



Proficiency Historian 2023

Release Notes



Proprietary Notice

The information contained in this publication is believed to be accurate and reliable. However, General Electric Company 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 General Electric Company. Information contained herein is subject to change without notice.

© 2023, General Electric Company. All rights reserved.

Trademark Notices

GE, the GE Monogram, and Predix are either registered trademarks or trademarks of General Electric Company.

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

- Chapter 1. Release Notes.....3**
- What's New.....3
- Resolved Issues.....7
- Known Issues and Limitations..... 11

Chapter 1. Release Notes


What's New in Historian 2023

Description	Tracking ID
<p>Configuration Hub Enhancements</p> <p>Configuration Hub provides a better user experience using an IDE model to manage systems, bringing in consistency across the portfolio to manage the configuration and administration of multiple products.</p> <p>All of the administrative features are now available in Configuration Hub, which is more user-friendly. You can now perform the following tasks as well:</p> <ul style="list-style-type: none">• Configure Historian systems and servers, collectors, tags, data stores, and archives.• Perform calculations.• Achieve high availability of systems (data replication or failover of disaster recovery sites)• Achieve high availability of collectors.• Configure offline collectors to specify the list of tags, tag properties, collector interface properties, and so on (without the need to manually update the XML configuration file).• Manage alarms and events data, along with creating an alarm.• Access activity logs.• Visualize data by unleashing the data extraction capabilities of Historian and using the various sample modes, query modifiers, and filter conditions.• Configure the advanced options of systems, collectors, and data stores.• Access Configuration Hub in Chinese. <p>For more information, refer to Configuration Hub.</p>	F64161
MQTT Collector Enhancements	F65029

Description	Tracking ID
<ul style="list-style-type: none"> • Enhanced Security: To enhance security while connecting an MQTT broker and an MQTT collector, you can now use authentication based on any of the following options: <ul style="list-style-type: none"> ◦ Username and password ◦ Certificate <p>You must first set these parameters in the MQTT broker, and then provide the same values while creating an MQTT collector.</p> • MQTT 5 Support: In addition to MQTT 3.1.1, Historian is now supported on MQTT 5, which provides additional features such as session/message expiry interval and reason code. • Sparkplug B V1.0 Support: In addition to the KairosDB format, you can now collect data in the Sparkplug B v1.0 format. • Quality of Service (QoS) Levels: You can choose among the QoS levels 0, 1, and 2 that you want to use while collecting data from an MQTT broker. • Data Loss Prevention: When an MQTT broker and an MQTT collector are reconnected, you can specify whether you want to use the old session instead of creating a new one. This will ensure that there is no loss of data. • Session Expiry Timeout: You can specify the timeout interval for connection between an MQTT broker and an MQTT collector. When you do so, data collected before reconnecting is stored by the MQTT broker. If the MQTT broker and the collector are reconnected before the session timeout, the data is collected; otherwise, it is discarded. <p>For instructions on setting these parameters, refer to Add and Configure an MQTT Collector.</p>	
<p>HAB Collector Enhancements</p> <p>Using Configuration Hub, in addition to adding a HAB collector instance, you can now perform the following tasks using the UI (without the need to manually edit the xml files):</p> <ul style="list-style-type: none"> • Configure the tags and alarms. • Approve tag changes. <p>For instructions, refer to Add and Configure a HAB Collector.</p>	F63932

Description	Tracking ID
<p>Also, the HAB collector can now collect data from GENMOM and NETMOM databases, which are databases supported by Habitat. To facilitate this enhancement, the following changes have been made:</p> <ul style="list-style-type: none"> • You can now set multiple values in the TagTemplate parameter. • The timestamp and quality values are now optional. This is to accommodate Habitat databases that do not use these fields. • You can now provide the MRID, composite key, and tag description values when configuring tags. If, however, you do not have the MRID, you can use the composite key. <p>In addition to alarms, you can now set a tag prefix for tags as well. In both the cases, you can now set the tag prefix at the collection definition level instead of at the collector level. This helps you identify tags based on the collection definition.</p> <p>For alarms, previously, tags from only the CIRCLG record type were supported. Now, you can specify tags from all the record types.</p> <p>For information on configuring these parameters, refer to Configure the HAB Collector for Tags and Configure the HAB Collector for Alarms.</p>	
<p>Data Replication or Failover of Disaster Recovery Sites</p> <p>You can set up a mirror of the Historian server in a network different from that of your organization. When you do so, any tag/data update requests to the Historian server can be routed to the public/IT network instead of your organization's network.</p> <p>For more information, refer to Set Up a Mirror of Mirror.</p>	F65763
<p>Extended Quality in Data Attributes</p> <p>SCADA applications such as Habitat support data samples with several quality types. To support such SCADA applications, Historian is now enhanced to store up to 128-bit quality types, which are stored in data attributes. These attributes are extended qualities that you can store more than the regular qualities and sub qualities such as good and bad.</p>	F65699

