

PAC System Requirements

Machine Edition 10.0

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Section 1: PAC Machine Edition 10.0

1.1 Operating System

Machine Edition Product	Windows Server 2016 and 2019	Windows 10 and Windows 10 IoT	Windows 11
QuickPanel CE Development Suite	√	√	√
Lite Development Suite	√	√	√
Professional Development Suite	√	√	√
ProPlus Development Suite	√	√	√

Notes:

- Windows regional settings must be set to English.
- Only 64-bit variations of Windows are supported
- It is a good security practice to always run software that has had security patches and other operating system support fixes provided by Microsoft and applied by the owner/operator as part of a cybersecurity maintenance program.
- It is recommended to apply security patches and other operating system support fixes before installing.

1.2 Windows Administrator Settings

Some features of PAC Machine Edition are not supported when running without elevated access.

When using the following features, you can lower your User Account Control settings and/or set up PAC Machine Edition Engineering to always "Run As Administrator":

- View and Logic Runtimes
- EGD Management Tool
- PROFINET DCP Tool
- PAC8000 I/O Configuration Tool
- Serial PLC Communications
- Creating Custom Project Templates
- IEC 61850 Configurator

1.3 Processor Speed and Memory

- Minimum (for small to medium-sized projects):
 - Intel Core i5 with 4 GB RAM
 - AMD FX or Phenom II X6 with 4 GB RAM
- Strongly recommended for large projects or when using multi-instance:
 - Intel quad-core Core i7 with 8 GB RAM
 - AMD higher FX or Phenom II X6 models with 8 GB RAM

Notes

- When using multiple instances, each instance will consume the resources required for a single instance. Running too many instances may cause your system to become unstable. You can run more instances with small projects than with medium or large projects. In general, more than 5 instances of small projects, 3 instances of medium projects or 2 instances of a large project will likely impact performance on most systems.
- A large project is one that exceeds 125,000 variables, 128 blocks, 10 targets, or combinations of each that would exceed these values.

1.4 Miscellaneous Requirements

- Internet Explorer Version: 11.0 or newer with current updates.
 - Note:** Install Internet Explorer before installing Machine Edition.
- TCP/IP Network protocol-based computer (if you use an Ethernet connection).
- .NET Framework 4.8 Full. If the Microsoft .NET Framework is not yet installed, it is automatically included during the installation of Machine Edition and may require a reboot to complete the installation. T
- 2 GB of hard disk space. Additional space is required for your projects and temporary files.
- The Development Environment is supported on VMware Player or VMware Workstation or VMWare ESXi

Section 2:View & PC Control Runtime (Windows PC) 10.0

When you install only View Runtime or Control Runtime from the DVD, the Runtime executables are automatically updated from the development computer when the project is downloaded.

2.1 Operating System

Machine Edition Product	Windows Server 2016 and 2019	Windows 10	Windows 11
Professional Development Suite	√	√	√

Notes

- Only 64-bit variations of the above operating systems are supported.
- Windows regional settings must be set to English.
- 233 MHz Pentium-based workstation (1.6 GHz recommended)
- 200 MB free hard disk space
- 4 GB RAM (8 GB recommended)

The following table describes the minimum requirements needed for the range of variables defined per project:

Requirements	Variables		
	< 500	500 - 10000	> 10000
CPU	233 MHz	1 GHz	2 GHz
Disk Space	200 MB	200 MB	200 MB
RAM	4 GB	4 GB	8 GB

Section 3: PAC Change Management 10.0

3.1 Operating System

Change Management Component	Windows 10	Windows 11	Windows Server 2016	Window Server 2019
Server	√	√	√	√
Thick Client	√	√	√	√
Scheduler Engine	√	√	√	√
Thin Client	√	√	√	√

Notes

- Windows regional settings must be set to English.
- Only 64-bit versions of the above operating systems are supported.
- The PCM Server and Thick Client are not supported in environments that use Microsoft Terminal Services or Microsoft Cluster Server. The PCM Thin Client is supported in environments that use Microsoft Terminal Services.
- To connect to the PCM server in a 64-bit environment, you will need to enter the PCM server IP address and name in the hosts file.
- If you install the PCM Server on Windows Server 2016, Windows Server 2019, Windows 10. Or Windows 11 after the installation you may need to run the following command line once to make the PCM Server service appear in the Registry and the Services list properly:

```
"C:\Program Files (x86)\Emerson\PAC Machine Edition\fxManager\Server\fxServer.exe" -service
```
- Local Change Management is no longer supported after PME 10.0 and will not be available for installation.

3.2 Processor Speed and Memory

For the PCM Server, Thick Client, and Scheduler Engine:

Minimum (for small to medium-sized projects):

- Intel Core i5 with 4 GB RAM
- AMD FX or Phenom II X6 with 4 GB RAM

Strongly recommended for large projects:

- Intel quad-core Core i7 with 8 GB RAM
- AMD higher FX or Phenom II X6 models with 8 GB RAM

Note: See your sales representative for server system recommendations based on your projected number of PCM Clients and the projected size of your project database.

For the PCM Thin Client, including the Scheduler and Scheduler Editor used with the Thin Client:

- 1.5 GHz Pentium-based computer recommended
- 4 GB RAM (8 GB recommended)

3.3 Miscellaneous Requirements

- Internet Explorer Version: 11.0 with current updates.
 - **Note:** Install Internet Explorer before installing Change Management.
- Ethernet Network Adapter and the TCP/IP Network Protocol (100 Mbit).
- .NET Framework 4.8 Full for the PCM Server, Thick Client, and Scheduler Engine. If the Microsoft .NET Framework is not yet installed, it is automatically included during the installation of Change Management and may require a reboot to complete the installation.
- PCM Thick Client for the PCM Scheduler Engine.
- Free hard disk space:
 - 20 GB, plus storage space for project files, for the PCM Server.
 - 50 MB, plus storage space for project files, for the PCM Thick or Thin Client (500 MB recommended to start with).
 - 50 MB (in addition to hard disk space required for the PCM Thick Client) for the PCM Scheduler Engine.
- One of the following version control systems (VCS) for the PCM Server:
 - Subversion 1.11.1 (Windows 32-bit)

Notes:

Subversion with PAC Change Management is supported only on Windows operating systems.

