

Q-SYS™

Release Notes

The QSC logo consists of the letters 'Q', 'S', and 'C' in a bold, sans-serif font. The 'Q' has a small square notch at its bottom-left corner. The 'S' and 'C' are also bold and sans-serif. A small trademark symbol (TM) is located at the top right of the 'C'.

Q-Sys Designer Release 3.1

February 2013 Rev. A

Release Notes

This document covers pertinent information, including [Known Issues](#) and [Resolved Known Issues](#), for Q-Sys Designer Release 3.1, February 2013. If you are upgrading from a Release prior to Release 2.3, be sure to read the Release Notes for the intermediate releases through 2.3. The most up-to-date Release Notes for Release 3.1 can be found on the QSC website (http://www.qscaudio.com/products/network/QSys/Q-Sys_Software.php).

Important

As with any upgrade, be sure to create backup files for any designs and media you have on the Core.

IMPORTANT: If you are upgrading from a Q-Sys Designer Release prior to 2.0, you must upgrade to Q-Sys Designer Release 2.0 before upgrading to Q-Sys Designer Release 3.1. Contact QSC Support for the Q-Sys 2.0 software. Be sure to read the 2.0 Release Notes for important upgrade details.

IMPORTANT: When you are upgrading to Release 3.1 from Q-Sys Release 2.3.xx, you will get the normal message, "Hardware firmware does not match..." 3.1.xxx, press OK, the Core is updated. Then you will see another message "upgrading from 3.1.xxx to 3.1xxx (same version). Press OK again. The Core is updated to version 3.1.xxx. After this, the peripherals are updated twice.

Installation Software Requirements

Software Package	Q-Sys Designer
Microsoft Windows XP Professional Version 2002 SP3 (32 bit) or Microsoft Windows Vista SP1 (32 bit) or Microsoft Windows 7 (32 or 64 bit) or Microsoft Windows 8	Prerequisite
Microsoft .NET Framework 3.5	Prerequisite for Windows XP The installation program automatically installs the required files. ¹
Microsoft .NET Framework 4.0 Client Profile	Prerequisite The installation program automatically installs the required files.
Microsoft .NET Framework 4.0 Extended	Prerequisite The installation program automatically installs the required files.
Microsoft Visual C++ 2010 Runtime	Prerequisite The installation program automatically installs the required files.
1. Internet access required.	

Q-Sys Designer / Design File Compatibility

Q-Sys Designer release numbering convention is a three-level system – major release.minor release.build number (2.2.100). Larger numbers indicate a newer release. If the "major.minor" release number of a design file and Q-Sys Designer software are the same, the "build" number doesn't matter. You will have to upgrade/downgrade your hardware to the same "build" number as the Q-Sys Designer software to Run the design on the Core.

You cannot open a design file with a newer "major.minor" release number than the Q-Sys Designer software. For example, you cannot open a 2.2.*nnn* design file with 2.1.*nnn* Q-Sys Designer software.

You can open a design file with an older "major.minor" release number than the Q-Sys Designer software. For example, you can open a 2.1.*nnn* design file with 2.2.*nnn* Q-Sys Designer software. If you save the file with the newer software, you cannot save it back to an older release.

IMPORTANT: Make sure your design files are backed up in your current release before starting the upgrade to a newer release.

Qualified Ethernet Switches

The online help contains a list of qualified Ethernet switches in the Ethernet Switches topic. Occasionally, between releases of Q-Sys Designer, new switches are qualified, and some disqualified. Be sure to check the QSC Website (http://www.qscaudio.com/products/network/QSys/Q-Sys_qualified_switches.php) for the latest information.

QSC recommends that you disable EEE (Energy Efficient Ethernet), a.k.a. IEEE 802.3az on switches that offer this feature. Some switch manufacturers offer their own version of a power saving mode or energy optimization mode, but the concepts are generally the same as those for the IEEE standard. These mechanisms attempt to reduce the drive current or wake time for a given LAN port by detecting the strength of the link partner and/or by detecting the length of the attached network cable and/or by detecting rest or idle periods between packet deliveries and placing the port into sleep or quiescent mode.