Description	Tracking ID
<p>In addition to regular qualities, the HAB collector collects extended qualities such as replaced, suspect, garbage, old, and so on. You can use these attributes using REST APIs as well as Configuration Hub.</p>	
<p>eDNA Data Extraction</p> <p>Using the Historian Extract, Transform, and Load (ETL) tools, you can now extract data from an eDNA server as well.</p> <p>Advantages:</p> <ul style="list-style-type: none"> • You can transfer data using a periodic file-transfer mechanism where a steady network connection is not possible or cost-effective. • You can collect both historical and current data. • You can create the tag file automatically. • You can use a custom data type for tags. • You can map the sub-quality values stored in a SCADA system with those in Historian. <p>For more information, refer to About Extracting Data from an eDNA Server.</p>	F65818
<p>REST API Calls for Alarms and Events Data</p> <p>You can now use REST APIs to perform the following tasks:</p> <ul style="list-style-type: none"> • Fetch a list of alarms and events • Create alarms • Backup and restore alarms • Delete alarms 	F60770
<p>Delta Calculation Modes in Excel Add-in</p> <p>You can now use the following calculation modes in Excel Add-in for Historian to return the delta of values over a time interval:</p> <ul style="list-style-type: none"> • DELTAPOS • DELTANEG • DELTA 	F65827
<p>Support for Mutual TLS (MTLS) Protocol for Enhanced Security</p>	N/A

Description	Tracking ID
<p>In Historian 2023, certificate-based security was implemented to strengthen the authentication mechanism and build trusted connections among the core Historian services. The Mutual Transport Layer Security (MTLS) protocol is used to build trusted connections among the core Historian services.</p> <p>Core Historian services include the Data Archiver, the Client Manager, the Configuration Manager, and the Diagnostic Manager. The MTLS feature is enabled by default.</p> <div data-bbox="203 632 1107 1121" style="border: 1px solid #f9c77c; border-radius: 10px; padding: 10px; background-color: #fff9e6;"> <p> Important:</p> <p>When you install Historian, you are presented with three install types: Historian Single Server, Historian Mirror Primary Server, and Historian Distributed/Mirror Node. The MTLS protocol and certificate-based security is enabled by default for all install types. If you are installing a Historian Single Server or the Historian Mirror Primary Server, the security settings for the certificates will be automatically configured for you by the installer. If you are installing a Historian Distributed/Mirror Node, you must configure the security settings manually after installation.</p> </div> <p>CreateRootCertificate.exe and MTLSCertificatesInstall.exe are the two binaries used for manually generating the certificates from the command-line.</p> <p>For more details, refer to the Post Install Steps for Configuring Certificate-based Security section in the Getting Started guide, or in the MTLS Security Enabling Guide.pdf document found in your Historian product install folder: <Install drive>\Program Files\Proficy\Proficy Historian\MTLS.</p>	
<p>Deprecation of the UAA Config Tool</p> <p>The UAA Config tool (file name: uaa_config_tool) is no longer available. You can now set up authentication using Proficy Authentication.</p>	N/A

