



QUICK GUIDE

GCP WEB USER INTERFACE (WEBUI)

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The equipment covered in this manual has been tested and found to comply with the limits for Class A digital devices, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

DOCUMENT HISTORY

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NOTES, CAUTIONS, AND WARNINGS

Throughout this manual, notes, cautions, and warnings are frequently used to direct the reader's attention to specific information. Use of the three terms is defined as follows:

WARNING

WARNING

INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY. WARNINGS ALWAYS TAKE PRECEDENCE OVER NOTES, CAUTIONS, AND ALL OTHER INFORMATION.

CAUTION

CAUTION

REFERS TO PROPER PROCEDURES OR PRACTICES WHICH IF NOT STRICTLY OBSERVED, COULD RESULT IN A POTENTIALLY HAZARDOUS SITUATION AND/OR POSSIBLE DAMAGE TO EQUIPMENT. CAUTIONS TAKE PRECEDENCE OVER NOTES AND ALL OTHER INFORMATION, EXCEPT WARNINGS.

NOTE

NOTE

Generally used to highlight certain information relating to the topic under discussion.

If there are any questions, contact Siemens Mobility, Inc. Application Engineering

ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

Static electricity can damage electronic circuitry, particularly low voltage components such as the integrated circuits commonly used throughout the electronics industry. Therefore, procedures have been adopted industry-wide which make it possible to avoid the sometimes invisible damage caused by electrostatic discharge (ESD) during the handling, shipping, and storage of electronic modules and components. Siemens Mobility, Inc. has instituted these practices at its manufacturing facility and encourages its customers to adopt them as well to lessen the likelihood of equipment damage in the field due to ESD. Some of the basic protective practices include the following:

- Ground yourself before touching card cages, assemblies, modules, or components.
- Remove power from card cages and assemblies before removing or installing modules.
- Remove circuit boards (modules) from card cages by the ejector lever only. If an ejector lever is not provided, grasp the edge of the circuit board but avoid touching circuit traces or components.
- Handle circuit boards by the edges only.
- Never physically touch circuit board or connector contact fingers or allow these fingers to come in contact with an insulator (e.g., plastic, rubber, etc.).
- When not in use, place circuit boards in approved static-shielding bags, contact fingers first. Remove circuit boards from static-shielding bags by grasping the ejector lever or the edge of the board only. Each bag should include a caution label on the outside indicating static-sensitive contents.
- Cover workbench surfaces used for repair of electronic equipment with static dissipative workbench matting.
- Use integrated circuit extractor/insertion tools designed to remove and install electrostatic-sensitive integrated circuit devices such as PROM's (OK Industries, Inc., Model EX-2 Extractor and Model MOS-40 Insertion (or equivalent) are highly recommended).
- Utilize only anti-static cushioning material in equipment shipping and storage containers.

For information concerning ESD material applications, please contact the Technical Support Staff at 1-800-793-7233. ESD Awareness Classes and additional ESD product information are also available through the Technical Support Staff.

GLOSSARY

TERM	DESCRIPTION
AAR:	<u>Association of American Railroads</u> – An organization that establishes uniformity and standardization among different railroad systems.
AREMA:	<u>American Railroad Equipment Manufacturing Association</u> – An organization that supersedes AAR.
ATCS:	<u>Advanced Train Control System</u> – A set of standards compiled by the AAR for controlling all aspects of train operation.
ECD:	<u>External Configuration Device</u> – A serial EEPROM (Flash Memory) device mounted inside the chassis of the GEO unit. The ECD is used to store site-specific configuration data (MCF, SIN, UCN, and card parameters) for the CPU.
EX Value	Is the phase of the received signal, which is the measure of the impedance of the track ballast. This measurement identifies how much current is leaking from one rail to another.
EZ Value	Is the measure of the received signal level.
MEF:	<u>Module Executable File</u> – The executive software running in the CPU or I/O Modules. The user can download the MEF through the Diag port to update the software.
MCF:	<u>Module Configuration File</u> – The GCP application logic file.
SIN:	<u>Site Identification Number</u> – The 12-digit ATCS address for the The SIN has the form 7.RRR.LLL.GGG.SS stored in binary coded decimal, with each digit in one nibble. The digit 0 is represented by “A” and 0 is used as a null byte.
Site Location:	The location where GCP unit is installed.
VPI:	<u>Vital Parallel Input</u> – A module input circuit the function of which affects the safety of train operation.
VRO:	<u>Vital Relay Output</u> – A module output circuit the function of which affects the safety of train operation.

SECTION 1 CONNECTING TO THE WEBUI

1.0 GENERAL INFORMATION

The GCP Display (A80485-1) and CPU III (A8903) modules provide a Web User Interface (WebUI) which enables the user to configure the GCP locally as well as remotely through the Laptop/Ethernet Port (RJ-45) on the front of the Display Module, and the Laptop/Ethernet port on the front of the CPU III module.

The Display Laptop Port default protocol is set as DHCP Server. The CPU III will default to operating as a Server as well. If the GCP is to be connected to a network, however, the Display and/or CPU III will need to be configured as a Client.

The default IP address for the Display from the factory is `https://192.168.255.81`. The CPU III will display an IP address scrolling across the four-character display. This can be accessed by using the Select (SEL) button to move between the scrolling displayed text.

The WebUI uses the HTTP Secure (https) protocol. The Display and CPU III DHCP Server protocol will assign the laptop an IP address to enable connection to the GCP.

The Display and CPU III support the following web browsers:

- IE 10 and 11 or newer
- Firefox (version 46.x) or newer
- Chrome (version 55.x) or newer

NOTE

NOTE

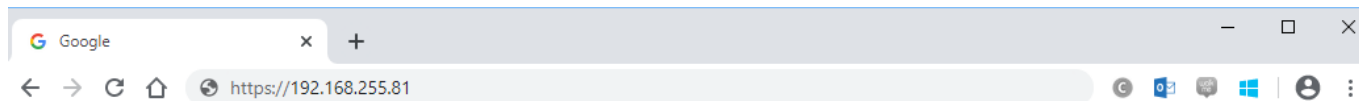
The WebUI menus covered in this quick guide are the ones shown on the Display WebUI. There are some differences between those and the menus seen on the CPU III WebUI. These differences are noted in section 8.0.

1.1 CONNECTING

If connecting to the WebUI locally, use a RJ-45 cable and connect to the Display Laptop Ethernet port or CPU III laptop Ethernet port.

If connecting to the WebUI remotely, simply proceed with the next step.

Open a web browser (approved versions listed above). and type in the IP address of the Display preceded by `https://`.



The web browser may display the screens shown below regarding the connection.

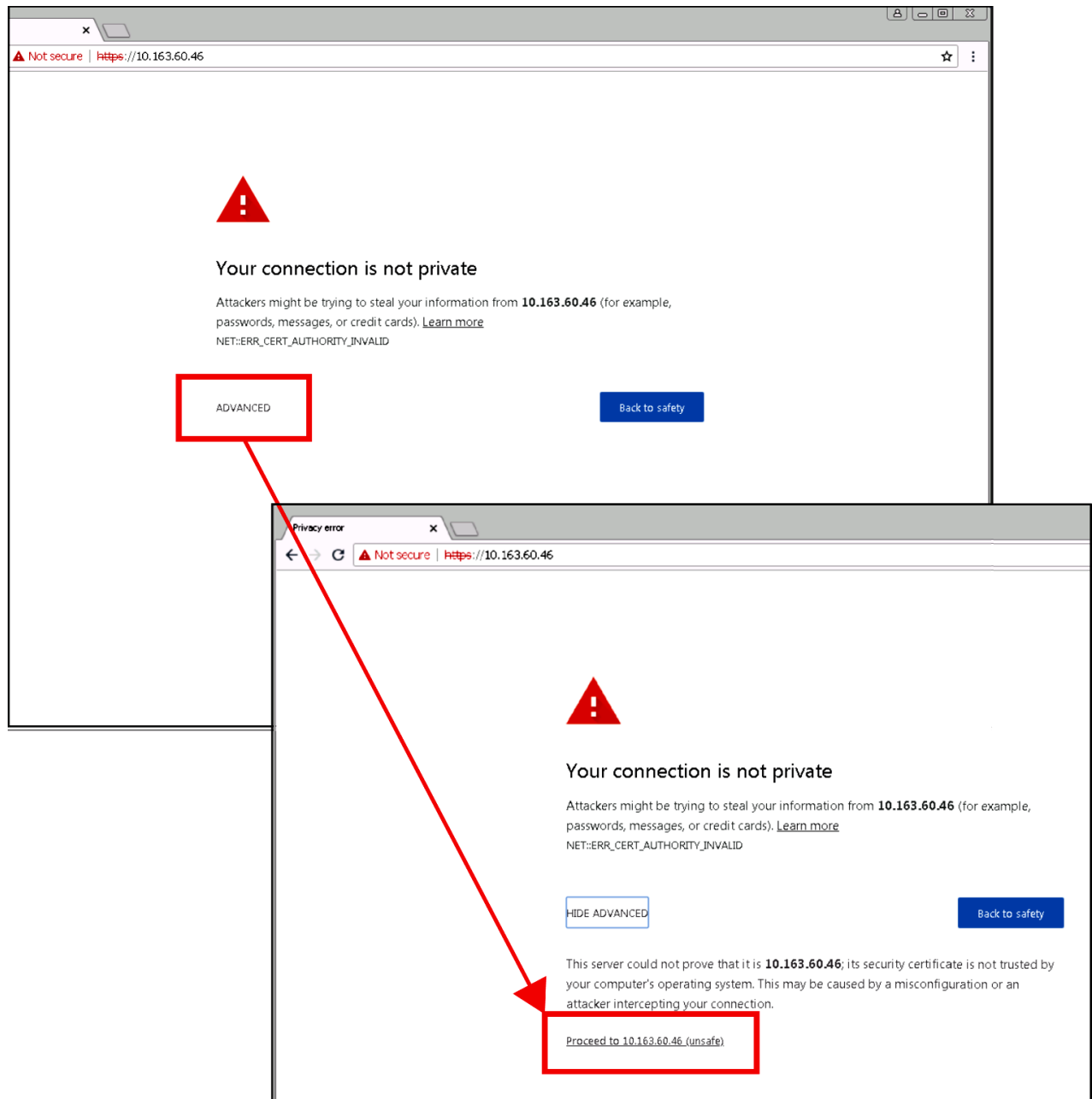


Figure 1-1 Unsecure Connection Warning

Click the **Advanced** option and select the option to proceed to the IP address listed. The WebUI will then appear.

Select the username as Maintainer (default). The Admin is for Siemens personnel use only.

The default password is GCP4000 (case sensitive) to open the session. If the security has not been set to enable a maintainer password, this default will allow all regular user functions of the WebUI to be accessed. If a specific maintainer password has been set, enter this. The default GCP4000 may still be used to access the WebUI, but the user will be unable to change GCP Programming parameters.

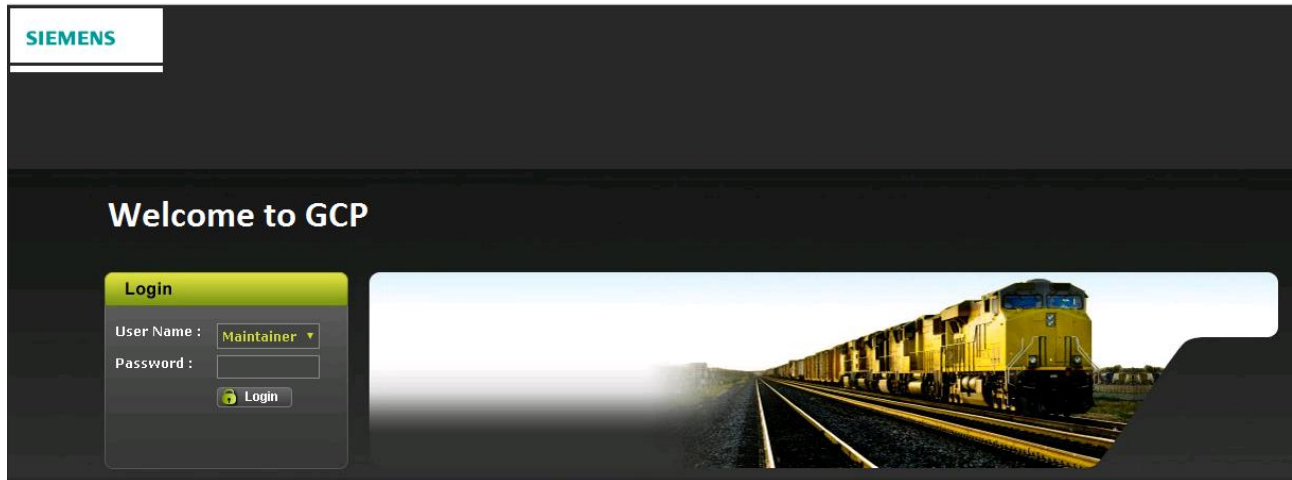


Figure 1-2 WebUI Login Screen

NOTE**NOTE**

The passwords **GCP3000+** and **GCP5000** are also valid Maintainer login passwords, this is because the Display Module is a common module for the 3000+, 4000, and 5000 GCP products.

CAUTION**CAUTION**

IF THE EQUIPMENT IS TO BE CONNECTED TO A NETWORK, IT WILL BE NECESSARY FOR THE USER TO SET THE ETHERNET PORT AS A CLIENT, FAILURE TO DO SO WILL CAUSE AN INTERRUPTION OF THE NETWORK SINCE TWO DHCP SERVERS WILL BE INTRODUCED ONTO THE NETWORK.

NOTE**NOTE**

The GCP WebUI has a 1-minute session timeout. If the web browser is closed without selecting **Logout**. The user will not be able to log back in for 1 minute.

1.2 MENU OVERVIEW

The WebUI has buttons at the top which allow the user to select the various functions. These top-level menus can vary from product to product, but the sequence remains the same.

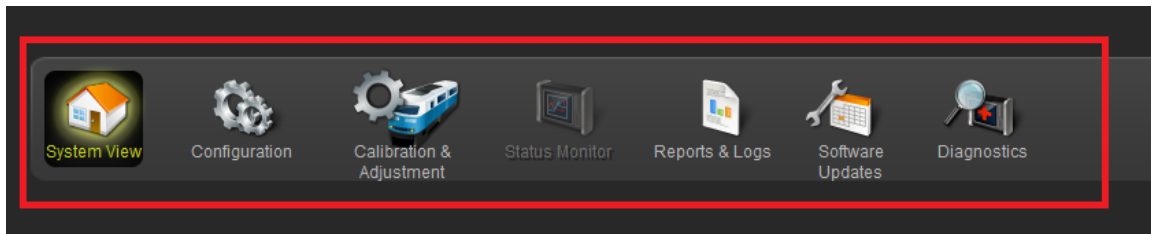


Figure 1-3 WebUI Tool Bar

NOTE

NOTE

For more “accessibility” the System View menu contains the Calibration & Adjustment and Diagnostics sub-menu items, thus duplicating the information under the Calibration & Adjustment menu and the Diagnostic menu.

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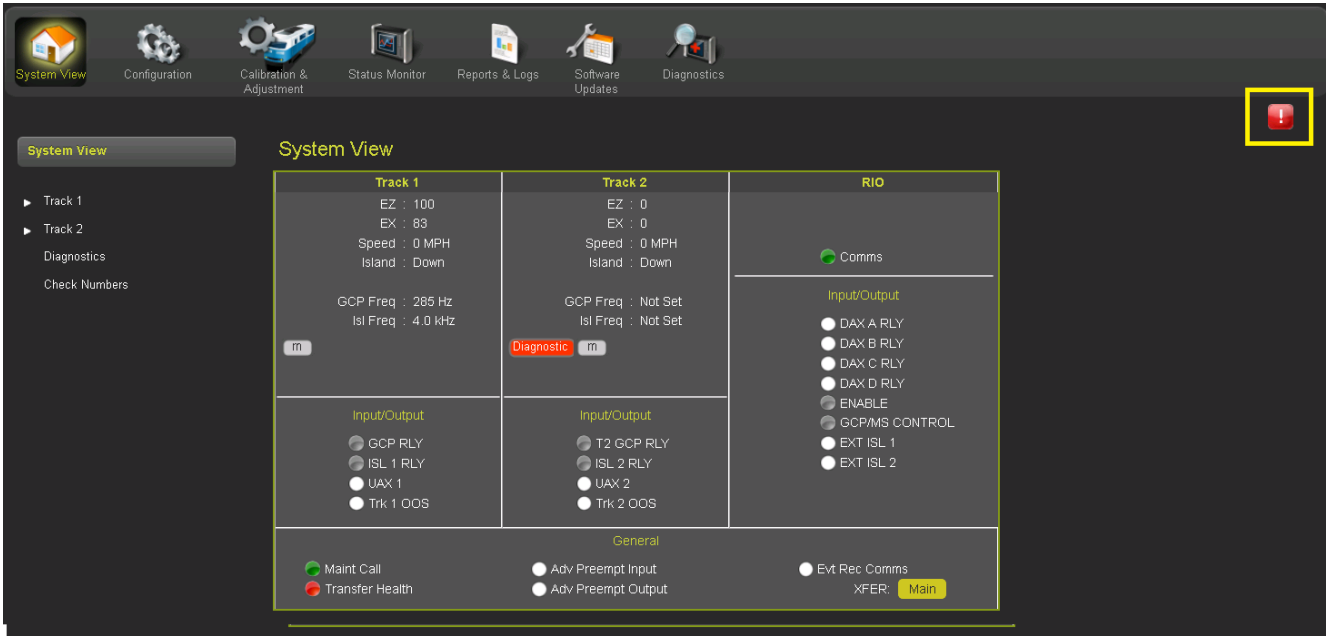


Figure 2-2 System View GCP 3000+



Figure 2-3 System View GCP 4000

The sub-menus shown under **System View** on the left will vary depending on which modules are installed in the GCP unit, and which model of GCP the WebUI is for. Each menu item with a white arrow next to it has an associated drop-down menu. The standard drop-down items for the track modules for each GCP model are shown below:



Figure 2-4 System View Sub-Menus

2.1 DETAIL VIEW

When Detail View is selected, the WebUI shows more detailed information about the 1st track. Click on the yellow tabs at the top to select a different track module. The tab will be red if the track card is not in session.

