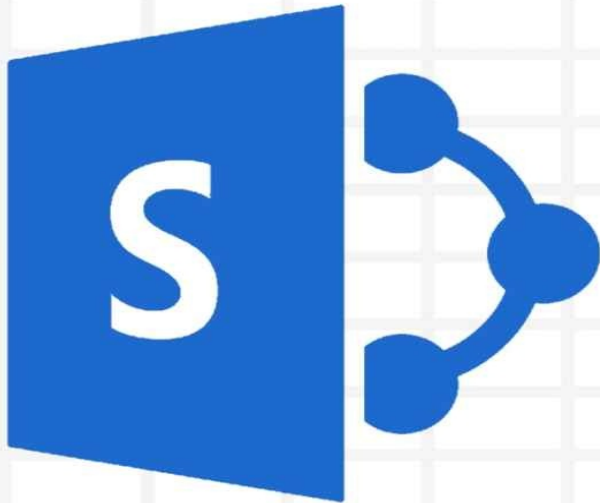


SharePoint Online from Scratch



Peter Kalmström

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By Peter Kalmström

SHAREPOINT ONLINE FROM SCRATCH

Welcome to *SharePoint Online from Scratch*! In this book for SharePoint administrators, content creators and other power users, I will start with the very basics of SharePoint Online, or SharePoint in Office 365, so that anyone can follow the more advanced information later on. I hope you will find *SharePoint Online from Scratch* useful.

I am a Microsoft certified SharePoint expert and trainer, and in my work as a SharePoint consultant and trainer for IT professionals I have come to understand what areas are the most important to SharePoint power users. The book focuses on those areas.

SharePoint Online from Scratch is not intended to be a full description of everything in SharePoint Online. The topic is huge, and Microsoft has a lot of detailed information on their websites. Instead, I want this book to give hands-on instructions on how to practically make use of a SharePoint tenant for an organization, or parts thereof.

The questions I get are most often concrete – “How do I ...?”, or “Can SharePoint ...?” – and I hope this book will give the answers to the most common of them. Therefore, *SharePoint Online from Scratch* has many images and step by step instructions, and to be even clearer I often refer to my online video demonstrations.

Microsoft has developed SharePoint so that it is possible to get substantial benefit without coding experience, and I have made *SharePoint Online from Scratch* as much no-code as possible. None of my instructions and suggestions require knowledge of how to write code, but in a few cases, I have given examples of code that you can use.

Even if *SharePoint Online from Scratch* primarily is a handbook, explanations on how SharePoint works are mixed into the instructions. I hope they will give you a good understanding and help you further explore SharePoint Online.

I often give several suggestions on how something can be done, so that you can choose the method that suits you or your organization. When I give recommendations, they are mainly based on user friendliness and scalability. Your SharePoint becomes what the users make of it, and believe me, it will grow! You and your colleagues will discover more areas where SharePoint is the best option, and Microsoft will continue to give us new features that expand SharePoint further.

The main part of *SharePoint Online from Scratch* is a manual: how to do various things in SharePoint Online and why you should do it. I also give some examples on SharePoint solutions for different information sharing situations, where you can take advantage of what you have learned and see how it can be used in practical applications.

Good luck with your studies!

Peter Kalmström

Microsoft certified SharePoint expert and trainer

CEO and Systems Designer

kalmstrom.com Business Solutions

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1 INTRODUCTION

SharePoint is Microsoft's platform for enterprise content and document management and sharing. It is also a place for social networking within organizations. The cloud edition of SharePoint is called SharePoint Online. It is included in most Office 365 subscriptions, and you need to subscribe to Office 365 to use SharePoint Online. Therefore, this book begins with some general information on how to set up Office 365.

Some practical advice:

In the first chapters, I describe in detail how to perform certain actions. When these steps are included in other descriptions later on, I don't repeat the steps. That would make the book unreasonably long and boring for everyone who has studied the book from the beginning – which I recommend! – and learned the steps. Instead, I link back to those sections when the book becomes more advanced. For example, I only explain once how to open the site settings. Next time the site settings should be opened, I *refer* to that explanation. This way the book can have a reasonable format.

The demo links in this book *refer* to articles in the kalmstrom.com Tips section. Here you can watch video demonstrations on the features I describe. The book does not follow the articles exactly, but many sections have suggestions on suitable articles that can give you a deeper understanding of the features I describe in the book.

To save space, some of the screenshots has been cut horizontally, where SharePoint only shows blank areas.

SharePoint Online is an ever changing platform, so some things will change and no longer work as described in this book. That is part of the charm of the product! I recommend you to not learn by heart how to do things step by step, but instead look at the instructions as a way to understand SharePoint better.

The steps will change, but if you understand why things are done the way they are, you will be able to figure out how to do things described in this book anyway. Even more important is that the understanding I hope you will acquire by studying *SharePoint Online from Scratch* will help you explore SharePoint far beyond the limits of this book!

2 OFFICE 365

In the first chapter, you will learn how to set up and configure Office 365 in general. After a short introduction to Office 365, we will look at how to set up an Office 365 tenant for an organization and how to add users to it. All this is needed before you can start working with SharePoint Online.

The chapter includes the following step by step instructions and descriptions:

- Set up an Office 365 trial
- Sign in to Office 365 and save the login details
- The Office 365 Navigation bar
- Add User Accounts to Office 365, one by one or in a bulk

2.1 OVERVIEW OF OFFICE 365

Office 365 is Microsoft's brand name for a group of software and services. Much of Office 365 is cloud based, but several subscription plans also include desktop versions of common software like Word, Excel, PowerPoint and Outlook.

When you start an Office 365 trial, your organization is assigned a tenant, "a room in the cloud". You can keep the same tenant and all the work you have done when/if you decide to go from a trial to a paid subscription.

2.1.1 Apps

The word "app" is used widely and with different meanings, but in Office 365 an app is generally a web based application that is run in a web browser like Internet Explorer, Google Chrome or Firefox. Office 365 comes with various apps, and when you build your SharePoint platform, you will use templates to create your own apps for various purposes.

2.2 SET UP AN OFFICE 365 TRIAL

Office 365 has several different subscription plans, but I recommend the Office 365 Enterprise E3. The steps below *refer* to that plan, but the process is similar for other plans.

Office 365 is a web-based platform, so you need to start in a web browser.

1. Type the web address Office.com in the address bar.
2. On the Office Online page, click on 'See all Office options'.
3. A home window will open. Click on 'See options for business'.
4. A business window will open. Select the 'See plans & pricing' option.
5. For the Enterprise plan, go to 'See more plans & pricing'.
6. Under the Enterprise tab, you will find the Office 365 Enterprise E3 option.
7. Click on 'Learn more' and go to the free trial.
8. Fill out the entries in Step 1-3.
9. Click on 'Create my account'.

When the account has been created, click on 'You're ready to go'. Now you can use Office 365 for free and try it. When the evaluation period is finished, you need to subscribe to Office 365 to continue using it.

Demo:

<http://www.kalmstrom.com/Tips/Office-365-Course/Setting-up-Office-365.htm>

2.3 SIGN IN TO OFFICE 365

When you have created an account, you need to sign in to Office 365. These are the steps.

1. Open a web browser.
2. Type the web address Office.com in the address bar.
3. In the top right corner of the page, click on the 'Sign in' button. A Sign in wizard will open.
4. Type the e-mail address of the account. (Note that you have to type the correct address, otherwise you will be redirected to the wrong login page.)
5. Click on the 'Next' button.
6. The Office 365 login page will open. Enter your password.

When you have been signed in, the Office 365 home window will open, and you can start working with Office 365.

Demo:

<http://www.kalmstrom.com/Tips/Office-365-Course/Signing-into-Office-365.htm>

2.3.1 Save login information

When you check the box 'Keep me signed in' at login, you must only enter the password and not the user name.

If you are on a secure computer (not shared), which you lock each time you leave it, you can also make Internet Explorer save the password so that you don't have to log in at all.

It is somewhat tricky and does not work 100% of the time, but if you follow these steps, it works most of the time.

1. Go to one of your favorite Office 365 apps, such as your Mail, Calendar or the Sites page.
2. Set that page as your Internet Explorer homepage. This is done by clicking on the Settings gear and selecting Internet Options. Under the General tab, click on the 'Use current' button at Home Page.
3. Under the Security tab, click on Local Intranet and then on the Sites button. Add the entries https://*.microsoftonline.com, https://*.outlook.com and https://*.sharepoint.com. Click Close and OK.
4. Close the browser. Then open it again and log in to Office 365, checking "Keep me signed in".

Demo:

<http://www.kalmstrom.com/Tips/Office-365-Course/Save-password.htm>

2.4 THE OFFICE 365 NAVIGATION BAR

In this section, we will look at how you find your way around Office 365. The navigation is managed in the navigation bar, which is present in most Office 365 apps.

2.4.1 The Left Navigation Bar

You can reach most Office 365 apps by clicking on the App Launcher in the left corner of the Office 365 navigation bar. Click on a tile to go into the corresponding app. Each user will only see icons for the apps he or she has access to. Most users will not see the Admin tile displayed below.



The heading 'Office 365' takes you back to the Office 365 start page.

2.4.1.1 The Office 365 Admin Center

When you click on the Admin tile in the App Launcher, you will be directed to the Office 365 Admin Center, where you can manage the Office 365 tenant.

2.4.2 The Right Navigation Bar

On the right side of the navigation bar on the Office 365 start page, there are other icons.



Here you can find an icon for alerts from Microsoft regarding your Office 365 tenant and subscription.

The gear icon is for your personal Office 365 settings. Here you can for example change the Office 365 theme, set another start page than the default one and select which notifications you want to see in your Office 365 navigation bar.

The language of Office 365 will automatically be set to the same as in the regional settings of your computer, but if you want to change the language of your Office 365, you can do that too in the settings.

In the Office 365 settings, you can also change your login password.

Under the question mark icon, you can find Help, Community, Legal and Privacy links.

The icon far to the right is meant to be replaced with your photo. Click on this icon to add another image. Under this icon, you can reach and add more information about yourself and your account, and here you should sign out when you want to leave Office 365.

Tips:

<http://www.kalmstrom.com/Tips/Office-365-Course/Office-365-Navigation-Bar.htm>

2.5 ADD USERS

Each user of Office 365 has his/her own account in the organization's tenant, and to create such accounts you need to be an Office 365 administrator. The user accounts can be added one by one or in a bulk.

2.5.1 Create a Single User Account

These are the steps to add a single user to Office 365.

1. Open The Office 365 Admin Center.
2. Expand the 'USERS' accordion and go to 'Active users'.
3. In the Active Users Dashboard, click on the plus (+) button. A 'Create new user' account wizard will be displayed.
4. Fill out the details and click on 'Create'.

Now the user account has been created, and a user name and password will be displayed. The login details can also be sent by e-mail to a specified e-mail address. The account can be edited and deleted via the Active Users dashboard.

Tips:

<http://www.kalmstrom.com/Tips/Office-365-Course/Create-Users.htm>

2.5.2 Bulk Add Users

Instead of adding the users one by one, you can add them all at the same time by using a CSV file.

1. Open The Office 365 Admin Center and click on 'Active Users' in the left panel.
2. Click on the 'Bulk add' icon.



3. In the window that opens, select 'Download a blank CSV file'. This file has headings but no other data.
4. Open the CSV file and enter your information.
5. Make sure that your CSV-file actually has commas and not some other delimitator. You can for example save the CSV file and open it in Notepad to check that the delimitator is a comma. Replace any other delimitator with a comma and save the file again.
6. Go back to Office 365 and upload the CSV file.
7. Click on Next and follow the instruction on the screen to create the user accounts.

If you have the user details in an Excel file or another file with a grid, put it side by side with the CSV file by using the Windows key + the right/left arrow key. Then you can copy the information in the Excel file column by column and paste it into the CSV file under suitable headings.

Each user also needs a user name. In Excel you can create all of them with a formula: =lower(B2)&"@DOMAIN", where B2 is the first name of the user and DOMAIN is the

domain of your Office365 tenant.

Demo:

<http://www.kalmstrom.com/Tips/Office-365-Course/Import-Users-CSV.htm>

2.6 SUMMARY

Now you have set up your Office 365 tenant, added users to it and understood how you can navigate among the apps. It is time to start using SharePoint!

3 GET STARTED WITH SHAREPOINT ONLINE

In this chapter we will look at how SharePoint is built and how you can move around among sites and apps. I will also describe the SharePoint permission system, so that users from start can be given access to what they need and information can be hidden from users who don't need it.

In this section I will describe:

- How to share information in SharePoint
- The outline of the SharePoint architecture
- Different kinds of pages and how to create a page
- How to reach the SharePoint admin center
- The difference between sites and site collections and how to create both
- How a SharePoint site collection for a team is built
- Where each user can find his/her sites and how you can follow and promote sites
- The SharePoint navigation and how you can modify it
- Permissions, security groups and permission inheritance
- How to enable Information Rights Management for the tenant, a site or a document library

3.1 SHARING

One of the most important reasons for using SharePoint is that you want to share information within a company or organization. These are the most common sharing methods:

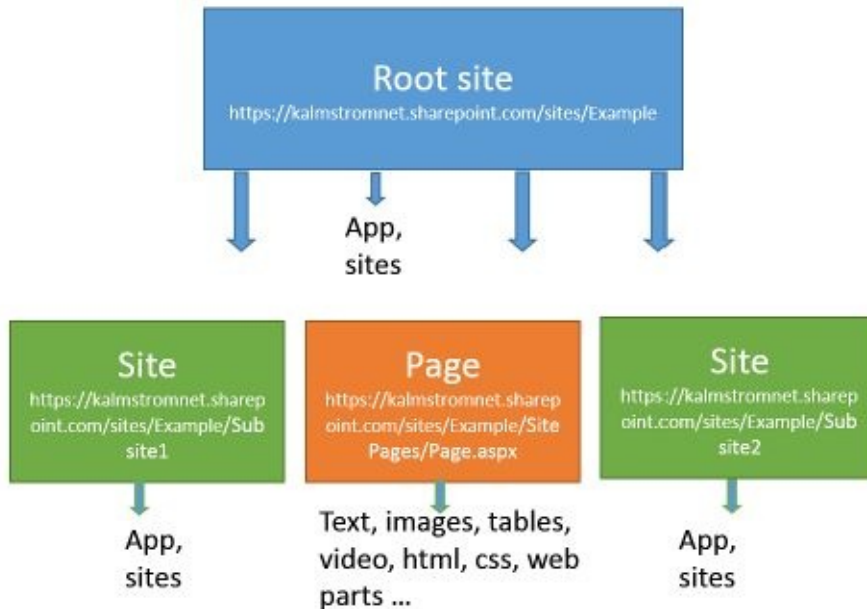
- Create a new document directly in SharePoint, or upload an existing document to the SharePoint site.
- Add info to a SharePoint list, for example a team tasks list or a team calendar.
- Use the Newsfeed on the home page of the SharePoint team site. Create a new entry, like or reply to an existing entry or upload an image or even tag someone.
- Add or edit SharePoint pages. You can fill your pages with text, images, links or videos and insert tables, app parts and web parts.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Share-Info-In-SharePoint.htm>

3.2 ARCHITECTURE

SharePoint is built as a hierarchy, where the highest level is the SharePoint tenant, followed by site collections and the lowest level is the list item. Each site collection can have all the lower levels, and things like permissions, navigation and themes can be inherited from higher to lower levels. We will look at the different levels from the bottom and up, from the content to the container.



3.2.1 Apps

SharePoint Apps are always contained within a site. They can be of three different types:

- Lists. A list is very much like a database or Excel table. It contains items such as appointments in a calendar list, contacts in a contact list or tasks in a tasks list. You can also create your own custom list such as a Cost Center list. Each list has many settings, such as which columns, views and permissions should be used on that list.
- Document libraries. A library can do almost everything that a list can do and it has most of the same settings and features. The main difference is what they contain. Lists contain items, while libraries contain files. *Refer to SharePoint Libraries.*
- Other apps. These can look and behave in a wide range of ways. Your organization can purchase or build them, and they are out of scope for this book. When I talk about apps, I *refer* to lists or libraries and not to other apps.

Lists – included libraries and calendars – use columns to characterize the content with metadata and keywords. The columns can be filtered in various ways, and the lists themselves have views that display the content from different angles. You will find much more information about this in the chapter SharePoint Apps.

3.2.1.1 The 5000 Limit

You should not make your apps too big, because SharePoint does not work well when you have more than 5000 items in an app. Views cannot show more than 5000 items, and libraries with more than 5000 items cannot be synchronized with OneDrive for Business.

3.2.2 Pages

A SharePoint page has a big area in the middle of the SharePoint interface, delimited by the top navigation menu and the Quick Launch. Each page has its own URL.

There are two kinds of pages, application pages and site pages. Application pages are normally used for settings control. They are supplied by Microsoft and cannot be customized at all in SharePoint Online. Site pages can be customized, so that is the kind of pages we will talk most about in this book.

How a site page looks, depends on how you customize the area in the middle and what content you place there. Site pages can contain text, images, video and web parts (which in turn can display app content).

Most pages are stored in a library called Site Pages. By default, SharePoint has two kinds of site pages, wiki pages and web part pages. (*Refer to Publishing Pages* for information about a third kind of page with more layout options.)

3.2.2.1 Wiki Pages

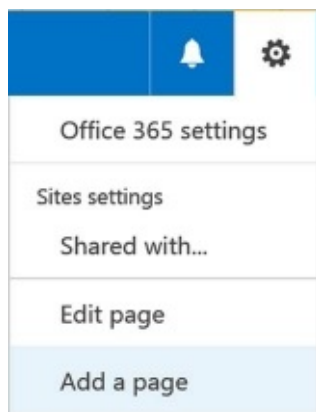
When you create a new page, it will most often be a wiki page. Here you can add text or links or insert images, videos etc. directly into the page or insert various kinds of Web Parts and customize them.

3.2.2.2 Web Part Pages

Web part pages are used for forms and views. They are also meant to be customized, but the customization is not done freely as with the wiki pages. Instead, it is formalized with web part zones that cannot easily be changed.

3.2.2.3 Add a Page

Click on the settings gear and select 'Add a page' to create a new page. A dialog will be displayed where you can give the page a name, and when you click on the Create button the page will be created. It will open in edit mode, so that you can customize it. *Refer to Edit Pages.*



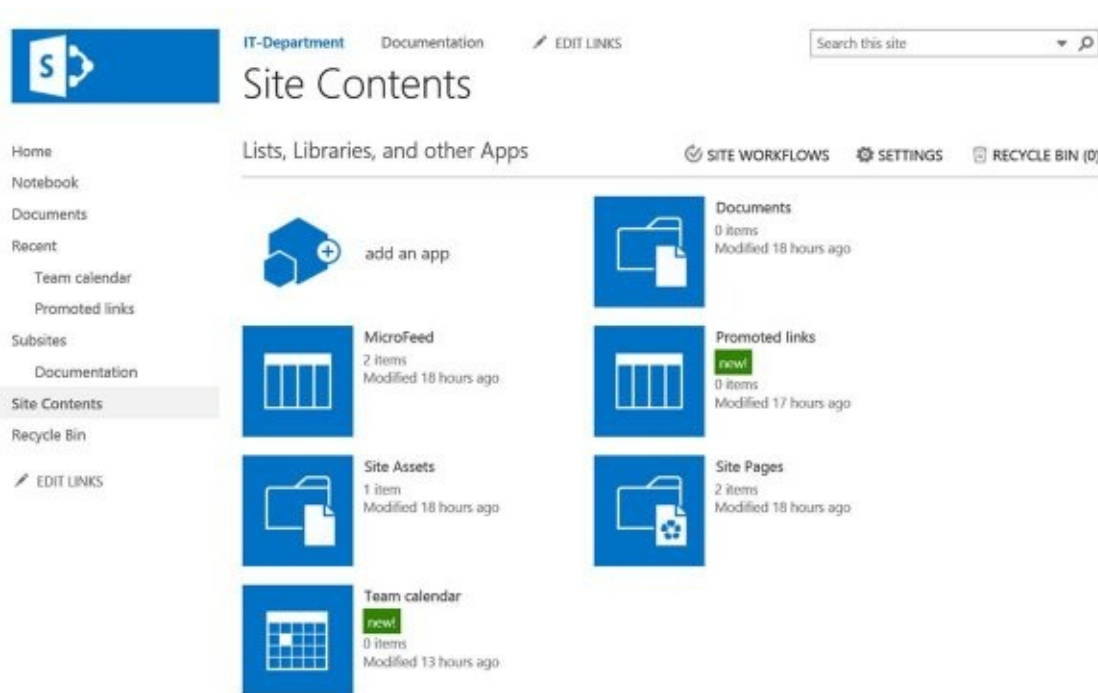
3.2.3 SharePoint Sites

The SharePoint sites are the core of the SharePoint tenant. All content added and all work done in SharePoint is done within the context of a site. A site can contain only two things:

apps and subsites. Each site also has a huge number of settings that controls how it works and looks.

3.2.3.1 Site Contents

To see all the contents of a site, click on the Site Contents link in the left hand panel, the Quick Launch. A page with icons and links to all content will open. Notice the heading where it says” Lists, Libraries and other Apps”. A site contains three things, remember?



3.2.3.2 Site Settings

You can reach the settings for the site via a settings gear in the Site Contents, *see image above*, and in The Right Navigation Bar.

3.2.3.3 Create a New Site

To create a new SharePoint subsite site, open the Site Contents of any existing site and click on the ‘new subsite’ link. As each site except the root site of a site collection is created from an existing site, every created site except the site collection root site has a parent site.

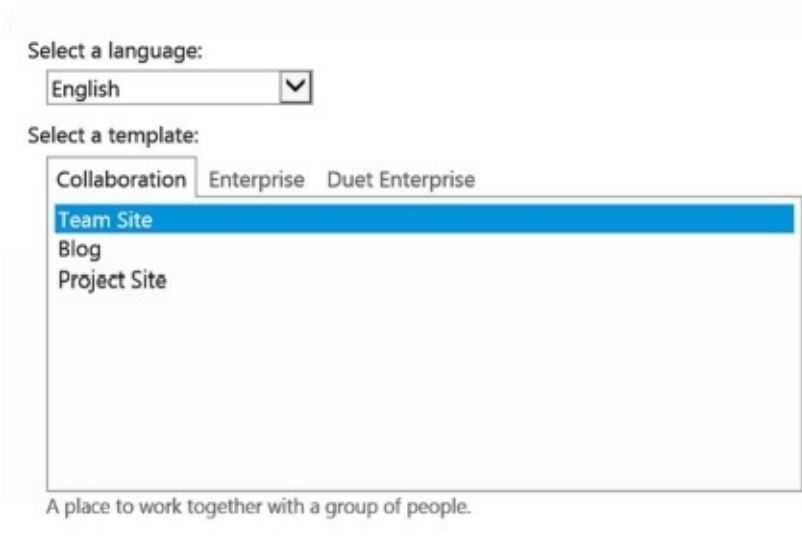
Subsites

[+ new subsite](#)

This site does not have any subsites.

You can also create a new site from The Sites Page, *refer to Create a Subsite*.

When you create a new site, there are different kinds of site templates to select from.



You can set the Permissions to be inherited or unique, and there are choices for the Navigation.

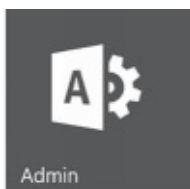
3.2.4 Site Collection

A SharePoint site collection is just what the term says: a collection of sites. Much of SharePoint is built on site collections, even if they don't always are named that way. Sometimes the word "site" actually *refers* to a site collection.

3.2.4.1 The SharePoint Admin Center

New SharePoint site collections are created in the SharePoint Admin Center, and here you can also see and reach the already existing site collections and manage a lot of other settings for the SharePoint tenant.

Click on the Office 365 Admin tile to open The Office 365 Admin Center.



At the bottom of the left panel in the Office 365 Admin Center, you can find the link to the SharePoint Admin Center.



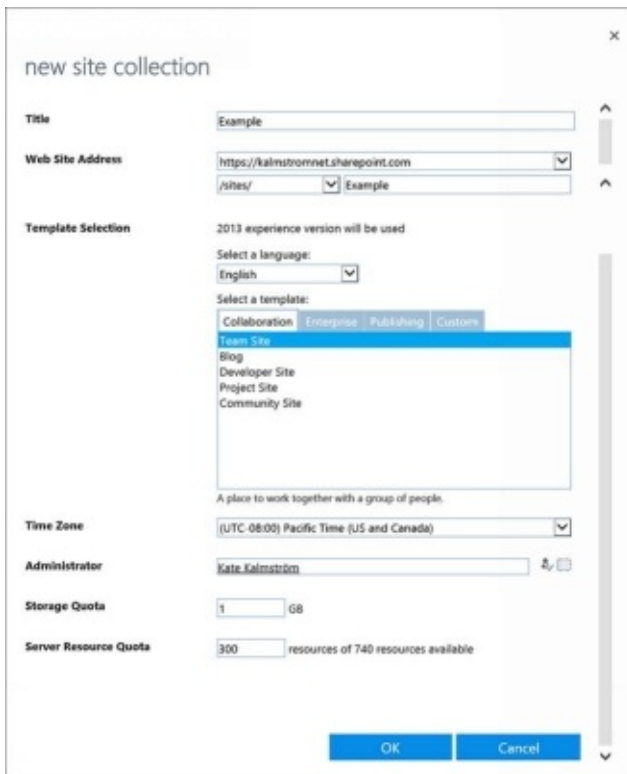
In the SharePoint admin center, you can see all the tenant's site collections. Even the first time you visit the SharePoint admin center, it has some links to site collections that are created automatically when SharePoint is installed.

The link with the same name as your tenant domain + sharepoint.com (for example <https://kalmstromnet.sharepoint.com>) is the default site collection.

Once you have found your way to the SharePoint Admin Center it is a good idea to bookmark it in your web browser, as you will most likely want to come back here often.

3.2.4.2 Create a New Site Collection

1. Click on the New Button in the ribbon and select 'Private Site Collection'. (There used to be the ability to create a public site collection, but that ability is no longer available)
2. A new site collection dialog will open. Give the new site collection a name and make the other settings you prefer. Click OK.



The screenshot shows the 'new site collection' dialog box. It has a title bar with a close button. The main area is divided into sections: 'Title' with a text box containing 'Example'; 'Web Site Address' with a dropdown menu showing 'https://kalmstromnet.sharepoint.com' and a text box containing '/sites/' followed by a dropdown menu showing 'Example'; 'Template Selection' with a note '2013 experience version will be used', a 'Select a language:' dropdown showing 'English', and a 'Select a template:' dropdown showing 'Collaboration', 'Enterprise', 'Publishing', and 'Customs'. Below this is a list of templates: 'Team Site', 'Blog', 'Developer Site', 'Project Site', and 'Community Site'. A description below the list reads 'A place to work together with a group of people.'; 'Time Zone' with a dropdown showing '(UTC-08:00) Pacific Time (US and Canada)'; 'Administrator' with a text box containing 'Kate.Kalmstrom' and a user icon; 'Storage Quota' with a text box containing '1' and 'GB'; and 'Server Resource Quota' with a text box containing '300' and 'resources of 740 resources available'. At the bottom are 'OK' and 'Cancel' buttons.

It might take up to 15 minutes for SharePoint to create the new site collection, but usually it is much quicker.

In the creation process, SharePoint creates a root site for the site collection, with the URL [https://\[tenant\].sharepoint.com/sites/\[site collection name\]](https://[tenant].sharepoint.com/sites/[site collection name]). The site collection created in the image above gets the root site URL <https://kalmstromnet.sharepoint.com/sites/Example/>

SharePoint also creates the default document libraries, among them the Documents, Site Assets and Site Pages libraries. Your choice of site template decides which default apps are included in the top site of your new site collection and which features are enabled by default.

From the root site, you can create new subsites, pages, libraries and lists, and they will all belong to the same site collection and their URLs will all begin in the same way.

By default everything in a site collection also share the same permissions, because if you don't break the inheritance, lower levels, like lists/libraries and items/documents, inherit the same permissions as the higher level. *Refer to Permissions.*

One tenant can have from a few up to 500 000 site collections. I recommend that you have many, instead of gathering too much data in the same site collection.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Create-A-New-Site-Collection.htm>

3.3 TEAM SITE

The team site is intended for work group collaboration, and it is the most often used type of SharePoint site.

3.3.1 *The Default Team Site*

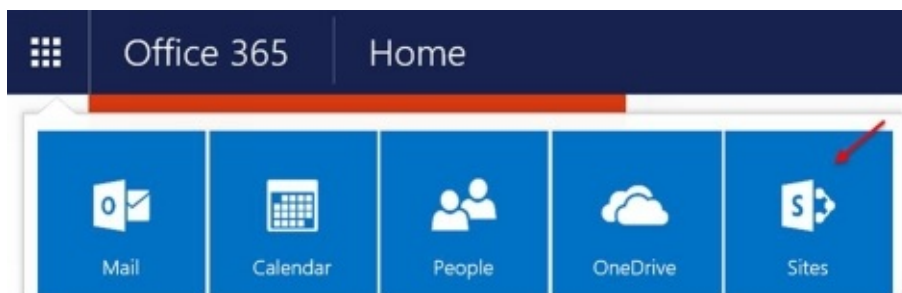
When you subscribe to an Office 365 package where SharePoint is included, some SharePoint site collections are already created. The most important one is the team site collection, which has certain characteristics:

- It is built on the Team Site template.
- All the tenant's users are by default added to the team site.
- All the users are by default added with Edit permission. (Note that this is a very high permission level for everyone to have. Most SharePoint administrators want to change that.)
- External sharing is enabled.
- Scripting is not enabled.

When you Create a New Site Collection in the The SharePoint Admin Center, scripting will be enabled and external sharing will not be enabled by default. No users will be added by default. You can enable external sharing, but there is no way to turn off scripting for new site collections created in this way.

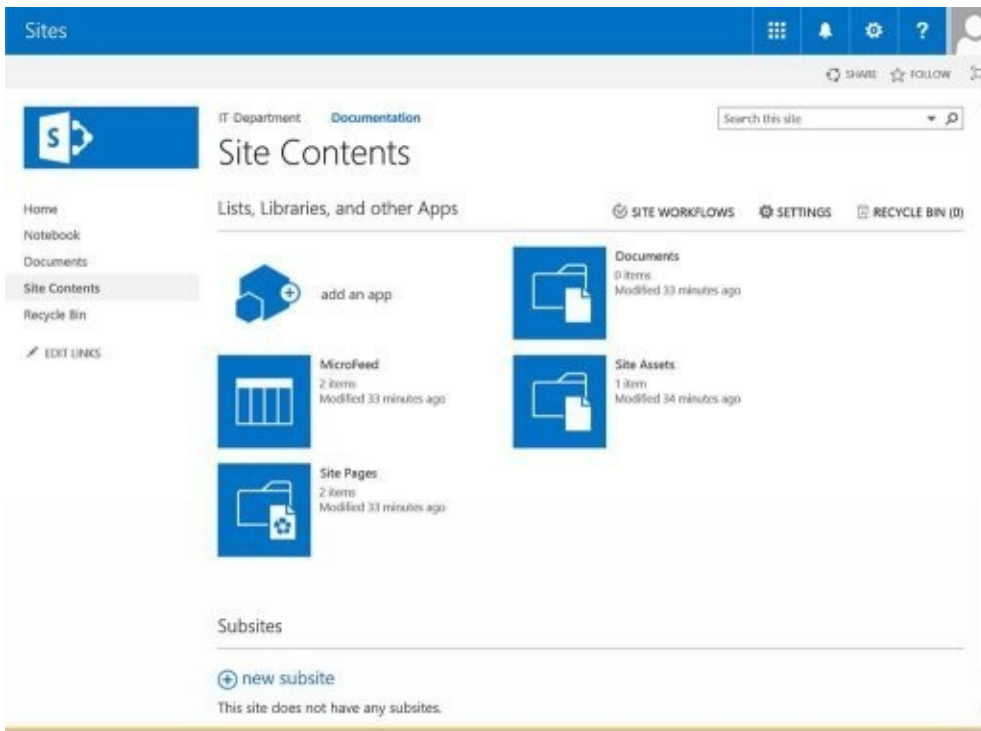
3.3.2 *Reach the Team Site*

All users can reach the root site of the default team site collection from the Sites button in the Office 365 home page or under the App Launcher.



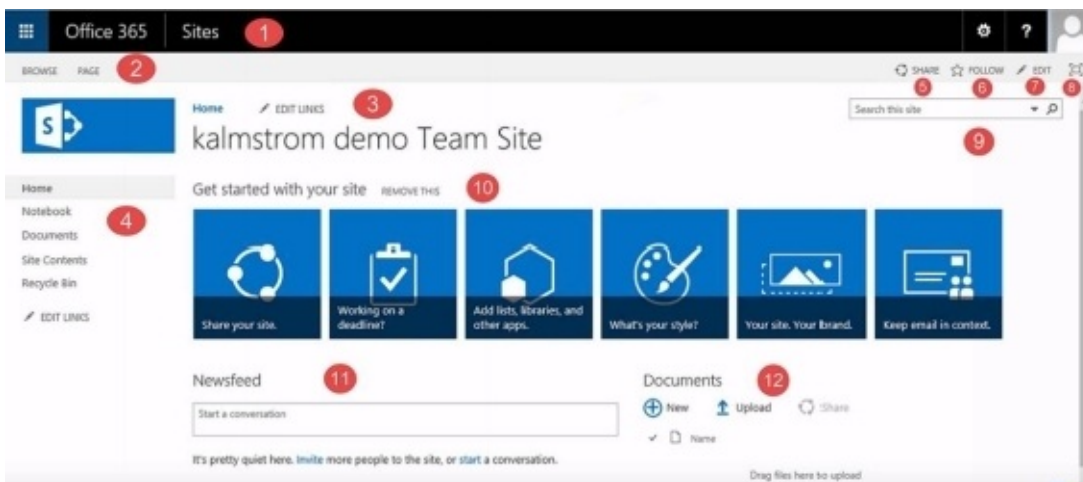
3.3.3 *Default Content*

The root site of the default site collection, and new subsites that you create on the team site template, have the same Site Contents from the beginning. There is a Documents library, a Site Assets library and two pages: the home page and a page with library instructions within the Site Pages library. There is also a Microfeed list, used for the Newsfeed that is by default placed on the home page.

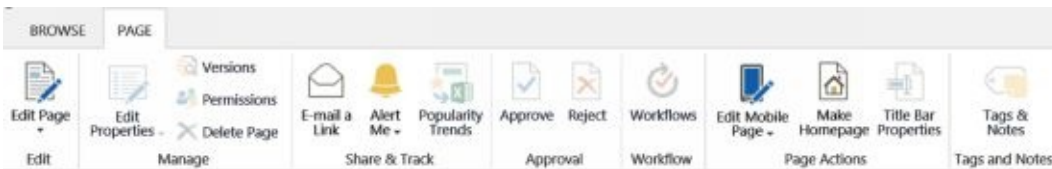


3.3.4 Home Page

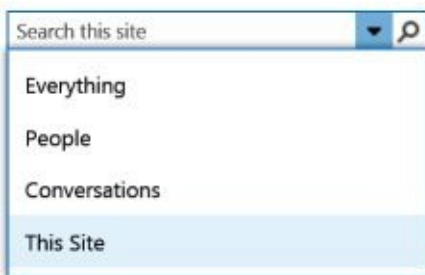
The image below shows the default home page of a SharePoint team site. It is of course intended to be customized to fit each organization, but here we will use it to go through the different parts.



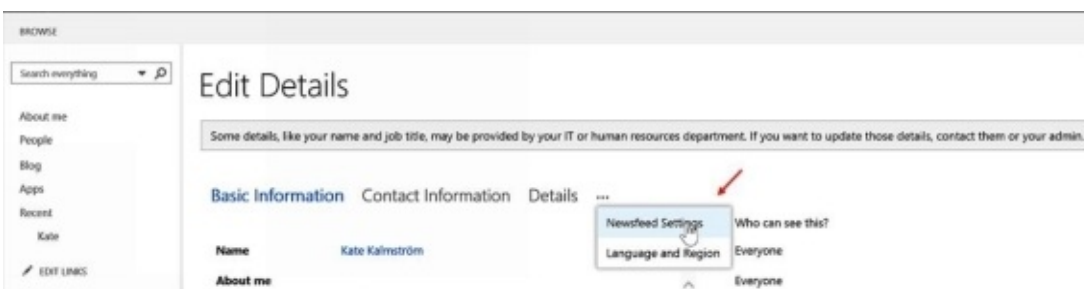
1. The Office 365 section is the same as you find in most Office 365 apps; *refer to* The Office 365 Navigation Bar. There is however an important difference for the SharePoint administrator, because the settings gear has many options for managing and modifying the SharePoint site. Ordinary users with Edit permissions on the site can also add new apps and pages from under that gear.
2. The SharePoint ribbon has various controls under the tabs. As always with the Office ribbon, the tabs and controls within those tabs vary depending on what you have selected and which object you are working with. The image below shows the controls under the PAGE tab.



3. The Top Navigation usually shows links to sites within the same site collection.
4. The Quick Launch usually shows links to apps within the current site.
5. The SHARE command is used to share sites. As the team site by default is shared by all the tenant's user accounts it is not often used, but other sites also have the same SHARE command.
6. Each user can use the FOLLOW command to Follow Sites. The user can find all followed sites in The Sites Page.
7. The EDIT command opens SharePoint Wiki Pages in edit mode, so that you can customize them. When a page is open in edit mode the EDIT command is replaced by a SAVE command.
8. The Focus on Content command shows the page without the navigation parts. Click on the icon again to show the navigation.
9. The Search field is used for Global Search in SharePoint. By default, the current site is searched, but the search can be filtered or you can search in all content of the tenant; *refer to Search*.



10. The Get Started tiles give links that may be important when you are new to SharePoint. These tiles are often removed after a while, when the team site should be customized. They are easy to remove by clicking on REMOVE THIS. You can also create your own link tiles; *refer to Promoted Links*.
11. The Newsfeed is intended for sharing information and ideas among the people who use the team site. Each user can define personal Newsfeed settings in his/her profile. Also *refer to Add Links to a Newsfeed*.



12. SharePoint stores different kinds of files in document libraries, but the content of those libraries can also be displayed in a page by using an app part. The default page of your site (called Home.aspx) contains a web part part that displays the files contained in the

Documents library. Here you can create new files, upload existing ones and search among the files.

Demo:

<http://www.kalmstrom.com/Tips/Office-365-Course/Start-With-SharePoint.htm>

3.3.5 The SharePoint Web Designer Galleries

In the SharePoint Web Designer Galleries, you can manage reusable components in a SharePoint site collection, like content types, site columns and solutions.

When you create a new site manually, the SharePoint Web Designer Galleries will be displayed in the Site settings by default. However, the first, automatically created team site does not show the SharePoint Web Designer Galleries, which might cause problems to SharePoint administrators.

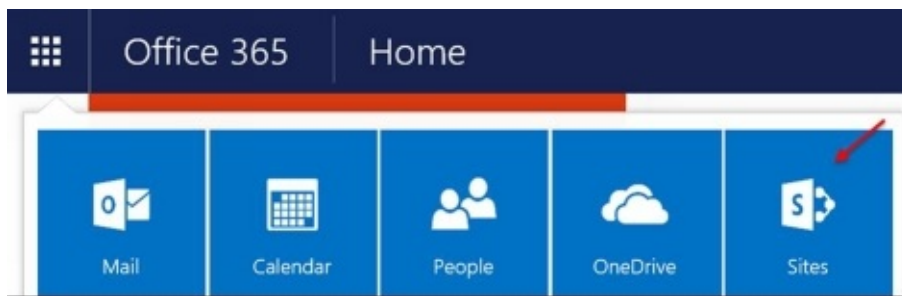
Enable the SharePoint Web Designer Galleries group in the Site settings of the default team site like this:

1. Open The SharePoint Admin Center.
2. In the left panel, click on 'settings'.
3. Scroll down and find the Custom Script section.
4. Enable the radio button 'Allow users to run custom script on self-service created sites'.

Demo:

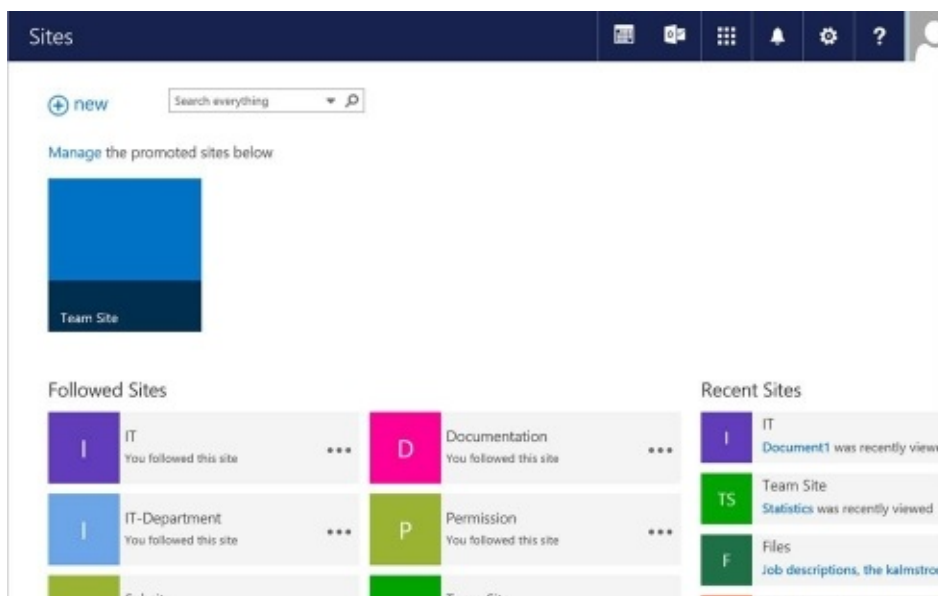
<http://kalmstrom.com/Tips/SharePoint-Online-Course/Allow-Custom-Script-In-SharePoint.htm>

3.4 THE SITES PAGE



When a user clicks on the Sites button in Office 365 he/she is directed to a kind of SharePoint Favorites page. Here each SharePoint user can find links to SharePoint sites he or she has decided to follow, sites promoted by the organization and suggestions for sites to follow (sites followed by colleagues).

The SharePoint admin can manage the promoted sites and create new sites from the Sites page.

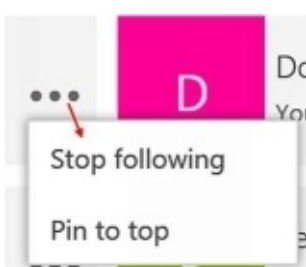


3.4.1 Follow Sites

To follow a site, each user can click on Follow in the top right corner of the screen:



To stop following a site, click on the ellipsis to the right of the site icon in the Sites page and select Stop following.



3.4.2 Promoted Sites

The sites on top of each Sites page are called promoted sites, and they are displayed as tiles that the SharePoint administrator can customize. Click on 'Manage' to add your own tile or customize an existing tile by changing the title, description or background image of the tile. The image must be available in Site Assets or elsewhere in the tenant, and the ideal size is 150x150 pixels.

The team site that is created automatically when SharePoint is set up, is promoted by default. SharePoint administrators can also promote other important sites, or link directly to particular content within a site such as an app, a particular item within an app or even content outside of your SharePoint Online tenant.

1. Copy the link to the site, page etc. that you want to promote.
2. In your Sites page, click on 'Manage' and then on 'Add a promoted site'.
3. Paste the link you copied and add a title, description and background image.
4. Stop the editing.

3.4.3 Create a Subsite

To create a new subsite under the promoted team site, click on +new and write a name for the site.

Demo:

<http://www.kalmstrom.com/Tips/Office-365-Course/Sites-Button-In-Office365.htm>

3.5 NAVIGATION

SharePoint administrators need to understand how the SharePoint navigation is built and can be manipulated. Here I will introduce the default navigation, but I will go more into navigation later.

Most SharePoint pages have two navigation panels. You can add any links to both panels, but I recommend that you use them differently. It is easier for users to learn that apps in the same site is found in the left panel, while other links that they might not use that often are found at the top of the page.

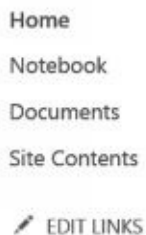
3.5.1 Top Navigation

The navigation banner on top of the page is called the Top or Global Navigation. It usually shows links to other sites within the same site collection, but you can add any links you want there, also links to external content, outside your SharePoint tenant.

A screenshot of the top navigation bar in SharePoint. It features a blue link labeled 'kalmstrom.com demos', followed by two grey links labeled 'Sales' and 'Development'. To the right of these links is a pencil icon followed by the text 'EDIT LINKS'.

3.5.2 Quick Launch

The navigation panel to the left on the page is called the Quick Launch or Current Navigation. It usually shows links to apps or content within the current site.

A screenshot of the Quick Launch navigation panel. It lists four links: 'Home', 'Notebook', 'Documents', and 'Site Contents'. At the bottom of the panel is a pencil icon followed by the text 'EDIT LINKS'.


3.5.3 Inherit links

When you create a new site, it can inherit the top navigation from the parent site. Click on the radio button in the Site Settings to make this happen:

A screenshot of a Site Settings dialog box. The question is 'Use the top link bar from the parent site?'. There are two radio buttons: 'Yes' (which is selected) and 'No'.

3.5.4 Edit Links

Click on EDIT LINKS to open the navigation panels in edit mode. The image below shows the top navigation, but the Quick Launch works in the same way.

A screenshot of the 'EDIT LINKS' interface for the top navigation. It shows a list of links: 'kalmstrom.com demos', 'Sales', and 'Development'. Each link has a small 'X' icon to its right. Below the list is a text box containing 'Drag and drop link here', followed by a 'link' icon, a 'Save' button, and a 'Cancel' button.

- Use the X icon to delete a link.
- Use the eye icon to hide a link.
- Change the order of links by drag and drop.

- Add new links by clicking on the +link icon. Give the new link a display text and paste or write in the path in the dialog that opens.
- Add links to the Quick Launch in edit mode by going into Site Contents and dragging the app you wish to link into the Quick Launch.
- Save the changes when you are done.

You can also edit the navigation from the Site Settings. In the Look and Feel group, there are links to edit pages for both navigation panels, but you cannot do more editing here. You can only add, delete and change the order of links.

Look and Feel
 Title, description, and logo
 Quick launch
 Top link bar ←
 Navigation Elements
 Change the look

To have more navigation options in the site collection; *refer to* Navigation with SharePoint Server Publishing Infrastructure.

3.5.4.1 Navigation hierarchy

You can drag links under each other, to create a hierarchy. When you want a heading, create a link without a path and drag other links under it. In the image below the Department caption is not linked.



If you want to try this, be prepared that you might need to try several times before you get the dropped link to stay under the heading. I have found it especially difficult in Internet Explorer!

It is easier to create headings in the Navigation Settings page, which is available when the SharePoint Server Publishing Infrastructure has been activated for the site collection; *refer to* Create a Mega Menu.

3.5.5 Navigation with SharePoint Server Publishing Infrastructure

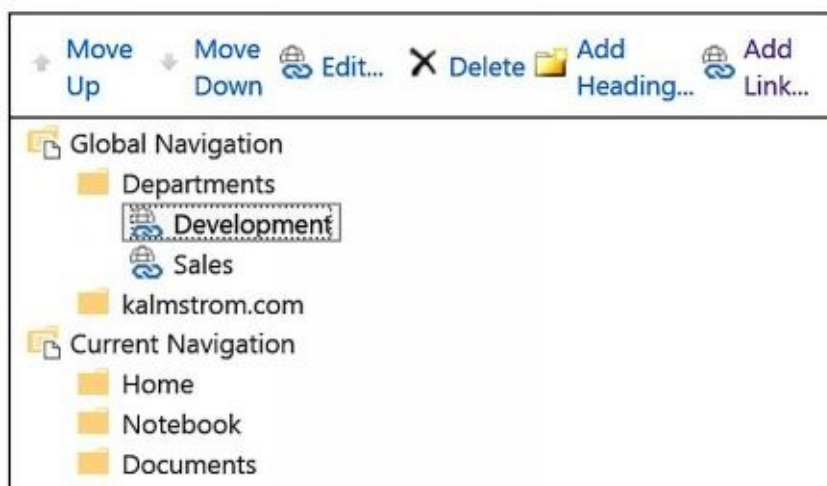
If you enable the SharePoint Server Publishing Infrastructure for the site collection, you will have more navigation options to choose from, for example to open a link in a new window. These are the steps:

1. Open the Site Settings and click on the 'Site collection features' link in the Site Collection Administration group.
2. Scroll down to SharePoint Server Publishing Infrastructure and click on the Activate button.
3. When the Publishing Infrastructure has been activated, the Look and Feel group in the Site settings looks different, and the navigation panels have new names: Global and

Current Navigation.

Look and Feel
Design Manager
Title, description, and logo
Device Channels
Navigation Elements
Change the look
Import Design Package
Navigation ←

4. When you click on the new Navigation link, you will have more navigation options than before you enabled the SharePoint Server Publishing Infrastructure. The box below is included in the new Navigation settings page.



Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Navigation.htm>

Also *refer to* the chapter SharePoint Server Publishing Infrastructure. It will give you much more info about this feature.

Another way to navigate is to use the SharePoint Search; *refer to* Share Navigation, about navigation between site collections.

3.6 PERMISSIONS

SharePoint permissions are very easy to use if you accept the default settings. That can work for a small team, but if you want to have more control over what users can see and do, SharePoint permissions get more complex. However, when you understand how the SharePoint permissions work, you can also take advantage of the benefits they give.

3.6.1 Permission levels

The permission levels are actually groups of connected permissions. For example, if you want to give a user the right to view, add, update and delete list items and documents, but nothing more, you don't have to give these four permissions separately. Instead you can set this user's permission to the pre-defined level 'Contribute'.

You can reach the built-in permission levels at Site Settings > People and Groups > Permission levels > the Permission Levels button in the ribbon.



In the Permission Levels page, you can see what the different levels give users permission to do. It is possible to edit these levels, but I recommend you to not do that. It is safer to create your own Custom Permission Levels. You can also remove levels on this page, but think twice before you do that, and test three times in a non-production site collection!

Permissions · Permission Levels ⓘ

Add a Permission Level | Delete Selected Permission Levels

Permission Level	Description
<input type="checkbox"/> Full Control	Has full control.
<input type="checkbox"/> Design	Can view, add, update, delete, approve, and customize.
<input type="checkbox"/> Edit	Can add, edit and delete lists; can view, add, update and delete list items and documents.
<input type="checkbox"/> Contribute	Can view, add, update, and delete list items and documents.
<input type="checkbox"/> Read	Can view pages and list items and download documents.
<input type="checkbox"/> Limited Access	Can view specific lists, document libraries, list items, folders, or documents when given permissions.
<input type="checkbox"/> View Only	Can view pages, list items, and documents. Document types with server-side file handlers can be viewed in the browser but not downloaded.
<input type="checkbox"/> Approve	Can edit and approve pages, list items, and documents.
<input type="checkbox"/> Manage Hierarchy	Can create sites and edit pages, list items, and documents.
<input type="checkbox"/> Restricted Read	Can view pages and documents, but cannot view historical versions or user permissions.
<input type="checkbox"/> Restricted Interfaces for Translation	Can open lists and folders, and use remote interfaces.

3.6.1.1 Default Permission Level

In SharePoint Online, the default permission level for all users is Edit. This means that

users by default can not only view, add, update and delete list items and documents but also add, edit and delete lists and libraries as well as create, edit and delete columns and public views.

In my opinion, this is a high level, but as long as you are aware of it there is no problem and you can decide if you should keep it or change it.

3.6.1.2 Custom Permission Level

If none of the pre-defined levels fit, you can easily create your own permission level. Click on ‘Add a Permission Level’ in the Permission Levels page, and a new page will open where you can select what the new permission level should allow. One such commonly requested permission level is “Add but not delete”.

3.6.2 Inheritance

SharePoint sites, apps and so on, beneath the site collection root site level, by default inherit the same permissions as the higher level. This means that sites inherit the same permissions as the site collection, the lists inherit the site permissions and the items inherit the list permissions.

- Site collections
 - Sites
 - Lists and Libraries
 - Items

Therefore users who have Edit permission on a site by default also have Edit permission on all lists in that site, and they even have Edit permission on all items in each list – if you don’t Break the Inheritance!

3.6.2.1 Break the Inheritance

It is not difficult to break the inheritance. When you create a new site, you can just select another radio button than the default one. Breaking the inheritance can be done for all levels down to item level, but not on the column level.

- User Permissions:
- Use same permissions as parent site
 - Use unique permissions

When you check the radio button for unique permissions a permissions page is displayed:

People and Groups › Set Up Groups for this Site

Visitors to this Site

Visitors can **read** content in the Web site. Create a group of visitors or re-use an existing SharePoint group.

Create a new group Use an existing group

Permission Visitors

Members of this Site

Members can **contribute** content to the Web site. Create a group of site members or re-use an existing SharePoint group.

Create a new group Use an existing group

Permission Members

Kate Kalmström

Owners of this Site

Owners have **full control** over the Web site. Create a group of owners or re-use an existing SharePoint group.

Create a new group Use an existing group

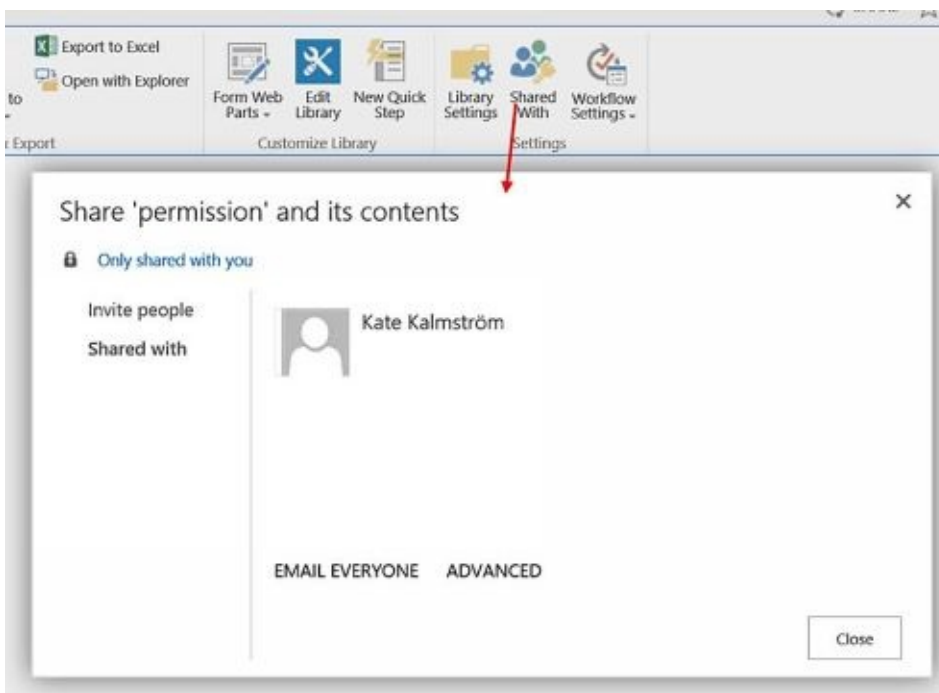
Permission Owners

Kate Kalmström

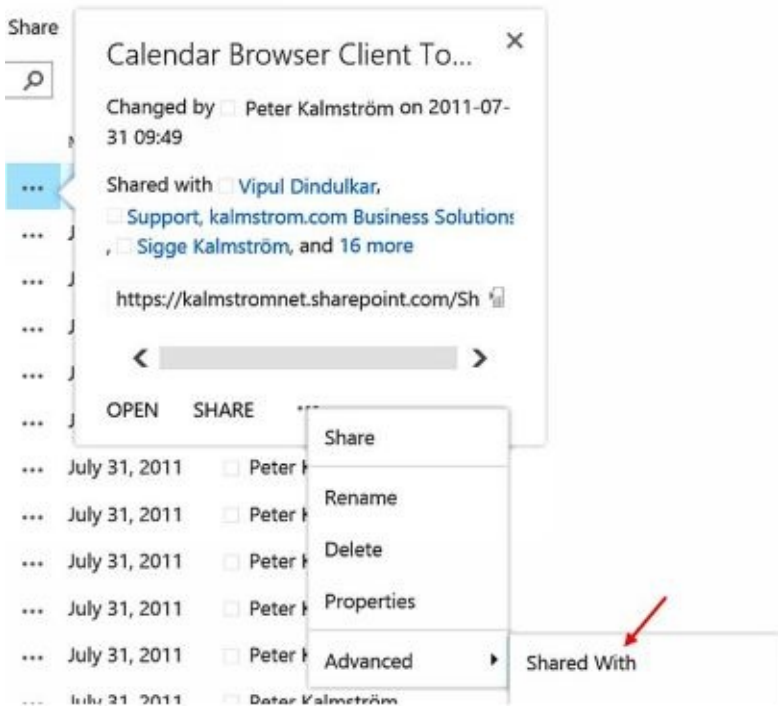
OK

When you create an app or a page there is no such choice. Instead you have to open the app or page and stop the inheritance.

