### Suite

#### Operating Systems (64-bit only):

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### Database Servers

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### Database Clients

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## Suite

**Manufacturing & Supply Chain Suite**

### Manufacturing Execution Systems (MES)

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<td>Desktop Apps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aspenONE Process Explorer Client</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Manufacturing &amp; Supply Chain Suite</td>
<td></td>
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<tr>
<td>Admin Tools</td>
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<tr>
<td>aspenONE Production Record Manager</td>
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<tr>
<td>Integration Foundation: mMDM</td>
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<tr>
<td>Role Based Visualization</td>
<td>64-bit</td>
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<td>Plant Operations 32-bit (ATOMS Server)</td>
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<tr>
<td>aspenONE Web Server</td>
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<tr>
<td>Integration Foundation: EIF</td>
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<td>Aspen Production Execution Manager</td>
<td>Plant Operations 32-bit (ATOMS Client)</td>
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<tr>
<td>InfoPlus.21 (IP.21)</td>
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<td>Cim-IO Interfaces</td>
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<td>Runtimes</td>
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<tr>
<td>.NET Framework 4.8</td>
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<td>.NET Framework 3.5</td>
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<td>.NET Core 3.1.x</td>
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<td>64-bit Oracle Java 8 JRE  LTS</td>
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<td>32-bit AdoptOpenJDK Java 11 LTS</td>
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<td>ASP.NET Core 3.1.x</td>
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<td>Visual Studio 2019</td>
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<td>Visual Studio 2013</td>
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<td>Visual Studio 2012 Tools for Office</td>
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<td>Microsoft Visual C++ Redistributable 2019</td>
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<td>Web Browsers</td>
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<td>Internet Explorer 11</td>
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<td>Microsoft Edge</td>
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<tr>
<td>Google Chrome Evergreen Version 75+</td>
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<td>Safari</td>
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<tr>
<td>Security Components/Services</td>
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<td>Java App (Servers)</td>
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<td>Apache Tomcat 9.0+</td>
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<tr>
<td>Native Web Servers</td>
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<tr>
<td>Oracle Client 12.2 32-bit</td>
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</table>
### Platform Specifications that are supported

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<thead>
<tr>
<th>Suite</th>
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<tbody>
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<td>V12.1 Platform Specifications that are supported</td>
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#### Installation

<table>
<thead>
<tr>
<th>Integration Components</th>
<th>aspenONE Process Explorer Client (A1PE)</th>
<th>aspenONE Integration Foundation: mMDM</th>
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<tr>
<td></td>
<td>aspenONE Production Manager</td>
<td>aspenONE Integration Foundation: EIF</td>
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<td>Plant Operations 64-bit (ATOMS Server)</td>
<td>Plant Operations 32-bit (ERP, 1999)</td>
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<td>InfoPlus.21 (IP.21) Server</td>
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#### Reporting Services

<table>
<thead>
<tr>
<th>Reporting Services</th>
<th>Microsoft Report Viewer 2015</th>
<th>aspenONE Web Server 64bit</th>
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<tr>
<td></td>
<td>Reporting Services</td>
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<td></td>
<td>Reporting Services</td>
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</table>

#### Desktop Types - Minimum Recommended

**Type I: Computer & processor:** Intel Core-i5 family or faster

- Memory (RAM): 16 gigabytes (GB) RAM
- Hard Disk: 120 gigabytes (GB) available
- Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor
- Network: 100MB/Sec

**Type II: Computer & processor:** Intel Core-i7 family or faster

- Memory (RAM): 16 gigabytes (GB) RAM
- Hard Disk: 250 gigabytes (GB) available
- Monitor: Graphics hardware acceleration requires a DirectX10 graphics card and a 1440 x 900 or higher resolution monitor
- Network: 100MB/Sec

**Type III: Computer & processor:** Intel Cascade Lake-based Xeon processor with 8 cores or more per processor

- Memory (RAM): 32 gigabytes (GB) RAM
- Hard Disk: 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: 100MB/Sec (Gigabyte network recommended)

**Type IV: IIoT Gateways**

- Computer & processor:** ARM or Intel based CPU 4 cores or more
- Memory (RAM): 256Mb or more
- Hard Disk: 128Mb or more

