

Liebert®

Communications Card Mass Firmware and Configuration Update Tool

Installer/User Guide

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Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures. Visit https://www.VertivCo.com/en-us/support/ for additional assistance.

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1 OVERVIEW

As a supplement to the IS-UNITY Card User Guide, this guide describes how to access and navigate the Mass Configuration Tool (MCT). The MCT enables you to update firmware or configuration files of one or more Liebert® IntelliSlot™ Unity™ Cards. The most current firmware update files and the MCT are available on the Vertiv web site, https://www.vertivco.com/en-us/support/software-download/monitoring/liebert-intellislot-communications-interface-cards/.

The MCT application includes the following features:

- Search (scan) a network subnet to find IS-UNITY card IP addresses:
- Save network scans for future use
- Network timeout facilitates search and configuration for widely distributed networks, such as GXT UPS systems at multiple banks or store locations
- Mass firmware updates (1000 cards maximum)
- Mass common configuration updates (1000 cards maximum):
 - Automatic reboot directive support by the import file
- Large and small batch update sizes
- Create a log file (operation log)

NOTE: Prior to using this tool, please refer to the IS-UNITY Card User Guide for instructions to install and operate the IS-UNITY card.

1.1 Minimum Requirements

The following are the minimum requirements to use the MCT tool:

- IS-UNITY card firmware version:
 - Minimum version for a mass firmware update is 2.0.0.0
 - Minimum version for a mass configuration update is 7.0.0.0
- 1 GHz or faster 32-bit (x86) or 64-bit (x64) processor
- .NET framework 4.0 or higher
- Microsoft[®] Windows[™] 7 or higher
- Network access to the cards using HTTP/HTTPS protocol communications. The RADIUS, TACACS+, LDAP and Kerberos remote authentication protocols are supported.

1.2 Using the MCT application

The MCT zip file must be downloaded from the Vertiv web site.

To download the MCT zip file:

- 1. On the Vertiv web site, use the Browse button to navigate to the MCT zip file.
- 2. Download the zip file to a folder on your computer and extract the files from the folder.
- 3. Double-click the LiebertCommunicationsCardMCT.exe file to open the application.



Figure 1.1 Mass Configuration Tool Controls



Table 1.1 Mass Configuration Tool Description

ITEM	NAME	DESCRIPTION
1	IP address range	IP subnet scan including the beginning and ending address.
2	Search	Initiate IP address search (device discovery) to find Vertiv cards in a given network subnet address range.
3	Browse	Open file finder dialogue to select a firmware or configuration file.
4	Progress bar	Visual indication of update progress.
5	Create Log File	Operation log.
6	Log in Credentials	Default (global) administrator Username and Password.
7	Start	Initiates the Firmware or Configuration update to the selected cards in the Update column.
8	Network Timeout	Amount of time the application waits for a response from a given IP address.
9	Batch size (1-50)	Number of cards to update at a time. A failure in any batch prevents the next batch from executing.
10	Refresh firmware version	Manual refresh of current firmware version.



ITEM	NAME	DESCRIPTION
11	Check All/Clear All	Following an IP range search, the user can select or de-select all cards for update in the Update column.
12	IP list	A.csv file that can be saved after searching an IP range. The saved .csv file or a customer provided text (txt) file can be loaded.
13	Firmware/ Configuration	Operation type selection, Firmware or Configuration update.

Table 1.1 Mass Configuration Tool Description (continued)

1.2.1 Device discovery (IP address range search)

The Unity cards on a network are discovered using the IP address range search feature. The available IS-UNITY cards are displayed in the IP list area of the application interface.

The IP list can be saved as a .csv file using the *Save* button. Multiple .csv files from different IP subnets can be manually combined/concatenated to form a single composite list. The .csv list can be loaded for future operations, thereby eliminating the need to search again. Also, an existing IP list (up to 1000 IP addresses) can be loaded in the text (txt) file format.



Figure 1.2	IP List Are	a Populated	Following	a Search
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	126.4.203.99	Mike-GXT4	IS-UNITY_7.5.0.0_00059	Mikes GXT	Liebert			0%
	126.4.203.104	UNITY-417831G	IS-UNITY_7.5.1.0_00063	Uninitialized	Liebert			0%
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Figure 1.3 IP List Example in a .txt Format



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1.2.2 Firmware update

When performing a bulk firmware update, use the MCT application to push the update to the selected cards. See the following procedure to update the firmware on multiple cards.

