



# Aspen Petroleum Supply Chain

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*Installation Guide*

## **Version Number: V12 October 2020**

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# 1 Introduction and Overview

This document addresses the suite-level installation of the Aspen Petroleum Supply Chain suite of products. Each product-specific, suite-level, or industry-solution installation guide contains critical information about computer requirements, product dependencies, and post-installation configuration procedures.

**Notes:**

- For specific instructions on requirements and installing and configuring Aspen Unified, please refer to the separate *Aspen Unified Installation Guide*.
- For information about the installation of an Aspen industry solution that includes the Aspen Petroleum Supply Chain suite of products, see the aspenONE Deployment Guide.

## Related Documentation

In addition to this document, other documents and files are provided to help users learn and use the Aspen Petroleum Supply Chain suite of products. The documentation set consists of the following:

### Help

Aspen PIMS Help

Aspen Unified Help

Aspen Petroleum Scheduler Help

Aspen Refinery Multi-Blend Optimizer Help

Aspen Petroleum Supply Chain Planner Help

Aspen Report Writer Help

Aspen Verify for Planning Help

### Documents and Manuals

Aspen Petroleum Supply Chain V12 Release Notes

Aspen Unified – Installation Guide  
Aspen PIMS Integration – User Guide  
Aspen Petroleum Scheduler Integration – User Guide  
Aspen Multi-Blend Optimizer Integration – User Guide

## Technical Support

AspenTech customers with a valid license and software maintenance agreement can register to access the online AspenTech Support Center at:

<https://support.aspentech.com>.

This Web support site allows you to:

- Access current product documentation
- Search for tech tips, solutions and frequently asked questions (FAQs)
- Search for and download application examples
- Search for and download service packs and product updates
- Submit and track technical issues
- Send suggestions
- Report product defects
- Review lists of known deficiencies and defects
- Registered users can also subscribe to our Technical Support e-Bulletins. These e-Bulletins are used to alert users to important technical support information such as:
  - Technical advisories
  - Product updates and releases

Customer support is also available by phone, fax, and email. The most up-to-date contact information is available at the AspenTech Support Center at <https://support.aspentech.com>.

**Note:** To access product specific documentation directly from a Petroleum Supply Chain application, you must register with the AspenTech Support Center and obtain a user ID and password.

# 2 Organizational Overview and Requirements

This chapter provides an overview of the aspenONE installation process, including the product requirements. This chapter contains the following:

- aspenONE Overview
- Aspen Petroleum Supply Chain Overview
- System Requirements

## aspenONE Overview

aspenONE® is the comprehensive set of software solutions and professional services provided by AspenTech; these are designed to help process companies achieve their operational excellence objectives. AspenTech customers are better able to increase capacity, improve margins, reduce costs, and become more energy efficient.

aspenONE solutions include the industry's leading:

- Simulation and design products in the aspenONE Engineering suite.
- Plant operations products in the aspenONE Manufacturing suite.
- Supply chain management products in the aspenONE Supply Chain suite.
- Predictive and prescriptive analytic products in the aspenONE Asset Performance Management suite.

The token-based aspenONE Licensing Model gives customers the flexibility to access and use any aspenONE product at precisely the time it is needed. This is especially critical in the dynamic market conditions of the process industries – whether during down economies or in high-growth periods. This enables customers to lower their risk while maximizing the return on their software investment.

# aspenONE Media

Unless you have specifically requested a USB drive, you will receive instructions on how to download the aspenONE media.

Download the media that you are entitled to and extract the zip file(s) using a zip extractor such as WinZip/7-Zip. You may choose from the following:

- **Aspen Engineering** – includes all Aspen Engineering products, Aspen PIMS and Aspen Administration and Licensing components.
- **Aspen Manufacturing and Supply Chain** – includes all Aspen Manufacturing products, Aspen Petroleum Supply Chain products, aspenONE Supply Chain Management products, GDOT, and aspenONE Infrastructure products as well as Aspen Administration and Licensing components.
- **aspenONE Asset Performance Management** – includes all APM products.
- **aspenONE Software License Manager** includes all Aspen Administration components (Aspen SLM, Aspen SLM tools, and ALC Auto Upload Tool).

**Note:** The product Release Notes and Installation Guides are included in the Documentation sub-folders under each family of products. There is a link to the Getting Started Guide on the Install Browser.

## Licensing

To manage your product entitlement, you will receive one of the following separately:

- A license file if you are using the SLM Server to manage the products to which you are entitled.
- Aspen License Deployment Assistant (ALDA): ALDA is a utility that will update a license server with the necessary licenses needed for a new release without having to send a new license key for applicable suites and qualified customers. For qualified customers, ALDA is available on the electronic software download site.
- A pre-configured dongle containing your customer license file if you are operating using a dongle to manage the products to which you are entitled.

**Note:** An invoice noting the products for which you are licensed is sent separately from the software shipment.

You will have access to one or more of the following:

- **aspenONE Token Media** – Contains the media that supports the aspenONE Licensing Model token-based system. This all-inclusive token-based licensing model was introduced in July 2009. Under this licensing model, customers are entitled to install and run all of AspenTech's products as long as they have purchased sufficient tokens. To install software purchased under this commercial

agreement, use this media. Software installed from the aspenONE Token media requires run-time token-based license keys.

- o **aspenONE Standard Media** – Contains the media that supports perpetual and pre-aspenONE Licensing Model token-based systems. If you have perpetual license agreements or token-based license agreements by product (pre-July 2009), you should use the media labeled Standard. Software installed from the aspenONE Standard media requires older license keys that have been in use since the aspenONE 2004 release.

## Upgrading to the aspenONE Licensing Model for Manufacturing and Supply Chain V8.x and above

If you have recently signed a new aspenONE Licensing Model agreement or if you have superseded an old license agreement with an aspenONE Licensing Model token-based license agreement for aspenONE Manufacturing and Supply Chain, you will receive a new token-based license file. During installation of any product in Aspen Manufacturing and Supply Chain, you will get a message indicating that the newly installed software will use the token-based license key. Accepting the warning message enables you to install the software.

### Notes:

- If you do not have the updated token-based license file, please contact AspenTech Customer Support.
- We have seen issues extracting large zip files on earlier versions of Windows. If you do not have access to an extractor, you may use the zip extractor utility on the Download Center.
- If you have an MSC perpetual license purchased prior to 2011 and are entitled to Informatica upgrades, you can download the Informatica software from the Download Center.
- Some products previously available on CD-ROM or DVD are not included. If you do not find a product, please contact AspenTech Support at <https://support.aspentech.com>.

## SLM License Server

Before you install products, it is recommended that you install and configure the SLM License Server.

When you deploy aspenONE V12 software on client machines, the SLM server should be from the V12 release. When migrating to a new version of aspenONE, the SLM Server should always be upgraded first, followed by the SLM clients. This is done to avoid any potential incompatibility issues. During this transition period, it is possible to have clients at a lower version than the SLM Server.

For more information about licensing, please see *Software License Manager (SLM) Installation and Reference Guide* on the aspenONE media.

# Localization

The V12 release media includes all localized products that are available when V12 is released. The Knowledge Base article #000093657 contains a spreadsheet that identifies which products are localized and how to access the localization.

## Accessing aspenONE Documentation

There are several ways to access Product Help files and context-sensitive Help (these are available depending on the type of application):

- Clicking the **Help** button.
- Pressing **F1** while in the application.
- Accessing the application's **Help** menu.
- Clicking a Help icon. For example:



Documentation in PDF format can be found in the following ways:

- Installation Guides and Release Notes can be found by clicking the corresponding link on the Welcome page of the aspenONE Installer.
- Logging onto the AspenTech Customer Support site, clicking **Support** in the upper right-hand side and then clicking **Product Documentation**.
- Downloading all the available documentation (other than Help files) from the AspenTech Customer Support website via the zip file of the aspenONE Documentation.

For Aspen Plus, Aspen HYSYS, Aspen Exchanger Design and Rating, Aspen Economic Evaluation, Aspen DMC3 Builder, and Aspen Fidelis Reliability only, you can access additional documents by:

- Clicking the Aspen Knowledge icon on the Resources ribbon. (All products except Economic Evaluation.)
- Entering a search string within the Search Aspen Knowledge search box – available in the upper-right corner of the application. (All products except Economic Evaluation.)
- Clicking Aspen Knowledge from the Help menu (Economic Evaluation only).

# Aspen Petroleum Supply Chain Overview

The Aspen Petroleum Supply Chain Suite of products provide a comprehensive set of solutions that address the unique needs of companies involved in the planning, scheduling, refining, and transporting of crude oils, intermediates, and refined products.