To stop existing permission inheritance, find the Shared With command and open the advanced settings. For libraries, you can find it under the LIBRARY tab in the ribbon.



To stop the inheritance of files and list items, click on the ellipses and find Shared With under Advanced.



In both cases, click on **ADVANCED** to reach the page where you can stop inheriting. Click on **Stop Inheriting Permissions**.



Now the ribbon will change, so that you can grant new permissions.



Click on 'Delete unique permissions' if you want to go back to the inherited permission levels. Note that a page is also a file and an item, so if you have a page that you want to assign unique permissions to, you would follow the same steps as above.

3.6.3 Permission groups

For easier permission management, I recommend you to create Office 365 security groups of people who should have the same permission level. This simplifies management, for example, when you want to give people access to several site collections. It is much quicker to add an Office 365 security group than to add each user separately.

A team site by default has three SharePoint Groups: Owners, Members and Visitors. You

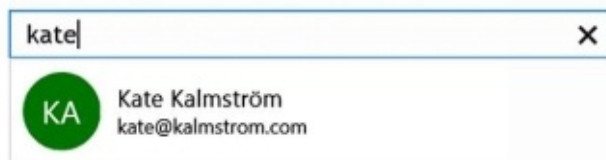
can add new users or Office 365 security groups to these groups, but you can also create your own permission groups.

3.6.3.1 Create a New Permission Group

All user management is done in The Office 365 Admin Center, so it is also here you create Office 365 security groups.

1. Open The Office 365 Admin Center.
2. Click on GROUPS in the left panel.
3. Click on the + sign.
4. Select the Security group radio button. Click on Next.
5. Give the group a name and a description and click on Next.
6. Start writing the name of a person that you want to add to the group, and SharePoint will give you suggestions. Select the suitable suggestion. Continue with the next person.

Search the shared address book for people



7. Click on Add Members.
8. To edit group members or delete the group, select it in the list of groups under the + sign. Now a panel will displayed where you can edit or delete the group.

Security group

Use to assign SharePoint permissions

3 members



EDIT MEMBERS



DELETE GROUP

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Permissions.htm>

3.7 INFORMATION RIGHTS MANAGEMENT

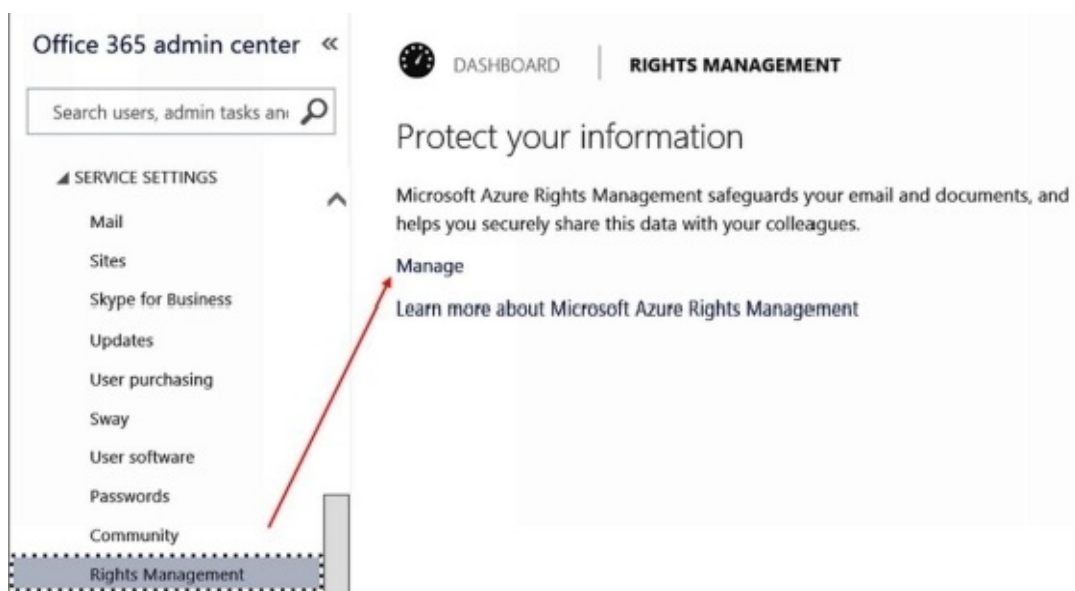
Files and e-mails are often the weakest security points in an organization's security system. When documents without any inside protection are sent as e-mail attachments or shared on memory sticks, they are accessible to aggressors. In the same way e-mails without protection can be forwarded outside the organization and constitute a risk. That is why you need Information Rights Management, or IRM.

If you enable IRM in Office 365, you can limit the actions users will be allowed to take on as well e-mails as files that have been downloaded from SharePoint libraries. The IRM settings can for example allow users to read files but not print or copy them.

IRM is an important Office 365 selling point, because it is much easier to implement IRM on Office 365 than it is for on-premise installations. Here I will explain how to enable basic IRM for Office 365 and how to enable IRM in a SharePoint document library.

3.7.1 Enable Basic Information Rights Management for Office 365

Before you can enable IRM in SharePoint you have to enable it in The Office 365 Admin Center.



1. Open The Office 365 Admin Center.
2. Under SERVICE SETTINGS, click on the 'Rights Management' link.
3. Click on the Manage link.
4. Click on the first Activate button to activate Basic IRM.

rights management

 Rights Management is not activated

Rights Management safeguards your email and documents, and helps you securely share this data with your colleagues.

To enable Rights Management, click activate.

activate

5. Confirm the activation.

3.7.2 Enable Basic Information Rights Management for SharePoint

When IRM has been activated for the tenant, and you can enable IRM for SharePoint.

1. Open The SharePoint Admin Center.
2. Click on the 'settings' link in the left panel.
3. At Information Rights Management (IRM), enable the radio button for 'Use the IRM service specified in your configuration'.

- Use the IRM service specified in your configuration
 Do not use IRM for this tenant

Refresh IRM Settings

4. Click on the Refresh IRM Settings button.

3.7.2.1 Enable Basic Information Rights Management for a Library

When you have enabled IRM for the tenant and for SharePoint, you can also enable IRM for a document library:

1. Open a SharePoint site and a library where you want to use IRM.
2. Open the Library Settings.
3. Click on the Information Rights Management link in the Permissions and Management group.
4. Check the box for permission restriction on download.
5. Enter a title and a description.
6. Click on SHOW OPTIONS.
7. Check the boxes for the restrictions you want to set.

Settings · Information Rights Management Settings

Information Rights Management (IRM)

IRM helps protect sensitive files from being misused or distributed without permission once they have been downloaded from this library.

Restrict permissions on this library on download

Create a permission policy title

Add a permission policy description:

HIDE OPTIONS

Set additional IRM library settings

This section provides additional settings that control the library behavior.

Do not allow users to upload documents that do not support IRM

Stop restricting access to the library at

2/22/2016

Prevent opening documents in the browser for this Document Library

Configure document access rights

This section control the document access rights (for viewers) after the document is downloaded from the library; read only viewing right is the default. Granting the rights below is reducing the bar for accessing the content by unauthorized users.

Allow viewers to print

Allow viewers to run script and screen reader to function on downloaded documents

Allow viewers to write on a copy of the downloaded document

After download, document access rights will expire after these number of days (1 - 365)

Set group protection and credentials interval

Use the settings in this section to control the caching policy of the license the application that opens the document will use and to allow sharing the downloaded document with users that belong to a specified group

Users must verify their credentials using this interval (days)

Allow group protection. Default group:

Enter a name or email address...

OK

Cancel

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Information-Rights-Management.htm>

3.8 SUMMARY

In this chapter, you have learned to find your way around SharePoint and how to create new pages, sites and site collections. You know how a team site is built and how you should set user permissions and information rights. You can also find the SharePoint admin settings and promote sites for users.

4 SHAREPOINT APPS

Within sites, content can be stored and shared in lists, or apps. Document libraries, picture libraries, contact lists and calendars are all examples of apps, and all app types have common features. Note that they are all shared within a group of people, so you should use them for information that should be shared, not for personal data. (That is the main point of SharePoint, after all.)

In this chapter, we will have a look at things that are common for all inbuilt SharePoint apps:

- Benefits
- The settings page
- The local and global search
- How to add an app
- The Standard and Quick Edit view display modes
- How to add and edit items and files
- How to create, edit, filter and sort list columns
- How to create and modify list views and how to create a views landing page
- How to enable versioning and how it works
- How to set alerts
- How to delete items, columns, views and lists, and how to restore what has been deleted
- How to create your own app templates
- How to declare record on items to protect them

I will also describe two app types that are a bit different: the calendar and the survey.

4.1 BENEFITS

A SharePoint app is similar to a database table or spreadsheet. Data is distributed in rows, and each row is known as a list item. Each row, or item, has various columns where you enter data that describes the item – metadata.

SharePoint apps have many benefits:

- SharePoint apps give a good overview over data.
- Use the powerful SharePoint Search to find information.
- The SharePoint Versioning feature lets you see earlier versions of each item and what exactly was changed in each version.
- You can Filter and Sort items to study the information in different ways.
- You can create different Views to permanently filter or display items in a particular way in a SharePoint list.
- With the Totals feature you can summarize values from your items with sum, average etc.
- You can Connect and Export SharePoint Data to Outlook, Excel, Access, Visio and Project.
- You can set Permissions on singular list items, so that only some people can view them.
- You can let SharePoint send you Alerts when list items have been added or changed.

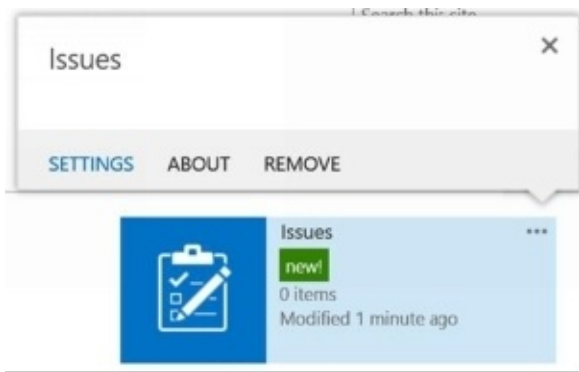
4.2 LIST SETTINGS

Each app has a settings page where you can find many different kinds of settings, including settings for permissions, columns and views.

The List Settings button is found under the LIST tab in the ribbon. In calendars, the tab is called CALENDAR and in libraries, you can find the Library Settings button under the LIBRARY tab.



You can also reach the list settings from the Site Contents. Click on the ellipsis at the list you want to use, and a SETTINGS link will be displayed.



The settings pages are a bit different depending on app type, but all give many options on how to customize the list.



Team calendar - Settings

- Home
- Notebook
- Documents
- Recent
- Team calendar
- Promoted links
- Site Contents
- Recycle Bin
- EDIT LINKS

List Information

Name: Team calendar
Web Address: https://kalmstromnet.sharepoint.com/sites/KalmTMSF2/sales/it/Lists/Team%20calendar/calendar.aspx
Description:

- | | | |
|---|---|--|
| General Settings | Permissions and Management | Communications |
| <ul style="list-style-type: none"> ▶ List name, description and navigation ▶ Versioning settings ▶ Advanced settings ▶ Validation settings ▶ Audience targeting settings ▶ Rating settings ▶ Form settings | <ul style="list-style-type: none"> ▶ Delete this list ▶ Save list as template ▶ Permissions for this list ▶ Workflow Settings ▶ Generate file plan report ▶ Enterprise Metadata and Keywords Settings ▶ Information management policy settings | <ul style="list-style-type: none"> ▶ RSS settings |

Content Types

This list is configured to allow multiple content types. The content types specify the information you want to display about an item, in addition to its policies, workflows, or other behavior. The following content types are currently available in this list:

Content Type	Visible on New button	Default Content Type
Event	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- ▶ [Add from existing site content types](#)
- ▶ [Change new button order and default content type](#)

Columns

A column stores information about each item in the list. Because this list allows multiple content types, some column settings, such as whether information is required or optional for a column, are now specified by the content type of the item. The following columns are currently available in this list:

Column (click to edit)	Type	Used in
Attendees	Person or Group	
Category	Choice	Event
Check Double Booking	Check Double Booking	
Created	Date and Time	
Description	Multiple lines of text	Event
End Time	Date and Time	Event
Free/Busy	Free/Busy	
Location	Single line of text	Event
Modified	Date and Time	
Resources	Resources	
Start Time	Date and Time	Event
Title	Single line of text	Event
Created By	Person or Group	
Modified By	Person or Group	

- ▶ [Create column](#)
- ▶ [Add from existing site columns](#)
- ▶ [Indexed columns](#)

Views

A view of a list allows you to see a particular selection of items or to see the items sorted in a particular order. Views currently configured for this list:

View (click to edit)	Show In	Default View	Mobile View	Default Mobile View
All Events	All		<input checked="" type="checkbox"/>	
Calendar	All	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Current Events	All		<input checked="" type="checkbox"/>	

- ▶ [Create view](#)

4.3 SEARCH

SharePoint gives several ways to search among all or part of the content in site collections, sites or lists. Here we will look at the two search fields.

SharePoint lists and libraries have two different Search fields, for local and global search. The calendar and survey lists only have the global search. When you use the SharePoint Search, the results are trimmed by permissions. Therefore each user will only see results that he or she is allowed to open.

4.3.1 Local Search

The local search field is present in lists and libraries. When you enter something in the local search field and press Enter, SharePoint searches the current list or library.



4.3.2 Global Search

The global search field, at the top right of the screen, is intended to always be visible wherever you are in SharePoint, whether it is a page or a particular app. When you enter something in the global search field, SharePoint by default searches the current site. However, the global search gives more options.



When you use the global search with the options Everything, People and Conversations, the search engine goes through the whole SharePoint tenant, and the results are shown in a Search Center page for the tenant. By default, the Search Center has the URL `<host_name>/search/`.

When you use the global search with the default option, This Site, the search results will be shown on a search results page for the current site.

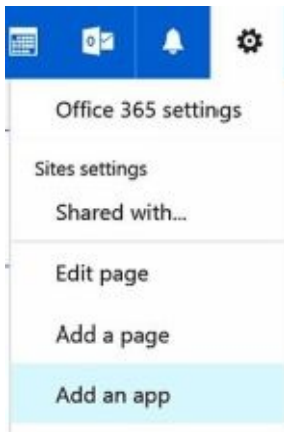
Learn more on how you can take advantage of the SharePoint Search in the Enhance the SharePoint Search section.

4.4 ADD AN APP

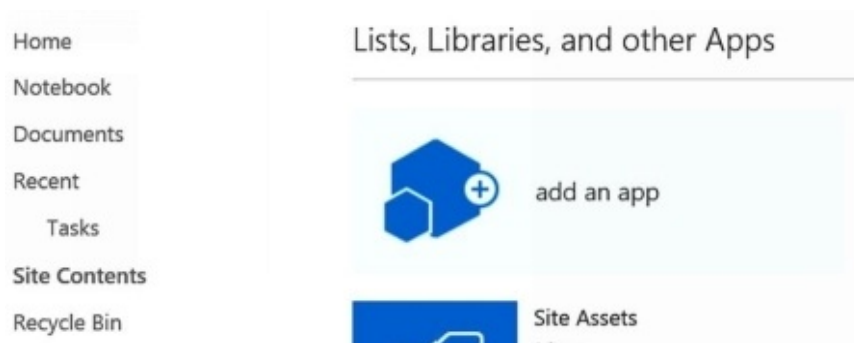
Use the 'add an app' command when you want to create a new app. SharePoint Online offers many templates that you can base a new app on, but you can also create your own templates; *refer* to Save the List as a Template.

Each new app will be placed inside the SharePoint site where you create it.

1. Open the settings gear and select Add an app.



You can also open the Site Contents library from the Quick Launch or Settings gear and click on 'add an app'.



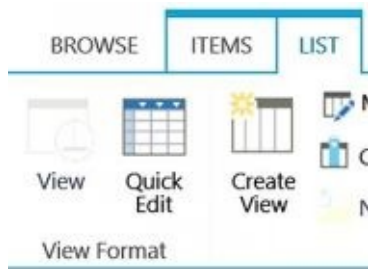
3. Find the list app that is most similar to the list you want to create, or select the Custom List. Click on the icon to create the new app.
4. Give the list a name and click on Create. If you click on the Advanced Options link, you will reach a few more settings.

4.5 VIEW DISPLAY MODES

Lists and libraries can be displayed in Standard or Quick Edit mode. The view display mode is changed under the LIST or LIBRARY tab. As the View button is greyed out on the image below, we can understand that this screenshot is taken from a list in Standard view mode.

The Quick Edit button is greyed out when the list is shown in Quick Edit mode or when it is not possible to switch to the Edit more for some other reason.

Calendars have no edit option in the calendar views, but you can create new Datasheet/Edit views in a calendar list too.

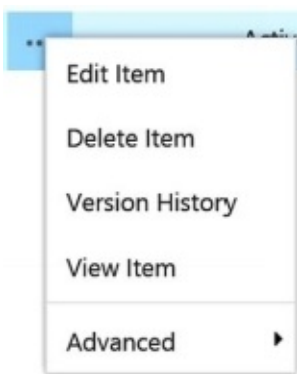


4.5.1 Standard

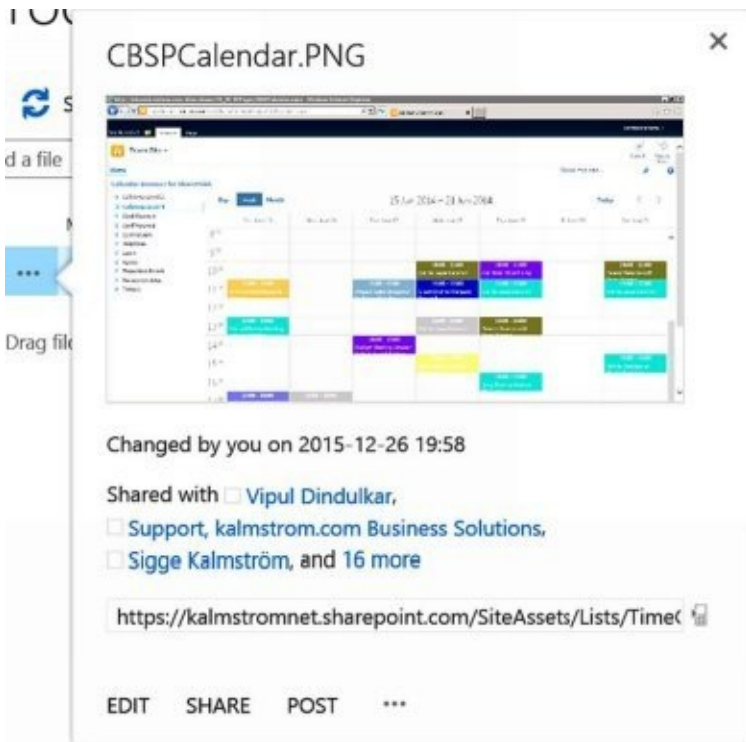
The Standard view display mode has a button for creating new items.



Each item has an ellipsis (...) and if you click on it, you can see options on what to do with the item. In lists, the dropdown is displayed when you either left or right click on the ellipsis.



In libraries, the option dropdown is displayed at right click. If you left click on the ellipsis, you will see information about the file.



The information window also has an ellipsis, which give the same options dropdown as left click on the ellipsis to the right of the file name.

4.5.2 Quick Edit

When an app is displayed in the Quick Edit mode it looks like a spreadsheet, and you can edit directly in the cells and add new rows and List Columns. Your changes are saved when you move to the next row.

The Quick Edit, or Datasheet, view is very popular and powerful for all who have knowledge of working in Excel lists. Copy and paste as well as some fill commands work in this view.



4.5.2.1 Open the App in Edit Mode

To open an app in edit mode from the Standard view mode, click on the Quick Edit button under the ribbon LIST/LIBRARY tab.

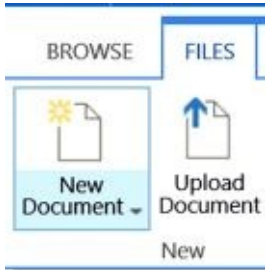
In lists, you can also click on the 'edit' link to the right of the new item link.



4.6 ADD AN ITEM

There are several ways to create a new item in an app, depending on what kind of app it is and what the view display mode you are using.

All kinds of apps and display modes have a New button in the left corner of the ITEMS/FILES/EVENTS tab.



4.6.1 New List Item

New list items can be created in two more ways, depending on view display mode.

4.6.1.1 New List Item in Standard Mode

Lists have a '+new item' link at the top. Click on it to open the new item form.



4.6.1.2 New List Item in Quick Edit Mode

Lists in edit mode have a blank row at the bottom, where you can enter or select data for each column.

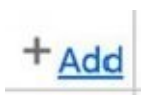
		Testing environment on VM. ...	Russian

4.6.2 New Library File

New files can be created in document libraries, and files that already exist somewhere else can be uploaded to libraries; *refer to* Add Content to Document Libraries.

4.6.3 New Calendar Event

New calendar events are created from the '+ Add' link that is displayed when you hover the mouse cursor over a calendar date in the Month view or over an hour section in the Week and Day views.



4.7 EDIT ITEM

When list items and calendar events are created, the info is added in a form. To edit these forms you just open them again. Use the Edit Item/Edit Event button under the ITEMS/EVENTS tab in the ribbon or in the open item/event to open the form in edit mode.

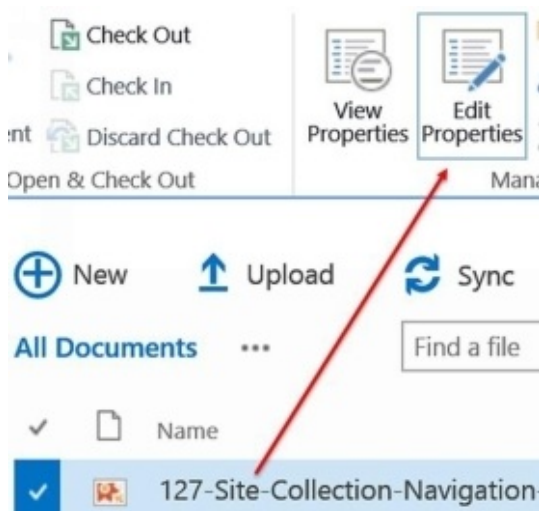


For list items, you can also right click on the ellipsis at the item you want to edit and select Properties, or open the whole list in edit mode and change cell values.

4.7.1 Edit File Properties

Library documents have a properties form for metadata, and to add metadata to files you must by default open the form and enter the values. In the Content Types section, I describe how you can make it easy for users to fill out the metadata right in the document.

To reach the properties dialog, select the file and click on Edit Properties under the ribbon FILES tab.



You can also right click on the ellipsis at the file and select Properties.

4.8 COLUMNS

The information in each list item is kept in different kinds of columns. There are many types of columns, and they work in different ways. The default column type is Single line of text, but when you create or edit a column, you can select other options:

The type of information in this column is:

- Single line of text
- Multiple lines of text
- Choice (menu to choose from)
- Number (1, 1.0, 100)
- Currency (\$, ¥, €)
- Date and Time
- Lookup (information already on this site)
- Yes/No (check box)
- Person or Group
- Hyperlink or Picture
- Calculated (calculation based on other columns)
- Task Outcome
- External Data
- Managed Metadata

The columns are generally the same for each item in the list (unless you use several content types; *refer to* Create a Content Type Form), even if each column does not have to be filled out for each item.

When you use the list item form to enter the data, the columns are displayed as fields. Therefore SharePoint list columns are also called fields. The information in the list columns is often *referred to* as metadata.

4.8.1 Create a Column

You can add new columns to your lists, but when you do that, you should be aware that there are different kinds of columns: site columns and list columns. Both can be added from the List Settings. Under the names of the existing columns, there are three choices for adding a new list column:

- Create column
- Add from existing site columns
- Indexed columns

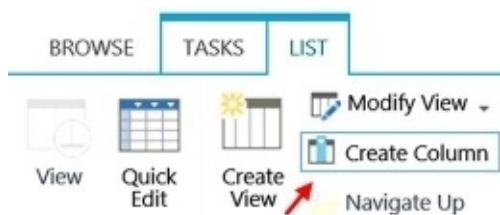
I recommend you to use site columns as much as possible. Indexed columns can be valuable for very large lists, with more than 5000 items, but I advise you to instead archive items or split lists and don't let them grow that big.

4.8.1.1 List Columns

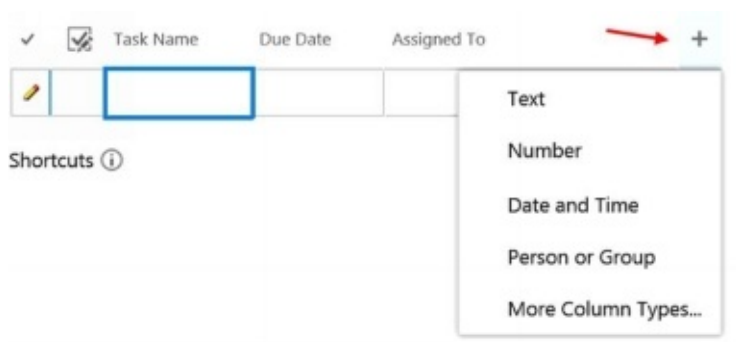
The first option in the settings, Create column, opens a Create Column dialog, where you can create a list column that is only available for the current list. Give the column a name and select column type. Then you will have different options depending on what list type you selected.

List columns can also be created in two other ways:

1. With the Create column button under the LIST/LIBRARY/CALENDAR tab. It will take you directly to the Create Column dialog.



2. Open the list in Quick Edit mode and click on the plus sign. You can select the most common column types right away, but if you select More Column Types, you will be directed to the Create Column page.



Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Categorization-Columns.htm>

4.8.1.2 Site Columns

A site column is a reusable column that you can assign to multiple apps in a site collection. Site columns are useful to establish consistency across lists and libraries.

You can use the settings for a site column in multiple lists and libraries, so that you don't have to recreate them each time. For example, if you define a site column named Consultants, users can add that column to other apps, and it will be the same in the whole site collection or even the whole tenant.

Site columns are always used in the reusable sets of columns and settings called Content Types.

When you select the second option for adding a column in the list settings, Add from existing site columns, you will have many different columns to select from.

Settings > Add Columns from Site Columns ⓘ

Select Columns

Select which site columns to add to this list.

Select site columns from:
All Groups

Available site columns:

- Active
- Actual Work
- Address
- Aliases
- Anniversary
- Append-Only Comments
- Assistant's Name
- Assistant's Phone
- Author
- Description: None

Columns to add:

Add >

< Remove

Group: Document and Record Management Columns

Options

- Add to all content types
- Add to default view

OK Cancel

Microsoft gives a huge number of built-in site columns, but you can also add your own. This is done in the Site Settings > Site columns:

- Web Designer Galleries
- Site columns
- Site content types
- Master pages
- Composed looks

When you open the Site columns page and click on the Create button, you will find the same kind of choices as when you create a list column.

4.8.2 Edit the Column

To edit the properties of a column, open the List Settings and find the Column group. Click on the column you want to edit and the Edit Column page for that column will open. Sometimes you can switch between different column types.

For example, you can switch from a single line of text to a choice column type, but not to a Person or Group-column type. Also refer to Workflow that Switches Content Type.

Site Columns can also be edited at Site Settings > Site columns.

4.8.3 Filter and Sort

SharePoint list and library items can be filtered by the various column values they contain. You can also combine filtering of several columns. In general, the list filtering works in the same way as in Microsoft Excel and Access.

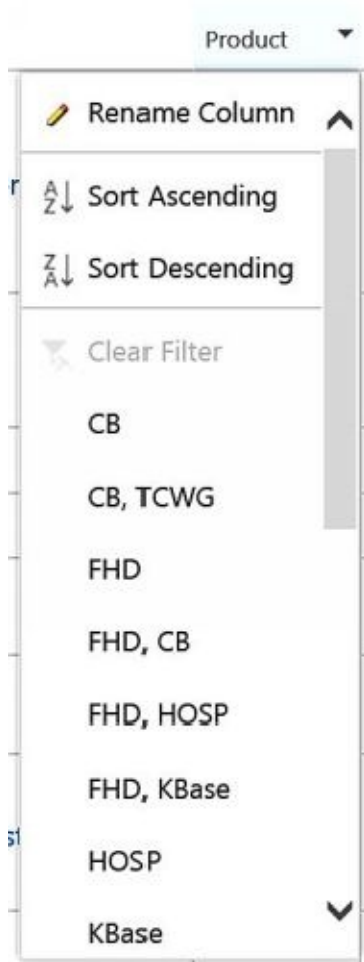
The filter is dynamically added to the URL, so you can link directly to a specific filter option. You can see the filter option at the end of the URL. For example,

“FilterField1%3DCountry-FilterValue1%3DCanada” at the end of a URL shows that the Country column is filtered to only show items with the value Canada in that column.

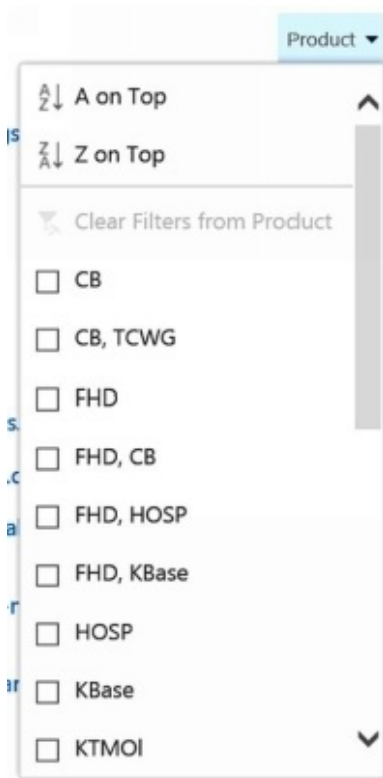
Users who don't have permission to create views, which give a permanent filter, can thus send a link to a filtered version of a list or library.

The column values can also be sorted ascending or descending.

The image below shows a Product column in Quick Edit mode. Here you can select one of the values and sort the column by it. Clear Filter will be active when the column is filtered.



In the Standard mode, you can filter by more than one value.



Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Categorization-Column-Filtering.htm>

Learn more about columns:

Columns and Metadata

Rate files in document libraries

Enterprise Keywords

Required Column Values

Default column values

Term Store

Add Columns for Date, Choice and Currency

4.9 VIEWS

All lists can show the information in different views. A list view is a permanent filter, as opposed to a filtered column. Each view is a separate .aspx page that can be linked to, opened in a new tab, customized and so on.

The default view, created by SharePoint, is called “All Items” in lists, “All Documents” in libraries and “All Events” in calendars. The All Events view can be shown as Day, Week and Month. These are basic views that show all items or files.

There are two kinds of views: personal and public. The personal view is only shown to the person who creates the view, while public views are shown to all users. The public view is the default and the one we are *referring* to here below.

You can see a maximum of three views above the items in a list or library. The rest are hidden under the ellipsis, where you also can find the links to modify the view or create a new view.



I recommend you to create new views and arrange data in ways that suit your organization, and when doing this you should combine meaningful views with the use of columns for relevant metadata. This way the information can be sliced and diced in many ways, and your SharePoint apps will be very informative.

When you have many views for a list or library, you can create a Views Landing Page.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/View-Intro.htm>

4.9.1 View Options

The choices and options are nearly the same whether you create a totally new view or modify an existing one. Both the Create View page and the Edit View page will give you all the columns, to include/exclude and order, and the possibilities to sort, filter, group and much more. Below we will give some examples on what you can do.

Display	Column Name	Position from Left
<input checked="" type="checkbox"/>	Title (linked to item with edit menu)	1
<input type="checkbox"/>	App Created By	2
<input type="checkbox"/>	App Modified By	3
<input type="checkbox"/>	Attachments	4
<input type="checkbox"/>	Content Type	5
<input type="checkbox"/>	Created	6
<input type="checkbox"/>	Created By	7
<input type="checkbox"/>	Declared Record	8
<input type="checkbox"/>	Edit (link to edit item)	9
<input type="checkbox"/>	Folder Child Count	10
<input type="checkbox"/>	ID	11
<input type="checkbox"/>	Item Child Count	12
<input type="checkbox"/>	Modified	13
<input type="checkbox"/>	Modified By	14
<input type="checkbox"/>	Title	15
<input type="checkbox"/>	Title (linked to item)	16
<input type="checkbox"/>	Type (icon linked to document)	17
<input type="checkbox"/>	Version	18

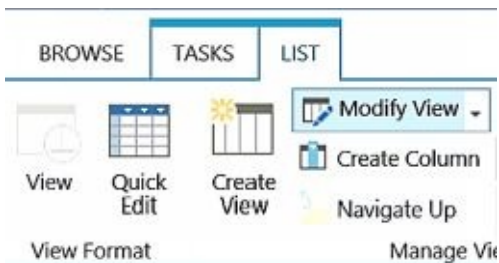
4.9.1.1 Modify the View

These are the ways to start modifying an existing view.

- Click on the ellipsis after the view name(s) and select Modify this View.



- Click on the Modify View button under the LIBRARY/LIST/CALENDAR tab.



- Click on the view name in the list of existing views in the List Settings.

Views

A view of a list allows you

View (click to edit)

All Items

30DayDownloads

Big Four Datasheet

Big430Days

▫ Create view

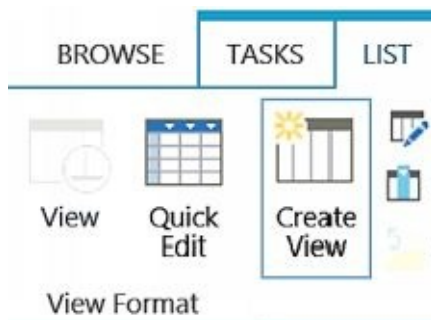
4.9.1.2 Create a View

You can create new views in all SharePoint lists except in the OneDrive for Business default library. Start creating a new view by one of these methods:

- Click on the ellipsis after the view name(s) and select Create View.



- Click on the Create View button under the LIBRARY/LIST/CALENDAR tab.



- Click on the Create view link in the List Settings under the list of existing views.

View (click to edit)

All Documents

▫ Create view

Whichever method you use, you will come to the View Type page, where you can select what kind of list or library to create. (You can also start from an existing view and modify it.)

Settings > View Type ⓘ

Choose a view type



Standard View

View data on a Web page. You can choose from a list of display styles.



Datasheet View

View data in an editable spreadsheet format that is convenient for bulk editing and quick customization.



Calendar View

View data as a daily, weekly, or monthly calendar.



Gantt View

View list items in a Gantt chart to see a graphical representation of how a team's tasks relate over time.



Access View

Start Microsoft Access to create forms and reports that are based on this list.



Custom View in SharePoint Designer

Start SharePoint Designer to create a new view for this list with capabilities such as conditional formatting.

Start from an existing view

▫ All Documents

When you have selected the Standard, Datasheet or Gantt View you will have the View Options shown above. The Calendar View opens a page with different options and the Access and SharePoint Designer Views open Access or SharePoint Designer.

4.9.2 Default View

When you make a view default, all users will reach that view first, whichever way they open the app, and this view name will be shown first in the row of views.

Make a view default by checking the default box in the Create View/Edit View page.

View Name:

Make this the default view
(Applies to public views only)

If you check this box for another view, it will become default instead. If you just uncheck the box in the default view, the All documents or All items view will become default as it was from the beginning.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/View-Default.htm>

4.9.3 Grouped View

To create a view that groups items, start with the Standard view and find the Group By section in the Create View/Edit View page. Click on the plus sign to expand the accordion. Here you can select what columns to group by on a first and second level and how data in them should be displayed.

The Quick Edit mode does not work in grouped views, which might be a reason for not making a grouped view default. Not all types of columns can be used for grouping, so

only columns suitable for grouping are shown in the dropdowns.

Group By

Select up to two columns to determine what type of group and subgroup the items in the view will be displayed in. [Learn about grouping items.](#)

First group by the column:

None

Show groups in ascending order (A, B, C, or 1, 2, 3)

Show groups in descending order (C, B, A, or 3, 2, 1)

Then group by the column:

None

Show groups in ascending order (A, B, C, or 1, 2, 3)

Show groups in descending order (C, B, A, or 3, 2, 1)

By default, show groupings:

Collapsed Expanded

Number of groups to display per page:

30

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/View-Grouped.htm>

4.9.4 Totals

The Totals feature can be used to summarize the values in a column. The SharePoint Totals can also calculate other values for number columns, like average, maximum and minimum. The result of the calculation is shown on top of the column that is calculated. It is however not shown in the Quick Edit mode.

Number ▼

Sum= 40

10

You can also use the Totals feature to count the number of items in columns of all types. Scroll down to Totals in the Create/Edit View page and click on the plus sign. Select the value you want to calculate from the dropdown to the right of the column that should have the Totals.

In the image below, the average of the Amount column should be calculated.

Totals

Select one or more totals to display.

Column Name	
Amount	
Application	
Code	
ID	
Organization	None
Organization:Email domain	None
PurchaseDate (Average supported in datasheet view only)	None

None
Count
Average
Maximum
Minimum
Sum
Std Deviation
Variance
None

None

None

None

Note that the totals feature does not work in the same way on all types of columns. It works best on number and currency columns, somewhat less on text-based columns and not at all on calculated columns.

Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/View-Total.htm>

4.9.5 Views Landing Page

SharePoint lists have the limitation of only displaying three views right on the page. To reach the other views, you have to click on the ellipsis. If you want to give users an overview of all views, you can create a landing page that is displayed when they open the app. You can also add more data than the view links to this page.

The landing page is created in two steps: first create the page with the links and then replace the links to the app, so that they point to the new landing page.

1. Create a Page.
2. When the new page opens, add the view Links to it and save the page.

4.9.5.1 Replace the App Link

When the landing page has been created, you should make sure users get to the landing page when they open the app. That means that you have to change the link in the Quick Launch.

1. Open the Site Contents and then the Site pages library.
3. Open the Quick Launch in edit mode and delete the default app link.
4. Drag the landing page from the Site pages to the place where you want a link to the landing page to appear in the Quick Launch. Save the changes. This way, users will reach the landing page when they click on the app link.

Sometimes the drag and drop does not work. In that case, copy the link to the new landing page and add it as a new link to the Quick Launch. You can also open the Site Settings and click on the navigation option in the Look and Feel group.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Landing-Page.htm>

Also refer to Create an Issues Landing Page, where we expand the landing page with a list

and *to* Landing Page with Chart where we add a dynamic Excel chart to the landing page.
For more about views; *refer to* Choice Filtered Views, Calendar View and Gantt View.

4.10 VERSIONING

The SharePoint Version history feature makes it possible to see and restore earlier versions of items, files and events.

The versions do not have any effect on the number of items in the app, so you don't have to worry that you increase the number of items by enabling version history.

4.10.1 Enable Version History

Version history is enabled by default in SharePoint document libraries, but in other SharePoint apps you have to enable it manually. You can enable and disable versioning in the List Settings >Versioning settings.

General Settings

- List name, description and navigation
- Versioning settings 
- Advanced settings

These are the options:

Create a version each time you edit an item in this list?

Yes No

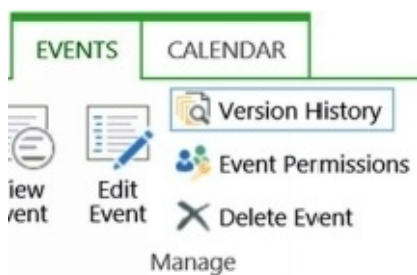
Optionally limit the number of versions to retain:

Keep the following number of versions:

Keep drafts for the following number of approved versions:

4.10.2 See Version History

To see the version history, select the item, file or event and click on the Version History button under the ITEMS/FILES/EVENTS tab.



In lists and libraries, you can also click on the ellipsis and select Version History.



The image below shows a document that has six versions. To open an earlier version, click on the blue marked date and time of the version you want to open.

Delete All Versions

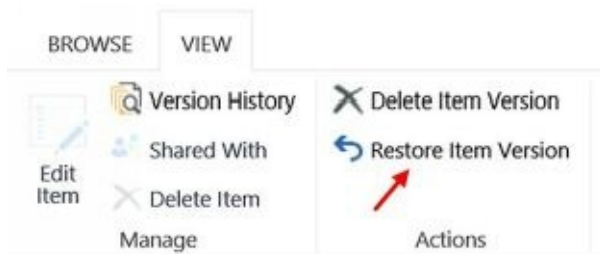
No. ↓	Modified	Modified By
6.0	2016-03-30 08:38	<input type="checkbox"/> Kate Kalmström
	Description	Update the slideshow for the new version
	Comments	It looks fine now. Thanks!
5.0	2016-03-29 14:10	<input type="checkbox"/> Rituka Rimza
	Comments	I added two slides about TimeCard Mobile and one about the Summary web part. Please have a look.
4.0	2016-03-29 11:53	<input type="checkbox"/> Kate Kalmström
	Comments	Yes, you are right. Please add them.
3.0	2016-03-29 11:36	<input type="checkbox"/> Rituka Rimza
	Comments	Done. How about TimeCard Mobile? Shouldn't we have 1-2 slides for the app too?
2.0	2016-03-26 17:35	<input type="checkbox"/> Kate Kalmström
	Task Name	TimeCard for SharePoint Slideshow
	Description	Update the slideshow for the new version
	Start Date	2016-03-26
	Responsible	Rituka
	Project	Other
	Comments	Remember to include one slide with the TimeCard Summary web part.
1.0	2014-11-13 12:40	<input type="checkbox"/> Sales, kalmstrom.com Business Solutions
	Task Name	Slideshow
	Priority	(2) Normal
	Status	Not Started
	Description	Update the slideshow with new images
	Start Date	2014-10-20
	Sequence	0,40625
	Phase	Finished
	Responsible	Kate
	Project	SPAR

4.10.3 Restore an Older Version

When versioning is enabled, you cannot only see older versions of an item. You can also restore the older versions.

4.10.3.1 Restore Item or Event

To restore a list item or calendar event, click on the blue marked date and time of the version you want to restore. It will open, and you can restore it by clicking on 'Restore Item Version'.



4.10.3.2 Restore File

When you open an earlier version of a file in a document library, it opens with a restore button. Click on the Restore button to restore the earlier version.



Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Version-History.htm>

4.10.4 Append Changes to Existing Text

You cannot See Version History when you open an item – you have to first click on the Version History button. If you want to see the history for a multiple lines text column as soon as you open the item, you should enable the feature ‘Append Changes to Existing Text’ for that column. When you do that, all changes are shown as a thread in the field.

The earlier text cannot be changed, but new text is shown above the earlier text in the field. The image below shows the same task item as in the Versioning example above. Here the comments column is set to append changes to existing text, so the changes in the comments field are visible in the open item.

Comments Kate Kalmström (2016-03-30 08:38):

It looks fine now. Thanks!

Rituka Rimza (2016-03-29 14:10):

I added two slides about TimeCard Mobile and one about the Summary web part. Please have a look.

Kate Kalmström (2016-03-29 11:53):

Yes, you are right. Please add them.

Rituka Rimza (2016-03-29 11:36):

Done. How about TimeCard Mobile? Shouldn't we have 1-2 slides for the app too?

Kate Kalmström (2016-03-26 17:35):

Remember to include one slide with the TimeCard Summary web part.

The Append feature is especially useful for discussions and issue tracking. It is not available for all columns, only for multiple lines text columns.

Before you enable 'Append Changes to Existing Text' for a column, you have to Enable Version History for the list.

To enable the Append feature, Edit the Column where you want to append changes.

Append Changes to Existing Text

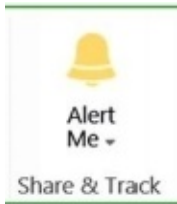
Yes No

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Append-Changes-to-Existing-Text.htm>

4.11 ALERTS

SharePoint apps have an Alert Me button for e-mail notifications on either all items or singular items. These e-mail alerts can be somewhat customized, because you can decide at what time they should be sent and for what changes.



The site collection administrator can set alerts to be sent to other users, and each user can also set his/her own alerts.

It is possible to set alerts for single list items, library documents and calendar events.

1. Select the item and click on the Alert me button under the ITEMS/FILES/EVENTS tab in the ribbon.
2. Change the title if you don't want to use the default: list + item.
3. If you are a site collection administrator, you can add other persons who should have this alert.
4. If you have text messaging service set up, you can choose between having the alert by sms or by e-mail. (This is not possible in all countries.) Otherwise e-mail is the only option.
5. Select at what changes you want to receive alerts.
6. Select when you want to receive alerts.

Only send me alerts when:

- All changes
- New items are added
- Existing items are modified
- Items are deleted

Send me an alert when:

- Anything changes
- Someone else changes a document
- Someone else changes a document created by me
- Someone else changes a document last modified by me

- Send notification immediately
- Send a daily summary
- Send a weekly summary

Time:

Thursday 12:00 AM

7. Click OK. You will now receive an e-mail confirming that your alert has been set up.

You can also set an alert for changes in a whole list, library or calendar.

1. Open the list for which you want to set an alert.
4. Click on the Alert me button under the LIST/LIBRARY/CALENDAR tab in the ribbon.
5. Follow the steps 2-7 above.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Alerts.htm>

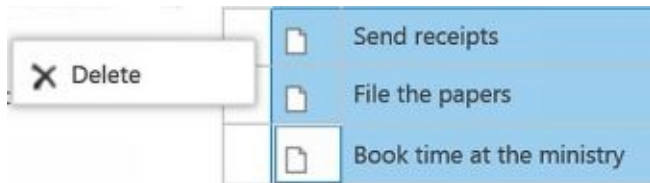
To have customized notifications you should create SharePoint Workflows.

4.12 DELETE

4.12.1 Delete an Item

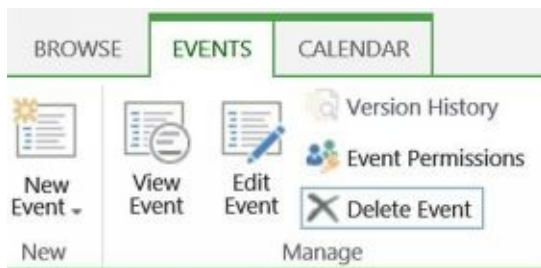
If you want to delete several items or files it is best to use the Quick Edit mode, where you can select several rows at a time:

1. Hold down the Ctrl key and click on the first cell to the left in the items you want to delete.
2. Right click and click on Delete.

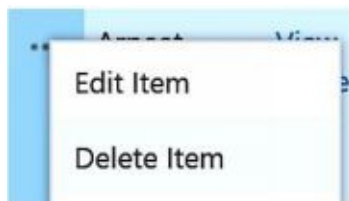


(This is not possible for calendars, as they don't have an edit display mode.)"

To delete a single item, file or event, you can use the Delete option under the ITEMS/FILES/EVENTS tab.



To delete a list item or library file, you can also click on the ellipsis and select the Delete option.



To delete an open list item or calendar event, you can click on the Delete Item button in the item ribbon.



4.12.2 Delete a Column

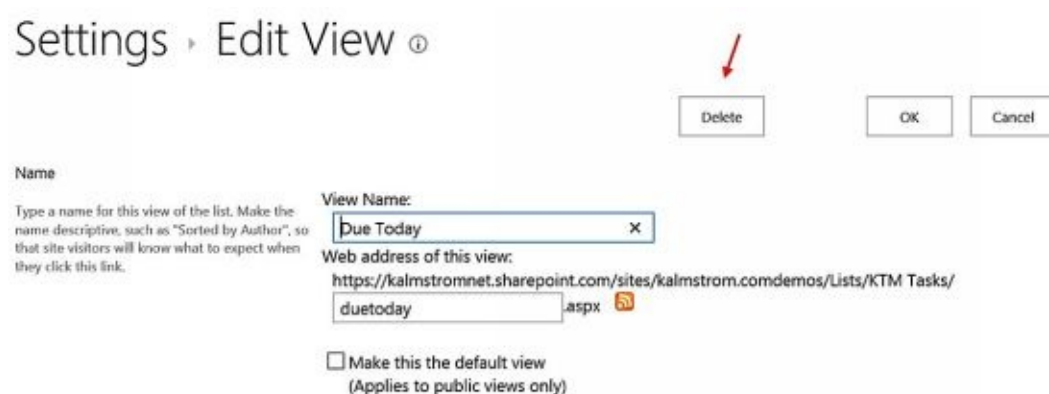
To delete a column, open the List Settings and find the list of columns. Click on the

column you want to delete and then on the Delete button at the bottom of the Edit Column page.

4.12.3 Delete a View

The Delete button for views is found in the Edit View page for views that are not default. You can reach it by the Modify View button.

To reach the Edit View page, you can also open the List Settings and click on the view you want to delete in the Views group.



Note that you cannot delete a Default View. If you want to delete a default view, you must first set another view to default.

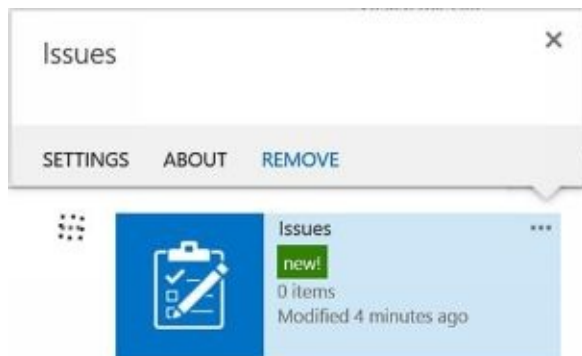
4.12.4 Delete an App

To delete an app, open the List Settings and click on the link 'Delete this list' in the Permissions and Management group.

Permissions and Management

[Delete this list](#)

You can also go into Site Contents and click on the ellipsis at the app you want to delete. Then click on the REMOVE link.



In both cases, you will be asked to confirm that you want to delete the app.

4.12.5 Restore Deleted Content

Deleted content is stored in the recycle bin for 93 days. All users can see and restore

content they have deleted themselves, and the site collection administrator can see and restore all deleted content.

Open the recycle bin from the Quick Launch or the Site Contents.

 RECYCLE BIN (14)

When you open the recycle bin, you can restore selected content or delete it.

Team Site › Recycle Bin ⓘ

 Restore Selection  Delete Selection

4.12.5.1 Second-Stage Bin

Content that is deleted from the recycle bin is not permanently deleted. Instead it is moved to the second-stage recycle bin, where it is kept for another 93 days.

The link to the second-stage bin is found in the recycle bin page, but only the site collection administrator can see it and restore or permanently delete content from the second-stage bin.

Check the [second-stage recycle bin](#).

4.13 SAVE THE APP AS A TEMPLATE

When you want to use a custom app several times you should save it as a template. Custom document libraries can be saved as templates in the same way as lists.

1. In the List Settings, click on the link 'Save list as template' in the Permissions and Management group.
2. Give the template a name and save it.

The template will now be stored as an STP file in the List Template Gallery of the site collection where you created it. To create a new list from the template, Add an App and select the template.

4.13.1 Upload the Template to Another Site Collection

If you want to use an app template in more than one site collection, you can download the template file from the List Template Gallery to your computer and then upload it to the List Template Gallery in the site collection where you want to use it.

This works when you have the same settings, license and activated functions on the site collections.

1. Open the Site Settings of the site collection root site.
2. Click on the 'List templates' link in the Web Designer Galleries group.
3. In the List Template Gallery, click on the STP file you want to download.
4. In the List Template Gallery of the second site collection, click on the upload icon under the FILES tab and upload the STP file.



Before you start using the template in the new site collection, remember to change any default column values set to suit another site collection.

4.14 SHAREPOINT CALENDARS

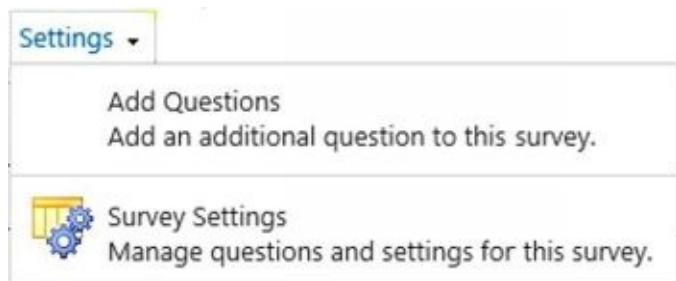
Use a SharePoint team calendar to share event information like holidays, leaves, delivery dates and other information that is of common interest to users who have access to the calendar, for example members of a workgroup.

To create a calendar, Create a New List on the Calendar template. To add an existing calendar to another page; *refer to Add a Calendar to a Page.*

4.15 SURVEY

A survey is a kind of app where you can create questions that other users can answer. You can use surveys for all kinds of questions, from simple lunch meeting setups to advanced questionnaires about work processes.

The survey app does not have a ribbon. Instead the settings are managed from a Settings dropdown.



4.15.1 Create a Survey

A survey is created like other apps, and when it has been created you can add your questions to it. There are several options to choose from depending on what type of response you want to collect: Rating Scale, Number and Choice with a dropdown menu or radio buttons are among the common response types.

1. Add an App – the Survey.
2. Open the new survey.
3. Expand the Settings accordion and select Add Questions.
4. Select a question type and enter choices if necessary.
5. When you have added the first question, click on Next Question to add more questions and repeat the process. Click on Finish when all questions are added.

4.15.1.1 Survey Branching Logic

Some answers need a follow up question while other answers don't, and for that you can use the Branching Logic. Each question has a Branching Logic option, where you can decide which should be the next question depending on the answer.

After you have entered your questions, open the question that should have a Branching Logic. Under Jump To you can select the correct question to come next for those answers that should not have all questions.

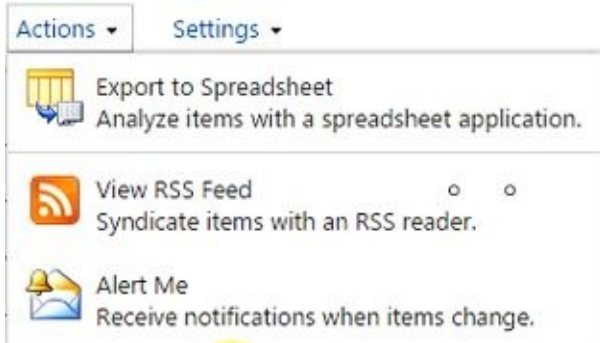
Possible Choices	Jump To
Every day	No Branching
Now and then	No Branching
Never	What should be the name of our next bicycle

4.15.2 Respond to a Survey

When the survey has been setup and a user opens it, there is a Respond link and details about the survey. Click on the link to start answering the questions.

4.15.3 See Survey Results

Once answers to a survey have been submitted, you can see them by clicking on ‘show a graphical summary of the response’ in the Survey dashboard, or by clicking on ‘Export to Spreadsheet’ under Action. All users who can respond to the survey can also see the results of it.

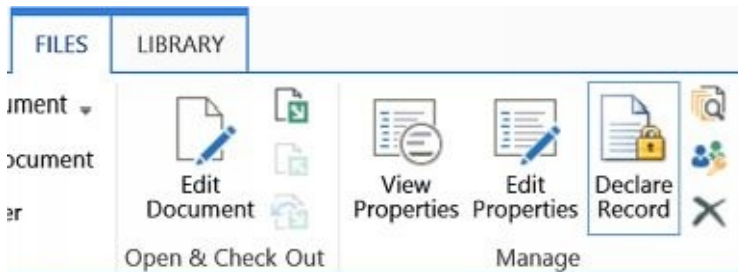


Once you have exported the results to an Excel spreadsheet, you just have to refresh it to have new responses included. From the Excel sheet you can create graphical representations of the survey answers; *refer to Analyze SharePoint List Data in Excel.*

4.16 DECLARE RECORD

When you want to protect a file or a list item, you can declare it “record”. This means that you put certain restrictions on it that are not tied to permissions. Most often you want to protect documents from being edited or deleted when you declare them records.

Declaring record can be done manually on list items and on files in document libraries, or you can build a workflow that declares a record. You must be a list contributor or administrator to manually declare items as records.



When a file with an icon has been declared record, the icon will have a lock.



List items that have been declared record are not marked in any way, but when you try to edit or delete it you will have a message:

This item cannot be updated because it is locked as read-only.