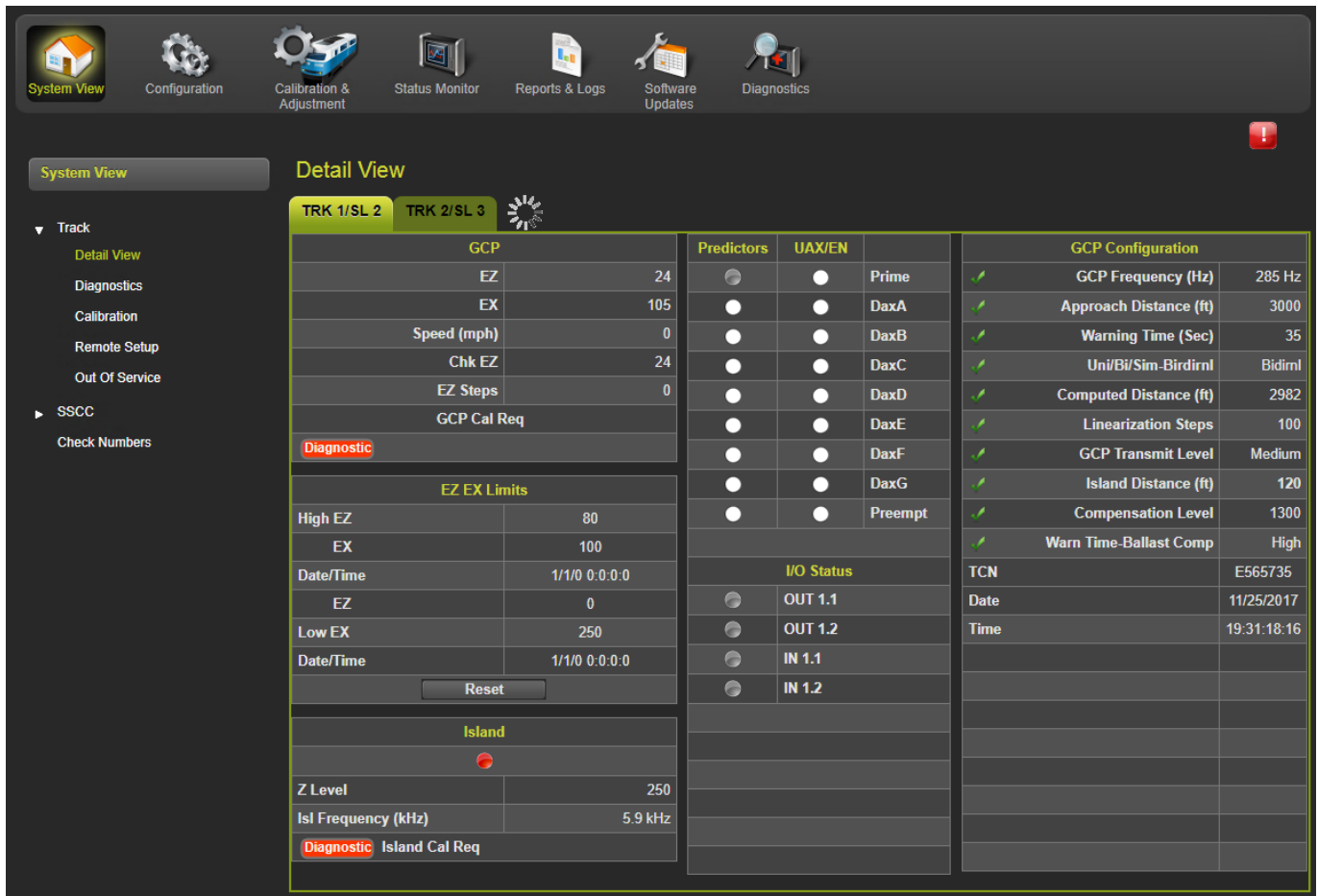


Figure 2-5 Detail View GCP 4000/5000

2.1.1 Track – Detail View

The track detail view shows more detailed information about the track module. This screen is primarily used to see the information shown in Figure 2-6 (highlighted with yellow boxes) as this is not available elsewhere on the WebUI:

- Check EZ – value of EZ on the check wires,
- Island Z Level – the island signal level, where 100 or lower indicates occupancy,
- Track Check Number (TCN) and date and time it was last changed.

The Island Z level represents the normalized signal level on the island. When the value is below 100 the island becomes occupied, the island will start its pickup delay timer running when the Z level goes back over 110. The display does not show values over 250, even though the island level will generally be much higher.

The track detail screen also shows the user the EZ/EX limits information consisting of:

- the highest EZ value the track has recorded since this screen was last reset and the EX value at that time. The time/date this occurred is shown.
- the lowest EX value the track has recorded since this screen was last reset and the EZ value at that time. The time/date this occurred is shown.

The values can be reset by pressing the **Reset** button.

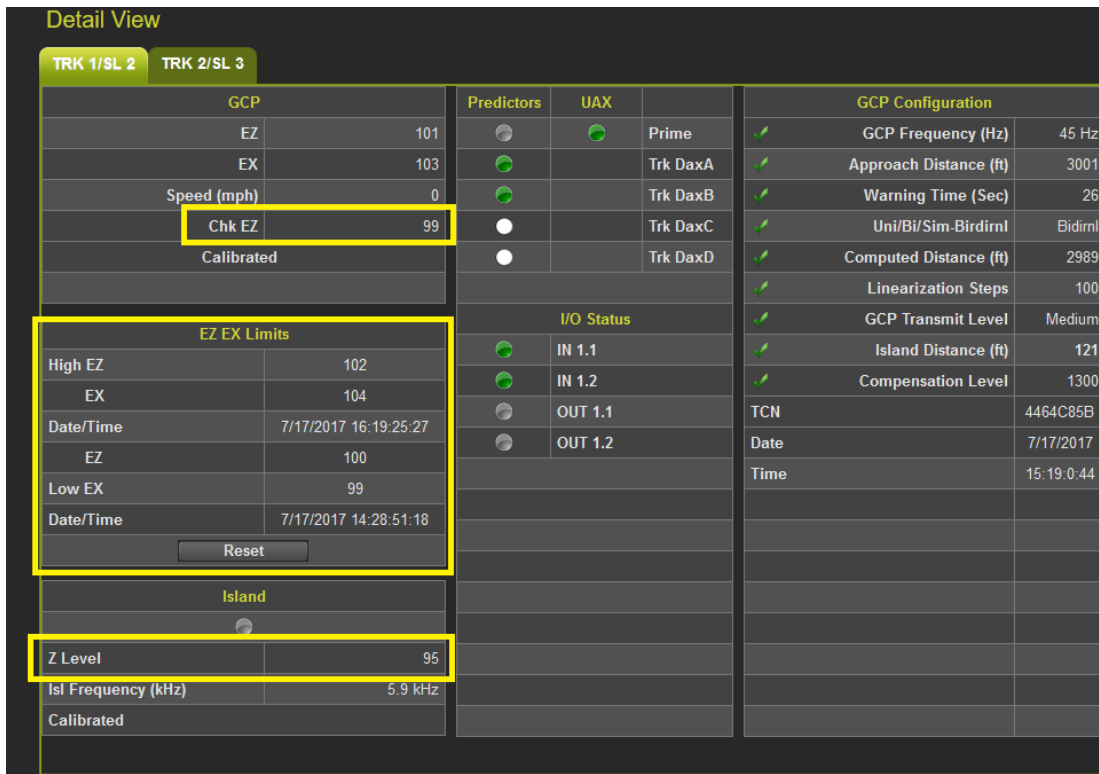


Figure 2-6 Track Detail View GCP 3000+

2.2 DIAGNOSTICS

Diagnostics is available under the **System View** tab but will be discussed in this document under the Section 6-1.

2.3 TRACK SETUP (GCP 5000 ONLY)

When Track Setup is selected the WebUI will show the following screen that allows the user to see and change configuration settings that are commonly modified during maintenance operations. This provides a more convenient way to access these maintenance related parameters than searching for them in the main program menus. Before options can be selected on the screen, it has to be unlocked and local user presence confirmed (see Section 6.1.5.1)

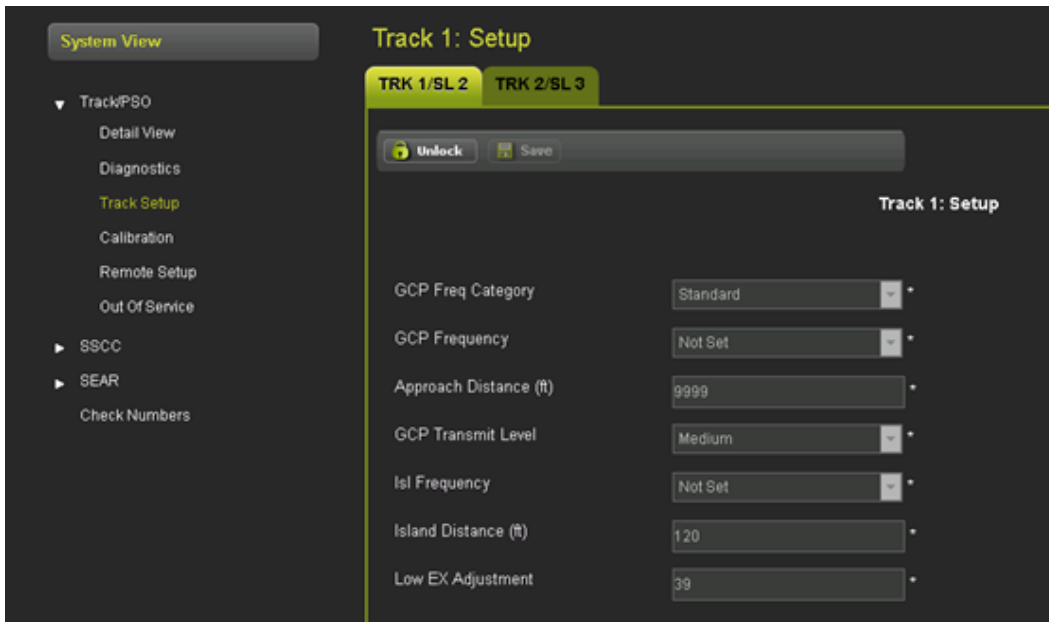


Figure 2-7 System View Menus

2.4 CALIBRATION

The calibration screen can be accessed from the **System View > Calibration** menu or from the **Calibration & Adjustment** icon on the tool bar.

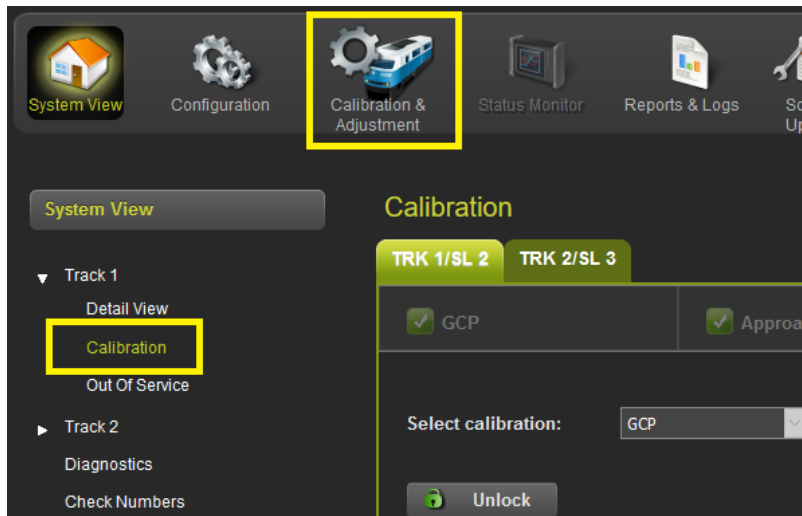


Figure 2-8 Selecting Calibration

Calibration is available under the **System View** tab but will be discussed in this document under section 4.0.

2.5 REMOTE SETUP (GCP 4000/5000 ONLY)

When Remote Setup is selected the WebUI shows the following screen that allows the user to obtain the remote setup password and select which tracks are going to be calibrated when the system is used with a VHF communicator and DTMF radio that allow remote setup operations to be performed. Before options can be selected on the screen, it has to be unlocked and local user presence confirmed.

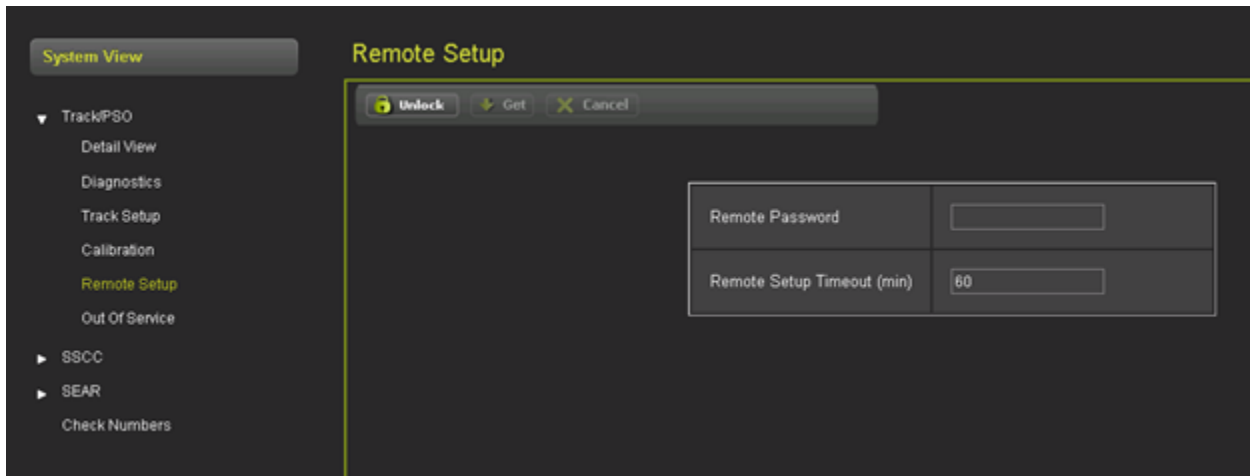


Figure 2-9 Remote Setup WebUI

2.6 TRACK – OUT-OF-SERVICE

WARNING

WARNING

THE RAILROAD PROCEDURES GOVERNING HOW TO TAKE A TRACK CIRCUIT OUT OF SERVICE SHALL BE FOLLOWED. THE INSTRUCTIONS IN THIS SECTION MAY BE FOLLOWED ONLY IF ALLOWED BY THE RAILROAD.

REQUIRED OPERATIONAL TESTS SHALL BE PERFORMED IN ACCORDANCE WITH RAILROAD PROCEDURES WHEN RESTORING TRACKS TO SERVICE.

THE RAILROAD PROCEDURES FOR APPLYING TEMPORARY JUMPERS MUST BE FOLLOWED WHEN ENERGIZING THE “OUT OF SERVICE” INPUT(S).

The WebUI can be used to take the GCP approach circuit and the island circuit out of service. There are three methods of using the Out of Service feature on the GCP. The method used is selected in the GCP Programming by using OOS Control parameter. The options are:

- Display
- Display + OOS IPs
- OOS IPs
- 4000/5000 Case OOS IP

WARNING

WARNING

INPUTS FOR “OUT OF SERVICE” SHOULD BE WIRED IN A PERMANENT MANNER IN ACCORDANCE WITH CIRCUIT PLANS. DO NOT USE TEST TERMINALS OR SWITCHES THAT CAN VIBRATE CLOSED TO ENERGIZED OOS INPUTS.

When **OOS Control** is set to **Display**, the Web or Local UI by itself can be used to take a GCP approach or island out of service.

When **OOS Control** is set to **Display+OOS IPs**, the WebUI is used in conjunction with the Trk Out of Service inputs (IN 2 on the each track module) to take a GCP approach or island out of service.

When **OOS Control** is set to **OOS IPs**, the WebUI is not used in taking the GCP approach and island out of service, only the Trk Out of Service inputs are used.

Selecting the **Track Out of Service** screen will show the **Out of Service** screen as shown below.

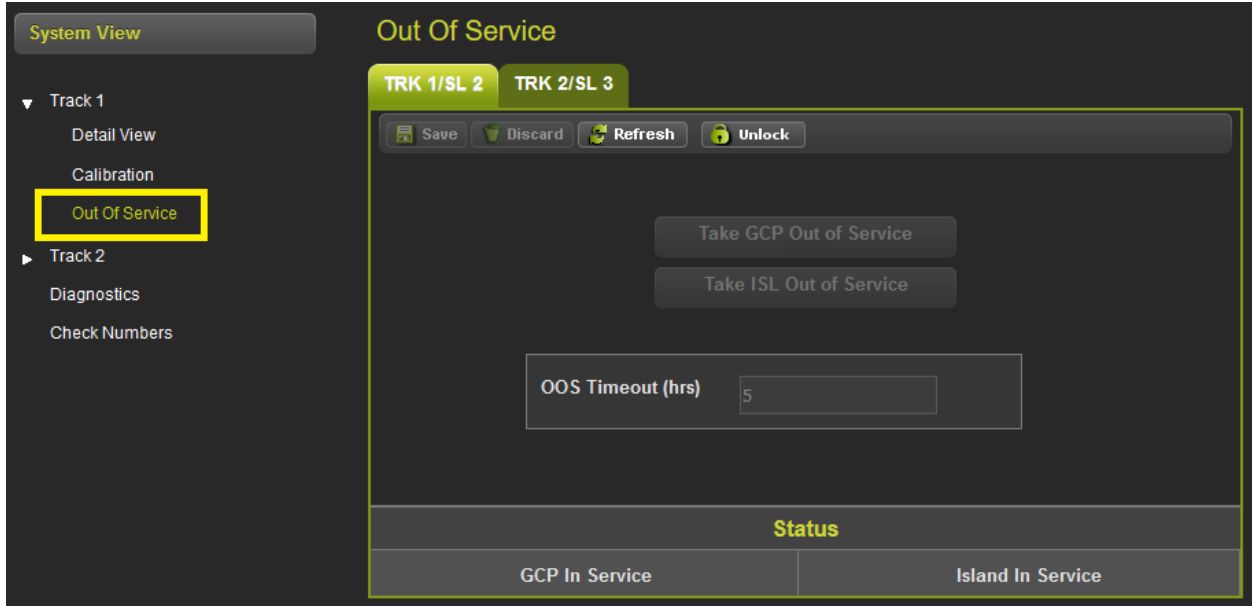


Figure 2-10 WebUI Out of Service

Since the WebUI may be used remotely, before anything can be changed on this page, the screen has to be unlocked by demonstrating that there is a person at the actual GCP in the field. Select the **Unlock** button and then have the person in the field use the keypad to acknowledge the message shown on the display, see Section 6.1.5.1 for more information.

Once local user presence has been confirmed, other buttons will be enabled as shown below.

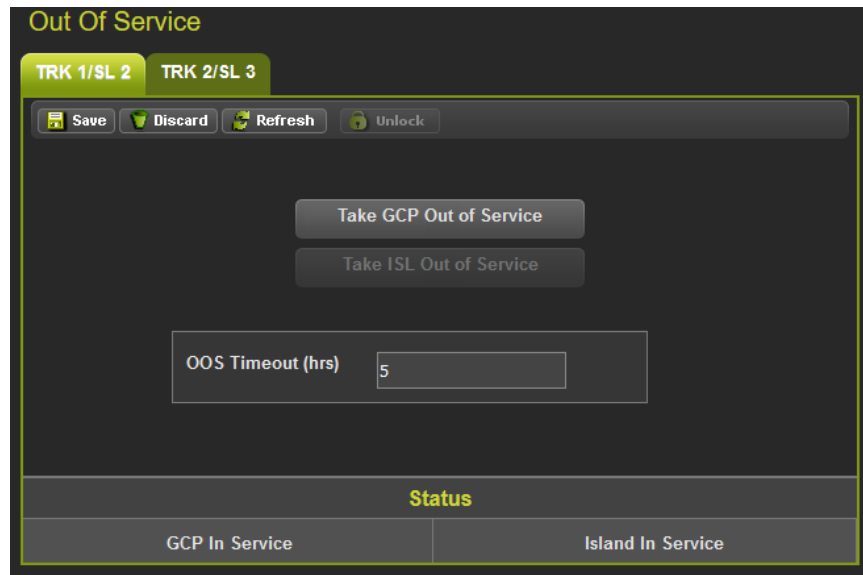


Figure 2-11 WebUI Out of Service Unlocked

First, enter the **Out of Service Timeout** that is required, and press **Save**. The timer cannot be changed once a track is out of service, so it needs to be set first. The valid values are 0 to 23 hours, where the value 0 means that the timeout is not being used.

NOTE

NOTE

The **Out of Service Timeout** covers all tracks taken out of service with one time interval.

If the timer is running for one track out of service, and it is desired to take the other track out of service for an added amount of time, do the following:

- Return to the first track service
- Edit the **Out of Service Timeout** to the new value
- Take both tracks out of service

If the Transfer Module transfers while a track is out of service, the track will be returned to service and may activate the warning devices.

If **OOS Control** is set to **Display+OOS IPs**, energize the Trk OOS Input according to railroad procedure before continuing and then select the **Take GCP Out of Service** button. The WebUI will ask for confirmation as shown below.

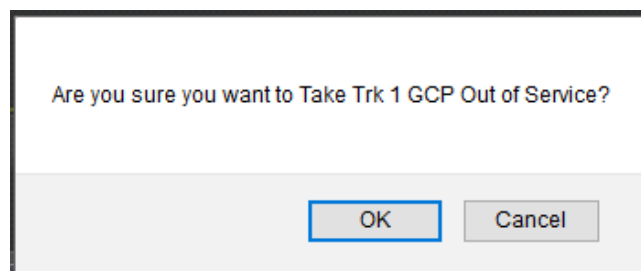


Figure 2-12 WebUI Out of Service Acknowledge

Select **OK** if required. The WebUI will now show: **GCP Out of Service** as shown in Figure 2-13 on the left. The System View will show the GCP OOS icon flashing between blue and white.

