## Using the Agilent PreConfiguration Utility with Agilent Instrument Control Framework (ICF) Support Version 2.2

To perform system setup using the Agilent PreConfiguration Utility in Empower:

## Preparing for a new system configuration:

1. Set the IP of the LAN to the desired static address using Agilent Instant Pilot.

To work with an Empower LAC/E<sup>32</sup> module, it is best to assign an address in the subnet of 192.168.0.x because the Instrument LAN on the LAC/E<sup>32</sup> will have a default address of 192.168.0.1 and a subnet mask of 255.255.255.0. If the component is pre-configured with an address on the 192.168.254.x subnet, then either change the IP on the LAC/E<sup>32</sup> to match the subnet via Waters DHCP Configuration Wizard, or reassign a static address on the instrument to match the default of 192.168.0.x subnet.

- 2. If the PreConfiguration Utility was used in prior attempts to set up the system, make sure to delete the created entry.
- 3. If a chromatographic system was previously created in Empower, you need to delete it through the Configuration Manager.
- 4. Access the node Properties and delete the entries in the Instruments tab as well as in the Waters DHCP Configuration window.
  - **NOTE:** Delete the system only if there is no access tied to this system.
- After you delete the node in the Configuration Manager, then log completely out of Empower and connect remotely to the LAC/E<sup>32</sup> node to delete the instsrv.dat file in C:\Empower\instrumentServer\.
  - **NOTE:** Delete this file only if all systems connected to the node have been deleted, and if the node has been deleted from the Empower Configuration Manager.

## Using the Agilent PreConfiguration Utility

- 6. Create a new node by remotely connecting to the LAC/E<sup>32</sup> node and logging into Empower directly on the node, and then specify the Time Zone for the node.
  - **NOTE:** You may want to verify the creation of a system by the same method used to access the PreConfiguration Utility in prior attempts, either:
    - The LAC/E<sup>32</sup> standalone executable C:\Empower\Instruments\Agilent\ Agilent.InstrumentControl.InstrumentPreConfigurator.exe, or
    - The Empower Configuration Manager Configuration Manager > Tools > Agilent PreConfiguration > Connect to Host or IP of LAC/E<sup>32</sup> Node
- 7. Log out of Empower from the LAC/ $E^{32}$  and close Empower.



- **NOTE:** Starting with Agilent ICF Version 2.2 with ICF Version A.02.03 Driver Update 2 (DU2), you should always access the PreConfiguration Utility using the Empower Configuration Manager rather than the LAC/E<sup>32</sup> standalone executable.
- 8. Log in to Empower from any client or through Citrix. In the Configuration Manager, select **Tools > Agilent PreConfiguration**.

🐣 WAT10 as Iwang/Administrator	- Configu	aration Manager	- • •
File Edit View Records Too	ols Help		
🔊 🖥 💁 💣 🗙	Empowe	er SQT	ilter By: Default
🖃 🖶 Empower 3 Configura	Empowe	er Analytics	
	Agilent	PreConfiguration	
🗐 Nodes			
		20 Valid_OGApex	
🗄 🛷 Libraries		21 Valid_OQMVM	
⊕ • • • • • • • • • • • • • • • • • • •	-	<	+
			23 T //

9. Enter the host name or IP address of the LAC/E<sup>32</sup> node and click **Connect**.

📁 Configuration Directo	ry: Disconnected	- • •
IP Address / Host Name	GssLaceC15	Connect
New Dele	te Configure	Exit
New Dele	te Configure	Exit

10. When you are connected to the node, click **New**.

📁 Configuration Direct	ory: Connected to GssLace	C15 🗖 🗖 💌
IP Address / Host Name	GssLaceC15 Co	onnect
New Deli	ste Configure	Exit

11. In the Configuration Editor window, select **Agilent 1100/1200/1260/1290 LC** and click **Auto Configure**.

5 Configuration Editor		
	< Auto Configure	
		Up Down Configure Clear Ok Cancel

- **NOTE:** Before you try the next step, make sure that you are able to ping the IP address of the Agilent LC System from the LAC/E<sup>32</sup> Command Prompt window.
- 12. In the Automatic configuration parameters dialog box, select **IP address**, enter the static IP address that you assigned to the Agilent LC System, and then click **OK**.

Automatic configuration para	ameters 🔀
IP address     192.16     Hostname	68. 0. 21
6	OK Cancel

If you successfully connect to the Agilent LC System, continue to Step 16.

