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Suite	Manufacturing & Supply Chain Suite							
V14.2 Platform Specifications that are supported	Advanced Process Control (APC)							
	Advanced Process Control (APC) Desktop	Advanced Process Control (APC) Online	Batch Advanced Process Control (APC) Online	Advanced Process Control (APC) Performance Monitor	Advanced Process Control (APC) Web Server	Aspen Process Recipe (client)	Aspen Process Recipe & Aspen Process Sequencer (server)	
Operating Systems (64-bit only)								
Windows 11								
Windows 10 Enterprise & Professional (64-bit)	✓					✓		
Windows Server 2022 ^{33, 45}								
Windows Server 2019 ^{33, 45}	✓	✓	✓	✓	✓	✓	✓	✓
Windows Server 2016 ^{33, 45}	✓	✓	✓	✓	✓	✓	✓	✓
Ubuntu Server Edition 20.04 LTS								
Ubuntu Server Edition 18.04 LTS								
Ubuntu Server Edition 16.04 LTS								
Microsoft Office								
Office 365 (Desktop/Click-to-run) (32-bit/64-bit)								
Office 2021 (64-bit)								
Office 2021 (32-bit)								
Office 2019 (64-bit)								
Office 2019 (32-bit)								
Office 2016 (64-bit)								
Office 2016 (32-bit)								
Office 2013 (32-bit)								
Database Servers								
Microsoft SQL Server 2019 (Enterprise/Standard Edition)							✓	
Microsoft SQL Server 2019 (Express Edition)						✓		
Microsoft SQL Server 2017 (Enterprise/Standard Edition)							✓	
Microsoft SQL Server 2017 (Express Edition)						✓		
Microsoft SQL Server 2016 (Enterprise/Standard Edition)							✓	
Microsoft SQL Server 2016 (Express Edition)						✓		

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Microsoft SQL Server 2014 (Enterprise/Standard Edition)							✓	
Microsoft SQL Server 2014 (Express Edition)						✓		
SQL Server 2019 Local DB							✓	
SQL Server 2014 -2019 Analysis Services								
PostgreSQL 13.2								
Oracle Database 19.x.x 64-bit								
MongoDB Database 5.0.x 64-bit								
Database Clients								
Oracle Client 19.x 32-bit								
Oracle Client 19.x 64-bit								
Oracle Client 18.x 32-bit								
Runtimes								
.NET Framework 4.8	✓	✓	✓	✓	✓	✓	✓	
.NET Framework 4.6								
.NET 6.0.3								
Aspen AIoT Cloud libraries								
ASP.NET Core 6.0.3								
64-bit Oracle Java 17 JDK LTS								
64-bit Oracle Java 17 JDK LTS								
64-bit Oracle Java 11 JDK LTS					✓ ⁴⁶			
64-bit Oracle Java 8 JDK LTS								
64-bit Oracle Java 8 JDK LTS								
32-bit AdoptOpenJDK Java 17 JRE LTS								
64-bit AdoptOpenJDK Java 17 JRE LTS								
32-bit AdoptOpenJDK Java 11 JRE LTS								
64-bit AdoptOpenJDK Java 11 JRE LTS			✓		✓			
64-bit AdoptOpenJDK Java 8 JRE LTS								
Python								

