g. “<True>” and “<False>” or if no tags are set: “<any>”.

### B1638, 2012-01-26

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- Changed the tag modifiers module to display the associated signals default source Tag in angled brackets: e.g. “<SD>” and “<HD>” or if no tags are set: “<no Tags>”.
- Fixed: The tag modifier module did not allow multiple tags to be true/false at the same time.

### B1637, 2012-01-25

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- Fixed: If both the source and target had tags which are identical (and are on the same layer) the connection was rejected with a tie-line error.
- Fixed: If a virtual signal source had optional pooling, the signal could not be connected to a target which did not require the inserted pooling.  
**Warning: Possible side-effects for other situation with virtual signals with active pooling.**

### B1635, 2012-01-24

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- Various performance improvements in the AXON protocol driver.

### B1631, 2012-01-22

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- Fixed: Missing length validation in old UMD text transfer.


### B1630, 2012-01-19

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- Fixed: A signals input assignment could not be removed.
- Fixed: Initial Sync (Regression in B1623)
- Fixed: A gadget parameter with a % in the formatting will cause a runtime error. (Regression in B1626)  
**Warning: Pending changes in the pooling server synchronization.**  
**Warning: Both servers have to be updated (step by step is OK) to B1629 for server synchronization to work in both directions.**

### B1424/B1627, 2012-01-17

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- Added: GP-I/O view now displays “orange” dot  when current state differs from calculated state. This is mostly caused by the configuration overriding the calculated state using buttons or secondary commands.

### B1423, 2012-01-17

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- Fixed: Leaked notification queue entries.
- Fixed: Possible fix for “suspended” interconnects.

## vsmStudio - Change Log and Version History

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### B1626, 2012-01-17

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- Fixed: Leaked notification queue entries.
- Fixed: Memory leak in MNOPL protocol.
- Fixed: Potential race condition in MNOPL save / load mapping functions.
- Added: Parameter Link Module: Possibility to adjust the gate and direction timeouts.
- Added: “Parameter Edit Field” panel page item: Added option to show/hide the parameter name.
- Fixed: The Axon Problems, Part 1: Added an update Gate, to “slow” down parameter update messages.  
**Warning: Pending changes in the AXON protocol driver.**

### B1623, 2012-01-13

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- QVS-770: Added “Layouts” to panel groups. This allows different layouts on different pages of a panel.  
**NOTE:** This is currently completely ignored by hardware panels which generally can’t change their layout.
- QVS-756: Some of the bulk operations in the signal path list did not update the list.
- Fixed: Feedback problem with the bidirectional “Parameter Link” Modules.  
**NOTE:** Use the Bi-Directional checkbox to create bi-directional links – **do not** create separate entries.
- Added: “Parameter Edit Field” panel page item.  
**NOTE:** vsmPanel version 3.0.81 or newer required.
- Fixed: Missing “Gain” parameter in the MNOPL “Stereo Monitoring” module.
- Fixed: Possible fix for “suspended” interconnects.  
**Warning: Pending changes in the AXON protocol driver.**

### B1615, 2012-01-09

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- QVS-775: 8 character support for ACOS protocol.
- QVS-776: Extended the AUX bus status information request to 64 busses in the ACOS protocol.
- Fixed: Possible crash caused by label changes on signals not yet synchronized to other server.

### B1614, 2012-01-06

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- Added: Gadget Parameters are now exported “descriptive” allowing them to be imported on systems that are unaware of the real parameters.  
**NOTE:** Loading templates stored with builds < B1614 will not load unknown parameters. Also, templates containing parameters stored with B1614 or newer will not load in older builds.  
**NOTE:** Imported Parameters might be shown offline until the configuration is saved and reloaded or the gadgets are accessed.

### B1613, 2012-01-05

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- Added: 3G SDI card support in MNOPL protocol.
- Added: Stereo Monitoring support in MNOPL protocol.  
**NOTE: The Monitoring base HLSD must be added to the [Devices: SDI] group, which will eventually renamed.**
- Added: Surround Monitoring support in MNOPL protocol.  
**NOTE: The Monitoring base HLSD must be added to the [Devices: SDI] group, which will eventually renamed.**
- Fixed: Possible timeout problem in the nVision protocol.

### B1610, 2011-12-21

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- Fixed: Tie-lines would not be routed for signal paths switched via virtual signals (Regression in B1599).
- Fixed: Paths with Tie-lines would not be routed if switched via pseudo devices (Regression in B1599).
- Fixed: Possible stack overflow when pruning corrupted pooling chain.
- Fixed: Manual pool inserts could corrupt the pooling chain.

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- Changed timing and command sequence for nVision master/backup switching.

### B1605, 2011-12-12

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- Added: Basic Box Mapping.

### B1604, 2011-12-12

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- Fixed: Bug in the “via Blind” module which did not remove the original switch from the queue in all cases.
- Added: Support for locking via vsmPanel matrix view.

### B1420/B1603, 2011-12-09

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- Fixed: Possible crash when syncing queue information to server that does not yet know the target and/or source involved.

### B1602, 2011-12-08

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- Fixed: Problem while reading multiple OIDs in the Lawo MNOPL protocol mapping file.
- Fixed: Drag and drop of pictures in the picture library.
- **Warning:** Adding boxing functionality to storage group view. Possible side-effects.

### B1600, 2011-12-05

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- Fixed: Problem with Axon “Use Axon Frame Names” entry, which was resetting itself to “False”.

### B1599, 2011-12-02

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- Fixed: Some modules would not refresh internal states after being created or edited.
- Added: The DAS keyword “pool” can now be qualified with a target to find optional “target” pool entries.  
E.g.: SelectedTarget / source / **pool ( SelectedTarget )** : “Format” : inserted  
**NOTE:** See B1560 entry for use of *inserted* and other pool related keywords.
- Added: “Pool Managed Signals” view option in the signal path view.
- Added: Secondary Command “Pool Prune” will remove any inserted pool devices which are no longer needed.
- Fixed: Possible fix for the “switching both physical and dependent virtual target to blind” problem.
- Added: Pooling is always processed if a source has tags.

### B1598, 2011-11-30

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- Fixed: Sort order in signal view list (Regression in B1596)
- Fixed: Importing panels with view page items could cause crash.
- Added: New pooling scheme
- Added: Internal signals are no longer visible in the signal path list.

### B1419/B1598, 2011-11-24

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- Fixed: Double connection messages in the quartz native inbound protocol.

### B1597, 2011-11-21

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- Added “Switch via Blind” Module.
- Fixed: Drop to multiple columns order problem in pseudo device edit view.

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### B1596, 2011-11-15

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- QVS-594: Added support for Lawo MNOPL “networking” on Nova73 and mc<sup>2</sup> cores. The appropriate OIDs have to be edited and specified in angled brackets e.g. <0>, <1>, <0, 1> or <\*>.
- Fixed: Performance issue when deleting big quantities of signals.
- Fixed: Crash when deleting signals which are both source and target and both, source and target, are selected during the delete operation. (Regression in B1589)

### B1591, 2011-11-07

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- Fixed: Possible crash when displaying signals after a layer has been edited or removed.
- QVS-716: Export of Panels with view page items with attached view, was incorrect and would crash the vsmStudio on import.

### B1589, 2011-11-05

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- Added: “Label” option for “Lawo MNOPL” protocol.
- Added: Support for Sony MVS-7000 in the “Sony DVS-9000 - Tally via Editor Port” protocol.
- Fixed: Sony S-Bus Video Mixer router layer switching problem.
- Fixed: Lawo MNOPL sending additional, invalid, command when performing “FadeInTime&Fade”.
- Fixed: nVision master/slave switching.
- Fixed: Performance issues in the Signal List View.
- Fixed: Performance issues in the Matrix View e.g. when inserting, removing or reordering signals.

### B1586, 2011-10-25 (FFC)

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- QVS-704: Support for confirmation dialog on view page items.  
**NOTE:** vsmPanel version 3.0.75 or newer required.
- QVS-705: Support for list style on view page items.  
**NOTE:** vsmPanel version 3.0.75 or newer required.
- FFC – “View” Panel Page Item.

### B1585, 2011-10-24

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- Fixed: It was not possible to browse the gadget tree of an inactive or offline tree node.
- Added: the “all groups” option ( <page>, ~ ) is now the default for a panels secondary “goto” command.
- Added: GVG Kayenne Contribution Tally Protocol.

Create Signals and Tallies with the following enumeration strings. Copy the **entire** (!) line into the name field. Replace keywords in *italics* as needed.

#### Signal Sources:

{Invalid, Input {1-96}, M/E {1-5} {PGM {A-D}, PVW {A-B}}, eDPM {1-4} {Video, Key}, Test, Black, White, Background {1-2}, unused, Image Store {1-6}}

#### Signal Targets:

{Output {1-48}, M/E {1-5} {A,B,U1,U2, Key {1-6} {Cut, Fill}}}

#### GPO Tally Enables:

{Output {1-48}, M/E {1-5} {PGM {A-D}, LAP {A-D}, PVW {A-B}}} - Enable *Colour*

#### GPI Tally Inputs:

{Input {1-96}, M/E {1-5} {PGM {A-D}, PVW {A-B}}, eDPM {1-4} {Video, Key}, Test, Black, White, Background {1-2}, unused, Image Store {1-6}} - Tally *Colour*

- General improvements on the response time of the signal path list.

### B1582, 2011-10-16

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- Fixed: Pooling would not always consider a cheaper pool device if the resulting tags were the same as a previously seen pool device.

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### B1580, 2011-10-12

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- Changed: Icon for Modules to  (was: .
- Added: vsmPanel button annotations.  
**NOTE:** vsmPanel version 3.0.72 or newer required.
- Added: Label support for RCP and MPK Panels.
- Added: Extended colours for MPK Panels.

### B1578, 2011-10-09

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- Fixed: Bug where pooling dependency would be reset when a user edits the signal.
- QVS-655: A gadget parameter with a % in the formatting will cause a runtime error. (Regression in B1500)
- Added: Multi-server awareness for Pooling.
- Added: Pooling should consider a virtual signal to a physical as a different source as to the physical.
- Fixed: Pooling and Tie-lining would skip routes where the output tags are identical but the input tags differed.
- Fixed: Resetting pooling would blind the internal source signals.

### B1574, 2011-09-30

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- QVS-650: The current signal path type is incorrectly displayed within the signal path's connection property dialog. (Regression in B1515)
- QVS-651: Buttons lose their hardware panel colours during copy panel operations.

### B1573, 2011-09-29

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- Fixed: Correctly remove manual inserts.
- Fixed: DAS “has Inserts” keyword. (Regression in B1567)




### B1571, 2011-09-27

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- QVS-608: Some update information from Axon cards is not correctly recognised.
- Fixed: The Online/Offline status for e.g. removed Axon cards was not correctly detected.
- Removed: Hide option for gadget tree elements (which caused more trouble than it was worth).

### B1567, 2011-09-25

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- Fixed: DAS would allow numbers or other constants as assignment targets.
- Added: DAS keyword “active =”. This controls the active state of a button.
- Added: DAS “==” and “!=” which can be used to compare two objects.
- Added: DAS “== “<string>” and “!= “<string>” which can be used to compare the state of an object against a string values. Currently only gadget parameters are supported. The gadget parameter compared against is the native value, not the i.e. modified, value without denominator.
- Added: DAS keyword “trigger”. This will trigger a secondary command with the condition “DAS Trigger”.  
**NOTE: This “trigger” has an “abuse” filter which prohibits the trigger from being called multiple times in sequence. Therefore the trigger command can only be used as part of a conditional path and must be “not triggered” by the script at least once before it will execute the secondary command again.**
- Added: The DAS tab now has a “trace” Checkbox. It is no longer necessary to enter the keyword trace into the script to enable trace output to CommTrace. Also, the buttons annotation displays a red  instead of the green  when trace is active on the button.
- Added: Button style attribute “Overlay Assigned Picture”. When enabled this will use the assigned picture as an overlay over the selected button Style. If no picture is assigned only the button style is visible. The button annotation displays a green  when this attribute is active.  
**NOTE:** Support on vsmPanel will follow.

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### B1565, 2011-09-21

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- Added: DAS keyword “is [not] Blind”. This allows testing if the object is a blind signal. If the signal is a blind signal the result is “true”. If either the object is not a signal or the signal is not blind when the result is “false”. The optional “not” negates the result.
- Added: DAS keyword “is [not] Locked”. This allows testing if a signal is locked. If signal is locked the result is “true”. If either the object is not a signal or the signal is not locked when the result is “false”. The optional “not” negates the result.
- Added: All “is” keywords (e.g. see above) can be negated using the “not” keyword e.g. “is not locked”.
- Fixed: Meta gadget tree would jump to beginning when new meta gadget is created.
- Fixed: The secondary command condition “Sync” on buttons now syncs changes to “clickable” parameters e.g. commands and enumerations.
- Added: New secondary command conditions on buttons:  
“Release < 100ms”: Performs the secondary if the button is released within 100ms of pressing the button.  
“Release > 100ms”: Performs the secondary if then button is released later then 100ms of pressing the button.  
“Held > 100ms”: Performs the secondary at 100ms after pressing the button if not released.

### B1563, 2011-09-16

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- QVS-621: Import / Export of Signal Labels.  
**NOTE:** Basic implementation (Use CommTrace to verify import status).  
**NOTE:** The files are written and read as Unicode, attempting to resave the files in ANSI or UTF-8 will not work.  
**Only edit with a Unicode enabled editor or excel.**

### B1562, 2011-09-16

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- QVS-644: Some protocol dialogs would not display the stored settings (Regression in B1518).  
**NOTE:** The protocols would still work correctly.
- QVS-218: Allow lock and unlock of multiple selected targets in the matrix view.
- Added: Select All “Ctrl-A” for signal path list.

### B1561, 2011-09-08

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- Fixed: The opacity slider in the panel item colour properties now updates correctly.
- Added: The “Visual Link” panel page item has now got the option to specify a “static” target. Once specified the visual link displays the signal path of the specified target instead of the selected target’s path.  
This is also DAS enabled by assigning a signal to “Target” within the associated DAS.  
**NOTE:** vsmPanel version 3.0.71 or newer required.

