Desigo CC Management Station – V2.1

Description

Desigo™ CC workstation software provides an integrated approach to managing and controlling facilities from a flexible, easy-to-use interface. Desigo CC provides facility-wide efficiencies, cost effective information sharing, improved event management and decision making.

- Class-leading workflow-oriented user interface (patent pending) enables fast and accurate operation and event handling.
- Full integration of building automation, fire safety, and live IP camera systems.
- Support for the leading open standards: BACnet, OPC, Modbus, ONVIF and SNMP.
- The latest industry-used IT technologies, including 64-bit operating system support.
- Multiple client options for dedicated, browser-based, and Windows desktop app clients with the same user interface.

Figure 1. Desigo CC User Interface, System Manager.
Key Features

Easy to Learn, Easy to Use
- Consistent interface designed around user-based workflows
- Simple navigation through tree views or graphics
- Anticipates your next step with auto-defined Related Items
- Drag-and-drop graphics creation

Smart Application for Better Decision Making
- Integrated data from multiple building and information systems
- Investigative event management for fast response to critical events
- Customized reporting capabilities
- Time-shifted Trend graphs for quick data comparison
- Powerful graphics with AutoCAD integration and endless display options
- Built-in email, SMS, and paging for remote notification

Adaptable to Meet the Needs of Any Facility
- Multiple client options for use at a dedicated workstation, in a browser, or as a light desktop application
- Built-in profiles for building automation and fire safety users
- Adjustable pane layouts support beginners and power users
- Separate operation and configuration modes
- Flexible Views organize facilities as you want to view them
- User groups and profiles control and simplify site visibility
Open, Integrated System

- Open protocol support for building automation, fire safety, and camera systems
- Standard interface support for IT systems
- Normalization and management of data from multiple sources
- Integration application support for complex and simple systems
- Intelligent import and discovery learn how points are used

Robust System Platform

- Built on a proven SCADA technology and IT standards
- Scalable to support small and large facilities
- Flexible to provide a wide range of applications
- Extensible to grow with facility’s needs

System Architecture

Desigo CC is a flexible full client-server architecture for building automation and fire safety applications allowing configurations from small single-seat to large multi-user installations.

Desigo CC can be installed completely on one computer, with full server and client functionality. Additional clients (dedicated, browser, and Windows desktop application) can be also be added. Additional system connections can be made through systems installed with a Desigo CC Front End Process (FEP) configuration.

An IIS server for Browser Clients and Desktop Application downloads can be installed on the server or on a separate installation.

The Desigo CC Server, FEP, and Dedicated clients run on Windows 7/8 64-bit or Windows Server 2008 R2 operating systems. Browser and Windows desktop application clients run on Windows 7 or Windows 8.1 operating systems.

The server hosts all the data for the system, while the clients are only for the visualization and the user interaction. The clients provide a high-resolution interface to all the relevant server data needed for monitoring and commanding the installation.

Figure 3. Desigo CC System Architecture.
Client Options

Desigo CC supports multiple client options for applications ranging from casual users to dedicated mission critical console installations. All client options are built around the same usability standards and capabilities so you can easily switch between different client options without needing to learn multiple interfaces.

User privileges can be assigned to users and to workstations, allowing users to be granted the same access from everywhere or different access depending where they are logged on.

Dedicated Client

The Dedicated Client installation is designed for mission critical applications, like UL Listed fire safety monitoring or critical process control, where users are focused entirely on monitoring and managing building systems. In this configuration, software components used for Event Management are locked in-place and cannot be moved or covered by other applications; this ensures that critical events are never missed or hidden.

Dedicated Client installations can optionally be configured to run in a “Closed Mode”, where only Desigo CC and other specifically identified applications are allowed to run. In Closed Mode, the workstation is truly dedicated to running Desigo CC, with access to the Start menu or other operating system applications available only to administrative users.

Browser Client

For users who demand greater flexibility in their system access, Desigo CC software can run in Internet Explorer. Users working in a browser can have the same capabilities as those working on a dedicated client installation, or can be restricted to have different access when connected remotely.