Here I will give the necessary settings for a library that should have the possibility to declare record. The principle is the same for other SharePoint lists.

4.16.1 Activate the In Place Records Management

The first time you set manual records management in a site collection, you have to activate the the In Place Records Management feature and define the restriction settings, which are the same for the whole site collection.

1. Open the Site Settings.
2. Click on the link ‘Site collection features’ in the group Site Collection Administration.
3. Activate In Place Records Management.

When In Place Records Management has been activated, you must define which restrictions should be set on files that are declared records:

1. Open the Site Settings.
2. Click on the link ‘Record declaration settings’ in the group Site Collection Administration.
3. Make the settings you prefer.

- No Additional Restrictions
Records are no more restricted than non-records.
- Block Delete
Records can be edited but not deleted.
- Block Edit and Delete
Records cannot be edited or deleted. Any changes will require a declaration to be revoked.

Manual record declaration in lists and libraries should be:

- Available in all locations by default
- Not available in all locations by default

The declaration of records can be performed by:

- All list contributors and administrators
- Only list administrators
- Only policy actions

Undeclaring a record can be performed by:

- All list contributors and administrators
- Only list administrators
- Only policy actions

4.16.2 Allow Record Declaration for App

As you see in the image from the Record Declaration Settings above, you can decide whether manual records declaration should be available for all lists and libraries. The default option is Not available, and I recommend you to keep it that way.

Instead of giving a general possibility to declare record, I advise you to allow record declaration for each app where you want to use it. This way you will have more control over how the feature is used:

1. Open the Library Settings.
2. Click on the link 'Record declaration settings' in the group Permissions and Management.
3. The default record declaration setting is to use the site collection settings. If the site collection setting is set to not available for all, you must change this setting to "Always allow" for this library.

Another option in the Library declaration setting is to automatically declare files as records when they are added to the library. If you use this option, you don't have to manually declare files as records. Instead you can move files that should be declared records to this list.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Declare-Record.htm>

To create a workflow that declares record automatically when a certain condition is met; refer to Declare Record Workflow.

4.17 SUMMARY

With this chapter, I wanted to give a good overview on how you can create and edit SharePoint apps and use them to share information in an efficient and user-friendly way. You have also learned how to save lapps as templates.

I hope you now understand how important it is to create suitable columns for metadata and how you can filter and sort list data in various ways. You should also understand how to use versioning, alerts and surveys, how to search, declare record and delete and restore SharePoint content.

There is more to learn about SharePoint apps. One feature that I have only mentioned but not explained in this chapter is the Content Types. With content types, you can help users create documents and list items with a consistent look and valuable metadata, so I will describe how to create and use them in several later chapters in this book.

5 SHAREPOINT DESIGNER

If you want to be a SharePoint power user, you should have SharePoint Designer installed. The 2013 version is essential to create workflows and import folders and files, but in some cases also the 2010 version is useful.

In this chapter, we will have a look at the two latest versions of SharePoint Designer, and I will explain what you must do to use SharePoint Online with SharePoint Designer 2010. You will learn how to find and install both versions and how to open a SharePoint Online site in SharePoint Designer.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Designer.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Designer-2010.htm>

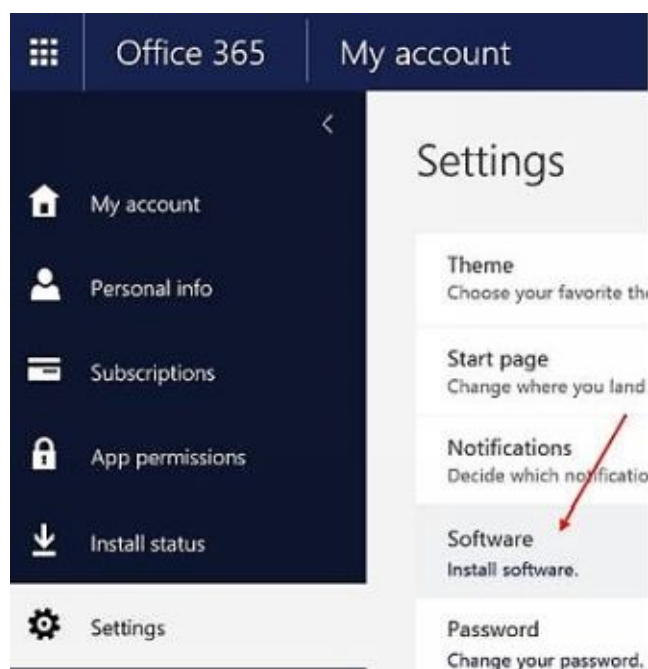
This chapter is short and will only give an introduction to SharePoint Designer. In later chapters you will learn more about how SharePoint Designer can help you enhance your SharePoint tenant.

SharePoint Designer is mentioned now and then later in this book, and the chapter about SharePoint Workflows is entirely focused on SharePoint Designer, as the workflows are created in SharePoint Designer.

5.1.1 SharePoint Designer 2013

SharePoint Designer 2013 is free of charge, but it is not included in any Office package installation. You will have to install it from Microsoft Download or from links in Office 365.

To install SharePoint Designer 2013 from within Office 365, click on the Settings gear on any page in Office 365 and open the Office 365 settings.



1. Open the Software section.
2. Open Tools & add-ins to find SharePoint Designer 2013.

3. Click on Download and Install. You are now re-directed to a Download center that opens in a new window.

4. Download and Run the file.

NOTE: There will be no “SharePoint Designer 2016”, and if you install Office 2016 on a PC that has SharePoint Designer 2013 installed it will be removed. It will still be possible to continue using SharePoint Designer 2013, but you will have to download it and install it again.

5.2 SHAREPOINT DESIGNER 2010

SharePoint Designer 2013 is what you need first, but installing SharePoint Designer 2010 as well, gives some additional advantages. SharePoint 2013 sites can be opened in the original SharePoint Designer 2010 (so you should *not* install updates!), and SharePoint Designer gives you Microsoft Picture Manager, which is not included in SharePoint Designer 2013 or any other Office 365 application.

Later in the book I will give some tips which require that a SharePoint Online site can be opened in the 2010 version of SharePoint Designer. If you want to try them, you need to install SharePoint Designer 2010.

NOTE: There is no supported way to block the updates on Windows 10, so if you want to run an un-patched version of SPD 2010, keep it on a Windows 8 or Windows 2012 machine, not Windows 10.

These are the steps to install SharePoint Designer 2010:

1. Search for the Microsoft download page for SharePoint Designer 2010 in a search engine.
2. Download the setup file.
3. Run the downloaded file.
4. Accept the license conditions.
5. Click on the 'Install Now' button.
6. Open SharePoint Designer when the installation is finished.

(If you need to install .NET Framework, you will get a message about that. Go to the Control Panel >Programs and Features >Turn Windows features on and off, and enable .NET Framework. Then you can install it from the link.)

The first time you want to open a site in SharePoint Designer 2010, the “Help Protect and Improve Microsoft Office” screen will be displayed. If you want to be able to open SharePoint Online sites in SharePoint Designer 2010, do NOT use the recommended settings. Instead, select the option ‘Don’t make changes’.

5.2.1 Remove updates

If SharePoint Designer 2010 updates already have been installed on your computer, you cannot open a SharePoint 2013 site in SharePoint Designer 2010. Solve this by either uninstalling each update or by uninstalling SharePoint Designer 2010 and install it again, with the option ‘Don’t make changes’, as described above.

5.3 OPEN THE SITE IN SHAREPOINT DESIGNER

You should always open the *site* in SharePoint Designer, even if you want to work with an app. Then you can select the app you want to work with.

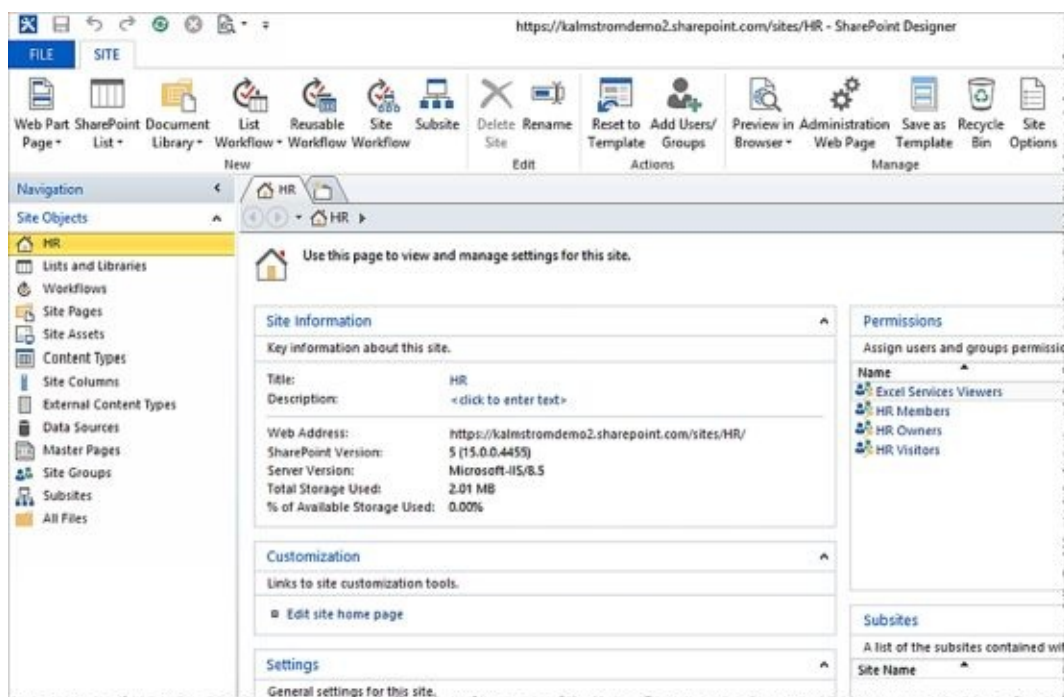
1. In SharePoint Designer, click on Open Site.



2. Paste or write in the URL to the site you want to open. Note that only the first part of the URL you see when you open the site should be entered, for example <https://kalmstromdemo.sharepoint.com/sites/Example/>.

3. Click on Open.

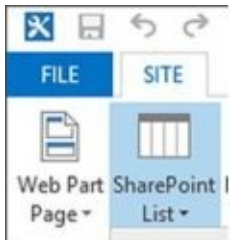
Now your SharePoint site will open in SharePoint Designer. You will see the site contents to the left in what resembles a folder view, and to the right there is a summary page with information about the selected item.



5.4 CREATE A LIST IN SHAREPOINT DESIGNER

Instead of creating new lists in the web browser interface, you can use SharePoint Designer 2013. It is quicker and saves you some clicks and loading of new pages.

1. Open the Site in SharePoint Designer
2. Click on the SharePoint List button in the ribbon.



3. Select the list type you want to use.
4. Give the list a name (and a description) and click OK.

Now the list options are shown on the SharePoint Designer summary page, and you can customize your list more quickly than in SharePoint. You can select settings options and add, remove and edit columns, views and forms.

When you have the list open in SharePoint Designer, you can preview the list in the browser by pressing F12 on the keyboard or using the preview button above the ribbon.



Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Designer-2013-Create-List.htm>

5.5 SUMMARY

This chapter has introduced SharePoint Designer. You have learned how to find and install SharePoint Designer 2013 and SharePoint Designer 2010, and you know how to handle the 2010 version to be able to open a SharePoint Online site.

Now you can open a site in SharePoint Designer, and you also know how to create a list. You can however do much more in SharePoint Designer. I will come to that later in this book – the first time as soon as in next chapter, where I explain how to use SharePoint Designer to import folders to a SharePoint document library.

6 *SHAREPOINT LIBRARIES*

SharePoint document libraries are a type of lists, so everything mentioned in the SharePoint Apps chapter above also applies to libraries.

SharePoint libraries also have some unique qualities and features, and they are described here.

In this chapter I will explain why using SharePoint libraries is a good way to store and share information. You will also learn how to:

- Create content in document libraries
- Upload files to document libraries in various ways
- Use – or not use! – folders
- Use Word Online and create a Word template for a document library
- Use OneNote to create and share notes
- Manage OneDrive for Business for storage and synchronization

6.1 WHY DOCUMENT LIBRARIES

Document libraries are often the best way to share documents within an organization, and it is certainly much better than sending e-mail attachments. When you use SharePoint document libraries for file sharing you have everything in one place, and all who have been given permission can reach the library.

Document libraries give the same kind of benefits as mentioned in the section about app Benefits, like alerts, version history and filtering.

I recommend that you use several document libraries, as a way of characterizing files. For example, if your site is made for sharing information about a new product you could have these document libraries:

- Suggested Specifications
- Supplier Contracts
- Design Sketches
- Radio Commercials in mp3 format

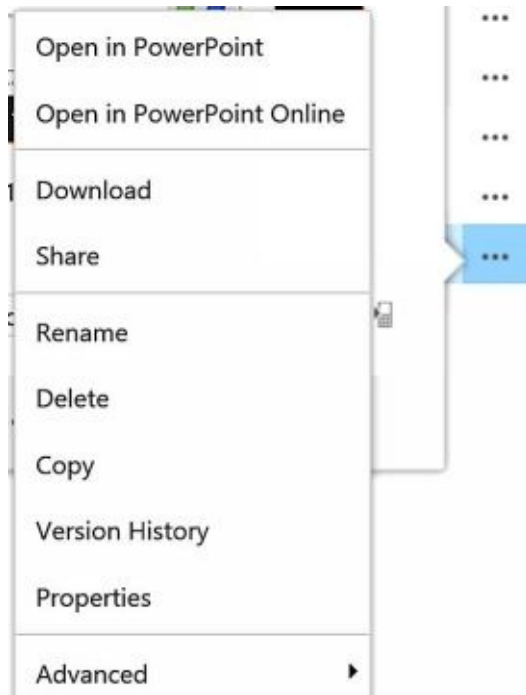
Within these libraries you would of course have files. Those files are sometimes referred to as documents in the SharePoint user interface. You can download files from the document library to your computer by clicking on the file name.

Refer to Information Rights Management for a description on how you can protect files in SharePoint libraries.

6.2 DOCUMENT OPTIONS

A SharePoint document library is more than a place for file storage and sharing – it is also a place where you can work with the files.

When you click on the ellipsis to the right of the file name in a document library, you will have many options for what to do with the file. You can work with the file online or open it in a desktop application. You can also download the file, share it, rename it and much more.



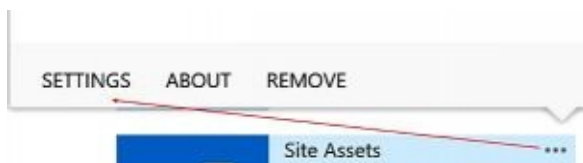
6.3 LIBRARY SETTINGS

Each library has a settings page where you can find many different kinds of settings, including settings for permissions, columns and views.

The Library Settings button is found under the LIBRARY tab in the ribbon.



You can also reach the library settings from the Site Contents. Click on the ellipsis at the library you want to use, and a SETTINGS link will be displayed.



6.4 ADD CONTENT TO DOCUMENT LIBRARIES

You can add content to a SharePoint library either by creating a new document in SharePoint or by uploading existing files to the library. The upload of existing files can be done in several different ways.

6.4.1 Create a File in a Library

The best way to get content into a SharePoint library, is actually to create it in SharePoint itself.

Many libraries have a default document type, for example Word. Follow these steps to create a new file in a SharePoint library that has a default template:

1. Open the library where you want to create the new file.
2. Under the ribbon FILES tab, click on New Document.



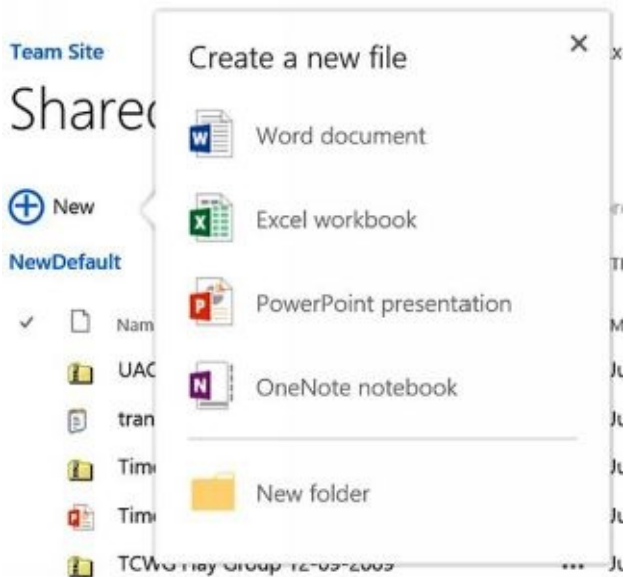
3. A new document will open in the online version of the default document type.



4. Create the document. It will be saved automatically when you go back to the library.
5. To save and return to the library, click on the site text (a). To work in the desktop version instead, click on the 'OPEN IN ...' (b).

When you use the +New icon to create a new document in the library, you can by default select what kind of document you want to create:

1. Click on the +New icon.



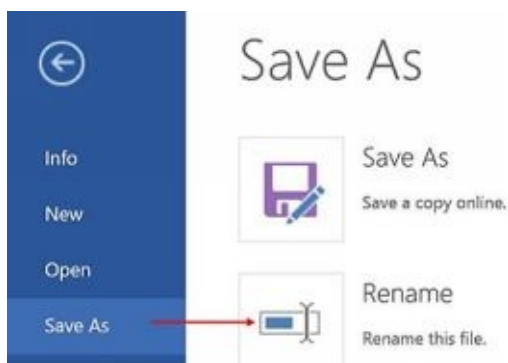
2. Click on the kind of file you want to create.
3. A new file will open in the online version of the Office app you selected.

Document libraries may have custom Content Types that restrict the options. Later in this book you will learn how to create such content types.

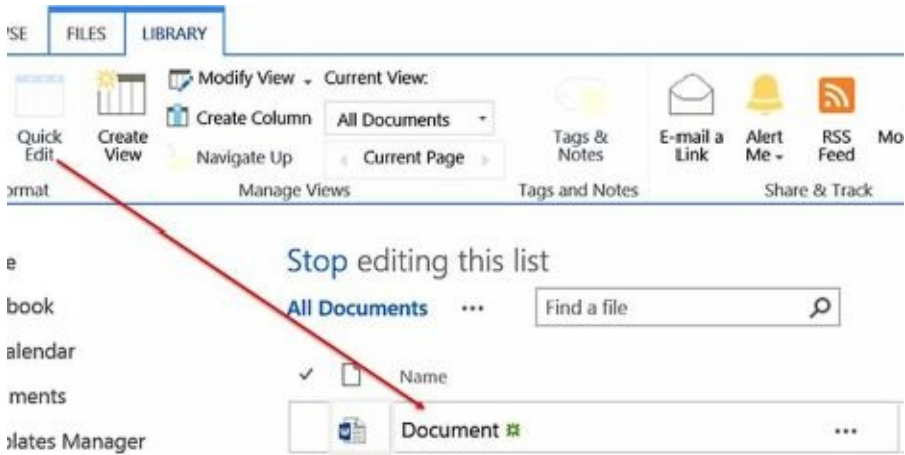
6.4.1.1 Rename a File

As the document you create in the library is saved automatically, you cannot directly give it the name you want to use. Instead you should rename the file when you have returned to the library. You can change the name in four ways.

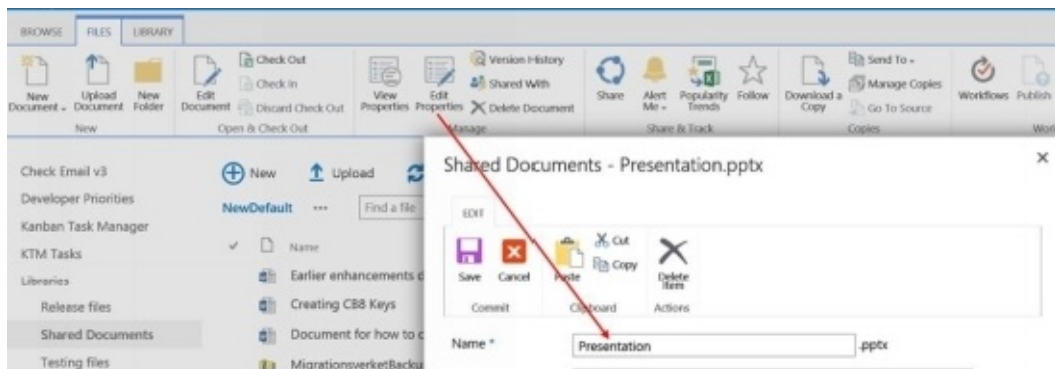
- In the open document, click on Save as under the FILE tab and select Rename.



- In the library, open the LIBRARY tab and click on the Quick Edit button. Select the cell that has the name of the new file and change the name. This method is especially suitable if you need to rename several files.



- In the library, open the FILES tab, select the file and click on the Edit Properties button. Now you can change the name of the file.



- In the library, select the file, click on the ellipsis and select Properties. The same dialog as in the image above will open.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Create-Content-in-SharePoint.htm>

To have documents created and named automatically based on specified templates; *refer to* The Document Set Content Type.

6.4.1.2 Open Behavior

By default browser-enabled documents are opened in the browser – Word documents are for example opened in Word Online. You can change that setting in the Library Settings >Advanced settings. In the image below, documents are instead opened in the client application.

Default open behavior for browser-enabled documents:

- Open in the client application
- Open in the browser
- Use the server default (Open in the browser)

If the client application is unavailable, the document will be opened in the browser even if you have set documents to open in the client application.

6.4.2 Upload Files

Most file types can be uploaded to SharePoint libraries, but there are some exceptions; refer to [Microsoft's information on file types that cannot be added to a list or library](#).

When you add files to SharePoint by the methods described below, they will be copied to the library. They will not be removed from your PC.

6.4.2.1 Upload a Single File

Click on the Upload button to upload a single file to a SharePoint library. Browse to the file and click OK, and the file will be uploaded.



You can also click on the Upload Document button under the FILES tab in the library ribbon.



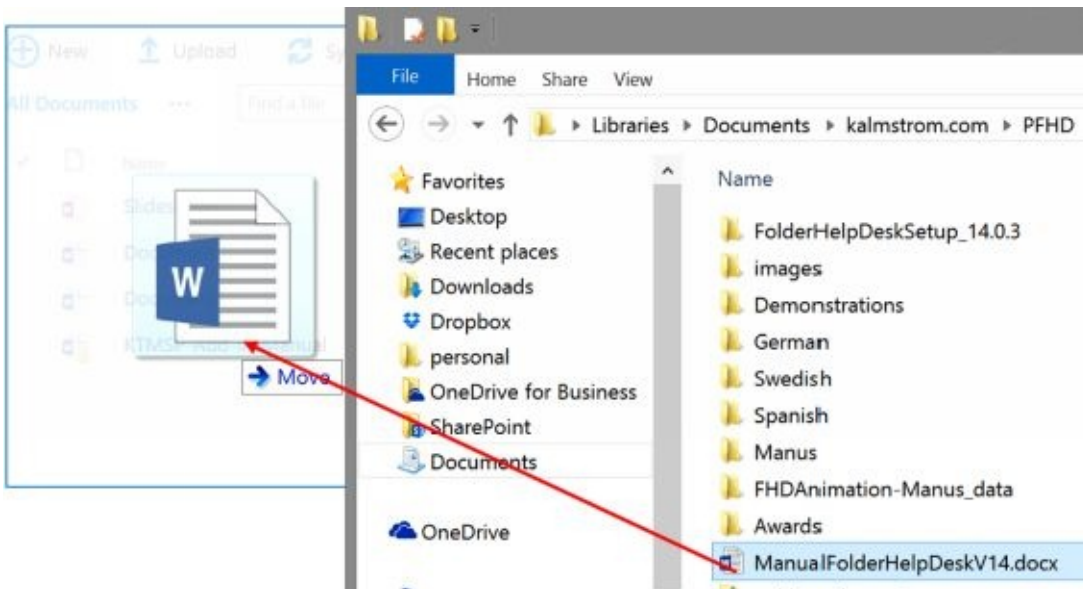
Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Upload-File.htm>

6.4.2.2 Drag and Drop Files

If you have a modern browser version, you can drag and drop files from your PC to a SharePoint Online library. This can be done with one file or with multiple files at the same time.

1. Open Windows Explorer on your PC in a small window over the SharePoint library window, or put the two windows side by side using the Windows button + the left/right keys.
2. Select the file(s) you want to copy to the library and drag them to the box that becomes visible in the library.



Drag and drop is a fast and convenient way to add files to SharePoint document libraries, but you cannot drag more than 100 items at the same time. If you want to add more files, use one of the import methods below.

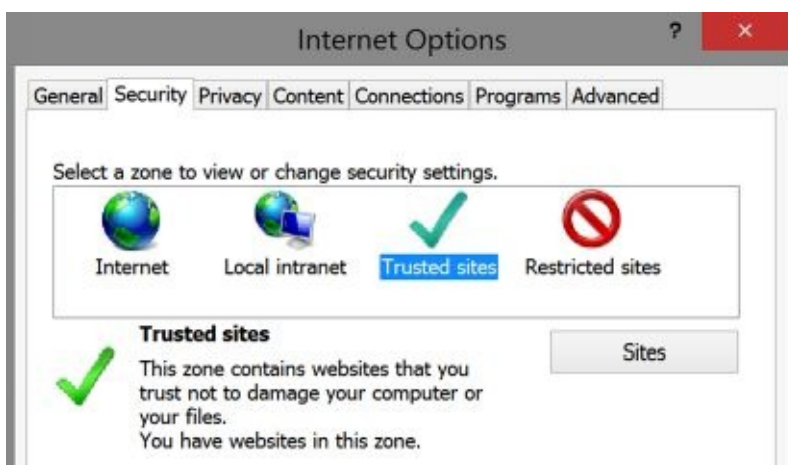
Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Upload-Multiple-Files-Drag.htm>

6.4.2.3 Import Files and Folders from Windows Explorer

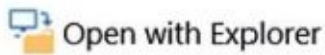
To be able to import files from Windows Explorer on your PC to a SharePoint library, three conditions need to be met.

- You need to use Internet Explorer.
- Save login information to the SharePoint site.
- Make sure the SharePoint site is added to either Local intranet or Trusted sites in the Internet settings.



This is the import process:

1. Open the SharePoint library in Windows Explorer by clicking on the Open with Explorer button under the LIBRARY tab in the ribbon.



You can also open the library in Windows Explorer from the Upload dialog.



2. The library will open as a folder in your Windows Explorer.
3. Copy and paste the files or folders you want to upload to SharePoint to the library folder.

You can also add the SharePoint library folder to Quick Access/Favorites and drag the files into it. This is a good solution if you often upload files to the same SharePoint library,.

If you have the library among your Quick Access/Favorites folders, you don't even have to open SharePoint to add new files to the library. (But they will not be uploaded to SharePoint until you are connected to the internet.)

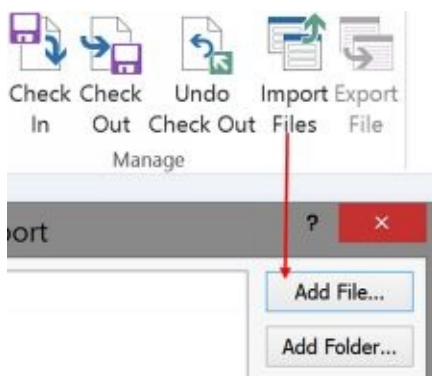
Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Import-Files.htm>

6.4.2.4 Import Files or Folders with SharePoint Designer

This is the process to add files and folders to a SharePoint library with SharePoint Designer 2013.

1. Open the Site in SharePoint Designer.
2. In SharePoint Designer, open the All Files folder and then the document you want to add files or folders to.
3. Click on the 'Import Files' button and then on the 'Add File...' or 'Add Folder...' button.



4. Select the files or folders you want to add to the document library.
5. Click on Open and then OK, and the upload begins.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Import-Files-SPD.htm>

Also *refer to* OneDrive for Business for information about synchronization between SharePoint and a PC folder.

6.4.2.5 Include Tags and Titles

When you copy files into SharePoint as described above, be aware that the file creator, creation date, security settings and other metadata is NOT copied to SharePoint.

However, if the Enterprise Keywords feature is enabled in the library, file tags will be added to the Enterprise Keywords column (and to the Term Store) and titles will be added to the SharePoint Title columns.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Import-Files-Tags.htm>

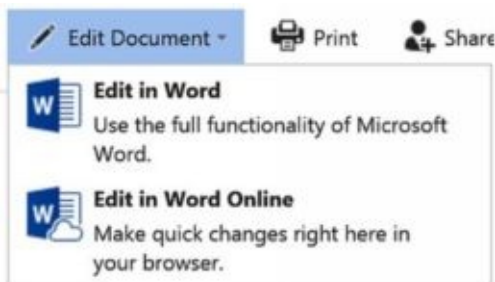
6.5 WORD ONLINE

When you are in a document library in SharePoint Online, Microsoft Word documents (.docx) by default open in Word Online.

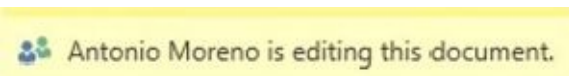
Word Online runs in the browser and automatically saves your document to the document library where it was created. Word Online looks almost the same as the desktop version of Word, but some things are missing in it. On the other hand, a Word Online document can be edited by multiple people at the same time.

6.5.1 Word Editing by Multiple Users

When you open a Word document in a library, you will have a choice to edit it in the desktop version of Word or in Word Online.



If you select Word Online and another person is editing the same document, you will have a message about it:



You can also see where in the document the other user is working.



You can continue your editing, because all changes, no matter which one of the users who made them, will be visible in the document.

You can be more than two users on the same document. I have seen examples on around 15 people collaborating on a document in Word Online!

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Word-Offline-Overview.htm>

6.5.2 Edit the Word Document Template

There are two ways to create a template. One is simple, and one is a bit more complicated. Here I will show the simple way, but in general I recommend the complicated way, because it has more benefits. *Refer to* the chapter about Content Types for the more advanced template option.

In step 2 below you can choose between editing the current template or give a URL to another template. Here I will describe the edit current template option.

1. Open the Library Settings and click on the link 'Advanced settings'.

2. In the Advanced Settings page, click on the link '(Edit Template)'.

Template URL:

Shared Documents/Forms/template.dotx

(Edit Template)

3. An External Protocol Request dialog will open.

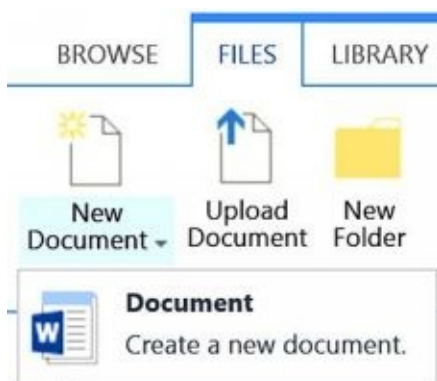
4. Click on the Launch Application button.

5. A Word document will open, and you can edit it as you wish.

6. Save and Close the document.

Now you have your Word template, but if you click on the '+ New' button to create a new document, the template that you have specified is not used.

The only way to reach your custom template is to open the ribbon FILES tab and click on New Document.



NOTE: when Allow Management of Content Types is set to Yes in the advanced library settings, there is no edit option and you cannot replace the template either. If you have allowed management of content types, you probably want to use the more advanced Content Types option instead.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Create-Word-template.htm>

6.5.2.1 Customize the Document View Page

As seen above the custom Word template is only used if you create a new document via the button under the FILES tab. If you want another way to reach the template, you can customize the document view page and show a link to the template there.

You must have the template in a file share for this solution to work. When you do, you can add a web part to the document view page, and in that web part you can have a link to the template that should be used – or to several templates to choose from.

1. Go to the 'Settings' gear on the top right of the page and select 'Edit page'.

2. Click on the link – 'Add a Web Part'.

3. In the 'Media and Content' category, select the 'Content Editor' web part.

4. Click on 'Add'.

5. Expand the web part tool pin accordion, and click on 'Edit Web Part'.
6. (To remove the web part caption, expand "Appearance under 'Test Link' and scroll down to the 'Chrome Type'. Select 'None' and click on 'Apply'.)
7. Write a display text and link it to a file server or directly to a specific template; *refer to* Link to a File Server.
8. Open the ribbon 'PAGE' tab and click on 'Stop Editing'.

Demo:

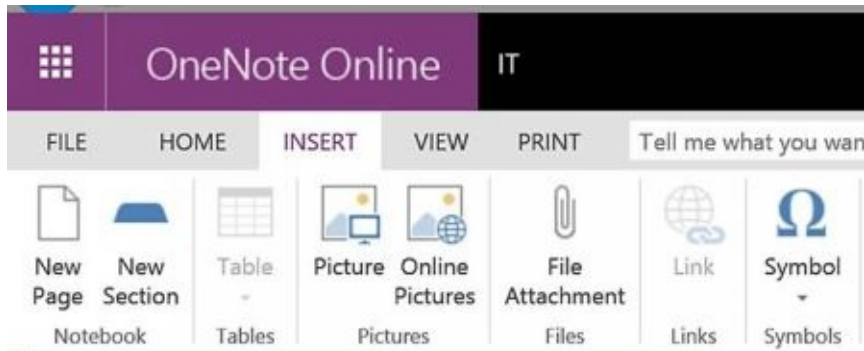
<http://kalmstrom.com/Tips/SharePoint-Online-Course/Customize-Document-View-Page.htm>

6.6 ONENOTE

Each SharePoint team site comes with a Notebook link in the Quick Launch. It opens the Online version of OneNote, Microsoft's note-taking tool that is part of the Office package.

OneNote Online works well in the browser, and by having it in SharePoint you can easily share it with other team members. The default OneNote notebook and all other notebooks you create are stored in each team site's Site Assets library.

When you open OneNote Online via the Notebook link in the Quick Launch, you have various options to insert text, images and links.



The notebook file type is one of the default file types you are offered when you create a new file in a document library that has the default content type; *refer to* Create a file in a library.

You can reach all the team site's notebooks by clicking on the Notebooks icon at the top left in OneNote Online.



If you don't want users to have access to OneNote, you can Edit Links and remove the Quick Launch link. You can also delete existing notebooks in the Site Assets library.

To remove OneNote from the default options when you create a new document in a library, you need to change the content type of that library; *refer to* Connect the Content Type to an App.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/OneNote.htm>

6.7 LIBRARY FOLDERS

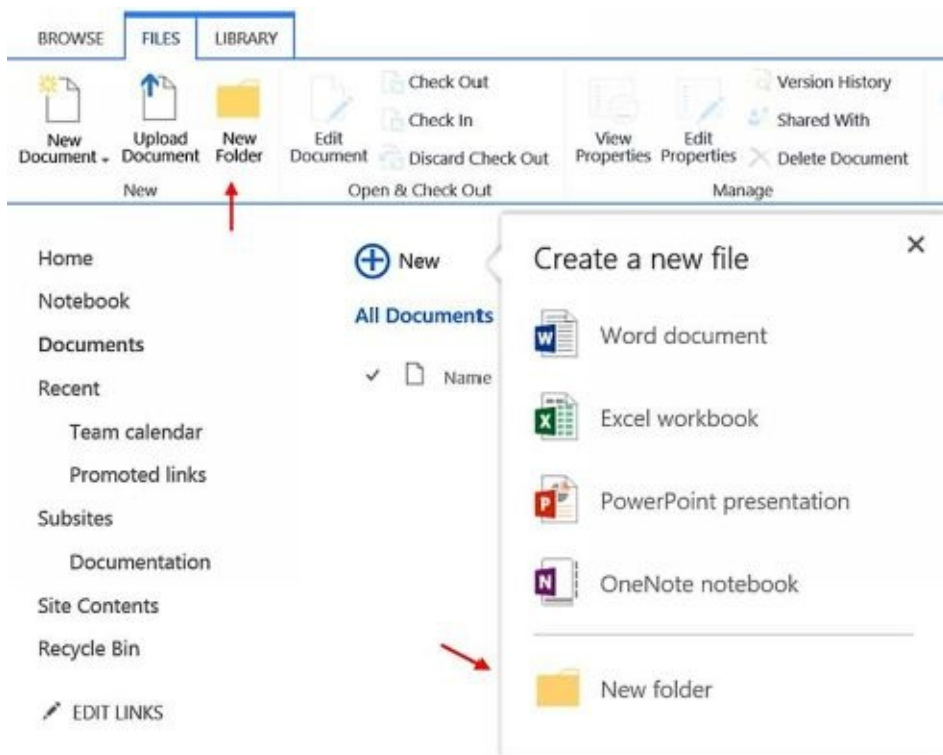
The old and tried folder is the most popular but least recommended way of characterization in SharePoint. It has some benefits, though, especially when used with OneDrive for Business or with the “Open with Windows Explorer” feature; *refer to* Import Files and Folders from Windows Explorer.

The main argument for folders is that users will feel at home, and you will not have to change the way information is stored compared to the file server. However, you will quickly experience that folders have some major drawbacks. SharePoint is really not built for handling folders in a good way, and it has some serious folder-related annoyances.

If you don't want to allow user to create new library folders as described below, you can Hide the Folder Option.

6.7.1.1 Create a New Folder

To create a folder in a SharePoint library, click on the New Folder button under the FILES tab in the ribbon, or click on New and select New folder.



Give the folder a name that tells what kind of files it contains, and click on Create.

6.7.2 Move Files Into and Out of Folders

To move documents into a folder, click on the file type icon to the left of the file name, drag the file and drop it on the folder.

To move documents out of a folder, click on the file type icon to the left of the file name, drag the file and drop it on the document library link in the Quick Launch.

When you use Internet Explorer, you can also open the document library in Windows Explorer and create folders and move documents; *refer to* Import Files and Folders from Windows Explorer.

Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Categorization-Folders.htm>

6.7.3 Hide the Folder Option

When you click on +new in SharePoint libraries you may by default also create a folder. Generally I don't recommend the use of library folders. If you agree and don't want users to be able to create folders, you can hide that option in the Library Settings >Advanced Settings.

Make "New Folder" command available?

Yes No

6.7.4 Share a File or Folder

Library files and folders can be shared with other people in the organization than those who have access by the regular Permissions settings. Click on the ellipsis at the file or folder you want to share, and select SHARE.

Now you can start typing in the name of the person(s) who should have access. Then you will have suggestions to select from.

The default permission when sharing is 'Can edit'. You might want to change that into 'Can view'.

By default an invitation is sent by e-mail, but you can uncheck that box if you inform about the sharing in another way. If you select the option 'Everyone', no e-mails will be sent.

In this dialog, you can also get the link to the shared file or folder.

6.8 ONEDRIVE FOR BUSINESS

With the cloud application OneDrive for Business, SharePoint users can add libraries as folders in their personal computers or other smart devices and edit them there. The files are synchronized automatically when the user is logged in to SharePoint, and there is also a manual synchronization.

Here I will explain how you can set up a synchronization between a SharePoint library and a folder in your PC.

6.8.1 *First Sync between SharePoint Library and PC Folder*

Once you have set up the synchronization between the library and your PC, OneDrive for Business will keep track of changes and synchronize this library and folder automatically, but the first time you have to do it manually. You can also perform the steps below anytime if you need to make a manual sync.

OneDrive for Business is included in the Office 365 subscription, so normally you should not have to use the download link that is present in the first 'Sync now' dialog.

1. Open the document library that has the files you want to synchronize to your computer and click on the Sync button above the files or under the ribbon LIBRARY tab.



2. Click on Sync now in the first dialog and then Sync now again in the second dialog.

3. If this is the first time you synchronize a SharePoint library, OneDrive for Business creates a new 'SharePoint' folder on your PC. You can see the path to that folder in the second 'Sync now' dialog.

4. OneDrive for Business then creates a new folder under the SharePoint folder. It gets the name of the SharePoint site + the name of the library.

5. All the files in the SharePoint library are shown in the new folder. They have a green flag that indicates that they are synchronized.

If you add the new SharePoint folder to your Favorites/Quick access it will be smooth to move files between the SharePoint folder and your other folders.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/OneDrive-SharePoint.htm>

6.8.2 *MySite*

OneDrive for Business is also used for a personal SharePoint site collection called MySite, where the stored files are private unless the user decides to share them. The Office 365 Enterprise subscription plans include unlimited OneDrive for Business space in the MySite collection for each user.

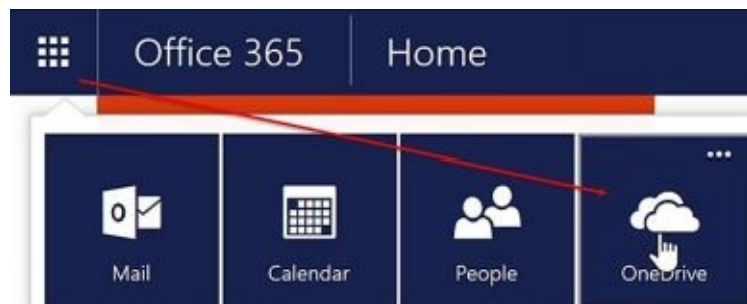
The default MySite library, Files, has limited features, so I recommend you to [create new libraries in the MySite site collection](#). They will have all the SharePoint library features, so they will give you more options than the Files library.

In fact, adding additional apps and subsites to a MySite site collection opens up the whole range of SharePoint functionality for each user. As each user is an administrator of his/her own site collection, the possibilities actually nearly endless.

In this section, I will explain how SharePoint users can take advantage of MySite.

6.8.2.1 Reach MySite

When you click on the OneDrive icon under the Office 365 App Launcher your personal MySite site collection will open.



You can also reach MySite directly from the office.com home page or by starting writing OneDrive in Windows and select OneDrive for Business.

(Note that there is also a “OneDrive” included in Windows 8.1 and 10. It is connected to your Microsoft account – not to your organizational Office 365 account – and it does not have unlimited storage space. That is not what we are talking about here.)

The path to MySite looks like this:

<https://TENANTNAME-my.sharepoint.com/personal/LOGINNAME/>.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/OneDrive-Intro.htm>

6.8.2.2 The Files Library

When you open MySite you are in the default documents library, Files. This library is the default saving location for the Office Online applications, but as it has some limitations I actually advise you to *not* use it.

You can share files and folders in the MySite Files library and add new content to it in the same way as with all SharePoint libraries; *refer to* Share a File or Folder, and Add Content to Document Libraries.

When you synchronize the Files library to your PC, OneDrive for Business will create a OneDrive for Business folder on your PC, and there is where you can find and work with the library files after synchronization.

However, the MySite Files library does not have a ribbon with a LIBRARY tab, so you cannot use metadata or tag documents in the default OneDrive for Business library and there is no possibility to create different views.

Because of these limitations, I recommend you to create new libraries at MySite instead of using the Files library. These new libraries will have all the SharePoint library

functionalities.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/OneDrive-Intro.htm>

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/OneDrive-Library.htm>

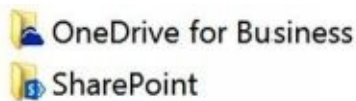
6.8.2.3 Selective Synchronization

You cannot create new apps from the Files library. Instead you have to open the Site Settings and click on the settings gear from there. Then you will have the Add an App and Site Contents links as usual.

Creating multiple libraries will give you three important advantages:

- SharePoint does not work well when you have more than 5000 files in a library. If you create more libraries in the MySite site collection, you will overcome that problem and still have unlimited storage
- The new libraries will give you the LIBRARY tab with all the SharePoint library features.
- When you create several libraries, you can choose to not synchronize all of them to your device. The not synchronized libraries can be used for storage of files you don't need to access very often.

Note that the new libraries will show up under SharePoint on your PC. The OneDrive for Business folder only contains the default OneDrive for Business library.



Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/OneDrive-More-Libraries.htm>

6.9 SUMMARY

The chapter about SharePoint libraries has shown how to create content in libraries and how to upload files and folders. I have also described how you can work several people with the same document in Word Online and how you can create a Word template and use the notebook.

Finally you have learned how you can take advantage of OneDrive for Business and MySite to create your own SharePoint site collection with unlimited storage and synchronization to your PC – and with all the SharePoint features on top of that.

7 EDIT PAGES

SharePoint Wiki Pages can be highly customized. You can add text or links or insert images, videos etc. directly in the content areas of the page. You can also insert various kinds of Web Parts and customize them. Web Part Pages can be edited too, but not to the same extent.

In this chapter, you will learn how to:

- Open pages in edit mode
- Edit wiki pages, and use the commands in the ribbon
- Edit web part pages, and add and edit web parts.

7.1 OPEN A PAGE IN EDIT MODE

Before you can edit a page, you must open it in edit mode. This is done differently if the page is a wiki page compared to a web part page. You can see which page it is by looking at the top right corner, where only the wiki page has an EDIT link.

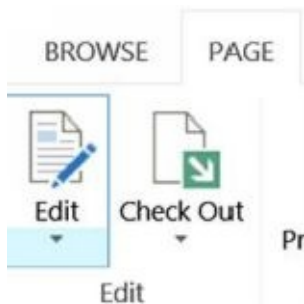
7.1.1 Open the Wiki Page in Edit Mode

There are three ways to open a wiki page in edit mode:

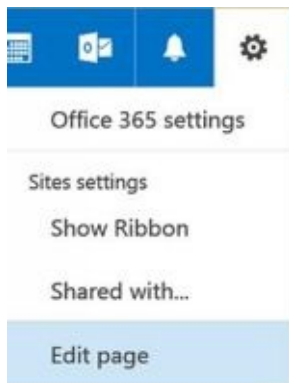
- Click on the EDIT link on the top right of the page.



- Click on the Edit button under the ribbon PAGE tab,



- Click on the settings gear in the Office 365 panel and select Edit page.



The page will open in Edit mode. The Edit button and link will now be replaced with a SAVE link in the top right corner and a Save button under the PAGE tab.

Place the mouse cursor where you want to insert content.

7.1.2 Open the Web Part Page in Edit Mode

To open a web part page in edit mode, click on the settings gear in the Office 365 panel and select Edit page. This is the same options as the third option for wiki pages above.

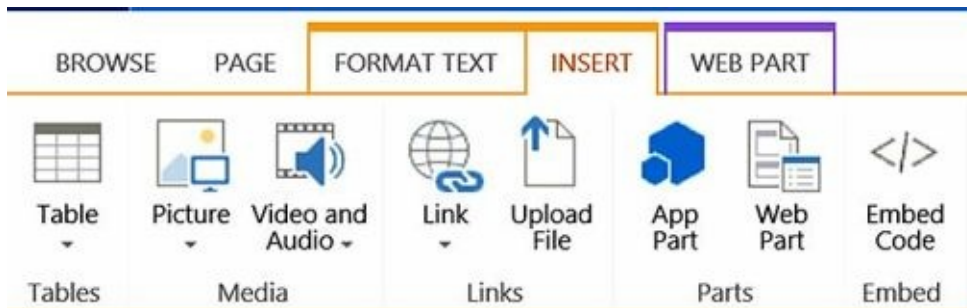
The page will open in Edit mode. It will now have a Stop Editing button under the ribbon PAGE tab, and the page will be saved automatically when you click on that button.

Modify the page by adding or editing web parts.

7.2 EDIT THE WIKI PAGE

Wiki Pages are coded in HTML, but Microsoft has made it easy to modify the pages and insert items with various tools in the SharePoint ribbon. It is also easy to undo changes.

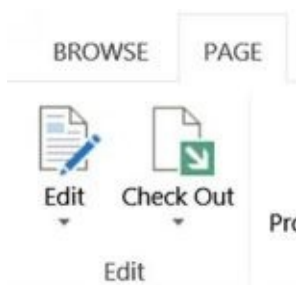
If you want to use HTML code, you should be aware that there are some restrictions in the use of CSS and JavaScript. Here I will only show how to reach the HTML code and instead focus on no-code customization with the SharePoint tools.



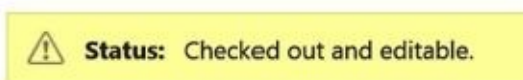
Besides customizing the wiki page directly, you can add web parts to the page and customize them.

7.2.1 Check out the page

You should check out the page while editing it. That way no one else can edit the same page at the same time. Click on the Check Out button under the ribbon PAGE tab to check out.



The Check Out button will now be replaced with a Check In button, which you can use when you are finished editing. The page will also have a warning.



If you Save the page without checking out, it will remain checked out. You have to check in the page to give other users access to the edited version and to let other users edit the page.

If you check in the page without saving first, it will be saved automatically.

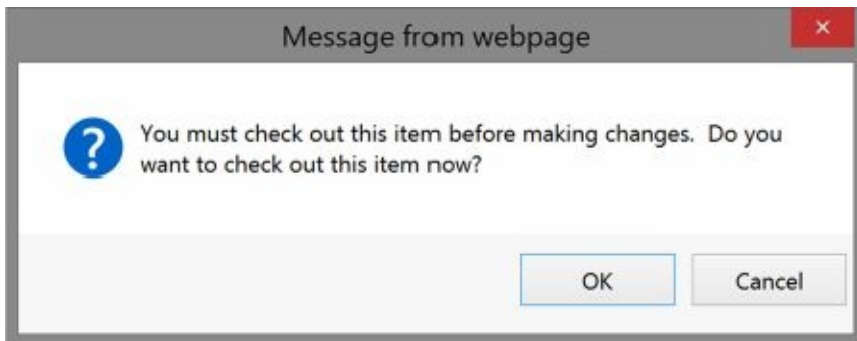
7.2.1.1 Mandatory Check-Out

If you are concerned about editing conflicts, you can set the Site Pages library to always require check out of pages that go into edit mode. That is done under the Versioning Settings and applies to all pages in the Site Pages library.

1. Open the Site Contents and then the Site Pages.
2. Click on the ellipsis and then on the SETTINGS link.
3. Open the Versioning settings in the General Settings group.
4. Select Yes at “Require documents to be checked out before they can be edited”. (Pages are documents too, remember?)

Require documents to be checked out before they can be edited?
 Yes No

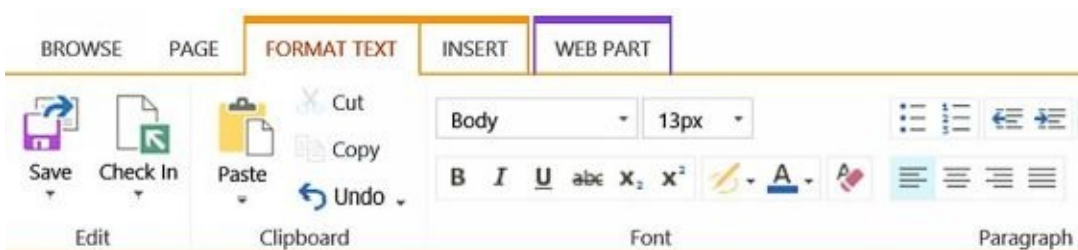
When a user tries to edit a page after this setting is done, a warning message is displayed and the user has to click OK to check out the page.



7.2.2 Enter and Format Text

You can enter and format text in a wiki page just like you do in Word and other Office apps. Place the mouse cursor where you want to start writing. Under the ribbon FORMAT TEXT tab, there are many options for text formatting.

You can easily undo changes with the Undo button or with the Ctrl key + the z key. Use Ctrl + y to repeat.



Instead of using the controls in the Font ribbon group, I recommend you to use styles. The Styles ribbon group is found further to the right under the FORMAT TEXT tab.

The styles are stored in a Styles library that is common for a site and all its subsites. It is a bit of work to edit the styles so that they become as you want them, but then they are there and can be used in other pages too.

The styles will give your SharePoint site a consistent look, and if you want to change something, you can just change the style. Then the change will be applied on all pages where that style is used.

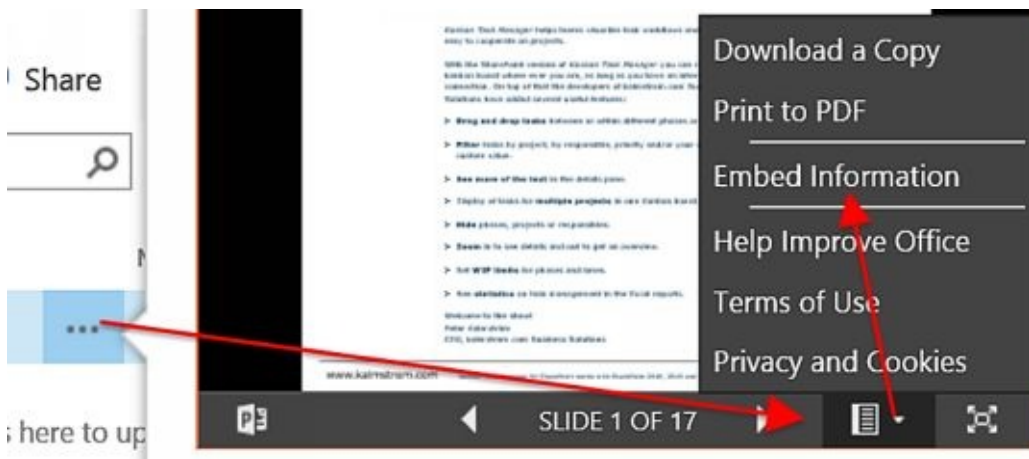


Demo:

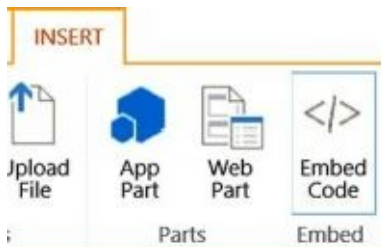
<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Start-Edit-Webpart.htm>

7.2.3 Embed a File

Word, PDF and PowerPoint files can be embedded in SharePoint wiki pages with the embed code of the file. To find the embed code, click on the ellipsis to the right of the file and then on the menu.



1. In the menu below the picture, open the Embed Information. Copy the embed code.
2. In the page, open the INSERT tab and click on the Embed Code button.

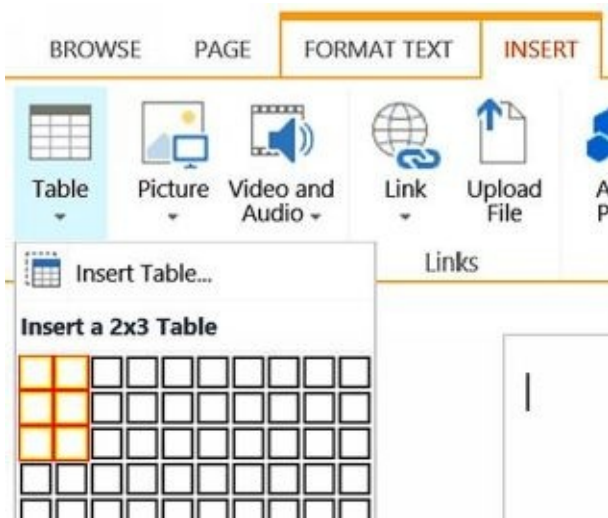


3. Paste the picture embed code into the form (and modify it if needed).
4. Click on Insert.

7.2.4 Add a Table

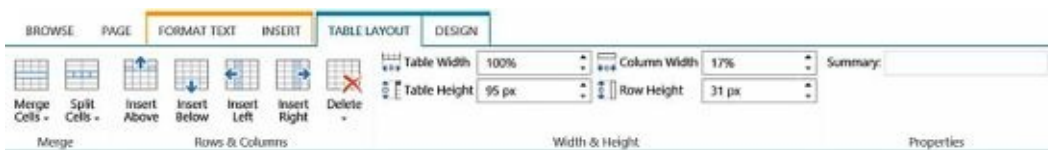
It is not as easy as in Word, and there are not as many features, but it is quite possible and not very difficult to add a table to a SharePoint wiki page.

1. Under the INSERT tab, click on the Table button.
2. Select Insert Table to open a dialog, OR use the grid below the button.



3. In the Insert Table dialog, enter the number of columns and rows you want the table to include, OR drag the mouse over the preferred number of columns and rows in the grid.
4. When you click OK in the dialog OR let go of the mouse, the table will be inserted into the page.

When you place the mouse cursor inside the table, two new table tool tabs will be shown: TABLE LAYOUT and DESIGN. Here you can edit the table.



If you prefer to create the table in Word or another Office application, you can copy that table and paste it into the SharePoint page.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Table.htm>

7.2.5 Edit Source

Far to the right in the ribbon, under the FORMAT TEXT tab, you can find the Edit Source button. This control opens the web part in HTML so that you can edit the code or paste code from another editor.



