PAC System Requirements

Machine Edition 10.6.219

EMERSON™

Contents

Section 1: PAC Machine Edition 10.6.219

1.1 Operating System

Machine Edition Product	Windows 10[1]	Windows 10 IoT Enterprise[2]	Windows 11[3]	Windows Server 2016[4], 2019[5], and 2022[6]
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

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[1] *Validated on Windows 10 version 22H2*
[2] *Validated on Windows 10 IoT version 21H2*
[3] *Validated on Windows 11 version 22H2*
[4] *Validated on Windows Server 2016 version 1607*
[5] *Validated on Windows Server 2019 version 1809*
[6] *Validated on Windows Server 2022 version 21H2*

1.3   Processor Speed and Memory

Minimum (for small to medium-sized projects):

* Intel Core i5 with 8 GB RAM

* AMD FX or Phenom II X6 with 8 GB RAM

Strongly recommended for large projects or when using multi-instance:

* Intel quad-core Core i7 with 16 GB RAM

* AMD higher FX or Phenom II X6 models with 16 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.

* 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) 10.6.219

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 10[7]	Windows 10 IoT Enterprise[8]	Windows 11[9]	Windows Server 2016[10], 2019[11], and 2022[12]
Professional Development Suite	√	√	√	√

Notes:

- Windows regional settings must be set to English.
- Only 64-bit versions of the above operating systems are supported.

2.2   Processor Speed and Memory

Minimum (for small to medium-sized projects):

- Intel Core i5 with 8 GB RAM
- AMD FX or Phenom II X6 with 8 GB RAM

Strongly recommended for large projects or when using multi-instance:

- Intel quad-core Core i7 with 16 GB RAM
- AMD higher FX or Phenom II X6 models with 16 GB RAM

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

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[7] *Validated on Windows 10 version 20H2*
[8] *Validated on Windows 10 IoT Enterprise build 17763*
[9] *Validated on Windows 11 version 21H2*
[10] *Validated on Windows Server 2016 version 1607*
[11] *Validated on Windows Server 2019 version 1809*
[12] *Validated on Windows Server 2022 version 21H2*

2.3   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 3:PAC Change Management 10.6.219

3.1 Operating System

Change Management Component	Windows 10[13]	Windows 10 IoT Enterprise[14]	Windows 11[15]	Windows Server 2016[16], 2019[17], and 2022[18]
Server	√	√	√	√
Client	√	√	√	√
Scheduler Engine	√	√	√	√

Notes

- Windows regional settings must be set to English.

- Only 64-bit versions of the above operating systems are supported.

- The PCM Server and Client are not supported in environments that use Microsoft Terminal Services or Microsoft Cluster Server.

- 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 10.1 and will not be available for installation.

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[13] *Validated on Windows 10 version 22H2*
[14] *Validated on Windows 10 IoT version 21H2*
[15] *Validated on Windows 11 version 22H2*
[16] *Validated on Windows Server 2016 version 1607*
[17] *Validated on Windows Server 2019 version 1809*
[18] *Validated on Windows Server 2022 version 21H2*

3.2   Processor Speed and Memory

For the PCM Server, Client, and Scheduler Engine:
Minimum (for small to medium-sized projects):

- Intel Core i5 with 8 GB RAM

- AMD FX or Phenom II X6 with 8 GB RAM

Strongly recommended for large projects:

- Intel quad-core Core i7 with 16 GB RAM

- AMD higher FX or Phenom II X6 models with 16 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.

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, 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 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 Client (500 MB recommended to start with).
    - 50 MB (in addition to hard disk space required for the PCM 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 by PCM 10.1 or later.

3.4   Subversion Repository Documentation

PAC Change Management 10.1 and later will require a subversion repository to be installed and configured. User can find the latest installation and configuration guides located at our support site: http://pacsystems.co/support

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 10.1 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 2022 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 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.

