

2011 | G100 Access

G100-2011 | G100 Access v1

Learning & Development Learning Module





SME Source Markham





Learning Module Objective

At the completion of this module you will be able to identify and recite all concepts presented.

If you are viewing this as part of a structured training program *PLEASE* complete the associated assessment test. You are required to score above 80%.

G100-2011 | G100 Access v1

Learning & Development Objective



SME Source Markham

nent Enger

Here's What is Covered in this Module

- 1. G100 Interface Options
- 2. Local KVM Local HMI Task Functions
- 3. Local KVM Screen Layout and Virtual Keyboard
- 4. Local KVM MCP Local Configuration Utility (mcpcfg)
- 5. Local KVM MCP Settings GUI
- 6. Local KVM Local MCP Runtime HMI
- 7. Ethernet MCP Local Configuration Utility (mcpcfg) via SSH
- 8. Ethernet MCP Settings GUI via HTTPS
- Ethernet Remote MCP Runtime HMI via HTTPS 9.
- 10. Ethernet MCP Runtime HMI via Remote Desktop
- 11. Serial Maintenance Port MCP Local Configuration Utility (mcpcfg)

Learning & Development Overview



SME Source Markham

G100 Interface Options

The following connection / interface options are available to connect to the G100:

Local KVM (Keyboard, Video and Mouse) :

- Connect the Display Port to a monitor with a display cable
- Connect a keyboard and mouse to any of the USB type A ports
- Support Access: MCP Local Configuration Utility (mcpcfg) / MCP Settings GUI / Local MCP Runtime HMI

Ethernet Interfaces:

- Ethernet Port #1:
- ✓ Port #1: 10/100/1000Base-T RJ45 Copper port
- ✓ Default IP address: 192.168.168.81
- Ethernet Port #2,3,4
- ✓ Port #2: 10/100/1000Base-T RJ45 Copper port
- ✓ Port #3, 4 are SFP ports that support multiple 100 Base and 1000 Base Options
- ✓ Must be in Internal Zone to access the G100
- Support Access: MCP Local Configuration Utility (mcpcfg) / MCP Settings GUI / remote MCP Runtime HMI / MCP Runtime HMI via Remote Desktop

Serial Maintenance Port:

- Default serial maintenance port: Serial port #4 with a Baud rate 115200
- Support Access: MCP Local Configuration Utility (mcpcfg)







MCP Local Configuration Utility (mcpcfg) or MCP Settings GUI

To configure MCP system settings and perform the initial MCP setup (e.g., Users, network, serial, time sync etc.)

MCP Runtime HMI

To view and control the runtime statistics including One-line diagrams and to configure the MCP Settings (e.g., User Management, Automatic Login etc.)



Local KVM – Local HMI Taskbar Functions

The Local HMI provides access to the G100 through a local substation computer setup via KVM. The Taskbar shown in the Local HMI on the bottom of the screen provides the following functions:



- 1. Access to Start applications
- Minimize all windows and Show Desktop 2.
- Switch between active windows and workspaces 3.
- Launch a Terminal session to the MCP shell 4.
- 5. Launch MCP System Settings GUI
- Launch MCP Emergency access 6.
- 7. Launch Local Runtime HMI
- **Network Interface 0 statistics** 8.
- Memory statistics 9.
- **10. CPU statistics**
- 11. Local time clock

