

# **SHAREPOINT SERVER 2016**

**New Features & Updates** 

#### **Abstract**

This document contains updates on what's new in SharePoint server 2013 as compare to SharePoint Server 2013 and also detail about deprecated areas.

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#### SharePoint Server 2016

SharePoint Server 2016 is our most reliable, scalable, secure and high-performant server release ever. With built-in Hybrid Cloud capabilities, it is the premier choice for organizations who are looking to take advantage of the latest innovations in Microsoft Cloud offerings while also maintaining critical content or custom applications on-premises. SharePoint Server 2016 will help organizations unlock breakthrough performance and resiliency as well as quickly build solutions and extend data across on-premises and Office 365 with the confidence that their data will be safe and secure.

SharePoint Server 2016 will deliver enhancements and new capabilities in three major areas:

- Improved user experiences
  - o Mobile Experience
  - Personalized insights
  - People-centric file storage and collaboration
- Cloud-inspired infrastructure
  - o Improved performance and reliability
  - Hybrid cloud with global reach
  - Support and monitoring tools
- Compliance and reporting
  - New data protection and monitoring tools
  - Improved reporting and analytics
  - Trusted platform

# Boundaries and Limitation in comparison to SharePoint Server 2013

	SharePoint 2016	SharePoint 2013
Content Database Size	Content database sizing into TB's	200 GB in general usage scenarios.
Site Collections per Content Database	100,000 site collections per content database	2,000 recommended 5,000 max
List Threshold	Increased List Threshold >5,000	5,000 items
MaxFile Size	MaxFile Size increases to 10GB and removed character restrictions	Default maximum file size is 250 MB which can increase up to 2GB
Indexed Items	2x increase in Search scale to 500 million items	<ul><li>100 million per search</li><li>service application.</li><li>10 million per index</li><li>partition</li></ul>

# Hardware and Software Requirements

# **Operating System**

- Windows Server 2012 R2
- Windows Server 2016 Technical Preview 4

#### **Software Requirements:**

- Microsoft SQL Server 2014 Service Pack 1– (64-Bit)
- SharePoint Server 2016 Beta 2
- SharePoint Server 2016 Release Candidate Patch

#### **Hardware Requirements:**

Below table shows the standard hardware requirement for Single Server installation or Multi-server installation.

Installation Scenario	RAM	Processor	Hard disk space
Single Server role (uses SQL Server)	16-24 GB	64-bit, 4 cores	80 GB for system drive 100 GB for second drive and additional drives
Web Server or Application Server (in three-tier farm)	8-12 GB	64-bit, 4 cores	80 GB for system drive 800 GB for second drive and additional drives

# Important Updates for Migration

- SharePoint Server 2013 is the foundation of next versions of SharePoint.
- Services Application Architecture of SharePoint 2016 will be same as of SharePoint 2013,
  PerformancePoint Service Application will be part of SharePoint 2016.
- SharePoint 2013 can be directly upgraded to SharePoint 2016, SharePoint 2013 will support for incremental upgrade to next versions of SharePoint.
- For upgrading SharePoint 2013 to 2016, any site collection with 14.5 mode need to be upgraded to 15 mode, this is required if there is any backward compatible site collection (from SharePoint 2010) then it need to be upgraded to SharePoint 2013 to ensure that they can be upgraded in SharePoint 2016.
- Detaching databases from SharePoint 2013 and re-attaching to same databases to 2016, this is similar as we do in previous versions of SharePoint.
- No direct upgrade form SharePoint 2010, you need to update SharePoint 2010 site collections to SharePoint 2013 then it will easy to upgrade to SharePoint 2016 as SharePoint 2013 is the foundation to upgrade next releases of SharePoint.

# New and improved features in SharePoint Server 2016 Release Candidate

# 1. MinRole farm topology

The role of a server is specified when you create a new farm or join a server to an existing farm. SharePoint automatically configures the services on each server based on the server role, optimizing the performance of the farm based on that topology. There are six predefined server roles that are available, as shown in the following table.

