

# Quick reference guide

## SharePoint Servers 2016 and 2019 Databases

This page shows the SharePoint system databases and the service applications that have multiple databases.

This topic is 1 of 2 in a series

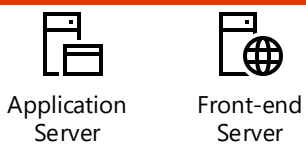


**System databases** – automatically created when you run the SharePoint Products Configuration Wizard (PSConfig.exe)

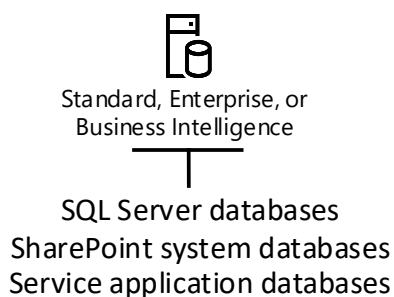
**Service application databases** – automatically created when you deploy a service application in your farm and when you choose a server role in the MinRole feature



### SharePoint Server 2016 SharePoint Server 2019



### SQL Server 2014 (SP1), SQL Server 2016, or SQL Server 2017 RTM



## SharePoint system databases

### Configuration (Small)

(SharePoint\_Config)

Contains data about all SharePoint databases, all Internet Information Services (IIS) Web sites or Web applications, trusted solutions, Web Part packages, site templates, Web application and farm settings specific to SharePoint Server, such as default quota and blocked file types.

**Requirements:**

- Must be co-located with Central Administration Content database.
- Only one Configuration database is supported per farm.

**Scaling guidance:** Scale up only, significant growth is unlikely.

### Central Administration Content (Small)

(SharePoint\_AdminContent\_<GUID>)

This is the Content database for the Central Administration web site.

**Requirements:**

- Must be co-located with Central Administration Content database.
- Only one Central Administration database is supported per farm.

**Scaling guidance:** Scale up only, significant growth is unlikely.

### Content (Medium – large)

(WSS\_Content)

Stores all site content, including:

- site documents
- files in document libraries
- list data Web Part properties
- audit logs
- apps for SharePoint
- user names and rights
- Project Server data

All data for a specific site resides in one Content database. Content databases can contain more than one site collection. Database size varies based on usage pattern, for example the number and size of documents, files, and lists, and the number of users.

**Important guidance:**

We strongly recommend limiting the size of the content databases to 200 GB to help ensure system performance. Content database sizes up to 1 terabyte are supported only for large, single-site repositories and archives with non-collaborative I/O and usage patterns such as Records Centers.

**Scaling guidance:**

- Scale up a database that supports a site collection.
- Scale -out at the Web application level: add more content databases as needed to support additional site collections.

## Search service databases

### Search Administration (Medium)

(Search\_Service\_Application\_DB\_<GUID>)

Hosts the Search service application configuration and access control list (ACL) for the crawl component.

**Scaling guidance:**

- Scale up the database that supports the service application instance.
- Scale out by creating additional instances of the service application, however, the decision to create a separate service application is likely to be based on business, rather than scale requirements.

**I/O patterns:** Equal read/write ratio

### Crawl (Medium)

(Search\_Service\_Application\_CrawlStoreDB\_<GUID>)

Stores the state of the crawled data and the crawl history.

**Scaling guidance:**

- Scale out by creating additional Crawl database per every 20 million items crawled.

**I/O patterns:** Read-heavy

### Link (Medium – large)

(Search\_Service\_Application\_LinkStoreDB\_<GUID>)

Stores the information that is extracted by the content processing component and the click through information.

**Co-location guidance:**

On sites with heavy traffic we recommend that Links database to utilize separate spindles from other databases.

**Scaling guidance:**

- Scale out by creating additional Link database per every 60 million documents crawled. Also add additional Link database per 100 million expected queries per year.

**I/O patterns:** Write-heavy during content processing

## User Profile service databases

### Profile (Medium – large)

(User Profile Service Application\_ProfileDB\_<GUID>)

Stores and manages users and their social information.

**Scaling guidance:**

- Scale up the database that supports the service application instance.
- Scale out by creating additional instances of the service application, however, the decision to create a separate service application is likely to be based on business, rather than scale requirements.

**I/O patterns:** Read-heavy

### Social Tagging (Small – extra large)

(User Profile Service Application\_SocialDB\_<GUID>)

Stores notes created by users along with their respective URLs. Size is determined by the number of ratings created and used.

**Scaling guidance:**

- Scale up the database that supports the service application instance.
- Scale out by creating additional instances of the service application, however, the decision to create a separate service application is likely to be based on business, rather than scale requirements.

**I/O patterns:** Read-heavy

### Synchronization (Medium – large)

(User Profile Service Application\_SyncDB\_<GUID>)

Stores configuration and staging data for use when profile data is being synchronized with directory services such as Active Directory. Size is determined by number of users, groups, and the ration of users to groups

**Scaling guidance:**

- Scale up the database that supports the service application instance.
- Scale out by creating additional instances of the service application, however, the decision to create a separate service application is likely to be based on business, rather than scale requirements.