This release adds the following Cisco Small Business switches, and the Juniper EX4200 switch. Refer to the setup instructions for details.

SG200-08	SG500-28
SG200-08P	SG500-28P
SG200-18	SG500-52
SG200-26	SG500-52P
SG200-26P	SG500X-24
SG200-50	SG500X-24P
SG200-50P	SG500X-48

SG500X-48P

Changed Hardware Functionality in Q-Sys

Core

The front panel LCD now reports the status of the Core's Aux port.

New Components in Q-Sys Designer

Please read the following information carefully. There are many changes and additions for Q-Sys Designer Release 3.1, some requiring your attention when you upgrade Q-Sys Designer to this release. As with any upgrade containing major changes, there may be a substantial impact to current designs. Before you upgrade be sure you understand the changes that are required for your system, and be sure you backup your design files.

Inventory

Softphone Components

The Q-Sys Softphone gives you the ability to connect to a Voice-over-IP telephone system (IP-PBX) or SIP-based devices. The Softphones tab in the Administrator facilitates registration with IP-PBX systems (such as Cisco CUCM, FreeSwitch, etc.). In addition, you can use the Softphone component in unregistered mode, which allows making ad-hoc IP-to-IP calls and connecting to other non-registered SIP-compatible equipment.

UCI Viewer Status/Control Component

The UCI Viewer component allows you to control various aspects and see the status of a UCI when you are using the UCI Viewer. As with all Inventory components, you can sort and filter the UCI Viewer Status/Control Component.

Changed Components in Q-Sys Designer

Audio Components

Audio Player Component

The Audio Player Component now has a time Remaining display. The display is in HH:MM:SS, and shows the play-time remaining for the selected file if it is Playing or Paused. When Stopped, the time displayed is the total play-time of the file.

Acoustic Echo Canceler

The Reinforcement Output is now optional, and is set in the Component's properties.

Equalizer and Filter Components

Redesigned the Control Panels, for many of the Equalizer and Filter Components, to be more aesthetically pleasing, and less confusing.

Audio Streaming Components

The URL Stream Receiver Component is renamed Media Stream Component, and moved to the Inventory under Streaming I/O.

The WAN Stream Receiver and Transmitter moved to the Inventory under Streaming I/O.

Control Components

E-mailer Component

The E-mailer Component now supports only one outgoing e-mail at a time. This is to avoid issues with queued outgoing messages.

Mixer Components

Mixer Matrix Component

The Input Gain Faders on the Matrix Mixer Component now have nudge, or bump, buttons to move the fader up or down in small equal increments.

Page Station Components

Virtual Page Station Component

When you activate the Talk button on the Virtual Page Station, Q-Sys disables all other controls in the Component's Control Panel until you deactivate the Talk button.

Test and Measurement Components

RTA - Band-Pass Component

The RTA Component is renamed to RTA - Band-Pass Component. The functionality remains the same.

Peripheral Components

Touch Screen Components

- The TSC-3 and TSC-8 components now have the ability to:
 - Specify if the UCI Assignment is Static or Dynamic
 - Specify the UCI the touch screen is running if the UCI Assignment is Dynamic
 - Specify the page in the UCI
 - Log off users
- If the UCI requires log on, and the screen-saver timeout expires, the user must log on again.
- When the design on the Core is changed or reloaded, the TCS Status screen closes.
- You can now slide your finger over multiple buttons to change their state. Press the first button, hold, and then slide your finger over the others. All the buttons are now in the same state as the first one you pressed.

Streaming I/O Components

Media (URL) Stream Receiver Component

- The URL Stream Receiver Component is now in the Inventory under Streaming I/O. It is no longer available in the Schematic Library.
- The URL Stream Receiver's name changed to Media Stream Receiver.

