grass valley
A BELDEN BRAND

NV9000 Control Software and NV9000-SE Utilities

Control System and Configuration Software

Release Notes

TN0116-00

02 October 2015

www.grassvalley.com

Table of Contents

Table of Contents 2
Introducing NV9000 and NV9000-SE Utilities v6.7.0 3
- New Features 3
- Improvements 6
- Fixes 7

Known Issues 7
Supported Routers 7
Contact Us 8
Copyright and Trademark Notice 9

Introducing NV9000 and NV9000-SE Utilities v6.7.0

The NV9000 router control system is the most broad and application-specific system available, offering the most efficient control paradigms that help operators execute signal routing fast and error-free from a highly resilient router controller platform.

The NV9000 panel series includes a wide range of highly adapted panels for superior control. The panel range includes informative and easy to use LCD relegendable panels, multi-destination panels, multi-mode button per source panels and destination/source (XY) panels.

The NV9000 control system offers a selection of two controllers. The NV960, a 2 RU enterprise range controller, is predominantly used in TV stations and larger installations; and the NV920 compact 1 RU redundant controller, which is perfectly suited for truck applications. The NV9000 control system is configured via the SE-Utilities software provided with the system.

This document lists cumulative changes to the NV9000 software and NV9000-SE Utilities software released together as version 6.7.0. The changes affect NV9000 core software, NV9000-SE Utilities, and third-party control code (as applicable).

New Features

NVSE-1249: Added a "Category contents match button color" check box

Added a "Category contents match button color" check box to the 9640/41/42/46/47/54 control panels and a matching "USE_CATEGORY_COLOR" config tag. When set to TRUE, this causes all of the source or destination buttons on a page generated by pressing a "Category" button to all have the same color as the "Category" button that was pressed initially.

NVSE-1247: Added "Source Assignment Color Inheritance" check box

Added an "INHERIT_CATEGORY_COLOR" config tag that's tied to a "Source Assignment Color Inheritance" check box to be used on 9649 panel configs in Panel Server Mode.

NVSE-1242: Added a table to NV9642 panel editor to list Expansion panels

This adds a table on the right side of the 9642 Panel Editor (in Stacking Mode), under the VFD Display Options box that lists the Expansion panel's position in the stack, their IDs, and their names.

NVSE-1241: “Panasonic Ethernet” as a router protocol added to SE-Utilities

This build has “Panasonic Ethernet” as a router protocol and Dynamic Updates have been re-enabled; no other changes were done.

NVSE-1229: Improved sort functionality of Name Set window

1) Removed advanced filtering using regular expressions, filtering now uses simpler "occurs anywhere in target" matching
2) Removed popup for filter history and quick selection
3) Made header click behavior consistent with other tables in the application: left click sorts, right click selects. Tool Tip reflects actual behavior.

NVSE-1228: Added support for stacked Suffix Page configurations

Added support for stacked Suffix Page configurations. This allows for the ability to edit all the panels in an NV9642/NV9646 stacked panel configuration in the same editor.

NVSE-1225: Added an option to create an NV9642 master panel from existing configuration

When creating a NV9642 panel, there is now an additional option called “New expanded panel named:_____ copied from _____”. Selecting this option presents the user with the same options pane that they see when expanding a panel from scratch. Here, the user can set the panel ID’s, names, and config names of the expansion panels, just as they can when expanding a panel from scratch.

NVSE-1223: Modified "Place the button on all subsequent pages" behavior

Modified the "Place the button on all subsequent pages" behavior to only be available on page 1 and it will place the desired button on all local pages

NVSE-1157: Added ability to export logs independent of the NV9000 logging system.

Created a batch file that, when run, extracts all logs and some other pertinent system information and puts the results into a folder on the system controller desktop. This is now independent of the logging system. This folder and its contents can now easily be moved onto an external memory device or off the controller

NVPL-179: Runtime Category pages can inherit color of Category button; NV9640/41/42/46/and 47.

The Category pages, generated automatically in a running panel, can inherit the color of the Category button that invoke them. This is controlled by a CheckBox in the configuration editor, for the panel, in Se Utilities. If the check box is checked then the resulting pages of automatically generated devices will inherit the color of the Category button that invoked them. This is for the NV9640, NV9641, NV9642 (stand alone and stacking modes), NV9646, and NV9647 panel types.