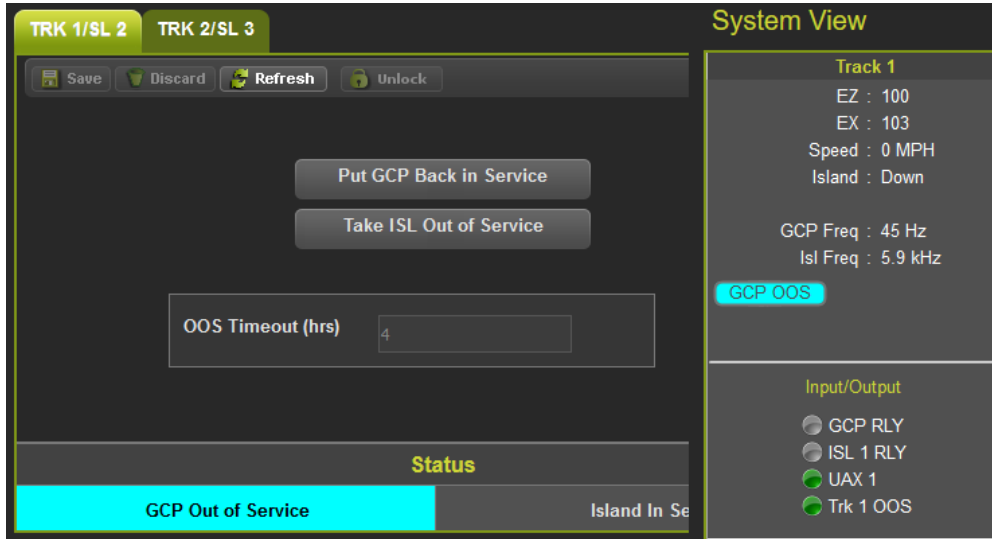


Figure 2-13 WebUI Out of Service Indications

The track module will also display the message GOFs on its four-character display. The maintenance call output on the GCP will turn off, causing the maintenance call lamp to go off, if it is wired. The maintenance call light is illuminated when running properly, if it goes dark, that indicates a problem at the location.

To return the GCP to service, if **OOS Control** is set to **Display+OOS IPS**, de-energize the track OOS input on the track module.

If **OOS Control** is set to **Display**, use the WebUI module and select the **Put GCP Back in Service** button shown in Figure 2-13 above. (This requires local user presence - Section 6.1.5.1).

NOTE

NOTE

When a GCP is OOS but the island remains in service, the crossing will activate when the island is occupied.

NOTE

NOTE

Putting the GCP back in service will also put the island back in service if it was out of service.

If the **OOS Control** is set to **Display+OOS IPs** and the Trk OOS Input is still energized, performing the above step will put the track back in service; however, the maintenance lamp call will remain off while the Trk OOS Input is still energized. Similarly, if the out of service timer expires and the Trk OOS Input is still energized, the maintenance call lamp will remain off.

WARNING

WARNING
ENSURE THAT TRACK OUT-OF-SERVICE INPUT IS RETURNED TO DE-ENERGIZED WHEN THE TRACK IS PUT BACK IN SERVICE.

NOTE

NOTE
The island cannot be taken out of service by itself, the GCP has to be first taken out of service.

If **OOS Control** is set to **OOS IPs** the options to take the GCP out of service will not be enabled on the **Out of Service** screen.

To take the island out of service, first take the GCP out of service, then select the **Take ISL Out of Service** button shown in Figure 2-13 above.

This will bring up the following confirmation screen.

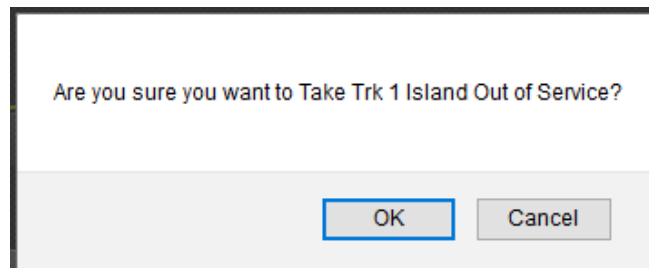


Figure 2-14 Island Out of Service Confirmation

If required, select **OK** to continue.

The **Out of Service** screen will now show the Island as **Out of Service**, and the top system level screen will show the message **GCP-ISL OOS** that will alternate between blue and white. The track module will display the messages **GOFs** and **IOFS** on its four-character display. As before, the maintenance call output on the GCP will turn off, this will cause the maintenance call lamp to go off, if it is wired.



Figure 2-15 Island Out of Service Indications on WebUI

If **OOS Control** is set to **Display+ OOS IPs**, to return the GCP and island to service, de-energize the track OOS input on the track module. If only the island needs to be put back in service, use the WebUI and select the **Put ISL Back in Service**.

NOTE**NOTE**

Either the WebUI or Display Keypad can be used to put the GCP and Island in or out of service.

When Out of Service is selected the WebUI shows the following screen that allows the user to take the GCP approach or island out of service. Before options can be selected on the screen, it has to be unlocked and local user presence confirmed.

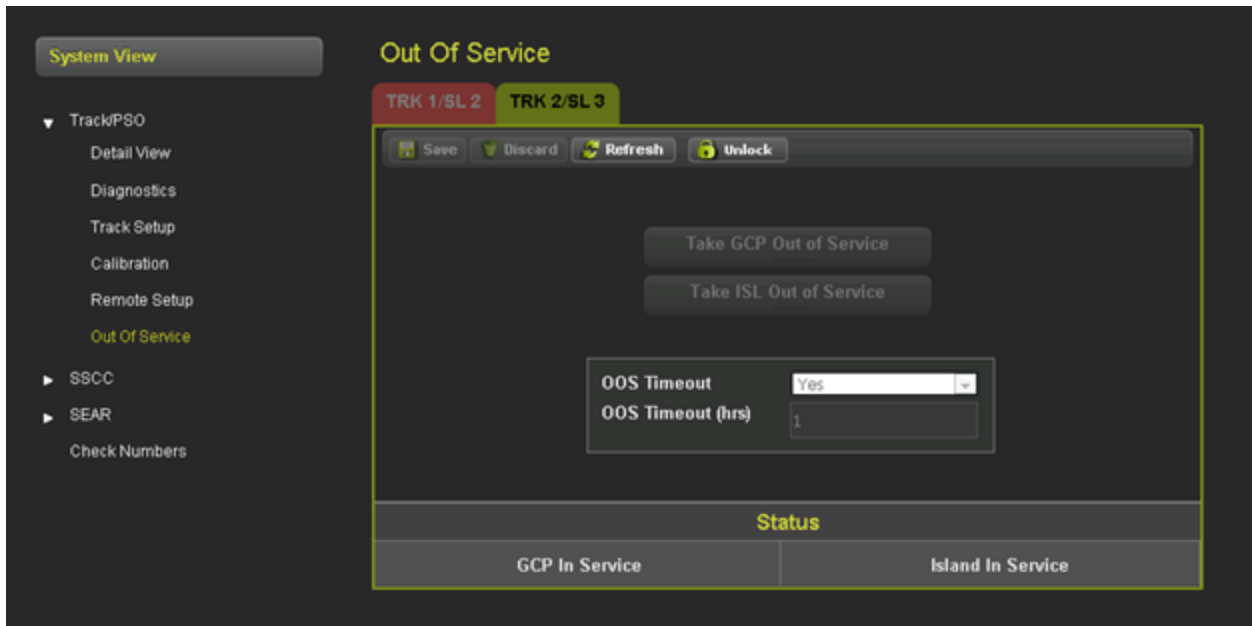


Figure 2-16 Out of Service WebUI

2.7 CHECK NUMBERS

The check numbers screen will show the following check numbers:

- MCF Name – the name/version of the MCF
- MCF CRC – the CRC of the MCF that is running
- CCN - Configuration Check number, a check number that covers every configuration parameter that is part of the GCP programming and can be used to check whether anything in the vital programming has been changed.
- OCCN – Office Configuration Check number, used to verify configuration settings prescribed by design office are correct
- TCN – Track Configuration Check Number
- FCN – Field Check number.

The Track Check Number is a value that will change every time the track module is calibrated (GCP, Approach, Linearization or Island). Each Track module has its own TCN. The main and standby track modules have different TCNs.

The Field Configuration Check Number (FCN) is a value composed of the TCNs for both track modules. The main and standby sides have different check numbers.

This field check number can be used by the maintainer to check whether any calibrations have been performed since they last visited the site. If the maintainer finds the FCN is different from the value they last recorded, they can look at the track detail screen at the track check numbers and find when the date and time they were last changed.

The Display module will show both Main and Standby TCNs and FCNs.

The TCN and FCN will show a value of 0 if the track card is not fully configured and calibrated and in session with the CPU (for the powered side).

If a parameter is changed which causes the GCP to require calibration, then the TCNs for both main and standby will show zero. When the main is then fully calibrated its values will be non-zero, the standby TCNs will still be at zero, thus providing an indication that the unpowered standby side has not yet been calibrated see Figure 2-17

NOTE

If a parameter that affects the TCN is changed, so calibration is required, but then it is changed back to its original value, the GCP will no longer require calibration, but the TCN is updated to a new value, as the TCN is recalculated when the GCP goes from an uncalibrated to a calibrated state.

The screen also allows hidden parameters to be reset when used on a GCP5000 or GCP3000+.

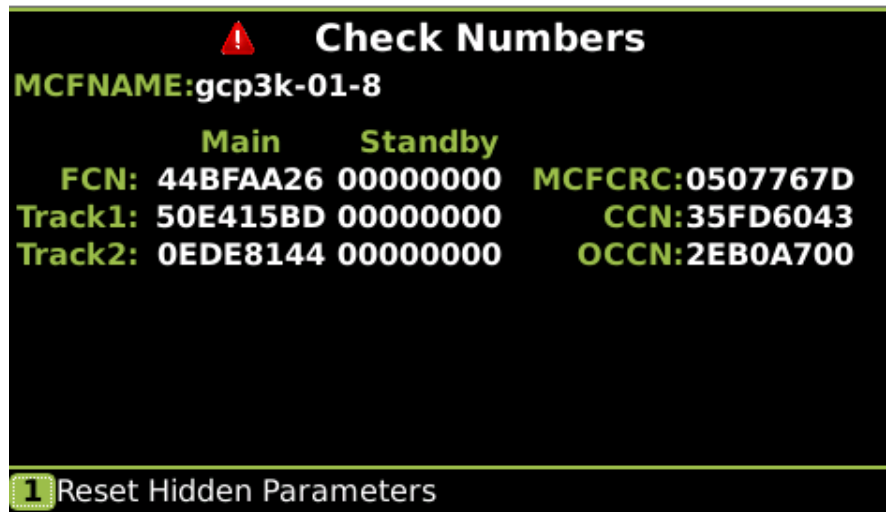


Figure 2-17 WebUI Check Number

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SECTION 3 CONFIGURATION

3.0 OVERVIEW

When the configuration icon on the tool bar is selected, the WebUI will show the menus illustrated in Figure 3-1 and Figure 3-2.



Figure 3-1 WebUI Configuration Menus

3.1.1 Configuration Menus (GCP 5000/3000+)

- **Site Configuration** is used to set up the non-vital site information, for example, site name, milepost, DOT number, etc.
- **GCP Programming** is used to set the vital parameters that control the operation and the GCP
- **SEAR Programming (5000 only)** is used to upload and remove the CDL, view the CDL Log, and adjust the settings for the CDL once uploaded
- **Display Programming** is used to set non-vital settings related to the operation of the display.

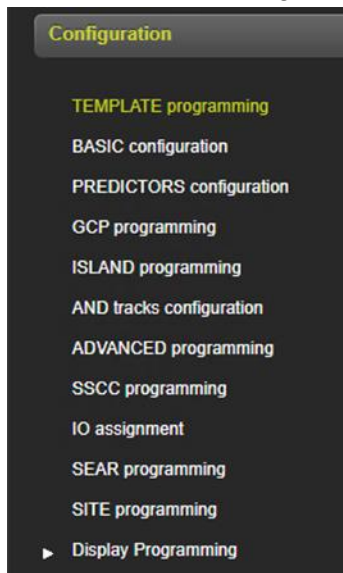


Figure 3-2 GCP 4000 WebUI Configuration Menu

3.1.2 Configuration Menus (GCP 4000)

- **Template Programming** displays only the configuration items and settings that are usually required for standard applications
- **Basic Configuration** is used to set up the non-vital site information, for example site name, milepost, DOT number, etc.
- **Predictors Configuration** is used to configure associated predictors
- **GCP Programming** is used to set the vital parameters that control the operation and the 4000 GCP
- **Island Programming** is used to configure the associated islands
- **AND Tracks Configuration** is used to configure associated ANDing
- **ADVANCED Programming** is used for Out Of Service (OOS), internal I/O, and other advanced programming configuration
- **SSCC Programming** is used to configure associated SSCCs
- **IO Assignment** assign Input / Outputs
- **SEAR Programming** used to configure SEAR
- **SITE Programming** is used for site-specific configuration
- **Display Programming** is used to set non-vital settings related to the operation of the display

3.2 SITE CONFIGURATION

This screen is used to set the non-vital site information, for example, site name, milepost, DOT number, etc. The GCP 3000+ contains a reduced list of parameters. To edit, first unlock and confirm local user presence (see Section 6.1.5.1). The fields will now be editable.

To change the values in a field, type in the new value and then press the **Save** button. Multiple fields on this page can be edited. If there are unsaved changes and a new screen is selected, the WebUI will prompt the user to save or discard the changes.

To discard changes without saving, press the **Discard** button.

Configuration

Site Configuration

Save
Discard
Refresh
Unlock

Site Name	<input type="text" value="RIO_OCE"/>
DOT Number	<input type="text" value="000000A"/>
Mile Post	<input type="text" value="441.9"/>
Time Zone	<input type="text" value="Eastern (GMT-5:00) *"/>
ATCS - Railroad	<input type="text" value="620"/>
ATCS - Line	<input type="text" value="100"/>
ATCS - Group	<input type="text" value="100"/>
ATCS - Display Subnode	<input type="text" value="1"/>
ATCS - CPU2+ Subnode	<input type="text" value="16"/>
ATCS - SEAR Subnode	<input type="text" value="99"/>
SEAR Temp. Format	<input type="text" value="Fahrenheit *"/>
SEAR Date Format	<input type="text" value="American (mm-dd-yyyy) *"/>
Units of Measure	<input type="text" value="Standard *"/>
Date	<input type="text" value="06/24/2019"/>
Time	<input type="text" value="21"/> <input type="text" value="24"/> <input type="text" value="04"/>

Figure 3-3 WebUI Site Configuration (GCP 5000)

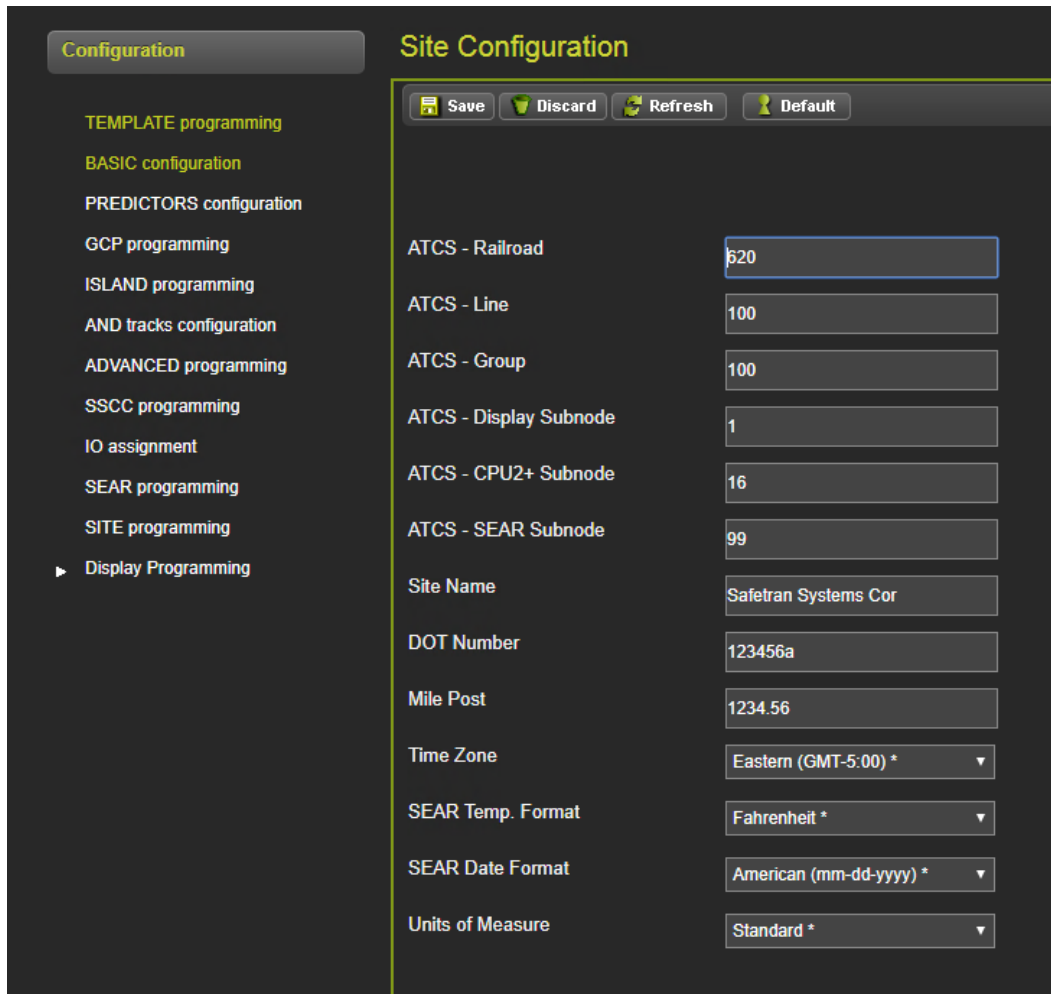


Figure 3-4 WebUI Site Configuration (GCP 4000)

The WebUI will not accept invalid characters in text fields. If the data entered is out of range, the WebUI will flag this with an error.

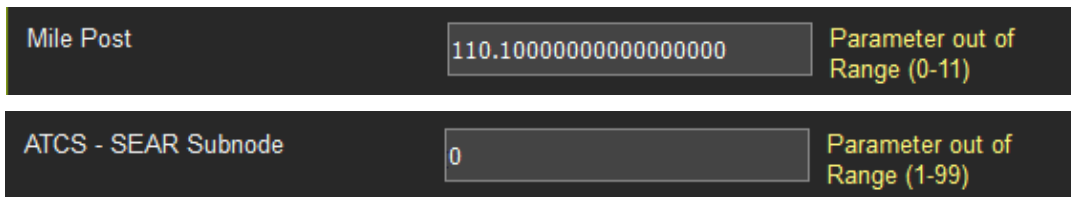


Figure 3-5 WebUI Error Checking

NOTE

NOTE

The Site and DOT numbers are to create file paths or file names when files are downloaded to a USB memory device.

NOTE**NOTE**

Changing the ATCS Railroad, Line, Group, Display or Subnode or CPU II+/CPU III subnode will cause the Display to disconnect from the CPU and then reconnect.

3.3 GCP PROGRAMMING

This screen is used to set parameters that affect the operation of the GCP and its ability to detect trains and provide a constant warning time. The design on the circuit plans for the crossing warning system determines the programming of the GCP.

WARNING**WARNING**

PROGRAM CHANGES MUST BE PERFORMED IN ACCORDANCE WITH RAILROAD PROCEDURES. SYSTEM OPERATION MUST BE VERIFIED PRIOR TO PLACING SYSTEM IN SERVICE OR FOLLOWING PROGRAMMING, HARDWARE OR WIRING CHANGES.

To edit the parameters, first unlock and confirm local user presence (see Section 6.1.5.1). The fields will now be editable.

NOTE**NOTE**

If the Security Enabled is set to Maintainer, the correct Maintainer password has to be entered in the WebUI in order to edit parameters. If the default password is used, the GCP programming parameters will remain locked.

3.3.1 GCP Programming GCP 4000/5000

To edit a field, either select from the drop-down list, or enter a numerical value as appropriate.

Multiple fields on this page can be changed before saving. After the required fields are changed, press **Save** to implement the changes. If there are unsaved changes and a new screen is selected, the WebUI will prompt the user to save or discard the changes.

