

BI xPress System Requirements

Last Modified on 15 April 2021

Notes

Note: BI xPress Version 2020.1.1 adds support for Visual Studio 2019 and SQL Server 2019.

Important: BI xPress no longer supports Business Intelligence Development Studio (BIDS). BI xPress no longer supports SQL Server Data Tools (SSDT) versions 2010, 2012, or 2013. You need to upgrade to SSDT versions 2015 or 2017 to continue using BI xPress for Visual Studio. BI xPress features that utilized BIDS or SSDT versions 2010, 2012, or 2013 only have been deprecated.

BI xPress System Requirements

The hardware requirements for BI xPress are based on your environment's deployment model. The following deployment models are available for BI xPress:

Deployment Model	Description
Single Machine	Workbench and the BI xPress database are installed on the same machine.
Multiple Machines	Workbench and the BI xPress database are installed on different machines.

BI xPress Single Machine Deployment

In the single machine deployment model, SentryOne Workbench and the BI xPress database are installed on the same machine. The SentryOne Workbench is the program that contains BI xPress and its associated assemblies while the BI xPress database is hosted within a SQL Server Instance.

The following memory and processor requirements apply to all editions of BI xPress:

Note: Hardware requirements can vary based on workloads and other processes.

Hardware Component	Minimum Requirements	Recommended Requirements

Hardware Component Memory	Minimum Requirements 4 GB	At least 8 GB. Recommended Requirements You should increase your system's memory as the BI xPress database size increases for optimal performance.
Processor Speed	1.4 GHz	2.0 GHz or faster
Processor Type	N/A	<ul style="list-style-type: none"> • AMD Opteron • AMD Athlon 64 • Intel Xeon with Intel EM64T support • Intel Pentium IV with EM64T support

BI xPress Multiple Machine Deployment

In the Multiple Machine deployment model, the SentryOne Workbench and BI xPress database are installed on separate machines. The SentryOne Workbench is the program that contains BI xPress and its associated assemblies, while the BI xPress database is hosted within a SQL Server Instance.

⚠ Important: It's important to differentiate between the client machine and the server machine:

- Client machine is the machine where the SentryOne Workbench is installed.
- Server machine is the machine containing a SQL Server instance where the BI xPress database is deployed.

The following memory and processor requirements apply to all editions of BI xPress:

📌 Note: Hardware requirements can vary based on workloads and other processes.

Client Machine Hardware Requirements

Hardware Component	Minimum Requirements	Recommended Requirements
Memory	4GB	6GB
Processor Speed	1.4 GHz	2.0 GHz or faster
Processor Type	N/A	<ul style="list-style-type: none"> • AMD Opteron • AMD Athlon 64 • Intel Xeon with Intel EM64T support

Hardware Component	Minimum Requirements	Recommended Requirements
Processor Type	N/A	<ul style="list-style-type: none"> • Intel Pentium IV with EM64T support

Server Machine Hardware Requirements

Hardware Component	Minimum Requirements	Recommended Requirements
Memory	4 GB	At least 6 GB. Note: You should increase your system's memory as the BI xPress database size increases for optimal performance.
Processor Speed	1.4 GHz	2.0 GHz or faster
Processor Type	N/A	<ul style="list-style-type: none"> • AMD Opteron • AMD Athlon 64 • Intel Xeon with Intel EM64T support • Intel Pentium IV with EM64T support

BI xPress Software Requirements

Before installing the SentryOne Workbench, make sure that you meet the following requirements:

- SQL Server Integration Services 2005, 2008, 2008 R2, 2012, 2014, 2016, 2017, 2019
- SQL Server Data Tools (SSDT) 2015, 2016, 2017, 2019
- Microsoft ® .NET 3.5 with Service Pack 1
- Microsoft ® .NET 4.0
- Microsoft ® .NET 4.5 (2017 Providers only)
- Microsoft ® SQL Server ® 2012 Transact-SQL ScriptDom x86

The following operating systems are supported by SentryOne Workbench:

64-bit Operating Systems	32-bit Operating Systems
<ul style="list-style-type: none"> • Windows Server 2003 (at least Service Pack 2)* 	<ul style="list-style-type: none"> • Windows XP (at least Service Pack 3)*
<ul style="list-style-type: none"> • Windows Vista (at least Service Pack 2) 	<ul style="list-style-type: none"> • Windows Server 2003 (at least Service Pack 3)*
<ul style="list-style-type: none"> • Windows Server 2008 R2 	<ul style="list-style-type: none"> • Windows Vista (at least Service Pack 2)
<ul style="list-style-type: none"> • Windows Server 2012 	<ul style="list-style-type: none"> • Windows Server 2008 R2

• Windows Server 2012 64-bit Operating Systems	• Windows Server 2008 R2 32-bit Operating Systems
• Windows Server 2016	• Windows Server 2012
• Windows 7	• Windows 7
• Windows 8	• Windows 8
• Windows 10	• Windows 10

⊖Unsupported: Windows XP and Server 2003 have been deprecated from full support. Any issues encountered on either Windows XP or Server 2003 must be reproducible on newer versions of Windows to be eligible for support.

The following prerequisites are required to enable some features within BI xPress:

Feature	Requirements
BI xPress extension for Visual Studio 2015, 2017, 2019	<ul style="list-style-type: none"> • Visual Studio 2015 (Community, Professional, or Enterprise edition) <ul style="list-style-type: none"> ◦ SQL Server Data Tools for SQL Server 2016 (now includes BI Projects) • Visual Studio 2017 (Community, Professional, or Enterprise edition) <ul style="list-style-type: none"> ◦ SQL Server Data Tools for SQL Server 2017 • Visual Studio 2019 (Community, Professional, or Enterprise edition) <ul style="list-style-type: none"> ◦ Analysis Services, Integration Services, or Reporting Services extensions
Auditing Framework, BI Compare, Package Builder Wizard, and/or SSIS Unit Test Plug-ins	<ul style="list-style-type: none"> • Any Third-Party Products (Connection Managers, Tasks, Components, et cetera) that are used within the SSIS Package(s)
Report Mover	<ul style="list-style-type: none"> • Reporting Deployment is compatible with SQL 2008 R2 or later
Report Monitoring Console	<ul style="list-style-type: none"> • Reporting Performance Monitor is compatible with SQL Server 2008 or later

The following prerequisites are required to enable some features within BI xPress and DOC xPress:

64-bit Operating Systems	32-bit Operating Systems
Microsoft ® System CLR Types for Microsoft ® SQL Server ® 2012 (or later) x64	Microsoft ® System CLR Types for Microsoft ® SQL Server ® 2012 (or later) x86
Microsoft ® SQL Server ® 2012 (or later) Shared Management Objects x64	Microsoft ® SQL Server ® 2012 (or later) Shared Management Objects x86
Microsoft ® SQL Server ® 2012 (or later) Analysis Management Objects x64	Microsoft ® SQL Server ® 2012 (or later) Analysis Management Objects x86
Microsoft ® SQL Server ® 2012 (or later) Transact-SQL ScriptDom x64	Microsoft ® SQL Server ® 2012 (or later) Transact-SQL ScriptDom x86
Microsoft ® System CLR Types for Microsoft ® SQL Server ® 2012 (or later) x86	
Microsoft ® SQL Server ® 2012 (or later) Shared Management Objects x86	
Microsoft ® SQL Server ® 2012 (or later) Analysis Management Objects x86	
Microsoft ® SQL Server ® 2012 (or later) Transact-SQL ScriptDom x86	

Software Requirements for Providers

Provider	Operating Systems	
SQL	64-bit Operating Systems	32-bit Operating Systems
	Microsoft ® SQL Server ® 2012 (or later) Shared Management Objects x64	Microsoft ® SQL Server ® 2012 (or later) Shared Management Objects x86
	Microsoft ® SQL Server ® 2012 (or later) Shared Management Objects x86	
SSAS	64-bit Operating Systems	32-bit Operating Systems
	Microsoft ® SQL Server ® 2012 (or later) Analysis Management Objects x64	Microsoft ® SQL Server ® 2012 (or later) Analysis Management Objects x86