<b>Product</b>	<b>Description</b>
<b>Aspen PIMS</b>	Aspen PIMS (Process Industry Modeling System) is a flexible planning tool used for economic planning in the process industries. PIMS includes PIMS Assay Management.
<b>Aspen Unified</b>	<p>Aspen Unified is a web-based application that incorporates both planning and scheduling.</p> <p><b>Aspen Unified PIMS (AUP)</b> is a web-based version of PIMS that has an improved interface, interactive flowsheet and the ability to easily create and configure cases to perform what-if scenarios and analysis.</p> <p><b>Aspen Multi-Site</b> allows you to create and maintain XPIMS and MPIMS models using an intuitive interface. You can see transport and distribution lines in a graphical environment.</p> <p><b>Aspen Unified Scheduling (AUS)</b> is a web-based scheduling application that allows you to perform many of the same basic features of Aspen Petroleum Scheduler (APS).</p> <p><b>Aspen Unified GDOT Model Builder</b> is a web-based application that allows you to construct and validate an optimal GDOT model using sophisticated diagnostic tools. Once created and validated, this model and all supporting files can be exported for quick deployment in Aspen GDOT Online.</p>
<b>Aspen Verify for Planning</b>	Aspen Verify for Planning is a virtual assistant that uses historical data from hundreds of cases to help evaluate the quality of a proposed operating plan. It provides feedback and expert recommendations quickly and easily to optimize your monthly planning.
<b>Planning Analysis Tools</b>	<p>These tools, by default, are automatically selected to install when Aspen PIMS or Aspen Petroleum Supply Chain Planner are installed.</p> <ul style="list-style-type: none"><li>• Aspen PIMS Viewer</li><li>• Aspen Matrix Analyzer</li><li>• Aspen Matrix Comparison</li><li>• Aspen XLR Viewer</li><li>• Aspen Marginal Analysis Viewer</li></ul>
<b>Aspen Refinery Multi-Blend Optimizer, formerly Aspen MBO</b>	Aspen Refinery Multi-Blend Optimizer (Multi-Blend Optimizer) is a multi-blend optimization tool for refinery products.

Product	Description
<b>Aspen Petroleum Scheduler, formerly Aspen Orion</b>	Aspen Petroleum Scheduler is a petroleum refinery and petrochemicals scheduling application that supports the comprehensive scheduling of all plant activities.
<b>Aspen Petroleum Supply Chain Planner, formerly Aspen DPO</b>	Aspen Petroleum Supply Chain Planner is an economic planning tool used to solve multi-commodity, multi-period transshipment optimization problems. PSCP solves problems involved in optimization of distribution networks for any industry having alternate modes of transporting materials to various plants, terminals and/or customers.
<b>Aspen Refinery Reporting</b>	Aspen Refinery Report Wizard and Aspen Report Writer are Add-In features that work with Microsoft Excel® to create report templates and custom reports.

## System Requirements

For the most up-to-date hardware and software requirements that must be met to install AspenTech products, download the platform specification from the following website:

<https://www.aspentech.com/platform-support/>

## Additional System Requirements and Notes

**Note:** For specific instructions on requirements and installing and configuring Aspen Unified, please refer to the separate *Aspen Unified Installation Guide*.

### Microsoft Message Queue (MSMQ)

Required if using **adapters** with **PIMS**, **APS** and **MBO**.

MSMQ Active Directory Domain Services Integration (for non-server computers joined to a Domain)

MSMQ HTTP Support

### .NET Components

You may need to **Turn Windows features on** from the **Control Panel** to enable the .NET requirements after installation of the components. If not already installed, download .NET 4.8 components from the following link:

<https://dotnet.microsoft.com/download/dotnet-framework/net48>

## Aspen PIMS

**Note:** Only a single instance of PIMS can run on any machine. This includes virtual environments. If you wish to run multiple instances of PIMS in a virtual environment, we suggest you run multiple virtual machines each with a single running instance of PIMS.

Analysis Services is required if using PIMS Analytics and running SQL; SQL Server Express is not sufficient since Analysis Services is required for PIMS analytics to function. If using SQL Express, you will need to install Analytic Services standalone.

## User requirements

Administrative privilege is required to install all AspenTech software. Your administrative privilege must allow you to write to the registry and also to specific folders on the installation machine. Consult with your IT department if you have issues or questions.

**SQL Administrative privileges** are required to perform any SQL functions including creating SQL databases and assigning proper permissions to SQL database accounts.

## Integration Services

If installing **Aspen Petroleum Scheduler Integration Services**, login information is required if using Microsoft SQL Server as your database. The user name you enter is the account login name used to connect to SQL.

## NetworkService Accounts

### **For APS:**

If using KPI passing or assay passing from **PIMS** to **APS**, the **NetworkService** account must have specific rights to successfully access databases.

If using SQL as the APS database, **NetworkService** on the machine where APS Integration services have been configured, must have **read-write** access to the database location.

If using Access as the APS database, the folder that contains the Access model must have **NetworkService read-write** access.



# 3 Installing the Aspen Petroleum Supply Chain Suite

## Overview

This chapter provides instructions for installing Aspen Petroleum Supply Chain products. Please refer to the *Aspen Unified Installation Guide* for specific instructions on how to install AU.

**Note:** Coexistence is not supported for Aspen Manufacturing and Supply Chain products (including PIMS). Those products do not support coexistence of multiple versions on any platform (including coexistence with Aspen Engineering products of a different version). Also, different patches of the same version cannot coexist.

## Before You Install

Before installing, perform the following pre-installation tasks and confirmations:

- Obtain the appropriate license file(s) or obtain the I.P. address or name of the SLM server.
- Ensure that Firewall protection has been disabled. Specifically, if a Firewall blocking message appears, you should allow MPICH2 message passing to occur by permitting Smpd.exe to run.
- Ensure that the system requirements are met:

In addition to the requirements above, check the following:

- Ensure you have local administrative permissions. (See "User Requirements" section in the "Overview" chapter.)
- Install/configure required third-party software as needed (e.g., Microsoft Excel).

# Granular Downloads

AspenONE V12 includes the ability to download some individual products/product families that can be used independently of a full suite. These sub-components are referred to as **granular downloads**. The granular downloads are used to provide smaller downloads in situations where customers only need a specific product/product family. If more than one granular download is needed, it is recommended that the entire suite is downloaded because it may take less time overall as opposed to downloading two or more sub-components.

**V12 Engineering (ENG):** In the case of the ENG media, users can download the entire suite or one of the items listed under the ENG group:

- Aspen Economic Evaluation
- Aspen Exchanger Design and Rating with Aspen Properties, Aspen Simulation Workbook and Aspen Version Comparison Assistant
- Aspen Simulation Workbook
- Aspen Multi-Case
- Aspen Cim-IO & Process Data\*

\*The Cim-IO & Process Data software is from the Manufacturing & Supply Chain suite and is useful for customers deploying a 3rd party historian and is included for convenience. Note: The Aspen Cim-IO & Process Data software is not a part of the overall Engineering suite download, and only available as a separate download.

**V12 Manufacturing & Supply Chain (MSC):** In the case of the MSC media, users can download the entire suite or one of the items listed under the MSC group:

- V12 Batch APC
- Aspen Supply Chain Management
- Aspen Planning, Scheduling and Blending, Supply & Distribution
- Aspen Manufacturing Execution Systems & Advanced Process Control
- Aspen Unified
- V12 Aspen GDOT Online
- V12 Aspen GDOT Offline & Unified GDOT Builder
- Aspen Informatica PowerCenter 10.4
- Aspen Cim-IO & Process Data

**V12 Asset Performance Management (APM):** In the case of the APM media, there is no downloadable suite. Users can download the products listed below the APM group:

- Aspen Asset Analytics
- Aspen Fidelis
- Aspen ProMV
- Aspen Mtell
- Aspen Mtell for Oil Well Optimization
- Aspen Asset Performance Management Insights

- Aspen Enterprise Insights On-Premise Stack

**V12 Aspen Internet of Things (AIoT):** In the case of the AIoT media, there is no downloadable suite. Users can download the products listed below the AIoT group:

- Aspen Cloud Connect
- Aspen Edge Connect

**Software License Manager (SLM):** In the case of the SLM media, the only granular download is ALDA:

- aspenONE License Deployment Assistant (ALDA)

# Installing the Aspen Petroleum Supply Chain Suite for the First Time

Log on using the account name and password of an account in the **Administrators** group of the target computer.

**Note:** Before you begin installation, you will want to review the What's New document and Release notes and print copies of the Installation Guides for products that will be installed. Those documents are included under each suite's folder.

## Getting Started

1. You can begin your software installation by clicking on the media download or inserting the *aspenONE USB* into the USB drive. The **AutoPlay** dialog box is displayed.
2. Select **Run aspenONE Install Browser**.
3. **User Account Control confirmation**

Before you see the Welcome page, you may see the following:



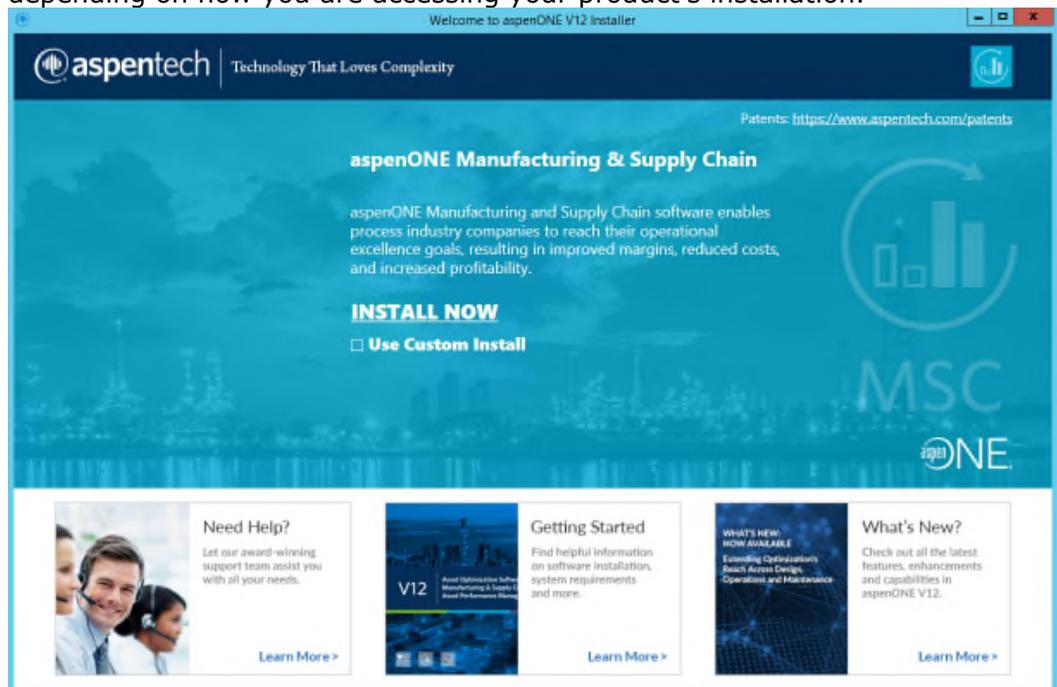
You must click **Yes** to continue.