NVPL-178: NV9654 Allow runtime category pages to inherit the color of the category button

Uses a checkbox in SE Utilities NV9654 panel editor.
When checked (defaults to NOT checked) all Category Pages made on the fly in a running panel will have the button color of the invoking Category Button. This is for XY and MD modes, Source Categories and Destination Categories.

NVPL-176: NV9659/NV9648 in Server/Client mode. Source assigned to Client can take on the color of the Category Page selected from.

When using the NV9649/NV9648 in Client/Server mode. The Source assigned to a NV9648 source button from the NV9649 server can take on the COLOR of the category Page that the source was assigned from. This ability is controlled by a TAG set in Se Utilities from a checkbox. This checkbox will default to false to preserve previous configurations.

NVPL-170: NV9649 in Server Mode, added Destination button type.

This issue required new work (new feature) to the existing code base of the NV9649 control panel. This feature was specifically for the Server Mode of the NV9649 and consisted of adding the button type Destination to this mode. It has been supported by changes to the panel editor in Se Utilities.

NVPL-168: NV9649 panel, Category & Suffix Pages, to include the left 12 button positions.

This new feature was implemented in the NV9649 control panel code base in Panel Server Mode and with check-box 'Use Category & Suffix Pages' checked. The feature allows the placement of Category button types on the left 12 button positions (in addition the the current right 16 button positions) when using the 'Edit Src Categories', 'Edit Dst Categories', and 'Edit Suffixes' editors in Se Utilities (and implemented in the running panel code). In the running panel, when these Category & Suffix Pages are used, Categories are placed on any button so indicated in the editors. Any other button position will have the button types placed on the panel itself in Se Utilities "Show Through". These button types that show through will be capable of performing any features that they indicate even though the user may be in the middle of using a Category Page. In the event that a button position is defined on the panel AND on a visible Category & Suffix Page the Category & Suffix Page will prevail.

NVPL-163: Implement Global Navigation Button type in NV9642/NV9646 stacked panels.

This allows the placing of Global Navigation Buttons (configured in SeUtilities Global Navigation Button editor).

NVPL-139: Ability to stack a NV9642 panel with up to 7 NV9646 panels to create one large panel.

This new development impacts the NV9642 code base (Server) and the NV9646 code base (client). The new development allows the stacking of one NV9642 panel (Server) and up to 7 NV9646 panels (clients) to form one large cohesive panel with ALL of the features of the stand alone NV9642 panel type. The newer versions of Se Utilities support configuration of the NV9642 panel and up to 7 NV9646 panels in one editor displaying all the panels in the order that they will be used.

NVCS-4367: Panasonic Switcher Interface Base

Created the project for the Panasonic Switcher Interface (Panasonic AV-HS6000 Switcher Interface for Routing). This will be the only issue resolved for the CREL of code that will go to Panasonic for testing. The hope is that we will receive a refined definition of requirements from the customer for this interface. AppNote 63 was created for this interface.

NVCS-4364: "In Router" Locks & Protects are the default behavior for Profile routers

SE Utilities now defaults to storing Lock & Protect info "In Router", which fixes a bug that caused LPR info to not get statused correctly for Profile routers. If users switch the protocol to virtual router, it is necessary to change

NVCS-4359: Debug tool for gathering logs and system information

This is a simple, but valuable tool that collects all of the logs and system information. This information is then deposited on the desktop of the controller you run it on. The tool can be found in the C:\nvision\envy\bin folder. The tool is labeled NvDiagnostics.bat. Once run, you will find the folder on the Desktop of the NV9000 with the name Diagnostics_Results_[Controller_Name].

NVCS-4356: Encore Router Protocol allows for "Take by index" - Direct Control of Trinix Router.

We have implemented the QJ and TJ commands for the Encore Router Protocol for the NV9000. That protocol previously was names-based. This implementation allows for direct NV9000 control of the Trinix Router. The Trinix firmware will require an update for the Broadlinx Matrix Controller card to accept and respond to these commands.

There is a newly created app note 62 for this functionality.

NVCS-4345: Tieline Monitor log is now written to disk

Tieiline Monitor Log is written to the log folder in D:\nvision\envy\userlocal\logs. Previously, that log was only available in the System Management live system logs.