### B1560, 2011-09-07

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- Fixed: Pool reroute e.g. on pool device failure, would interpret an inserted non pool signal as the parent signal.
- Added: DAS keyword “LinkedTarget”. This allows access to the target which was transferred to a panel by a “panel link” button. The linked target is not reset by escape or by selecting a different signal as target.
- Added: DAS: when the current object is a pool or an internal pool signal the following keywords can be used to access pool specific signals: “ : Target” the internal target signal, “ : Source” the internal source signal, “ : Parked” the, if any, packed pool signal and “ : Inserted” the, if any, currently inserted pool signal.
- Added: “Picture” Panel Page Item which can be used to display e.g. BMPs or PNGs.  
**NOTE:** vsmPanel version 3.0.71 or newer required (Restrictions apply).
- QVS-345: Allow creating frames for e.g. Groups, Sub Panels or Visual Link in all directions.

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### B1558, 2011-09-06

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- Optimized the resource management.
- Fixed: A Signal's "Pool Disable" was also assigned to [tie-lines] "Signal Disable".
- Added: DAS keywords "is true" and "is false" which can be used to check the state of a GP-I/O.
- Added: The "Source of Target" and "Target of Source" buttons now support vsmPanel rendering.
- Added: Components used within DAS scripts are now monitored and retrigger DAS parsing on state changes.
- QVS-636: Reselecting a target on a panel would not show a source with active pooling as connected.
- Added: Secondary sources e.g. pool inserts will be shown as "fuzzy" (on hardware panels as dark pink).

### B1554, 2011-09-02

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- Fixed: Button copy now also copies the picture assignment.
- Fixed: The vsmPanel would not display any cross points on the matrix view (Regression in B1506).  
**NOTE:** vsmPanel version 3.0.67 or newer required.
- QVS-622: Possibility to modify the Tag assignment of multiple signals within the signal list view.
- QVS-637: The "Targets of Source" button should not show internal or inserted pool signals.
- QVS-638: The "Target" button should not display internal signals when set to show "source".
- Changed: vsmPanel map resources and pictures no longer require a network share.  
**NOTE:** vsmPanel version 3.0.67 or newer required.
- Added: New Style "Slider V (Silver)"  
**NOTE:** vsmPanel version 3.0.68 or newer required.

### B1418/B1553, 2011-09-01

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- Change: The layer number is now honoured for inbound connection messages.
- Fixed: Sony ROT16 protocol would send duplicate or conflicting labels when using certain signal attribute combinations.

### B1552, 2011-08-30

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- QVS-609: Allow multiple vsmPanel sessions per PC with individual sub GUIDs.  
**NOTE:** vsmPanel version 3.0.66 or newer required. Use command line option "session=<number>" (see vsmPanel documentation).

### B1551, 2011-08-29

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- Fixed: Importing ancient vmConfig configurations would lose the signal pictures due to changes in the way the vsmStudio manages the layers status while loading.
- Fixed: vsmStudio could freeze when the user selected a button in the editor for the first time, causing the property box to open and take focus, and e.g. used the cursor keys to navigate without putting the focus back to the editor. This is originally caused by a bug in windows [MSDN: Q261192].

### B1550, 2011-08-25 (FFC)

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- Fixed: Missing "InterlockedCompareExchange64" in kernel32.dll on XP.
- QVS-630: Locking via pro-bel sw-p-02 protocol (aurora).
- QVS-632: Induce deadlock does not trigger self-monitoring.
- [FFC – Lock Status.](#)

### B1416/B1545, 2011-08-23

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- Fixed: The pro-bel sw-p-08 protocol had lost the label assignment feature at some stage.



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### B1415/B1543, 2011-08-19

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- Added: Registry entry “Force TCP Framing” (REG\_SZ) for TSL 5.0 protocol. Default is “false”. If set to true the protocol will send messages framed for TCP (see TSL 5.0 protocol description) even when using a UDP connection.

### B1415, 2011-08-19

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- Added the “extended” (sw-p-02 issue 31) switching commands to the pro-bel sw-p-02 protocol.

### B1414/B1543, 2011-08-17

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- Added: Registry entry “Honor Acknowledge” (REG\_SZ) for pro-bel sw-p-02 protocol. Default is “true”. If set to false the protocol will not wait for response before sending the next command. The exception remains the poll command which is only sent after receiving the poll responses.
- Change: Refined the behaviour of the pro-bel sw-p-02 protocol in regards to the online/offline state of redundant controller cards.  
**NOTE: It is important to observe the warning in the entry for B1411.**
- Change: Flush connection queue on nVision protocol when the card is in standby.
- Added: Idle Tally Map for most UMD/Tally protocols (TSL 3.1, TSL 4.0, TSL 5.0 and ImageVideo).
- Added: TSL 4.0 now allows changing the text colour assignment independently from the tally control bits.  
Tally Map Format (valid for protocols with Tally Map):  
MMMMFFFF, where MMMM is the Tally mask and FFFF are the Tally flags.  
TSL 4.0 Tally flags bit assignment:  
OOLLTTTTRR0000DCBA  
Where LL is the left ear colour, TT is the text colour, RR is the right ear colour and DCBA are tally bits 3, 2, 1 and 0 respectively.  
00=OFF, 01=Red, 10=Green and 11=Amber
- Change: The TSL 4.0 protocol no longer has a predefined colour for idle. To restore the original behaviour, change the protocol’s “TallyMap-Idle” registry entry to DWORD: 0x00000C00.

### B1413/B1541, 2011-08-16

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- Change: Sony (DVS-9000) Tally via Editor Port: Added source offset.
- Fixed: Problem with the Quartz nativ protocol not switching or not switching correctly. (Regression in B1407)  
Also introducing functional changes from B1407 into B1541.

### B1540, 2011-08-11

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- QVS-573: Enable "Views" as Meta gadgets and allow assignment via DAS.

### B1411, 2011-08-11

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- Added: Registry option “Dual Controller Cards” to the pro-bel sw-p-02 protocol. This is a “workaround” for the strange way that pro-bel handles redundant controller cards. Also, when this option is active the “Disconnect” option will use input 1022 instead of 1023, as 1023 is used to signal the inactive state of the card.  
**WARNING: The controller card will also return 1023 for any target that does not exist or is otherwise invalid - this will put the port into “passive” state. Therefore special care must be taken to not include invalid targets on the defining layer.**

### B1410/B1539, 2011-08-10

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- QVS-619: Legacy BD15xx Panels no longer display correct information.

### B1538, 2011-08-08

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- QVS-551: Miranda NVision Router Master/Backup switch.

## vsmStudio - Change Log and Version History

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- QVS-625: When deleting meta gadgets the vsmStudio might crash after deleting the last entry.
- QVS-623: Storage Groups should not store associated internal signals.

### B1537, 2011-08-02

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- QVS-586: A target button was not updated when the source changed, if the signal has appending labels.

### B1409, 2011-08-02

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- Added: Possible fix for a problem in the pro-bel sw-p-08 protocol which can cause crashes when using labels.

### B1408/B1536, 2011-07-29

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- Added: UDP support for TSL 5.0 protocol.

### B1535, 2011-07-28

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- Fixed: Usage module now takes the signals failed and disabled state into account.
- Fixed: Tags can now be renamed.
- Fixed: Some panel display functions would show the internal signals.
- Added: "Send Configuration". Opens an e-mail message window with the current configuration as zipped attachment.

### B1534, 2011-07-22

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- Added: DAS: "has inserts". Returns true if the signal has active inserts e.g. pool devices.
- Fixed: The delay setting in the dummy feedback would honour the order in which the connections were issued, which would, in some cases, effectively defeat the purpose.
- Fixed: When the order of connects, while switching via tie-lines, was changed by e.g. slow routers, the signalling on virtual layers could be incomplete.

### B1408/B1534, 2011-07-22

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- Fixed: The property box might hang when it is initially opened and the user pressed the up arrow key.

### B1533, 2011-07-20

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- Fixed: Panel Editor now also displays other formats apart from BMPs.
- Added: More control for CommTrace output of tie line processing (Verbose Tielines).

### B1407, 2011-07-20

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- Added: Support for "Disconnect" (0) source in "Quartz" protocol via registry entry.

### B1532, 2011-07-19

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- Fixed: The Tag list on the Tag Management Dialog would jump to beginning of the list every time the Tags or Tag Groups were modified.
- Fixed: When deleting multiple meta-gadget entries, only one would be deleted.
- Added: Columns for source and target tags in the signal path list view.
- Added: DAS: "Enable =". This assignment can be used to enable (or disable) a button via DAS.
- Added: DAS: "Display =". This assignment can be used to override the component displayed on the button. The visual behaviour of the button will behave accordingly.

## vsmStudio - Change Log and Version History

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### B1531, 2011-07-15 (FFC)

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- Fixed: Dependency issues when rerouting “failed” pool signals.
- Added: DAS “is used” keyword. Returns true if the object (e.g. a signal) is in use.
- Added: vsmPanel hints for displaying pool information.  
**NOTE:** vsmPanel 3.0.64 or newer required.

### B1527, 2011-07-12

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- Added: Source and target signal tag parameters for “Tag Modifier” Module.

### B1406/B1526, 2011-07-07

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- Changed SC400 to Jupiter ASCII protocol.

### B1525, 2011-07-07 (FFC)

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- Fixed: Loading sequence for pools and the contained pool signals (Regression in B1523).
- Fixed: Loading of Internal signals.
- Fixed: Meta keyword (Regression in B1523).
- Added: Released pool signals are set to default blind source.
- Added: Fail option for pool devices.
- Added: Automatic pool replacement on Failure.
- Added: Secondary Command “Pool Reset” will remove pool signal from chain if executed on a pool signal.
- Added: Module “Usage Indicator” which provides Total, Used and Free counters based on the attached view.
- Added: Module “Tag Modifier” which provides control of the Tags of the attached signal.
- Added: Support for “Disconnect” (0) source in “Quartz” protocol via registry entry.

### B1405/B1524, 2011-07-04

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- QVS-576: Alarm Stacks updates were not correctly sent to vsmPanel.
- QVS-596: “invalid DWORD (32-bit) value” for some stores values.
- Added: “Label” option for “Sony - DVS-9000 Tally”.

### B1523, 2011-06-27

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- Added: Support for empty Pools.
- Added: Secondary Command “Pool Reset”. **(Restrictions Apply)**
- Fixed: Layer Type might be lost when changing layer properties.

### B1404, 2011-06-23

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- Added: Extra-long delays for TV-Logic protocol.

### B1520, 2011-06-22

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- Added: DAS keyword “pool: “<pool name>”, which returns either the internal pool insertion point signal target (e.g. {{ExternalJFS'o}} ) or the actual pool if there is no active insertion point.
- Added: DAS keyword “EffectiveSource”, which returns the **effective** source as seen e.g. on UMDs.
- Added: DAS keyword “RawSource”, which returns the “raw” source which includes e.g. the tie-lines and internal signals which are skipped by the source keyword.
- Fixed: Expansion of multiple bypass pools.

## vsmStudio - Change Log and Version History

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### B1518, 2011-06-16

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- Added: State storage for “internal” signals.
- Added: Reconstruction of “internal” signal paths.
- Added: Inbound tally to GPI mapping for TSL 3.1 and TSL 4.0 protocols.
- Added: Write/Replace scheme for dummy x-switch storage.
- Added: Sony Serial Tally Protocol: Access to all sources up to 310, Crosspoint switching (on Layer 1), Output assignment (Layer 2) and Main Table Setup Key / Video Assignment (Layer 3 / 4).

### B1403/B1515, 2011-06-07

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- Added: Event occurrences are always written into log.

### B1515, 2011-06-03

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- Added: Default value of 65000 for “Server State GPI Base”.
- Added: “Panel-LCD” type for MPK-Proxy.
- Added: A new (signal) pathfinder sub system, which is base for the upcoming pool and tagging subsystem.  
**NOTE:** The related traces are currently hardwired to active, CommTrace may be “noisy” when routing tie-lines.

### B1402/B1515, 2011-06-02

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- Added: TvLogic UMD protocol.

### B1514, 2011-05-31

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- Added the “extended” (sw-p-02 issue 31) switching commands to the pro-bel sw-p-02 protocol.

### B1401/B1514, 2011-05-31 (FFC)

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- Added: “Encoder Offset” option for panels with encoder bank(s).
- Fixed: Gadget subsystem would cause runtime error if axon sent a % as unit symbol.

### B1400/B1513, 2011-05-23

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- Fixed: Swapped label index in pro-bel sw-p-08 protocol.
- Fixed: The label exchange dialog would crash when creating inbound signals on e.g. TSL 3.1.

### B1399/B1512, 2011-05-21

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- Fixed: Possible race condition when storage folders are synchronized during configuration start-up.
- Fixed: Default “Honour Acknowledge” setting for nVision protocol.

### B1398/B1511, 2011-05-19

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- Added “bulk gate” to inbound message processing for pro-bel sw-p-08 protocol.
- Fixed: Deleting a storage group entry while editing the name of the storage group might cause crash.

### B1510, 2011-05-18 (FFC)

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- Fixed: Problem with auto component pointers.
- Fixed: Problem with reflect identifier.
- Added: The internal cost e.g. for tie-lines and pooling is now accessible for configuration.
- Fixed: Virtual signals were not correctly shown in signal path list (introduced with B1506).
- Fixed: Multi server GUID formatting problem due to Unicode conversion.

## vsmStudio - Change Log and Version History

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- Fixed: pro-bel panel LED range problem.  
NOTE: "MultiSerial / pro-bel" Firmware 00.18 required.

### B1396/B1507, 2011-05-10

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- Added sub keys for inbound connections.

