Proficy CIMPLICITY 11.1

Important Product Information

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

Chapter 1. Important Product Information

What's New in CIMPLICITY 11.1

The HMI/SCADA CIMPLICITY v11.1 release includes the following new features and enhancements.

CimEdit/CimView

• **Support for anti-alias appearance optimization**

The **Text rendering** section is introduced in the **Compatibility** tab of **Global Configuration**. It includes the following radio buttons:

◦ **Non-anti-aliased**: Anti-aliasing is not applied. Selecting this option is similar to de-selecting the **anti-alias font**checkbox in the previous versions.
◦ **Anti-alias (speed optimized)**: Anti-aliasing is applied but it is speed optimized. Select this option for better performance. Selecting this option is similar to selecting the **anti-alias font**checkbox in the previous versions. This option is selected by default.
◦ **Anti-alias (appearance optimized):** Anti-aliasingis applied, and it is appearance optimized. Select this option for better font clarity than the **Anti-alias (speed optimized)** option.

• **Support to include description for an object in CimEdit**

A **Description** text box is added to the **General** tab of the **Properties** screen of CimEdit. This enables you to add a description for an object. You can view the saved description in the **Properties** screen of CimEdit or CimView.

📝 **Note:** For a linked object, the description of the source object is displayed in the **Source Description** section of the **Link Container** tab of the **Properties** screen. You can add a description for the linked object in the **Description** text box of the **General** tab.

• **Enhanced the .Net Components Feature**

Previously, the newly added members/controls or members would not work as expected if there was a Dispatch ID mismatch. This issue has now been resolved. Whenever a new member or control is added, it is mapped to the next available ID.

Also, you can now modify the following properties as per your requirement in the **GEIP.Orion.ComponentBuilder.config** file located at **<installation_location >\Proficy \Proficy CIMPLICITY\exe**

Property	Default Values	Values
IncludeBaseMembers	<IncludeBaseMembers>false</IncludeBaseMembers>	The base members are not included to object properties in CimEdit. Set to True if you want to include base members to object properties in CimEdit.
IncludeNewMembers	<IncludeNewMembers>false</IncludeNewMembers>	When you upgrade .Net components version the, the new members introduced in the version, will not appear in object properties in CimEdit. Set to True if you want to include newly introduced members to object properties in CimEdit.
IncludeNewControls	<IncludeNewControls>true</IncludeNewControls>	When you upgrade .Net components version the, the new controls introduced in the version, will appear in the .Net Component Browser in CimEdit. Set to False if you do not want to include the newly introduced controls to the .Net Component Browser in CimEdit.

- **Improved screen caching algorithm**

  Previously, when you opened a screen or when there was a screen overlay, the cache logic searched for a screen that matched the screen name and project of the current screen.

  Now, a global parameter **GSM_CACHE_USE_VARS** is introduced to improve the screen caching algorithm. When the value of **GSM_CACHE_USE_VARS** is set to Y, the cache logic searches for a screen with the same screen name, project, and initial variables. The default value of the parameter is N.

  When the value of the parameter is N or if the parameter does not exist, the cache logic searches for a screen with the same screen name and project.

Logging

- Enhanced Logging Features

The logging feature if EM_LOG is now enhanced, for every run script action_type, a corresponding run script done, or run script abort, or run script error action_type would be logged. This enables you to know the status and time of an action.

Introduced PTMRP_CALOG_EU_VALUES to enable you to log the EU values in the point_val and point_prevval fields of CA_LOG.

Network Systems

• **Introduced CIMPLICITY HMI Webspace Plug-In**

The CIMPLICITY HMI Webspace Plug-In is introduced to enable users to access CIMPLICITY CimView screens from Operations Hub. It can be integrated with other Operations Hub widgets for better consolidation and visualization of data. This provides the users an end-to-end solution for better data analysis, visualization, and monitoring.