Resolved Issues

Description	Tracking ID
Previously, even if you disabled future data, when you attempted to collect future data, instead of displaying an error message, a success message was displayed although future data was not stored. This issue has been resolved in Historian 2023.	DE138535
Previously the Data Archiver crashed when querying for more than one collector. This issue has been resolved in Historian 2023.	DE165564
Previously, the option to recalculate was disabled for iHtagAdmin users. This issue has been resolved by changing the security and user permissions.	DE167016
Previously, there were issues in the OPC UA HDA collector redundancy. These issues have been resolved.	DE168191
Previously, if you updated the collection interval and compression values, tag data was not collected. This issue has been resolved.	DE170431
Previously, a login to the Archiver with no user failed (Security message which says that Unknown (\) failed login). This issue has been resolved in Historian 2023.	DE154221
Previously, the ifixAECollector.exe shut down from time-to-time. This issue has been resolved in Historian 2023.	DE178154
Previously, when trying to create a chart in the Historian Trend Client while using domain security an "Unkown error" message appeared. This issue has been resolved in Historian 2023.	DE184585
Previously, the Excel Add-In threw an error "Compile error in hidden module: frmTagSearch." This issue has been resolved in Historian 2023.	DE184584
When Historian switched to a new archive, calculations stop working. Bad CalcFailed is received on the calculation.	DE176969
Previously, memory consumption is high for the Diagnostic Manager. Optimizations were done to minimize memory consumption of this service.	DE177422

Description	Tracking ID
The Calculation Collector ignores the data quality. These tags have good values in Historian Administrator for 'Last 10 values'. To solve it, we restarted the OPC Kepware collector.	DE175743
Previously, memory consumption was high for the UA HAD Server. Optimizations were done to minimize memory consumption of this service.	DE185245
Previously, memory consumption was high for Client Manager. Optimizations were done to minimize memory consumption of this service.	DE187941
The HDA Collector shut down when adding a new tag. This issue has been resolved in Historian 2023.	DE181238
The Filtered Data dialog was not displayed properly in Proficy Historian Excel Add-in. This issue has been resolved in Historian 2023.	DE173096
When browsing the tag on the Historian, Swedish characters appears as ?? instead of the real characters. This issue has been resolved in Historian 2023.	DE191441
The OLE-DB provider query failed when a non-existing tag was in the first position. This issue has been resolved in Historian 2023.	DE183849
Issues with OPC redundancy have been fixed in Historian 2023.	DE188552
Previously, a Linked Server - access denied (c000005) with SQL 2016 message may appear. This issue has been resolved in Historian 2023.	DE186000
Previously, the Server-Server Collector was not working properly. This issue has been resolved in Historian 2023.	DE191561
Historian 2023 includes support for the FMG Query regarding the upcoming DCOM hardening from Microsoft (CVE-2021-26414).	DE178873
Previously, the OLE DB problem max value query did not send output to what was the expected result. This issue has been resolved in Historian 2023.	DE121596
Previously, the OPC UA Collector could not handle handle Swedish letters. This issue has been resolved in Historian 2023.	DE121597

Description	Tracking ID
Previously, when a connection from the OPC Server to the PLC was broken, data in Historian still had a quality flag "Good". It's now it's fixed.	DE125668
Previously, we were getting the actor field set to null from ihSql. This issue has been resolved in Historian 2023.	DE171154
Previously, ihSql was providing an alarm type= Alarm history - API Error. This issue has been resolved in Historian 2023.	DE168388
Previously, the Alarm Backup, Purge, and Restore operation did not return the A&E Database to its previous status. This issue has been resolved in Historian 2023.	DE109010
Previously, random duplicate Alarm Comments generated. This issue is now fixed to eliminate duplicate alarm comments.	DE120509
Previously, the SQL Server A&E Database result could become corrupt and was not able to get all Alarms & Events information. This issue has been resolved in Historian 2023.	DE128453
Previously, the Upgrade AEDB 6.0 - 8.0 - Emergency Stop Requested was not included in the VerifyScriptsLog.log. This issue has been resolved in Historian 2023.	DE186522
Previously, index timeouts during install resulted in performance issues. This issue has been resolved in Historian 2023.	DE186523
Using Configuration Hub, you cannot define a calculation formula for a tag for a Calculation collector. You can, however, define a calculation formula using Historian Administrator or other Web-based Clients.	DE171279

Known Issues and Limitations

Table 1. Known Issues

The following issues are unresolved in this release.

