

SharePoint Server 2019 Overview



About Me

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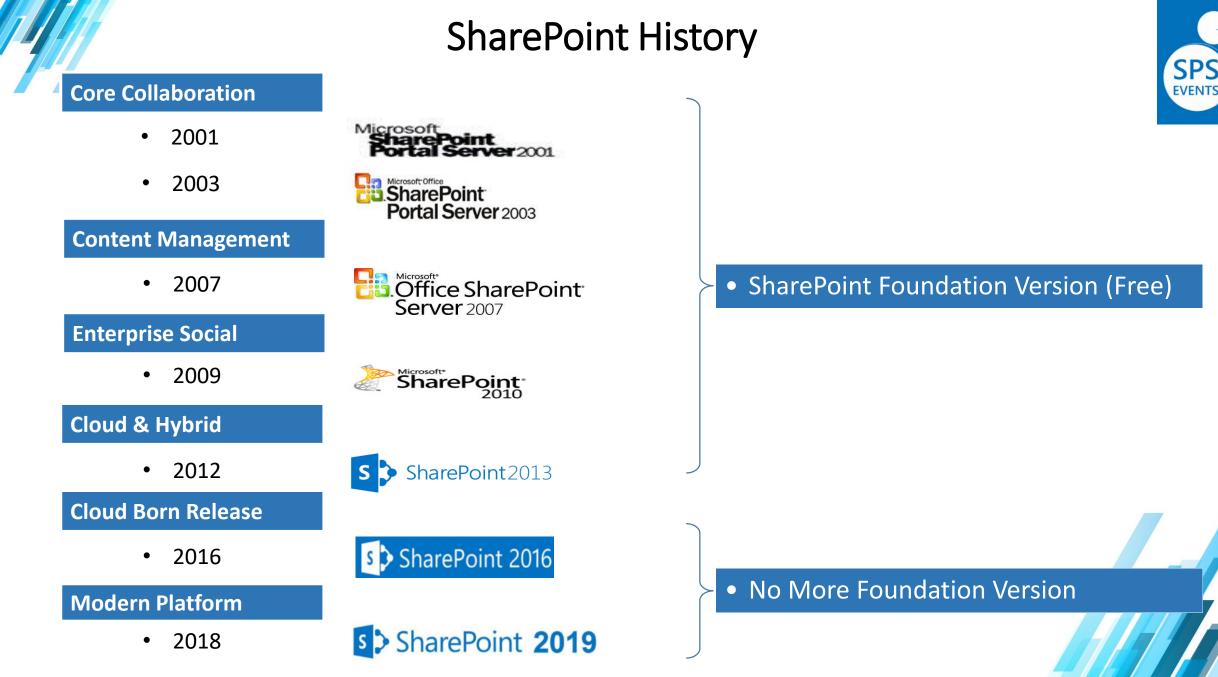
- Lead SharePoint Infrastructure architect
- Blogger, Technical Writer, Community Contributor, Speaker
- Office Servers and Services MVP
- C-SharpCorner MVP
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- Moderator of SharePoint 2010,2013 & 2016 TechNet Forums.
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 - : @waqas105
 - : krossfarm.com







Overview



SharePoint Server 2019

Built on the foundational release of SharePoint 2016

Brings customers closer to the cloud

The cloud, closer to our customers

Only Bring the fully baked features on prem from Office 365.







Configuration

Hardware Requirement

			-		
Installation Scenario	Deployment type and scale	Processor	RAM	Hard disk	EVE
Single-Server Farm role that uses SQL Server	Development or evaluation installation with the minimum recommended services for development environments.	64-bit, 4 cores	16 GB	 80 GB for system drive 100 GB for second drive 	
Single-Server Farm role that uses SQL Server	Pilot or user acceptance test installation running all available services.	64-bit, 4 cores	24 GB	 80 GB for system drive 100 GB for second drive and additional drives 	
SharePoint server in a multi-tier farm	Development or evaluation installation with the minimum recommended services for development environments.	64-bit, 4 cores	12 GB	 80 GB for system drive 80 GB for second drive 	
SharePoint server in a multi-tier farm	Pilot or user acceptance test installation running all available services.	64-bit, 4 cores	16 GB	 80 GB for system drive 80 GB for second drive and additional drives 	

Hardware and software requirements for SharePoint Server 2019 Public Preview

SharePoint 2019 Software Requirement

Operating System

Windows Server 2016 Standard or Datacenter (Desktop Experience)

Windows Server 2019 Standard or Datacenter (Desktop Experience)

SharePoint Versions

SharePoint Server 2019 Standard

SharePoint Server 2019 Enterprise

SharePoint Server 2019 Enterprise & Project Server 2019

Note: Yes, SharePoint foundation is now history.