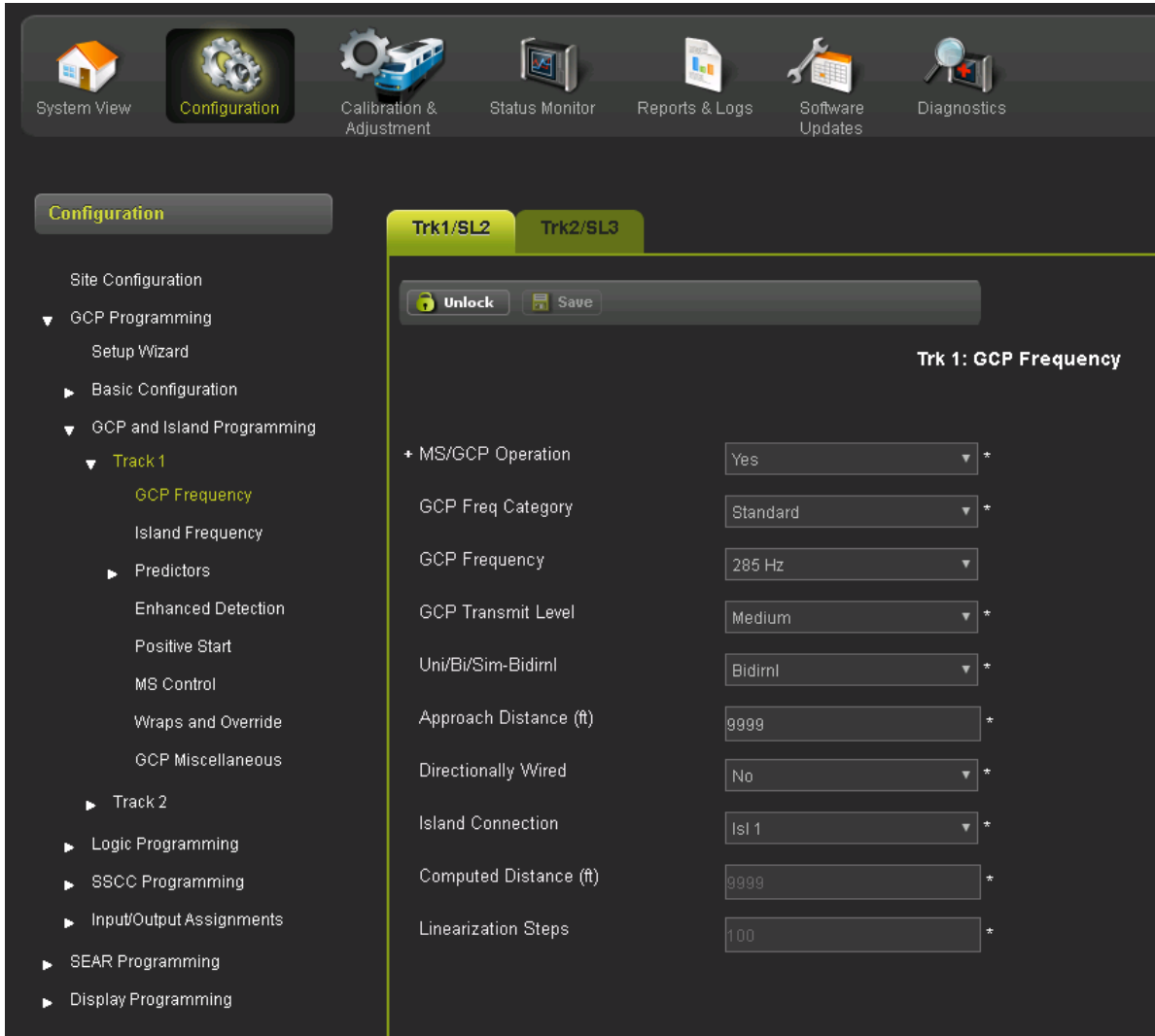


Figure 3-6 WebUI GCP Programming

Some parameters get hidden based upon the value or other parameters. The hidden parameter is not visible until the parameter that causes it to be hidden is saved.

For example, the Prime Pickup Delay Mode is only visible when the Prime Prediction Offset is not 0. So, if the plans indicate to change the Pickup Delay Mode, the Prime Prediction Offset first has to be changed to a non-zero value and then the changes saved before the Pickup Delay Mode is visible.

The GCP 4000 has the parameters split by pages with **Prev** and **Next** arrows as shown in Figure 3-7.



Figure 3-7 GCP Programming 4000

3.3.2 GCP Programming 3000+

To edit a field, either select from the drop-down list, or enter a numerical value as appropriate.

Multiple fields on this page can be changed before saving. After the required fields are changed, press **Save** to implement the changes. If there are unsaved changes and a new screen is selected, the WebUI will prompt the user to save or discard the changes.

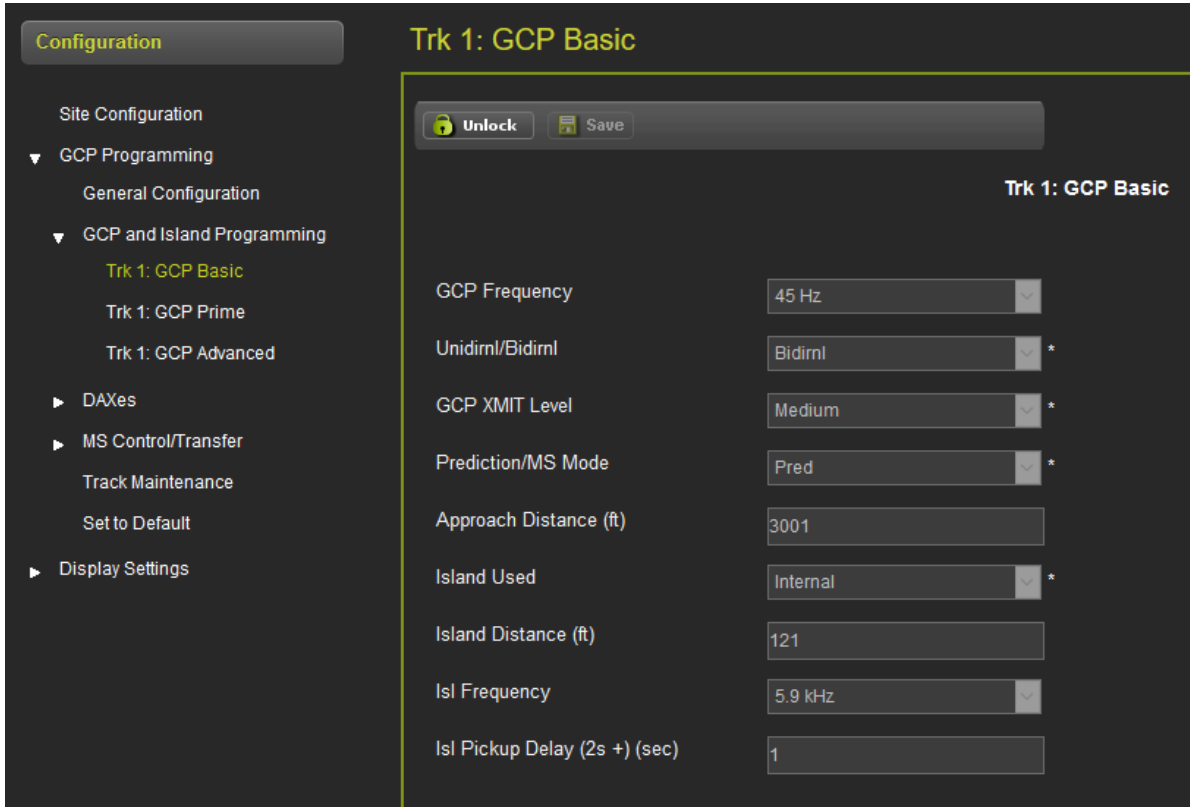


Figure 3-8 WebUI GCP Programming

Some parameters get hidden based upon the value or other parameters. The hidden parameter is not visible until the parameter that causes it to be hidden is saved.

For example, the Prime Pickup Delay Mode is only visible when the Prime Prediction Offset is not 0. So, if the plans indicate to change the Pickup Delay Mode, the Prime Prediction Offset first has to be changed to a non-zero value and then the changes saved before the Pickup Delay Mode is visible.

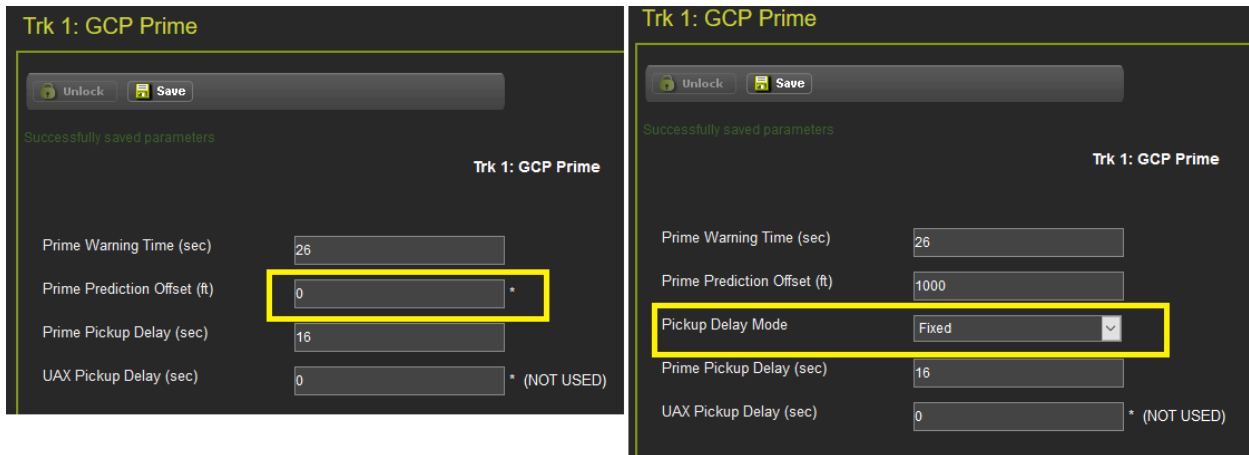


Figure 3-9 WebUI Hidden Parameters

The * to the left of the value indicates that the parameter is set to its default value.

The 3000 GCP had some numerical parameters where 0 represented a **Not Used** or **Off** condition. In order to emulate this on the 3000+ GCP, these specific parameters that use an **Off** value will show this in text to the right of the value, as shown in the following examples:



Figure 3-10 WebUI Off Values

Changes to some parameters cause the options in the left-hand menu to change. For example, the DAXes menu is empty unless the **Number of DAXes** is greater than 0 in the **General Configuration** menu.

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SECTION 4 CALIBRATION & ADJUSTMENT

4.0 TRACK - CALIBRATION

The calibration screen can be accessed from the **System View Track Calibration** menu or from the **Calibration & Adjustment** icon on the tool bar.

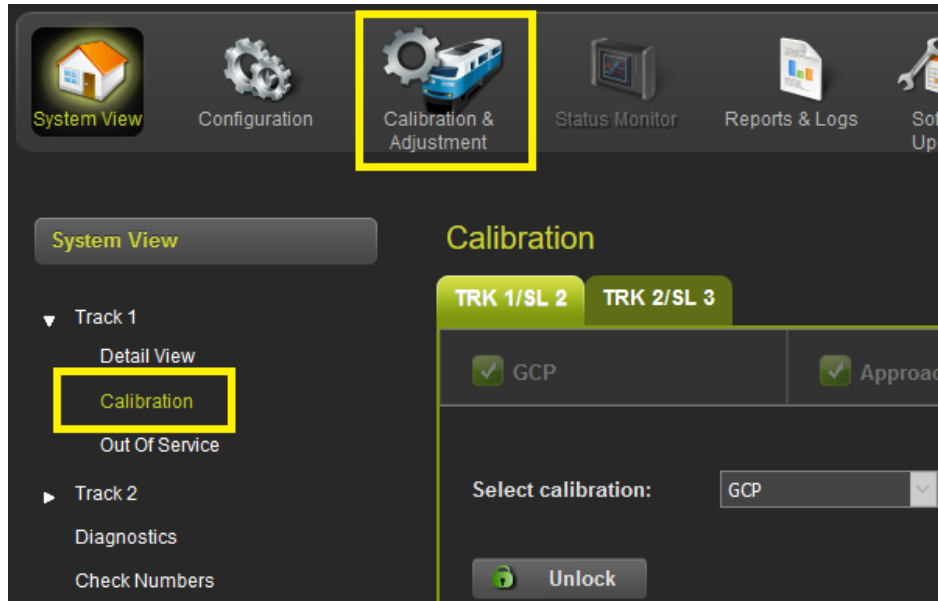


Figure 4-1 Selecting Calibration

The Calibration screen shows the state of the calibration for the specified track. If the calibrations are complete, these are marked with a green check mark as shown in Figure 4-2.

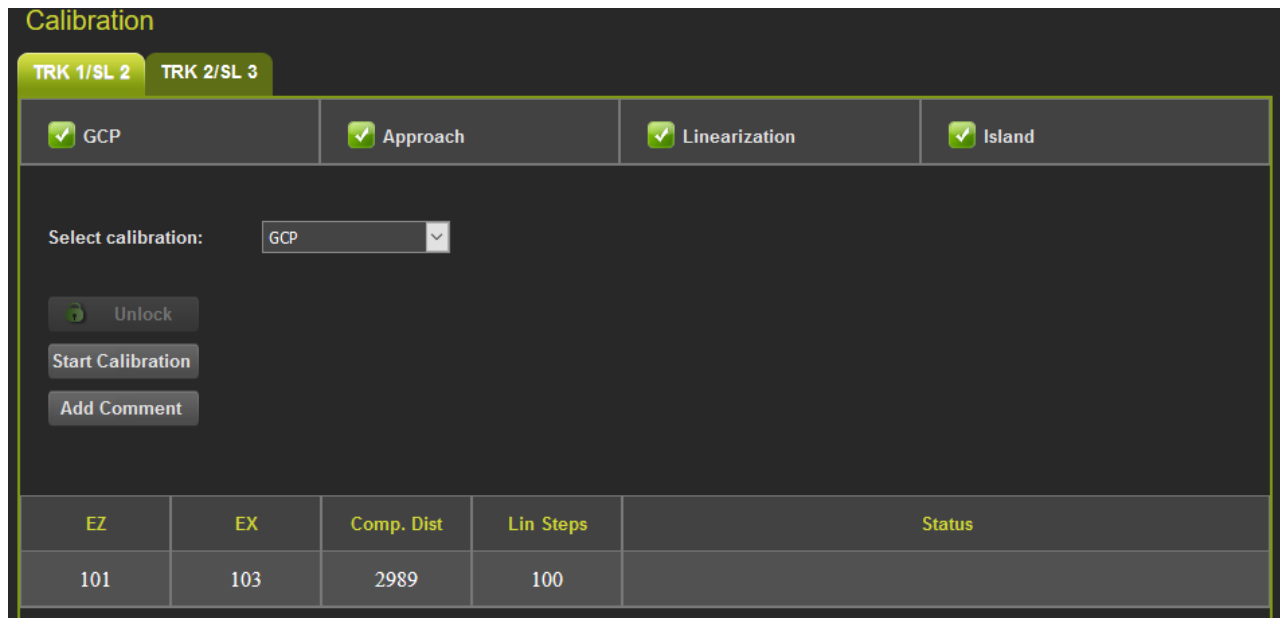


Figure 4-2 Calibration Not Required

If the calibrations are required, these are marked with a red check box as shown in Figure 4-3.

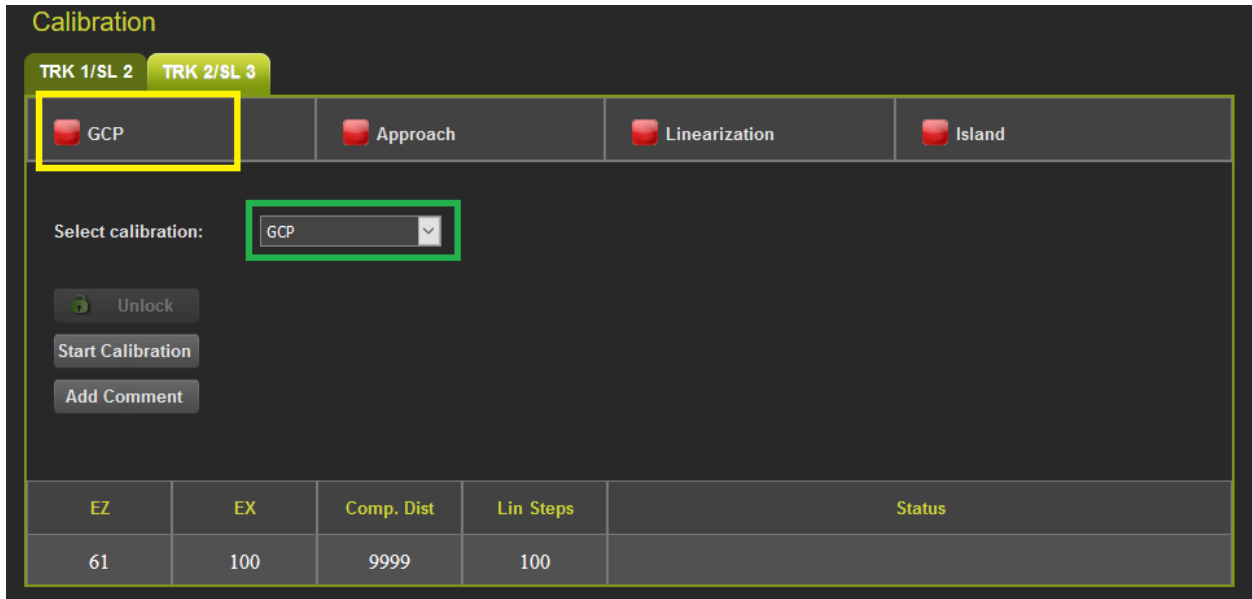


Figure 4-3 Calibration Required

To select which calibration to perform, either click on a specific calibration in the menu bar, for example, GCP shown in the yellow box above, or select the calibration from the drop-down menu shown in green box (Figure 4-3).

4.1 ISLAND CALIBRATION

When the island calibration is selected, the WebUI will show the distance at which the hard wire shunt should be placed. The distances shown are automatically calculated for the island frequency that has been configured.

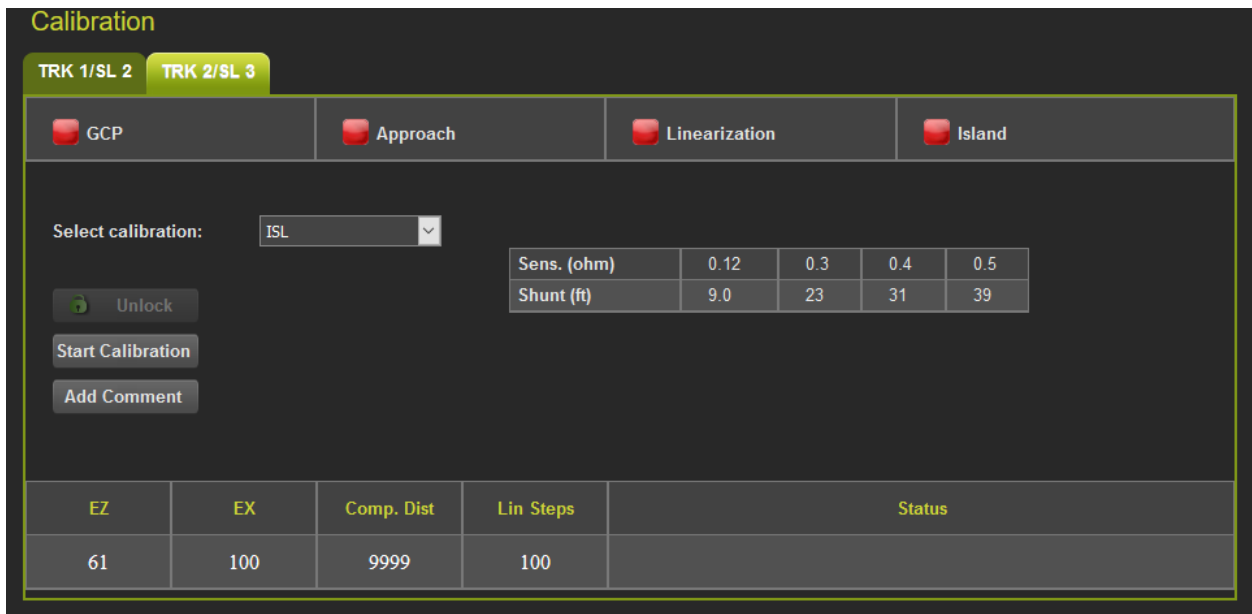


Figure 4-4 Island Calibration

When Calibration is selected, the WebUI will show the following screen that allows the user to calibrate the GCP, approach, linearization or island. Before options can be selected on the screen, it has to be unlocked and local user presence confirmed.



