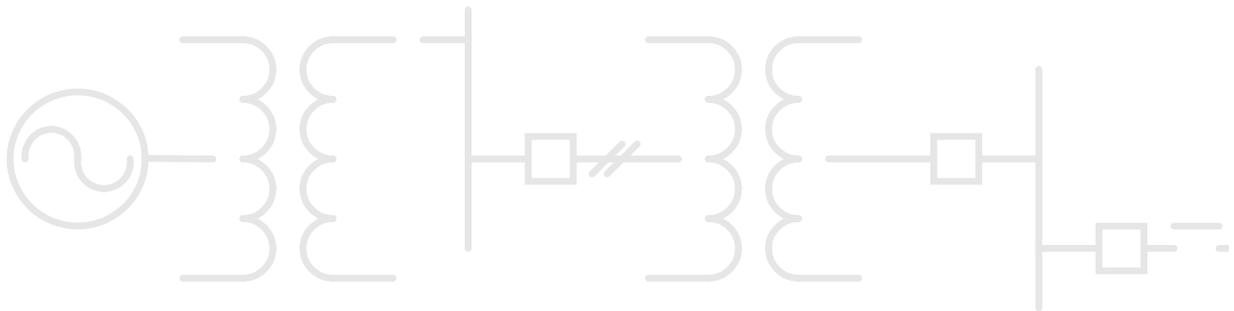


# D20E Ethernet I/O Modules

## Release Notes

MIS-0112

Version 6.3.0 Revision 0



Building a world that works

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# About this Document

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## Purpose

The purpose of this document is to outline key updates for a D20E I/O Module firmware and associated configuration software release.

## Additional Documentation

For further information about the D20E Substation I/O Module, refer to the following document:

- *994-0145 D20E Ethernet IO Module Instruction Manual*
- *DAPserver Studio User Manual*

For the most current version of the above D20E documentation, please download a copy of the manual from the GE Grid Solutions website at:

<https://www.gegridsolutions.com/multilin/energy/catalog/d20e.htm>

or the Substation Automation Technical Support Library at:

[http://sc.ge.com/\\*SASTechSupport](http://sc.ge.com/*SASTechSupport)

# Product Support

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If you need help with any aspect of your GE Grid Solutions product, you can:

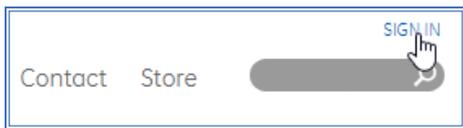
- Access the GE Grid Solutions Web site
- Search the GE Technical Support library
- Contact Technical Support

## 1.1 GE Grid Solutions Web Site

The GE Grid Solutions Web site provides fast access to technical information, such as manuals and release notes.

Visit us on the Web at: <http://www.gegridsolutions.com>

Subscribe for Product Updates:



## 1.2 GE Technical Support Library

This site serves as a document repository for post-sales requests. To *get* access to the Technical Support Web site, go to:

[http://sc.ge.com/\\*SASTechSupport](http://sc.ge.com/*SASTechSupport)

## 1.3 Contact Technical Support

For questions or further product support, please contact the GE support team 24/7 using:

Region	E-mail	Telephone
Global Contact Centre	ga.support@GE.com	+44 1785 250070
Central and East Asia and Pacific	ga.supportCEAP@GE.com	+61 414 730 964
India	ga.supportIND@GE.com	+91 44 22648000
Middle East, North Africa and Turkey	ga.supportMENAT@GE.com	+971 42929467
Europe, Russia, CIS and Sub-Saharan Africa	ga.supportERCIS@GE.com	+34 94 4858854
North America	ga.supportNAM@GE.com	+1 877 605 6777
Latin America	ga.supportLAM@GE.com	+55 11 36187308

## 2. Version 6.3.0-2 (2023-July-27)

### 2.1 Features Added and Issues Resolved

With the D20E V6.3.0-2 firmware, the following features have been added or improved and issues have been resolved:

GE Internal Reference #	Description
DCSSUP-21320	D20E Firmware and Configuration are now stored on flash chip instead of SD Card.
DCSSUP-21153	Resolved: DAPServer Studio drop down menu not working for non-GE laptops.
DCSSUP-21320	Resolved: Slow D20E Memory leak that could cause a soft reboot after ~4 years.
DAP-781	Resolved: Warning 4154 during fresh install of DAP Server Studio. Integrated gtk-sharp-2.12.25 pre-requisite into installer so it does not need to be manually pre-installed.
DCSSUP-23416	Resolved: D20E always asserts T- quality flag for AI and DI over IEC 61850 MMS protocol.
DCSSUP-23013	Implemented IEC 61850 MMS Status object
DCSSUP-21320	Disable DNP3 Time Sync by default. NTP time sync is recommended.
DCSSUP-21320	Default DNP3 AI deadbands to 0.2% of full scale (32 counts).