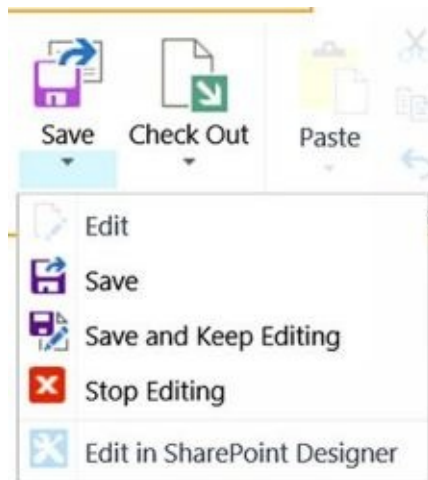
Note that only the code of the body is displayed, and there are some limitations when it comes to JavaScript and CSS. Also refer to Add Custom CSS to a Page and Add Custom JavaScript to a Page.

7.2.6 Save

When you have finished editing the page, you must save it to keep the changes. Click on

the SAVE link on the top right of the page. You can also click on the Save button under the ribbon PAGE and FORMAT TEXT tabs.

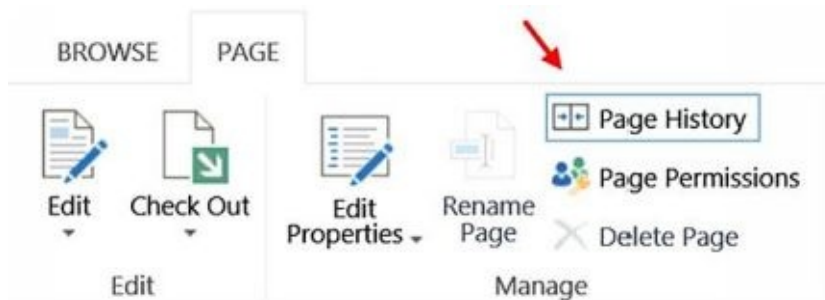
The Save button has more options. Use the Stop Editing option when you want to discard your changes.



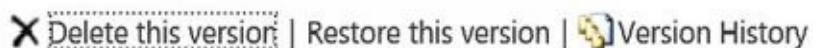
7.2.6.1 Restore Earlier Versions

When the page has been saved, you cannot use the Undo button. However, as Versioning is enabled on pages by default, you can restore an earlier version of the page if needed.

You can find the Page History button under the ribbon PAGE tab.



Click on the version you want to restore and then on Restore this version.



You can also restore earlier versions via the Site Content. Click on the Site Pages icon and then on the ellipsis at the page you have been editing. Find Version History, select the version you want to restore and select Restore from the dropdown.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Start-Edit-Webpart.htm>

7.3 WEB PARTS INTRODUCTION

A SharePoint web part is a building block that you can add to a SharePoint page and most often also fill content. There are different web parts for different kinds of content. All SharePoint Pages are built of web parts, but you can only customize the web parts in Wiki Pages and Web Part Pages.

I recommend you to explore the web parts. It is a safe environment to work in, because you can always go back and Restore Earlier Versions if you make a mistake.

7.3.1 App Parts

From a user perspective app parts and web parts are similar, and some parts are found under both Web Parts and App Parts. Therefore I don't go into the differences here. You can use app parts in the same way as web parts.

7.3.2 The Get Started Web Part

When you create a team site, the “Get started with your site” web part is included by default. “Get started with your site” provides five links displayed as tiles, so called Promoted Links.

The “Get started with your site” web part is the only web part that you can delete without first opening the page in edit mode, and that is because Microsoft has given a “REMOVE THIS” link for removal of the Get Started web part.

If you want to have the Get Started web part back again you need to add it like you add other web parts; *refer to* Add a Web Part to a Wiki Page below.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Get-Started-Web-Part.htm>

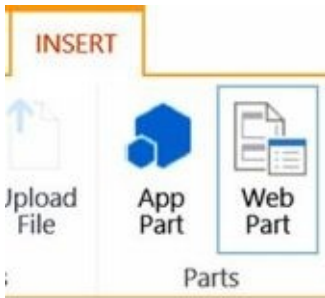
7.3.3 Add a Web Part

Web parts are added in different ways depending on if the page is a wiki page or a web part page.

7.3.3.1 Add a Web Part to a Wiki Page

These are general step for adding a web part to a wiki page:

1. Open the Wiki Page in Edit Mode.
2. Place the mouse cursor where you want to add the web part.
3. Open the INSERT tab and click on the Web Part button.



4. Select a category.
5. Select a web part and click on the Add button.
6. Make your changes or additions to the web part.
7. Save the changes by clicking on the Save button or link. The changes will be saved, and Save will once again be replaced with Edit.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Get-Started-Web-Part.htm>

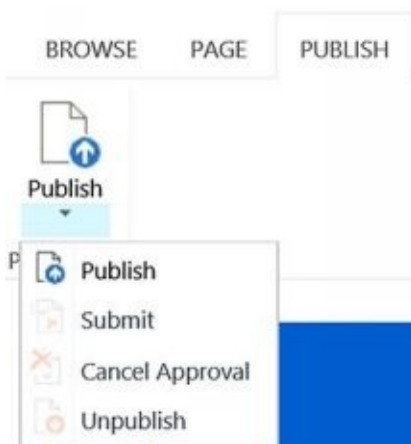
7.3.3.2 Add a Web Part to a Web Part Page

When you want to add a web part to a web part page you should use a link to add a web part on top of the page, and the page is often published instead of saved. Otherwise the steps are the same.

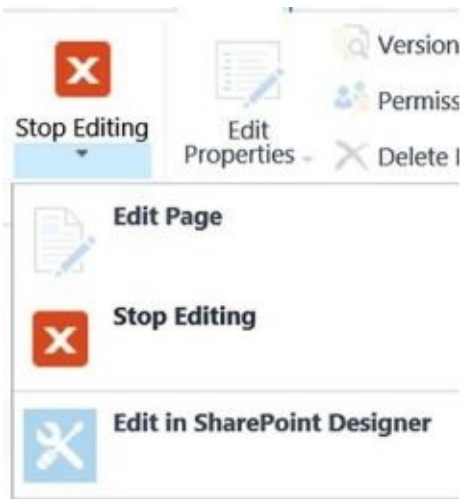
1. Open the Web Part Page in Edit Mode.
2. Click on the Add a Web Part link on top of the page.

Add a Web Part

3. Select a category.
4. Select a web part and click on the Add button.
5. (Drag and drop the web part, or drag other web parts above it, if you don't want the new web part to be placed on top.)
6. Make your changes or additions to the web part.
7. Save the changes by clicking on the Save button or link.
8. Publish the page to make it available to other users. You can also submit it for approval.

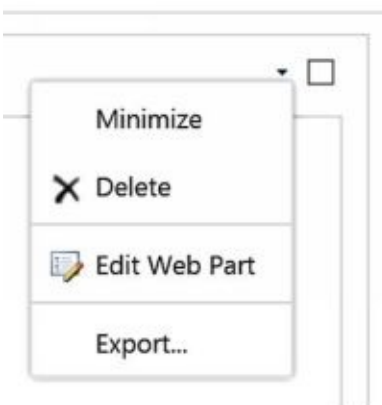


9. Sometimes web part pages have a Stop Editing button instead of a Publish button.

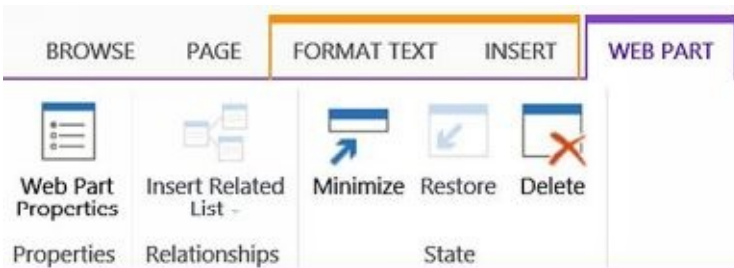


7.3.4 Edit the Web Part

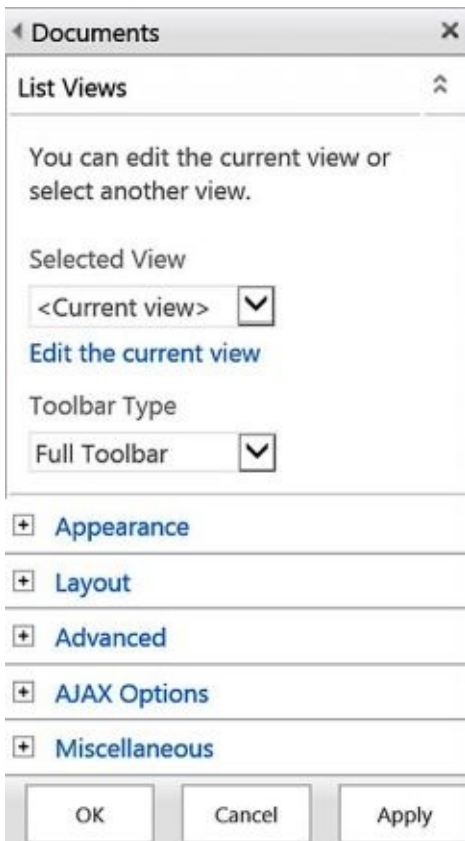
Modify the web part properties by clicking on the arrow in the top right corner of the web part and selecting Edit Web Part. Here you can also delete and minimize the web part, and some web parts can be exported to your PC.



Another way to reach the Edit Web Part command is to open the WEB PART tab and click on the Web Part Properties button.



The Edit Web Part panel is shown to the right of the web part and have the name of the web part in the top banner. These panels look different for different web parts, but all of them have various options. The image below shows the panel for a Documents web part.



7.3.5 Add a Calendar to a Page

When you have created a team calendar you probably want to display it on a page, maybe on the home page of the team site, instead of having it in a separate list.

1. Open a Page in Edit Mode.
2. Add a Web Part – in this case your newly created calendar app. (You can also find it under App Part).
3. Edit the Web Part Design as you prefer and save the page.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Calendar-App.htm>

7.3.6 The Content Editor Web Part

In SharePoint 2007 and earlier, the Content Editor web part was the only way to insert text, images and so on in a web page. It still works in that way, so when you add the Content Editor web part to Web Part Pages and edit them, you will get all the options that you also get in Wiki Pages.

Insert the Content Editor web part and focus it, and a ribbon with many options will be visible.



Because of this, the most common reason to use the Content Editor web part is to add it to a web part page to have the same features as in a wiki page.

There are however reasons to use the Content Editor web part in wiki pages too. You can for example add JavaScript and CSS to a page with the Content Editor, something that cannot be done directly in a wiki page; *refer to* Add Custom CSS to a Page and Add Custom JavaScript to a Page.

You can find the Content Editor web part in the Media and Content category. Edit the Web Part and set the Chrome Type to None to avoid having the Content Editor caption on the web part.

Demo: <http://kalmstrom.com/Tips/SharePoint-Online-Course/Content-Editor-Intro.htm>

7.4 SUMMARY

This chapter has explained the difference between editing wiki pages and web part pages, and now you should be able to start customizing both. We have taken a first look at web parts, and I have given two examples, a Calendar and a Content Editor.

For more information about web parts, *refer* to the Web Parts chapter. I will also give example on page customization in other chapters later in this book.

8 CATEGORIZATION

When you add more and more documents and list items to SharePoint, it becomes increasingly important to have them categorized in a good way, so that users quickly can find the data they need.

In this chapter, we will look at various ways to categorize list items and files. I will suggest what you as content creator or administrator can do to make it easier for users to categorize content. I will also discuss benefits and drawbacks of each method.

I will also describe how to manage keywords centrally for the whole organization. This is easier for the administrator, and as it means that users are given suggestions when they start writing a keyword, the characterization becomes more consistent.

These are the categorization methods I discuss in this chapter:

- Create columns. Columns can be sorted and filtered in various ways, so they are very useful for categorization.
- Required Column Values. Make it mandatory to enter a column value.
- Default column value. Use a static or calculated value that is added by default.
- Tag documents with Enterprise Keywords. Such keywords can be used by the whole organization, and they are synchronized between all libraries and managed centrally in the Term Store. Here you can also manage term sets for different site collections.
- Create multiple document libraries. Use separate document libraries instead of adding new folders to the default library.
- Rate files in document libraries.

8.1 COLUMNS

Imagine if a hotel booking site was organized into folders. Folders rely on information being categorized in one dimension only, and it would start out rather well. I could click my way into the Europe folder and then into the London folder – but then I would quickly realize that once I get into deeper categories it gets complex. Where will I find the hotels that have both “Free breakfast” and “Free wifi”? In one of those folders or both?

As you see, at a certain level of complexity the folder way of storing information breaks down. Most likely your information is that complex too. A good way of categorization is creating Columns and combining them with Views.

If we continue to use the hotels example from above, I would create a country column based on the choice, managed meta data or lookup column type, and then I would create two yes/no fields for the breakfast and the wifi.

If I fill out the column values for my hotel descriptions correctly, it would be very easy for anyone to find hotels with free wifi and breakfast in London by filtering the list for those three values.

Title	Town ▼	Rating	Price level	Free Wifi in room ▼	Breakfast included ▼	Pets	Room Service
Elite 🌿	... London	5 stars	High	Yes	Yes	No	Yes
Star 🌿	... London	3 stars	Low	Yes	Yes	No	No
Johnson's 🌿	... London	4 stars	Middle	Yes	Yes	No	Yes
More 🌿	... London	3 stars	Middle	Yes	Yes	Yes	No

8.1.1 Mandatory Column Values

With mandatory, or required, column values you can be sure that all new files and list items will be categorized.

To make a column value mandatory, click on the Yes radio button under “Require that this column contains information” in the Edit Column dialog.

Require that this column contains information:

Yes No

8.1.1.1 Mandatory List Columns

In lists, some columns can very well be set to required, because what happens is that a new list item cannot be saved until a value is entered. Users will have more work, but you can feel sure the categorization will be done.

% Complete *

%

You can't leave this blank.

8.1.1.2 Mandatory Library Columns

With libraries there is more to consider before you make set a column value to mandatory. When there is a required column in a library, a Check in dialog is displayed when a file has been uploaded. The file cannot be accessed by other users until the required fields have been filled out.

Add a document

EDIT

Check In Cancel Paste Copy Delete Item

Commit Clipboard Actions

The document was uploaded successfully and is checked out to you. Check that the fields below are correct and that all required fields are filled out. The file will not be accessible to other users until you check in.

Name * Content-Types .png

Title

Area *

Version: 1.0

Created at 12/20/2015 8:37 AM by Kate Kalmström

Last modified at 12/20/2015 8:37 AM by Kate Kalmström

Check In Cancel

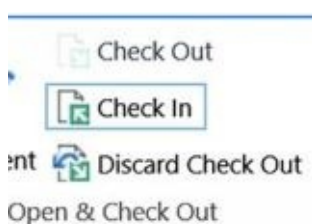
If no column is marked as required, an uploaded file will show up in the library, accessible to all users, without categorization.

With a required field, the user has to Edit File Properties to make the categorization so there is a risk that this will be omitted.

When a new file is created in the library, or when a file is added to a library that is opened in Windows Explorer, no dialog will be shown. Instead the file will have an icon, which shows that it has to be checked in.



To check in a file, open the Edit File Properties dialog and add the missing value. Then check in the file with the Check in button in the library ribbon or via the ellipsis, Advanced.



Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Categorization-Required-Values.htm>

8.1.2 Default Column Values

If you want to avoid mandatory columns and still want to have them categorized, you can use a static or calculated value that is added by default to each new item or document. Default values increase the risk of wrong categorization, but on the other hand default values can help users get started with categorization.

The default value for a column is set in the Edit Column dialog. Enter or select the value that should be default. The default setting looks a bit different in different column types.

Default value:

Choice Calculated Value

(2) Normal

When a default value has been added, it can be seen and changed in the List Settings, 'Column default value settings' under General Settings.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Categorization-Default-Values.htm>

8.2 ENTERPRISE KEYWORDS

Enterprise Keywords can be used by the whole organization. They are synchronized between all the tenant's lists and libraries and managed centrally in the Term Store.

This means that once a keyword has been added in one library, it will come up as a suggestion when a user starts writing a similar word in the same or another library.

8.2.1 Add an Enterprise Keywords Column

When you want to add an Enterprise Keywords column to a SharePoint list or library, open the List Settings and click on Enterprise Metadata and Keywords Settings under Permissions and Management. Here you can check the box for Enterprise Keywords.

- Permissions and Management
- ▣ [Delete this list](#)
 - ▣ [Save list as template](#)
 - ▣ [Permissions for this list](#)
 - ▣ [Workflow Settings](#)
 - ▣ [Generate file plan report](#)
 - ▣ [Enterprise Metadata and Keywords Settings](#)
 - ▣ [Information management policy settings](#)

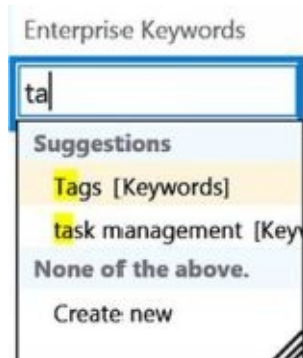
When that is done, an Enterprise Keywords column of the type Managed Metadata is added to the library. It can however only be seen when you open the properties of a document. I recommend you to Modify the View so that it becomes visible in the library or list views.

8.2.2 Tag with Enterprise Keywords

Tag documents and list items with Enterprise Keywords like this:

- For a list item, open it and enter the keyword in the Enterprise Keywords field.
- For a document, open the Edit File Properties dialog and enter the keyword in the Enterprise Keywords field.
- When the Enterprise Keywords column is added to the view, you can also open the list/library in Quick Edit mode and enter the keyword in the Enterprise Keywords cell.

In all cases you will have suggestions to select from once you start writing.

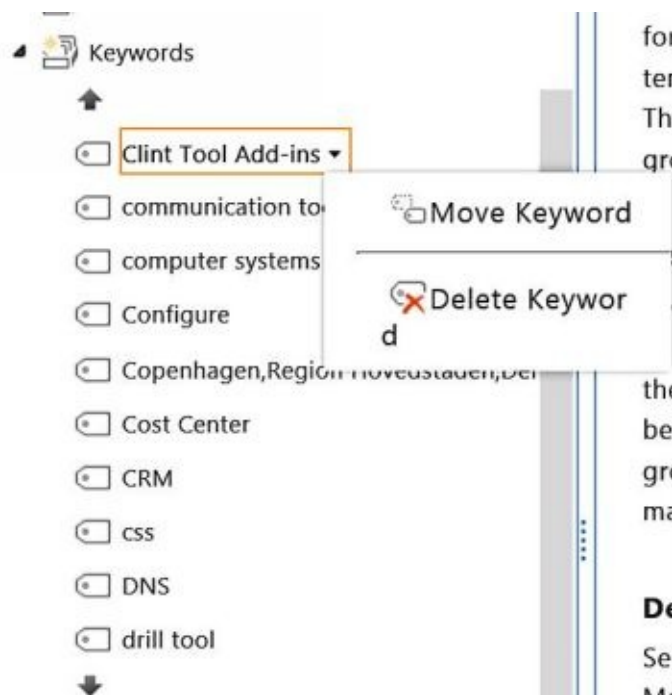


8.2.3 Term Store

The Enterprise Keywords is a folksonomy, which means that any user with write permission on a list or library can add keywords, which will then be available across the tenant. The concept of tagging is well-known from social media, and usually this freedom of suggesting keywords, or tags, works in SharePoint too.

If you still need to edit the keywords, for example to remove wrongly spelled or inappropriate words, this is done in the SharePoint Admin Center. You need to have the SharePoint or a global administrative role of the Office 365 tenant to perform this action.

1. In The SharePoint Admin Center, click on the 'term store' link in the left panel.
2. (The first time this is done, add yourself as Administrator of the Term Store.)
3. Open the Keywords accordion and move or delete keywords.



8.2.4 Remove the Enterprise Keywords column.

To add the Enterprise Keywords column you just check a box in the library settings, but you cannot remove the column by unchecking the same box. Of course you can remove the column from any view, but when you open the properties of an item, the column will still be there.

To remove the Enterprise Keywords column from a SharePoint app, you must do like with other columns; *refer to Delete a Column*.

When the column has been deleted, the Enterprise Keywords are not visible in the app, but they are still left in the Term Store and can be used in other apps. If you want to remove them totally, you must delete them from the Term Store.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Categorization-Enterprise-Keywords.htm>

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Categorization-Remove-Keywords.htm>

8.3 MANAGED METADATA

When you use Enterprise Keywords, SharePoint automatically adds the keywords entered in that column to the Term Store. You can also manage the Term Store yourself and set up different sets of terms.

In this case the column type to use for the keywords can be called anything, but it must be of the same type as the Enterprise Keywords column: Managed Metadata.

8.3.1 Add Keywords in the Term Store

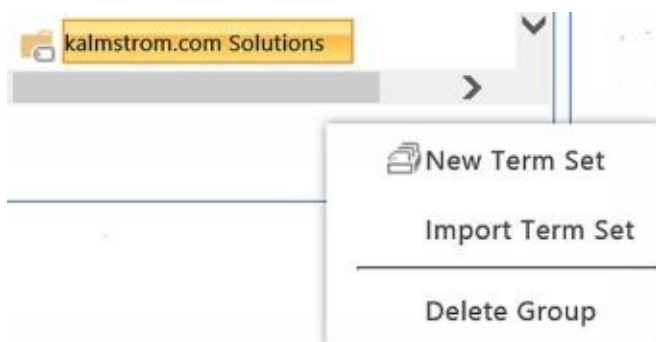
This is how to add a new term store group and term set, but you can of course also add keywords to existing term sets and term sets to existing groups in the same way as described below.

1. In the Term Store, right click on the top level, Taxonomy, and select New Group.



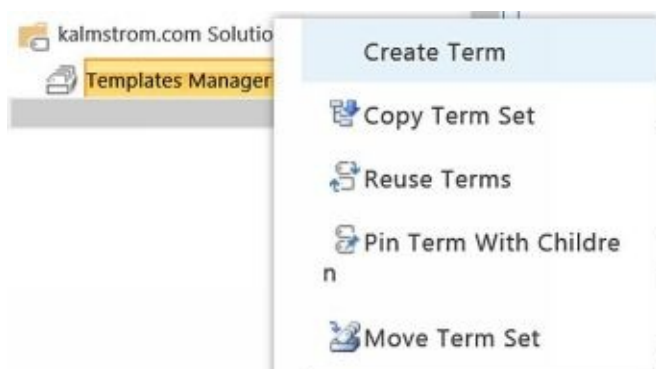
2. Write a name for the new group.

3. Right click on the new group to add a New Term Set, or click on Import Term Set to import data from a CSV file.



4. Press Enter to add more Term Sets.

5. Right click on each term set to add keywords.



6. Click on Save.

8.3.2 Connect a Column to the Term Store


To connect a column to the Term Store and use the keywords stored there, Create a Column, give it any name and check the radio button for the Managed Metadata column type.

Managed Metadata

In the Create Column dialog you can then connect the column to one of your term sets. Write a keyword, and all term sets with that keyword will be shown. Select the top level of the term set you want to use.

Use a managed term set:

Find term sets that include the following terms.



Now all keywords added to this column will be stored in the term set you connected it to, and all keywords in the term set can be suggested to users.

You can of course also open an existing Managed Metadata column from the library settings to connect it to a term set or change the term set the column is connected to.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Categorization-Term-Store-Start.htm>

8.4 CATEGORIZATION OF LIBRARY FILES

When you share documents in SharePoint, it is possible to put all of your files directly into a big document library with lots of folders within folders. Most things will work as they do in a file server, and you will have the additional features of version history, full text search, workflows, views and alerts. But there are better ways!

All of the categorization methods mentioned above work well for all apps, included libraries, but here I will mention some other methods that are special to libraries.

8.4.1 *Multiple Libraries*

Once you start building with Views and Columns, it quickly becomes apparent which files fit into your document library and which don't. To continue with the hotels example I started above, it would be silly to fill out the "Swimming Pool" value on an excursion and the "Mode of transportation" value for a hotel.

Instead of trying to fit both excursions and hotels in one document library, it makes sense to create one document library for each of those information types. Using multiple libraries for different kinds of files is generally a good idea.

These four feature works better if you use multiple libraries, instead of one library with folders:

- Permissions
- Search
- Navigation
- Scaling. A SharePoint document library should not contain more than 5000 items, so if you put all your documents in one library you will sooner or later have to move files to new libraries anyway.

Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Categorization-Create-Libraries.htm>

8.4.2 *Rate Files*

There are two options for file rating in SharePoint document libraries: by stars or by likes. Rating has several benefits:

- You can filter the column by rating.
- You can create views based on the rating.
- Search results are shown in rating order. By default the highest rated/most liked hits are shown first.

8.4.2.1 *Enable Rating*

To allow rating in a library, go into the Library Settings and click on the Rating settings link under General Settings.

Now you can allow rating and decide which kind of rating, likes or stars, should be used.

Settings › Rating Settings

Rating settings

Specify whether or not items in this list can be rated.

When you enable ratings, two fields are added to the content types available for this list and a rating control is added to the default view of the list or library. You can

Allow items in this list to be rated?

Yes

No

Which voting/rating experience you would like to enable for this list?

Likes

Star Ratings

A new rating column will be created and displayed in the default view. You may of course also include it in any other views; *refer to* Modify a View.

8.4.2.2 Rate files

The star rating column has five empty stars, and you can rate each file by clicking on a star. When you do, all stars to the left will be filled, so if you want to rate a file with three stars you should click on the third star.

Rating (0-5)



The like rating has a Like link, and when you click on it a smiley emoticon is shown at the file. It is possible to remove the linking by clicking on Unlike.

Number of Likes

😊 1 Unlike

In both cases SharePoint also shows how many users who have rated the file.

Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Categorization-Ratings.htm>

8.5 SUMMARY

Now you have learned categorization methods like rating, required and default column values and use of enterprise keywords. You know how to reach the Term Store and manage keywords centrally, and you understand how important it is to consider the use of columns, lists and libraries.

I will come back to categorization of SharePoint content in later chapters. This was just an introduction.

9 LINKS

Links are the foundation of everything on the web. A link, formally called hyperlink, is a reference to another specific web page, section, document, image or sound. It is also called URL or shortcut.

In SharePoint, a link is recognized when the mouse cursor transforms into a hand when you hover over text or an image. When you hover over text, the link will often be highlighted and underlined.

In this chapter you will learn:

- How links can be added, edited and used in SharePoint
- Different ways to add links to Wiki Pages, lists, images and file servers
- How to write and use wiki links
- How to add captions and make a link open in a new window
- How to create promoted links
- How to create a Links app and add links to it

9.1 ADD LINKS TO A WIKI PAGE

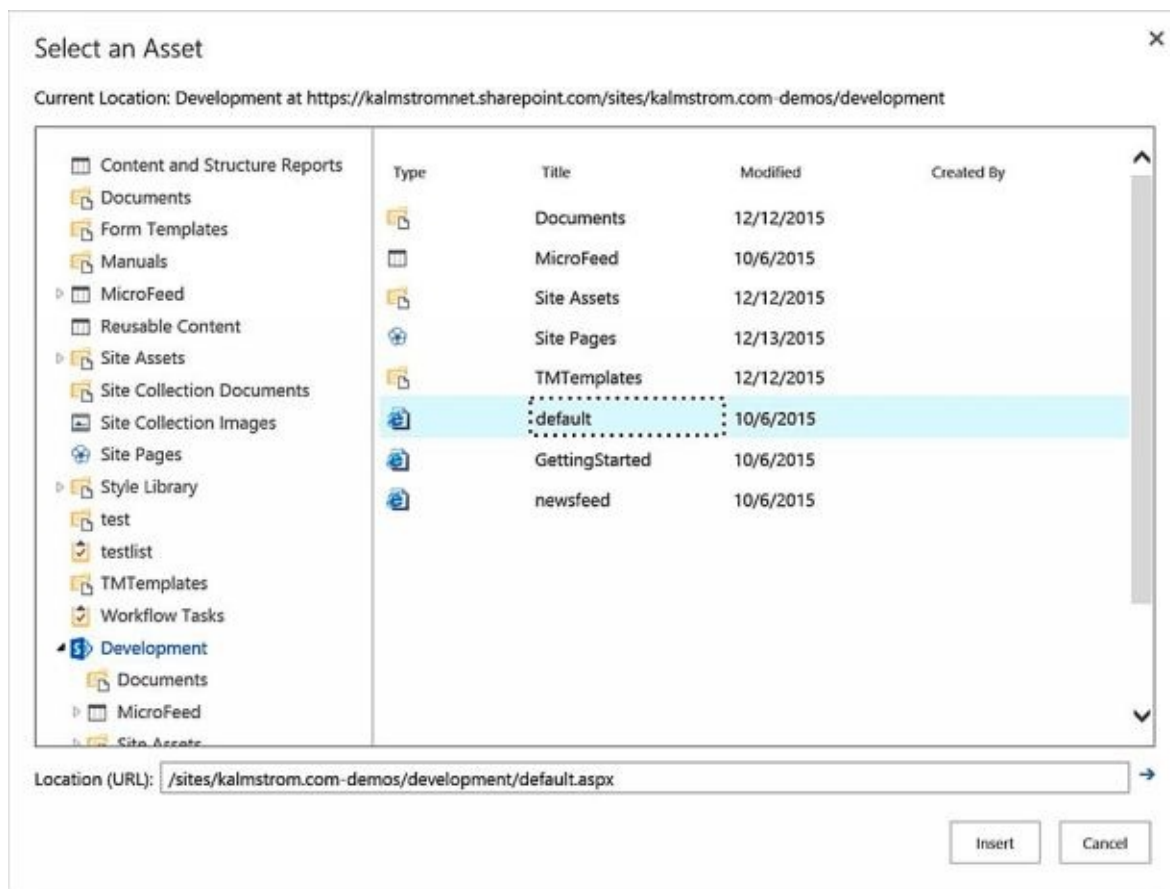
When you want to add links to Wiki Pages you have two options: 'From SharePoint' and 'From Address'. Both are found under the ribbon INSERT tab.



First you must Open the Page in Edit Mode. Then, place the mouse cursor where you want to add a link, or select the text or image you want to add a link to.

9.1.1 From SharePoint

Use the 'From SharePoint' link option, when you want to add a link to a page in the same site collection. When you select 'From SharePoint', a new page will open where you can select the location to link to.

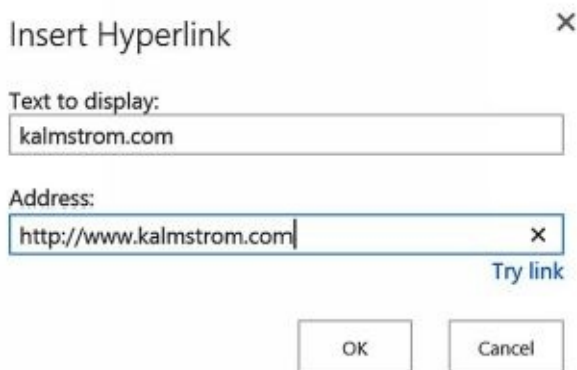


9.1.2 From Address

Use the 'From Address' link option, when you want to add a link to a page that is outside the site collection or even outside your SharePoint Online. When you select 'From

Address’, a dialog will open where you can write a URL.

If you have selected a text it will be filled out under Text to display. Otherwise you can enter an anchor text to be displayed. You can also try the link before you click OK.



To copy a link, right click on it and select Copy Shortcut. Then you can paste it in the ‘From Address’ dialog or at any other place where you want to add it.

9.1.3 Link Options

When you place the mouse cursor next to the new link, the LINK tab will open.



Here you can add a description that will be shown in a pop-up window when users hover the mouse cursor over the link. You can also add a bookmark on the web page you are linking to and enter it under the LINK tab. Then the page will open at that bookmark.

Check the box for Display icon if you have linked to an Office file and want the file type to be indicated with an icon. In other cases you will just have a white icon of no interest.

Under the LINK tab you can also set the link location to open in a new tab, remove a link and open the link location.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Add-Links-to-a-Page.htm>

9.2 ADD LINKS IN LISTS

When you want to add a link to a list, you should first Create a Column of the type Hyperlink or image in the list. Give the column a name and select to format the URL as Hyperlink.



There are two ways to add a link to the new column:

- In Quick Edit mode, paste or write the URL directly in the new column. This will give you the link without a display text.
- In Standard mode, open the list item to add the URL. Now you can enter a display text.

The image shows a screenshot of a list item in Standard mode. It features two input fields. The first field is labeled "Type the Web address: (Click here to test)" and contains the text "http://". The second field is labeled "Type the description:" and is currently empty.

You can also add links in columns of the type Multiple lines of text, if the radio button for Enhanced Rich text is selected.

The image shows a screenshot of the column configuration options. Under the heading "The type of information in this column is:", there are four radio button options: "Single line of text", "Multiple lines of text" (which is selected), "Choice (menu to choose from)", and "Number (1, 1.0, 100)". Below this is a small input field containing the number "0". Under the heading "Specify the type of text to allow:", there are two radio button options: "Plain text" and "Enhanced rich text (Rich text with pictures, tables, ar" (partially visible).

When you open an item and write in a Multiple lines of text field, you will have the same Link Options in the ribbon as when you add links to a page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Add-Links-to-Lists.htm>

9.3 ADD LINKS TO A NEWSFEED


To add links in a Newsfeed you can either paste or type the URL. Press Enter after entering the URL, and you will have a possibility to type or paste another display text than the link.

Click on the check icon to save the display text, before you click on Post to publish the whole Newsfeed entry.

Newsfeed

URL:
http://www.kalmstrom.com

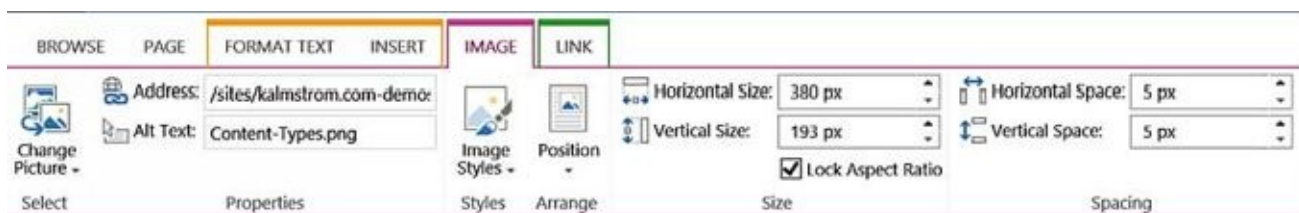
Display as:



9.4 LINK AN IMAGE

If you Add a Picture to a wiki page, you can link the image just like you link text.

1. Open a Page in Edit Mode.
2. Select the image on the page.
3. Open the INSERT tab and click on the Link button.
4. Select one of the two options for where to point the image link.
5. Select the location or enter the address, depending on option, and click OK.
6. Select the image. Two more tabs, IMAGE and LINK, will be visible in the ribbon.
7. Open the LINK or IMAGE tab and edit the link.



9.5 LINK TO A FILE SERVER

When you don't want to upload a file to SharePoint, but still wish to have quick access to it from a SharePoint page, you can give a link on the page.

You can link to any file server address (UNC).

1. Copy the link of the network folder that you want to link to a SharePoint page.
2. Open a Page in Edit Mode and click on the Link button under the ribbon INSERT tab.
3. Select the From Address option.
4. Type the address in the format File: //[folder link].
5. Write a text display and click OK.
6. Click on the link to show the LINK tab, and set the link to open in a new page.
7. Save the page.

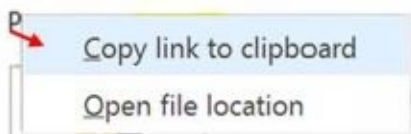
Now the folder link will be displayed on the page. When you click on the link, you will get a warning message. Click 'Allow' and the linked network folder will open.

You can also link to a specific document on a file server.

1. Right click on the document file in the file server and select Create shortcut.
2. Right click on the shortcut and select Properties.
3. Copy the path in the Target field. This will give you the whole link, including File: //.
4. Insert the link on the SharePoint page as described above.

When the file is an Office document, you can also have the correct link from within the document.

1. Open the document and Enable Editing.
2. Under the FILE tab, click on the file location on the Info menu and select Copy link to clipboard. This will also give you the whole link, including File: //.



Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Link-Shared-Drive.htm>

9.6 WIKI LINKING

Wiki links can be added to Wiki Pages and help you achieve things that are difficult to manage in other ways. With wiki links you can for example link to a page that has not been created yet. The page must be open in Edit mode; *refer to* Open a Page in Edit Mode.

Wiki links only work within one site. This means that you can link to pages, lists, libraries and even to a certain view or item, but you can *not* use a wiki link to link to content in another site, site collection or outside SharePoint.

The wiki link syntax has to be typed in, and the links must start and end with double square brackets, [[...]]. When you type the first two brackets on a SharePoint wiki page in edit mode, you will be shown a list of the site's pages, lists and views. Select one of the options, and the closing brackets will be added automatically.

You can also type in the syntax instead of selecting, for example if you want to link to a non-existing page. Then you have to add the closing brackets manually too.

9.6.1 Wiki Link and Create Page

When using wiki links you can first create the link and then create the page you have linked to:

1. Write the name of the new page surrounded by double square brackets, for example [[Sales]].
2. Save the page, and the link will be displayed with a dotted underline, to show that the page does not exist yet.

[Sales](#)

3. Click on the link, and you will be asked to create the page.

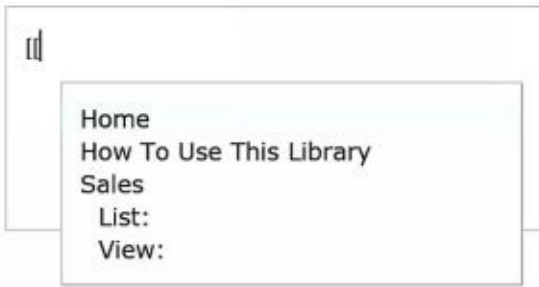


4. Click on Create, and the new page will open in edit mode, so that you can customize it.
5. When you return to the page where you created the link, it will no longer be underlined, and the link will take you to the page you just created.

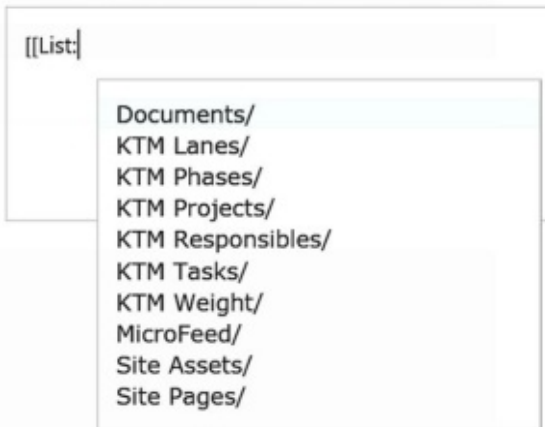
9.6.2 Wiki Link to a List

When you link to an existing list or library, you can use the select option instead of typing the syntax within the double brackets.

1. Write the two brackets and click on List:



2. Now all apps are displayed, and you can click on the list/library you want to link to.



3. The two end brackets are added automatically.

```
[[List:KTM Tasks/]]
```

4. Save the page, and the link will be shown with the list name as display text.

[KTM Tasks](#)

9.6.3 Wiki Link to a View

To create a wiki link that points directly to view, you have to do some more steps when you have selected the app.

1. Write the two brackets and click on View.
2. All apps are displayed. Click on the list/library that has the view you want to link to. Now the link is completed – but it still only points to the list/library.
3. Remove the two end brackets.
4. Press the Ctrl key + the space key. Now the views of that list will be displayed, and you can select the view you want to link to.

```
[[View:Documents/|
```



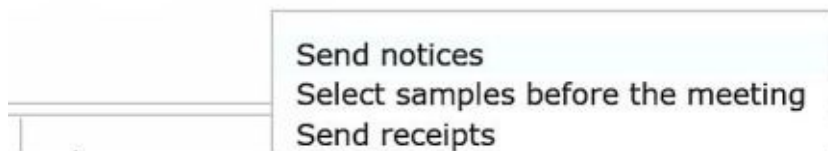
5. When you save the page, the link will be shown with the view name as display text.

9.6.4 Wiki Link to an Item

When you want to link to a specific item in a list or library, the process is nearly the same as when you link to a view.

1. Write the two brackets and click on List.
2. All apps are displayed. Click on the list/library that has the item you want to link to. Now the link is completed – but it still only points to the list/library.
3. Remove the two end brackets.
4. Press the Ctrl key + the space key. Now the items of that list will be displayed, and you can select the item you want to link to.
5. If there are many items in the list, you will first be asked to start typing to have choice. In the image below I have written an s, and then all items that begin with an s are displayed.

[[List:KTM Tasks/s]]



6. When SharePoint creates the link, the ID number of the item is added as the actual location for the link. After that comes a pipe (vertical bar) and then the display text, which is the title of the item.

[[List:KTM Tasks/6|Send notices]]

7. When you save the link, the item name will be shown as display text for the link.

9.6.5 Manipulate Display Text

As we have seen in the section above, the wiki link to an item uses the item ID and then adds the item name after a pipe to get the link to show the item name as display text.

Pipe + display name can be used in all wiki links:

1. Create the wiki link as described in one of the sections above.
2. Type a pipe + the word(s) you want to use as display text before the two square brackets at the end.
3. Save the page, and the text after the pipe will be shown as display text.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Wiki-Pages.htm>

9.7 ADD A LINKS APP

A nice way of adding links to a SharePoint page is to add an app that is designed to display links, and place the links there.

✓   The kalmstrom.com website ... SharePoint solutions and tips

1. Add an App, in this case the Links app.
2. Open the Page in Edit Mode and place the mouse cursor where you want to add the Links app.
3. Add a Web Part – the links app you just created.
4. To add links to the links app, click on ‘new link’.

 new link

5. Enter the address in the URL field and give a description that gives a suitable display text. The Notes text will be shown in a separate column.

URL *	Type the Web address: (Click here to test) <input type="text" value="http://www.kalmstrom.com"/>
	Type the description: <input type="text" value="The kalmstrom.com website"/>
Notes	<input type="text" value="SharePoint solutions and tips"/>

Created at 12/19/2015 3:13 PM by Kate Kalmström
Last modified at 12/19/2015 3:14 PM by Kate Kalmström

6. Click on Save.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Links-List-App.htm>

9.8 PROMOTED LINKS

When you first create a SharePoint Online team site, it has links in the shape of moving tiles on the start page. These links are called promoted links, and you can create such links yourself and place them on any SharePoint page.



9.8.1 Create Promoted Links

Use the command Add an App to create a Promoted Links app.

1. Open the Promoted Links app and go to the All Promoted Links view.
2. Click on '+ new item'. A dialog will open, where you can enter links to the background image and link location, a description and sequence the order of the tile.
3. You can also select if the link location should open in the same page, in a new tab or in a dialog. Click on Save when the form is filled out.

Title *

Background Image Location Type the Web address: (Click here to test)

Type the description:

Description

Link Location * Type the Web address: (Click here to test)

Type the description:

Launch Behavior * ▼

Order

4. Repeat step 2 for each tile.
5. (Remove the app from the Quick Launch.)

9.8.1.1 Promoted Links Images

You don't have to add images to the promoted links, but if you want to do that, any image can be used. The size will be 150x150px, so if you use a bigger image it will be compressed. Avoid using a smaller image, as it will give bad quality. (It is possible to change the size of promoted links only by using code.)

9.8.2 Add the Promoted Links App to a Page

When you have created the Promoted Links app you can add it to any SharePoint page.

1. Open the Page in Edit Mode.
2. Place the mouse cursor where you want the app to be displayed and click on the App Part button under the INSERT tab.
3. Select the newly created Promoted Links app.
4. Make any preferred changes to the app part before you save.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Promoted-Links.htm>

9.9 SUMMARY

As the SharePoint site grows, it becomes increasingly important to have a good navigation. In the Links chapter I have introduced promoted links, wiki links and links apps in addition to the more well-known links. I have also shown how to add captions and how to make links open in a new window.

10 PICTURES

You can use images in SharePoint pages. They can be added from different sources and edited in various ways. They can also be linked; *refer to* Link an Image.

In this chapter I will introduce picture libraries and explain how you can add pictures to wiki pages and web parts. I will also show three ways to create and add images that have different links in different areas, so called hotspot images.

10.1 PICTURE LIBRARY

Instead of using the Site Assets library to store images that should be used in a SharePoint site, you can create Picture Libraries. You may very well create several Picture Libraries, to categorize the images.

The benefit of using a picture library is that it by default will have three different views.

- The Thumbnails view, which shows thumbnails of all pictures.
- The Slides view, where you can move between different pictures.
- The All Pictures view, which looks like any standard library.

Another important benefit is that you can add The Picture Library Slideshow Web Part to a page and thus show pictures from the library in a slideshow on that page.

To create a Picture Library, Add an App and select the Picture Library template. *Refer to Add Files to a Library* on how to add image files to the library.

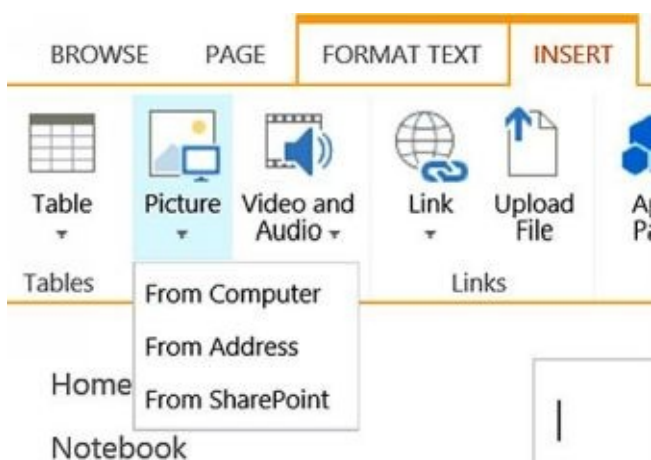
10.2 WIKI PAGE PICTURE OPTIONS

Image can be added directly to SharePoint Wiki Pages from three different kinds of sources.

- From Computer
- From Address
- From SharePoint

Follow these steps when you want to add an image to a page, no matter which source you wish to use.

1. Open the Page in Edit Mode.
2. Place the mouse cursor where you want the image to be placed.
3. Open the INSERT tab and click on Picture to see the options.



10.2.1 Add a Picture 'From Computer'

When you select the 'From Computer' option to add a picture, a copy will be uploaded to a SharePoint document library.

1. Select 'From Computer' and browse to the file on your computer.
2. In the Upload Image dialog, select a destination library where you want to place your picture. The default choice is 'Site Assets', but you can also add the image to a Picture Library or even to a document library.
3. Click OK, and the picture will be displayed on the page.

10.2.2 Add a Picture 'From Address'

When you add a picture from an address you have no control over it, if you don't control the original site. If the picture is removed from the original site, it will no longer be shown on your SharePoint site, and if it is updated on the original site it will be updated on your site too.

To have full control over the picture, download it and use the 'From Computer' or 'From SharePoint' option. But this of course means that your picture will not be updated when the original picture is updated.

1. Select 'From Address' and enter the URL in the address field.

2. Click OK, and the picture will be displayed on the page.

10.2.3 Add a Picture 'From SharePoint'

When you add an image 'From SharePoint', it means "from this SharePoint site collection". Use one of the other two options if you want to add a picture from another SharePoint site collection.

1. Select 'From SharePoint'.
2. Browse to the picture you want to add.
3. Click on Insert, and the picture will be displayed on the page.

10.2.4 Picture Display

When you select a picture on a page in edit mode, the IMAGE tab will be displayed. Here you can modify how the image is displayed in several ways.



From left to right you can:

- Change Picture. This button gives the same three options as the Picture button under the INSERT tab.
- See the path to the image.
- See and change the Alt text, which is a text that is shown instead of the image if the image cannot be shown.
- Set image borders in various styles.
- Set the relative position of the image. (If you want to give the image an absolute position I recommend you to Add a Table and place the image in a cell.)
- Change the size and lock the aspect ratio while doing so. If you are using Internet Explorer, you can also change the size by dragging the handles of the selected picture.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Add-an-Image-from-the-Computer.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Adding-an-Image-from-Address.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Adding-an-Image-from-SharePoint.htm>

10.3 PICTURE WEB PARTS

When you insert a picture web part on a page and add your images there, you will have additional options. Picture web parts can be used on Wiki Pages as well as on Web Part Pages.

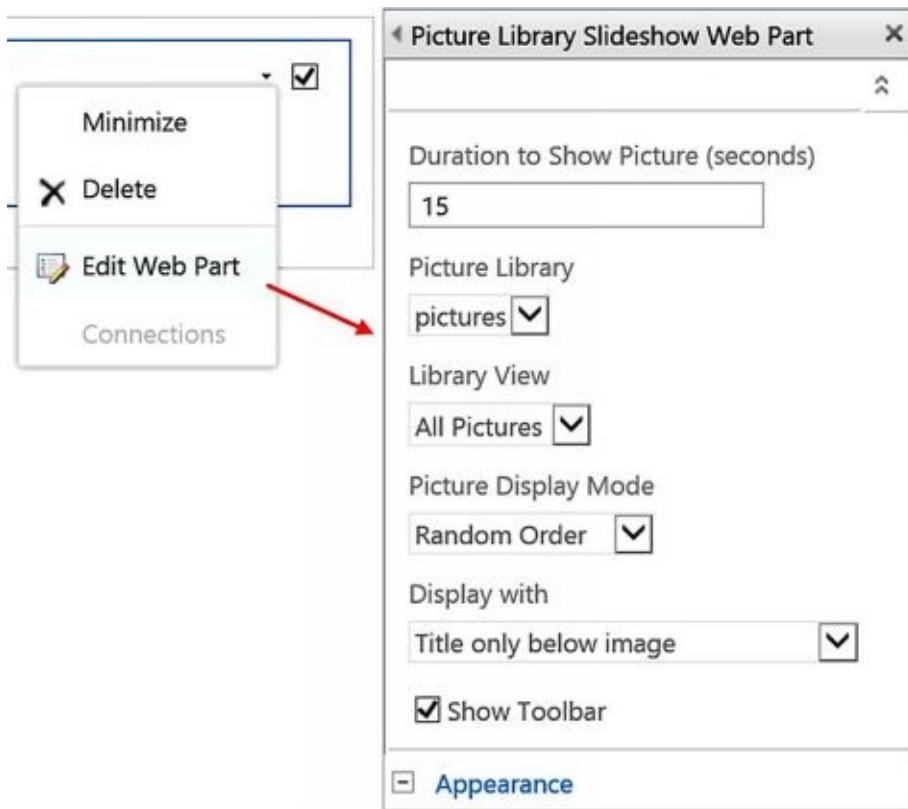
10.3.1 The Picture Library Slideshow Web Part

If you want to show all the images in a Picture Library, you can add it in a slideshow web part. It shows the images one by one, either with controls for manual selection or with a timer that switches images automatically. A limitation of the Picture Library Slideshow web part is that the picture library must be in the same site as the page where you put the web part.

Consultants



1. Add a Web Part, the Picture Library Slideshow web part in the Media and Content category.
2. Edit the Web Part and select which picture library should be used and how the images should be displayed.



3. Click OK and save the page.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Picture-Library-Slideshow-Web-Part.htm>

10.3.2 Add a Picture in the Image Viewer Web Part

In SharePoint versions before 2010, the Image Viewer Web Part was the only way to add a picture to a SharePoint page. Nowadays this web part is not so commonly used, but it is still there.

1. Add a Web Part, the Image Viewer web part in the Media and Content category.
2. Edit the Web Part and type or paste the image URL in the Image Link field. The picture will be displayed on the page.
3. Make other changes you prefer.
4. Click OK and save the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Image-Viewer-Web-Part.htm>

10.4 HOTSPOT IMAGE

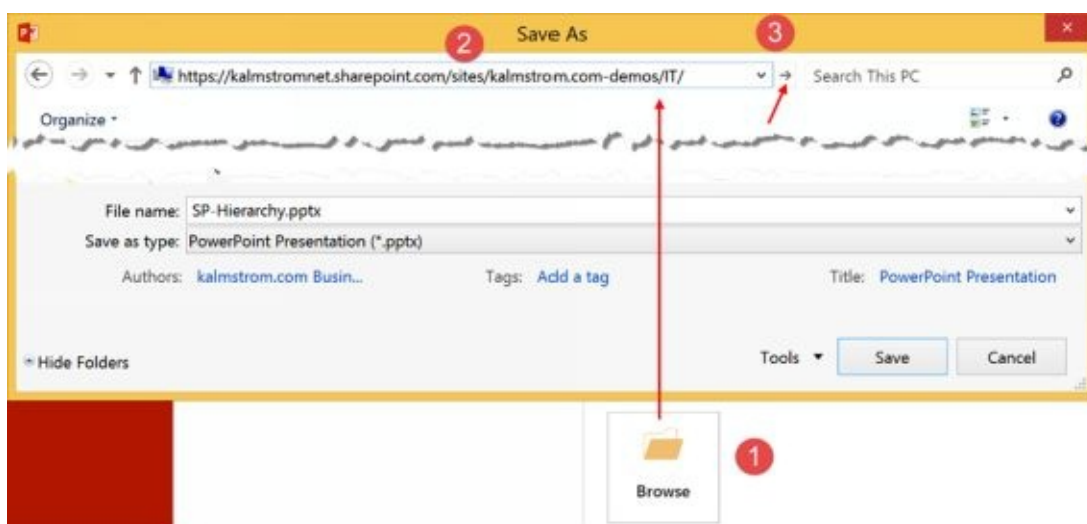
Images with clickable regions are often called HTML maps, image maps or hotspot images. Such pictures with areas linked to different locations can be created in PowerPoint or Visio. The creation is out of scope for this book, but you can see the process in the demos I refer to at the end of this section.

Hotspot images can also be created in SharePoint Designer 2010, and I will explain how to do that below. The PowerPoint option is the easiest one, but Visio and SharePoint Designer 2010 gives a cleaner picture and can be added to both Wiki Pages and Web Part Pages.

10.4.1 Save a File to SharePoint

When you want to save files to a SharePoint site to use them on pages, for example from PowerPoint or Visio, you should Save As and use the Browse button. First enter the site path as address and then select the location where you want to store the file.

1. Click on the Browse button.
2. Add the path to the SharePoint site in the address field. (If you copy the path, remember to only copy the part of the URL that gives the site.)



3. Press Enter or click on the arrow to the right of the address field.
4. Select where your picture should be saved on the SharePoint site.
5. Click on Save.

10.4.2 Add a PowerPoint File to a Wiki Page

When you have created an image in PowerPoint, save the .pptx file to the SharePoint site where you want to add the picture; *refer to* Save File to SharePoint. Then use the Embed Information of the file to embed it in the page; *refer to* Embed a File.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Clickable-Links-PowerPoint.htm>

10.4.3 Add a Visio Drawing to a Page

When you have created an image in Visio, save the drawing to the SharePoint site where you want to add the picture; *refer to* Save File to SharePoint. Visio images should be added into the Visio Web Access web part.

1. Add a Web Part, the Visio Web Access in the Business Data category.
2. Edit the Web Part.
3. At Web Drawing URL, browse to the Visio drawing, or enter its URL.
4. Make other settings you prefer and click on Apply or OK.
5. Save the page.

Demo:

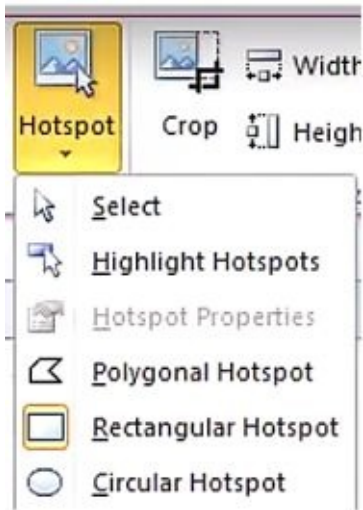
<http://kalmstrom.com/Tips/SharePoint-Online-Course/Clickable-Links-Visio.htm>

10.4.4 Add a SharePoint Designer 2010 Image to a Page

In SharePoint Designer 2010 it is possible to create hotspot images – pictures with clickable links. That possibility is removed in SharePoint Designer 2013, but if you are using SharePoint Designer 2010 without updates, you can open a SharePoint Online page in SharePoint Designer 2010 and add the picture. (*Refer to* Open the site in SharePoint Designer.)

You cannot edit existing SharePoint Online pages in SharePoint Designer 2010, but you can create new pages. Therefore you must first add an image to a new .aspx page in SharePoint Designer 2010 and add hotspot links to it. Then you can add the picture code to the SharePoint page where you want to have the picture.