Figure 4-5 Track Calibration Screen

This page intentionally left blank

SECTION 5 REPORTS & LOGS

5.0 OVERVIEW

Selecting the **Reports and Logs** icon will result the WebUI showing the following menu selections.

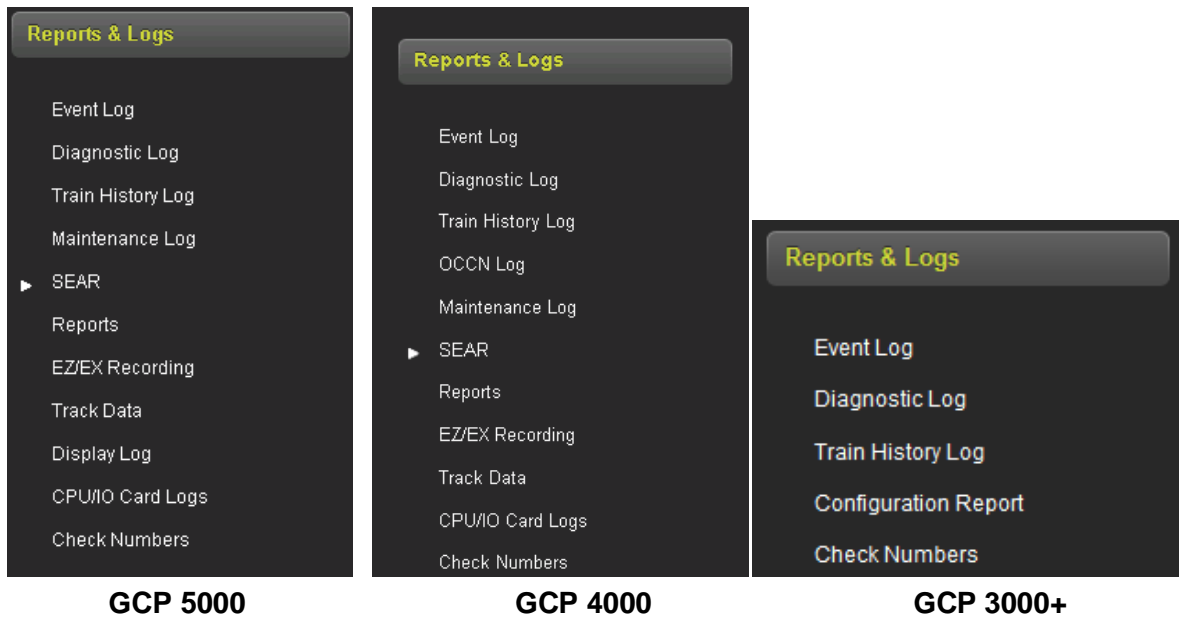


Figure 5-1 WebUI Reports and Logs Menus (Display WebUI)

The WebUI will also display the last events in event log when the Reports and Logs are first entered.

5.1 EVENT LOG

The display contains an event log. The events in here are generated by the CPU and sent to the display where they are time stamped and added to the log. In a redundant system, the Display log will contain events from both the main and standby systems.

The WebUI event log page allows the user to page through the event, download all or part of the log, or turn on a real time trace so new events get displayed as they are logged.

Time Stamp	Card/Slot	Event Text
24-Jun-2019 17:34:41.26	CPU:VLP	IN 7.4 Energized
24-Jun-2019 17:34:41.46	CPU:VLP	IN 7.5 Energized
24-Jun-2019 17:59:15.38	CPU:VLP	Preempt Logic : Advnce
24-Jun-2019 17:59:15.58	CPU:VLP	CCN: 671BC00A OCCN: 718B3001
24-Jun-2019 18:13:31.30	CPU:VLP	Gate Down Logic Used : Yes
24-Jun-2019 18:13:31.50	CPU:VLP	CCN: 4E64F412 OCCN: 58F40419
24-Jun-2019 18:15:56.48	CPU:VLP	Second Trm Logic Used : Yes
24-Jun-2019 18:15:56.69	CPU:VLP	CCN: 1C9A9C22 OCCN: 0A0A6C29
24-Jun-2019 18:19:20.45	CPU:VLP	Preempt Logic : Simult
24-Jun-2019 18:19:20.63	CPU:VLP	CCN: 13EAB7A7 OCCN: 057A47AC
24-Jun-2019 18:24:29.24	CPU:VLP	Preempt Logic : Advnce
24-Jun-2019 18:24:29.46	CPU:VLP	CCN: 1C9A9C22 OCCN: 0A0A6C29
24-Jun-2019 18:24:40.73	CPU:VLP	Traffic Sys Hlth IP Used : Yes
24-Jun-2019 18:24:40.95	CPU:VLP	CCN: 530A5FBE OCCN: 459Aafb5
24-Jun-2019 18:24:41.16	CPU:VLP	Traffic Health IP Deenergized
24-Jun-2019 18:30:29.79	CPU:VLP	Preempt Logic : No
24-Jun-2019 18:30:29.97	CPU:VLP	CCN: 5625B93D OCCN: 40B54936

Figure 5-2 WebUI Event Log

Use the buttons as follows:

- First – show the oldest page of events in the log
- Last – show the newest page of events in the log
- Previous – move back a page in the log
- Next – move forward a page in the log

50 events are shown per page, use the scroll bar on the right to see all the events on the page.

The Download button provides the following selections:

- Displayed – download the current page displayed
- Last 24 hours – downloads the events that occurred in the last 24hrs
- All – downloads the whole event log

The screen provides a filter box so events that match the entered text are the only shown. Enter the text to be filtered, then press enter.

Time Stamp	Card/Slot	Event Text
31-Jan-2016 20:19:42.42	CPU	Advanced Preempt IP Deenergized
31-Jan-2016 20:19:45.15	CPU	Advanced Preemption Timer Expired

Figure 5-3 WebUI Event Log Text Filter

To clear the filter, either delete the text in the box and press **Enter** or press the red **X**.

The events log contains CPU, Display, Maintenance, and Diagnostic Events. To see the Diagnostic events, either change the log filter to Diagnostic, or select the Diagnostic Log menu item from the left menus.

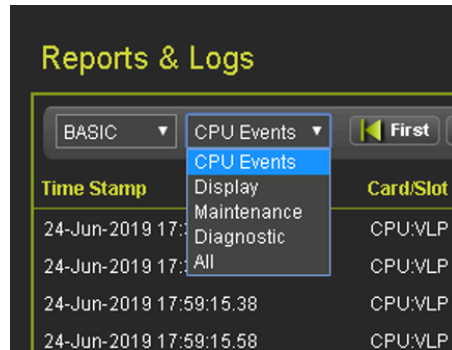


Figure 5-4 WebUI Log Selection Filter

The first drop-down menu on the Event Log page allows the selections shown in the following figure with **BASIC** as the default.

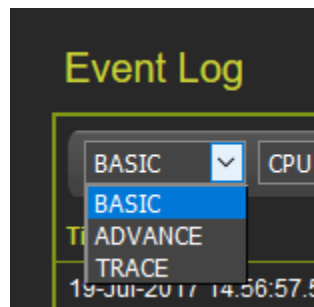


Figure 5-5 WebUI Event Log Mode

If **ADVANCE** is selected, the WebUI allows the user to choose a range of dates to view. Enter the required date range. The **First** button will now show events from the start date and time. The **Last** button will now show events up to the selected end date and time. The **Download** button now has the option to download a selected range.

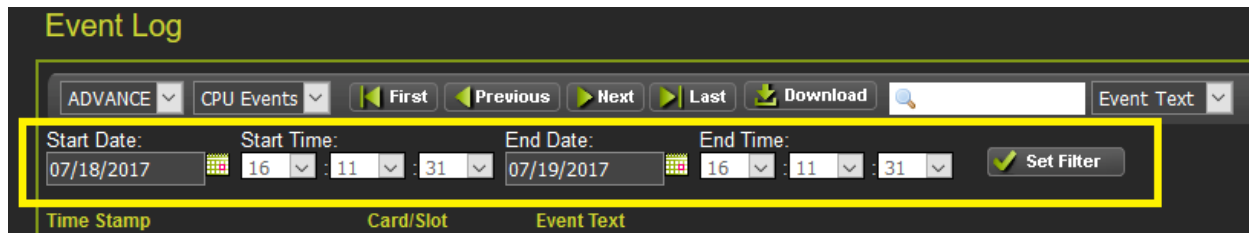


Figure 5-6 WebUI Event Log ADVANCE Mode

If **TRACE** is selected, the WebUI will go into Trace mode and add events to a text buffer as they are received in real time. To pause the trace, press the **Stop** button. To restart tracing, press the **Start** again. To clear the trace buffer press the **Clear** button. Press the back button to exit **TRACE** mode and return to the **BASIC** mode.

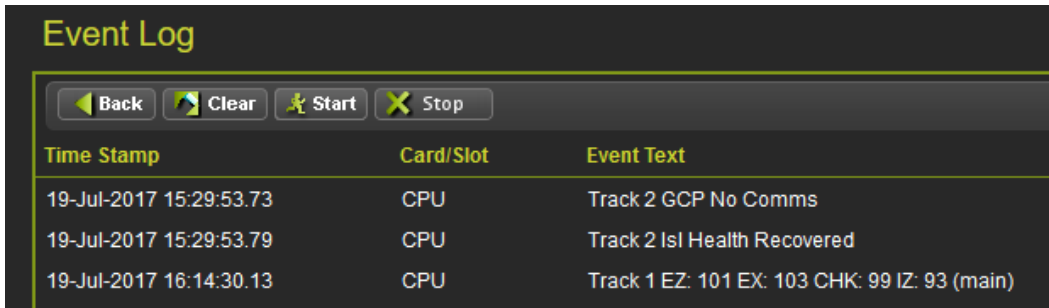


Figure 5-7 WebUI Event Log TRACE Mode

5.2 DIAGNOSTIC LOG

The Diagnostic log contains entries for whenever a diagnostic message is generated or cleared. The events in here are generated by the CPU and sent to the display where they are time stamped and added to the log. In a redundant system, the Display log will contain events from both the main and standby systems.

The WebUI diagnostic log page allows the user to page through the events, download all or part of the log, or turn on a real time trace so new events get display as they are logged.

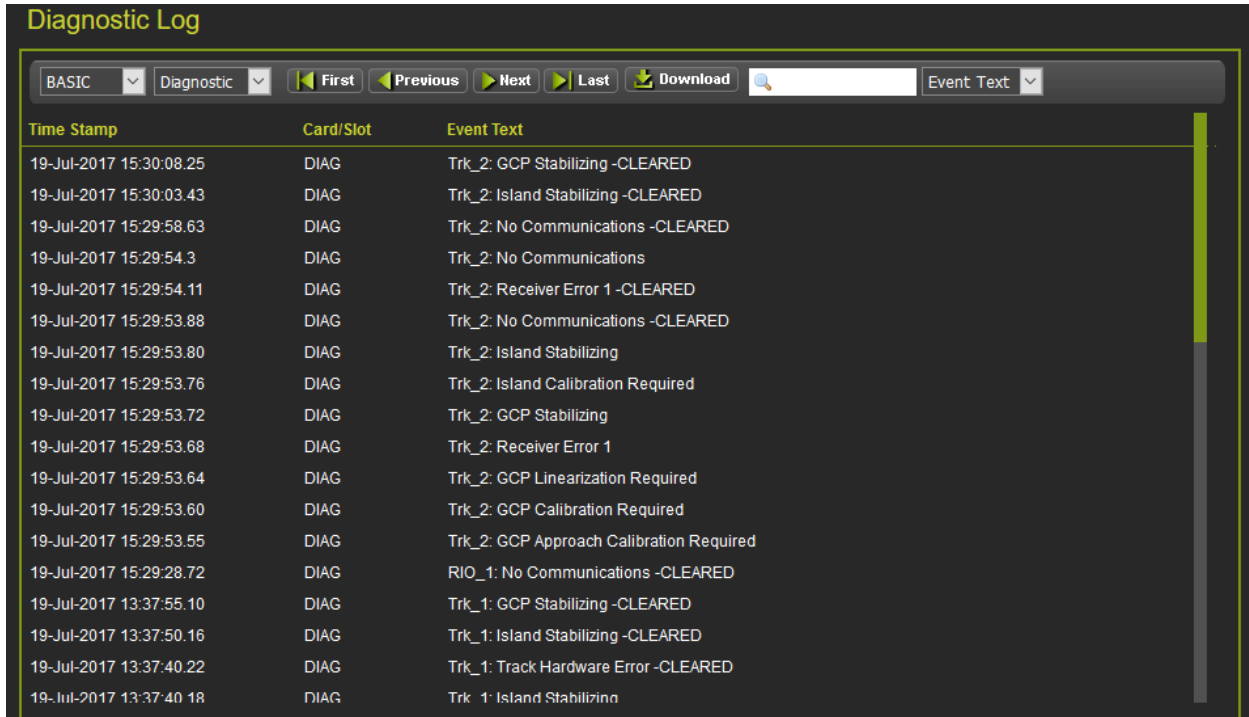


Figure 5-8 WebUI Diagnostic Log

The menu bar allows navigation of the log and downloading is the same as for the Event Log.

5.3 TRAIN HISTORY LOG

The train history log contains a log of the last 100 train moves. The log shows the following:

- Track - which track the train was detected on.
- WT – the recorded warning time in seconds.
- Det Spd – the detected train speed.
- Isl Spd – the train speed at the island.
- Avg Spd – the average train speed.

If the units are set to standard in the Site Configuration, the speeds are shown in mph. If the units are set to metric, the speeds are shown in km/h.

Train History Log					
WT Filter: <input type="text"/> Refresh Clear Download					
Date/Time	Track	WT (sec)	Det Spd (mph)	Isl Spd (mph)	Avg Spd (mph)
19-Jul-2017 01:24:02	1	255	0	21	0
18-Jul-2017 20:58:53	2	255	0	0	1
18-Jul-2017 20:40:35	1	255	0	30	0
21-Jun-2017 13:14:38	1	27	44	43	43
30-May-2017 13:06:12	1	42	0	125	123
26-May-2017 12:08:49	1	11	122	122	122
25-May-2017 11:28:37	1	11	126	125	124
25-May-2017 11:19:48	1	10	120	125	114
25-May-2017 10:56:14	1	28	44	44	44
23-May-2017 16:14:56	2	255	47	40	41
23-May-2017 16:11:25	1	28	44	43	44
23-May-2017 16:07:27	1	255	45	43	43
23-May-2017 15:49:22	1	230	0	0	0
23-May-2017 13:54:18	2	255	0	0	0
16-May-2017 17:14:00	2	23	0	0	0
02-May-2016 16:04:42	1	27	44	44	44
02-May-2016 14:37:08	1	127	44	44	43
01-May-2016 16:16:56	1	28	44	45	44
01-May-2016 16:14:59	1	27	44	43	44
01-May-2016 16:11:26	1	255	124	127	123

Figure 5-9 WebUI Train History Log

Select the **Clear** button to clear the event in the train history.

The WT filter is used to filter the train moves with warning times below or equal to this value. The value entered has to be between 23 and 99s. Enter the value and press equal, or refresh, and the WebUI will show the train moves that meet this criterion. To cancel the filter, delete the value then press enter.

Train History Log

WT Filter: Refresh Clear Download

Date/Time	Track	WT (sec)	Det Spd (kmph)	Ist Spd (kmph)	Avg Spd (kmph)
26-May-2017 12:08:49	1	11	196	196	196
25-May-2017 11:28:37	1	11	202	201	199
25-May-2017 11:19:48	1	10	193	201	183
16-May-2017 17:14:00	2	23	0	0	0

Figure 5-10 WebUI Train History Log WT Filter

To download the train history log, press the **Download** button.

NOTE

NOTE
 The download button will download the events shown on the screen. Clear the warning time filter first to download all events.

5.4 OCCN LOG (GCP4000/5000)

The display module and CPU III provide a new log to aid in tracking down issues where the OCCNs do not match the current plan. This is primarily intended for use once the system is in service and in a maintenance mode. The new log easily allows parameters changed which have altered the OCCN to be seen.

NOTE

The OCCN Log is only available from the Display module when the Display Module has a version after 1.5.7r and is used with CPU II+ versions later than ncg05_30.mef or CPU III versions later than 9VC72-V3H01_00.mef.

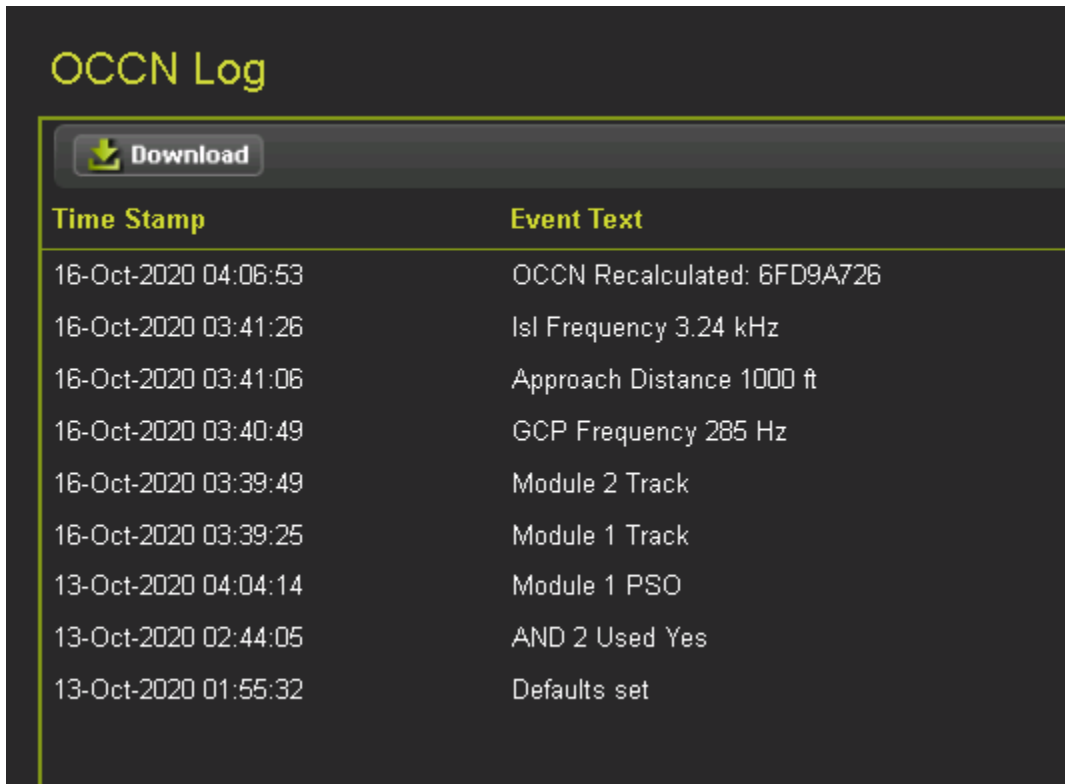
NOTE

The OCCN Log is only available from the CP Web UI when the CPU III has CP version later than 1.1.61r.

The log is cleared whenever the configuration is set to default, a new MCF loaded, or a PAC file loaded. The log is stored in the CIC on the chassis and so it will be retained even if CPUs or display modules are swapped out and provides a long term history of OCCN parameter changes.

The option is available on the Local UI on the Reports and Logs page.