			05:24:37 PM
		8 9 10	11
<u>⊾ T</u> erminal			Terminal
🗾 <u>S</u> ystem Settings			System Settings
🗾 <u>m</u> cpemergency			mcpemergency
Applications			Applications
System			<u>System</u> ►
Windows •	2. Workspace 2		<u>W</u> indows
Se <u>t</u> tings	<u>3</u> . Workspace 3	•	Se <u>t</u> tings
Logout	<u>4</u> . Workspace 4		Logout
G100 _ 🔁 🖬 🖬	<u>W</u> indow list	Alt+Ctrl+Esc	G100 _ 🔁 🖬 🖬 📓
nal 🗾	<u>[</u> erminal	<u></u> ≣ <u>T</u> erminal	
n Settings	System Settings	🗾 <u>S</u> ystem S	ettings
mergency 🗾	<u>m</u> cpemergency	🗾 <u>m</u> cpemer	gency
ations 🕨 🖻 🖉	Applications	<u>Application</u>	ons 🔹 🕨 🖳 <u>G</u> 100 HMI
n 🕨 🗀 🖻	System •	<u>System</u>	►
ws 🕨 🗓	<u>N</u> indows	<u>W</u> indows	
gs 🔸 S	Se <u>t</u> tings	Se <u>t</u> tings	•
t <u>I</u>	_ogout	<u>L</u> ogout	
🔁 🗖 🗖 🖬	.00 _ 🔁 🖬 🗖	G100 _	



							05:2	4:37	PM
			;	8	9	10		11	
							Term	vinal	
							Syste	em Settin	gs
							<u>т</u> сре	emergen	су
•							Appli	cations	•
•							<u>Syste</u>	em	•
	2. Workspace	2					Wind	ows	•
•	<u>3</u> . Workspace	3				•	Se <u>t</u> tii	ngs	
	<u>4</u> . Workspace	4					<u>L</u> ogo	ut	
>_	<u>W</u> indow list		Alt+	-Ctr	1+E	sc	G100 _	- 🔁 🗖	D
		_			_				
<u>T</u> er	rminal			<u>>]</u>	ern	ninal			
<u>Sys</u>	stem Settings	_		<u>}_</u>	yste	em S	ettings		
<u> </u>	pemergency			<u>>_ [</u>	<u>n</u> cp	eme	rgency		100111
	plications				<u>A</u> ppl	icatio	ons		100HMI
<u> </u>	stem	•		<u> </u>	byste	em			
<u>W</u> ir	ndows			V	vinc	iows			
Set	tings	•		S	<u>et</u> ti	ngs		•	
Log	jout			Ī	ogo	ut			
G100	_ 🔁 🖬 🖬			G1	00	_ \C) .	N	

The Color theme can be changed using Start \rightarrow Settings \rightarrow Themes

The Local HMI and all running applications can be restarted using Start \rightarrow Logout

Local KVM – Screen Layout and Virtual Keyboard

Screen Layout

- Screen/Monitor layout and resolutions may be configured using Screen Layout utility
- This utility can be launched from Local HMI start menu using Start → System → **Screen Layout**
- G100 supports single monitor only. Once connected, the monitor becomes the Primary
- The minimum resolution supported in Local HMI is 1280x1024 and the recommended resolution is FHD (1920x1024) or higher

Virtual Keyboard

- A virtual keyboard may be displayed on the screen using Start → System → **OnBoard**
- Clicking on the top right X will close the virtual keyboard





The configured layout will always be persisted once the Screen Layout utility is closed. And whenever the HMI is relaunched, it will open as per the last configured layout

	=	œ		21
P	[1	-1	6 4
4		1	**	Abc
	/ 1			123
+	+	1	4	
				- CO104951 Pt



Local KVM – MCP Local Configuration Utility (mcpcfg)

The MCP Gateway Local Configuration Utility (mcpcfg) is used to configure system level settings on the G100

Once the G100 device is powered up and has a valid license installed, click on the G100 name via the taskbar then click **Terminal**

<u>⊾ T</u> erminal					
System Settings					
📧 <u>m</u> cpemergency					
Applications					
⊡System ▶					
<u>W</u> indows					
Se <u>t</u> tings					
<u>L</u> ogout					
G100 _ 🔁 🖬 🖬 🖬					

A default Terminal application will be opened showing Login screen

- Login using Administrator credentials
- Shell based command line interface
- Type "sudo mcpcfg" and the user password when prompted

Proceed with the settings

F	M11 1	tilin	MCP	Firm
		0 4 4 4 4		

admin@G100:~\$ sudo mcpcfg [sudo] password for admin:

				_	=	=	=	=	=	
	G	a	t	ew	a	v		(G	
					_	1	=	ì	_	
	0				В	a	С	k		
	1				С	0	n	f	i	
	2				С	0	n	f	i	
	3				С	0	n	f	i	
	4				С	0	n	f	i	(
	5				С	0	n	f	i	(
	6	;.			С	0	n	f	i	
	7				С	0	n	f	i	
	8				R	e	3	e	t	
	9				R	e	3	e	t	
	1	0			R	e	3	e	t	
	1	1			L	0	С	a	1	
	1	.2			С	0	n	f	i	
	1	.3			R	e	d	u	n	
	1	.4			A	R	R	Μ		
	1	.5			S	u	p	p	r	
	1	6			E	m	u	1	a	
	1	7			С	0	n	f	i	
	1	8			С	0	n	f	i	
	1	9			С	0	n	f	i	
	2	0			E	d	g	e	0	
	2	1			С	1	e	a	r	
	2	2			R	e	3	t	0	
	2	3			R	e	S	t	0	
	2	4			R	e	b	0	0	
Enter	You	r		Ch	0	i	C	e		

ware Release 310 Production Build 153 2023-08-18:00:01:30



00) Settings Menu

ure Authentication ure Network Settings ure Network Interfaces ure Secure Access ure Firewall ure Host Names ure Time & Time Sync System Logs Database Tables File Persistence Data HMI gure Sync Manager lancy ss Forced Qualities To Masters e D20 RTU IEC101 DPA Unbalanced Mode Functionality gure IEC101+104 DPA Startup Quality Event Suppress Interval ure Serial Ports gure D.20 Port Settings Host Chassis Intrusion State (Not available in G100) e Clone Snapshot e Factory Default Device (Between 0 and 24):

This interface is the Shell based equivalent of the MCP Settings GUI

Only one instance is allowed to run at any given time across both "mcpcfg" and "MCP Settings GUI".



Local KVM – MCP Settings GUI

The MCP Settings GUI is the Web based equivalent of the MCP local Configuration Utility (mcpcfg), is used to configure system level settings on the G100

Once the G100 device is powered up and has a valid license installed, click on the G100 name via the taskbar then click System Settings

<u>T</u> erminal	
System Settings	
🗾 <u>m</u> cpemergency	
Applications	۲
<u>System</u>	×
<u>W</u> indows	۲
Se <u>t</u> tings	۲
Logout	
G100 _ 🔁 🗷 🗷	

A default web browser will be opened showing MCP Settings Login screen

Login using Administrator credentials

Proceed with the settings

MCP Settings	
💄 <u>admin</u>	
Password	
Login	



Gateway

eway Settings	Logged in as: admin Logout
Configure Authentication	
Configure Network Settings	
Configure Network Interfaces	
Configure Secure Access	
Configure Firewall	
Configure Host Names	
Configure Time & Time Sync	
Reset System Logs	
Reset Database Tables	
Reset File Persistence Data	
Local HMI	
Configure Sync Manager	
Redundancy	
ARRM	
Suppress Forced Qualities To Masters	
Emulate D20 RTU IEC101 DPA Unbalanced Mode Functionality	
Configure IEC101+104 DPA Startup Quality Event Suppress Interval	
Configure Serial Ports	
Configure D.20 Port Settings	
EdgeOS Host	
Clear Chassis Intrusion State	
Restore Clone Snapshot	
Restore Factory Default	
Reboot Device	

The functionality of the system is identical when system is configured via MCP Setting GUI or MCP Local Configuration Utility (mcpcfg). The only difference is that settings GUI is a Web based interface

Local KVM – Local MCP Runtime HMI

Local Runtime HMI will be started automatically once G100 is powered up and has a valid license installed

Local Runtime HMI can be launched by clicking on the G100 name via the taskbar then click **Application** \rightarrow **G100HMI**

The Local Runtime HMI access is protected by a Login screen that requires a username and password

If configured with Auto Login, then Local Runtime HMI will be launched automatically with G100 Home Page and the configured user privileges

Local HMI Settings

From system settings (mcpcfg or MCP Settings GUI), you can:

- Configure the settings of the monitor
- Enable/Disable Standby HMI Redirect to Active