Description	Tracking ID
You will be able to access Advance Configuration in Configuration Hub only with Historian 2023.	DE195195
<p>The alarms show in the Alarms grid when the linked Data Collector is selected. However, the close alarm action does not work with Data Collector selection.</p> <p>Workaround: Select the corresponding A&E Collector from the filter section. Select close alarm. The quality on all open alarmss will be set to bad.</p>	DE194868
<p>In some non-English operating Systems like German, when you try to upgrade Web clients to Historian 2023, you will see port conflicts that do not allow you to proceed.</p> <p>Workaround: Use Silent Installation to install the Historian Web components.</p>	DE194621
<p>In a Primary Mirror installation, all Proficy Authentication users who do not have the ih-SecurityAdmins Windows Security group added to the Windows user, will encounter an error while accessing the System details in Configuration Hub. Users can proceed to perform other actions. There is no workaround.</p>	DE194610
<p>It is not possible to uninstall Historian Server 9.1 with Excel Add-in version 11.0.</p> <p>Workaround: Stop the services and delete the files (or) upgrade the server.</p>	DE194363
<p>While using the pre-built functions or insert function wizard, you cannot browse tags when the Calculation collector is running on a remote machine.</p>	DE194325
<p>Upgrading collectors to 2023 with Historian Server 9.1 causes opening issues with Historian Administrator and in accessing the System in Configuration Hub.</p> <p>Workaround: Upgrade the Historian Client Tools to 2023.</p>	DE194063
<p>When using the OPC UA collector on Windows Server 2022, you cannot browse tags when the OPC UA source is on the remote machine.</p>	DE193985
<p>Spare Fields Labels configured for a system will be lost when the system is added to another Configuration Hub.</p>	DE193890

Table 1. Known Issues

The following issues are unresolved in this release.

(continued)

Description	Tracking ID
<p>If you are upgrading from 2022 to 2023, once the Hab collector is instantiated, you need to manually create a registry entry SamplerID for this instance in the following registry. The datatype is String.</p> <p>Computer\HKEY_LOCAL_MACHINE\SOFTWARE\GE Digital\iHistorian\Services\Hab-Collector\</p>	DE193880
<p>If you use an alias during the installation of the web-based clients, on the FQDN screen, the Historian Configuration Hub plugin fails to load. This is due to not having the respective certificates for aliases which validates the Configuration Hub plugin.</p>	DE193789
<p>After a Start or Stop action is performed, the Hab Collector's status takes some time to reflect on the Configuration Hub UI.</p>	DE189053
<p>If a SCADA (Habitat) system does not have MRID logics, then the user can use the Hab collector for data collection.</p> <p>However, the tags cannot be renamed or deleted /disabled automatically. Any tag is renamed in the SCADA system, then Hab collector will treat as a new tag instead of renaming.</p>	DE185516
<p>All Audited Actions performed from Configuration hub do not have the Username. There is currently no workaround.</p>	DE182243
<p>You cannot back up an archive at a command prompt using the following command:</p> <pre data-bbox="212 1388 1222 1434">ihArchiveBackup.exe -a <archive name></pre> <p>However, this issue does not occur if the archive is associated with the default data store.</p> <p>Workaround: When you back up an archive, include the data store name as follows:</p> <pre data-bbox="212 1619 1222 1665">ihArchiveBackup.exe -d <data store name> -a <archive name></pre>	DE188825
<p>After you upgrade Historian, the Historian Remote Collector Management Agent does not start automatically.</p> <p>Workaround: Restart the computer.</p>	DE175062

Table 1. Known Issues

The following issues are unresolved in this release.

(continued)