Hardware and software requirements for SharePoint Server 2019 Public Preview



Database Servers

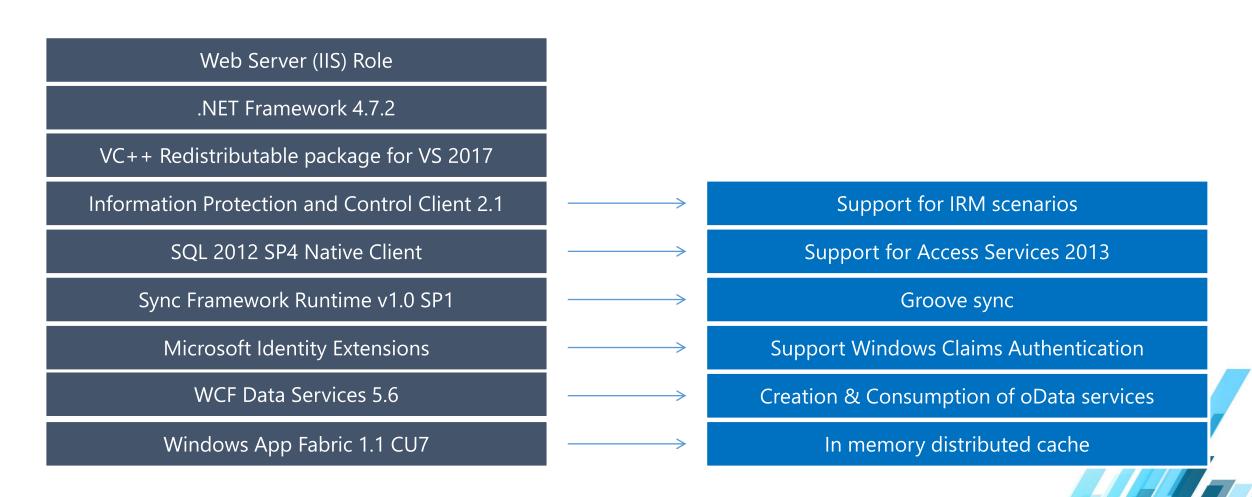
SQL Server 2016

SQL Server 2017



SharePoint 2019 Prerequisites





Supported Browser for SP2019



Desktop

Microsoft Edge

Internet Explorer 11

Google Chrome (Latest Released Version)

Apple Safari (latest released version)

Mozilla Firefox

Note: Internet Explorer 11 will give you maximum.

• <u>Plan browser support in SharePoint Servers 2016 and 2019 Public Preview</u>

Mobile Devices

Chrome

Safari on ioS10 or later



Farm Topology

• MinRole

- SharePoint Server 2019 supports the same farm topologies as SharePoint Server 2016.
- MinRole v2 is part of SharePoint 2019 Preview.

Roles Categories	Server Role
	Front-end
Dedicated Roles:	Application
Dedicated Roles:	Distributed Cache
	Search
Shared Roles:	Front-end with Distributed Cache
Shared Roles:	Application with Search
Spacial Palace	Single-Server Farm
Special Roles:	Custom

SPS EVENTS

• High Availability

• No change for HA farms since SharePoint 2016.

Content Farm Topology	Total Servers in Farm	Description		
Single-Server Farm		One server with all roles:		
-	1	Evaluation, development, testing.		
		Very light and simple production workloads.		
Small Non-High		Two servers with two shared roles:		
Availability MinRole farm	2	One Front-end with Distributed Cache server		
i i i		One Application with Search server		
Small High Availability		Four servers with two shared roles:		
(HA) MinRole farm	4	Two Front-end with Distributed Cache servers		
		Two Application with Search servers		
Medium Non-High		Four servers with four dedicated roles:		
Availability MinRole farm		One Front-end server		
-	4	One Distributed Cache server		
		One Application server		
		One Search server		
Medium High Availability		Six servers with both dedicated and shared roles:		
(HA) MinRole farm (Search		Two Front-end with Distributed Cache servers		
optimized)	farm2One Front-end with Distributed Cache set One Application with Search serverty4Four servers with two shared roles: Two Front-end with Distributed Cache set Two Application with Search serversfarm4Four servers with four dedicated roles: 	Two Application servers		
		Two Search servers		
Medium High Availability		Six servers with both dedicated and shared roles:		
(HA) MinRole farm (user		Two Front-end servers		
optimized)	6	Two Distributed Cache servers		
		Two Application with Search servers		
Large High Availability		Eight servers with four dedicated roles:		
(HA) MinRole farm		Two Front-end servers		
	8	Two Distributed Cache servers		
		Two Application servers		
		Two Search servers		

Planning for a MinRole server deployment in SharePoint Servers 2016 and 2019 Public Preview

Workflow Support for 2010 & 2013

• SharePoint Workflow Manager 1.0

- Workflow manager 1.0 with CU 5.0
- Azure Service Bus 1.1
- WFM Client CU4

• Installation Requirement:

- No change for hardware
- Software requirement : Windows Server 2016 and Microsoft SQL Server 2014 or Higher

Configure SharePoint Workflow Manager for SharePoint Server





Office Online Server

- No Change (Business as Usual)
 - Current OOS version Supported 2016 & 2019
 - OOS November 2018 Release
 - Same features
 - Durable Links
 - Excel Services
- Installation Requirement:
 - No major change in hardware
 - Software requirement : <u>Windows Server 2012 R2</u> or <u>Windows Server</u> <u>2016.</u> (Note that Windows Server 2016 requires Office Online Server April 2017 or later.)

