

PROFICY® SOFTWARE & SERVICES

PROFICY HISTORIAN

Quick Installation Guide



Proprietary Notice

The information contained in this publication is believed to be accurate and reliable. However, GE Vernova assumes no responsibilities for any errors, omissions or inaccuracies. Information contained in the publication is subject to change without notice.

No part of this publication may be reproduced in any form, or stored in a database or retrieval system, or transmitted or distributed in any form by any means, electronic, mechanical photocopying, recording or otherwise, without the prior written permission of GE Vernova. Information contained herein is subject to change without notice.

© 2024 GE Vernova and/or its affiliates. All rights reserved.

Trademark Notices

"GE VERNOVA" is a registered trademark of GE Vernova. The terms "GE" and the GE Monogram are trademarks of the General Electric Company, and are used with permission.

Microsoft[®] is a registered trademark of Microsoft Corporation, in the United States and/or other countries.

All other trademarks are the property of their respective owners.

We want to hear from you. If you have any comments, questions, or suggestions about our documentation, send them to the following email address: doc@ge.com

Contents

Historian Quick Install Guide	3
Install the Historian Server	
Install Web-based Clients	12
Register with Configuration Hub	29
Install Collectors	
Perform Post-Installation Tasks	35
Setting up Configuration Hub for Historian	36
Upgrade	36
About Setting up Configuration Hub	36
Access Configuration Hub	36
Historian Plugin Management in Configuration Hub	42
Common Tasks	54

Historian Quick Install Guide

Install the Historian Server Using the Installer

- set up the Historian environment.
- If you want to install web-based clients and view Historian license information on Configuration Hub, you must provide the Configuration Hub and Proficy Authentication server details during installation. Therefore, ensure that you have already set up Proficy Authentication in Configuration Hub. For more information on setting up Proficy Authentication in Configuration Hub, refer to https://www.ge.com/digital/documentation/confighub/version2023/t_authentication_setup.html.
- If you are changing the role of a Historian server that was previously a distributed/mirror server to any other configuration (single-server or mirror primary server), you must first uninstall Historian.
- If you are installing a distributed/mirror server, use the same configuration, license key, installation drive, Proficy Authentication instance, and domain as the primary server.

This topic describes how to install the Historian server using the installer.

You can also install it at a command prompt.

- 1. Log in as an administrator to the machine on which you want to install the Historian server.
- 2. Run the InstallLauncher.exe file.
- 3. Select Install Historian Server.

The welcome page appears.

4. Select Next.

The license agreement appears.

5. Select the Accept check box, and then select Next.

The Where do you want to install Historian? page appears.



If needed, change the default installation drive of the Historian server, and then select Next.
 The Override the default Historian data Path? page appears.



 If needed, change the default folder of the log files, and then select Next. If you want to include the Historian server in a cluster, enter the path to the shared folder of the cluster.
 The Register with Configuration Hub page appears.



8. Select the **Use existing Proficy Authentication and Configuration Hub Instance** check box, and provide values as described in the following table.

This step is needed only in the following cases:

- \circ The Historian Server and the Web-based clients will be on two different machines.
- You already installed Proficy Authentication and Configuration Hub, and you want to use the Historian Web-based clients and view the Historian license information on Configuration Hub.

If you do not select the **Use existing Proficy Authentication and Configuration Hub Instance** during the installation, to use the Historian Web-based clients and view the Historian license information on Configuration Hub, you must use the Proficy Authentication Tool from the Start menu to register with Proficy Authentication and Configuration Hub servers.

If you do not have Proficy Authentication and Configuration Hub installed, and you intend to use the Historian Web-based clients and view the Historian license information on Configuration Hub, you can install them while installing the Web-based clients.

Note:

Proficy Authentication is required for user authentication. It provides identity-based security for applications and APIs. It supports open standards for authentication and authorization, including Oauth2.

By registering, you'll be able to work with Historian web information on Configuration Hub.	-based clients, and you can also view Historian license
Use existing Proficy Authentication and Cont	figuration Hub Instance
Proficy Authentication server name:	
Proficy Authentication Public https Port:	443
Proficy Authentication Admin Client Id:	admin
Proficy Authentication Admin Client Secret:	•••••
Configuration Hub server name:	
Configuration Hub Public https port:	5000
	Test Connection
Test Connection Status: Test connection with P pending; click Test Connection	roficy Authentication and Configuration Hub is
Ensure to provide the highly privileged admin C installing Proficy Authentication Server	Client ID and Secret which was created while

Field	Description
Proficy Authentication server name	Enter the name of the machine on which the Proficy Authentication server is installed. If the machine uses a fully qualified domain name (FQDN), provide the FQDN. By default, the local hostname is considered.
Proficy Authentication Public https port	Enter the port number used by the Proficy Au- thentication service. The default value is 443. Ensure that this port number matches the one

Field	Description
	on the TCP Port Assignments page during Web-based Clients installation.
Proficy Authentication Admin Client Id	The client ID to connect to the Proficy Authenti- cation service.
Proficy Authentication Admin Client Secret	The password to connect to the Proficy Authen- tication service.
Configuration Hub server name	The server name or the FQDN of the existing Configuration Hub server, as displayed in the address bar of the browser when you access Configuration Hub from the machine where Configuration Hub is installed.
Configuration Hub Public https port	The web server (https) port that you want to use for Configuration Hub. By default, it is 5000.
Test Connection	Option to test the status of the connection with external Proficy Authentication server.

Note:

If you change the Proficy Authentication server for Web-based Clients later, you must also change the Proficy Authentication server for the Historian server. This can be done using the Proficy Authentication Configuration Tool located at <Install Drive>:\Program Files\Proficy\Proficy Historian\x64\Server without the need to install the Historian server again. Alternatively, you can search for the Proficy Authentication Tool in the Windows search bar and open it.

9. Select Next.

The Historian Security Groups page appears.

Using Historian security groups provides an added layer of control over access to your Historian system.

By default, the option to create Historian security groups is not selected.



10. If you want the installer to create Historian security groups (*on page*), select the corresponding check box, and then select **Next**.

The Choose the type of install you want to perform page appears.



