# SHAREPOINT SERVER 2019

A DETAILED GUIDE

BIJAYA KUMAR SAHOO

# Table of Contents

About TSInto Technologies:	2
About Authors:	2
Introduction	3
Useful Links for SharePoint Server 2019	3
SharePoint Server 2019 installation Steps	4
Hardware and software requirements for SharePoint Server 2019	4
Prerequisites for SharePoint 2019	6
SharePoint 2019 prerequisites installation	6
SharePoint Server 2019 Installation	11
Configure SharePoint Server 2019	
SharePoint Installation Errors You may face	29
Create First Web Application	
Create Site Collection in SharePoint Server 2019	
Few new features in SharePoint Server 2019	
Modern User Experiences	33
Modern Team Sites	33
Modern Site Pages	34
Modern List in SharePoint server 2019	34
Modern Libraries in SharePoint Server 2019	35
Communication Sites	35
OneDrive for Business	36
SharePoint Mobile	36
Large File Support, Character Restrictions, and File/Folder Names	36
Conclusion	36
Want to Learn SharePoint?	36

# About TSInfo Technologies:

TSInfo Technologies is one of the top SharePoint development & outsourcing company in India founded by two Microsoft MVPs. We have skilled certified professionals whose focus is to deliver high-quality work. We help organizations to build intranet to collaborate more effectively.

TSInfo Technologies works in technologies like SharePoint, Office 365, Azure, PowerBI, Nintex etc.

#### **TSInfo Technologies services includes:**

SharePoint development services SharePoint consulting services

SharePoint migration services SharePoint/Office 365 support service

Microsoft Azure consulting service PowerBI consulting service

SharePoint Training Service Nintex Training Service

SharePoint/Nintex corporate training service SharePoint Apps or Add-in development

SharePoint customization/Branding service SharePoint workflow, web part development

For any kind of SharePoint project work or corporate training contact us:

info@tsinfotechnologies.com || Mob: +91-9916854253 || https://www.TSInfoTechnologies.com

#### Sites we worked with:

https://www.EnjoySharePoint.com

Ш

https://www.SPGuides.com

## **About Authors:**

# Bijay Kumar Sahoo:

Bijay Kumar Sahoo is a Microsoft MVP in Office Servers and Services category specialized in SharePoint. He has more than 12+ years of experience in Microsoft technologies like SharePoint, Office 365, SharePoint Online, Azure, PowerBI, Nintex etc. Bijay is a SharePoint consultant, trainer and founder of TSInfo Technologies a SharePoint development company in India. Bijay also focuses on SharePoint technical blogging and blogs in EnjoySharePoint.com and SPGuides.com.

**Note:** I have taken the screenshot from the SharePoint Server 2019 preview version, the same steps can be followed for SharePoint Server 2019.

## Introduction

Microsoft has released SharePoint 2019 version which you can download and install and try out the new features of SharePoint server 2019.

In SharePoint server 2019, Microsoft focused on team collaboration, user experiences across devices, and how the cloud can be blended into existing on-premises scenarios in new and compelling ways. SharePoint Server 2019 will deliver enhancements and new capabilities in three major areas:

- Modern, familiar and intuitive user experiences based on our investments in SharePoint Online
- New ways to engage with content across browsers and devices
- Robust scale, security and compliance capabilities to meet growing demands

# Useful Links for SharePoint Server 2019

First of all below are few useful links of SharePoint server 2019:

Download SharePoint Server 2019

https://www.microsoft.com/en-us/download/details.aspx?id=57462

SharePoint Server 2019 Preview Reviewer's Guide

https://go.microsoft.com/fwlink/?linkid=2006360

PDF guide to install and deploy SharePoint Server 2019 Preview

https://go.microsoft.com/fwlink/?linkid=2006253

SharePoint Server 2019 Preview new features PDF guide

https://go.microsoft.com/fwlink/?linkid=2006360

SharePoint Server 2019 Preview Forum

https://social.technet.microsoft.com/Forums/office/en-US/home?forum=SP2019

Technical documentation for SharePoint Server 2019 Preview

https://technet.microsoft.com/en-us/library/fp179725.aspx

Enterprise trial product key: M692G-8N2JP-GG8B2-2W2P7-YY7J6

Standard trial product key: F2DPD-HPNPV-WHKMK-G7C38-2G22J

# SharePoint Server 2019 installation Steps

This pdf contains step by step tutorial with screen shots on how to install SharePoint server 2019 in windows server 2016. The installation steps will be similar when SharePoint 2019 will be released and you will try to install. I do not think there will be any major differences.

Read an article on Windows server 2016 installation steps: <a href="https://www.enjoysharepoint.com/windows-server-2016-installation-step-by-step-with-screen-shots/">https://www.enjoysharepoint.com/windows-server-2016-installation-step-by-step-with-screen-shots/</a>

Also, you need to configure active directory domain services after installing Windows server 2016. Follow below article:

https://www.sharepointsky.com/install-and-configure-windows-server-2016-active-directory-and-domain-controller/

https://www.sharepointsky.com/add-user-windows-server-2016/

Before starting the installation, make sure you have gone through the hardware and software requirements for SharePoint server 2019.

The installation steps of windows server 2019 are quite similar with windows server 2016.

Below are few hardware and software requirements. But you can check the below MSDN link.

https://docs.microsoft.com/en-us/sharepoint/install/hardware-and-software-requirements-2019

# Hardware and software requirements for SharePoint Server 2019

Below are the hardware and software requirement we should follow before installing SharePoint server 2019.

Based on your requirement there can be various installation scenarios, so make sure you should have the below guidelines for your web servers or application servers.

Installation	Deployment type	RAM	Processor	Hard disk space
scenario	and scale			
Single server role	Development or	16 GB	64-bit, 4 cores	80 GB for system
that uses SQL	evaluation			drive
Server	installation of			100 GB for second
	SharePoint Server			drive
	2019 Public			
	Preview with the			
	minimum			
	recommended			
	services for			
	development			
	environments. Use			
	the Single-Server			
	farm role that will			
	let you choose			
	which service			
	applications to			
	provision. For			

	additional information on Single-Server farm role.			
Single server role that uses SQL Server	Pilot or user acceptance test installation of SharePoint Server 2019 Public Preview running all available services for development environments.	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 a three-tier farm	Development or evaluation installation of SharePoint Server 2019 Public Preview with a minimum number of services.	12 GB	64-bit, 4 cores	80 GB for system drive 80 GB for second drive
Web server or application server in a three-tier farm	Pilot, user acceptance test, or production deployment of SharePoint Server 2019 Public Preview running all available services.	16 GB	64-bit, 4 cores	80 GB for system drive 80 GB for second drive and additional drives

## **Operating System Requirement:**

SharePoint Server 2019 will be supported any one of the below operating system:

- Windows Server 2016 Standard or Datacenter (Desktop Experience)
- Windows Server 2019 Standard or Datacenter (Desktop Experience)

#### **Database Requirements:**

SharePoint Server 2019 requires any one of the below sql server:

- Microsoft SQL Server 2016 RTM
- Microsoft SQL Server 2017 RTM for Windows

# Prerequisites for SharePoint 2019

Below are the prerequisites required to install SharePoint 2019, Like SharePoint 2013, SharePoint 2019 has a Prerequisite Installer (prerequisiteinstaller.exe) which will install the required components. If not installed successfully through prerequisiteinstaller.exe, you can manually download and install the components.