<u>Plan Office Online Server</u> <u>Deploy Office Online Server</u> <u>Configure Office Online Server for SharePoint Server</u>









Modern SharePoint Makes it On-Premises

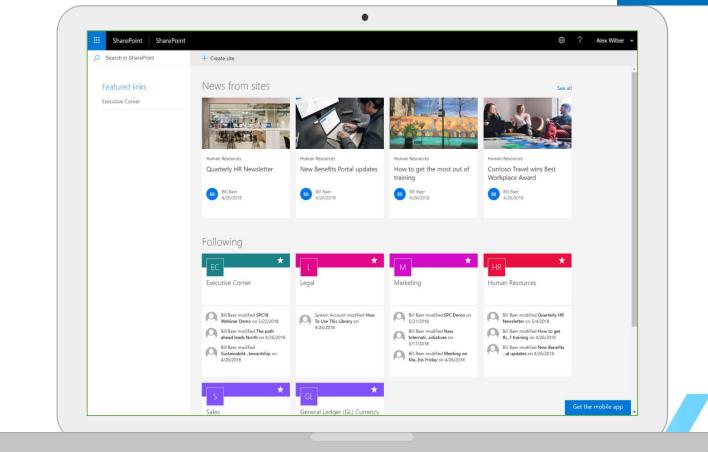


SharePoint Home

New SharePoint sites page

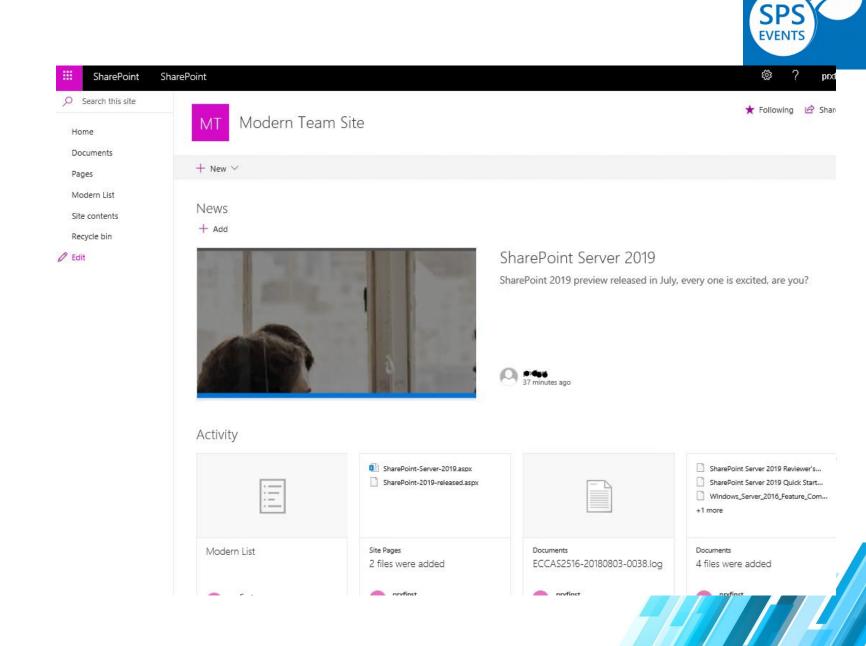
Most relevant sites in one place

- News
- Following
- Featured Links
- Suggestion



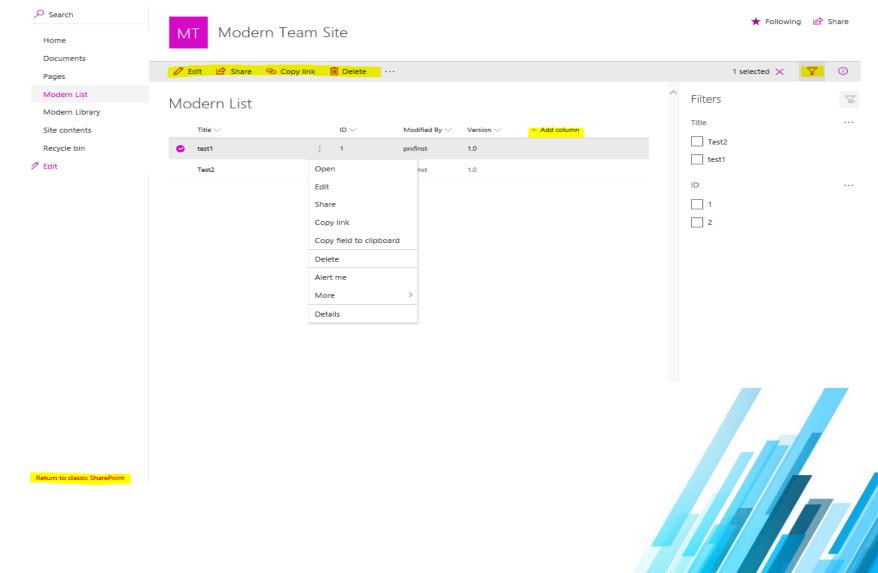
Modern Team Sites

- Updated lists, libraries, pages and news
- Fast, mobile ready, and customizable experience



Modern Lists

- Add columns and rows with ease
- Format columns with JSON
- Simplified filtering experience
- Details pane gives you more information without leaving the list view