Server Role	Description
Front end	Service applications, services, and components that serve user requests belong on front-end web servers. These servers are optimized for fast performance.
Application	Service applications, services, and components that serve back-end requests, such as background jobs or search crawl requests, belong on Application servers. These servers are optimized for high throughput.
Distributed Cache	Service applications, services, and components that are required for a distributed cache belong on Distributed Cache servers. Optionally, you can configure these servers to also load balance farm traffic using the SharePoint Request Manager.
Search	Service applications, services, and components that are required for search belong on Search servers.
Custom	Custom service applications, services, and components that do not integrate with MinRole belong on Custom servers. The farm administrator has full control over which service instances can run on servers assigned to the Custom role. MinRole will not control which service instances are provisioned on this role.
Single- Server Farm	Service applications, services, and components required for a single-machine farm belong on a Single-Server Farm. A Single-Server Farm is meant for development, testing, and very limited production use. A SharePoint farm with the Single-Server Farm role cannot have more than one SharePoint server in the farm.

# 2. Central Administration is no longer provisioned on all servers by default

SharePoint Server 2016 Central Administration is now provisioned on the first server in a farm by default when using the SharePoint Products Configuration Wizard. Central Administration is not provisioned on additional servers in a farm by default.

# 3. Compliance features

The document deletion policy allows you to delete documents in users' OneDrive for Business sites after specific periods of time. The In-Place Hold policy allows administrators to preserve documents, email, and other files.

### 4. Document Library accessibility

The following features are now available for working in SharePoint Server 2016 Release Candidate document libraries

Landmarks to a page make it easier to navigate, and there are alt text improvements for all major navigation links.

- Keyboard shortcuts
- Focus improvements
- Announcements for upload progress.
- Improved callout reading.
- Fixed use of color issues for views switcher.
- Updates to the Help documentation.

#### 5. Fast Site Collection Creation

This new feature provides templates that work at same level as SQL Server, which reduces the round trips required between the SharePoint and SQL servers.

#### 6. File names - expanded support for special characters

SharePoint has historically blocked file names that included the &, ~, {, and } characters, file names that contained a **GUID**, file names with leading dots, and file names longer than 128 characters. These restrictions are removed in SharePoint Server 2016 Release Candidate and are now available to use.

#### 7. Hybrid in SharePoint Server 2016 Release Candidate

In SharePoint Server 2016 Release Candidate, new hybrid features are available to enable hybrid solutions.

- Hybrid sites
- Hybrid sites features
- Hybrid OneDrive for Business
- Cloud hybrid search

# 8. Identify and search for sensitive content in both SharePoint Server 2016 Release Candidate and OneDrive documents

With this new capability, you can:

- Search for sensitive content across SharePoint Server 2016 Release Candidate, SharePoint Online, and OneDrive for Business.
- Leverage 51 built-in sensitive information types (credit cards, passport numbers, Social Security numbers, and more).
- Use DLP Queries from the eDiscovery site collection to discover sensitive content relating to common industry regulations from the SharePoint eDiscovery Center, identify offending documents, and export a report.
- Turn on DLP Policies from the Compliance Policy Center site collection to notify end users and administrators when documents with sensitive information are stored in SharePoint and automatically protect the documents from improper sharing.

# 9. App Launcher

The App Launcher provides a new navigation experience where all your apps are easily available from the top navigation bar. You can quickly launch your application, browse sites and access your personal files.

#### 10. Image and video previews

Now you can see a preview by hovering the mouse over the image or video, or by clicking on them

## 11. Large file support

Previous versions of SharePoint did not support uploading or downloading files larger than 2,047 MB. SharePoint 2016 now allows you to upload or download larger files. You can configure the desired maximum file-size limit on a per-web application basis in your SharePoint farm.

# 12. Power Pivot add-in and Power View are now available to use with SharePoint Server 2016 Release Candiate

Power Pivot add-in and Power view are after the release of SQL Server 2016 CTP 3.1 available in SharePoint Server 2016.

#### 13. Sharing

The following list shows the sharing improvements that are available for SharePoint Server 2016 Release Candidate:

- Create and Share folder
- Sharing Hint
- See who the folder is shared with when viewing a folder
- Members can share
- Improved invitation mail

• One-click email to approve or deny a request for access

# 14. SharePoint Search Service application

SharePoint Search supports indexing of up to 500 million items per Search Server application.