Description	Tracking ID
If you install only Historian without installing iFIX, you may find some iFIX-related files in the C drive. You can ignore/delete them. If, however, you plan to install iFIX later, you must reinstall Historian Client Tools after installing iFIX.	
If using Windows server 2022 or Window 11, you cannot connect to the Historian OPC UA HDA server using a remote OPC HDA client.	DE174953
If you install iFIX SCADA with the Historian server and Historian collectors on a remote machine using the iFIX integrated installer, then install License Client, and then uninstall Historian, an error message appears after you restart the machine and try to access iFIX.	DE174741
If you install iFIX SCADA with Historian Client Tools on a remote machine using the iFIX integrated installer, and then if you uninstall Client Tools, License Client is uninstalled as well.	DE174737
In a distributed node that is part of a mirror location, sometimes, you cannot back up an archive file. In addition, you cannot remove an archive file either from the primary node or a distributed node of a mirror location.	DE174808
If using a Historian web client or Historian Administrator of an older version with Historian 2022 server, you cannot perform actions on data stores or archives.	DE174355
<p>If you are upgrading the Historian server on a passive node, an error message may appear behind the installer screen, stating that the Archives directory is not created.</p> <p>Workaround: You can ignore this message, or you can make the node active before upgrading the Historian server.</p>	
The OPC UA DA collector stops working for unsolicited tags after you disconnect and reconnect to the source.	DE135433
<p>For a collector instance whose destination is Azure IoT Hub, you cannot restart the collector using the Save and Restart button in Configuration Hub. You cannot restart the collector using the Windows service either.</p> <p>Workaround: Use the Restart Collector API to restart the collector.</p>	DE151454

Table 1. Known Issues

The following issues are unresolved in this release.

(continued)

Description	Tracking ID
<p>After you delete a collector instance, the Windows service and the registry entry for the collector are not deleted.</p> <p>Workaround: Delete the Windows service and the registry entry manually.</p>	DE151169
<p>If the version of Historian collectors is different from that of Client Tools, ihSQL does not work.</p> <p>Workaround: Ensure that you have the same version of Client Tools and collectors.</p>	DE149550
<p>Using Configuration Hub, if you add a system by specifying its host name, and then add the same system by specifying its IP address, or vice versa, no validation error appears.</p>	DE146366
<p>When Configuration Manager is down, you cannot browse for tags in a horizontally scalable system.</p>	DE141885
<p>If you register the Configuration Hub plugin with a remote Configuration Hub container, the local instance of the connection is not unregistered.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Run the <code>Web_Clients_Configuration_Tool.exe</code> file located in the following folder: <code>C:\Program Files\GE Digital\Historian Config</code> 2. In the Config Hub Configuration section, in the External Server name box, enter the local host name, and then select Unregister. 	DE150907
<p>If you install Configuration Hub and the Web Admin console on the same machine, and use self-signed certificates for both of them, the login page for Configuration Hub does not appear.</p> <p>Workaround: Disable the domain security policies:</p> <ol style="list-style-type: none"> 1. Access the following URL: <code>chrome://net-internals/#hsts</code> 2. In the Domain Security Policy section, in the Delete domain security policies field, enter the domain name for Configuration Hub, and then select Delete. 	DE151105
<p>You cannot create multiple instances of the File collector on a single machine.</p>	DE151715

Table 1. Known Issues

The following issues are unresolved in this release.

(continued)

Description	Tracking ID
<p>Using Configuration Hub, you cannot restart an OPC collector whose destination is Azure IoT Hub.</p> <p>Workaround: Restart the collector from the Collectors section in Configuration Hub, modify the registry entry for the collector instance and restart manually, or restart the collector machine.</p>	DE151454
<p>When you change the destination of a collector from Historian to Predix TimeSeries, no success message appears although the destination is changed. In addition, the collector is not started automatically.</p>	DE151859
<p>Even after you uninstall collectors and Web-based Clients, the corresponding Windows services and registry entries are not removed.</p>	DE151169
<p>When you upgrade iFIX collectors to version 9.0, the custom registry folders are deleted.</p>	DE151435
<p>In Configuration Hub, for a stand-alone Historian system, when you select a server, the Diagnostics Manager service does not appear in the Details section.</p>	DE151711
<p>If you upgrade Historian from a version earlier than 8.1, by default, storing future data is enabled.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Stop the Historian DataArchiver service. 2. Open Command Prompt with elevated privileges or administrator privileges. 3. Navigate to the folder in which the ihDataArchiver_x64.exe file is located. By default, it is C:\Program Files\Proficy\Proficy Historian\x64\Server. 4. Run the following command: <pre data-bbox="293 1598 1222 1696">ihDataArchiver_x64 OPTION.<data store name> ihArchiverAllowFutureDataWrites 0</pre>	DE149376
<p>If you upgrade Historian server from a single-server installation to a primary mirror installation, and if you then add a distributed machine to the Historian system using Configuration Hub, you may see issues in connecting the distributed machine to the primary machine.</p>	DE152582

Table 1. Known Issues

The following issues are unresolved in this release.

