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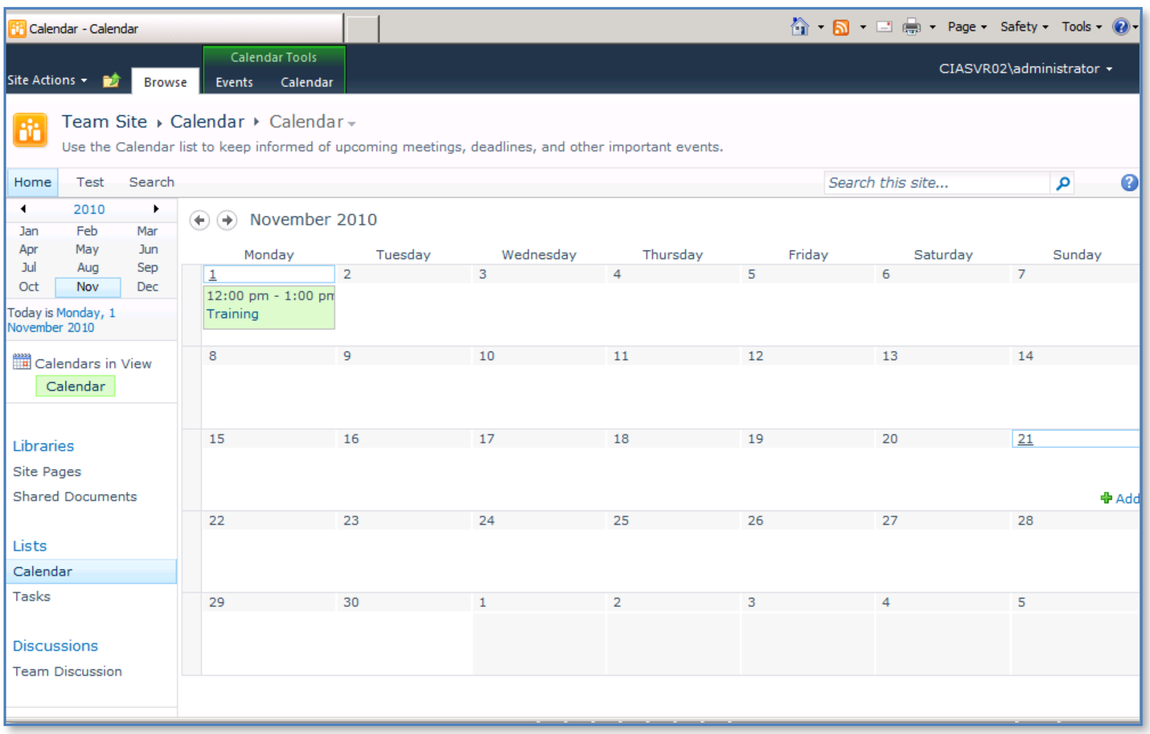
16.1 Scope

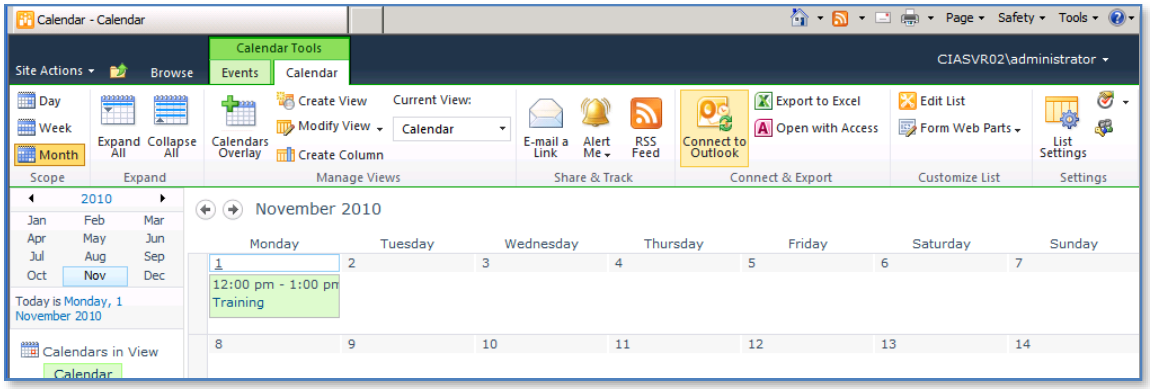
This chapter will show you how to complete a number of tasks when using SharePoint 2010.

16.2 Connecting to Outlook

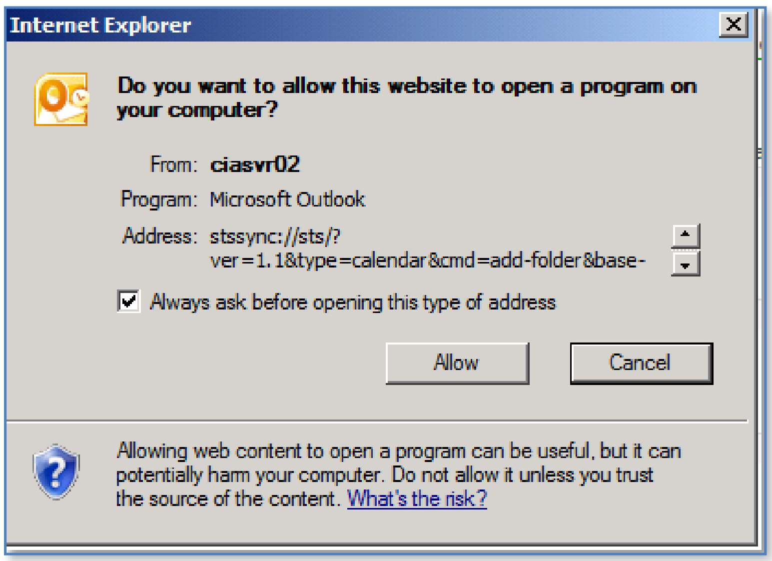
This tutorial will show you the steps required to link Outlook 2010 to a SharePoint 2010 calendar. This will allow you to create appointments in either SharePoint 2010 or Outlook 2010 and have them automatically sync with all other linked calendars. Only using Outlook 2010 or Outlook 2007 it is possible to achieve two way synchronization between the calendars. It is possible to follow the same steps with Outlook 2003 but you can only synchronize from SharePoint 2010 to Outlook 2003 and the not the reverse.



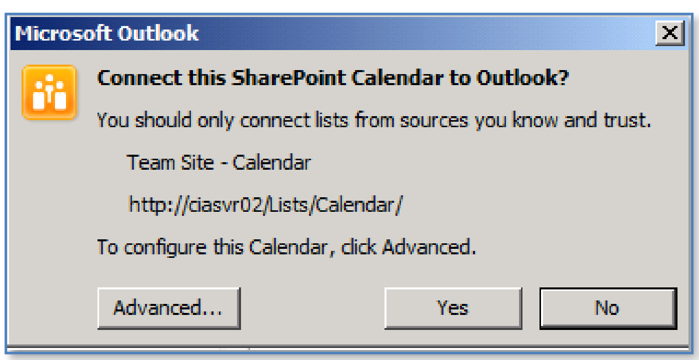
The first step in the process is to locate the SharePoint 2010 calendar you wish to synchronize with Outlook 2010. It is also recommended that you have Outlook 2010 already running before you commence this process.



From then ribbon select **Calendar | Connect to Outlook**.

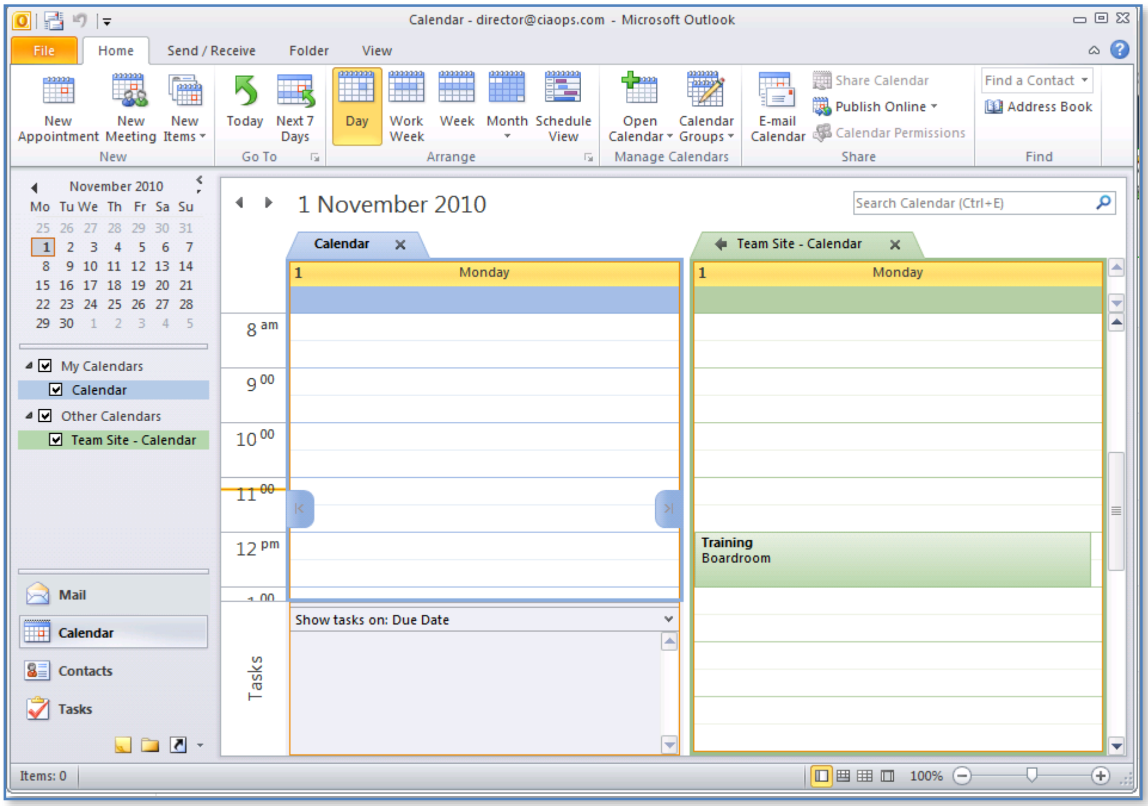


You may be prompted with a security warning about allowing content from a web site. As this is a known good source select the **Allow** button to continue.



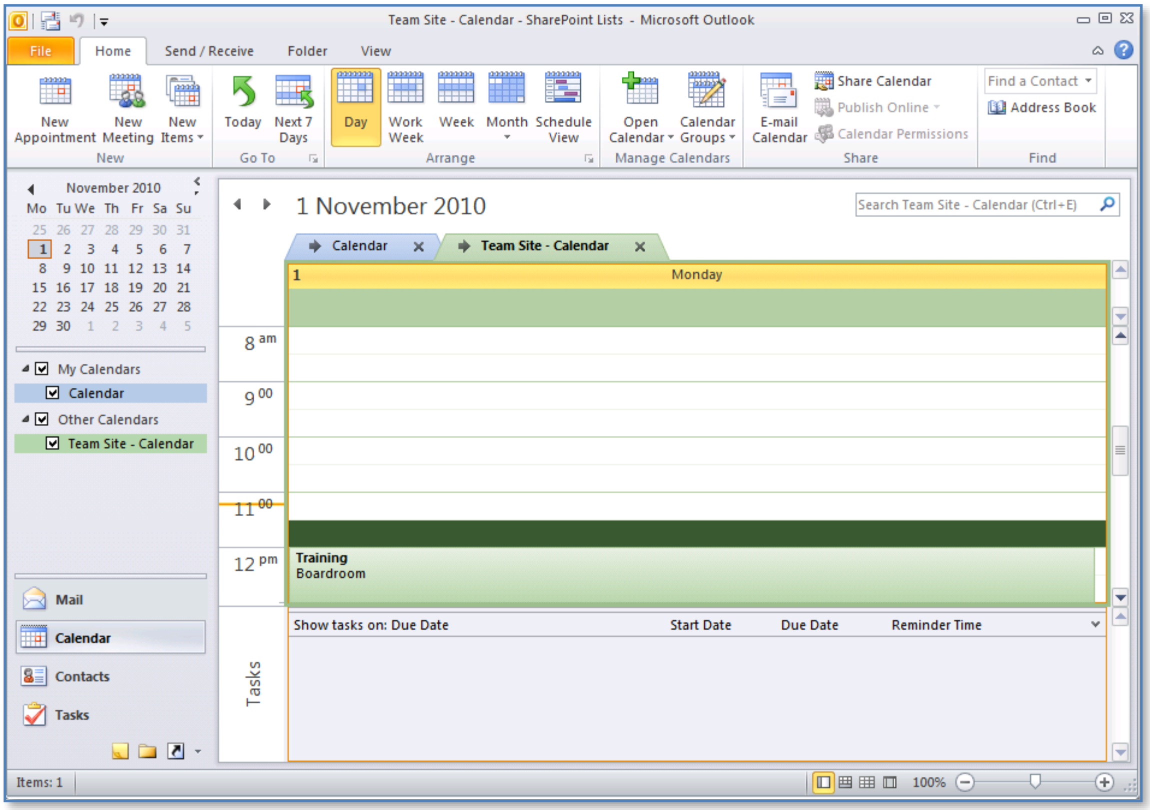
You will now be taken to Outlook 2010 where you will see the above message asking for permission to connect Outlook 2010 to your SharePoint 2010 calendar.

Select **Yes** to continue.



When you select *Calendar* in Outlook 2010 you should now see you have an additional calendar from which you can select to view.

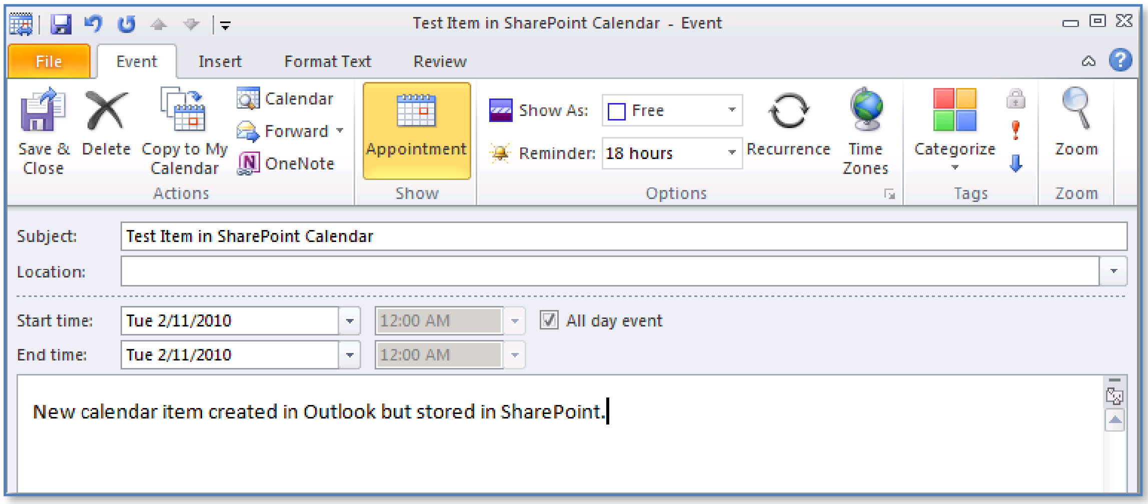
As you can see in the above screen shot above there is the normal (private) Outlook calendar on the left (in blue) and the new linked SharePoint 2010 calendar on the right (in green). Under the *All Calendar Items* on the left hand side of the screen you can see that making a selection of which calendar to view is as simple as clicking the selection box for that calendar. Likewise, to remove any calendar from the view, simply uncheck the box that corresponds to that calendar.



You will also notice on the left of the tab, at the top of the calendar, that contains the name of the calendar there is an arrow. If you press this arrow that calendar will overlay the other one.

In the above case, the SharePoint 2010 calendar (green) that was on the right of the screen has been overlaid on the private Outlook 2010 calendar (blue). You will notice that although the calendars are overlaid you can still see the appointments in both. If you look closely at the appointments you will see that some are coloured blue. This indicates that this appointment belongs in the private Outlook 2010 calendar (blue).

This overlay ability is unique to Outlook 2010 and Outlook 2007 and provides an easy way to view two calendars to determine whether appointments clash. This could prove to be very handy if the SharePoint 2010 calendar represented common company-wide appointments, because it could be quickly linked and then overlaid on private calendars to determine business scheduling.

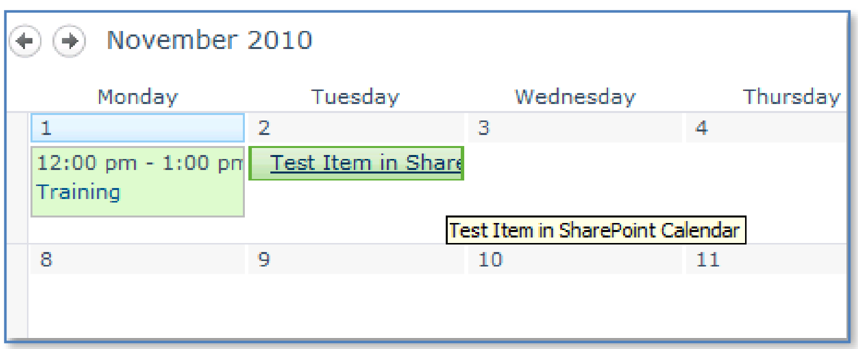


To demonstrate the bi-direction synchronization ability of SharePoint 2010 calendars and Outlook 2010 a new appointment will be created in the SharePoint 2010 calendar from Outlook 2010.

To create a new appointment, simply locate the SharePoint 2010 calendar (in this case green) and double click on any day. This will launch the event window like shown above. You will note that this new appointment will reside in the SharePoint 2010 calendar by examining the lower left corner of this window. Here it says *In Shared Folder: SharePoint – Calendar* confirming we are actually creating this new event in our SharePoint 2010 calendar.

Complete the remaining details for the event and press **Save and Close** in the upper left of the window when complete.

When you are returned to your calendar view you should now see the new appointment you just created. In the above example we can see the new appointment on the right hand side, in the green calendar on the 2nd.



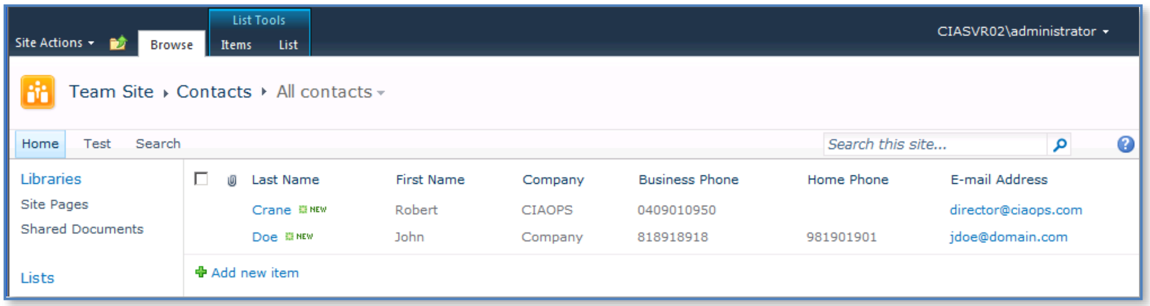
If we now return to our calendar in SharePoint 2010 and refresh the page, we can see that the new appointment we just created in Outlook 2010 now appears in the SharePoint 2010 calendar (on the 10th as expected).

To create calendar events in SharePoint 2010 you must have the appropriate rights to do so, these same rights apply when creating events from linked Outlook 2010 as well.

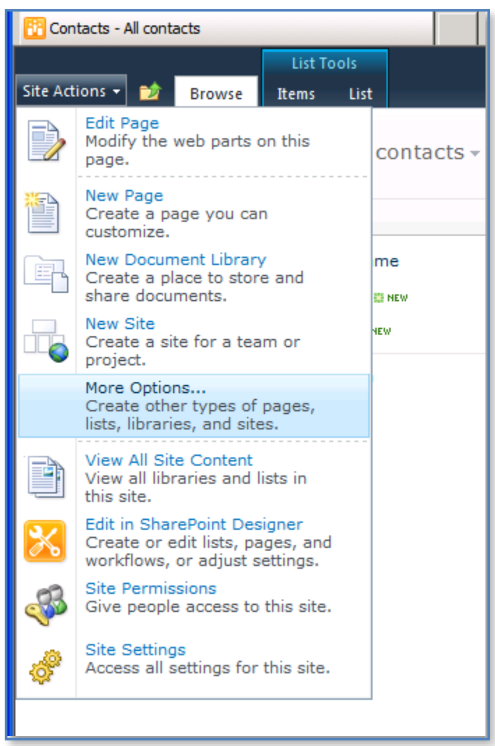
16.3 Creating linked fields

Good database design allows you to create fields which are linked between database tables. This is known as relational databases and improves the performance of databases by avoiding redundancy and data errors.

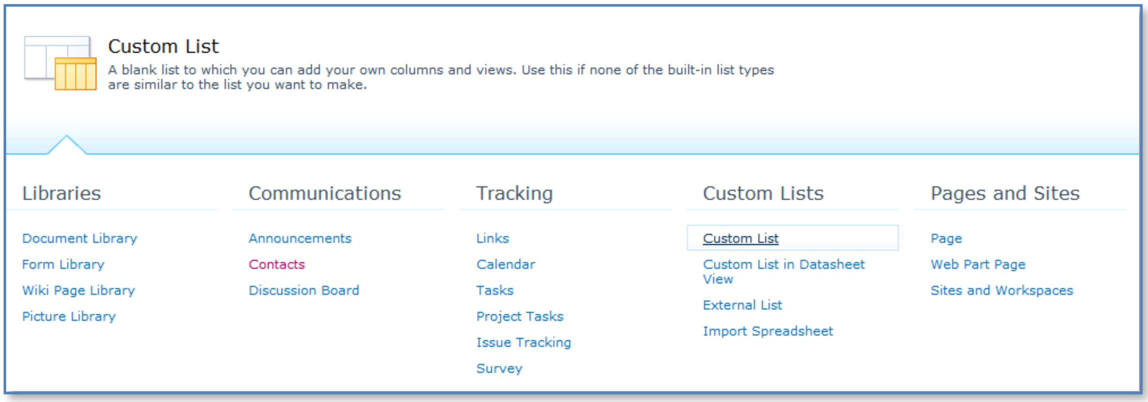
It is possible to create something similar within SharePoint 2010 via the use of linked fields. In this case we are going to create a new list that records telephone calls from an existing list of customers. Here our SharePoint 2010 site already has a list of the customer details so we will link our new list to this.



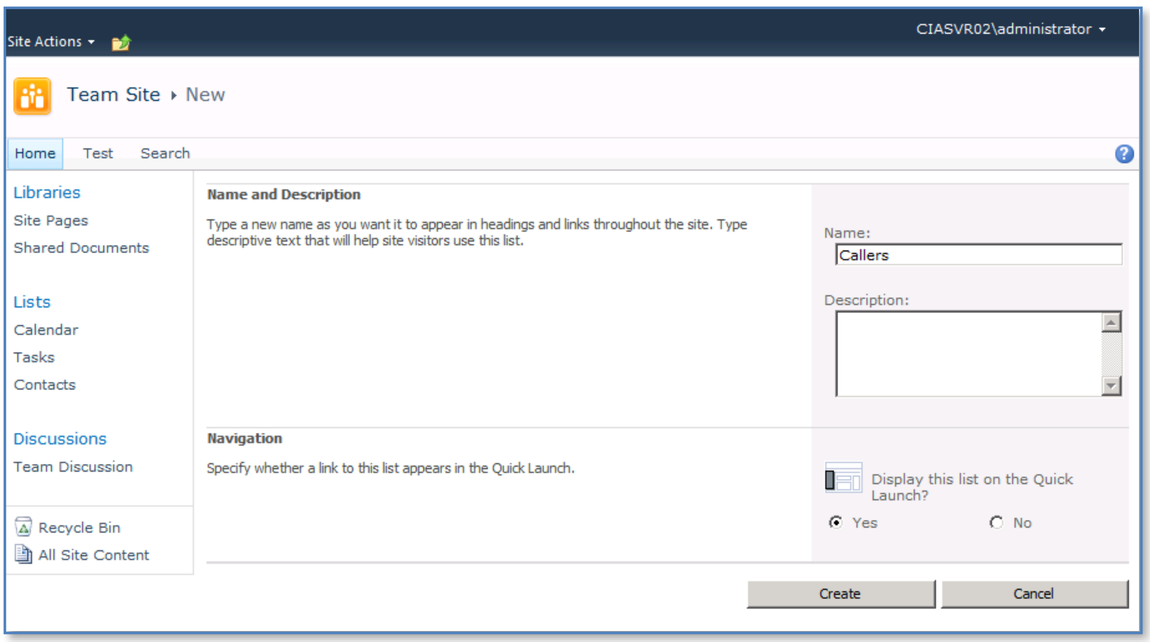
As you can see from the above screen shot a list of contact details already exists in our SharePoint 2010 site. Note here that this list contains a field called *Last Name* which we will be using to link to in our new list.



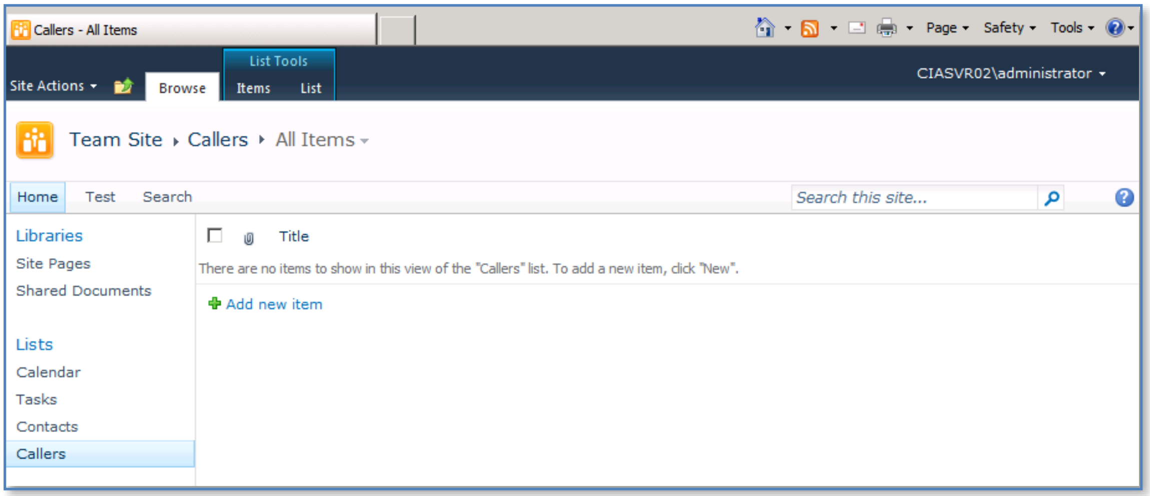
The first step in the process is to create our new list. To do this we select **Site Actions | Create** from the upper left of the screen. Remember, that you do not see the *Site Actions* tab unless you have the appropriate design rights on the SharePoint 2010 site.



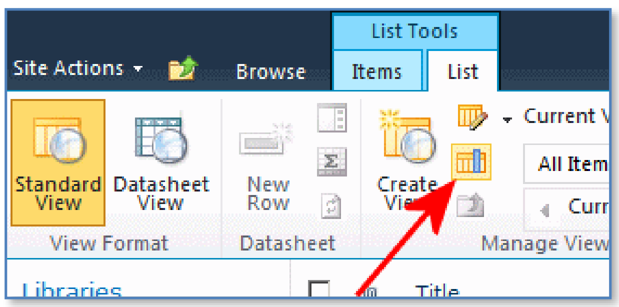
Next, select **Custom List** from under the *Custom Lists* heading.



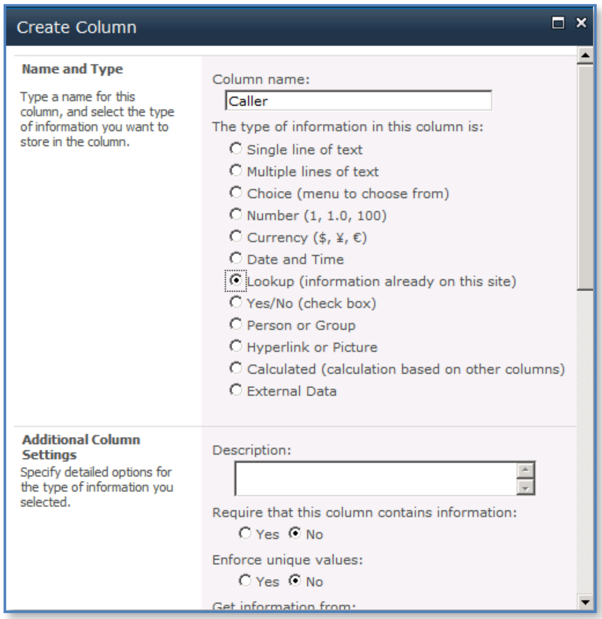
Give the new list a name. In this case it is *Callers*. Add a description if desired, set the navigation option and press the **Create** button to create a new list.



You should now see the new list displayed on the screen as shown above. You will notice that it only has a single field called *Title*.



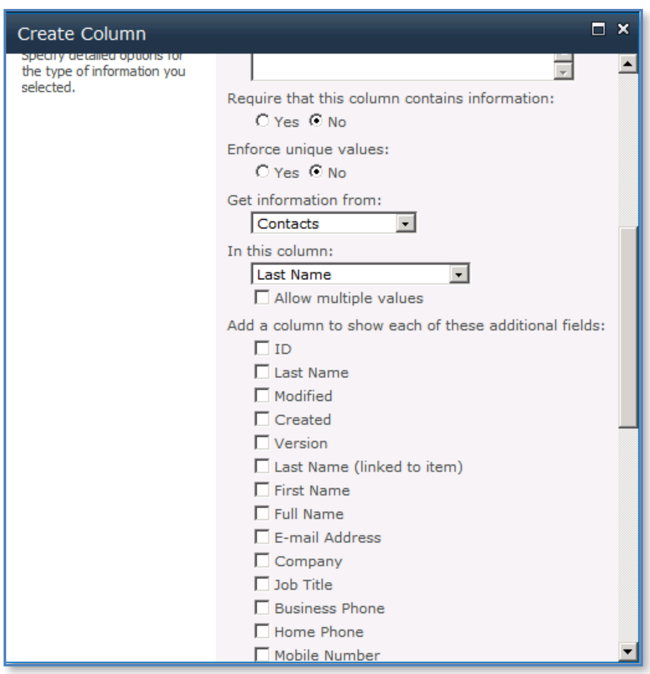
To create a new field select **List | Create Column** from the ribbon menu. The *Create Column* button is highlighted above.



In the *Create Column* screen select a name for the field (in this case *Caller*) and then select the type of field desired.

In this case we want the *Caller* field to reference another list so we select the **Lookup** option.

Scroll down the screen for further options.

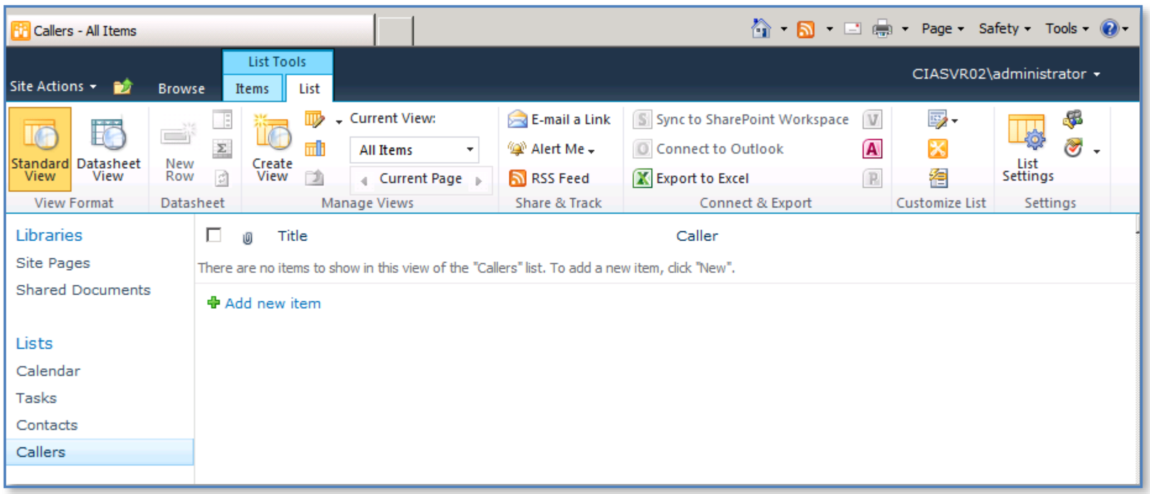


You can enter a description if desired.

In the *Get Information From:* field you will see a drop box, that when selected, will allow to select from any existing list you have on your SharePoint 2010 site. In this case we select our existing list **Contacts**.

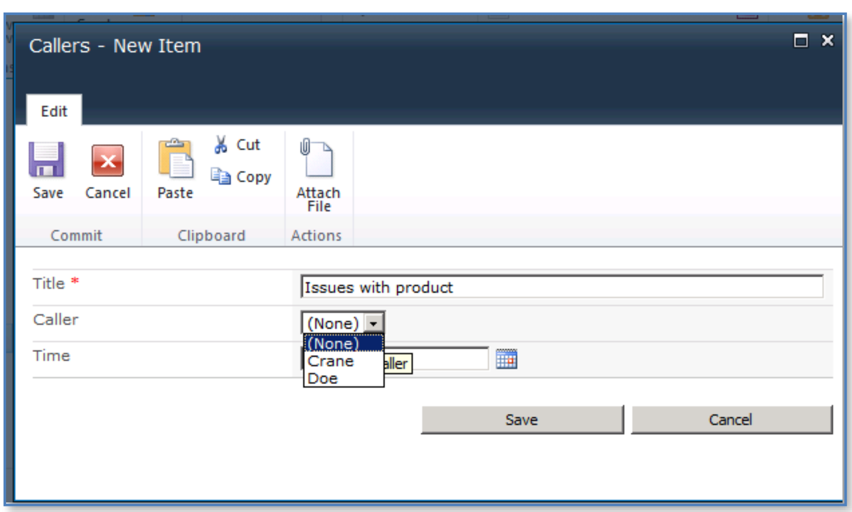
Once you have selected the existing list to retrieve information from you then need to select which field in that list the information will come from. To do this, select the drop down for *In this column:*. When selected this will show all the fields (or columns) in the previously selected list (that we are linking to). In this case we wish to select the field **Last Name**.

Press the **OK** button to create the new field.



You should now see the new field displayed in the list as shown above.

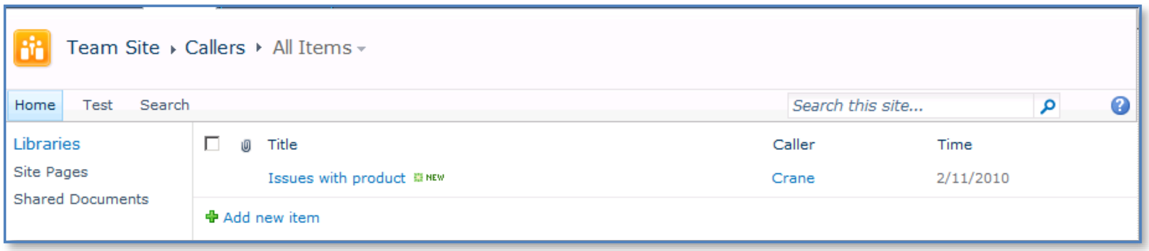
Continue to add any columns required for the new list.



If you now create a new item in that list you can see the linked field in operation.

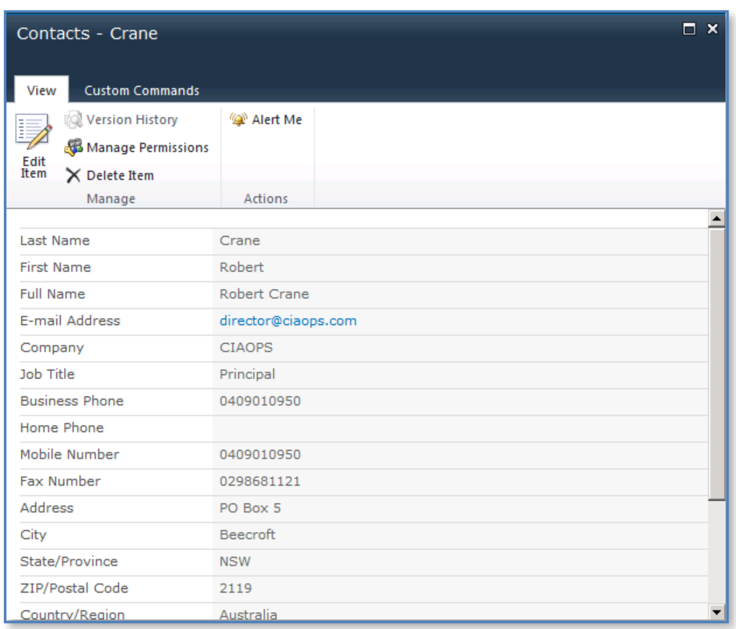
In the above example you can see when a choice is required for the *Caller* field a drop down selection is presented. This drop down is populated with entries from the *Last Name* field of the list *Contacts* that we chose to link to. No option, unless it already appears in the *Contacts* list, will be listed here. This greatly reduces the chance of errors being introduced into your information since data in this new list is now directly linked to information you already have present on your site.

