

Suite	Manufacturing & Supply Chain Suite					
V11 Platform Specifications that are supported	Advanced Process Control (APC)					
	Advanced Process Control (APC) Desktop 32-bit	Advanced Process Control (APC) Online 32-bit	Advanced Process Control (APC) Performance	Advanced Process Control (APC) Web Server 32-bit	Aspen Process Recipe (client) 32-bit	Aspen Process Recipe & Aspen Process Sequencer
<b>Operating Systems (64-bit only)</b>						
Windows 10 Anniversary Enterprise & Professional (64-bit)	✓				✓	
Windows 8.1 Update 1 Enterprise & Professional (64-bit)	✓				✓	
Windows 7 Enterprise & Professional SP1 (64-bit)	✓				✓	
Windows Server 2019 <sup>22</sup>						
Windows Server 2016	✓	✓	✓	✓		✓
Windows Server 2012 R2	✓	✓	✓	✓		✓
Windows Server 2008 R2 SP1	✓	✓	✓	✓		✓
Ubuntu Server Edition 16.04 LTS						
Advantech Smart Swarm 2.2.2						
Advantech Smart Router Series coLinux						
Safari on iOS 11+ for iPad Support						
<b>Microsoft Office</b>						
Office 365 (Desktop/Click-to-run)						
Office 2016 (64-bit)						
Office 2016 (32-bit)						
Office 2013 SP1 (32-bit)						
Office 2010 SP2 (32-bit)						
<b>Database Servers</b>						
Microsoft SQL Server 2017 (Enterprise/Standard Edition)						✓
Microsoft SQL Server 2017 (Express Edition)					✓	
Microsoft SQL Server 2016 SP1 (Enterprise/Standard Edition)						✓
Microsoft SQL Server 2016 SP1 (Express Edition)					✓	
Microsoft SQL Server 2014 SP2 (Enterprise/Standard Edition)						✓
Microsoft SQL Server 2014 SP2 (Express Edition)					✓	
Microsoft SQL Server 2012 SP3 (Enterprise/Standard Edition)						✓
Microsoft SQL Server 2012 SP3 (Express Edition)					✓	
SQL Server Local DB						✓
SQL Server 2012 Analysis Services						

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Oracle Database 12.2.x 64-bit						
Oracle Database 11.2.x 64-bit						
Database Clients						
Microsoft SQL Server 2017 (Express Edition)						
Microsoft SQL Server 2016 SP1 (Express Edition)						
Microsoft SQL Server 2014 SP2 (Express Edition)						
Microsoft SQL Server 2012 SP2 (Express Edition)						
Microsoft SQL Server 2008 R2 SP3 (Express Edition)						
Oracle Client 18.3 32-bit						
Oracle Client 18.3 64-bit						
Oracle Client 12.1.0.2 32-bit						
Oracle Client 11.2.0.4 32-bit						
Oracle Client 12.2.x 64-bit						
Oracle Client 11.2.x 64-bit						
Runtimes						
.NET Framework 4.7.1	✓	✓	✓	✓	✓	✓
.NET Framework 4.0						
.NET Framework 3.5						
32-bit Java 8 JRE update 151				✓ <sup>10</sup>		
32-bit Java 8 JDK update 151						
64-bit Java 8 JRE update 151						
64-bit Java 8 JDK update 151						
64-bit AdoptOpenJDK Java 8 u181						
32-bit AdoptOpenJDK Java 8 u181				✓ <sup>10</sup>		
MSXML 6	✓	✓	✓	✓	✓	✓
Visual Studio 2013, 2015, 2017						
Microsoft Visual C++ Redistributable 2017	✓	✓	✓	✓	✓	✓
Microsoft Visual C++ Redistributable 2015	✓	✓	✓	✓	✓	✓
Microsoft Visual C++ Redistributable 2013	✓	✓	✓	✓	✓	✓
Visual Studio 2010 Tools for Office Runtime						
Virtualization						
Microsoft App-V 5.1						
Microsoft Hyper-V (Server)	✓	✓	✓	✓	✓	✓
VMware ESX Server 6.x (Server)	✓	✓	✓	✓	✓	✓

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Microsoft Terminal Services (Desktop)	✓				✓	
Citrix XenApp 7.14 (Desktop)						
Web Browsers						
Internet Explorer 11	✓	✓	✓	✓	✓ <sup>8</sup>	✓ <sup>8</sup>
Microsoft Edge	✓	✓	✓	✓		✓
Google Chrome Evergreen Version 104+	✓	✓	✓	✓	✓	✓
Safari on iOS 11+ for iPad Support						
Security Components/Services						
Aspen Framework (AFW) 5	✓			✓	✓	✓
Non-Domain Security Group	✓			✓	✓	✓
Microsoft Active Directory / Active Directory Domain Services	✓			✓		
Java App (Servers)						
Apache Tomcat 8.5+						
Web Servers						
IIS 10				✓ <sup>9</sup>		
IIS 8.5				✓ <sup>9</sup>		
IIS 7.5				✓ <sup>9</sup>		
Reporting Services						
Microsoft Report Viewer 2010 SP1						
Microsoft SQL Server 2008 R2/2012/2014/2016/2017 Reporting Services						
Crystal Reports 8.5						
Crystal Reports 11						
Malware Blocking Features						
DEP-Data Execution Prevention	✓	✓	✓	✓	✓	
Integration Components						
Aspen Supply Chain Connect						
Informatica Powercenter 10.2 HF1						
Cloud Support *						
Azure VM - Microsoft						
Amazon VM (AWS)						
Azure VM - Linux						