If you do not see this dialog box or something similar, you may have accessed the installation incorrectly and in doing so, appropriate settings may not occur. The consequence is that the applications may not run correctly or errors may appear even though the installation seems to complete successfully. If this dialog box does not appear, cancel the installation and re-launch **setup.exe** to start the installation again.

Carefully read the instructions, make your selections and proceed with the installation.

**Note:** If patches are available for the product that you are installing, a screen may appear that lets you view the patches before you install. You will also have an opportunity to view the updates after you finish the installation process.

The AspenTech Suite selection screen displays. The screen you see varies depending on how you are accessing your product's installation.



The following links are available:

- o **Patents** – Allows you to download a document with a list of recent patents.
- o **Use Custom Install checkbox** (appears after suite selection)– Most customers can use the standard installation for the media. We recommend using the standard install because that is the configuration where we focus our testing.

If you cannot use the standard install (you have disk space limitations, for example) you can check **Custom Install** on the Start Install screen before beginning the install process. This simply allows a more granular selection of which elements of a suite to install or not install when selecting programs.

**Note:** To install **Aspen Petroleum Integration Services** without APS or MBO, you *must* install using the **Custom Installation** option. Under **aspenONE Petroleum Supply Chain and Distribution Family | Aspen Petroleum Scheduler & Aspen Refinery Multi-blend Optimizer**, select the **Aspen Petroleum Integration Services** option.

- o **Need Help?** – Connects to the AspenTech Support Web site, where you can find knowledge base articles, tips, and solutions to known problems.
- o **Getting Started** – Links to brochure containing information about prerequisites, installing and upgrading the software, documentation and translated versions.
- o **What's New** – Links to a description of new features.

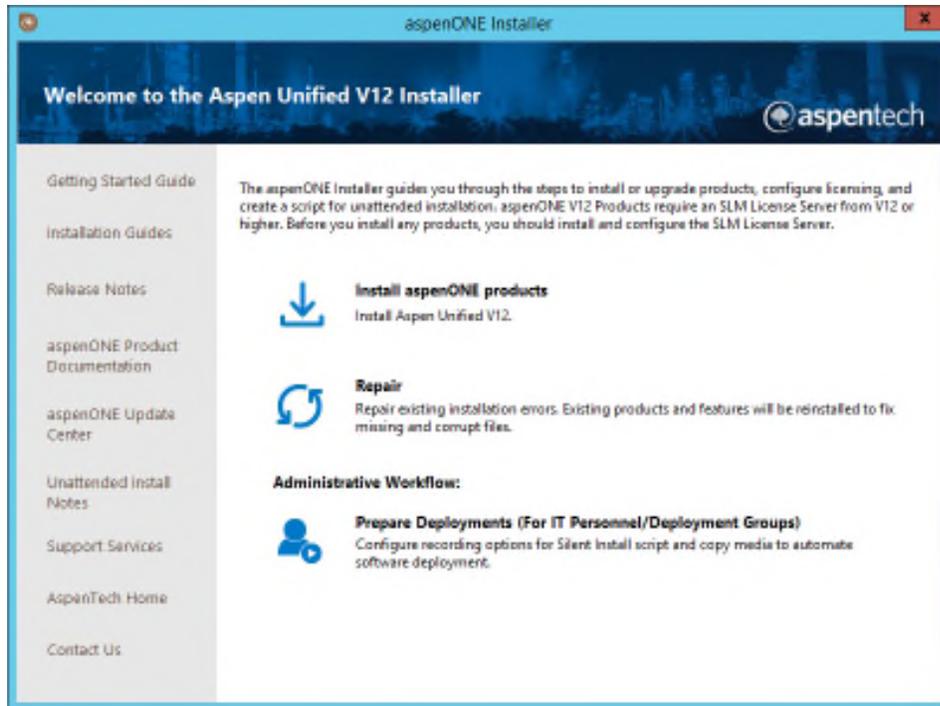
4. Click **INSTALL NOW**.

## Installation Welcome Page

The **AspenTech Installation Welcome Page** provides options to install or upgrade aspenONE products, configure licensing, and create install scripts for unattended installations.

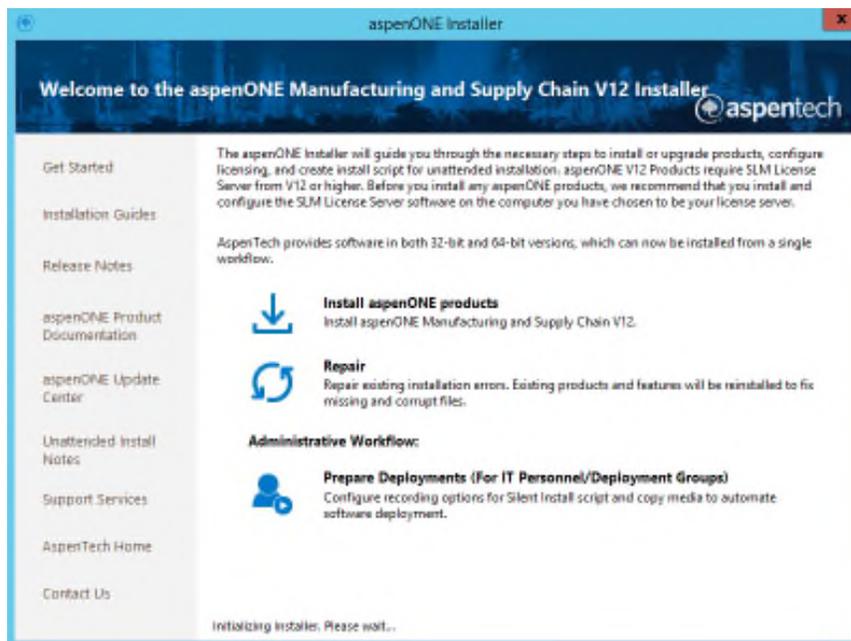
The following links are available on the left side of the aspenONE Installer Welcome Page:

- **Get Started Guide** – Opens the AspenTech Deployment Solutions Web site.
- **Installation Guides** – Opens a folder that contains all the Installation Guides for the products.
- **Release Notes** – Opens a folder that contains all the Release Notes for the products.
- **aspenONE Product Documentation** – Opens the AspenTech Support Web site.
- **aspenONE Update Center** – Connects to the Aspen Support Update Center so that you can check to see if there are patches available for the product(s) that you are installing. You must be a registered user on the Support Web site to access the Update Center.
- **Unattended Install Notes** – Provides instruction on creating an unattended installation.
- **Support Services** – Connects to the AspenTech Support Web site, where you can find knowledge base articles, tips, and solutions to known problems.
- **AspenTech Home – Connects to the AspenTech Web site.**
- **Contact Us** – Connects to the AspenTech Support Web site, where you can obtain the latest e-mail and telephone contact information and find the AspenTech Support location closest to you. You can see hours of operation for global support and submit your support issues.



The following options are available on the aspenONE Installer Welcome Page:

- **Install aspenONE products.** – Launches the installation process during which you will select new products to be installed on this computer.
- **Repair** – Repair existing installation errors.
- **Prepare Deployments (For IT Personnel/Deployment Groups)** – Create install scripts and copy media to automate software deployment.

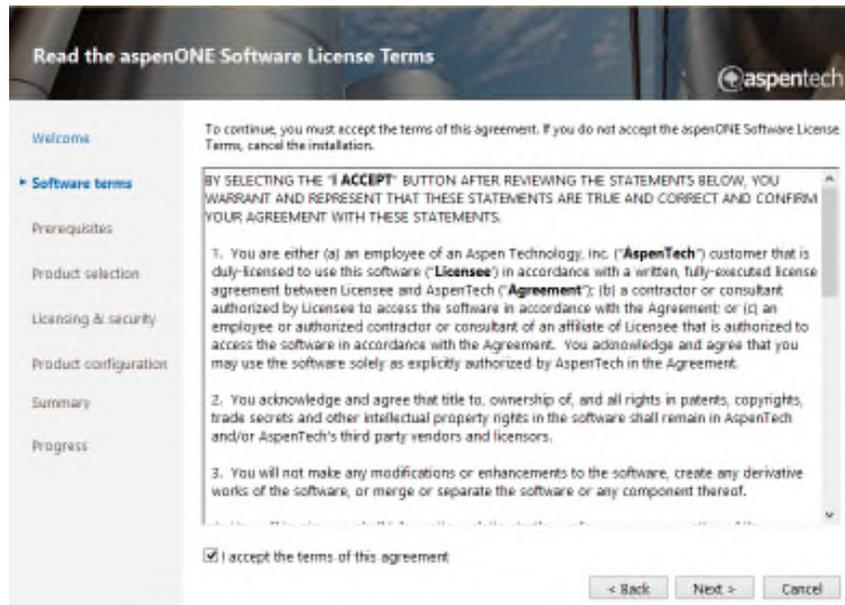


### Notes:

- Aspen Petroleum Supply Chain applications are developed as 32-bit applications. Though 32-bit applications, they can run on a 64-bit machine. The installation automatically detects your operating system and displays allowable applications to install.
- Be sure that the SLM license server or standalone license is available prior to installation. SLM tools are automatically install when installing aspenONE products.