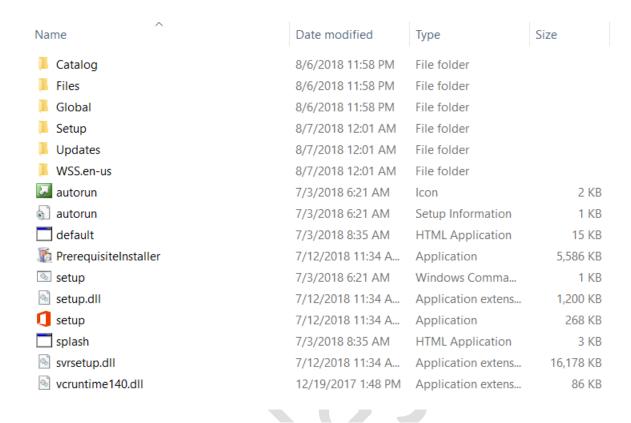
- Web Server (IIS) role
- Application Server role
  - Microsoft .NET Framework version 4.7.2 (<a href="https://www.microsoft.com/net/download/dotnet-framework-runtime">https://www.microsoft.com/net/download/dotnet-framework-runtime</a>)
  - Microsoft SQL Server 2012 Service Pack 4 Native
     Client(https://www.microsoft.com/download/details.aspx?id=56040)
  - Microsoft WCF Data Services 5.6(<a href="https://go.microsoft.com/fwlink/p/?LinkId=320724">https://go.microsoft.com/fwlink/p/?LinkId=320724</a>)
  - Microsoft Identity Extensions
  - (https://go.microsoft.com/fwlink/?LinkId=252368)
  - Microsoft Information Protection and Control Client (MSIPC)( https://go.microsoft.com/fwlink/p/?LinkId=544913)
  - Microsoft Sync Framework Runtime v1.0 SP1 (x64)( https://go.microsoft.com/fwlink/p/?LinkId=618411)
  - Windows Server AppFabric 1.1(https://go.microsoft.com/fwlink/p/?LinkId=618412)
  - Cumulative Update Package 7 for Microsoft AppFabric 1.1 for Windows Server (KB 3092423) (https://support.microsoft.com/kb/3092423)
  - Visual C++ Redistributable Package for Visual Studio 2012(https://go.microsoft.com/fwlink/?LinkId=627156)
  - Visual C++ Redistributable Package for Visual Studio 2017(https://visualstudio.microsoft.com/downloads/)

# SharePoint 2019 prerequisites installation

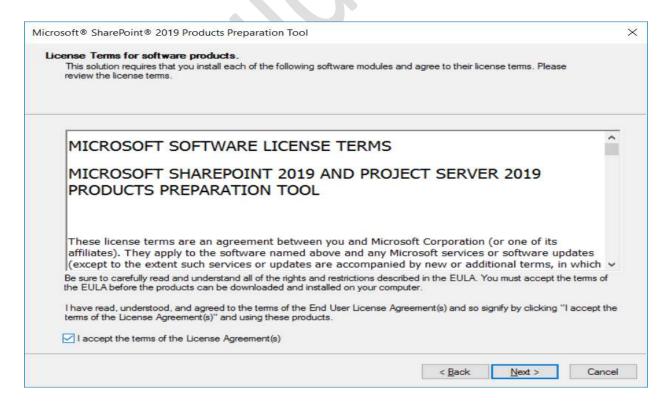
Before installing SharePoint server 2019, we need to install prerequisites required for SharePoint 2019.

#### Step-1

Extract the setup file to folder and click on **prerequisiteinstaller.exe** file as shown in the below figure. This will install all the required prerequisites required for SharePoint Server 2019.



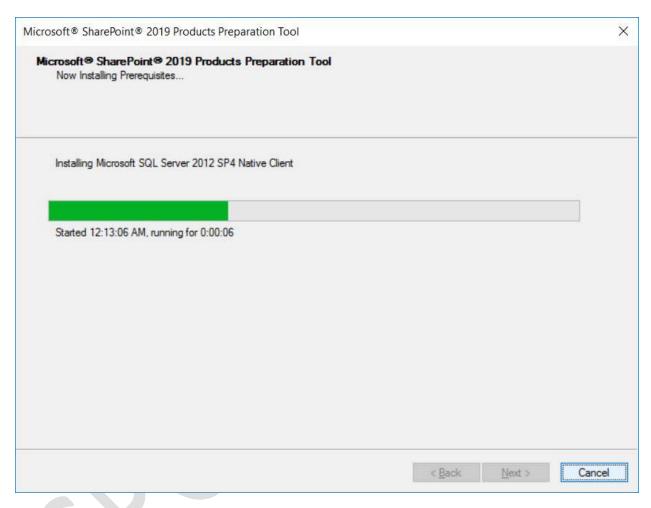
After clicking prerequisite installer, a Microsoft software license terms will come. Here select "I accept the terms of the License Agreement(s)" and click to next.



Then it will start the Prerequisites Installation and it may restart the computer couple of times.

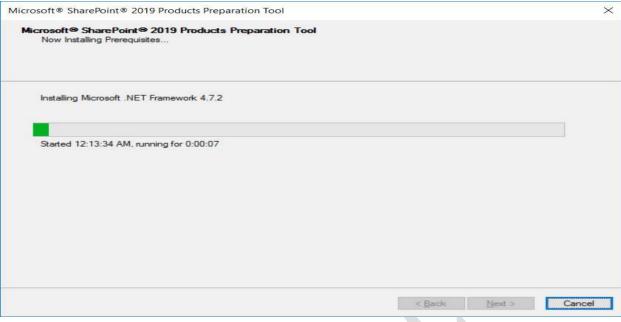
#### Step-3

This will start the installation, below screen shot you can see it is installing "Microsoft SQL Server 2012 SP4 Native Client".



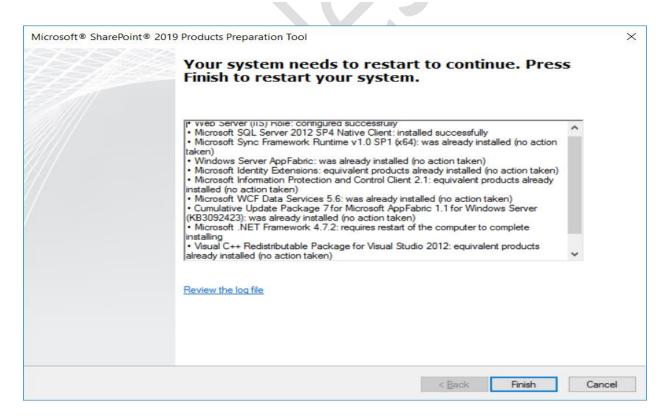
Then you can see it is trying to install "Microsoft .NET Framework 4.7.2".