Windows Desktop Application

The Desigo CC Windows Desktop Application is a light application that can be downloaded from the Desigo CC server when connecting through a browser. When the desktop application is downloaded, it runs like any other Windows application on your desktop. It can be launched from the Start menu, desktop icon, Quick-launch toolbar, and so on.

The desktop application runs as a ClickOnce client in its own pane, without the overhead of the browser application and menus.

Every time the desktop application runs, it checks with the server to see if a newer version is available. When a new revision is discovered, it automatically downloads to your workstation, giving you the power of a real Windows application without ever needing to manually install software on your computer.

Open Integration Platform

Desigo CC is an open system by design and supports a variety of open system protocols and IT standards.
Open System Standard Protocols

- **BACnet.** Certified by BACnet Testing Laboratory as BACnet Advanced Workstation Software (BTL B-AWS), including support for Life Safety Points and Life Safety Zones.
- **OPC Client.** OLE for Process Control OPC DA 2.0
- **OPC Server.** OLE for Process Control OPC DA V2.05/V3.00
- **Modbus.** Supported using PXC controller
- **XNET.** FireFinder XLS and MXL fire safety systems
- **OnVIF.** Standard for IP video camera systems
- **Axis.** Standard for Axis video camera systems

IT Standards

- **SNMP (V1 and V2).** IP device monitoring
- **WMI.** Computer hardware monitoring
- **SMTP, PO3, IMAP.** For email delivery
- **Microsoft SQL Server.** Trend and History data storage
- **HTTP(S).** Client-server communication
- **DWG, DXF.** AutoCAD import formats
- **TAP.** Protocol for pager communication

Application Support

Representative data points in Desigo CC can be created manually, imported through data exchange files, or uploaded through a selective auto-discovery mechanism depending on the type of system being connected.

A unique, extensible object modeling approach allows Desigo CC to normalize information brought in through any interface, and to provide the same look, feel and operation through a common set of applications, without concern for the source of the data.

As a true integration platform, Desigo CC allows you to configure connected subsystems directly, as well as perform typical controller functions (such as scheduling, trending, and event generation) at the workstation for connected systems that do not support those functions directly.

Desigo CC is designed to provide the ultimate user experience for all of your building systems. Whether you are monitoring fire safety events, ensuring optimal comfort and building performance, or modifying system configuration, the flexible user interface of Desigo CC supports just the right environment for every situation.

Event Management

Desigo CC provides a robust set of applications to ensure quick, easy, and accurate response to any events.

Client Profiles

To ensure the right level of event management support for users in any situation, workstation and/or users can be easily assigned predefined profiles supporting casual, intermediate, or dedicated event management notification and management.
Summary Bar
The Summary Bar is the anchor of Desigo CC event management. It highlights current conditions with clear indication of current event priorities, and allows you to quickly open the Event List. Depending on the client profile in use, the Summary Bar can be docked on the desktop or freely opened and closed as needed.

Event List
The Event list provides a complete and/or easily filtered list of events under control of the management station. The Event List gives clear indication of each event source, severity, and current status, as well as custom messages and suggested action steps through the use of text, color, and icon representations. Events can be acknowledged, silenced, and reset from the Event List.

Event Bar
When using profiles for critical event management, the Event List can be collapsed into a condensed list that remains docked on the desktop for easy access. This patented design keeps current situations in focus at all times.

Investigative Treatment
From the Event List or Event Bar, operators can quickly open the System Manager with focus on the source of the event, and all information (live video, recent history, schedules, trends, and so on) related to the event source.

Assisted Treatment (Operating Procedures)
Operating Procedures consist of a sequence of steps or actions, which the operator must, or is suggested to perform with the Assisted Treatment. For each step of a procedure, the system provides instructions and operating tools. With appropriate permissions, you can create, view, edit, or delete Operating Procedures.

From the Event List or Event Bar, operators can quickly open the Assisted Treatment to guide the operator through pre-configured Operating Procedures. Each Operating Procedure is composed of steps—some of which may be mandatory—that you must complete (for example, to see the graphic of the object in alarm, fill-in a treatment form, or automatically print on paper the information of the event).