If an Automatic Configuration failed message appears, it is possible that there is already an existing connection to the instrument. Access the Windows Task Manager by rightclicking the **Task Bar** and selecting **Start Task Manager**. 13. In the Task Manager, select the **Processes** tab, select **AgilentPlugInServer.exe \*32** and then click **End Process**.

Applications Pro	ocesses	Services	Performa	ance N	Vetwork	king Users	;	
Image Name CPU Memory (								
AgilentPlugIn	Server.exe	e *32	SYST	ГЕM	00	17,428	=	
AuthManSvr.	.exe *32		lwan	g	00	4,840		
ccSvcHst.exe	e *32		SYST	ΓEM	00	11,212		
ccSvcHst.exe	e *32		lwan	g	00	1,744		
cmd.exe			lwan	g	00	1,356		
cmgr.exe *3	2		lwan	g	00	1,556		
concentr.exe	e *32		lwan	g	00	4,224		
conhost.exe			lwan	g	00	2,164		
csrss.exe			SYST	ΓEM	00	2,732		
csrss.exe			SYST	ΓEM	00	2,144		
csrss.exe			SYST	ΓEM	00	6,932		
dwm.exe			lwan	g	00	1,728		
Empower.exe	e *32		lwan	g	00	1,024		
eqmtftps.exe	е		SYST	ſΕΜ	00	2,004	÷	
•						÷.		
Show proce	esses from	all users			Fr	od Process	-	

- 14. Next, select the **InstrumentServer.exe** \*32 process and click **End Process**.
- 15. Repeat Step 12.
- 16. When you have successfully connected to the Agilent LC System, the appropriate instrument configuration appears on the right side of the Configuration Editor.

Configuration Editor			- • •
	Auto Configure	Quat. Pump (G4204A:DEBAN01064) HiP Sampler (G4226A:DEBAP05830) Column Comp. (G1316C:DEBAC09052) DAD (G4212A:DEBAF01415)	
		Up Down Configu	re Clear Cancel

17. If there are any special changes or adaptations on your Agilent LC stack, such as allowing control of the G1330A/B in an Empower instrument method, changing syringe size on the sampler, or adding an extension loop to allow a larger injection volume, then make these adjustments by selecting the appropriate component and identifying these changes.

In the example below, **Thermostat controlled by method** is selected in the configuration of the HP G4226A to allow the Agilent G1330A/B Autosampler Thermostat to be controlled by Empower in the instrument method.

🗊 Configuration Edit	or					
	H000 H000 L0				Quat. Pump (G4204A:DEBAN01064)	
Agilent 1100/1200     Agilent 1120/1220	/1260/1290 LC				HiP Sampler (G4226A:DEBAP05830)	
	Configure HiP Sampler			×	DAD (G42126-DEBAE01415)	
	l ype IU	G4226A	•			
	Serial number	DEBAP05830				
	Firmware revision	A.06.54 [006]				
		Connection settings.				
	Options					
	Syringe	20 🔻	μΙ			
	Seat Capillary	1.2 💌	μΙ			
	Max. injection volume	20.00	μ	-		
	External contacts bo	ard installed		=		
	use BCD port for					
	Location	Binary Output				
	BCD port output	format				
	I BCD I	Binary				
	Thermostat installed					
	☑ Thermostatico	ntrolled by method				
		I I I I I I I I I I I I I I I I I I I				
	Flexible Lube installe	a		-	Up Down Config	ure Clear
	Help	OK	Cance		Πk	Cancel

- **NOTE:** Refer to <u>TECN134909208</u> for more information on using the G1330A/B Thermostat with Empower. For other uses of the PreConfiguration Utility, such as changing the syringe or seat capillary, you will have to restart the LAC/E<sup>32</sup> in order for the changes to take effect.
- 18. When you are finished making changes in the PreConfiguration Utility, click **Ok** to close the Configuration Editor.
- 19. If you are finshed configuring systems, click **Exit** to close the Configuration Directory dialog box and continue to Step 20.

If you have another system that you want to set up, repeat Steps 10 through 19.