- Use the 32-bit SVN repository 1.11.1 from CollabNetSubversion.
- Microsoft Visual SourceSafe is not supported with PCM 10.0.

3.4 Subversion Repository Documentation

PAC Change Management 10.0 and later will require a subversion repository to be installed and configured. User can find the latest installation and configuration guides located here:

https://emerson-mas.force.com/communities/en_US/Article/PCM-Installation-and-Configuration-Guide

For detailed instructions, please consult the three following documents:

- “PCM Windows 2019 Installation and Configuration Guide”
- “PCM Subversion SVN Repository Backup Guide”
- “PCM Subversion SVN Repository Restore Guide”

Note: The PCM Windows 2019 Installation and Configuration Guide informs the user to download the latest SIM. Machine Edition versions 10.0 and later do not have SIMs to download.

3.5 Supported Product Modules

Below is a list of custom project support modules included on the Change Management installation DVD. A custom project module is a group of configuration files and scripts that let you manage projects of that project type on a Change Management system.

You must select the desired modules when you install the Change Management Server/Client system. You may also have to update certain files based on the configuration of your system and network.

3.5.1 Project Type Modules

- **CIMPLICITY:** Version 7.0 or higher.
- **Engineering Workstation:** Version 6.0 or greater.
- **Proficy iFIX:** iFIX 5.1, 5.5, or 5.8.
- **LM9030:** LogicMaster 90-30 projects, version 9.05.
- **LM9070:** LogicMaster 90-70 projects, version 7.05.
- **Machine Edition:** Version 5.9 or greater.
- **Microsoft Excel:** Microsoft Excel™ *.XLS documents.
- **Microsoft Word:** Microsoft Word™ *.DOC documents.
- **RSLogix 5, 500, and 5000:** RSLogix 5 *.RSP files, RSLogix 500 *.RSS files (versions 7.10.00, 7.20.00, 7.30.00, and 8.10.00), or RSLogix 5000/Studio 5000 Logix Designer *.ACD files (version 15.01.00, 16.00.00, 18.00.00, 19.00.00, 21.00.00, 23.00.00, 24.00.00, 26.00.00, and 27.00.00). Change Management supports both the standard and professional versions of RSLogix software.
- **Siemens S7:** Versions 5.3x and 5.4 SP1 and 5.4 SP4.
- **Unity Pro XL:** Version 11.0 or greater.

3.5.2 Thin Client Modules

- **RSLogix 5, 500, and 5000:** RSLogix 5 *.RSP files, RSLogix 500 *.RSS files (versions 7.10.00, 7.20.00, 7.30.00, and 8.10.00), or RSLogix 5000 *.ACD files (version 15.01.00, 16.00.00, and 18.00.00). Change Management supports both the standard and Professional versions of RSLogix software.
- **Siemens S7:** Versions 5.3x and 5.4 SP1 and 5.4 SP4.
- **Modicon ProWORX32:** Version 2.0.

3.5.3 As-is Project Type Modules

The following project types have not been validated for PAC Change Management since version 5.90. They are available as is:

- **ABB Robots:** ABB Robot device programs and configuration data files, S4C plus robot controllers with Robotware 4.0 Rev 70.
Note: While only models listed above are fully tested and supported, this module should work with most ABB Robot hardware.
- **AutoCAD:** AutoCAD™ *.DWG files.
- **Fanuc CNC:** Fanuc CNC device programs and data files, PowerMate and CNC 16iM models only.

Notes:

- CNC 16iM models require CNC Executive version B0F2/23 and FWLib version 1.13.0.1.
- While only models listed above are fully tested and supported, this module should work with most Fanuc CNC hardware.
- **Modicon Concept:** Version 2.6
- **Modicon ProWORX:** Modicon ProWORXPLUS and Modicon ProWORX NxT projects, version 2.20 SP6.
- **Process Windows:** Version 2.x.
- **Siemens 840D CNC:** Siemens 840D CNC ARC files from the archiving system in the CNC PCU (PC Unit).
- **Siemens S5:** Version 7.2.
- **Wonderware:** Version 9.0.

General Contact Information

Home link: <http://www.emerson.com/industrial-automation-controls>

Knowledge Base: <https://www.emerson.com/industrial-automation-controls/support>

Technical Support

Americas

Phone: 1-888-565-4155
1-434-214-8532 (If toll free option is unavailable)

Customer Care (Quotes/Orders>Returns): customercare.mas@emerson.com

Technical Support: support.mas@emerson.com

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+39-0362-228-5555 (from Italy - if toll-free 800 option is unavailable or dialing from a mobile telephone)

Customer Care (Quotes/Orders>Returns): customercare.emea.mas@emerson.com

Technical Support: support.mas.emea@emerson.com

Asia

Phone: +86-400-842-8599
+65-6955-9413 (All other Countries)

Customer Care (Quotes/Orders>Returns): customercare.cn.mas@emerson.com

Technical Support: support.mas.apac@emerson.com

Any escalation request should be sent to: mas.sfdcescalation@emerson.com

Note: If the product is purchased through an Authorized Channel Partner, please contact the seller directly for any support.

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