5. Click **Install aspenONE Products**.

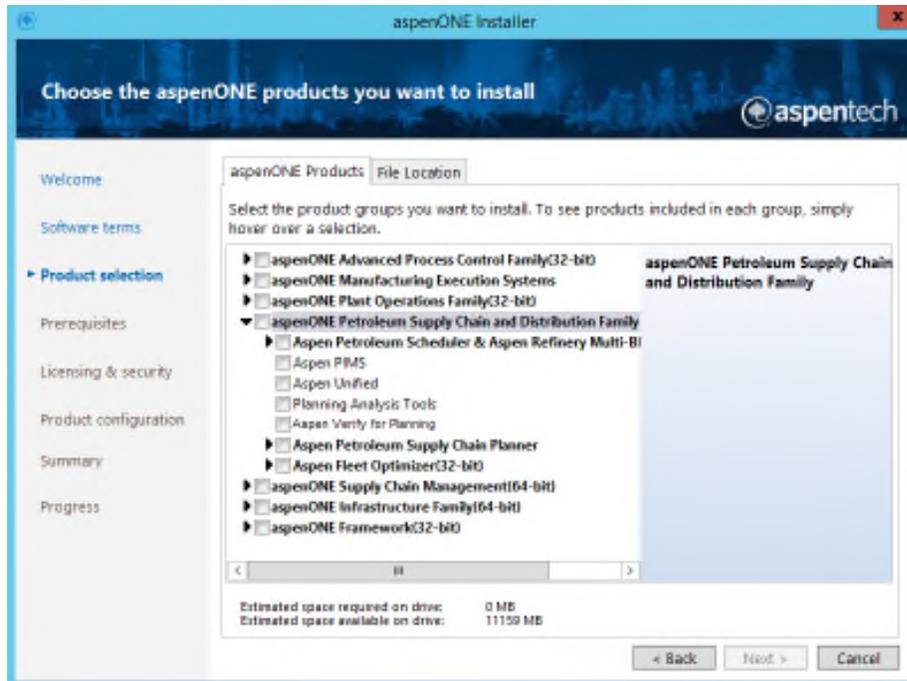
## License Terms and Conditions



6. Select **I accept the terms of the agreement** and click **Next** to continue.

## Choose the aspenONE products you want to install and the location

Below is a representation of the products screen, with the Petroleum Supply Chain and Distribution Family of products displayed.



## Installation Notes

### Options

aspenONE Petroleum Supply Chain and Distribution Family

Aspen Petroleum Scheduler and Aspen Refinery Multi-Blend Optimizer

Aspen PIMS

### Description

Select this checkbox to install all the family products.

Integration options EIF and mMDM Adapters, are automatically selected when selecting these products. Without these components, integration between products cannot occur. Installation of these products also automatically installs:

- Aspen Report Writer
- Excel Integration Utilities (EIU)
- Reporting Wizard

If you do not wish to install the above, you can use the **Custom Installation** option control installed products and utilities.

Installs on a local machine. You do not need any specific privileges to install these options.

Installing PIMS automatically selects the **Planning Analysis Tools** to install.

## **Options**

Aspen Unified

## **Description**

The AU Administrator role is automatically granted to anyone with local machine administrator rights.

Aspen Unified is a server application but can be installed for standalone use. AU allows you to assign roles and responsibilities for each model. A website is created where users can access a common server interface when working with AU. AU data can be housed on multiple SQL servers. Result databases are accessible to all.

Refer to the separate *Aspen Unified Installation Guide* for detailed instructions.

Aspen Verify for Planning

You will need to install either SQL Express or SQL Server prior to running this application.

### **Note:**

If you do not have permission to create the AVP SQL database and database tables, two SQL scripts can be found in the following location:

**<installation drive/directory>\Program Files (x86)\AspenTech\Aspen Verify for Planning**

The two SQL scripts are:

AspenVerifyForPlanningDatabaseCreation.sql

AspenVerifyForPlanningTableCreation.sql

These scripts should only be executed by a SQL database administrator.

Once the initial database and tables are created, any user can add new AVP models to the newly created SQL database.

Planning Analysis Tools

Planning Analysis tools are automatically selected to install when Aspen PIMS or Aspen Petroleum Supply Chain Planner are selected.

Aspen Petroleum Supply Chain Planner

Integration options EIF and mMDM Adapters, are automatically selected when selecting these products. Without these components, integration between products cannot occur.

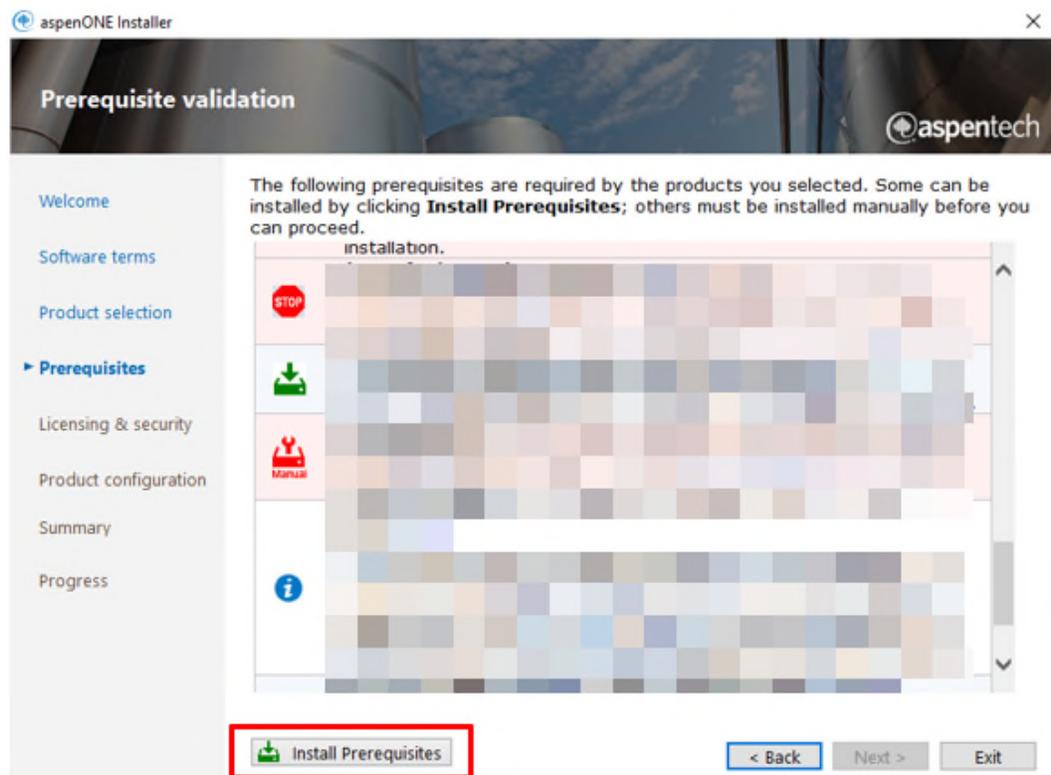
Aspen Fleet Optimizer

Select the specific products associated with AFO that you wish to install. Refer to the separate *Aspen Fleet Optimizer Installation Guide* for specific instructions.

### Additional Notes:

- Once the installation of any AspenTech product to the default folder has been completed, this folder cannot be changed. Any further AspenTech installations on the computer are made to that folder by default.
- Common features are always installed in the Program files\Common Files\AspenTech Shared folder regardless of the destination location selected.

## Prerequisite Validation



This screen will only appear if prerequisites are missing. The screen above is only a representation of the screen you may see.