1. Open the SharePoint page where you want to place the clickable image in SharePoint Designer 2010.
2. Click on Page under the Pages tab and create a new .aspx page.
3. Edit the new page in advanced mode.
4. Click on the Picture button under the 'Insert' tab and browse to the image you want to use.
5. Click on the Insert button.
6. Select the image to see the 'Picture tools' tab.
7. (Click on the Properties button and set the border thickness to 0 if you don't want a border around the image.)
8. Click on the Hotspot button and select the form of the hotspot.



9. Place the mouse cursor in the corner of the area where you want the hotspot and drag it to the preferred size.
10. When you let go of the mouse a dialog for the link URL will be shown. Enter the path to the site you want to link to.
11. Repeat step 8-10 for each link.
12. Save the page.

Now you have a page with a hotspot image, but it is a separate page with no connection to the rest of your SharePoint site. You must add the hotspot image code to your preferred page.

1. In SharePoint Designer 2010, open the code of the page with the hotspot image.
2. Copy the map and image code for the hotspot image.

```
<map name="FPMap0" id="FPMap0">
<area href="http://www.kalmstrom.com/" shape="rect" coords="198, 1, 297, 67" />
<area href="http://www.kalmstrom.com/tips" shape="rect" coords="94, 112, 191, 171" />
</map>

```

The final step, to paste the copied code into another page, is a bit different depending on what kind of SharePoint page you want to use.

Wiki Page:

1. Open the Wiki Page in Edit Mode.
2. Under the FORMAT TEXT tab, click on the Edit Source button.
3. Delete the existing code and paste the code you copied from SharePoint Designer.
4. Save the page.

Web Part Page:

1. Open the Web Part Page in Edit Mode.
2. Add a Web Part to a Web Part Page, the Content Editor web part in the Media and Content category.
3. Under the FORMAT TEXT tab, click on the Edit Source button.

4. Paste the code you copied from SharePoint Designer.

5. Publish the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Clickable-Links-SPD2010.htm>

10.5 SUMMARY

In the Links chapter you have learned how to add pictures to SharePoint wiki pages and web parts. I have also shown some ways to create hotspot images and add them to SharePoint pages.

11 CONNECT AND EXPORT SHAREPOINT DATA

SharePoint lists can be opened in other platforms, where you can take advantage of features that make it easier to work with the data. You can find the Connect & Export ribbon group under the LIST/LIBRARY/CALENDAR tab.



SharePoint lists that build on the Tasks template, also has another button for synchronization with Project; *refer to* Sync SharePoint Tasks list with Project.

In this chapter, I will show several different ways to connect and synchronize SharePoint with Outlook, Excel, Project and Access. I will explain how the result of the connection is different for connections to Excel, compared to Outlook, Project and Access, and I will make a comparison between Excel and SharePoint. I will also give some examples on how Access can be used with SharePoint.

Another way to connect is to show content from Excel in a web part on a SharePoint page. This can also be done with Visio drawings in a similar way.

11.1 CONNECT SHAREPOINT AND OUTLOOK

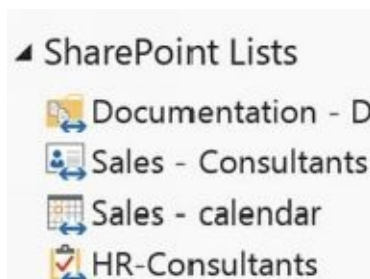
The Calendar, Tasks and Contacts list types have a lot of semi-hidden functionality that allows them to synchronize with Outlook. You can also synchronize SharePoint libraries with your personal Outlook.

Click on the 'Connect to Outlook' button under the LIST/LIBRARY/CALENDAR tab to make the connection.

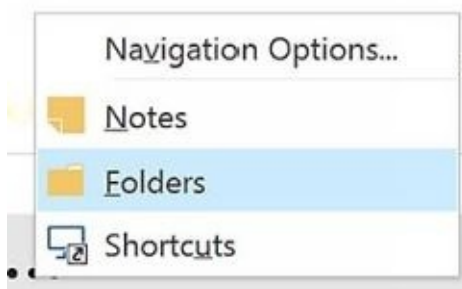


11.1.1 The Outlook Folders view

When lists and libraries are synchronized with Outlook, they are displayed under the heading SharePoint Lists in the Outlook Folders view.



To open the Folders view, click on the ellipses (...) at the bottom left corner of any Outlook view.

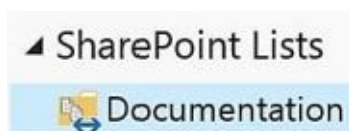


(Contacts and Calendar lists are also displayed in the Outlook Contacts/Calendar view.)

11.1.2 Sync a SharePoint Library with Outlook

When you connect a SharePoint library to Outlook, you can work offline with the library files. Note that metadata is not synchronized, only the files themselves.

The library files are placed under a separate heading in The Outlook Folders view.



When you open a file in Outlook, you first have to click on the Edit Offline button to work with it. Then you can edit and save the files as usual, and the changes will be synchronized to SharePoint next time you are connected to SharePoint Online.

As you have the files in Outlook, you can also use other Outlook settings, like send and receive settings, on the folder that is synchronized with SharePoint.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Sync-SharePoint-Files-with-Local-Outlook.htm>

11.1.3 Sync a SharePoint Calendar with Outlook

Outlook has more calendar features than SharePoint has, so it is often useful to connect the SharePoint team calendar to your personal Outlook. When you do that, the SharePoint calendar will be shown as a separate calendar in Outlook. New events that you create using Outlook will be synchronized to SharePoint, so when you refresh your SharePoint page you will see these events in the team calendar.

In the image below, from the Outlook calendar view, the calendar named “Calendar” is your personal calendar, which is usually stored within your Exchange mailbox. The calendar called ‘HR – HR Events’ is the SharePoint calendar. The two parts of the name are the name of the site (HR) and the name of the calendar list within that site (HR Events).



When the boxes for both calendars are checked, they will be displayed side by side and you can drag and drop or copy and paste events from one calendar to the other. Uncheck one of the boxes if you want to see only one calendar.

In Outlook, you can categorize the SharePoint calendar events with colors, just as you do with your personal calendar, but these colors are not displayed in SharePoint – at least not when this book is published!

Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Outlook-Sync-Calendars.htm>

11.1.4 Sync a SharePoint Contacts List with Outlook

When you connect a SharePoint contacts list to your personal Outlook, the SharePoint list will be shown under Other Contacts in your Outlook. New contacts that you create in that Outlook folder will be synchronized to SharePoint, so when you refresh the SharePoint page you will see these contacts in the SharePoint contacts list.

In the image below, from the Outlook contacts view, ‘HR- Consultants’ is the SharePoint contacts list in the HR site.



You can drag and drop or copy and paste contacts between My Contacts and Other Contacts. The 'Contacts' in this case is stored within the Exchange mailbox while the 'HR - Consultants' is stored in SharePoint.

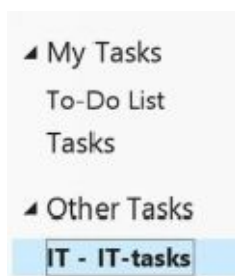
Demo:

<http://www.kalmstrom.com//Tips/SharePoint-Online-Course/Outlook-Sync-Contacts.htm>

11.1.5 Sync a SharePoint Tasks List with Outlook

When you connect a SharePoint Tasks list to Outlook, the SharePoint list is added to the Outlook Tasks as a separate tasks folder, and you can work with the tasks while off-line. As soon as you are connected to SharePoint again, the tasks will be synchronized. As with contacts and calendars, you are also able to copy and paste or drag and drop between the SharePoint tasks and Exchange tasks.

In the image below, from the Outlook tasks view, the 'IT-IT-tasks' is the SharePoint tasks list in the IT site.



Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Sync-SharePoint-Tasks-List-with-Outlook.htm>

11.1.6 Remove a Synchronized List from Outlook

If you no longer have an Office 365 license, or you don't want to have a synchronized SharePoint list in your Outlook for some other reason, it is very easy to remove that list:

1. Open The Outlook Folders view.
2. Scroll down to the SharePoint lists.
3. Right click on the list you want to remove and select Delete Folder.
4. Click Yes in the confirmation dialog.

Demo:

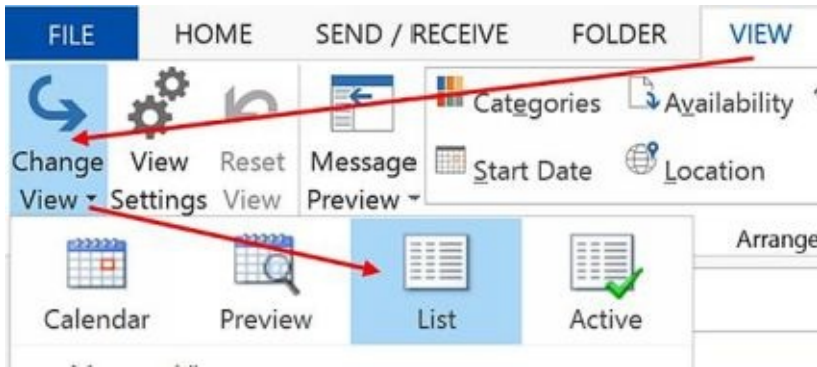
<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Remove-Synched-SharePoint-List-from-Outlook.htm>

11.1.7 Import an Outlook Calendar to SharePoint

You can import calendar info from an Outlook calendar to a new SharePoint calendar by using the Connect to Outlook feature.

1. In SharePoint, Add an App, in this case a calendar app.

2. Connect the new calendar to Outlook; *refer to* Connect SharePoint to Outlook.
3. In Outlook, change the calendar view for the original Outlook calendar into List view.



4. Copy all the items in the original Outlook calendar.
5. Open the SharePoint calendar and change the view into List.
6. Paste all the items you copied from the original Outlook calendar into the SharePoint calendar.

You can even use this method to get a calendar ICS file from another place, for example a website, into SharePoint. Use Outlook as an intermediate step, so that you first import the external calendar to Outlook and then copy the items to the synchronized SharePoint calendar in Outlook, as described above.

Demo: <http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Copy-Events-from-Calendar-or-ics-File.htm>

11.2 CONNECT SHAREPOINT AND EXCEL

SharePoint lists and Excel have many similarities – but also important differences. Even if Microsoft Excel was not originally created for data sharing, it is often used that way. SharePoint, on the other hand, was designed for collaboration from the beginning, and therefore SharePoint has advantages that make it more suitable for data sharing than Excel:

- **Editing.** A SharePoint list does not get locked when someone is editing it. An Excel file on a file server is locked, so that no one else can access it until the editing is finished and the new version of the file has been saved.
- **Versioning.** SharePoint can show and restore earlier versions of each row in a list. Excel does not have a versioning feature, so to have several versions of a file you have to give them different names – and even if you do that, you have to manually find out the differences between the two files.
- **Alerts.** SharePoint lists have an Alert feature, so that you can have an automatic e-mail each time a list item has been changed. There are several different options for when this alert should be sent. You can also create more advanced notifications with SharePoint Workflows. Excel does not have this possibility without extensive coding.
- **Independence.** In a SharePoint list each item is independent from the others, so that you can edit and lock each row (=item) and set independent row Permissions.

SharePoint also has some problems that you should be aware of:

- **Portability.** A SharePoint list cannot be transferred as easy as an Excel file. (This might also be seen as a benefit! It is not always an advantage that you easily can share an Excel file.)
- **Re-training and moving costs.** If you already have your data in Excel, it will take some time to move it to SharePoint. It is always easier to let people work as they have always done!
- **The 5000 items list limit.** Currently SharePoint Online has a list limitation of 5000 items in a view. Therefore you should split up the data if it will give more than 5000 list items. (Another option is to Upload Files to a Library and share Excel files in SharePoint that way.)

The conclusion is that SharePoint is much better when it comes to sharing options, so data that should be shared should be kept in SharePoint.

On the other hand Excel has excellent calculation, analysis and visualization features. The good thing is that you can use these Excel features on your SharePoint list data too! In this section I will explain how it is done.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Excel-vs-SP.htm>

11.2.1 Export a SharePoint List to Excel

If you export SharePoint lists to Excel, you can take advantage of the analysis, calculation and visualization features where Excel shines.

You should however be aware that data can only be changed in SharePoint. Any changes you make in the SharePoint list will be reflected in Excel, but it is not vice versa. Excel does not give you an error message if you try to edit the data in Excel, but your input will be over-written with the information from SharePoint when you refresh.

1. In the SharePoint list, click on the Export to Excel button under the ribbon LIST tab.



2. Click OK and Enable to the warning messages.

3. Select how you want to view the data in Excel. The default option, Table, is often the most useful.

All the columns of the SharePoint view you export will be included and visible in Excel. You will also have two extra columns, Item Type and Path, which you will probably want to hide.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Totals-ExcelExport.htm>

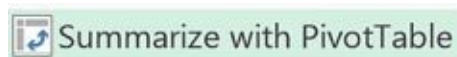
11.2.2 Analyze SharePoint List Data in Excel

When you have worked with list items for a while, you probably want to study the data. By exporting the list to Excel; *refer to* Export a SharePoint List to Excel above, you can both analyze data and visualize it in charts. Excel charts can also be added to SharePoint pages; *refer to* Landing Page with Chart.

11.2.2.1 Pivot Table and Chart

You can study SharePoint list data in Excel by creating a pivot table and a chart.

1. Click anywhere in the Excel table and then on 'Summarize with PivotTable' under the ribbon DESIGN tab.



2. Select what data you want to view in the Pivot table. The default option is the table you clicked in.

3. Drag and drop the fields you want to work with to some of the four Pivot areas.

4. To create a chart, click in the Pivot table and then on the PivotChart button under the PIVOTTABLE TOOLS, ANALYZE tab.

5. Select the chart type and design you prefer, to visualize the data from the SharePoint list.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-PivotTable-Chart.htm>

In my book and e-book [Excel 2016 from Scratch](#) (also suitable for earlier versions), you can learn much more about Excel. My focus is on calculation and visualization, from basics to advanced, and I give links to more than 60 online articles with video demonstrations and downloadable exercises.

11.2.3 Direct Export/Import of Excel Data to SharePoint

Exporting or importing Excel data to SharePoint gives many sharing advantages. The transfer can be done in several ways, and the major question is how much functionality and control you need.

Should you take the extra trouble and use Access, or can you do with the simpler methods of direct export or import that is described in this section? For the Access option; *refer to* Export an Excel Table to a SharePoint List via Access.

The two methods below are quick, but they have some serious drawbacks.

- A new SharePoint list will be created for your data. Excel does not push data into an existing list.
- The columns created in the new list are List Columns, not Site Columns.
- When you have exported the Excel data to SharePoint, it can only be updated in SharePoint. Changes in SharePoint can be pulled down to Excel with the Excel Refresh button, but not vice versa.
- You cannot change the order of columns or exclude columns from the export/import. The range or table will be transferred just as it is.
- You cannot change the order of columns or exclude columns from the export/import.
- You cannot connect the list created from Excel data to Outlook as described in Connect SharePoint to Outlook.

There are also other problems with this method of transferring Excel data to SharePoint, but they can be helped by a “clean up” of the SharePoint list; *refer to* Enhance SharePoint List Created from Excel Export.

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Problems.htm>

11.2.3.1 Export an Excel Table to a SharePoint List with the Excel Export button

The easiest way to move items from Excel to SharePoint is to export an Excel table to a SharePoint list by using the ‘Export Table to SharePoint List’ button in Excel.

1. Copy the URL to the SharePoint site where you want the new list to be created. Note that you should only copy the site URL in itself:
2. In Excel, format the data as a table.
3. Click on the Export button under TABLE TOOLS >DESIGN >External Table Data and choose Export Table to SharePoint List.



4. Paste the URL you copied into the Address field in the dialog that opens.
5. Check the box for read-only connection.
6. Write the name you wish to use for the SharePoint list that is going to be created. You may also add a description for it. Click Next.
7. In the new dialog that opens, you can see the different list columns that will be created. It is not possible to change anything here, so if the list looks wrong you have to go back and make changes in the table. Click on Finish.

Now a new SharePoint list will be created on the site you gave the URL to, and the data from the Excel table will be added into it.

When the process is finished, you will get a message dialog with a link to the new list. You can also open the list by clicking on the new Open in Browser button in Excel or by going into the SharePoint Site Contents and find it.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Import-Excel.htm>

11.2.3.2 Import Excel to SharePoint

Above I showed how to export an Excel table to a SharePoint list. You can also do it the other way around and import the Excel table to SharePoint with the Import Spreadsheet app. If you use that method, you can also import a range of cells without formatting them as a table.

1. Add an App.
2. Search for Excel and select the Import Spreadsheet app.



3. Give the app a name and browse to the Excel file you want to import.
4. Enter the URL of the SharePoint site to where you want to import the Excel table.
5. Click on Import, and you will be asked to log in to SharePoint again.
6. Select the table or range that you want to import and click on Import.

Now the Excel data you selected will be imported to the SharePoint list app.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Import-Excel-Spreadsheet.htm>

11.2.3.3 Enhance a SharePoint List Created from Excel Export/Import

Unfortunately the SharePoint list that is created when an Excel table is exported or imported to a SharePoint list does not take advantage of all SharePoint features. Here are some tips on how you can make the new list better adapted to SharePoint:

- Enable Version History, so that you can see different versions of the list. This possibility is one of the major benefits with having the data in SharePoint, instead of in Excel.
- The default view of the new list is Datasheet/Quick Edit, not Standard view. But having the Datasheet view as default creates problems if you want to display the list in a web part. Therefore you might want to change the default view to Standard
- Add an Edit button to the Standard view; *refer to* Edit Button and Data Entry View.
- Make the view cleaner by not showing all columns; *refer to* Modify View.
- Create more views to show the data from different aspects.
- Add the list to the Quick Launch; *refer to* Edit Links.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Clean.htm>

11.2.4 The Excel Web Access Web Part

The Excel Web Access web part is useful when you want to show Excel content in SharePoint. With this method the Excel data is not exported to SharePoint but instead shown as it is in a web part. You can display all or just a part of a workbook in this web part.

The Excel Web Access web part tool pane gives a lot of options, mostly regarding the user interaction with the Excel content. Here I will just go through the most basic: how to define what workbook and what part of that workbook should be displayed in SharePoint.

1. Add or save the Excel file to a SharePoint library; *refer to* Upload Files.
2. Open a Page in Edit Mode, where you want to add content from Excel.
3. Add a Web Part, the Excel Web Access web part in the Business Data category.
4. Edit the Web Part.
5. Enter the URL to the Excel file in the Workbook field in the web part panel, or click on the Browse button to the right of the field and find the Excel file.
6. If you want to show the whole workbook, click on Apply and then save the page.
7. If you want to show only part of the workbook, select that part in Excel and give it a name. Then add the name in the Named Item field in the web part panel before you apply and save.

You can continue updating the Excel file in either Excel Online or the client version of Excel. The Excel Web Access web part will be updated each time you save your changes.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Excel-Web-Access.htm>

11.3 CONNECT SHAREPOINT AND PROJECT

Microsoft Project is a project management software with powerful features that help managers develop plans, assign tasks, track progress, manage budgets and analyze workloads.

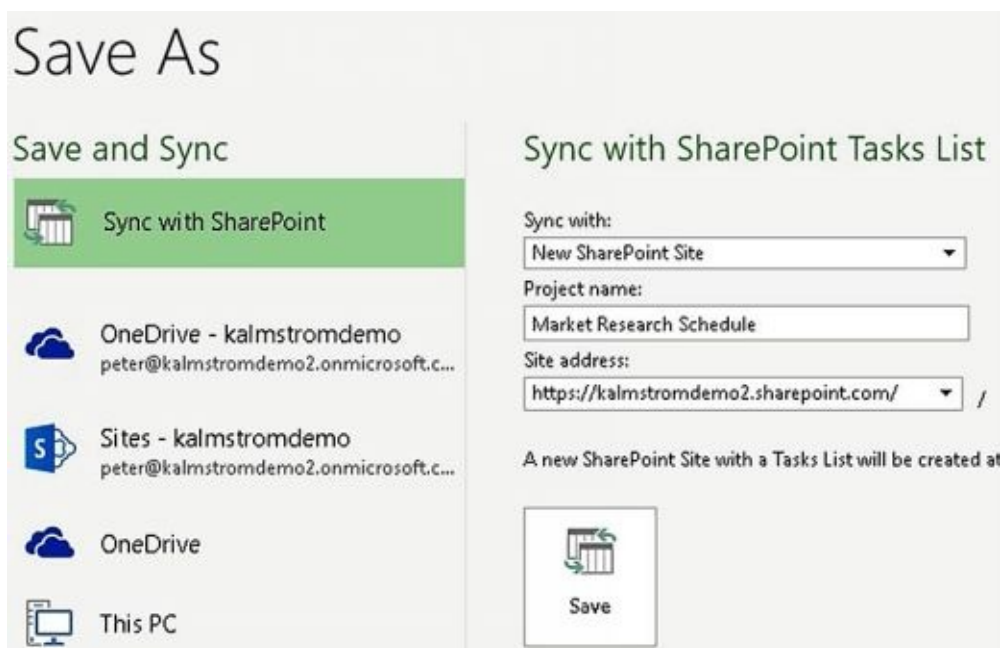
Project can be used with SharePoint, and thereby Project tasks can be shared with users who don't have a Project license, users who don't need all the project management features but just want to have an overview over their tasks and set them to completed as work proceeds.

The synchronization between SharePoint and Project is not automatic. Whether you create new items in SharePoint or Project, click on the Sync button in Project to update SharePoint with the data from Project and get any changes made on the SharePoint side into Project (including live views, permissions and versions).

11.3.1 Sync Project File with SharePoint Tasks List

If you start from Project, you can either let Project create a new SharePoint site with a Tasks list or first Add an App built on the Tasks template to SharePoint and use it for the Project file.

1. In Project, open the file and Save as. Select the option 'Sync with SharePoint'.



2. Create a new site or give the URL to an existing site. If you have already synchronized a SharePoint site, you can select that URL from the existing sites.

3. Verify the site.

4. Select the list you want to use and click on Save.

Now items are created in the Tasks list from all the Project items, and links are established between the Project and SharePoint fields. The Project file itself will be saved in the SharePoint Site Assets library.

11.3.2 Sync SharePoint Tasks list with Project

When you open a SharePoint tasks list in Project, you use Project to view the data. However, everything (like views and permissions) is stored in SharePoint.

There are two methods to open a SharePoint tasks list in Project:

- In the SharePoint list, click on the Projects button under the ribbon LIST tab.



- Copy the URL to the SharePoint site. Open Project, click on the 'New from SharePoint Tasks List' button and paste the URL. Then click on the 'Check Address' button and select the list you want to open in Project.

Now a new Project file will be created, connected to the SharePoint list and added to the SharePoint Site Assets.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Project.htm>

11.4 CONNECT SHAREPOINT AND ACCESS

When you open a SharePoint list in Access, you can take advantage of Access features like find and replace, and you can copy and paste more easily in Access than in the SharePoint datasheet view.

Access is also a good to use as an intermediary to connect data from two platforms that cannot be directly connected. You can, for example, work with SharePoint lists from different farms or connect an SQL Server database with SharePoint.

You can also export an Excel table to SharePoint via Access. This will give you more influence over the connection than if you make a Direct Export/Import of Excel Data to SharePoint.

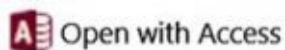
11.4.1 SharePoint-Access Synchronization

When you open a SharePoint list in Access, the list and the resulting Access table are synchronized. You can make changes in Access, as well as in SharePoint.

When you enter data in the Access table, it is saved to the SharePoint list as soon as you move to another row. When you enter data in the SharePoint list, the linked Access table will be updated next time it is opened or refreshed.

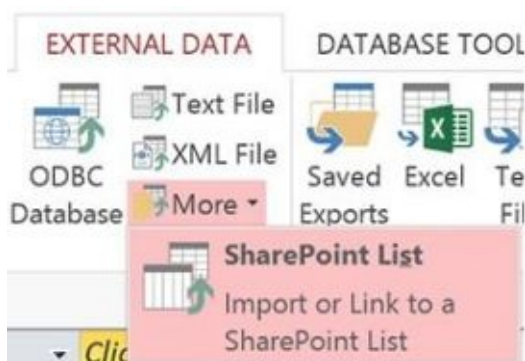
11.4.2 Open a SharePoint List in Access

Internet Explorer detects if Access is installed on the computer, and in that case the 'Open with Access' button under the LIST tab in the list ribbon will be active. If it is, click on it and select the default option, 'Link to data on the SharePoint site'.



The detection does not always work, so if the button is inactive even though you have Access installed, you can instead open Access, create a new desktop database and link it to the SharePoint list like this:

1. Close or delete the default table.
2. Click on the More button under the EXTERNAL DATA tab in the ribbon and select SharePoint List.



3. In the dialog that opens, paste or type the path to the site that has the list you want to open in Access.
4. Select the linked table option and click Next.

5. Now all lists and libraries of the site are shown. Select the one you want to use, and it will open in a new table. You can also select multiple lists or libraries. Each of them will be connected as a linked table.

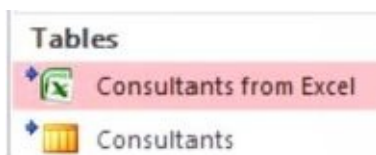
11.4.3 Export an Excel Table to a SharePoint List via Access

Above I have shown how to Direct Export/Import of Excel Data to SharePoint. This is a quick method, but as I have mentioned it has some disadvantages.

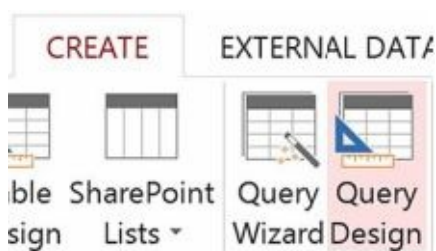
The Access method is more complicated than the direct method, but it gives you better control over how data is added to the SharePoint list:

- You can decide which Excel columns you want to include in the SharePoint list.
- You can decide how data should be distributed.
- You can use an existing list with Site Columns for the import of Excel data.
- Changes can be made in both Access and SharePoint.

With the Access method, you import both a SharePoint list and an Excel datasheet to Access, where they are shown as database tables. Then you can create a query that copies the data you want to use from the Excel to the SharePoint table.



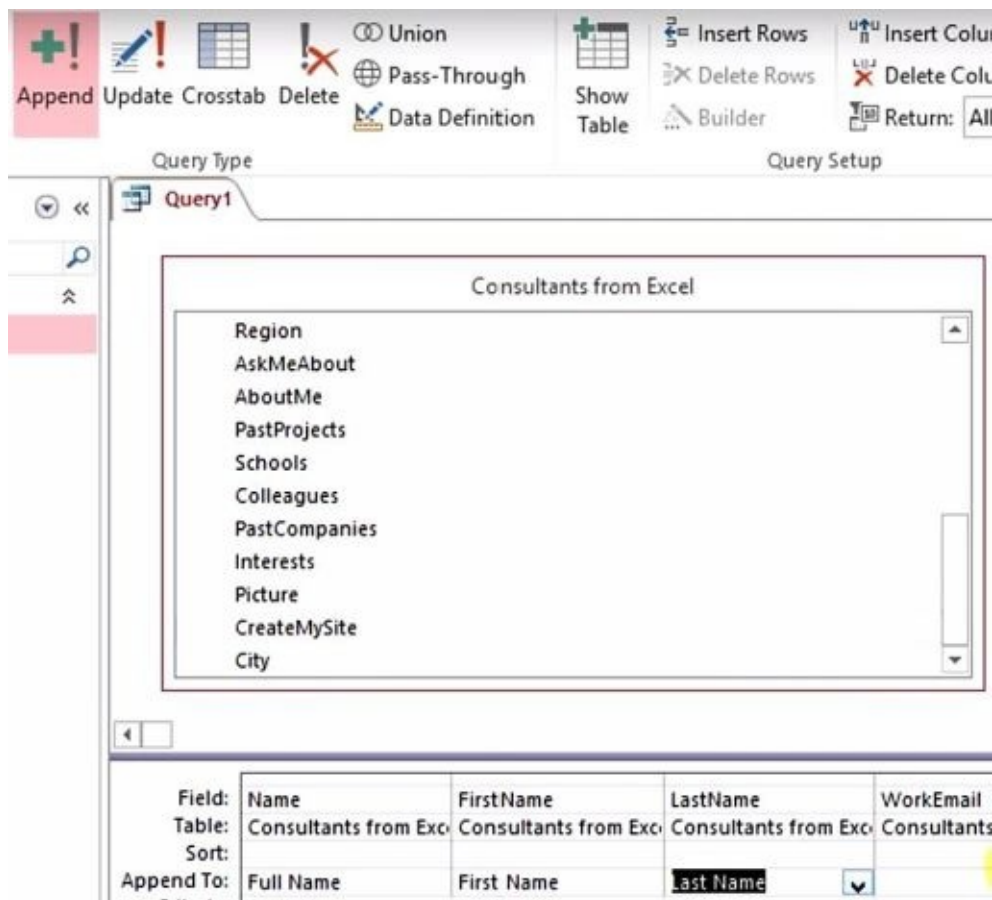
1. In SharePoint, Add an App of the kind you want to use.
2. Under the LIST tab, click on 'Open with Access'; *refer to* Open a List in Access. A new database is created. Select the option 'Link to data on the SharePoint site'.
3. In Access, click on the Excel button under the EXTERNAL DATA tab and browse to the Excel file you want to use. Select the option 'Link to the data source by creating a linked table'.
4. Check the box for headings if your Excel table has headings.
5. Give a name to the new, linked table with your Excel data.
6. In Access, click on the Query Design button under the CREATE tab.



7. Drag the Excel table into the Query field.
8. Under the DESIGN tab, click on the Append button.
9. Select to append to the SharePoint list you have opened in Access, and click OK.
10. In the Excel table in the Query field, double click on the names of the columns you

want to include in the SharePoint list. They will then show up in the grid below, so that you can append them. You may also drag and drop the column names to the grid.

11. Append the Excel columns to the corresponding columns in the SharePoint list.



12. Run the query by clicking on the Run button under the DESIGN tab.

Now when you go back to the SharePoint list and refresh it, you can see the Excel data distributed in the list columns in the way you mapped it in Access.

This described method of using Access to get data into SharePoint works very well with other data sources too, not only Excel data sources. For an example with an SQL database; refer to Import data from SQL to SharePoint Online below.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Import-Access.htm>

11.4.4 Recurring Tasks

In this section I will give an another example on how you can use Access queries to update SharePoint lists. The starting point is a 1 table in Excel. This table shows tasks that have to be done repeatedly each month, and it has info about tasks, assigned people and due dates in columns called What, Who and Day of Month.

SharePoint has no simple way to handle recurring tasks, but you can still make it easy to both remember recurring tasks and to verify that the tasks have been done.

The trick is to let an Access query upate a To Do Tasks list in SharePoint. Then you can let SharePoint Alerts remind the responsible people about the tasks, and when it is done the responsible can set task to completed.

11.4.4.1 Export to SharePoint

The first step is to Export/Import Excel Data to SharePoint, so that you get the recurring tasks data into a SharePoint list. Here I will call that list Every Month.

11.4.4.2 Create a To Do List

When you have the Excel data in SharePoint, Add an App and select the Tasks list template. Here I will call this list To-Do. Now you can copy and paste the What and Who data from the Every Month list into the Task Name and Assigned To fields in the To Do list.

However, the Due date column cannot be copied as easily as the other columns, and this way you have to copy and paste recurring tasks for every month.

A better solution is to let Microsoft Access handle the update with a query. Then you will just have to run the query for each month to have everything in the SharePoint To Do, including the due dates.

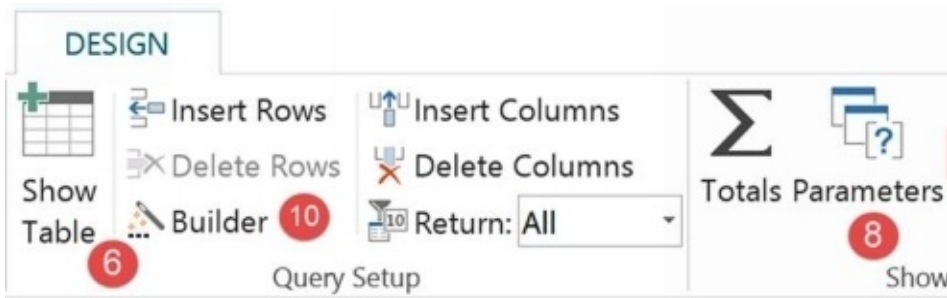
11.4.4.3 Update the To Do list with an Access Query

Here I will give the steps to create a query that takes data from the SharePoint lists Every Month, (imported from Excel) and UserInfo and appends it to a new SharePoint To Do list.

The UserInfo list is a hidden SharePoint list that becomes visible when you link Access to the SharePoint site. When you select to use a list that has an Assigned To field, Access creates a linked UserInfo table from the UserInfo list as well, even if you don't check the box for it.

The What field in the Every Month list can be directly appended to the Task name field in the To Do list, but the Who field can *not* be directly appended to the Assigned To field. Instead you have to use the UserInfo table.

1. In Access, open a blank desktop database and close the default table.
2. Under the EXTERNAL DATA tab, click on More and select SharePoint List. Give the URL to the *site*, and use the Linked table option. Click on Next.
3. Check the Every Month list and the To Do list. Click OK, and two new tables with the same names and content as the lists will be created in the database. A UserInfo table will also be created.
4. Under the CREATE tab, click on the Query Design button. Add the Every Month table, and select the What and Who fields. (Add by double clicking on the field or by clicking on the Add button.)
5. Under the DESIGN tab, click on the Append button. Append the What field in the Every Month table to the Task Name in the To Do table.
6. Click on the Show Table button under the DESIGN tab, or right click in the query pane and select Show Table... Add the UserInfo table.



7. Connect the Who field in the Every Month table to the ID of the UserInfo. This will be shown in the second column in the Query, and you can append the Assigned To field.

8. To have the Due Date info into the To Do table also, select the Every Month table and click on the Parameters button under the DESIGN tab.

9. Enter Year and Month. Both should be Integers.

10. Click on the Builder button under the DESIGN tab.

11. Select Functions, Built-in Functions, Date/Time and Date Serial.

12. Still in the Builder, select the query you just created and the parameters Year and Month.

13. For the day, select the Every Month table and Day of Month. Click on Value and then OK.

14. Now the expression you have built will be filled out in the third query column, and you can change the text “Expr1” into Due Date and append the Due Date field.

Field:	What	ID	Due: DateSerial([Year],
Table:	Every month	UserInfo	
Sort:			
Append To:	Task Name	Assigned To	Due Date

15. Click on the Run button under the DESIGN tab to run the query. You will now be asked to enter values for the parameters Year and Month. Use numbers for both.

16. Run the query for every month and year, to have the SharePoint To Do list updated with all the recurring tasks.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Recurring-Tasks.htm>

11.4.5 Import data from SQL to SharePoint Online

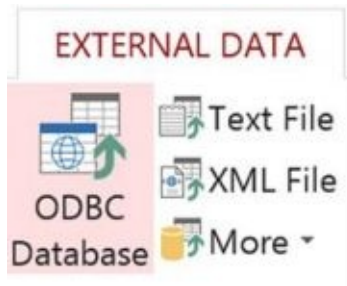
When you want to input data from an SQL Server database to a SharePoint list, you cannot do it directly. Instead you can open both the SQL Server database table and the SharePoint list in Access. Then you can create a query that copies data from the SQL Server to SharePoint.

Here I will describe how to add data from a contacts database table to a SharePoint Online Contacts list.

1. In SharePoint, Add an App, a Contacts app.

2. Add and remove Columns as you prefer.

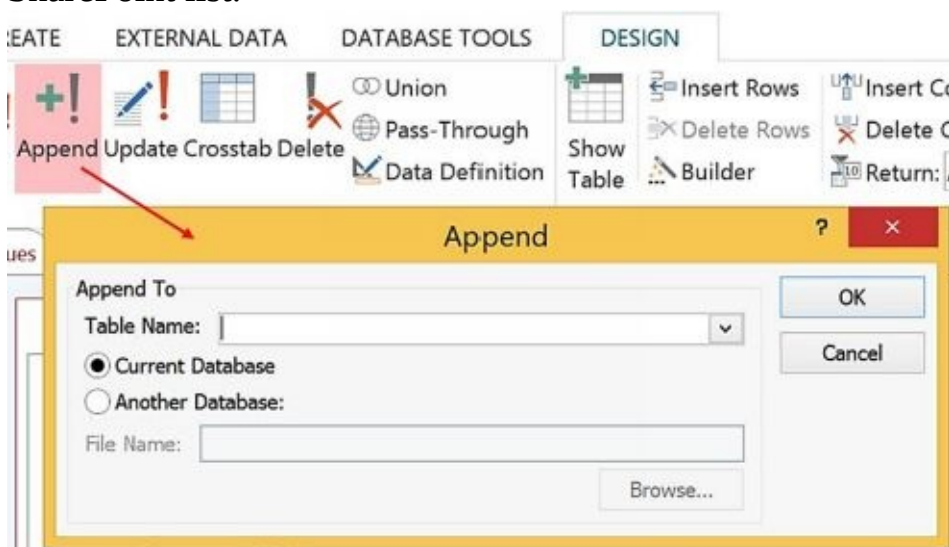
3. Open the Contacts list in Access; *refer to* Open a List in Access.
4. In Access, open the EXTERNAL DATA tab in the ribbon and click on the ODBC Database button.



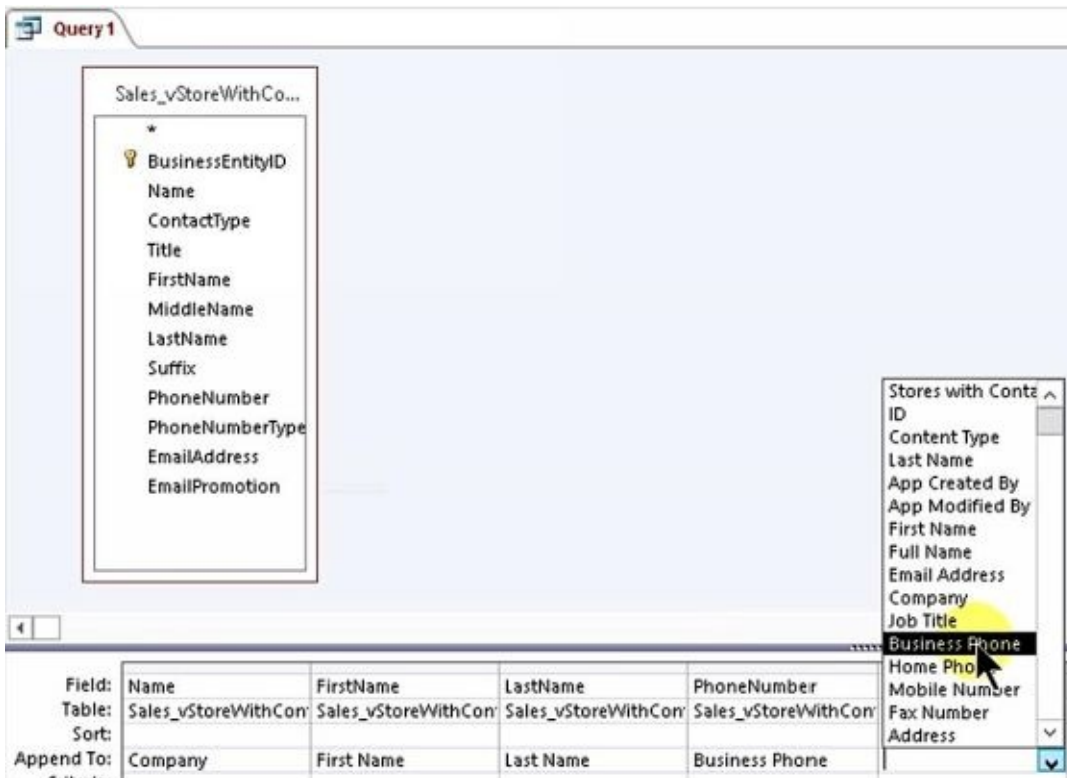
5. In the window that opens, check the radio button 'Link to the data source by creating a linked table' and click OK.
6. In the Select Data Source dialog, click on New to create a new data source, for which you use the SQL driver.
7. Save the new data source.
8. Change the default database to pick up the new data source.
9. When you are back in the Select Data Source dialog again, select the new data source and link it to the Access table.
10. Select BusinessEntityID as the Unique Record.

Now we have two connections in Access, with SQL and with SharePoint, and we can connect the SQL contacts database to the SharePoint contacts list. It is time to create a query that selects data from the SQL database table and appends it to the SharePoint list.

1. Click on the Query Design button under the CREATE tab and select the SQL database table.
2. Click on the Append button under the ribbon DESIGN tab to append data to the SharePoint list.



3. Select how the data from the SQL database table should be added to the SharePoint list.



4. Click on the View button under the ribbon DESIGN tab to view the result.
5. If everything looks good, click on the Save icon.
6. Run the query by clicking on the Run button under the ribbon DESIGN tab. Now the SQL Server data will be imported to the SharePoint list.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Import-data-from-SQL-to-SharePoint-online.htm>

11.4.5.1 Update Imported SQL Data

If you continue to update the information on the SQL Server, you need a way to keep imported data up to date in the SharePoint list too. You can do this by creating an additional query that deletes the data from the SharePoint list.

Now you have two queries: the add query, which adds the SQL Server data to Access and appends it to the SharePoint list, and the delete query. If you run first the delete query and then the add query, you will have data refreshed and updated in SharePoint.

If you create a macro that runs the two queries in sequence and a Run button in Access, you can update the SharePoint list even more quickly when data has been changed in the SQL Server database table.

Create a delete query:

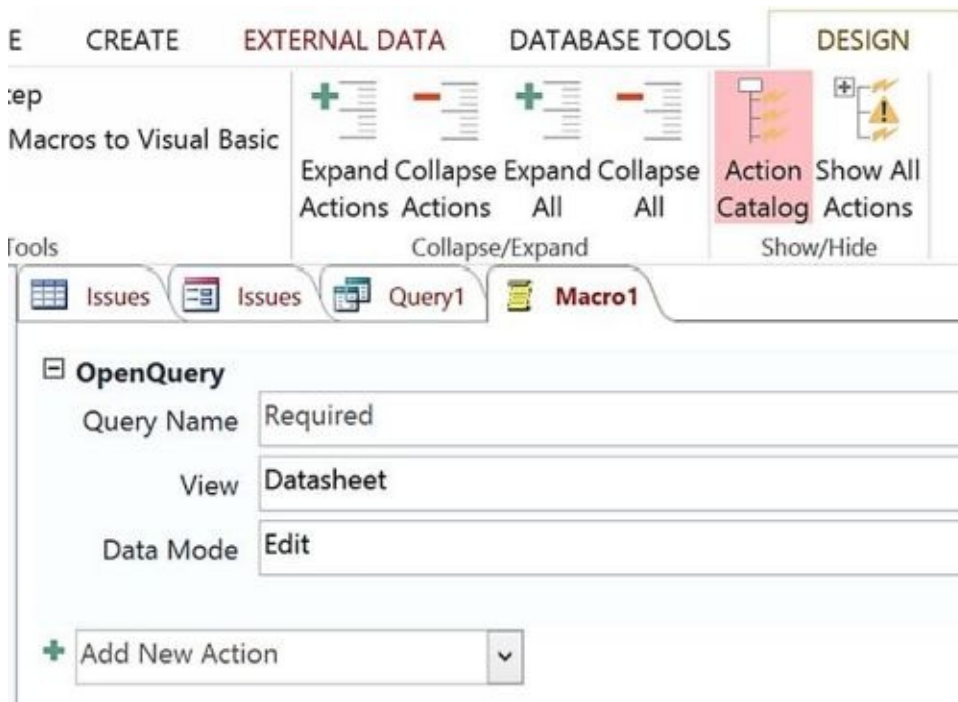
1. Click on the Query Design button under the CREATE tab and select the SQL database table.
2. Click on the Delete button in the ribbon to create a delete query.
3. Save the query.
4. Run the query to test that it removes the SQL Server data from the SharePoint list.

A macro is a way to automate a task that you perform repeatedly or on a regular basis. It consists of a series of commands and actions that can be stored and run when you need to perform the task. Here is how you create a macro that runs the two queries mentioned above in sequence, first the delete query and then the add query.

1. Click on the Macro button to the right under the ribbon CREATE tab.



2. In the Action Catalogue, select the action 'Open Query' and the query that deletes data.



3. Select the action 'Open Query' again and now select the Add query to run.

4. Select the action 'Close the database'.

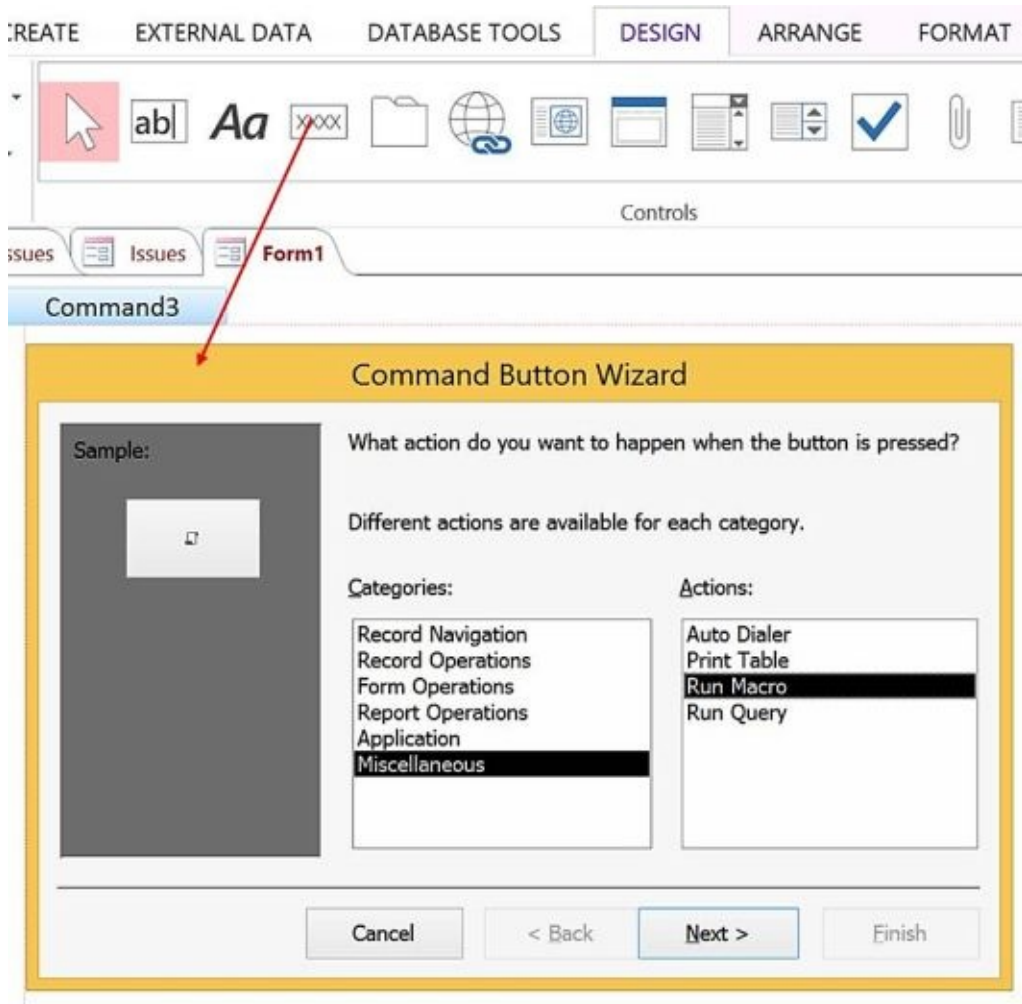
5. Save the macro.

To further simplify the update you can add a Run button in Access.

1. Click on the 'Blank Form' button under the CREATE tab.

2. Click on the button icon and then in the form.

3. Select the action Run Macro under Miscellaneous.



4. Select the new macro you just created.
5. Give the button a text and save the form.
6. Click on Options under the FILE tab, and select the new form as Display Form for the Current Database.
7. To test, close Access and open it again. Then click on the button to run the query.

Demo: <http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Update-Imported-SQL-Data.htm>

11.5 CONNECT SHAREPOINT AND VISIO

Visio is a diagramming and vector graphics application that is part of Microsoft Office. You can use the Visio Access web part to display and interact with Visio drawings in SharePoint, and below I described two examples on how it can be used.

SharePoint also has a site collection template with a default library that is intended for Visio files.

11.5.1 The Visio Web Access Web Part

Visio Web Access is a part of Office Online that lets you show Visio files, but it is also the name of a web part. This web part is useful when you want to show Visio content in a SharePoint page.

11.5.1.1 Add a Visio Drawing to Visio Web Access

The Visio Web Access web part tool pane gives a lot of options, mostly regarding the user interaction with the Visio content. Here I will only describe the most basic: how to define what drawing should be displayed in the web part.

1. Add or save the Visio file to a SharePoint library; *refer to* Upload Files.
2. Open a Page in Edit Mode, where you want to add a Visio drawing.
3. Add a Web Part, the Visio Web Access web part in the Business Data category.
4. Edit the Web Part.
5. Enter the URL to the Visio file in the Web Drawing URL field in the web part pane, or click on the Browse button to the right of the field and find the Visio file.
6. Make the user interaction settings you prefer.
7. Click on Apply and then save the page.

Now you can manage the Visio drawing as much as the settings allow, but note that you cannot click in the Visio Web Access web part and scroll the page, because then the drawing will be in focus.

You can continue updating the Visio file that has been saved to SharePoint. The Visio Web Access web part will be updated each time you save your changes.

Demo:

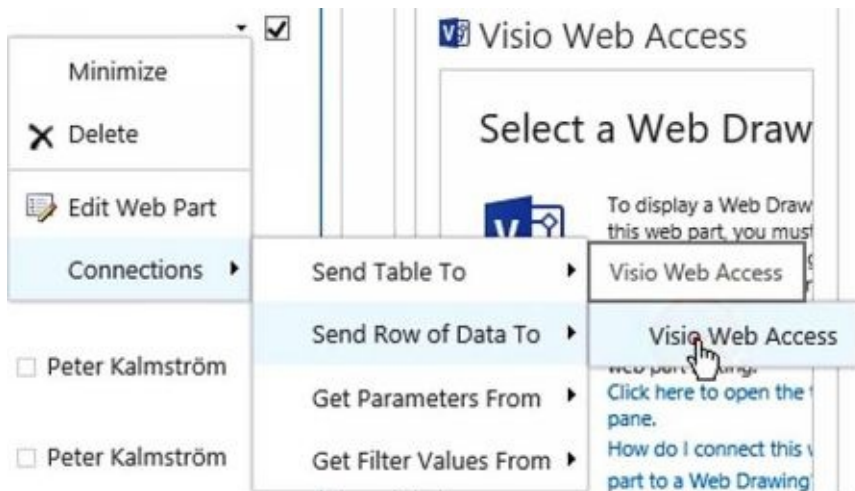
<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Visio-Web-Access.htm>

11.5.1.2 Connect a Visio library to Visio Web Access

Use a page with two columns to connect a document library with Visio files to the Visio Web Access web part. That way you can make any file in the Visio library show up in the Visio Web Access web part on the same page.

1. Upload or save the Visio files that you want to display in SharePoint to a new document library; *refer to* Upload Files.
2. Add a Page.

3. Click on the Text Layout button under the FORMAT TEXT tab and select the two columns option.
4. Add a Web Part – the Visio files document library that you just created.
5. Add a Web Part – the Visio Web Access part in the Business Data category.
6. Edit the Web Part – the Visio Web Access.
7. Click on the Edit arrow again and select Connections >Send Row of Data To >Visio Web Access.



8. In the pop-up dialog, select ‘Get Web Drawing URL ...’.
9. Click on Configure.
10. Connect the Document URL field in the Provider to the Web Drawing URL field in the Consumer.
11. Click on Finish and then Apply and save the page.

Now you can click on the icon at a drawing in the Visio drawing library web part, and that drawing will be shown in the Visio Web Access web part.

Refer to Connect Web Parts for more examples on how web parts can be connected.

11.5.2 Visio Process Repository

If you create a Visio Process Repository site collection, you will have a default document library that is adapted to sharing of Visio files.

The default Visio Process Repository library has check-in/check-out functionality and versioning, and there are columns that display validation status and cross-functional flowchart headings. The library also has various useful templates for flowcharts and diagrams.

1. Create a New Site Collection.
2. Select the Visio Process Repository site collection template under the Enterprise tab.
3. Make other preferred settings and click OK.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Visio-Web-Access-Connected.htm>

11.6 SUMMARY

In this chapter we have seen how SharePoint list data can be used in Outlook, Excel, Access and Project. In Outlook and Access the content is synchronized in both directions, but to have the same synchronization with Excel you have to make the connection via Access. Project requires manual synchronization with a button.

I have shown how to make the connections and also given examples on more advanced use of Access as an intermediary when exporting data from an SQL Server database table to a SharePoint list.

Finally you have learned to use web parts to display Excel and Visio content on a SharePoint page.

12 SHAREPOINT SEARCH

The more extensive your SharePoint tenant is, the more important it is to consider how categorization and search should be utilized to make it easy for users to find the content they need. I discussed Categorization in an earlier chapter, as this is even more important than customizing the search. Now it is time to look at how the SharePoint Search can be enhanced.

In this chapter you will learn various ways to modify how the search feature works and shows the search results:

- Tell the crawler what pages are most important
- Find and use Managed Properties
- Use and customize a Content Search web part to collect info from several sites
- Create a custom search vertical
- Add a results web part that can be customized
- Create a custom Search Center
- Modify the Refinement web part in the Search Center

12.1 THE SEARCH CRAWLER

SharePoint searches in an index, so whichever SharePoint search method you use, it takes a while before new items or documents show up in searches.

A crawler updates the index in the background when you add, change or remove content from SharePoint, but that crawler takes some time to do its work. A search schema helps the crawler decide what content and metadata to pick up.

12.2 ORDER SITE PAGES AFTER IMPORTANCE

In Office 365 we have limited control over the search crawling process, but we can tell SharePoint which pages are the most important ones in the tenant.

1. Open The SharePoint Admin Center and click on the 'search' link in the left panel.
2. Click on 'Manage Authoritative Pages' in the right panel.
3. Order the already existing site collections by copy and paste, and add new pages. Click OK when finished.

Authoritative Web Pages

Authoritative pages are those that link to the most relevant information. Search uses this list to calculate the rank of every page in the index. There might be many authoritative Web pages in your environment. Type the most valuable in the topmost text box. You also have the option of specifying second and third-level authorities in the lower text boxes.

Enter one full URL per line. Example: <http://intranet/site-directory.html>.

Most authoritative pages: *

```
https://kalmstromnet.sharepoint.com/
https://kalmstromnet.sharepoint.com/sites/English/
https://kalmstromnet.sharepoint.com/sites/swedish/
https://kalmstromnet.sharepoint.com/sites/docume:
https://kalmstromnet.sharepoint.com/sites/kalmst:
```

Second level authoritative pages:

```
/kalmstromnet.sharepoint.com/sites/Gates
/kalmstromnet.sharepoint.com/sites/kalmst:rom
/kalmstromnet.sharepoint.com/sites/kalmst:roadmap
/kalmstromnet.sharepoint.com/sites/english2
/kalmstromnet.sharepoint.com/sites/SwedishSM
```

Third-level authoritative pages:

```
https://kalmstromnet.sharepoint.com/sites/Ritika
https://kalmstromnet.sharepoint.com/sites/kalmst
https://kalmstromnet.sharepoint.com/sites/langol
https://kalmstromnet.sharepoint.com/sites/kalmst
https://kalmstromnet.sharepoint.com/sites/0
https://kalmstromnet.sharepoint.com/sites/katekt
https://kalmstromnet.sharepoint.com/sites/cbsp=a
```

Non-authoritative Sites

You can specify that all content from certain sites be ranked lower than that of all other sites. Type the URLs of those sites here, one per line.

URLs typed in this section are treated as prefix matches. Example: entering <http://archive/> will demote the rank of all URLs that begin with

Sites to demote:

```
https://kalmstromnet.sharepoint.com/sites/cbsp
https://kalmstromnet.sharepoint.com/sites/corner
https://kalmstromnet.sharepoint.com/sites/cm
https://kalmstromnet.sharepoint.com/sites/vaxjo
https://kalmstromnet.sharepoint.com/sites/english
https://kalmstromnet.sharepoint.com/sites/katekt
https://kalmstromnet.sharepoint.com/sites/content
https://kalmstromnet.sharepoint.com/sites/Testin
```

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-Intro.htm>

12.3 MANAGED PROPERTIES

When you want SharePoint to search only among content with specific properties, you can use Managed Properties. These are written before the search word, with a colon as separator.