Remote Notification Option
With the Remote Notification Option enabled, Desigo CC can be configured to automatically or manually send email, SMS messages, or pages to first responders. In addition to simple notification, notification can also be escalated to second level responders when necessary.

System Manager
The System Manager application is used for navigating the system to view and override current conditions, analyze historical operation, and to configure the system.
Navigation

The System Manager is built around the concept of a common workflow for all system navigation. This simple and consistent workflow allow you to select from traditional applications, or better yet, select the part of the facility they are interested in and let the system guide them to the most relevant information.

From the initial starting point, you can make additional selections for more details, act on the system, or navigate further to automatically calculated Related Items based on their selection. The well-defined pane-based navigation keeps important information in front of you with no overlapping windows. You can navigate the system through graphics or flexible Views that allow the system to be represented the way that you see your facility.

Graphics

Desigo CC graphics are built using smart objects that know how they are used and how to represent themselves graphically. The use of smart objects allows you to create graphics by simply dragging and dropping objects onto a page, without manually binding object to graphical symbols.

Desigo CC also provides a powerful AutoCAD importing tool that allows you to select and manipulate layers of AutoCAD drawings during and after the import process.

Text Viewer

The Text Viewer provides a quick summary of current value and status of any selected object(s) without any prior system configuration. This is a handy tool for getting an overview of system status.

Trend and System Activity Logging

Both panel-based and workstation-based Trending is provided to support control systems without embedded Trend capabilities.

Trend and System Activity data is stored in a Microsoft SQL Server database. SQL Server Express is included with the Desigo CC software, and can be upgraded as required.

The Trend Comparison View allows you to time shift the Trend view to compare data at different times for quick analysis of changing conditions.

Schedules

The Scheduling application allows complete configuration and monitoring of standard BACnet schedule, calendar, and command objects, as well as for workstation base schedules that can be used to support systems without built-in scheduling capabilities.

Schedules are automatically associated to systems they control, so you can quickly navigate to schedules related to any selected object.
Reports

The Desigo CC reporting tool includes standard reporting templates and allows for creating fully configurable reports, with custom logos, headers, footers, and layouts that include tabular and graphical system information. Reports can be scheduled, and saved in CSV or PDF formats for future use.

Video Camera Viewer

Desigo CC can integrate IP video cameras for displaying live video streams. Cameras associated to locations or equipment can be easily accessed through Related Items whenever live video is available. Pan, tilt, zoom capabilities are available with Axis camera equipment that supports these features.

Desigo CC supports a wide variety of IP based CCTV cameras. Built on the industry proven ONVIF standard, Desigo CC enables viewing cameras from a wide variety of vendors as also and controlling Axis PTZ cameras.

Operating and Engineering Mode

The System Manager provides two distinct modes of behavior for system Operation and Engineering. Operating Mode allows you to simply navigate the system to view and override current conditions, and analyze historical operation, without the complexities of managing system configuration.

Users that are granted privileges for system configuration can toggle the System Manager into Engineering Mode where they can set up system parameters and manage user accounts. The same common workflow is used in both Operating and Engineering modes.

Desigo CC for Building Automation

Desigo CC is an integral component of the APOGEE Automation System. As a building automation management station, Desigo CC provides a full breadth of application support for ensuring that facilities remain comfortable, productive, and achieve optimal energy and equipment performance.

A well-defined user interface, coupled with standard protocol support, integration capabilities, and multiple client options that allow full operation and configuration from anywhere, make Desigo CC the perfect tool for maintaining facility operation.

- Graphically monitor and control the building automation infrastructure.
- Schedule and modify mechanical equipment operation and automatic report generation
- Collect, view, analyze and compare trend information
- Make management decisions with information and reporting capabilities
- Store and retrieve long-term information

Desigo CC for Fire Safety

Desigo CC is designed and UL Listed for use with Desigo Fire Safety, FireFinder XLS and MXL fire life safety systems. In a UL Listed configuration, Desigo CC software runs on specialized workstation hardware that has passed rigorous performance and environmental testing by Underwriters Laboratories (UL). In this configuration, Desigo CC workstations are UL Listed—according to UL864 9th Edition Standard for Control Units and
Accessories—for fire alarm and security protective signaling and can be used to monitor and control fire alarm and life safety systems.

