



Remote Operations

Command Center

Remote Operations – Command Center is a centralized secure system to rapidly configure industrial applications for data aggregation, connectivity, and visualization to easily contextualize plant and asset information into a single view. This modern digital experience enables enterprise-wide collaboration to perform controls, monitoring, data collection, and other critical tasks to improve operations, productivity, and business intelligence – from anywhere, on any device.

Through Command Center’s code-free design experience, organizations can easily create intuitive application dashboards that monitor, analyze, and operate enterprise control rooms, fleet, and even down to the equipment level – remotely in a securely contained environment

Command Center Solution Components

Create, manage, connect, display, and aggregate data from equipment historian, HMI/Scada, DCS, or other industrial applications – without needing developer or costly 3rd party resources.

Proficy Operations Hub

Easy drag drop design tool to visualize, connect, and aggregate data into intelligent dashboards

Data Modeling & Connectivity:

Data Management: Modeling including Entities and Pivot Tables; Queries, alerts, events, and notifications

Model and flat tag support

RDP/VNC & HTML

Up to 1,000 concurrent clients on a single server

Connectivity: OPC UA, Relational databases, Time series, Historian, MQTT, REST API

High Performance HMI Runtime

Data analysis with standard model context with app capabilities

Benefits:

Improved Productivity – Empower operators, expertise across roles and locations with access to information at any time, any pace.

Intuitive Design – Single design tool with infinite flexibility for industrial applications – code-free configuration

Intelligent Data – Deliver actionable data across the fleet, plant, and equipment for an automatic response based on IIoT data

Safe, Secure, Connected – Secure real-time access to information that scales command center centrally or across fleet

Industrial Design:

WYSIWYG App Builder, with a rich dev library, extensive widgets, and drag-and-drop configuration.

Mobile friendly responsive design. Actions, Conditions, and Formulas. QR code navigation for mobile

SDKs for customizations – widgets, dashboards

Advanced Historian Trend Analysis App detects root cause and collaboration analysis using ad hoc trending and KPI dashboards from Historian data

Web-based technologies, cloud, and Docker: Deployment, product updates, accessibility/mobility, improved collaboration, and lower IT costs

Platform independence by using HTML5 and CSS3



Provisions, Controls, Security:

Monitor, control, data entry, analysis, and task management capabilities.

Multiple language support – English, Japanese, Chinese, Korean, Spanish, German, Russian

Role-based permissions at the page level

Secure by design including AD and shared UAA support

Access controls to applications and data, by user roles

ISA 18.2 and ISA 101 for improved operator performance and safety



Software License Packages:

- 1. **Perpetual Starter Option – License per client for smaller specialty systems or OEM equipment**
- 2. **Term Agreement – License term per client or per site. This option is available for GE Digital add-on software or as standalone purchase.**

For pricing and package availability, contact your GE representative.

Servers and Hardware:

Depending on the implementation site requirements, GE Digital provides additional or self-contained server options to host multiple complex applications via virtual machines to highly scale across many users and locations. Computing technology and operating system lifecycles and hardware models are subject to change. The chart is a snapshot of the server model availability and GE Digital will provide the latest options in market as a standard.

Optional Hardware Components:

If more safety and security is required, GE Digital provides additional digital worker options for on-site operations.

Safety – Remote e-stop, communications, and collaboration tools for reduced staff schemes

Lone Worker – Communications, safety devices, and wearables

Simplex			Redundant
Type	6 Core	36 Core	72 Core HA
	Dell PowerEdge R340	Dell PowerEdge R340	Dell PowerEdge R340
Number of Servers	Single	Single	Two
Operating System	Windows 2019	Windows 2019	Windows Server 2019 with Hyper-V
Processors	Intel Xeon 3.3Ghz 6 Physical Core/12 Hyperthreaded	Intel Xeon Gold 2.3Ghz 18 Physical Core /36 Hyperthreaded	Intel Xeon Gold 2.3Ghz 36 Physical Core /72 Hyperthreaded total
RAM:	32GB	256GB	512GB total
SSD Capacity Hard Drive:	960GB (Expandable)	960GB (Expandable)	3TB (Expandable)
Processors	Dual	Dual	Dual
RAM:	2-6	4-8	4-8
SSD Capacity Hard Drive:	19" Rack - Shallow	19" Rack - Deep	19" Rack - Deep

Command Center Requirements:

The system is highly flexible centrally or across any size fleets. Data aggregation is achieved from any source and location. Prior to installation, Command Center requires the following for optimal performance.

- **Remote Operations Advanced – For more information see datasheet**
- **Windows® UX on connected devices**
- **1 Mbps network connection (symmetric upload and download speed – six (6x) times safety factor applied). For contingency operations, the system may work lower speed. Network connection is supplied by customer.**
- **Ethernet connection within twenty (20 ft.) feet of the firewall installation**
- **Minimum two (2) units of rack space**
- **Connectivity RDP/VNC & HTML**
- **Windows interface and open-sourced non-proprietary protocols. If unavailable, a pre-requirement is a suitable interface through GE Cimplicity® and/or Proficy Historian**
- **GE will assist you in optimizing your data infrastructure to support your environment**

Support & Services:

GE Digital provides system configuration and software installation

- **Configuration and support services**
- **On-going cybersecurity patching and upgrades**
- **Optional Dashboard creation support**
- **Option-based safety equipment subscriptions**

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