

# Moving to a modern data platform

*Planning for Microsoft SQL Server 2005 Express Edition end of support*

*Upgrading to SQL Server 2014 Express is an investment in the future, and there has never been a better time to migrate. Take the next step to gain the benefits of a modern data platform, upgrade to SQL Server 2014 Express and Azure SQL Database.*

SQL Server Upgrade:  
<http://microsoft.com/sqlserverupgrade>

SQL Server 2014 Express Edition Download:  
<http://microsoft.com/en-us/download/confirmation.aspx?id=42299>

*Microsoft will end support for SQL Server 2005 Express Edition on April 12, 2016. Now is the time to upgrade.*

## Why upgrade from SQL Server 2005 Express?

Extended support for SQL Server 2005 ends on April 12, 2016. At that time, all support for SQL Server 2005 Express, including security updates and hotfixes, will no longer be available from Microsoft. The risk and costs of running SQL Server 2005 will rise with the end of extended support. Therefore, organizations should respond by migrating or upgrading to a newer version of the database, whether it's on-premises or hosted. This is an opportunity for organizations to increase performance, maintain security and compliance, while modernizing their data platform and infrastructure by upgrading to SQL Server 2014 Express or Microsoft Azure SQL Database.

## Benefits of moving to a modern version of SQL Server Express

Running a fully supported, newer version of SQL Server Express offers major enhancements in scale, manageability, programmability, and security for your application:

**Scale increase.** The size limit for databases has increased from 4GB in SQL Server 2005 to 10GB in SQL Server 2014 Express.

**Manageability.** SQL Server 2014 Express supports scripting with Windows PowerShell 3.0. It also provides policy-based management from SQL Server Management Studio.

**Programmability.** New version of SQL Server drivers support a variety of programming languages and platforms, including .NET, C/C++, Java, Linux, and PHP. The latest version of SQL Server support SQL Server Data Tools.

**Security.** Modern SQL Server versions give additional security features, including user-defined server roles, enhanced separation of duty, and backup encryption support to fully safeguard important data.

## Options to migrate or upgrade to SQL Server 2014 Express

For applications running on SQL Server 2005 Express, there are many possible migration options, including both on-premises and hosted destinations. Whether you're doing it yourself or with the support of a partner, Microsoft has various free tools, resources, and utilities available to help you make the move either to SQL Server 2014 Express or Azure SQL Database.

# End of support for SQL Server 2005 Express

## Microsoft Assessment and Planning (MAP) Toolkit

Organizations can use this tool to discover instances of SQL Server 2005 Express within their network. The MAP Toolkit is an automated planning and assessment tool that can simplify the migration planning process by making a list of databases sorted by version and edition to show what needs upgrading.

## SQL Server Management Studio 2014 (SSMS)

SSMS is available as a free download with SQL Server Express Edition. It is typically used for routine SQL Server administrative tasks (create, backup, restore, and set security options) and can be used for on-premises databases and Azure SQL databases. SSMS is used for migrating instances of SQL Server 2005 Express to newer versions of SQL Server by the methods described below.

### In-place upgrade

You can perform an in-place upgrade from SQL Server 2005 Express to SQL Server 2014 Express using the Graphical Installation Center, or you can upgrade by running setup.exe from a command prompt using a configuration file. You just need to download the required SQL Server 2014 Express Edition that matches your system configuration from the Download Center. This method is very fast as you install the newer version of SQL Server on top of the older SQL Server 2005 Express Edition. This method allows organizations to upgrade everything within the instance at once without needing to change connection strings for applications.

### Detach and attach

The data and log files of a SQL Server 2005 Express database can be detached and then reattached to an instance of SQL Server 2014 Express. You can detach and attach databases and log files using either T-SQL or the SQL Server Management Studio Express. Detaching and attaching a database is useful if you want to move a database to a different instance of SQL Server on the same computer—you just change the connection information to point to the new server, and you're up and running.

### Backup and restore

In this method, a database attached to an instance of SQL Server 2005 Express is backed up and later restored in an instance of SQL Server 2014 Express using the SQL Server Management Studio Express GUI or T-SQL. This method

performs a full and a transactional log backup of the SQL Server 2005 Express database and then copies the database backup files to SQL Server 2014 Express. You can also verify the backup when finished and perform checksum before writing to media, which will validate the database before restoring it. Restoring a database in SQL Server 2014 Express automatically creates the database files that are needed to run the database.

### Migrate to Azure SQL Database

You can migrate a SQL Server 2005 Express database to Azure SQL Database using the SQL Azure Migration Wizard. This tool can help determine if a database is a good candidate for migration and move the data to an Azure SQL database. After selecting a SQL 2005 Express database, the migration wizard analyzes the source database for compatibility issues, then allows the user to select which objects to migrate.

### Archive database to Azure Storage

If you have SQL Server 2005 Express databases that haven't been accessed for a while but need to be stored where they can be accessed in the future, Azure Storage is an inexpensive and secure way to archive a SQL Server 2005 Express database. Archiving a database to Azure Storage offers the benefits of availability, limitless geo-replicated off-site storage, and ease of data migration to and from the cloud. You can use the AzCopy command-line utility to copy your SQL 2005 Express database backup from a local drive using parallel processing and put it on Azure Storage for archival purposes. You can automate the backup and archive process by using the SQL command utility in conjunction with the AzCopy command.

### Summary and next step

End of support for SQL Server 2005 Express Edition is coming soon. Organizations still running SQL Server 2005 Express need to make a plan to upgrade their database workloads to a modern data platform. Whether it's to SQL Server 2014 Express Edition or to the cloud with Azure SQL Database, Microsoft provides options for upgrading and tools to help with the upgrade process. Follow the links on the front of this datasheet to learn more about upgrading from SQL Server 2005 Express and migrating to a modern data platform.