To update the firmware:

1. Enter the IP address range of the cards to be updated and click Search.

-or-

Load a previously saved IP List file.

- 2. Verify the Firmware radio button is selected.
- 3. Using the *Browse* button, navigate to and select the updated firmware file. See Figure 1.4.
- 4. In the IP list, click the checkboxes of cards to update. (See Figure 1.5 with two cards selected.)

-or-

In the IP list header, click the Check All button to update all the cards in the IP address range.

- 5. Enter any card admin credentials that are different than the Default Username/Password. (In the following example, Username = "LiebertRep" and Password = "RepDemo" are the credentials.)
- 6. Click the Start button to begin the firmware update process.
- 7. Verify completion of the update in the Update Progress column, shown as 100% in Figure 1.5.

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Figure 1.4 Firmware File Selected and Cards Selected to be Updated



Figure 1.5 Firmware Update Completed for Selected Cards

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1.2.3 Configuration update

When performing a bulk configuration file update, a single file (with the common elements to be changed) is exported from an IS-UNITY card and saved to a computer file system drive. The file is edited to contain only the desired changes. All other configuration items should be deleted from the file to prevent unintended changes. After the file is edited, the MCT application is used to push the update to the cards that are selected from a range of IP addresses. For more about configuration file updates, see Important security considerations of the exported configuration file on page 12 and Configuration export/import file naming and general format on page 13.

To export a configuration file:

- 1. In a Unity card web browser window, click the *Communications* tab and select *Support Configuration Export/Import*. (See Figure 16.)
- 2. Click Enable and enter a username and password.
- 3. Click *Export* to save the file in the default folder.



Click *Export* and save the file to the desired folder.

To revise the selected configuration file:

- 1. Open the file to update.
- 2. Click File Save as and enter a unique name for the file.
- 3. Update the desired information, such as the Contact Information in Figure 1.7.
- 4. Remove all configuration items that will not be updated.
- 5. If desired, remove any comments associated with the intended changes.

NOTE: Retain the reboot directive.

6. Click Save to save your changes.

To update the configuration on multiple files:

- 1. Open the MCT application and verify the Configuration radio button is selected.
- 2. Using the Browse button, navigate to and select the file that includes the update. (See Figure 1.8.)
- 3. Enter the IP address range of the cards to be updated and click Search.

-or-

Load a previously saved IP List file.

4. In the IP list, click the checkboxes of specific cards to update. (See Figure 1.9 with two cards selected).

-or-

In the IP list header, click the Check All button to update all the cards in the IP address range.

- 5. Enter the card admin credentials that are different than the Default Username/Password. (In the following example, Username = "LiebertRep" and Password = "RepDemo" are the credentials.)
- 6. Click the Start button to begin the update process and automatically reboot the cards with the update.
- 7. Verify completion of the update in the Update Progress column, shown as 100% in Figure 1.9.



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VERTIV.	GXT4-1500RT120 Communications	Liebert®
	Configuration Export/Import:	Updated: April 22, 2019 02:39:10PM
Identification	Commands	Enable Cancel
GXT4 Web Demo Delaware Monitoring Lab	Export configuration file	Export
GXT4 in Main Rack	Import configuration file	Import
Status	Import log file	
GXT4-1500RT120 Normal Operation Communications Normal Operation	import_00-02-99-17-44-74_001_1970-01-05_20 import_00-02-99-17-44-74_002_2019-03-22_20 import_00-02-99-17-44-74_003_2019-04-22_15)-49-45.log
Communications		
 Summary ⇒ Active Events Downloads Configuration Protocols Status Support Active Networking Firmware Update Configuration Export/Import 		

Figure 1.6 Navigating to the Configuration File Export Page Location.

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Figure 1.7 Configuration Parameter for Contact Information

NOTE: The key:value pair is represented as Contact Information: "Vertiv Representative" in the following configuration example and in Figure 1.7.