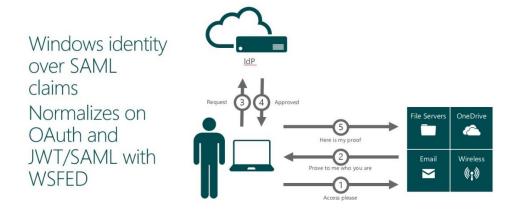
### 15. SMTP connection Encryption

In SharePoint 2013 & SharePoint 2010, we always leverage port 25 for any communication, now **SharePoint 2016 supports STARTTLS connection encryption**.

In older versions of SharePoint all the communication through emails, alerts was unencrypted. In SharePoint 2016, we can run on non-default ports which encrypted communication between SharePoint and the messaging service. This can be configurable through Central Administration and PowerShell.

#### 16. Authentication

- SAML authentication becomes a first class citizen in SharePoint 2016.
- There were multiple authentication providers in SharePoint 2013 like windows Claims, form based authentication, SAML Claims, WSFED and others to provide backward compatibility.
- In SAML Claims is the default and recommended model but **SharePoint 2016 will continue** to support Windows Identity.



### 17. New controls for working with OneDrive for Business

You can click a control to create new Office documents, upload files, synchronize your files for offline use, and share your files.

#### 18. Open Document Format (ODF) available for document libraries

The Open Document Format (ODF) enables you to create new files in a document library and save as ODF files so that users can edit the new file with a program they choose.

# Deprecated in SharePoint Server 2016 Release Candidate

#### 1. SharePoint Foundation

SharePoint Foundation is no longer available in the SharePoint Server 2016 release.

#### 2. Standalone Install mode

SharePoint Server 2016 Release Candidate doesn't support the standalone install option, so it is no longer available in the setup program. The Single Server Farm option where everything is installed on the same computer is supported for dev/test/demo purposes. When you use this option, you must install SQL Server yourself and then run the SharePoint Server 2016 farm configuration wizard.

## 3. ForeFront Identity Manager client (FIM)

Earlier versions of SharePoint used ForeFront Identity Manager client (FIM) to synchronize between Active Directory and SharePoint. SharePoint Server 2016 Release Candidate no longer uses FIM as the synchronization client. The default process is Active Directory Import. You can also use any synchronization tool such as Microsoft Identity Manager 2016, or any third-party tool. We'll soon release tools to help you deploy and configure Microsoft Identity Manager 2016 to work with SharePoint Server 2016 Release Candidate for identity synchronization.

#### 4. Excel Services in SharePoint

Excel Services and its associated business intelligence capabilities are no longer hosted on SharePoint Server. Excel Services functionality is now part of Excel Online in Office Online Server Preview.

The following Excel Services functionality has been deprecated:

- Trusted data providers
- Trusted file locations
- Trusted data connection libraries
- Unattended service account
- Excel Services Windows PowerShell cmdlets
- Opening of Excel workbooks from SharePoint Central Administration site

The following Excel Services functionality requires Excel Online in Office Online Server Preview:

- Viewing and editing Excel workbooks in a browser (with or without the Data Model)
- Excel Web Access web part for SharePoint
- ODC file support (no longer requires Data Connection Libraries)
- Programmability features such as JavaScript OM, User Defined Function Assemblies, SOAP and REST protocol support.

## 5. SharePoint BI capabilities

The SQL Server 2014 Power Pivot and Power View add-ins for SharePoint Server 2016 cannot be deployed or used in SharePoint Server 2016 Release Candidate. To deploy these add-ins you need to upgrade to SQL Server 2016 CTP 3.1.

# 6. Tags and Notes

The Tags and Notes feature is deprecated in SharePoint Server 2016 Release Candidate. Users can no longer create new tags and notes or access existing ones. However, an administrator can archive all existing tags and notes by using the Export-SPTagsAndNotesData cmdlet.

#### 7. Stsadm.exe

The Stsadm command-line tool has been deprecated, but it is included to support compatibility with previous product versions.

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