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MSXML 6	✓	✓	✓	✓	✓	✓	✓	
Visual Studio 2022								
Visual Studio 2019	✓	✓	✓	✓	✓	✓	✓	
Visual Studio 2017								
Visual Studio 2010 Tools for Office Runtime								
Microsoft Visual C++ Redistributable 2022								
Microsoft Visual C++ Redistributable 2019	✓	✓	✓	✓	✓	✓	✓	
Microsoft Visual C++ Redistributable 2017	✓	✓	✓	✓	✓	✓	✓	
Microsoft Visual C++ Redistributable 2015								
Virtualization								
Microsoft Hyper-V (Server)	✓	✓	✓	✓	✓	✓	✓	
VMware ESXi Hypervisor Server 6.x (Server)	✓	✓	✓	✓	✓	✓	✓	
VMWare vSphere Enterprise Plus								
Microsoft Terminal Services (Desktop)	✓					✓		
Citrix Virtual Apps and Desktops 7.1912 (Desktop)								
Web Browsers								
Microsoft Edge ²⁵	✓	✓	✓	✓	✓	✓	✓	
Google Chrome Evergreen Version 75+	✓	✓	✓	✓	✓	✓	✓	
Firefox								
Chrome on iOS 14+ for iPad Support								
Safari on iOS 14+ for iPad Support								
Android 10+								
Security Components/Services								
Aspen Framework (AFW) 5	✓		✓		✓	✓	✓	
TLS 1.2								
TLS 1.3								
Java App (Servers)								
Apache Tomcat 9.x								
Native Web Servers								

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IIS 10					✓ ⁹			
Reporting Services								
Microsoft Report Viewer 2015								
Microsoft SQL Server 2014/2016/2017/2019/ 2020/2022 Reporting Services								
Load Balancing								
FS Load Balancing								
Integration Components								
Aspen Supply Chain Connect								
Informatica Powercenter 10.5.2								
Cloud Support *								
Azure VM (Microsoft)	✓							
AWS VM (Amazon)								
Azure VM - Linux								
Azure Virtual Desktop (AVD) ²⁷	✓							
AWS RDS (SQL)								
Azure SQL								
Deployment Tools								
SCCM								
Supported Versions of Fortran								
FORTRAN 2021	✓	✓		✓	✓			
Container Support								
Docker Engine-Enterprise 19.03.x								
Docker Compose 1.26.x								
Desktop Types - Minimum Recommended								
Type I: Computer & processor: Intel Core-i5 family or faster Memory (RAM in GB): 16 Hard Disk (GB): 120 Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network (MB/s): 100Mbps	✓					✓		

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Type II: Computer & processor: Intel Core-i5 family or faster Memory (RAM in GB): 16 Hard Disk (GB): 250 Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network (MB/s): 100Mbps								
Type III: Computer & processor: 4CPU >= 2.8GHz (turbo max 3.2 preferred) Memory (RAM in GB): 16 Hard Disk (GB): 500 Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network (MB/s): 100Mbps								
Server Types - Minimum Recommended								
Type I: Computer & processor: Intel Core-i7 family or faster for standalone deployment Intel Xeon Gold series, 4 cores or more for multi-user environment Memory (RAM in GB): 16 + for standalone deployment, 32+ for multi-user environment Hard Disk (GB): 150 for standalone deployment, 300 for multi-user environment Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network: 100 Mbps			✓					
Type II: Computer & processor: Intel Xeon Gold series type system (4 cores) or faster Memory (RAM in GB): 16 + Hard Disk (GB): 300 + Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network: 100 Mbps		✓ ⁹			✓ ⁹		✓	
Type III: Computer & processor: Intel Cascade Lake-based Xeon processor with 8 cores or more per processor Memory (RAM in GB): 32 or above gigabytes (GB) RAM Hard Disk (GB): 500 gigabytes (GB) or more available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network: 100Mbps (Gigabyte network recommended)				✓ ⁹				
Type IV: (IIoT Gateways) Computer & processor: ARM or Intel based CPU or more Memory (RAM in GB): 256Mb or more Hard Disk (GB): 100 GB or more								
Type V Windows Server 2019 v1809+ Memory (RAM in GB): Minimum: 16 Recommended: 32 Cores: Minimum: 4 , Recommended: 8 Disk space (GB): Minimum: 64, Recommended: 100 Network: Minimum: 50, Recommended: 100 Mbps								
Type VI Computer & processor: Intel Xeon E class processor or equivalent with dual core min. Memory (RAM in GB): Minimum: 4 Hard Disk (GB): Minimum 50 . High IOPS drive, SSD preferred Network: 100 Mbps								