Modern Libraries

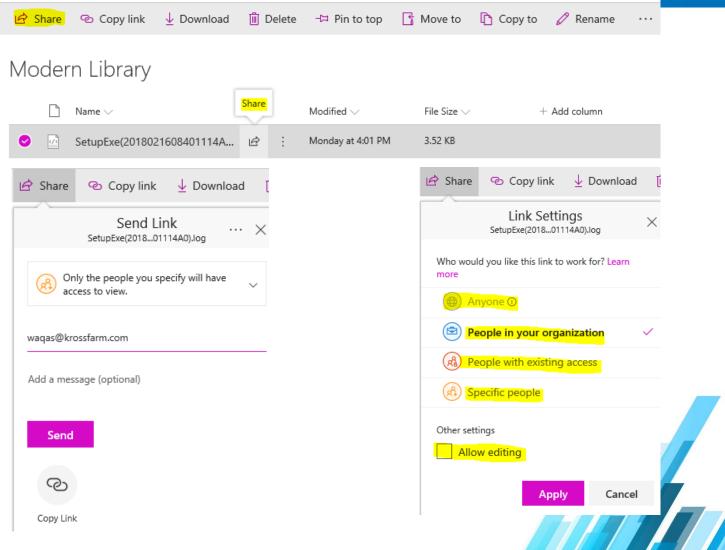
- Updated, responsive UI
- Aligned with UI fabric of OneDrive
- Optimized for light weight • structure and process

♀ Search Home	MT Modern Team Site	★ Following 🖻 Share
Documents		Open the details pane
Pages	💼 Open 🗸 🖻 Share 🐵 Copy link 🚽 Download 📋 Delete 🕞 Pin to top \cdots	1 selected 🗙 🔽 🔟
Modern List	Modern Library	 SharePoint Server 2019 Qu 1.75 MB - About a minute ago
Modern Library	Modern Library	
Site contents	□ Name ∨ Modified ∨ File Size ∨	
Recycle bin	SetupExe(2018021608401114A0).log * 4 minutes ago 3.52 KB	Has Access
🖉 Edit	SharePoint 2019&#ofCDB%.docx * About a minute 1.16 MB</td><td>A 3 A Manage access</td></tr><tr><td></td><td>SharePoint Server 2019 Quick Start Gu</td><td></td></tr><tr><td></td><td>SharePoint Server Setup(20180216102 Share</td><td>Properties Edit all</td></tr><tr><td></td><td>Copy link</td><td>Name *</td></tr><tr><td></td><td>Download</td><td>SharePoint Server 2019 Quick Start</td></tr><tr><td></td><td>Delete</td><td>Guide.pdf</td></tr><tr><td></td><td>Pin to top</td><td>Title</td></tr><tr><td></td><td>Move to</td><td>Enter text here</td></tr><tr><td></td><td>Copy to</td><td></td></tr><tr><td></td><td>Rename</td><td>Recent Activity</td></tr><tr><td></td><td>Version history</td><td>This week</td></tr><tr><td></td><td>Alert me</td><td>Portest edited "SharePoint Server 201"</td></tr><tr><td></td><td>More ></td><td>4 minutes ago</td></tr><tr><td>Return to classic SharePoint</td><td>Details</td><td> SharePoint Server 201 " </td></tr></tbody></table>	



Modern Sharing Experience

- Simplified sharing UI
- Easily share links to content with others
- Also warned if you shared with larger group or large number of items



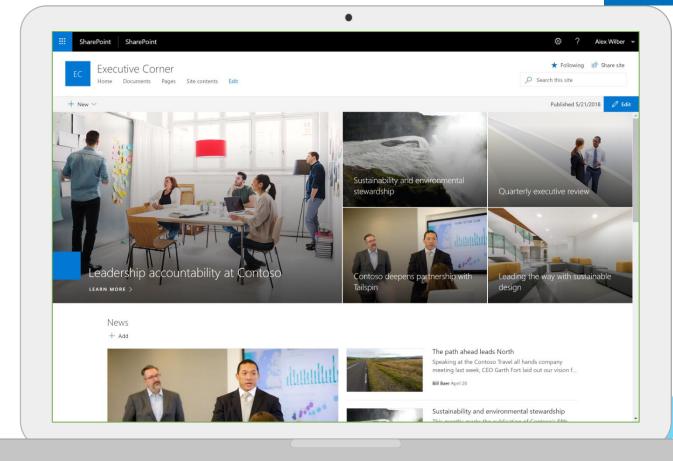




Communication Sites

Beautiful, dynamic site to reach broad audience

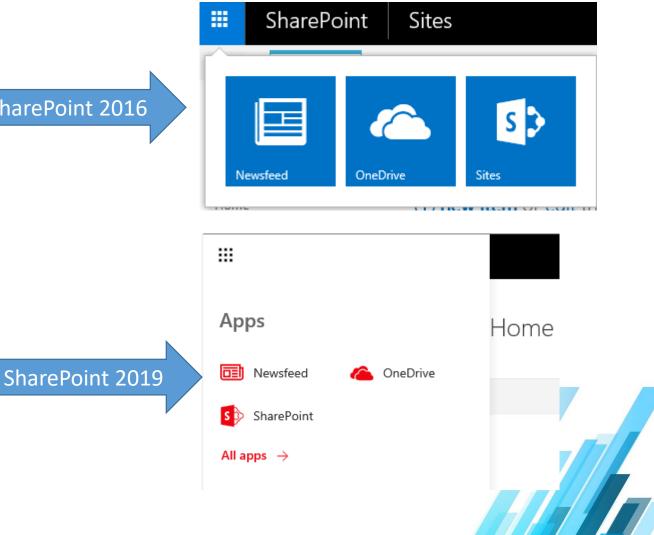
Keep the organization informed and engaged