Standby HMI Redirects to Active

If the Standby HMI redirects to the Active G100 when redundancy is enabled, both the Local HMI monitors connected to each G100 unit points to Active MCP only

The Local HMI Power Bar on each G100 indicates whether the Local HMI is showing information for this G100 or the PEER G100



Local HMI Setti

General Settings

Active gateway acces

Screen Settings

Desktop Mode:

Monitor Horizontal

Monitor Horizontal

<u>⊾ T</u> erminal		
🗾 <u>S</u> ystem Settings		
🗾 <u>m</u> cpemergency		
Applications	≯	<u> G</u> 100НМІ
🖻 <u>S</u> ystem	≯	
<u>W</u> indows	►	
Se <u>t</u> tings	►	
<u>L</u> ogout		
G100 _ 🔁 🗷 🗷		Ŧ

GE Grid Solu	itions		- ×
MCP Sub	statio	n Gateway	
<u>U</u> se <u>P</u> as	rname: sword:	Login	
ings			
ss from standby HM	/II (redund	ancy): Disabled 🗢	
		DPMS Settings	
	Window	Standby Timeout (in mins, 0=disabled):	10
Refresh Rate (hz):	30-64	Suspend Timeout (in mins, 0=disabled):	20
Refresh Rate (hz):	50-90	Off Timeout (in mins, 0=disabled):	00
		Apply	Cancel

The Local HMI provides the same functions for local display and control as the remote HMI with few exceptions

The User Login level/role determines which Local Runtime HMI features and functions the user can have access to/support

Multiple users can use the MCP Runtime HMI simultaneously, using any of the Local/Remote/Remote Desktop concurrently

The number of concurrent users is configurable under **Systemwide** \rightarrow Access Manager \rightarrow Max Simultaneous Observers/ **Operators/ Supervisors**





Ethernet – MCP Local Configuration Utility (mcpcfg) via SSH

- Establish network connection between the PC and the G100 (any LAN port)
- Terminal session with SSH as Protocol type with Port number: 22
- Login with Administrator credentials
- Shell based command line interface
- Type "sudo mcpcfg" and the user password when prompted
- Proceed with the settings

Connection	×
Protocol:	SSH 🗸
-Connection se	ttings
Host name:	10.14.24.136 Port: 22
Login name:	admin
Private key:	
Login	
UNAUTHORIZE	ED ACCESS TO THIS DEVICE IS PROHIBITED
You must have device. All act governing this be reported to in accessing th	explicit permission to access or configure this ivities may be logged. Violations of policy device may result in disciplinary action and may law enforcement. There is no right to privacy is device.
User Name	admin
Password	
	Login Cancel

GE Multilin MCP Firmware Release 310 Production Build 153 2023-08-18:00:01:30 admin@G100:~\$ sudo mcpcfg [sudo] password for admin: Settings Menu ______ ure Authentication ure Network Settings ure Network Interfaces ure Secure Access ure Firewall jure Host Names jure Time & Time Sync System Logs Database Tables File Persistence Data HMI gure Sync Manager lancy ess Forced Qualities To Masters e D20 RTU IEC101 DPA Unbalanced Mode Functionality ure IEC101+104 DPA Startup Quality Event Suppress Interval ure Serial Ports ure D.20 Port Settings Host Chassis Intrusion State (Not available in G100) Clone Snapshot e Factory Default Device

	===	==	==	=	=	=	=	=	_
	G	at	ew	a	У		(G	1
	===	==	==	=	=	=	=	=	
	0			В	a	С	k		
	1			С	0	n	f	i	ç
	2			С	0	n	f	i	ç
	3			С	0	n	f	i	ç
	4			С	0	n	f	i	ç
	5			С	0	n	f	i	ç
	6			С	0	n	f	i	ç
	7			С	0	n	f	i	ç
	8			R	e	3	e	t	
	9			R	e	5	e	t	
	1	0.		R	e	3	e	t	
	1	1.		L	0	C	a	1	
	1	2.		С	0	n	f	i	ç
	1	3.		R	e	d	u	n	C
	1	4.		A	R	R	M		
	1	5.		S	u	p	p	r	e
	1	б.		E	m	u	1	a	t
	1	7.		С	0	n	f	i	ç
	1	8.		С	0	n	f	i	ç
	1	9.		С	0	n	f	i	ç
	2	0.		E	d	g	e	0	5
	2	1.		С	1	e	a	r	
	2	2.		R	e	3	t	0	1
	2	3.		R	e	S	t	0	1
	2	4.		R	e	b	0	0	t
Enter	You	r	Ch	0	i	C	9		