Section 4: PAC Productivity Suite 10.6.219

4.1 Operating System

Product	Version	Engineering Workstation	Operator Console	Application Server	System Server
PME (LD PLC)	10.6.219	√			
HMI (CIMPLICITY)	2022 SIM 11	√	√	√	
EGD Power Tool	7.40k	√	√	√	√
EGD Management Tool	8.0	√	√	√	√

PPS Product	Windows 10[19]	Windows 10 IoT Enterprise[20]	Windows 11[21]	Windows Server 2016[22], 2019[23], and 2022[24]
Engineering Workstation	√	√	√	√
Operator Console	√	√	√	√
Application Server	√	√	√	√
System Server (EDG Configuration Server)	√	√	√	√
EGD Management Tool	√	√	√	√

Notes:

If the EGD OPC Server needs to run as a regular server, follow these directions:

1) Go to the command prompt, and change directory to c:\Program Files\PAC\EGD OPC Server

2) On the c:\Program Files\PAC\EGD OPC Server> command prompt, enter EGDDrv regserver

3) Restart your system and ensure that the EGDDrv Server is not listed as a service in Services.

   a) Some components of the PAC Productivity Suite products may not be supported on some operating systems. For detailed information, refer to the product's installation guide.

   b) As a system, PAC Productivity Suite no longer supports Windows Vista. Individual components of PAC Productivity Suite may still support Windows Vista.

   c) As a system, PAC Productivity Suite no longer supports Windows 2003. Individual components of PAC Productivity Suite may still support Windows 2003.

   d) As a system, PAC Productivity Suite no longer supports Windows 2000. This includes the Windows 2000 Advanced Server. Individual components of PAC Productivity Suite may still support Windows 2000.

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[19] *Validated on Windows 10 version 22H2*
[20] *Validated on Windows 10 IoT version 21H2*
[21] *Validated on Windows 11 version 22H2*
[22] *Validated on Windows Server 2016 version 1607*
[23] *Validated on Windows Server 2019 version 1809*
[24] *Validated on Windows Server 2022 version 21H2*

e) Install a full version of .Net Framework v1.1, v3.5 SP1, and v4.0 and Windows installer 4.5 on Windows operating systems.

f) Enable .Net Framework v3.5 SP1 and Desktop Experience in the Server - Manager features list on Windows 2008.Internet Explorer

The table below is an overview of the regional settings on localized operating systems that each PAC Productivity Suite product is supported on.

PAC Productivity Suite Product	Regional Settings[1]	Operating system language			
		English	German or French (single-byte)	Simplified Chinese (double-byte)	Russian (Cyriliic)
Engineering	U. S.	Yes	Yes	Yes	Yes
Workstation	Local				
Operator console	U. S.	Yes	Yes	Yes	Yes
	Local		Yes	Yes	Yes
Application Server	U. S.	Yes	Yes	Yes	Yes
	Local		Yes	Yes	Yes
System Server	U. S.	Yes	Yes[2]	Yes[2]	Yes[2]
	Local				

Note: *Regional settings include numbers, currency, time, and date settings.*

4.2   Processor Speed and Memory

- Minimum (for small to medium-sized projects):
    - Intel® Core™ i5 with 8 GB RAM
    - AMD FX™ or Phenom™ II X6 with 8 GB RAM
- Strongly recommended for large projects or when using multi-instance:
    - Intel® Core™ i7 (quad-core) with 16 GB RAM
    - AMD higher FX™ or Phenom™ II X6 models with 16 GB RAM

This includes:

- 2 GB hard disk space for Logic Developer

⚠CAUTION

After installing PAC Productivity Suite and the .NET Framework, do not install an older or beta version of the .NET Framework, otherwise the newest version of .NET Framework fails.

Note: The EGD Management Edition OPC Server is automatically installed with Engineering Workstation installations, with CIMPLICITY on Application Server installations, and with iFIX on all installation types. If you install CIMPLICITY on an Operator Console, it uses its native OPC Client to communicate.

Contact Information and Support

Questions? We are here to help.

Before starting a case or making a call, try searching our Knowledge Base on the Customer Center website—it might have the answer you need right away.

If you have a question, try the following steps:

Search our Knowledge Base	Open a Support Ticket	Register for a Customer Account
pacsystems.co/knowledge	pacsystems.co/support	pacsystems.co/signup

Other Helpful Links

Customer Center Home Page	Commercial Website	Contact Information
pacsystems.co/customercenter	pacsystems.co/commercial	pacsystems.co/contactus

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