### B1506, 2011-05-04 (FFC)

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**Warning: B1506 and later are no longer backwards compatible with B13xx.**

- Added: It is now possible to have multiple router sources per signal (e.g. Distribution Amplifier).  
**Known Issues:**
  - The vsmStudioEditor will no longer work correctly.
  - Possible display problems with visual link when displaying signal which are part of a 1:1 emulation.

### B1395/B1505, 2011-04-29

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- QVS-569: Changed the mapping for pro-bel panels: 0-199 Buttons, 200-399 LEDs, 400... Displays.  
NOTE: "MultiSerial / pro-bel" Firmware 00.15 required.
- Fixed: Accessing the "Alternate Label" drop-down menu in a UMD protocol's signal assignment dialog would cause a crash.

### B1503, 2011-04-22

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- QVS-574: Some strings sent via the gadget interface were losing the last letter or digit.

### B1395/B1502, 2011-04-21

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- QVS-569: Added support for pro-bel panels and UMDs via "MultiSerial / pro-bel".

### B1394/B1502, 2011-04-15

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- Fixed: Possible invalid access to signal label cache.

### B1393/B1502, 2011-04-14

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- Fixed: nVision protocol: A switch on one layer might overwrite another switch on another layer if the target numbers are identical.
- Fixed: nVision protocol: Race condition that could lead to jam of transmit queue.
- Added: nVision protocol: only poll targets that are actually used.

### B1391/B1502, 2011-04-13

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- Fixed: Bug where the Induce Button would cause a crash if no signal is assigned.

### B1390/B1502, 2011-04-11

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- Fixed: Bug in the Simple OCP Module.
- Fixed: Bug in nVision protocol when switching more than 500 targets.

### B1386, 2011-03-29

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- QVS-568: Extended the "Simple TSL Tally protocol" for inbound communication.
- Added: Colour selectors for the timer rings on the "clock" page item.

## vsmStudio - Change Log and Version History

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### B1385, 2011-03-28

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- QVS-538: Fixed the behaviour when “deselected” option is enabled.
- QVS-566: Added “Timer Base” module, which allows creating clock relative intervals.
- Added: “Clock” panel page item.
- Fixed: Colour property dialog would lose opacity when new background colour was selected.
- QVS-567: Only apply the button attachment override to mimic buttons.
- Fixed: Possible crash if the lock status was “Invalid”.

### B1379, 2011-03-15

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- QVS-543: Option to modify the default label behaviour for UMDs.  
**NOTE:** Currently only the TSL 3.1, 4.0 and 5.0 protocols support the changes completely. The protocols Jupiter ASCII, Jupiter Binary, Amazon, Z-Protocol and Netia share the same configuration dialog yet currently do not support the extensions.
- Fixed: Removed some leftover debug code that was slowing things down.
- Fixed: Lawo GPCs.
- Fixed: Restructured the pro-bel sw-p-08 driver label change detecting.

### B1371, 2011-03-09

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- Added “Honor Acknowledge” attribute to the nVision protocol.

### B1369, 2011-03-04

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- QVS-527: Extended the Leitch protocol to support the “X” (disconnect) source. The associated source can be set using the “Disconnect Source” entry (default: 4096).
- QVS-541: Added the PESA PREC2 protocol(s).
- QVS-561: The “Sony Mic Gain” module might display incorrect values at times.
- QVS-562: The “Mimic” button executed the jump of the previously mimicked button when released after entering assignment mode.
- QVS-530: Adjusted the behaviour of the “Enable” button.
- QVS-564: Style and Label were no longer displayed (due to B1364, QVS-550).

### B1366, 2011-03-03

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- QVS-560: Added GP-I/O Transfer via TSL 3.1 protocol.
- Added code signing: The “vsmStudio.exe” is now digitally signed.

### B1364, 2011-02-28 (FFC)

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- QVS-550: Option to set the Opacity of panel buttons.
- QVS-538: Option to from Multi-Target-from-Source button to add targets in deselected state and option for Multi-Target buttons to be view only.
- [FFC – Button Attribute: Opacity.](#)

### B1362, 2011-02-25

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- QVS-549: Some Parameters for the Lawo MNOPL Parametric EQ were sent with the wrong parameter type.
- QVS-548: The Mx33 module did not handle reassignment or re-usage of a tie-line correctly.
- QVS-547: The Assignment module Mx34 did not detect additional targets being assigned to a monitored signal and therefore did not update the assignments accordingly.

## vsmStudio - Change Log and Version History

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- QVS-545: The Label Induce button shows the wrong label and does not refresh when a label changes.

### B1360, 2011-02-18

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- QVS-518: Signals that are connected to virtual signals which are routed across tie-lines are not correctly synced between servers.
- QVS-592: Added prefix for the pro-bel sw-p-08 protocol for an application specific alternative source label behaviour.
- Removed obsolete NOTIFY\_Delete handler.

### B1357, 2011-02-11

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- Fixed: TSL 3.1 protocol – “Delay Message” now works as intended.
- Fixed: TSL 3.1 protocol – Adjusted Tally Mask.
- Added: Disable for “MX34” module.
- Added: “Suppress Default Logging” option to GPIs.
- Removed: The option “Enable Logging” – simply entering a text in “Log on Signalled” or “Log on Non-Signalled” will enable the logging of signalled state.

### B1354, 2011-02-08

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- QVS-560: The “Enable” button did not work with vsmPanel version 3.x and higher.
- QVS-515: It was possible to sidestep the unique signal naming rule using iterator strings.
- QVS-539: ImageVideo Protocol: Added option to map and send vGPOs (Events specific extension).
- QVS-533: The Mix/Line parameter “Amplification” in Lawo MNOPL does not show the correct values.
- Fixed: Possible stack overflow when signals with “&” label prefix are looping back onto themselves.
- Added: Average internal processing times to the floating internal status window.

### B1353, 2011-02-04

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- QVS-517: Adjusted Tally Mask for ImageVideo protocol as Yellow was missing since B1346.
- QVS-522: Lawo MNOPL protocol: Changing Phantom Power on Mic/Line setting also changed Attenuation.
- QVS-523: “Sync” now works with a Parameter Button’s Dynamic Secondary Command.
- QVS-524: Added Tally Mapping option to TSL 3.1 protocol.  
**NOTE:** “Sync” now also correctly works with a Link Button’s Dynamic Secondary Command.
- QVS-521: Adjusted the base offset for the PESA P1N protocol.
- Fixed: Possible crash during shutdown when removing half destructed Nodes from Matrix.
- Fixed: DAS “Target” Keyword did not return a target of a signal.
- Removed: Unused “Monitor Prefix” option for Monitor Walls.

### B1350, 2010-12-10

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- Added “Delay Message” setting to TSL 3.1 protocol.
- Dragging the mouse up and down in the matrix view no longer “drags” the connections if the mouse is outside the selected area.

### Firmware - Core Version 2.16 C (MOPS-sw-p-08, CommServer), 2010-12-09

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- CommServers: Added support for the internal GP-I/Os.
- MOPS-sw-p-08: Now has interrupt bases ACK and regular response time of < 200µS.

## vsmStudio - Change Log and Version History

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### B1349, 2010-12-08

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- Fixed UMD proxy protocol which broke with B1342.
- Enabled “Visibility” property page for all panel page items.
- Removed BD1551 layout that kidnapped the LBP51 layout.

### B1346, 2010-12-02

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- QVS-514: Disappearing buttons when creating new pages while the panel is in use.
- QVS-471: Added “Label” option to “Image Video” protocol.
- QVS-435: Updated “Mimic” button assignment restrictions.
- QVS-475: Action list was not updated during record.
- Fixed order of buttons when creating new panel.
- TSL-3.1, TSL-4.0, TSL-5.0 and “Image Video”: Added tally mask, so that protocols can limit updates.
- Fixed crash when closing timer dialog after configuration had been closed.

### B1343, 2010-11-30

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- QVS-150: Deleting a signal which is used in one of the TSL protocols could lead to a crash.
- Fixed crash when deleting a UMD that was displayed in the UMD editor.
- Fixed Icon and Colour pickers’ behaviour in multi-monitor environments.

### B1342, 2010-11-26

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- QVS-485: Target of Source buttons are now updated when primary and when physical source changes.
- UMD-1504 und UMD-1505 are now selectable again.

### B1341, 2010-11-24

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- QVS-511: When performing a connection on a panel, the “Current Source” would not always detect successful connections if the source was virtual source and the result modified by the connection engine.
- QVS-479: The User Rights Editor menu entry is only visible when Access Control is actually enabled.
- QVS-497: A race condition between scheduled and spontaneous tally updates could cause slow tally update.

### B1340, 2010-11-18

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- QVS-480: Dragging signals from the signal path list into the master matrix would not yield the expected result if the signals were already somewhere on the matrix.
- QVS-474: The panel editor would not perform button type modifications if the panel had to be scrolled and the modified cursor position was then “virtually” outside of the window.
- QVS-484: Simplified “Automatic open” option replaces “Open on <Computer>” option in panel properties.
- QVS-488: Panel and S101 connections can now be reset in the “Manage Communication Ports” dialog.
- QVS-506: When changing the active matrix view, the selections were not reset.
- QVS-481: The signal path list did not display virtual signals after switching back to “all” layers.
- QVS-508: A Panel Pool entry can now be deleted. Deleting is only possible when the entry no longer contain any panels.
- QVS-510: A View could no longer be dropped into a Panel Button.
- QVS-489: Removed the “Properties” entry of the Panel Page Items context menu.
- QVS-495: Removed the unused options in the SD UMD Property Dialog.
- QVS-507: The “Properties” entry in the Panel Pool context menu has been disabled.



## vsmStudio - Change Log and Version History

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### B1339, 2010-10-26

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- Added support for storage groups managed via vsmPanel.  
NOTE: vsmPanel 3.0.56.4 or newer required.

### B1337, 2010-10-21

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- Improved the dump file creation.

### B1334, 2010-10-20

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- Removed the cyclic update boost for TSL 4.0 and TSL 5.0
- First element of signal name iterator is now used to create signal pictures.

### B1334, 2010-10-15

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- Fixed: Transfer and display of the filename for the image map page item.
- Fixed: “No Drop” cursor was no longer correctly displayed when dragging e.g. signals over the matrix header.
- Adjusted the range and stepping of the Mix/Line Amplification parameter for the MNOPL protocol.
- Added type verification for the new attachment drop field in the button property box.
- Removed some of the unused toolbar icons.
- Removed the obsolete “special command” option for buttons.
- Removed the obsolete creation options for monitor displays.
- Added: Lazy Refresh for TSL 4.0
- Added: Lazy Refresh for TSL 5.0

### B1330, 2010-10-13

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- QVS-072: Panel Tools would work “through” other windows if they overlapped the panel editor.
- QVS-257: Moved panel page item properties of most page items to the property box.
- QVS-473: Remove the obsolete panel editor tools.
- Various minor optimisations.

### B1329, 2010-10-07 (FFC)

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- QVS-342: Added option to store (Induced) labels in storage groups.
- Improved the behaviour of selection in the matrix view.
- Fixed: Possible crash in Ember Deferral when port is restarting or closing.
- [FFC – Storage Groups.](#)

### B1323, 2010-10-04

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- QVS-460: Display the lock status when “render by vsmPanel” mode is active.  
**NOTE:** vsmPanel version 3.0.55 or newer required.
- QVS-241: Allow scrolling via mouse wheel.  
**NOTE:** Currently no support for horizontal tilt or horizontal wheels, but holding the “shift” key will scroll horizontal.
- Extended “Simple OCP” module to 12 CCUs.
- QVS-351: Don’t allow a parameter to be adjusted if the corresponding button is disabled.
- QVS-333: Option to sort matrix jump points alphabetically.
- QVS-306: Matrix View Editing: Add dedicated “Move” and “Insert” (Holding **Shift** Key) for drag and drop.
- QVS-318: Jump points were not correctly moved along with the signals.
- QVS-398: Allow insertion of a new empty column or row into the matrix.

## vsmStudio - Change Log and Version History

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### B1321, 2010-09-24

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- QVS-092: Changing the colour of a GPI would not automatically update a dependent Alarm's colour.
- QVS-366: When the name of a storage folder or group was changed, the associated panel button(s) did not automatically reflect the change.
- QVS-434: The Binding flag was only set for the source side of the pseudo device.
- QVS-438: In the panel editor, selections were not visible for buttons outside of the active panel area.
- QVS-467: The GP-I/O list did not show selection when inactive.
- QVS-289: The selection in the storage tree did not correspond to the storage content after a drop operation.
- QVS-263: When hovering over an entry in the storage and gadget views an extended tooltip is now displayed.
- QVS-314: The Meta Gadget List did not reset the Drop target display when drag over operation ends.
- QVS-343: The "Close other Dialogs" message box is now only opened once when the user tries to open multiple Signal Property Dialogs.
- QVS-446: Added support for "Crosspoint Tie Line" messages (111, 112 and 113) to pro-bel sw-p-08 protocol.
- QVS-445: Added support for inbound label changes into pro-bel sw-p-08 protocol.
- QVS-268: The scheduler page item would auto selected all channels if none were specified when editing the properties.

### B1319, 2010-09-22

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- QVS-458: The GPO Pulse option was broken, since B1274, for the GP-I/O-Boxes and some other devices.
- QVS-414: Added a formatter to display recorded GPOs in the scheduler.
- QVS-235: Fixed view tab behaviour when matrix properties are changed.
- QVS-343: The Signal Path Property Dialog can now only be opened once
- QVS-191: The color picker did not always trigger a button refresh when changing a color.
- QVS-459: The button visibility options, were not cleared when a button is set to "blanked".
- QVS-408: Signal label changes, were not always displayed when only displayed "by reference".
- QVS-335: When creating several signals at once, entering a primary, secondary or any other label resulted in a corrupt label string.
- Fixed: A bug may have led to a crash when opening the UMD Editor.
- Fixed: German Text in the English version of the "modify view" dialog.

### B1317, 2010-09-03

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- Fixed: Gadget Parameters did not display the value but the description (Bug introduced in B1183).
- Fixed: Possible cause for a strange and rare crash during start-up phase of the Sony S-Bus protocol.
- Added: Ability to create and edit new sections for HD-UMD.