In CIMPLICITY Options, the **Webspace** tab has been modified to include options to configure the servers. These configurations allow you to use Operations Hub authentication to access CimView screens from Operations Hub.

To enable seamless integration of the products some of the default ports have been modified. Also, you must open the firewall for some of the ports.

Service	Default Port Number	Firewall must be opened?
NGINX	9443	Yes
Webspace Application Publishing Service	491	Yes
SCADA Web Configuration, REST	4955	No
OPC UA browse service, REST	4956	No
Webspace session Manager, REST	4957	No
Webspace Session Manager, CimView socket	4958	Yes(*)
Webspace Application Publishing Service	491	Yes

Watch the following videos for demos on CIMPLICITY HMI Webspace Plug-in Setup:

Points

• **Introduced Buffer Data for Redundant Failover Option**

Buffer Data for Redundant Failover check box in introduced in Point Device Properties to enable PTMRP to buffer the data from OPC DA and UA in case of a failover. When you select **Buffer data for redundant failover** check box in Point Device Properties the data changes are buffered to avoid any data loss during the switch over. When the secondary server starts working, the relevant Alarms and Events can be generated based on the buffered data.

• **Enhanced Point Configuration Feature**

PTMDP_DO_OVERRIDE_EXPR_RESULT_ALWAYS parameter is introduced to ensure that an equation with an override point is updated when the values of the source points are modified.

Introduced Log Only Option

The Change Approval feature is enhanced to include **Log Only** option. It enables you to log point changes into CA_LOG without any digital signature from users or services.

Scada Web Config

• **Support to Use the Certificate of External Certificate Authority**

Introduced new batch files **Generate_CSR.bat** and **process_server_cert.bat** that enable you to generate the Certificate Signing Request, and then process the SSL certificate received from external authority.

Server Redundancy

• **Enhanced Cabling Redundancy Feature**

Introduced SOCKET_CONNECT_TIMEOUT to enable you to prevent the Windows Firewall from creating a failure mode. You must add this parameter to **cimhosts.txt** file. The optimal value may differ from system to system. However, the recommended range of values is >=2 seconds and <=5 seconds.

Tracker

• Validated tracker configuration limits for large region location counts

The maximum number of regions supported, depends on the PRT_DC process memory. If the memory utilized exceeds 4 gb, the following error appears in the status log: 'Not enough memory resources are available to process this command.'

The maximum number of available locations that are allowed in the region is 32767. The maximum number of items that can reside at a single region location is 32767. The maximum items per project should not exceed 33554429.

📄 **Note:** Be aware of the following:

- Microsoft Access is no longer supported by CIMPLICITY.
- Portal is at its end of life, and its integration with CIMPLICITY is no longer supported. Contact your sales representative for alternate solutions.

System Requirements and Compatibility

Hardware Requirements

CIMPLICITY v11.1 requires, at a minimum, the following hardware specifications. GE Digital recommends testing your particular system to determine if your performance needs require hardware beyond the base system recommendations.

Hardware	Requirements
Microprocessor	Intel Core 2 Duo 3.0 GHz
RAM	4 GB
Hard disk	40 GB
Ports	• USB port, if using a USB M4 or M5 license or a green key. • Serial port for some touch screens, pointing devices, and I/O drivers • Additional ports for I/O hardware
Monitor	• Color graphics monitor, SVGA or better • 24-bit graphics card capable of 800 x 600 resolution

Supported Operating Systems and Versions

CIMPLICITY v11.1 runs on any of the following operating systems, provided that specified revisions and service packs are included.

- Microsoft® Windows® 10 (32-bit or 64-bit), Professional, Enterprise & Ultimate Editions

- Microsoft® Windows® 8.1 (32-bit or 64-bit), Professional, Enterprise & Ultimate Editions

- Microsoft® Windows® Server 2019

- Microsoft® Windows® Server 2019 Cluster

- Microsoft® Windows® Server 2016

- Microsoft® Windows® Server 2016 Cluster

- Microsoft® Windows® Server 2012 R2

- Microsoft® Windows® 10 IoT Enterprise (LTSB) (Only full blown IoT version is supported. Not the core & mobile versions)

.NET Installation

NET 3.5 SP1 is required for the CIMPLICITY installer.