Suite Navigation & App Launcher

- Update the SuiteBar, more Align with 0365
- Microsoft refreshed Suite Navigation and App Launcher in SharePoint Server 2019 Public Preview. The user interface now is closely aligned with what is seen in Office 365 so that SharePoint hybrid customers will have a seamless experience as they move between SharePoint Server 2019 Public Preview and SharePoint Online.

SharePoint 2016





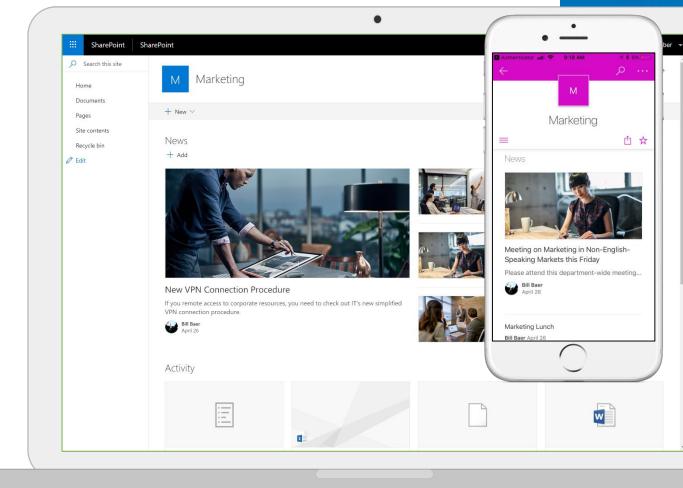




Beautiful sites on every device

Get SharePoint on the go with the SharePoint Mobile App

ADFS authentication not supported for OnPrem scenario.



SPS EVENTS

OneDrive

Fast, reliable, and proven experience with OneDrive.exe (NGSC)

Connect and sync OneDrive and SharePoint document libraries

Files on demand with Windows 10

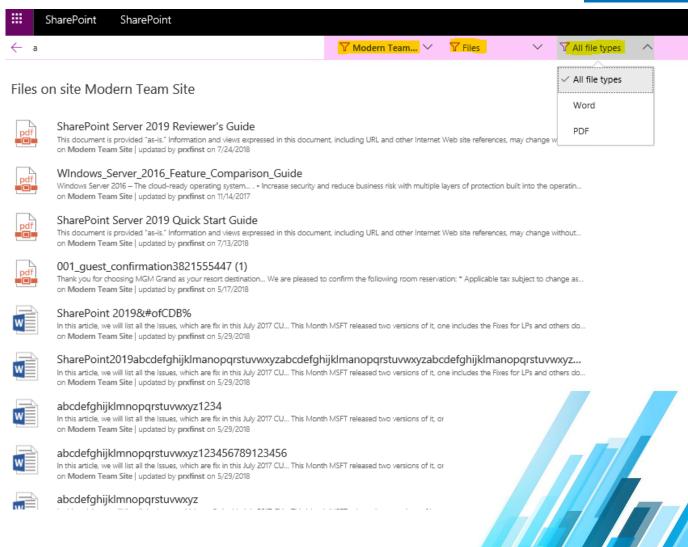
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Alex Wiber Files Recent Shared with me Recycle bin Sites G GL Finance Meeting E Event Planning Location C Determine Target Audience C Determine Suret Message M Risk Assessment C Determine Objectives. C Evaluation Criteria More sites	Files Personal April 27 Ad Goals for QT Series d Ad Goals for QT Series d Ad Goals for QT Series d Ad Goals for Sectie Exp April 27	Shared with Everyone April 27 Ad Goals for QT Series.p. # ^A April 27 Imesheet_AlexW.xlsx April 27	Getting ready to sync We're opening OneDrive on your computer. Sign in with your spectemostalesw account, if prompted. If noting happens, you may need to get the attest version of OneDrive.	Sugg Mark	Aritps://sh. Financials Jun 25 [] Jun 25 [] Asia 04 Soles Jun 10, 2014 [] Contosuct List Apr.7, 2015 [] CR-22verview CR-22verview Files	Sharedveryone :: Apr 26 :: Carbonroposal :: Jan 22016 :: Contosnalysis :: Apr 7, 2015 :: Contosnalysis :: Contosnalysis :: Apr 7, 2015 :: Contosnalysis ::	Asia Q2 Sale Asia Q2 Sale Aug 1_2015 Que to the second secon
Return to classic OneDrive							

- Deploy the new OneDrive sync client for Windows
- Deploy and configure the new OneDrive sync client for Mac