- Event visualization and event treatment (Acknowledge, Silence, and Reset the Desigo Fire, FireFinder XLS and/or MXL Fire system)
- Graphically monitor and control the life safety system
- Arm and Disarm system devices
- View and schedule automatic Detector Sensitivity and History reports
- Highest priority events are highlighted so operators always know where to start
- Events guides directly to the triggering element with just one click
- Quickly navigate to custom operator instructions and graphical display of event locations
- Store and retrieve fire alarm system activity data
- Distribute fire monitoring and control capabilities across a network of Desigo CC workstations
- Automatic remote notification (RENO) of responders through email, SMS, and pagers.

Desigo CC for Combined Automation, Fire Safety and IP Camera Systems

As an integration platform, Desigo CC is designed for simultaneous connection to multiple systems and use by multiple operators, each with their unique focus. With Desigo CC, you can be assured of optimal system performance of both automation and UL-listed fire safety and Mass Notification applications without compromise.

Through state of the art platform architecture and user interface design, Desigo CC provides the ultimate user experience for all of your building systems. Whether they are monitoring life safety events, ensuring optimal comfort and building performance, or modifying system configuration, the flexible user interface of Desigo CC supports just the right environment for every operator situation.

The unique workflow oriented user interface provides the same look, feel and operation to all connected subsystems. This brings integration to the next level, a unification where tasks are not differentiated by the subsystem.

As an open system, Desigo CC unifies workflows and user interfaces for supervisory tasks like, commanding, event handling, reporting, and scheduling.

Compatibility

Desigo CC is compatible with the following subsystems:

- APOGEE BACnet (Firmware 3.2.4 through 3.4 with some exceptions*)
- APOGEE P2 Ethernet (Firmware 2.8.x in PXC, MBC, and MEC controllers)
- APOGEE P2 RS-485 via AEM (Firmware 2.8 in PXC, MBC, and MEC controllers)
- XNET FireFinder XLS and MXL (FireFinder XLS V8 and V11)
- FCnet for Desigo Fire Safety System (FS20 MP1.x, MP2.0)
- FVnet for Desigo Intelligent Voice Communication System (FS20UL MP2.0)
- Third-party BACnet (BTL B-AWS)
- Third-party OPC Client compliant with OPC DA2.0
- Third-party OPC Server compliant with OPC DA V2.05/V3.00
- SNMP Manager (V1 and V2)
- Simatic S7- 300/400(-H)/1200 V3
*Recommended APOGEE BACnet controller compatibility for complete Point, PPCL, and TEC editing capabilities:

- PXC with Firmware Revision 3.2.4 or later
- At least one PXC-36 or PXC-M with controller UI files installed

**Technical Data**

Refer to the Desigo CC System Description document for detailed configuration recommendations.