Supported External Software Versions

CIMPLICITY v11.1 is compatible with the following external software.

External Software	Supported Version
Microsoft Office	2016 and 2019
Microsoft SQL Server	2014, 2016, 2017, and 2019 ⚠ **Important:** SQL Server 2008 can be installed but is no longer supported. 📝 **Note:** CIMPLICITY has been validated to work with Database configurations using SQL 2016 AlwaysOn with the exception of the Tracker Attribute Database (TADB) functionality.
SQL Express	2014, 2016, 2017, and 2019
Oracle	18c and 19c **Note:** Both the client and server should be running same version of Oracle.
Microsoft Visual Studio	2017

External Software	Supported Version
Flexera Software - Install Shield	2018
Sequent - Alarm Cast	10.02.01

Supported GE Software Versions

CIMPLICITY v11.1 is compatible with the following GE software.

GE Software	Supported Version	Install Before or After CIMPLICITY
Alarm Cast Administrator	10.02.01	After
Change Management	9.5	Before
Common Licensing	Latest version	With CIMPLICITY
Driver Server	Latest version	Either
Global Discovery Server	2.2	After
Historian (full version)	9.0 and 8.1 Note: Logging array points to Historian is supported from version 7.0 onwards.	Either
IGS OPC Server	Latest version	Either
Machine Edition	9.5 and 9.0	Either
Plant Apps	8.2 and 8.1	Either
Portal	3.5 SP5	Either
Proficy Driver Server (PDS) *	Latest version	With CIMPLICITY
OPSHUB	2.0 SIM 4	After
Webspace	6.0.3	After

Starting CIMPLICITY 11.1 , the Proficy Driver Server will not be installed with CIMPLICITY installation.

To install Proficy Driver Server, navigate to the CIMPLICITY Install Media located at **Setups \Proficy Driver Server\setup.exe**. Before you install Proficy Driver Server, you must install .NET Framework 3.5 through your Windows options.

📄 **Note:**

- If you are already using the Proficy Driver Server in your CIMPLICITY projects, it will continue to work as expected. Existing PDS is not uninstalled when you uninstall CIMPLICITY and upgrade to 11.1.

- The Driver Server protocol may be enabled in Project Properties even when Proficy Driver Server is not installed.

Compatibility Requirements

Note the following as they apply to your installation:

Element	Requirement
Network Communication I/O	Allen-Bradley Ethernet Driver Note the following: • RSLINX OEM 3.80.00 is required. • Rockwell requires a Factory Talk activation for RSLINX OEM. If RSLINX OEM is not activated, the Allen-Bradley Ethernet device communication interface will not run. Allen-Bradley Internet is supported on the following operating systems: Windows 2019 Windows 8.1 Windows 10 Server2012R2 Server 2016 Windows 10 IoT, LTSB 📄 **Note:** Depending on the OS, some RSLINX OEM features may not be supported. Refer to the RSLINX documentation for further information.
Genius PCI	If you are using Genius PCI communications you need: • One full height PCI slot for each port (up to four) • One Genius PCI card (IC660ELB931) 📄 **Note:** Genius PCI is only supported on 32-bit Windows 7 and Windows 10 systems.