11. Select the type of the Historian server that you want to install, and then select Next.

- **Historian Single Server**: This is for a stand-alone Historian system, which contains only one Historian server. This type of system is suitable for a small-scale Historian setup.
- **Historian Mirror Primary Server**: This is for a horizontally scalable Historian system, which contains multiple Historian servers, all of which are connected to one another. Installing this server will allow you to add machines and distributed/mirror servers to this system.
- **Historian Distributed/Mirror Node**: This is for a horizontally scalable Historian system. Installing this server will allow you to add this node to a primary server.

The Historian Server Certificate-based Security page appears.

Historian Server	Certificate-based Secu	rity	1
riistonun server	Certificate-based Secu	ity is a	1
Enable Certificate-based	Security		
Root Certificate Password:	****		
Historian implements certifi among its core Historian ser installation types. You can d	icate-based security to strengthen the aut over services. By default, this is enabled for isable by unselecting the above option.	hentication mechan all Historian server	ism
If you are installing Historiar automatically configured by the security settings must b	n Single Server or Mirror Primary Server, th the installer. If you are installing Historian e manually configured after installation.	e security settings w Distributed/Mirror N	vill be lode,
For detailed instructions, ref in Historian.	fer the online help section: <u>Overview of the</u>	e Certificate-based S	ecurity
Cancel		Previous	Next

12. If you want to enable certificate-based security (MTLS-based security), leave the **Enable Certificate-based Security** check box selected, and then enter **Root Certificate Password**.

Note:

Ensure to use the same password to create MTLS (client) certificates. For more information on creating MTLS (client) certificates, refer to Generate MTLS certificate.

For more information on certificate-based security, refer to overview of the Certificate-based Security in Historian *(on page)*.

Warning:

If you do not select the **Enable Certificate-based Security** check box during the installation, you must generate the root certificates manually, as described in the Manually Install Certificates for Historian section. However, this is not recommended.

13. Select Next.

The You are ready to install page appears.

14. Select Install.

The installation begins.

15. After the installation, when you are asked to reboot your system, select Yes. The Historian server is installed on your machine in the following folder: <installation drive>:\Program Files\Proficy\Proficy Historian\x64\Server, and the following registry path is created: HKEY_LOCAL_MACHINE\SOFTWARE\Intellution, Inc. \iHistorian\Services.

In addition, the following components are installed:

- The RemoteCollectorConfigurator utility: A command-line tool, which allows you to manage collectors remotely. By default, it is located in the C:\Program Files\GE Digital \NonWebCollectorInstantiationTool folder. For instructions on using this utility, refer to About Installing and Managing Collectors Remotely.
- The Proficy Authentication Configuration tool: A utility that allows you to specify the Proficy Authentication server details to match with the Proficy Authentication server used by Webbased Clients. By default, it is located in the C:\Program Files\Proficy\Proficy Historian\x64\Server folder. For instructions on using this tool, refer to Register with Configuration Hub (on page 29).

Install Web-based Clients Using the Installer

1. Install the Historian server (on page 3). During the installation, in the **Register with**

Configuration Hub page, select the **Use existing Proficy Authentication and Configuration Hub Instance** check box, and the provide the Proficy Authentication server and Configuration Hub server details.

Note:

This step is needed only in the following cases:

- The Historian Server and the Web-based clients will be on two different machines.
- You already installed Proficy Authentication and Configuration Hub, and you want use the Historian Web-based clients and view the Historian license information on Configuration Hub.

If you do not select the **Use existing Proficy Authentication and Configuration Hub Instance** during the installation, to use the Historian Web-based clients and view the Historian license information on Configuration Hub, you must use the Proficy Authentication Tool (*on page 29*) to register with Proficy Authentication and Configuration Hub servers. If you do not have Proficy Authentication and Configuration Hub installed, and you intend to use the Historian Web-based clients and view the Historian license information on Configuration Hub, you can install them while installing the Webbased clients.



2. If you want to use Web-based Clients in a cluster environment, ensure that your network is enabled for multicast traffic, and set up high availability on each node in the cluster.

This topic describes how to install Web-based Clients using a GUI-based installer.

You can also install Web-based Clients using the command line.

During the installation, you can choose to use Web-based Clients in a cluster environment, thus ensuring high availability of connection to the Historian server using the client applications.

- 1. Run the InstallLauncher.exe file.
- 2. Select Install Web-based Clients.

The welcome page appears.

3. Select Next.

The license agreement appears.

4. Select the Accept check box, and then select Next.

The TCP port assignments page appears.

Public https port:	443
Proficy Authentication http port:	9480
Proficy Authentication database port:	9432
Historian http port:	8070
Historian database port:	8432

5. As needed, change the values for TCP port assignments as described in the following table, and then select **Next**.

Field	Description
Public https	Port for https protocol communication used by Web-based Clients (through a fire-
port	wall). The default value is 443. Ensure that this port number matches the one you
	specify while installing the Historian server. In addition:
	\circ If you will install Operations Hub later on the same machine, the value that
	you provide in this field is populated while installing Operations Hub.
	\circ If you have already installed Operations Hub on the same machine, this
	field is disabled and populated with the value you have provided while in-
	stalling Operations Hub.

Field	Description
Proficy Au- thentication http port	Port for http protocol communication used by the Proficy Authentication service. The default value is 9480.
Proficy Au- thentication database port	Port for the Proficy Authentication database. The default value is 9432.
Historian http port	Port for the http protocol communication used by Web-based Clients. The default value is 8070.
Historian database port	Port for the PostgreSQL Historian database. The default value is 8432.

The Fully Qualified Domain Name(s) page appears.

- If you will install Operations Hub later on the same machine, the value that you provide in the **FQDNs** field is populated while installing Operations Hub.
- If you have already installed Operations Hub on the same machine, the FQDNs field is disabled and populated with the value you have provided while installing Operations Hub.



6. In the FDQNs field, enter the fully qualified domain names, and then select Next.

This enables you to access Historian web applications remotely. You can use it to access the Web Admin console using alias names. Enter the values separated by commas.