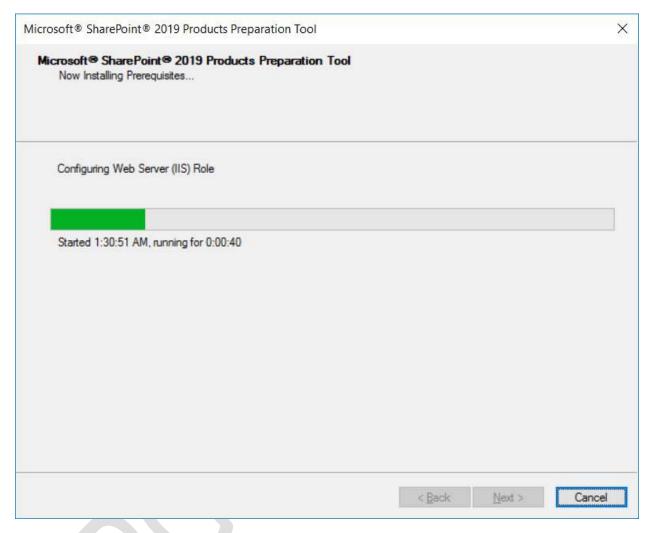


Step-4

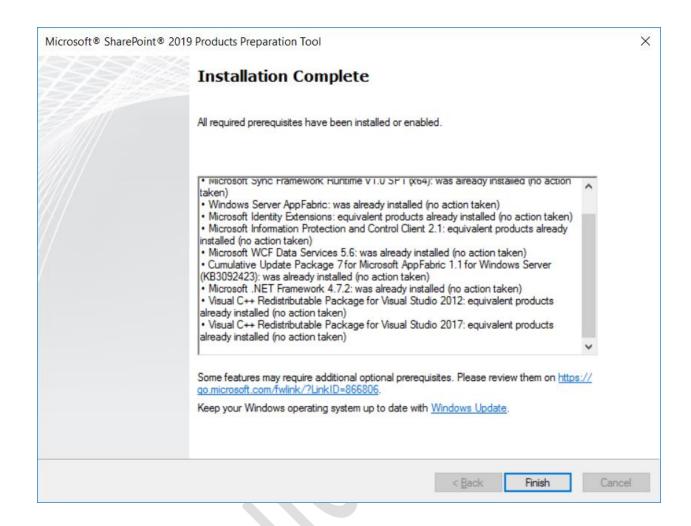
During the installation it will ask you to restart the system to continue the installation. Click Finish to continue the installation.



**Note:** If anyone of the prerequisites are fail, then resolve that before proceeding for SharePoint server 2019 installation process.



Once the installation is over, it will display **Installation Complete** screen. You can see the fig below:

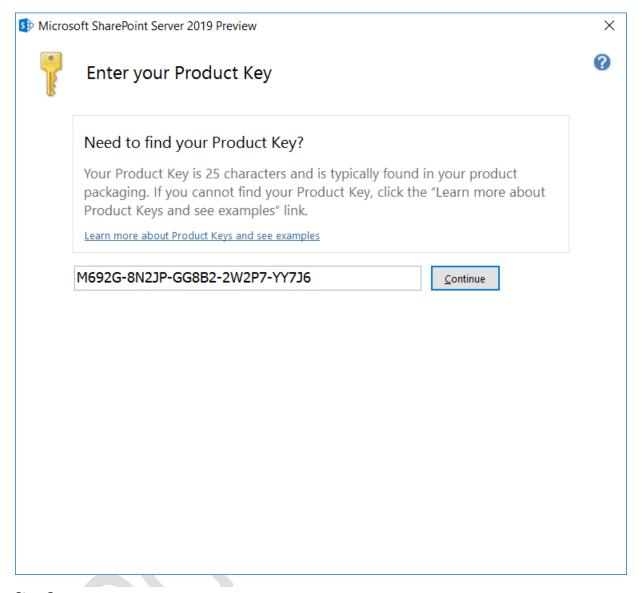


# SharePoint Server 2019 Installation

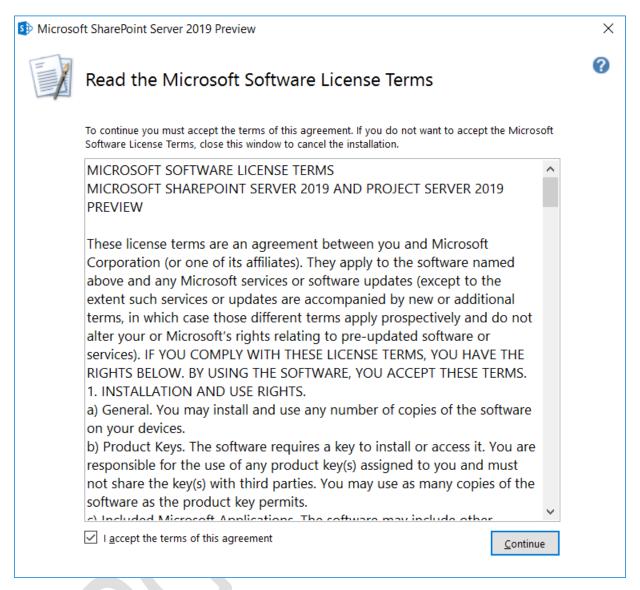
Once the prerequisites installation over, we can now install SharePoint server 2019.

#### Step-1

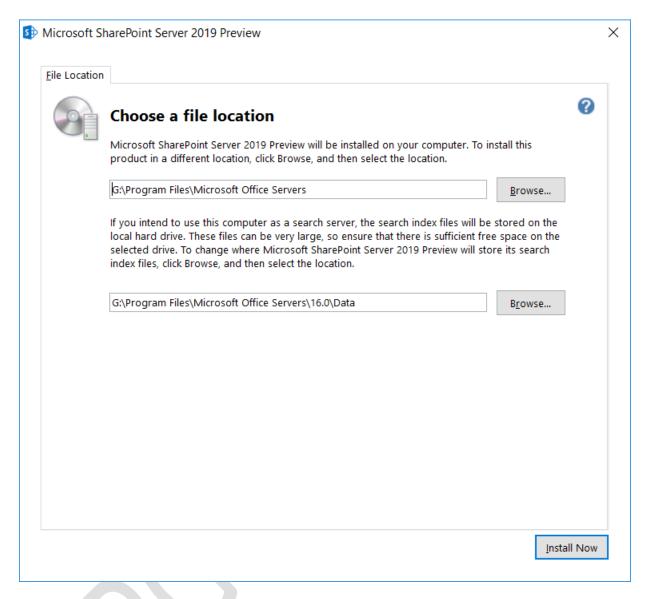
Once you click on **setup.exe** file, Then it will ask you to give enter your product key which is 25 characters and click on to continue. You can insert the trial version product key as mentioned above.