(Between 0 and 24):

The PC and the G100 shall be in the same subnet to establish communications

Ping is not enabled by default and can be enabled through the "Network Settings" option in mcpcfg

Ethernet – MCP Settings GUI via HTTPS

- Web based equivalent of the MCP local Configuration Utility (mcpcfg)
- Establish network connection between the PC and the G100 (any LAN port)
- Using a supported web browser, disable proxy and enter the G100's IP address with port number 8081 into the address bar
- User is required to confirm security certificate exception
- The MCP Settings Login screen is displayed
- Login with Administrator credentials
- Proceed with the settings

ee)	
MCP Settings	
admin	
Password	
Login	



Gateway

eway Settings	Logged in as: adm Logout
Configure Authentication	
Configure Network Settings	
Configure Network Interfaces	
Configure Secure Access	
Configure Firewall	
Configure Host Names	
Configure Time & Time Sync	
Reset System Logs	
Reset Database Tables	
Reset File Persistence Data	
Local HMI	
Configure Sync Manager	
Redundancy	
ARRM	
Suppress Forced Qualities To Masters	
Emulate D20 RTU IEC101 DPA Unbalanced Mode Functionality	
Configure IEC101+104 DPA Startup Quality Event Suppress Interval	
Configure Serial Ports	
Configure D.20 Port Settings	
EdgeOS Host	
Clear Chassis Intrusion State	
Restore Clone Snapshot	
Restore Factory Default	
Reboot Device	

The PC and the G100 should be in the same subnet to establish communication

Supported web browser: Internet Explorer, Microsoft Edge, Mozilla Firefox and Google Chrome

Only one instance is allowed to run at any given time between "mcpcfg" and "MCP Settings GUI".

Ethernet – Remote MCP Runtime HMI via HTTPS

The Remote Runtime HMI provides access to the G100 from a remote computer setup:

- Requires Windows x64 bit OS
- Requires download and installation of setup file
- The remote MCP Runtime HMI runs as a standalone application.
- Once launched, the login mode is always secure HTTPS and the default port number is 443
- The User Login level/role determines which MCP HMI features and functions the user can have access to/support
- By customizing MCP Runtime HMI shortcut, user can predefine the login User, IP Address, or Remote Port.
- When Remote HMI auto login is enabled, the configured user screen is launched automatically with the configure user and privilege level

User Management 🔒 Authentication 😔	Automatic Login
Name	
Local UI Automatic Login	false
Local UI Automatic Login Wait Time	60
Local Automatic Login Privilege Level	Observer
Local Automatic Login User	
Remote UI Automatic Login	true
Remote UI Automatic Login Wait Time	60
Remote Automatic Login Privilege Level	Observer
Remote Automatic Login User	auto_observer

MCP Runtin	me HMI v3.0 Properties X	Login (172,12,236,215)	- X
Security	Details Previous Versions	Login (1) 2.12230.213)	
General	Shortcut Compatibility	GE	
P. 19	ICP Runtime HMI v3.0	Grid Solutions	
Target type:	Application		
Target location	x 3.0		
Target:	_v3.0.exe" -host 172.12.236.215 -usemame admin	MCP Substation Gate	way
Startin	"C:\Program Files\MCP Runtime HMI\3.0\"		
Shortcut key	None	<u>U</u> sername: admin	
Run:	Normal window ~	Password:	
Comment:	MCP Runtime HMI v3.0	Login	
Open File I	ocation Change Icon Advanced		
_			
	OK Canad Analy		
	On Canon Apply		
		G100 (10.47.255.139)	– @ ×
us Tren Operat	. Connectio ARRM Point Logs Histo SOE Acti !	Esystem Stat	G1 Fri Dec 22, 2023 Standalo 10:52:27 (E ST) Us Administrat Settin Help
cree Not	Stat Deta Even Alar		
	_		
		@ G100 *	



Installation of Java/JRE on the Windows PC is not required.