To access the Web Admin console using any of the following URLs, enter

Test.abc.ge.com,localhost,127.0.0.1,aliasName

- https:// Test.abc.ge.com /historian-visualization/hwa
- https:// 127.0.0.1 /historian-visualization/hwa
- https:// aliasName /historian-visualization/hwa
- https:// localhost /historian-visualization/hwa

Important:

- Do not enter a space between the values.
- You must add the IP address and alias name in the hosts file located at C: \Windows\System32\drivers\etc. The IP address that you add must be a static or fixed IP address.

Format: <IP address> <alias name>



The **Cluster Configuration** page appears.

C	Cluster Configuration	E	
W	/ant to configure this as Cluster Node?		
N	ote: Select above check box if you want to install Web-based Clients in a clus chieving high availability.	ter environm	nent for
		-T	THE
		er se	
		R	
Ca	ncel	Previous	Next

If, however, you are upgrading Web-based Clients, this page does not appear. In that case, skip the next step.

7. If you want high availability of Web-based Clients, select the **Cluster Node** check box, and enter values as described in the following table.

Field	Description
Historian Database Folder	Provide the database folder in the shared dri-
	ve that you have created. The default value is
	C:\ProgramData\GE\OperationsHub. You
	<i>must</i> change this value.

Field	Description
Cluster FQDN	Enter the client access point of the role for which you have added the resources while set- ting up high availability <i>(on page)</i> .
Multicast Address	If needed, modify the common IP address that all the nodes in the cluster can use. Enter a val- ue between 224.0.0.0 and 239.255.255.255 (or a hostname whose IP address falls in this range).The default value is 228.0.0.4.
Historian Cluster Membership Port	If needed, modify the common port number that all the nodes in the cluster can use. The de- fault value is 45564. This port number, in con- junction with the multicast address, is used to create the cluster.
Historian Cluster Receiver Port	If needed, modify the multicast port number that you want to use for incoming Historian da- ta. The default value is 4000.

8. Select Next.

The **Proficy Authentication** page appears, allowing you to choose whether you want to install Proficy Authentication along with Web-based Clients installation or use an existing Proficy Authentication.



- If you want to install Proficy Authentication, clear the Use Existing Proficy Authentication check box. If you want to include Proficy Authentication in the cluster, you must install Proficy Authentication locally on each cluster node.
- If you want to use an existing Proficy Authentication server, select the Use Existing Proficy Authentication check box. Proficy Authentication is detected if you installed it using a unified installer or Operations Hub, or if Historian uses Proficy Authentication installed remotely from an earlier version.
- 9. If you want to install Proficy Authentication, enter the **Admin client secret**, re-enter the secret, and then select **Next**.

The admin client secret must satisfy the following conditions:

- Must not contain only numbers.
- \circ Must not begin or end with a special character.
- Must not contain curly braces.



The format of username for Historian Web-based Clients is <host name>.admin, where <host name> is the machine on which Web-based Clients are installed. And, the default client ID is admin. Both the host name and client ID are case-sensitive.

If, however, the Proficy Authentication server hostname is long, resulting in a username longer than 20 characters, Windows does not allow you to create the user. In that case, you can create a Proficy Authentication user, and then create the corresponding Windows user, using the uaa_config_tool utility.

- 10. Alternatively, if you want to use an existing Proficy Authentication service (that is, a Proficy Authentication instance already installed by an external application such as Operations Hub):
 - a. Select the **Use Existing Proficy Authentication** check box.

The fields for the existing Proficy Authentication service appear.

	or Proficy Authentication		
USEEXISUI	ig Proficy Authentication		
Proficy Au	thentication Base URL:		
Admin Clie	ent ID:		
Admin clie	nt Secret:	*****	Test Connection
Test Conn click Test (ection Status: Test conne Connection	ection with External Proficy Auther	ntication Server is pending;
Test Conn click Test (Note: Ensu Proficy Au	ection Status: Test conne Connection are to provide the highly p thentication Server.	ection with External Proficy Authen privileged admin Client ID which w	ntication Server is pending; vas created while installing
Test Conn click Test (Note: Ensu Proficy Au Note: The sensitive.	ection Status: Test conne Connection Ire to provide the highly j thentication Server. Username to login to Hist	ection with External Proficy Authen privileged admin Client ID which w torian web-based clients is <	ntication Server is pending; vas created while installing t.admin>. This is case-
Test Conn click Test (Note: Ensu Proficy Au Note: The sensitive.	ection Status: Test conne Connection are to provide the highly p thentication Server. username to login to Hist	ection with External Proficy Authen privileged admin Client ID which w torian web-based clients is <	ntication Server is pending; vas created while installing t.admin>. This is case-
Test Conn click Test (Note: Ensu Proficy Au Note: The sensitive.	ection Status: Test conne Connection The to provide the highly p thentication Server. Username to login to Hist	ection with External Proficy Authen privileged admin Client ID which w torian web-based clients is <	ntication Server is pending; vas created while installing t.admin>. This is case-

b. Enter values as described in the following table.

Field	Description
Profi-	Enter the URL of the external Proficy Authentication server in the following for-
cy Au-	mat: https:// <proficy authentication="" name="" server="">:<port number="">, where <proficy< th=""></proficy<></port></proficy>
thenti-	Authentication server name> is the FQDN or hostname of the machine on which
cation	Proficy Authentication is installed. By default, the port number is 443.
Base	
URL	Note:
	Do not enter a trailing slash character.
Admin	Enter the client name that you provided while installing the external Proficy Au-
Client	thentication. The default value is admin.
ID	
Admin	Enter the client secret that you provided while installing the external Proficy Au-
Client	thentication.
Secret	

c. Select Test Connection.

The results of the connection test appear. You cannot proceed until the connection is successful.

11. Select Next.

The **Configuration Hub Installation** page appears, allowing you to choose whether you want to install Configuration Hub along with Web-based Clients or use an existing Configuration Hub.

Use Existing Configuration H	ub:	
Install Location:	C:\Program Files (x86)\GE\	Browse
Plugin-Name:	Historian_	
Server Port:	5000	A THE
Container Port:	4890	Ten
ConfigHub Admin Port:	4920	
Client ID:	admin	
Client Secret:		
Re-enter Secret:		
Note: Credentials used here a Hub. Make sure to save these Hub.	are needed for registering other products e credentials for future registrations and u	with this Configuration upgrades to Configuration

Configuration Hub allows you to add and manage a collector instance remotely. For more information, refer to About Configuration Hub.