Provider	Microsoft SQL Server 2012 (or later) Analysis Management Objects x86	32-bit Operating Systems
	<ul style="list-style-type: none"> • Microsoft .NET 4.5 is required by SSAS 2017 Only. • SSAS Azure Analysis Services: <ul style="list-style-type: none"> ◦ Microsoft Azure Analysis Services Client Libraries 	
SSIS	<ul style="list-style-type: none"> • Microsoft .NET 4.5 (Required by SSIS 2017 Only) • Each version of SQL Server Integration Services (2012 or later) that you want to document. • SQL Server Data Tools or Business Intelligence Development Studio. • Any Third-Party Products (Connection Managers, Tasks, Components, etc) that are used within the SSIS Package(s) 	
SSRS	<ul style="list-style-type: none"> • At least one version of SQL Server Reporting Services (2012 or later) that you want to document. • SQL Server Data Tools or Business Intelligence Development Studio. • Support provided for the following report locations: <ul style="list-style-type: none"> ◦ File System: SQL Server 2012 or later ◦ Native Web Services: SQL Server 2012 or later ◦ SharePoint Web Service: SQL Server 2012 or later <div data-bbox="391 949 1401 1218" style="background-color: #fff9c4; padding: 10px; margin-top: 10px;"> <p>⚠️Unsupported: SSRS versions 2008 R2 and earlier are no longer officially supported. The providers remain accessible in the software if the prerequisites are met, however, we will not be able to provide support for any issues that are specific to these older releases.</p> </div>	

⚠️Unsupported: Hive, Informatica, and Oracle have been deprecated in BI xPress. No additional updates or support are available for these providers.

Downloading Provider Files from Microsoft

ⓘ Note: These instructions reference an external system from Microsoft and may appear differently than described below.

Download the additional provider requirements by completing the following steps:

1. Navigate to the [Microsoft SQL Server 2012 SP4 Feature Pack](#).

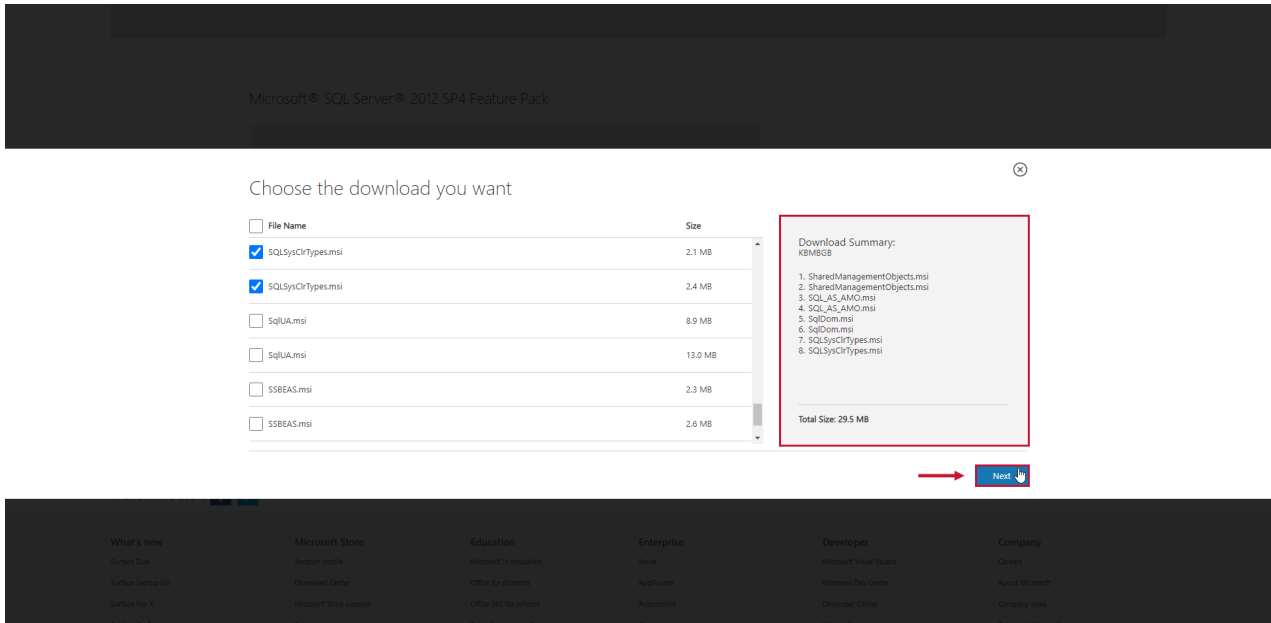
2. Select the following additional files:

