IBM GLobal Console Manager Firmware Update Guide



IBM GLobal 2x2x16 Console Manager (GCM16), 1754-D1X (1754-HC1) IBM GLobal 4x2x32 Console Manager (GCM32), 1754-D2X (1754-HC2) This page has been intentionally left blank

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Chapter 1 Introduction

This document provides information on the various methods on how to upgrade the firmware of the following IBM Keyboard, Video, and mouse switches (KVM):

- IBM Global 2x2x16 Console Manager (GCM16), 1754-D1X (1754-HC1)
- IBM Global 4x2x32 Console Manager (GCM32), 1754-D2X (1754-HC2)

There are two general interfaces that can be used for upgrading the firmware of an IBM Local Console Manager:

- 1. The remote On-board Web Interface (OWBI)
- 2. <u>The local On-board Web Interface (OWBI)</u>

Both methods require that an IP address, either IPv4 or IPv6, is assigned to the KVM switch to be upgraded.

The remote and local OWBI are very similar and have only minor differences.

Attention!

Before upgrading the firmware of the KVM switch all KVM sessions should be closed as else these will be disconnected. The KVM switch will automatically reboot after the code update has been applied.

Prequisites

In order to be able to update the firmware of an IBM GCM16 or GCM32 unit a valid IPv4 and / or IPv6 address needs to be assigned to the KVM switch.

Further either an ftp or a tftp or a http server must be available in the LAN where the firmware file for the KVM switch is located on.

Chapter 2 Firmware update via remote OWBI

Before following the instructions of this chapter review Chapter 1.

This KVM switch has an On-board Web Interface which can be accessed via https.

In order to update the firmware the remote user must be logged on with unit administrative privileges.

Default log on credentials

The default Username for the administrator is Admin (case sensitive!) and no password.

Checking current KVM firmware

Checking the current KVM firmware can be done by clicking in the main menu under "Appliance" on "Versions".



Auto-updating attached Cable Options

It is strongly recommended to ensure that any Cable Option (CO) gets updated when applying the firmware to the KVM switch. The auto-upgrade function guarantees that the CO firmware is compatible with the switch firmware. As COs come online, their firmware is automatically upgraded to that available on the switch.

Enabling CO auto-updating

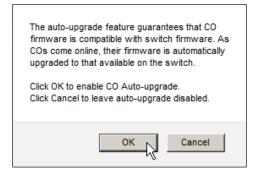
- Notes: Before following the instructions of this chapter review <u>Chapter 1 Introduction</u> and the section <u>Default log on credentials</u> in Chapter 2.
 - 1. On the main menu click on "COs" under "Target List"

Welcome Admin!				📀 REFRESH 🔒 PRI	NT 🤌 LOGOUT HELP
GCM16					TBM.
A *					
 Unit View Target List 	Target List				
 Appliance Overview 					
 Properties 	Show Ports				Filter
Identity Location	NameA 520407-012B1C	Type VCO	Status Idle	Action KVM Session	*
 Appliance Settings Versions 		100	Iure	RVM Session	×
Network					
■ General ■ IPv4					
∎ IPv6 ∎ DNS					
NTP					
SNMP					
SNMPv3	/				
Events					
- Ports					
COs Cascade Switches					
Power Devices Local Port UI					
Modem					
 Setup Sessions 					
⊾ General ⊾ KVM					
Virtual Media					
Serial					
E Local					

2. Click on "Enable Auto-Upgrade"

Welcome Admin!						📀 REFRESH	🖶 PRINT 🔌 LOGOUT 😗 HELF
GCM16							IBM.
✓ Unit View ▲ Target List ★ Appliance	Appliance COs - GCM16-25-D7-9B						
 Overview Properties 		nable Auto-Upgrade					
 Identity Location Appliance Settings 	elD△ elD elD△ elD△ elD△ elD△ elD△ elD△ elD△	520407-012B1C	Port 1	Status Online	Application 3.2.1.6	Interface Type VCO	USB Speed USB 2.0 HS
 ⊌ Versions ✓ Network ⊌ General 							
∎ IPv4 ∎ IPv6							
∎ DNS ∎ NTP ▼ SNMP							
■ General ■ SNMPv3							
➡ Auditing							
Cascade Switches							

and confirm the selection by clicking on "OK" in the pop up window



3. CO Auto-upgrade is now enabled

Welcome Admin!						📀 REFRESH	🖶 PRINT 🤌 LOGOUT 🧿 HELP
GCM16							IBM.
▼ Unit View					_		
📱 Target List	Appliance COs - GCM16-25-D7-9B				_		
✓ Appliance Overview ✓ Properties	Delete Offline Operations & D	isable Auto-Upgrade					
Identity Location	elDA	Name 520407-012B1C	Port 1	Status Online	Application 3.2.1.6	Interface Type VCO	USB Speed USB 2.0 HS
Appliance Settings Versions Cascade Switches							