Element	Requirement
Reflective Memory	If you are using reflective memory, the card requirements are: • PCPCIE-5565PIORC requires a low profile PCI Express Slot for each card • PCI-5565PIORC requires a 64-bit PCI slot for each card • PCIE-5565RC requires a PCI Express Slot. 📄 **Note:** You can install up to two reflective memory cards, but not all computers support two cards due to hardware or BIOS-specific limitations. The Reflective Memory driver is only supported on Windows 7 and is no longer packaged with CIMPLICITY. However, the package is available from Abaco, who is also the vendor for the reflective memory cards. You must install the following package: RFM2G Windows 7/XP/Vista/Server 2008/Server 2003/32/64-bit PCIE/PCI/PMC Driver for X86 R08.01.
DDE Communications	The DDE communications interface runs in the service session only. The DDE server must be able to run from the service session.
Browsers	The following browsers are supported for WebSpace with CIMPLICITY. • Google Chrome 66 or Greater • Microsoft Edge 41 or Greater • Firefox • Safari The following browsers are supported with the SCADA Web Configuration: • Google chrome 76 and above • Safari 10 and above, MacBook only (not iPad or iPhone) • Microsoft Edge on Windows 10 - 44.x • Firefox 67

Known Issues in CIMPLICITY 11.1

The following issue has been identified in CIMPLICITY v11.1.

US475944

Issue: Webspace adds a DBCM.bin file error in its logs and the CIMPLICITY HMI Webspace Plug-In stops working.

Workaround: To re-enable Proficy Webspace, delete the C:\Windows\system32\DRIVERS \DBCM.bin file and restart the computer. To prevent a Bug Check from disabling Proficy WebSpace, create the DWORD registry value [\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet \Services\ggse\DBCM_Disabled] and set it to 0x00000001. (Diagnostic DBCM bits 0x001f0000)

DE154535

Issue: You may have port conflict when you install CIMPLICITY and Operations Hub on the same node.

Workaround: If you encounter any port conflict you must change the port number accordingly. You are recommended to install Operations Hub after CIMPLICITY.

DE155485

Issue: When adding additional custom control from an assembly that controls have already been added from, the properties and methods for the additional controls are not included in the interface to the control.

Workaround: Change either IncludeBaseMembers or IncludeNewMembers flag to true based on your requirement. You must modify the flag in the GEIP.Orion.ComponentBuilder.config file located at <installation_location>\Proficy\Proficy CIMPLICITY\exe.

Other

Issue: When **IncludeNewControls** flag is false, any new control that is added may appear on the UI, but it would not be functional.

Workaround: If you want to add a new control, you must ensure that IncludeNewControls flag is set to true in the GEIP.Orion.ComponentBuilder.config file located at <installation_location>\Proficy \Proficy CIMPLICITY\exe.

Fixed Defects in CIMPLICITY 11.1

The following issue has been identified in CIMPLICITY v11.1.

US475944

Issue: Webspace adds a DBCM.bin file error in its logs and the CIMPLICITY HMI Webspace Plug-In stops working.

Workaround: To re-enable Proficy Webspace, delete the C:\Windows\system32\DRIVERS \DBCM.bin file and restart the computer. To prevent a Bug Check from disabling Proficy WebSpace,

create the DWORD registry value [\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet \Services\ggse\DBCM_Disabled] and set it to 0x00000001. (Diagnostic DBCM bits 0x001f0000)

DE154535

Issue: You may have port conflict when you install CIMPLICITY and Operations Hub on the same node.

Workaround: If you encounter any port conflict you must change the port number accordingly. You are recommended to install Operations Hub after CIMPLICITY.

DE155485

Issue: When adding additional custom control from an assembly that controls have already been added from, the properties and methods for the additional controls are not included in the interface to the control.

Workaround: Change either IncludeBaseMembers or IncludeNewMembers flag to true based on your requirement. You must modify the flag in the GEIP.Orion.ComponentBuilder.config file located at installation_location\Proficy\Proficy CIMPLICITY\exe.

Other

Issue: When IncludeNewControls flag is false, any new control that is added may appear on the UI, but it would not be functional.

Workaround: If you want to add a new control, you must ensure that IncludeNewControls flag is set to true in the GEIP.Orion.ComponentBuilder.config file located at <installation_location>\Proficy \Proficy CIMPLICITY\exe.