

SEL Grid Configurator

Questions and Answers



Below is a list of frequently asked questions raised since Grid Configurator's release in 2020, and we will continue to update it with each rapid release of Grid Configurator. Be sure to check out the *Grid Configurator News* webpage at selinc.com/products/grid-configurator/news for information on the current release. If you have further questions, please reach out to Michael Rourke (michael_rourke@selinc.com) or Dylan McArthur (dylan_mcarthur@selinc.com).

SUPPORT FOR SEL DEVICES

What products will Grid Configurator support?

Over time, Grid Configurator will support all SEL power system devices presently supported in ACSELERATOR QuickSet® SEL-5030 Software (i.e., relays, meters, and distribution controllers). We will also incorporate all remaining devices supported in SEL-5010 Relay Assistant Software. Product support for existing devices will include all previous firmware versions.

You can find the most up-to-date list of supported devices at selinc.com/products/software/5037-supported-products.

Will Grid Configurator support automation and communications devices? Does Grid Configurator replace SEL-5020 software?

Grid Configurator is not a replacement for SEL-5020 Settings Assistant Software.

We do not plan to support automation and communications products in Grid Configurator, with the exception of devices presently supported in QuickSet (e.g., the SEL-2411 Programmable Automation Controller and the SEL-3031 Serial Radio Transceiver). These products have their own configuration software.

COMMUNICATION TO RELAYS

What connection methods are supported by Grid Configurator?

Grid Configurator supports network and serial connections. Serial connections include the use of a USB-serial converter from a computer.

How many simultaneous connections does Grid Configurator support over Ethernet and serial?

Simultaneous serial connections are limited by the computer hardware. The number of USB ports plus the number of serial ports on your computer is the maximum number of simultaneous connections. Grid Configurator can support more than 20 simultaneous Ethernet connections.

How do I communicate with Grid Configurator through communications processors, RTACs, and security gateways?

You will use transparent connections through communications processors and real-time automation controllers (RTACs) to communicate with connected devices.

Grid Configurator does not include a connection hierarchy.

Grid Configurator is not integrated with the SEL-3620 Ethernet Security Gateway. We expect that support in an upcoming release.

Can you batch read or write settings to multiple devices?

Grid Configurator provides a mechanism to perform simultaneous device operations (e.g., send and read) to all connected devices without the necessity of batch or scripted operations.

What is the maximum number of users that can simultaneously connect to a single device?

Grid Configurator does not limit the number of users that can connect to a device simultaneously. Refer to the device instruction manual to determine the number of simultaneous connections for that device.

Can I use Grid Configurator to search a network to find all SEL devices on the network?

Grid Configurator does not include a network search operation.

IEC 61850 CONFIGURATION

Will Grid Configurator support configuration of IEC 61850?

ACSELERATOR Architect® SEL-5032 Software and ACSELERATOR® Bay Screen Builder are independent applications. Grid Configurator does not support IEC 61850, but this feature will be implemented in a future release. Please monitor the SEL website and *Grid Configurator News* for more information as details are published.

TEMPLATES

Will Grid Configurator support templates?

Grid Configurator does not have a separate template design tool. However, device configurations may be copied or duplicated from any individual device or any folder of devices in the system explorer. Commissioned devices may be used as references for new devices, and configurations for entire substations may be duplicated this way.

SETTINGS COMPARISON

Will Grid Configurator allow for comparison between settings groups?

This feature is planned for an upcoming release.

Can I edit settings from the comparisons screen? Can I edit and view settings for two devices side by side rather than in tabs?

The offline compare view supports editing settings directly for all devices being compared. Grid Configurator does not have a split-screen feature to work on two devices side by side visually; only the tab views are available.

What is the maximum number of devices I can compare?

As in QuickSet Device Manager, the compare feature in Grid Configurator allows you to compare ten devices.

Can I save a comparison between the devices?

You can save your results by exporting a comparison report in .json and .html file formats.

FILE MANAGEMENT

What files can I import into Grid Configurator?

Grid Configurator supports importing individual .grx and .rdb files from SEL-5010 software and any tab-delimited text file. These features will be included with Grid Configurator as we release support for existing SEL devices. Grid Configurator also supports the import of zipped folders of set.txt files.