If, however, an earlier version of Configuration Hub is available on the same machine, you will be prompted to enter the details of the existing Configuration Hub, and it will be upgraded to the latest version. If that happens, skip the next step.

Important:

ļ

By default, Configuration Hub points to the same Proficy Authentication server as the one you provided during the Historian server installation. If you want to install Web-based Clients in a cluster environment, ensure that:

- Configuration Hub does not use the same Proficy Authentication server as that used by the cluster.
- The Proficy Authentication and Configuration Hub details must be the same for all cluster nodes.

12. If you want to install Configuration Hub, ensure that the **Use Existing Configuration Hub** check box is cleared, and then provide values as described in the following table.

Field	Description
Install Location	If needed, modify the installation folder for Con- figuration Hub.
Plugin Name	If needed, modify the name of the Configuration Hub plugin for Historian. The default value is in the following format: Historian_ <host name="">. If, however, you are installing Web-based Clients in a cluster environment, the default value is Historian_<cluster name="">. You can modify this value, but provide the same value for all the nodes in the cluster.</cluster></host>
Server Port	If needed, modify the port number that you want to use for the web server. The default val- ue is 5000. If you want to install Web-based Clients in a cluster environment, provide the same value for all the nodes in the cluster.
Container Port	If needed, modify the port number for the Con- figuration Hub container. The default value is 4890.
ConfigHub Admin Port	This is the port number of the Configuration Hub admin. The default value is 4890. If need- ed, you can change the port number.
Client ID	Enter the username to connect to Configuration Hub. The default value is admin. The value that you enter can contain: • All English alphanumeric charac- ters (ABCDEFGHIJKLMNOPQRSTU- VXYZ abcdefghijklmnopqrstuvwxyz 0123456789) • The following special characters: ><:~! @#\$%^&*?

Field	Description
Client Secret	Enter the password to connect to Configuration Hub. The value that you enter can contain: • Must contain at least eight characters. • All English alphanumeric charac- ters (ABCDEFGHIJKLMNOPQRSTU- VXYZ abcdefghijklmnopqrstuvwxyz 0123456789) • The following special characters: ><:~! @#\$%^&*?
Re-enter Secret	Re-enter the password to connect to Configura- tion Hub.

- 13. Alternatively, if you want to use an existing Configuration Hub:
 - a. Select the **Use Existing Configuration Hub** check box. This check box is disabled if an existing Configuration Hub is detected.

The fields for the existing Configuration Hub appear.

Use Existing Configuratio	n Hub: 🔽	
Plugin-Name:		
Server Name:		ET H
Server Port:	5000	and the second second
Client ID:	admin	and the second
Client Secret:	•••••	Test Connectio
Test Connection Status: 1 Test Connection	est connection with Existing Configurat	ion Hub Server is pending; click
Enter the Client ID and Se Historian to register with	ecret that you provided while installing C existing Configuration Hub.	Configuration Hug plugin for

b. Provide values as	described in the	following table.
----------------------	------------------	------------------

Field	Description
Plugin Name	If needed, modify the name of the Configu- ration Hub plugin for Historian. The default value is in the following format: Historian <i><host name=""></host></i>
Server Name	Enter the server name or the FQDN of the existing Configuration Hub server, as dis- played in the address bar of the browser when you access Configuration Hub from the machine where Configuration Hub is in- stalled.
Server Port	If needed, modify the port number that you want to use for the web server. The default value is 5000.
Client ID	If needed, modify the username to connect to Configuration Hub. The default value is admin.
Client Secret	Enter the password to connect to Configura- tion Hub.

c. Select Test Connection.

The results of the connection test appear. You cannot proceed until the connection is successful.

14. Select Next.

The default installation drive appears.



15. If needed, change the installation drive for Web-based Clients, and then select **Next**. The log files location page appears.



16. If needed, change the location for log files, and then select **Next**.

The destination Historian server page appears.



17. Provide the name of the destination Historian server to which Web-based Clients are connected by default. When you login to Configuration Hub, the default system will point to this server.

Note:

- Provide the name of either Historian single-server or mirror primary server because the systems in Configuration Hub will be either a stand-alone system or a horizontally scalable system.
- If you want to connect to a remote Historian server, you must disable the Enforce Strict Client Authentication and Enforce Strict Collector Authentication options using Historian Administrator in the remote server.

18. Select Next.

The You are ready to install page appears.

19. Select Install.

The Web-based Clients installation begins.

20. When you are prompted to reboot your machine, select Yes.

Historian Web-based Clients are installed in the following folder: <*installation drive*>:\Program Files\GE, and the following registry paths are created:

- HKEY_LOCAL_MACHINE\SOFTWARE\GE Digital
- HKEY_LOCAL_MACHINE\SOFTWARE\GE

If you want to use Configuration Hub installed using other products such as iFIX, Plant Applications, and so on, set up authentication to point to the Proficy Authentication instance.

Register with Configuration Hub

Ensure the following:

• Installed Web-based Clients (*on page*), specifying the details of the new Proficy Authentication and Configuration Hub servers.

The Historian server and Web-based Clients must always point to the same Proficy Authentication server and Configuration Hub server. Only then you can access Web-based Clients (such as Configuration Hub, Trend Client, the Web Admin console, and REST APIs), and also view Historian license information on Configuration Hub. Therefore, you can use the Proficy Authentication Tool in the following cases:

- If you changed the Proficy Authentication server used by Web-based Clients, the Historian server must point to the same Proficy Authentication and Configuration Hub servers.
- If you did not select the **Use existing Proficy Authentication and Configuration Hub Instance** during the Historian Server, and now you want to register with the Proficy Authentication and Configuration Hub servers to use the Historian Web-based clients and view Historian license information on Configuration Hub.

This topic describes how to register the Historian Server with the Proficy Authentication server and Configuration Hub server without the need to reinstall it.