Pres **OK** to save the item when compete.



Once we have saved this item we can see it displayed as shown above.

If you now click on the value for any entry in the linked field (in this case *CRANE* which you will note is hyperlinked), you will be taken directly to that entry in the linked list (in this case *Contacts*).



The display from the original linked list (in this case, *Contacts*) is shown above. To return to the new list simply press the **Continue** button at the bottom of the window.

The big advantage of using linked or lookup fields in your lists, is that you can reduce the amount of information in each list and you can also improve your data integrity. This means that when others use the SharePoint 2010 site they do not have to remember what values should appear in fields they simply select that from a drop down if that field is already linked.

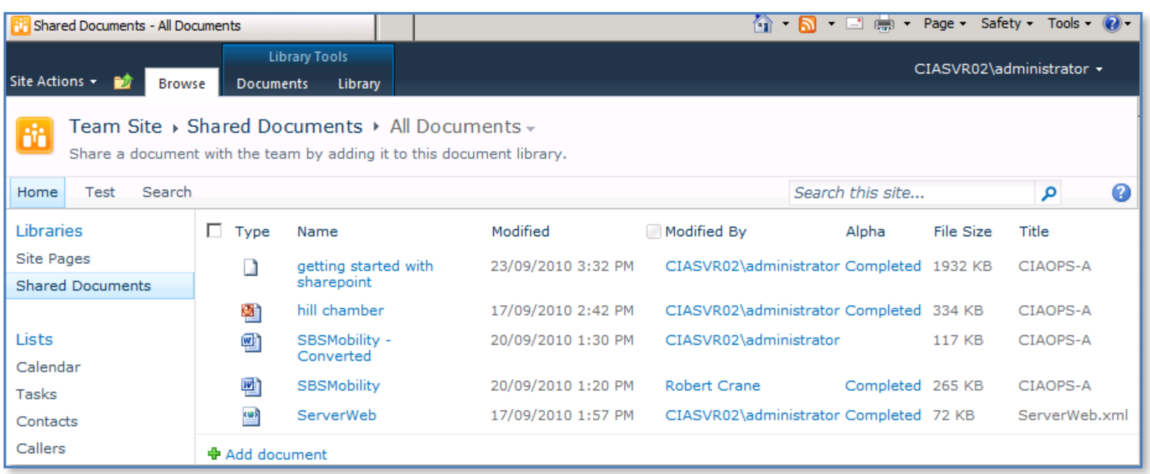
16.4 Configuring a basic workflow

A workflow is a pre-configure set of steps that are followed from beginning to end. SharePoint 2010 comes with what is known as three state workflow built in. It is also possible to create additional workflows via SharePoint designer. In this tutorial we will only cover the basics of using the standard three stage workflow.

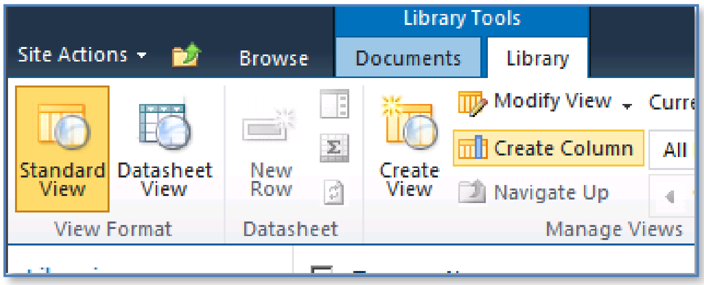
For more information about Windows SharePoint workflows see:

Introduction to workflows: http://office.microsoft.com/en-us/sharepointtechnology/HA101641241033.aspx

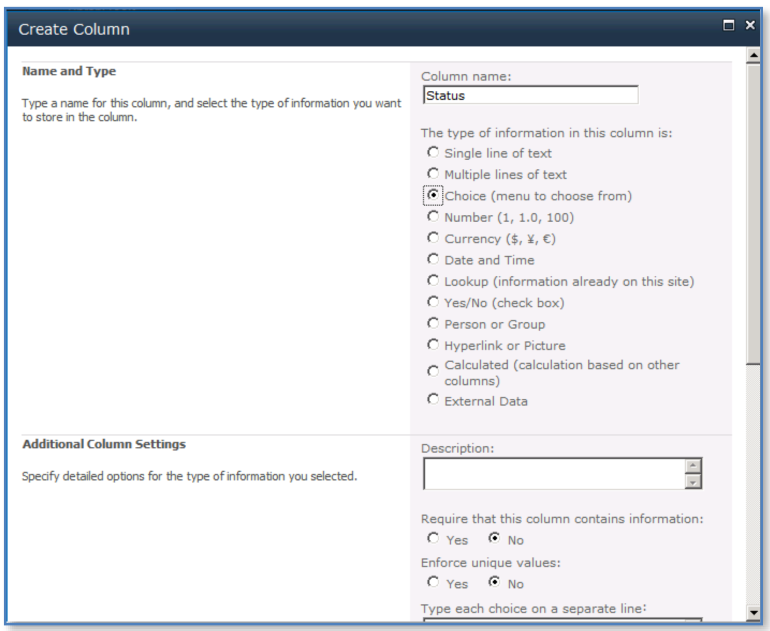
A good example of workflow might be where a new document is uploaded to a SharePoint 2010 document library. Once this document is completed it needs to be reviewed and approved by someone within the organization. You would like this process to be as automatic as possible with the appropriate person being notified at each stage of the process, as to what their requirements are. In short, that is exactly the process that this tutorial will take you through.



The first step in the process is to locate the document library in your SharePoint 2010 site that you wish the workflow to apply to. Note that you can attach a workflow (or multiple workflows) to many SharePoint 2010 items, but not all.

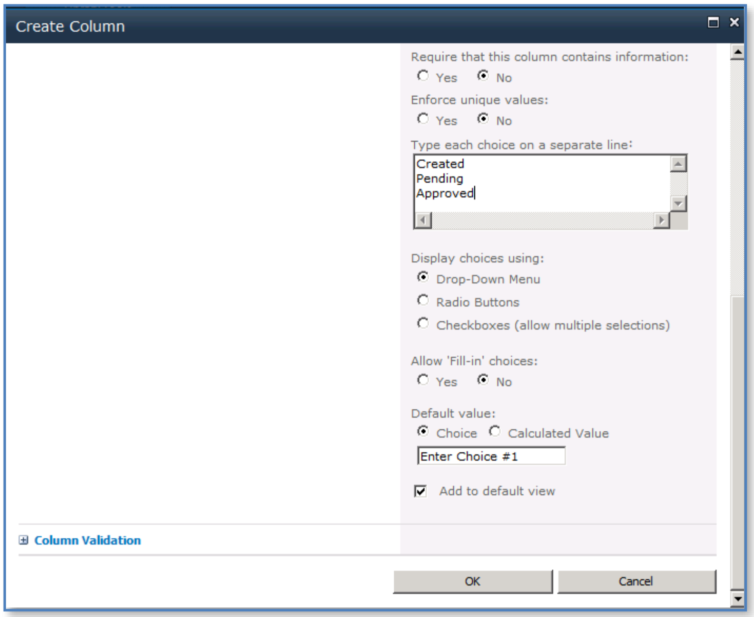


The first step in the process is to create an additional field in our document library that will be used for controlling the stages of our work flow. To add this field, from the ribbon menu of the document library, select **Library | Create Column**.



Give the new column or field a name (in this case *Status*) and select **Choice** for the type of information that this column will hold.

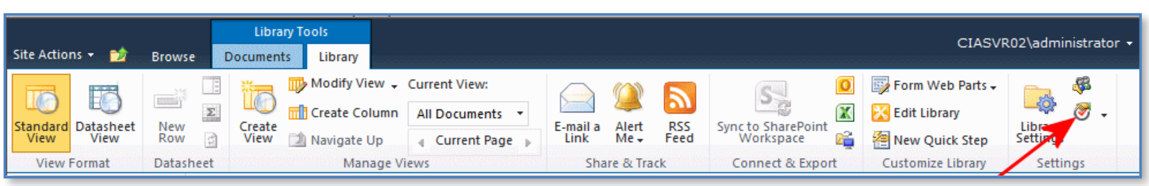
Scroll down the screen for further options.

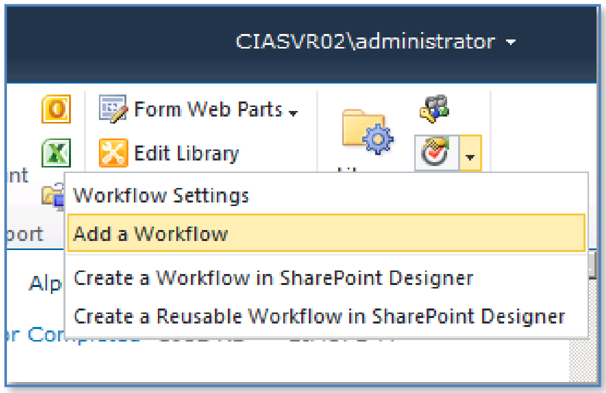


In the *Type each choice on a separate line:* box enter three values to represent the different stages of your workflow (here *created*, *pending* and *approved*). Remember, given that is a three state workflow any additional choices apart from the initial three will have no effect on the workflow, although they could still be used at a later stage if you wanted to have additional states available in this field after the workflow has completed.

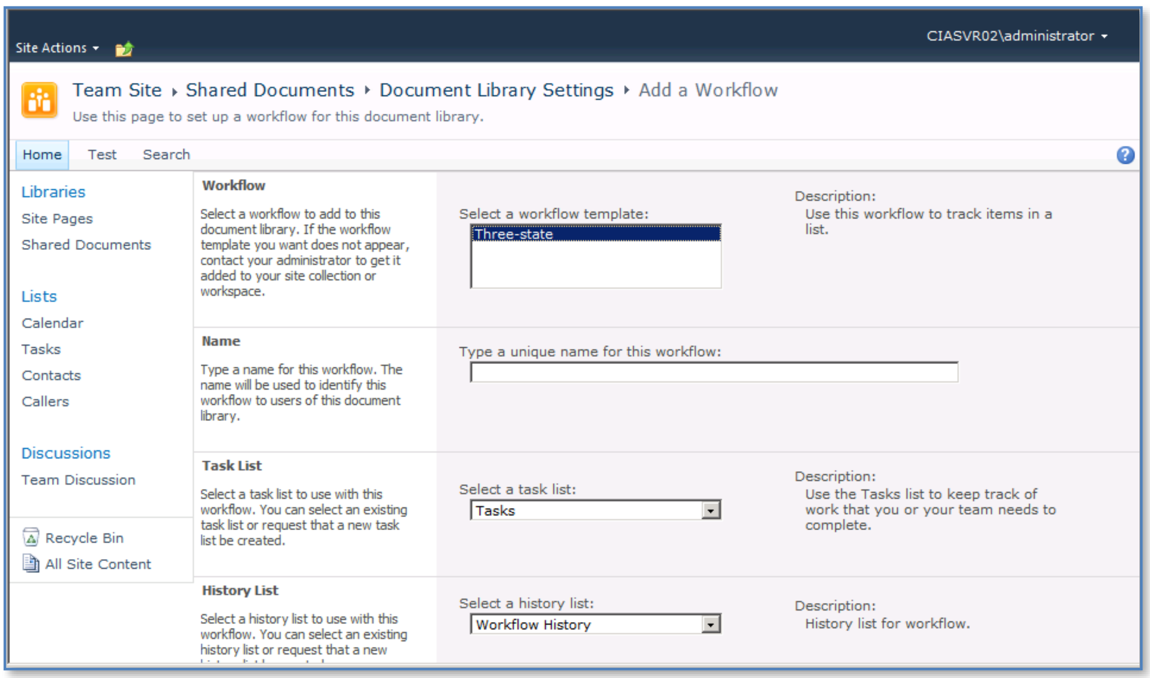
Select any additional choices that you require and press the **OK** button to save your changes.

After you have been return to the document library, now select **Library | Workflow Settings** from the document library ribbon menu to commence configuring a workflow. The button is on the extreme right of the ribbon as shown below.





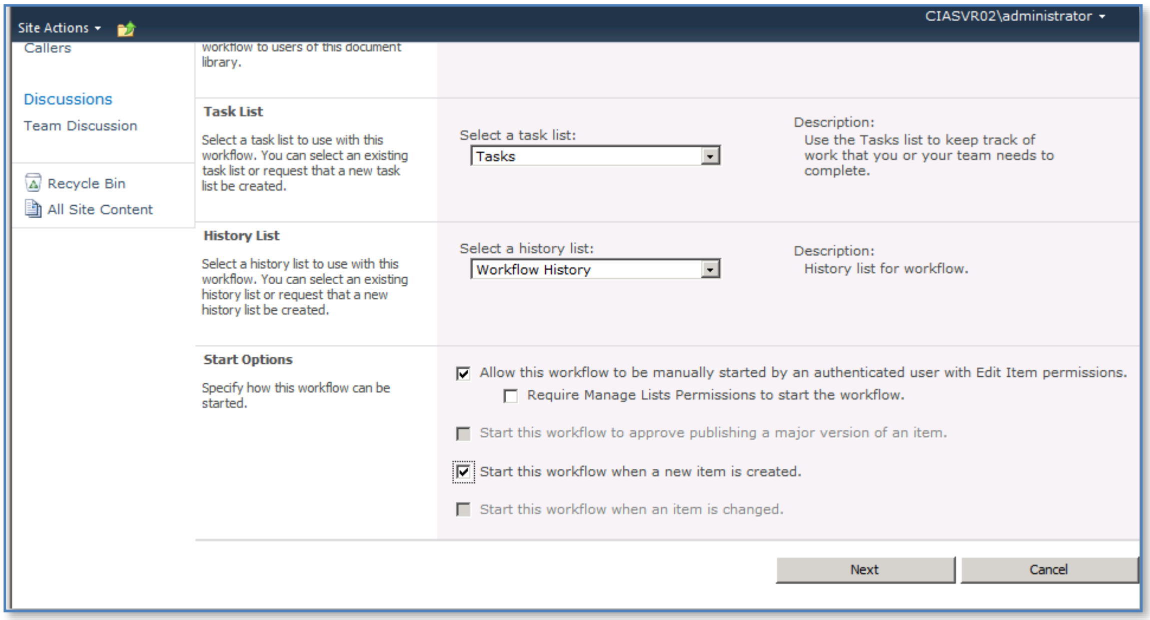
Select **Add a Workflow**.



In the *Workflow* section, at the top of the page, you should see the only option available is *Three-State*.

In the *Name* section, give your workflow a unique descriptive name because, remember, it is possible to have multiple workflows attached to different elements of a SharePoint 2010 element like this document.

Scroll down the screen for further options.

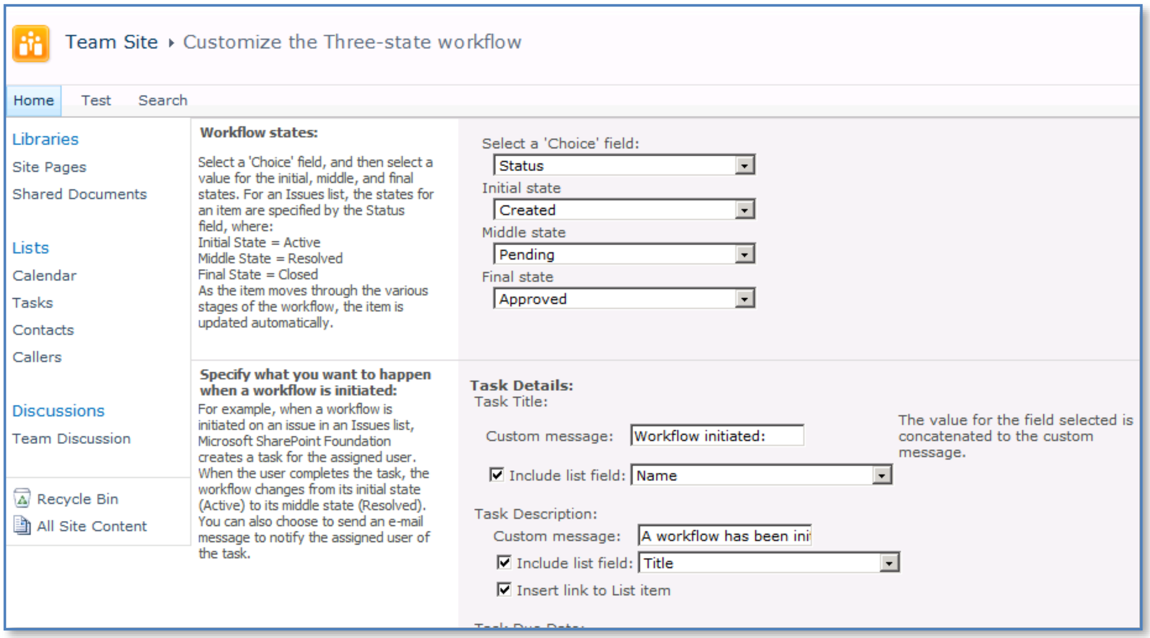


You now need to select a *Task list* to use with the workflow. You can use an existing task list on your SharePoint 2010 site but it is generally recommended that you select the option *New task list* in order to have the workflow information separate from any other task lists you may have on your site.

Additionally, you will require a *History list* to keep track of the operations of the workflow. For reasons of separation again it is recommended that you select the option *Workflow History (new)* from the drop down list to create a new history list.

In the *Start Options* section you specify how the workflow will be started. In this case we require the options that the workflow be able to be started manually as well as commencing automatically when a new item is created or uploaded.

When you have made the desired options press the **Next** button to continue.

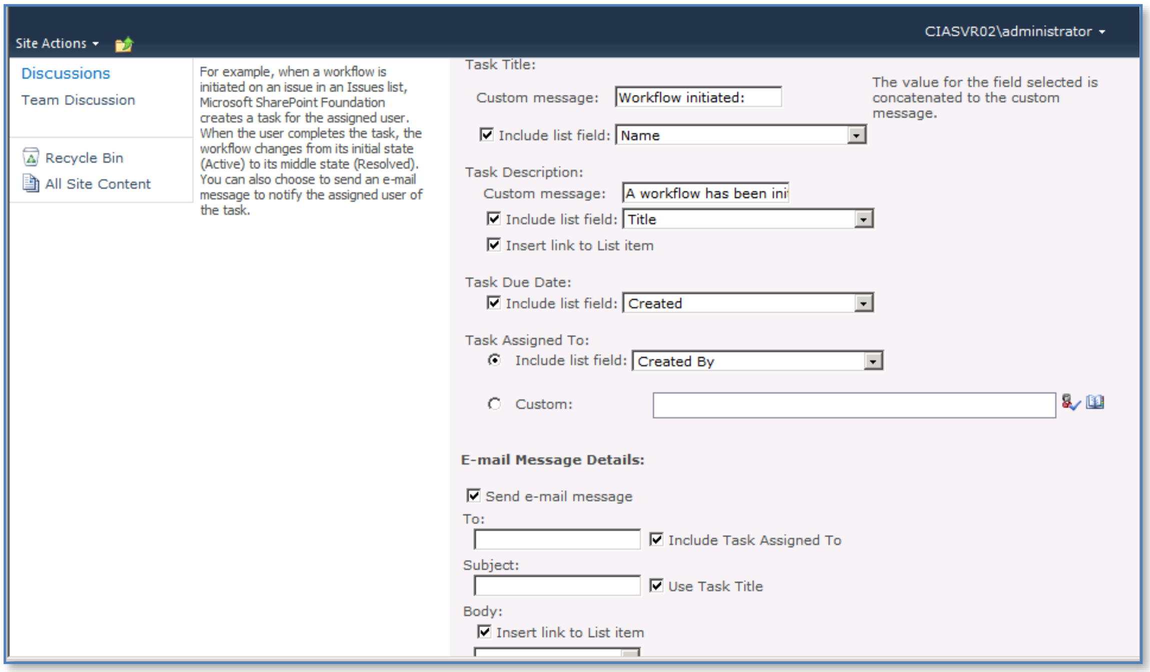


In the *Workflow states* section you are now asked to select a field in your document library that can be used to control the workflow progress.

In this case, because that field was created prior to starting the workflow configuration process (at the beginning of this tutorial), it has automatically selected this field (which is called *Status*). If you do not have a suitable field in your document library then you will not be able to progress past this point, because you will have to return and create a suitable field.

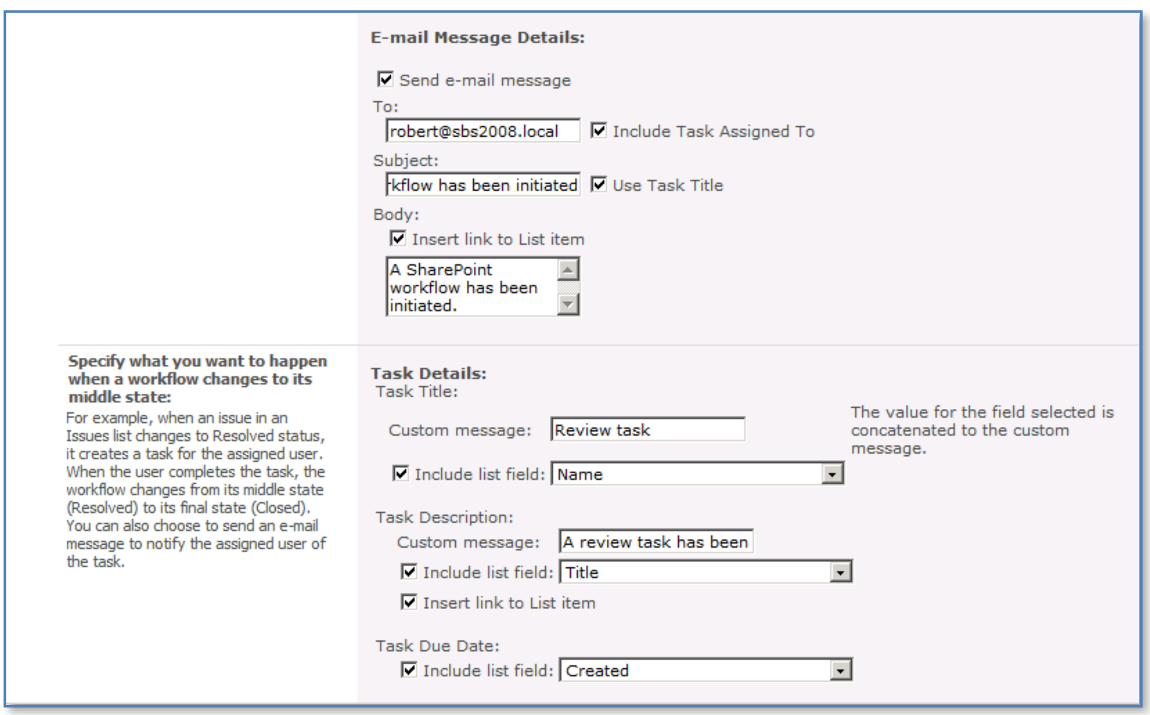
You can adjust the state values for *Initial*, *Middle* and *Final* to any value in the choice field if required, however in this case they are correct.

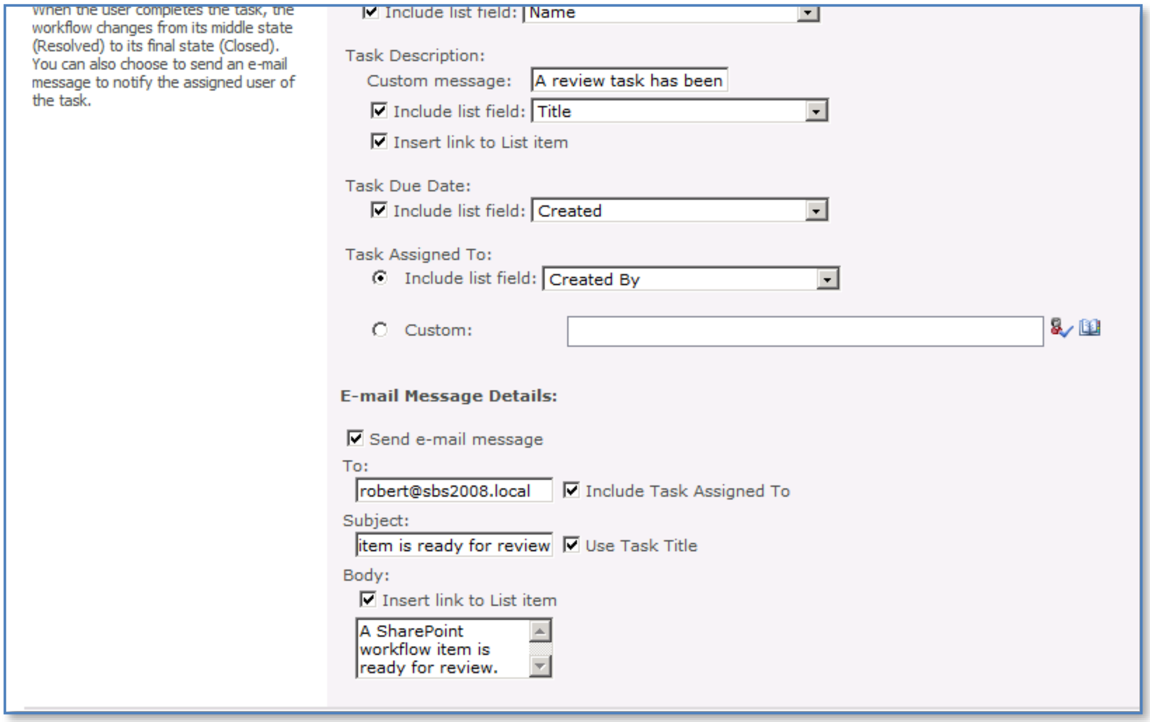
Scroll down the screen for further options.



Next, you need to decide what actions will take place when a workflow is initiated (the first stage of the workflow). You can now set the options for what will appear in the workflow task list that you created in the previous screen and also determine when the task is due and who the initial task will be assigned to.

Scroll down the screen for further options.

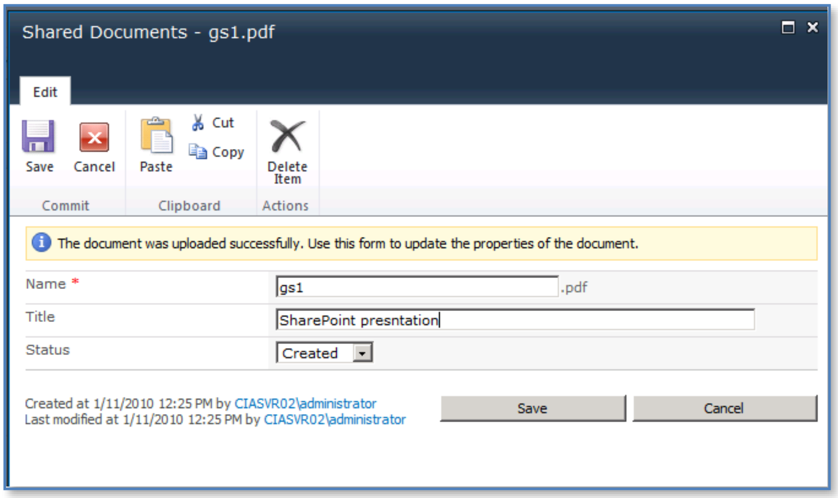




As part of the workflow initiation process you can also elect to send an email to any email address as well as to whom the task is assigned to. The reason for this maybe to give visibility to some third party that the workflow is progressing. Also, as part of that email you can include a specific subject and body as well as a link to the list item.

The next section of the workflow is similar to that you have just completed except it applies to actions that will be taken when the workflow changes to its middle state (or second stage).

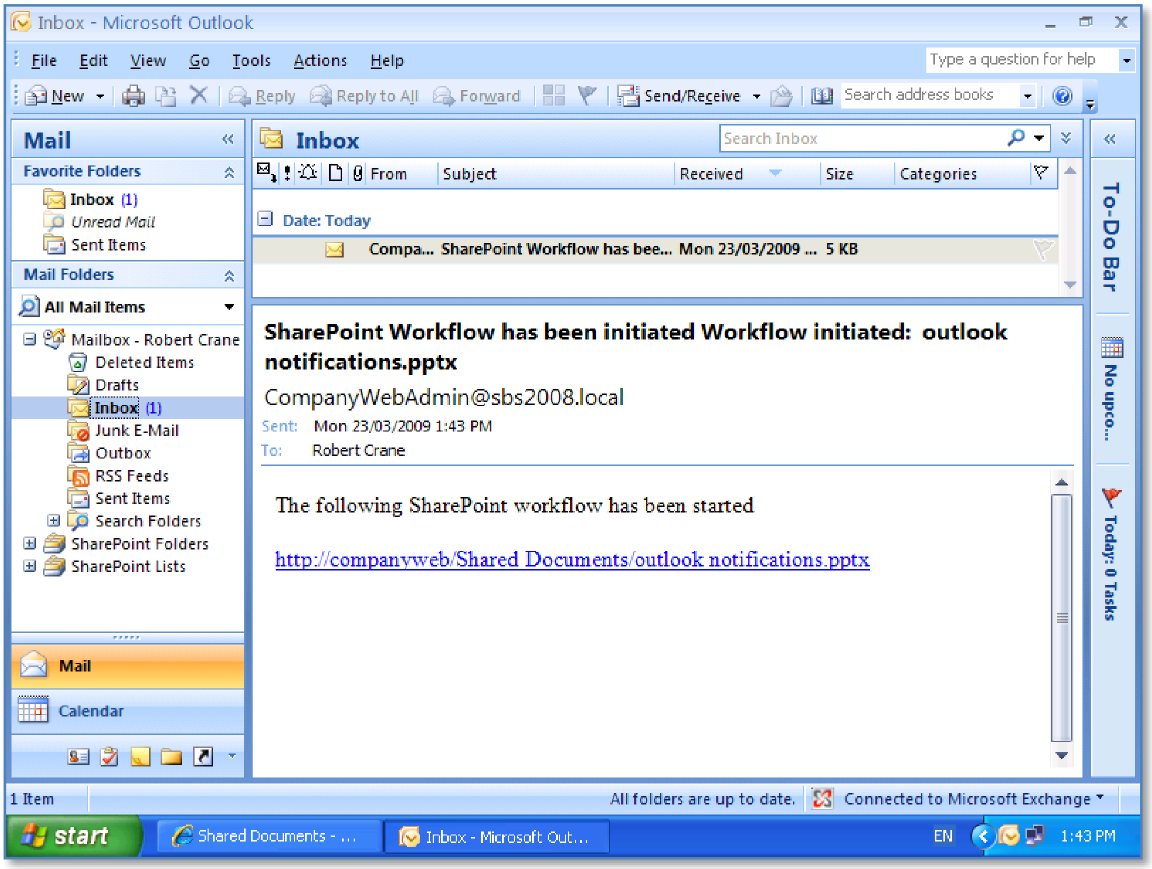
Once this information has been entered scroll down to the bottom of the screen and press the **OK** button to save the workflow.



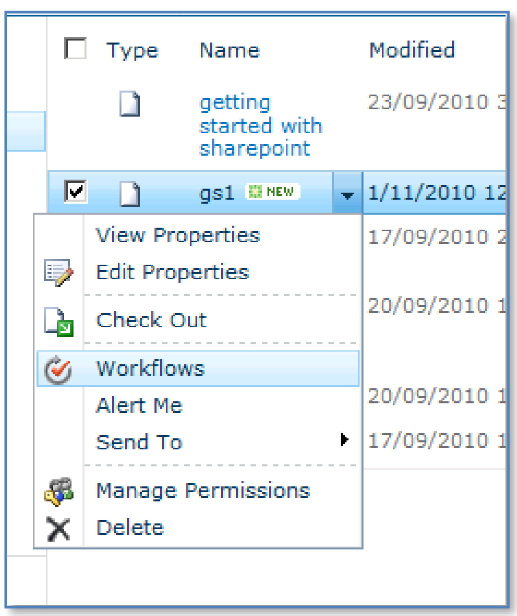
If we now return to the document library and upload a new document we will initiate the workflow just created.

When we do this we see the *Status* field with the default entry of *Created* as shown above. Once we press the **OK** button and save the document to the document library the workflow will commence since we configured it to automatically commence whenever a new item was created in the document library.

After saving the document to the document library we can now see it listed along with the workflow field (*Document Approval*) which indicates that the workflow is *In Progress*. We can also see that the *Status* of the item is set to *Created*.

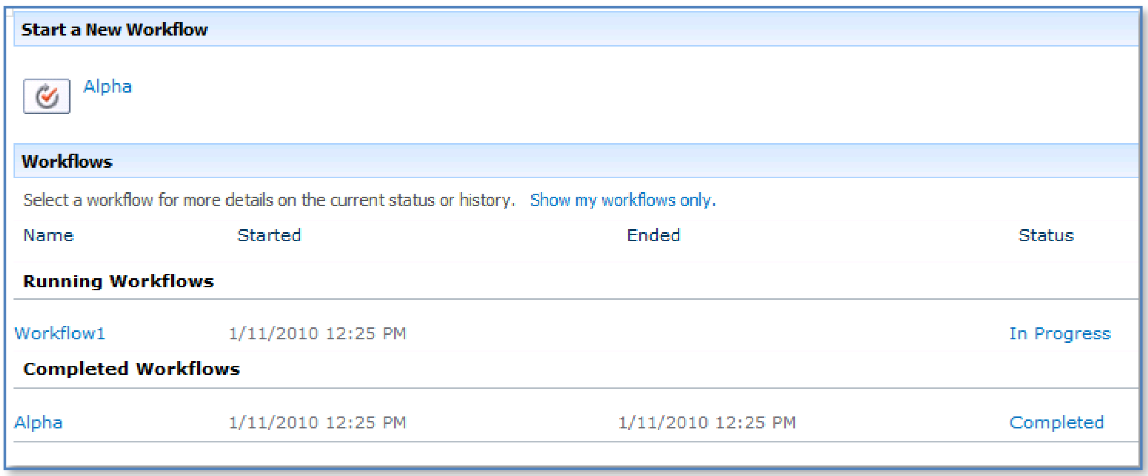


If we now examine the inbox of the person whom we nominated to receive the workflow initiated email alert when the workflow was initiated, we find the above email from SharePoint 2010. You will notice that the email has a link to the SharePoint 2010 document library to make access very easy.



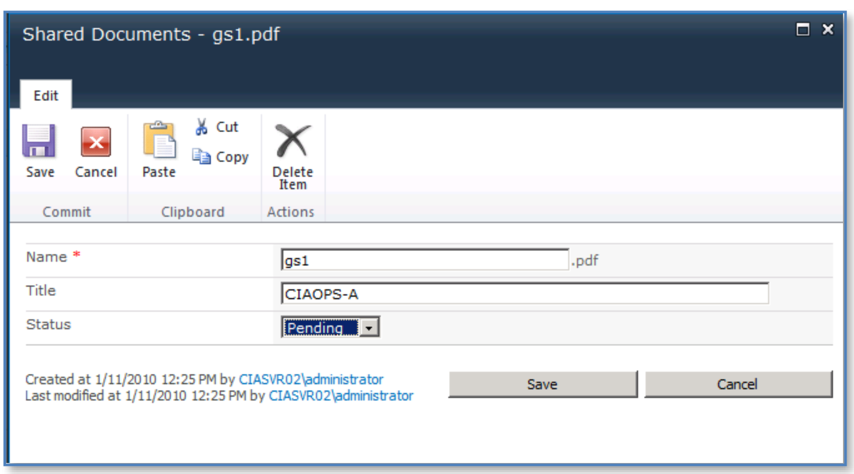
Returning to the document library we now see there is an additional menu item on the properties menu (the pull down arrow appears when you hover over the item in the document library). This *Workflows* item allows us to view the workflow process in more detail.

Select the item **Workflows** from the item's property menu.

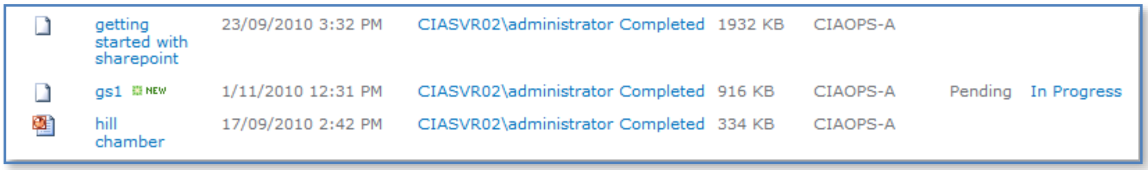


We can now see the details of the workflow for that item.