Firmware update via Filesystem

- Notes: Before following the instructions of this chapter review <u>Chapter 1</u> <u>Introduction</u> and the section <u>Default log on credentials</u> in Chapter 2
 - The firmware file name in this chapter are used for illustration purposes only. The actual firmware file name may be different
 - 1. On the main menu on the left side click on "Overview" and then on the icon "Upgrade Firmware"

🛃 Upgrade	e Firmware	
Welcome Admin!		🗞 REFRESH 🛞 PRINT 🔌 LOGOUT 🥎 HELP
GCM16	-1	IBM.
👻 Unit View	Unit Maintenance - GCM16-25-D7-9B	
■ Target List		Save
Overview		
 Properties 	Appliance	
Location	Name: GCM16-25-D7-9B	
 Appliance Settings 		2
Versions	Type: GCM16	/
✓ Network		
Seneral	Tools	¥
∎ IPv4		
IPv6	Reboot	🔂 Upgrade Firmware
DNS		
NTP	Run Diagnostics	Ping
▼ SNMP		
General SNMPv3	Save Appliance Configuration	Restore Appliance Configuration
➡ Auditing		
Events	🔝 Save Appliance User Database	Restore Appliance User Database
Destinations		
- Ports	Export Target Device Configuration	Import Target Device Configuration
E COs		
Cascade Switches	Reset Appliance Configuration to Factory Defaults	Save Appliance Trap MIB
Power Devices		
Local Port UI	Manage Appliance Web Certificate	
Modem		
Setup		
- Sections		

Click on the radio button left of "Filesystem", click the "Browse" 1 button to navigate to the KVM firmware file on your local computer, and then click on "Upgrade" 2 button in order to initiate the firmware update

Welcome Admin!	a a se a facal a se dana a a a se a facal	TRY DSVIEW
GCM16		IBM.
 ✓ Unit View ▲ Target List ✓ Appliance 	Upgrade Appliance Firmware - GCM16-25-D7-98	Upgrade Cancel
Overview Properties Identity Location Appliance Settings Versions Network	Please select the firmware file to upload for GCM16-25-D7-98, then click Upgrade Firmware File: Method: © Filesystem C TFTP C FTP C HTTP 1 Filename: Browse. No file selected.	2

3. Browse to the directory containing the firmware file, click on it, click the "Open" button and then click on the "Upgrade" button to start the firmware update

▼ O ~ Computer	 Windows7_OS (0 	C:) • Code_deploy		👻 🌆 Search (Code_deploy	
rganize 🔻 New folder					· · ·	
🖈 Favorites 📥	Name *		Date modified	Туре	Size	
🧮 Desktop	emerson_fv	v_gcm16_gcm32_v1.30.5.24433.	fl 19/12/2015 03:23	FL File	62,364 KB	
Downloads						
🖳 Recent Places						
libraries						
Documents						
J Music						
Pictures						
Videos						
Computer						
Windows7_OS (C:)						
Lenovo_Recovery						
📭 Network 📃						
File n			<i>2</i> 1	✓ All Files	(* *)	10
File n	arrie: emerson_tv	v_gcm16_gcm32_v1.30.5.24433	.11	All Files	(.)	10

4. The firmware file will be transferred to the KVM switch

Welcome Admin!		🔇 REFRESH 🖹 PRINT 🔌 LOGOUT 🤫 HELP 😲 TRY DSVIEW
GCM16		IBM I IBM
🗢 🗸	Upgrade Appliance Firmware - GCM16-25-D7-9B	
 Target List Appliance 		Upgrade Cancel
Overview Froperties Identity Location Appliance Settings		The firmware file is being loaded to the appliance

5. The firmware will be applied, that is flashed, to the KVM switch

Welcome Admin!		🗞 REFRESH 🖀 PRINT 🔌 LOGOUT 😗 HELP 🔋 TRY DSVIEW
GCM16		IBM.
 ✓ Unit View ► Target List ✓ Appliance 	Vpgrade Appliance Firmware - GCM16-25-D7-9B	
Overview Properties Identity Location Appliance Settin Versions		ng applied to the appliance ● ● ○ ●