### 2.1 Installation File Information

Installer Name	DAPserverStudioSetup-6.3.0-2.exe
SHA256	4502b5205b726e8dc33715998ff988d78ab18f6c80e1793e84c83fb69723fc10
MD5SUM	6c1214c748eb5a71c2ccc097b1c0f62a

### 2.2 Minimum Software Versions

The D20E firmware is distributed with DAPserver Studio. When a new release of DAPserver Studio is installed on the Windows PC, the matching version of firmware is available to be downloaded to the D20E module.

**NOTE:** When connecting to a D20E module, the DAPserver Studio version should match the firmware on the D20E module. If the D20E is running a firmware version that is older than the DAPserver Studio software version, DAPserver Studio may not connect (communicate) with the

older D20E firmware device. However, most older firmware versions on the D20E will connect to the latest DAPserver Studio.

The following defines the minimum software versions required for interaction with the D20E.

Package	Minimum Version
DAPserver Studio	6.3.0-2

**Note:** DAPserver View does not work in Windows 7. Please use 6.2.19-1 or consider migrating to Windows 10 if this feature is critical for your installation.

## 2.3 Upgrade Procedure

Please refer to “**Chapter 10: Maintaining a D20E Module Firmware**” in the 994-0145 D20E Ethernet IO Module Instruction manual for detailed steps on how to upgrade any version of the D20E to the firmware version corresponding to the DAPserver Studio version that is being used.

## 3. Version 6.2.20-1 (2021-May-21)

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### 3.1 Key Features

With the D20E V6.2.20-1 firmware, the following key features have been added or improved:

- DAP Server Studio auto exits when changing digital input "initial value" or "class", in Windows 10 Enterprise with only Dot Net Framework 4.8

### 3.2 Minimum Software Versions

The D20E firmware is distributed with DAPserver Studio. When a new release of DAPserver Studio is installed on the Windows PC, the matching version of firmware is available to be downloaded to the D20E module.

**NOTE:** When connecting to a D20E module, the DAPserver Studio version should match the firmware on the D20E module. If the D20E is running a firmware version that is older than the DAPserver Studio software version, DAPserver Studio may not connect (communicate) with the older D20E firmware device. However, most older firmware versions on the D20E will connect to the latest DAPserver Studio.

The following defines the minimum software versions required for interaction with the D20E.

Package	Minimum Version
DAPserver Studio	6.2.13-1

**Note 1:** The gtk-sharp-2.12.25.msi has to be installed before installing the DAPServerStudio. It is available along with the binary.

**Note 2:** DAPserver View does not work in Windows 7. Please use 6.2.19-1 or consider migrating to Windows 10 if this feature is critical for your installation.

### 3.3 Upgrade Procedure

Please refer to “**Chapter 10: Maintaining a D20E Module Firmware**” in the 994-0145 D20E Ethernet IO Module Instruction manual for detailed steps on how to upgrade any version of the D20E to the firmware version corresponding to the DAPserver Studio version that is being used.

## 4. Version 6.2.16-1 (2020-Jan-30)

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### 4.1 Key Features

With the D20E v6.2.16-1 firmware, the following key features have been added or improved:

- Resolved an issue where D20E Subnet Mask for USB port is 255.0.0.0, modify to allow routing for a 10.x.x.x IP on Ethernet ports.

### 4.2 Minimum Software Versions

The D20E firmware is distributed with DAPserver Studio. When a new release of DAPserver Studio is installed on the Windows PC, the matching version of firmware is available to be downloaded to the D20E module.

**NOTE:** When connecting to a D20E module, the DAPserver Studio version should match the firmware on the D20E module. If the D20E is running a firmware version that is older than the DAPserver Studio software version, DAPserver Studio may not connect (communicate) with the older D20E firmware device. However, most older firmware versions on the D20E will connect to the latest DAPserver Studio.

The following defines the minimum software versions required for interaction with the D20E.

Package	Minimum Version
DAPserver Studio	6.2.13-1

### 4.3 Upgrade Procedure

Please refer to “**Chapter 10: Maintaining a D20E Module Firmware**” in the 994-0145 D20E Ethernet IO Module Instruction manual for detailed steps on how to upgrade any version of the D20E to the firmware version corresponding to the DAPserver Studio version that is being used.

## 5. Version 6.2.13-1 (2019-May-31)

### 5.1 Key Features

With the D20E v6.2.13-1 firmware, the following key features have been added or improved:

- Resolved an issue where D20E Counters in the IEC 61850 publisher were using the INT128 datatype (128-bit integers) to send the data. In Clients where the INT128 datatype were not supported, counter values were always offline.

To resolve this issue, a new "64 Bit-Counters" option under Publisher > View > Protocol was added for forcing INT64 counters.

### 5.2 Minimum Software Versions

The D20E firmware is distributed with DAPserver Studio. When a new release of DAPserver Studio is installed on the Windows PC, the matching version of firmware is available to be downloaded to the D20E module.