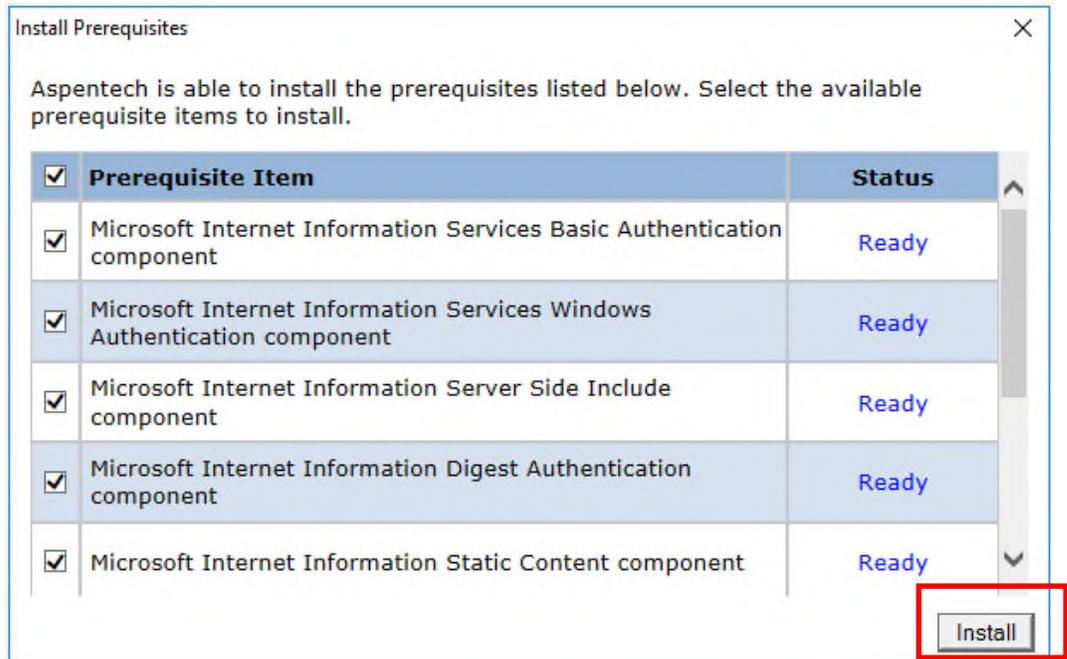
Starting with V11, the capability to install and/or configure some of the product pre-requisites during the Aspen software installation process – mostly Microsoft Internet Information Services (IIS) was added. If the prerequisites window appears, you will see the “**Install Prerequisites**” option at the bottom of the screen. Here is a description of the icons related to installing pre-requisites. (These must be installed before the AspenTech installation can proceed). You may also encounter other icons that are informational only.

-  This item can be installed automatically by selecting “**Install Prerequisites**”

-  or  This item cannot be installed automatically by selecting “**Install Prerequisites**”. Select the link in the item’s description to open an AspenTech support site link that describes how to install this item.
-  This item is informational

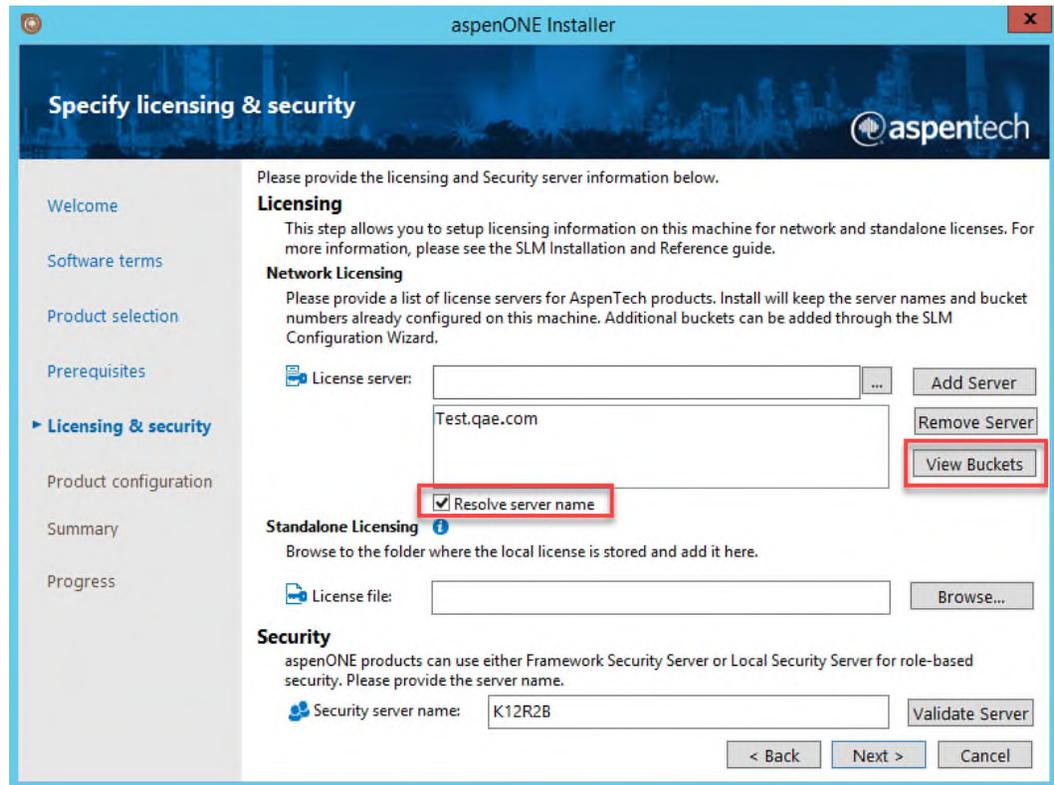
**To install the prerequisites:**

- Click **Install Prerequisites** if you want to install or configure the relevant prerequisites.
- When the **Install Prerequisites** option is selected, the Install Prerequisites screen appears. This will identify which prerequisites can be installed and/or configured. Note that the image below is only a representation of prerequisites which may or may not be applicable for your application.



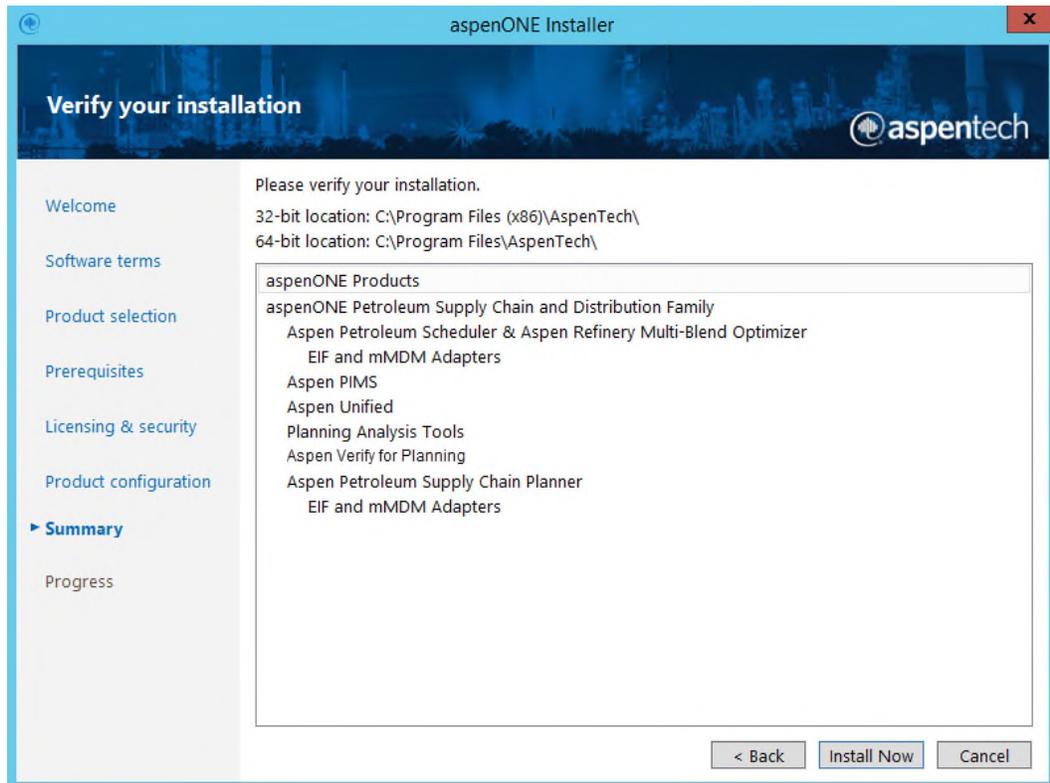
- All options will be checked by default - unselect any that you do not want installed automatically and then click **Install**.
- When **Install** is clicked, PowerShell windows will appear that perform the install and/or configuration for the specified prerequisites. When the install and/or configuration steps are done, you will see the **Install Prerequisites** window again.
- Click “**x**” to close the window and return to the installation process.

# Specify licensing & security



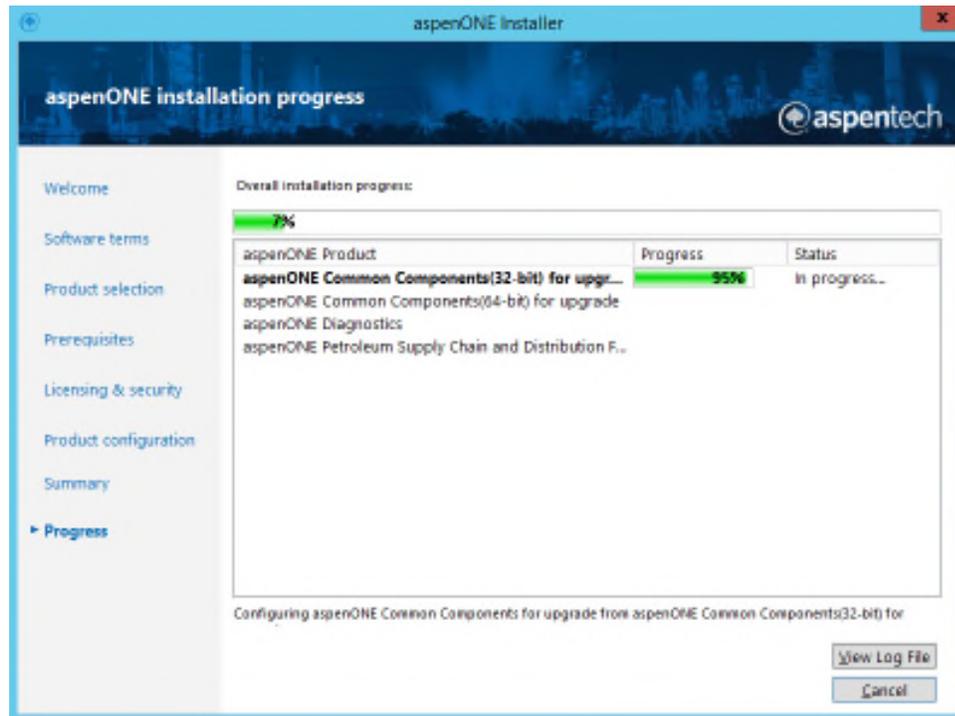
An option is available to specify buckets. If you use buckets, you can specify them during the install or later using the SLM Configuration Wizard. Also, when **Resolve server name** is checked, the fully qualified server name is used in the registry. If you use aliases, you can uncheck this setting.