- Modern search experience
- Type ahead contextual results in search box
- Modern search result page for SharePoint Home and Site search







What's new for IT Pro

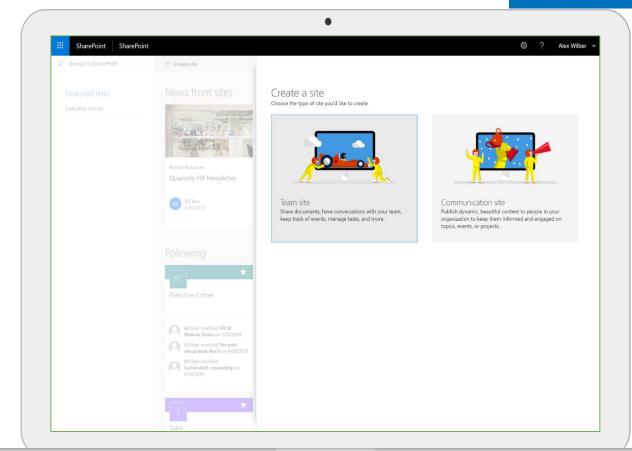


Simple site creation

Experience for Teams and communication sites

Fast site creation

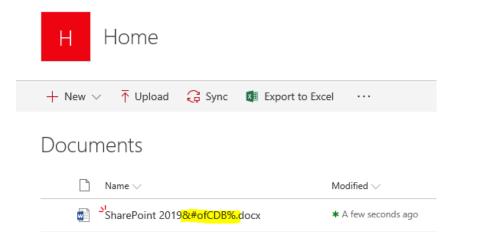
- OneDrive personal sites [SPSPERS#10]
- Modern Team sites [SPSPERS#10]
- Communication sites [STS#3]





Special Character Restriction

• # and % characters are allowed



Max File Size

 Max File size increased up to 15GB, Up from 10 GB from SharePoint 2016. File Performance, Optimized the upload and download performance using unclaimed bandwidth

File Path Limit



- increases the URL path length restrictions from 260 Unicode code units to 400
- https://krosfarm.com/test/abcdefghijklmanopqrstuvwxyzabcde fghijklmanopqrstuvwxyzabcdefghijklmanopqrstuvwxyzabcdefg hijklmanopqrstuvwxyzabcdefghijklmanopqrstuvwxyzabcdefghijkl manopqrstuvwxyzabcdefghijklmanopqrstuvwxyzabcdefghijkl manopqrstuvwxyzabcdefghijklmanopqrstuvwxyzabcdefghijklm anopqrstuvwxyzabcdefghijklmanopqrstuvwxyzabcdefghijklman opqrstuvwxyzabcdefghijklmanopqrstuvw/abcdefghijklman uvwxyz123456789123456.docx



Sharing email template:



 Sharing email notifications have been refreshed to use a modern template design. Customers can set the SPWebApplication.SharingEmailUseSharePoint2016Templates property to true if they want to continue using the previous sharing email template.

Recycle Bin restore improvements

• SharePoint Server 2019 Public Preview users can now restore items that they've deleted themselves, and also items that other users in the site have deleted. Users need edit permission on the deleted items so they're visible in their SharePoint recycle bin.



SMTP Server Authentication

• Now support the SMTP Server Authentication helps ensure your communications are secured and protected. Removed old school anonymous relays.

\$CentralAdmin = Get-SPWebApplication -IncludeCentralAdministration | ? {

\$_.IsAdministrationWebApplication -eq \$true }

\$SmtpServer = "mail.example.com"

\$SmtpServerPort = 587

\$FromAddress = "user@example.com"

\$ReplyToAddress = "replyto@example.com"

\$Credentials = Get-Credential

Set-SPWebApplication -Identity \$CentralAdmin -SMTPServer \$SmtpServer -SMTPServerPort \$SmtpServerPort -OutgoingEmailAddress \$FromAddress -ReplyToEmailAddress \$ReplyToAddress -SMTPCredentials \$Credentials

Outgoing E-Mail Settings ()

Warning: This page is not encrypted for secure communication. User names, passwords, and any other information contact your administrator.

Mail Settings

Specify the SMTP mail server to use for Microsoft SharePoint Foundation e-mail-based notifications for alerts, invitations, and administrator notifications. Personalize the From address and Reply-to address.

Outbound SMTP server:
Kfexchange.krossfarm.com
Outbound SMTP server port:
25
From address:
sharept@krossfarm.com
Reply-to address:
noreply@krossfarm.com
Character set:
65001 (Unicode UTF-8)

Mail Security

Specify the authentication credentials Microsoft SharePoint Foundation will use to connect to the SMTP mail server. If the SMTP mail server doesn't require authentication, select **Anonymous**.

Note: You must set an application credential key on each server in the farm before specifying credentials. Learn about configuring e-mail settings.