**Hardware Requirements**

<table>
<thead>
<tr>
<th>Hardware Categories for Desigo CC - Physical Machines</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>3.2 GHz Core i5 or i7</td>
<td>3.5 GHz Core i5 or i7</td>
<td>3.5-3.9 GHz Core i7 or Xeon</td>
<td>3.5-4.5 GHz Core i7 or Xeon</td>
</tr>
<tr>
<td>Example: Intel Core i5 4460</td>
<td>Example: Intel Core i5 4690K</td>
<td>Example: Intel Core i7-4770K Intel Xeon E5-1630 v3 Intel Xeon E5 1620 v2</td>
<td></td>
<td></td>
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<tr>
<td><strong>Memory</strong></td>
<td>8 GB</td>
<td>16 GB</td>
<td>32 GB</td>
<td>32 GB</td>
</tr>
<tr>
<td><strong>Hard Disk</strong></td>
<td>Size: 1 TB RPM: 7.2k Cache 64 MB</td>
<td>Size: 1 TB RPM: 7.2k Cache 64 MB</td>
<td>Size: 2x 1 TB RPM: 7.2-10k Cache 64 MB</td>
<td>Size: 2x 800 GB Professional / Enterprise SSD with SATA or SAS</td>
</tr>
<tr>
<td>Example: Western Digital Green</td>
<td>Example: Western Digital Red</td>
<td>Example: Western Digital Red Seagate Constellation ES.3</td>
<td></td>
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<tr>
<td><strong>Network Card</strong></td>
<td>Gigabit speed</td>
<td>Gigabit speed</td>
<td>Gigabit speed</td>
<td>Gigabit speed</td>
</tr>
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<td><strong>Graphic Card</strong></td>
<td>Memory: 2GB Resolution: 2.560x1600</td>
<td>Memory: 2GB Resolution: 2.560x1600</td>
<td>Memory: 2GB Resolution: 2.560x1600</td>
<td>Memory: 2GB Resolution: 2.560x1600</td>
</tr>
<tr>
<td>Example: Onboard Intel 4600HD GeForce GT 730 AMD Radeon R7 250</td>
<td>Example: Onboard Intel 4600HD GeForce GT 730 AMD Radeon R7 250</td>
<td>Example: Onboard Intel 4600HD GeForce GT 730 AMD Radeon R7 250</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Use for Server</strong></td>
<td>Up to 25,000 system objects</td>
<td>Up to 50,000 system objects</td>
<td>Up to 100,000 system objects</td>
<td>Up to 150,000 system objects</td>
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<tr>
<td><strong>Use for Clients</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Use for FEP</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Use for Remote Web Server</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Use for Remote SQL Server</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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### Hardware Categories for Desigo CC - Virtual Machines

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>vCPU</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
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<td>Memory</td>
<td>8 GB</td>
<td>16 GB</td>
<td>32 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>Hard Disk</td>
<td>Size: 1 TB</td>
<td>Size: 1 TB</td>
<td>Size: 2 TB</td>
<td>Size: 2 TB</td>
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<td>Network Card</td>
<td>Gigabit speed</td>
<td>Gigabit speed</td>
<td>Gigabit speed</td>
<td>Gigabit speed</td>
</tr>
<tr>
<td>Use for Server</td>
<td>Up to 25,000 system objects</td>
<td>Up to 50,000 system objects</td>
<td>Up to 100,000 system objects</td>
<td>Up to 150,000 system objects</td>
</tr>
<tr>
<td>Use for Clients</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Use for FEP</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Use for Remote Web Server</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Use for Remote SQL Server</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Database

<table>
<thead>
<tr>
<th>Database</th>
<th>RAIMA (Real-time) – Data MS SQL 2008 R2 - History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size-Limit</td>
<td>150,000 System Objects (see System Description for details)</td>
</tr>
<tr>
<td>Countable entries</td>
<td>• Physical BA points on ALN</td>
</tr>
<tr>
<td></td>
<td>• APOGEE FLN devices = 10 BA points</td>
</tr>
<tr>
<td></td>
<td>• Physical Fire points (automatic detectors, manual call points, I/O modules, notification devices)</td>
</tr>
<tr>
<td></td>
<td>• Video Cameras</td>
</tr>
<tr>
<td></td>
<td>• SCADA (OPC) Objects</td>
</tr>
<tr>
<td>Max users</td>
<td>400</td>
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</table>

### Operating Systems

The Desigo CC Server, FEP, and Installed Clients run on the following Microsoft operating systems and editions:

- Microsoft® Windows 7 64-bit (Professional and Enterprise)
- Microsoft® Windows 8.1 64-bit (Professional and Enterprise)
- Microsoft® Windows Server 2008 R2
- Microsoft® Windows Server 2012 R2

Web Clients and Windows App Clients run on following Microsoft operating systems and editions:

- Microsoft® Windows 7 64-bit (Professional and Enterprise)
- Microsoft® Windows 8.1 64-bit (Professional and Enterprise)

Run Web Clients with Microsoft Internet Explorer 11.
## UL Listed 19“ All-in-One Work Station