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Windows Virtual Desktop (WVD Fall 2019 Release) <sup>27</sup>						
Nutanix XiFrame						
Azure Virtual Apps Essentials						
Deployment Tools						
SCCM 2016 (version 1606)						
SCCM 2012 R2 SP1						
Built With						
FORTRAN 2017						
Desktop Types - Minimum Recommended						
<b>Type I:</b> Computer & processor: Intel Core-i5 family or faster Memory (RAM): <b>16</b> gigabytes (GB) RAM Hard Disk: <b>120</b> gigabytes (GB) available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1280 x 1024 or higher resolution monitor Network: 100MB/Sec	✓				✓	
<b>Type II:</b> Computer & processor: Intel Core-i5 family or faster Memory (RAM): <b>16</b> gigabytes (GB) RAM Hard Disk: <b>250</b> gigabytes (GB) available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1280 x 1024 or higher resolution monitor Network: 100MB/Sec						
Server Types - Minimum Recommended						
<b>Type I:</b> Computer & processor: Intel Core-i7 family or faster for standalone deployment Intel Xeon Gold series, <b>4</b> cores or more for multi-user environment Memory (RAM): <b>16</b> or above gigabytes (GB) RAM for standalone deployment, <b>16</b> or above gigabytes (GB) RAM for multi-user environment Hard Disk: <b>150</b> gigabytes (GB) available for standalone deployment, <b>300</b> gigabytes (GB) for multi-user environment Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1280 x 1024 or higher resolution monitor Network: 100MB/Sec						
<b>Type II:</b> Computer & processor: Intel Xeon Gold series type system ( <b>4</b> cores) or faster Memory (RAM): <b>16</b> or above gigabytes (GB) RAM Hard Disk: <b>300</b> gigabytes (GB) or more available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1280 x 1024 or higher resolution monitor Network: 100MB/Sec (Gigabyte network recommended)		✓ <sup>9</sup>		✓ <sup>9</sup>		✓
<b>Type III:</b> Computer & processor: 4 x Intel ( <b>8</b> cores) or faster Memory (RAM): <b>32</b> or above gigabytes (GB) RAM Hard Disk: <b>500</b> gigabytes (GB) or more available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1280 x 1024 or higher resolution monitor Network: 100MB/Sec (Gigabyte network recommended)			✓ <sup>9</sup>			

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<b>Type IV: (IIoT Gateways)</b> Computer & processor: ARM or Intel based CPU or more Memory (RAM): <b>256Mb</b> or more Hard Disk: <b>128Mb</b> or more						
<b>Notes</b> <p>* In general, AspenTech aspenONE® software license agreements with customers permit use of the licensed software on Supported Computers at customer Sites. "Supported Computers" include computers with a manufacture, model and operating system for which AspenTech offers a supported version of the software, and that are controlled by the customer. "Sites" are customer facilities or locations specified in the license agreement.</p> <p>AspenTech permits customer use of licensed aspenONE software in the cloud where: (i) the Platform Support specifications published by AspenTech for the relevant version of the software product include cloud support; (ii) only the customer has access to the licensed software hosted by the cloud service provider; and (iii) the user is accessing the software only from a Site specified in the applicable license agreement.</p> <p>Cloud deployment does not change any license restrictions, including the restrictions on which regions can access the software.</p>	Advanced Process Control (APC) suite consists of the following products: Aspen DMCplus, Aspen DMC3, Aspen Watch Performance Monitor, Aspen PID Watch Performance Monitor, Aspen RTO Watch Performance Monitor, Aspen Inferential Qualities, and Aspen Process Recipe & Aspen Process Sequencer.					
When running software on a virtual machine, the machine should meet the same requirements.						
AspenTech does not support the in-place upgrade of the Operating System (for example: upgrade Windows 7 to Windows 10) with AspenTech software already installed. Our recommendation is to uninstall Aspen Software before upgrading the OS and reinstall it after the upgrade.						
Your Aspen SLM Server must be installed and running prior to installing any V11 product.						
If running standalone, 1280 x 800 is the minimum recommended resolution monitor for servers.						
For SLM server using the Type 1 Desktop configuration, the minimum memory is 4GB with 20GB hard drive.						
Microsoft Active Directory/Domain Services (Required for aspenONE Web Server)						
<b>8</b> Must be in compatibility mode for Aspen Process Sequencer						
<b>9</b> See "Basic Deployment Recommendations" in Appendix C of the Aspen Manufacturing Suite Advanced Process Control Installation Guide.						
<b>10</b> For new installations of APC Web Server, install IIS and JRE before installing APC Web Server						