Example: to find files with the word “consumer” in the file name, you should write `Filename:consumer` in the search field. When you enter the search term like this, you are telling the search engine to give you all files which have the word consumer in the filename. (By default, if you do not supply a managed property, you are searching all content.)

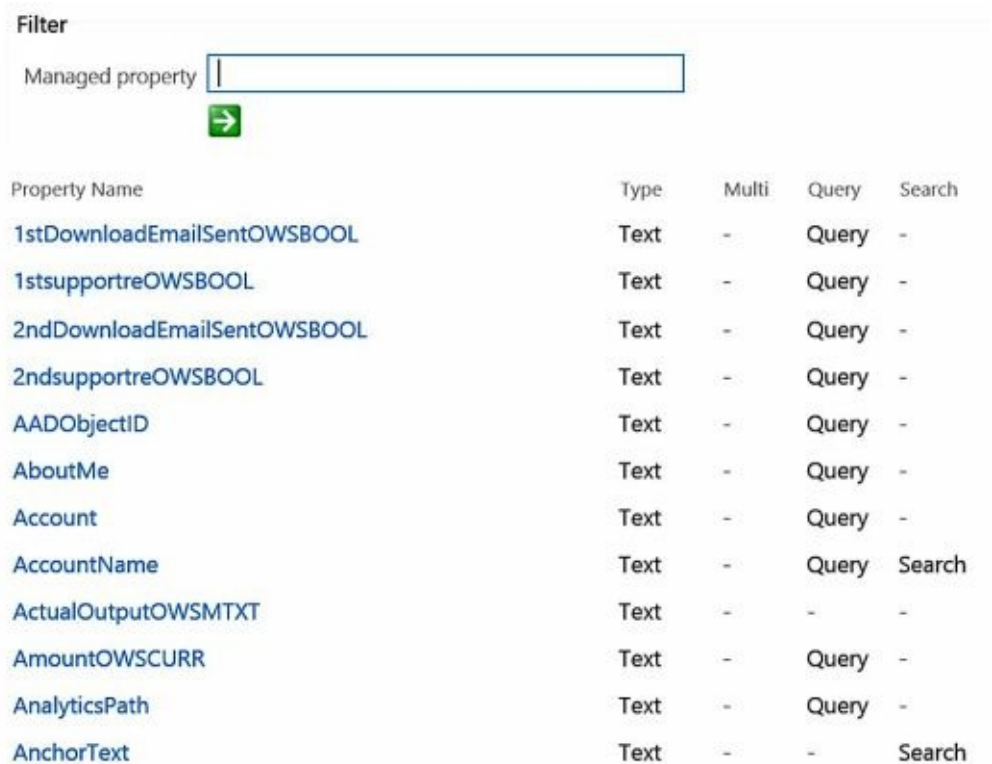
Which managed properties are the most relevant ones depends on how you are using SharePoint, but the Body, Title, Author and FileType managed properties are very useful.

When you create a site column of the type Single line of text, Choice, Managed Metadata, Date and Time, Number, Currency or Yes/No, a new managed property is created. For example, if you create a single line column named Street, you can configure the SharePoint Search to allow you to search for `Street:avenue`.

12.3.1 Find Managed Properties

Here is how you can find and learn new Managed Properties:

1. Open the Site Settings and click on Schema in the Search group.
2. Search or browse through the list to find the property you are looking for. All of these are not searchable, but you can use those who are marked with Search, like AccountName and AnchorText in the image below.



Property Name	Type	Multi	Query	Search
1stDownloadEmailSentOWSBOOL	Text	-	Query	-
1stsupportreOWSBOOL	Text	-	Query	-
2ndDownloadEmailSentOWSBOOL	Text	-	Query	-
2ndsupportreOWSBOOL	Text	-	Query	-
AADObjectID	Text	-	Query	-
AboutMe	Text	-	Query	-
Account	Text	-	Query	-
AccountName	Text	-	Query	Search
ActualOutputOWSMTXT	Text	-	-	-
AmountOWSCURR	Text	-	Query	-
AnalyticsPath	Text	-	Query	-
AnchorText	Text	-	-	Search

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-Managed->

[Properties.htm](#)

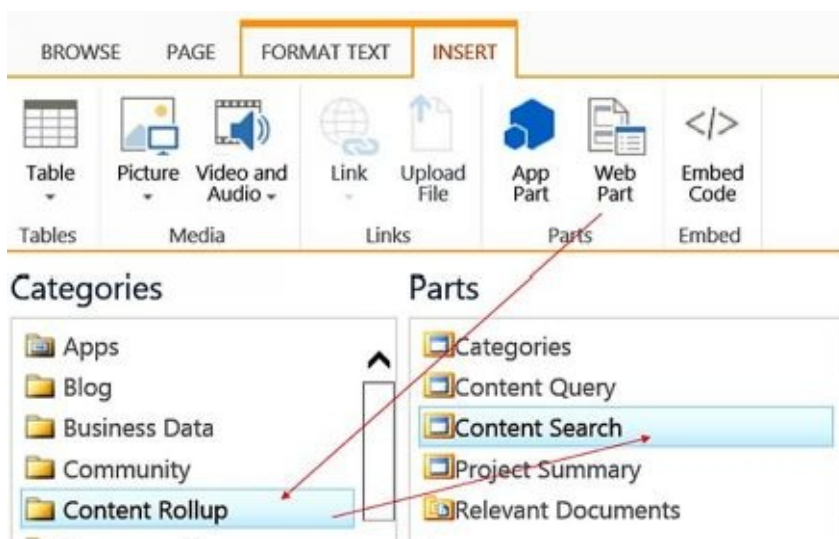
12.4 THE CONTENT SEARCH WEB PART

The Content Search web part searches anything from the index of the entire SharePoint tenant to a specified URL, and it can be used for all purposes when you want to collect certain data and display it on a page.

Note that the SharePoint Search results are always trimmed by permissions. You only see results that you are allowed to open. Therefore, users who don't have access to some of the search hits in the Content Search web part will not see that content.

12.4.1 Add a Content Search Web Part to a Page

The Content Search web part is added to pages in the same way as other web parts; *refer to Add a Web Part*. You can find the Content Search web part in the Content Rollup category.

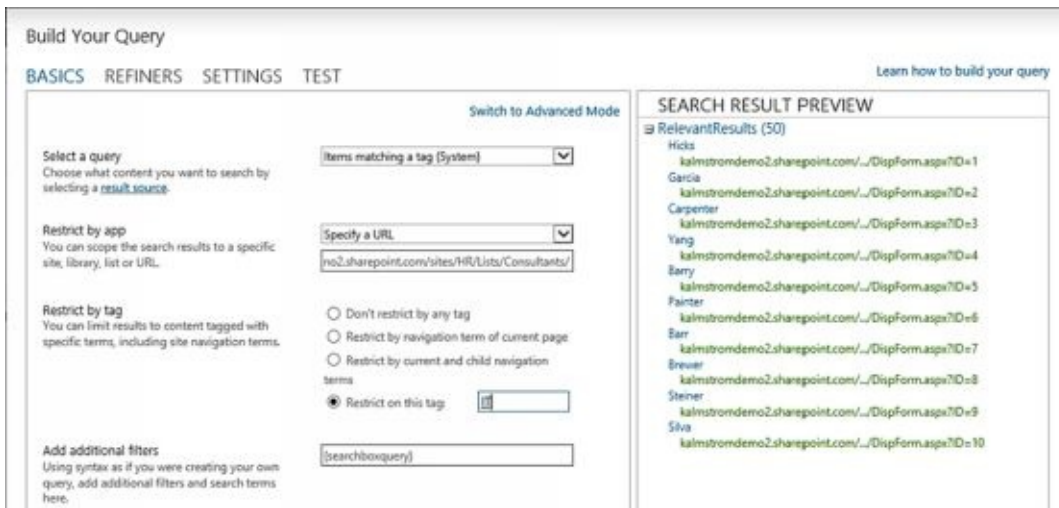


12.4.1.1 Query Builder

The conditions for the search are specified in a query page, which has a preview so that you can make sure you get the correct search results. Edit the Web Part and click on the 'Change query' button to reach the Query Builder.

Here you can limit the search in various ways, filter and sort the results and much more.

When you restrict the search to a specific content type, both that particular content type and all content types that inherit from it are displayed in the search results.



The Content Search web part can also be highly customized, so that you can display the search results in the way you prefer.



12.4.1.2 Property Mappings

Property Mappings are used to specify which column values should be displayed in a Content Search web part and on what line they should be shown. Open the Property Mappings accordion and check the box for 'Change the mappings...'. Then you can select from the Managed Properties what column information to show on each line.

Property Mappings

Change the mapping of managed properties for the fields in the Item Display Template.

Picture URL

PublishingImage;PictureURL;PictureThur

Link URL

Path

Line 1

Title

Line 2

Description

Line 3

12.4.2 Search Specified Contacts Data

If you have a Contacts list or similar with people's photos, names, e-mail addresses and comments, you can let the Content Search web part show only contacts that are tagged in a certain way.

1. Add a Content Search Web Part to a Page
2. In the Query Builder, restrict the search to contacts that have a certain tag:
 1. Select the query 'Items matching a tag (System)'.
 2. Restrict to the Contacts list (remove the view part of the URL).
 3. Restrict the results by tag and enter the tag you wish to use.
 4. Click OK.
3. Set the number of items to show and select the Display Template.
4. Set the Property Mappings.
5. Click on Apply and Save the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-Content-Search-Property-Mapping.htm>

12.4.3 Search News from Several Sites

The Content Search web part can be used for efficient news distribution. You can for example create Announcements apps for several sites and display them all in a Content Search web part on one page.

1. Add an App of the type Announcements for each site collection that should be included in the distribution.
2. Add a Content Search Web Part to a Page.
3. In the Query Builder, restrict the search to announcements:

1. Select the query 'Items matching a tag (System)'.
2. Restrict to the content type Announcements.
3. Do not make any other restrictions.
4. Click OK.

Build Your Query

BASICS REFINERS SETTINGS TEST

Select a query
Choose what content you want to search by selecting a [result source](#).

Items matching a content type (System) ▼

Restrict by app
You can scope the search results to a specific site, library, list or URL.

Don't restrict results by app ▼

Restrict by tag
You can limit results to content tagged with specific terms, including site navigation terms.

Don't restrict by any tag
 Restrict by navigation term of current page
 Restrict by current and child navigation terms
 Restrict on this tag:

Restrict by content type
You can limit results to a particular content type and all those that inherit from it.

Announcement ▼

4. In the Content Search edit panel, select a Display Template for Control and Item. I recommend 'List with Paging' and 'Two lines'.

☰ **Display Templates** Help

Control

List with Paging ▼

Item

Two lines ▼

5. Click on Apply and Save the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-News-Distribution.htm>

12.4.4 Add a Search Vertical to the Search Center

Search verticals are common in search engines, as they give users a possibility to only see hits of a specified type. When you use the Global Search, the results are displayed in a Search Center page with four default search verticals: Everything, People, Conversations and Video.



With a few steps you can add your own search vertical to the Search Center:

1. Create a Page from the Search Center, so that the new page will use the Search Results

page layout. This page is a web part page.

2. Modify the Search Results web part in the new page, so that it only shows the type of information you want: Edit the Web Part and click on the 'Change query' button.
3. Select the query 'Items matching a content type (System)'. Restrict to the content type and app you want to use.
4. Set the number of items to show.
5. Make any other changes in the web part you prefer.
6. Publish the page.

Now the Search Results web part of your new page only shows the type of items you have decided. The last step is to add the search vertical to the Search Center.

1. Open the Site Settings and click on the 'Search settings' link in the Search group.
2. At Configure Search Navigation, click on 'Add Link'.
3. Enter a title and browse to the new search page you just created.
4. (Make sure the new vertical will be displayed among the first and not under the ellipsis, by changing the order or remove an existing vertical.)

12.4.4.1 Show the Search Results in a Custom Results Web Part

Instead of showing the search results in the default Search Results web part, you can show them in a custom Content Search web part. This gives you a possibility to customize how the search results are presented.

Create a new page on the Search Center template as described above, but instead of modifying the Search Results web part you should delete it. Then you can add the Content Search web part instead, which has a few more settings you can make use of.

1. Add a Content Search Web Part to a Page created from the Search Center.
2. Drag the Content Search web part to the bottom of the page, where you want to show the search results.
3. Edit the Web Part and set the number of items to show.
4. Open the Query Builder and restrict the search to the app and content type you want to use:
 1. Select the query 'Items matching a tag (System)'.
 2. Restrict to the preferred app.
 3. Restrict to the preferred content type.
 4. Click OK.
5. Select the query 'Items matching a content type (System)'. Restrict to the content type and app you want to use.
6. Do the Property Mappings.
7. Make other preferred settings to the web part before you click on Apply and Publish the page.

12.4.4.2 Query settings for News and Contacts

The difficult part of creating a search vertical might be how to set the query, but it is easy to try as there is a preview. However, here are two common custom search verticals and their restriction settings. Both use the 'Items matching a content type (System)' query.

- Announcements apps: Restrict to the content type Announcements.
- Contacts list: Restrict to the content type Contacts and the app to a contacts list URL.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-Vertical.htm>

For more examples on how to create search verticals, *refer to* Create a Phone Messages Search Vertical and Create a Meetings Search Vertical. In the The Search Method section, you can learn how to use a search vertical to search among several site collections.

12.4.5 Hide Top Navigation Link

When you create a custom search vertical, a link to the search vertical page will by default show up in the global/top navigation of the Search Center home page. This link can be hidden; *refer to* Edit Links.

When the SharePoint Server Publishing Infrastructure is activated for the site collection, you can prevent future links from being automatically created in the global navigation.

1. Open the Site Settings.
2. Click on the Navigation link in the Look and Feel group.
3. At Managed Navigation, uncheck the box 'Add new pages to the navigation automatically'.
4. Click OK.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-Vertical-Remove.htm>

12.5 CREATE A CUSTOM SEARCH CENTER

The Search Center site collection is created by default when you start using SharePoint Online, and when you create new site collections these are automatically connected to the same Search Center. *Refer to Global Search.*

You can also create new Search Centers, either directly in The SharePoint Admin Center or from a site collection.

Here I will explain how to create a new Search Center for a site collection and how to make it replace the default Search Center in searches within that site collection. However, the principle is the same if you create a new Search Center site collection in the SharePoint admin center and want to use it for a site collection.

1. Before you can create a new Search Center, you have to enable the SharePoint Server Publishing Infrastructure for the site collection, if that is not already done.
2. To create the new Search Center, Create a New Site and select the template Enterprise Search Center under the Enterprise tab.

Select a template:



3. Define the other settings for the new site and click OK.

To see the new Search Center in the top navigation/global navigation, you have to show subsites in the navigation:

1. Click on the Navigation link under the Look and Feel group in the site settings.
2. Check the box for 'Show subsites'. Click OK.

Replace the default Search Center with your own:

1. Copy the URL of your new Search Center page.
2. Open the Site Settings of the site collection root site, and click on the Search Settings link in the Search group.
3. Paste the URL you copied into the field 'Search Center URL', and remove the part after the last dash (/).

Search Center URL:

4. Uncheck the box for 'Use the same results page settings as my parent'. Click OK.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Search-Center.htm>

12.6 MODIFY THE REFINEMENT WEB PART

The Search Center has no Quick Launch to the left. Instead there is a Refinement web part, which allows users to filter search results by certain criteria. Among the most commonly used refiners are Author, Modified and Object Type.

The Refinement web part can be customized and the refiners changed:

1. Open the Web Part Page in Edit Mode.
2. Edit the Web Part.
3. Click on the 'Choose Refiner' button and Add and/or Remove refiners. Here you can also change their order.

Refinement configuration for 'Refinement'

The refiners will be displayed in the order listed.

The screenshot shows the configuration interface for the Refinement web part. It is divided into two main sections: 'Available refiners' on the left and 'Selected refiners' on the right. In the 'Available refiners' section, a list of refiners is shown with a scroll bar and arrow controls. The 'Selected refiners' section shows a list of refiners that have been chosen, with 'WebTemplate' highlighted at the top. Between the two sections are four buttons: 'Add >', '< Remove', 'Move up', and 'Move down'.

Available refiners	Selected refiners
AttachmentType	WebTemplate
BaseOfficeLocation	DisplayAuthor
ClassificationLastScan	LastModifiedTime
ClassificationType	
CombinedUserProfileNames	
companies	
contentclass	
ContentType	
ContentTypeId	
Created	

Refer to Add Managed Metadata Refiner on how to add refiners based on Managed Metadata.

12.7 SUMMARY

In this chapter you have learned to take advantage of the SharePoint Search. Now you know how to use and customize the Content Search web part to assemble data from several sites on one page. You have also learned how to create a custom Search Center with a modified Refinement web part, and you can build a custom search vertical and a customized search results web part.

In the next chapter I will recommend a navigation method that builds on the SharePoint Search, and I will also come back to the Content Search web part that you have learned to know in this chapter.

Another way to enhance the SharePoint Search is to let a workflow fill out the Title field in apps, to make them better searchable; *refer to Set Title Workflows*.

13 BETWEEN SITE COLLECTIONS

In this chapter, we will have a look at how you can go outside a Site Collection and share content and navigation between several collections. I will describe two methods for sharing files and two methods for navigation, and I will comment on benefits and drawbacks.

13.1 SHARE DOCUMENTS

There are several ways to share documents between site collections, and here I will describe two of them. Common for all methods is that you should have the shared documents in one place, so that you don't have to change at several places when the documents must be edited. That is why copy and paste documents is such a bad idea.

I recommend you to Add an Enterprise Keywords Column to SharePoint libraries that contain files you want to share. This makes it easy to find the files in filtering and searching.

13.1.1 The No Access Issue

SharePoint only shows content to those who have permissions to see them, so when you decide sharing option you must consider how the page will look for people who have access to the page but not to all of the shared files.

Of the two options described below, the Content Search method is the best for users without access, because it only shows links – or a small empty space from missing links.

The embed method shows users without access an ugly frame with a no access message, so this method should only be used for files that all users have access to.

13.1.2 Embed Files

It is only possible to embed Word, PDF and PowerPoint files. (The second method below, the Content Search Web Part method, works with all file types.) *Refer to* Embed a File for a description on how the embedding is done.

13.1.3 Content Search Web Part

With The Content Search Web Part you can quickly gather files from several site collections on one page. In this example the web part gives links to all files that are tagged with a certain keyword.

1. Add a Content Search Web Part to a Page
2. Edit the Web Part.
3. In the Query Builder, set the query to only show documents that are tagged in a certain way.
 1. Select the query 'Items matching a tag (System)'.
 2. Select to not restrict the results by app if you want to have files from the whole tenant.
 3. Restrict the results by tag and enter the tag you wish to use.
 4. Click OK.
4. Define the other settings for the web part and click on Apply.
5. Publish or Save the page.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Share-Docs-Between-Collections.htm>

13.2 SHARE NAVIGATION

I recommend that you create several site collections, for example one for each department, instead of having everything in just one site collection. It will be easier to manage, and you can set different permissions on each site collection. It is however important to have a smooth navigation between the site collections.

I will show two common ways to build navigation between site collections. The first method, the links method, is suitable only when there are few site collections. The second method builds on SharePoint Search and can be used even if there are hundreds of thousands of site collections to navigate between.

13.2.1 The Links Method

The links method works in the same way for site collections as links to sites within one collection.



1. Click on EDIT LINKS in the Global Navigation/Top navigation.
2. Copy the path to the top-level site of the site collection you want to link to.
3. Click on the '+link' button. A dialog will open.
4. Write a Display text and paste the path you copied.
5. Do the same with all site collections you want to link to.

You can create a collective, not linked, caption and drag the other links under it to have a shorter row of links.

The obvious disadvantage of this method is that the Global Navigation links have to be added to the top-level site of each site collection. Subsites can inherit the navigation from the top-level site, but links cannot be inherited between site collections.

Therefore the Links method is suitable only if you have a few site collections and don't expect your SharePoint tenant to grow. When you have more, I recommend you to use the Search method instead, *see below*.

13.2.2 The Search Method

The second way of navigating between site collections is to not link at all. Instead users take advantage of the SharePoint Search to find site collections.



For this navigation method, you should Add a Search Vertical to the Search Center that searches in all or specified site collections. Usually a search vertical is intended to show only search results of a particular type, but a search vertical can also be used to find site collections.

The necessary settings can be used in both the Content Search web part and the default Search Results web part. Therefore you can use this method whether you have modified the page to Show the Search Results in a Custom Results Web Part or not.

Make the settings in the Query Builder of the web part that shows the search results in the search vertical page:

1. Under Property filters, select 'content class' 'Equals' 'Manual value' and 'STS_Site' to get the search results to show only site collections.
2. Click on 'Add property filter' and then on 'Test query'. You will probably have some site collections included that you don't want to search.
3. To add property filters that remove site collections you don't want to include in the searches, select 'Path' under Property filters and then 'Not contains' 'Manual value' and the path to the site collection you want to exclude.

When the new Search vertical has been displayed with the other verticals in the Search Center (*refer to* Add a Search Vertical to the Search Center), you can use it to search only site collection top sites. When the Sites vertical is selected, sites matching the searched term will be displayed.

Users can access the Search Center by selecting Everything in the top right Search field. You can also copy the link to the Search page (remove the search term!) and add it to the top-level site of the site collection in the same way as in The Links Method. This has to be done manually for the root site in each site collection.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Site-Collection-Navigation.htm>

13.2.2.1 Search Method Enhancements

These are some enhancement suggestions if you want to use The Search Method to navigate among site collections:

- Sort the site collections that are shown in the Search Results/Content Search web part. In the Query Builder, select the managed property you want to sort by under the Sorting tab.
- You might also need to select the radio button 'Don't remove duplicates' under the Settings tab, as it sometimes removes similar site collections.
- Modify the Refinement Web Part.
- Add image links to the most used site collections in the form of Promoted Links or a Hotspot Image. Note that the Search Center page is a web part page. *Refer to* Add the Promoted Links App to a Page, and for a hotspot image Add a SharePoint Designer 2010 Image to a Page.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Site-Collection-Navigation-Enhancements.htm>

13.3 SUMMARY

In this chapter you have learned how sharing can be managed between many site collections. I have shown how files can be shared by embedding or by using the Content Search web part, and I have suggested a highly scalable navigation solution that utilizes the same web part.

14 CONTENT TYPES

The best way to make sure a SharePoint site will contain the desired content and is managed in a consistent way, is to use content types – a reusable collection of metadata columns and settings that describe the shared attributes and behaviors for a specific kind of content, for example an item in a list.

By default, SharePoint includes many pre-defined content types, such as Document or Announcement. You can (and probably should) also create your own custom content types.

Here are some other explanations:

If you are familiar with object oriented programming, a content type is like a class definition with properties. An item is an instance of such a class.

If you are familiar with Platonic realism, a content type is the universal idea of an object with its characteristics, while items are the spatial objects that exists in our plane of reality.

The best way to understand content types is probably to work with them, and we are going to do that in this chapter and in several more chapters ahead.

Here I am using library content types as examples, but the principle is the same for any item type, including list items and media files. First I will introduce the Content Type Hub, a site collection where you can create content types for the whole SharePoint tenant. I will come back to the Content Type Hub later, when we have reached more advanced chapters of this book.

I will then describe how to create and use two kinds of documents content types: a Document content type and a Document Set content type. I will also show how you can create a content type template from the Document content type.

The first sections have some general information about content types. After that I give an example on what can be done with a library content type that inherits from the parent Document and has some extra columns for metadata collection.

14.1 THE CONTENT TYPE HUB

The Content Type Hub site collection builds on the team site template, but it has one extra unique feature, which is active by default: the Content Type Syndication Hub.

When you create and publish content types in the Content Type Hub site collection, they become available for the whole tenant, and you don't have to create content types for each site collection. Therefore it is worth the extra trouble of creating content types in the Hub.

14.1.1 Open the Content Type Hub

The Content Type Hub site collection is not visible in the SharePoint admin center. Instead you can reach it from the root site of any site collection:

1. Open any root site and go into the Site Settings.
2. Click on the 'Content type publishing' link in the Site Collection Administration group.
3. Click on the Hub link.

Taxonomy_4chjPBF5mKZrHQdAoooAWA==

https://kalmstromdemo2.sharepoint.com/sites/contentTypeHub/_layouts/15/mngctype.aspx

I suggest that you give the Content Type Hub site collection a specific name and Follow it, so that you can find it more easily next time.

14.1.2 Publish the Content Type

When you have created your first content type in the Hub, the settings page for that content type will have a 'Manage publishing for this hub' link. The Publish option is already selected in the page that opens, so you only have to click OK to publish the content type.

After a certain delay, the content type will be available to the whole tenant for search and to define app columns and settings.

When you have made a change to a content type, the Republish option will be default instead. The Content Type Publishing page also has an Unpublish option.

Note: You can very well try the content type in an app in the Content Type Hub before you publish, because the content type works there without publishing. The publishing is just to propagate the content type to the other site collections in the tenant.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Hub.htm>

14.2 CREATE A CONTENT TYPE

If you want to create a content type for just a Site Collection, open the Site Settings from the top level site in the site collection. To create content types that will be shared between all site collections in the tenant, Open the Content Type Hub and create the content type there.

The process is the same in both cases:

1. Open the Site Settings.
2. Click on 'Site content types' in the Web Designer Galleries group.
3. Click on the Create link to create a new content type.



4. Give the content type a name.
5. Select a parent content type to use as a template for the new content type.
6. Put the content type in an existing or new content type group and click OK.

Parent Content Type:

Select parent content type from:

Document Content Types

Parent Content Type:

Document

Description:

Create a new document.

Put this site content type into:

Existing group:

Custom Content Types

New group:

Now you can add new Site Columns to the content type. Add the columns from a new or existing site column group.

Site Content Types ▸ Site

Site Content Type Information

Name: Support Contract Quotes

Description:

Parent: Document


Group: Quotes

Settings

- Name, description, and group
- Advanced settings
- Workflow settings
- Delete this site content type
- Information management policy settings
- Document Information Panel settings

Columns

Name	Type
Name	File
Title	Single line of text

- Add from existing site columns
- Add from new site column 
- Column order

If you choose one of the simpler column types when creating your new site column, SharePoint will create Managed Properties of the column names. This allows you to use it as a search filter, which might be very useful. Single line of text, choice, managed metadata, date and time, number, currency and yes/no are the ones considered simple in this context.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Content-Types-Create.htm>

14.2.1 Edit the Content Type

When you try a content type with an app, you often discover things that could be better. Then you want to make changes in the content type, and if you have created the content type in the Content Type Hub, you should make the changes there too.

In the Content Type Hub, the default setting is to have the content type automatically updated in all apps where it is used. This setting is shown when you have opened a column in edit mode.

Update all list columns based on this site column?

Yes No

1. Open The Content Type Hub site collection.
2. Open the Site Settings and click on the link 'Site content types' link in the Web Designer Galleries group.
3. Select the group your content type belongs to, to show all content types in that group.



4. Click on the link to the content type you want to edit.
5. Now you can either click on the link 'Add from new site column' to add a new column, or click on a column you want to change. Then click on the 'Edit site column' link, and the column opens in edit mode, so that you can do the necessary modifications.

When a change has been made in the Content Type Hub, the content type must be republished. Click on the link 'Manage publishing for this content type' in the Content Type Hub site settings. Now the default option is Republish, so you only have to click OK.

14.3 CONNECT THE CONTENT TYPE TO AN APP

When you have created a content type, you should add it to the app where you want to use it. When that is done, all new items in that list or library will be based on the content type you added. This means that they will all have the same columns and settings, and thereby the same metadata information.

1. Open the List Settings and click on 'Advanced settings' in the General Settings group.
2. Select the Yes option under 'Allow management of content types', and click OK. (The default setting for this is No in most app types, with the exception of Tasks and Issue Tracking lists.)

Allow management of content types?

Yes No

3. Under the new Content Type group, click on 'Add from existing content types'.

Content Types

This document library is configured to allow multiple content types available in this library:

Content Type

Document

-
- [Add from existing site content types](#)
 - [Change new button order and default content type](#)

4. Select the group and content type you want to use. Click Add and then OK.
5. (I advise you to Delete the Default Content Type.)

Now the content type is added to the app, and users can start creating new items of this type. If you have deleted the default content type, all new items will be of the same kind, as there is no other possibility.

You might find it useful to add several content types to an app, but my preference is usually to create new apps for each content type.

14.3.1 Delete the Default Content Type

Even if you have added a custom content type to an app, the default content type is still there and gives a possibility to create other kind of documents/items. I recommend you to remove the default content type from the app.

In the Content Type group, click on the content type you want to remove and then on the link 'Delete this content type'. (The content type is only removed from this list or library. It is not actually deleted from the site/site collection content types.)

14.3.2 Add Content Type Columns to a View

When you have created custom columns for a content type, they are not visible in the list

views. Before you start creating new items, you should therefore modify the default view; *refer to* Modify a View and also create some new views based on filter options of the new columns; *refer to* Create a View.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Content-Types-Use.htm>

14.4 USE LIST COLUMNS WITH A CONTENT TYPE

Sometimes you want to add some different metadata columns to a list or library that builds on a content type. That is no problem. You only have to allow that in the settings.

1. Open the List Settings and click on the link to the content type the list is using.
2. Click on the Advanced settings link.
3. At 'Should this content type be read only?' select No. (For content types created in the Content Type Hub the default setting is Yes.)
4. Now you can create new List Columns. The columns will be added to the list, but otherwise the list columns will be like in the content type design.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Flexibility.htm>

14.5 CREATE A NEW DOCUMENT WITH A CUSTOM DOCUMENT CONTENT TYPE

When you create a new document based on a custom content type for Word documents, it will by default open in Word Online. However, Word Online does not yet support the Document Information Panel shown below. Neither does it support QuickParts.

This will most likely change in the near future, but for now, you should change the Open Behavior so that the library always uses the client application if you need those features.

Once you have added the new content type and the document is open in Word, you should see the Document Information Panel, which allows user to easily fill out the metadata.

The creation of the fields in the image below, is described in the chapter Quotes Library Tips, but any document content type you create and add to a library will give the site columns as fields in the open Word document.



Title: Quote Date: Quote Decision Date: Quote Value: Quote Approval: 1. Undecided

If the columns are not shown, open the FILE tab and select to show the document properties.



Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Content-Types-Add-Doc.htm>

14.6 CREATE A DOCUMENT CONTENT TYPE TEMPLATE

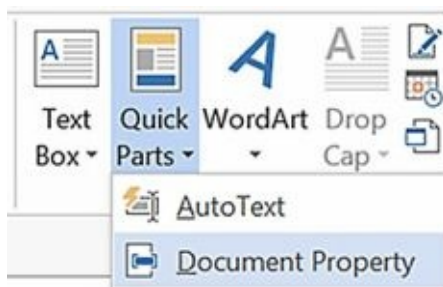
When you have added a custom content type to a library app and set the open behavior to the client application, as described in the section above, the metadata entered in the columns will always be displayed in SharePoint.

However, as the metadata columns are placed above the actual document, they will not be included if you print the document.

To include the values of the metadata columns in a printed document, you need to create a template which has the content type fields in the document body too. These body fields will be filled out automatically when you fill out the content type fields in the Document Property– and vice versa.

Create a template by creating a Word document that you connect to your content type.

1. Create a new Word document.
2. Insert a table with two columns and as many rows as you have metadata columns in the content type + one more row for the title.
3. Enter the column labels in the cells of the left column.
4. Place the mouse cursor in the first row of the right column. Open the Quick Part under the INSERT tab and select Document Property and then Title.



5. Repeat step 4 for each row and select the other metadata columns.
6. Save the document as a .docx or .dotx file to your computer.
7. Now you must connect the Word document to your content type, to be used as a template for new library items.
8. In SharePoint, open the Site Settings and click on the Site Content Types link.
9. Select the content type group you want to connect the template to.
10. When the content type group opens, upload the template you have just created. (Here you can also enter the URL to an existing template.)
11. Make sure that the radio button for Yes at 'Update all content types inheriting from this type' is selected.

Update all content types inheriting from this type?

Yes

No

Now the template will be used when you create a new document in a library where you are using the content type you connected the template to.

You can of course use all other Word features in your template and make it compliant with your company graphic profile as needed.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Content-Types-Template.htm>

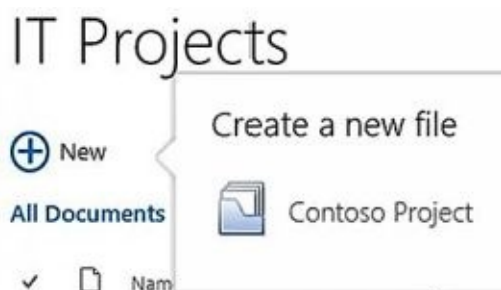
<http://kalmstrom.com/Tips/SharePoint-Online-Course/Content-Types-Connect-Template.htm>

14.7 THE DOCUMENT SET CONTENT TYPE

When you work with projects within an organization, you often create a set of documents for each project. Templates are often used for such documents to make them consistent. With a document set you can have such documents created and named automatically from your specified templates when you create a new project item. All the documents for a project are found in that project item.

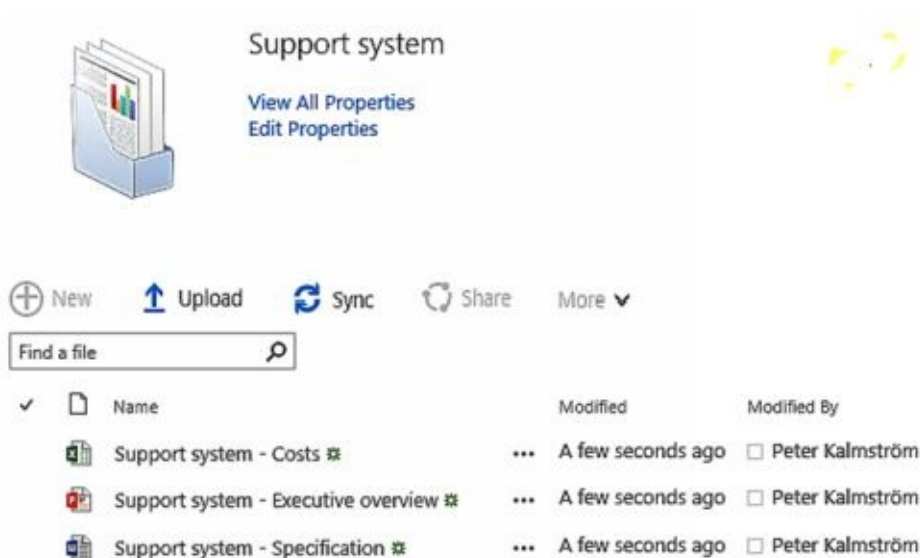
If you plan to use folders for project documents or similar, I recommend you to study document sets first. Using document sets is a better option than folders in many ways. Another way to avoid folders, is of course to use one library for each project. In my opinion, the document sets give a better overview, and separate libraries do not give you the automatic creation and name giving of documents.

When you create a new project item in a library that uses a document set content type, there will be no choice of document type. Instead you will have the specified set of documents created automatically.



The content writer can just open each document and start writing, instead of creating and naming three new documents.

In the image of an open item below, the specified documents are an Excel cost breakdown, a PowerPoint executive overview and a Word specification. By default the auto-created documents are named with the name of the project item (here 'Support system') + the name of the template.



Libraries with document sets are using a content type based on the Document Set Content Types parent group, so to create a document set you must create such a content type.

Create a Content Type for a Site Collection, and use the Document Set Content Types parent group and the Document Set parent.




When the content type has been created and you have added the site columns you need, click on the new link 'Document Set settings' in the Site Content Type page. At Default Content, add links to the templates you want to use in this document set.

Content Type	Folder	File Name	
Document		C:\Users\Peter\Desktop\Costs.xlsx	Browse... Delete
Document		C:\Users\Peter\Desktop\Executive overview.ppt	Browse... Delete
Document			Browse... Delete

Add new default content ...

Then you only have to Connect the Library to the Content Type.

In the library, each item will have the document set icon to show that it contains several files.

	Name		Project Cost	Project Manager
			Sum= \$15,000	
	Moving servers to the cloud	...	\$5,000	<input type="checkbox"/> Peter Kalmström
	Support system	...	\$10,000	<input type="checkbox"/> Antonio Moreno

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Document-Set-Content-Type.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Document-Set-Use.htm>

14.8 SUMMARY

After studying this chapter I hope you understand how content types are used and feel inspired to create your own content types for lists and libraries. You have learned to create a content type and add it to an app, and you can also connect a document template to a content type.

You can find more information about content types in the chapter about SharePoint forms, where I explain how to Create a Content Type Form. In the chapter Phone Messages, I create a content type for a list, and in Meeting Notes and Action Points I show how you can use site collection specific columns, even if you are using a content type that is shared between several site collections.

15 ISSUE TRACKING TIPS

SharePoint Tasks or Issue Tracking list templates are useful for helpdesk and support groups, but these templates are also suitable for incident management, issue tracking and other shared tasks. In this section I will give some tips on how you can handle and enhance such list templates.

My intention is not to give a recipe on the perfect helpdesk list. Instead I want to point to these various options, so that you can make the modifications that best suit each team:

- Comparison of the two templates
- Suggestions for a helpdesk list
- E-mail notification
- Data entry and edit button
- Edit multiple list items
- Landing page with views, issues list and Excel chart
- Status indicator icons

15.1 TASKS AND ISSUE TRACKING LIST TEMPLATES

SharePoint provides two templates that can be used as helpdesk lists and often can replace each other: the Tasks list and the Issue Tracking list. Both have their benefits and drawbacks, and there are some differences you should be aware of when you decide which list template to use.

- Only the Tasks list has a timeline.
- The Tasks list has more in-built views than the Issue tracking list.
- Only the Tasks list item has a ‘Show more’ link, but there is no way to decide what should be hidden. The Issue tracking list item shows all fields as soon as you open it.
- Only the Tasks list item has a ‘Start Date’ field.
- Only the Issue Tracking list item has a ‘Category’ dropdown.
- Only the Issue Tracking list item has a Comments field.
- The ‘Predecessors’ field in the Tasks list item has a corresponding ‘Related Issues’ field in the Issue Tracking list item.
- If you use the Issues Tracking list template you lose the ability to synchronize the list with Outlook and Project!

Tasks	Issue Tracking
timeline	
6 views	3 views
Show more	
Start Date	
	Category
	Comments
Sync with Outlook/Project	No sync with Outlook/Project

I recommend that you choose the list that has most of the features you need and then modify it, for example by adding or deleting columns and creating more views.

In the following articles I will give you some tips on how to enhance the Issue Tracking template, and I hope you will find them useful even if you choose to use the Tasks list. What I describe is applicable to both list templates.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Tasks-Issues.htm>

15.2 CREATE A HELPDESK LIST

Here I will give some suggestions on what to think about and how to modify the default SharePoint Issue Tracking list if it should be used by a support team.

Create a New List based on the Issue Tracking or Tasks template. Then make the following changes:

- When the list has been created and is displayed under Recent in the Quick Launch, Edit the Quick Launch and drag the list link to the permanent links. *Refer to* Edit Links.
- Make sure Versioning is enabled, so that you can see different versions of the list items.
- Make sure that multiple selection is not allowed for the Assigned To column; *refer to* Edit the Column.

Allow multiple selections:

Yes No

- Add a new column for additional people you want to assign a task to (instead of allowing multiple selection).
- Change the Category names into something that suits your team. Write the values in alphabetical order.
- Delete any columns you will not need, for example the Related Issues column; *refer to* Delete a Column.
- Add new columns for important metadata; *refer to* Create a Column.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Creation.htm>

15.3 E-MAIL NOTIFICATION TO ASSIGNED

The E-mail Notification to Assigned alert is only available in SharePoint lists that build on the Tasks or Issue Tracking template. It sends an automatic e-mail to the person who has been assigned a task, and the setting is done for the list, not on a personal level.

The Tasks and Issue Tracking e-mail notification is very easy to set – you just click a radio button – but it is not possible to customize the notification at all. It is only sent when a task has been assigned to a user, and only to that user.

There is no control over when the e-mail is sent out, but normally it is sent within a few minutes after the assignment.

1. Open the List Settings and click on Advanced settings in the General Settings group.
2. Click Yes to ‘Send e-mail when ownership is assigned’. Click OK.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Email-Notification.htm>

To have more control over when e-mails should be sent, what they should contain and to whom they should be sent, you can create SharePoint Workflows.

15.4 EDIT BUTTON AND DATA ENTRY VIEW

When you want to enter new information in a SharePoint list or edit existing data, you want to get to the right place as quickly as possible. If you create a Data Entry view or add an edit button to an existing standard view, you simplify the process of entering data into a SharePoint list and minimize the number of clicks and waiting.

15.4.1 Edit Button

When you add an edit button to a standard mode view, you can quickly come into edit mode of a single item without having to open the whole list in edit mode.



1. Open the list view where you want to add the Edit button.
2. Modify the View and check the Display checkbox for 'Edit (link to edit item)'.

Edit (link to edit item)

3. Select the first position for the Edit button. Click OK.

15.4.2 Data Entry View

When you create a Data Entry view, users are directed directly to a datasheet view when they select that view. Of course you might as well click on 'edit this list', but in a Data Entry view you can also remove columns and only keep those that are important when you create a new item.

1. Open the list where you want to create a new view.
2. Create a View and select the Datasheet View link.
3. Give the new view a name and make the customizations you prefer.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Data-Entry-View.htm>

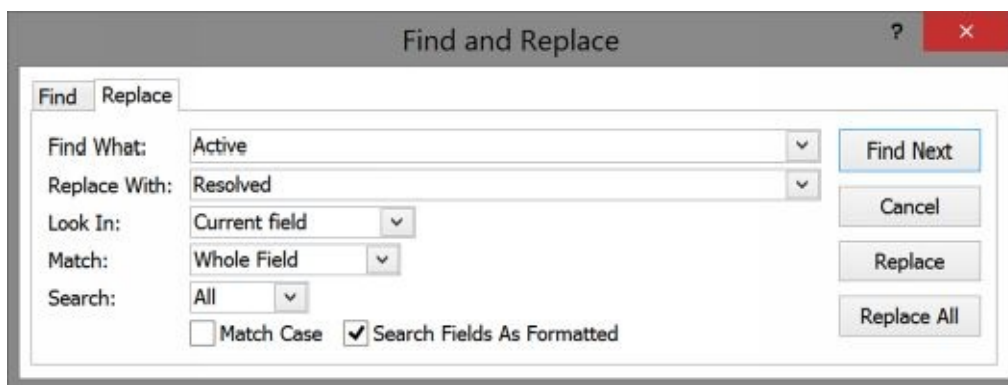
15.5 EDIT MULTIPLE LIST ITEMS

When you want to edit several list items, it is convenient to do them all in one step, instead of changing them manually one by one – especially if they should be changed in the same way. Here we will look at 3 ways to edit multiple SharePoint list items at the same time.

- Open the List in Edit Mode. Now you can quickly change values, and when you want several items to be changed in the same way, you can do like in Excel and drag the little handle in the bottom right corner of a cell.



- Open a SharePoint List in Access. Now you can copy and paste more quickly than in SharePoint, and you can use the Access Find and Replace feature to edit multiple items that should be changed in the same way. Everything you change will be reflected back to the SharePoint site.



- Run an Access Query. When you have a SharePoint list open in Access and want to change multiple items in the same way, the quickest method is to run a query:
 1. Click on the Query Design button under the CREATE tab in the Access ribbon.
 2. Add the list table to the query.
 3. Click on the Update button under the DESIGN tab in the ribbon.
 4. Select the field you want to update.
 5. Fill out the update value and the criteria.
 6. Click on the Run button under the DESIGN tab in the ribbon. Now the values will be replaced quickly, and everything will be reflected back to the SharePoint site.



Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Edit-Multiple-Items.htm>

15.6 LANDING PAGE WITH ISSUES

A simple Views Landing Page for an Issue Tracking or Tasks list can be enhanced with a web part that shows the list items on the same page, where users can work with them. The description below is for an existing landing page.

If you start from scratch, follow the instructions in [Create a Views Landing Page](#), but include the layout mentioned below and add the links directly in the sidebar.



1. Open the Wiki Page in Edit Mode.
2. Click on the Text Layout button under the ribbon **FORMAT TEXT** tab and select a layout. One column with sidebar is a good layout for this kind of page.
3. Move the view links to the sidebar by copy and paste.
4. Add a Web Part, and select your Tasks or Issue Tracking list.
5. Edit the Web Part. Under Selected View, select the list view you want to show by default and click on Apply. Save the page.

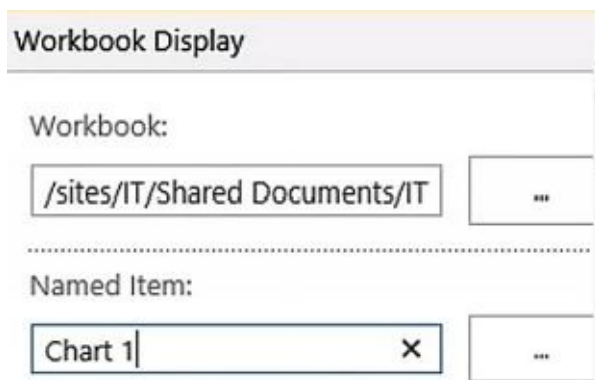
Now the list is displayed in the column, and you can work with the list items as usual. The only limitation is that you have to select an item to see the **LIST** and **ITEM** tabs.

15.7 LANDING PAGE WITH CHART

We can further enhance the simple Views Landing Page with a chart that visualizes the data in the list. Note that the Excel Web Access web part necessary for this is only available in the Enterprise Plan of SharePoint or Office 365.

15.7.1 Add an Excel Chart to a Landing Page Web Part

1. In Excel, save the Excel chart to SharePoint. Select a view option under Browser View Options... Most common is to show the entire workbook.
2. Copy the path to the saved workbook.
3. In SharePoint, Open the Wiki Page in Edit Mode and place the mouse cursor in the column where you want to add the chart.
4. Add a Web Part, the Excel Web Access part.
5. Edit the Web Part, and click on the ellipsis to select which workbook to use.



6. Type the name of the item you want to show in the web part.
7. Uncheck the box for All Workbook interactivity, and make other settings to customize the web part before you click OK.
8. (If the chart size does not fit you can change it in Excel. Save and refresh the SharePoint page, to check if it looks better.)
9. Save the page.

15.7.1.1 Refresh an Excel Chart on a SharePoint Page

When an Excel chart is added to a SharePoint page in the way described above, it will not be updated automatically when the SharePoint list data is changed. Instead you have to open Excel and refresh the chart. This can be done in two ways:

- Click on the Refresh button under the ANALYZE tab and select Refresh All.
- Click on the Refresh All button under the DATA tab.

Under the DATA tab you can also click on the Connections button and then Properties, and check the box for 'Refresh data when opening the file'.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Landing-Page-Chart.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Chart-Update->

15.7.1.2 VBS Script that Updates an Excel Chart on a SharePoint Page

If you don't want to update Excel manually, you can add a scheduled task with a script that updates the Excel chart automatically. This is the script when the URL to the chart is <https://kalmstromdemo2.sharepoint.com/sites/IT/SharedDocuments/ITTicketsSummary.xls>

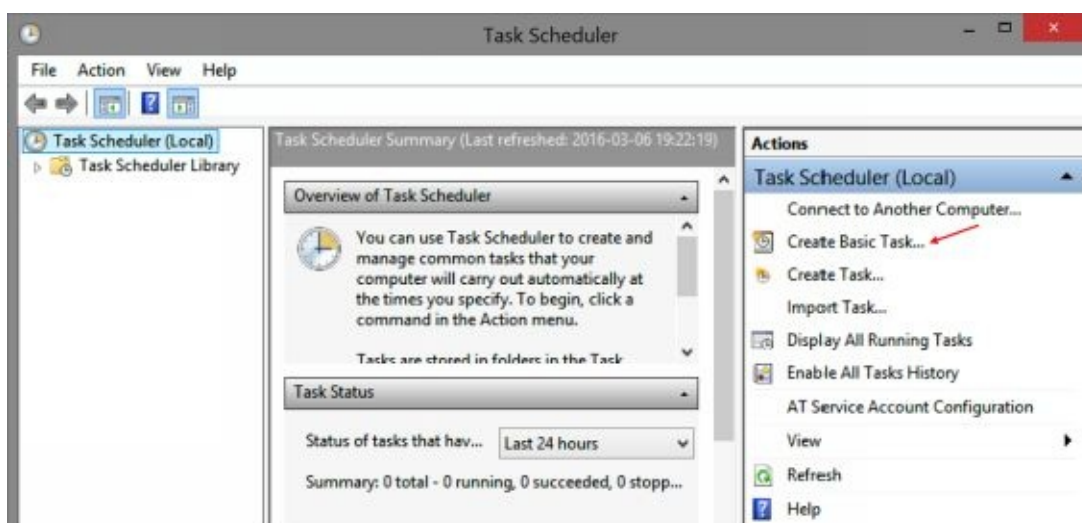
```
Set xl = CreateObject("Excel.Application")  
set wb = xl.WorkBooks.open("https://kalmstromdemo2.sharepoint.com/sites/IT/  
SharedDocuments/ITTicketsSummary.xlsx")
```

```
WScript.Sleep 1000  
wb.RefreshAll  
wb.Save  
wb.Close  
xl.Quit
```

Save login information in your browser, so that the script can work automatically.

To run the script, use the Windows Task Scheduler.

1. Open the Task Scheduler.



2. Create a basic task, give it a name and click on Next.
3. Set how often the task should be run and click on Next.
4. Set when the task should start running and click on Next.
5. Select the option 'Start a program' and click on Next.
6. Browse to the VBS file and click on Next.
7. Check the box for 'Open the Properties Dialog for this task when I click Finish' and click on Finish.
8. Under the Triggers tab, select the Daily task and click on the Edit... button. Set the task to be repeated with the interval you prefer and click OK.

9. Click OK to the Properties Dialog.

10. Select the new task and enable the All Tasks history if you want to have a log over what is happening.

11. Right click on the new task and select Run.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Update-Excel-Chart-Script.htm>

Note that if you have Excel as part of an Office 365 ProPlus license, you have to log in to Excel once a month to make sure the subscription is updated. This is not necessary with a regular Office license.

15.8 STATUS INDICATOR ICONS

The SharePoint Status Indicator feature visualizes key performance indicators with icons. The icons are displayed according to the set rules, and they are automatically updated when list data changes.

Indicator	Goal	Value	Status
Average working hours	40	54	

To use the status indicator feature, you must first create a reports library. From this library you can then create a status list. There is no status list template if you go directly from 'add an app'.

1. Add an App, and select the Report Library template.
2. Open the new library, and click on New. Select 'Web Part Page with Status List'.
3. Give the list a name and make the settings.

Add a link to current navigation bar?

No Yes, use navigation heading:
Home

Layout

Three column horizontal layout
One column vertical layout
Two column vertical layout

- Create a status indicator list for me automatically.
 Allow me to select an existing status indicator list later.
 Do not add a status indicator list to this dashboard.

4. SharePoint will now create a web part page with three web parts: the Status List and two parts for Excel Web Access.

You can use the web part page, but here I will show how to put the status list on a Views Landing Page.

1. In the Status List created in step 4 above, click on New and select the option 'SharePoint List based Status Indicator'.
2. Give the Status Indicator a name and browse to the list you want to connect it to. Select view and calculation options, and set the Status icon rules. The image below shows the setting for an average of hours worked for an issue category, where the goal is a maximum of 40 hours.

Calculation using all list items in the view

Average

of

Hours worked

Status Icon Rules:

Better values are

Display when value has met or less than goal *

Display when value has met or less than warning x *

Display otherwise

3. Open the landing page in Edit mode.
4. Add a Web Part, the Status List in the Business Data category.
5. Edit the Web Part and browse to the Indicator list. Make other settings that you prefer. Click OK and save the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Key-Indicators.htm>

15.9 SUMMARY

Most organizations use SharePoint lists for different kinds of issue tracking, and in this chapter I have given suggestions on various ways to enhance such lists. I have also described how to create a landing page with view links, list items, status indicators and an Excel chart that visualizes the list data.

16 SHAREPOINT WORKFLOWS

SharePoint workflows are most often created in SharePoint Designer, and they can be used for all kinds of SharePoint lists and libraries. They let you customize when and how e-mail notifications should be sent, and they can also be used for calculation, archiving and much more.

Here I will first give an overview on how workflows are created in general and then show a few examples. I hope this chapter will make you understand the workflow possibilities and encourage you to explore them and create your own workflows. The chapter will cover:

- The general principle behind workflows
- The difference between a list workflow and a reusable workflow
- Differences between SharePoint 2010 and 2013 workflows
- How to check a workflow
- E-mail alert to high prio assignee – workflows in text based and Visual Designer view
- Alert e-mail to assigned with cc
- Overdue alert to manager
- Declare Record workflow
- Set Title workflows

16.1 GENERAL

The principle of all workflows is that you select conditions to be met and actions to be taken when these conditions are met.



When you have clicked on one of the buttons in the image from the SharePoint Designer ribbon above, you will have this kind of link for the Condition button:

If value equals value

And for the Action button:

Set field to value

Click on the links to select or type in the valid values, fields or what your workflow should be using or doing.

16.1.1 List Workflows and Reusable Workflows

The most common workflows, the list workflows, are only intended to be used on the items in one list or library. They are created for that app and cannot easily be re-used in another app. (Note that SharePoint Designer 2013, doesn't actually use the word app anywhere, but we will continue to use it here for consistency.)

If you want to use the workflow in more than one app, or think you might do that in the future, you should create a reusable workflow. Reusable workflows can be saved as workflow templates.

16.2 SHAREPOINT 2010 AND 2013 WORKFLOWS

SharePoint Designer 2013 allows you to create both SharePoint 2010 and SharePoint 2013 workflows. For a simple workflow the SharePoint 2010 platform can be easier to use, but SharePoint 2013 workflows have new features that allow you to do more. Some things are however only possible with the 2010 workflow.

In most cases you can use both the 2010 and 2013 workflows, but as they are different in design I mention which version I use in each instruction below. The principle is the same for both types of workflow, but the steps are a bit different.

16.2.1 Important Differences in SharePoint 2010 and SharePoint 2013 Workflows

- The SharePoint 2013 workflow has another view in addition to the Text-Based Designer. If you have Microsoft Visio installed, you can also use the Visual Designer view.
- The SharePoint 2013 workflow has a Stages concept, so you build the workflow in stage after stage. Each stage can hold one or more Actions and Conditions.
- Between each stage there is a transition, where you decide if the workflow should go to another stage or to the end of the workflow. You have to use this transition even if the workflow only has one stage. (In that case the transition will be to go to the end of the workflow.)
- The two Common Conditions of the SharePoint 2010 workflow have been merged into one in the SharePoint 2013 workflow.
- There are more Actions in the SharePoint 2013 workflow.
- The SharePoint 2013 workflow can include loops.
- There are no impersonation steps in SharePoint 2013 workflows and therefore no actions allowing you to modify permissions on items.
- You cannot assign a reusable workflow to a specific content type in 2013 workflows. They can only be built to connect to all content types.
- Only SharePoint 2010 workflows can be started from a timer; *refer to* Retention Stages.

16.3 START CREATING A WORKFLOW

The actual conditions and actions are the same for list workflows and reusable workflows, but there are some differences in how you start creating them.

In both cases you should give the workflow a name, select if it should be a SharePoint 2013 (default) or SharePoint 2010 workflow and click OK.

Now you will have a new tab with the name of the workflow and two new pages, the Edit Workflow page and the Workflow Settings page.

The image below shows the tabs when creating a Set Title workflow in the Sales.



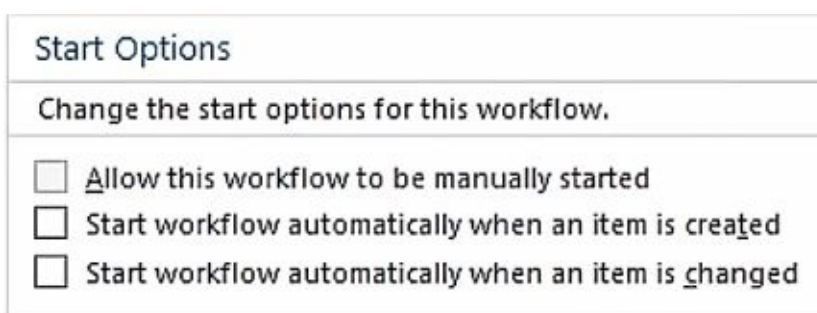
Switch between the two workflow pages with the thumbnail links under the tab, or use the buttons Edit Workflow and Workflow Settings in the ribbon. In the Workflow Settings page there is also an 'Edit workflow' link.