## Creating a new system in Empower

20. In the Empower Configuration Manager, right-click the desired node and select **Properties**.



21. In the Node Properties dialog box, click **Configure DHCP**.

Node 'Gsslacec15' Properties	×
General Instruments Serial Ports Configure DHCP Access IQ Info IQ/0Q	
The Waters DHCP Server is designed to work automatically without user intervention but in some cases you will need to change or specify DHCP settings for the instrument network or third-party instruments in your laboratory.	
Click the button below to configure third-party Ethernet instruments on this node or to use a different IP address range for your instrument network.	
Configure DHCP	
OK Cancel H	elp

22. In the Waters DHCP Server Configuration window, click **Add** to manually add the static IP address of your Agilent LC System.

Reference Server He	Server Configuration			٢.
	·γ 			_
IP Address	MAC Address	Туре	Name	_
•				
				1
	Add	Edit Remo	ve OK	J

23. In the Add IP Address dialog box::

- Enter the static IP Address that you assigned to the Agilent LC System in Step 1.
- Enter he MAC address of the Agilent LC System.
- Select AgilentLC as the Instrument Type.
- Enter the Serial Number or Unique Name of the System in accordance with your applicable SOP.
- Click OK.

Add IP	Address	X
	IP Address	192 . 168 . 0 . 2
	MAC Address	00 - 30 - D3 - 1F - 84 - B9
	Instrument Type	AgilentLC
	Serial Number/ Unique Name	1290AgilentLC
		_
	ОК	Cancel

24. Click **OK** in the Waters DHCP Server Configuration window.

船 Waters D File Server	HCP Serve Help	r Configuration					
IP Address	;	MAC Address		Туре		Name	
192.168.0	.2	00-30-D3-1F-84-B	9	AgilentLC		1290Agi	lentLC
•							4
		Add	Edit		Remove		ОК

25. In the Node Properties dialog box, select the Instruments tab and click **Scan Instruments** to add the new system to the table. The OK? column status should indicate Yes.

Click **OK** to update the Node Properties with the scanned system and close the dialog box.

Node 'Gsslacec15' Properties							
General	Ins	struments	Serial Ports   Configure DHCF	Access	IQ Info   IQ/OQ		
	Ē	Туре	Address	OK ?	Serial Number		
	1	AgilentLC	AgilentLC#1290AgilentLC	Yes			
	•	III			۴		
Scan Instruments Remove Instrument							
			40		Cancel H	lelp	

26. To create a chromatographic system in Empower, right-click on **Systems** in the Empower 3 Configuration tree and select **New > Chromatographic System**.



27. In the Type Entry page of the New Chromatographic System, Wizard select **Create New System** and select **Next**.

New Chromatographic System	Wizard - Type Entry	x
	Choose to define a new chromatographic system, or to connect to a system which already exists. System Type Create New System Connect to Existing System	
	< <u>B</u> ack <u>N</u> ext > Cancel He	elp

28. In the Select Server page, select the appropriate  $LAC/E^{32}$  node and click **Next**.



29. In the System Selection page, select the **Agilent System** from the Unused Components list in the left pane and drag it to the New System list in the right pane, and then click **Next**.

New Chromatographic S	System Wizard - System Selection	×	
New Chromatographic S	System Wizard - System Selection Drag desired instruments from the Av New System Instruments list. Note: You may open existing System New System Instruments list. Available Instruments	ilable Instruments list to the s and drag instruments to the New System Instruments ■ ♣ New System ▲ AgilentLC#1290Agilentt	
	<	< Þ	
	< <u>B</u> ack <u>N</u> ext >	Lancel Help	

30. In the Access Control page, select **Share System with Other Network Users**, select the appropriate Allowed Access setting and Allow Access to Group(s) choice(s), and then select **Next**.

New Chromatographic Sy	stem Wizard - Access Control  Share System with Other Network U  Allowed Access Ouvner Only Ouvner and Group(s) Ouvner, Group and World Password Protect System Access Password Required Password Confirm Password	sers Allow Access to Group(s) Administrators Agilent_LC_SOT Guests
	< <u>B</u> ack <u>N</u> ext >	Cancel Help

31. In the Name Selection page, enter a **System Name** and any system-related or Audit Trail comments in the **System Comments** box. Ensure that the **Online** check box is selected and click **Finish** to exit the wizard.

New Chromatographic System Wizard - Name Selection	×
System Name: AgilentLC1290 Node Name: Gsslacec15 V Online System Comment	
< <u>B</u> ack Finish Cancel	Help

32. The Configuration Manager displays a message informing you that the system is online. Click **OK**. The system is now ready for use.



**NOTE:** When making any changes to a system, you should consider the applicable Standard Operating Procedures (SOPs) and complete the appropriate documentation and validation.