Do the settings I import from an outside source need to be formatted in columns, as shown in the example?

For Grid Configurator to read in the settings accurately, each row of text must include the Setting Name, Group Name, and Setting Value, in that order. These entries need to be tab-delimited, with a carriage return and line feed between each row of text.

What file types can I export from Grid Configurator?

You can export .grx files that include individual devices, folders with devices, or the entire System Explorer. These files are not human-readable and may be password-protected by the user. Settings reports and comparison reports can be exported in human-readable (.html) and programmatic-friendly (.json) file formats. Grid Configurator also supports the export of zipped folders of set.txt files.

If I am using Grid Configurator, but a coworker is only using QuickSet, can we convert settings from Grid Configurator to QuickSet?

Grid Configurator can run on the same computer alongside QuickSet running the Device Manager plug-in. You can install Grid Configurator and Device Manager to share the same database. This lets you edit the same settings in both QuickSet and Grid Configurator for devices that are supported in both applications. Grid Configurator does not include the ability to export .rdb files.

What happens to Device Manager?

Grid Configurator is designed to be a complete replacement for Device Manager. Some features presently available in Device Manager—including client-server architectures, user management, and settings version management—are not included in Grid Configurator. We will include these in upcoming releases. Grid Configurator and Device Manager may be installed on the same computer and configured to share the same database. Please refer to the previous question for more information.

What third-party applications can share information with Grid Configurator?

We are discussing new features with third-party software providers. We encourage customers to use SEL-5231 SEL Configuration API to read and write settings between Grid Configurator and other software applications.

Grid Configurator also supports an export file format (.grx) for relay settings that can also be used as offline archives.

Can I manage relay settings files outside the Grid Configurator database?

Natively, Grid Configurator stores all settings in a database, not on the computer file system. However, if preferred, you can store exported files from Grid Configurator (.grx) in computer file systems. Exported files from Grid Configurator may include a single device, one or many folders and subordinate devices, or the entire database of folders and devices.

Can I import settings from competitor products?

This capability is not supported at this time.

Can I import DNP3 lists the same way as settings files from Microsoft Excel?

You can copy DNP3 and Modbus maps from external text or spreadsheet lists and paste them into Grid Configurator. The editors for these maps in Grid Configurator also support copying and pasting the map data without requiring that the matched settings be provided.

Is there a way that I can import system explorer devices from a list of IP addresses, device IDs, or station names?

This capability is not supported at this time.

Can I export settings?

In addition to directly exporting settings and folders as .grx files, you can create a printable settings report for a single device in .csv, .html, and .json file formats. The .csv format is very useful for editing settings in a spreadsheet. Grid Configurator also supports the export of zipped folders of set.txt files.

What does the structure of the settings file and database look like in Grid Configurator?

The .grx file format is a binary database export that is not editable in a text editor. Grid Configurator natively stores settings in a relational database and not in your file system. The SEL Configuration API provides a programmatic read/write interface to all settings and devices in Grid Configurator. Additionally, you can create a .csv settings report to externally edit settings and import them back into Grid Configurator.

Can two users access the same system explorer?

Grid Configurator does not currently support multiuser access. This will be included in an upcoming release.

Can I merge settings?

The compare feature includes merges between devices. A future release will support importing settings and merging them with existing stored settings.

Are there any Excel templates available on the SEL website?

You can create your own templates by exporting a .csv format settings report, but no application-specific templates are available.

PRODUCT SUPPORT ROADMAP

How often will Grid Configurator receive updates?

We anticipate feature updates every 8–10 weeks.

When will QuickSet retire?

We expect to continue supporting QuickSet for the foreseeable future. SEL will provide customers at least six months of advanced notice of end-of-life plans to provide adequate time for training and orientation with the new software.

APPLICATION

What platforms does Grid Configurator support?

Grid Configurator supports Microsoft Windows 10 (64-bit) and Microsoft Windows Server 2016 (64-bit) operating systems.

Can I copy from one settings group to another?

You can copy one settings group to another (or to multiple other groups) by selecting “Copy Groups” under the Device menu.

Does Grid Configurator provide revision control?