# Verify your installation

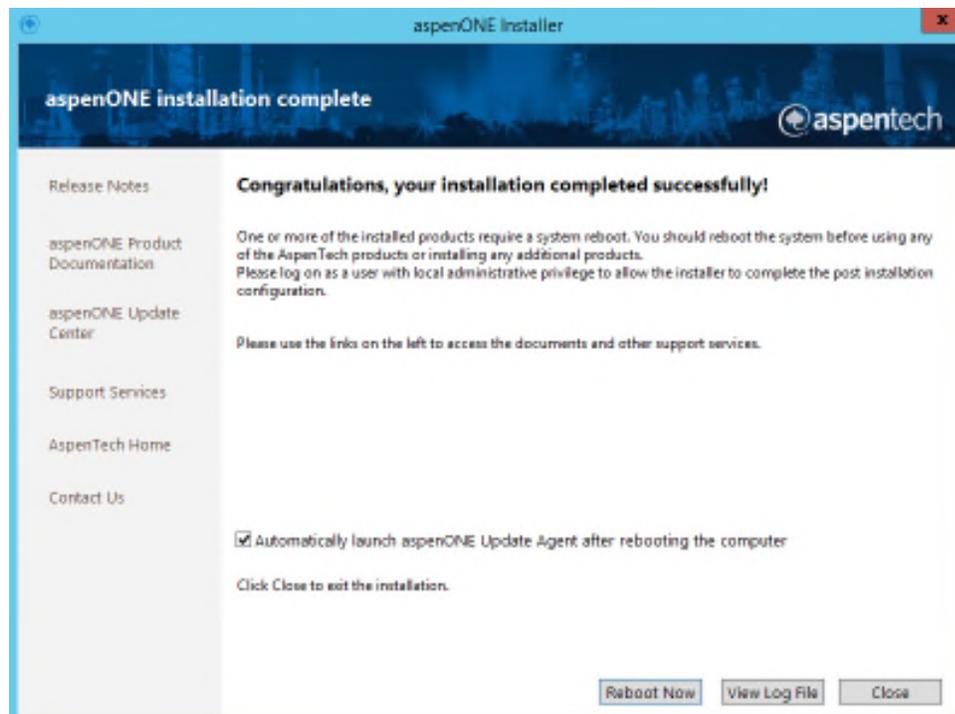


**Note:** If you encounter a Window Firewall Security Alert after clicking **Install Now**, allow access to enable use of message queuing needed by the selected application to install.

## aspenONE installation progress



## aspenONE installation complete



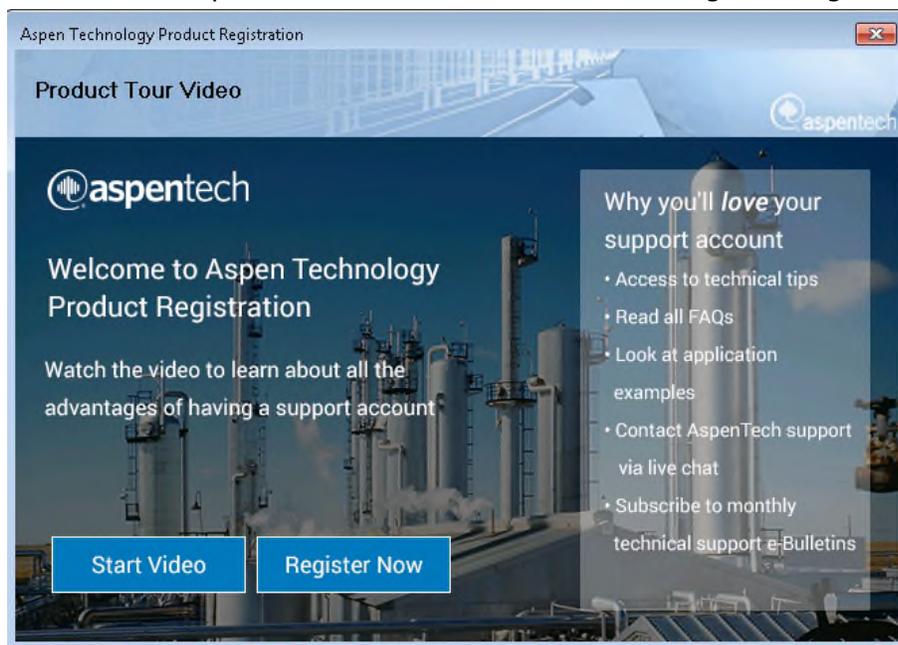
# Aspen Unified Post Installation Note

**Note:** You will **NOT** be able to launch AU until the appropriate SQL databases have been created. See the *Aspen Unified Installation Guide* for detailed instructions.

## Other Petroleum Supply Chain Verify Installation

To verify the installation of any Petroleum Supply Chain products besides Aspen Unified:

1. Click **Start | All Programs | AspenTech** and navigate to the installed product name.
2. Launch the product. You should see the following after login:



3. Click **Register Now** to complete the registration process.
4. After completing registration, you should see a product dialog box that contains the release version number. After logging in, you can also look in the title bar for the release version number to verify the correct version has been installed.

# 4 Aspen PIMS Post Installation

## Overview

This chapter describes post installation instructions for Aspen PIMS, specifically how to use SQL as an output database.

## Aspen PIMS – Using SQL as an Output Database

PIMS model execution has a unique identifier, Solution ID, associated with each run. When an execution run occurs, the solution data is written to an output database. All report data is obtained from the output database that is specified from the PIMS **Output Database** tab of the **General Model Settings** dialog box.

**Note:** PIMS does not support exporting information from multiple models into a single SQL database. Doing so may cause erroneous or unexpected results.

The following information is applicable if you plan to store PIMS model data results in a Microsoft SQL Server database.

### Create the SQL Server Instance

**Note:** Aspen Technology recommends that a qualified Database Administrator (DBA) create and configure the SQL Server database for use with any Aspen products.

For best results, and in order to avoid disk contention, at a minimum, please install the following on different physical drives:

- Operating System
- Database
- Logs

For additional information or clarification on SQL Server installation recommendations, please consult Microsoft for the latest best practices. Also please note that during SQL role setup, to enable the **Grant Connect** option for **TSQL Default TCP** found under **SQL Security | Server Roles | Public | Permissions**.

After installing SQL Server, perform the following related to your server:

1. Enable Allow Remote Connections.
2. Enable TCP/IP.
3. Check the default SQL Server port; 1433 should be automatically added to the Windows Firewall exceptions list. This is a troubleshooting tip.
4. Check with your IT department for specific details related to your organization.

## Create Database User Accounts

1. Create database login accounts and users and assign them to their appropriate database roles based on the local IT security policy.
2. For the associated **SQL Security | Login** you will need to enable the **sysadmin Server role** option.
3. The *minimum* database **User Mapping | Database role membership** options for PIMS users is **db\_datawriter** and **db\_datareader** for each database login.
4. To be able to truncate a database, the **db\_ddladmin** role is also required. Granting **db\_owner** covers all required roles.

## Database Management Tool

Starting with V11, the **Database Management Tool** is available to assist in creating and managing SQL databases from *within* PIMS. After SQL has been set up for the first time, this tool eliminates the need to run the **PimsDbCreationScript.sql** script to create new PIMS results databases. It also eliminates the need to modify and run the **PimsTableCreationScript.sql** used to apply the correct database schema.

Daily PIMS users can use this tool to access, create, delete, clear and view database details, including PIMS case and solution information, directly from PIMS.

**Note:** In order to *create* databases, the user creating a database must have the **db\_owner** role assigned.

From PIMS, launch the tool by doing the following:

- Select **Tools | Data Management Tool**. The **PIMS Database Management Tool** dialog appears.

See the PIMS online help topic **Database Management Tool** for specific information and instructions.

# Database Management Tool is not available

If you do not have direct access to Aspen PIMS, for example, if you are a system administrator who is configuring SQL but has no access to PIMS, you can use the provided scripts to create the SQL database and then apply the database schema.

## Create the SQL Server Database

If you are a SQL database administrator, you may already have a procedure to create a new SQL database. If a database creation procedure is not available, we have provided a script to help create a blank database, the description of which is found below.

Once the initial SQL database is created, go to the [Create the database objects using the provided schema](#) to create the appropriate tables.

## Create the database using the provided SQL script

Complete the following procedures on the computer where SQL Server is installed to create the target PIMS results database.