**Step-2**Read the Microsoft Software License Terms of Microsoft SharePoint Server 2019. Then select the check box of "I accept the terms of this agreement" and click on continue like the below screenshot.

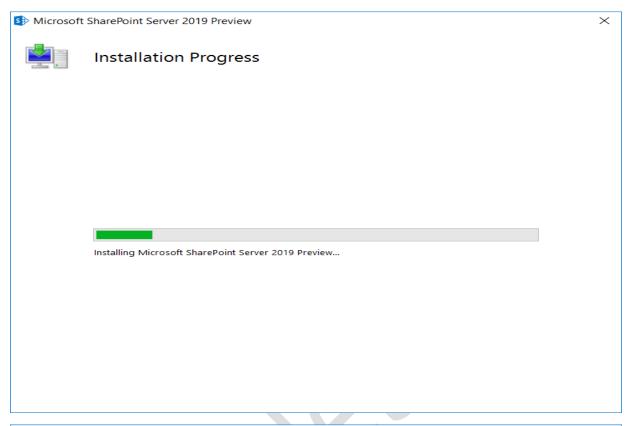


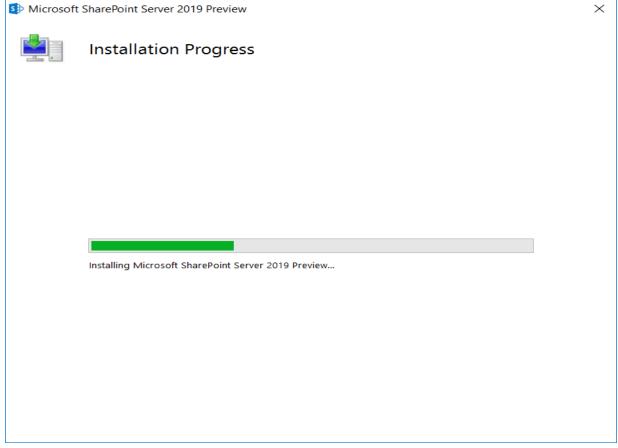
In this "Choose a file location", no need to browse anything. So just go for 'Install Now' as below in the screenshot of Microsoft SharePoint Server 2019. If you want to change the installation location, you can change also by using the "Browse" option like below screenshot.



Step-4

Then you can see the installation progress in the "installation progress" dialog box in Microsoft SharePoint Server 2019. The installation will be running and it will take some time to complete the installation process like below figure.



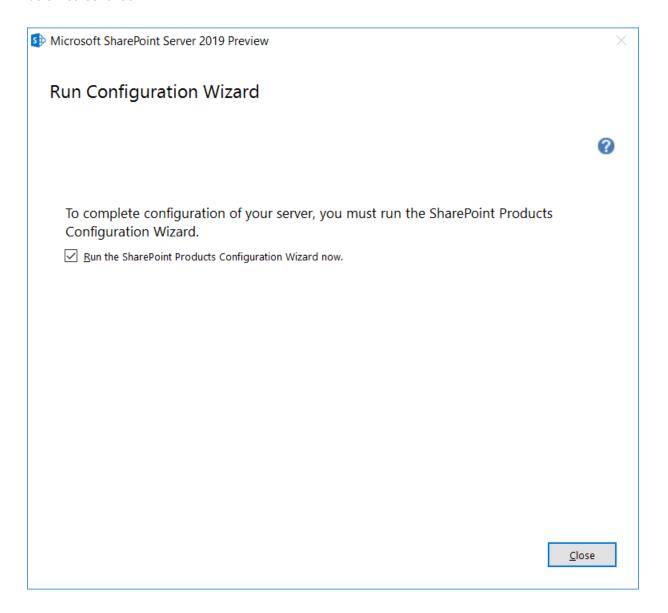


# Configure SharePoint Server 2019

Once the installation over, we can start the SharePoint server 2019 Preview configuration wizard.

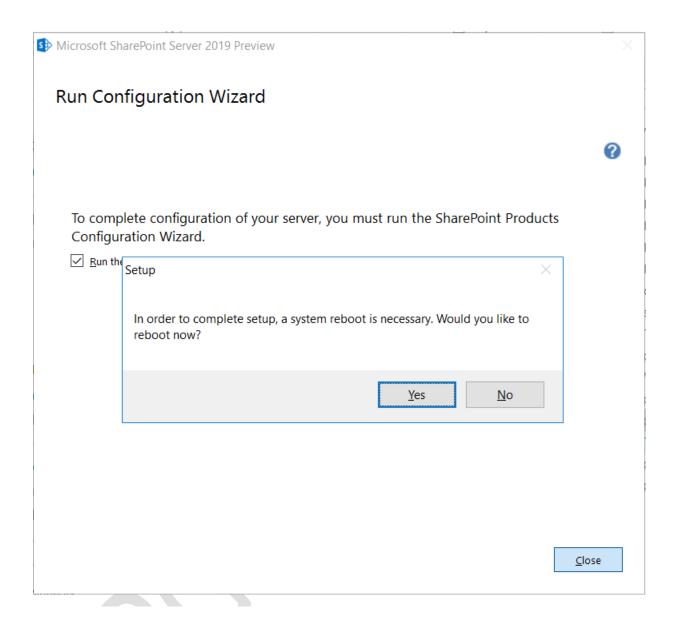
#### Step-1

After installation complete, it will open the "Run Configuration Wizard". To configure your server, just select the check box of 'Run the SharePoint Products Configuration Wizard now' and click to close as like below screenshot.