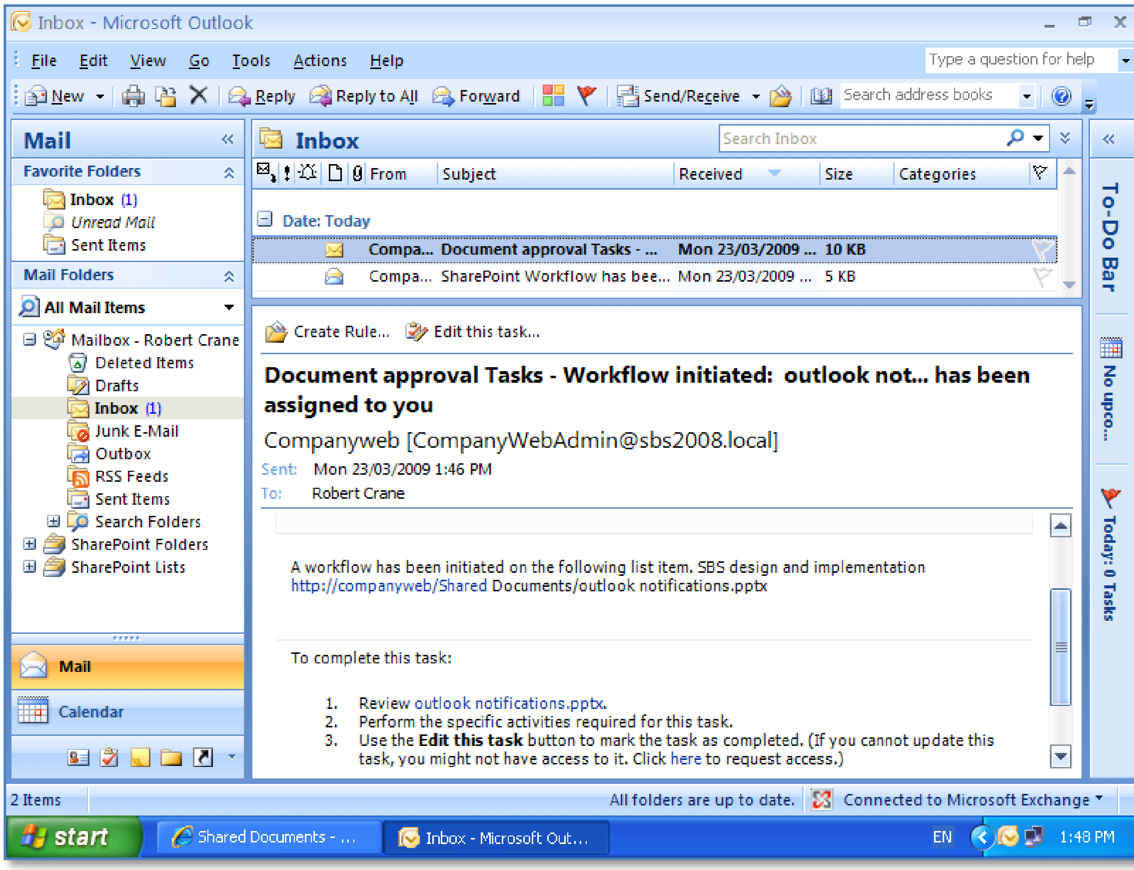
In this case we can see that the item is already running the *Workflow1* workflow and that it is *In Progress*.



If we now return to the file in our document library, view the properties of the item and then change the *Status* field from *Created* to *Pending* and select **OK** to save we will move the workflow from the initial stage to the next (or middle) stage of the workflow.

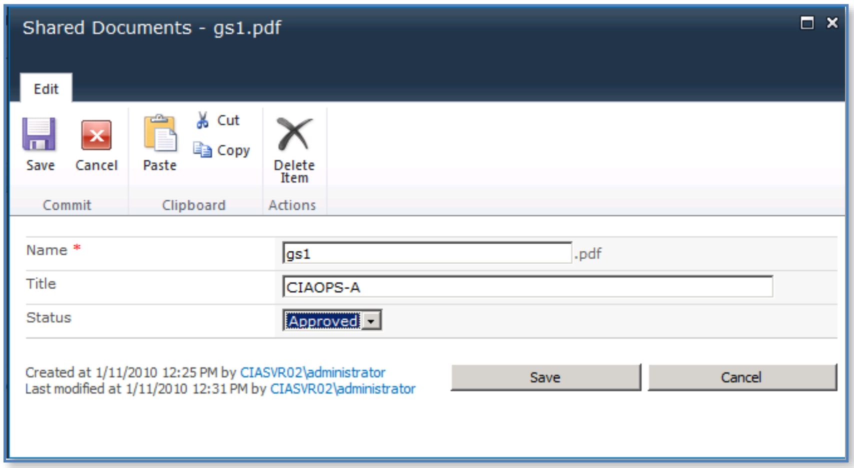


Once the document properties update is complete we see that the *Status* of the document has now changed to *Pending*. Also note that our workflow field, (*Document approval*), still shows as *In Progress* because the workflow still hasn't been completed.

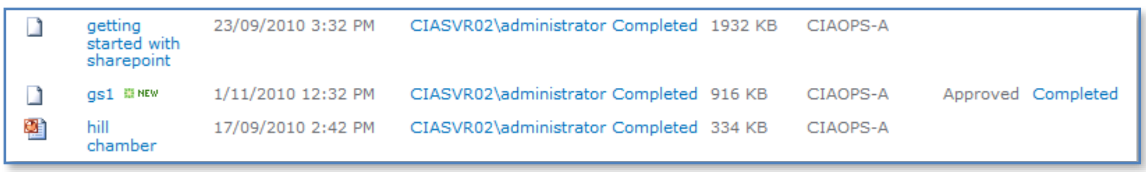


If we examine the inbox of the recipient of the email whom we configured to receive a task alert when the workflow entered its second (or middle) stage, we find an email similar to that shown above.

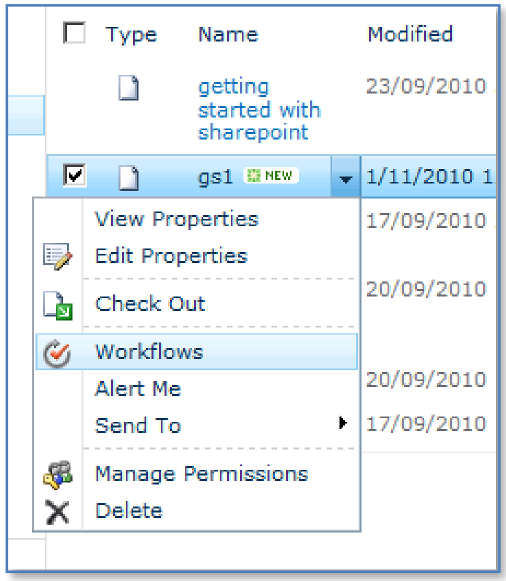
The email outlines the steps that must be taken to complete this task as well as links to relevant areas in the SharePoint 2010 site.



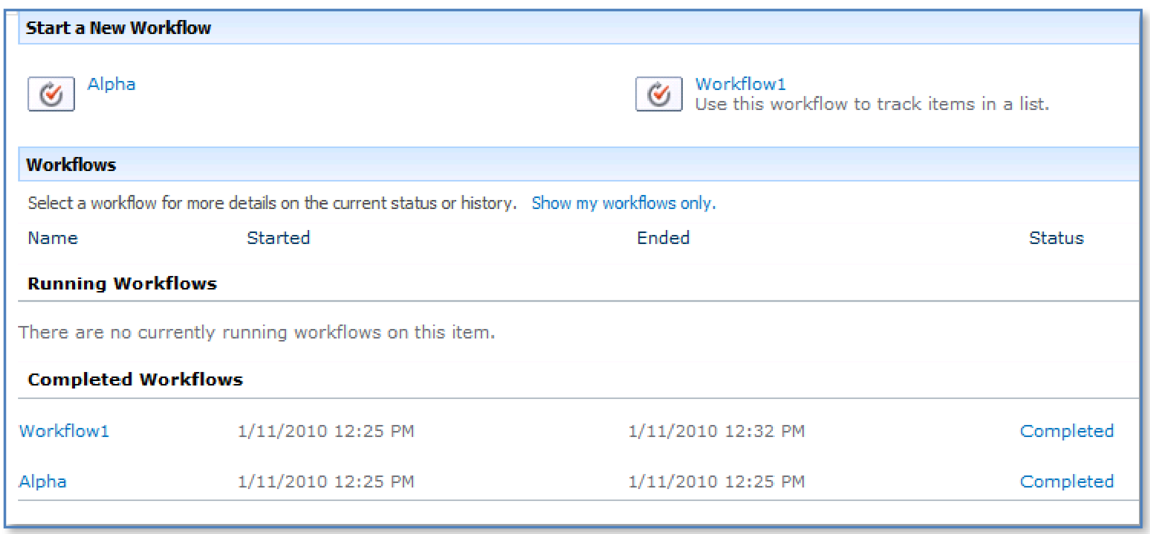
As part of this document approval process we return to the properties of the item in the SharePoint 2010 document library and change the *Status* field to *Approved* and press **OK** to update.



Once the document status has been updated you will be returned to the document library. You will now see that the workflow field, (*Document approval*), has changed to read *Completed*. This indicates that the workflow process for that document is now complete.

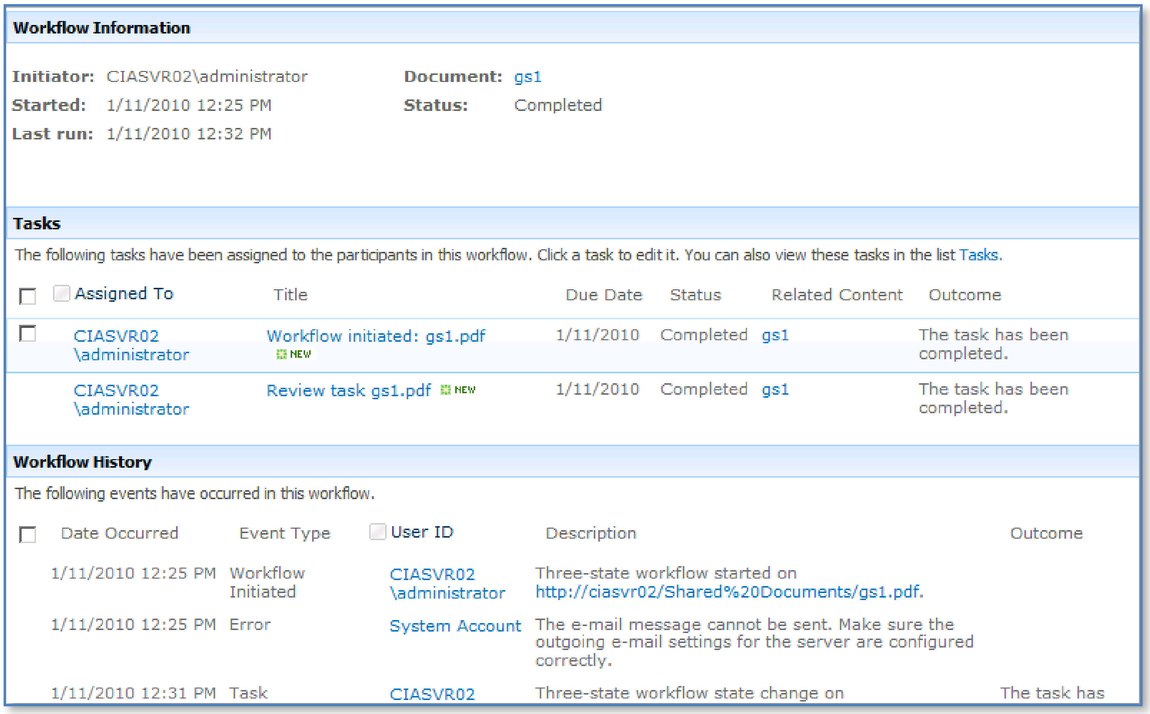


If you now select item properties for the item in the document library again and choose the *Workflows* item you will be able to view the properties of the workflow again.



At the top of the screen you will see that it is possible to initiate another workflow on this item (since the previous one is now complete). You will also notice that the status of the workflow says *Completed*.

To view the history of the workflow click on the workflow name, in this case *Document approval*, under the heading *Completed Workflows* at the bottom of the screen.



Workflow Information

Initiator: CIASVR02\administrator **Document:** gs1
Started: 1/11/2010 12:25 PM **Status:** Completed
Last run: 1/11/2010 12:32 PM

Tasks

The following tasks have been assigned to the participants in this workflow. Click a task to edit it. You can also view these tasks in the list Tasks.

Assigned To	Title	Due Date	Status	Related Content	Outcome
CIASVR02 \administrator	Workflow initiated: gs1.pdf	1/11/2010	Completed	gs1	The task has been completed.
CIASVR02 \administrator	Review task gs1.pdf	1/11/2010	Completed	gs1	The task has been completed.

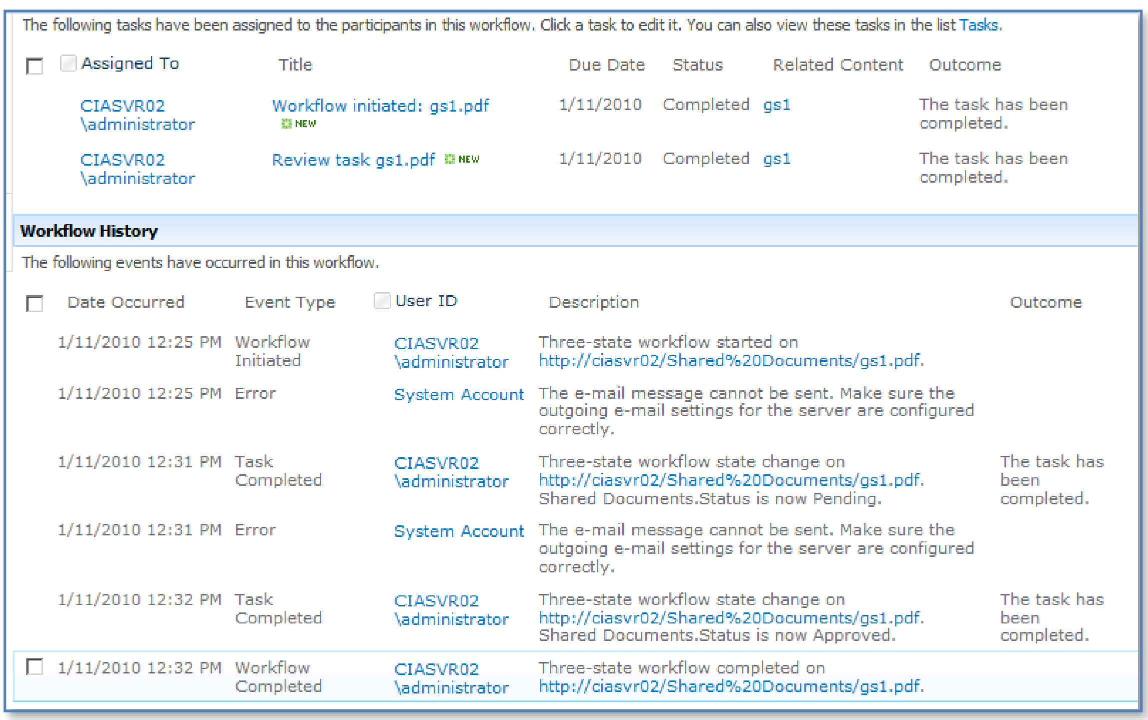
Workflow History

The following events have occurred in this workflow.

Date Occurred	Event Type	User ID	Description	Outcome
1/11/2010 12:25 PM	Workflow Initiated	CIASVR02 \administrator	Three-state workflow started on http://ciasvr02/Shared%20Documents/gs1.pdf.	
1/11/2010 12:25 PM	Error	System Account	The e-mail message cannot be sent. Make sure the outgoing e-mail settings for the server are configured correctly.	
1/11/2010 12:31 PM	Task	CIASVR02	Three-state workflow state change on	The task has

You can see the tasks that were assigned, their due dates as well as their status. You can click on the task names if required for more information.

Continue to scroll down the screen for more information.



The following tasks have been assigned to the participants in this workflow. Click a task to edit it. You can also view these tasks in the list Tasks.

Assigned To	Title	Due Date	Status	Related Content	Outcome
CIASVR02 \administrator	Workflow initiated: gs1.pdf	1/11/2010	Completed	gs1	The task has been completed.
CIASVR02 \administrator	Review task gs1.pdf	1/11/2010	Completed	gs1	The task has been completed.

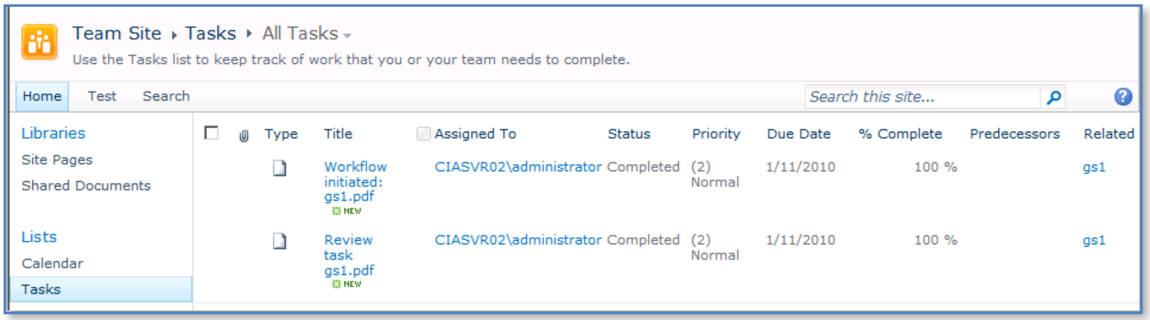
Workflow History

The following events have occurred in this workflow.

Date Occurred	Event Type	User ID	Description	Outcome
1/11/2010 12:25 PM	Workflow Initiated	CIASVR02 \administrator	Three-state workflow started on http://ciasvr02/Shared%20Documents/gs1.pdf.	
1/11/2010 12:25 PM	Error	System Account	The e-mail message cannot be sent. Make sure the outgoing e-mail settings for the server are configured correctly.	
1/11/2010 12:31 PM	Task Completed	CIASVR02 \administrator	Three-state workflow state change on http://ciasvr02/Shared%20Documents/gs1.pdf. Shared Documents.Status is now Pending.	The task has been completed.
1/11/2010 12:31 PM	Error	System Account	The e-mail message cannot be sent. Make sure the outgoing e-mail settings for the server are configured correctly.	
1/11/2010 12:32 PM	Task Completed	CIASVR02 \administrator	Three-state workflow state change on http://ciasvr02/Shared%20Documents/gs1.pdf. Shared Documents.Status is now Approved.	The task has been completed.
1/11/2010 12:32 PM	Workflow Completed	CIASVR02 \administrator	Three-state workflow completed on http://ciasvr02/Shared%20Documents/gs1.pdf.	

At the bottom of the screen you will find the workflow history providing you a complete audit trail of all the steps that have been taken.

All of this workflow information is available at any stage during the workflow process.

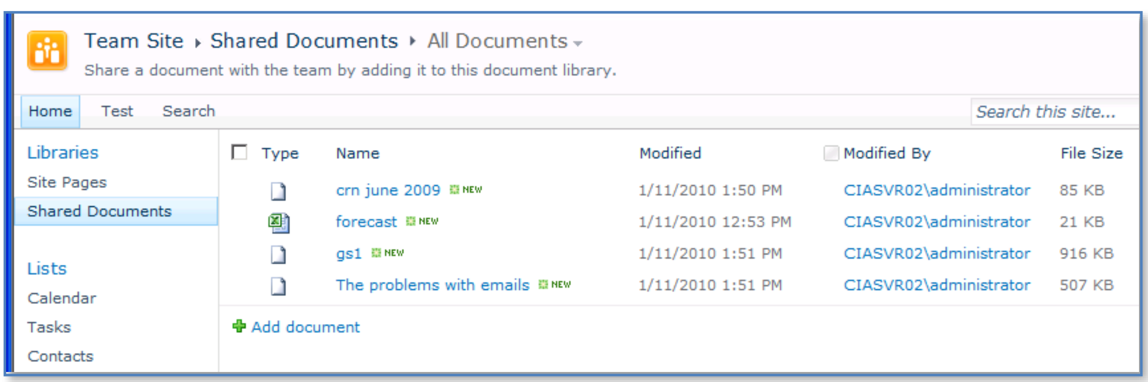


If you *View All Site Content* (in the upper left above the *Quick Start* menu) you will find a Task list corresponding to your workflow (in this case called *Tasks*) if required for review.

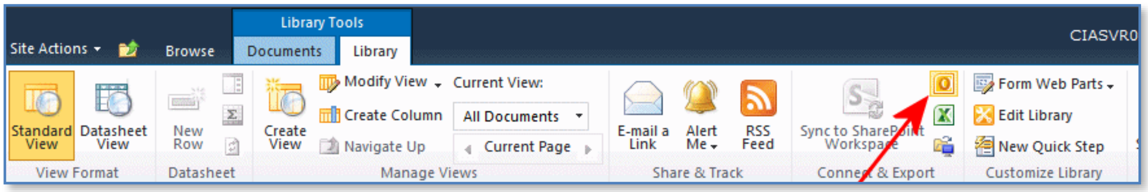
This tutorial has taken you through the steps of configuring and using a basic three state workflow that come standard with SharePoint 2010.

16.5 Taking files offline with Outlook 2010

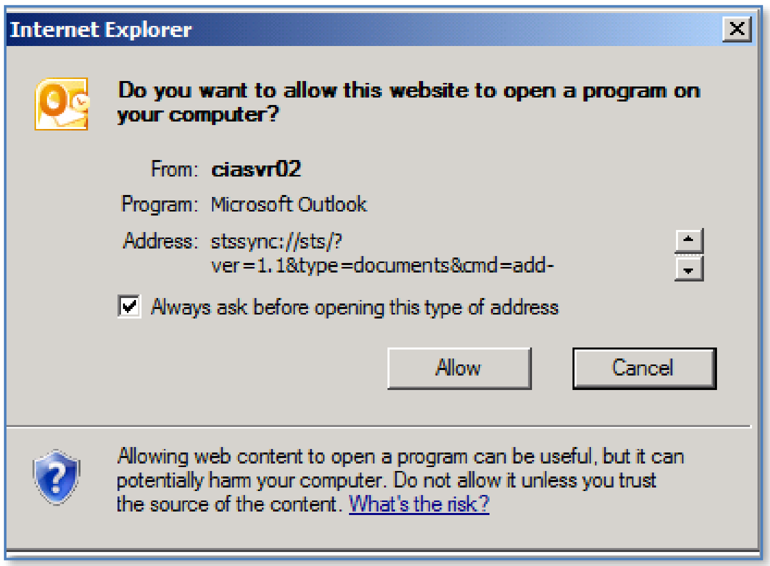
This tutorial is designed to explain how to take documents in SharePoint 2010 Document Libraries offline with Microsoft Outlook 2010. To complete this process you will require access to a SharePoint 2010 site via a web browser as well as Microsoft Outlook 2010 installed on your local system.



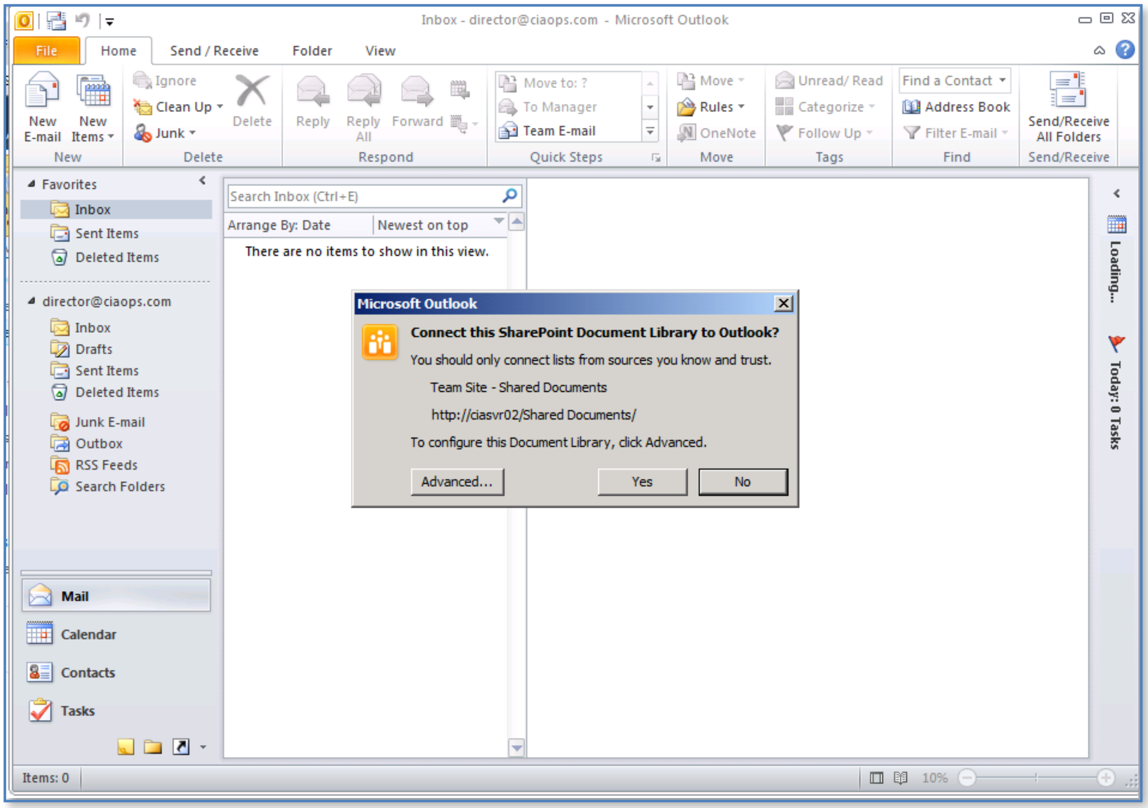
To take files from a SharePoint 2010 Document Library offline using Outlook 2010 firstly navigate to the Document Library in your SharePoint 2010 Site using a web browser.



From the ribbon menu item of the Document Library select **Library | Connect to Outlook** item. This button is to the right of the screen as indicated above.



You may be prompted with a security warning about allowing content from a web site. As this is a known good source select the **Allow** button to continue.

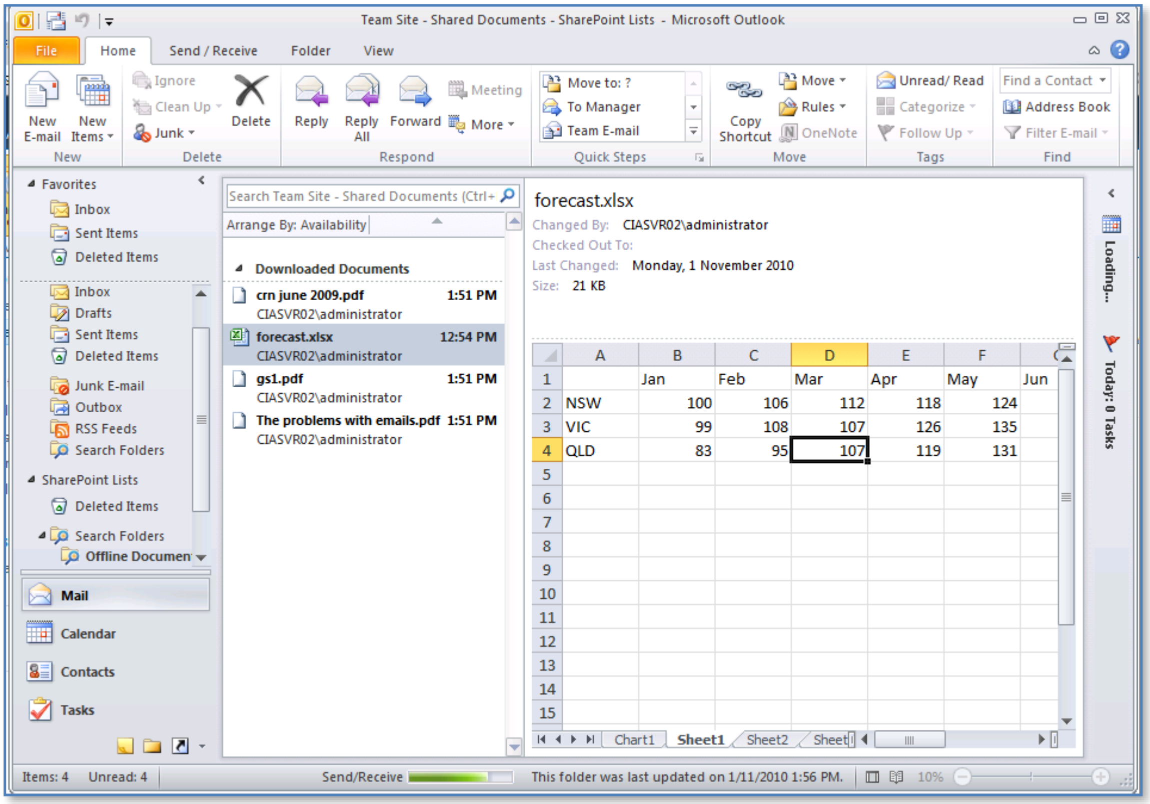


If not already open, Outlook 2010 will launch. You will then be presented with a warning window like that shown above asking whether you wish to allow Outlook 2010 to connect to this document library.

Press the **Yes** button to allow this connection.

If you press the *Advanced* button a new window appears with a number of additional options displayed that can be altered if desired.

Make any changes and press the **OK** button to continue.



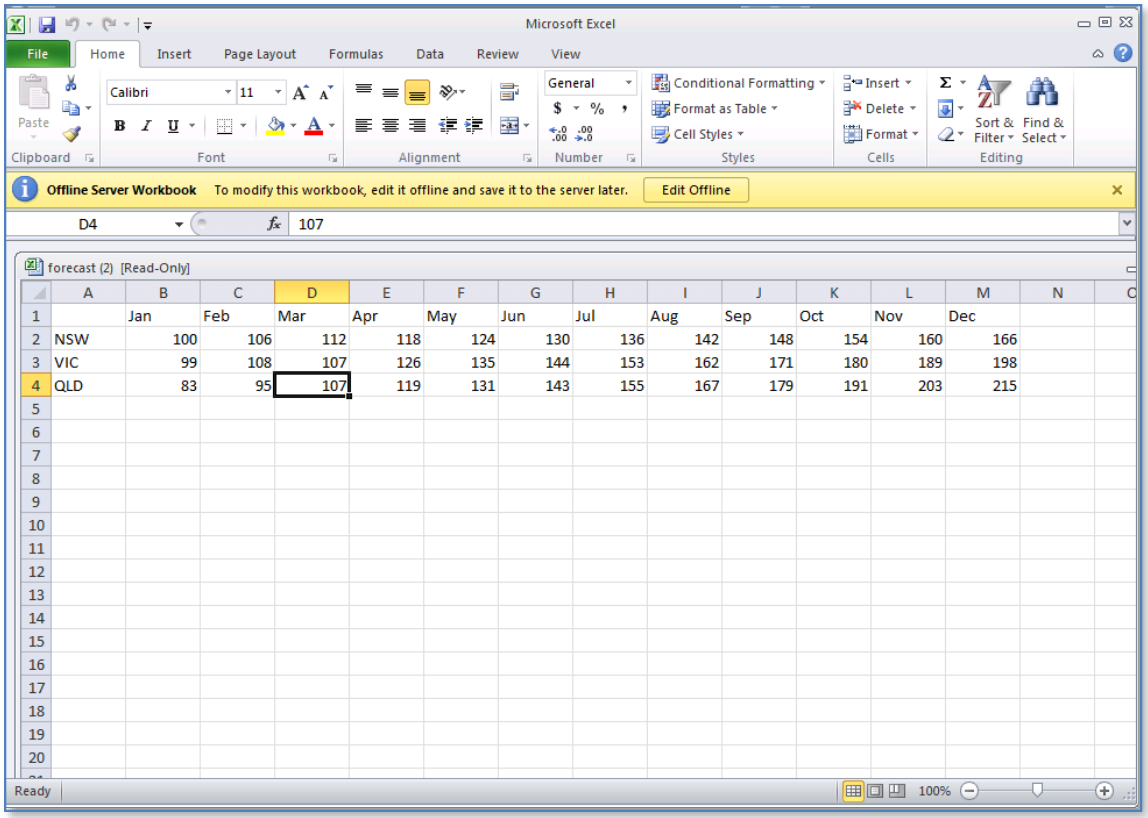
Once the SharePoint 2010 Document Library is connected you will see that Outlook 2010 creates an additional folder (if it did not already exist) called *SharePoint Lists* under the current mail folders on the left of the screen. Underneath this folder you will find your linked SharePoint list (in this case *Shared Documents*).

If you click on this *SharePoint List* in Outlook 2010 you will see a list of the documents in the SharePoint 2010 document library appear as items. Selecting any of these items will display a preview of that file (provided the appropriate file viewer is available in Outlook 2010).

You can open an item in the list by **double clicking** on it.

You will normally be prompted as to whether you wish to open the file since the source may be un-trusted to the local machine.

In this case select the **Open** button to continue.



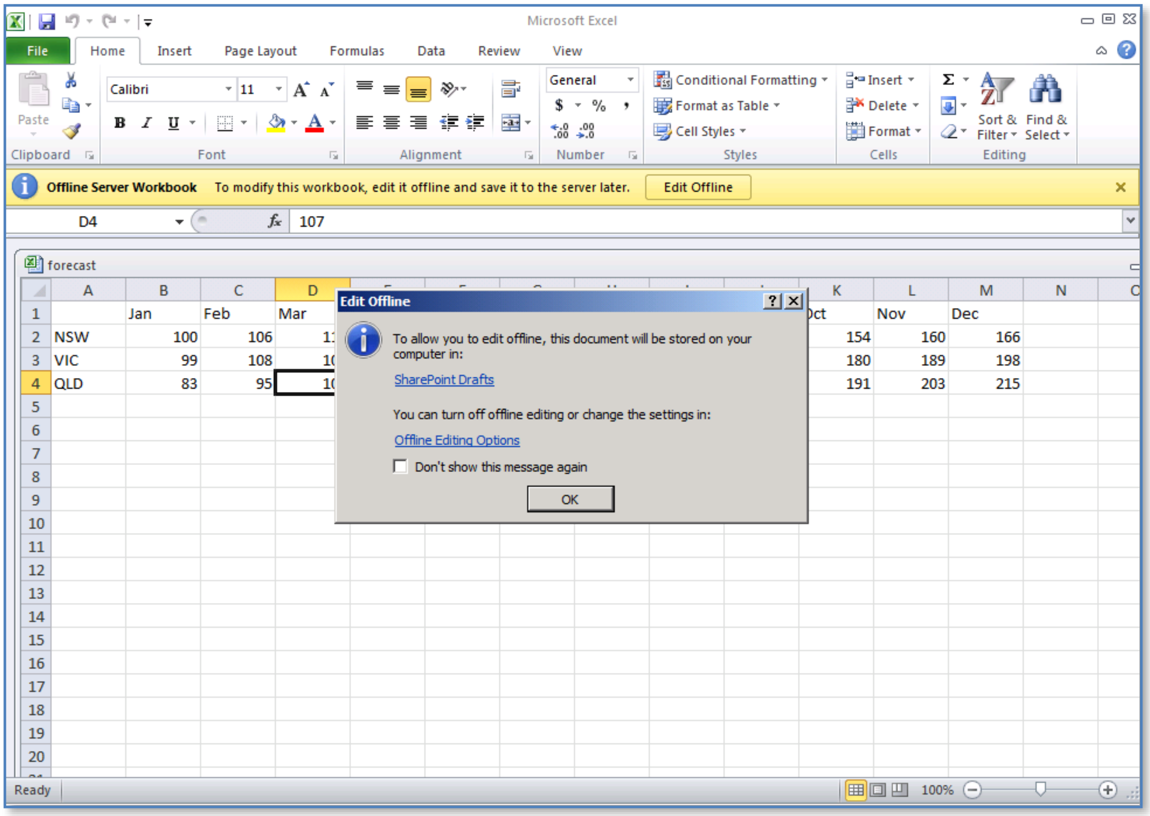
	A	B	C	D	E	F	G	H	I	J	K	L	M
1		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2	NSW	100	106	112	118	124	130	136	142	148	154	160	166
3	VIC	99	108	107	126	135	144	153	162	171	180	189	198
4	QLD	83	95	107	119	131	143	155	167	179	191	203	215

The document will now open. Because the document opened is an *Excel* document it will open in the version of *Excel* we have on our local machine. A document will not open on the local machine unless the correct program to open that file is installed.

When opened in *Excel* you will notice a message bar, just below the ribbon menu that says:

Offline Server Document. To modify this document, edit it offline and save it to the server later.