(continued)

Description	Tracking ID
Workaround: Restart all the Historian server services on Primary Mirror server and Distributed/Mirror server machine.	
In a horizontally scalable system, if Client Manager is down, Web-Based Clients do not failover to the other Client Managers in the system. And, the following error message appears in Web-Based Clients: Service call to central buffer server fail.	DE152830
In a horizontally scalable system, instead of adding a distributed machine, if you add a primary mirror machine or a monolithic (stand-alone) machine, no validation message appears, but causes issues later.	DE153191
If you upgrade Historian server to 9.0, the machine is restarted abruptly when the installation is still in progress. The installation will, however, resume after the machine is restarted.	DE151125
If you upgrade Historian server from a mirror system to a horizontally scalable system in 9.0, you cannot query data from the distributed machine when the distributed machine is removed from the DefaultMirror location.	DE152677
If you install iFIX on a machine that has Historian Web-based Clients, sometimes, the reverse proxy service stops working. Workaround: Restart the reverse proxy service - GE Operations Hub Httpd Reverse Proxy.	DE151157
If you reinstall collectors and Web-based Clients, the size of the Historian server and Web-based Clients appears as decreased in the Programs and Features page, although there is no functional impact.	DE152484
When you install Client Tools, incorrect installation pages appear, although the installation is successful. Workaround: Ignore the incorrect installation pages, and proceed with the installation of Client Tools.	DE153175
If you change the destination of a collector instance, the destination is not updated in the older machine, although the destination is updated in the new machine.	DE153176

Table 1. Known Issues

The following issues are unresolved in this release.

(continued)

Description	Tracking ID
<p>When you attempt to fetch a list of OPC servers using the Get OPC Server API, an error occurs. This is applicable to the following OPC servers:</p> <ul style="list-style-type: none"> • OPC Data Access • OPC Historical Data Access • OPC Alarms and Events <p>Workaround: Add collector instances using the RemoteCollectorConfigurator utility.</p>	DE147276
<p>Even if you install Web-based Clients using an alias name, you cannot access Configuration Hub using the alias name.</p>	DE148939
<p>While connecting to a remote Historian, you cannot add an instance of the File collector unless Client Tools are installed.</p>	DE152330
<p>After you install Client Tools in an iFIX system, the Configure Historian Server option is disabled in iFIX 6.5.</p> <p>Workaround: Reinstall Client Tools, and restart the machine.</p>	DE149001
<p>In Configuration Hub, for a horizontally scalable system, in the Collectors section, you cannot access an offline collector; a blank error message appears.</p> <p>Workaround: Ensure that the URI registry entry is the same for all the machines in a horizontally scalable system.</p>	DE151380
<p>If you upgrade collectors, an error occurs when you access Historian Administrator.</p> <p>Workaround: Install Client Tools.</p>	DE151932
<p>If you upgrade collectors, you cannot manage the OPC collectors. An error message appears in the <code>CollectorManager.shw</code> file.</p> <p>Workaround: Refer to Troubleshooting Remote Collector Management Issues.</p>	DE151366
<p>While installing Web-based Clients, after the connection to the external UAA is successful, if you change the UAA details, you can proceed to the next step even without testing the connection. Because of this, you will not be able to connect to the UAA server if the UAA details are incorrect (although you can install Web-based Clients).</p>	DE155570

Table 1. Known Issues*The following issues are unresolved in this release.***(continued)**

Description	Tracking ID
Workaround: Test the connection to the external UAA again, and only after the connection is successful, proceed to the next step.	
When you try to upgrade Web clients to Historian 2023, you will see port conflicts that do not allow you to proceed. Workaround: Use Silent Installation to install the Historian Web components.	DE194621
In a Primary Mirror installation, all Proficy Authentication users who do not have the ih-SecurityAdmins Windows Security group added to the Windows user, will encounter an error while accessing the System details in Configuration Hub. Users can proceed to perform other actions. There is no workaround.	DE194610