### B1315, 2010-08-31

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- Added: Option to turn off label transfer to Thomson Vision Mixers using ACOS protocol.
- Added: "Recopy Picture" option for buttons. This will copy, e.g. an updated picture file, from the original location to the resource folder and signals the vsmPanel to refresh.

### B1314, 2010-08-24 (FFC)

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- Fixed: Potential chance of corrupting the button override storage file if storage fails.
- Added: Y position support for UMDs.
- Added: Browser Panel Page Item.
- FFC – UMDs.

## vsmStudio - Change Log and Version History

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### B1313, 2010-08-20

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- QVS-444: The Mx33 module now exposes a “free” parameter which reflects the available resources / tie-lines.
- QVS-448: The editor allowed the user to modify the goto groups for the Escape button.
- QVS-449: Added “Native Mapping” to the Lawo MNOPL protocol.
- Fixed: Dragging an object e.g. a signal over the “Manage Communication Ports” dialog would crash the system.

### B1312, 2010-08-16

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- Added: Select “Label” option added to TSL 3.1, TSL 4.0 and TSL 5.0 protocols.

### B1311, 2010-08-15

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- Fixed race condition when tracing to file.
- Added: In the signal list view, the information column now displays “follows” and “sync” depending on the signals sync settings.
- Added: Changed scheme and interval for checking the retention time of events.

### B1308, 2010-08-13

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- Fixed possible application crash when creating a cyclic follow relationship for gadget parameters via DAS.

### B1307, 2010-08-06

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- QVS-429: Automatic Target Button does not activate on page change when button is within a group.
- Made the “Display Alarm Name” on Alarm Stacks option accessible.

### B1306, 2010-08-05

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- Added: Lazy refresh for TSL 3.1 protocol.

### B1305, 2010-08-04

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- Fixed: In rare cases, queued ember packets could overtake each other on the way to execution causing them to be executed in the wrong order. As a bonus the execution is now pipe-lined and will execute faster.
- Added: Adjustable columns in the GPI Edit View.
- Added: Trace Messages for framing and checksum errors in the pro-bel sw-p-08 protocol.
- Added: PESA P1N protocol.  
**NOTE:** The P1N protocol has to be polled for changes. The Poll rate is at about 500ms.

### B1304, 2010-07-30

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- Fixed: The auto generated bitmaps of buttons were not automatically flushed when the dynamic assignment changed.
- Added: TSL 5.0 protocol.

### B1303, 2010-07-27

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- Added Grass Valley Group – Basic Native Protocol (Inbound) protocol.
- Added TSL 4.0 protocol.

### B1301, 2010-07-21

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- QVS-421: Fixed some difficult to understand dialog text.

## vsmStudio - Change Log and Version History

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- QVS-250: After deleting a Storage Disk or Storage Folder the vsmStudio does not ask to store changes when closing the configuration.
- QVS-252: Copying a View Panel Item did not copy the attached View reference and read only flag.
- QVS-292: It was possible to drop an object into a Component Drop Control while it is disabled.
- QVS-059: Ports disabled by licence issues don't display correct icon in Manage Communication Ports Dialog.
- QVS-424: Within the Signal List View, when adding a signal the signal would be shown in the list even if the current layer filter does not include the signal's layer.
- QVS-423: After deleting signals, newly created signals might not be displayed until the signal list view is closed and reopened.
- QVS-426: The GP-I/O Editor would display artefacts when changing or removing a GPO's clock source.
- QVS-294: Generally reworked the captions of the different view throughout the application.

### Firmware - Core Version 2.16 (Panels only), 2010-07-19

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- [QVS-384: Fixed Timer Display.](#)

### B1299, 2010-07-16

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- Added: Sony SBUS Router Protocol.

### B1292, 2010-07-13

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- Added: Possible fix for the PPMs staling when downloading event history.

### B1290, 2010-07-09

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- Added: Mx34 (Search and distribute resource manager) module.

### B1288, 2010-07-08

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- Fixed: Potential problem when reconfiguring GPO clocks while the signalling component toggles.
- Fixed: "View-XY" would no longer work on signals not in alarm. Introduced with fix in B1284.
- Added: Final version of the Mx33 (4-wire resource manager) module.

### B1287, 2010-07-07

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- Fixed: Potential chance that an attached component goes out of scope while in panel context's subscription or un-subscription queue, hereby causing a crash.

### B1286, 2010-07-05

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- Fixed: The signal connection timestamps were not updated correctly due to the changes in B1277. This would cause some modules e.g. the Apology Module to no longer detect certain signal changes correctly.
- Fixed: Possible incorrect display of current active state in the Apology Modules.
- QVS-413: Penta/VTs Display Protocol would sometimes not start-up the gadgets.

### B1284, 2010-07-05

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- Fixed: Setting an alarm into nuisance would also send the alarm to the configured XY-Panel.

### B1282, 2010-07-02

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- Fixed: GP-I/Os dependent from signals would use the signal's primary timestamp and not the latest timestamp. This could lead to incorrectly interpreted states.

## vsmStudio - Change Log and Version History

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### B1281, 2010-07-01

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- Fixed: Inter-server connection synchronization could cause loss of virtual signal assignment.
- Fixed: Timer synchronization could cause an exception.
- Added: Up/Down buttons in the secondary command edit dialog.

### B1278, 2010-06-30

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- Fixed: Inter-server connection synchronization could lose the connection's physical timestamp.

### B1276, 2010-06-29

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- Added: New Ticket system for connects which enables more detailed log entries.
- Added: Additional log information.
- Fixed: User modified start time for Timers in Multi-Server environments.
- Fixed: Operational Status in Z-Protocol.

### B1274, 2010-06-28

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- Added: New signal management module (currently called "Mx33" for the lack of a better name).
- Changed: Blind signal connections that are the result of virtual connections are indicated as black/yellow dot, analog to the normal blue/yellow dot.
- Changed: Reintroduced the signal annotation scheme for signals in the log file: "name" = Standard, <name> = Tie-Line, {name} = Virtual Signal, \*name\* = Concealed Signal, \*{name}\* = Concealed Virtual Signal, {"name"} = Invisible Signal, [name] = Pool Signal (**As described in Application Note 006**).
- Fixed: Problems with synchronization of GP-I/Os with "Set to "true" on Start-up" flag set.  
**NOTE: The GP-I/Os will be set at start-up (and attached functionality *will* be executed) but the GP-I/Os will eventually take on the state as current in the server zone. Therefore, **DO NOT** use these GP-I/Os to trigger cross-points, parameters or other GPOs that will be modified by users or other means at a later stage.**
- Fixed: General problem with synchronization of GP-I/Os during start-up or configuration sync.
- Fixed: Removed redundant update notification when queuing primary signal changes.  
**NOTE: This might influence the system in unexpected ways. Please report any observations.**

### B1273, 2010-06-23 (FFC)

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- Added: A Target can be marked as "Blind" and used within the pseudo device list e.g. with the blind rule to disconnect return paths in 4-Wire scenarios. If within a pseudo device a source is connected to a blind target the corresponding associated target of the previously connected primary source will be connected to blind.
- Added: 4 Wire attribute for signals.
- Removed: Obsolete "Enable Device Gadgets" and "Never Store".
- Reduced the max amount of labels supported in the "Binary Jupiter UMD" protocol to 4 (Jupiter does not support more).
- [FFC – Signals](#).

### B1272, 2010-06-21

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- Added: New parameter streaming schema for Ember. The old schema is still fully supported.

### B1271, 2010-06-20 (FFC)

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- Fixed: Opening a Panel as virtual without installed vsmPanel would cause crash.
- Fixed: Pushing the configuration multiple times might not work.
- Fixed: Attempting to select Target/Source Headers outside the defined range would cause crash.

## vsmStudio - Change Log and Version History

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- Added: “Manual Apology” GPI for the “Apology Module”. This GPI can be used to put the module directly into apology mode.
- [FFC – Apology Module.](#)

### B1270, 2010-06-18

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- Fixed: Condition “Source change not Blind” will also accept target specific blind as blind.
- Fixed: Pending “Reporting Events” were not correctly synchronized after reloading a configuration in an active zone.

### B1269, 2010-06-18 (FFC)

---

- Added: Persistent Targets. On Source changes the Target will verify if the connected source is its associated persistent source. If not, the target will attempt to reconnect the persistent source. This will be tried a maximum of 20 times, counting from the last successful connection to the persistent source, with increasing delays between the false connects and the attempt.
- [FFC – Signals.](#)

### B1268, 2010-06-17

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- Fixed: Resetting a hardware panel with active parameter subscriptions could cause a crash.
- Fixed: Potential deadlock in component helper functions.
- Fixed: Various bugs in the DAS lexer which would lead to crashes e.g. when editing the scripts.

### B1264, 2010-06-15

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- Fixed: The Queued Objects for the Panels would not be completely sent to the vsmPanels. Especially the Matrix View would show up incompletely.

### B1263, 2010-06-14

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- Added: Only the events of the last 36 hours will be initially sent to the vsmPanel. Later events are sent on demand, when the user accesses them.  
**NOTE:** vsmPanel version **3.0.47** required to view events older than 36 hours.
- Added: “Export to file” option for Storage Folders.
- Change: The storage folders no longer automatically expand on opening the storage tree view.
- Added: “Source Change not Bind” condition for secondary commands on signals.

### B1260, 2010-06-13

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- Added: The log entries for “Stored Parameters” now also show the containing Storage Folder.

### B1259, 2010-06-11

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- Reduced the amount of messages sent when performing a “fade in time & fade” or a “fade out time & fade” command in the Lawo MNOPL protocol.

### B1256, 2010-06-10

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- Fixed: Hardware Panels could unexpectedly enter “Lock” mode if the user used multiple Link buttons and then held a button for 2 seconds.

## vsmStudio - Change Log and Version History

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### B1251, 2010-06-07 (FFC)

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- Added: The “Auto Fader” module can now be used to catch out-of-order fade-out, switch and fade-in sequences from automation.
- [FFC – Auto Fader Module.](#)

### B1250, 2010-06-07 (FFC)

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- Added: Last Processed timestamp.
- Added: MNOPL Protocol: Extra delay before fetching the silence status after router/server switch-over.
- [FFC – Auto Fader Module.](#)
- [FFC – Alarm Events.](#)

### B1249, 2010-06-05

---

- Fixed: Some value changes of attached Gadget Parameters might not be displayed on panels.
- Fixed: Potential deadlock in panel subscription logic.

### B1248, 2010-06-04

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- Fixed: Selecting “view in XY” would only select the targets with alarm state into multi-target.
- Fixed: Problem where the object property box might hang due to windows bug Q149501.

### B1246, 2010-06-03

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- Fixed: After adding multi selection to panel editor in B1193, the mouse resize and move no longer worked.
- Fixed: Dropping an Alarm or an AlarmStack outside of or between the designated fields in the alarm page item would cause the system to crash.
- Fixed: When deleting an active panel with active parameter streams the system could crash.
- Fixed: The properties of an “Alarm” page item would not be copied when copying a Panel or Panel page.
- Added: “Suppress Take for this source” option to panel buttons.

### B1243, 2010-06-02

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- Fixed: Associated alarms, as introduced in B1229, would not be marked as unprocessed when the panel ends the processing.
- Added: DAS can assign a collection to a target button.
- Added: DAS keyword “SelectedTargets” – returns a collection of the currently multi selected targets.
- Added: The pro-bel sw-p-08 protocol can now use the full source and target range (0-65535).
- Added: “Execute when pressed” option to panel buttons. Currently on enabled on Source Buttons.
- Added: “End-Talkback” command to Talkback sources.

### B1240, 2010-06-01

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- Fixed: Possible race condition in the “reverse lookup table”.

### B1239, 2010-05-31

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- Fixed: Bug in gadget persistence check which prohibited the automatic and manual prune of the gadget tree.

### B1238, 2010-05-31 (FFC)

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- Added: “Filter by” option when “Viewing in XY” for alarm panel items.
- [FFC – Panel Item: Alarm.](#)

## vsmStudio - Change Log and Version History

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### B1237, 2010-05-30 (FFC)

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- Added: Individual delay for GPO input Pins. The delay may be 0 or >500ms.
- [FFC – GPI/Os: Delay.](#)

### B1234, 2010-05-28

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- Added: DAS keywords “or” and “and”.
- Fixed: Panel assign via gadget parameter.
- Fixed: Correlation Stream parameters were falsely offered on the DSP sources in the Lawo MNOPL protocol.

### B1231, 2010-05-27

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- Added: DAS keyword “visibility”.
- Fixed: The DAS keyword “follow” no longer worked correctly after B1213.

### B1230, 2010-05-26 (FFC)

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- Added: Configuration Option “View Panel” for the “Alarm” page item.  
**NOTE:** vsmPanel version 3.0.45 or newer required.
- [FFC – Panel Item: Alarm.](#)

### B1229, 2010-05-26

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- Added: New alarms which are associated with signals which are currently in “Alarm Processing” are automatically also put into “processing” state.

### B1228, 2010-05-25

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- Fixed: Problem in the nVision protocol which would lead to the first target to not be queried.
- Fixed: Some protocols would falsely indicate their connection operational GPIs even when not connected.
- Fixed: Removed reference to a non XP compatible kernel function that sneaked in a few builds ago.
- Fixed: GPOs did not evaluate themselves after drag and dropping new term sources into it.

### B1226, 2010-05-25

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- Added: Extra debugging information for fade in / fade out.

### B1225, 2010-05-24

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- Added: Filter for “Multi Target from Source” button. The Targets have to be members of the selected View to be selected.
- Added: “Allow Deselecting” and “Display Deselected” options to “Multi Target” button.

