

# SEL Grid Configurator

Questions and Answers



Interest in our “Discover Life After QuickSet—Introducing SEL Grid Configurator” webinar was unprecedented! In addition to a record number of participants, we received a record number of questions. Below is a list of frequently asked questions raised during the webinar sessions, answered by our presenters. If you have further questions, please reach out to Michael Rourke (michael\_rourke@selinc.com) or Tyler Dusek (tyler\_dusek@selinc.com).

## SUPPORT FOR SEL DEVICES

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### What products will Grid Configurator support?

The initial release of SEL-5037 Grid Configurator Software will support the SEL-400G Advanced Generator Protection System and the SEL-2664S Stator Ground Protection Relay. The remaining SEL-400 series devices will be supported by Grid Configurator in 2020.

Eventually, 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. Existing SEL devices and legacy devices will be supported in future scheduled releases on the product roadmap.

### Will Grid Configurator support automation and communications devices? Does Grid Configurator replace SEL-5020 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. Grid Configurator is not a replacement for SEL-5020 Settings Assistant Software.

## COMMUNICATION TO RELAYS

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### What connection methods are supported by Grid Configurator?

Grid Configurator will support 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. We expect to support more than 20 simultaneous Ethernet connections and are currently evaluating the final number.

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

The initial release of Grid Configurator is not integrated with the SEL-3620 Ethernet Security Gateway. That will be in an upcoming release. You will use transparent connections through communications processors and real-time automation controllers (RTACs) to communicate with connected devices. The initial release of Grid Configurator does not include a connection hierarchy.

### **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.

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

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**

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### **Will Grid Configurator support configuration of IEC 61850?**

acSELERATOR Architect® SEL-5032 Software and acSELERATOR® Bay Screen Builder are independent applications. The product roadmap includes plans to integrate IEC 61850 and custom touchscreen design into Grid Configurator workflows. It may take a couple years to support existing devices in Grid Configurator, so please monitor the SEL website for more information as details are published.

## **TEMPLATES**

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### **Will Grid Configurator support templates?**

Integrating the engineered template design capability equivalent to the feature supported in QuickSet is on the product roadmap and will be added in an upcoming release. If you have existing QuickSet templates, we will provide a mechanism to import those templates into Grid Configurator in an upcoming release.

Until that release, you can create a simple template by creating a folder in your system explorer that includes basic settings for the devices commonly used. You can then copy those into a new device as a starting point.

## **SETTINGS COMPARISON**

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### **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

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### What files can I import into Grid Configurator?

Grid Configurator will support importing .rdb files and .mdb files from SEL-5010 software and from individual settings text files. These features will be included with Grid Configurator as we release support for existing SEL devices.

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

We showed an example from a Microsoft Excel spreadsheet for simplicity, but you can use other sources. For Grid Configurator to read in the settings accurately, each row of text must include the group name, setting name, and setting value. These entries need to be tab delimited, with a carriage return and line feed between each row of text.

### What files 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.

### 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 allows you the option to 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 the initial release of 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. This is at your discretion.

## **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 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 in the initial release.

## **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 does not provide a mechanism to export 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?**

The initial release of Grid Configurator does not 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 with the first release.

## **PRODUCT SUPPORT ROADMAP**

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### **When is Grid Configurator available?**

Grid Configurator will be available upon the release of the SEL-400G, which is currently scheduled for March 2020.

### **Will the SEL-400G be supported by both Grid Configurator and QuickSet?**

All new SEL devices, including the SEL-400G, will only be supported in Grid Configurator.

### **What is the plan for releasing Grid Configurator features?**

There will be frequent releases with new features and additional device support. Watch the SEL website for updates as they are available.

### **When will QuickSet retire?**

We expect to continue supporting QuickSet for at least four years. 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**

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### **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?**

Group functions will be included in an upcoming release.

### **Does Grid Configurator provide revision control?**

Version management features will be included in an upcoming release.

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

Grid Configurator includes SELogic® comments in the initial release. 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.

### **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.

### **Can I navigate to the context menus by right-clicking?**

There are no right-click operations in Grid Configurator.

### **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**

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

Graphical HMI features will be included in multiple upcoming releases.

### **Does Grid Configurator provide a live status of elements?**

The terminal is the interface for all live values.

## TESTING AFTER CONVERSION

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### **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

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### **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 and multiuser client-server installations will be licensed features.

## SEL COMPASS®

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### **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 you will need in order to gain access to new features in future firmware releases of SEL devices.

## FIRMWARE UPDATES

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### **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

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### **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.

## EVENT FILES AND REPORTS

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### **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<sup>®</sup> 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 ACSELERATOR TEAM<sup>®</sup> SEL-5045 SOFTWARE

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### **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

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### **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

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### **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, like 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 will be included in an upcoming release.

### **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 know what variables are used in the protection logic?**

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

### **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 will be available in a wide variety of means. 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 is currently working on an instructor-led training course for the new SEL-400G, which will include training on Grid Configurator specific to its use with the SEL-400G.

### **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 in the initial release.

### **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.