1. On the machine where PIMS is installed, go to:  
C:\Program Files (x86)\AspenTech\Aspen PIMS\Enterprise Configuration\Database.
2. Using SQL Server Management Studio or a text editor, open the **PimsDbCreationScript.sql** script. This script is used to create the database.
3. Replace all instances of **%databaseName%** with the name of the database that is being created, e.g. ResultsPIMS.
4. Replace all instances of **%databasepath%** with the path of where the database will be created, e.g., "C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\DATA". Please also notice that the path does not contain a final backslash.
5. Replace all instances of **%logfilepath%** with the path of where the log file will be created, e.g., "C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\DATA". Please also notice that the path does not contain the final backslash.
6. Replace all instances of **%initialdatabasesize%** with the initial size for the database, e.g., "2048KB."
7. Replace all instances of **%initiallogfilesize%** with the initial size for the log file, e.g., "1024KB."
8. In summary, these are the items that should have been replaced in the script, **%databaseName%**, **%databasepath%** (without the final backslash), **%logfilepath%** (without the final backslash), **%initialdatabasesize%**, **%initiallogfilesize%**.

9. Save the file.
10. Execute the script.

## Create the database objects using the provided schema (i.e. script)

The referenced script creates the necessary database objects or tables.

If you know how to apply an SQL script to an existing blank database, use the **PimsTableCreationScript.sql** script to do so, after commenting out the `%databaseName%` at the top.

If you do not know how to automatically apply a script, follow the steps below:

1. In the same directory as the database creation script, for example, `C:\Program Files (x86)\AspenTech\Aspen PIMS\Enterprise Configuration\Database`, use SQL Server Management Studio or a text editor to open `PimsTableCreationScript.sql`.
2. Replace all instances of `%databaseName%` with the name of the database that is being created, e.g., `ResultsPIMS`.
3. Save the file.
4. Execute the script.

The database scripts should run without error. If there are any errors, make sure you have sufficient privileges to execute the scripts and create objects.

## Test SQL Server Setup and User Access from PIMS

Use the following procedure to test SQL Server login credentials and to test the connection to your results database.

1. Test the login by logging onto SQL Server with SQL Server authentication mode using SQL Server Management Studio from the same machine on which SQL Server is installed.
2. Test the connection has been set up correctly by launching PIMS.
3. Go to the **General Model Settings** dialog box.
4. Click the **Output Database** tab.
5. Select **SQL Server** from the **Database Type** list dropdown.
6. Click the **"..."** associated with the **Connection String** field to open the **Data Link Properties** dialog box.
7. Complete the SQL Server data connection information using the SQL database name you created.
8. Click **Test Connection** to verify connection to the database is successful.

# 5 Aspen Petroleum Scheduler, Aspen Refinery Multi-Blend Optimizer and Aspen Report Writer Post Installation

## Overview

This chapter describes post installation instructions for Aspen Petroleum Scheduler, Aspen Refinery Multi-Blend Optimizer, Aspen Report Writer and Excel Add-ins.

## Excel Trust Center Macro Settings

To ensure simulation/optimization, use of the Excel Multi-Event Editor and other features that use Excel perform correctly, you will need to verify a **Trust Center** option prior to running your Aspen application. If the option described below is not set, you will receive a Microsoft Visual Basic run-time error or erratic behavior when the application attempts to access Excel.

1. Launch **Excel** and access **Excel Options**.
2. Click **Trust Center**.
3. On the main **Trust Center** screen, click **Trust Center Options**.
4. Click **Macro Settings**.
5. Locate the **Developer Macro Settings** section and enable the **Trust access to the VBA project object model**.

**Note:** Depending on your version of Excel, the specific steps to access this option may vary, but you must have the **Trust access to the VBA project object model** option selected to ensure proper application operation.

## Adapter Configuration

If you are not using adapters, be sure to set the **CONFIG** table keyword **USEADAPTER** to **N**. The default is **Y**, indicating you will be using adapters.

Please refer to the specific application integration user guides for pre-requisites and specific instructions on how to setup adapters.

## SQL and Oracle Database Configuration

If you plan to use an SQL Server or Oracle database to store Petroleum Scheduler or Multi-Blend Optimizer model data, you will need to perform the necessary post installation steps described in the **Appendix** of the **Petroleum Scheduler** or **Multi-Blend Optimizer Help** file that can be accessed directly from the product.

## Using MS Office 365 with Aspen PIMS, Aspen Petroleum Scheduler and Aspen Refinery Multi-Blend Optimizer Access Databases

There is a known compatibility issue when running Office 365 on Windows 10 or Windows 8.1 and using Access databases. Without performing the following, you will not be able to open your databases.

**Note:** The steps below will work for both 32 or 64 bit versions of Office 365. If running the 64 bit version of Office 365, another option is to create a DSN for each database and skip the steps below.

Please follow the steps below:

1. Download the **Microsoft Access Database Engine 2013 Re-distributable** from the following location:  
<https://www.microsoft.com/en-us/download/details.aspx?id=39358>
2. Click **Download** and select **AccessRuntime\_x86\_en-us.exe**.
3. Click **Next** to start the download process. The executable can be found in your **Downloads** folder.

4. Once downloaded, install **AccessRuntime\_x86\_en-us.exe** by double-clicking on the executable. Follow the instructions.
5. The installation installs an associated driver that you can see under **Control Panel | Programs | Programs and Features**.  
Example: Microsoft Access Runtime 2013

After completing the steps above, you will be able to open .mdb databases through the application.

## **Aspen Report Writer, Aspen Refinery Report Wizard and Aspen Excel Integration Utilities Post-Installation Configuration**

Aspen Report Writer, Aspen Refinery Report Wizard and Aspen Excel Integration Utilities are Excel add-ins. After installation, you should see these utilities either on the main Excel toolbar or under Add-ins. If you do not see these utilities, you will need to manually add the add-in to the Excel interface. These steps vary depending on your version of Excel. Please refer to the Microsoft Excel online help for the correct procedure related to add-ins.



# 6 Upgrading or Repairing Aspen Petroleum Supply Chain Suite Products

## Overview

Upgrading your application is performed through the Upgrade center.

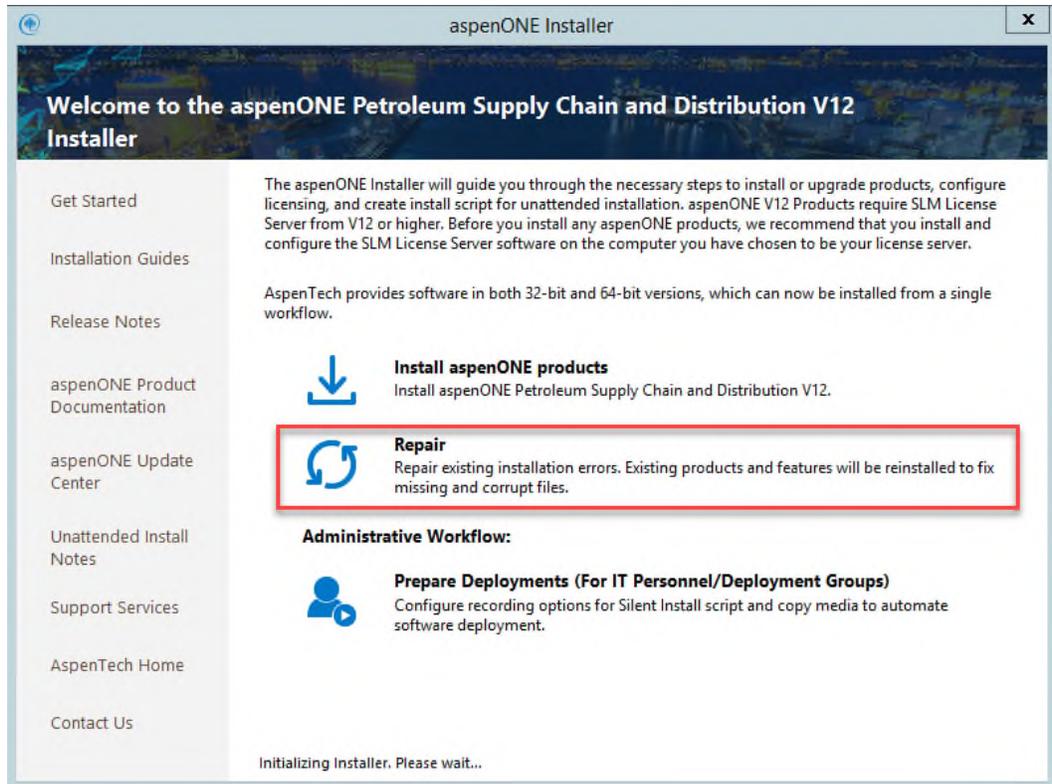
Repairing products associated with the Aspen Petroleum Supply Chain is performed from the installation application. The installation program detects what software has been installed.

**Note:** If patches are available for the product that you are installing, you may see a screen that allows you to view those patches before you install. You will also have an opportunity to see the Updates when you finish the installation.

Please also note that coexistence is not supported for Aspen Manufacturing and Supply Chain products (including PIMS). Those products do not support coexistence of multiple versions on any platform (including coexistence with Aspen Engineering products of a different version). Also, different patches of the **same** version cannot coexist.

Aspen PIMS EE and Aspen Olefins Scheduler were sunset in V10 and aspenONE PIMS Platinum was subsumed into Aspen Unified PIMS. Upgrading PIMS, APS or MBO will remove AOS, PIMS EE and Platinum from your system, depending on the product you select to upgrade. You will be warned prior to software removal and will have an opportunity to cancel the upgrade request if desired.

When you get to the **Welcome** screen, click **Upgrade or repair existing products**. You will be prompted on how to continue.