### B1224, 2010-05-23

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- Added: Option for Server-State Status GPIs. Starting from the base address, each server signals 4 GPIs. The two first GPIs are currently defined as “Online” and “Loaded”.  
**NOTE:** The controlling setting “Settings/Server State GPI Base” must be set individual on each server. Failing to do so will result in confusing results as the GPI synchronization will cause the GPIs to reflect the correct state “most-of-the-time”.  
**WARNING:** Also, as this setting is global, beware that when loading different configurations this setting might conflict with existing GPIs. **Therefore it is strongly recommended, that this value is set to 65000 (hex: fde8).**



## vsmStudio - Change Log and Version History

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### B1219, 2010-05-21

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- Fixed: Potential race condition within route 6000 protocol.

### B1218, 2010-05-21

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- Fixed: DAS collection retrieval did not set default usage which would confuse the xSwap command.

### B1217, 2010-05-20 (FFC)

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- Added: Signal Processing GPO for Alarm Processing.
- FFC – Panel Item: Alarm.

### B1216, 2010-05-20

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- Added: DAS inline conditional operations.
- Fixed: Offset during initial sync in Quartz Native protocol.

### B1215, 2010-05-19

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- Fixed: During initial status retrieval, heartbeat messages might interfere and cause connection status information to be lost.

### B1214, 2010-05-19

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- Fixed: Under some conditions, dependent connections were not delegated when the executing server had an offline connection to device.  
**NOTE: Testing of the complete Switching Engine behaviour in standalone and cluster required!**

### B1213, 2010-05-18

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- Possible fix for invalid “reverse lookup table” problem.
- Added Pre-Compiling of “Dynamic Attachment Scripts”. This yields a 10-20 times faster processing time.  
**NOTE: Please check and report any strange or unusual behaviour.**

### B1210, 2010-05-13

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- Fixed: case dependency problem in DAS scripts.

### B1209, 2010-05-13

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- Fixed: “No local handler” Bug introduced in B1207.
- Added: Possibility to change the Z-Order of Panel Buttons. Ctrl-Page-Up moves back, Ctrl-Page-Down moves forward; holding shift at the same time sends buttons to back most or front most position.

### B1207, 2010-05-10

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- Fixed: Excessive overhead through duplicate transfer of tombstones.
- Fixed: Problem when synchronizing virtual signals over tie-lines in one-zone operations.

### B1206, 2010-05-08 (FFC)

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- Added: The Panel assignment is now assessable via the panel gadget parameters.
- Removed: Obsolete “Send panel to server” functionality.
- FFC - Panel: Internal Unique Identifier.

## vsmStudio - Change Log and Version History

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### B1205, 2010-05-04

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- Added: “Toggle with Previous Source” attribute for panel “source” and “blind” buttons.

### B1203, 2010-05-03

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- Fixed: Deleting a panel page item could cause a crash.

### B1202, 2010-04-30 (FFC)

---

- Added: “Quick Start Groups” for Panels.  
**NOTE:** Eventually this functionality will be replaced by the upcoming general grouping ability. At that stage the groups will be migrated to the new schema.
- Added: Allow multiple instances of the same object in the Meta list.  
**NOTE:** Duplicate entries require an alias to be accessible.

### B1201, 2010-04-30

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- Extended Jupiter-Binary-Label-Exchange protocol to support secondary (e.g. Audio) outbound labels. The secondary labels are accessed via the signals target pseudo devices association.

### B1200, 2010-04-29

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- Fixed: Small bug introduced into DAS parsing in B1199.
- Added: “Suppress TAKE” button attribute for Target Buttons. This suppresses the TAKE button action for the buttons target until a difference target is selected.  
**NOTE: Testing for secondary effects required.**

### B1199, 2010-04-29

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- Added: New DAS keywords “contains” and “not”.
- Added: Extended the DAS assignment (=) to allow button local storage.
- Added: The “Deselect Active Target” attribute can now be used on target buttons to deselect and end the “multi target” selection mode.

### B1198, 2010-04-28

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- Fixed: “Source of Target” button would show active when no assignment on button and nothing selected.
- Fixed: Colour Bug with “Link” buttons introduced B1193.
- Added: “Hide when Inactive” button attribute.

### B1197, 2010-04-27

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- Added: New exception and dump handler.

### B1193, 2010-04-26

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- QVS-353: While creating new layers, double clicking into the empty space of the layer list could cause crash.
- Display on all layers with an empty button on the first page could result in button that could not be assigned.
- Added basic multi select of buttons and page items, bulk alignment and positioning. Multiple buttons may be selected by holding the shift key while selecting.
- Added comment to dump file name.

## vsmStudio - Change Log and Version History

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### B1192, 2010-04-22

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- QVS-385: Fixed loophole in the signal usage management that could cause tie-lines' usage counters to be incremented ("used") by downstream signals and would prohibit switching on the targets using tie-lines.

### B1191, 2010-04-22

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- Fixed parsing error in DAS.
- Added new PPM style "CBC".
- Added new button Style "Tab".  
**NOTE:** Requires vsmPanel version 3.0.42 or higher.

### B1190, 2010-04-20 (FFC)

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- Added "Offset" parameter to the PPM panel page item.

### B1189, 2010-04-19

---

- Added Apcon/MultiDyne CLI3 v2.5 protocol.  
**NOTE:** Requires a username and password, as well as sufficient access rights to be configured in the router and the same username and password to be set in the VSM (See Application Note 21).  
**NOTE:** This protocol/device suffers not only under extreme slowness of the actual command execution and total lack of e.g. feedback on connects, but also required to be constantly be polled for updated connection status (each request takes 2-3 seconds). Expect to see significant lag (and don't call us).

### B1187, 2010-04-15

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- Added the option to modify the displayed name of a gadget parameter. Also, if the parameter is an enumeration it is now possible to modify which values the user may select and which text is displayed.  
**NOTE:** Only panel display and use the modified text and values. Within the configuration only the real text and values are used and displayed.



### B1186, 2010-04-13






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- Fixed possible loss of virtual signal path information due to latency and overlapping switch commands.

### B1184, 2010-04-12

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- Added new server status display:  iason: CBC-AlarmTestC  vsm-x1  
**NOTE:** The local server is displayed first, followed by the name of the currently loaded configuration file.  
The dot indicates the current state of the server:  

	Blue	Primary server
	Green	Active server(s)
	Orange	Online with different configuration
	Black	Online with no configuration
	Red	Offline

  
Additionally, a flashing clock  will indicate excessive time offsets.

### B1183, 2010-04-12 (FFC)

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- Fixed bug where custom images for parameter buttons would not be overlaid with parameter value.
- Fixed bug where while in a zone, exiting the vsmStudio application would result in a crash. This would happen if the configuration had been activated on the server that is now closing the application. In most cases this would lead to a crash.
- Fixed possible loophole to toggle the null GPI through the connection status on protocols.

## vsmStudio - Change Log and Version History

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- Gadget parameters now store the enumeration and other attributes so that they can be edited while the associated device is not connected or not online.  
**NOTE:** Only parameters that are actually used are stored.

### B1182, 2010-04-08

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- QVS-266: Panel “PPM” page items with DAS will not display the correct alarm states when these change.
- Fixed a potential race condition when synchronizing signal path states.
- Reduced the amount of redundant sync messages sent.

### B1179, 2010-04-01

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- Added AI Module. Using voice recognising this Artificial Intelligence will automatically create the configuration based on speech dialog with the user. This option is enabled via “File / Advanced Editing Options”. (Speakers and Microphone are required. Also, ensure that your microphone has been calibrated before use).  
**NOTE: The AI has some Mega-lo-manic ambitions at times, save the configuration frequently.**
- Added “Clock” option for GPOs (In the right click context menu within the GPO editor).  
**NOTE: This is preview only and should not be used in production until further notice.**

### B1178, 2010-03-30

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- Fixed annoying typo in “Apology” Module which caused strange behaviour.
- QVS-361: The “Automatic” function on panel buttons did not always work as expected.

### B1177, 2010-03-26

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- Set the “FadeIn” multiplication for the Lawo DSP Timed Fader from x2 back to x1.

### B1175, 2010-03-25

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- QVS-373: Opening the pseudo device view before assigning a signal to the virtual matrix causes a crash.
- QVS-372: The Mimic button terminates the mimic assignment operation if the user presses the “same” button on a different page. Also the final post mimic navigation to the original page is not performed.
- Added new “Glass” button style to style menu. Requires vsmPanel 3.0.39 or higher.

### B1173, 2010-03-24

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- QVS-341: The Slider for the parameter adjustment in the gadget parameter list cannot handle extreme value ranges.

### B1172, 2010-03-24

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- Fixed: Logging of gadget parameter changes might contain the parameter as originator instead of the actual panel button.
- Fixed: The “Audio Monitor” module would incorrectly default to 1024er volume range when loading an older configuration instead of maintaining the 64er range.

### B1171, 2010-03-24

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- English only version.

### B1170, 2010-03-24

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- Reduced the chances of users causing disappearing nodes in GPOs by not placing related signals on the VM.  
**NOTE: It is, and always has been, mandatory for every operational signal to be located somewhere on the VM.**

## vsmStudio - Change Log and Version History

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### B1169, 2010-03-24

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- Fixed: The signal path connection status on vsmPanel “View” page items were not updated for layers that are not local to the vsmPanel primary controlling server.
- Fixed: Potential crash during synchronization of GP-I/Os from another server.
- Fixed: Bug in the pending state management of GPOs introduced in B1154.
- Fixed: When a Connections’ timer is pending and multiple IOCP events on the same connection occur this would result in the IOCPs being processed sequential instead of being queued. This could have slowed down the overall I/O performance.

### B1166, 2010-03-22

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- Fixed: Inline editing of signal path labels was disabled by accident.
- Fixed: During shutdown and load cycle it was possible that timers would be created due to e.g. changes to routers states and would end up in the execution queue of the “other” configuration causing a crash.
- Reworked the memory allocation schema to speed-up closing / shutdown of a configuration.
- Reworked parts of the interconnection protocol in search of possible cause of loss of received data.
- Fixed: Interconnection messages being lost before the interconnect session is fully established.
- Fixed: Interconnection messages being sent before the interconnect session is fully established.

### B1160, 2010-03-17

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- Removed legacy support for touch-screens.
- Reduced the amount of trace info for ports that are suspended or disabled.
- Added logging of gadget parameter changes.  
**NOTE:** The log information is logged 3 seconds after the last change to the parameter happened. This is to reduce the amount of log entries when the user is using an encoder button or a slider to control the parameter.
- QVS-142: Option to select which label is displayed in the visual link.  
**NOTE:** Requires vsmPanel version 3.0.38 or higher.

### B1158, 2010-03-15 (FFC)

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- Fixed: The sorting order of the columns is now honoured by drag and drop operations.
- Added: The order of the pseudo device columns is now configured in the columns configuration property page and stored in the configuration.  
**NOTE:** The user can still reorder the columns in the pseudo device view by dragging the headers, but these changes are no longer stored.

### B1157, 2010-03-10

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- The Signal Path List View now displays all (named) labels and allows direct editing.  
**NOTE:** Work in process...
- Fixed: Bug in the Source Label processing in the Sony sBus protocol.

### B1155, 2010-03-09

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- Changed the Message Queue behaviour on the Lawo mc<sup>2</sup>82 protocol.

### B1154, 2010-03-03

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- Fixed: Missing Operational Status update in Lawo mc<sup>2</sup>82 protocol.
- The GPI state distribution has been reworked and some very historic constructs were removed.

## vsmStudio - Change Log and Version History

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NOTE: Testers are requested to test all GP-I/O related functions and components with special focus on multi server environments.

### B1152, 2010-03-03

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- QVS-356: The GPI and GPO lists flicker

### Firmware - Core Version 2.14, 2010-02-25

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- Finally tracked down a problem in the network chip driver that reacted badly when transmission errors accumulated due to some switches using half-duplex. This would lead to a unit that would still be running but would have no network access and therefore e.g. would no longer respond to a ping.

### B1151, 2010-02-24

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- Added protection against incremental dependencies causing stack overflow.  
NOTE: This only would happen if the user massively abuses the system with dependent virtual signal states.

### B1150, 2010-02-23

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- Reduced the poll rate on Evertz Symphony protocol.

### B1149, 2010-02-22

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- Added support for audio layer on Evertz Symphony protocol.
- Added support for mapped signal labels on Evertz Symphony protocol.  
NOTE: The mapped names are specified with the 05 / "Protocol" label of the signals.

### B1148, 2010-02-19

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- Fixed offset in the Lawo GPC handling.  
**NOTE:** This might impact some configurations.
- Added multi unit support for VTS UMD protocol.

### B1144, 2010-02-18

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- Added support for Tally via ACOS protocol.

### B1143, 2010-02-18

---

- Added extra support for Lawo DSHS Core Takeover.

### B1141, 2010-02-15

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- Fixed problem with the pro-bel-sw-p-08 protocol when starting up virtual layers.

### B1137, 2010-02-12

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- Fixed the problem that fades via "ParameterLink" modules would only work once.
- Added some debug information to the "ParameterLink" modules. Can be enabled in the debug flags dialog.
- Removed source limitation from Kalypso contribution Tally protocol.

## vsmStudio - Change Log and Version History

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### B1135, 2010-02-10

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- Added “Prune” menu command to Gadget Tree View. This command scans the selected gadget and its sub items and removes them from the persistent list if they are not referred by other components. It also dumps the usage to the CommTrace, so that it is possible to see where a parameter is used.  
**NOTE:** To see the changes the configuration has to be saved and re-loaded.

### B1134, 2010-02-09

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- QVS-319: It is no longer possible to drag-and-drop storage content.
- QVS-322: The droplist and edit field for the conditional GPO entries is positioned correctly.
- QVS-315: Alias names are correctly assigned when the user clicks into a different alias field before completing his entry with enter.
- QVS-310: “Fired” TAKE button will no longer perform action again when pressed.
- QVS-326: The name enumeration string can now contain special characters e.g. hyphens ‘-’ when the name is enclosed in double quotes e.g. “Tape-23”.
- QVS-307: Storage Folder now correctly reflects its content state.
- QVS-296: Menu option “Load” is now only active if a storage-group or bin is not empty.
- QVS-304: Label updates sent to other server for signals which are not yet on that server, no longer crashes the system.