6. Once the update has completed the KVM switch will reboot

Welcome Admin!	🗞 REFRESH 🗎 PRINT 🥔 LOGOUT 💡 HELP 🚺 TRY DSVIEW
GCM16	
Vinit View Target List Appliance Overview Properties I identity E Location Appliance Settings E Versions Versions Versions Versions Secretal	Jpgrade Appliance Firmware - GCM16-25-D7-9B The firmware file has successfully been loaded. Waiting for appliance to complete rebooting ● ● ● ● ● ● ● ● ●

7. After the firmware update is complete, the web browser should automatically reload to display the logon screen. If the browser does not auto-refresh then manually reload the page after a couple of minutes in order to display the logon screen



Firmware update via TFTP

- Notes: Before following the instructions of this chapter review <u>Chapter 1</u> <u>Introduction</u> and the section <u>Default log on credentials</u> in Chapter 2
 - tftp is a simple and unsecure file transfer protocol
 - The firmware file name in this chapter are used for illustration purposes only. The actual firmware file name may be different
 - 1. On the main menu on the left side click on "Overview" and then on the icon "Upgrade Firmware"

🛃 Upgrade	Firmware	
Welcome Admin!		😯 REFRESH 🖷 PRINT 🔌 LOGOUT 😗 HELP
GCM16	1	
✓ Unit View Larget List ✓ Appliance	Unit Maintenance - GCM16-25-D7-98	Save
Overview Properties Identity Location Appliance Settings Versions Network	Appliance Name: JGCM16-25-D7-98 Type: GCM16	/ ²
Li General Li IPv4 Li IPv6 Li DNS Li NTP ▼ SNMP	Tools	Dpgrade Firmware
ii General ii SNMPv3 ✓ Auditing ii Events ii Destinations ✓ Ports	Save Appliance Configuration Save Appliance User Database Suport Target Device Configuration	द्धि Restore Appliance Configuration द्वि Restore Appliance User Database स्त्रि Import Target Device Configuration
 ii COs ii Cascade Switches iii Power Devices iii Local Port UI iii Modem iii Setup iiii Sessions 	Reset Appliance Configuration to Factory Defaults	Save Appliance Trap MIB

2. Click on the radio button left of "TFTP" 1, enter the IP address of the tftp server, and then click on the "Upgrade" 2 in order to initiate the firmware update



Note: If the firmware file resides in a subdirectory of the tftp server, for example in the directory $/fw_files$ then precede the firmware file with the fully qualified path and firmware file name, e.g.

/fw_files/emerson_fw_gcm16_gcm32_1.30.5.24433.fl

3. The firmware file will be transferred to the KVM switch

Welcome Admin!			REFRESH	🔊 logout	? HELP ! TRY DSVIEW
GCM16					IBM.
👻 Unit View	Upgrade Appliance Firmware - GCM16-25-D7-9B				
 Target List Appliance 					Upgrade Cancel
 Overview ✓ Properties ► Identity 		The firmware file is being loaded to the a	ppliance		
Location					

4. The firmware will be applied, that is flashed, to the KVM switch

Welcome Admin!	😵 REFRESH 🗎 PRINT 🖉 LOGOUT 😗 HELP 😢 TRY DSVIEW
GCM16	
✓ Unit View Target List	Upgrade Appliance Firmware - GCM16-25-D7-9B
Appliance Overview Properties Identity	The firmware file is being applied to the appliance
 Location Appliance Settings Versions 	$\bullet \bullet \bullet \circ \bullet$

5. Once the update has completed the KVM switch will reboot

Welcome Admin!	🗞 REFRESH 🖀 PRINT 🖉 LOGOUT 💡 HELP 😲 TRY DSVIEW
GCM16	
▼ Unit View	
■ TargetList ■ Appliance	Upgrade Appliance Firmware - GCM16-25-D7-9B
Overview Properties	
 Hopentes Identity Location 	The firmware file has successfully been loaded. Waiting for appliance to complete rebooting
 Appliance Settings 	
 Versions Network 	••••
General	

6. After the firmware update is complete, the web browser should automatically reload to display the logon screen. If the browser does not auto-refresh then manually reload the page after a couple of minutes in order to display the logon screen

GCM16			• HELP • TRY DSVIEW
	User Login	Ĺ	

Your session h	as expired	- Please lo	ogin again
Usemame:			
Password:			
Language:	English	-	