After successful login, the MCP runtime HMI shows either G100 or G500 automatically, by detecting the connected device type.

The G100 contains a lock out feature which prevents you from logging in after several failed attempts for a set period.

Lagring & Development &

Ethernet – MCP Runtime HMI via Remote Desktop (RD)

Starting with MCP v3.00 is possible to connect to a separate instance of the Local HMI using Remote Desktop (RD)

- Requires a Remote Desktop MCP license and a separate RD HMI Application installed using PETC based workflow
- RD sessions use the Windows Remote Desktop Connection application
- For security reasons, all RD sessions are handled inside an RD SSH tunnel.
- Only user declared Rdtunnel role will be able to initiate the RD SSH Tunnel session.
- Only one RD session is allowed at a time

RD Configuration and Settings

- Declare users with Rdtunnel role
- Enabled /Disabled RD functionality
- Configure RD inactivity timeout (default 15 mins)

Connections Client Maps	s Server Map System Point Manager Alarm Calculat	or Data Logger	
Systemwide Setting	gS 😸 Save		
System	Name		
Event Logger	Max Simultaneous Observers	8	
Cocale	Max Simultaneous Operators	4	
Access Manager	Max Simultaneous Supervisors	5	
	Inactivity Timeout for Local HMI (min)	15	
	Inactivity Timeout for Remote HMI (min)	1,440	
	Inactivity Timeout for command line operations (min)	15	
	Lockout Count	5	
	Lockout Duration	15	
	Remote Desktop Functionality	Enabled	
	Remote Desktop Inactivity Timeout(min)	10	
	Remote Desktop Functionality Remote Desktop Inactivity Timeout(min)	Enabled 10	

Command Pro

C:\>ssh -N -p UNAUTHORIZED

You must have may be logged action and may ing this devid rduser1@192.16



mpt	- ssh -N -p 53389 -L 33389:127.0.0.1:3389 rduse	er1@192.168.1	68.81			_		×
53	389 -L 33389:127.0.0.1:3389 rdu ESS TO THIS DEVICE IS PROHIBITED	ser1@192. D	168.	168.81				
ex / b ce. 58.	plicit permission to access or o Violations of policy governing t e reported to law enforcement. 168.81's password:	configure this devi There is	thi ce m no	s devid ay resu right t	te. Al alt in to priv	l act disci acy i	iviti plina n acc	25 ^y 255
	Remote Desktop Connection				×			
	Remote Desktop)						

Connection

	/	
General	Display Local Resources Experience Advanced	
Logon s	ettings	1
	Enter the name of the remote computer.	
	<u>C</u> omputer: 127.0.0.1:33389 ~	
	User name: hmi	
	Saved credentials will be used to connect to this computer. You can edit or delete these credentials.	
op Conned	ction	- 0
GE Grid	Solutions	- ×
ЛСР	Substation Gateway	
	Username: Password: Login	

The RD HMI application is not included in firmware images of MCP 3.0 (G100 and G500), unless was factory ordered

Users can operate independently the KVM Local HMI and the RD Local HMI Sessions

RD sessions with HMI application runs in the target device. The user experience, relative to performance, depends on the target device resources and speed.