- **SharedManagementObjects.msi 6.4mb**
- **SqlDom.msi 2.4mb**

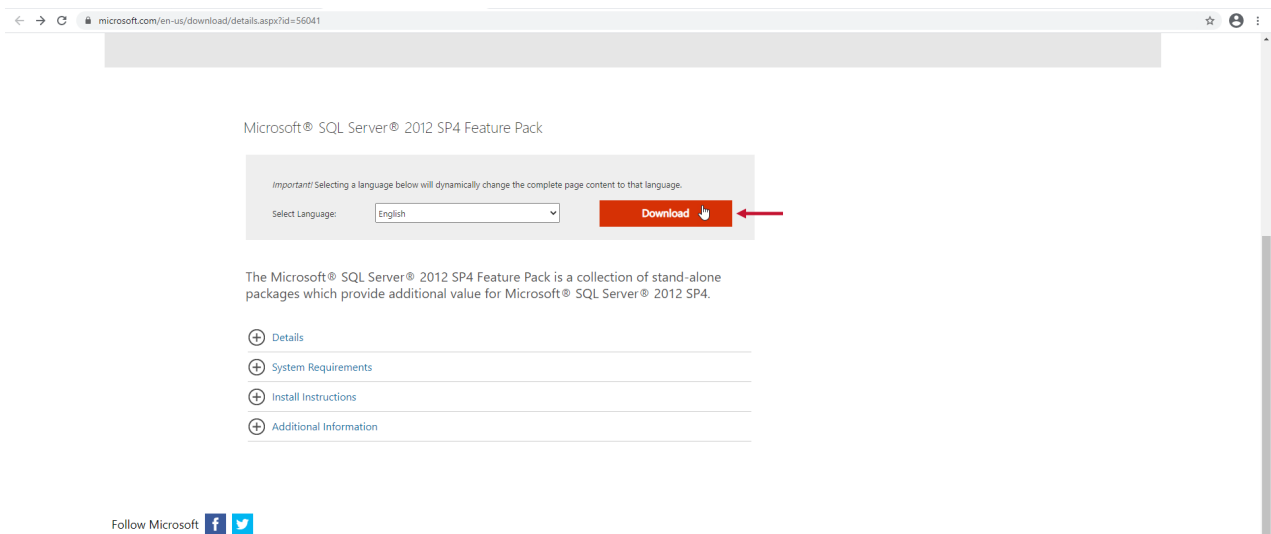
- SharedManagementObjects.msi 7.6mb
- SQL_AS_AMO.msi 3.6mb
- SQL_AS_AMO.msi 2.7mb

- SqlDom.msi 2.2mb
- SQLSysClrTypes.msi 2.1mb
- SQLSysClrTypes.msi 2.4mb

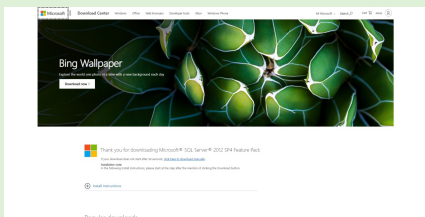
3. Select Next.