**I/O patterns:** Equal read/write ratio update

More information

For SharePoint Server database details, see

[Database types and descriptions in SharePoint Server](#)

(<https://aka.ms/e8gibl>)

# Quick reference guide

## SharePoint Servers 2016 and 2019 Databases

All SharePoint service applications shown on this page have single, default databases.

This topic is 2 of 2 in a series

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The SharePoint Server databases shown on this page are service application databases that are automatically created when you deploy a service in your farm.



### App Management (Small)

(App\_Management\_<GUID>)

Stores the app licenses and permissions that are downloaded from the SharePoint Store.

**Scaling guidance:**

- Scale up when the database reaches 10 GB.
- Scale out only on SharePoint Online.

**I/O guidance:** Write-heavy during apps installation and license renewal.

### Apps for SharePoint (Very small)

(Apps\_<GUID>)

Stores the information about apps for SharePoint and Access apps.

**Scaling guidance:**

- Scale up the database that supports the apps instance (significant growth is unlikely).

**I/O guidance:** Read-heavy

### Business Data Connectivity (Small)

(Bdc\_Service\_DB\_<GUID>)

Stores external content types and related objects.

**Scaling guidance:**

- Scale up the database that supports the service application instance.
- Scale out by creating additional instances of the service application. This decision is likely to be based on business reasons rather than scale requirements.

**I/O guidance:** Read-heavy

### Managed Metadata (Medium)

(Managed Metadata Service\_<GUID>)

Stores managed metadata and syndicated content types.

**Scaling guidance:**

- Scale up the database that supports the service application instance (significant growth is unlikely).
- Scale out by creating additional instances of the service application.

**I/O guidance:** Read-heavy

### PerformancePoint Services (Small)

(PerformancePoint Service\_<GUID>)

Stores temporary objects and persisted user comments and settings.

**Scaling guidance:**

- Scale up the database that supports the service application instance (significant growth is unlikely).
- Scale out by creating additional instances of the service application. This decision is likely to be based on reasons rather than scale requirements.

**I/O guidance:** Read-heavy

### Secure Store Service (Small)

(Secure\_Store\_Service\_<GUID>)

Stores and maps credentials such as account names and passwords.

**Co-location guidance:**

For secure credential storage, it is recommended that the secure store service database be hosted on a separate database instance with limited access to one administrator.

**Scaling guidance:**

- Scale up the database that supports the service application instance (significant growth is unlikely).
- Scale out by creating additional instances of the service application. This decision is likely to be based on business reasons rather than scale requirements.

**I/O guidance:** Read-heavy

### SharePoint Translation Service (Small)

(SharePoint Translation Services\_<GUID>)

Stores information about pending and completed batch document translations with file extensions that are enabled.

**Scaling guidance:**

- Scale up the database that supports the service application instance (significant growth is unlikely).

**I/O guidance:** Read-heavy

### SQL Service Power Pivot Service (Small)

(DefaultPowerPivotServiceApplicationDB\_<GUID>)

Stores data refresh schedules, and Power Pivot usage data that is copied from the central usage data collection database. When in use, Power Pivot stores additional data in content databases and in the Central Administration content database.

**Requirements:** SQL Server 2016 Analysis Services, Business Intelligence or Enterprise Edition.

**Scaling guidance:**

- Scale up the database that supports the service application instance.

### State Service (Medium – large)

(StateService\_<GUID>)

Stores temporary state information for InfoPath Forms Services, Exchange, the chart Web Part, and Visio Services. Database size depends on the usage of features that store data in it.

**Requirements:** Scale out by adding another State database using Windows PowerShell cmdlets.

**I/O guidance:** Read-heavy

### Subscription Settings Service (Small)

(SettingsServiceDB)

Stores features and settings information for hosted customers. This database is not created by default but must be created by using Windows PowerShell or SQL Server.

**Scaling guidance:**

- Scale up the database that supports the service application instance.
- Scale out by creating additional instances of the service application. This decision is likely to be based on business reasons rather than scale requirements.

**I/O guidance:** Read-heavy

### Usage and Health data collection (Extra-large)

(WSS\_Logging)

Installed on SharePoint Online or SQL Azure and also on-premises but not provisioned

By default. Stores health monitoring and usage data temporarily, and also used for reporting and diagnostics. The Usage database is the only SharePoint database that can be queried directly and have schema modified by either Microsoft or third-party applications.

The database size varies based on retention policy and actual traffic load.

**Co-location guidance:**

Place on a separate spindle.

**Requirements:**

Only one Usage and Health data collection service application instance is supported per farm.

**Scaling guidance:**

- Scale up the database that supports the service application instance.

**I/O guidance:** Read-heavy

### Word Automation Services (Small)

(WordAutomationServices\_<GUID>)

Stores information about pending and completed document conversions and updates.

**Scaling guidance:**

- Scale up the database that supports the service application instance (significant growth is unlikely).

**I/O guidance:** Read and write-heavy once per conversion item.

More information

For SharePoint Server database details, see [Database types and descriptions in SharePoint Server](https://aka.ms/e8gibl) (<https://aka.ms/e8gibl>)