### B1133, 2010-02-09

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- Fixed the “wiring” for the Lawo SDI card parameters.

### B1131, 2010-02-08

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- Removed support for the .L command from Quartz Native protocol, as the command is now discontinued in newer routers.

### B1130, 2010-02-07

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- Finalized Evertz Symphony protocol.  
**NOTE:** This protocol suffers from “Acknowledge required” syndrome, depending on the transport layer and the hardware on the other side switching might be sluggish. This protocol implementation supports both outbound (talking to router) and inbound (pretending to be router) switching. The later is not final, as the implementation will confirm connections on command reception, resulting in possible incorrect status if the controlled layer does not perform the connection. The source and target names are currently fixed to “DST-0000” - “DST-9999” and “SRC-0000” - “SRC-9999”.

### B1129, 2010-02-05

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- Fixed possible crash in “AutoFader” module.
- Added Evertz Symphony protocol (Ironically, while listening to Vivaldi’s four sessions).

### B1128, 2010-02-03

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- Modified the behaviour of the Lawo “Timed Fader” module’s “FadeOutTime&Fade” and “FadeInTime&Fade” parameters so that the effective fade time corresponds with the expected time.
- Gadget Parameters can now be dropped directly into a GPO in the GP-I/O List.
- Holding the shift key while dropping a Gadget Parameter into a GPO changes the resulting condition from equal (==) to not equal (!=).

## vsmStudio - Change Log and Version History

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### B1125, 2010-02-02

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- Fixed calculation problem in the “AudioMonitor” module.
- Fixed DAS assignment problem for the PPM’s over/under alarm entries.  
NOTE: There still remains a problem with the actual update of the over/under range alarms.

### B1124, 2010-02-02

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- Added additional control parameters for the “AudioMonitor” module. It is now possible to set the amount of volume steps (64 for Encoders and 1024 for Faders), the maximum and minimum Gain, and the Dim value.
- Added a bandwidth control for the “AudioMonitor” module to balance the gadget traffic when controlling a lot of attached parameters.

### B1123, 2010-01-29

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- Fixed initial Mute/Dim states in “AudioMonitor” module.
- Fixed limitation in the Jupiter Label Transfer protocol.
- Fixed possible race condition between DAS and protocol handlers.

### B1120, 2010-01-28

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- Fix for Sony-SBUS protocol to display label changes without having to trigger a connection change.
- Extended Evertz/ImageVideo protocol to 256 Signals.

### B1119, 2010-01-27

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- Added support for LPBP “Brightness”. Available with LPBP Panels Firmware Versions 2.12 and newer.

### B1118, 2010-01-25

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- Fixed bug in “AutoDefault” Module.
- Added configuration title left of zone status display.
- Added left and right mute to “AudioMonitor” Module.  
NOTE: the “Link” Mode has reduced functionality for the moment, as it no longer allows for an offset between left and right channels. This will be corrected as soon as a valid method is found to perform this in both gain and volume mode.

### B1116, 2010-01-23

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- Extended the Audio Monitor to 64 channels and added a switch which automatically detects if the user is using the module in Gain or Volume mode and provides native resolution for both modes.

### B1115, 2010-01-21

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- Removed historic and obsolete slicing of the inter server communication.

### B1114, 2010-01-20

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- Added protection against loading virtual signal path that have a timestamp way in the future, which would effectively block the virtual signal until the timestamp becomes past. The problem can only be induced by a user manually setting the time incorrectly and performing switches on virtual signals. The allowed future offset is now 60 seconds. Any timestamp beyond that is set to “Now” + 60 seconds.



## vsmStudio - Change Log and Version History

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### B1109, 2010-01-14 (FFC)

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- Added “Enable AutoFade” option in the layer options. This controls if inbound connects from e.g. automations should trigger “Auto Fader” Modules (if existent). The default is false and should only be enabled if required.

### B1108, 2010-01-14

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- Added “AutoDefault” Module.

### B1107, 2010-01-07

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- Fixed: When an alarm is processed, only the active alarms should be transferred onto the processing panel.

### B1106, 2010-01-06

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- Reworked the IOCP core to solve problems with lost write data on some GigaBit-LAN Network cards.

### B1105, 2010-01-05

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- Added context menu option “Scroll to Current Source” in the Matrix View (Target Header) which scrolls the matrix view to show the current connected source. When possible the view will be adjusted so that the beginning of the containing group is visible. The containing group is determined by the signal’s family or by gaps in the matrix’s source list.

### B1104, 2010-01-01

---

- A SUCCESSFUL AND **HAPPY NEW YEAR** TO EVERYBODY!
- First build with new build environment.

### B1102, 2009-12-12

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- Removed the Netia label revoke as implemented in B1100.

### B1101, 2009-12-11 (FFC)

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- Added options to select the displayed and modified label on the “Induce Label” button.

### B1100, 2009-12-09 (FFC)

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- QVS-130: “View Only” option for Visual Link.
- QVS-129: “Show Family Colours” option for Visual Link.  
**NOTE:** QVS-129 and QVS-130 require vsmPanel 3.0.33 or newer.
- Added possible solution for the Netia label revoke request.

### B1097, 2009-12-08

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- Fix for fix of possible stalemate in protocol termination lifecycle control (B1094).

### B1095, 2009-12-08

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- Extended “ParameterSplit” Module to 64 Channels.
- Reduced “AudioMonitor” Module back to 8 L/R Channels.
- Extended debug output for “process” alarms.

### B1094, 2009-12-07

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- Fixed order of label overlay.

## vsmStudio - Change Log and Version History

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- Added cache for overlaid labels.
- Added “sub-panels” to VTS protocol.
- Fixed possible stalemate in protocol termination lifecycle control.

### B1090, 2009-12-03

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- Fixed bug in secondary commands on GPIs introduced in B1080.
- Added “Outbound Labels” trace option to Sony SBUS protocol.
- Added option to disable the automatic detection of base station in the Sony SBUS protocol.  
**NOTE:** The default is OFF, as ON seems to produce problems in certain Sony setups.
- QVS-283: Added option to deselect the current selected Target or Component on panel.
- Fixed value mismatch of MUTE parameter on the Ross protocol.
- Fixed offline and restart issues with the Ross Protocol.

### B1086, 2009-12-01

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- Added “Label” Attribute for Netia ZProtocol.

### B1085, 2009-11-30 – Version 0.8.0.1085

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- **Scheduled Release: 0.8.0.1085.** Many thanks to all that have contributed!

### B1082, 2009-11-29

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- QVS-97: The Opaque value of Background Colours changed to drastically when upgrading from a build previous to Build B0866. Nonetheless, not all visual will display as before due to the changes in the overall colour processing.

### B1080, 2009-11-27 (FFC)

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- Added the possibility to combine “Secondary Commands” with “Dynamic Attachment Scripts”.  
**NOTE:** The manufacture cannot be held liable for any brain damage caused by use of this functionality.

### B1079, 2009-11-26

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- Added “Netia” version of Thomson ZProtocol.
- QVS-231: Un-processing an Alarm should cancel the processing on any panel actively processing this alarm.

### B1077, 2009-11-25

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- Fixed the Ross “Volume to Gain” / “Gain to Volume” precession loss problem.

### B1076, 2009-11-24

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- QVS-183: Changes to signal paths are not always correctly displayed within the visual link panel page item.  
**NOTE:** Please also update to vsmPanel version 3.0.28 or newer.

### B1075, 2009-11-20

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- QVS-276: When automation triggers alarm removal, panels do not correctly update e.g. PPMs if the changed target is secondary target of the displayed alarm.

### B1073, 2009-11-18

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- QVS-182: Problems with synchronization of Reporting Events during start-up.
- QVS-211: Problems with synchronization of Reporting Events during hand-over.

## vsmStudio - Change Log and Version History

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### B1071, 2009-11-16

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- Eliminated some minor memory leaks.
- Eliminated some redundant and/or unnecessary component update calls.  
(Might also eliminate some rare update related crashes in complex update and load situations)

### B1070, 2009-11-15

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- QVS-248: Ember tunnelling into protocols might cause crash.

### B1069, 2009-11-11

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- In the gadget tree view, display gadgets that have been renamed by user in a different colour.

### B1068, 2009-11-10

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- QVS-233: Hiding a Pseudo-Device column does not always work.
- Updated the Audio Monitor Module to allow native Gain steps indecent of the volume curve.

### B1067, 2009-11-09

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- QVS-258: A crash will occur if an attempt is made to copy the layout page of a panel.

### B1066, 2009-11-09

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- Reworked part of the panel collections in order to eliminate possible crash in combination with alarm panels.

### B1065, 2009-11-05

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- Modified the re-connect behaviour of the nexus 5 protocol.
- The "Assign Signal Family" popup menu in the signal path list view was not displayed if no families existed.

### B1064, 2009-11-03

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- QVS-246: A crash may occur, when closing large configurations with many active V-Bits.

### B1063, 2009-11-03

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- Closed loophole where individual reporting events would be replaced rather than synched when syncing between servers, causing e.g. vsmPanel to not correctly reflect state changes.
- Storage Group Buttons now show the active colour when all contained signals and GPOs are connected or have the state as specified within the Storage Bin.

### B1062, 2009-11-03

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- QVS-242: The Alarm Status Information on the PPM Meters is not updated correctly.

### B1060, 2009-11-02

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- QVS-237: Last entry in a storage group bin can't be deleted.
- QVS-73: The Storage Tree View jumps to the top when items are saved.
- Storage Group Buttons now show the active colour when all contained signals (!) are connected as specified within the Storage Bin.

### B1058, 2009-10-28

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- QVS-236: "An unsupported operation was attempted" when opening an Alarm Module.

## vsmStudio - Change Log and Version History

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### B1057, 2009-10-26 (FFC)

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- QVS-219: Allow disable of Tie-Lines.  
**NOTE:** This will disable a tie-line for future assignment or usage; it will also **disconnect** any target subscribing the tie-line's source signal via the tie-line.
- Changed signalling conditions while loading Storage-Groups.

### B1055, 2009-10-23

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- QVS-178: Incorrect Usage Count for Tie-Lines in conjunction with through signals.
- QVS-060: Add "Storage-Group-Disc" to valid meta-gadget entries.
- Added "Tielines" command to show the available tie-lines and their usage status.

### B1052, 2009-10-22

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- QVS-228: A page change that occurs between pressing and releasing a button will cause the release action of the button on the *new* page to be executed when releasing the button.
- If the actual "Shift Button" is navigated away from the shifted page e.g. by another navigation button, the shift return operation is now cancelled.
- Tweaked the communication between the vsmStudio and Hardware Panels.

### B1051, 2009-10-16

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- QVS-224: The pro-bel extended connect command does not correctly map to Blind.
- Removed missing null pointer check in "invisible source" dependency management.

### B1050, 2009-10-16

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- QVS-217: "Target of Source" Button does not always displays correctly when target is both primary and physical.

### B1049, 2009-10-15

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- Added "Are you sure?" dialog boxes to "Storage Group" actions Load, Save and Delete.

### B1048, 2009-10-08

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- Fixed problem where in a multi server environment a manual configuration close will trigger a reload.

### B1047, 2009-10-08

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- Fixed problem where panel groups are not correctly copied when copying a panel.
- Added drop action modifier for GPIs: Drop with CTRL Key pressed - All dropped items are OR'ed.
- Added drop action modifier for GPIs: Drop with SHIFT Key pressed - All dropped items are AND'ed.

### B1046, 2009-10-07

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- QVS-203: Fixed problem with German language matrix size property sheet.
- QVS-208: Fixed problem with old, still active, reporting events after restart of system.
- QVS-186: Turning a panel's encoder will now wake-up panel from "dark" mode.
- Added 5 second option to "Return to "idle" page".

### B1045, 2009-10-07

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- Fixed problem with Tally where downstream tally would not correctly propagate through virtual signals.

## vsmStudio - Change Log and Version History

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- Added a very application specific option to only display the source label on a target button.

### B1042, 2009-10-02

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- Extended the “Audio Monitor” Module to 64 channels.

### B1041, 2009-09-28

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- Fixed bug in Archive sub system which could cause archived files to become unreadable.
- Added Bulk Gate to Amazon UMD protocol.

### B1038, 2009-09-25

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- Fixed potential (but very improbable) race condition in the Layer map initialization which might cause crash.

### B1037, 2009-09-25

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- “Reporting Events” are now sent in latest first order for faster “current” state display on vsmPanel.
- The “in process” flag now gets removed from “Reporting Events” during start-up.

### B1036, 2009-09-24

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- Added origin port information for inbound connects.
- Added timeslots for information sent to vsmPanels.
- Enlarged the hash table size for Tombstones.
- Added active PPM Stream counter.
- Added read Bytes, read Bytes/sec and written Bytes/sec display.
- Added floating internal status window.
- “Cancel processing” will now “Escape” the processing panel.

### B1030, 2009-09-21

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- Fixed very exotic race condition between execution and reporting threads.

### B1027, 2009-09-08

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- Added “Panel” frame draw item.

### B1026, 2009-09-07 (FFC)

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- QVS-167: Add option to disallow “nuisance” of individual alarms.

### B1025, 2009-09-04 (FFC)

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- QVS-175: Fixed bug that inhibited assigning a virtual signal paths to layers greater 64.
- Added “Selection Style” option to Panels.

### B1023, 2009-09-04

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- Extended Studer R6000 protocol Source/Target range to 65536.
- QVS-164: Storage Groups did not load “Enumerated” type Gadget Parameters correctly.

### B1021, 2009-09-03 (FFC)

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- Added DAS “Meta” keyword.
- Added support for non gadget parameters in Signal Meta Lists.

## vsmStudio - Change Log and Version History

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- Separated Gadget and Meta Views.
- Fixed potential crash when editing a panel with an unassigned “Target of Source” Button.

### B1018, 2009-08-31

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- Apology Modules can now detect reoccurring connects to the same source.

### B1017, 2009-08-28

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- Fixed a bug in timer logic that would not restart timers which were repeatedly restarted with the same timestamp.