KVM firmware update via ftp

- Notes: Before following the instructions of this chapter review <u>Chapter 1</u> Introduction and the section <u>Default log on credentials</u> in Chapter 2
 - The KVM switch does not support the ftps or sftp protocols for firmware updates
 - The firmware file name in this chapter are used for illustration purposes only. The actual firmware file name may be different
 - 1. On the main menu on the left side click on "Overview" and then on the icon "Upgrade Firmware"

🔁 Upgrade	e Firmware	
Welcome Admin!		😣 REFRESH 🖀 PRINT 🔌 LOGOUT 🤫 HELP
GCM16	1	IBM.
✓ Unit View E Target List ✓ Appliance ⑤ Overview	Unit Maintenance - GCM16-25-D7-98	Save
 ✓ Properties ► Identity ► Location ✓ Appliance Settings ► Versions 	Appliance Name: GCM16-25-D7-98 Type: GCM16	/ ²
✓ Network S General IPv4 IPv6 DNS	Tools	Upgrade Firmware
⊾ NTP ▼ SNMP ⊾ General ⊾ SNMPv3	Run Diagnostics	Ping
 ✓ Auditing Levents Destinations ✓ Ports LCOS 	Save Appliance User Database	Restore Appliance User Database
 Cascade Switches Power Devices Local Port UI Modem Setup Sessions 	Reset Appliance Configuration to Factory Defaults	Save Appliance Trap MIB

2. Click on the radio button left of "FTP" 1, enter the IP address of the ftp server, and if required also the log on credentials for the ftp server. Click on the "Upgrade"
2 button in order to initiate the firmware update

Welcome Admin!		TRY DSVIEW
GCM16		IBM.
✓ Unit View	Upgrade Appliance Firmware - GCM16-25-D7-9B	Upgrade) (Cancel)
Overview Properties Identity Location Appliance Settings Versions	Please select the firmware file to upload for GCM16-25-D7-98 then click Upgrade Firmware File: Method: C Filesystem C TFTP C HTTP Server: 192.168.10.1	2
Vetwork General IPv4 IPv6 DNS	Username: Password: Filename: emerson_fw_gcm16_gcm32_v1.30.5.24	

Note: If the firmware file resides in a subdirectory of the ftp server, for example in the directory $/fw_files$ then precede the firmware file with the fully qualified path and firmware file name, e.g.

/fw_files/emerson_fw_lcm8_16_1.2.46.0.fl

3. The firmware file will be transferred to the KVM switch

	Welcome Admin!	🗞 REFRESH 🗃 PRINT 🥔 LOGOUT 😗 HELP 😲 TRY DSVIEW
	GCM16	
ł		
	✓ Unit View Target List Appliance	Upgrade Appliance Firmware - GCM16-25-D7-98 Upgrade [Cance]
	Overview Properties Identity Location Appliance Settings	The firmware file is being loaded to the appliance
	Versions	

4. The firmware will be applied, that is flashed, to the KVM switch

Welcome Admin!	🥸 REFRESH 🖀 PRINT 🔌 LOGOUT 😗 HELP 😲 TRY DSVIEW
GCM16	
✓ Unit View i: Target List ✓ Appliance	Upgrade Appliance Firmware - GCM16-25-D7-9B
Overview Properties Identity Location Appliance Settings	The firmware file is being applied to the appliance ● ● ● ● ○ ●
Versions	

5. Once the update has completed the KVM switch will reboot

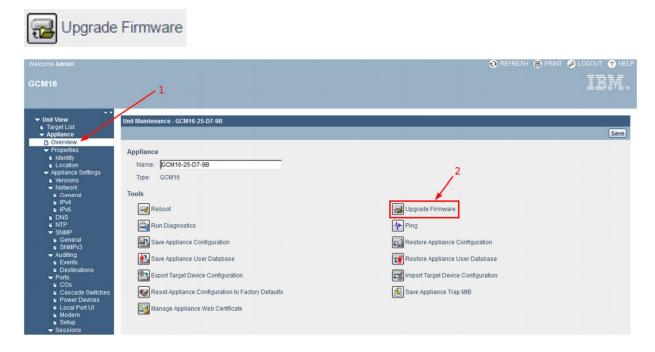
Welcome Admin!	🗞 REFRESH 🖀 PRINT 🖉 LOGOUT 😗 HELP 🚺 TRY DSVIEW
GCM16	IBM.
✓ Unit View ▲ Target List ✓ Appliance	, Upgrade Appliance Firmware - GCM16-25-D7-9B
Overview Properties identity is Location Appliance Settings	The firmware file has successfully been loaded. Waiting for appliance to complete rebooting
Versions Network	•••••