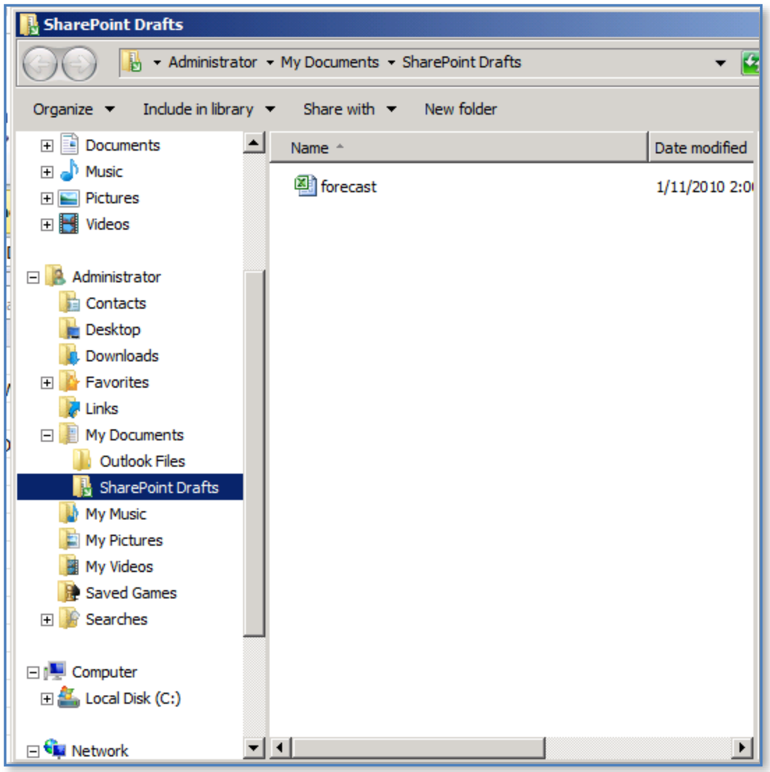
You will also notice an *Edit Offline* button to the right.



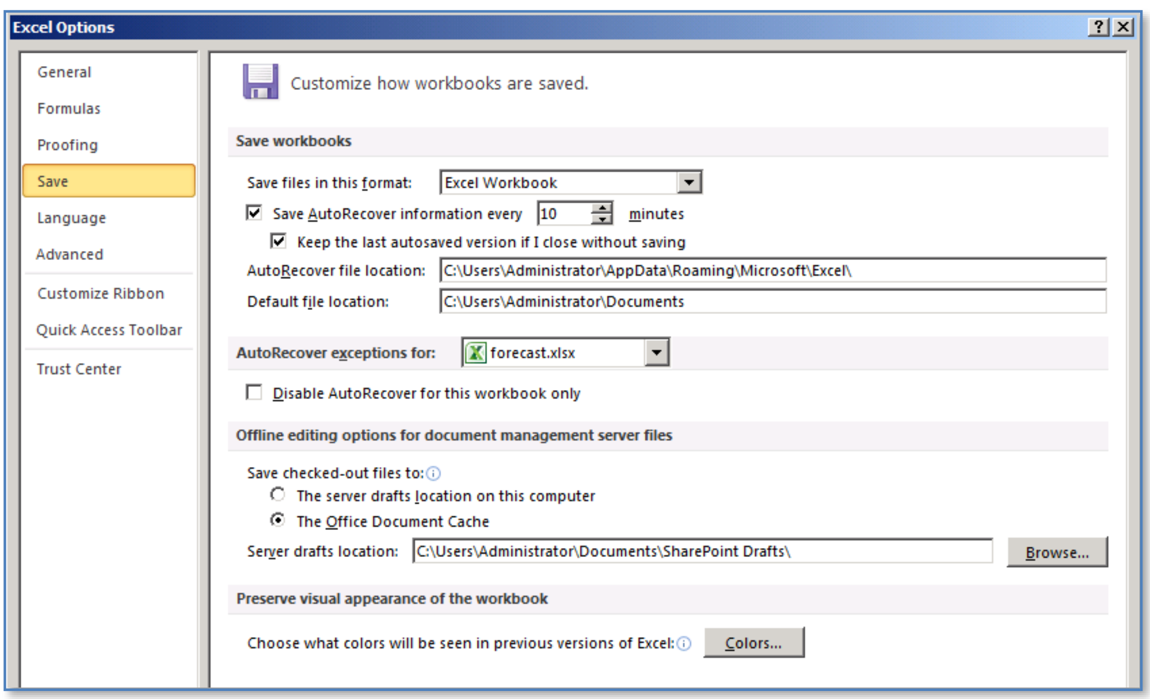
If you wish to edit the document press the **Edit Offline** button.

A message like shown above will be displayed indicating that a local copy of the document will be stored in the *SharePoint Drafts folder* on the local machine. You will also be informed that this setting can be altered by changing the *Offline Editing Options* in *Excel*.

Press the **OK** button to continue.



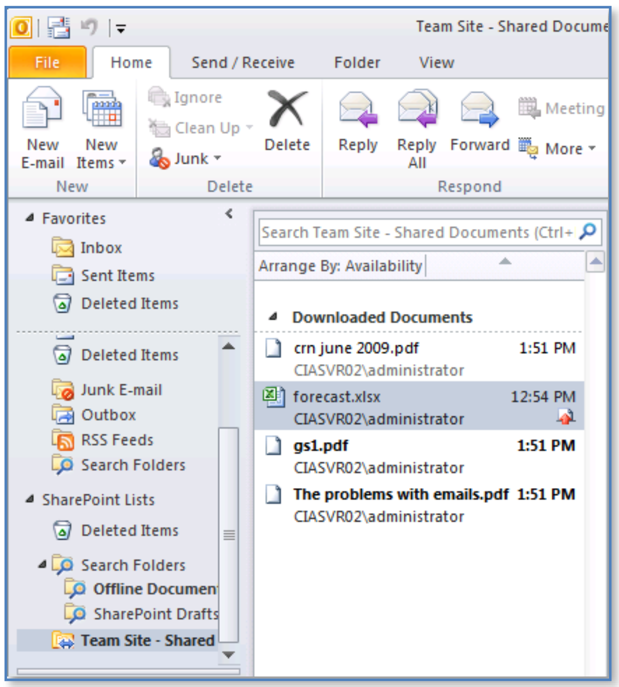
The location of the SharePoint Draft folder by default is *C:\users\<current_user>\My Documents\SharePoint Drafts* as shown above.



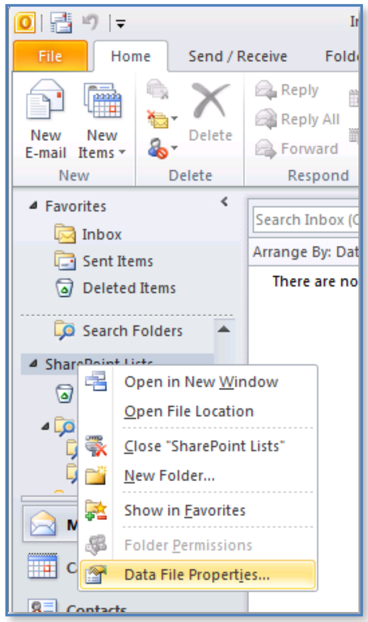
You can alter the offline *Excel* options either by clicking the hyperlink shown in the previous window.

When you do you will see a window similar to that displayed above. The middle section on the right displays the offline editing options which can be changed if desired.

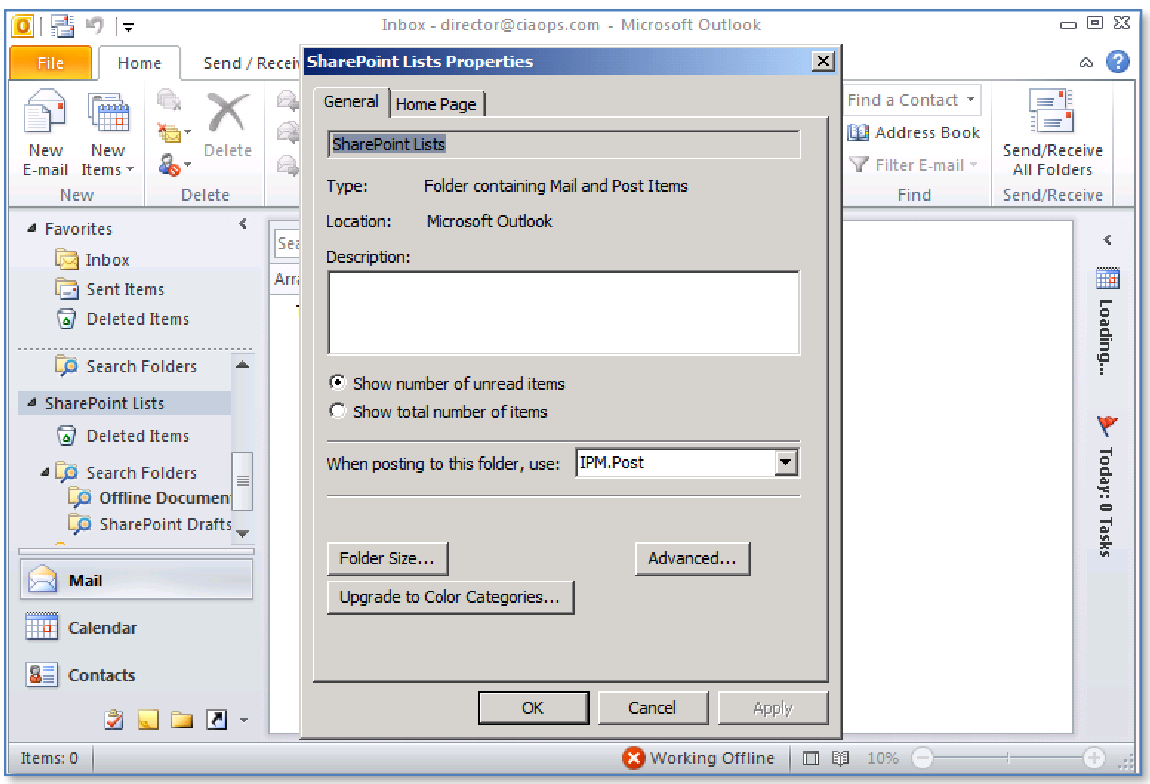
After you finish editing the document and close it,



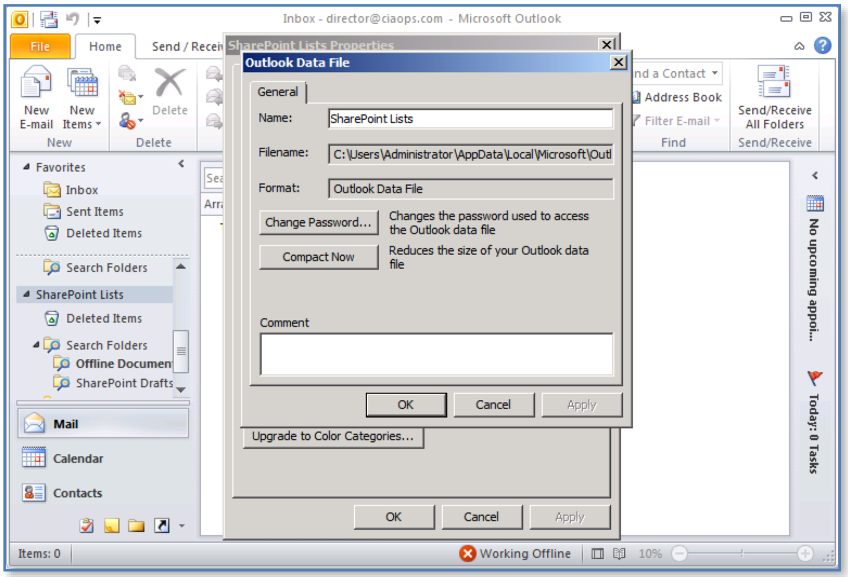
You will now see in a small icon in the bottom right of the item in Outlook 2010 as well a message window in the document preview basically telling you that the changes made to the document only reside on the local machine and have not been updated to the SharePoint 2010 Document Library. This is typically because the machine is now working in an ‘offline’ state, not connected to the original SharePoint 2010 Document Library.



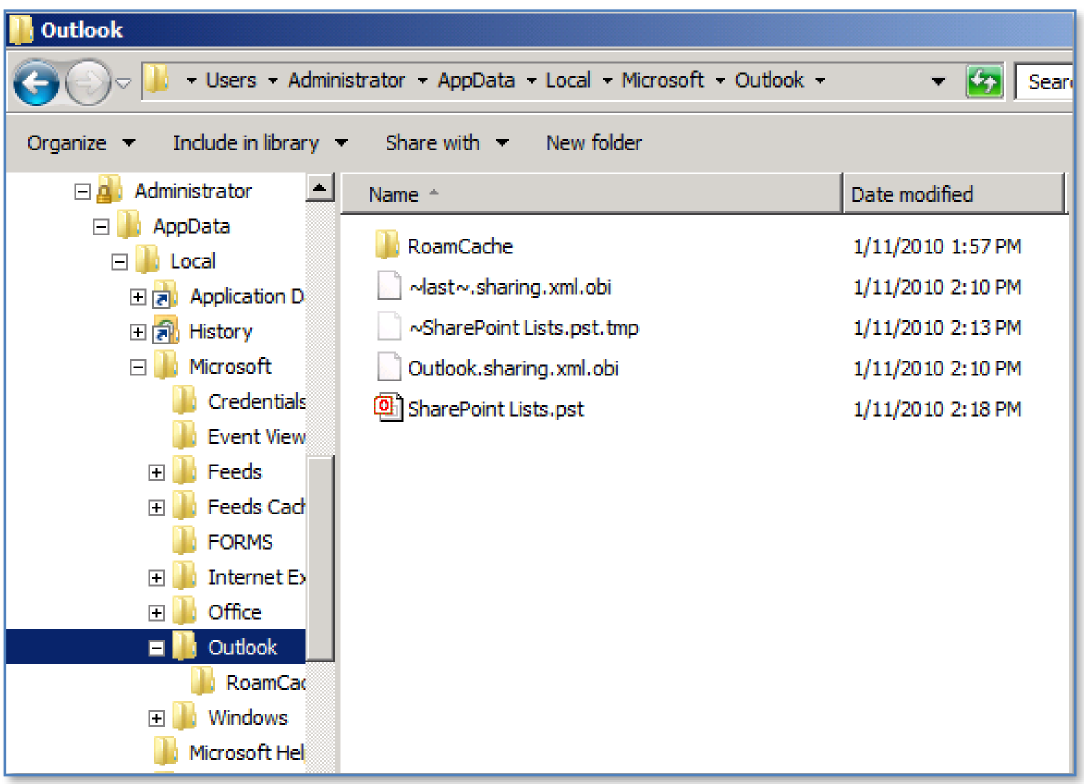
The actual SharePoint Lists folder in Outlook 2010 is merely a PST file saved on the local workstation. You can determine the location of this PST by **right mouse clicking** on the *SharePoint Lists* item in Outlook 2010 and then selecting **Properties** from the menu that appears.



Select the Advanced **button**.



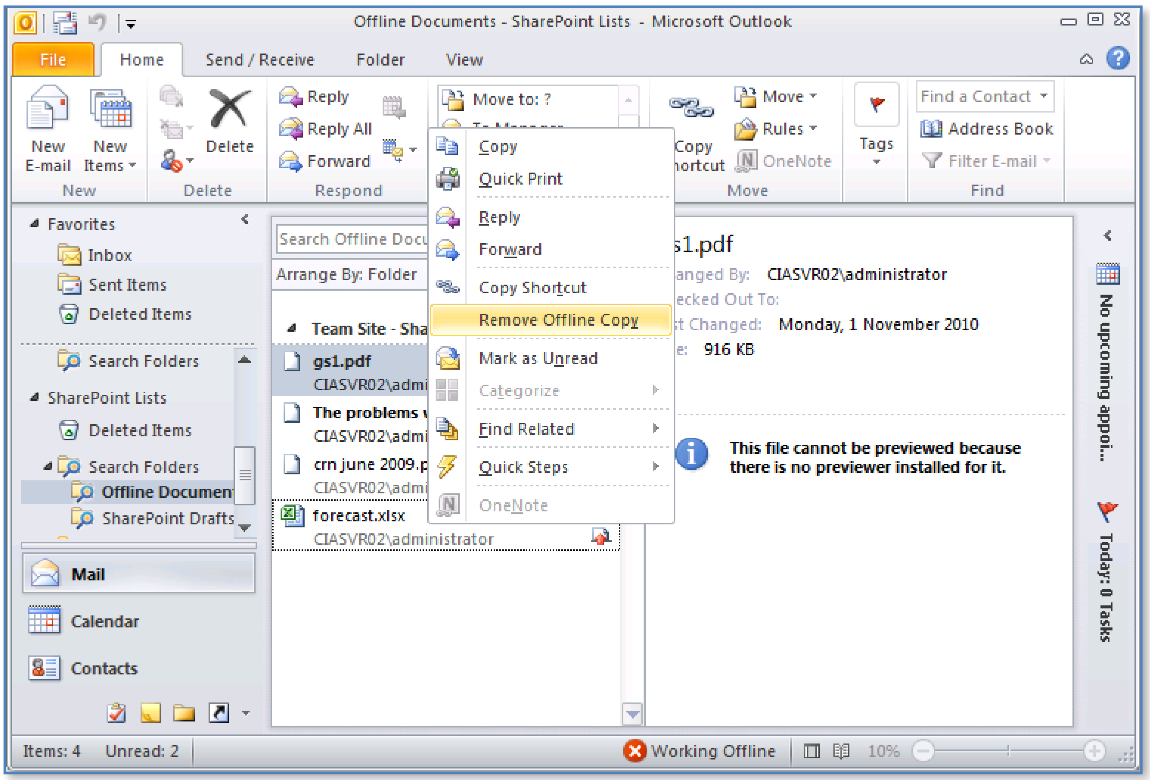
In this case you can see that SharePoint Lists item is a *Personal Folder File* format (i.e. PST) and by default its location is *C:\users\<current_user>\AppData\local\Microsoft\Outlook*.



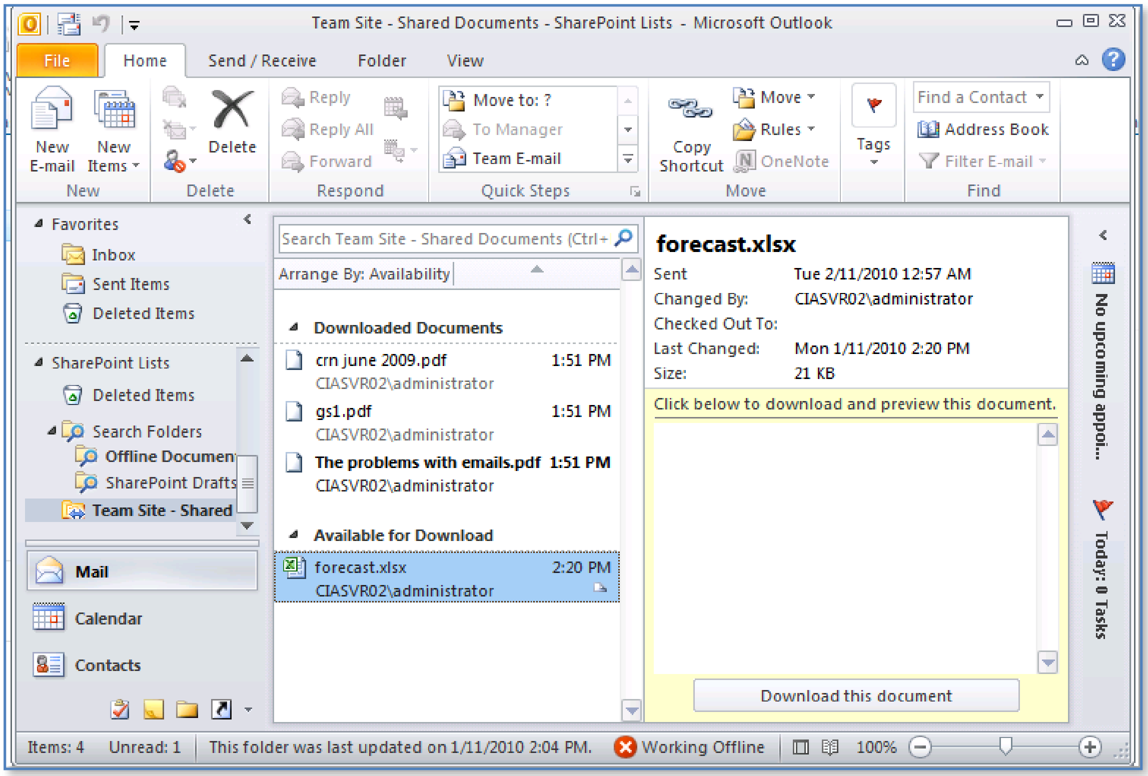
If you view this location with the Windows file manager you can see the .PST file (in this case *SharePoint Lists.pst*).

Inside this PST file is initially kept a full copy of every document in your SharePoint 2010 Document Library. If you wish to connect to a large document library it could result in a large PST file being created on the local system.

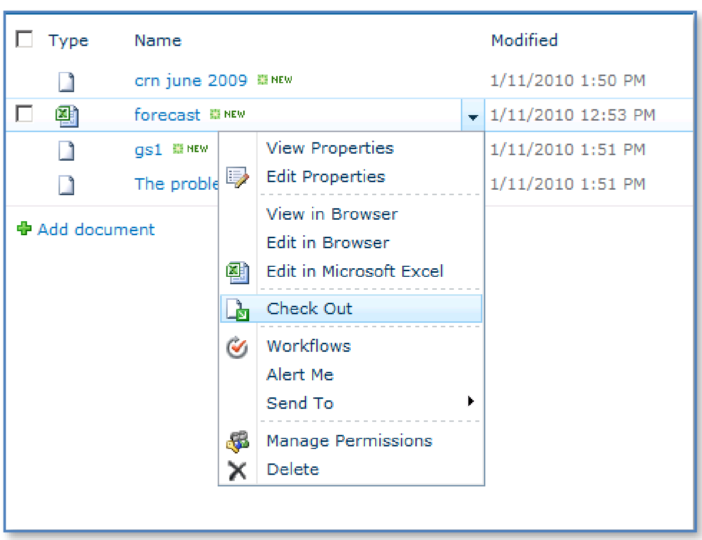
It is also important to note that while the offline files remain read only they reside inside this PST. When you elect to edit them locally a copy is also stored in the *SharePoint drafts folder* also on the local machine as shown previously.



It is possible to remove the offline copy of the file from the local PST file by **right mouse clicking** on the item and selecting **Remove Offline Copy** from the menu that appears.



After doing this you will no longer see a preview of that file. If you wish to have an offline copy for viewing simply click the **Download this document** button to copy that file from the SharePoint 2010 document library back to the local .PST file again.

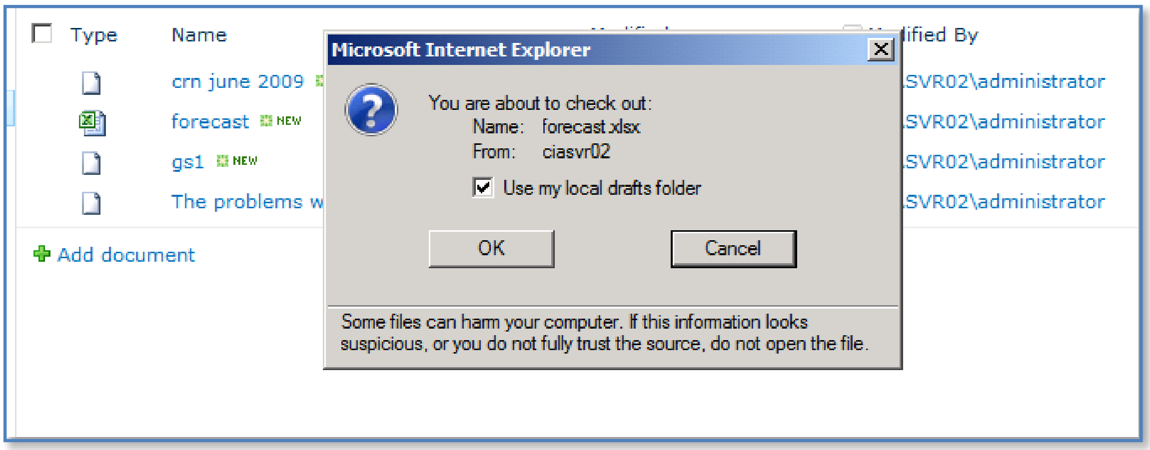


If you connect to a SharePoint 2010 document library in Outlook 2010, subsequently take it offline and edit documents offline, you may face the issue of document version conflicts when you try and update a document to the SharePoint 2010 Document

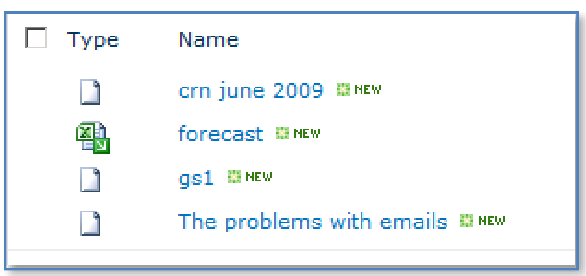
Library upon return. This is because another person may have already updated that document in your absence.

Any such document version conflicts will need to be handled by the document application software.

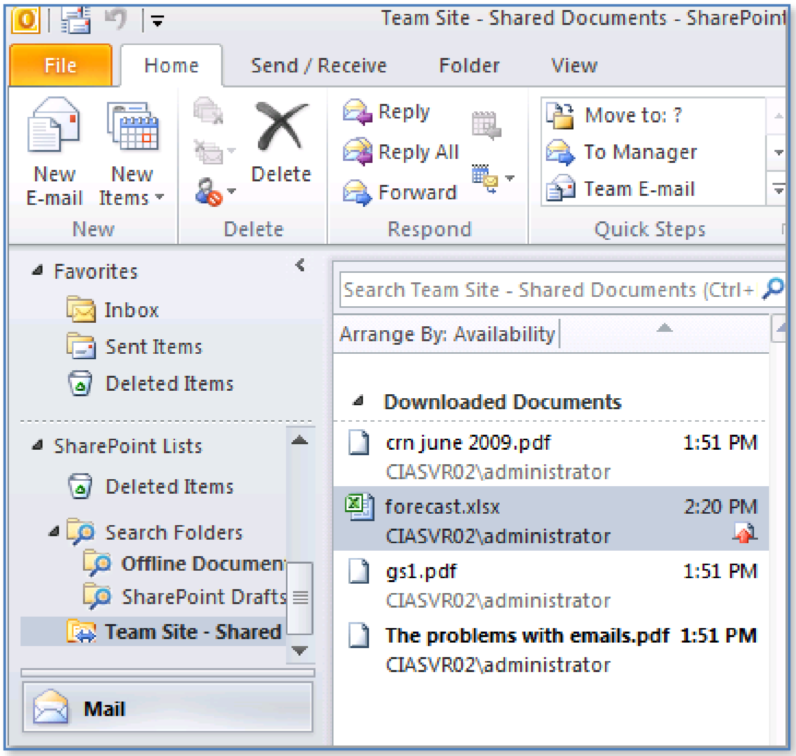
To prevent document version conflicts you should ensure any documents you wish to take offline for editing are checked out in the document library beforehand. This checkout process can only be done via a browser in the SharePoint 2010 Document Library and not via Outlook 2010. Simply select the **options arrow** to the right of the document name and select **Check Out** from the menu that appears.



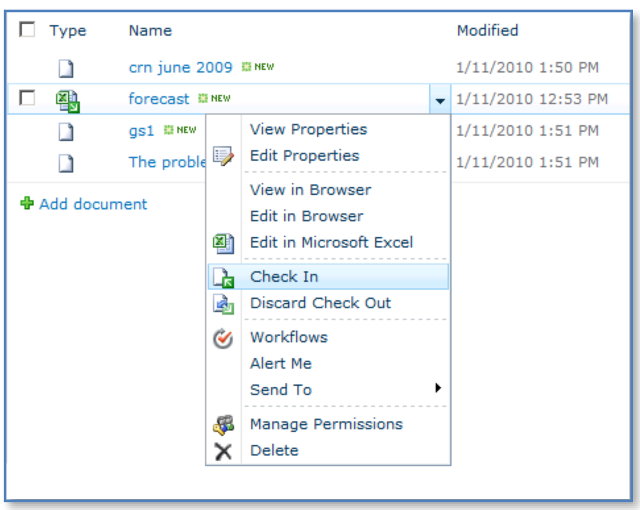
When you do a check out you will be prompted whether you wish to use the local drafts folder. This again stores a copy of the file in your *SharePoint Drafts folder* as detailed previously. If you elect not to use the local draft folder, a copy will be made anyway when you elect to edit the document after opening it in Outlook 2010.



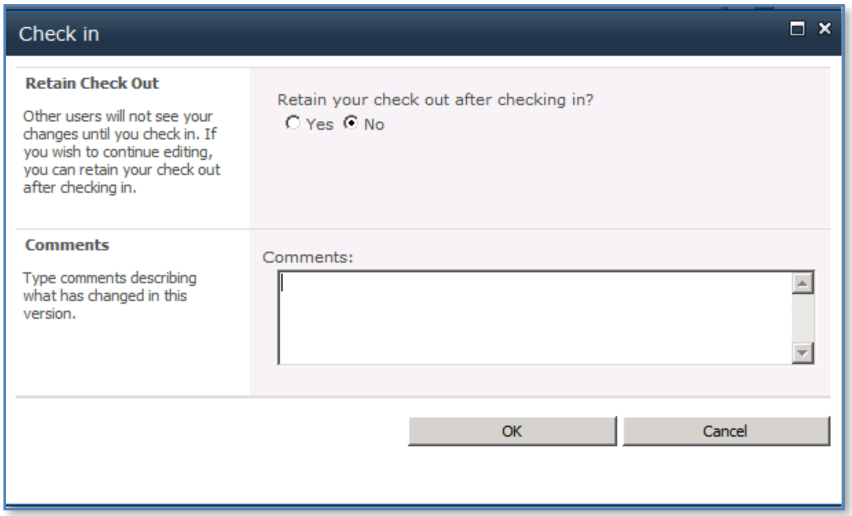
When a document is checked out from a document library the *type icon* appears with a little green arrow in the bottom right when viewed in a web browser. In this mode any other user will only be able to view this file and not make changes until the file has been checked back in.



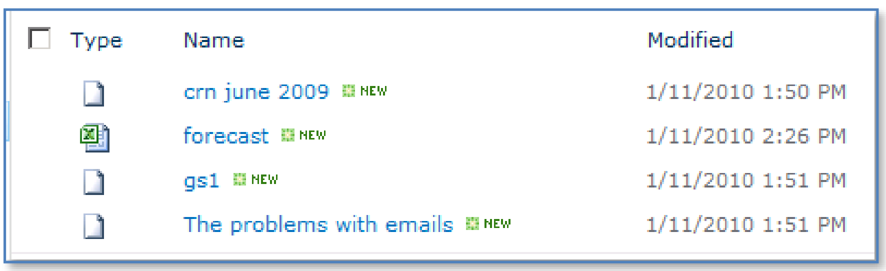
After the file has been checked out, and in this case saved to the local drafts folder, you will again see the icon in the bottom right of the item in Outlook 2010 and the message window in the document preview telling you that the document is currently on the local machine.



When the local machine has been returned 'online' and any offline documents have been updated you need to return to the SharePoint 2010 Document Library via a web browser and check in any documents that were previously checked out so other people can edit them.



When you check in a document you will be prompted as to whether you wish the document to remain checked out and enter any comments about the version you wish. Normally, you will select the option for **Yes** to check the document back into the library and press the **OK** button to continue.



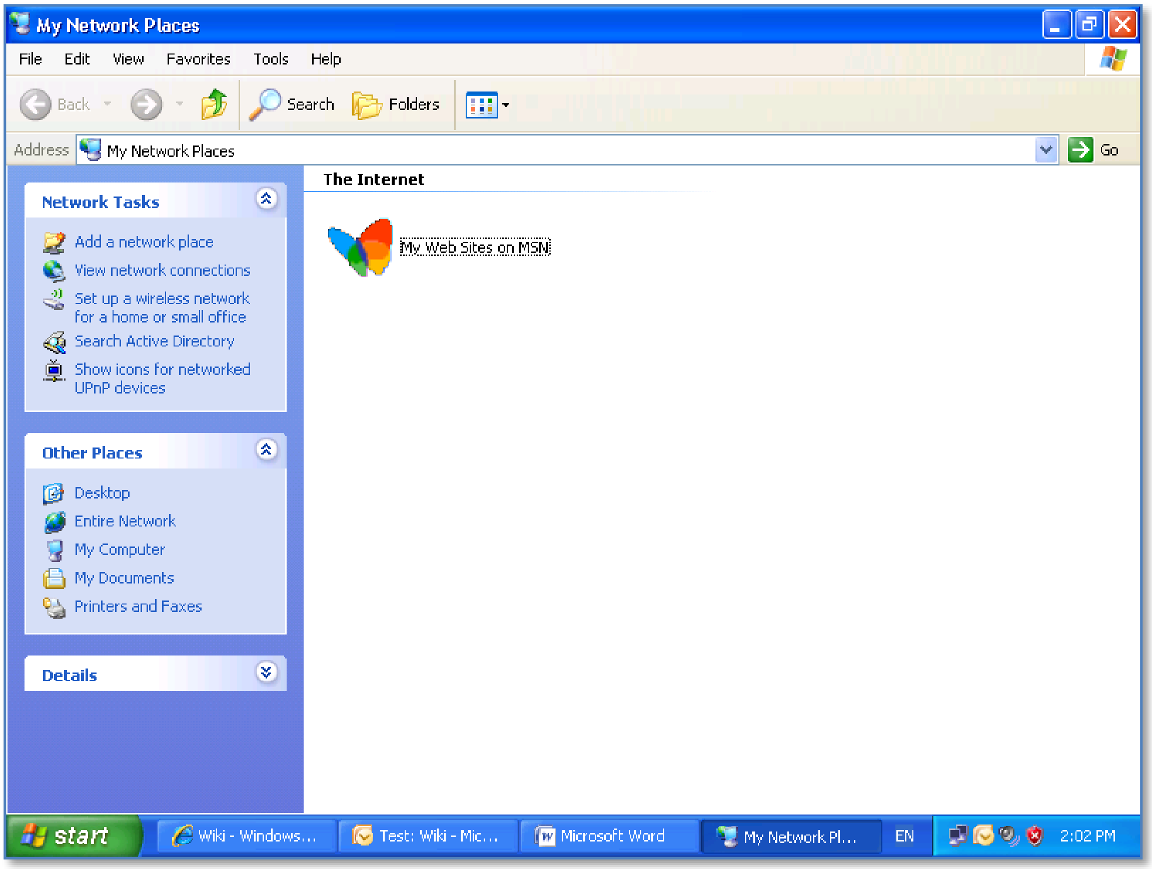
Once the document has been checked back in you will no longer see a green arrow in the bottom right of the document type icon.

If you also return to Outlook 2010, you will no longer see any indication that there is a local edited copy.

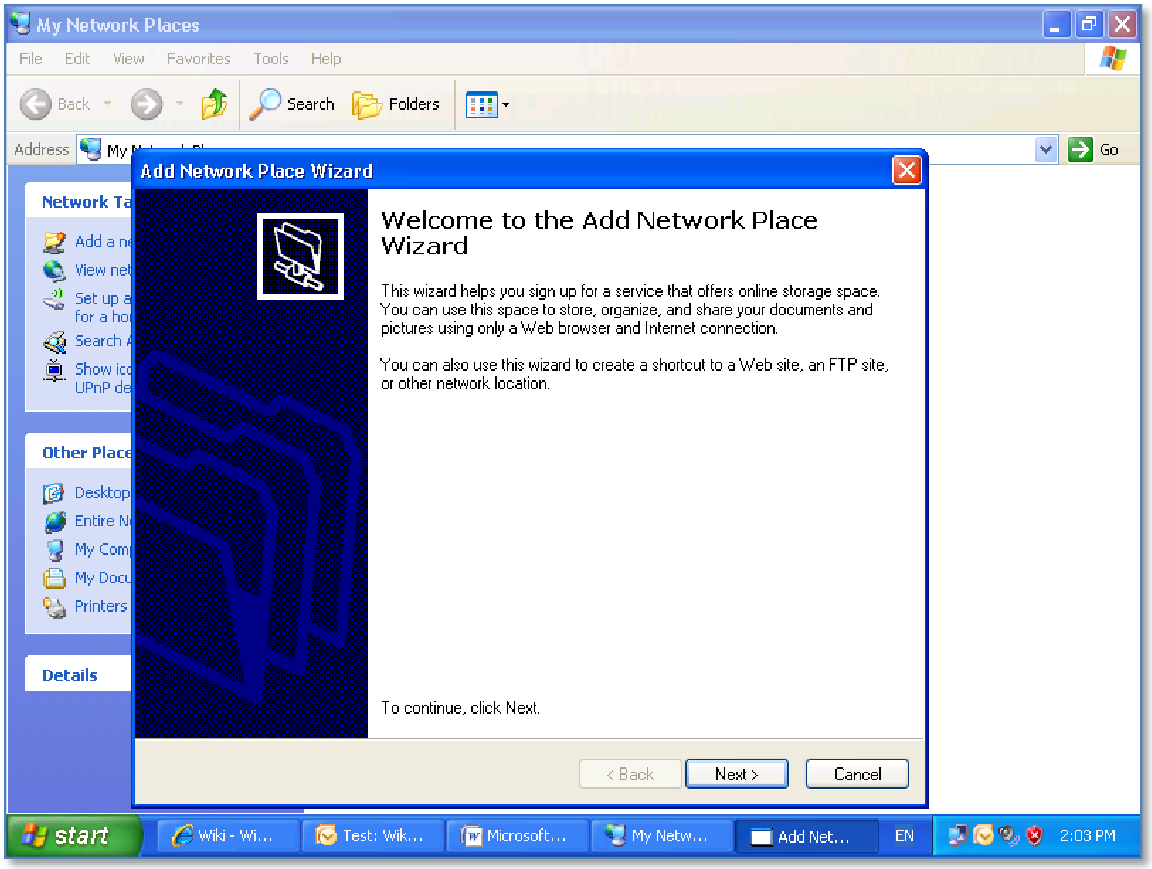
16.8 Mapping a Network Place

This tutorial will cover how to create a standard Windows network place that points to a SharePoint 2010 Document Library. You will need access to a local workstation and need to know the address of the SharePoint 2010 Document Library you wish to directly map to.