**CAUTION:** Upgrades on same versions may cause some files to be overwritten. If in doubt as to whether a proper upgrade or repair will occur, please perform the appropriate database backups, uninstall and perform a full install to be sure the most current files have been replaced, registered and installed. This will ensure your application will run and perform as expected.

For **Petroleum Scheduler** or **Refinery Multi-Blend Optimizer**, if you are using adapters, you will need to install **Aspen Manufacturing Master Data Manager** (mMDM) and **Aspen Enterprise Integration Framework** (EIF). By default, these options are selected for you on the installation page.

## Upgrading Aspen Petroleum Scheduler or Aspen Refinery Multi-Blend Optimizer to the Latest Version

When upgrading to a new version, you should run DBupdate.exe on all previous databases to acquire any changed database schemas.

Also, starting with V8.7, pipeline scheduling is included that directly affects any events that include pipelines, requiring you to perform an additional upgrade step.

**Note:** You will *not* need to upgrade your models regarding pipelines UNLESS these models are created prior to V8.7. In this case, if your model contains pipelines, you will be required to update pipeline information, whether or not you use the pipeline scheduling feature.

### **To update pipeline information:**

1. Ensure you have updated to the most current schemas by running DBUpdate.exe located in your application folder, on all applicable databases.
2. The **Migrate PIPELINE tables on Update** option will be available if pipelines are detected.
3. Select this option and click **Update**. The **Pipeline Configuration Wizard** launches. Follow the steps to update your database.



# 7 Removing the Aspen Petroleum Supply Chain Suite

## Overview

This chapter provides instructions for removing the entire Aspen Petroleum Supply Chain suite of products or individual products from your computer.

## Before You Remove

Before removing any products, close all applications and all subfeature programs and save any files that you do not want to permanently lose. Pay particular attention to custom configuration files.

## Removing the Aspen Petroleum Supply Chain Suite of Products

The supported method for uninstalling Aspen software is by clicking **Start | Programs | AspenTech | Uninstall AspenTech Software**. From here a dialog appears listing all installed AspenTech products. Select the products you wish to uninstall and proceed with any additional instructions as applicable.



# 8 Troubleshooting

This chapter contains:

- Information that may help you if you have problems installing or running the software
- Information to handle error messages
- Issues and resolutions associated with specific products

## Common Problems

The following is a list of considerations to help solve installation problems.

- License file is not installed on the computer.
- Pre-requisite software has not been installed
- No local administrative rights to your computer.
- Windows Registry is corrupted.
- Insufficient rights to servers and/or various folders.
- Network inoperable.
- Incorrect license file for software being installed.
- Hard drive is full.
- Not enough space in the "temp" directory.
- Incorrect operating system.

## Error Messages

### Registry Settings

Errors associated with registry settings are usually due to insufficient rights for changing those settings. You must have administrative privileges on the computer you are installing on in order to change registry settings.

### Firewall Settings

Messages that appear during installation related to firewall restrictions should be directed to your IT department due to individual company policies regarding application installation and security.

# Display Issues on PSC Desktop Applications

## Problem

When using 4k or similar high resolution displays, where a set resolution has been applied as well as text zooming, some labels and text in dialogs and tables are not visible or are displayed incorrectly.

## Resolution

Disable the display scaling when using high DPI devices. This can be applied to specific applications allowing you to continue scaling on applications that are not affected.

### To resolve display scaling:

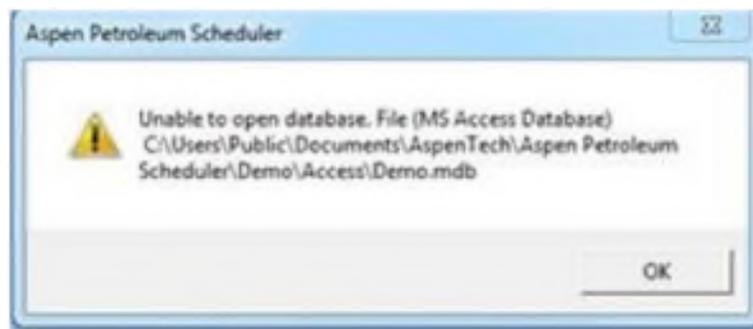
1. Access the **Properties** dialog box associated with the affected application. You can do this by right-clicking on the application icon and selecting **Properties** or by right-clicking on the .exe name and selecting **Properties**.
2. Click on the **Compatibility** tab.
3. Check/enable the **Disable display scaling on high DPI settings** option. The location and name of this setting will vary depending on your operating system. It may be found on a dialog accessed from the **Change high DPI settings** button. In this case, check/enable the **Use this setting to fix scaling problems for this program instead of the one in Settings** option. If the display issues are not resolved, you can try setting the other high DPI setting options as your operating system allows.

# Aspen PIMS, Aspen Petroleum Scheduler and Aspen Refinery Multi-Blend Optimizer

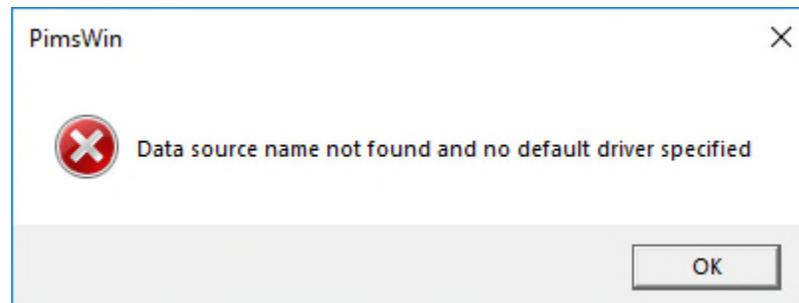
## Error opening an Access database

### Problem

On launching an Access database model or model referencing an Access database, a message appears similar to the following:



-or-



The cause of the problem can be the following:

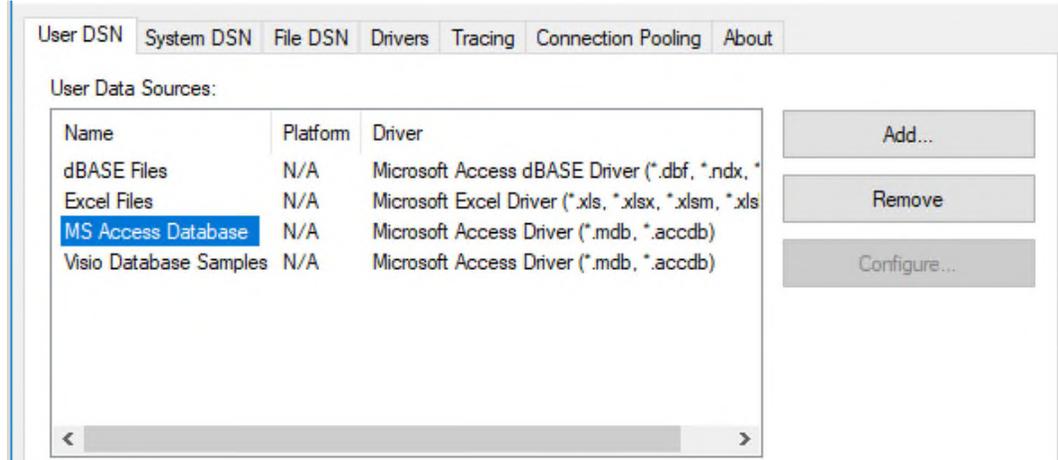
1. You do not have MS Access driver installed  
-or-
2. The default connection for the MS Access database has not been created.

### Resolution for problem 1

#### Create a MS Access connection

1. Open the ODBC Administrator.

2. On the **User DSN** tab, verify that a data source called **MS Access Database** exists.



3. If it does not exist, click **Add** to create a new connection with that name.

## Resolution for problem 2

### Default connection for MS Access database was not created

In case you cannot locate the MS Access driver in the ODBC window, you need to install the ODBC driver.

1. Download the 32-bit version of the Microsoft Access Database Engine 2013 re-distributable from the following location:  
<https://www.microsoft.com/en-us/download/details.aspx?id=39358>
2. Download **AccessRuntime\_x86\_en-us.exe**.
3. Once downloaded, install **AccessRuntime\_x86\_en-us.exe** by double-clicking on the executable and following the instructions.

After installation, you will be able to open any .mdb file without any issues.

# Aspen Excel Utilities

## Problem

After performing any uninstall and reinstall of Microsoft Office (e.g., upgrading, downgrading or repairing), the AspenTech Excel utilities are no longer visible or will not launch from Excel.

## Resolution

Obtain the matching installation media associated with the current version of installed AspenTech products. Run the AspenTech Repair option.

aspensONE Installer

## Welcome to the aspenONE Petroleum Supply Chain and Distribution V12 Installer

The aspenONE Installer will guide you through the necessary steps to install or upgrade products, configure licensing, and create install script for unattended installation. aspenONE V12 Products require SLM License Server from V12 or higher. Before you install any aspenONE products, we recommend that you install and configure the SLM License Server software on the computer you have chosen to be your license server.

AspenTech provides software in both 32-bit and 64-bit versions, which can now be installed from a single workflow.

-  **Install aspenONE products**  
Install aspenONE Petroleum Supply Chain and Distribution V12.
-  **Repair**  
Repair existing installation errors. Existing products and features will be reinstalled to fix missing and corrupt files.

**Administrative Workflow:**

-  **Prepare Deployments (For IT Personnel/Deployment Groups)**  
Configure recording options for Silent Install script and copy media to automate software deployment.

Initializing Installer. Please wait...