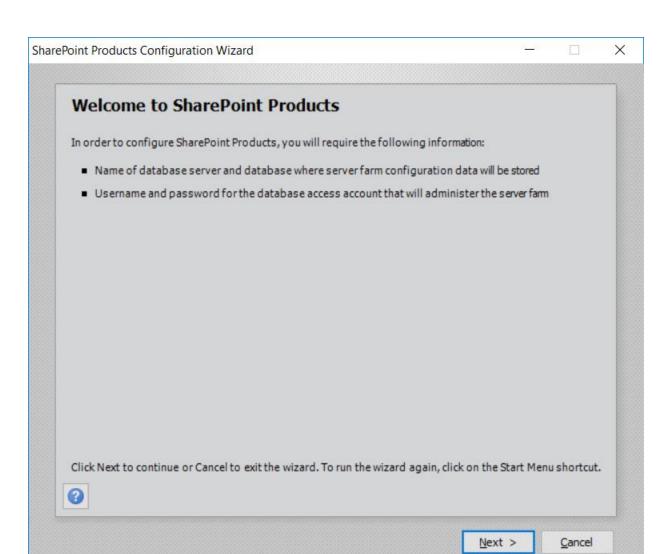


#### Step-2

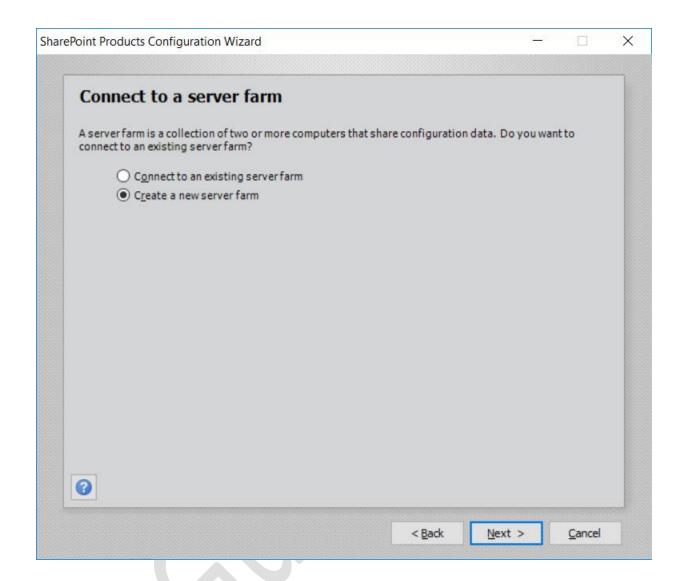
After closing the "Run Configure Wizard", A Setup box will come where a system necessary to reboot. If you want to reboot at that configuration time, then click on "Yes" and if you don't want to reboot, then click on "No" and again click on "Close" option for closing the Run Configuration Wizard.



Then it will display the Welcome to SharePoint Products dialog box in SharePoint Products Configuration Wizard. Here it will ask to keep the Name of the databases server and database and also to keep the Username and password to access the database. Those things will required in the following screens. Then click "Next" to continue the Wizard.



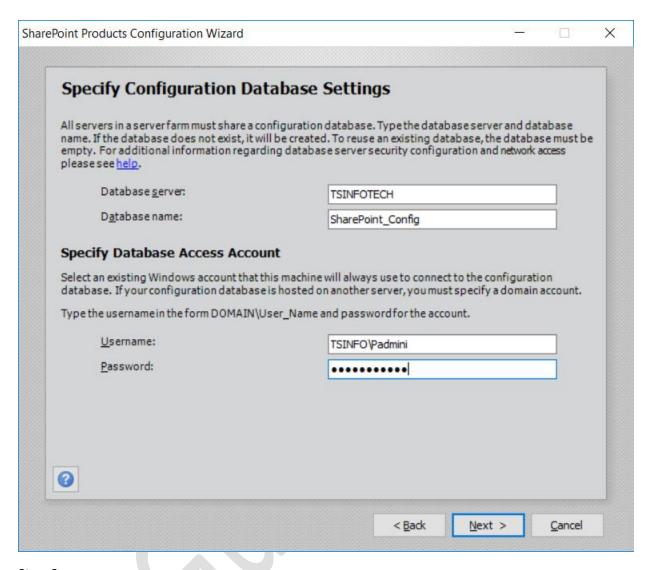
Step-4
After clicking "Next" to the Wizard, it will display a page named as "Connect to a server farm". Here choose "create a new server farm" for creating a new server farm and then click on to next. If you want to connect to an existing farm, then you can choose Connect to an existing server farm.



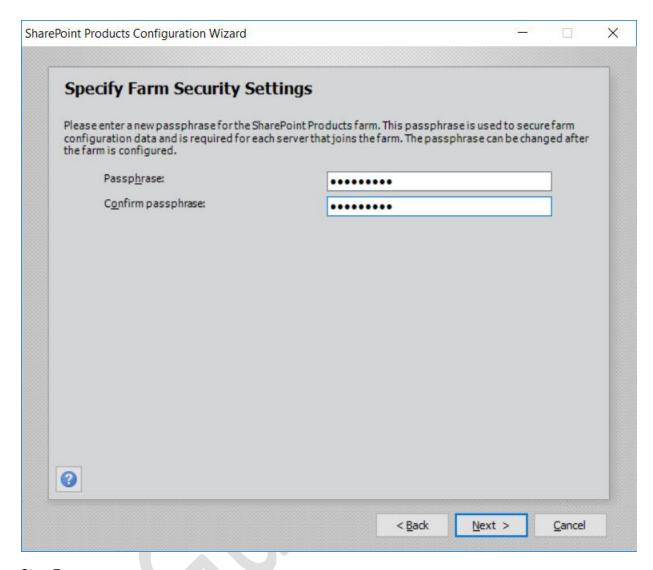
Step-5

After clicking "Next" of Server Farm. Here it will ask you to provide

- Database server
- Database name
- Username This should be a domain account, else it will give error.
- Password



Then it will ask the Passphrase and Confirm passphrase. This is required when you want to join servers to the farm.

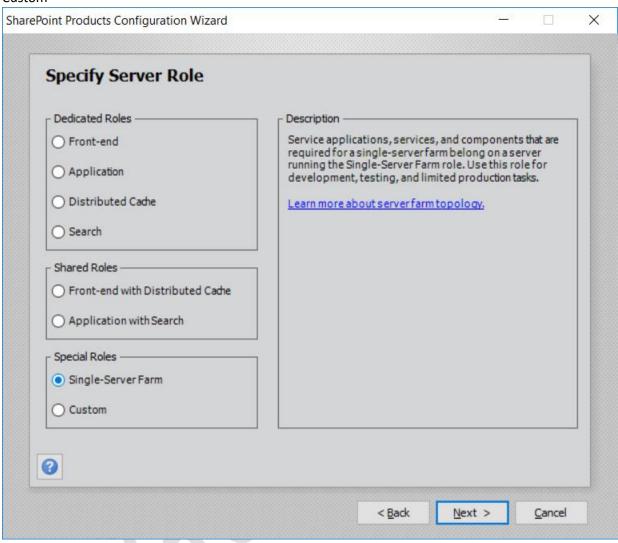


The next step is very important and little different from SharePoint server 2016 installation screen. This is known as MinRole and we need to specify the role of the server here.

Below are 8 roles will be there:

- Front-end
- Application
- Distributed Cache
- Search
- Front-end with Distributed Cache
- Application Search
- Single-Server Farm

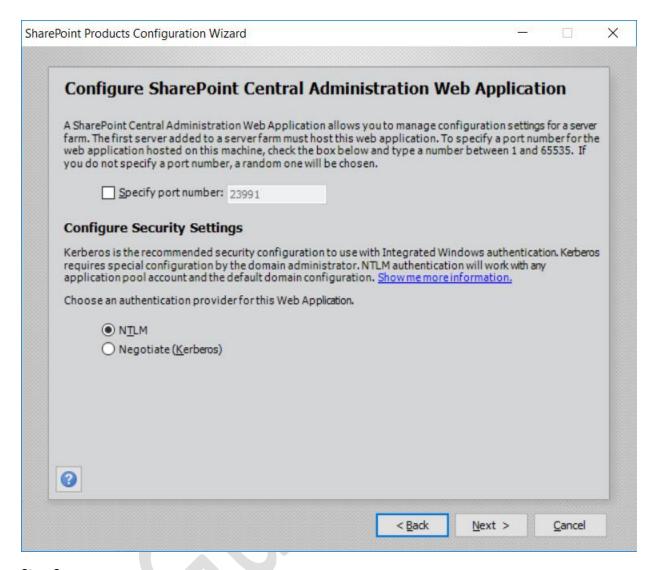
Here we are trying for a Single server farm, so choose "Single-Server Farm" like below:



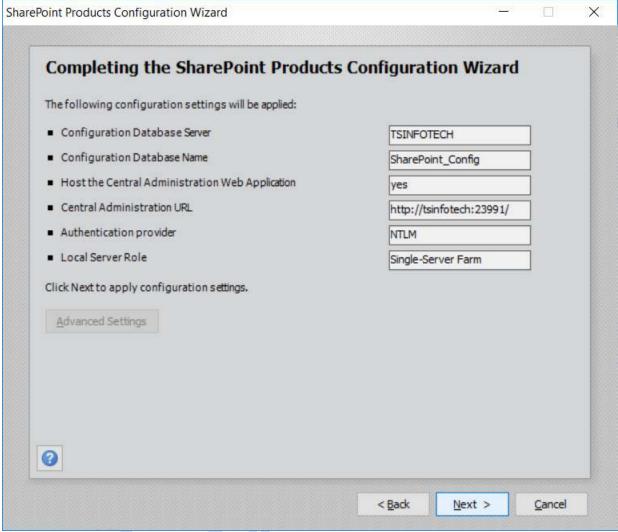
Step-8

Then it will display the default port number which you can change if you want to by check the checkbox and providing the new port number.

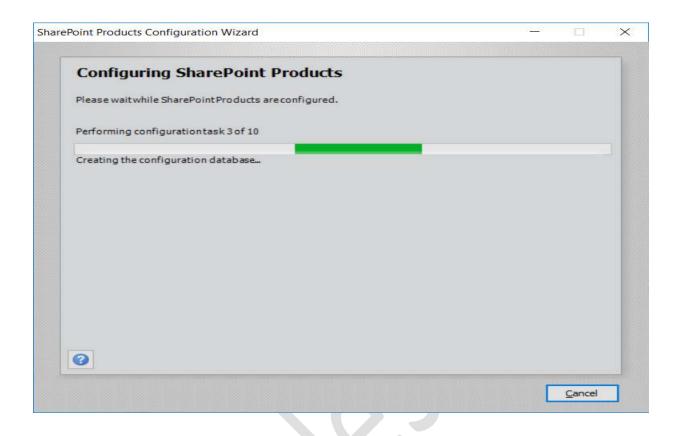
Also leave the authentication provider as NTLM like below:

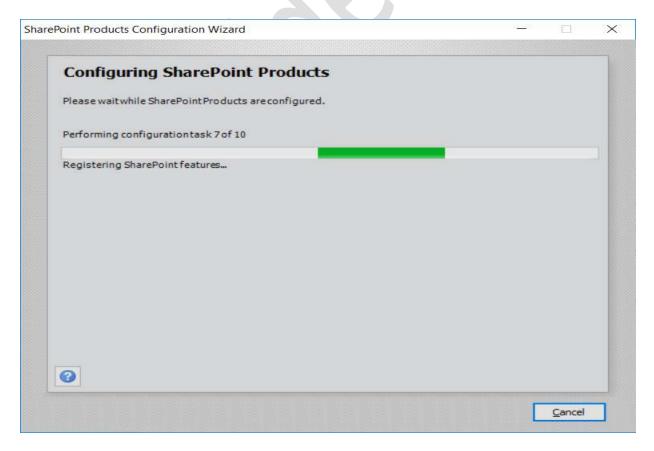


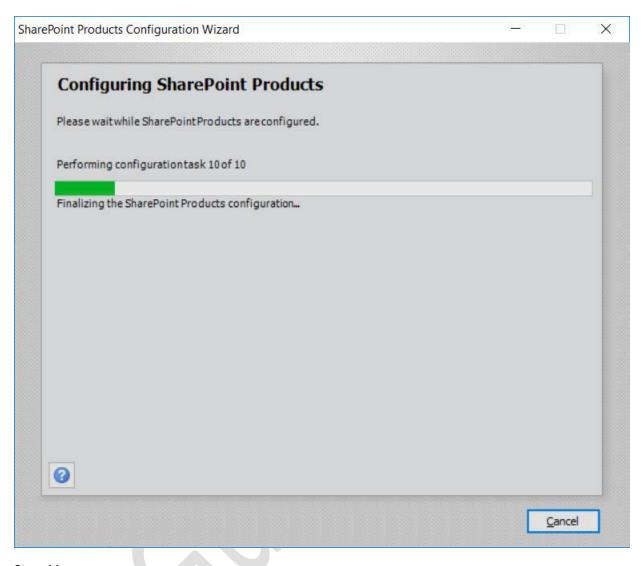
Then in the next screen, it will display all the configuration settings details like below:



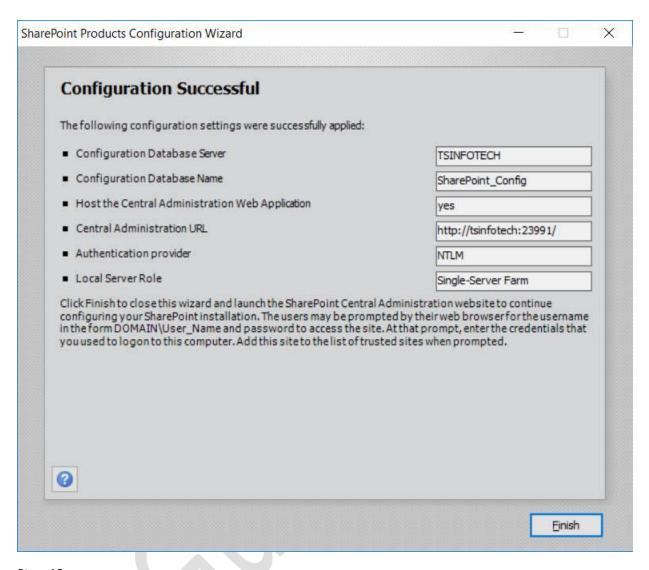
Once you click on Next, it will start the configuration. The first few steps will require some time, keep the system open.





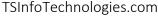


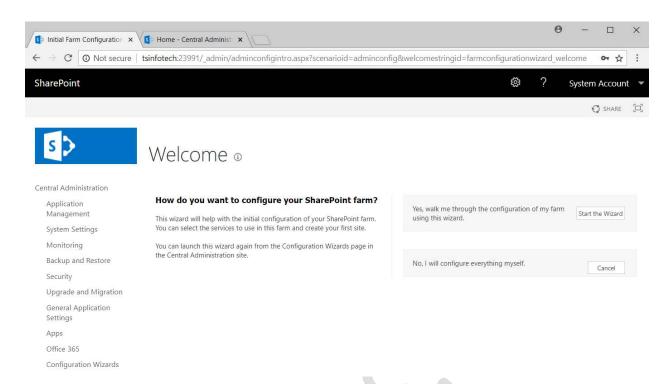
Once the configuration is over, it will display Configuration Successful message like below. It will display the configuration database details, as well as SharePoint 2019 central administration URL etc.