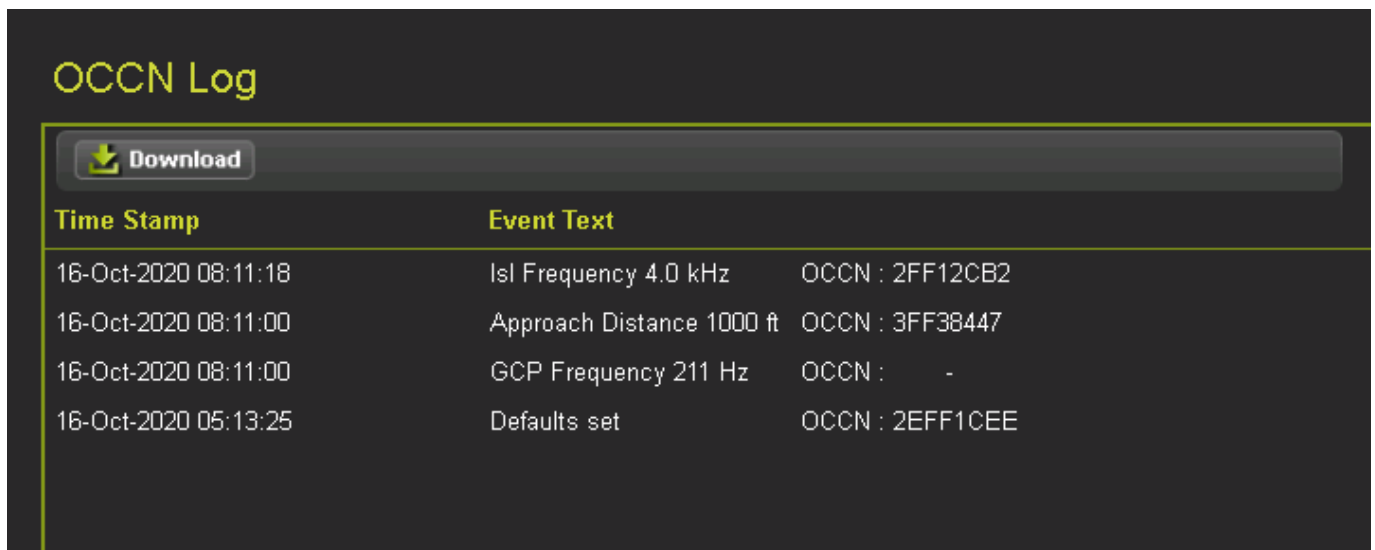
Figure 5-11 shows the OCCN log from the GCP 4000, the OCCN value is recorded when the user selects to recalculate the OCCN from the check number screen.



Time Stamp	Event Text
16-Oct-2020 04:06:53	OCCN Recalculated: 6FD9A726
16-Oct-2020 03:41:26	Isl Frequency 3.24 kHz
16-Oct-2020 03:41:06	Approach Distance 1000 ft
16-Oct-2020 03:40:49	GCP Frequency 285 Hz
16-Oct-2020 03:39:49	Module 2 Track
16-Oct-2020 03:39:25	Module 1 Track
13-Oct-2020 04:04:14	Module 1 PSO
13-Oct-2020 02:44:05	AND 2 Used Yes
13-Oct-2020 01:55:32	Defaults set

Figure 5-11 GCP 4000 OCCN Log

Figure 5-12 shows the OCCN log from the GCP 5000, the OCCN value is recorded for each entry. If multiple parameters are changed on Web UI then save pressed, the OCCN is only logged once for those changes.

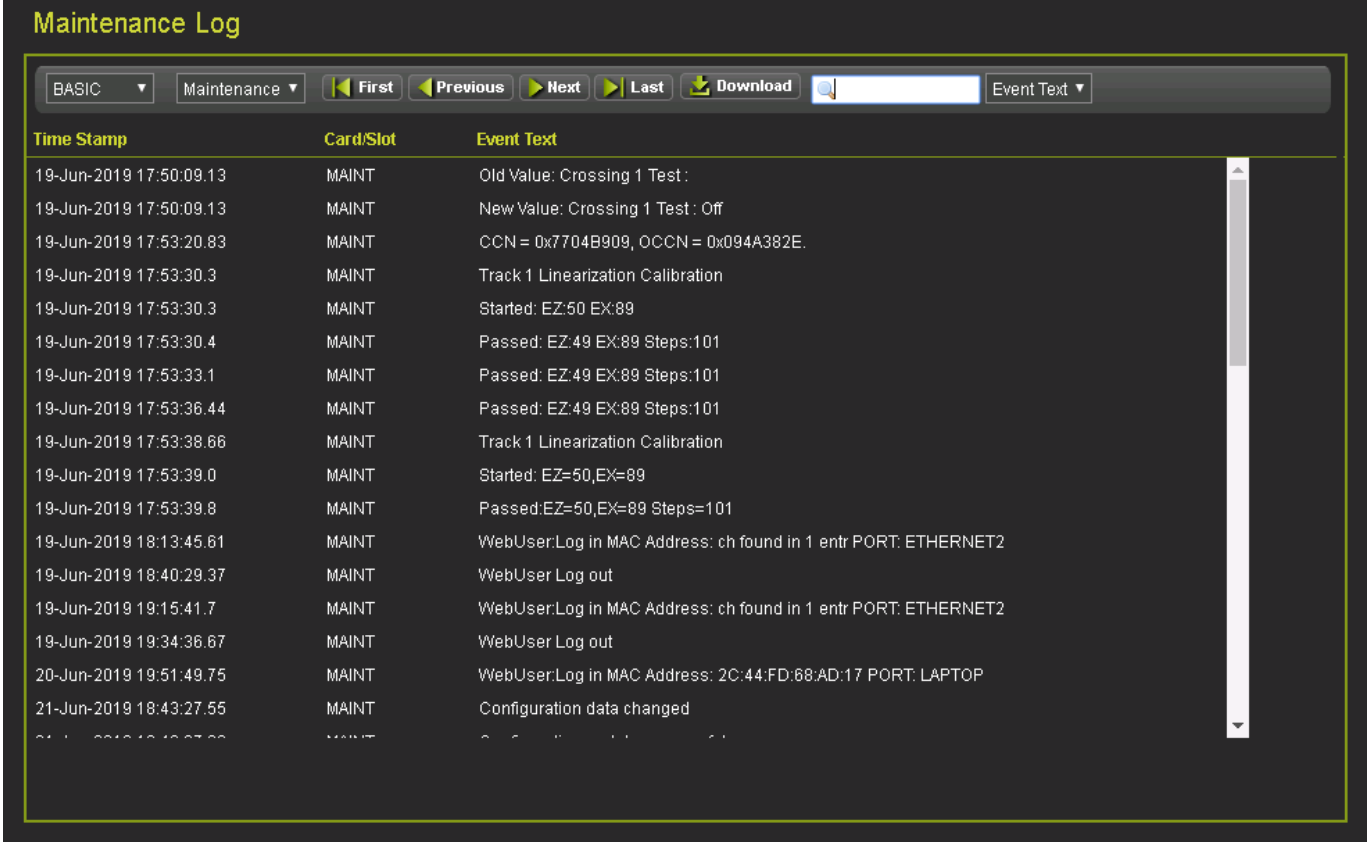


Time Stamp	Event Text
16-Oct-2020 08:11:18	Isl Frequency 4.0 kHz OCCN : 2FF12CB2
16-Oct-2020 08:11:00	Approach Distance 1000 ft OCCN : 3FF38447
16-Oct-2020 08:11:00	GCP Frequency 211 Hz OCCN : -
16-Oct-2020 05:13:25	Defaults set OCCN : 2EFF1CEE

Figure 5-12 GCP 5000 OCCN Log

5.5 MAINTENANCE LOG (GCP 4000/5000 ONLY)

The Maintenance Log is a detailed record of all programming, configuration, and calibration changes to the unit, providing a maintainer with a detailed look into any events affecting the unit. This log can also be filtered and downloaded.



The screenshot displays the Maintenance Log WebUI interface. At the top, there is a navigation bar with a dropdown menu set to 'BASIC', another dropdown set to 'Maintenance', and navigation buttons for 'First', 'Previous', 'Next', and 'Last'. A 'Download' button and a search input field are also present. Below the navigation bar is a table with the following data:

Time Stamp	Card/Slot	Event Text
19-Jun-2019 17:50:09.13	MAINT	Old Value: Crossing 1 Test :
19-Jun-2019 17:50:09.13	MAINT	New Value: Crossing 1 Test : Off
19-Jun-2019 17:53:20.83	MAINT	CCN = 0x7704B909, OCCN = 0x094A382E.
19-Jun-2019 17:53:30.3	MAINT	Track 1 Linearization Calibration
19-Jun-2019 17:53:30.3	MAINT	Started: EZ:50 EX:89
19-Jun-2019 17:53:30.4	MAINT	Passed: EZ:49 EX:89 Steps:101
19-Jun-2019 17:53:33.1	MAINT	Passed: EZ:49 EX:89 Steps:101
19-Jun-2019 17:53:36.44	MAINT	Passed: EZ:49 EX:89 Steps:101
19-Jun-2019 17:53:38.66	MAINT	Track 1 Linearization Calibration
19-Jun-2019 17:53:39.0	MAINT	Started: EZ=50,EX=89
19-Jun-2019 17:53:39.8	MAINT	Passed:EZ=50,EX=89 Steps=101
19-Jun-2019 18:13:45.61	MAINT	WebUser:Log in MAC Address: ch found in 1 entr PORT: ETHERNET2
19-Jun-2019 18:40:29.37	MAINT	WebUser Log out
19-Jun-2019 19:15:41.7	MAINT	WebUser:Log in MAC Address: ch found in 1 entr PORT: ETHERNET2
19-Jun-2019 19:34:36.67	MAINT	WebUser Log out
20-Jun-2019 19:51:49.75	MAINT	WebUser:Log in MAC Address: 2C:44:FD:68:AD:17 PORT: LAPTOP
21-Jun-2019 18:43:27.55	MAINT	Configuration data changed

Figure 5-13 Maintenance Log WebUI

5.6 SEAR LOG (GCP 4000/5000 ONLY)

The SEAR Log enables the user to view and sort through all recorded SEAR state changes as seen by the independent monitoring of the SEAR Ili. Users can refine the view to show only Basic, Advanced, or Trace Events. The SEAR Ili configuration change information is received from the GCP. The log can store up to 180,000 events.

5.7 SEAR INCIDENTS (GCP 4000/5000 ONLY)

The Incidents tab provides a detailed report of all saved GCP incidents. Incident storage is an important feature in the SEAR Ili. The SEAR Ili is capable of storing a range of events after an incident in a file that can be securely stored. Each line of data in the file is identified by a security code that validates that the data has not changed.



Figure 5-14 SEAR Incident Log

5.8 SEAR SYSTEM LOG (GCP 4000/5000 ONLY)

The System Log is a comprehensive log that includes diagnostic information for Siemens use. To obtain the log, the user must first confirm local user presence.

5.8.1 Reports

Selecting the Reports Menu will bring up the screen shown in the following figure. Press the **Create** button to create one of the five available reports: Configuration Report, Program Report, Min Program Steps Report, Template Report, or Version Report.

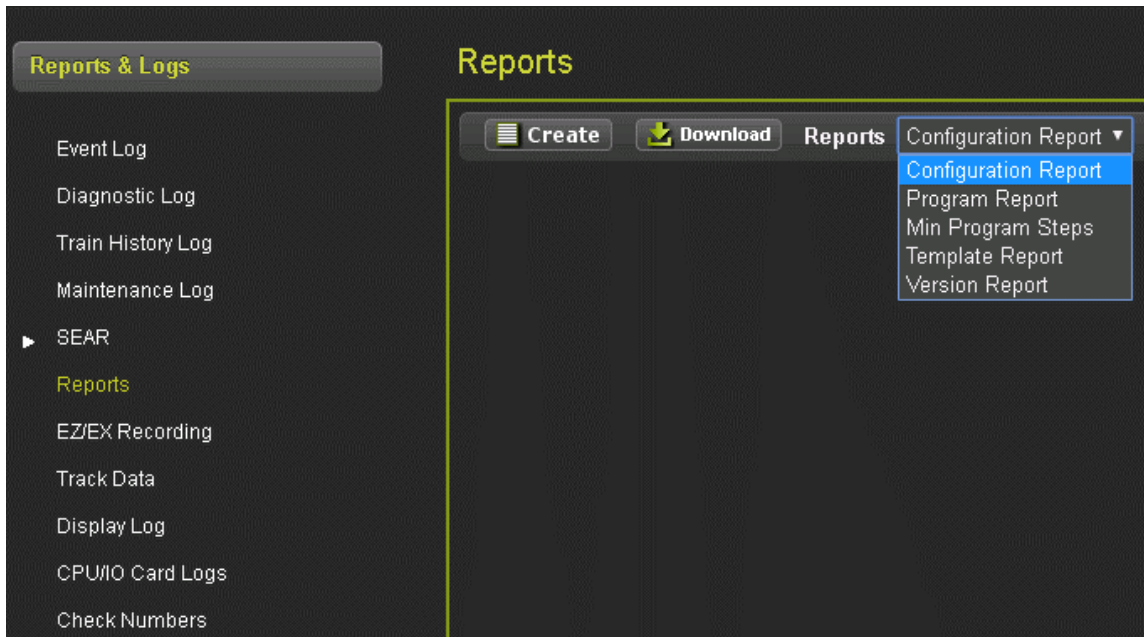


Figure 5-15 Report Types WebUI

Once the report has been selected and **Create** has been clicked, the screen will have a status bar for the report generation progress.

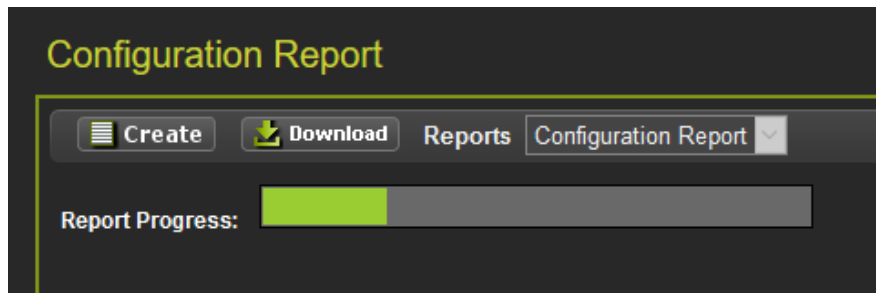


Figure 5-16 WebUI Configuration Report Progress

After the Configuration report has been created, it will show up as illustrated in Figure 5-17. Use the scroll bars to navigate it. Select the download button to save the report to the PC or open it in a separate file.

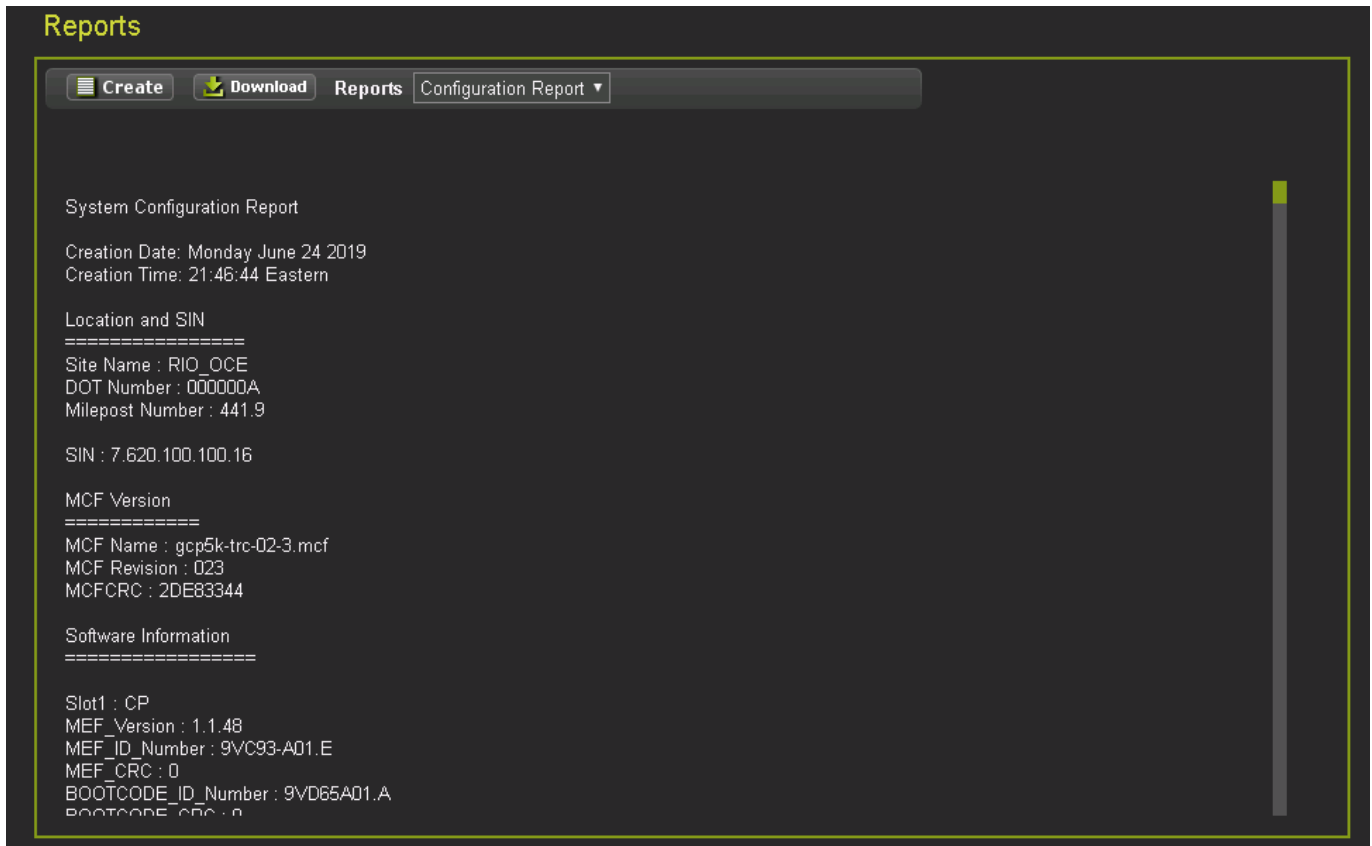


Figure 5-17 WebUI Configuration Report

5.8.2 Logs

The EZ/EX Recording Data log, Track Data log, Display log, and CPU/IO Card logs are all available via the WebUI under the Reports & Logs menu.

5.8.3 Check Numbers

This menu provides an alternative way to see the check number from the System View menu. The check numbers shown here are the same as described in Section 2.7.

SECTION 6 SOFTWARE UPDATES

6.0 SOFTWARE UPDATES GCP 4000/5000

When the software updates icon is selected, the WebUI will show the menu options illustrated in the following figure. The screen will open with the **Configuration** options.

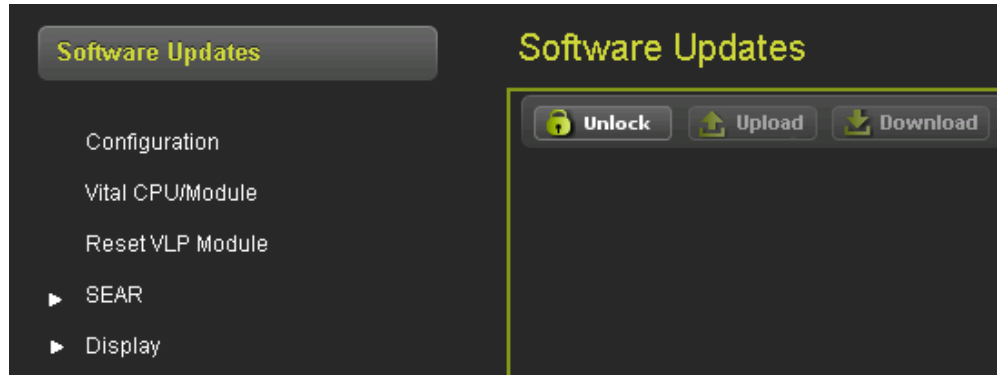


Figure 6-1 WebUI Software Updates

6.1 SOFTWARE UPDATES GCP 3000+

When the software updates icon is selected, the WebUI will show the menu options illustrated in the following figure. The screen will open with the **Configuration** options.