- The Media Stream Receiver Component supports up to 16 Components in a design running on a Core 250i/500i, and 32 Components on a Core 1000/3000/4000.
- A buffer control is now available in the Media Stream Receiver.
- You can select the Network Interface (LAN A, LAN B, etc.), or allow Q-Sys to select the Network Interface (Auto), through which the audio streams are received.

WAN Stream Receiver Component

Moved to the Inventory under the Streaming I/O Category

WAN Stream Transmitter Component

Moved to the Inventory under the Streaming I/O Category

Q-LAN Receiver Component

Moved to the Streaming I/O Category

Q-LAN Transmitter Component

Moved to the Streaming I/O Category

New and Changed Features in Q-Sys Designer

Control Scripting

Lua Language

- As of Q-Sys 3.1, the Script Component uses Lua version 5.2. This means that some of your scripts written with earlier version might not function correctly. Below is a list of changes that we have identified.
 - Functions `setfenv` and `getfenv` are no longer available because of the changes in environments.
 - Function `math.log10` is no longer available. Use `math.log` with 10 as its second argument, instead.
 - Function `loadstring` is no longer available. Use `load` instead; it now accepts string arguments and are exactly equivalent to `loadstring`.
 - Function `table.maxn` is no longer available. Write it in Lua if you really need it.
 - Function `unpack` is now in the table library and therefore must be called as `table.unpack`.
 - Character class `%z` in patterns has been removed, as now patterns may contain `\0` as a regular character.
- Refer to <http://www.lua.org/manual/5.2/contents.html#index> for complete information.
- The Lua Language (5.1) topic is no longer available. Refer to <http://www.lua.org/manual/5.2/contents.html#index> for the complete Lua Language reference for Lua 5.2

Special Operators

The **Special Operators** are no longer available, instead use the Bitwise Operations built into Lua.

Bitstream Operations

This release adds the Bitstring Operations topic and functionality.

HttpClient

This release adds :UploadString to the HttpClient.

NamedControl

Added an optional ramp time to the NamedControl.SetValue, and NamedControl.SetPosition

Q-Sys Designer Workspace

Inventory

This release changes and clarifies the names of many items in the Inventory.

Context Find

The Context Find now dims the workspace, and highlights and flashes the "found" item, making it much easier to see what you found.

Inventory Items

You can now move Inventory items between Schematic Pages and between Container components. You can drag and drop, or cut and paste the item to the Page tab or Container component.

UCI Design Interface

UCI Design Interface Workspace

In the UCI Designer Interface, you can now select Panel Types for iPad Mini, and iPhone 5.

To add navigation buttons to a multi-page UCI you now must right click a page in the UCI pane, and drag it into the selected page in the UCI Designer. In previous releases, you had to left click the page in the UCI pane and drag it into the selected page.

New and Changed Features in Q-Sys Administrator

Softphones

This release adds the Softphones Tab in the Q-Sys Administrator. Use this tab in conjunction with the Softphone Status/Control Component found in the Inventory of Q-Sys Designer. The Administrator provides the parameters necessary to register the Softphone with a SIP Trunk provider, or an IP-PBX.

New and Changed Features in Q-Sys Configurator

Device Network Settings Changes

- When you change any of the network settings of a device, selected in Q-Sys Configurator, the device no longer needs to restart.
- When you change the Name of the device in Configurator, the design currently running on that device stops running on the changed device. You must redeploy the design.
- When there is no link for a LAN port, a red (NO LINK) message displays next to the port.

New and Changed Features in the Q-Sys UCI Viewer

UCI Viewers and UCI Names buttons

These radio-type buttons allow you to view a list of all the UCIs available, and a list of UCI's that are associated with UCI Viewer Status/Control components in the design. You can connect the UCI Viewer to a UCI using either list.