### B1015, 2009-08-25

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- Fixed a bug in DAS logic that could lead to the system using the original “Node” attachment and not the dynamic assigned node.
- Removed some of the chatty trace messages forgotten in B1014.
- Changed the behaviour of the secondary “toggle” action in conjunction with “Talkback” sources.  
**NOTE:** Now the toggle will only connect a talkback source when it is not currently the source to the target and if it is no action is executed (See Application Note AN0024 for full details).

### B1014, 2009-08-24

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- Fixed a problem where signal connection timestamps could be lost.
- Fixed a problem where delayed release could attempt to dispose objects after the configuration had closed.
- Added Summing Matrix Control Module.

### B1010, 2009-08-20

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- Corrected the Tally access point for ALL 3<sup>rd</sup> party UMDs.

### B1009, 2009-08-19 (FFC)

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- Fixed the “dump io” command which would crash when used.
- Added a panel option to have vsmPanel render some of the Labels (QVS-116).
- QVS-119: Added retention time and size limits for log file.
- Added retention time limit for Alarms and Reporting Events.

### B1008, 2009-08-16

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- Added some debug code.

### B1007, 2009-08-14

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- QVP-102: Fixed problem were the “Back” button would use the page stack from the wrong group scope.

### B1005, 2009-08-12

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- Fixed case where protocol would receive data before configuration load state is correctly set. Consequently the protocol would discard any state changes when the configuration is signalled as loaded.

### B1003, 2009-08-11

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- Fixed case where signals feeding from a transparent source were not notified when the source of transparent source was updated.

## vsmStudio - Change Log and Version History

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### B1001, 2009-08-10

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- Fixed case where 3<sup>rd</sup> party UMDs would display the incorrect tally state by bypassing virtual signals with tally modifiers e.g. “tally through” off.
- QVS-141: The TSL protocol attempts to access signal past configuration closure.

### B0999, 2009-08-08

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- Fixed potential race condition in the V-Bit management which might cause crash.
- Fixed issue in Marshall UMD protocol where the protocol might crash during reload of a configuration.

### B0996, 2009-08-07

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- Fixed loophole where panel-to-panel navigation will corrupt the stream distribution map. This would not only leave no longer required streams active but could also cause a crash some time later.

### B0995, 2009-08-07

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- QVS-132: Assigned Images are not displayed (disappear) when the same image should be displayed on the same button as on previous page.
- QVS-104: Enable/Disable Nuisance for Alarm Stacks.
- QVS-120: Option to show or hide current user name on Alarm Stack Indicators.

### B0993, 2009-08-06

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- QVS-123: Some bits of the “Layer Mask” were reset by some legacy code.

### B0992, 2009-08-05

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- Fixed possible deadlock in the layer access locks.

### B0990, 2009-08-04

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- Fixed: In rare cases, or after a panel copy, page items are not refreshed during page navigation.
- Fixed: The “Member of Scope” is lost when copying panels.

### B0989, 2009-08-03

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- Added option to use the Axon frame names (User Label) as “Reflect Identifier”.  
**WARNING:** All frames should be fully configured with **unique** User Labels before activating the Axon protocol.  
**NOTE:** There is **no** option to migrate already existing entries or renamed frames.

### B0988, 2009-07-29

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- Added option to disable the dimmed state on Source Buttons e.g. when no Target selected by checking the “Don’t dim the Button when disabled” visibility option.
- QVS-95: Take button status is incorrectly cleared when secondary target/source changes are processed.

### B0986, 2009-07-28

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- QVS-93: Aborted DAS line does not empty look-ahead buffer which may cause the next line to be ignored.
- QVS-94: Fixed Potential Deadlock in the XSwitch access locking.

### B0984, 2009-07-27

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- QVS-91: Fixed Potential race condition in when using multiple “Target of Source” buttons on (multiple) panels.

## vsmStudio - Change Log and Version History

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### B0983, 2009-07-24

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- QVS-90: Add option to the sw-p-02 protocol to disable disconnect mapping.

### B0982, 2009-07-22

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- QVS-78: Swap display order of Target and Source in the crosspoint context popup.
- QVS-89 - Support for RDE UMDs (BTS Protocol).  
**NOTE:** The RDE UMD Master Unit is very slow and loses messages – the “Slow Device” option **must** be used.

### B0981, 2009-07-21

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- QVS-75: Added updated Volume/Gain Formula for the Ross/Rap protocol.

### B0980, 2009-07-20

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- QVS-85: Fixed Potential Race Condition in Various Loop Prohibit Code.

### B0976, 2009-07-17

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- QVS-84: Remove Targets from “Alarm Processing” collection if switched by Automation.
- Fixed problem between QVS-84 and “Auto Fader Modules”.

### B0971, 2009-07-15

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- QVS-77: Panels with lots of DAS sometimes don't update correctly.
- QVS-76: Gadgets and Streams are not recovered after hardware or connection fall-over on Lawo Nova73.

### B0969, 2009-07-13

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- CommServer: Added on-the-fly data bits, stop bits and parity mode change possibility.  
**NOTE:** Requires CommServer Firmware 2.04 or higher. **Not yet supported on MSS.**  
**NOTE:** Required for Amazon UMD protocol.
- QVS-69: Moved the second line in the button picture editor down one pixel.
- QVS-73: Storage Tree View Jumps to top when entries are modified.

### B0965, 2009-07-10

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- QVS-65: Crosspoints were not correctly synchronized during start-up (Possibly caused by firmware updates and changes to the way evertz implements the protocol).
- QVS-55: Fixed and overhauled the Groups on panels. Maximum amount is now 31 + Outside.

### B0964, 2009-07-08

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- Fixed: The ‘&’ Label (Append Label to source) prefix works again.
- Fixed: Sorting after adding new GP-I/Os.
- QVS-38: Gadget Parameters may be now dropped directly into the parameter list of Meta-Gadgets.

### B0960, 2009-07-03

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- Added Amazon UMD Protocol V1.00.

### B0958, 2009-07-02

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- Fix: Changes to Axon parameters by other servers or 3<sup>rd</sup> party devices are now detected again.



## vsmStudio - Change Log and Version History

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### B0957, 2009-07-02

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- Added basic support for nuisance on Alarms.
- Changed the way the protocols received configuration load/unload notification; this should solve a few issues with the thread safety of some of the runtime classes.
- Fixed: The “Matrix view” page item’s “View Only” state was not correctly initialized when a new item was created (Does not fix a problem with the vsmPanel which seems to not always send connection requests).

### B0956, 2009-07-01

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- Some changes to the behaviour of Tally with disabled Feedback.
- Fixed: Modifying GPI Term will now always issue a GPI re-evaluate.

### B0955, 2009-06-30

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- Fixed update problem when changing pages on panel when the same gadget parameter is located on same button on both the source and target pages.
- Fixed: Unpractical default values for schedule channels and scheduler page items.

### B0952, 2009-06-30

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- Added additional information for the info command.
- Added global modifier for Tally Feedback behaviour.

### B0948, 2009-06-26

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- Fixed problem where Dynamic Attachment Scripts don’t parse numbers correctly.
- Added the option to disable the alarm popup / expanding effect on the Alarm panel items.

### B0946, 2009-06-26

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- Fixed problem where gadget parameters were not correctly evaluated by GPIs.

### B0945, 2009-06-25

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- Fixed update bug in panel page items.
- Fixed connection queue sequence error.
- The Zero GPI now only fires once after the configuration has loaded.

### B0937, 2009-06-24

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- Fixed the shutdown sequence that hadn’t been updated to consider changes made since B0922.
- Fixed vsmPanel restart configuration issue.
- Fixed inbound port shutdown problem.

### B0935, 2009-06-23

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- Fixed some loopholes in the inter-queue handling that was causing connections to not reconnect.

### B0934, 2009-06-23

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- Some more adjustments on the Connection Life Cycle management.

### B0933, 2009-06-22

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- Fixed potential NULL pointer in vsmPanel event handler.

## vsmStudio - Change Log and Version History

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- Added MultiTarget State button.

### B0932, 2009-06-19

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- Added a “slow” start for Metering Data in the Lawo MNOPL protocol.
- Found and removed problem in the protocol priority decoder.
- Found and removed potential deadlock in “reset all”.
- Found and removed multi-server start-up problem introduced B0922.
- Consolidated PPM and Correlation Stream.
- Only display “Write Backlog” Messages once every minute per connection.
- Optimized Overlapped Object lifecycle.
- Fixed duplicate alarm/signal filter.

### B0923, 2009-06-18

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- Changes to the pro-bel sw-p-02 protocol; the entry “Differentiate Connect” now controls if connect messages which don’t actually modify the connection state are answered by a “tally” message (=true) or a “connected” message (=false or default).

### B0922, 2009-06-17

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- Rewrite of most of the Connection Life Cycle code to eliminate potential deadlocks.

### B0921, 2009-06-17

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- Various changes in the attempt to locate the two deadlocks which seem to remain.
- Fixed effect where entering numbers into the event annotation field would display strange characters.

### B0920, 2009-06-17

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- Fixed very improbable “Write after delete” problem.
- Fixed very hard to find memory access bug.

### B0917, 2009-06-12

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- Fixed crash when vsmWebPanel accesses a panel which exceeds the allowed amount of buttons.

### B0916, 2009-06-12

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- Added “Assign Signal Family” option to Signal Path List View’s popup menu – Enjoy!

### B0915, 2009-06-11

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- Fixed incorrect GUID sent to vsmPanels during start-up.

### B0914, 2009-06-10

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- Fixed crash when opening an empty panel with vsmPanel.
- Fixed crash when reloading tombstones during start-up.
- Added Annotation field for Alarms.  
**NOTE:** This requires vsmPanel 3.0.6.3 or above to display correctly.
- Added Correlation Alarm field to PPM Panel Page Item.  
**NOTE:** This requires vsmPanel 3.0.6.2 or above to display correctly.

## vsmStudio - Change Log and Version History

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### B0913, 2009-06-09

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- Fixed Run/Stop timer button mode (was performing Run/Restart).
- Fixed Stop at Timeout behaviour on UMDs.
- Added "Final" stage to timer which show when the timer has reached its timeout.

### B0912, 2009-06-09

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- Upps – removed some leftover debug information.

### B0911, 2009-06-09

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- Fixed a crash when copying an empty panel that has been never saved.
- Added option to hide e.g. the alarm startup delay timers from the timer queue CommTrace output
- Reduced the delay for silence status query on the Lawo MNOPL protocol.

### B0910, 2009-06-07

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- Added new handler for "Runtime Errors".
- Added output of "Marker" into log-file when Right-Clicking into the top left header of the Virtual Matrix.
- Added some safeguards.

### B0909, 2009-06-05

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- Added "iAlarm" collections "Targets" and "Secondary".
- Added secondary signal field to Alarm.
- Fixed various smaller issues.

### B0908, 2009-06-04

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- Fixed problem with colour schema of page items.
- Fixed potential crash when activating a panel with page items but no groups.

### B0907, 2009-06-04

---

- Fixed problem where trigger-less alarms could not be acknowledged.
- Fixed problem with colour schema conversion of signal colour families.

### B0906, 2009-06-03

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- Fixed problem where internal gadgets would only display their Identifier but not their Description in the Gadget Tree until the gadget was selected once.

### B0905, 2009-06-03

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- Fixed a bug in the Gadget Tree parsing (Introduced B0900, due to disturbance in the force).

### B0904, 2009-06-02

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- More changes on the internal locking.

### B0903, 2009-06-02

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- Further changes on the internal locking.

## vsmStudio - Change Log and Version History

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### B0902, 2009-06-01

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- Revision of some of the interdependency paths, introducing various changes to the internal object locking.
- Fixed crash when content of Storage Group was modified while viewing the storage group at the same time.
- Fixed minor bug in parameter subscription management which would enrol parameters too often.

### B0901, 2009-05-28

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- Fixed Panel Page Index. The newly implemented group dependent page items would not show correctly when the page was moved or copied.

### B0900, 2009-05-28

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- Added “disconnect” to the Network Vikinx protocol (Blind Source on 1025).

### B0898, 2009-05-25

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- Modified “Apology Module” auto recovery function. The module only triggers auto recovery when the Source of the Source (1<sup>st</sup> / Primary, L or R) actually changes.
- Added option to only load the Storage Groups embedded within the configuration on start-up.

### B0894, 2009-05-16

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- Panel Page Copy now also copies the page items.

### B0893, 2009-05-15

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- Fixed the behaviour of the GP-I/O list view when creating, editing and deleting entries.

### B0892, 2009-05-15

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- Added Logarithmic Volume/Gain Curve for the Ross interface.

### B0890, 2009-05-14

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- Added “Auto Fader (V)” Module.

### B0889, 2009-05-13

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- Fixed wrong background colour when creating a new panel.
- Added status display in GP-I/O List.
- Added context menu option to set or clear GP-I/Os from the GP-I/O list.

### B0888, 2009-05-12

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- Changes to the way the system handles colours internally.  
**NOTE:** This requires vsmPanel 3.0.4.15 or above to display correctly.

### B0883, 2009-05-03

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- Added DAS support for Page Items.
- Added DAS support for “Peakmeter” page item.

### B0883, 2009-05-03

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- Fixed the “idle” colour for the Alarm Stacks.
- Added option to open signal paths from any view.

## vsmStudio - Change Log and Version History

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- Added “Cardinal Source” support to Alarm Modules.
- Added Signal Secondary commands “Source Changed” and “Source Updated”.

### B0881, 2009-04-20

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- Added “Cardinal Source” attribute for Signals. This indicates that the signal is point of interest or a prime source of a signal. All “source only signals” are cardinal as per definition and do not require this attribute to be set. This attribute helps e.g. the alarm modules to determine the relevant signal to refer.
- Added “Recover on Source Change” option to the Apology Modules. When this option is active, any change of the source to the apology module will trigger the module’s reset.