Access the UAAConfiguration.exe file. By default, it is located at <Install Drive>:
 \Program Files\Proficy\Proficy Historian\x64\Server.
 Alternatively, you can search for the Proficy Authentication Tool in the Windows search bar and
 open it.

The **Proficy Authentication Configuration tool** window appears, displaying the Proficy Authentication server details that you specified while installing the Historian server. Also, it allows you to specify the Configuration Hub server details. 2. In **Proficy Authentication Server Details**, provide the following details as described in the table below.

Field	Description
Proficy Au- thentication server name	Enter the name of the machine on which the Proficy Authentication server is in- stalled. If the machine uses a fully qualified domain name (FQDN), provide the FQDN. By default, the local hostname is considered.
Public https port	Enter the port number used by the Proficy Authentication service. The default value is 443. Ensure that this port number matches the one on the TCP Port Assignments page during Web-based Clients installation.
Admin Client Id	The client ID to connect to the Proficy Authentication service.
Admin Client Secret	The password to connect to the Proficy Authentication service.
Proficy Au- thentication Test Connec- tion	Option to test the status of the connection with external Proficy Authentication server.

3. In **Configuration Hub Server Details**, provide the following details as described in the table below.

Table 1.

Field	Description
Configu- ration Hub server name	The server name or the FQDN of the existing Configuration Hub server, as dis- played in the address bar of the browser when you access Configuration Hub from the machine where Configuration Hub is installed.
Configu- ration Hub Public https port	The web server (https) port that you want to use for Configuration Hub. By default, it is 5000.
Configu- ration Hub Test Con- nection	Option to test the status of the connection with an existing Configuration Hub server.

4. Select Configure.

The Proficy Authentication server and Configuration Hub details are updated for the Historian server. The changes are reflected as soon as you refresh the browser in which you have opened any of the Web-based Clients components (such as Configuration Hub, the Web Admin console, Trend Client).

If testing the connection fails, try these steps:

- Verify that you can ping the Proficy Authentication server. If you cannot ping the Proficy Authentication server, add the IP address and the server name in the hosts file located in C: \Windows\System32\drivers\etc.
- Ensure that the following services are running on the Proficy Authentication server machine:
 - Proficy Operations Hub Httpd Reverse Proxy
 - Proficy Authentication Tomcat Web Server
 - All the GE Proficy Configuration Hub services
- Verify that the Proficy Authentication server details provided during Web-based Clients installation match the ones you have specified in the Proficy Authentication Configuration tool.

Install Collectors Using the Installer

After you install collectors, the following artefacts will be available:

- Executable files: These files are required to add a collector instance.
- Instances of the following collectors:
 - The iFIX collector
 - The iFIX Alarms & Events collector
 - The OPC Classic Data Access collector for CIMPLICITY
 - The OPC Classic Alarms and Events collector for CIMPLICITY

These instances will be created only if iFIX and/or CIMPLICITY are installed on the same machine as the collectors.

- The Remote Collector Management agent: Provides the ability to manage collectors remotely.
- 1. Run the InstallLauncher.exe file.
- 2. Select Install Collectors.

The welcome page appears.

3. Select Next.

The license agreement appears.

4. Select the Accept check box, and then select Next.

The default installation drive appears.



 If needed, modify the installation drive, and then select Next. The data directory page appears.



If needed, change the folder for storing the collector log files, and then select Next.
 The destination Historian server page appears.

Historian Server Details	
Provide a valid windows user of the default His Remote Collector Manager will connect.	storian server to which the
Historian Server:	
User Name:	
Password:	
Confirm Password:	
Note: If you have created security groups or enabled strict clie the destination Historian credentials. If the password changes, you must reinstall Remote Managen	ent/collector authentication, provide nent Agents to reset the password.
Cancel	Previous Next

7. Provide the credentials of the Windows user account of the destination Historian server to which you want Remote Management Agent to connect.

These details are required for Remote Collector Manager to connect to Historian to manage the collectors remotely. If you are installing collectors on same machine as the Historian server, and if strict collector authentication is disabled, you need not provide these details; by default, the machine name of the local Historian server is considered. If, however, they are installed on different machines, or if strict collector authentication is enabled, you must provide the credentials of the Historian server user.

8. Select Next.

The You are ready to install page appears.

9. Select Install.

The installation begins.

10. When you are prompted to reboot your system, select Yes.

The collector executable files are installed in the following folder: <installation drive>:\Program Files (x86)\GE Digital<collector name>. The iFIX collectors are installed in the following folder: C:\Program Files\GE\iFIX. The following registry paths are created:

- HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\ GE Digital\iHistorian\Services \<collector type>
- HKEY_LOCAL_MACHINE\SOFTWARE\GE Digital\iHistorian\Services\<collector type>

In addition, if iFIX and/or CIMPLICITY are installed on the same machine as the collectors, instances of the following collectors are created:

- The iFIX collector
- The iFIX Alarms & Events collector
- The OPC Classic Data Access collector for CIMPLICITY
- The OPC Classic Alarms and Events collector for CIMPLICITY

Perform Post-Installation Tasks

- If you do not want strict authentication, disable the Enforce Strict Client Authentication and Enforce Strict Collector Authentication options under Historian Administrator > Data Stores > Security.
- 2. While installing the Historian server, if you have allowed the installer to create Historian security groups, create a local Windows user with the format <Web-based Clients server name>.admin, and add the user to the ihSecurity Admins group. This user will log in to Web-based Clients. Alternatively, you can create Proficy Authentication users in an external Proficy Authentication and map their security groups. For information, refer to About Proficy Authentication Groups.

Depending on whether the Historian server will use local or domain security groups, select the appropriate option in Historian Administrator.

- 3. Ensure that the Windows user that you have specified while installing collectors is added to the iH Security Admins and iH Collector Admins groups.
- 4. Enable trust for a client certificate for Configuration Hub.
- 5. Enable trust for a self-signed certificate on Chrome.
- 6. Import an issuer certificate.

You are now ready to use Configuration Hub.

Access Configuration Hub (on page 36).

Setting up Configuration Hub for Historian

Upgrade Configuration Hub

If you install Web-based Clients before uninstalling the previous version, you cannot modify the Configuration Hub credentials. If an earlier version of Configuration Hub is available on the same machine, you will be allowed to use the same; you cannot install Configuration Hub again.