Version management features will be included in an upcoming release. It is recommended that users back up device settings in a .grx export before major configuration changes.

Are settings comments only available with a hashtag, or can they be stored separately, like in QuickSet?

Grid Configurator 4.0.0.50 includes SELogic® comments. Settings comments will be included in an upcoming release.

Is Grid Configurator driver-dependent?

Grid Configurator will support all settings versions for SEL devices. It can support backwards-compatible settings versions without updating the entire application. In subsequent releases, you will select the products that your Grid Configurator installation supports, but you won't need to update existing product drivers when adding new devices.

Can I view instruction manuals in Grid Configurator?

Instruction manuals load in Adobe Reader. Links to the manuals are provided in Grid Configurator. Manuals must be downloaded initially, but they are stored locally after that download.

Can I create a folder that has a read-only function, while others are both read and write?

Grid Configurator does not include folder-level permissions.

Are the settings in the Main Feature view the same as the settings in the Settings Grid view? Can the settings be edited from either location?

Yes—you can view and edit the settings from either location.

Can I paste the relay part number into the system, or will I need to adjust each element?

Either method is supported, per user preference.

Does Grid Configurator support a quick change of one setting without needing to download all settings to a device?

You can use the Terminal interface in Grid Configurator to edit just one device setting.

Where can I reference available terminal window commands?

Refer to the device instruction manual to see a list of available terminal commands.

HMI FEATURES

Does Grid Configurator have HMI functions equivalent to that of QuickSet?

HMI features are included for the SEL-851 Feeder Protection Relay. HMI features will be included for all devices that offer them in upcoming releases.

Does Grid Configurator provide a live status of elements?

The terminal is the interface for all live values.

TESTING AFTER CONVERSION

Is additional testing or commissioning required after updating to Grid Configurator?

Grid Configurator supports a binary format conversion, not settings value conversions. Any confirmation you presently do for converting between SEL-5010 software and QuickSet or for importing .rdb files into Device Manager should be done for Grid Configurator as well.

Are Device Manager functions maintained in Grid Configurator (e.g., setting versions; setting states; updating device information, such as firmware, serial, and model numbers; and so on)?

Grid Configurator can record the device serial number. Version management and other device management features will be in future releases.

LICENSING

How much does Grid Configurator cost?

The basic single-user version of Grid Configurator is free of charge.

Will there be a licensing cost? Will there be a feature-added version?

Similar to Device Manager, there will be advanced features released in the future that will include licensing costs. For example, the template design tools will be a licensed feature.

SEL COMPASS®

Will I need to use Compass to install and manage Grid Configurator software, manuals, and drivers?

You can choose to use Compass or the SEL website to receive installation media for Grid Configurator. While it is less restrictive than QuickSet, there will be some updates necessary for access to new features in future firmware releases of SEL devices.

FIRMWARE UPDATES

Will devices need firmware upgrades to support Grid Configurator?

Once a device is supported in Grid Configurator, you do not need to change the firmware on your SEL device to use the software. There will be a firmware upgrade tool in Grid Configurator for cases where you need to perform that function.

Can I install firmware updates over Ethernet? Can I send firmware updates to multiple devices simultaneously?

These features will be added in upcoming releases for SEL devices that support this capability.

DOCUMENTATION

Will I see a front and rear view of the relay next to the part number in the future?

Our team has discussed this but has not made a final determination.

Does connecting to the relay cause Grid Configurator to update the relay part number based on the relay's response?

Not upon first connection. If you read settings from the relay, the part number in Grid Configurator will update automatically.

Can I access instruction manuals directly from Grid Configurator?

Links to the Grid Configurator instruction manual and relay instruction manuals will be available in Grid Configurator. Initially, the manuals will be downloaded from the SEL website. They will then be stored locally for offline access.

EVENT FILES AND REPORTS

How do I download and view event files?

Once connected to a device, use the Reports view to download event reports and view Sequence of Events (SOE) reports on your device. Once you download event reports, launch SEL-5601-2 SYNCHROWAVE[®] Event Software to perform event analysis.

Can I export and print settings and visual diagrams?

You can export settings in .csv, .html, and .json file formats for printing. Characteristic plots are not included in the settings reports, but this capability is under consideration for future releases.