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating System</strong></td>
<td>Windows 7 64-bit</td>
</tr>
<tr>
<td><strong>Max. amount of simultaneously accessing clients</strong></td>
<td>Hardware limited</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>8 GB</td>
</tr>
<tr>
<td><strong>Processor</strong></td>
<td>Intel i7</td>
</tr>
<tr>
<td><strong>Hard disk</strong></td>
<td>250 GB SSD + 750 GB HDD</td>
</tr>
<tr>
<td><strong>Monitor</strong></td>
<td>1280 x 1024 integrated</td>
</tr>
<tr>
<td><strong>LAN</strong></td>
<td>Dual Gigabit LAN ports</td>
</tr>
<tr>
<td><strong>Serial Port</strong></td>
<td>2 RS-232 serial ports</td>
</tr>
<tr>
<td><strong>DVD ROM</strong></td>
<td>Slot load DVD drive</td>
</tr>
<tr>
<td><strong>Expansion</strong></td>
<td>2 32-bit PCI slots</td>
</tr>
<tr>
<td><strong>Free USB 2.0 port</strong></td>
<td>- 6 USB ports and one mounted to the side of the system - USB UL I/O Board</td>
</tr>
<tr>
<td><strong>Keyboard/Mouse</strong></td>
<td>PS/2 mouse and keyboard ports</td>
</tr>
</tbody>
</table>

## UL Listed i7 - Workstation

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Operating System</strong></td>
<td>Windows 7 64-bit</td>
</tr>
<tr>
<td><strong>Max. amount of simultaneously accessing clients</strong></td>
<td>Hardware limited</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>8 GB</td>
</tr>
<tr>
<td><strong>Processor</strong></td>
<td>Intel i7</td>
</tr>
<tr>
<td><strong>Hard disk</strong></td>
<td>240 GB SSD + 2 TB HDD</td>
</tr>
<tr>
<td><strong>Monitor</strong></td>
<td>VGA and DVI Resolution: 1280 x 1024 to 1920 x 1200</td>
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<tr>
<td><strong>Communications</strong></td>
<td>2 Gigabit LAN ports</td>
</tr>
<tr>
<td><strong>Serial Ports (5-RS-232 and 1-RS-232/485</strong></td>
<td>DVD/RW Drive</td>
</tr>
<tr>
<td><strong>DVD ROM</strong></td>
<td>DVD/RW Drive</td>
</tr>
<tr>
<td><strong>Free USB 2.0 port</strong></td>
<td>6 USB Ports</td>
</tr>
<tr>
<td><strong>Free USB 2.0 port</strong></td>
<td>2 USB ports behind locked peripherals door</td>
</tr>
<tr>
<td><strong>Keyboard/Mouse</strong></td>
<td>PS/2 mouse and keyboard ports</td>
</tr>
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</table>
UL Listed Dual Xeon - Workstation

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Windows 2008 Server, 64-bit</td>
</tr>
<tr>
<td>Max. amount of simultaneously accessing clients</td>
<td>Hardware limited</td>
</tr>
<tr>
<td>Memory</td>
<td>24 GB</td>
</tr>
<tr>
<td>Processor</td>
<td>Dual Intel Quad-Core Xeon</td>
</tr>
<tr>
<td>Hard disk</td>
<td>250 GB SSD + 2 TB HDD</td>
</tr>
<tr>
<td>Monitor</td>
<td>Dual Video Card</td>
</tr>
<tr>
<td>Communications</td>
<td>2 Gigabit LAN ports</td>
</tr>
<tr>
<td></td>
<td>Serial Port (1-RS-232)</td>
</tr>
<tr>
<td>DVD ROM</td>
<td>DVD/RW Drive</td>
</tr>
<tr>
<td>Free USB 2.0 port</td>
<td>3 USB Ports</td>
</tr>
<tr>
<td></td>
<td>2 USB ports behind locked peripherals door</td>
</tr>
<tr>
<td>Keyboard/Mouse</td>
<td>PS/2 mouse and keyboard ports</td>
</tr>
</tbody>
</table>

Resources

Desigo CC Web site at [www.usa.siemens.com/desigocc](http://www.usa.siemens.com/desigocc)