6. After the firmware update is complete, the web browser should automatically reload to display the logon screen. If the browser does not auto-refresh then manually reload the page after a couple of minutes in order to display the logon screen

GCM16		• HELP • TRY DSVIEW
	User Login	
	*This page contains errors	
	Your session has expired - Please login again Username: Password: Language: English 💌 Login	

Firmware update via http

- Notes: Before following the instructions of this chapter review <u>Chapter 1</u> <u>Introduction</u> and the section <u>Default log on credentials</u> in Chapter 2
 - The KVM switch does not support the https protocol for firmware updates
 - The firmware file name in this chapter are used for illustration purposes only. The actual firmware file name may be different
 - 1. On the main menu on the left side click on "Overview" and then on the icon "Upgrade Firmware"



2. Click on the radio button left of "HTTP" 1, enter the IP address of the http server, and if required also the log on credentials for the http server. Click on the "Upgrade"
2 button in order to initiate the firmware update

Welcome Admin!		🗞 REFRESH 🗃 PRINT 🔌 LOGOUT 🥱 HELP 🌓 TRY DSVIEW
GCM16		IBM.
Unit View is Target List Appliance Overview Properties il identity is Location Appliance Settings Versions Network General iPv6 DNS NTP	Upgrade Appliance Firmware - GCM16-25-D7-98 Please select the firmware file to upload for GCM16-25-D7-98, then click Upgrade Firmware File: Method: C Filesystem C TFTP C FTP C HTTP Server: 192.168.10.1 Username: Password: Filesystem Filename: Password: emerson_fw_gcm16_gcm32_v1.30.5.24	Upgrade Cancel

Note: If the firmware file resides in a subdirectory of the http server, for example in the directory $/fw_files$ then precede the firmware file with the fully qualified path and firmware file name, e.g.

/fw_files/emerson_fw_lcm8_16_1.2.46.0.fl

3. The firmware file will be transferred to the KVM switch

Welcome Admin!			📎 REFRESH 🖲 PRINT 🤌 LOGOU	
GCM16				IBM.
🕶 Unit View	Upgrade Appliance Firmware - GCM16-25-D7-9B			
 Target List Appliance 				Upgrade Cancel
Overview Properties Identity Location		The firmware file is being loaded	to the appliance	
 Appliance Settings Versions 				

4. The firmware will be applied, that is flashed, to the KVM switch

Welcome Admin!			📀 REFRESH	🖲 PRINT 🔌 LOGOU	T ? HELP ? TRY DSVIEW
GCM16					IDM.
🕶 Unit View	Upgrade Appliance Firmware - GCM16-25-D7-9B				
 Target List Appliance 					
 Overview Properties 					
■ Identity		The firmware file is being applied to	the appliance		
 Location Appliance Settings 					
Versions					

5. Once the update has completed the KVM switch will reboot

Welcome Admin!	🗞 REFRESH 👜 PRINT 🔌 LOGOUT 😗 HELP 😲 TRY DSVIEW
GCM16	
• •	
 Unit View Target List 	Upgrade Appliance Firmware - GCM16-25-D7-9B
Appliance Overview	
➡ Properties	The firmware file has successfully been loaded.
Location	Waiting for appliance to complete reboting
- Appliance Settings	
 Versions Network 	• • • • •
Seneral	

6. After the firmware update is complete, the web browser should automatically reload to display the logon screen. If the browser does not auto-refresh then manually reload the page after a couple of minutes in order to display the logon screen

GCM16		• HELP • TRY DSVIEW
	User Login	

Your session h	as expired	- Please lo	ogin again
Usemame:			
Password:			
Language:	English	-	

Chapter 3 Firmware update via local OWBI

Before following the instructions of this chapter review Chapter 1 Introduction.

The local On-board Web Interface (OWBI) is displayed e.g. after powering up the KVM switch. Its structure is similar to the remote On-board Web Interface (OWBI).

Checking current KVM firmware

Checking the current KVM firmware can be done by clicking in the main menu under "Appliance" on "Versions".

GCM16		
Vinit View Target List - Basic Target List - Full Appliance B Overview Properties b Identity	Appliance Version Information - GCM16-2 Versions Description △	15-D7-9B Version
Location	Application	1.26.1.23978
Appliance Settings Versions Network General Flow Pv4 Flow Source	Boot	2.4.24247

Auto-updating attached Cable Options

It is strongly recommended to ensure that any Cable Option (CO) gets updated when applying the firmware to the KVM switch. The auto-upgrade function guarantees that the CO firmware is compatible with the switch firmware. As COs come online, their firmware is automatically upgraded to that available on the switch.