Serial Maintenance Port – MCP Local Configuration Utility (mcpcfg)

- Connect a RS232 cable between your computer and the serial maintenance port of the G100
- The default serial maintenance port is serial port #4 configured as RS232 at 115200 bps
- Launch the Terminal Application such as Secure Terminal Emulator from the DS Agile Studio folder in the start menu
- Select **File \rightarrow Connect** and ensure the Protocol is set to Serial Port. Select the PC serial port for the connection to G100 with Baud rate – 115200 and then Connect.
- Login with Administrator credentials at the G100 command shell prompt.
- Type "sudo mcpcfg" and the user password when prompted
- Proceed with the settings

Connection		×
Protocol: Serial Port ~		
Port settings Serial port: COM2: Communications Port The settings Serial port: COM2: Communications Port The settings The settings <	Ŧ	
Connect		



	Gate	way	(G10
		====	
	Ο.	Bac	: k
	1.	Cor	figu
	2.	Cor	figu
	з.	Cor	figu
	4.	Cor	figu
	5.	Cor	figu
	6.	Cor	figu
	7.	Cor	figu
	8.	Res	et S
	9.	Res	set D
	10.	Res	et F
	11.	Loc	al H
	12.	Cor	figu
	13.	Red	lunda
	14.	ARF	M
	15.	Sup	pres
	16.	Emu	late
	17.	Cor	figu
	18.	Cor	figu
	19.	Cor	figu
	20.	Edg	reOS
	21.	Cle	ar C
	22.	Res	tore
	23.	Res	tore
	24.	Reb	oot
Enter Y	our C	hoid	;e :

GE Multilin MCP Firmware Release 310 Production Build 153 2023-08-18:00:01:30 Settings Menu e Authentication Network Settings Network Interfaces Secure Access Firewall e Host Names e Time & Time Sync stem Logs atabase Tables le Persistence Data re Sync Manager Forced Qualities To Masters D20 RTU IEC101 DPA Unbalanced Mode Functionality e IEC101+104 DPA Startup Quality Event Suppress Interval e Serial Ports re D.20 Port Settings ost assis Intrusion State (Not available in G100) Clone Snapshot Factory Default Device

Between 0 and 24):

Only one instance is allowed to run at any given time across both "mcpcfg" and "MCP Settings GUI".





Thank You for Watching this Module.

If you are watching this as part of a structured learning program, please don't forget to take the test.

Learning & Development Thank You





Technical Support by Location

Protection & Control or Automation North America, Latin America

GA.SupportNAM@ge.com The North America: 1-800-547-8629 Thermational: 1-877-605-6777

Europe

GA.SupportERCIS@ge.com

Monitoring & Diagnostics Worldwide

 \boxtimes contact.center@ge.com ***** +44 (0) 1785 250 070

Industrial Communications Worldwide

The North America: 1-800-474-0964 Thermational: 1-585-242-8311 Learning & Development By Location

Protection & Control or Automation North America, Latin America

training.multilin@ge.com

Europe GA.SupportERCIS@ge.com

Montpellier, France Grid-sam-training@ge.com ***** +33 4 67 54 21 50

Monitoring & Diagnostics Worldwide

Trainingevents.ManD@ge.com

Industrial Communications Worldwide ⊠ training.mds@ge.com

Regional Contact Information

North America

GA.SupportNAM@ge.com **1**-877-605-6777

Toll Free in North America * +1-678-844-6777 Tirect: 1-800-547-8629

Latin America

GA.SupportLAM@ge.com *****+55-113-618-7308

Europe

GA.SupportERCIS@ge.com +34- GA.SupportIND 94-485-8854

Middle East & Nort

- GA.SupportMer
- ***** +971-429-9666

India

Contact Us

GE Grid Solutions Website



http://www.gegridsolutions.com http://www.gegridsolutions.com/Resources

Follow Us On Social Media



https://www.youtube.com/user/ **GEGridAutomationLD**

th Africa nat@ge.com	France:	SAM_Aftersales@ge.com	UK \square GA.Support@ge.com
	Russia:	Support.AMR@ge.com	Asia
@ge.com	Spain:	GA.SupportERCIS@ge.com	GA.SupportCEAP@ge +65-6210-5337





e.com



Copyrights 2024

This content and the information contained within is the exclusive property of General Electric Company. You may not copy or duplicate this content in whole or in part without the prior written permission of GE Vernova.

The information contained in this content is subject to change without notice.

Trademark Notices GE and Service marks of GE Vernova.

Learning & Development Copyrights