System

- # Contact Information
- # End user assigned contact information for the system
- # maximum length: 50
- Contact Information: "Vertiv Representative"



Lieb	ert Communicat	ions Card Mass Con	nfiguration Tool v1.0 - Vertiv	Co. All rights reserv	red			-		>
) Fim	ess range 126 nware nfiguration			Search Browse	Defaul	t Password	jebert jebert		Start	
255/2	55				Cre	eate Log File	Network	k Timeo	out (sec)	10
							В	atch siz	ze (1-50)	50
list	Load	Save		efresh firmware version	_		Check		Clea	
ist	IP Address	Hostname	Firmware Version	System Name	Usemame	Password	Check	Upda	Clear ate Progre	
st	IP Address 126.4.203.202	Hostname UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062	System Name Uninitialized	Usemame Liebert	Password		Upda 0%		
st	IP Address 126.4.203.202 126.4.203.208	Hostname UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware	Usemame Liebert Liebert	Password	Update	Upda 0% 0%		
st	IP Address 126.4.203.202 126.4.203.208 126.4.203.200	Hostname UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4	Usemame Liebert Liebert Liebert	Password		Upda 0% 0% 0%		
st	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.0.0_00060	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo	Usemame Liebert Liebert Liebert LiebertRep	Password	Update	Upda 0% 0% 0% 0%		
st	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS	Usemame Liebert Liebert Liebert LiebertRep Liebert	Password	Update	Upda 0% 0% 0% 0%		
st	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247 126.4.203.224	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo	Usemame Liebert Liebert Liebert LiebertRep Liebert Liebert	Password	Update	Upda 0% 0% 0% 0% 0%		
st	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247 126.4.203.224 126.4.203.220	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G Stephens-GXT4	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo Stephens GXT4	Usemame Liebert Liebert Liebert Liebert Rep Liebert Liebert Liebert	Password	Update	Upda 0% 0% 0% 0% 0% 0%		
st	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247 126.4.203.224 126.4.203.220 126.4.203.231	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G Stephens-GXT4 UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo Stephens GXT4 EXM Demo	Usemame Liebert Liebert Liebert Liebert Liebert Liebert Liebert Liebert	Password	Update	Upda 0% 0% 0% 0% 0% 0%		
ist	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247 126.4.203.224 126.4.203.220 126.4.203.231 126.4.203.225	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G Stephens-GXT4 UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo Stephens GXT4 EXM Demo CRV Demo	Usemame Liebert Liebert Liebert Liebert Liebert Liebert Liebert Liebert Liebert	Password	Update	Upda 0% 0% 0% 0% 0% 0% 0%		
ist	IP Address 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247 126.4.203.224 126.4.203.220 126.4.203.231	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G Stephens-GXT4 UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo Stephens GXT4 EXM Demo	Usemame Liebert Liebert Liebert Liebert Liebert Liebert Liebert Liebert	Password	Update	Upda 0% 0% 0% 0% 0% 0%		

Figure 1.8 Configuration File Selected and Cards Selected to be Updated.

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Figure 1.9 Configuration Update Completed for Selected Cards.