Enabling CO auto-updating

1. On the main menu click on "COs" under "Target List"

							REFRESH
GCM16							IDN.
 ✓ Unit View ▲ Target List - Basic ▲ Target List - Full ✓ Appliance ▲ Overview 	Appliance COs - GCM16-25-		rade				
 Properties Identity 	elD	Name Δ	Port	Status	Application	Interface Type	USB Speed
Location	520407-012B1C		1	Online	3.2.1.6	VCO	USB 2.0 HS
 → Appliance Settings is Versions → Network is General is IPv4 is IPv4 is IPv5 is DNS is NTP ⇒ SNMP is General is SNMPv3 ⇒ Auditing is Events is Destinations 	S20407-01251C	520407-012BIC	1	Unime	32.110		0362.015
✓ Ports Cos Cascade Switches Power Devices							
E Local Port UI E Modem E Setup							
 ✓ Sessions is General is KVM is Virtual Media is Serial ✓ User Accounts is Local 							
■ Local ■ DSView ■ LDAP ■ Overview ■ Search ■ Query ■ Connections ■ Artitic Secret							

2. Click on "Enable Auto-Upgrade"

GCM16							© refres IBVL.
 Unit View Target List - Basic Target List - Full Appliance 	nce COs - GCM16-25-I	-		-	-	-	
Overview Properties Identity E Location Availance Settings	te Offline Operations eID • 520407-012B1C	Name 🛆	Port 1	Status Online	Application 3.2.1.6	Interface Type VCO	USB Speed USB 2.0 HS
 ✓ Appliance Settings E Versions ✓ Network E General E IPv4 							
E IPv6 E DNS E NTP ▼ SNMP							
■ General ■ SNMPv3 ▼ Auditing ■ Events							

and confirm the selection by clicking on "Yes" in the pop up window

								📀 REFR
5CM16								IBM
🗸 Unit View		CO. CCU16 35 D	2.00		_	_	_	_
Target List - Basic	Appliance	COs - GCM16-25-D	7-9B					
Target List - Full								
 Appliance Overview 	Delete	Offline Operations	Enable Auto-Upg	a da				
 Properties 		June Joperations	Enable Auto-Opgi	aue	-			
ldentity	е е	ID	Name 🛆	Port	Status	Application	Interface Type	USB Speed
Location		520407-012B1C	520407-012B1C	1	Online	3.2.1.6	VCO	USB 2.0 HS
 Appliance Settings Versions 								
 Network 								
General								
E IPv4 E IPv6		-	The auto-upgrade	feature qua	rantees that CO			
DNS		?	firmware is compa	tible with swi	tch firmware. As			
NTP			COs come online,					
SNMP			upgraded to that a	available on	the switch.			
General			Click OK to enable	CO Auto-u	pgrade.			
SNMPv3			Click Cancel to lea	ive auto-upg	rade disabled.			
 Auditing Events 								
Destinations					A V v v			
➡ Ports				No	<u>Tes</u>			
🗅 COs								
Cascade Switches								

3. CO Auto-upgrade is now enabled

								😵 REFRESH
GCM16								IBM.
🗢 Unit View			AL 199		_			
Target List - Basic	Appliar	nce COs - GCM16-25-D	7-9B				Alter in the first	
Target List - Full								
- Appliance								
Overview Descention	Dele	te Offline Operations	Disable Auto-Up	grade				
 Properties Identity 		elD	Name 🛆	Port	Status	Application	Interface Type	USB Speed
Location		520407-012B1C	520407-012B1C	1	Online	3.2.1.6	VCO	USB 2.0 HS
- Appliance Settings		C SECHON DIEBIC	SECTOR CIEDIC		Oninc	5.2.12.10	100	000210110
Versions								
✓ Network								
 General IPv4 								
IPv6								
DNS								
NTP								
- SNMP								
General SNMPv3								
✓ Auditing								
Events								
Destinations								
- Ports								
🕒 COs								
Cascade Switches								