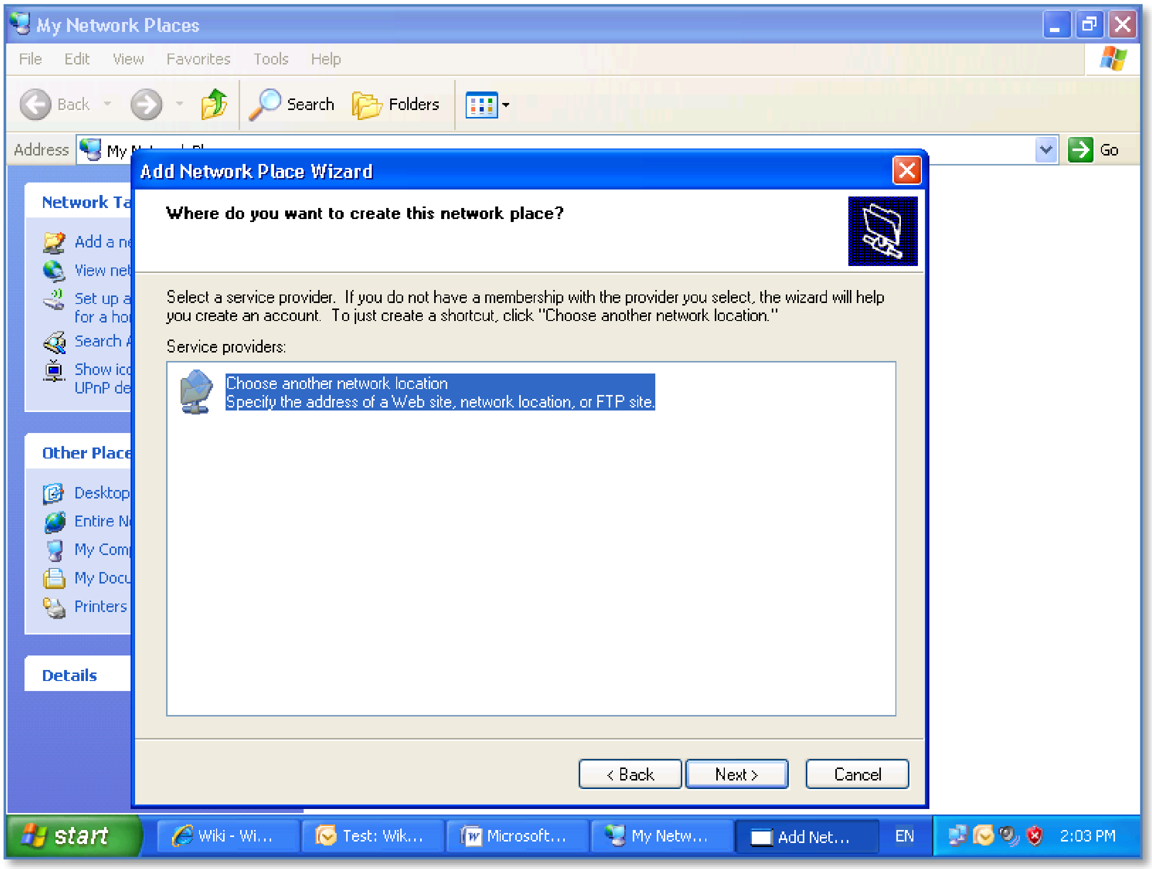
On a local workstation select the option to view Network Places after logging in as the required user.



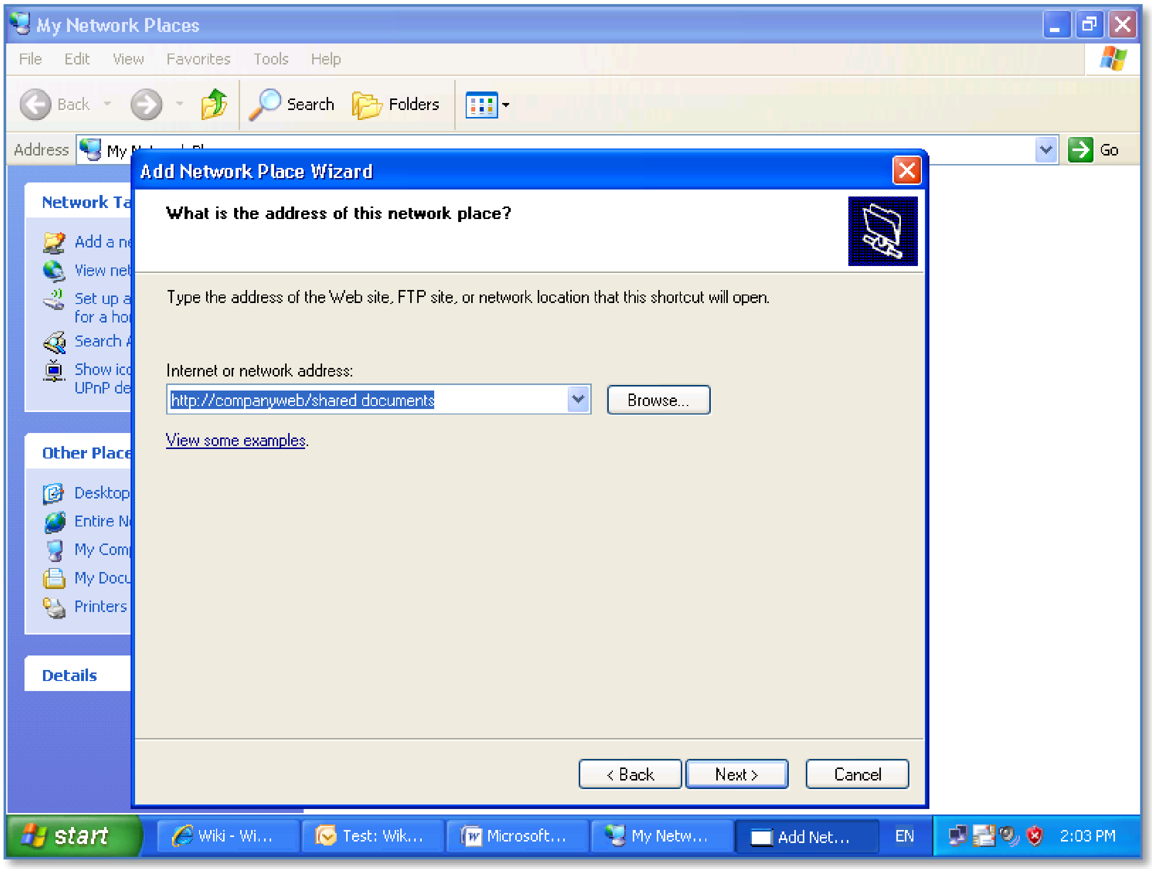
Select the option to **Add a Network Place**.



In this case click **Next** to continue with the wizard.

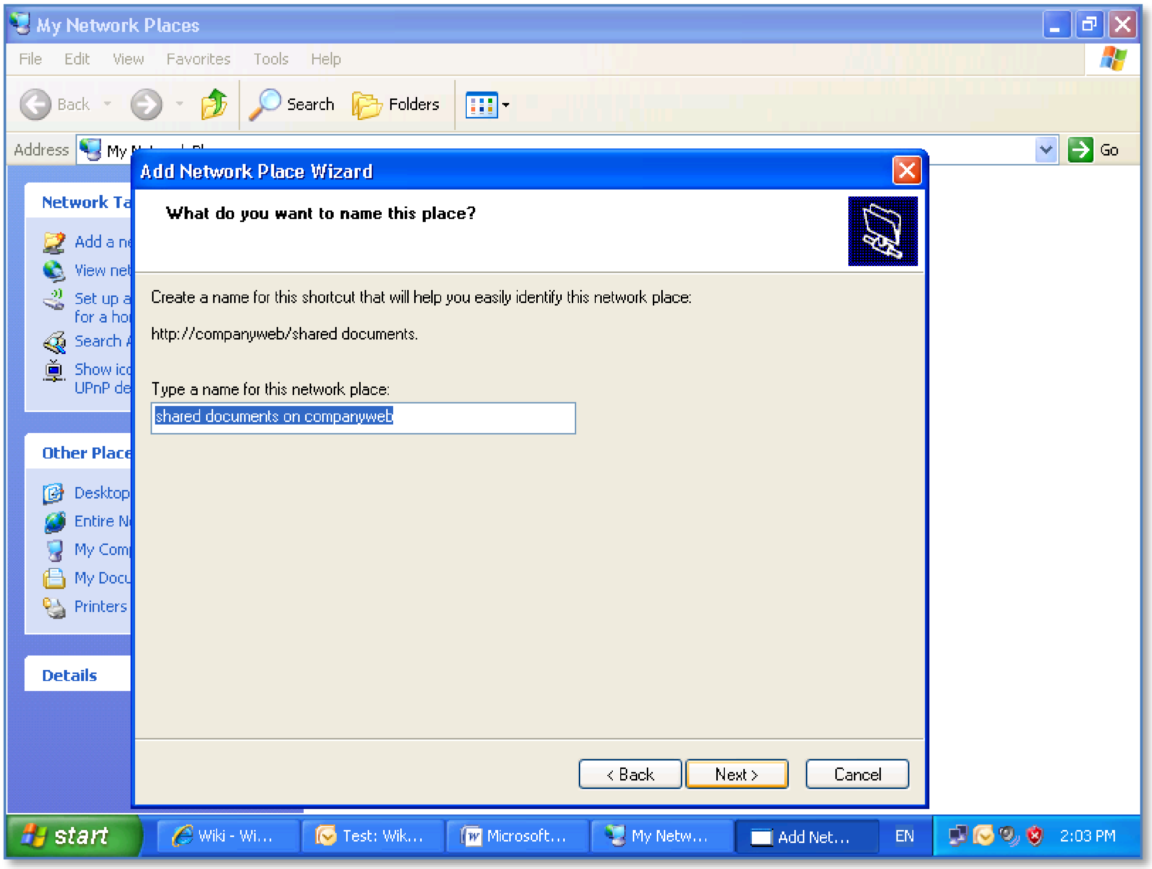


Click **Next** again to continue.

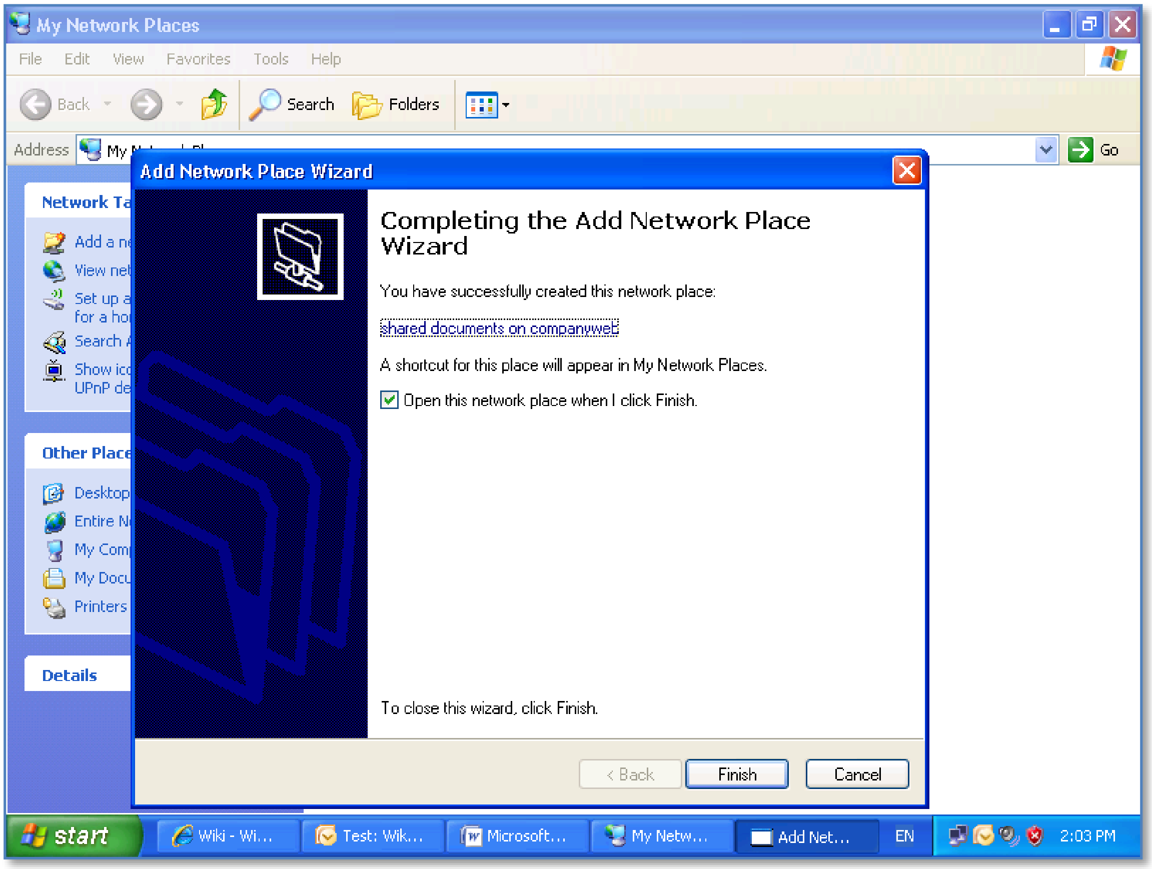


Enter the address of the SharePoint 2010 Document Library, in this case *http://companyweb/shared documents.*

Press **Next** to continue.

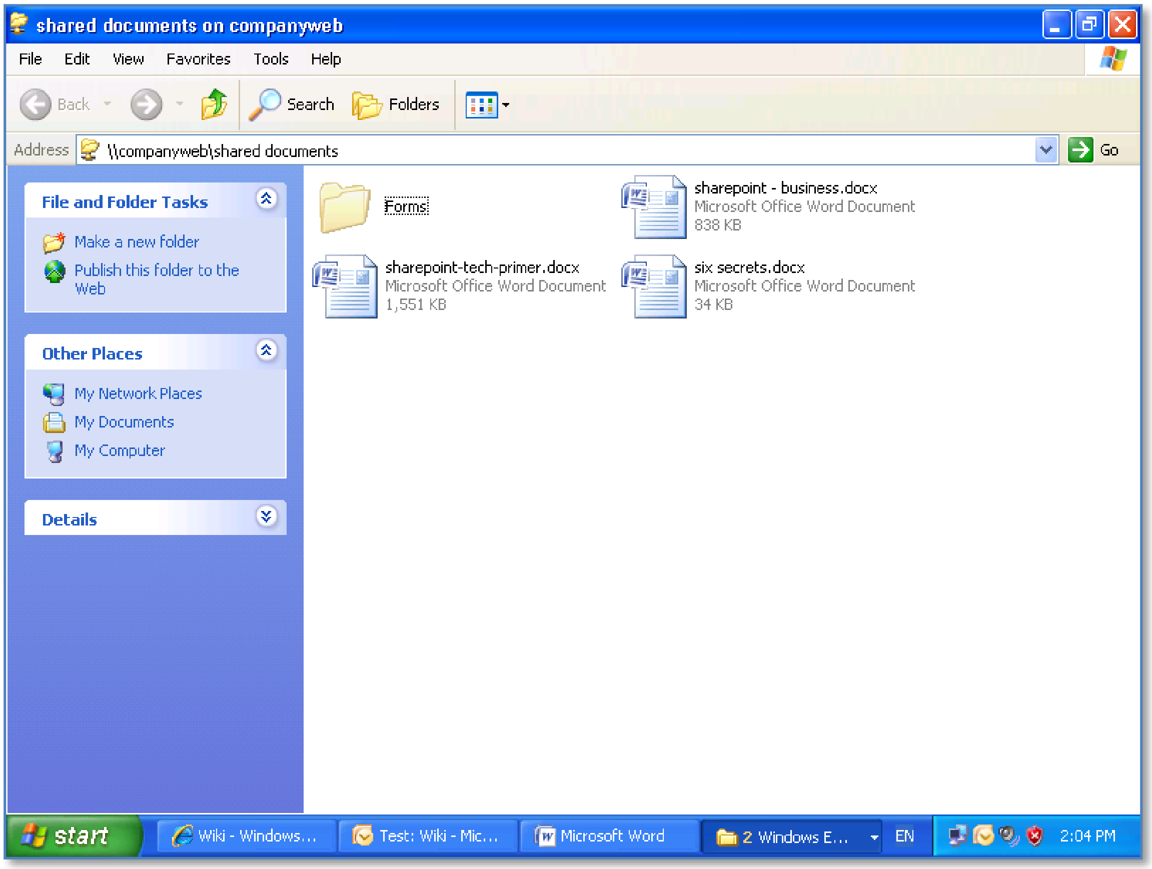


Provide a descriptive name for the new network place, in this case 'shared documents on companyweb'.

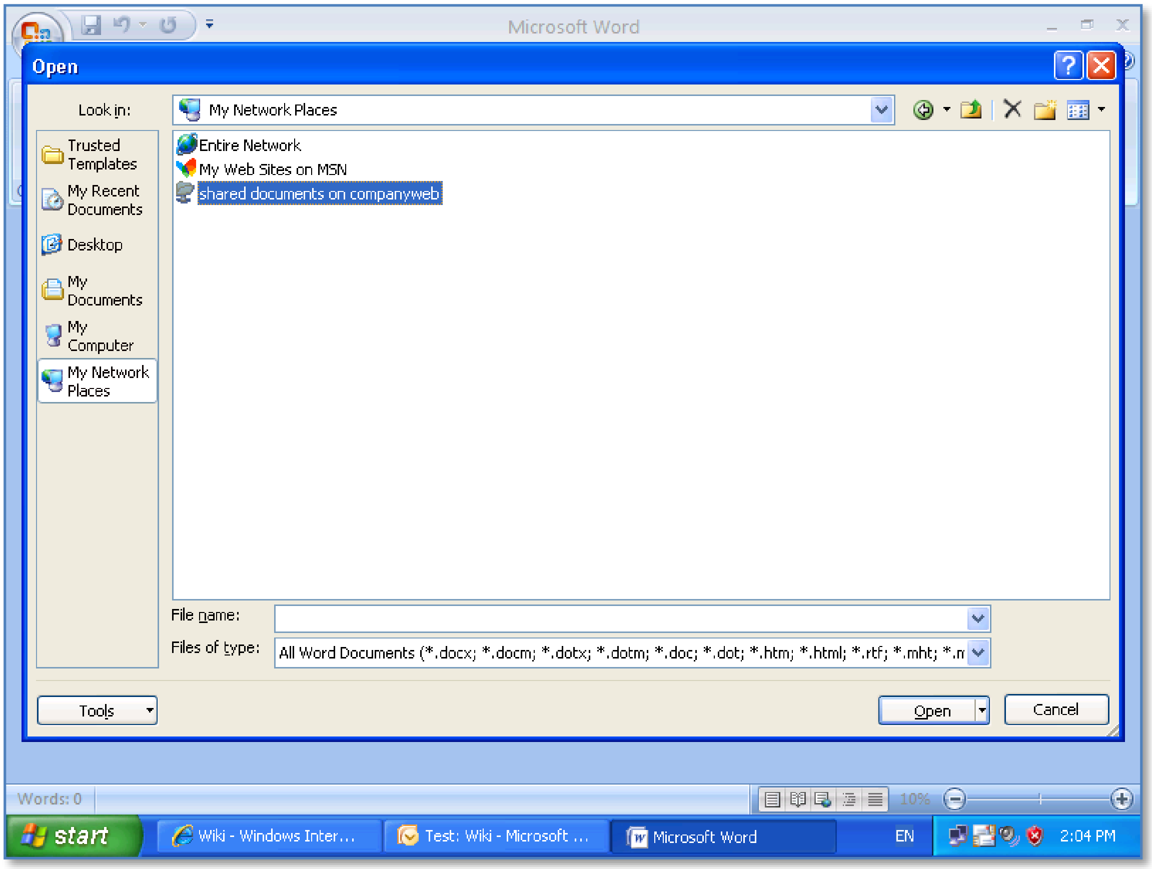


Leave the *Open this network place when I click Finish* checked.

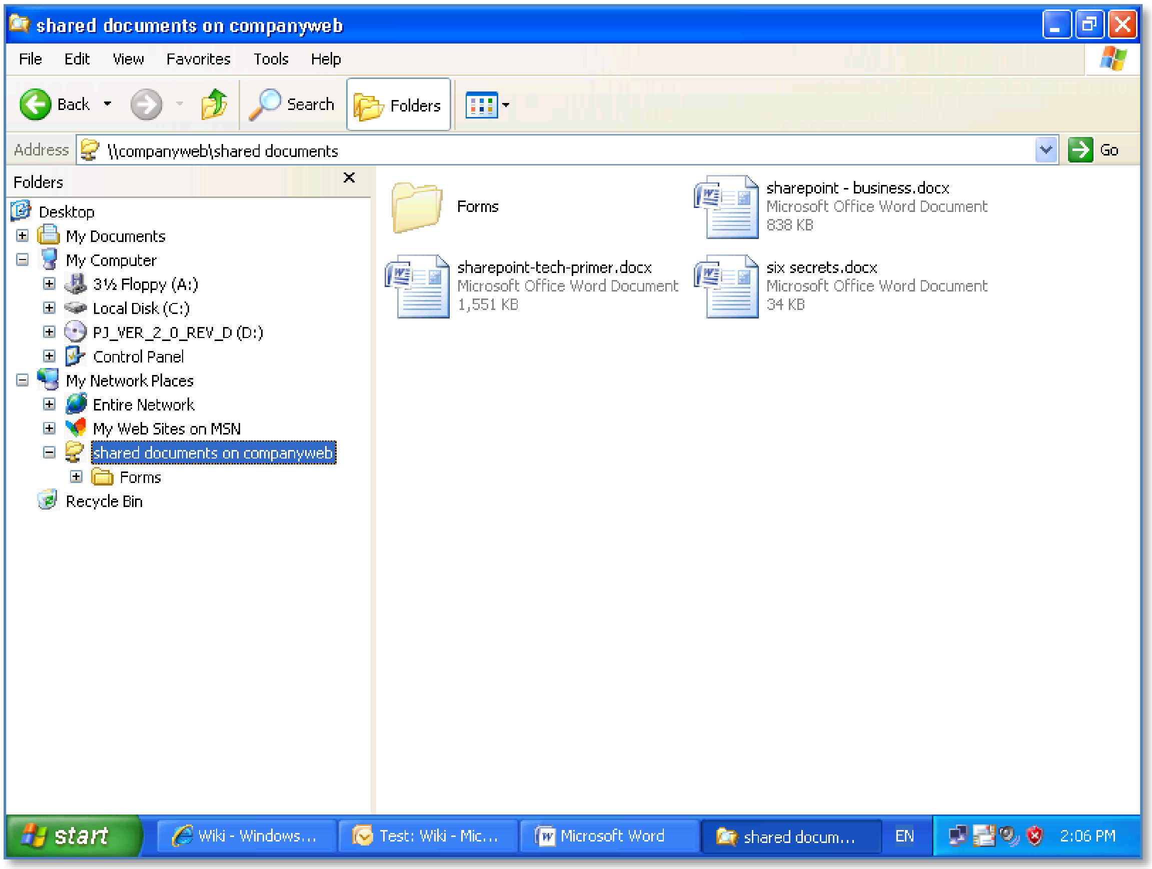
Press the **Finish** button to complete the process.



The network place should now be displayed and it should display the files in the SharePoint 2010 Document Library.



Now, when you use any application you can navigate to the network place you just created that points to the SharePoint Document Library just like any other file location.



If you use Windows Explorer you should also be able to browse to this location under *My Network Places*. The ability to create and edit documents here is determined by the user rights within SharePoint 2010.

16.7 Implementing shared OneNote notebooks

OneNote is an electronic version of a paper notebook where you can record all sorts of information that you probably now typically keep on paper. You enter the information into OneNote in a variety of ways including typing, copying and pasting as well as using a stylus if available. You can also easily draw diagrams and include other graphics to enhance the information that you save.

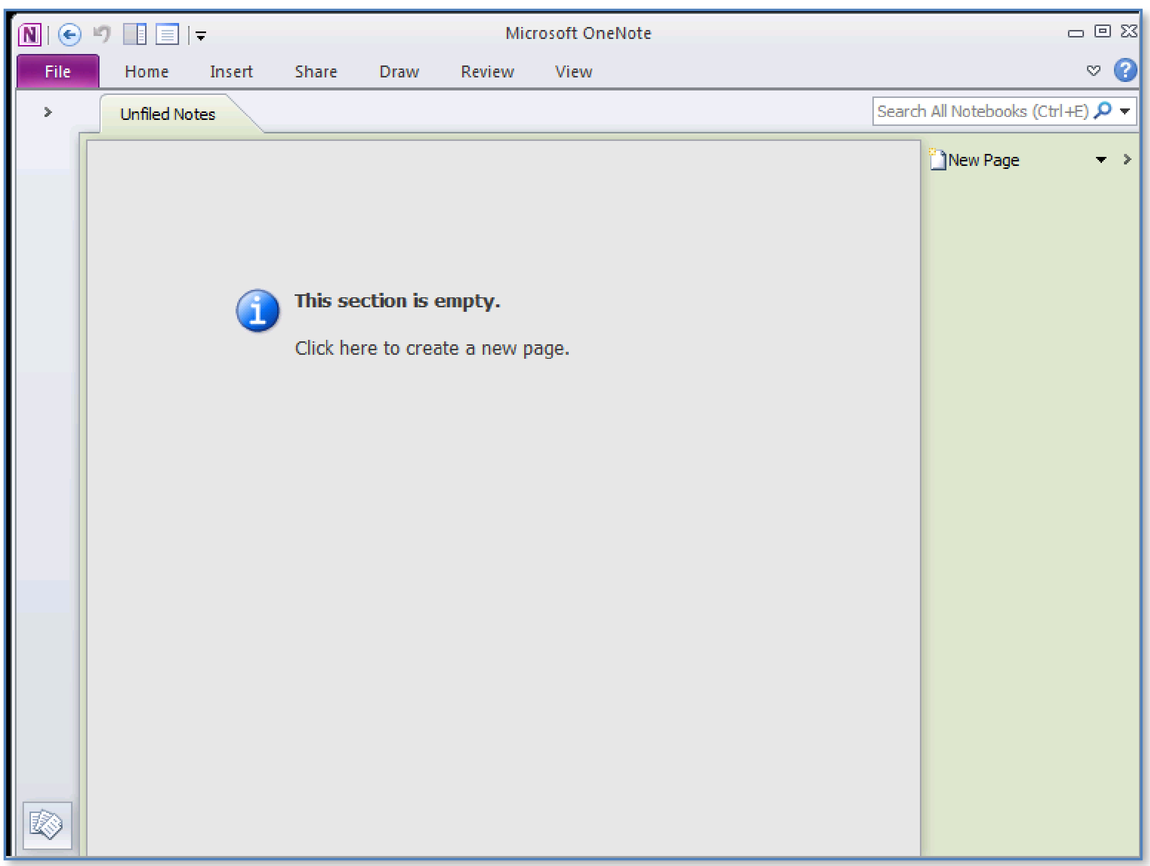
OneNote allows you to easily edit and relocate your information. You can quickly and easily create more space at the bottom of a page, move a section to another location or create new pages and sections quickly and easily. You can even have multiple notebooks for each different type of information.

When OneNote is installed it also installs a number of ‘clipping’ buttons to other applications like Outlook and Internet Explorer. This allows you to easily send information like emails or web pages directly to OneNote for later reference. As part of this clipping service, OneNote will tag your information so you know exactly where it came from for later reference if required.

By default, OneNote creates notebooks on your local computer. It is however also possible to save these notebooks in a shared location such as a File or SharePoint server. Once the notebooks are saved in a shared location they can be accessed by multiple people. This allows a team to easily collaborate and share information such as emails and projects. When changes are made they are immediately updated so that they are available to all users of the notebook.

If the notebooks are saved in a shared location it is possible to work with them offline and update the shared copy when back online. Using this feature it is possible to locate OneNote notebooks on shared locations on the Internet and have them available to users connected to the Internet. When these users are not connected to the Internet they can still work on their local copy of the notebook and update the shared copy when they return to being online.

This tutorial will show you how to create a shared OneNote notebook on a SharePoint server that is hosted on the Internet.



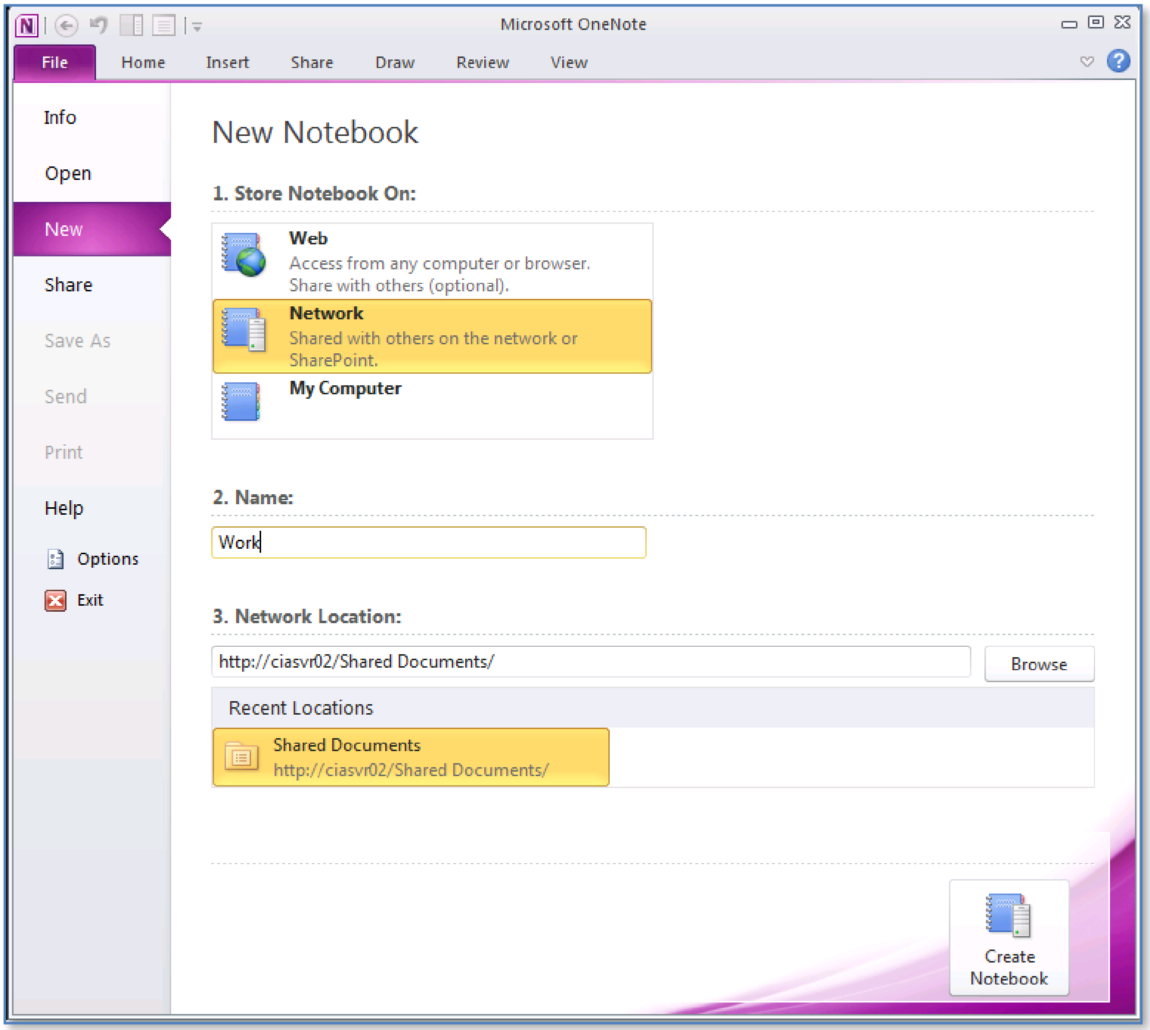
The first step is to ensure that you have OneNote installed on your local machine. If you do not already have a copy you can download a free trial copy from:

> http://www7.buyoffice.microsoft.com/asia/product.aspx?sku=10234613&cache=-144022050&country_id=AU&culture=en-US

Once installed on your machine open OneNote, like shown above. You may find a number of demonstration notebooks are loaded by default. You can either close these or select to continue.

To create a new shared OneNote notebook you will first need at least contributor rights on a SharePoint site, whether hosted on a local server or on the Internet. You will also need to know the location (directory or URL) into which the new notebooks will be saved prior to creating the notebook. It is recommended that you create a separate document library for saving OneNote notebooks to keep the same content types together but this is not absolutely necessary.

Once you have this information select **File | New** from the menu.

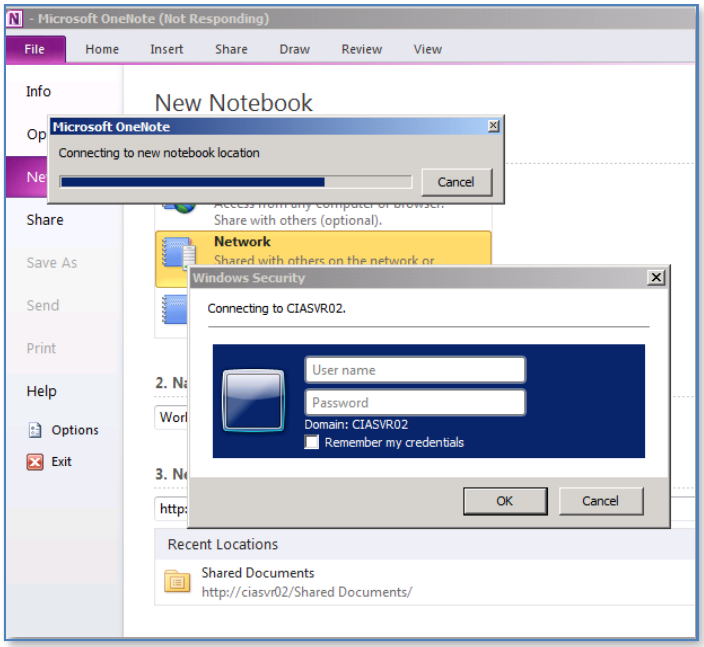


Select **Network** as the location, enter a notebook name and the network location (in this case a SharePoint 2010 Document Library).

It is recommended that you keep the notebook name as short but descriptive as possible and avoid using special characters like spaces, question marks, exclamation marks and so on.