) Fir	mware	• • • • • •		Search Browse			jebert jebert		Start	
Co	onfiguration	ity Mass Coring (neica		DIOWSE		eate Log File	Networ	k Timeou	t (sec)	1
2/2 (100%)				ĕ u	eate Log Hie		latch size		5
		Contact update.txt								_
tch	Size: 50									
tch										
			g the configuration file g the configuration file							
22/2	2019 4:09:03 PM 1	26.4.203.247 Configur	ation import completed succes							
			ation import completed succes	sfully.						
22/2	2019 4:09:04 PM C	onfiguration import con	npleted successfully.							
list	Load	Save	R	efresh firmware versior	1		Check	All	Clear /	A
list										
list	IP Address	Hostname	Firmware Version	System Name	Usemame	Password	Update	Update	Clear / Progress	
list						Password		Update 0%		
ist	IP Address	Hostname	Firmware Version	System Name	Usemame	Password	Update	Update		
list	IP Address 126.4.203.104	Hostname UNITY-417831G	Firmware Version	System Name Uninitialized	Usemame Liebert	Password	Update	Update 0%		
list	IP Address 126.4.203.104 126.4.203.114	Hostname UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060	System Name Uninitialized Paul's Unity Card	Usemame Liebert Liebert	Password	Update	Update 0% 0%		
list	IP Address 126.4.203.104 126.4.203.114 126.4.203.202	Hostname UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062	System Name Uninitialized Paul's Unity Card Uninitialized	Usemame Liebert Liebert Liebert	Password	Update	Update 0% 0% 0%		
list	IP Address 126.4.203.104 126.4.203.202 126.4.203.202 126.4.203.208	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066	System Name Uninitialized Paul's Unity Card Uninitialized GXT 4 Delaware	Usemame Liebert Liebert Liebert Liebert	Password	Update	Update 0% 0% 0% 0%		
list	IP Address 126.4.203.104 126.4.203.114 126.4.203.202 126.4.203.208 126.4.203.200	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized Paul's Unity Card Uninitialized GXT 4 Delaware Main Rack GXT4	Usemame Liebert Liebert Liebert Liebert Liebert		Update	Update 0% 0% 0% 0% 0%		
list	IP Address 126.4.203.104 126.4.203.114 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.0.0_00060	System Name Uninitialized Paul's Unity Card Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo	Usemame Liebert Liebert Liebert Liebert Liebert LiebertRep		Update Update	Update 0% 0% 0% 0% 0% 100%		
	IP Address 126.4.203.104 126.4.203.114 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.233 126.4.203.247	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized Paul's Unity Card Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo	Usemame Liebert Liebert Liebert Liebert Liebert LiebertRep Liebert		Update	Update 0% 0% 0% 0% 0% 100%		
	IP Address 126.4.203.104 126.4.203.114 126.4.203.202 126.4.203.203 126.4.203.200 126.4.203.200 126.4.203.203 126.4.203.204 126.4.203.204 126.4.203.224 126.4.203.224 126.4.203.220	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G Stephens-GXT4	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized Paul's Unity Card Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo Stephens GXT4	Usemame Liebert Liebert Liebert Liebert Liebert Liebert Liebert Liebert		Update	Update 0% 0% 0% 0% 100% 0%		
	IP Address 126.4.203.104 126.4.203.114 126.4.203.202 126.4.203.208 126.4.203.200 126.4.203.203 126.4.203.204 126.4.203.202 126.4.203.203 126.4.203.204	Hostname UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G UNITY-417831G	Firmware Version IS-UNITY_7.5.1.0_00063 IS-UNITY_7.5.0.0_00060 IS-UNITY_7.5.1.0_00062 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066 IS-UNITY_7.5.1.0_00066	System Name Uninitialized Paul's Unity Card Uninitialized GXT 4 Delaware Main Rack GXT4 NXL Web Demo EXS UPS EXL S1 Demo	Usemame Liebert Liebert Liebert Liebert Liebert Liebert Liebert Liebert		Update	Update 0% 0% 0% 0% 0% 100% 0%		

Important security considerations of the exported configuration file

Passwords and other secrets are not exported. Protected values are shown as asterisks and the lines are commented-out. To use the file as a complete, importable back-up file, you must replace the asterisks (*) with your password/secret values and un-comment the lines. You can also reference the header of the export file for additional details.



CAUTION: Do not import an un-modified export file from one card to another. This could cause a duplicate IP address or other unintended duplications.

CAUTION: When using sensitive data such as passwords or secrets in an import file, it is recommended that you use an HTTPS connection if the card is used on a non-secure or public network.



Configuration export/import file naming and general format

The exported file is self-describing using commented lines and includes the following format designations:

- Filename is formed using the card MAC address, date stamp and time stamp.
 - Example: config_XX-XX-XX-XX-XX_2019-02-24_21-52-10.txt
- # precedes comments.
- Parameters and their values are not commented. A colon (:) separates the parameter and value, for example, key:value pair.
- Double quotes (") enclose all text-based values.
- Numeric and enumerated values are not enclosed in double quotes.
- Brackets ([]) indicate the folder that contains the parameters.
- User password and other secrets are hidden in the export file, and the line is commented to prevent inadvertent import. To import a new password or other secret, un-comment the line and enter the new password. Because secrets are text strings, they must be enclosed in double quotes (").
- Reboot Directive This directive instructs the IS-UNITY card to reboot after the configuration import is completed. This directive is enabled by default for IS-UNITY_7.5.1.0_00066 firmware release and higher. For a lower firmware version than this release, the Reboot Directive is disabled by default. Please ensure the Reboot Directive is enabled (uncommented) for the card to reboot and make the desired changes.