- 1. Uninstall Configuration Hub.
- 2. Set up Configuration Hub (on page 36).

About Setting up Configuration Hub

To set up Configuration Hub, you must perform the following steps:

- 1. Install the Historian server (on page 3).
 - For a stand-alone Historian server, install single-server Historian.
 - For a horizontally scalable Historian server, install the mirror primary server and distributed/ mirror servers.
- 2. Install Web-based Clients (on page 12).
- 3. Install collectors (on page 31).
- 4. Perform the post-installation tasks (on page 35).

If you want to upgrade Configuration Hub, refer to Upgrade Configuration Hub (on page 36).

After you install or upgrade the required components, you can access Configuration Hub (on page 36).

Access Configuration Hub

Perform the tasks outlined in About Setting up Configuration Hub (on page 36).

1. Double-click the Configuration Hub icon on your desktop (20)

- The Configuration Hub login page appears. 2. Depending on whether you want to use Proficy Authentication or custom authentication, select the
 - appropriate tab. If custom authentication is not applicable, skip this step.

Note:

For instructions on setting up authentication, refer to https://www.ge.com/digital/ documentation/confighub/version2024/t_authentication_setup.html

3. Select the Configuration Hub node that you want to access, and then select **Continue to Login**. The Proficy Authentication login page appears.

If you cannot access the login page, start the GE Operations Hub Httpd Reverse Proxy and the Data Archiver services.

4. Log in with your credentials.

Note:

By default, the username is *<host name>*.admin, and the password is the value that you have entered in the **Admin client secret** field on the **Proficy Authentication Service** page during Web-based Clients installation.

The Configuration Hub application appears, displaying the following sections:

 The Navigation section: Contains a list of systems that you have added. In addition, it helps you navigate to the Model, Collectors, and Tags sections. You can also access Proficy Authentication to create users and groups.

NAVIGATION \times	Ċ
\sim Proficy Authentication	
Security	
₽ FIX	
Ƴ 🖻 Historian_Enterpri	
> 🖻 Systems	
윰 Model	
Collectors	
🕗 Tags	_

• **The main section:** Displays content based on your selection in the **NAVIGATION** section. For example, if you select a Historian system, you can access a list of servers in the system. You can also navigate to the system statistics as shown in the following image.



Similarly, if you select **Model** in the **NAVIGATION** section, you can access the Historian model.

• **The Details section:** Contains the details of the item selected in the main section. For example, If you select a system, you can view the description of the system, and add data stores and mirror locations using the **Details** section.

DETAILS		
Q Search		
∨ General Prop	erties	
Name	ctorcollector	
System Type	Horizontally S	
Primary Server	oriz-collectors	
Description	oriz-collectors	
Default System	Yes	
Collectors	10 🗹	
Tags	1 🗹	
Data Stores	3 🗹	
Clients	3 🗹	
✓ System Defa	ults	
Default Locati	oriz-collec 🗹	
Default Data S	User 🗹	
✓ Alarms and E	ivents	
Alarm Rate	0 (Alarms/min)	
✓ License		
Historian Tags	1 (214748364	
Scada Tags	0 (2500 Licens	
Users	1 (1000 Licens	
Data Stores	3 (200 License	
Calculations	Enabled	

Depending on your requirements, set up a stand-alone system or a horizontally scalable system.

Historian Plugin Management in Configuration Hub

About Historian Plugin Management in Configuration Hub

The Historian plugin in Configuration Hub enables you to perform several tasks like monitor, supervise, retrieve, and control gathering functions from a server, client, or one or more remote nodes. However, it operates as a web-based application.

When you install the Historian server and web-based clients, the Configuration Hub application is installed along with Proficy Authentication. Additionally, the Historian node and plugin are automatically registered with the Proficy Authentication and Configuration Hub based on the Historian HTTP and database port numbers.

After installing the Historian Server and the Web-based clients, if you access the Configuration Hub, you can see the Historian plugin displayed in the **NAVIGATION** pane. Also, the Historian node and the plugin can be seen in the **Administration** plugin **> Node Manager**.

Note:

However, if during installation, the Historian node did not properly register with the Proficy Authentication and Configuration Hub, and did not appear in the Node Manager, you can add a Historian node (on page 45) on Configuration Hub using the Node Manager.

The Node Manger consolidates control over product and license details, and you can view the corresponding Historian node's certificate, and license details. Using the Node Manager, if needed, you can modify a plugin display name (*on page 48*), unregister a plugin (*on page 51*), and if you want to register it at a later stage, you can register the plugin (*on page 49*) again.

a Save	
wigation ×	DETAILS
Proficy Authentication	
Administration	
🖌 🍽 Historian_	
> 🖻 Systems	
윦 Model	
B Collectors	
⊘ Tags	
Data Stores	
🖻 Archives	
<u>≁</u> Data	
@ Alarms	
℃ Configuration Templates	
Reports	
🗏 Activity Logs	

View Historian Node Details

Using the Historian node, you can view the Historian node-specific certificate and license details, and also plugin-specific details.

1. Double-click the Configuration Hub icon on your desktop (20).

The Configuration Hub login page appears.

GE VERNOVA	
Welcome!	
User Identifier	
Password	
SIGN IN	

2. Login with the default user credentials. That is, <hostname>.admin.

The Configuration Hub application appears, listing the Historian plugin in the **NAVIGATION** pane.

- In the NAVIGATION pane, select and expand Administration, and then select Node Manager. The Node Manager administration page appears, listing the available Historian node and the plugin.
- To view the Historian node-specific license details, select the node. The node-specific details appear in the right-side section. Also, the license details are displayed in the License Expiry and Status columns.