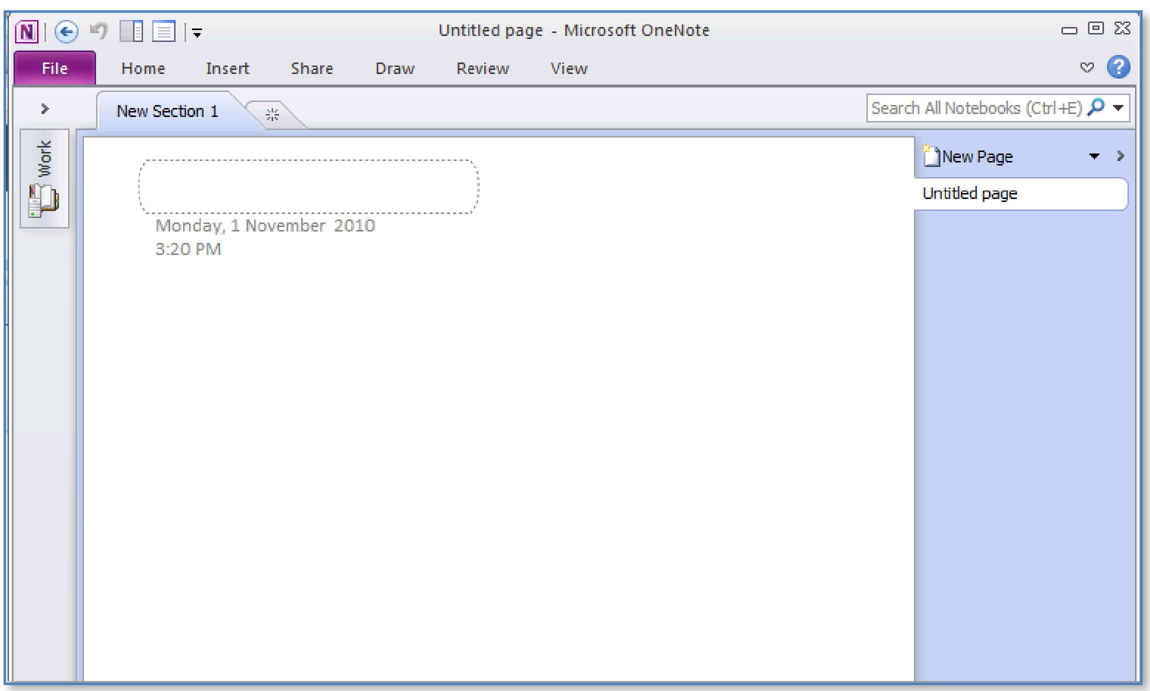
Once you have selected these options press the **Create Notebook** button to continue.

You can also elect to send an email to others to let them know about this new shared notebook but it is recommended that you uncheck this option because identical emails can be sent out once the notebook has been created.



If the location in which you have chosen to store the new notebook requires a password for access you will need to enter it now. If you are storing the new notebook on an internal server then you will normally not be prompted for credentials as they will automatically be passed through to the server for you.

Press the **OK** button once you have entered your login details.



You should now see a new notebook displayed in *OneNote*. You will notice that near the notebook name, in the upper left of the screen, is a sync icon. In this case it is green which indicates that the information on the server and the information displayed to you are the same.

Once you start entering information into this notebook it will automatically be synced with the server in the background. This process will also update any one else who is working with the notebook from the server.

Type	Name	Modified	Modified By
	Work	1/11/2010 3:20 PM	CIASVR02\administrator
Add document			

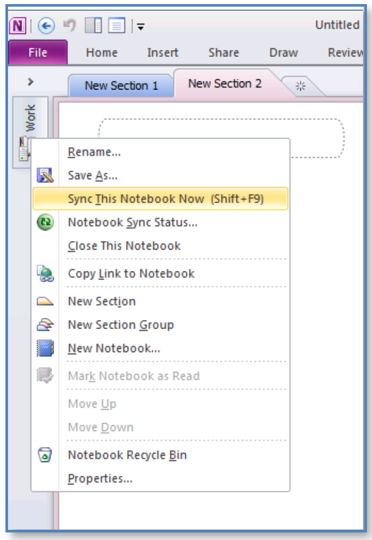
If you now visit the location where the notebook is stored on the SharePoint 2010 server, you will find a folder with the name of the notebook in the document library (in this case *Work*).

Type	Name	Modified	Modified By
	New Section 1 NEW	1/11/2010 3:21 PM	CIASVR02\administrator
	Open Notebook NEW	1/11/2010 3:21 PM	CIASVR02\administrator
Add document			

If you drill into that folder you will find the contents of that notebook displayed as single files.

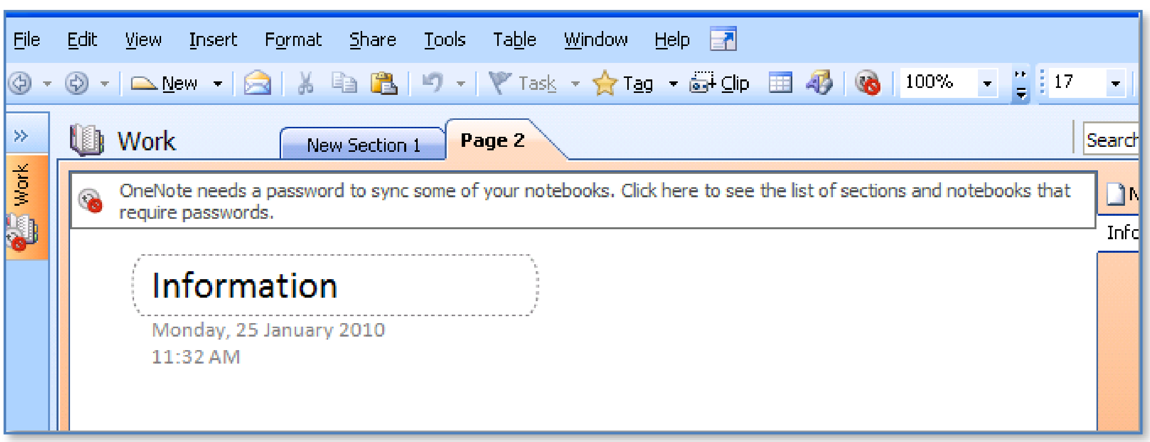
Type	Name	Modified	Modified By
	New Section 1 NEW	1/11/2010 3:21 PM	CIASVR02\administrator
	New Section 2 NEW	1/11/2010 3:26 PM	CIASVR02\administrator
	Open Notebook NEW	1/11/2010 3:26 PM	CIASVR02\administrator
Add document			

Once you update the notebook and add more pages you will see them appear in the folder in the document library.



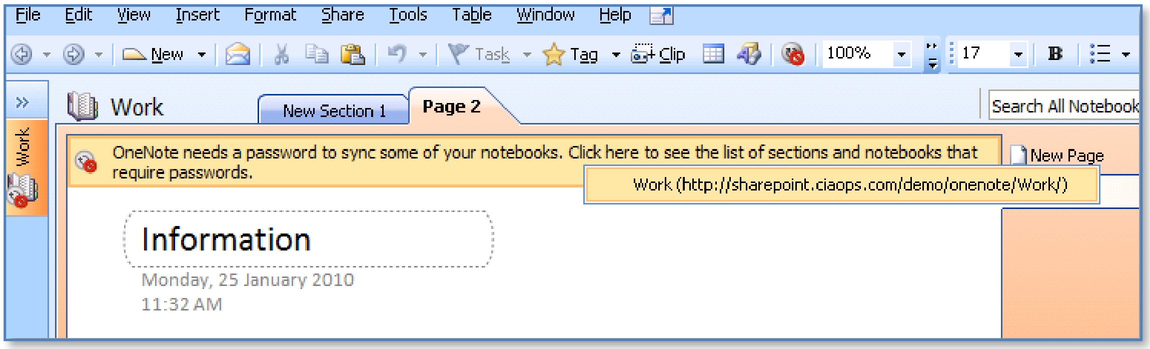
Although a notebook stored on a SharePoint server will automatically synchronize in the background it is possible to force this synchronization process at any time. To do this, right mouse click on the Notebook name on the left hand side and select **Sync Theis Notebook Now** or simply press the **Shift+F9** key.

When synchronization occurs, the green sync icon next to the notebook name in the upper left of the screen will spin. Once it stops spinning the synchronization is complete.

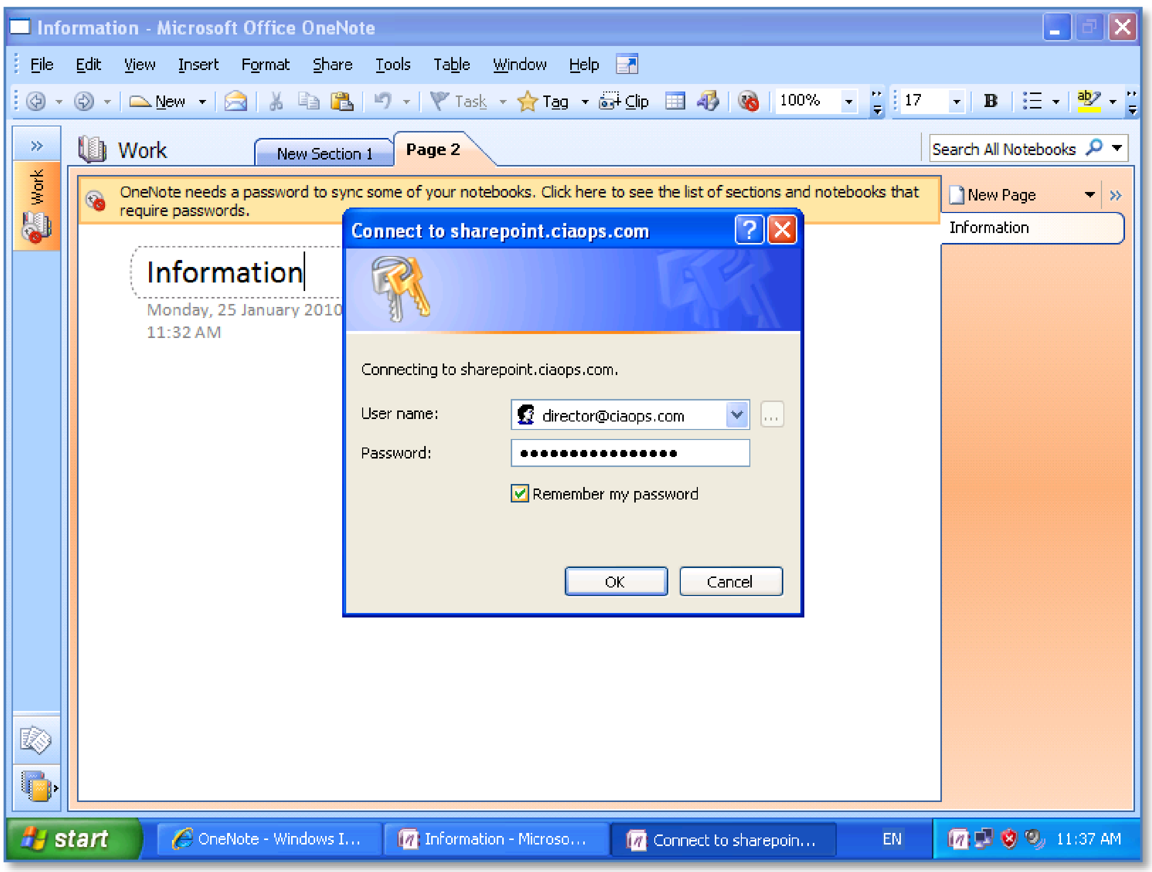


If you return to the notebook after closing the OneNote application you will find that OneNote automatically opens the notebook for you. However it merely opens the last local copy of the notebook it has stored. It is possible that additional updates have been made to the notebook since it was closed so you need to ensure that these changes are synchronized.

As you can see above, when you open the notebook at the top of the page will appear a warning that prompts you that you need to login to get the latest changes to the notebook from the remote server. This will normally not occur with internal servers as they typically automatically pass through any login credentials.

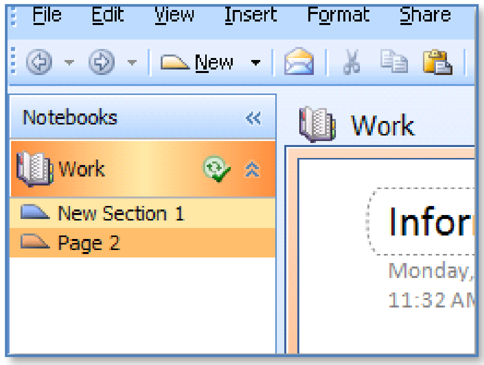


To login to the remote notebook to access any changes simply click on the warning message and select the location of the notebook that appears.



You will then be prompted to enter your login details for the remote notebook.

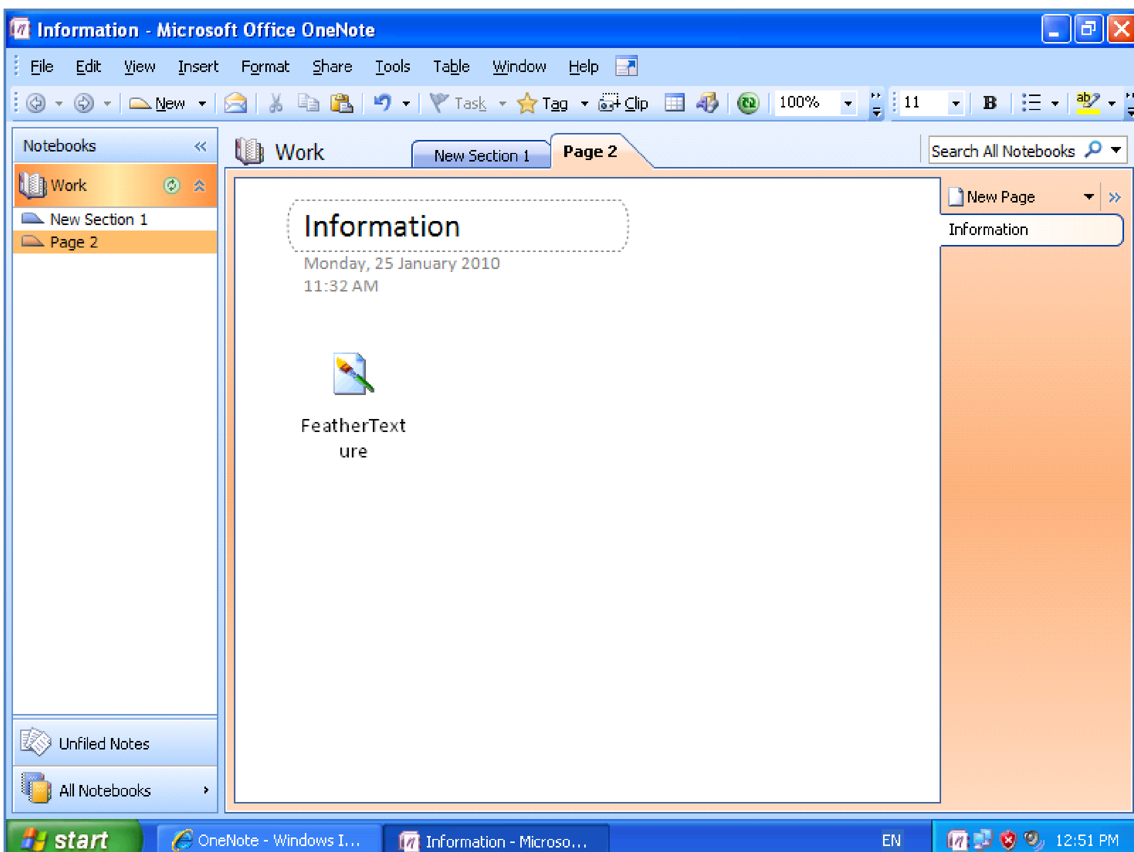
Press the **OK** button when complete.



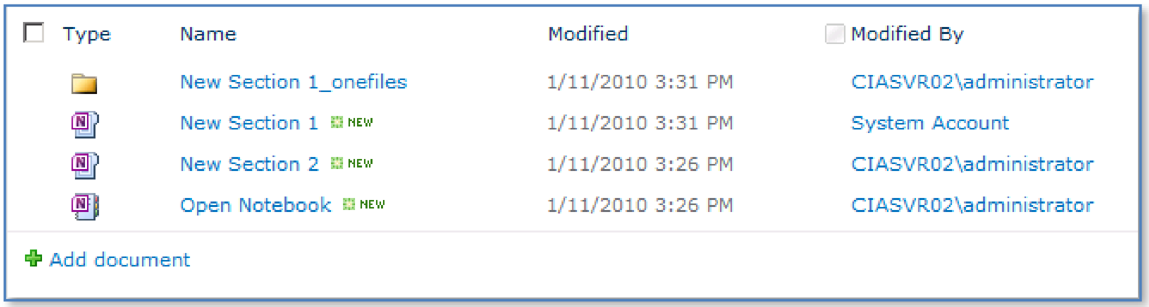
Upon correct login you should see the green sync icon near the notebook name spin as any updates are loaded to your local copy. The time that this synchronization takes depends on how many changes have occurred since the local notebook was last synchronized with the server.

When the synchronization process is complete the sync icon will stop spinning and remain green. Depending on how you have your notebook view configured you may also see a green tick with the sync icon indicating that the process is complete.

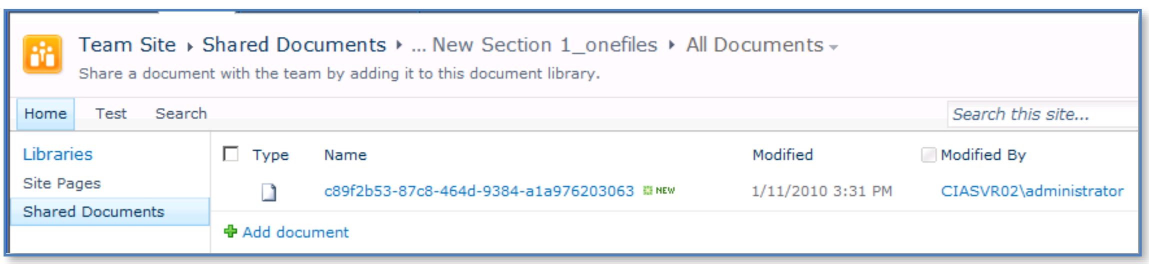
Now the copy of the local notebook and the one on the server are the same.



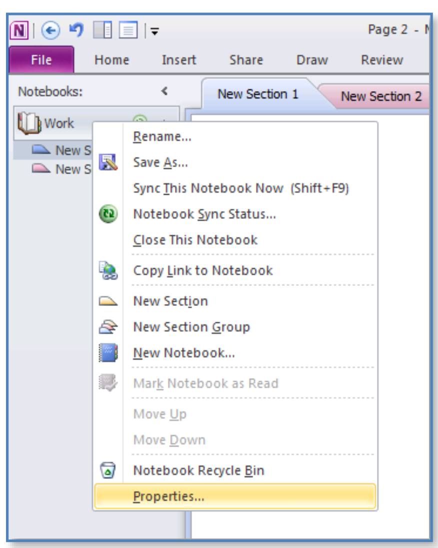
If a file is embedded in a OneNote notebook that is stored on a SharePoint server that file can be updated without the need for OneNote on the remote desktop.



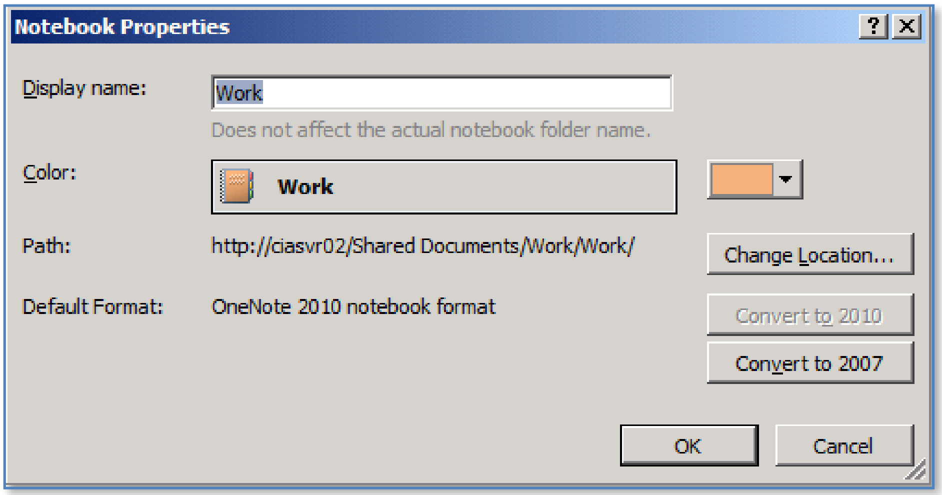
This is because the file that is embedded in the OneNote notebook page is actually saved in a separate folder in the document library as shown above (in this case the folder called *New Section 1_onefiles*).



Inside this folder you will find the embedded document which can be updated without OneNote and any updates will also be pushed out to the OneNote notebooks when they synchronize.



You can view the storage location of a OneNote notebook by simply **right mouse clicking** on the notebook name in the upper left and selecting **Properties** from the menu that appears.



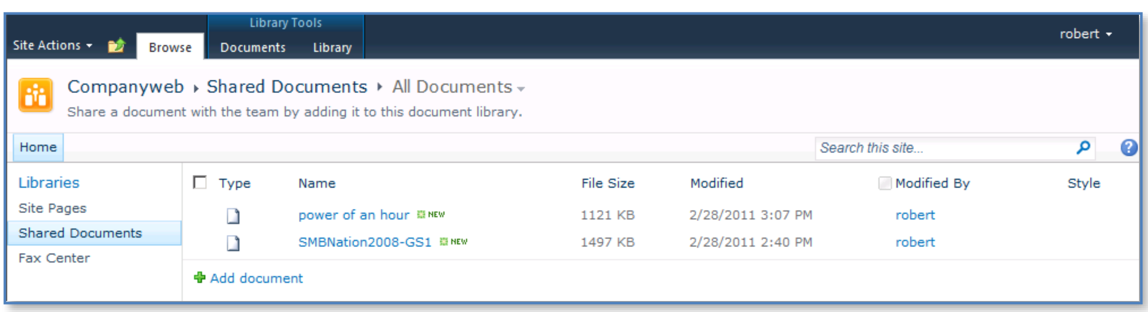
You will then see the path to which the notebook is displayed as well as an option to change its location if desired.

Press the **OK** button when complete.

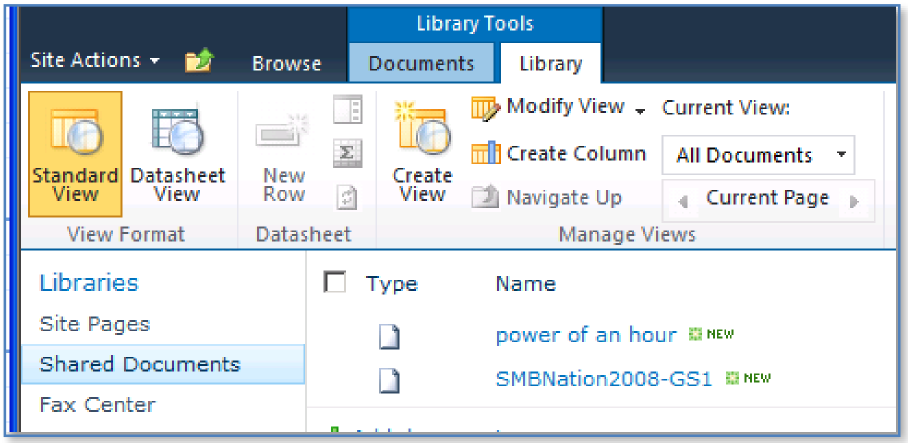
16.8 Inline Editing

One of the new features of SharePoint 2010 is inline editing. This means that you can edit the properties of a list item without having to firstly open the item.

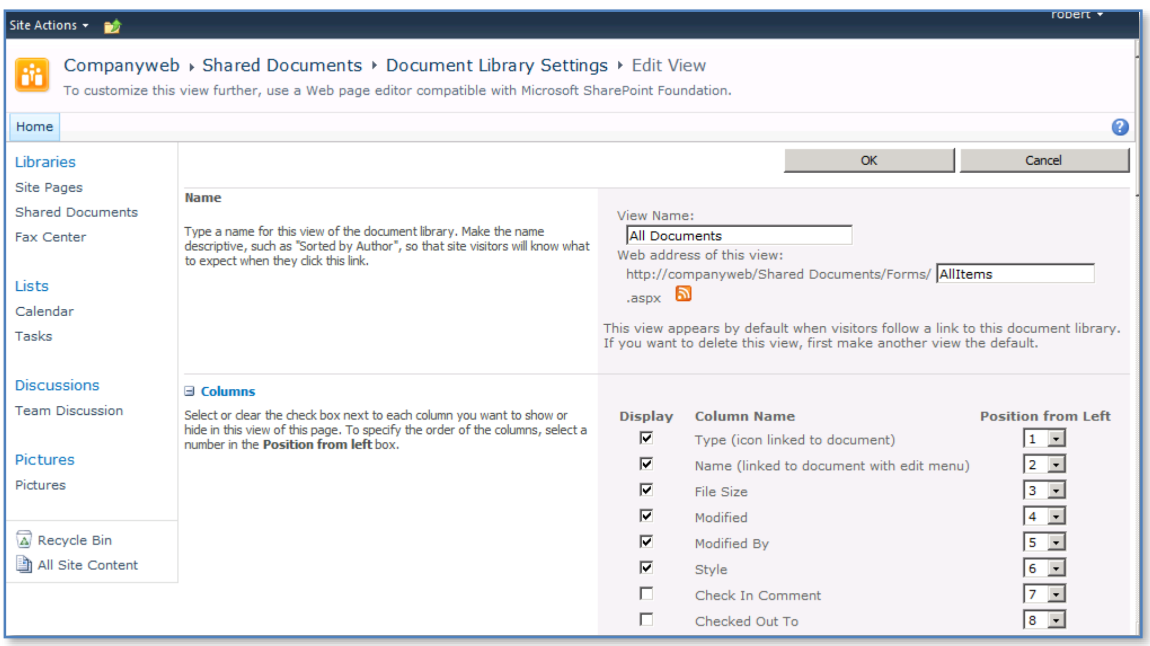
The first step in enabling inline editing is to modify the existing view of the items. In this case we'll do it on a document library to demonstrate that it can also be done here.



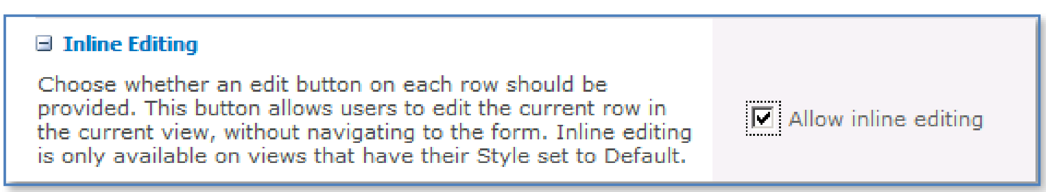
View the *Document library* as shown above. Select the **Library** tab, at the top of the page, to expose the ribbon menu.



From the ribbon menu select the option **Modify View** (just under the *Library* tab), which is towards the middle of the ribbon near the *Create View* button.

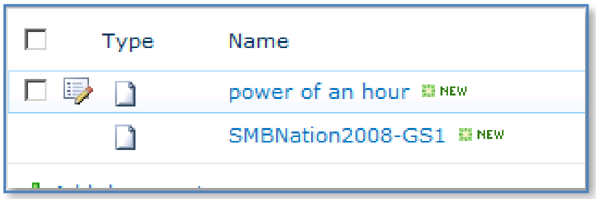


This will bring you into the *Edit View* window. Scroll down until you locate the option *Inline editing*, which is towards the bottom.

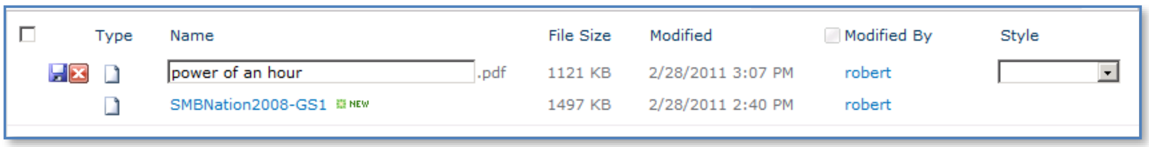


If you now expand the option you should see that you can tick a check box to enable this setting.

Check the *Inline Editing* option and scroll to the bottom of the screen and press the **OK** button to save your changes for this view.



You should now be returned to the list of items. If you hover the mouse over an item you should see that a new *edit icon* appears to the left of the entry. **Click** on this icon to open the Inline editing ability for this entry.



Once clicked, you should now see all the editable fields in entry placed into edit mode. You can now simply make the changes desired and use the *Tab* button to move to the next field.

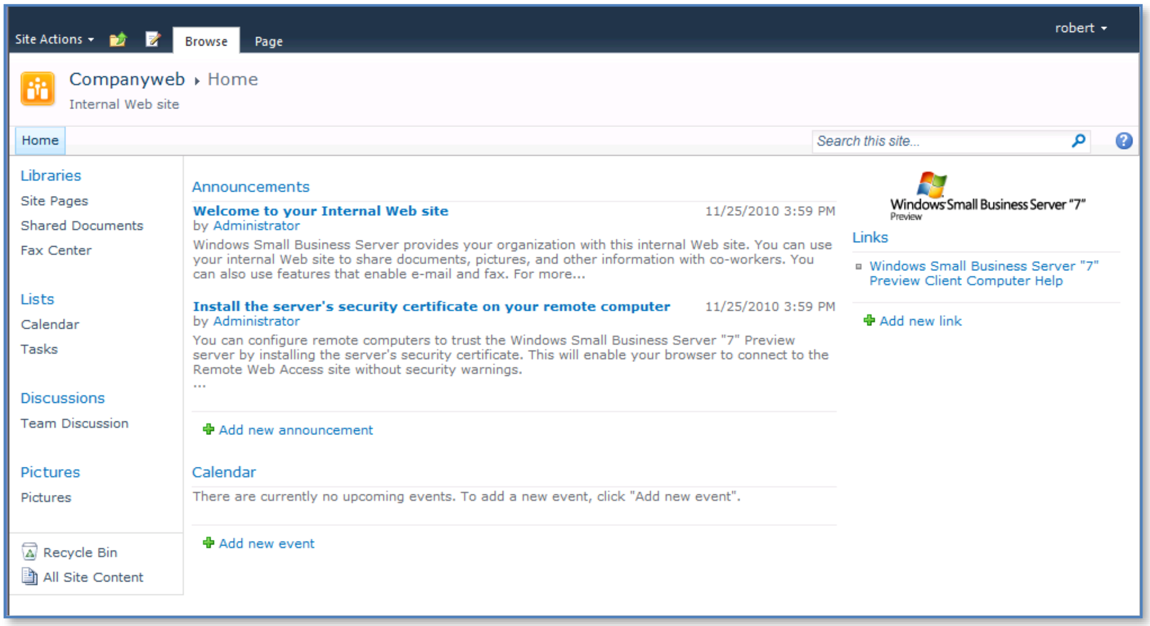
When you have finished simply press the **Save** icon (on the left of the entry, where the edit icon you pressed was. The icon appears as a floppy disk). Alternatively if you wish to discard the changes you have just made press the *Cancel* button (red cross).

You can still edit items in the list the normal way by selecting the item and then clicking *Edit Properties* from the ribbon menu, however Inline editing does provide improved functionality and can easily be enabled on most views.

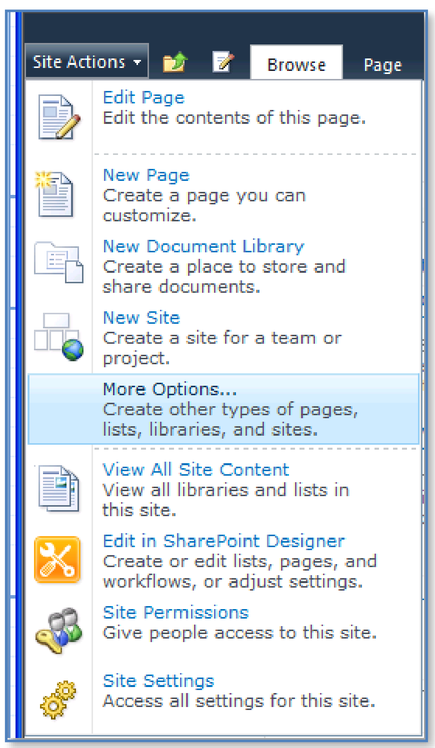
16.9 Creating and using a wiki

A wiki document library is similar in many ways to the standard *Document Library*. It contains a list of HTML documents that can be easily opened, sorted and filtered. Where a *Wiki Library* differs from a standard *Document Library* is can only contain HTML documents and these documents are created and linked together simply using a web browser. Unlike most standard *Document Libraries*, you don't require any application except a web browser to work with a *Wiki Library*.

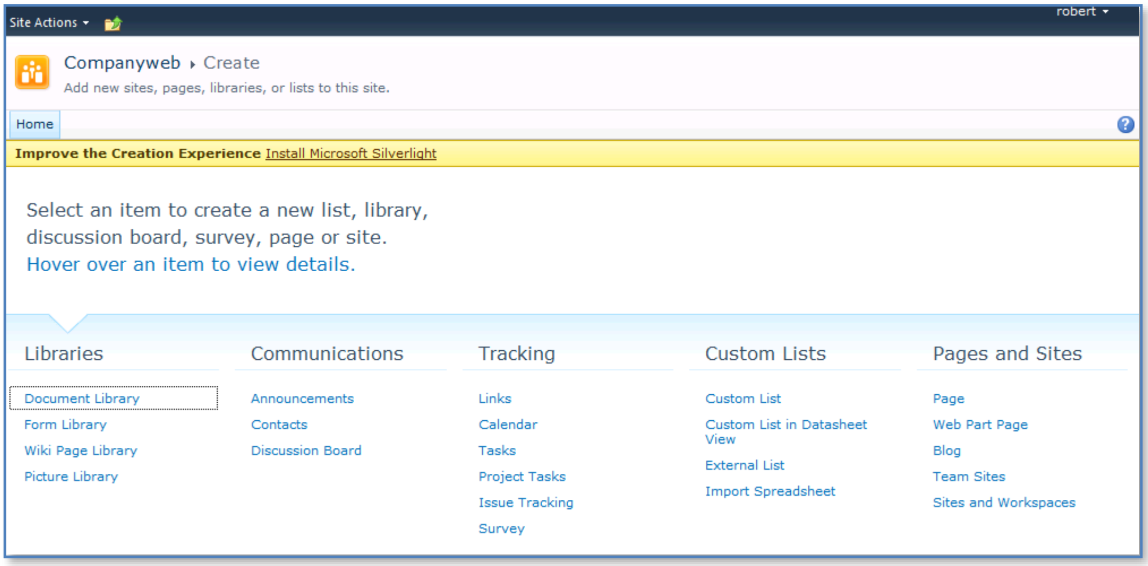
A *Wiki Library* works really well for things like knowledge bases and frequently asked questions. It is also very handy when multiple people need to collaborate on a single topic, maybe like a meeting agenda.



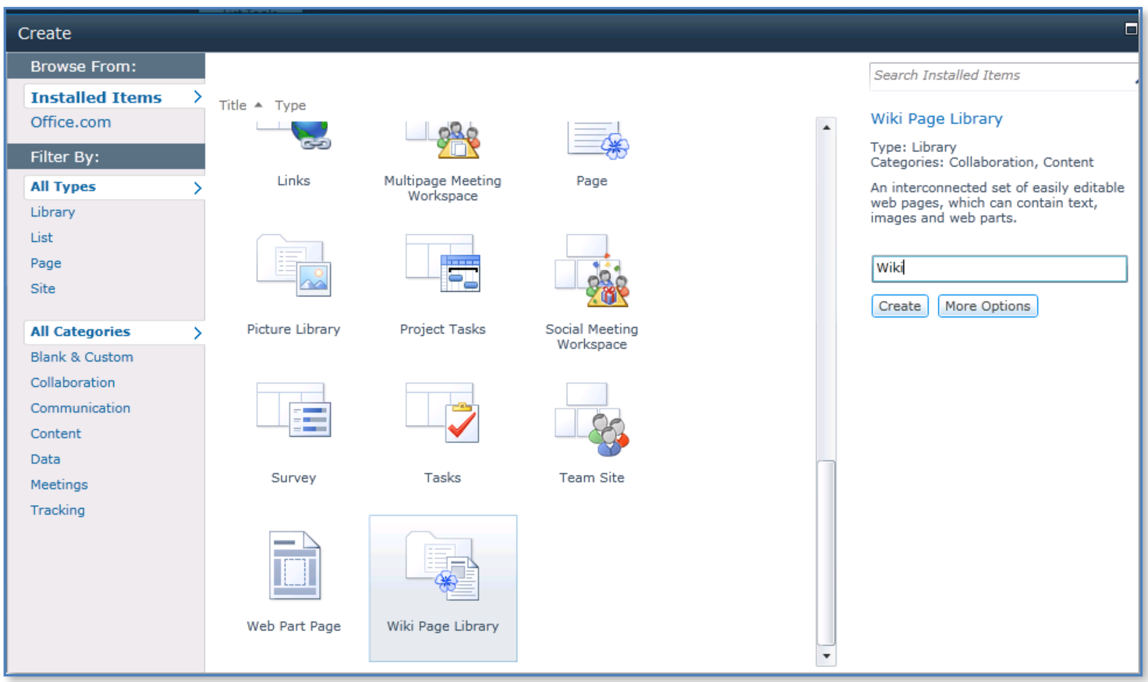
In most default SharePoint installations a *Wiki library* will not have been created on a site. To do so, go to the location where you wish to create the *Wiki Library*.



Select **Site Actions** in the top left and then **More Options** from the pull down menu that appears.