Example: Reboot Directive



0.1 Configuration Export/Import - parameter: setting examples

The following examples are the parameter: setting (key: value) pair formats that are used in the import (and export) files.

The minimum lines required to change one parameter are:

- One folder (in the left navigation pane) enclosed in an open and close bracket ([]).
- One parameter and setting (key: value pair). The key:value pair is represented as Contact Information: "Vertiv Representative" in the following configuration example and in Figure 1.7.

NOTE: The commented lines facilitate a self-describing file; however, they are not required for the import file.

System # Contact Information # End user assigned contact information for the system # maximum length: 50 Contact Information: "Vertiv Representative"





2 APPENDICES

Appendix A: Configuration Examples

Example: Text-based Settings

Text-based settings, shown in bold, are always encoded in double quotes (") as follows.

[System] # System Name # End user assigned name for the system # maximum length: 64 System Name: "GImport Test" # Contact Information # End user assigned contact information for the system # maximum length: 50 Contact Information: "Vertiv Representative" # System Location # End user assigned location of the system # maximum length: 50

System Location: "Columbus Ohio" # System Description # End user assigned description for the system # maximum length: 50 System Description: "Example"

Example: Enumerated Values are Used Without Punctuation

[Time Service] # External Time Source # The external source to use for time synchronization. # 0: NTP Server # 1: Modbus System # 2: BACnet System # 3: Velocity Management System # 4: LIFE (TM) Watch Station # 5: YDN23 System # 6: Remote Services System External Time Source: 0

Example: Numeric Values are Used Without Punctuation

[Authentication.RADIUS] # Timeout # The timeout for an authentication query to be answered. # range: 0 to 65535 sec Timeout: 3



Example: IP Address

[Network.IPv4] # IPv4 Protocol # Enable or disable IPv4. #0: disabled #1: enabled IPv4 Protocol: 1 # IP Address Method # Method by which the system acquires a network address. #0: Static #1: DHCP #2:BOOTP IP Address Method: 0 # Static IP Address # Manually assigned network address. # IP address in standard form Static IP Address: 126.4.203.251

Example: Literal Passwords and Secrets

The following is an example of a password or secret in an Export file. They are always exported as eight asterisks "********" and commented.

[Local User.1] #User Name # Case sensitive string containing printable ASCII characters excluding: \: '<>~?#, double quote, and space # maximum length: 30 # minimum length if not blank*: 1 #*This setting can be cleared with a blank string. User Name: "Liebert" # User Password # Case sensitive string containing printable ASCII characters excluding: \:'<>~?#, double quote, and space # maximum length: 30 # minimum length if not blank*: 1 #*This setting can be cleared with a blank string. #** Protected value not displayed. Uncomment following line to import new value: # User Password: "******** # Authorization for User # User access privilege level - No Access, General User, Administrator #0: No Access #1: General User #2: Administrator Authorization for User: 2

Example: Passwords and Secrets

The actual password/secret text must be enclosed in double quotes for importing.

The following is an example of a password or secret in an Import file. The actual password/secret is shown.



[Local User.1] # User Password # Case sensitive string containing printable ASCII characters excluding: \:'<>~?#, double quote, and space # maximum length: 30 # minimum length if not blank*: 1 # *This setting can be cleared with a blank string. # ** Protected value not displayed. Uncomment following line to import new value: User Password: "Liebert"

Example: Import File With No Comments

The following is an example of an import file using the previous examples in this guide with all comments removed. This style is useful until you become familiar with the file syntax. It is recommended to retain some or all comments. See the following example and figure.

RebootAfterImport [System] System Name: "Import Test" Contact Information: "Vertiv Representative" System Location: "Columbus Ohio" System Description: "Example" [Time Service] External Time Source: 0 [Authentication.RADIUS] Timeout: 3 [Local User.1] User Name: MyName" User Password: "MyPassword"



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