Set Use TLS connection encryption to Yes to require Microsoft SharePoint Foundation to establish an encrypted connection to the SMTP mail server before sending e-mail. If this is set to Yes and an encrypted connection can't be established, no e-mails will be sent SMTP server authentication:

Anonymous
 Authenticated

User name

kf\kfemail

Password

Use TLS connection encryption:

<u>Configure outgoing email for a SharePoint Server farm</u>



SharePoint Documentations Links on CA

- Make the Admin life easy, added SharePoint administration documentation and latest Public Updates links in the SharePoint Central Administration homepage.
 - SharePoint Server Documentation
 - SharePoint Server Updates



Management Manage web applications Create site collections Manage service applications Manage content databases System Settings Manage servers in this farm Manage services in this farm Manage farm features Configure alternate access mappings

-



Resources

- SharePoint Server
 Documentation
- SharePoint Server Updates
- Third Party Notices

🖶 Add new link



New PowerShell Commands



- Get Orphan Objects in database Get-SPContentDatabaseOrphanedData
 - The <u>"stsadm.exe -o enumallwebs"</u> command has been converted into a PowerShell cmdlet. You can now use the new <u>Get-SPContentDatabaseOrphanedData</u> cmdlet to find orphaned objects within a content database. The <u>"stsadm.exe -o enumallwebs"</u> command will still be supported for backward compatibility.
- Set Application Credentials key on Local server <u>Set-SPApplicationCredentialKey</u>
 - The <u>"stsadm.exe -o setapppassword"</u> command has been converted into a PowerShell cmdlet. You can now use the new <u>Set-SPApplicationCredentialKey</u> cmdlet to set the application credential key on the local server for the SharePoint People Picker and SMTP authentication. The <u>"stsadm.exe -o setapppassword"</u> command will still be supported for backward compatibility.

• Remove Application Credentials key on Local server - <u>Remove-SPApplicationCredentialKey</u>

 The new <u>Remove-SPApplicationCredentialKey</u> cmdlet allows you to remove the application credential key from the local server. The impact level of this cmdlet is set to high, as removing the application credential key from the local server may degrade or block the functionality of features if they're configured to use the application credential key. For example, the SharePoint People Picker or SMTP authentication.

User Profile Synchronization Commands



<u>"stsadm.exe -o sync"</u> command has been converted into serveral PowerShell cmdlet

- <u>Get-SPContentDatabase</u> You can now use the <u>Get-SPContentDatabase</u> cmdlet with the optional parameter <u>-</u> <u>DaysSinceLastProfileSync</u> to return content databases that haven't been synchronized with User Profile for the past n days.
- <u>Clear-SPContentDatabaseSyncData</u> The new <u>Clear-SPContentDatabaseSyncData</u> cmdlet clears User Profile synchronization information from the content databases in the farm that haven't been synchronized for the past n days.
- <u>Update-SPProfileSync</u> The new <u>Update-SPProfileSync</u> cmdlet updates the User Profile synchronization settings to specify the main synchronization schedule, the sweep schedule to identify new users, and which web applications should be excluded from synchronization.



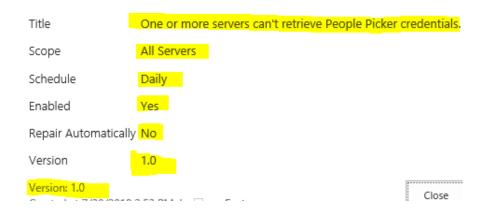
New Health Rule:

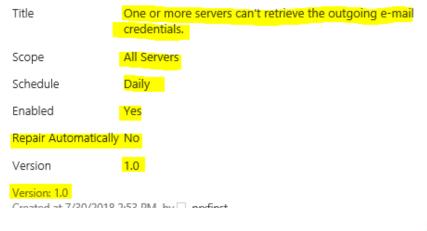
• People Picker health rule

The People Picker is configured to use specific credentials when searching for users in certain forests or domains. There are one or more servers in this farm that can't retrieve these credentials. Without these credentials, the People Picker won't be able to search for users in those forests or domains from these servers. <u>One or more servers can't retrieve People Picker credentials</u>

SMTP authentication health rule

 At least one web application is configured to use authentication when sending email. There are one or more servers in this farm that can't retrieve the credentials used to authenticate to the outgoing email server. Without credentials, these servers can only send email anonymously. <u>One or more servers can't retrieve the outgoing email</u> <u>credentials</u>







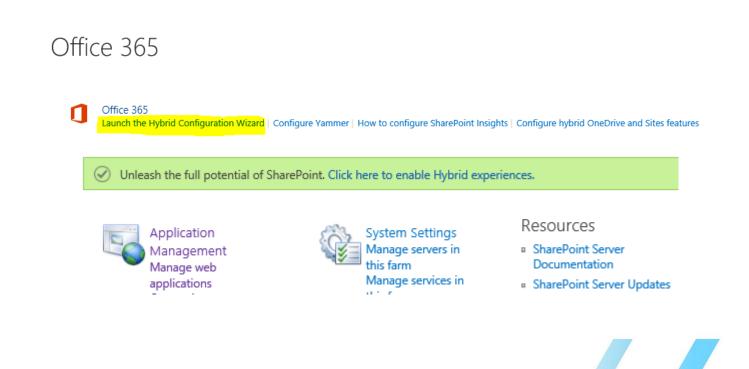


SharePoint Hybrid

SharePoint Hybrid

Easy Configuration of Hybrid

- SharePoint Hybrid configuration wizard can be launched from Central admin throughout CA.
- SharePoint Hybrid Status Bar was added to the top of Central admin
- OneDrive by Default experience available in SharePoint 2019.