19 🔓 💿							
NAVIGATION	Node Manager-Administration $~~ imes~~$					DETAILS	×
Proficy Authentication	Q. Search				+ 94		Q Search
Ø Security						V NODE MANAGER	© 🗇
U Custom labels	Display Name	Product Type	License Expiry	Status		Display Name	Historian_Node
	Configuration Hub	Configuration Hub				 CERTIFICATE DETAILS 	ď
Administration	Proficy Authentication	Proficy Authentication				Subject Name	CN=RSWIN10,OU=Unit,
Node Manager	> Historian_Node	Node Manager				Thumb Print	08:D0:59:52:61:3B:69:5
License Server						Issuer Name	CN=INTEROP@SelfSigne
License server						Valid From	2024-02-22 15:38:14 +0
Historian_						Valid To	2026-02-21 15:38:14 +0
						Signature Algorithm	SHA256-RSA
						Serial Number	2
						LICENSE DETAILS	2
						Customer Name	
						CSN	None
						Expiration date	None
						License type	None
						Creation Date	None
						License Version	Unknown (0)
						License Source	No License
						Device ID	The second second
						 LICENSES ACTIVATED 	v + ⊠
						✓ ADVANCE SETTING	ď
						Server Proxy	http://pitc-zscaler-globa

5. To view the plugin-specific details, expand the node and select the plugin. The plugin-specific details appear in the right-side section.

🕫 🍙 Save							
NAVIGATION \times	Node Manager-Administration $~~ imes~$					DETAILS	×
✓ ■ Proficy Authentication	Q. Search				+ 📭		Q Search
Security						V PLUGHN	08
March 111	Display Name	Product Type	License Expiry	Status		HISTORIAN	Registered
Custom labels	Configuration Hub	Configuration Hub				Display Name	Historian,
VIGATION VICATION VICATION VICATION VICATION VICATION Q	Proficy Authentication	Proficy Authentication				 CERTIFICATE DETAILS 	
Node Manager	✓ Historian_Node	Node Manager				Subject Name	CN=RSWIN10
	Historian	HISTORIAN		Registered		Thumb Print	79:C4:D9:9F:E9:33:C7:7
License Server						Issuer Name	CN=RSWIN10 Root CA 2
 Historian 						Valid From	2024-02-22 00:00:00 +0
						Valid To	2026-02-21 00:00:00 +0
						Signature Algorithm	SHA256-RSA
						Serial Number	-
						V LICENSE DETAILS	
						Customer Name	
						CSN	None
						Expiration date	None
						License type	None
						Creation Date	None
						License Version	Unknown (0)
						License Source	No License
						Device ID	

If you have the needed permission, you can perform additional certificate and node management tasks. For more information, refer to **Administration Plugin** in the Configuration Hub help.

Add a Historian Node (Optional)

The steps listed in this topic are only needed if the Historian node was not properly configured during the installation and is not being displayed in the Node Manager.

1. Double-click the Configuration Hub icon on your desktop (20). The Configuration Hub login page appears.

GE VERNOVA	
Welcome!	
User Identifier	
Password	
SIGN IN	

2. Login with the default user credentials. That is <hostname>.admin.

The configuration hub application appears, listing the Historian plugin in the **NAVIGATION** pane.

G Save		÷ 0
igation ×	DETAILS	
Proficy Authentication		
Administration		
Historian		

3. In the NAVIGATION pane, select and expand Administration, and then select Node Manager.

	💋 🏠 Save	
N	AVIGATION	×
>	Proficy Authenticatio	n
\sim	Administration	
	Node Manager	
	License Server	
>	Historian_	

The node manager administration page appears.

😒 🔓 Save					
NAVIGATION \times	Node Manager-Administration $~~ imes~$				
> Proficy Authentication	Q Search				+ 9
🗸 🖻 Administration					
Node Manager	Display Name	Product Type	License Expiry	Status	
Node Manager	Configuration Hub	Configuration Hub			÷ •
License Server	Proficy Authentication	Proficy Authentication			

4. In the upper-right corner, select +.

The Add Node Manager window appears.

Add Node Manag	jer	\times
Host Name		
DISPLAY NAME		
Display Name		
PORT NUMBER ⑦ 5200	Kot Trusted	
Test Connection		Add

- 5. Enter the **HOST NAME**. Here, it is the Historian node host name in a fully qualified domain name format. For example, testmachine123.testdomain.com.
- 6. Enter the **DISPLAY NAME** for the Historian node.
- 7. Enter the **PORT NUMBER** of the host that you entered.
- 8. You must trust the node manager certificate. To trust the certificate, select **Not Trusted**. The **Certificate Details** window appears, listing the certificate information.
- 9. Read the certificate details and if you trust, select Trust.

In the Add Node Manager window, the certificate status changes to trusted.

10. Select Test Connection.

If the connection is successful, a success message appears. If not, check the host name and the port are correct.

11. Select Add.

The Historian node along with the plugin are added.

By default, the plugin gets registered.

Save						
NAVIGATION \times	Node Manager-Administration $~~ imes~~$					
> Proficy Authentication	Q Search				+	G
✓ ■ Administration						
Nede Manager	Display Name	Product Type	License Expiry	Status		
Notemanager	Configuration Hub	Configuration Hub				
License Server	Proficy Authentication	Proficy Authentication				
Historian_	✓ Historian_Node	Node Manager				
	Historian_	HISTORIAN		Registered		

In rare cases, for some reason, if the plugin is not registered, you can register the plugin (on page 49).

Modify a Historian Plugin Display Name

1. Double-click the Configuration Hub icon on your desktop (20). The Configuration Hub login page appears.

GE VERNOVA	
Welcome!	
User Identifier	
Password	
SIGN IN	

2. Login with the default user credentials. That is <hostname>.admin.

The configuration hub application appears, listing the Historian plugin in the **NAVIGATION** section.

- In the NAVIGATION pane, select and expand Administration, and then select Node Manager. The Node Manager administration page appears, listing the available Historian node and the plugin.
- 4. Select and right-click the node, and then select Manage.

Manage Products In	e Plug-ins			>
\checkmark	Product Type	Plugin Display Name	Status	
	Historian		Registered	
		Update	Unregister Reg	ister

The Manage Plug-ins window appears.

5. Change the plugin display name and select Update.

The changes you made are updated and applied to the plugin.

Register a Historian Plugin

If you had unregistered a plugin and want to register it again, or if, for some reason, the plugin was not registered after installation, you can register the plugin using the Node Manager, provided that you have the Historian node in the Node Manager. If the Historian node did not register properly, you must first add a Historian node (on page 45) and then register the Historian node and its plugin.