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Type VII Computer & processor: Intel Xeon E class processor or equivalent with dual core min. Memory (RAM in GB): 8 + Hard Disk (GB): 100 GB min. High IOPS drive, SSD preferred Network: 100Mbps								
Type VIII Computer & processor: Intel Xeon E class processor or equivalent with 8 cores or higher Memory (RAM in GB): 12 or above gigabytes (GB) RAM Hard Disk (GB): 2000 min. High IOPS drive, SSD preferred Network: 200Mbps								
Type IX Single model environment: Computer & processor: 4 vCPU >+ 2.8 GHz Memory (RAM in GB): 8+ Hard Disk (GB): 100 Network: 100Mbps								
Type X Single model environment: Computer & processor: 8 vCPU >+ 3.2 GHz Memory (RAM in GB): 16+ Hard Disk (GB): 100 Network: 100Mbps								
Type XI Multiple models within single environment (max models <= 10): Computer & processor: 4 vCPU >+ 2.8 GHz (add 1.5vCPU per concurrent user) Memory (RAM in GB): 8+ (add 3GB per concurrent user) Hard Disk (GB): 100 (add .5GB per concurrent user) Network: 100Mbps								
Type XII Multiple models within single environment (max models <= 10): Computer & processor: 8 vCPU >+ 3.2 GHz (add 1.5vCPU per concurrent user) Memory (RAM in GB): 16 or above gigabytes (GB) RAM (add 4GB RAM per concurrent user) Hard Disk (GB): 100 GB min. (add .5GB per concurrent user) Network: 100Mbps								
Type XIII Supports 20 concurrent users: Computer & processor: 16 vCPU >+ 2.2 GHz Memory (RAM in GB): 64 Hard Disk: 100 Network: 10 Mbps								
Type X1V Supports 100 concurrent users: Computer & processor: 16 vCPU >+ 2.2 GHz Memory (RAM in GB): 32 Hard Disk (GB): 100 Network: 5 Mbps								
Type XV Computer & processor: 16 vCPU >+ 2.2 GHz Memory (RAM in GB): 32 Hard Disk (GB): 100Mbps								

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Type XVI Computer & processor: 16 CPU Memory (RAM in GB): 64 or above gigabytes (GB) RAM Hard Disk (GB): 2000 gigabytes (GB) or more available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network: 100Mbps (Gigabyte network recommended)								
Type XVII Computer & processor: 32 CPU Memory (RAM in GB): 256 or above gigabytes (GB) RAM Hard Disk (GB): 2000 gigabytes (GB) or more available Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor Network: 100Mbps (Gigabyte network recommended)								
Notes * 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. 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. Cloud deployment does not change any license restrictions, including the restrictions on which regions can access the software.	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, Batch APC, 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 V14 product.								
If running standalone, 1280 x 800 is the minimum recommended resolution monitor for servers.								
For SLM server using Type 1 Desktop configuration, the minimum memory is 4GB with 20GB hard drive.								
Microsoft Active Directory/Domain Services (Required for aspenONE Web Server)								
A minimum of 10GB of free space is needed to install/upgrade products on the C drive.								
¹ This configuration is only practical for small scale models and deployments. For most applications, best deployment practice dictates the use of a separate and dedicated database server for acceptable performance								
² EDR does not use any database servers. Deploys its own LocalDB database files.								