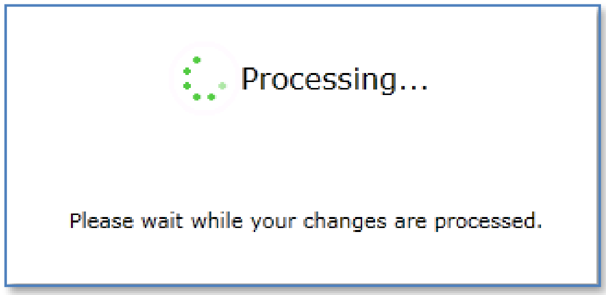
If you do not have Microsoft Silverlight installed then you will see the above basic screen. Select **Wiki Page Library** from the *Libraries* section to the left of the page.



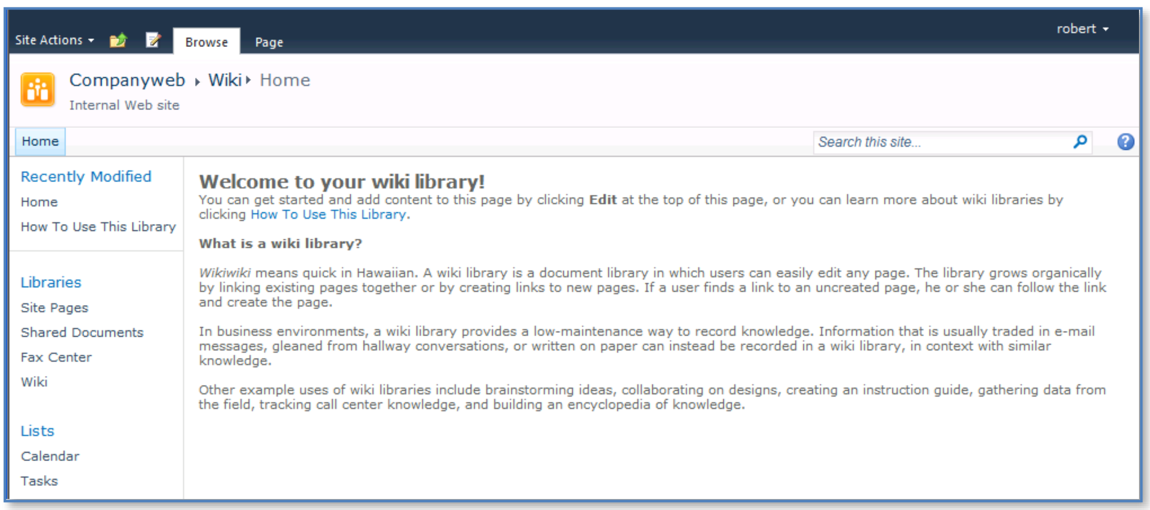
Given that it is easy to install Microsoft Silverlight and it gives you a much better user experience we will assume here that it is installed.

When it is, locate the option *Wiki Page Library* at the bottom of the displayed list. When selected provide a name for the library (in this case **Wiki**) over on the right hand side of the screen.

Press the **Create** button to complete the process.

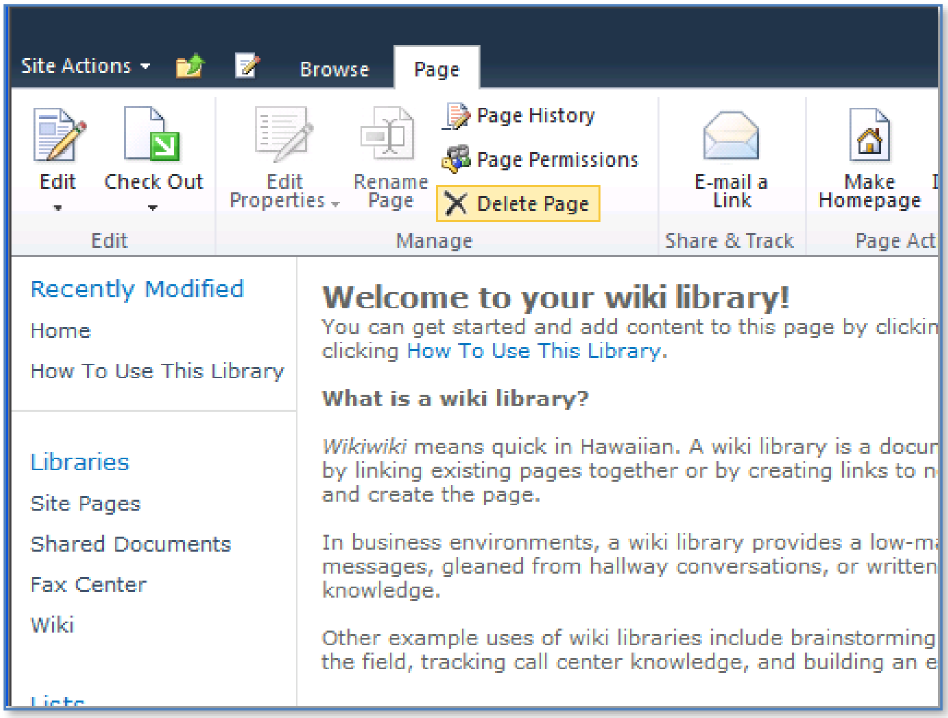


You should see the *Processing* status displayed and in a matter of moments the Wiki will be created.

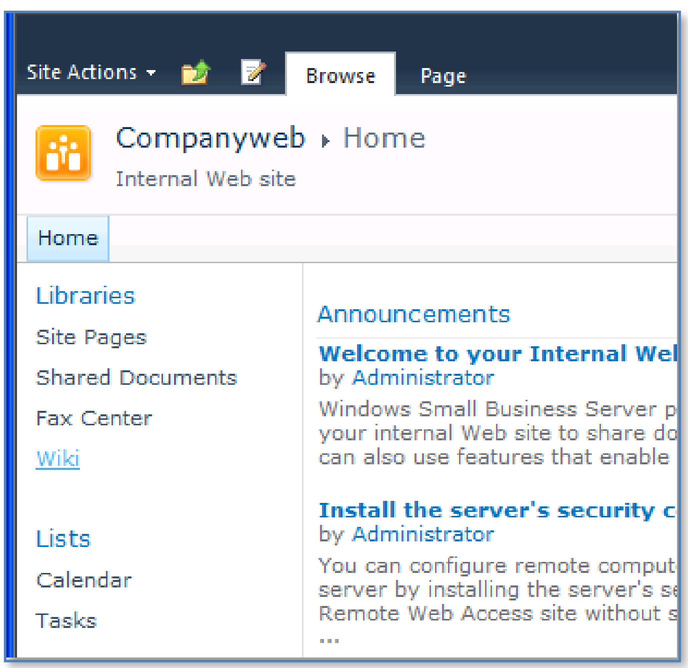


Upon successful creation you will now see the default Wiki Home page (which is called *Home*). In most cases it is easier to delete the default *Wiki Library* documents and start afresh. You can however edit these pages as desired by clicking on the **Page** tab at the top of the screen and then the **Edit document** button on the ribbon menu that appears.

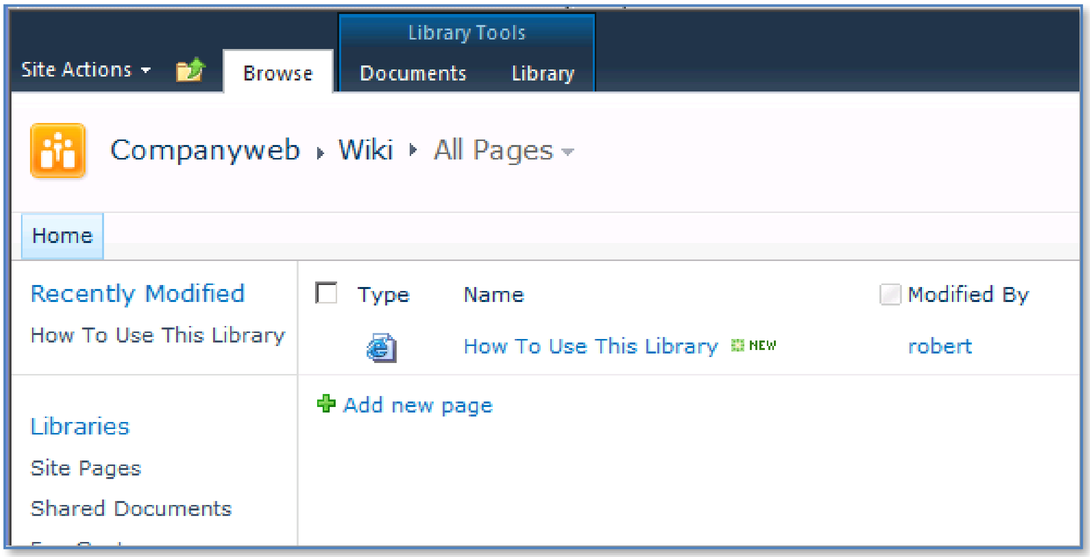
However, in this case we will remove the default documents and start creating new pages.



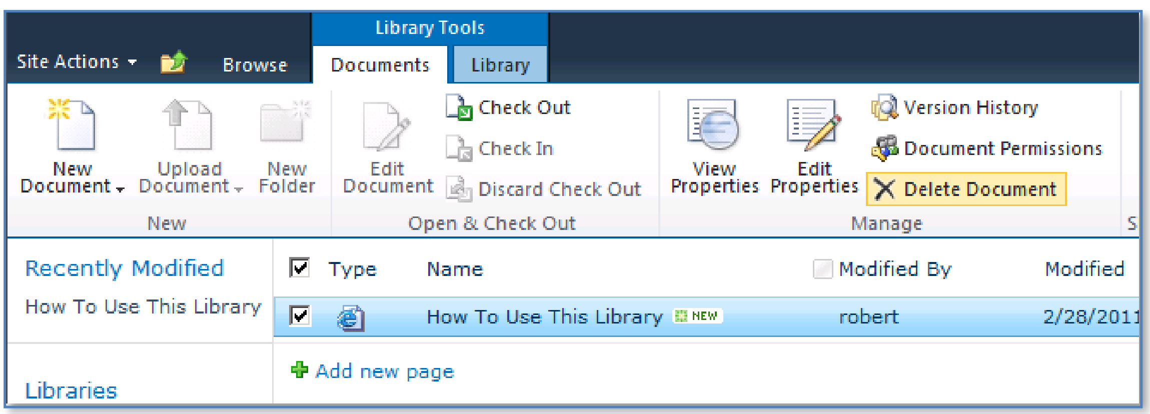
To delete the document on screen select the **Page** tab at the top of the screen. This should reveal the ribbon menu. Click on the **Delete Page** option to remove the page from the Wiki.



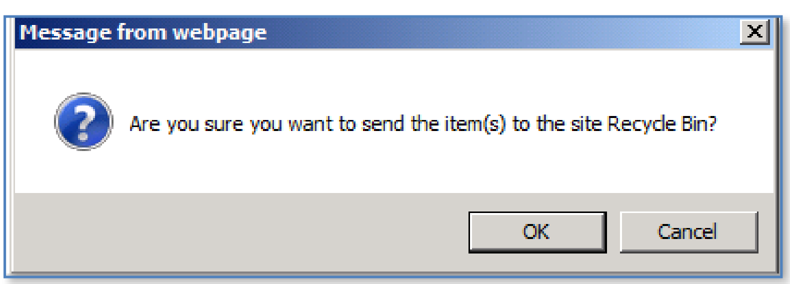
Once the page has been deleted you will be returned to the home page of the SharePoint site. To return to the Wiki click the name of the Wiki (in this case **Wiki**) on the Quickstart menu on the left of the screen.



You should now see only a single HTML document listed in a familiar *Document Library* view (here called *How To Use This Library*).

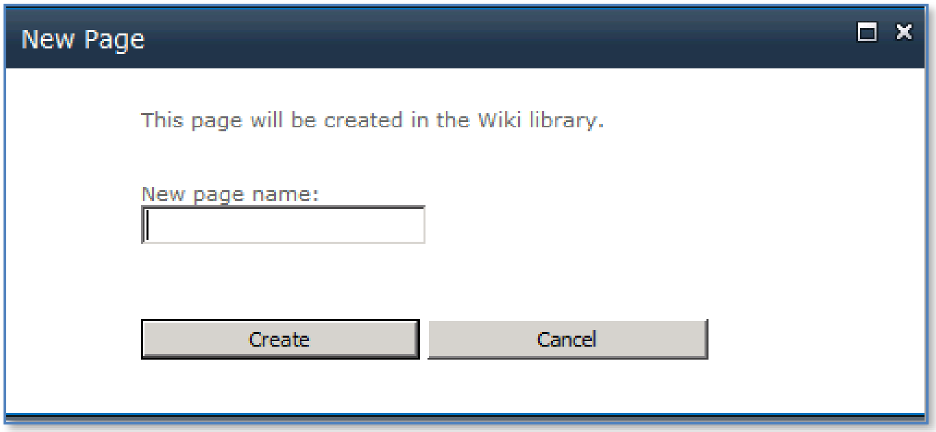


Select the **Documents** tab at the top of screen of the screen to reveal the ribbon menu. Select the page listing and then click **Delete Document** from the ribbon menu.

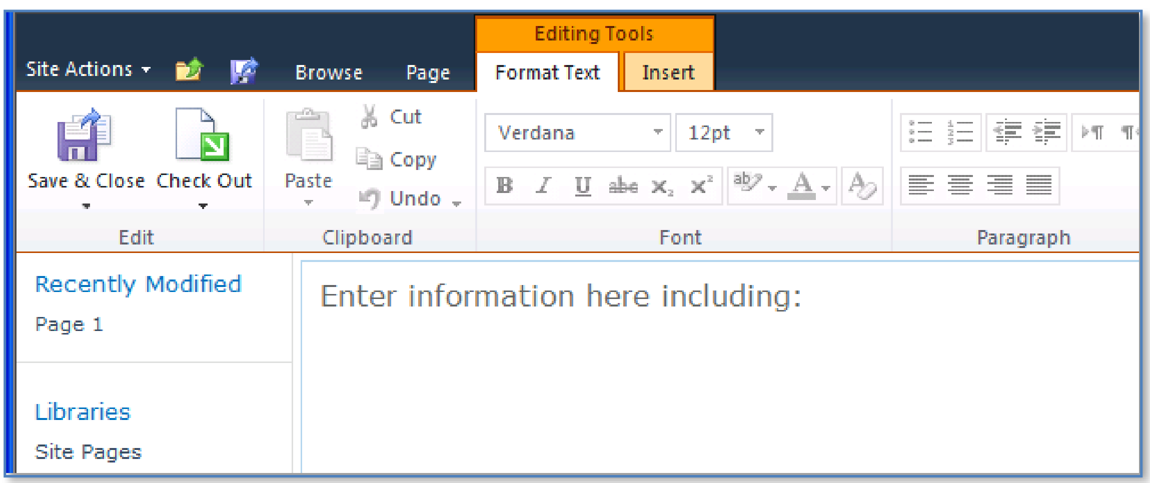


You will be prompted to confirm the document deletion. Select the **OK** button to remove the document from the *Wiki Library*.

With the ribbon menu still open select the **New Document** icon on the left of the ribbon menu.

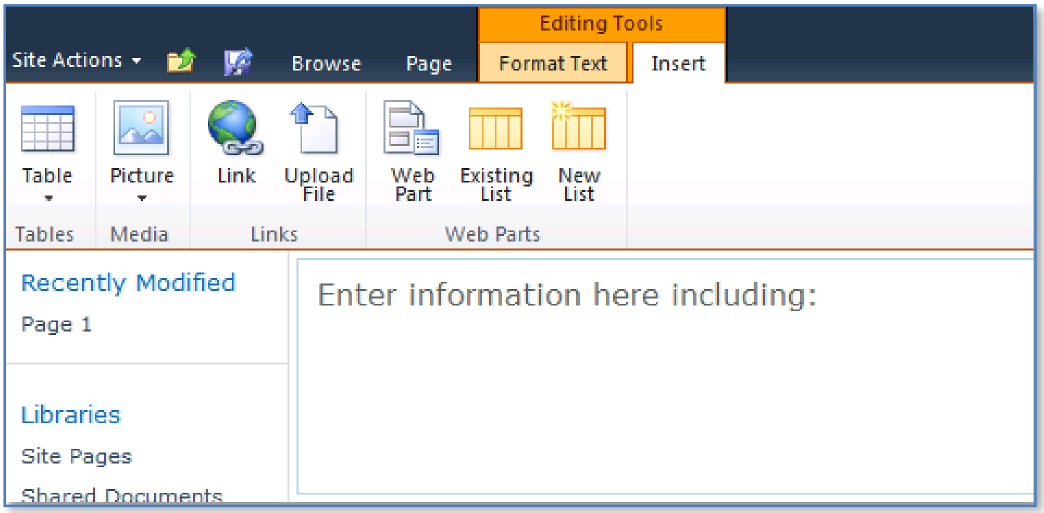


You'll now be prompted to enter the name of the document you are creating. There are some limitations on what you can call Wiki documents but generally most names arte acceptable.



You will now be placed into edit mode and can start typing directly into the web page displayed.

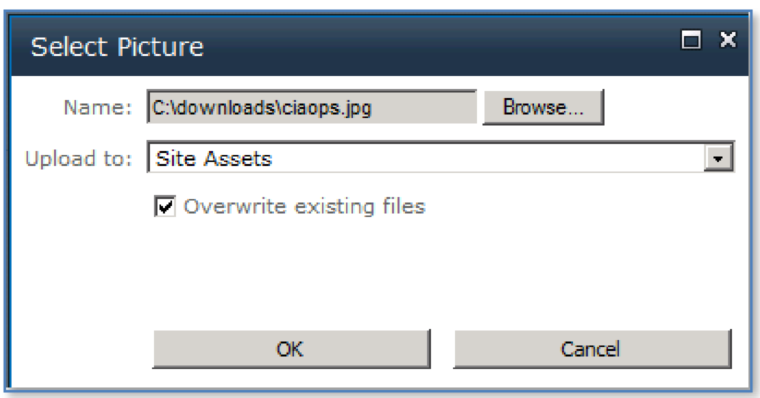
As with most Microsoft Office programs, you can use the buttons on the ribbon menu to help you format your text. This includes setting the font, alignment and so on.



You can also add additional 'web elements' to the *Wiki Library* via the *Insert* tab at the top of the page.

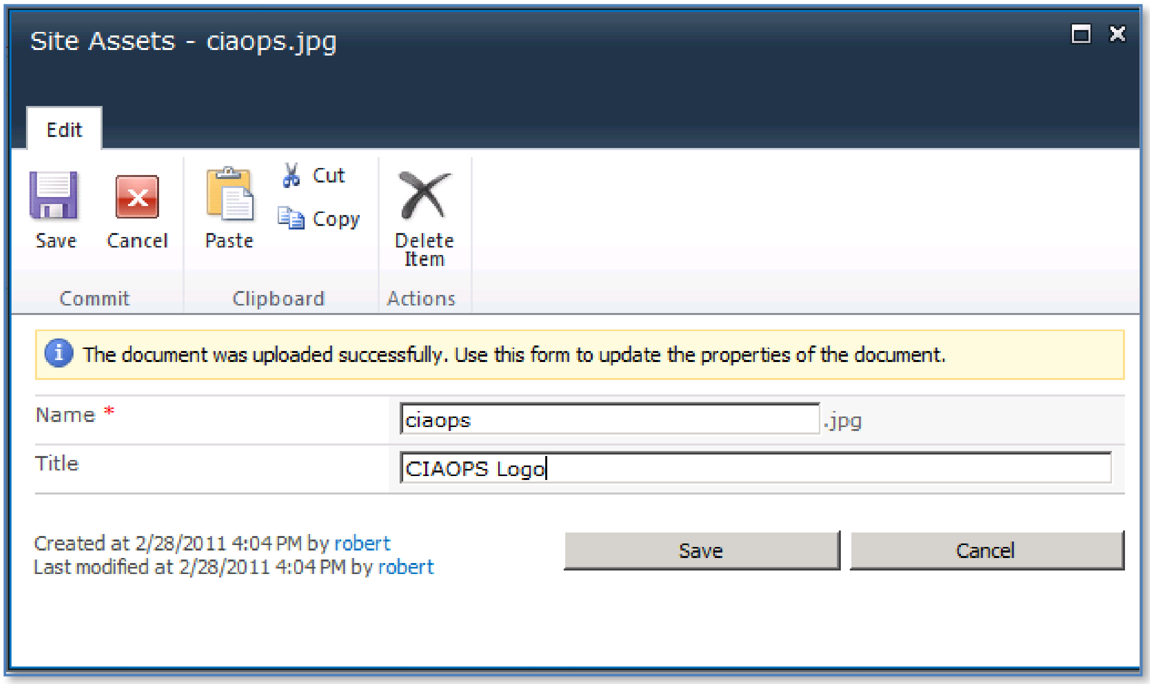
When you click this you can see the number of additional elements you can add to the Wiki document at the current location of the cursor.

For example, if you wanted to add an image to the wiki document at the current location of the cursor press the **Picture** button on the ribbon menu.



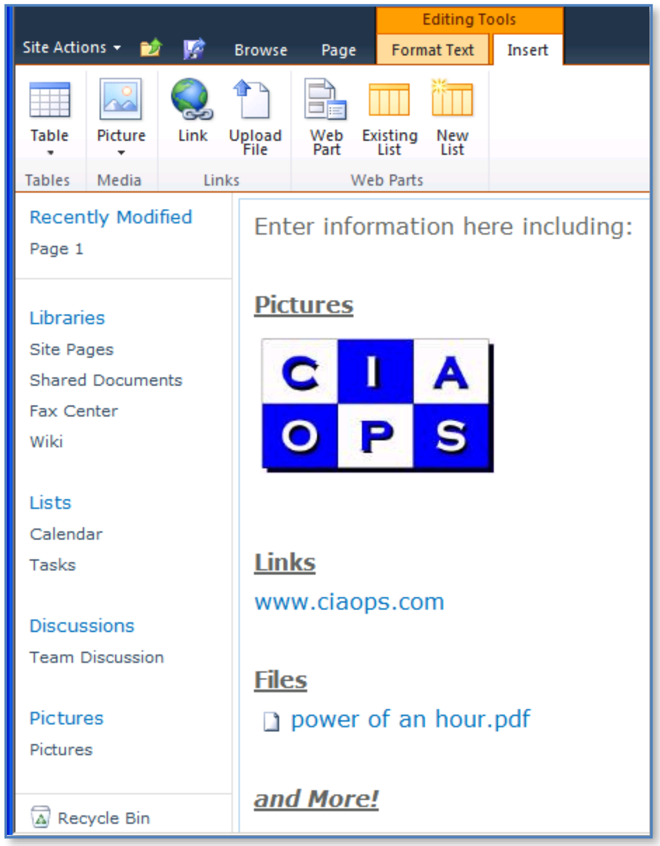
This will display the above dialog box asking you to browse to the location of the image on your local machine as well as a location where the image will be uploaded to. By default all *Wiki Library* assets are saved into a separate document library called *Site Assets*.

When you are happy with your selections, press the **OK** button to proceed. The image you selected will now be copied up to the SharePoint site, and placed in the *Site Assets* document library, and displayed on the wiki page.



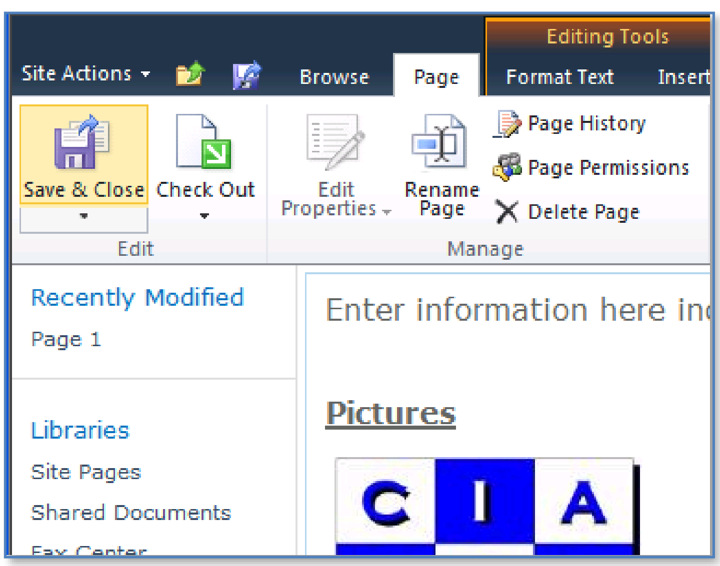
You will then be prompted to enter more detail about the image that you are uploading. It is always good practice to provide as much detail as possible to assist you later on searching and indentifying the image.

Once complete, press the **Save** button to continue.



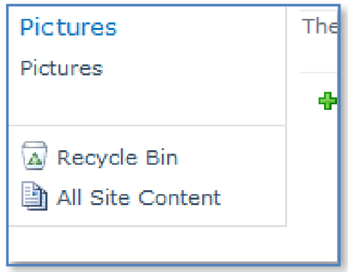
You should now see the image displayed on the Wiki page.

You can also add a number of other elements in a similar way like web links, embedded files, etc as shown above.



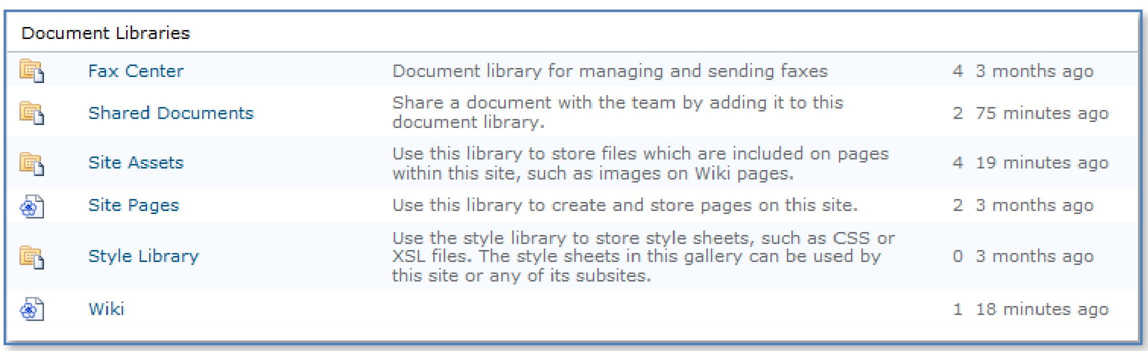
Importantly, once you have finished editing the file it is vital that you save your changes. To do so, simply press the **Save & Close** button on the left of the ribbon menu.

You should now see document displayed a web page. You can return to editing this document at any stage simply by pressing the **Edit Document** button from the ribbon bar.

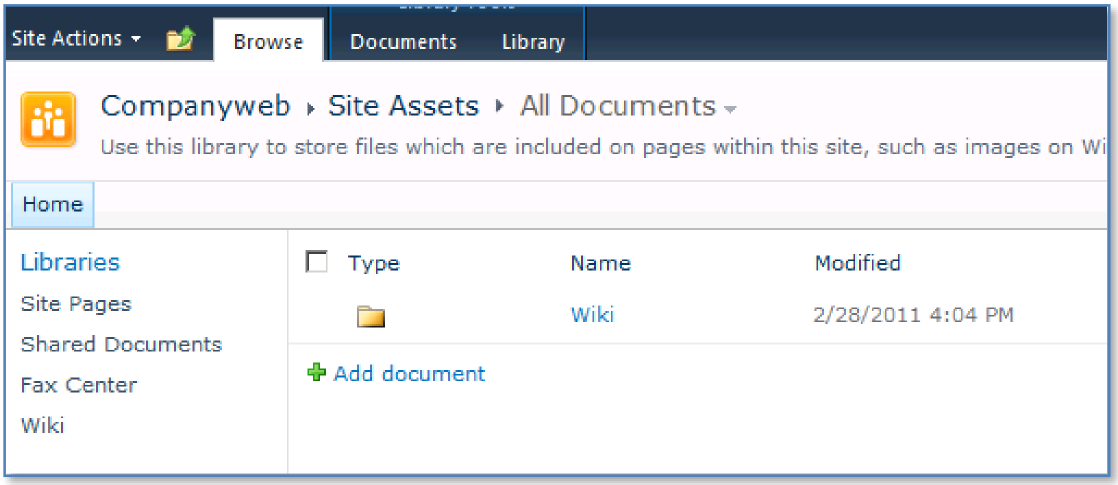


When you upload additional items to a wiki page, by default, they are saved in a *Document Library* called *Site Assets*. This *Document Library* is not normally visible on the *Quickstart* menu but can be located via the *All Site Content* area.

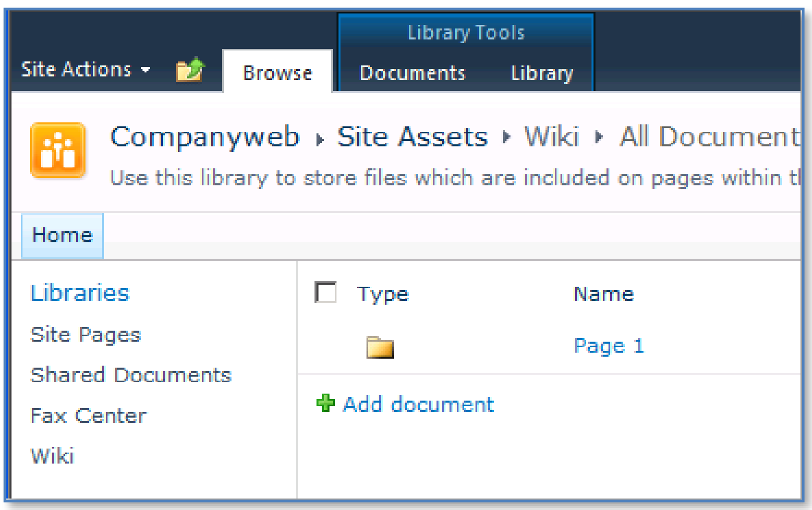
To locate the *All Site Content* area simply return to the Home page of your site and look for the *All Site Content* link at the bottom of the *Quickstart* menu as shown above. Click on this.



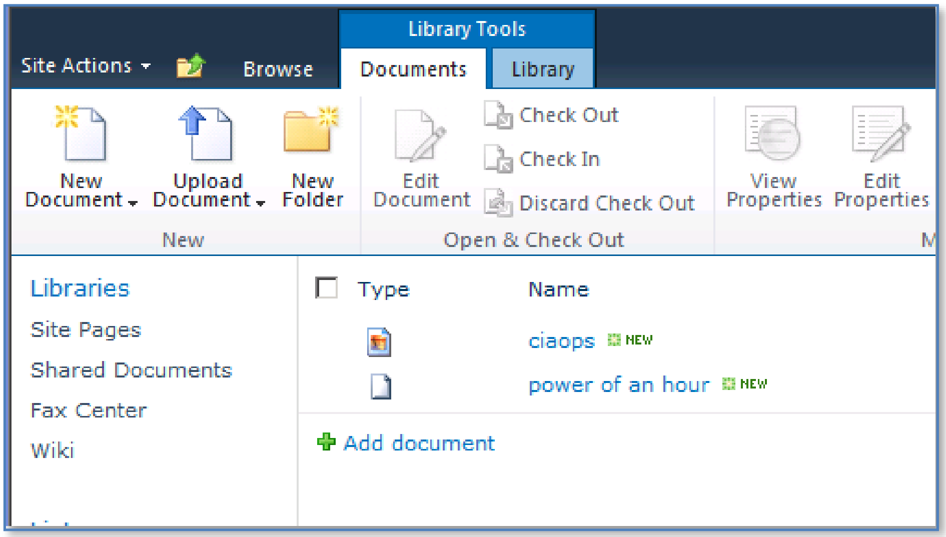
You should now see a complete list of all the content on the site. In the list you will find a *Document Libraries* heading and in here a *Document Library* called *Site Assets*. To view *Site Assets* simply click on the text.



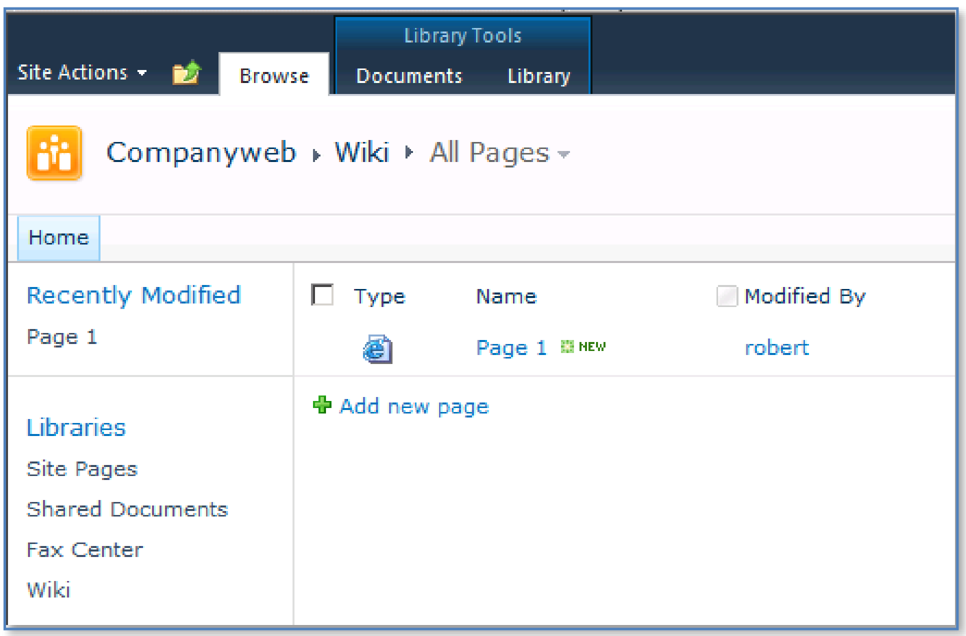
In the Site Assets *Document Library* you will find the content which you uploaded in a folder with the name of the Wiki.



Inside this folder is another folder with the name of each page in the Wiki where additions have been uploaded. In this case, *Page 1*.



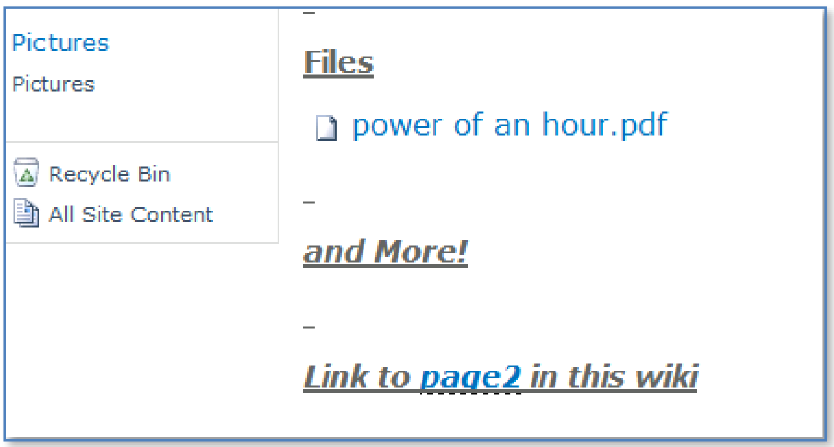
Finally, inside this wiki page folder you will find the items that you uploaded for use on the Wiki page. In this case an image and a file.



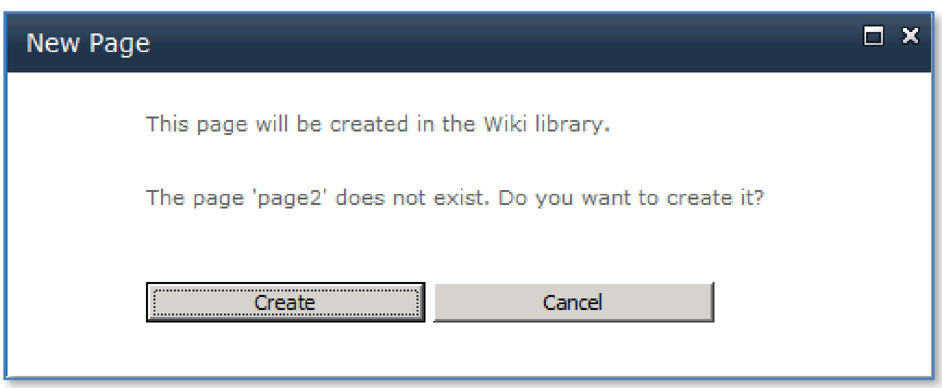
If you return to the *Wiki Library* by clicking on its name on the *Quickstart* menu you should see a familiar list of documents as shown above. If you wish to have a default page displayed when you click on the link for a *Wiki Library* simply name that document Home.

To view any Wiki document in the library simply click on the document name.