4. Select Download to install the selected components.



Success: You have now downloaded the additional provider requirements!



Required Permissions

BI xPress Minimum Permissions

The user account that is executing packages requires the following permissions to write data to the BI xPress repository database and trigger [Notification Framework](#) communications:

1. The SQL Server instance where the *BixPress* database is hosted needs the *Connect* securable for the SSIS execution account.
2. For the *BixPress* database level permissions on this instance, the account executing the packages must have *Execute* permissions.

[Additional Information:](#) See the [Permissions \(Database Engine\)](#) article on Microsoft Docs for details on the permissions.

Note: The permissions listed above are the minimum permissions required for the BI xPress Frameworks to function.

BI xPress Required Permissions

Many of the features within SentryOne Workbench only need **db_owner** when issuing database updates from an older version to a newer version. Outside of database updates, you only need **db_datareader** and **db_datawriter** permissions. The following is a comprehensive list of each feature and their required permissions:

Feature	Required Permissions
Best Practice Analyzer	<ul style="list-style-type: none">• BI xPress Database Regular Usage:<ul style="list-style-type: none">◦ db_datareader◦ db_datawriter• BI xPress Database updates<ul style="list-style-type: none">◦ db_owner
Data Generation	<ul style="list-style-type: none">• Each table where you want to generate data requires :<ul style="list-style-type: none">◦ db_datareader◦ db_datawriter
Deployment Wizard (2005 and 2008)	<ul style="list-style-type: none">• Permission to deploy to the SQL Server
SSIS Unit Test	<ul style="list-style-type: none">• Permission to execute the packages you are testing (at their location, for example, file system, SQL server)

Feature	Required Permissions
SSRS Monitoring Console	<ul style="list-style-type: none"> • SSRS ReportServer database(s) <ul style="list-style-type: none"> ◦ db_datareader
Monitoring Console	<ul style="list-style-type: none"> • BI xPress Database Regular Usage: <ul style="list-style-type: none"> ◦ db_datareader ◦ db_datawriter • BI xPress Database updates <ul style="list-style-type: none"> ◦ db_owner • For importing Package Layouts from SSIS Catalogs <ul style="list-style-type: none"> ◦ db_datareader
SSIS Catalog Import	<ul style="list-style-type: none"> • SSIS Catalog <ul style="list-style-type: none"> ◦ db_datareader
Other Features	<ul style="list-style-type: none"> • For other features you need permission to access and obtain the packages at their location.

Technology Specific Permissions

Technology	Required Permissions
Hive	<ul style="list-style-type: none"> • Read permissions for the HDFS files that you want to document
Informatica	<ul style="list-style-type: none"> • View definition permissions on the Informatica repository • Read permissions within the Informatica repository on any folder and object you want to document
SQL Server	<ul style="list-style-type: none"> • Definition permissions for any object you want to document
SQL Server Integration Services	<ul style="list-style-type: none"> • SSIS Catalog <ul style="list-style-type: none"> ◦ Read and Modify permission for each project within the SSISDB you want to analyze
SQL Server 2008 R2 (or higher) Reporting Services	<ul style="list-style-type: none"> • Folder Security Settings <ul style="list-style-type: none"> ◦ Minimum Predefined User Roles required <ul style="list-style-type: none"> ▪ My Reports ▪ Content Manager ◦ Minimum Tasks required for a custom User Role <ul style="list-style-type: none"> ▪ View Reports ▪ View Folders ▪ View Data Sources ▪ View Models ▪ Consume Reports • Web Service Security Settings: <ul style="list-style-type: none"> ▪ Minimum Predefined System Role required <ul style="list-style-type: none"> ▪ System User ▪ Minimum Tasks required for a custom System Role <ul style="list-style-type: none"> ▪ Execute Report Definitions

Technology Permissions	Required Permissions
Oracle	Connect permissions on any schema that you want to document
Tableau Permissions	<ul style="list-style-type: none">• The user must be a part of the Server Administrator role