Firmware update with USB memory key

Prerequisites

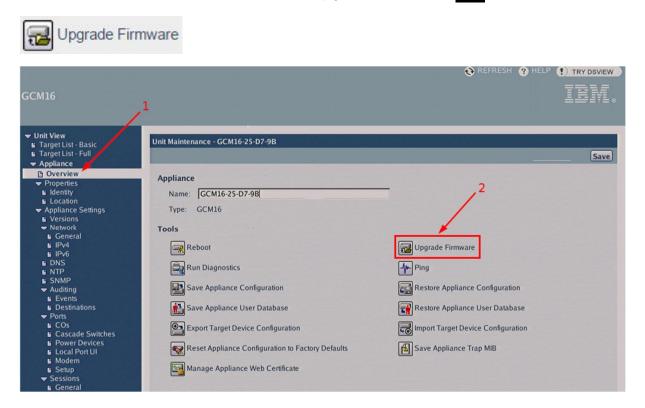
The USB memory key / USB pen drive / USB flash drive must have a standard USB-A plug in order to update the KVM firmware.



The USB memory key must be FAT32 formatted as else the KVM will not recognise any files on the USB memory key.

Update procedure

 On the main menu on the left side click on "Overview" 1, in the "Unit Maintenance" window click on the icon "Upgrade Firmware" 2



2. In the window "Upgrade Appliance Firmware" click the radio button left to "USB Mass Storage" 1, then enter in the "Filename" field the name of the firmware file
2 and then click on the "Upgrade" button 3

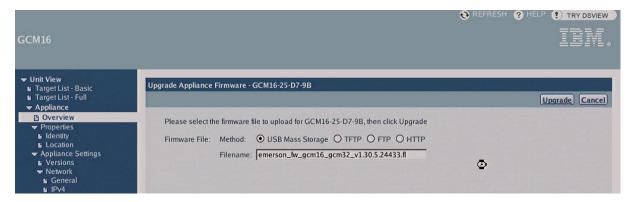
GCM16	_ ¹	
✓ Unit View E Target List - Basic E Target List - Full ✓ Appliance Overview ✓ Properties E Identity E Location ✓ Appliance Settings E Versions ✓ Network E General E IPv4 E IPv4	Upgrade Appliance Firmware - GCM16-25-D7-9B Please select the firmware file to upload for GCM16-05-D7-9B, then click Upgrade Firmware File: Method: OUSB Mass Storage OTFTP OFTP OHTTP Filename: emerson_fw_gcm16_gcm32_v1.30.5.24433.fl 2	Upgrade Cancel

Note: If the firmware file resides in a subdirectory of the USB memory key, for example in the directory */fw_files* then precede the firmware file with the fully qualified path and firmware file name, e.g.

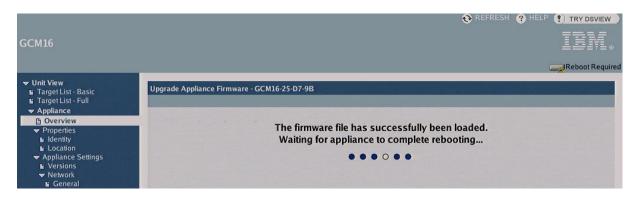
/fw_files/emerson_fw_lcm8_16_1.2.46.0.fl

In the above image the firmware file resides in the root directory of the USB memory key.

3. During the firmware upgrade of the KVM switch a watch symbol is displayed



4. At the end of the firmware update the KVM switch will reboot



Other methods to update the KVM firmware

Other methods to update the KVM firmware are described in the relevant sections of <u>Chapter 2 Firmware update via remote OWBI</u>. The procedure and the menu of the remote OWBI is similar to the local OWBI. The following additional methods are available:

Firmware update via TFTP	8
KVM firmware update via ftp 1	
Firmware update via http1	

Please also review <u>Chapter 1 Introduction</u> for additional information prior to updating the KVM firmware.

Chapter 4 Added Functions

This chapter discusses added features in the firmware which are not to be found in the relevant KVM User's Guide.

Blocking and unblocking TCP port 3871

Introduction

The firmware releases for the IBM Global Console Managers contain security fixes for any IP related security problems which are recorded in CVEs. The TCP port 3871 is used by the Avocent DS View Port to communicate with the IBM Global Console Managers. This requires that TCP port 3871 is open on the KVM switch. The Avocent DS View application secures any communication between the software and the KVM switch. Per default TCP port 3871 is open on the KVM switch.

Users may find that when the Avocent DS View application is not in use that the KVM switch appears to be vulnerable to CVEs which are resolved according to the KVM switch firmware change log file. In order to eliminate these vulnerabilities it is possible to disable TCP port 3871. This requires that the KVM switch is at least at Application firmware v2.4.0.25463.