16.3.1 Start Creating a List Workflow

To create a list workflow you must first open the list or library in SharePoint Designer. When you click on the list you want to create a workflow for, a Summary page with information about the list properties will open. Click on the New button at Workflows to start creating the new workflow.



For list workflows, you need to set when the workflow should be started, and I recommend you to check this extra as the checking not always sticks in the box. This is done in the Workflow Settings page.



16.3.2 Start Creating a Reusable Workflow

To create a reusable workflow, open the root site of the site collection in SharePoint Designer and click on the Reusable Workflow button in the ribbon.

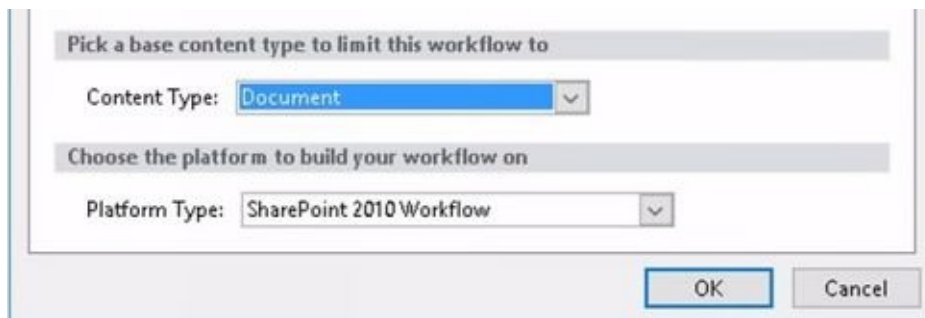


For reusable workflows, the start options are set in the site collection where the workflow will be used. In SharePoint Designer, the reusable workflow can only be disabled.

16.3.2.1 Connect the Workflow to a Content Type

Reusable workflows are most often assigned to a specific content type. In those cases it has to be a SharePoint 2010 workflow, at least when this book is published, because at that time SharePoint 2013 workflows cannot be connected to a specific content type.

When you you assign the reusable workflow to a content type, you must do it twice. First you must assign it in SharePoint Designer, to give the workflow access to the columns of the content type.



Then you must assign content type again in the site collection(s) where you want to use the workflow. When you do that in the root site of the site, the workflow will be applied in all apps that are based on the associated content type in that site collection.

1. Open the Site Settings in the root site of the site collection, and click on the Site content types link in the Web Designer Galleries group.
2. Select the Content Types group, and then click on the content type you want to use the workflow with.
3. Click on the Workflow settings link and then on Add a workflow.
4. Select the workflow. (You might have to activate it. In that case there is an Activate button.)
5. Give the workflow a name, and set it to start when an item is created or changed if that is what you need. (You can also leave the start options blank, in case you want to start the workflow with a timer; *refer to* Retention Stages.)
6. Make sure that you select 'Yes' for 'Add this workflow to all content types that inherit from this content type?' or 'Add this workflow to all related content types', before you click OK.

Now all the site collection's existing and new libraries that use the content type will have this workflow.

If you only want to assign the workflow to one list, you can open the List Settings and then the Workflow Settings for that list. Click on 'Add a workflow' and select the content type and then the workflow you want to add.

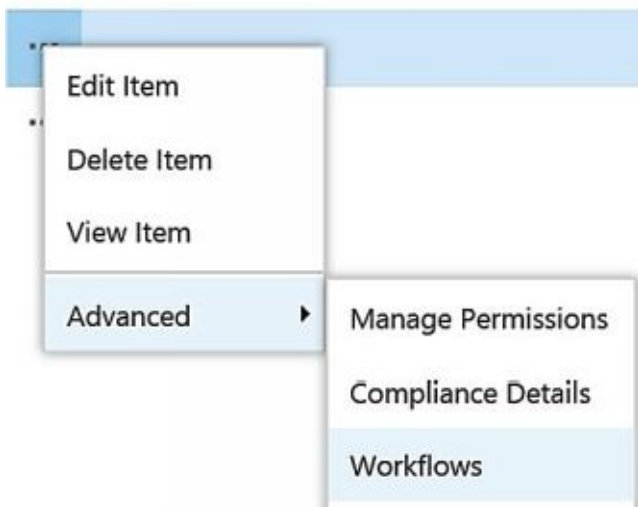
16.3.3 Publish and Check the Workflow

When you have created a list workflow or reusable workflow, you must publish it. In the same ribbon group as the Publish button, you can also find buttons to save the workflow (to continue working with it later) and to check the workflow for errors.



Even if you have checked the workflow for errors, you should always control that it really works as intended. Simulate the condition described in the workflow, and see if the set action is performed.

You can also see details on running and completed workflows, if you right click on the ellipsis at an item and select Advanced and then Workflow.

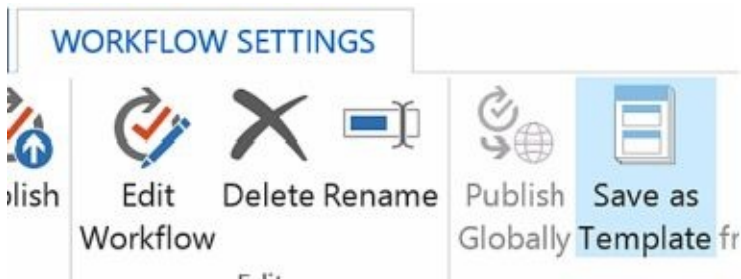


If you cannot check the workflow directly, because it is activated by a timer and not by a changed or created item, you can start it manually. Click on the Workflows button under the ITEMS tab and select the workflow you want to test. Click on the Start button to start the workflow manually.

16.3.4 Reusable Workflow Template

When you have published a reusable workflow you can save it as a template. It will then be saved as a WSP file in the Site Assets library of the site where you created the workflow. From there you can download the file to your PC and upload it to other sites.

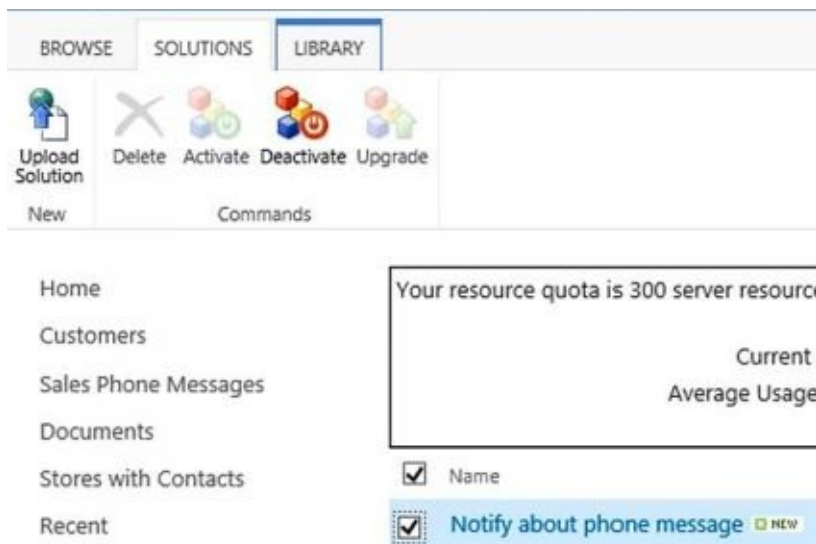
In SharePoint Designer, open the settings for the reusable workflow and click on the Save as Template button in the ribbon. (The Publish Globally button you see on the image below only publishes the workflow within the site collection.)



16.3.4.1 Distribute a Workflow Template

When you have saved a reusable workflow as a template, you can download the WSP file from the Site Assets library to your PC and then upload it to other site collections to use it there.

1. Open the Site Settings in the root site of the site collection where you want to use the workflow.
2. Click on 'Solutions' in the Web Designer Galleries group.
3. Upload the WSP file and activate it to make it available for the whole site collection.



4. Open the site settings again and click on the 'Manage site features' link in the Site Actions group, to activate the workflow for the site.
5. Find the reusable workflow in the list and activate it. (Note that you have to activate twice, first under 'Solutions' and then under 'Manage site features', even if you are using the root site of the site collection.)



6. When the activation has finished you will see an Active icon, and the Activate button has been replaced by a Deactivate button.



7. Connect the Workflow to a Content Type for the site collection.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Reusable-Workflow.htm>

16.4 E-MAIL ALERT TO HIGH PRIO ASSIGNEE

I will create a workflow that sends an e-mail about a new high priority task to the assigned person, and to illustrate the differences between a SharePoint 2010 workflow and the two design views in the SharePoint 2013 workflow I will do it three times. Also *refer to* Important Differences in SharePoint 2010 and SharePoint 2013 Workflows.

16.4.1 Text-Based Designer

The SharePoint 2010 workflow only has a Text-Based Designer, and the SharePoint 2013 workflow has the Text-Based Designer as one of two View options. The steps to create a workflow in these Text Based Designers are similar in both versions.

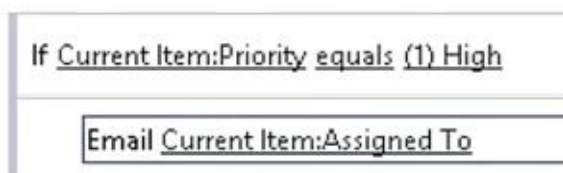
Start both workflows with the steps in Start Creating a Workflow.

End both workflows with these steps:

1. Click on the Condition button in the ribbon to set the conditions for the workflow.
2. Select 'If current value field equals value'.
3. Set the field to Priority and the value to High.
4. Click on the Action button in the ribbon and select the action Send an Email.
5. Click on 'these users' and select Workflow Lookup for a User.
6. Click on Add and select the 'Field from source' Assigned To and the 'Return field as' Email Address. Click OK.
7. Enter a subject for the e-mail to be sent, and add the body text you wish to use. Click OK.
8. If you are using a list workflow, set the start options you wish to use under Start Options in the Workflow settings.
9. Publish and Check the Workflow.

16.4.1.1 SharePoint 2010 Workflow

When you use a SharePoint 2010 workflow you don't have to add more steps between the Start and the End steps mentioned above. This is the finished workflow:



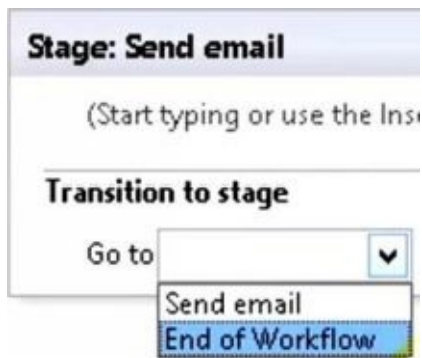
Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Notification-2010-Workflow.htm>

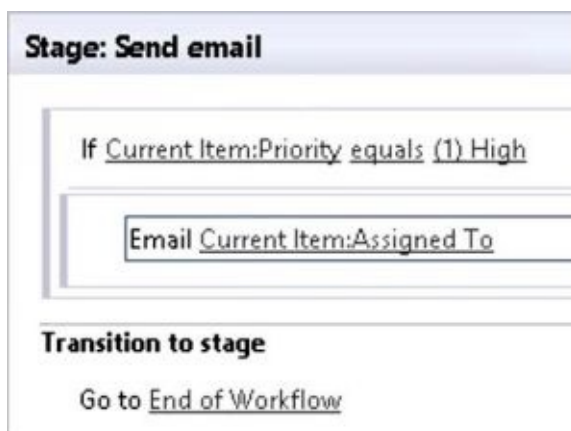
16.4.1.2 SharePoint 2013 Workflow

When you use a SharePoint 2013 workflow, you must add a few more steps to set the stages between the Start and the End steps mentioned above:

1. Enter the Stage: Send email.
2. At Transition to stage, enter 'go' and press Enter.
3. Click on 'stage' and select 'End of Workflow'.



Then you can continue with the same End steps as in the SharePoint 2010 workflow. This is the finished workflow:



Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Notification-2013-Workflow.htm>

16.4.2 Workflow in Visual Designer View

SharePoint Designer 2013 has a new design view for SharePoint 2013 workflows. It is called Visual Designer, and here you can create a workflow by dragging shapes to a design surface. You must have Visio Professional 2013 installed on the same PC as SharePoint Designer 2013 to use the new view.

If you are not used to reading code, the Visual Designer view is probably easier to understand and explain than the Text-Based Designer. You can write your own text in the Visual Designer shapes, and Visual Designer gives a picture that describes the conditions and actions.

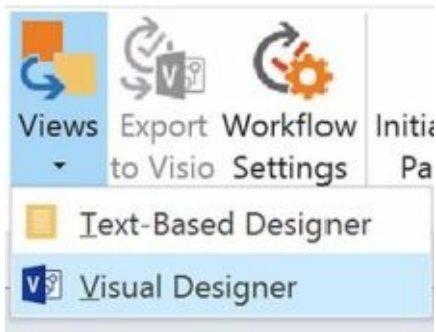


Start Visio before you begin working in SharePoint Designer. Then you can follow the

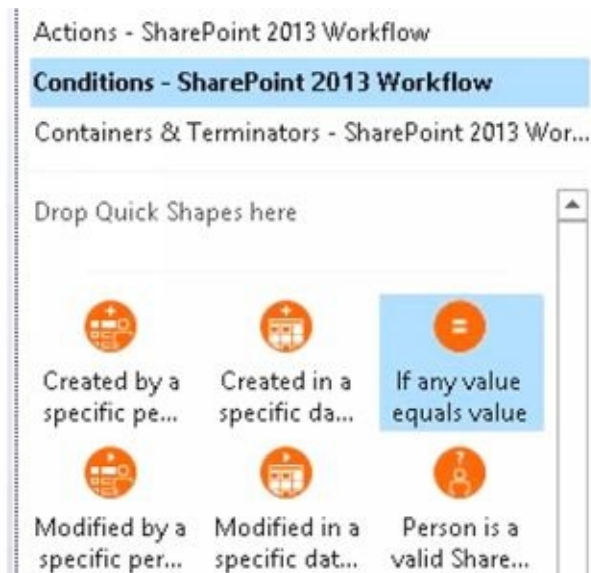
same Start steps as when you are creating a workflow in the Text-Based Designer.

Then follow these steps:

1. Click on the View button in the ribbon, and select Visual Designer. Visio will now open inside SharePoint Designer.



2. Under Shapes in the left panel, click on Conditions and then drag the shape 'If any value equals value' to the design surface as the first stage.



3. Click on the gearwheel icon and select Value.

4. Select Assigned To and then High.

5. Under Shapes in the left panel, click on Actions and then drag the shape 'Send an email' to the design surface and place it after the first shape you added.

6. Click on the gearwheel icon and select Email.

7. Click on 'these users' and select Workflow Lookup for a User.

8. Click on Add and select the 'Field from source' Assigned To and the 'Return field as' Email Address. Click OK

9. Enter a subject for the e-mail to be sent and add the body text you wish to use. Peter just adds a link to the list. Click OK.

10. To connect the Condition shape and the Action shape, right click on the connector between them and select Yes.

11. Select the Condition shape to show the Connector tool in the ribbon and create another connection from the Condition to the end of the workflow. Right click on the connector and select No.

12. If you are creating a list workflow, set the start options you wish to use under Start Options in the Workflow settings.

13. Publish and Check the Workflow.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Workflow-Visual-Designer.htm>

16.4.3 Add Link to Edit Item

You can of course build out the e-mail alert workflow as you like. Here is a suggestion on how you add the title of the assigned task in the e-mail subject and a link that opens the task in edit mode in the e-mail body.

Add these steps after step 4 in the End steps when working in the Text-Based Designer; refer to Text-Based Designer:

1. In the e-mail subject, enter the text you wish to use and then click on the ellipsis to add the high priority item title into the subject text.
2. Click on the Add or Change Lookup button and select the 'Field from source' Title. Click OK.
3. Write the body text of the e-mail.
4. To fetch the link to the edit form, open the Summary page for the list and click on All Files.
5. Open the lists and select the list you want to use with the workflow.
6. Right click on the file EditForm.aspx and select Properties. Copy the URL to the form.
7. Paste the URL into the e-mail String Builder and add the ID of the current item. Click OK to all dialogs.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Direct-Link.htm>

16.5 ALERT E-MAIL TO ASSIGNED WITH CC

If you use a list based on the Tasks or Issue Tracking template, there is a setting for sending an E-mail Notification to Assigned. This can be done either without a workflow, but to have a cc on the e-mail you need to use a workflow.

This list workflow, that sends an e-mail to two people or groups, can be created as a SharePoint 2010 or 2013 workflow. Here I am describing the steps for 2013. but the principle is the same for SharePoint 2010 workflows.

I set the workflow to be sent when a new item is created in a task list, but you can use the workflow for any list and also make it send the e-mail when an item has been changed.

1. In the SharePoint list, Create a Column of the type Person or Group.
2. Open the site in SharePoint Designer.
3. Open the Summary page for the list.
4. Start Creating a List Workflow.
5. Click on the 'Edit the workflow' link and set the Transition to Stage to Go to End of Workflow.
6. For Stage 1, click on the Action button in the ribbon and select Send an Email.
7. Click on 'these users' and select 'Workflow Lookup for a User' for To in the Define E-mail Message dialog.
8. Click on Add, and select the 'Field from source' Assigned To and the 'Return field as' Email Address.
9. For CC in the Define E-mail Message dialog, select 'Workflow Lookup for a User. Click on Add, and select the new Person or Group column you created at 'Field from source' and Email Address at 'Return field as'.
10. Enter a subject and the e-mail body text. You can also add a lookup for the title of the overdue task and a link to the item that opens in edit mode; *refer* to Add Link to Edit Item.
11. Publish and Check the Workflow.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Notify-Boss.htm>

16.6 OVERDUE ALERT TO MANAGER

When you want to create a workflow that sends an alert when a task has not been completed on time, you cannot use the workflow options to send automatically when a task is created or changed.

Instead you want the workflow to be sent when the task is overdue, and that should be set in the List Settings. For this list workflow you have to use the SharePoint Designer 2010 workflow.

1. In the list, Create a Column of the type Person or Group.
2. Open the site in SharePoint Designer.
3. Open the Summary page for the list.
4. Start Creating a List Workflow.
5. Click on the ribbon Condition button.
6. Set the conditions for the workflow: select 'If current value field equals value' and select the field Task Status.
7. Select 'not equals' and then Completed.
8. Click on the ribbon Action button.
9. Click on 'these users' and select Workflow Lookup for a User.
10. Click on Add and select the Person or Group who should receive the notification at 'Field from source'. The 'Return field as' should be Email Address.
11. Enter a subject for the e-mail to be sent. You can also add a lookup for the title of the overdue task; *refer* to Add Link to Edit Item.
12. Add body text and a lookup for the Assigned To field.
13. Check no option or only the first one at Start Options in the Workflow settings.
14. Publish and Check the Workflow.

Go back to the SharePoint list where you want to use the workflow, to set the start option.

1. Open the List Settings and click on the link 'Information management policy settings'.
2. Click on the Task content type link.
3. Check the box for Enable Retention.
4. Click on 'Add a retention stage'.
5. Select to base the retention stage on the Due date + 1 day.
6. Select the action 'Start a workflow'.

Event

Specify what causes the stage to activate:

This stage is based off a date property on the item

Time Period: +

Set by a custom retention formula installed on this server:

Action

When this stage is triggered, perform the following action:

Start this workflow:

7. Select the overdue notification workflow you just created.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-Overdue-Notification.htm>

For more information about retention stages, *refer to* Retention Stages.

16.7 DECLARE RECORD WORKFLOW

Instead of manually Declare Record to protect list items and library files, you can use a workflow that does it automatically. If you have a policy for which items or files should be declared record, you can create a workflow that declares record when a certain condition is met. Here are the steps to create a workflow that declares a file record when it changes.

1. Open the Site in SharePoint Designer 2013.
2. Create a new SharePoint 2010 workflow. (The Action “Declare record” is not yet available in SharePoint 2013 workflows.)
3. On the workflow summary page, set the workflow to start when an item is created and changed.
4. Click on the Edit workflow link.
5. Set the condition ‘If current field equals value’, and set the field, equal condition and value you wish to use.
6. Set the action to Declare record.
7. Publish and Check the Workflow.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Declare-Record-Workflow.htm>

16.8 SET TITLE WORKFLOWS

The SharePoint Search displays title hits on top, so for the search to work well, it is important that title columns are filled out with terms that give relevant information. For many organizations it is a problem that the titles are not accurate, which leads to few or inaccurate search results.

As the title field does not have the same importance in a file system as it has in SharePoint, files that are imported into SharePoint libraries will often lack titles or have irrelevant titles. And when new documents are created in SharePoint, users often avoid filling out the title for a file, as they are not used to doing it and it is not mandatory.

Another problem with the title field is when a template has a title. New files created from that template will inherit the same title, if it is not changed by the creator, and that will result in many documents with different content but the same title.

A SharePoint workflow can set the title to the same as the name of the list item or file. The name is hopefully relevant, so this workflow solves the problems with non-existing as well as irrelevant titles.

16.8.1 List Workflow to Set Title

The list workflow described here is easy to create, but it is directly connected to just one list. If you want to set the title to the same as the name in another list, you have to re-create the workflow for that list too.

The steps are for a SharePoint 2013 list workflow, but you can do this workflow with nearly the same steps if you use a SharePoint 2010 platform instead.

1. Start Creating a List Workflow.
2. At Transition to stage, type 'go' and select 'End of Workflow'.
3. Select the Condition to 'If any value equals value' and set the Values to Title 'not equals' Name.
4. Select the Action 'Set Field in Current Item' and set the Field to Title and the Value to Name.
5. Set the workflow to start automatically when an item is created or changed.
6. Publish and Check the Workflow.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Title-List-Workflow.htm>

16.8.2 Reusable Workflow to Set Title

When you create a reusable workflow and connect it to a content type, the workflow will be used in all apps in the site collection that have that content type. To use it in other site collections, create a Reusable Workflow Template.

You have to create a SharePoint 2010 workflow, because SharePoint 2013 workflows cannot be connected to a specific content type, which is necessary for this workflow.

The steps below *refer* to a library with the default Document content type.

1. Start Creating a Reusable Workflow.
2. Create a new SharePoint 2010 workflow and assign it to the Document content type.
3. Select the Condition to 'If current item field equals value' and set it to Title 'not equals' Name.
4. Select the Action 'Set Field in Current Item' and set the Field to Title and the Value to Name.
5. Do *not* set any start options. That will be done when you associate the workflow with the content type.
6. Publish and Check the Workflow.
7. Connect the Workflow to a Content Type, in this case the Document content type.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Title-Reusable-Workflow.htm>

16.8.3 Run the Workflow on Existing Files

As the workflow is run at change or creation, existing files that are not touched will still be without a title. A quick way to make the workflow run on existing files, is to create a dummy column in the app and set a dummy value that changes the metadata of all items.

1. Create a Column.
2. Modify the View to show the Title column and the new column.
3. Open the App in Edit Mode, and enter any value in the first cell in the new column.
4. Drag the value down to all documents. (If you have many documents in the library, you should Open a SharePoint List in Access and work with it there instead.) This will change all items and thus trigger the workflow to run.
5. When the workflow has run and all the documents have titles, remove the dummy column again.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Title-Reusable-Workflow.htm>

16.9 SUMMARY

Workflows can be used for different purposes, when you want to automate actions in SharePoint. After studying this chapter, I hope you have a general idea on how different kinds of workflows are created and can be used.

I have given a few examples on how to make workflows send alert messages, declare record and set title, and I hope they have inspired you to try for yourself. You can find more workflow descriptions in later chapters, for example Phone Messages Alert Workflow and Workflow that Switches Content Type.

17 QUOTES LIBRARY TIPS

You already know the basics of SharePoint Columns and Views. In this chapter, I will give more suggestions on how informative columns and views can make it easier to understand and find information.

A SharePoint document library for quotes is taken as example in this chapter, but the techniques are of course applicable on other apps too.

I first add four columns: date columns for quote and decision, a choice column for the quote status and a currency column for the quote value. (I also recommend you to enable Versioning for this library, so that you get a change log for it.)

When the columns are in place, I show how to create views based on how the quote status is filtered. I also explain how to create a calendar view and a Gantt view.

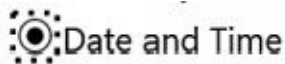
In the section Create a New Document with a Custom Document Content Type, I have used a content type with the columns described here.

17.1 ADD COLUMNS FOR DATE, CHOICE AND CURRENCY

It is often a good idea to modify a default view so that it gives more information about the files in a document library, for example by adding columns with important metadata, and by removing columns with uninteresting or repetitive information.

For a Quotes library, it is suitable to add columns for Quote Date, Decision Date, Decision and Quote Value.

17.1.1 Date and Time Column



When a column is of the type Date and Time, users will have a DateTimePicker at the Date field. In the Quick Edit mode, the hour and minute selectors are placed below the Today info.

A screenshot of a date and time picker. At the top, there is a calendar icon, a dropdown menu showing "12 AM", and another dropdown menu showing "00". Below this is a calendar for "December 2015". The calendar shows days of the week (S, M, T, W, T, F, S) and dates from 29 to 2. The date "29" is highlighted in blue. Below the calendar, it says "Today is Tuesday, December 29, 2015".

When you Create a Column of the type Date and Time, you will have some options that are only available for this column type.

Date and Time Format:

Date Only Date & Time

Display Format:

Standard Friendly

Default value:

(None)
 Today's Date

12 AM 00

Enter date in M/D/YYYY format.

Calculated Value:

If you change the Display Format from Standard to Friendly, the selected date will be shown like this:


Quote Date

Tomorrow

Thursday

17.1.2 Choice Column

When a column is of the Choice type, users are asked to make a choice among several alternatives.

 Choice (menu to choose from)

At the bottom of the Create Column page you should fill out the choices in the order you want them to be shown and select display method for the choices. The default value will be filled out if no value is selected.

Type each choice on a separate line:

Enter Choice #1
Enter Choice #2
Enter Choice #3

Display choices using:

- Drop-Down Menu
- Radio Buttons
- Checkboxes (allow multiple selections)

Allow 'Fill-in' choices:

- Yes
- No

Default value:

- Choice
- Calculated Value

Enter Choice #1

17.1.3 Currency Column

When a column is of the Currency type, users write or paste in the figures.

 Currency (\$, ¥, €)

Currency (and number of decimals) is added automatically according to your settings:

You can specify a minimum and maximum allowed value:

Min: Max:

Number of decimal places:

Automatic

Default value:

Currency Calculated Value

Currency format:

\$123,456.00 (United States)

For Currency columns it is often suitable to add a Totals value to the view.


Demo:


<http://kalmstrom.com/Tips/SharePoint-Online-Course/Quotes-Columns.htm>

17.2 ADD VIEWS

17.2.1 Choice Filtered Views

A Quotes library needs views that show only one of the alternatives in the Choice Column. Create a View and select to show only one of the alternatives under Filter.

 Show all items in this view

 Show items only when the following is true:

Show the items when column

Quote Status

is equal to

Accepted

If you also want to use a Totals for the Quote Value column, add it at the same time to this view. Then you can build other views on this view. Create a View as usual, but select to start from an existing view instead of selecting one of the view types.

Start from an existing view

- All Items
- Accepted

All views created this way will have the Totals and the same filtering. You only have to change the filter choice and give this view another name.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Quotes-Views.htm>

17.2.2 Calendar View

When you have dates information in a calendar view, it is often easier to overview. You can use the date columns to create a calendar view. This kind of view is also suitable for Tasks and Issue Tracking lists, to visualize creation and due dates.

6 SUNDAY	7 MONDAY	8 TUESDAY	9 WEDNESDAY	10 THURSDAY
SharePoint Support (\$700.00)				
Quality Assurance (\$300.00)				
	Sponsorship KTMOL (\$500.00)			

1. Create a View and select the Calendar View Type.
2. Specify what columns should be used for the dates in the calendar.
3. Specify what columns should be used as titles and sub headings. (In the image above

the Quote Value column is used as a sub heading.)

Begin:

 ▼

End:

 ▼

Month View Title:

 ▼

Week View Title:

 ▼

Week View Sub Heading:

 ▼

Day View Title:

 ▼

Day View Sub Heading:

 ▼

4. Make other settings as you prefer.

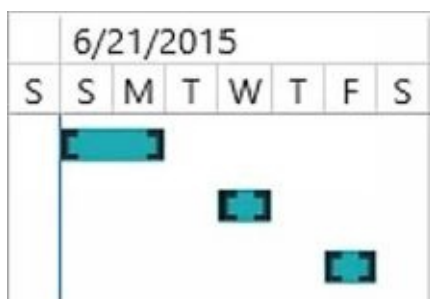
Note that even if you get a link to the calendar view in the other views, there is no easy way to add the other views in the calendar view. Therefore you have to click on the library in the Quick Launch to leave the calendar view.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Quotes-Calendar.htm>

17.2.3 Gantt View

A Gantt view is a type of bar chart that illustrates start and end dates. This view makes use of the Name (for use in forms). In libraries you can also use the Title field.



1. Create a View and select the Gantt View Type.
2. Uncheck the Name box and instead select the check box for Title. Make other changes to what columns should be displayed as you prefer.
3. Specify which columns should be Gantt columns.

Title:

Choose a column ▼

Start Date:

Choose a column ▼

Due Date:

Choose a column ▼

Percent Complete:

Optional ▼

Predecessors:

Optional ▼

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Quotes-Gantt.htm>

17.2.3.1 Workflow that Sets a Title

If you want to use a Gantt view on an existing list but don't have the 'Name (for use in forms)' or Title field filled out, you can create a SharePoint Workflow that automatically sets this field to the same value as the Name field when the 'Name (for use in forms)' or Title field of a new item is empty.

The image below shows a SharePoint 2013 workflow when the Title is filled out automatically.



1. Open the site in SharePoint Designer that has the list you want to use.
2. Open the Summary page for the list.
3. Start Creating a List Workflow.
4. Set the workflow to start automatically when an item is created.
5. Click on the 'Edit the workflow' link.
6. At Transition to stage, enter 'go' and press Enter.
7. Click on 'stage' and select 'End of Workflow'.
8. Click on the Condition button in the ribbon to set the conditions for the workflow.

9. Select 'If current value field equals value' and the condition if the current item field you want to have automatically filled out is empty.
10. Write in Set and press Enter to have choices. Select the alternative 'Set field in current item'.
11. Select the field you want to have automatically filled out.
12. Set the field to the field you want to fetch the name from.
13. Publish and Check the Workflow.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Quotes-Titles-Workflow.htm>

Also *refer to* Set Title Workflows.

17.3 SUMMARY

Even if you don't need a quotes library I hope this chapter has given you some insight in how columns for dates, choice and currency are created and used and how you can create views based on filters or calendar and Gantt views based on dates.

18 SHAREPOINT FORMS

Forms are often used in SharePoint lists. You can customize them by adding and removing Columns, but you can also re-design the form itself if the design is not optimal for your organization.

In this chapter, I will show some different ways to customize SharePoint forms. I cannot tell you which method is best, because each organization has its own prerequisites and requirements, but by knowing the options you can understand what is best in each case.

- A convenient way to customize SharePoint forms is to use InfoPath, but it has some drawbacks, which I discuss.
- Add a web part to a form. This is the only no-code way to show, for example, an instruction or a video above the actual form.
- Create a content type form.
- Open the list in Access and customize the form there.

18.1 WHY CUSTOMIZE A FORM?

Why customize list forms at all, in the first place? Isn't it enough that you can add and remove or hide Columns and put them in any order you want? Yes, that is certainly useful, and we should absolutely take advantage of it, but that does not solve all forms issues.

One of the reasons to customize a form is to avoid unnecessary scrolling. In most SharePoint forms the fields are just put below each other, even if the entry only requires a number or a choice of yes and no. These fields can very well be put side by side instead. Or you might want to have more space in the description field, to avoid scrolling there.

18.2 OPEN THE FORM IN A NEW DIALOG

When you open a list item, the browser by default directs you to another page, usually the Display form page. You can also select to “Open in a form” which opens the list item in a pop-up dialog within the same browser window.

1. Open the List Settings and click on the Advanced Settings link.
2. At the bottom, select the Yes radio button for ‘Launch forms in a dialog’.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Forms-Intro.htm>

18.3 CUSTOMIZE THE FORM IN INFOPATH

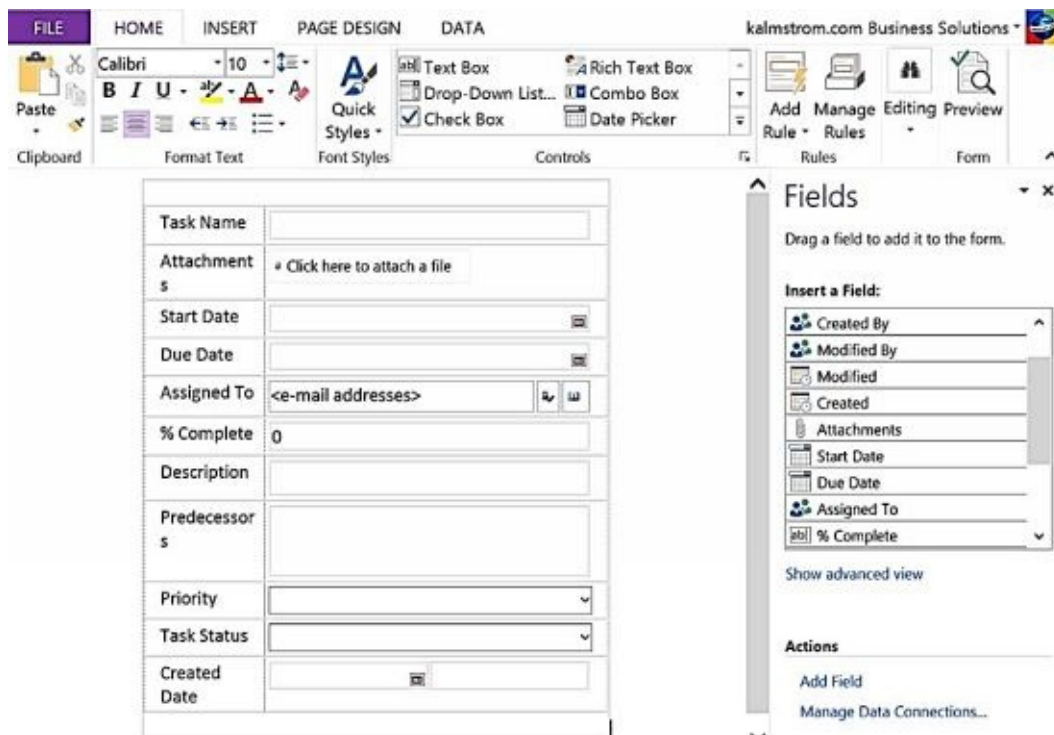
InfoPath is an Office application that is included in Office 2013. Forms customization with InfoPath is smooth, and you can rather easily create better forms than the in-built ones. You should however be aware of the drawbacks if you decide to use InfoPath.

- Microsoft has announced that InfoPath will be deprecated. It will be replaced by something else, but so far they have not told us what.
- Microsoft will support the InfoPath 2013 client application until April 2023, and InfoPath Forms Services will be fully supported in Office 365 “until further notice”.
- InfoPath is not included in Office 2016, so your current installation will be wiped out if you upgrade. You will have to download and install InfoPath 2013 again.
- Another, less important, drawback with InfoPath forms is that new columns are not automatically added to the form when you create them via the Create a Column command. Instead you have to open the list form in InfoPath again, and add the new column as another field in the form.

You can find the ‘Customize in InfoPath’ button under the ribbon LIST tab.



When you click on the button, the list form opens in InfoPath, and you can start customizing it.



These are some of the changes you can do:

- Drag fields to make them smaller or bigger.
- Drag fields around to re-arrange them.

- Delete fields.
- Insert pictures and links.
- Add blank rows.
- Add fields from the list to the right by drag and drop.

Publish the form when you are finished, and the new form will be used in new as well as existing items in that list.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Forms-InfoPath.htm>

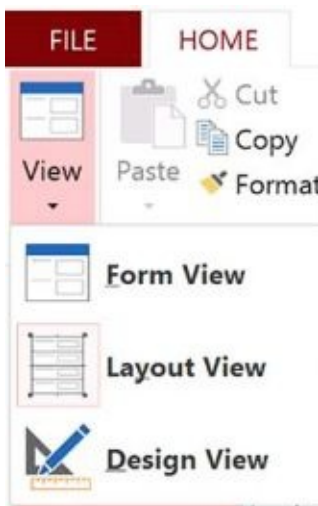
18.4 CUSTOMIZE A LIST FORM IN ACCESS

As SharePoint lists can be opened in Microsoft Access, you can also customize their forms in Access. This method also works for libraries. When you customize a form in Access the data is stored in SharePoint, but the form itself is displayed in Access. SharePoint workflows and settings will work as if the form was shown in SharePoint.

1. Open a List in Access.
2. In Access, select or open the list table and click on the Form button under the CREATE tab in the ribbon.

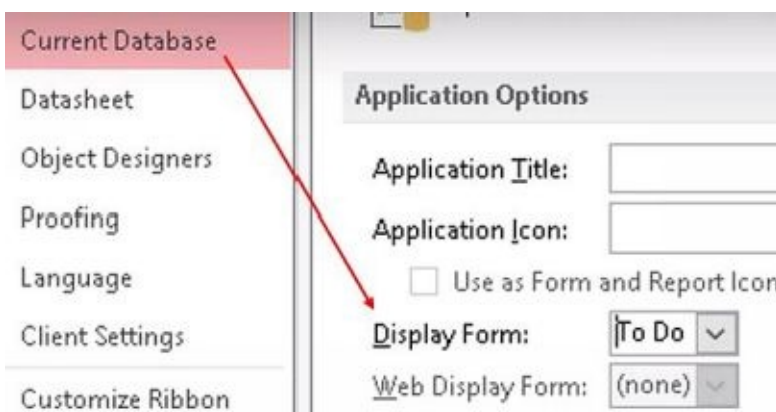


3. To customize the form, click on the Views button under the ribbon HOME tab and select the Design View. Now you can change captions and drag fields to resize them.



To use the form, you should instead select the Form View. Any changes you make will be saved to both Access and SharePoint as soon as you move the cursor to another field.

To always open the data base list in the Form View, click on Options under the FILE tab and select the list at the Display Form entry.



Demo:

<http://www.kalmstrom.com/Tips//SharePoint-Online-Course/SharePoint-Forms->

[Access.htm](#)

18.5 ADD A WEB PART TO A FORM

SharePoint list forms are contained in web part pages, and the existing web parts cannot be customized without extensive coding. You can however add another web part which can be customized, and I recommend The Content Editor Web Part.

In the Content Editor web part you can embed code and add tables, links, pictures, videos or even another web part, so this is the only no-code way to show for example an instruction or a video above the form.

1. Click on the button 'Form Web Parts' under the LIST tab in the ribbon. The three options correspond to the form that opens when you create a new item, the form that shows the item and the form that opens in edit mode.



2. Select one of the options, depending on which form you want to customize.

3. Add the Content Editor web part in the Media & Content category; *refer to* Add a Web Part to a Web Part Page.

4. Add the content you wish to add from the options under the ribbon tabs.

5. Edit the Web Part and set the Chrome Type to None to avoid having the Content Editor caption on the web part.

6. Click on the Stop Editing button.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Forms-Content-Types.htm>

18.6 CREATE A CONTENT TYPE FORM

You can modify list web parts with content types, and one way to customize a form is to use a content type to design an entry form for a tasks list. If you hide fields that are not important at first task creation, users will have a simpler form to fill out.

When work on the task begins, the full form can be selected in a dropdown. The switch to the other form can also be done automatically with a workflow.

1. Create a Content Type. Select the parent content type to be fetched from List Content Types and then select Tasks as the parent content type.
2. Add the new group to an existing or new group.
3. Open each column that you want to modify and hide those of the columns that are not necessary in an entry form.

This column is:

- Required (Must contain information)
- Optional (May contain information)
- Hidden (Will not appear in forms)

4. Connect the Content Type to an App where you want to use the new form.
5. Under the Content Types group in the List Settings, click on the link 'Change new button order and default content type' and set the new content type as number one.

Now, when you create a new task, it will open with the new content type. Next time you open the same task, you can select to instead select the earlier content type from the new dropdown.

Content Type 

18.6.1 Workflow that Switches Content Type

If you want a different form to be shown automatically the second time a task is opened after creation, you can let a workflow make the switch from the entry form to the full form.

1. Open the Site in SharePoint Designer and then open the list you want to use.
2. Create a new SharePoint 2013 workflow and give it a name.
3. At Transition to stage, end the workflow by entering 'go to End of Workflow'.
4. Set the Start Option to 'Start the workflow automatically when an item is created'.
5. Select the Action 'Set Field in Current Item'.
6. Select the field 'Content Type ID' and set the value to the content type you wish to switch to.

Stage: Stage 1

Set Content Type ID to Issue

Transition to stage

Go to End of Workflow

7. Publish and Check the Workflow.

Demos:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Forms-Content-Types.htm>

18.7 SUMMARY

In the SharePoint Forms chapter I have explained why you might need to customize a form and shown how to do it with InfoPath, with a web part, with Access and with a content type. I have also explained how to get SharePoint to open forms in a dialog within the same browser window instead of re-directing you to another page.

19 WEB PARTS

SharePoint web parts are very useful, and you have already learned how to use several different kinds of web parts. In this chapter we will go into more advanced use of web parts.

We will start with looking at how web parts can be connected on a page, and after that we will see how you can use the Content Editor web part to add CSS and JavaScript to a page. Finally I will introduce the RSS Viewer web part, which helps you add an RSS feed to your SharePoint site.

19.1 CONNECT WEB PARTS

In Wiki Pages, it is possible to connect two web parts, so that specified content from one web part is displayed in another web part on the same page.

Note that a list web part cannot be connected to another web part, if the default view of the list is the Quick Edit/Datasheet display mode. The default view has to be a Standard view.

To connect a web part to another web part, you must have the edit pane open in the first web part. Otherwise you will not get the connect option when you click on the edit arrow in the top right corner of the web part.

In my experience, the Google Chrome web browser is the most stable when it comes to creating web part connections.

In this section I will use country information from a Customers list as an example on how connected web parts can be useful. The list has country as one of its metadata, and I will show three different ways to let users select or click on a country and see all customers in the list that are tagged with that country.

19.1.1 Choice Filter Web Part

The Choice Filter web part has a field similar to a list choice field, where you can enter the options you want to filter by. If you already have these data in a list column, it is easy to copy them and paste them into the Choice Filter web part.

When you add a Customers list in a web part on a page where you also add a Choice Filter web part, users can click on the icon to the right in the Choice Filter web part and select a country from the dialog that opens.



When they click OK in the dialog, they will see the customers in the selected country in the Customers web part.

Choice Filter

Finland

Customers

new item or edit this list

CustomerID	CustomerName	Contact first name	Contact last name	E-mail	Contact Title
WARTH	Wartian Herkku	Pirkko	Koskitalo	pirkko.koskitalo@adventureworks.com	Accounting Manager
WILMK	Wilman Kala	Matti	Karttunen	matti.karttunen@adventureworks.com	Owner/Marketing Assistant

These are the steps to connect web parts to show filter choices by selection:

1. Add a Page or use an existing wiki page.
2. Add a Web Part, the Customers list.
3. Place the mouse cursor outside the Customers list web part on the page.
4. Add a Web Part again, now the Choice Filter web part in the Filters category.
5. Edit the Web Part – the Choice Filter web part.
6. Enter your choice alternatives in the right panel.

Choice Filter

Filter

Learn about filter web parts

Filter Name

Choice Filter *

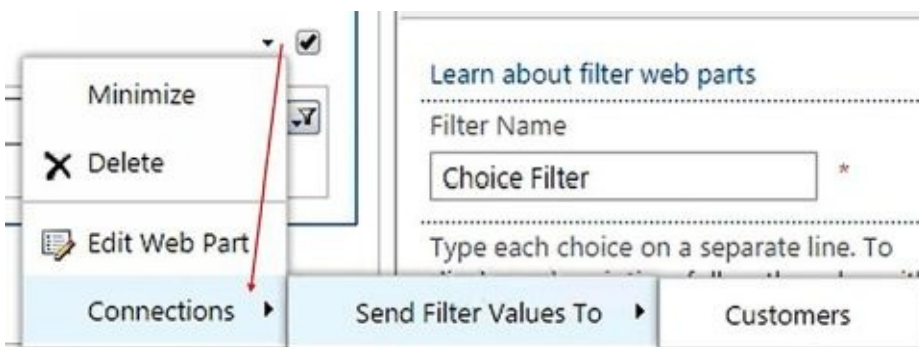
Type each choice on a separate line. To display a description, follow the value with the description, separating them with ";"

Value 1
Value 2
Value 3; Description 3 *

Advanced Filter Options

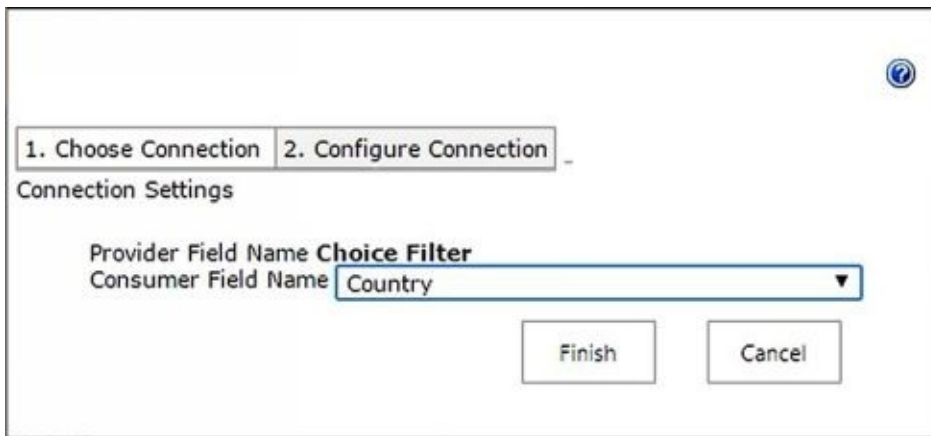
Appearance

7. Expand the edit accordion in the top right corner of the Choice Filter web part and select Connections >Send Filter Values To >Customers.



8. In the pop-up window, select 'Get Filter Values From'.

9. Click on Configure and select the Country Choice Filter.



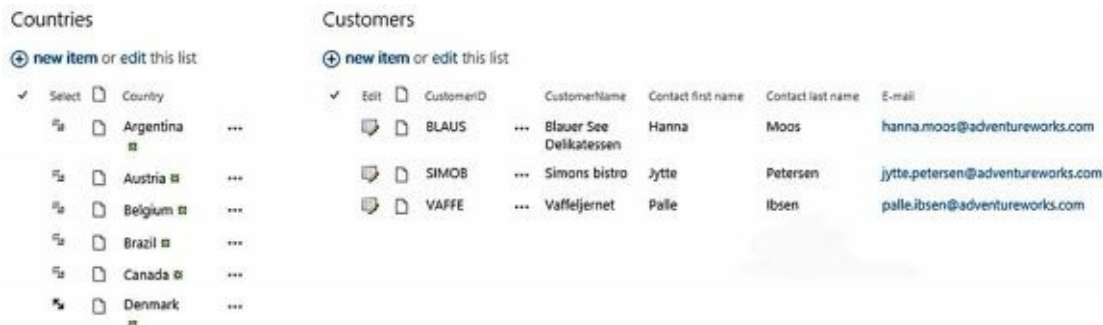
10. Click on Finish and save the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Connect-Web-Parts-Choice.htm>

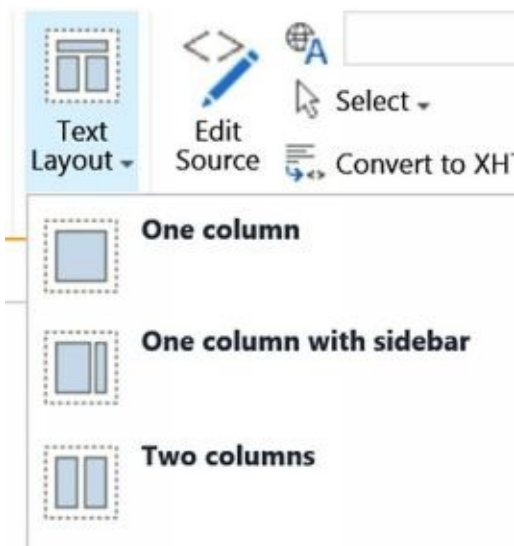
19.1.2 Click to Filter with Connected List Web Parts

Instead of using the Choice Filter web part, as described above, you can connect the Customers list to a Countries list by adding them to two separate web parts on the same page. The result lets users click on an icon to the left of a country to see all customers from that country. In the image below the Denmark icon at the bottom has been clicked, and the Danish customers are displayed.

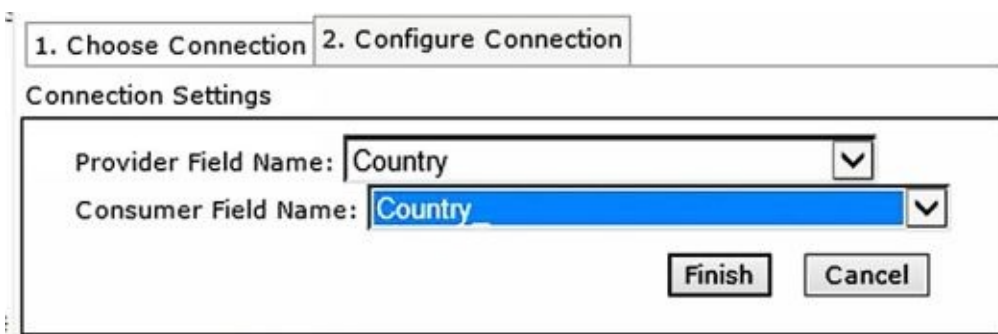


To use this method you must first create a separate list that contains all the country names from the Customers list.

1. Add a Page or use an existing wiki page.
2. Click on the Text Layout button under the FORMAT TEXT tab and select two columns.



3. Add a Web Part in the left column – the Countries list.
4. Add a Web Part in the right, – the Customers list.
5. Edit the Web Part – the Countries list.
6. Expand the edit accordion in the top right corner of the Countries list web part, and select Connections >Send Row of Data To >Customers.
7. In the pop-up dialog, select ‘Get Filter Values From’.
8. Click on Configure.
9. Connect the Country field in the Provider to the Country field in the Consumer.



10. Click on Finish and save the page.

This method is quicker to use than the Choice Filter, at least for the alternatives on top of the list, because no extra dialog has to be opened. But if the list is long users will have to scroll – first down to find their country and then up again to see the customers. Then the solution in the next section might work better.

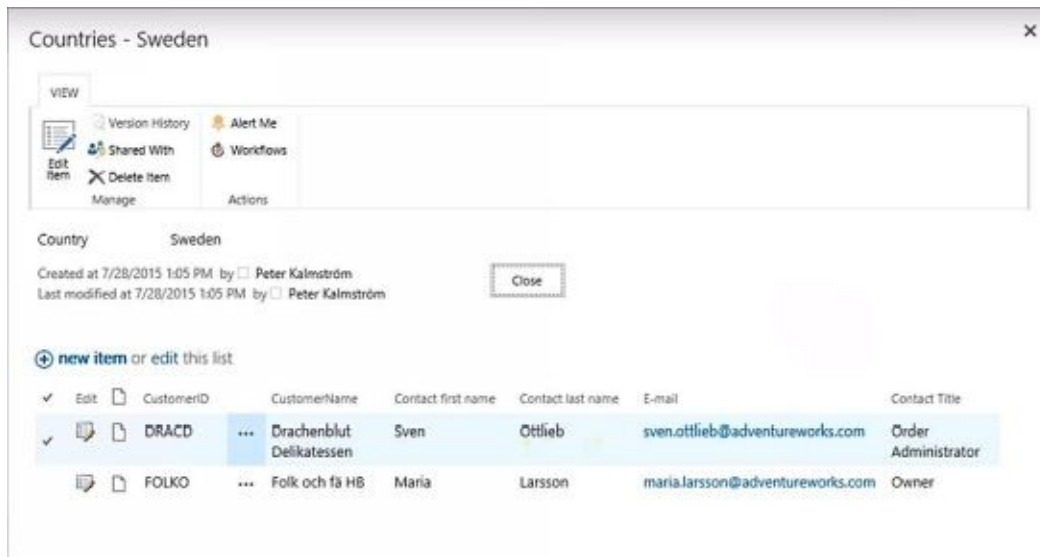
Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Connect-Web-Parts-Click-To-Filter.htm>

19.1.3 Show Connected List Data in Display Form

In this connection example we use the same two lists as in the section above, but we will create a new kind of connection. We will enhance the display form of the Countries list, so that all customers from that country in the Customers list are shown when you open a

country list item.



The list item display form is a web part page, so you can very well enhance it to show data from another list by connecting web parts.

1. In the Countries list, open the ribbon LIST tab and click on 'Form Web Parts'.
2. Select 'Default Display Form' and it will open in edit mode.
3. Click on the link 'Add a Web Part' and select the Customers list web part. Click on Add.
4. The Customers list web part gets added to the top. Minimize it and drag it below the Countries list web part. Then restore the list again.
5. (Click on Stop Editing as a security measure, in case the next step fails. The page is saved automatically when you stop editing.
6. Open the Default Display form again, as in step 1 and 2.)
7. Edit the Web Part – the Countries list.
8. Open the accordion in the top right corner of the Countries list web part and select Connections.
9. Select 'Provide Row To'.
10. In the pop-up dialog, select 'Get Filter Values From'.
11. Click on Configure.
12. Connect the Country field in the Provider to the Country field in the Consumer.
13. Click on Finish and Stop Editing.

Now users can open a country item and see all customers from that country.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Connect-Web-Parts-Display-Form.htm>

19.2 ADD CUSTOM CSS OR JAVASCRIPT TO A PAGE

CSS is a language that describes how HTML (or XML) elements must be rendered on, for example, a web page. The look of your SharePoint site is decided by CSS code in the background. JavaScript is a programming language for web pages.

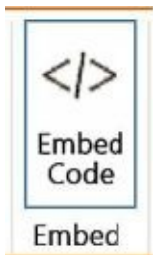
How to write CSS and JavaScript is far out of scope for this book, that is mainly no-code, but here I will show how you can do if you have a snippet of code that you want to use on a SharePoint page.

I will however describe how you can add code to make small changes in a site page. There are three ways to do it, but you can *not* do it by directly pasting your CSS or JavaScript code into the HTML source of the page. It will look fine until you save the page, but when you do that your code will disappear.

If you want to modify an object on the page but don't know the name for it, press the F12 key to show the browser's developer tools. Click on the 'Select element' icon at the top left and select the element you want to find the name for.

19.2.1 Script Editor

You can paste CSS or JavaScript code to the minimal Script Editor web part in the Media and Content category. In Wiki Pages, you can also use the Embed Code button under the INSERT tab, which inserts the Script Editor web part in the page.



19.2.2 Content Editor Source

The Content Editor Web Part can also be used to add code to a page. When you have added the Content Editor web part to the page, the CSS or JavaScript code can be pasted into the HTML source of the web part:

1. Add a Web Part, the Content Editor in the Media and Content category, to the page.
2. (Click on the link to add new content if you are using a web part page.)
3. Click on the Edit Source button in the ribbon.



4. Paste your code in the HTML source.
5. Apply and save the page.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Content-Editor-CSS.htm>

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Content-Editor-JavaScript.htm>

19.2.3 Content Editor Link

In my opinion, the best method for adding CSS or JavaScript code to a page, is to create a separate .css, .txt, js or .htm file with the code. Upload it to the Site Assets library and add a link to the file in The Content Editor Web Part.

This method is good if you often change the CSS code, because you can make the change directly in the file. Another advantage is that you can use the same file for multiple pages.

1. Add the code to a file and upload it to the Site Assets library.
2. Add a Web Part, the Content Editor in the Media and Content category, to the page.
3. Edit the Web Part and type the path to the CSS or JavaScript file in the Content Link field.
4. Apply and save the page

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Content-Editor-CSS-Link.htm>

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Content-Editor-JavaScript-Link.htm>

If you want to change the CSS for a site and not just for a page, *refer to* Link to an Alternate CSS File.