SharePoint Hybrid

List of Hybrid Features

- Hybrid App Launcher
- Hybrid Auditing
- Hybrid Profile
- > Hybrid Picker
- Hybrid Site following
- Hybrid Self-Service Site Creation
- Hybrid Cloud Search / Federated Search
- Hybrid Taxonomy/Content Types
- Hybrid OneDrive for Business and Sites

Minimum public update levels for SharePoint hybrid features







PowerApps and Flow integration

By using on-prem data gateway, SharePoint 2019 can use PowerApps and Flow.

III PowerApps			$\stackrel{\text{Environment}}{\text{United States}} \checkmark \underline{ \lor}$	©?
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🛄 Learn	Build busines	S apps, Tast data and work across web and mobile	Learn about PowerApps	
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🖽 Data 🗸	Make apps like these		All Office $\ensuremath{\mathcal{P}}$ Search	
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			No. Loss Preventaria y anti congressione annumentaria 2 No. No. Tragenti representaria preventaria 2 Non Stratuto representaria preventaria preventaria	
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			broats Good Lineary	
	Start from blank	Start from data	Service Desk	
	Budget Trakker All Budgets Maker Statut	C Estimate for Earld Vision	ton 4	
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	Budget Tracker	Cost Estimator	Case Management	
	And Sector -			
		CONVECTS 0		
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Deprecated & removed features

What's deprecated or removed

Deprecated / Supported

Access Service 2010

Access Service 2013

Aggregated News Feed

Custom Help

Groove Sync Client

InfoPath Services

Lists Web Service

Machine Translations (and Variations)

PerformancePoint Services

SharePoint Designer

Site Mailbox

Site Manager

Removed

Code-Based Sandbox Solutions

Digest Authentication

Incoming email automatic mode

Multi-Tenancy

PowerPivot Gallery and Refresh

Visio Services - Silverlight Based Rendering

What's deprecated or removed from SharePoint Server 2019 Public Preview





Time to Upgrade

Getting content on SharePoint 2019

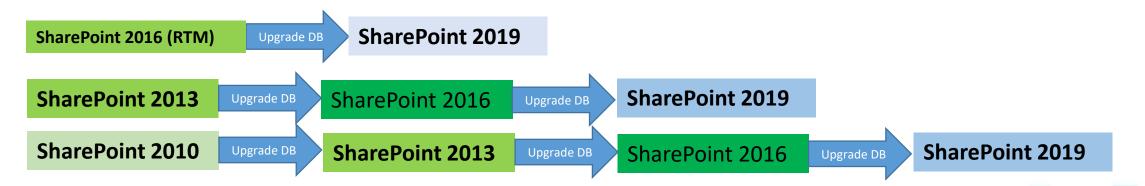
Upgrade

• No Direct Database Upgrade Option from 2010/2013 to SharePoint 2019

SharePoint 2013

SharePoint 2019

• Only following Database Upgrade Option supported:



Migration

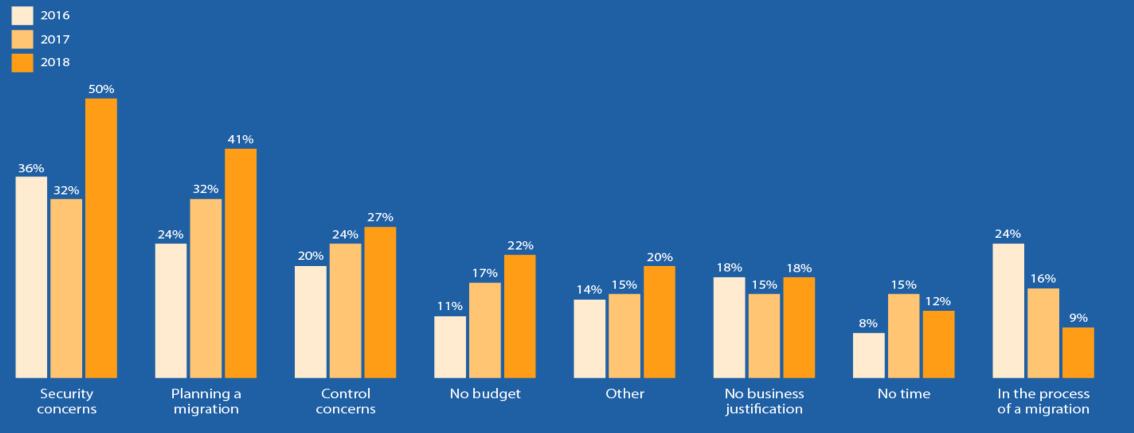
• Use the 3rd party tools to migrate the content to SharePoint 2019



SharePoint and Office 365 trends 2018

The Global SharePoint and Office 365 survey, conducted by Hyperfish, Sharegate, Nintex, and LiveTiles

What is keeping you from moving your On-Premises SharePoint deployments to the cloud?



🔗 hyperfish



Thank You and Keep Enjoying!