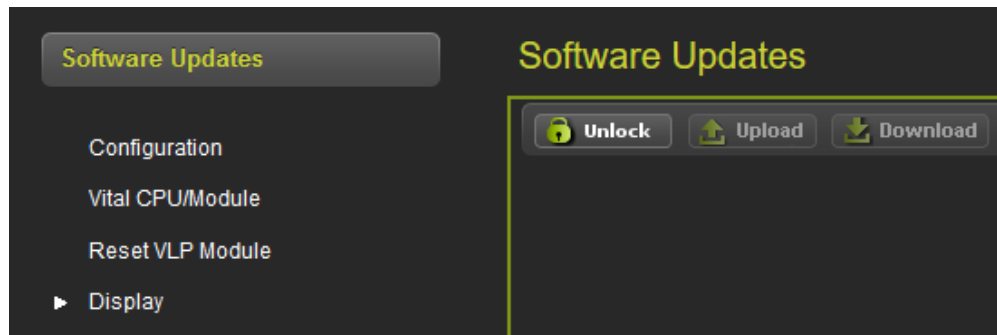


Figure 6-2 WebUI Software Updates

6.1.1 Configuration

This menu is used to download the configuration file (PAC file) from the GCP or to upload a new one. The configuration file is known as the PAC file. The PAC file can be opened offline using the OCE tool (See manual SIG-00-11-15). The PAC file can be used as a back up to the GCP configuration and loaded back into the system using the Upload Configuration step described below.



CAUTION

SOFTWARE UPDATES MUST BE LOADED IN THE FOLLOWING ORDER TO ENSURE NO REPROGRAMMING IS REQUIRED:

- LOAD MCF
- LOAD CDL (SEAR)
- LOAD PAC FILE

First, unlock the screen if needed. To download the configuration, select the download button. The WebUI will start to download the file and show the progress as in figure below left. Occasionally the download may fail, if this happens, select the download again.

Once the download is complete, the WebUI will ask to **Save** or open the file (exact format of this depends on browser used). Select to save the file, as the file is in binary format and cannot be opened using standard Windows software. The PAC file name is created from the combination of the DOT number and date - e.g. CONFIG-{DOT number}-PAC-{date}...{time}..

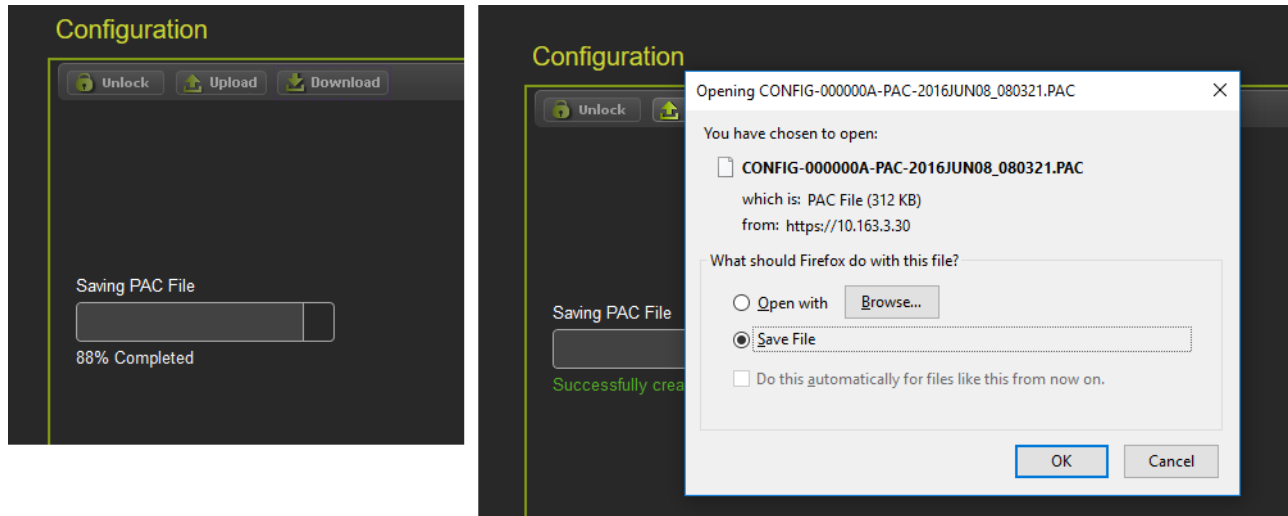


Figure 6-3 WebUI Configuration Download

To upload a new configuration file, select the **Upload** button. The WebUI will show the warning message illustrated in the figure above on the left. If **Yes** is selected, the WebUI will ask to save the current configuration first. Select the desired option.

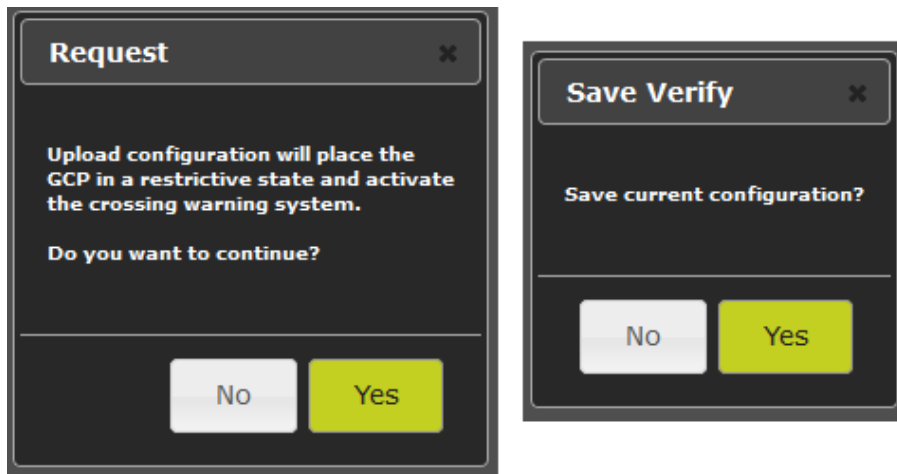


Figure 6-4 WebUI Configuration Upload Messages

WARNING

WARNING

UPLOADING A NEW CONFIGURATION WILL PUT THE GCP INTO A RESTRICTIVE STATE AND ACTIVATE THE CROSSING.

WARNING

WARNING

IF A NEW CONFIGURATION FILE IS LOADED INTO THE GCP, THE GCP WILL HAVE TO BE RETESTED ACCORDING TO RAILROAD STANDARDS.

If **Yes** is selected, the WebUI will download the current configuration as shown in the figure below. If **No** is selected, the message below is shown immediately. Select the configuration file to be loaded.

NOTE

NOTE

The GCP must be running the same MCF that the PAC file was created for. If the PAC file is created for a different MCF, the WebUI will reject the upload.

Once the file has been selected, the WebUI will ask for confirmation.

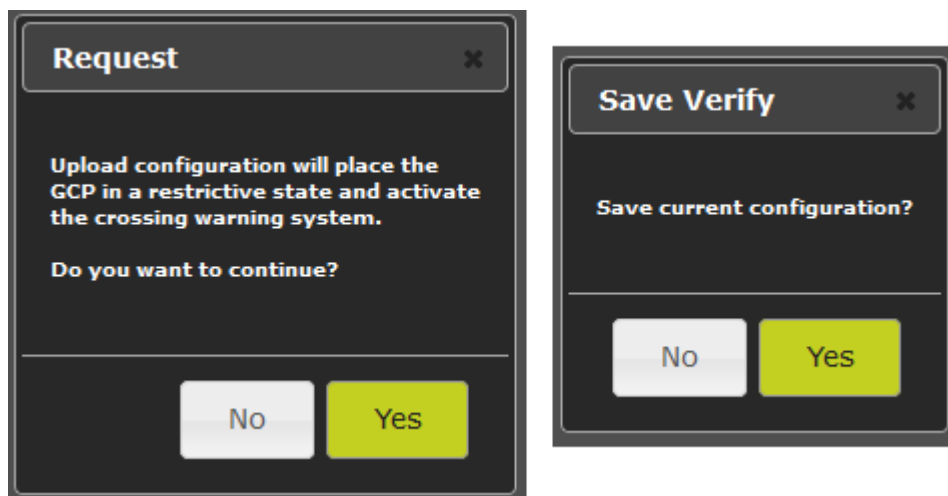


Figure 6-5 WebUI Configuration Upload File Selection

If the user decides not to continue the upload process, select **No**. At this point the CPU is in a restrictive state and the crossing will be active. The old configuration has not been lost at this point, to get the CPU back into its previous operational state, reset the VLP module (see Section 6.1.3).

If the user wants to continue and load the selected PAC file, press **Yes**. The WebUI will show the progress, (Figure 6-6, left) then give the message shown in Figure 6-6 on the right, which gives one final confirmation to continue. At this stage, the user has to prove there is someone in the field at this location by having them press a pushbutton on the CPU module. Once a button has been pressed, select **Yes** to

continue. The configuration will now be updated in the CPU and the CPU will reboot, this will cause the display to temporarily lose the session with the CPU.

If the upload is cancelled at the stage above, and the user wants to put the CPU back into an operational state, the VLP will need to be rebooted as described previously.



Figure 6-6 WebUI: Configuration Upload Progress and Final Check

6.1.2 Vital CPU/Module

NOTE

NOTE

In order to load new software into a CPU II+ (A80403), track module (A80418) or RIO module (A80413) a serial cable with null modem needs to be connected between the serial port on the front of the display and the DIAG port on the module whose software is to be updated.

NOTE

NOTE

In order to load new software into a track module (A80418) or RIO module (A80413) from the CPU III, a serial cable with null modem needs to be connected between the serial port on the front of the CPU III and the DIAG port on the module whose software is to be updated. To update software on the CPU III itself, an Ethernet cable can be plugged directly into the module itself and the WebUI used, or if the unit is on the network, the IP address of the CPU III can be used to login remotely.

To update the software on the CPU II+, Track or RIO module, select the Vital CPU / Module option.

The WebUI will ask the user to confirm that there is a serial cable connected between the display and module to be uploaded. If the cable is connected, press **OK** to continue.



Figure 6-7 WebUI Module Upload

The display module will then transfer the load setup code to the module to be updated and provide a menu of options.

6.1.3 Reset VLP Module

This menu is used to reset the VLP module. This may be necessary if an attempt has been made to load a new configuration and the process cancelled before complete. Unlock the screen as described in section 6.1.5.1, then press the **Reset VLP** button and the WebUI will ask for confirmation first.

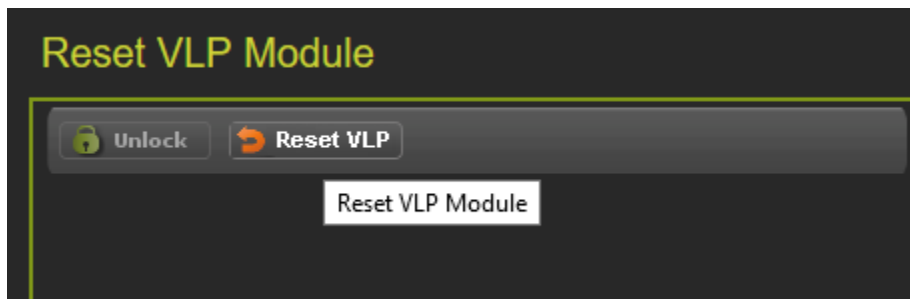


Figure 6-8 WebUI Reset VLP

6.1.4 SEAR Software

Application (CDL)

Access the “Application (CDL)” Menu under SEAR and select **Upload CDL**. Select the **Browse** button and navigate to the appropriate file.

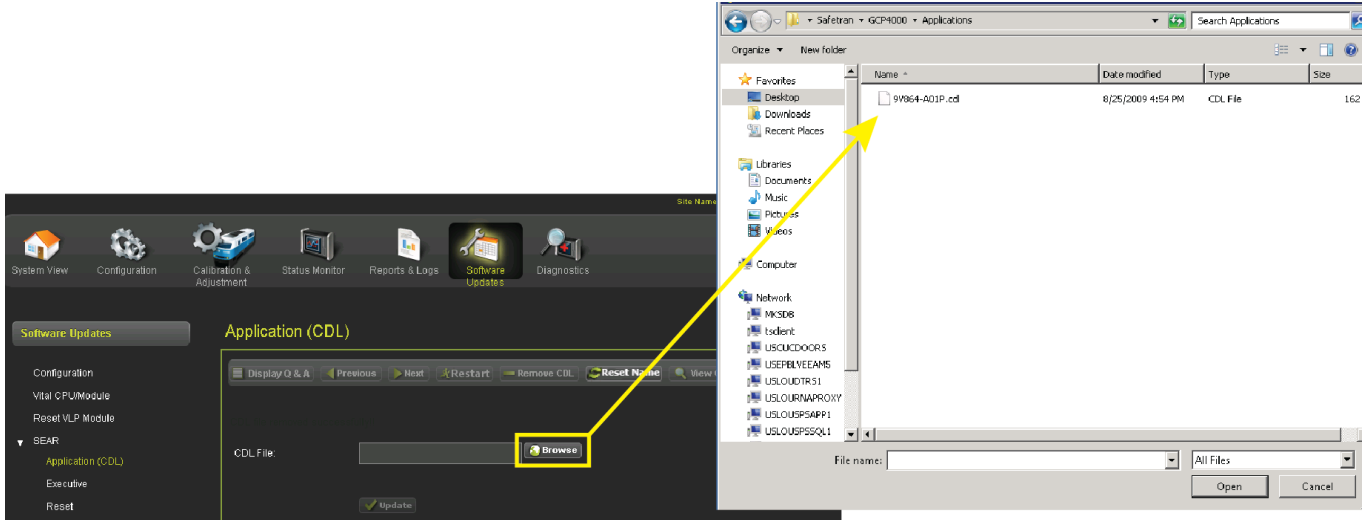


Figure 6-9 Select CDL File

After selecting the **Upload** button, the CDL will begin to load as show in Figure 6-10.

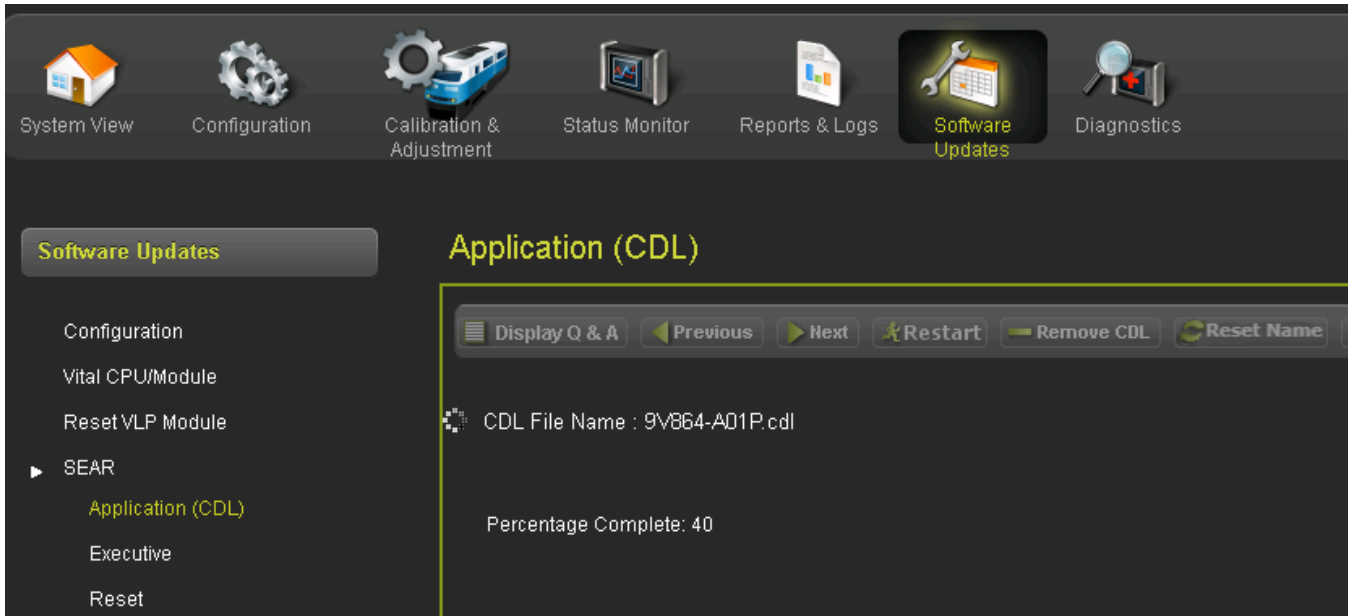


Figure 6-10 CDL Uploading

Once the CDL file has been uploaded, a series of configuration questions will require an answer.

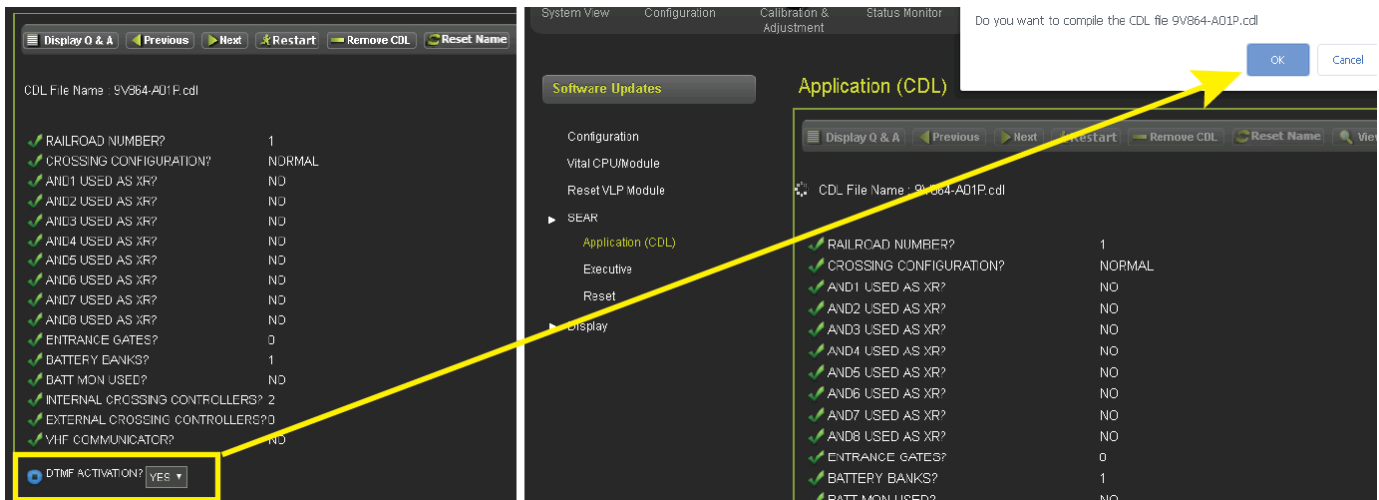


Figure 6-11 Configure and Compile CDL

Once each configuration question has been answered, the user is prompted to compile the CDL. Once the CDL is compiled the process is complete.

Executive

To upload the Executive software, the unit will have to be unlocked via local user presence confirmation. Once unlocked, the user can browse to the correct file, select, and update.

6.1.5 Display

To update the software on the display, select the Display / Executive option, use the browse button to select the correct tgz file for the display, then press **Upload**.

NOTE

NOTE

This menu is only available on the Display module and will not appear when the WebUI is used with the CPU III.

The Display executive can be recognized as it will have a name of the format ng5k_mef_x.y.zzr.tgz.

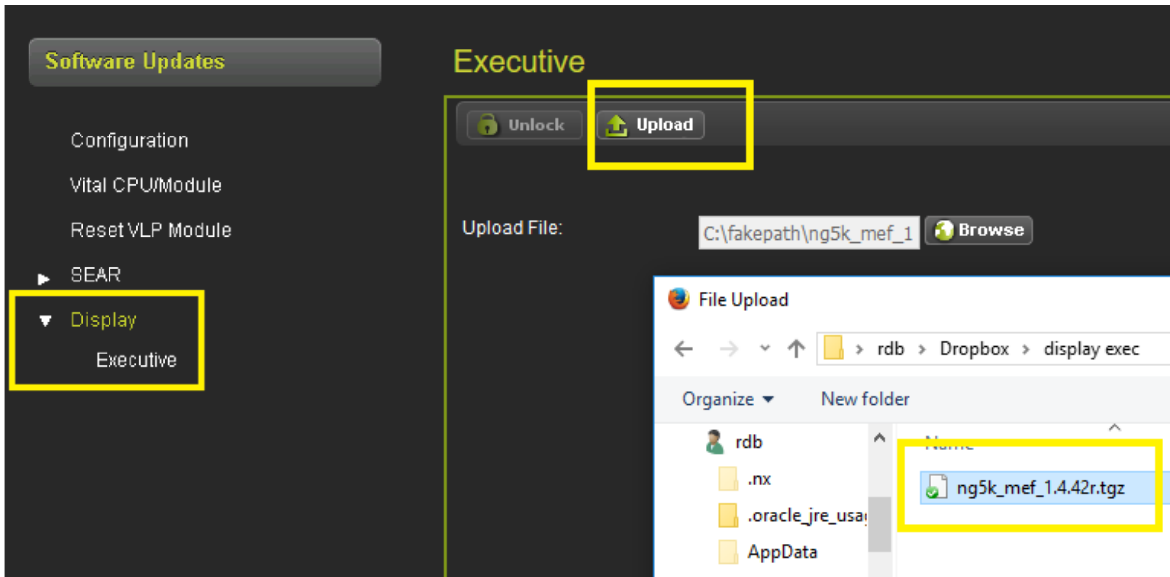


Figure 6-12 WebUI Reset Upload Display Executive

CAUTION

CAUTION

ENSURE THAT THE FILE SELECTED IS ACTUALLY FOR THE DISPLAY (NAME HAS FORMAT ng5k_mef_x.y.zzr.tgz). LOADING THE TGZ FILE FOR A DIFFERENT PRODUCT MAY CAUSE THE DISPLAY TO GET LOCKED UP.