19.3 THE RSS VIEWER WEB PART

Use the RSS Viewer web part when you want to show content on a SharePoint page from any site that has an RSS feed. When you have added the web part and entered the link to the Atom page of the site you want to display in the web part, it will be updated automatically.

1. Open the site that you want to display in SharePoint.
2. Click on the 'Atom' subscription button and copy the URL to the page that opens.
3. Open a Page in Edit Mode, where you want to add RSS content.
4. Add a Web Part, the RSS Viewer in the Content Rollup category.
5. Edit the Web Part.
6. Paste the URL to the RSS page in the 'RSS Feed URL' field in the web part pane.
7. Define settings for how often the RSS feed should be updated and how many items should be shown on the page.
8. (To avoid having the title RSS Viewer on the web part, expand the Appearance accordion and set the Chrome Type to None.)
9. Click on Apply and save the page.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/RSS-Viewer.htm>

19.4 SUMMARY

In this chapter I have used three different examples to show the principles of connecting web parts, so that specified content from one web part is displayed in another web part on the same page. You have learned how to connect the Choice Filter web part to a list web part and also how to connect to list web parts to each other.

We have also looked at the various possibilities to add CSS and JavaScript to a SharePoint page. Finally we have seen how the RSS Viewer web part can enhance a SharePoint page.

20 SHAREPOINT SERVER PUBLISHING INFRASTRUCTURE

SharePoint Online has various features that are not enabled by default when the root site in the site collection is a team site. One of them is the SharePoint Server Publishing Infrastructure.

When the SharePoint Server Publishing Infrastructure has been activated, several new features become available in the site collection. Some of them are immediately obvious, while others are visible only through the links on the Site Settings page or in galleries or libraries.

In this chapter we will have a look at some features that require activation of the SharePoint Server Publishing Infrastructure. You will learn how the options in the Look and Feel group in the Site Settings becomes different after activation and what possibilities the new options give.

You will also learn how to manage SharePoint content in the Content and Structure application and how you can use the Content Query web part.

When you have activated the SharePoint Server Publishing Infrastructure for a site collection, you can also activate the SharePoint Server Publishing feature for a site within that site collection. This feature gives you more powerful layout options, and we will look into them in the last sections of this chapter.

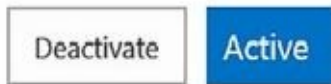
20.1 ACTIVATE THE PUBLISHING INFRASTRUCTURE

Activate the SharePoint Server Publishing Infrastructure from the root site of the site collection. When you activate the SharePoint Server Publishing Infrastructure it is enabled for the whole site collection. This means that the all sites in the collection will have the new features that become available, and the navigation settings will also be changed for all sites in the collection.

1. Open the Site Settings.
2. In the Site Collection Administration group, click on the link 'Site collection features'.
3. Scroll down to SharePoint Server Publishing Infrastructure and click on the Activate button.



The activation takes a few minutes, and you can see the message "working on it" at the top of the page while the Publishing Infrastructure is being activated. When the activation has finished, you will see an Active icon, and the Activate button has been replaced by a Deactivate button.



Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Activate.htm>

20.2 NAVIGATION CHANGES WITH THE PUBLISHING INFRASTRUCTURE

When the SharePoint Server Publishing Infrastructure has been activated for a site collection, the Look and Feel group in the Site Settings has become different.

Look and Feel
Design Manager
Title, description, and logo
Device Channels
Navigation Elements
Change the look
Import Design Package
Navigation

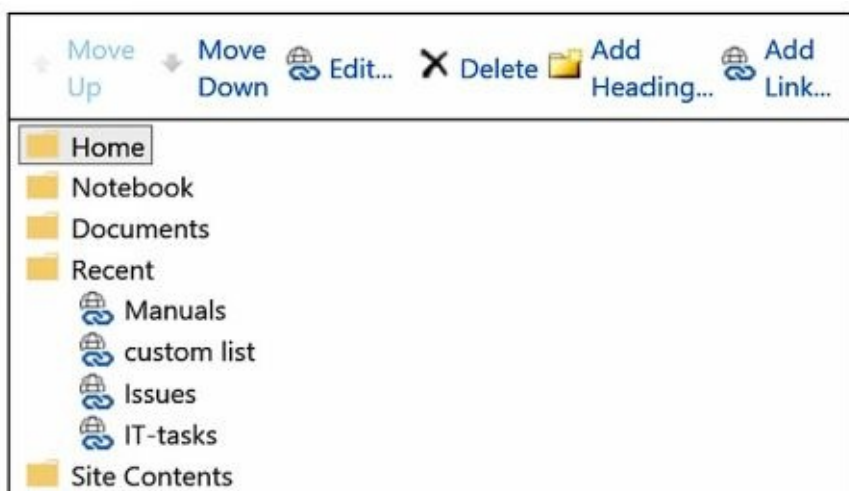
The links to the Quick Launch and the Top link bar are now replaced with a link to Navigation settings, which give more options than before.

These are the most important changes in the Navigation settings:

- The navigation areas are called local and global navigation instead of Quick Launch and top navigation.
- You have to enable 'Show subsites' in the Navigation Settings to display links to subsites. Even if you select 'Use the top link bar from the parent site' when you create a new subsite, the link will not be shown until you enable 'Show subsites'.


Show subsites

- There is a Structural Navigation settings box that helps you move links and add link headings more easily than without the Publishing Infrastructure.



- When you click on 'Add Link...' you will have more advanced options than before. You can, for example, set links to open in a new window.

Navigation Link ×



 Edit the title, URL, and description of the navigation item.

Title:

URL:

Open link in new window

Description:

Audience:  

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Navigation-Changes.htm>

20.3 CONTENT AND STRUCTURE

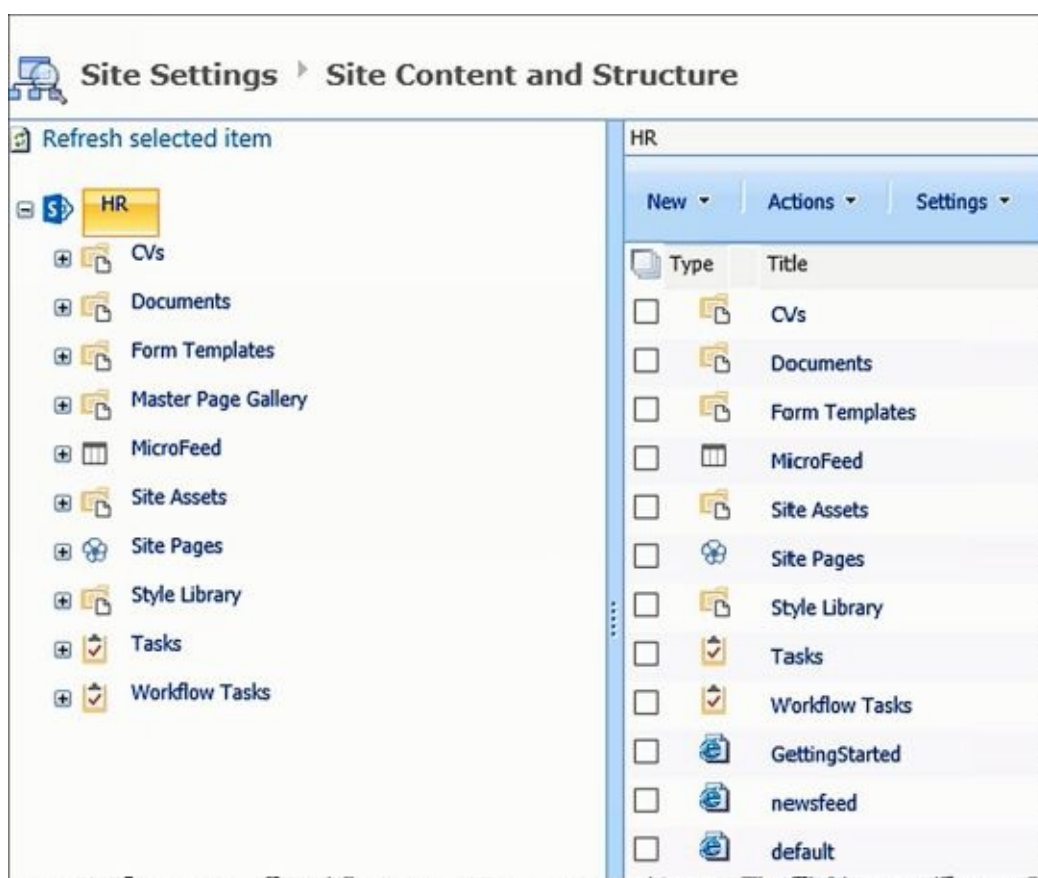
When the SharePoint Server Publishing Infrastructure is activated, there is a link to the Content and Structure application under Site Administration in the Site Settings.

Content and structure

(You can however use Content and Structure even without enabling the Publishing Infrastructure, by adding “sitemanager.aspx” to a site URL.)

Use Content and Structure to manage the site collection’s files, apps and sites. Files can be moved between sites and you can even move sites. You don’t have to download anything, as everything is handled on the server.

The interface of the Site Content and Structure page resembles Windows Explorer. You can see the site collection hierarchy in the navigation pane as a tree view to the left, and to the right you have the content of the selected item.



To work with the site collection, right click on the content you want to modify and select one of the options. You can also use the controls on top in the right panel.

20.4 CREATE A MEGA MENU

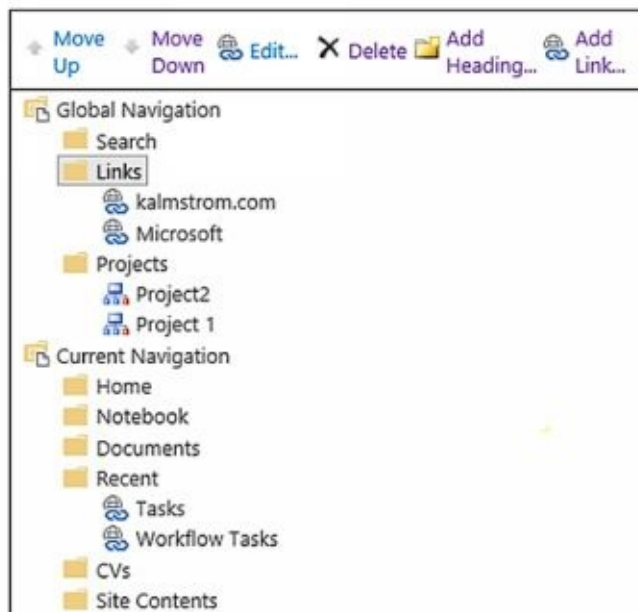
When the SharePoint Server Publishing Infrastructure is activated, you can use the Navigation page to create a mega menu within the global navigation.

In such a menu the links are grouped under headings, which makes it more scalable than if you just put the links in a long row. (Another navigation option is to use the SharePoint Search.)



If the SharePoint Server Publishing Infrastructure is not activated, you can still create headings and add links under them by using drag and drop, but it is often difficult to get the links where you want them. The Navigation Settings page that comes with SharePoint Server Publishing Infrastructure makes it easier.

A bit down on the Navigation Settings page you can find the entry 'Structural Navigation: Editing and Sorting'. Here you can add headings and links and move content up and down in the navigation. You can also delete content here.



Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Mega-Menu.htm>

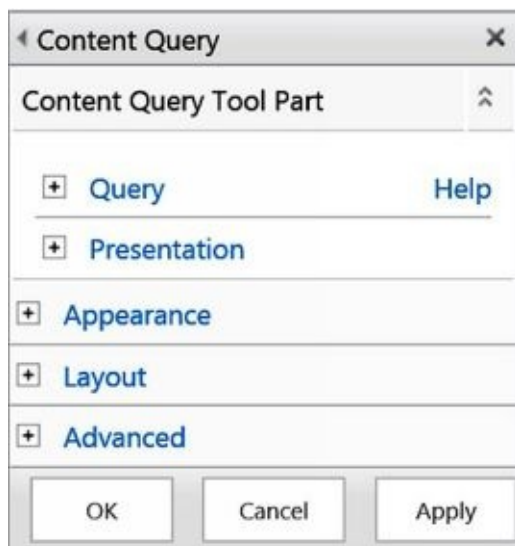
20.5 THE CONTENT QUERY WEB PART

The Content Query web part is only available when the SharePoint Server Publishing Infrastructure feature has been activated for the site collection. Then you can find it in the Content Rollup web part category.

The Content Query is similar to The Content Search Web Part that I have used in several earlier examples, but there is an important difference in how the search is performed: The Content Search can search the index of the entire tenant, while the Content Query only can search the site collection (default) or specified sites in the site collection.

There is a certain delay before the index is updated, so you will not see your changes right away when you let the Content Search web part search the whole index. With the Content Query web part any changes are shown more quickly, and therefore the Content Query is suitable for content that is often changed, like tasks.

The Content Query is a bit easier to configure than the Content Search, as you don't have to build a query. You can find all options in the Content Query web part properties.



Here is an example on how you can use the Content Query web part to collect tasks from sites within the same site collection and show them on a page.

1. Open a Page in Edit Mode.
2. Add a Web Part, the Content Query web part in the Content Rollup category.
3. Edit the Web Part and open the Query accordion.

The screenshot shows the 'Content Query' web part configuration window. It has a title bar with a close button (X) and a 'Content Query Tool Part' header with an expand/collapse arrow. Below the header is a 'Query' section with a 'Help' link. The 'Source' section contains three radio button options: 'Show items from all sites in this site collection' (selected), 'Show items from the following site and all subsites:' (with an empty text box and a 'Browse...' button), and 'Show items from the following list:' (with an empty text box and a 'Browse...' button). The 'List Type' section has a label 'Show items from this list type:' and a dropdown menu with 'Tasks' selected. The 'Content Type' section has two labels: 'Show items of this content type group:' with a dropdown menu showing '<All Content Types>', and 'Show items of this content type:' with a dropdown menu also showing '<All Content Types>'. There is a checked checkbox for 'Include child content types'. The 'Audience Targeting' section has an unchecked checkbox for 'Apply audience filtering'.

4. Add site URLs, if you want to restrict the search to certain sites and not include the whole site collection.
5. Select to show items from the Tasks list type.
6. Expand the Presentation accordion and remove the text in the URL textbox under Fields to display. Under Presentation you can also group and sort the displayed items, set the number of columns and make other settings.
7. Expand the Appearance accordion and enter a suitable title for the web part.
8. Make any other web part settings you prefer, apply and save the page.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Content-Query.htm>

20.6 SHAREPOINT SERVER PUBLISHING

Once the SharePoint Server Publishing Infrastructure feature has been activated for the site collection, you can activate the SharePoint Server Publishing feature for the site. Enable the SharePoint Server Publishing feature for sites where you want to have more layout options than those I have shown in earlier chapters.

The SharePoint Server Publishing also gives you access to the Master page feature. Here you can specify a master page for the site and use an alternate CSS URL for the entire site and its subsites.

Another SharePoint Server Publishing feature is the Image Renditions, which lets you define different image formats.

Enable the SharePoint Server Publishing feature in the Site Settings, via the link 'Manage site features' in the Site Actions group. Scroll down to the feature and click on Activate.



The activation only takes a few seconds, and after that you will have several new libraries in the Site Contents and links to the Master page and Image Renditions settings under Look and Feel in the Site Settings.

20.6.1 Publishing Pages

When SharePoint Server Publishing is enabled and you add a page to the site, it will be of the publishing type. These pages have more layout options than the standard Wiki Pages I have shown how to customize earlier. You can also create your own layouts. The check in/check out feature is enabled by default in publishing pages.

While the wiki pages are stored in the Site Pages library, the publishing pages are stored in a separate Pages library.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Server-Publishing.htm>

20.6.2 Image Renditions

Image Renditions is one of the new features you get when the SharePoint Server Publishing feature has been activated. New pages will then be publishing pages, and when you create a new page and insert an image, multiple renditions of the image will be created on the server.

20.6.2.1 Insert an Image

The Wiki Page Picture Options are present in publishing pages too, and you insert an image in the same way, under the INSERT tab. When you upload an image from your computer, you will first have a chance to add metadata to your image.

Upload Image ✕

EDIT

Save
Commit

Cancel

Paste
Clipboard

Cut
Clipboard

Copy
Clipboard

Delete Item
Actions

i The document was uploaded successfully. Use this form to update the properties of the document.

Content Type Image ▼

Upload an image.

Name * .png

Title

Keywords

For example: scenery, mountains, trees, nature

Comments

A summary of this asset

Author

The primary author

Date Picture Taken 12 AM ▼ 00 ▼

Copyright

Version: 1.0

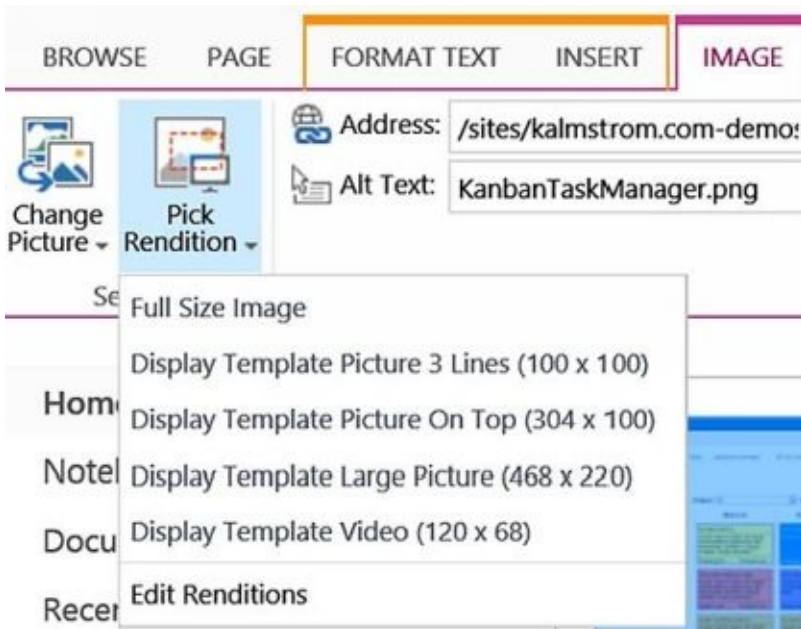
Created at 3/7/2016 12:18 AM by Kate Kalmström

Last modified at 3/7/2016 12:18 AM by Kate Kalmström

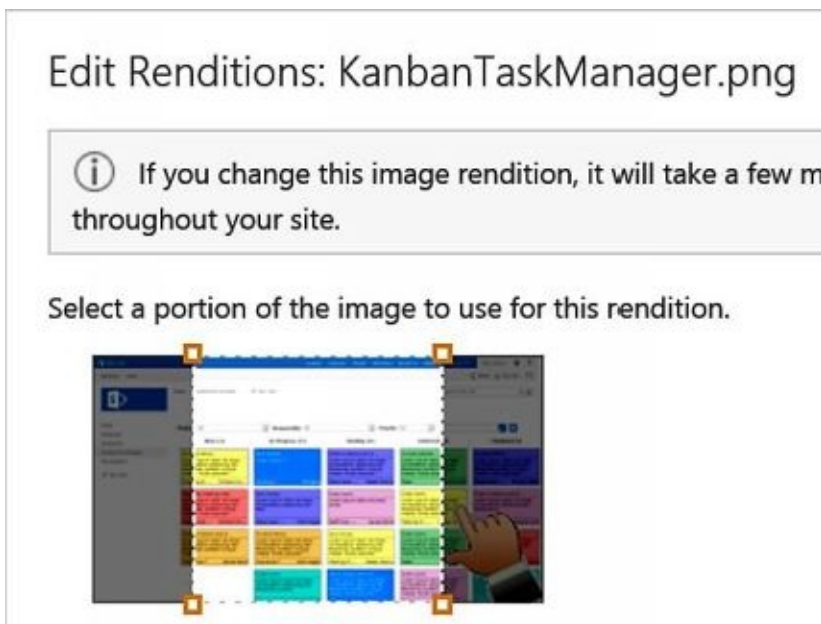
Save

Cancel

When you have clicked on Save, the renditions will be created, and you can select which format you want to use for your image. Click on the Pic Rendition button under the IMAGE tab to see the options.



If you select 'Edit Renditions', you can select what part of the image you want to use for each rendition. Click on the 'Click to change' link at the size you want to edit, and drag the handles to the portion you prefer.



20.6.2.2 Manage Renditions

You can easily create your own renditions. Next time you add an image to a page, the new rendition will be used and shown among the default renditions.

1. Open the Site Settings.
2. In the Look and Feel group, click on the link 'Image Renditions'.
3. Click on the 'Add new item' link.
4. Give the new rendition an name and specify the size of it.
5. Click on Save.

In the Image Renditions page you can also edit and remove renditions.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Image-Renditions.htm>

20.6.3 Link to an Alternate CSS File

When the SharePoint Server Publishing Infrastructure feature has been activated for the site collection and the SharePoint Server Publishing feature for the site, you can use an alternate CSS file for that site. Add the alternate CSS file in the Master Page settings:

1. Upload the CSS file to the Site Assets or to another location on your SharePoint site.
2. Open the Site Settings.
3. In the Look and Feel group, click on the link 'Master page'.
4. Expand 'Alternate CSS URL'.
5. Select the 'Specify a CSS file' option and browse to the location where you uploaded your CSS file.

Alternate CSS URL

Typically, Master Pages define CSS styles for your site. If you would like to apply a separate CSS style sheet independent of your master page, specify it here.

Choose the first option to inherit these settings from the parent site. Choose the second option to rely only on the styles defined in master pages. Choose the third option to apply a separate CSS style sheet.

Inherit Alternate CSS URL from parent of this site

Use default styles and any CSS files associated with your Master Page

Specify a CSS file to be used by this site and all sites that inherit from it:

All Channels

Reset all subsites to inherit this alternate CSS URL

6. Check the box for subsite inheritance if you want all subsites to use the CSS file.
7. Click OK.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Publishing-Infrastructure-Alternate-CSS-URL.htm>

20.7 SUMMARY

In the chapter about SharePoint Server Publishing Infrastructure we have looked at the changes this feature gives in the Site Settings Look and Feel group and at the new navigation options they give.

You have also learned how to use the Content and Structure application and the Content Query web part, and you have seen how the activation of SharePoint Server Publishing can give a site more layout options.

21 CREATE EXAMPLE DATA

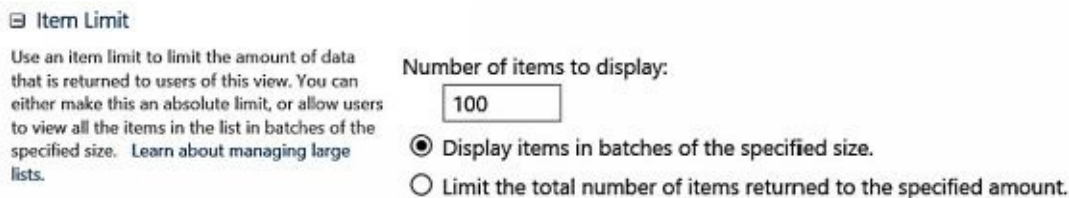
When you are trying different solutions and scenarios for SharePoint apps, it is helpful to use example data. In this chapter I will show how to create example data for a SharePoint list in Microsoft Excel and Access.

21.1 CREATE EXAMPLE DATA IN EXCEL

Here we will first create a column for Hours Worked and then add example data to it.

1. Create a Column and select the radio button for the Number column type.
2. Write a description how the column should be used.
3. Select to show 0 decimals and click OK.

Modify the View so that the item limit includes all the rows in the grid. This way you can easily paste the example data you create in Excel into the new column.



To create the example data you can use the Excel RAND function.

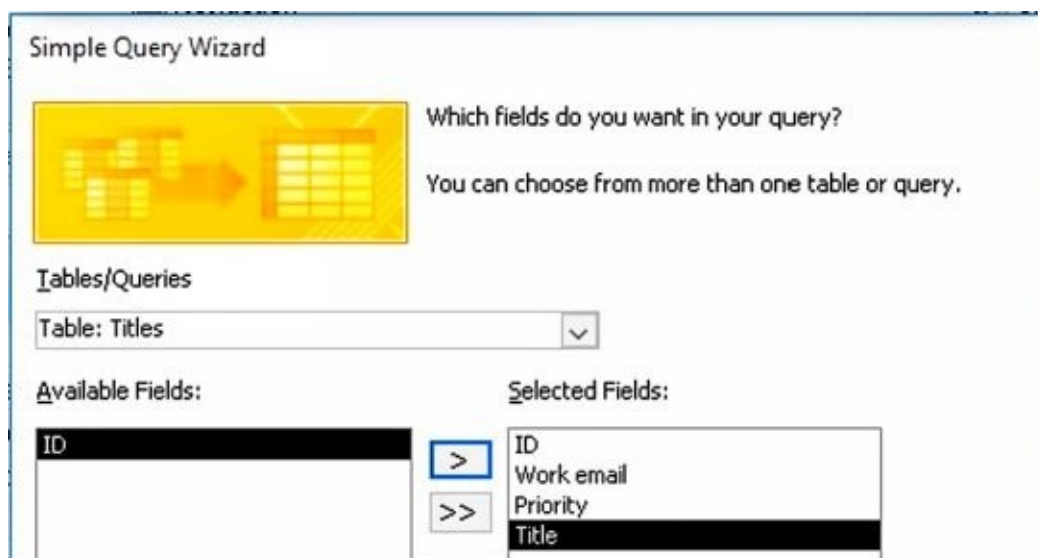
1. Create a new Excel spreadsheet.
2. Enter a RAND function in a cell to generate random numbers: `=int(RAND()*100)`
3. Drag the cell down to copy the formula to as many cells as you need for the SharePoint list column.
4. Copy the column and paste it into the SharePoint column you just created.

When you don't have too many rows in the SharePoint datasheet grid, it works well to paste the values you have copied from Excel. For long SharePoint lists it is safer to Open a List in Access and paste the values into the new column there.

21.2 CREATE EXAMPLE DATA IN ACCESS

When you add users to a SharePoint site, a hidden users list is created. This list can be seen when you open the list in Access. Here I will explain how to open a SharePoint list in Microsoft Access and create example data for Priority and Titles.

1. Open a List in Access.
2. Create a new table for Priorities.
3. Copy the priority values from the SharePoint list column where you already have them, and paste them into the Access table.
4. Create another table for Titles. Copy or write some titles into the table.
5. Click on the Query Wizard button under the ribbon CREATE tab. Keep the default Simple Query Wizard option. Click OK.
6. Select the fields from the different tables that you want to include in the query. In this case it is the Title and Priority fields but also the ID and Work email fields from the User info table.



7. Click OK to have no Relationships and close the Relationship tab.
8. Click on the Query Design button under the CREATE tab in the ribbon and add the tables you want to use to the query.
9. Click on the Run button under the DESIGN tab in the ribbon to get all possible combinations of the fields.
10. If needed, adjust the query so that you get reasonable values and run the query again. (Add the parameter 'not null and [the crawler e-mail address]' to the Work e-mail field to get rid of blank rows and the crawler e-mail address.)
11. Click on the Append button under the ribbon DESIGN tab.
12. From the dropdown in the Append dialog, select the SharePoint list where you want to have the example data. Click OK.
13. Append the query columns to suitable fields in the SharePoint list.
14. Click on the Run button under the ribbon DESIGN tab.

Now when you refresh the SharePoint list, you will see the new items created by the

Access query there.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/HelpDesk-ExampleData-Access.htm>

21.3 SUMMARY

In this short chapter, I wanted to give tips on how example data can be created in Excel or Access to try out different scenarios in SharePoint before you go out in production.

22 RENTAL AGREEMENTS

This chapter has rental agreements as the starting point. Such contracts must be registered in a way that gives a good overview over what the organization is renting, and renewals must be taken care of in due time.

My intention is not to give a recipe on how to create the perfect application for rental agreements management. Instead I want to point to various options that might be useful when you handle similar information sharing situations in your own organization.

We will create a content type with suitable site columns, connect it to a list and then create a template from the list so that the same type of lists can be created easily via Add an app.

We will also create two reusable workflows, one that sets the renewal date and one that sends an e-mail alert to the person responsible for the renewal. Finally we will set two retention policies, one for the e-mail workflow and one for how long rental agreements should be kept.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Intro.htm>

22.1 CONTENT TYPE

The first step when building a rental agreements solution, is to Create a Content Type for the rental agreements lists. Create it from The Content Type Hub if you want it to be available for the whole tenant, or from the root site of a Site Collection if you only want to use it in one collection only.

Base the content type on the List Content Types group and the Item. That will give you a list with just a Title column, which you can use for the Name of the rented location.

I suggest the following columns. My comments about new or existing site columns are based on what site columns most organizations have or not have already, so don't take them too literally.

- Square meters of the location that is being rented: a new site column of the Number type.
- Start Date for the rental agreement: an existing site column.
- End Date for the rental agreement: an existing site column.
- Department that is renting the location: an existing site column.
- Renewal Date: a new site column of the Date and Time type.
- Responsible Person for the rental agreement: a new site column of the Person or Group type.

When the content type has been created, Add an App, a Custom List, and connect the list to the rental agreements content type; *refer to* Connect the Content Type to an App.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Content-Type.htm>

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Content-Type-Use.htm>

22.2 TEMPLATE

Add the views and settings you prefer to the rental agreements list. I suggest that you Enable Version History, and I also like to Open the Form in a New Dialog and to have an Edit Button in views.

When you have a good list for rental agreements, Save the List as a Template. It will show up among the other SharePoint app templates, and with such a template it is easy to create new lists for other kinds of rental agreements.

You can of course have all the rental agreements in one list also, but if you have multiple lists you can set different permissions on them, and users will not be burdened by many items in one list.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Template.htm>

22.3 RENEWAL DATE WORKFLOW

Here we will create a reusable workflow that sets the renewal date to two months before the end date of the rental agreement. We have to create a SharePoint 2010 workflow, because SharePoint 2013 workflows cannot be connected to a specific content type, which is preferable for this workflow.

1. Start Creating a Reusable Workflow. Connect the workflow to the rental agreements content type.
2. Select the Condition to 'If current item field equals value' and set it to Renewal Date 'is less than' 1970 or some other value that is not going to happen. The point here is that the field should be left empty by users, which would result in a field value less than 1970.
3. Select the Action 'Add Time to Date' and set the Time to -2 months and the Date to End Date. Output to a new variable.
4. Select the Action 'Update List Item' and set the Field Renewal Date to the value of the new variable.
5. Publish and Check the Workflow.

Associate the Reusable Workflow with a Content Type – in this case the rental agreements content type. That is done once for the whole site collection. Then all lists that use the rental agreements content type will have the renewal date workflow.

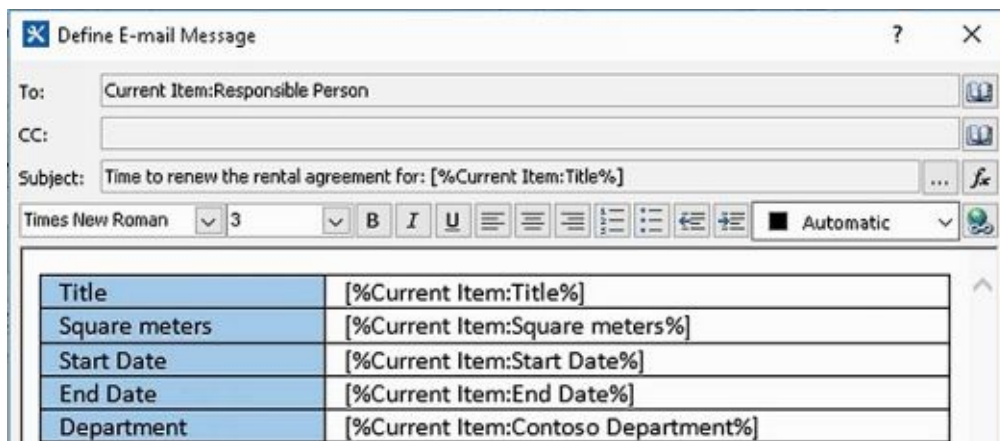
Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Reusable-Workflow-Date.htm>

22.4 RENEWAL E-MAIL WORKFLOW

In the section above we created a reusable workflow that sets the rental agreement renewal date to two months before the end date of the agreement. On the renewal day, the responsible person should have an e-mail about the renewal, so here we will create a reusable workflow that sends a renewal reminder.

1. Start Creating a Reusable Workflow.
2. Select the Action 'Send an Email'.
3. For the e-mail To field, set a Workflow Lookup for a User to the Responsible Person and return it as an Email Address.
4. For the e-mail Subject field, type the text you want to use in the String Builder and add a lookup for the Title, which is used for the name of the location.
5. For the e-mail body, enter or paste the content you want to use. (You can for example create a table in Word, paste it in the body field and add lookups for the current item's values in the content type columns, like in the image below.)



6. Add a link to the rental agreement item. Pick the link from the function guide. Choose the Data source 'Workflow Context' and the Field from source 'Current Item URL'.
7. Publish and Check the Workflow.

Associate the Reusable Workflow with a Content Type used in the rental agreements lists. That is done once for the whole site collection. Then all lists that use the rental agreements content type will have the send renewal e-mail workflow.

NOTE: this workflow is still not finished. It must be set to start on a specific date for each rental agreement. This date is defined in the Information Management Policy Settings; *refer to* the next section, Retention Stages.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Reusable-Workflow-Email.htm>

22.5 RETENTION STAGES

To set the e-mail sending date for the workflow created in the section above, the Renewal E-mail Workflow, you must create a retention stage in the Information Management Policy Settings of the content type. There you can set the alert to be sent on a calculated date, and you can also set the rental agreements to be deleted permanently at a specific number of years after the end date.

1. Open the Site Settings from the root site of the site collection.
2. Click on the 'Site content types' link in the Web Designer Galleries group.
3. Select the content type group that contains the rental agreements content type and then the content type itself.
4. Click on the 'Information management policy settings' link.
5. Enable retention and click on 'Add retention stage...' to add two retentions:
 - Set the Event Renewal Date to 0 days and the Action to start the workflow that sends the renewal alert.

Enable Retention

Specify how to manage retention:
Items will not expire until a stage is added.
[Add a retention stage...](#)

Event

Specify what causes the stage to activate:

This stage is based off a date property on the item

Time Period: +

Set by a custom retention formula installed on this server:

Action

When this stage is triggered, perform the following action:

Start this workflow:

- Set the Event End Date to your preferred number of years and the Action to Permanently Delete the item.

These retention settings cannot be checked immediately, as they are time dependent, but you can make sure that they are active in a list by going into the List settings and open the 'Information management policy settings' link. Click on the content type, and you should see a message that the policy settings cannot be changed, as they are inherited from the parent content type.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Rental-Agreements-Timer-Retention.htm>

For a simpler retention stage example, *refer to* Overdue Alert to Manager.

22.6 SUMMARY

In this chapter we have looked at how SharePoint can be used to facilitate the management of rental agreements. We have created a content type for rental agreements lists and added two reusable workflows to it: one for renewal date and one for a time activated e-mail alert.

23 PHONE MESSAGES

In this chapter I will show a way to use SharePoint to automate the distribution of phone messages within an organization. The system also has a way to register if the phone message has been taken care of or not.

It might seem a bit of overkill to go through all this trouble for phone messages, but my intention is to repeat and expand techniques that we have gone through earlier and that you can use for any information distribution within your organization. The phone messages are just a simple piece of information that everyone can relate to.

I will first describe a simple solution that is difficult to scale. Then I will show a more advanced solution that will work over many site collections in a SharePoint tenant.

These are some of the things you have already learned to create, which are repeated and used in another way in this chapter:

- List app with list columns
- List Entry view
- List views
- Alert workflow
- Content type
- Add web parts
- Reusable workflow
- Create an app template
- Search vertical
- Managed Metadata column
- Customize Refinement web part

23.1 CONSIDERATIONS

Before you start creating a SharePoint solution for phone messages management, or similar, you have to consider what kind of list columns and views are needed. In my example I use these:

Columns

- Caller name – Single line of text
- Caller phone number – Single line of text
- Called person – selection from People or Group
- Returned? – Yes/No, with the default value set to No

Views

- Today's calls
- Un-returned calls
- Grouped per person called
- Entry view

Another very important thing to consider, is whether you should create a simple list, or spend some more time in creating a scalable solution that can be used in the whole tenant. I show both options below, but as always I recommend the scalable solution.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Intro.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Case.htm>

23.2 CREATE A PHONE MESSAGES LIST

In this section I will first explain how to create a simple SharePoint list app for phone messages, a list that can satisfy a small company or a limited number of users. After that I will show a more advanced solution, which will work over many site collections in a SharePoint tenant.

23.2.1 *Simple List*

The simple list is created with List Columns, which means that the list cannot be reused.

1. Add an App, the Custom List.
2. (The list will show up under Recent in the Quick Launch. Click on EDIT LINKS and drag the new list out of Recent.)
3. Open the List Settings.
4. Open the Title column and rename it to another single line of text field, for example Caller phone number.
5. Create List Columns, a single line of text column for Caller name, a People or Group column for the called person and a Yes/No column for Returned, with the default value set to No.

If you want to use the same kind of list in another site you have two alternatives to creating the list all over again:

- When the new list is within the same site collection, you can Save the App as a Template and use that template for the new list.
- When the new list is in another site collection, you can Upload the Template to Another Site Collection.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-App.htm>

23.2.2 *Enterprise List*

To create a list that can be used all over the SharePoint tenant, you should first create a content type with Site Columns in The Content Type Hub. Then you can create a list in the Content Type Hub and connect it to the content type.

The content type gives the columns and settings you wish to use for each list item, but it does not give the views. Therefore you should create the views you need and then save the list as a template.

Then new lists can be created from the template in all site collections with the same settings, and these lists will have the same content type and the same views. (For site collections with other settings you can still use the content type and only add the views.)

23.2.2.1 Create a Phone Messages Content Type

1. Open the Content Type Hub.
2. Create a Content Type.
3. Base the new content type on the Item in the List Content Types group.

Parent Content Type:

Select parent content type from:

List Content Types

Parent Content Type:

Item

Description:

Create a new list item.

4. Put the content type in an existing or new content type group.
5. Click OK.
6. Create new Site Columns for the content type and add them all in the same new site column group.

Note that you cannot rename the Title field to “phone number” as we did when creating the list column above, because that would rename all Title fields in all content types in the tenant!

When the columns have been created, you can Publish the Content Type to make it available in the whole tenant.

23.2.2.2 Create a Phone Messages List Connected to a Content Type

1. Add an App, the Custom List, in The Content Type Hub.
2. Connect the new Custom List and the Phone Messages content type; *refer to Connect the Content Type to an App*.
3. Delete the Default Content Type.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Content-Type.htm>

23.3 PHONE MESSAGES VIEWS

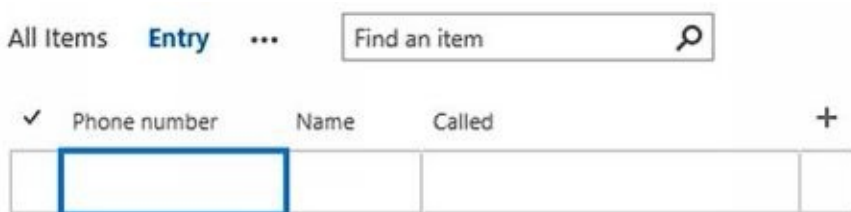
I suggest four views for a Phone Messages list: Today's calls, Calls grouped by person called, Unreturned calls and finally an Entry view. *Refer to* Create a View for general info on how to create views. Here I will only explain what is special for each list.

For the Grouped View, group by the Called column.

For the un-returned calls view, filter the items by the Returned column and show only items where the Returned value is not equal to Yes. (This is more secure than selecting is equal to No.)

23.3.1 Entry View

If you create an Entry view based on the Datasheet view type, it will be very easy to enter new messages.



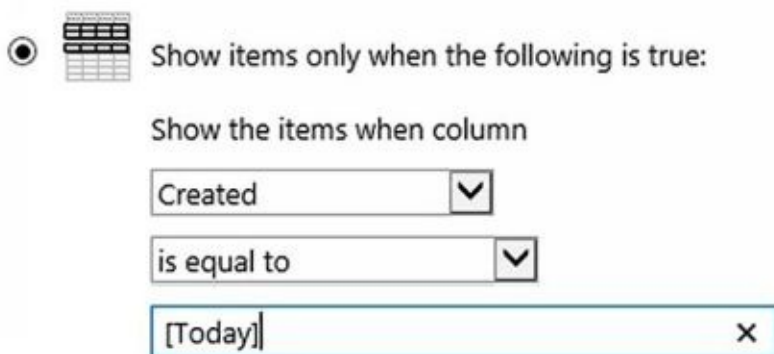
The screenshot shows a SharePoint list view in 'Entry' mode. At the top, there are tabs for 'All Items' and 'Entry', followed by a search bar labeled 'Find an item'. Below the search bar is a table with the following columns: 'Phone number', 'Name', 'Called', and a plus sign '+'. The 'Phone number' column is highlighted with a blue border.

To create this view, select the Datasheet view type and hide the Returned column. (The calls that are entered in this list have not been returned yet.)

Filter the items to only show items with the ID 0. As there are no such items, no existing items will be shown in this view. It is only to be used for entering new phone messages.

23.3.2 Today's Calls View

Use the Standard view type for the Today's view and filter to only show items that are created today. Type [Today] to select the current day as the filter.



The screenshot shows the filter configuration interface in SharePoint. It starts with a radio button selected for 'Show items only when the following is true:'. Below this, there are three dropdown menus: 'Created', 'is equal to', and '[Today]'. The '[Today]' dropdown is highlighted with a blue border.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Entry.htm>

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Views.htm>

23.4 CREATE A PHONE MESSAGES TEMPLATE

1. In the Content Type Hub, create Phone Messages Views for the Phone Messages list you created.
2. Save the App as a Template.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Template.htm>

23.5 PHONE MESSAGES ALERT WORKFLOW

In this section I will show two types of workflows for e-mail alerts about missed calls. One is suitable for the simple SharePoint list app for phone messages. The other one is reusable and can be connected to a content type, so I recommend you to use that workflow when your phone messages list is built on a content type in the Content Type Hub.

The message should contain the name and telephone number of the person who called and info about who received the call. It is also good to have a link to the list item in edit mode, so that the user quickly can mark the call as returned.

23.5.1 Workflow for One List

The workflow steps for the one list workflow are intended for a SharePoint 2013 workflow, but you can use a SharePoint 2010 workflow also. The steps are a bit different, but the most important difference is that you have to end the SharePoint 2013 workflow. The other actions are similar.

1. Open the Site in SharePoint Designer.
2. Go into Lists and Libraries and click on the Phone Messages list to open its summary page.
3. Start Creating a List Workflow. Set the workflow to start automatically when an item is created. You can also set it to be possible to start manually.
4. At Transition to stage, type go and press Enter. Click on the stage and select End of Workflow.
5. Select the Action 'Send an Email'.
6. Click on 'these users' and select a Workflow Lookup for a User .
7. Select the 'Called' field from source and the Return field 'Email Address'.
8. Enter a subject and a body text for the e-mail. Add the lookups you want to use.
9. Publish and Check the Workflow.

It is suitable to have a Lookup for the name of the person who called in the subject. In the body you can add lookups for the Phone number, the created time and the e-mail address of the person who received the call.

You can also add a link to the current list item in edit mode, *see below*.

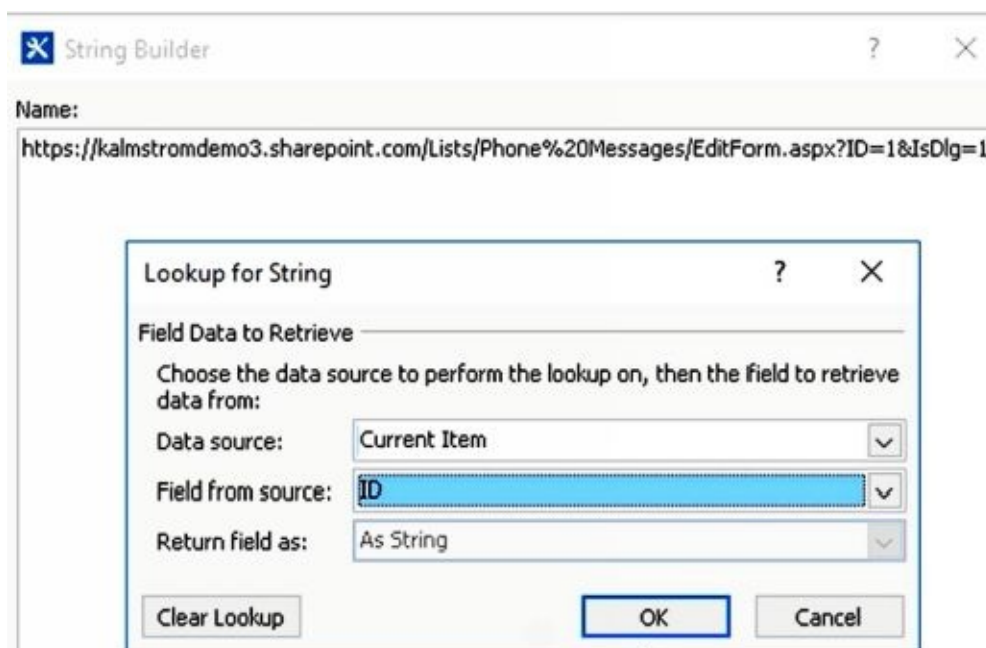
Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Workflow.htm>

23.5.1.1 Add Item Link to Workflow E-mail

If you want the e-mail message sent by the workflow to have a link to the list item from where the e-mail info was taken, you should first copy the link to one of the items and then create a lookup for the ID. With such a link, the person who gets the e-mail message can open the list item directly from the e-mail and mark the call as returned.

1. In the SharePoint Phone Messages list, open one of the current items and click on the Edit Item button.
2. Right click on the form and select Properties.
3. Copy the path to the item in edit mode.
4. In SharePoint Designer, click on Workflows and find the Phone Messages workflow if you don't have it open.
5. Click on the link 'Current Item Called' to open the e-mail message.
6. Add a display text in the e-mail body and select it.
7. Click on the Edit Hyperlink button and then on the String Builder button.
8. Paste the link you copied into the String Builder.
9. Select the ID number in the link and click on the "Add or Change Lookup" button.
10. Select the ID at Field from source.



11. Click OK to all dialogs, and Publish and Check the Workflow.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Workflow-Link.htm>

23.5.2 Reusable Workflow

If you create a reusable SharePoint 2010 workflow and connect it to the Phone Message content type, it can be used in all lists that have this content type. You must save it as a template, though, and upload it to each site collection where you want to use it.

You can use the same actions and lookups as in the list workflow above.

Note that the reusable workflow has to be a SharePoint 2010 workflow, as 2013 workflows cannot be connected to a specific content type. Also note that you do not set in SharePoint Designer when the workflow should be run. That is done on site collection level for reusable workflows.

1. Start Creating a Reusable Workflow.
2. Give the workflow a name and select to create a SharePoint 2010 workflow .
3. Connect the workflow to the Phone Message content type and click OK.

Pick a base content type to limit this workflow to

Content Type:

Choose the platform to build your workflow on

Platform Type:

4. Create the workflow as described for the list workflow in the section above.
To distribute the workflow to other site collections; *refer to* Reusable Workflow Template.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Reusable-Workflow.htm>

23.6 MY MESSAGES

You can add a Content Search web part that shows each user his/her phone messages to a page that is often visited, for example the SharePoint home page. In this example the current user's unreturned calls are shown independently of which site collection the phone messages were created in.

1. Open a Page in Edit Mode.
2. Click on the Text Layout button under the FORMAT TEXT tab and select 'One column with sidebar'. This will give you a web part with the default document library in the sidebar.
3. Delete the default web part, because it is here we will add the web part for the unreturned calls.
4. Add a Web Part, the Content Search web part in the Content Rollup category.
5. By default, the web part shows the latest changed items in the site collection. To change that, Edit the Web Part and click on the 'Change query' button.
6. In the Query Builder, select 'Items matching a content type' and don't restrict by app. Restrict the search to the phone messages content type.
7. Switch to Advanced Mode and Add two Property Filters: 'CalledOWSUSER' 'Contains' 'The name of the user who runs the query' and 'CallerreturnedOWSBOOL' 'Not equals' Manual value and the manual value is Yes.
8. Make any other web part settings you prefer, apply and save the page

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-My-Calls.htm>

23.7 ENHANCEMENTS

There are more you can do to enhance the phone messages solution, for example add a phone messages search vertical in the Search Center and add a Managed Metadata column to the phone messages list. Search verticals and Managed Metadata have been described earlier in this book, so here I will just point out what is special for the phone messages application.

23.7.1 Create a Phone Messages Search Vertical

When you Add a Search Vertical to the Search Center that is restricted to the phone messages content type, you can find these messages more quickly. If you Show the Search Results in a Custom Results Web Part, you can for example show the name of the caller on the first line and the telephone number on the second line of each found item.

Demos:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Search-Vertical.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Search-Vertical-Content-Search.htm>

23.7.1.1 Refinement Customization

When you create a search vertical page, I recommend you to also Modify the Refinement Web Part of that page. Remove uninteresting refiners and add those that are helpful in a search.

It is sometimes difficult to find the right refiner, but samples are shown below in the dialog, so you can easily select different options and see the results. (For example, in the demo below I select 'owstaxidmetadataalltagsinfo' for the managed metadata Department column.)

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Refiner.htm>

23.7.2 Managed Metadata

If you add a Managed Metadata column to the phone messages list and set Default Column Values, you will have additional information without burdening the users with more columns to fill out.

When you use a content type, Edit the Content Type and add a Managed Metadata column, but do not set a default value.

After republish and the usual delay, you should instead open the column in each list where the content type is used and set the default value there. This way you can set the default value that is suitable for each list.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/Phone-Messages-Enterprise-Managed-Metadata.htm>

24 MEETING NOTES AND ACTION POINTS

In this last chapter I want to once again repeat and expand techniques that we have gone through earlier. I will show how you can combine what you have learned to create a SharePoint solution that automates taking meeting notes and handling meetings and meeting decisions in general.

I hope my suggestion will inspire you to try something similar for your SharePoint tenant. By now you should have the knowledge to modify the solution given in this chapter, so that it suits your organization perfectly!

The solution has a meeting notes list for all meetings. Each meeting will be entered as an item in this list. The list is built on a content type that has a link column, and this link column will have a link to an action point list – one for each meeting. One person will be assigned to creating such an action point list before each meeting, so it must be a quick task.

The creation of this system involves several steps:

- What to consider?
- The Content Type Hub introduction
- Create a content type for a meeting notes list
- Create a content type for an action points list
- Add the new content types to lists
- Manage changes in the content types
- Create list templates
- Copy templates to other site collections
- Create a meetings overview page
- Create a meetings search vertical
- Use list specific columns with content types
- Display “my tasks” in a Content Search web part

24.1 CONSIDERATIONS

Before you start creating a SharePoint solution for meetings management you have to consider your organization's information strategy.

- What do you want to store?
- How many mandatory fields are necessary? In general you should try to keep them at a minimum!
- How should data be categorized?
- How to best find information?
- What permissions are needed? Some meeting notes will need strict permissions, others can be open to all users. How to manage that in the best way?
- For how long should we store the meeting notes? How can the retention time be set quickly?
- Should the meeting notes be stored in lists or libraries? Lists are more powerful in general, but if it must be easy to print the meeting notes, you need to use libraries.

Demo:

<http://www.kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Intro.htm>

24.2 CONTENT TYPES

For this meeting management example, I create two content types in The Content Type Hub: a meeting list content type and an action point list content type.

When you create and publish content types in the Hub, they become available for the whole tenant, and you don't have to create content types for each site collection. Therefore it is worth the extra trouble of creating content types in the Hub.

24.2.1 Meeting Notes Content Type

Here I will describe the work with the two lists I suggested above, but is also possible to select the Document content type in the Document Content Types group as a parent.

Create a Content Type for meeting notes in the Content Type Hub. This list content type should inherit from the regular Item content type in the List Content Types group.

When the new content type has been created, we can start customizing it. As we have built this content type on Item, there is only one column, the Title, (besides the created by, modified at and similar auto generated columns). Now we must add the columns we need, and for content types we always use Site Columns.

I suggest a Comments column from the existing site columns, for meeting notes.

Maybe you also have an existing Departments column of the Managed Metadata type, connected to a Departments term store. If not, I recommend you to create a new Department managed metadata site column and connect it to a term set in the Term Store, before you create the Department column.

For the rest of the columns, you may have to create new site columns:

- Meeting comments: multiple lines of text, append changes to existing text
- Chairperson: person
- Internal Attendees: person or group, allow multiple choices
- External Attendees: multiple lines of text, plain text
- Action Points, hyperlink

Publish the Content Type when you have created the content type and tested it in the Content Type Hub.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Content-Type-Item.htm>

24.2.2 Action Points Content Type

In the Content Type Hub you should also create a content type for the action points lists. This will be a Task content type, selected from the List Content Types group.

When you base a new content type on the Task content type, you will have multiple columns, so you probably have to remove some of them instead of creating new ones.

1. Create a Content Type.
2. Remove or hide columns that are not needed.
3. Publish the Content Type.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Content-Type-Task.htm>

24.3 SAVE AS A TEMPLATE

In my suggestion one list is used for all meetings – or all meetings within a department or similar, and each meeting is entered as an item. The action points list must however be created for each meeting.

To make it easier for the user responsible for creating the action point list, you should create an action point list as you want it and then Save the App as a Template. Then the responsible can just Add an App and select the Action Points template.



Contoso Action Points
App Details

A template is also a good option for the meeting notes list, if you want to use the same kind of list in several site collections.

Upload the Template to Another Site Collection if needed.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Content-Type-Use.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Action-Points.htm>

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Upload-Templates.htm>

24.4 ENHANCEMENTS

Now we have set up the meetings management system in SharePoint, with the content types and list templates. Next step is some enhancements that make the meetings easier to find.

24.4.1 Create a Meetings Overview Page

It is convenient to have a page that gives an overview of all company meetings. Such a page can be create with the The Content Search Web Part.

1. In the Query Builder, select 'Items matching a content type' and don't restrict by app. Restrict the search to the meeting notes content type.
2. Switch to Advanced Mode and click on SORTING, to sort the meetings. When you sort them after creation date, the most recent meetings will be displayed on top.
3. Make other changes to the web part, like how many items should be shown, how many rows and what should be mapped to the rows.

24.4.2 Create a Meetings Search Vertical

If you Add a Search Vertical to the Search Center, it will be easy for users to search specifically for meetings.



Everything People Sites News Meetings

As always when you create a search vertical you start with creating a new page from the Search Center, so that the new page will use the Search Results page layout. In the Content Search Query Builder, select the query 'Items matching a content type (System)'. Do not restrict by app or tag but restrict to the meeting notes content type.

24.4.2.1 Add Managed Metadata Refiner

While you are creating a search vertical page I suggest that you also Modify the Refinement Web Part. Here is a suggestion on how to add a Departments filter.

The 'owstaxidmetadataalltagsinfo' is the Managed Property that collects all the tags that have been applied to the search result items. Thus if you used any Managed Metadata, like Department in this case, you can refine it using this Managed Property. Change the display name of the 'owstaxidmetadataalltagsinfo' tag to Department.

If you have used another managed metadata, you can instead use 'owstaxidmetadataalltagsinfo' and add that managed metadata as the refiner.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-Search-Vertical.htm>

24.5 SHOW MY TASKS IN CONTENT SEARCH WEB PART

When action points have been decided on a meeting and entered as items in the action points list for that meeting, it is convenient for each user to see the tasks assigned to him/her displayed on a much visited SharePoint page. Add a Content Search Web Part to a Page to do that.

When the Content Search web part searches for a specific content type, both that particular content type and all content types that inherit from it are displayed. This means that I have two options for this web part: restrict the search to the Task content type and include all “my” tasks, or restrict to “my” tasks in lists that have the content type used in the action points lists.

1. In the Query Builder, select ‘Items matching a content type’ and don’t restrict by app. Restrict the search to the Task content type or the Action Point content type.
2. Switch to Advanced Mode and Add two Property Filters: ‘Assigned To’ ‘equals’ ‘The name of the user who runs the query’ and ‘StatusOWSCHCS’ ‘Not equals’ Manual value and the manual value is Completed.
3. Make other settings you prefer to the web part, apply and save the page.

Demo:

<http://kalmstrom.com/Tips/SharePoint-Online-Course/SharePoint-Meetings-MyTasks.htm>

24.6 SUMMARY

The building of the meeting management system I suggest in this chapter has given new knowledge about templates management and a chance to repeat how to create a search vertical and use the Content Search web part. I hope it has also given you a deeper understanding of content types and the Content Type Hub.