Disabling TCP port 3871

- Notes: The procedure is identical for both via local On-board Web Interface (OWBI) and remote OWBI
 - In order to complete this task the users must be logged on to the unit as Administrator
 - Before following the instructions of this chapter review <u>Chapter 1</u> <u>Introduction</u> and the section <u>Default log on credentials</u> in Chapter 2
 - 1. Log on the KVM switch with administrative privileges

GCM16		?⊫ IBM
	User Login Username: Admin Password: Language: English •	Login

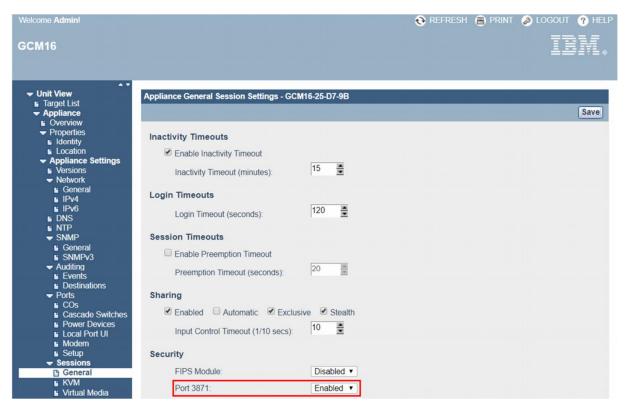
2. Once logged into the KVM switch, click on "Versions"

Welcome Admin!				📀 REFRESH 🗎 PR	INT 🔌 LOGOUT 😗 HELP
GCM16					IBM.
Unit View Target List Appliance	Target List	_			
 Overview Properties 	Show Ports				Filter
Location	Name∆	Туре	Status	Action	
Appliance Settings Eversions Network E General Ei IPv4 E IPv6 E DNS					
INTP SNMP General SNMPv3 Auditing Events Is Destinations Ports					
COs Cascade Switches Power Devices Local Port UI Modem Setup					
✓ Sessions					

3. Confirm that the KVM switch is at least on Application firmware v2.4.0.25463

Welcome Admin!		📎 REFRESH 👜 PRINT 🔌 LOGOUT 🥱	HELF
GCM16		IBA IBA	
 ✓ Unit View List ✓ Appliance ♦ Overview 	Appliance Version Information - GCM16	25-D7-9B	
 Properties Identity 	Versions		
 Location Appliance Settings 	Description	Version	
P Versions	Application	2.4.0.25463	
✓ Network Seneral IPv4	Boot	2.4.24247	

4. Click on "General". Under "Security"select the arrow down in the box right to "TCP Port 3871"



5. Change the settings as desired

come Admin!			📀 REFRESH 🗎 PRINT	logout 💡
M16				131
• Unit View • Target List	Appliance General Session Settings - GCM	A16-25-D7-9B	a second s	
 Appliance 				S
 Overview Properties 	Inactivity Timeouts			
Identity				
 Location Appliance Settings 	Enable Inactivity Timeout			
Versions	Inactivity Timeout (minutes):	15		
Network	mactivity mineout (minutes).			
General	Login Timeouts			
∎ IPv4	Login mileouts			
≌ IPv6 ≌ DNS	Login Timeout (seconds):	120		
NTP				
- SNMP	Session Timeouts			
General	Enable Preemption Timeout			
SNMPv3				
 Auditing Events 	Preemption Timeout (seconds):	20		
Destinations				
	Sharing			
COs	Enabled Automatic Exclusion	ive Stealth		
Cascade Switches Power Devices	Chabled C Automatic C Exclus			
Local Port UI	Input Control Timeout (1/10 secs):	10		
Modem				
Setup	Security			
 Sessions 	FIPS Module:	Disabled V		
General KVM	FIFS WOULIE.	Disabled		
Virtual Media	Port 3871:	Enabled		
Serial		2.100100		

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Appendix B. Notices

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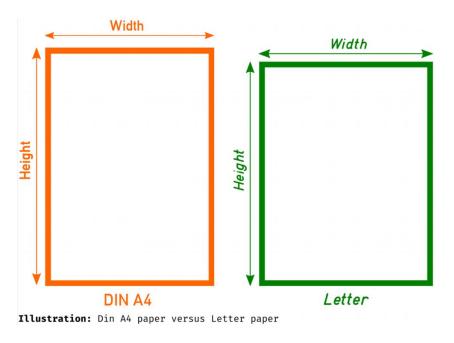
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