#### Deployment Tools

|------------------|-------------------------|------------|

#### Container Support

| Container Support | Docker Engine 19.11.1 | Azure Container 2.0 |

#### Desktop Types - Minimum Recommended

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### V12.1 Platform Specifications that are supported

#### Manufacturing Supply Chain Suite

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<tr>
<th>Feature</th>
<th>Minimum</th>
<th>Recommended</th>
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<tr>
<td>Network (MB/s)</td>
<td>50</td>
<td>100</td>
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<tr>
<td>Disk space (GB)</td>
<td>64</td>
<td>100</td>
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<tr>
<td>Cores</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Memory (RAM in GB)</td>
<td>16</td>
<td>32</td>
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</table>

#### Manufacturing Execution Systems (MES)

- AspenTech does not support the in-place upgrade of the Operating System for supported operating systems (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.
- Only Web Download Excel Add-in requires Excel.
- Your Aspen SLM Server must be installed and running prior to installing any V12 products.
- When Exchanger Design and Rating is driven by Aspen Online using Local System Account, then SQL Express 2014 is fully supported by ABPD.
- EDR does not use any database servers. Deploys its own LocalDB database files.
- 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.

### Licensing

- In general, AspenTech-expect OS 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 owned by the customer. There are a few exceptions, locations specified in the license agreement.
- AspenTech permits a customer use of licensed V12 software in the cloud, only if: (i) the cloud software is delivered in an enterprise software as a service (SaaS) cloud deployment; (ii) the customer has some or all of the licensed software hosted by the cloud service provider; and (iii) the user is remoting 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 use any third-party software.

### Technical Information

- A minimum of 10GB of free space is needed to install/upgrade products on the C drive.
- For SLM server using Type 1 Desktop configuration, the minimum memory is 4GB with 20GB hard drive.
- When running software on a virtual machine, the same memory should be used.
- Only Web Download Excel Add-in requires Excel.
- Users need to install both the 32-bit and 64-bit Oracle Clients 19.x for building and running reports.
- A minimum of 10GB of free space is needed to install/upgrade products on the C drive.
- For new installations of APC Web Server, install IIS and JRE before installing APC Web Server.
- Only Web Download Excel Add-in requires Excel.
- Cloud deployment does not change any license restrictions, including the restrictions on which regions can use any third-party software.
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<td>Manufacturing Execution Systems (MES)</td>
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</table>

**V12.1 Platform Specifications that are supported**

- FIPS is enabled, regard-EXE users must have the latest Windows Update patches installed on their machine.
- Office 2016 - 32-bit is supported only.
- Server grade systems are not required but still supported.
- Aspen Support as it relates to Knowledge Delivery only for 64-bit.
- APEM Metals does not support Oracle.
- Only the version of SQL that uses the Google Chrome engine is supported.
- Aspen supported database servers: SQL Server 2016 and later.

**Notes:**

1. If FIPS is enabled, regard-EXE users must have the latest Windows Update patches installed on their machine.
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7. Aspen supported database servers: SQL Server 2016 and later.

**Additional Notes:**

1. APV does not support Office 365.
2. APV does not support EIF.
3. 32-bit support is available with V12.1.
4. Office 365 - 32-bit support only.
5. APV does not support Office 365. 32-bit support is available with V12.1.
6. Server-grade systems are not required but still supported.
7. Browser Support as it relates to Knowledge Delivery only (for +A).
8. ATOMS Web does not support Oracle.
9. Only the version of SQL that uses the Google Chrome engine is supported.
10. Browser Support as it relates to Knowledge Delivery only (for +A).

**Additional Notes:**

1. APV does not support Office 365. 32-bit support is available with V12.1.
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10. Only the version of SQL that uses the Google Chrome engine is supported.

**Additional Notes:**

1. Publishing WVD apps to users local machine start menu is not supported.
2. Interoperability with 3rd party products only, supported only with Office 365.
3. Server-grade systems are not required but still supported.
4. Server-grade systems are not required but still supported.
5. The following products have not been certified for V12.1: ARPEM, APEM, ADAS.
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**Additional Notes:**

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