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<p>3 Aspen Batch Process Developer does not support the 64-bit version of Visio. Visio is used in ABPD to generate the block diagram and process flow diagram reports; it is an optional feature. The 64-bit versions of Word and Excel are fully supported by ABPD.</p>								
<p>4 When Aspen Utility model is driven by Aspen Online using Local System Account, then SQL Express 2014 is required.</p>								
<p>5 When Exchanger Design and Rating is driven by Aspen Online using Local System Account, then SQL Express 2014 is required</p>								
<p>6 Aspen Modeler family supports FORTRAN compiler version 2020</p>								
<p>7 Oracle or AdoptOpenJDK Java is needed if the 3rd party scheduling application Primavera is used with Economic Evaluation (EE). Primavera is owned by Oracle and its API uses Java.</p>								
<p>8 Must be in compatibility mode for Aspen Process Sequencer</p>								
<p>9 See "Basic Deployment Recommendations" in Appendix C of the Aspen Manufacturing Suite Advanced Process Control Installation Guide.</p>								
<p>10 For new installations of APC Web Server, install IIS and JRE before installing APC Web Server</p>								
<p>11 CIM-IO Interfaces can be installed on 32-bit desktops</p>								
<p>12 This configuration is only practical for small scale models and deployments. For most applications, best deployment practice dictates the use of a separate and dedicated database server for acceptable performance.</p>								
<p>14 Only Web Download Excel Add-in requires Excel.</p>								
<p>15 Users need to install both the 32-bit and 64-bit Oracle Clients 19.x for building and running reports</p>								
<p>16 Non-English OS's are not supported</p>								
<p>19 SLM supported in cloud (Azure VM/Amazon VM) for ENG products that are supported in the cloud</p>								
<p>20 If FIPS is enabled, aspenONE Exchange users must have the latest Windows Update patches installed on their machine.</p>								
<p>21 Office 365 - 32-bit support only</p>								
<p>22 Server-grade systems are not required but still supported.</p>								
<p>23 Browser Support as it relates to Knowledge Delivery only</p>								
<p>24 ATOMS Web does not support Oracle</p>								
<p>25 Only the version of MS Edge that uses the Google Chrome engine is supported</p>								

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26	Maestro supports Windows Server 2019 version 1809+							
27	WVD Certification Notes – 1. Publishing WVD apps to users local machine start menu not supported 2. Interoperability with 3rd party products only supported with Office 365 3. Aspen Properties Enterprise Database (APED) via SQL Server not supported 4. The following products have not been certified for WVD: ABE, ABPD, AVCA							
28	APEM does not support CDB-PDB database in Oracle 19. Weigh & Dispense Client 32-bit does not support Oracle							
29	SCCM support for APEx only							
30	APM Insights must be installed on the same server as AEI.							
31	When you have more than 8 simultaneous users, the recommendation is 2CPU's and 4GB RAM per user. <i>Performance will vary based on product and usage profiles. This can be considered a starting point for</i>							
32	OptiPlant requires a graphic card which supports OpenGL 4.1							
33	Includes support for Windows Server Datacenter							
34	Browser support for AFO Connect							
35	Type II is the minimum recommended when IP.21 is used with Aspen Enterprise IP.21 Historian							
36	Small SLM Server							
37	Medium SLM Server							
38	Large SLM Server							
39	These applications can run on a desktop, but it is recommended to run models on a server and have							
40	This Application Should be installed on a dedicated Web Server.							
41	Require db needs to be created in MS SQL using Mtell and then migrated to the target platform							
42	"Desktop Experience" installation of Windows Server. Windows Server installers present the option to install with or without "Desktop Experience". For GDOT, "Desktop Experience" is required.							
43	SQL is needed for S3D Layout, SQL versions 2014 and 2016 are supported by Hexagon							
44	Resolution no higher than 1920x1080							
45	Refer to the AspenTech Lifecycle Knowledge Base article to see a reference to the supported Windows Server upgrade path: https://esupport.aspentech.com/S_ProductLifecyclePolicy							
46	The selected product uses Java 11 JRE as Oracle do not have an option to download JRE, please use Oracle JDK download							

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47 SQL Server 2014 does not support AT TIME ZONE functionality.. Due to this, Daylight Saving time will not be accounted for in the database views defined in Unified Scheduling Results database.								
48 Only Excel Document template does require Excel								
49 Only Core service requires MongoDB								
2/27/2023								