6.1.5.1 Local User Presence

Since the WebUI may be used to connect to the GCP remotely, it is necessary to confirm that someone is present at the location before certain operations such as changing GCP programming or re-calibration can be performed.

To enable the GCP programming or Calibration, first unlock the screen from the WebUI by pressing the **Unlock** button.

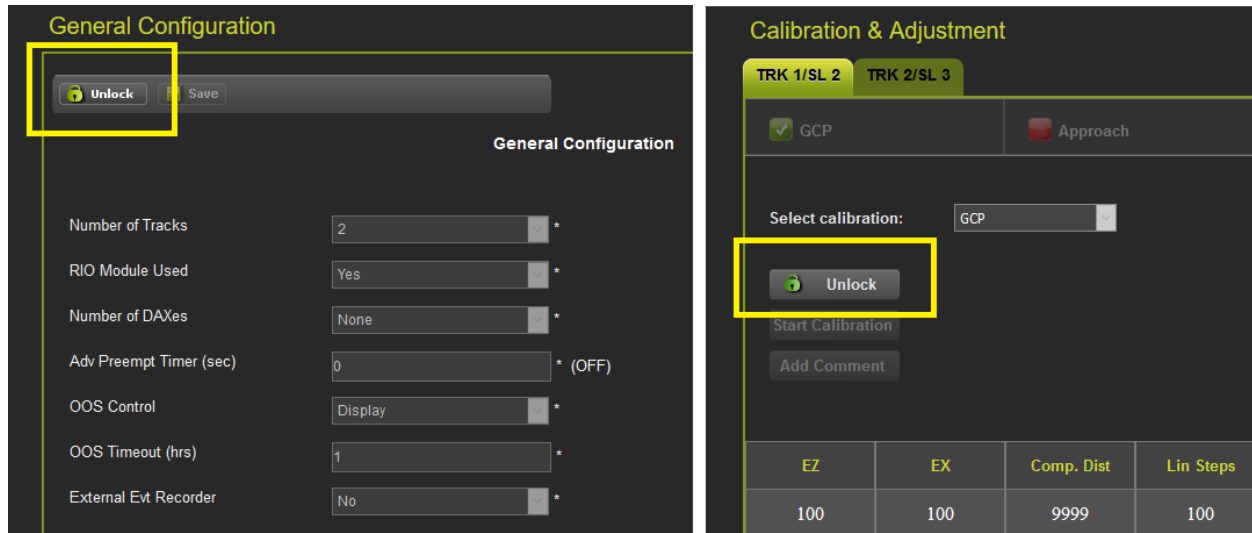


Figure 6-13 WebUI Unlock

The WebUI will show the message below on the left, asking for confirmation to continue. Select **OK** and the WebUI will show the message below on the right.

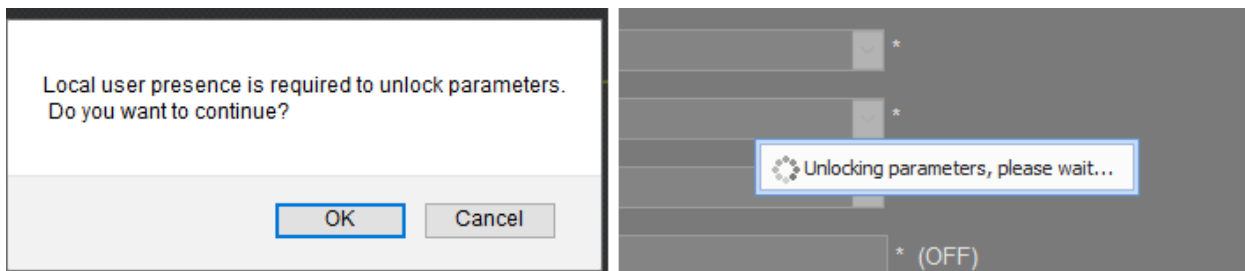


Figure 6-14 WebUI Confirm Local User Presence

At this point, the display module will show the message in the following figure to the user in the field. The user in the field will press **Enter** to confirm that the remote user may continue, or the local user may deny the remote user editing access by pressing the back key.

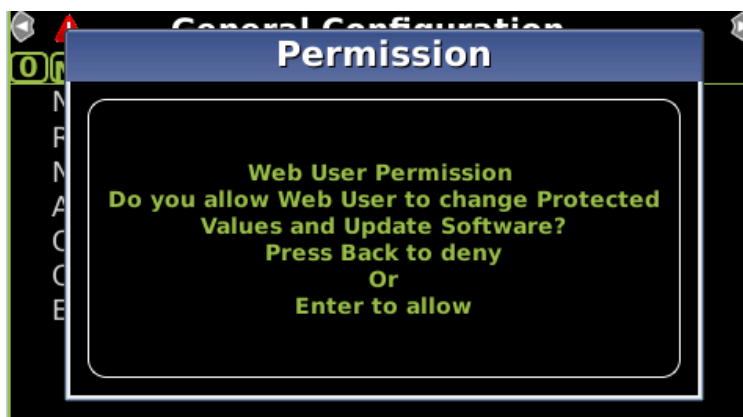


Figure 6-15 Display Confirm Local User Presence

If the local user denies access to the remote user, the WebUI will show the **Failed** message in the figure below on the left. If there is no confirmation by the local user, the WebUI will show the timeout message in the figure below on the right.

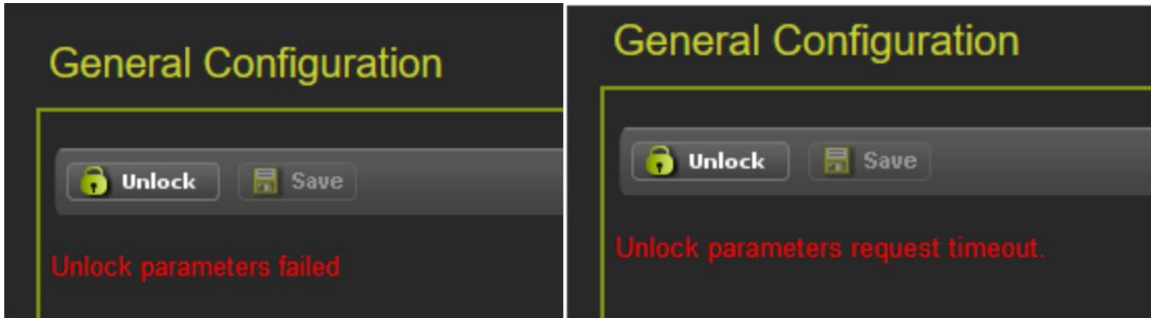


Figure 6-16 WebUI Local User Presence Error Messages

The local user can tell when a remote user still has Editing permission as the program and calibration screens will show the little blue man indication shown in the yellow box below.

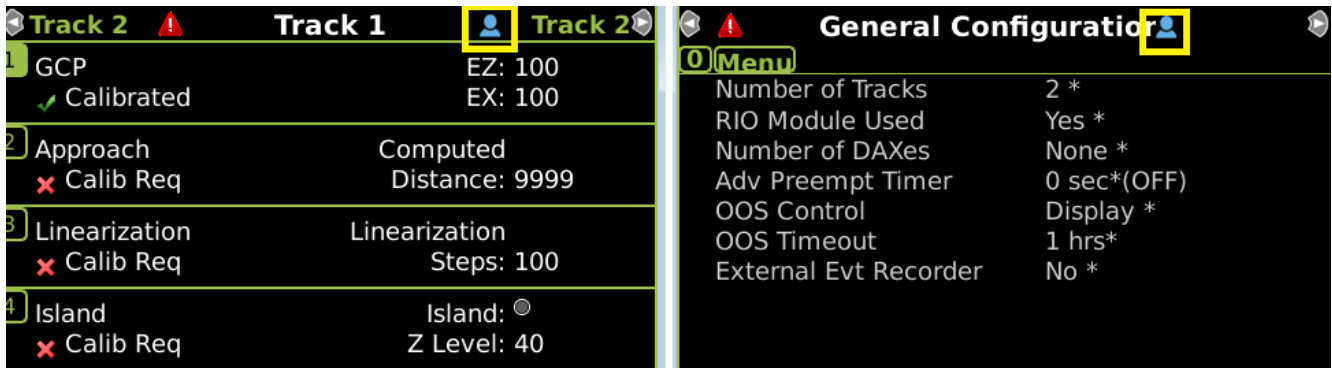


Figure 6-17 Display Local User Presence Indicator

6.1.5.2 WebUI Display / CPU Connecting

If the Display module is not in session with the CPU, it will be indicated with just a red exclamation point as illustrated in the top pane below. During the connection process, the display will show the icon in the second pane below (boxed in yellow). The last pane indicates Creating Real Time Database.

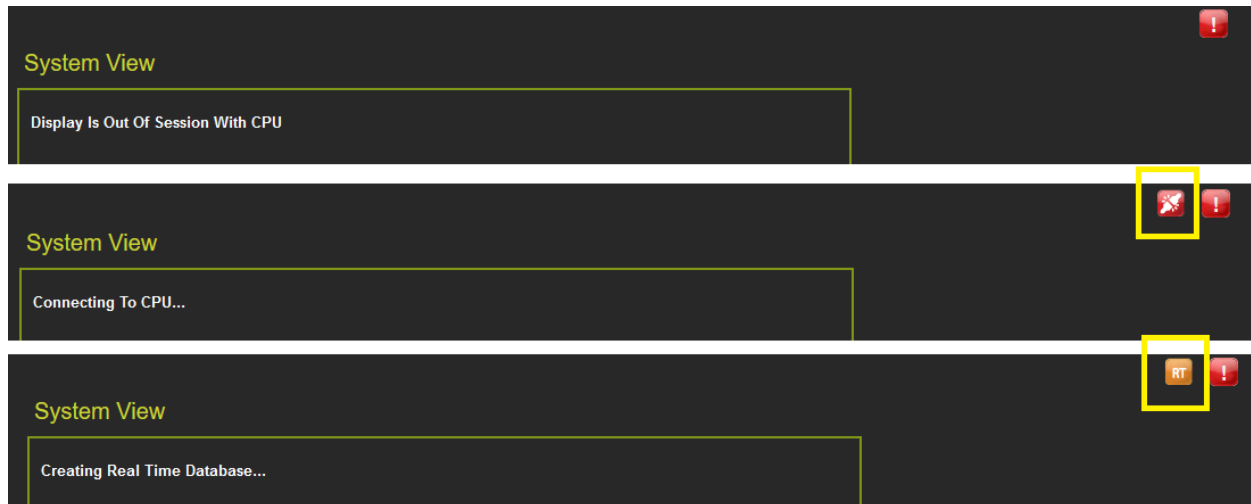


Figure 6-18 Display Module Not in Session

When this is complete, the display will show the Diagnostics screen (if Diagnostic messages are present) or it will show the System View.

If the VLP is in the unconfigured state, for example, the user has started the upload configuration process, but not gone through the final step of rebooting the VLP, then the WebUI System View will show an indication of this at the bottom of the screen.

If the system is in an unconfigured state for a different reason, for example, the MCF CRC is incorrect, the System View will show the message in the following figure:

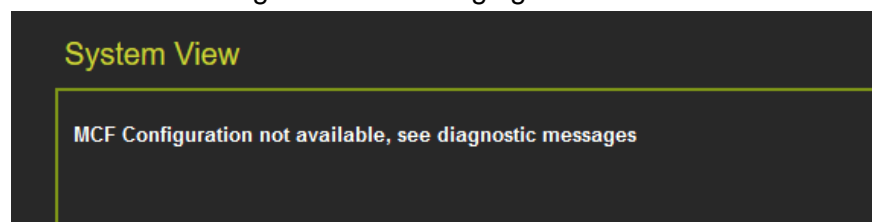


Figure 6-19 WebUI System View when VLP Unconfigured due to MCF CRC Error

At this point, check the diagnostic messages to see what the problem is. Examples are shown in Figure 6-20.

Slot	Description	Code
Trk 1	No Communications	1017
VLP2	MCF CRC incorrect	3004
VLP2	VLP Unconfigured	3018
SEAR	Incompatible SEAR / MCF Combination	6002

Figure 6-20 WebUI System Diagnostics when VLP is Unconfigured due to MCF CRC Error

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SECTION 7 DIAGNOSTICS

7.0 OVERVIEW

Selecting the Diagnostics menu from the System view will show the Diagnostics screen. This shows diagnostic messages present in the system. The slot column shows which component this is related to.

- Trk N indicate a diagnostic message related to track module N (where N is 1..6).
- VLP2 indicates a diagnostic message related to a CPU
- SSCC3I 1 or SSCC3I 2 indicates a diagnostic message related to a SSCC IIIi module (GCP 4000/5000)
- SEAR indicates a diagnostic message related to a SEAR module (GCP 4000/5000)
- RIO N indicates a diagnostic message related to RIO module N (N = 1..3)
- EvtRec indicates a diagnostic message related to a connected event recorder (GCP 3000+)
- SYS 1 indicates a system diagnostic message not specific to a track or RIO module

To show diagnostic messages for just a specific module in the system, select the drop-down menu labeled 'select slot'.

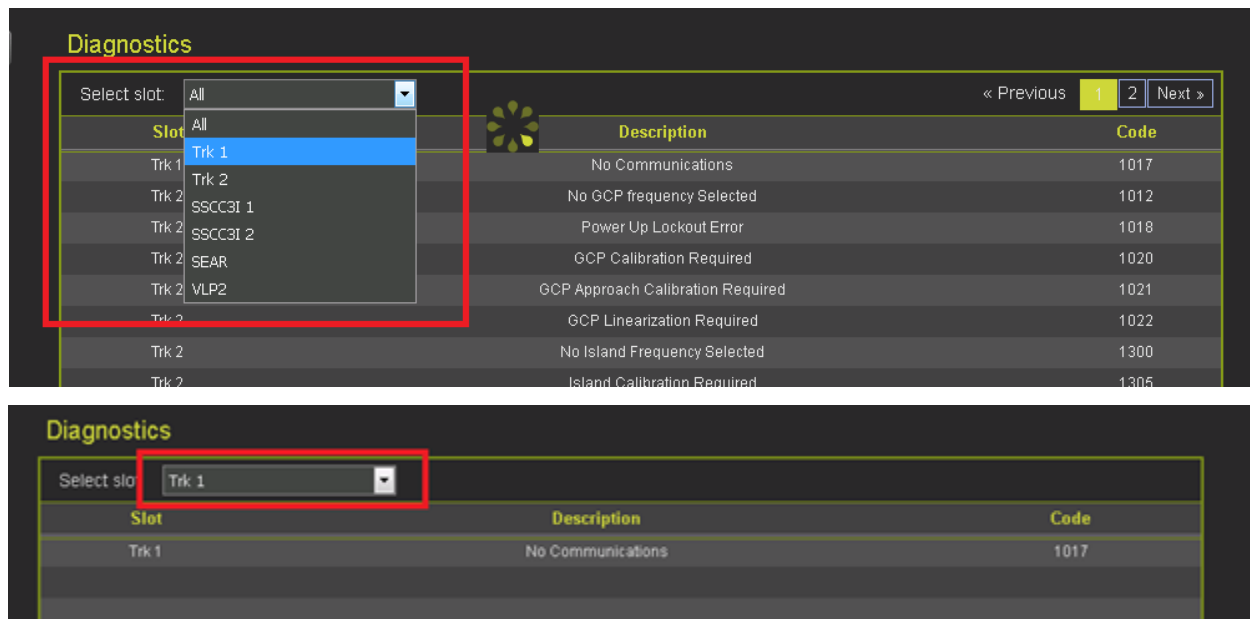


Figure 7-1 Select Diagnostic Slot

If a specific message is selected, the display will show possible causes of this diagnostic messages and remedies to help fix it.

Diagnostics		
Select slot:	All	
Slot	Description	Code
Trk 2	GCP Calibration Required	1020
Trk 2	GCP Approach Calibration Required	1021
Trk 2	GCP Linearization Required	1022
SYS 1	Maintenance Call Light Turned On	4001
Details		
Cause	Remedy	
The GCP requires approach calibration if the: a) GCP calibration was performed b) module was replaced c) program was set to defaults d) programmed approach distance has changed e) MCF was changed	Go to the Setup Track Approach Calibration screen. If the computed approach distance is correct, hit the bypass button. If the computed approach distance is known for this track from a previous calibration, enter the correct value by hitting the edit button. If the computed approach distance is incorrect and not known, perform an approach calibration as described in the manual.	

Figure 7-2 Diagnostic Message

The Diagnostic screens provides WAMs testing functionality.

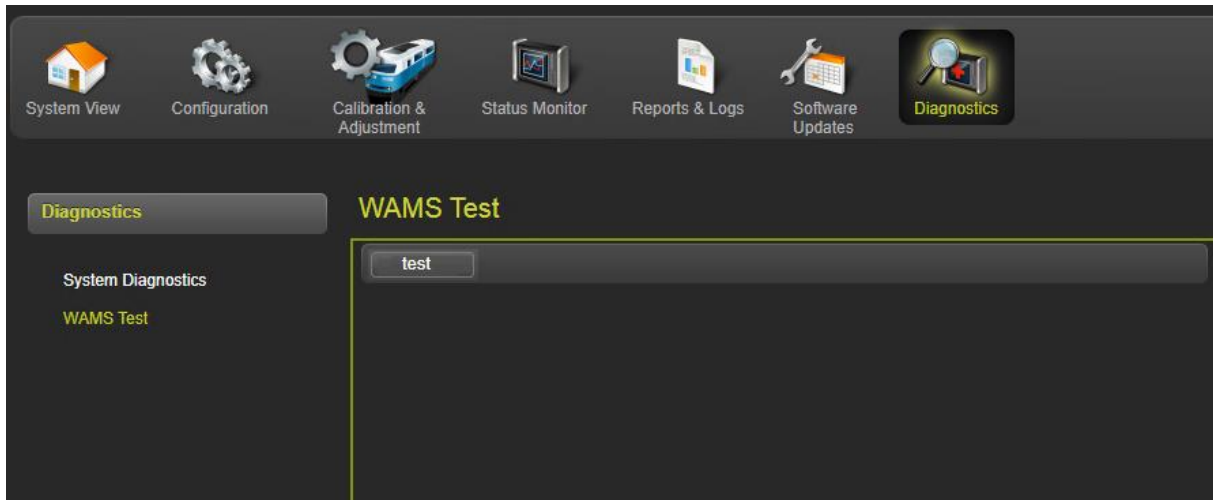


Figure 7-3 WAMS Test (GCP 4000/5000)

SECTION 8 CPU III WEBUI

8.0 CPU III WEBUI ACCESS

There will be a few differences in the WebUI menus if the WebUI is accessed via a connection to the Laptop/Ethernet port on the CPU III instead of via the Display Laptop/Ethernet port.

8.1 WEBUI MENUS AVAILABLE ON CPU III WHILE DISPLAY ALSO IN SESSION

If a user connects to the CPU III via the WebUI while the Display is in session, some features are not available to be used on the CPU III, even if they still appear on the menu.

The Configuration / Site Information cannot be edited. Use the Display module to make changes.

The Software Update / Configuration screen does not allow a new PAC file to be uploaded. Load the PAC file using the Display Module.

NOTE**NOTE**

Software updates and settings for the Display are not available from the CPU III.

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