INTEGRATION WITH ACCELERATOR TEAM[®] SEL-5045 SOFTWARE

How will Grid Configurator integrate with TEAM?

TEAM is an independent software application. Watch for upcoming announcements on integration between Grid Configurator and TEAM. Until then, add devices to your TEAM server to set up automatic event collection.

LOGIC EDITOR

Will Grid Configurator support graphical logic editing?

Graphical logic editing will be supported in an upcoming release.

Will it support live view?

Use the terminal to view live values in the device. Further live view support will be available in upcoming releases.

RELAY SETTINGS

Will other graphical representations (e.g., time current curves) be viewable and live?

You can view characteristic plots individually. They represent offline (not live) values.

Can I include calculations in comments?

Settings comments are not supported in the initial release.

Do relay settings comments transfer when downloading settings and reading back the file from the relay?

SELogic comments are included in the initial release. QuickSet comments will be supported in an upcoming release.

Does SEL have plans to simplify relay testing with this software?

Many testing and commissioning tools are planned for Grid Configurator.

How do I set, manage, and store relay passwords in Grid Configurator?

Device passwords are stored in the database on your computer. If you export settings in a .grx file, the passwords are included. You can optionally password-protect the exported files, which will be encrypted, for an extra level of security.

What does the DNP3 map setting look like in Grid Configurator?

A DNP3 map and Modbus map editor are included with Grid Configurator. They also work in a text editor style, as in QuickSet.

Will Diagram Builder be integrated in Grid Configurator?

Grid Configurator is designed to support SEL power system devices (i.e., relays, meters, and distribution controllers). ACSELERATOR Diagram Builder™ SEL-5035 Software is designed to configure HMI screens for the RTAC family and thus is not planned to be integrated in Grid Configurator.

Can the mimic view graphics be changed in Grid Configurator?

Initially, Grid Configurator will only support the SEL-400 series device mimic screens, which do not support user-editable mimic screens. If you need custom SEL-400 series mimic screens, please contact SEL.

Will there be a time stamp on settings files?

The settings reports do not include time stamps. User auditing will be supported in an upcoming release of Grid Configurator.

Will Grid Configurator improve the process of entering equations?

Multiline SELogic editing is supported in Grid Configurator 4.0.0.50.

Is the SER trigger list similar to that of QuickSet?

You can use Grid Configurator to configure Sequential Events Recorder (SER) settings for devices. This process is very similar to the process in QuickSet.

How can I view what each available logic bit is?

If you hover over a binary or analog value in the editor, you will see a pop-up with the description. If the description includes units, they will be visible. Additionally, Grid Configurator includes a search utility when selecting SELogic elements. The search includes descriptions and category information for all supported SELogic elements.

Will Grid Configurator indicate that I used the same Relay Word bit several times in the protection logic?

This feature is not included in the initial release.

Is there an option to switch between primary and secondary values for relay settings?

This feature is not included in the initial release but is in the product roadmap.

If you are only using Settings Group 1, can you disable the other settings groups?

No SEL devices currently support this capability.

Can you attach or link other types of documents to a settings record?

This feature is in the product roadmap for when we include other Device Manager features.

Will training courses be provided on Grid Configurator through SEL University in the future?

Training is available in a variety of options. Monitor the SEL website and the SEL YouTube channel for customer webinars and how-to videos. In the future, look for training on Grid Configurator at SEL regional and interactive seminars as well as in existing SEL University courses. SEL University currently offers a training course on using the new SEL-851, which includes training on Grid Configurator specific to its use with the SEL-851. *Grid Configurator News* documents major feature changes with each update.

Will new relays accept ASCII commands? Will a HyperTerminal program be integrated with Grid Configurator?

A terminal is included in Grid Configurator to access device ASCII commands. Direct file transfer commands are not supported.

Can I make custom shortcuts?

This feature is not included in Grid Configurator.

Are there any plans to move away from the serial port to a USB port on the relay front panel?

Some SEL devices already include USB ports. Grid Configurator will support all available connection methods for SEL devices.

Can Grid Configurator store relay settings for competitor products?

Grid Configurator does not store settings for non-SEL devices at this time.