You can now slide your finger (or mouse cursor) over multiple buttons to change their state. Press and hold the first button, then slide your finger over the others. All the buttons are in the same state as the first one pressed.

BETA Version Features

There are a number of features in Q-Sys Designer currently in a BETA version. These features are marked as such in the Q-Sys Designer user interface, and in the associated help topics. A feature labeled as BETA indicates that the feature is not as polished as we would like it to be. It is functional, but there might be caveats and rough edges associated with it. In addition, a BETA feature is more likely to change in the future.

Currently in BETA

- Channel Group
- SMPTE LTC Generator
- SMPTE LTC Reader

Resolved Known Issues

High-priority Delayed Page/Message Command Sometimes Delayed Until a Lower-priority Command Completes

Issue: Under certain conditions it is possible for a high priority delayed page or message command to be delayed until a lower priority command completes. This can occur when the buffer memory in the PA Router is close to 100% full.

Non-reachable NTP Server Entries can Prevent a Working NTP Server from Updating the Q-Sys Clock

Issue: In Q-Sys Configurator, if you have NTP Enabled, and more than one NTP Server identified, and the first entry in the list is not reachable, the clock does not get updated.

Known Issues

Q-Sys Designer Interface

Empty Snapshot's Save and Load Buttons Appear to Function but Do Not

Issue: When you place a Snapshot Controller Component into the Schematic, then deploy or Emulate the design without any controls associated with the snapshot, you can operate the Save and Load buttons, and they appear to function correctly. When you re-deploy the design, the Load buttons are disabled, and nothing was saved.

I/O Frame Status and I/O Slot Status Do Not Match

Issue: During an I/O Frame firmware update, and then during the restart of the I/O Frame, the status of an I/O Frame slot with an output card installed reads "Missing - I/O Frame Missing", while the the Inventory status string for the I/O Frame indicates other, varying states.

cgi-bin/status_xml Error when Deploying

Issue: Rarely, when deploying a design to the Core, Q-Sys Designer may idle for a few minutes with a "Discovering Core..." message. Eventually, an error appears stating, "Error downloading file cgi-bin/status_xml..."

Workaround: Clear the error message by clicking 'OK', then wait 5 minutes and deploy the design again.

Lua Script Code Written with the Control Script Component in, or dragged into, a Channel Group Component, is Hidden/Deleted when you Emulate or Run the Design.

Issue: Q-Sys Designer hides Lua code, written in a Control Script, in the following circumstances

- Write the code in Design, Run, or Emulate mode, then go to Design mode (if not already there) and drag the Control Script into the Channel Group and Emulate or Run the design.
- Drag the Control Script Component into the Channel Group, write the code in Design mode, then Emulate or Run the design.

Q-Sys Designer deletes Lua code in the following circumstance.

- Write the code in one of the above circumstances, then Emulate or Run the design, and write some more code in the Control Script component. Go to the Design mode, only the code written while in the most recent Emulate or Run mode is in the Control Script Component.

Workaround: Write all code with the Control Script component in the Channel Group, in Run or Emulate Mode.

Network

The TSC-3 is Unable to Boot from LAN-B or Aux on a Core 250i

Issue: If a TSC-3 is connected via the Q-LAN network to LAN-B, or the Aux port on a Core 250i, it is unable to boot.

Core Network Addressing

Issue: If Automatic addressing is used on the Core and a DHCP server is not available (causing the Core to take an AutoIP address in the 169.254 subnet), the Core will occasionally not be discovered after a reboot or firmware update. Sometimes, in the Case of redundant Cores, it may appear as though both Cores are Active. When the Core is in this state, a reboot is required.

Workaround: The solution is to use Static IP addressing or make sure a DHCP server is available.

Core Redundancy

Issue: A CobraNet card in a Core which is in standby is not automatically suppressed from transmitting and receiving. This might affect your ability to use a redundant pair of Cores populated with CobraNet cards.