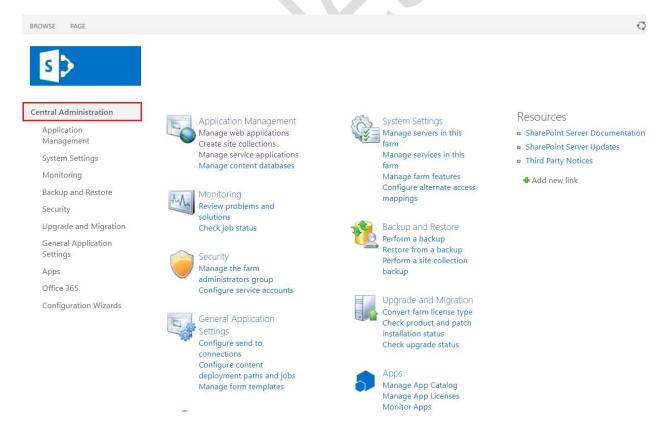
Step-12

Once you will click on Finish, it will display the Configure your SharePoint farm wizard.





Then you can also access the SharePoint server 2019 Central administration which looks exactly similar to SharePoint 2016 or SharePoint 2013.



# SharePoint Installation Errors You may face

Below are few Errors you may get and solutions which you can follow for the solution:

Microsoft .net framework 4.6 installation error SharePoint 2016

https://www.spguides.com/microsoft-net-framework-4-6-installation-error-sharepoint-2016/

The RPC server is unavailable error in SharePoint 2016

https://www.spguides.com/the-rpc-server-is-unavailable-sharepoint-2016/

microsoft sql server 2012 native client download error sharepoint 2016

https://www.spguides.com/microsoft-sql-server-2012-native-client-download-error-sharepoint-2016/

microsoft sync framework runtime v1.0 sp1 (x64) download error sharepoint 2016

https://www.spguides.com/sharepoint-2016-prerequisites-sync-framework-download-error/

Windows Server Appfabric: download error

https://www.spguides.com/windows-server-appfabric-download-error/

# Create First Web Application

You can create your first web application from SharePoint 2019 central administration or you can create by using PowerShell.

Here we will create web application using PowerShell. Below is the PowerShell command.

Add-PSSnapin "Microsoft.SharePoint.PowerShell"

\$authentication = New-SPAuthenticationProvider -UseWindowsIntegratedAuthentication - DisableKerberos

New-SPWebApplication -Name "SharePoint 2019 Web App New" -Port 80 -ApplicationPool "SP2019AppPoolNew" -ApplicationPoolAccount (Get-SPManagedAccount "TSINFO\Padmini") - AuthenticationMethod NTLM -AuthenticationProvider Sauthentication

Please change the names according to your machine and farm.

To create the web application from SharePoint 2019 central administration, you can follow the below URL:

https://www.spguides.com/create-sharepoint-web-application/

#### Create Site Collection in SharePoint Server 2019

After creating web application we can now create our first site collection. Open SharePoint 2019 central administration. From Application Management click on Create site collections.

It will ask for Site collection Title, Description, URL and Template and Primary site collection administrator and Secondary site collection administration.

In the template section, you can see two templates:

- Team Site
- Team Site (Classic Experience)

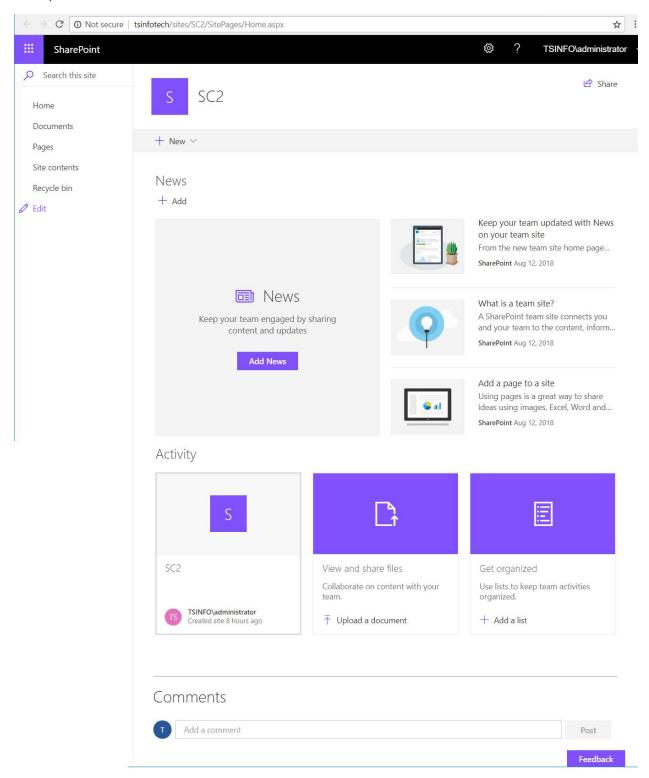
You can see below we have chosen Team Site and it will create a team site with modern experience.



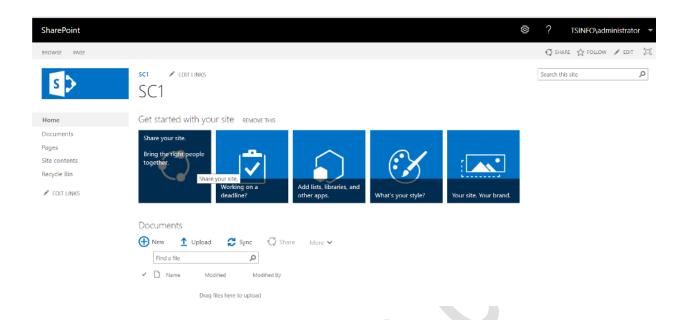
# Create Site Collection ®

Web Application	Web Application: http://tsinfotech/ ▼		
Select a web application.	web Application. http://tsimotech/		
To create a new web application go to New Web Application page.			
Title and Description	Tidle		
Type a title and description for your new site. The title will be displayed on each page in the site.	Title:		
	Description:		
	SC2		
Web Site Address  Specify the URL name and URL path to create a new site, or choose	URL:		
to create a site at a specific path.	http://tsinfotech /sites/ ▼ SC2		
To add a new URL Path go to the Define Managed Paths page.			
Template Selection	Select a template:		
	Collaboration Enterprise Publishing Custom		
	Team site		<b>A</b>
	Team site (classic experience)		
	Blog Developer Site		
	Project Site		
	Community Site		
	A site with no connection to an Office 365 Group.		•
	A site with no connection to an office 300 Group.		
Primary Site Collection Administrator	User name:		
Specify the administrator for this site collection. Only one user login can be provided; security groups are not supported.	TSINFO\administrator;	♣⁄ 🔡	
		_	
Secondary Site Collection Administrator	User name;		
Optionally specify a secondary site collection administrator. Only one user login can be provided; security groups are not supported.	TSINFO\administrator;	♣⁄ 🔡	
		_	
Quota Template			
Select a predefined quota template to limit resources used for this site collection.	Select a quota template:  No Quota		
To add a new quota template, go to the Manage Quota Templates	Storage limit:		
page.	Number of invited users:		
		OK	Cancel