1. Double-click the Configuration Hub icon on your desktop (20). The Configuration Hub login page appears.



GE VERNOVA	
Welcome!	
User Identifier	
Password	
SIGN IN	

2. Login with the default user credentials. That is <hostname>.admin.

The configuration hub application appears, listing the Historian plugin in the **NAVIGATION** section.

 In the NAVIGATION pane, select and expand Administration, and then select Node Manager. The Node Manager administration page appears, listing the available Historian node and the plugin.

6 Sare				0 C	J~ &~
NAVIGATION \times	Node Manager-Administration $~~ imes~$				
> Proficy Authentication	Q, Search				+ 👍
Administration					
Made Manager	Display Name	Product Type	License Expiry	Status	
Node Manager	Configuration Hub	Configuration Hub			
License Server	Proficy Authentication	Proficy Authentication			
	∨ Historian_Node	Node Manager			
	Historian,	HISTORIAN		Unregistered	

4. Select and right-click the plugin, and then select **Register**.

Alternatively, you can select and right-click the node, and then select Manage.

You can register the plugin using the **Register** button available in the **Manage Plug-ins** window.

The **Register Plug-in** window appears.

Register Plug-in	\times
PLUGIN HOST	
PRODUCT TYPE	
Historian	
DISPLAY NAME	
	Register

5. Enter the values as described in the following table:

Field	Description
PLUGIN HOST	The host name of the plugin in a fully qualified domain name format.
PRODUCT TYPE	The product type for the plugin. For example, Historian.
DISPLAY NAME	The plugin name that you want to see below the Node Manager.

6. Select Register.

The plugin gets registered and added in the **NAVIGATION** pane.

- 7. For the plugin to work, you must refresh the browser or log out and log in again to restart Configuration Hub.
- 8. Now try accessing the plugin.

Unregister a Historian Plugin

If you need to unregister a plugin, you can do that using the Node Manager.

1. Double-click the Configuration Hub icon on your desktop (20). The Configuration Hub login page appears.

9	GE VERNOVA	
	Welcome!	
	User Identifier	
	Password	
	SIGN IN	

2. Login with the default user credentials. That is <hostname>.admin.

The configuration hub application appears, listing the Historian plugin in the **NAVIGATION** pane.

3. In the NAVIGATION pane, select and expand Administration, and then select Node Manager.

The node manager administration page appears.

99 🔐 🔓 Save					○ @ ■∨ ೭∨
NAVIGATION \times	Node Manager-Administration $~~ imes~$				
> Proficy Authentication	Q. Search				+ 0a
✓ ➤ Administration					
	Display Name	Product Type	License Expiry	Status	
Node Manager	Configuration Hub	Configuration Hub			
License Server	Proficy Authentication	Proficy Authentication			
> Historian_	✓ Historian_Node	Node Manager			
	Historian.	HISTORIAN		Registered	Unregister

4. Select and right-click the plugin, and then select Unregister.

Alternatively, you can select and right-click the node, and then select Manage.

The Mange Plug-ins window appears, listing all the available plugins.

1			Registered
		-5	
	1		

- 5. Select the plugin as needed.
- 6. Select Unregister.

The plugin gets unregistered.

Alternatively, you can also unregister a plugin from the Plugin **DETAILS** section by selecting **X** on the top-left corner in the **PLUG-IN** section.

This will prompt you whether to delete the plugin. Selecting **Continue** will unregister the plugin.

Common Tasks in Configuration Hub

Task	Procedure
Show or hide the Navigation or the Details section.	 In the upper-right corner of the page, select . Select the check boxes for the sections that you want to show.
Show or hide columns in a table.	Image: Convergenzation Image: Machine Filter Filter Historian WIN10TECH Historian WIN10TECH Historian WIN10TECH Historian WIN10TECH 1. In the upper-right corner of the table, select Image: Convergenzation
Note: You cannot hide some of the columns (for ex- ample, the COLLECTOR NAME column).	TagName:* × Description:* × Reset to Default Refreshed on 2021-12-21 11:22:30 $\mathcal{C} \mid + \textcircled{0}$ ∇ DESCRIPTION ∇ COLLECTOR NAME ∇ LAST 10 VALUES <i>Filter Filter</i>
	 Simulation •••• The Table Settings window appears. Select the check boxes in the SHOW COLUMN column, and then select Apply.

Task	Procedure		
Reorder columns in a table.	1. In the upper-right corner of the table, select 🕸.		
Note: You cannot reorder some of the columns.	TagName:* X Description:* X Reset to Default		
	Refreshed on 2021-12-21 11:22:30 📿 + 🔯		
	Υ DESCRIPTION Υ COLLECTOR NAME Y LAST 10 VALUES Filter Filter		
	02Simulation		
	The Table Settings window appears. 2. Use the arrow buttons in the RE-ORDER column, and then se- lect Apply .		
Refresh a page/table.	In the upper-right corner of the main section or a table, select $ \mathbb{C}. $		
	TagName: * X Description: * X Reset to Default		
	Refreshed on 2021-12-21 11:22:30 \Bigg + 🕸		
	Y DESCRIPTION Y COLLECTOR NAME Y LAST 10 VALUES Filter Filter		
	02Simulation		

Task	Procedure				
Select multiple tags or clear the selection.	 To select multiple tags, select the check boxes corresponding to the tags as needed. Alternatively, to select all the available tags, select the check box in the upper-left corner of table header. 				
	Tags- X SYSTEM V Filter Max Tag Count: 1000 Collector Name: X Tag Name:* X Description:* X You can increase MaxTagCount to get more than the default 1000 tags. Please refine your s				
Navigate through grids in a page	TAG NAME Filter ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTEST ARRAYTAGTESTBYSITAUPDATED	♥ DESCRIPTION Filter Test_multi_tag_description Test_multi_tag_description Test_multi_tag_description Ge numbers are en- Desce page numbers to			
	abled at the bottom-right corner. You can use the navigate through the grid and access other avail	Able rows. Reset to Default V20/2023.12:09:56 PM ② ↓ ① + ③ *** ALUES D. TAG ALL ♡ IS STALE Filter ● On false ● On false			