**NOTE:** When connecting to a D20E module, the DAPserver Studio version should match the firmware on the D20E module. If the D20E is running a firmware version that is older than the DAPserver Studio software version, DAPserver Studio may not connect (communicate) with the older D20E firmware device. However, most older firmware versions on the D20E will connect to the latest DAPserver Studio.

The following defines the minimum software versions required for interaction with the D20E.

Package	Minimum Version
DAPserver Studio	6.2.13-1

### 5.3 Upgrade Procedure

Please refer to "Chapter 10: Maintaining a D20E Module Firmware" in the 994-0145 D20E Ethernet IO Module Instruction manual for detailed steps on how to upgrade any version of the D20E to the firmware version corresponding to the DAPserver Studio version that is being used.

### 5.4 Known Issue

When installing DAPserver Studio 6.2.13.1 on a Windows 7 or Windows 10 computer for the first time, a "Warning 4154. Gtk# for .Net 2.12.25 prerequisite was not correctly installed" message may appear.

To resolve this issue, first install Gtk# for .Net 2.12.25 separately and then install DAPserver Studio. Gtk# for .Net 2.12.25 can be downloaded from the D20E folder on the Substation Automation Technical Support Library or directly from

<http://download.xamarin.com/GTKforWindows/Windows/gtk-sharp-2.12.25.msi>

## 6. Version 6.2.7-2 (2019-Feb-28)

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### 6.1 Key Features

With the D20E v6.2.7-2 firmware, the following key features have been added or improved:

- Resolved an issue where all admin level actions were blocked on the D20E for new users in the admin user group. This resulted in the device always being offline when exploring, the Project Sync operation not restarting the D20E, and real time settings not being applied.
- Performed cybersecurity improvements.
- Resolved issue with the IEC 61850 Publisher where the OSI-TSEL and OSI-PSEL values swap when using a custom SCL creator.

### 6.2 Minimum Software Versions

The D20E firmware is distributed with DAPserver Studio. When a new release of DAPserver Studio is installed on the Windows PC, the matching version of firmware is available to be downloaded to the D20E module.

**NOTE:** When connecting to a D20E module, the DAPserver Studio version should match the firmware on the D20E module. If the D20E is running a firmware version that is older than the DAPserver Studio software version, DAPserver Studio may not connect (communicate) with the older D20E firmware device. However, most older firmware versions on the D20E will connect to the latest DAPserver Studio.

The following defines the minimum software versions required for interaction with the D20E.

Package	Minimum Version
DAPserver Studio	6.2.7-2

### 6.3 Upgrade Procedure

Please refer to “**Chapter 10: Maintaining a D20E Module Firmware**” in the 994-0145 D20E Ethernet IO Module Instruction manual for detailed steps on how to upgrade any version of the D20E to the firmware version corresponding to the DAPserver Studio version that is being used.

## 7. Version 6.2.0-4 (2017-Oct-12)

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### 7.1 Key Features

With the D20E v6.2.0-4 firmware, the following key features have been added or improved:

- 1 ms time stamp accuracy
- Simplified design for improved reliability, single module simplified design
- Similar form factor and terminal block alignment (pin to pin) with Multilin D20 IO Module
- Protection grade onboard relay 8A (300VDC / 4A continuous)
- No need for interposing relay
- Open Protocols for the Server/Publisher:
  - DNP3/IEEE1815 or
  - IEC 61850

### 7.2 Minimum Software Versions

The D20E firmware is distributed with DAPserver Studio. When a new release of DAPserver Studio is installed on the Windows PC, the matching version of firmware is available to be downloaded to the D20E module.

**NOTE:** When connecting to a D20E module, the DAPserver Studio version should match the firmware on the D20E module. If the D20E is running a firmware version that is older than the DAPserver Studio software version, DAPserver Studio may not connect (communicate) with the older D20E firmware device. However, most older firmware versions on the D20E will connect to the latest DAPserver Studio.

The following defines the minimum software versions required for interaction with the D20E.

Package	Minimum Version
DAPserver Studio	6.2.0-4

### 7.3 Upgrade Procedure

Please refer to “**Chapter 10: Maintaining a D20E Module Firmware**” in the 994-0145 D20E Ethernet IO Module Instruction manual for detailed steps on how to upgrade any version of the D20E to the firmware version corresponding to the DAPserver Studio version that is being used.

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**MODIFICATION RECORD**

Version	Revision	Date	Author	Change Description
6.2.13	0	5 <sup>th</sup> June, 2019	D. Morris	Created for version 6.2.13-1
6.2.16	1	4 <sup>th</sup> Feb, 2020	E. Chamas	Added version 6.2.16-1
6.2.20	0	22 Oct 2021	D. Morris	Added version 6.2.20-1
6.3.0	0	15 Aug 2023	D. Morris	Added version 6.3.0-2