Improvements

NVSE-1231:

Added the "Destination" button type to NV9649 panels in Panel Server Mode

NVSE-1230:

Expand the Src or Dst category pages to cover all 28 buttons on the NV9649 panel

NVCS-4374: Improvement to the Encore Router Protocol driver

This adds to the "By Index" implementation of the Native Protocol implementation of the Encore Router Protocol:

Each NV9000 controller can tally the active matrix controller in the Trinix.

Each NV9000 can detect the inactive matrix controller in the Trinix and handle NO RESPONSE.

Fixes

NVPL-197: Bug Fix: A locked destination on a Client NV9648 retained preset and could not be cleared.

Previously in a NV9649/NV9648 Server Client group, if one, ore more, of the destinations on one, or more, of the Client panels was locked and the user initiated a Take All to the client panels, the locked destinations would retain their preset source and could not be cleared. This has been corrected by not letting a Locked or Protected destination on a Client panel be preset.

NVCS-4392: No longer set a flag in DHP for inactive controller

Made a change to the check for active controller before HandleGetOutputChangesCommand(). The NV9000 performs the check in RouterServer before sending the getchanges command to DHP. However, DHP was setting a flag for command not supported.

NVCS-4375: Allow group tielines to be routed as individual tielines.

Previously, if a subset of a tieline group were routed, on a subsequent take unused tielines from that group were not available. That behavior has been modified to allow the usage of individual tieline(s) from within a tieline group. Tielines in a tieline group are now associated with the source ports virtual levels. Some configuration is required. See app note 10.

Known Issues

NVCS-4364: The fix for automatically set to "In Router" created another issue.

We have added an improvement that will be in a future release - NVSE-1258. The issue involves manually setting the "In Router" to "In Server". If this does not happen and you create a router with virtual router protocol, that router will not initialize. Virtual Routers cannot have locks and protects stored In router.

Supported Routers

Company	Protocol	Interface	Functions

Grass Valley	NV Compact router (NP-16)	IP	Routing control no mnemonics
Grass Valley	NV Enterprise router (NP-17)	IP	Routing control with mnemonics
Grass Valley	Horizon TCI	RS-422	Supports connection to a Grass Valley Group Horizon series router through an HX-GPI external controller. An HX-GPI unit running TCI protocol is required for this interface to function.
Grass Valley	Jupiter (ES-Bus)	RS-422	Enables the NV9000 to switch Philips routers using a VM3000 controller. Very old Philips routers might not function with this interface. However, most late model matrices, such as Venus, are supported. A properly configured VM3000 is required. Please note: The NV9000 does not connect directly to a Philips matrix. Operation using a serial port on an SI-3000 is not recommended if the total controlled matrix space will exceed 256 × 256.
Grass Valley	Trinix	IP	Routing control
Grass Valley	Jupiter Bridge		Routing control
Grass Valley	Encore		Routing control
Stagetec	Nexus		Routing control
Utah	RCP-1	Serial	Routing control
PESA	Pesa Protocol	RS-232	Routing control
SAM	Probel SP-08	IP and Serial	Routing control
ISIS	ISIS serial	RS-422	Routing control
DataTek	D-2815 serial	RS-422	Routing control
Sony	CART+	RS-422	Routing control
Siera video			
Klotz	Klotz	Serial	Routing control
LAWO	LAWO	Serial	Routing control
DHD	DHD	Serial	Routing control

Contact Us

For technical assistance, contact our international support center at 1-800-547-8949 (US and Canada) or +1 530 478 4148.

To obtain a local phone number for the support center nearest you, please consult the Contact Us section of Grass Valley's website (www.grassvalley.com).

An online form for e-mail contact is also available from the website.

Copyright and Trademark Notice

Belden, Belden Sending All The Right Signals and the Belden logo are trademarks or registered trademarks of Belden Inc. or its affiliated companies in the United States and other jurisdictions. Grass Valley and the trademarks listed below are trademarks or registered trademarks of Grass Valley. Belden Inc., Grass Valley, and other parties may also have trademark rights in other terms used herein. Registered trademarks (®) may have been registered in one or more of the following jurisdictions: Australia, Canada, China, Chile, Colombia, European Union, France, Germany, Hong Kong, Japan, New Zealand, Norway, Peru, Russian Federation, Serbia, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, Turkey, United Kingdom, United States of America, Venezuela and WIPO.