Once you will click on Create, it will create a modern team site like below:



And if you will chose Team Site (Classic Experience), you will be able to see a classic team site like below:



# Few new features in SharePoint Server 2019

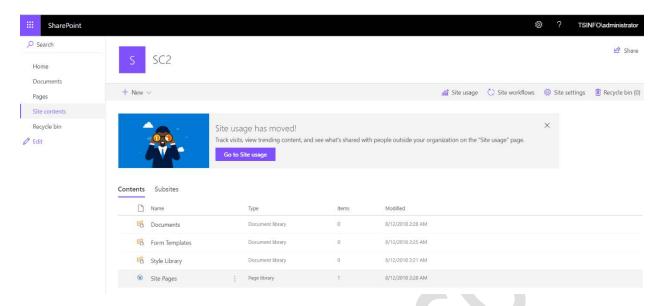
As SharePoint server 2019 built on the same platform of SharePoint online, you will see lots of similar features like SharePoint online.

## Modern User Experiences

Like SharePoint Online, on SharePoint server 2019, we can see the modern user experience. You will have similar look and feel like SharePoint online. Modern user experiences are easy to use, and ensure reliability, performance, and security under real-world pressures of scale and complexity. Read SharePoint Online Modern Experience tutorial.

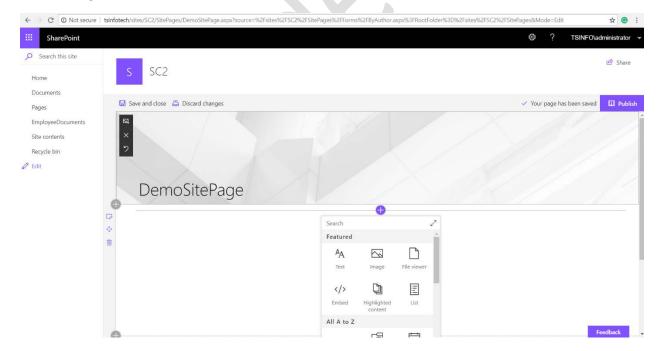
### Modern Team Sites

All most all the organizations use team sites to connect with the team across the organization. In SharePoint server 2019, you will see the modern team site experience, you will have an engaging home page like SharePoint online. Check out a figure taken from the Microsoft Official site. This is how the Site Contents page looks like:



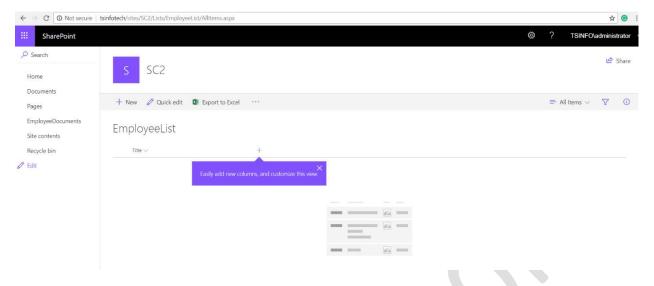
# Modern Site Pages

In SharePoint Server 2019, you will have modern site pages, Modern pages is a great way to share ideas using images, Excel, Word and PowerPoint documents, embed video content, and more. You can create and publish modern pages quickly and easily, and they look great on any device. Modern pages are built with web parts, which you can customize according to your needs. You can add documents, embed videos, images, site activities, Yammer feeds, and more.



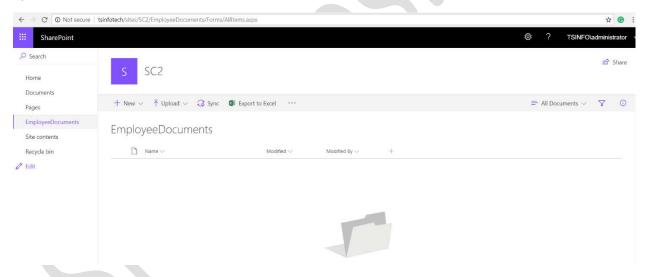
#### Modern List in SharePoint server 2019

In SharePoint server 2019, Microsoft has introduced modern list experience like SharePoint Online for teams to access, share, and collaborate around structured data and to bring information from other systems into SharePoint to support a business process. People can create, curate, and interact with information with a rich set of capabilities that work across devices and browsers.



#### Modern Libraries in SharePoint Server 2019

Similarly, SharePoint server 2019 introduced modern document libraries which provide better user experiences, is faster, more intuitive and responsive. Modern document libraries have an updated user interface that offers an experience similar to OneDrive, so it's more intuitive to create a new folder and upload files in the browser.



# **Communication Sites**

Communication sites have been introduced to SharePoint online and quite popular to provide collaboration features, helps people to work together on files, lists, and libraries. SharePoint server 2019 introduces Communication sites which will allow you to communicate to people throughout your organization with beautiful, dynamic, mobile-ready communication sites and pages that keep everyone informed and engaged.

https://www.spguides.com/create-communication-site-sharepoint-online-powershell/

https://www.spguides.com/sharepoint-online-team-site-vs-communication-site/

#### OneDrive for Business

SharePoint Server 2019 provides improved mobile access to content, people, and applications along with engaging and responsive experiences across devices and screen sizes. It makes file storage and document collaboration more people-centric with new support for the latest generation of sync clients with OneDrive for Business.

#### SharePoint Mobile

SharePoint Server 2019 makes your intranet more accessible on the go, more intelligent, and more personalized, based on your activities across sites, the people you work with, the content you work on and the business processes you drive.

## Large File Support, Character Restrictions, and File/Folder Names

There is a huge change in the file size allowed in SharePoint server 2019, SharePoint server 2019 allows you to upload files up to 15 GB.

SharePoint Server 2019 delivers support for a broad array of types and naming conventions to include support for # and % as supported characters in file and folder names across document libraries in SharePoint and OneDrive for Business. This will allow people to create, store, and sync files containing # and % characters whether those characters are used as a prefix or suffix to the file or folder name.

SharePoint Server 2019 increases the URL path length restrictions from 260 Unicode code units to 400.

## Conclusion

The PDF contains below items:

- Introduction to SharePoint Server 2019
- Hardware and Software requirements for SharePoint server 2019
- Prerequisites to SharePoint Server 2019
- SharePoint Server 2019 installation steps
- Create a web application using PowerShell in SharePoint 2019
- Create Site Collection in SharePoint Server 2019
- New Features of SharePoint Server 2019

## Want to Learn SharePoint?

If you want to learn SharePoint and want to become an expert developer in SharePoint? Check out the SharePoint developer training courses. You can get the entire SharePoint developer training course bundle for the discounted price.

https://sharepointsky.teachable.com/p/sharepoint-training-course-bundle/?product\_id=1522804&coupon\_code=BFS46

If you required any kind of SharePoint consulting, training or support contact us at: <a href="mailto:info@tsinfotechnologies.com">info@tsinfotechnologies.com</a> or +91-9916854253