### B0879, 2009-04-26

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- Added “Priority” option for Alarms.
- Added “Show when Acknowledged” option for Alarms.
- Added Panel Page Item option “Visible as part of containing group” which controls the visibility of page items in regards to their affiliation to the groups on the panel. Any item which is not completely within a group is considered part of the outside group.
- **NOTE: Germany Language Support is activated again...**

### B0877, 2009-04-20

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- **NOTE: Temporarily disabled the Germany Language Support...**
- Added support for vsmMediaPanel.

### B0876, 2009-04-19

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- Fixed bug introduced in B0873 where GPO buttons would be disabled if the GPO state was false.

### B0875, 2009-04-19

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- Completed changes to the internal Alarm sub system.

### B0873, 2009-04-18

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- Removed support for more layers in Network VikinX protocol, and added an offset instead.

### B0871, 2009-04-17

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- Added support for more layers in the Network VikinX protocol.
- **INTERMEDIATE BUILD – the Alarm Module is not functional due to work in progress.**

### B0870, 2009-04-14

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- Added **Gadget Parameter to GPO** interfacing. It is now possible to drag a gadget parameter onto a GPO and have the parameter control the state of the GPO based on conditions specified by the user.
- Added some GUI enhancements in the GP-I/O Edit View.

### B0868, 2009-04-11

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- Fixed problem with gadget usage recovery with Axon frames.  
**WARNING:** Due to the above fix, the Axon UMD interface is currently disabled and will not work.

### B0866, 2009-04-06

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- Fixed possible problem when loading Virtual Signals during startup.

## vsmStudio - Change Log and Version History

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### B0865, 2009-04-05

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- Fixed problem where some GPI changes would not generate correct timestamp.  
**NOTE: This might fix the bouncing GPI problem – further tests and reports are required.**

### B0864, 2009-04-03

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- Fixed problem alarms when in multi-server mode.

### B0863, 2009-04-03

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- Fixed problem with the self unlocking of targets on external change of connections.

### B0862, 2009-04-03

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- Fixed the length of the pro-bel sw-p-08 protocol's "Extended Crosspoint Connected" Message.
- Alarms are now reset (cleared) when disabled.

### B0861, 2009-04-02

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- Fixed vsmPanel inline option.
- Added vsmPanel connection status message.
- Added Masterlock support.

### B0860, 2009-03-30

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- Fixed the length of the pro-bel sw-p-08 protocol's "Extended Crosspoint Tally" Message.

### B0859, 2009-03-30

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- Added edit Properties for Views.
- Added foreground / background colour edit for link button.

### B0858, 2009-03-29

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- Added persistence for signal locks.
- Added server sync for signal locks.
- Added two new lock modes: "Target Lock" and "Pseudo Device Lock" (Previously only "Signal Path Lock" was supported). The "Target Lock" only locks the select target and the "Pseudo Device Lock" locks the selected target as well as all targets bound to it via pseudo devices.  
**NOTE:** Existing lock buttons will remain "Signal Path Lock" buttons, but newly created lock buttons will default to "Target Lock".

### B0857, 2009-03-28

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- Fixed possible conflict when a vsmPanel port disconnects while receiving a parameter stream.
- Added FadeInTime&Start and FadeOutTime&Start parameters to Lawo gadgets.
- Added Graphic EQ to Lawo gadgets.  
**WARNING: Modifications pending in the Lock infrastructure.**

### B0856, 2009-03-24

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- Fixed possible crash when modifying the amount of buttons on a panel, which is active at the time.

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- Changed the layout behavior when adding button to a panel, automatic layout is performed only when no button were previously present. The selected layout is that of the panel with the matching or higher amount of buttons (8, 16, 17, 24, 32, 34, 51 and 80).
- Added support for months with 6 weeks. If the 6<sup>th</sup> week is missing, the 5<sup>th</sup> week is copied into the 6<sup>th</sup> week.  
**NOTE:** Latest version of vsmPanel is required for correct visualization and the ability to edit the 6<sup>th</sup> week. In addition, when editing the entries with an older version of vsmPanel the 6<sup>th</sup> week **will be cleared** again.
- Changed behavior of how the locking system responds when signal source is changed externally. Previously the internal lock state would be canceled if previously locked - now the lock state remains locked.  
**NOTE:** The user interaction via panels and views is unchanged, as users cannot change source of a target while the target is locked.

### B0855, 2009-03-19

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- Updated the Sony Tally Protocol.

### B0854, 2009-03-18

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- Added CommServer Tunnel (CommServer Firmware 2.02 or above required) which enables e.g. Breaks to be sent to connected equipment.  
**NOTE:** See Application Note 022 for more information.

### B0853, 2009-03-14

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- Fixed potential crash in the Gadget Tree View.
- Fixed potential deadlock in the "ComponentUpdate" chain.
- Added extra debug information for the "Apology Modules".

### B0852, 2009-03-13

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- Fixed a potential deadlock problem within the Lawo MNOPL protocol driver.
- Removed the obsolete leftovers from vmReflect.

### B0851, 2009-03-13

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- Fixed the suspension timer for the Apology modules.

### B0850, 2009-03-13

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- Added minidump to "Runtime Error".  
**NOTE:** The "Runtime Error" dialog has to be confirmed by the user for the minidump to be written.

### B0849, 2009-03-13

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- Added support for Harris/Leitch router protocol with username and password.

### B0848, 2009-03-12

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- Added DVE support to the Kahuna Contribution Tally protocol.

### B0847, 2009-03-11

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- Fixed an exception catch problem when exporting panels.
- Removed obsolete "virtual panel = 0" entry from panel property dialog.

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### B0846, 2009-03-09

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- Added “Media Player” panel page item.

### B0845, 2009-03-08

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- Added map-file import for panel “map” function.

### B0844, 2009-03-07

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- Fixed problem with gadget parameters that were only referred to by meta-gadgets. These would not re-initialize after the gadget provider reconnected.
- Removed obsolete signal path attribute “Invert Multi Server behaviour”.
- Removed obsolete layer attribute “Monitoring”.

### B0843, 2009-03-05

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- Fixed a problem where some of the protocols with higher levels of functionality (e.g. Lawo MNOPL and pro-bel’s sw-p-08) would stop reconnecting if a configuration was reloaded while the port had a pending reconnect.

### B0841, 2009-03-04

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- Fixed potential problem, were the timer event handling thread would remain active when configuration is closed.
- Added the option that GPI and Node Buttons can be used with assignment buttons even when set to “display only”.

### B0840, 2009-03-03

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- Undid the changes in the GP-I/O path that were introduced in B0831.  
**NOTE:** This reintroduces the potential deadlock problem.

### B0839, 2009-03-03

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- Fixed problem where timers and timer events would not be executed on a newly created configuration.
- Fixed the Sony Tally via Editor port dialog.

### B0838, 2009-02-27

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- Fixed problem where Lawo MNOPL gadget parameters would not come back online after a connection re-connect.

### B0834, 2008-12-29

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- Added Ross RAP Protocol Support.

### B0833, 2008-12-27

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- Added PPM distribution.

### B0832, 2008-12-27

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- Added display of sequence number for storage templates and discs.



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### B0831, 2008-12-23

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- Fixed potential deadlock in the GP-I/O path when synchronizing.
- Added protection against “right channel only” apology modules.
- Added debug flag for Modules.

### B0827, 2008-12-20

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- Fixed the Left Channel only (Mono) mode for Apology Modules.
- The Signaled GPO support for Alarm Modules did not clear if the alarm is set to “No Acknowledge Required”.
- The default sort condition for the GP-I/O-List-View is set to “by Number”.
- The scroll bar in the GP-I/O-Edit-View now takes the number of “dependent” objects into account.

### B0825, 2008-12-15

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- Added “Silence Detect Suspension” for Apology Modules.
- Added “Signaled GPO” support for Alarm Modules.
- Added a delay for the silence detection query in MNOPL.

### B0824, 2008-12-14

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- Added Tooltip to the secondary command list. Hover over a field in the Name column to see detailed information for the attached object.

### B0823, 2008-12-13

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- Added missing subscriptions for Lawo 4x4 and 8x8 summing matrix.

### B0822, 2008-12-08

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- Gadget Connectors did not show “Operational” status.
- Fixed a possible memory exception when sending a value change to a gadget where a previously connected gadget connector is disabled or disconnected.
- Fixed a possible memory exception when creating a new alarm without actually populating the alarm trigger field.
- Added option to directly generate Alarms from GP-I/Os.

### B0821, 2008-12-08

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- Fixed “between releases problem” with signal names editing.

### B0820, 2008-12-08

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- Fixed a problem where the Lawo mapping file would not be written when previously unpopulated.

### B0819, 2008-12-07

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- Added Iterator support when creating new Signals.  
**NOTE:** Issues remain with the numbering on hand drawn signal images and labels.
- Added extra protection against Lawo’s version flaws.

### B0817, 2008-12-06

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- Added Iterator support when creating new GPIs.

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### B0816, 2008-12-05

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- Fixed the missing “Show Hidden” option in the gadget tree view.
- Fixed incorrect “skip to next occurrence” value on disabled occurrences.

### B0815, 2008-12-03

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- Added automatic restart of port listeners when new network interface is detected.  
**NOTE:** It might be necessary to reset the listeners whenever the interfaces change or to add some more in-depth verification of the network interface status.
- New **Firmware** is available for Panels (2.00)
  - Fixed problem where changing between servers due to network status changes or other influences might “freeze” the panel.  
**NOTE:** This fix (most likely) does not fix the problem where panels shows “smarties” and does not connect to any servers – this problem is still under investigation.

### B0813, 2008-12-01

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- Added additional status information into log when a TCP close occurs.
- Added log of reference time (OS time) and internal time at 02, 22 and 42 minutes.
- Added log of last reported remote ping time.
- Added suppression of repeated (>10) reconnects.
- Added log of system time change notification.

### B0812, 2008-11-27

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- Added GVG TEN-XL ASCII protocol.

### B0811, 2008-11-25

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- Fixed local panel access to panels with IDs above 255.
- Fixed issue where parent “Storage Groups” would not store contained children until the configuration had been stored and reloaded.
- Fixed issue where the week-of-month was incorrectly calculated.  
**NOTE:** Update vsmPanel to version greater 1.0.195 (2.0.5.0).

### B0810, 2008-11-24

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- Added logging of “Modified Occurrences”.

### B0809, 2008-11-21

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- Added “Copy” page function to panel editor.
- Added GPIs support to Storage Groups.
- Added Gadget Parameter support to Storage Groups.

### B0808, 2008-11-20

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- Added Modifier “Divider” to Gadget Parameters. Also added extra column “Modifier” in gadget parameter list to visualize any modifiers.
- Added Lawo AFV commands.
- Added Lawo Event status query and display.

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### B0806, 2008-11-17

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- Fixed the audio label distribution in the Binary Jupiter driver.
- Fixed some issues with sync'ed parameters on buttons and linking enumerated parameters.
- Added tooltips to component drop control.

### B0805, 2008-11-14

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- Fixed Endian problem with the Label Type within the Lawo driver.
- Fixed problem with the "Zero GPI" being reporting enabled.
- Fixed startup delay problem on the Zandar Z protocol.  
**NOTE:** This does not fix the problem that Zandar has screwed up the protocol in some of their newer devices.
- Added log file entries when scheduled events are created, modified or deleted.

### B0804, 2008-11-11

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- Fixed the server status messages via port 8001 (as used by DR's Open View).
- Added "System Nick Tags" for scheduled events.  
**NOTE:** A vsmPanel version greater 1.0.192 (2.0.4.0) is required to display this information.
- Updated the "Audio Monitor" module, so that the initial volume is generated from the current gain value returned from the controlled device.  
**NOTE:** The **first** valid value from any of the specified channels is used to compute the volume.

### B0803, 2008-11-10

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- Added support to send (User) Label updates to Lawo MNOPL.
- Fixed missing signal state updates on vsmPanel when linking between panel contexts.
- Removed some superfluous scope information that was sent to the vsmPanel.

### B0801, 2008-11-06

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- Fixed problem with AUX buses on the Thomson ACOS protocol.
- Fixed problem were changes to Source labels would not update the "Associated Target Labels" on a pro-bel sw-p08 connection.
- Fixed a problem with the "Mimic button" on the vsmPanel, this problem occurred when both the mimicked button and the mimic button were visible at the same time.
- Added new visual for source/target/effective tally in the GPI edit window, making the difference between the different tally extraction points more visible.

### B0800, 2008-11-04

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- Added support of Lawo MNOPL DSP Summing Matrix.
- Virtual Panels (ID: 0) can no longer be created (Obsolete).

### B0799, 2008-11-03

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- Added "ALT Drop" to matrix view.
- Added "ALT Drop" to drop enabled property sheets.
- Changed the default panel button colors (orange/yellow as per wlu).
- Removed obsolete no (white) tally display on sources.

### B0798, 2008-11-02

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- Fixed possible memory drain if the "Zero" GPI was "reporting" enabled.

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- Fixed bug where users could create “virtual page” groups visible only on page 1.
- Added “Sony Camera Gain” Module.

### B0797, 2008-10-31

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- Fixed possible stack overflow while resolving “Effective Targets”.
- Jupiter Label Transfer: Secondary Audio Labels are induced into associated audio signals via the bound source pseudo device (Columns: Audio 1, 2, 3, 4).

### B0796, 2008-10-30

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- First build on new build platform.
- Added panel HEX value in the panel list’s number column.
- Connection ports are now monitored for the time since the last successful write operation completion. A port will be restarted if the remote device is not picking up write data for more than 60 seconds (currently not configurable and also subject to external factors like e.g. OS buffers on both sides).  
**NOTE:** The current implementation is for disaster prevention only and may require further refinement.

### B0795, 2008-10-30

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- Added Lawo single parameter commands for the Summing Matrix. Using the bulk commands could cause problems when multiple parameters are changed at the same time depending on the speed of the MNOPL server (e.g. RlPer or Core).  
**NOTE:** The single parameter commands are **not supported** in some older version of the MNOPL protocol (e.g. 2.9). The routers firmware **should be updated** before using this version.
- Added use of Lawo “subscribe all” message.