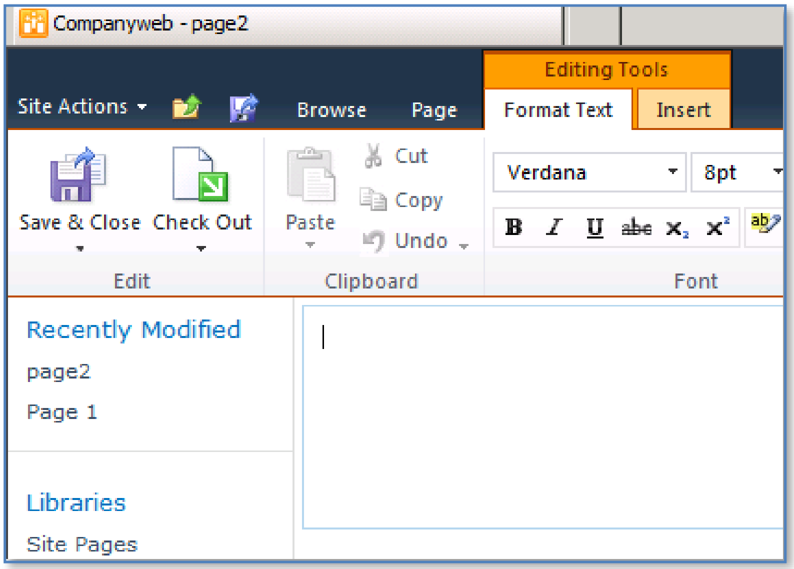
Another feature of Wiki documents is that it easy to create hyperlinks between them. To create a hyperlink to another page in the *Wiki Library* simply edit the document and insert the name of the page that you wish to link between a set of double square braces like shown above.



After you save the page and view it you will see that the hyperlink has already been created.

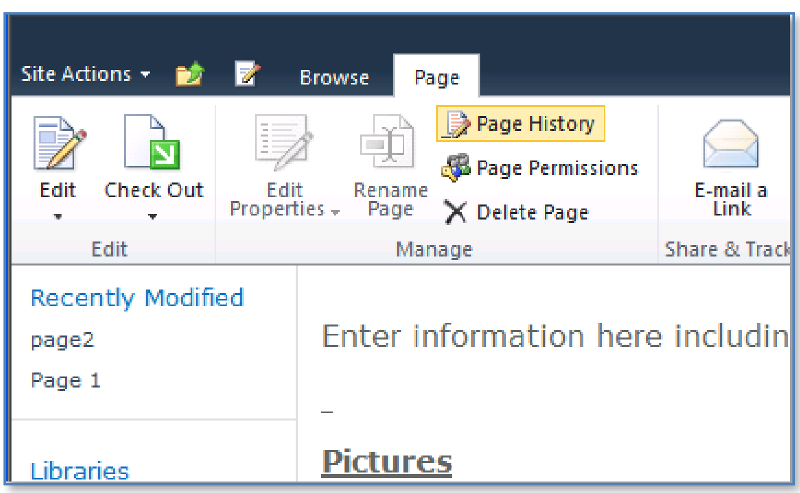


There is no need to create the page prior to creating the hyperlink in a Wiki page. If you click on a hyperlink that doesn't already have a matching Wiki page you will be prompted to automatically create it as shown above.

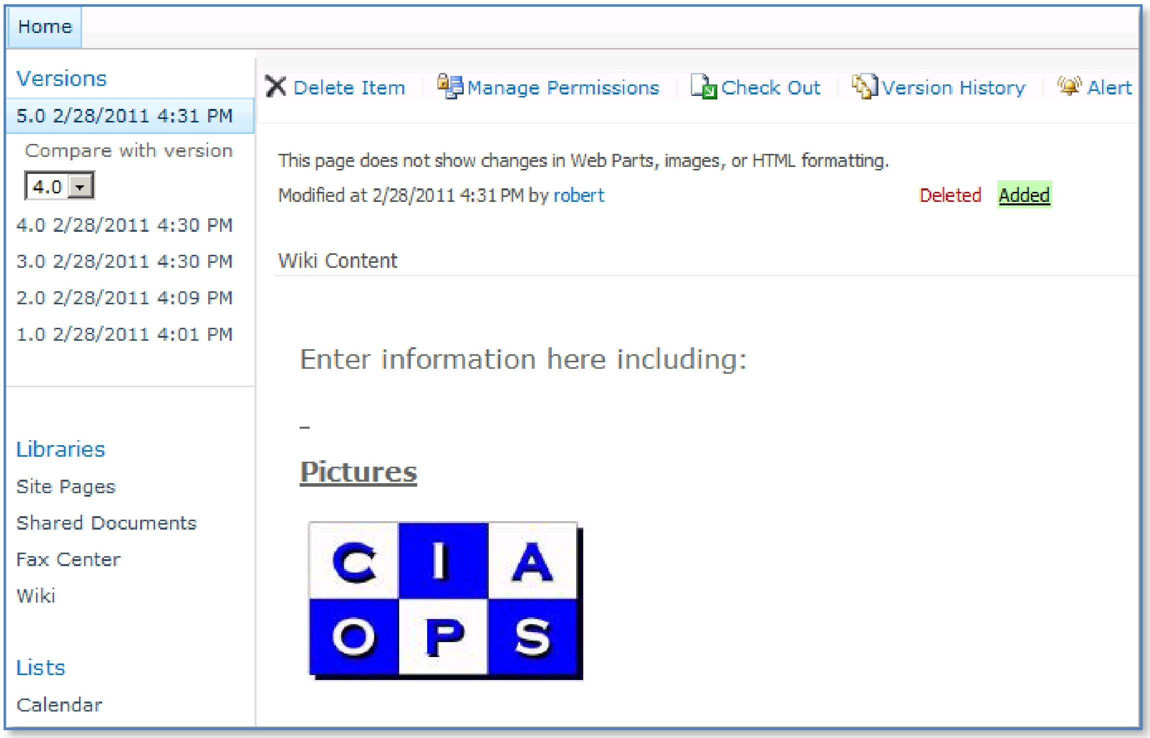


By clicking **Create** a new page, with the title of the hyperlink, will be created and you will immediately being editing that page.

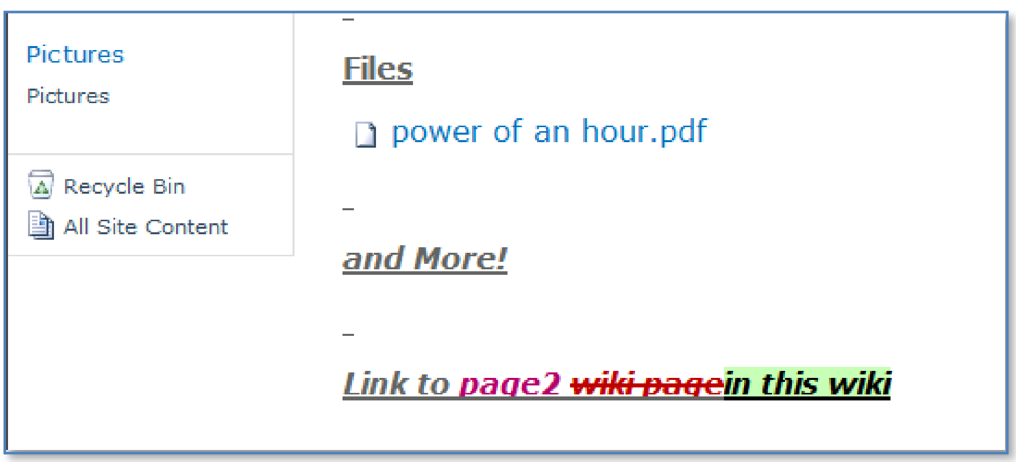
This allows you to start creating an extensive Wiki page library structure without the need for creating all the pages first. Simply create the hyperlinks inside the documents as you go and when they are clicked on (by someone with contribute rights) they will automatically be created.



Another feature of *Wiki Libraries* that is on by default is versioning. This means that every time a Wiki page is edited a previous copy is retained. You can view these by viewing the wiki page you desire, then selecting the **Page** tab at the top of the screen and finally the **Page History** option from the ribbon menu.



When you do so, you will see a list of previous version on the left. There you can select a different version to compare the current document with.



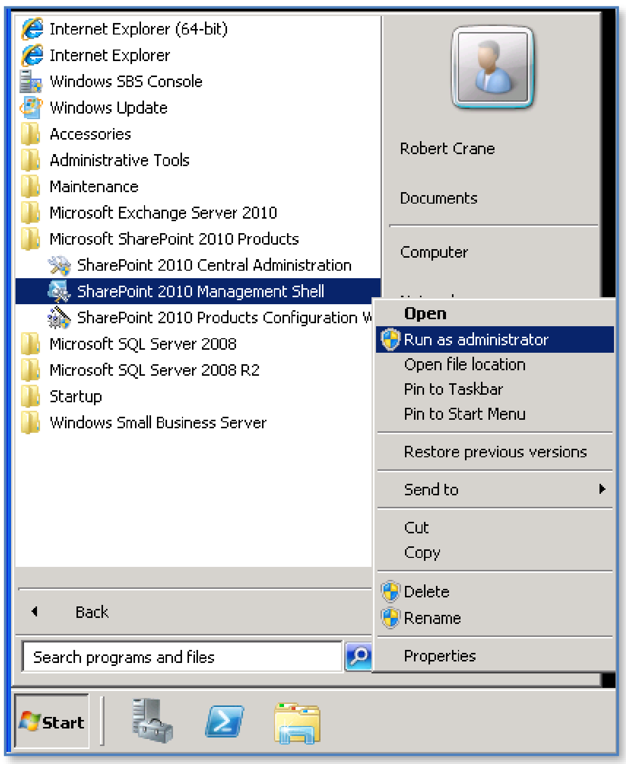
If you scroll through the document you will see the location where changes have been made as shown above.

This brief introduction has given you a basic overview of how to create and work with SharePoint *Wiki Libraries*. The major difference between *Wiki* and *Document Libraries* is that *Wiki Libraries* do not require any additional application to create and work with documents, it is all done through a web browser. This makes Wiki Libraries ideal for things such as knowledge bases, frequently asked questions (FAQs) as well a general collaboration.

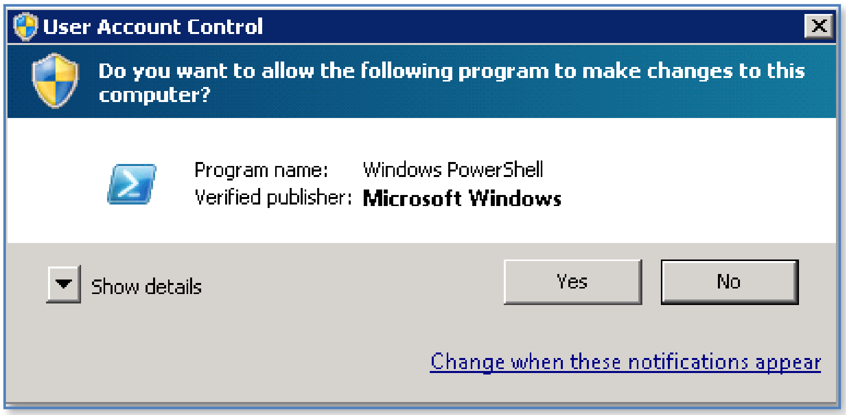
16.10 Using Powershell

The Basics

The preferred tool for SharePoint 2010 administration by Microsoft is now Powershell. Powershell is basically a powerful scripting language that is executed from a command prompt on the server console. Powershell is not only available for SharePoint but is also available for most Microsoft programs.



To run the SharePoint Powershell, from the SharePoint server console select **Start | All Programs | Microsoft SharePoint 2010 Products | SharePoint 2010 Management Shell**. Ensure that you **right mouse click** on this icon and select **Run as administrator** from the menu that appears.



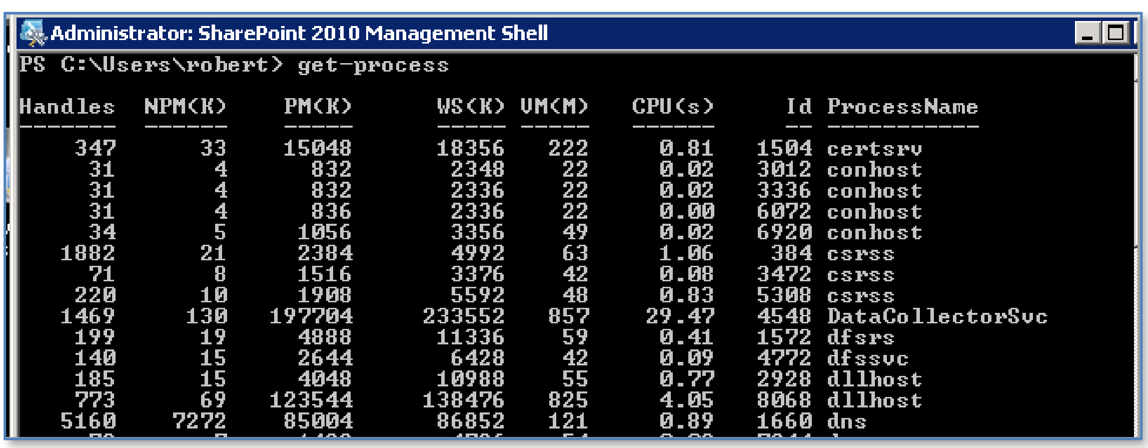
Accept the *User Account Control* when it appears by click on the **Yes** button.

All you will see now is what looks like a standard command prompt. Closer examination will reveal the letters *PS* at the beginning of the line. This indicates a Powershell command prompt.

As mentioned previously, Powershell is a scripting language that is common to many Microsoft products. It works by executing commands that are typed at the Powershell command prompt. For example if we type:

get-process

at this SharePoint Powershell prompt we see:

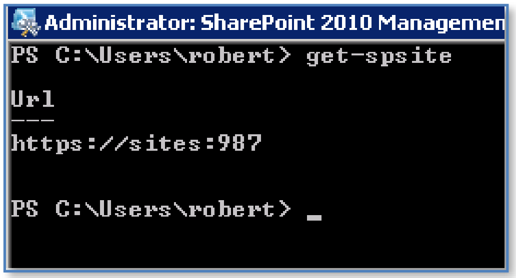


This is because the command *get-process* is a know Powershell command that will return all the processes running on the machine.

If you now type:

get-spsite

we see:



The command *get-spsite* is a SharePoint specific command that returns information about the SharePoint sites on that SharePoint server.

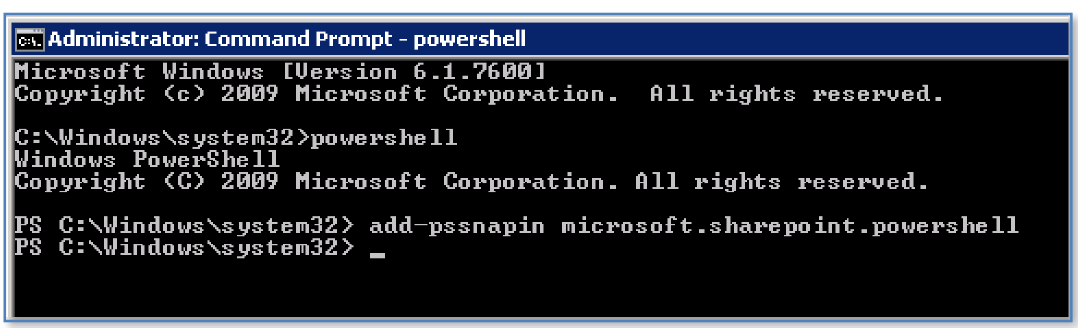
The Powershell commands are known as command-lets or cmdlet for short.

As you can imagine, with so many software products installed so many different ways, there is not always the need to have all the Powershell commands for every application available on every system. For this very reason Powershell allows you to load software specific 'snap-ins' that allow you to work with the applications that are installed on your system. When you run the SharePoint Management Shell you are actually running standard Powershell and automatically adding the snaps-ins for SharePoint so they are available when the prompt is displayed.

You could do exactly the same thing by first running the command Powershell from an elevated command prompt and then typing the following command:

add-pssnapin Microsoft.sharepoint.powershell

like so:

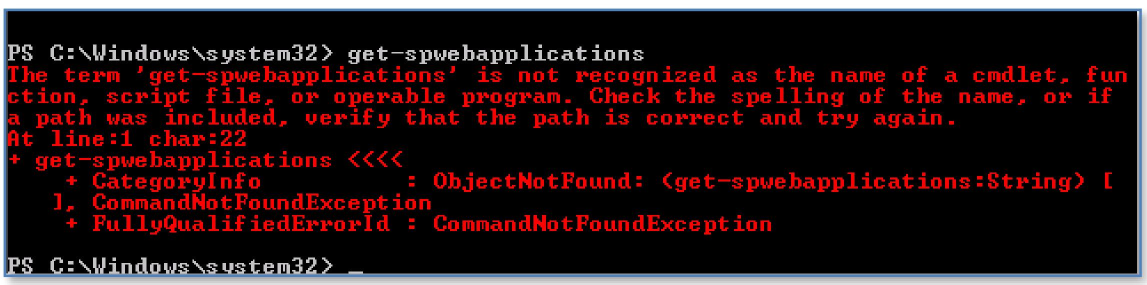


Without adding this specific snap-in for SharePoint none of the SharePoint cmdlets will work. So when you run the SharePoint Management Shell you are simply running standard Powershell with the SharePoint snap-ins as well.

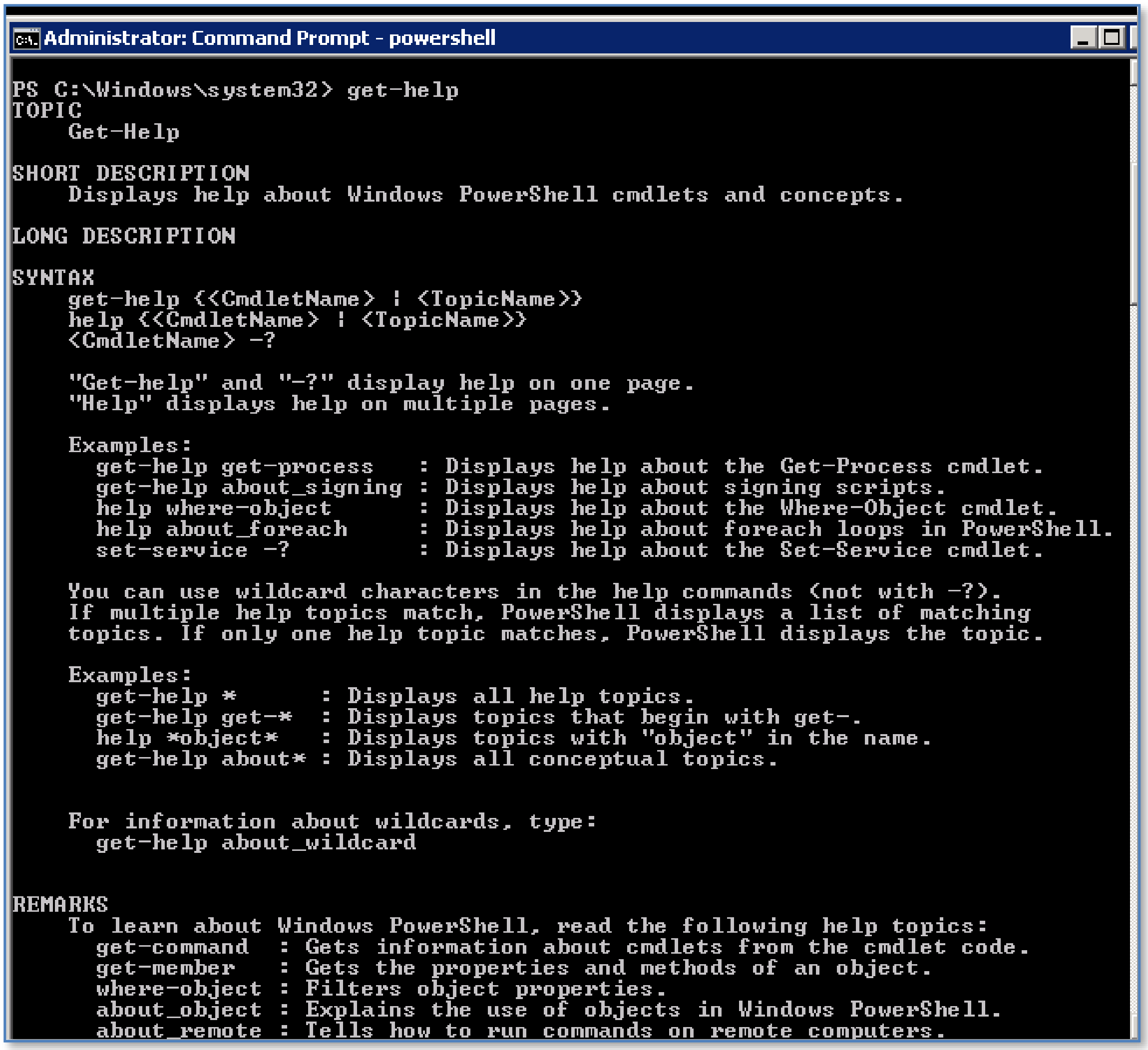
You may ask where do these snap-in files come from? They are basically automatically installed when you install the application software. So for each supported application that you install on your system, a set of Powershell snap-ins will also be installed, ready for use.

Another handy thing is that you can create a file containing all the commands and execute that a program. This allows you to script a number of common tasks and execute them consistently. All you need to do is save the commands into a text file with a .ps extension and then execute them from an elevated command prompt via:

powershell script.ps



If you make an error by typing a command incorrectly you will normally be greeted by a message like that shown above in red. It is usually easy to determine exactly where the problem lies and how to make a correction.



```
Administrator: Command Prompt - powershell

PS C:\Windows\system32> get-help
TOPIC
    Get-Help

SHORT DESCRIPTION
    Displays help about Windows PowerShell cmdlets and concepts.

LONG DESCRIPTION

SYNTAX
    get-help {<CmdletName> | <TopicName>}
    help {<CmdletName> | <TopicName>}
    <CmdletName> -?

    "Get-help" and "-?" display help on one page.
    "Help" displays help on multiple pages.

    Examples:
      get-help get-process   : Displays help about the Get-Process cmdlet.
      get-help about_signing : Displays help about signing scripts.
      help where-object      : Displays help about the Where-Object cmdlet.
      help about_foreach     : Displays help about foreach loops in PowerShell.
      set-service -?         : Displays help about the Set-Service cmdlet.

    You can use wildcard characters in the help commands (not with -?).
    If multiple help topics match, PowerShell displays a list of matching
    topics. If only one help topic matches, PowerShell displays the topic.

    Examples:
      get-help *         : Displays all help topics.
      get-help get-*     : Displays topics that begin with get-.
      help *object*      : Displays topics with "object" in the name.
      get-help about*    : Displays all conceptual topics.


    For information about wildcards, type:
      get-help about_wildcard


REMARKS
    To learn about Windows PowerShell, read the following help topics:
      get-command  : Gets information about cmdlets from the cmdlet code.
      get-member   : Gets the properties and methods of an object.
      where-object : Filters object properties.
      about_object : Explains the use of objects in Windows PowerShell.
      about_remote : Tells how to run commands on remote computers.
```

Powershell also has an extensive help system that you can access via the command prompt. For example you can type the following as shown above:

get-help

If you want assistance with a specific command (for example *get-spweb*) simply type:

get-help get-spweb

and something like the following will be displayed:

```
PS C:\Windows\system32> get-help get-spweb

NAME
    Get-SPWeb

SYNOPSIS
    Returns all subsites that match the given criteria.


SYNTAX
    Get-SPWeb [[-Identity] <SPWebPipeBind>] [-AssignmentCollection <SPAssignmen
    tCollection>] [-Confirm [<SwitchParameter>]] [-Filter <ScriptBlock>] [-Limi
    t <String>] [-Regex <SwitchParameter>] [-Site <SPSitePipeBind>] [-WhatIf [<
    SwitchParameter>]] [<CommonParameters>]


DESCRIPTION
    The Get-SPWeb cmdlet returns all subsites that match the scope given by the
     Identity parameter. All subsites that meet the criteria are returned.

    The Identity can be either the full URL or a relative path. If you specify
```

SharePoint cmdlets

<u>Get-spwebapplication</u>

```
PS C:\Windows\system32> get-spwebapplication

DisplayName                        Url
-----------                        ---
SBS SharePoint                     https://sites:987/


PS C:\Windows\system32> _
```

Returns the Display name and URL of SharePoint sites configured on server.

<u>Get-spsite</u>

```
PS C:\Windows\system32> get-spsite

Url
---
https://sites:987


PS C:\Windows\system32> _
```

Returns the URL of SharePoint sites configured on server.

<u>Get-spfarm</u>

```
PS C:\Windows\system32> get-spfarm

Name                                                      Status
----                                                      ------
SharePoint_ConfigurationDatabase                          Online

PS C:\Windows\system32> _
```

Returns the name of the SharePoint farm configuration database and its status (online or offline)

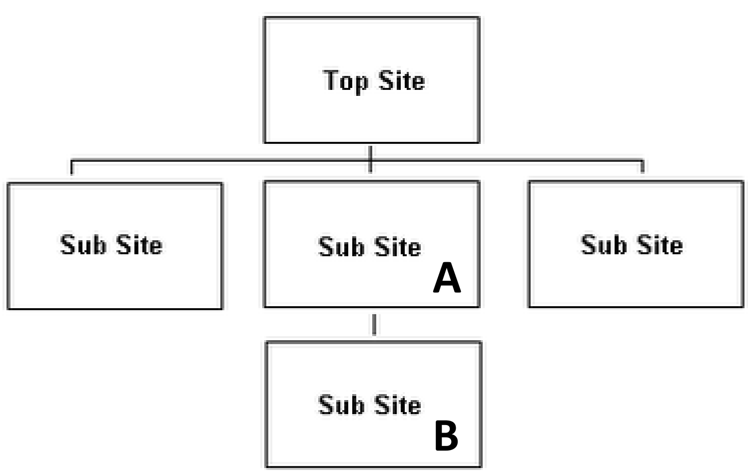
<u>Get-spcontentdatabase</u>

```
PS C:\Windows\system32> get-spcontentdatabase

Id                : eece9d82-72a6-4e46-888d-da9347772641
Name              : ShareWebDb
WebApplication    : SPWebApplication Name=SBS SharePoint
Server            : CIASVR03\SHAREPOINT
CurrentSiteCount  : 1


PS C:\Windows\system32> _
```

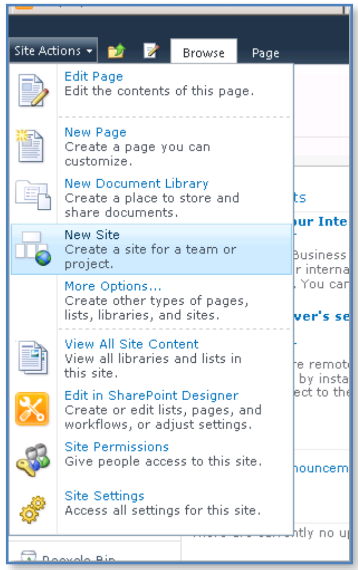
Returns information about the SharePoint content database including its Id, name, web application it is attached to, the SQL server instance.

16.11 Working with subsites

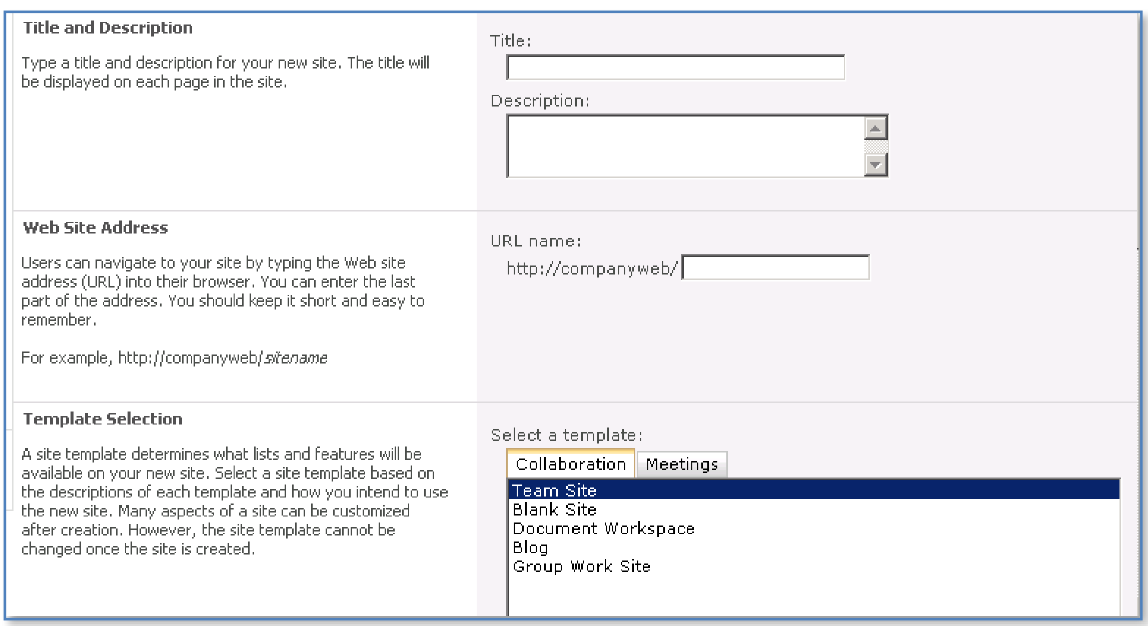
A SharePoint *subsite* is like a completely new SharePoint site except that it lives underneath an existing site, much like folders and sub folders in a hard disk file system.



Subsites can have their own independent look and feel, they can have their own unique security and they can even have their own *subsites* creating a full tree structure as shown above. The thing they all have in common is that they all have a parent site and it is from this parent site that a *subsite* is created. Thus, in the above diagram the **Top site** is the parent of **Subsite A**, while **Subsite A** is the parent of **Subsite B**.



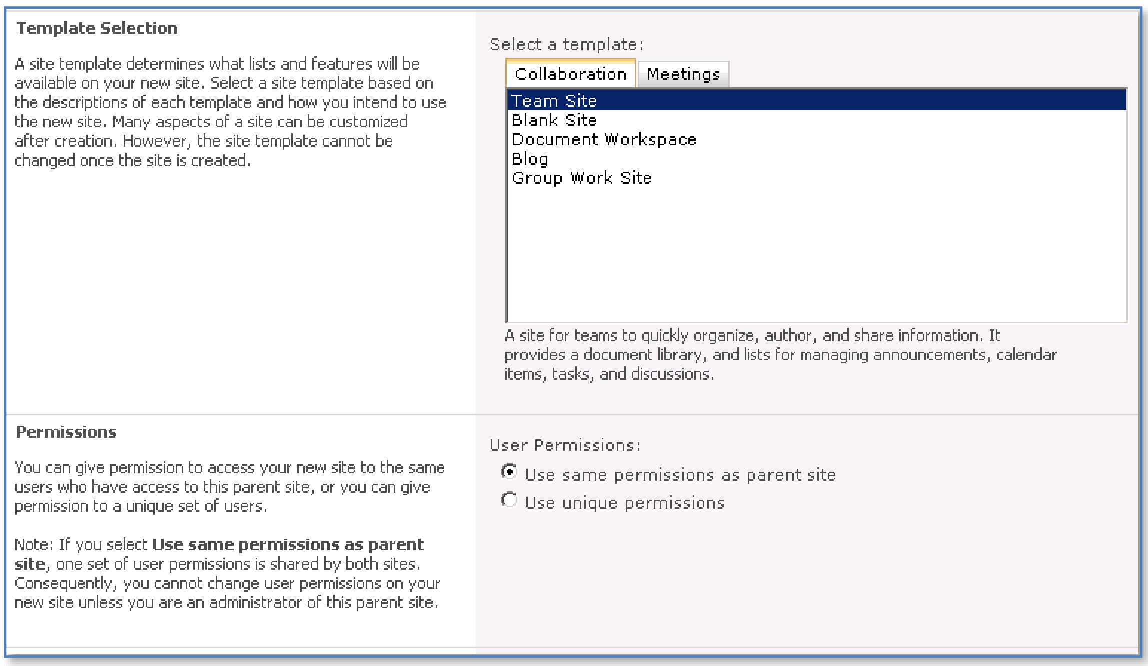
To create a *subsite* from your existing location, ensure that you are logged into the site with the rights to create a *subsite* and then click on the **Site Actions** option in the top left of the screen. From the menu that appears select **New Site**.



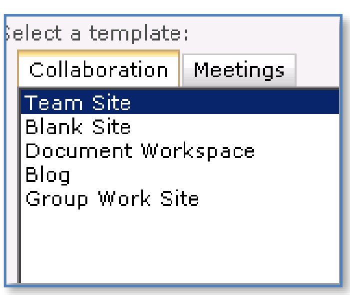
You will then be taken to location where you will need to enter some parameters about your site. At the top of the screen you will need to enter a **Title** and **Description** for the *subsite*.

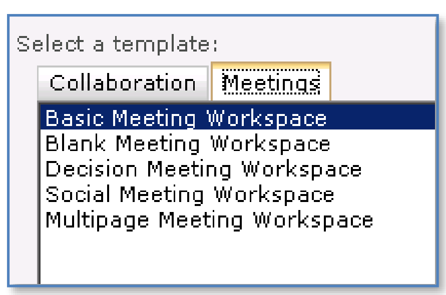
The next option is to enter the **Web Site Address**. This is the URL that can be directly typed into the address bar of a browser to take you to this *subsite*. It is recommended that you keep it as short as possible and avoid using special characters such as spaces, commas, dots, slashes etc. The prefix for the URL will already be displayed (as it is taken from the parent site). All you need to do is enter in what you desire for the site identification part of the URL.

Scroll down the screen for more options.



In the *Template Selection* you now need to select from a range of different templates on which the *subsite* will be based. The number of templates available depends on how many templates have been installed on your SharePoint system. In most cases you will only see two tabs, **Collaboration** and **Meeting**.

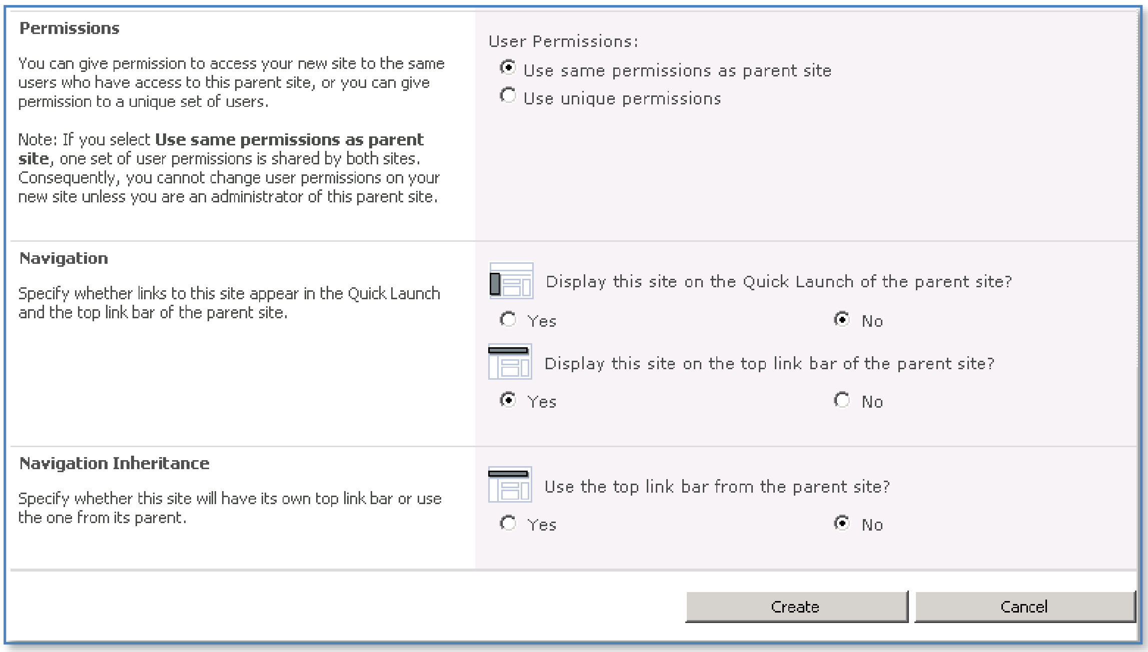




In general it is recommended that you select the **Team Site** template as this has most of the options required already configured for you. However, there is no reason why you cannot select any of other templates displayed.

As mentioned it is also possible to add new templates to your SharePoint site that you can select here. This will be covered in a later tutorial.

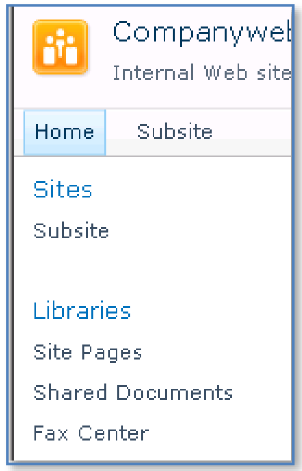
Scroll down the screen for more options.



You are next prompted to enter how permissions will be handled for this *subsite*. The *Use same permissions as parent site* inherits the permissions from the location where you are creating this new *subsite* in. This means that users at this location will have exactly the same rights in this *subsite* as the do in the parent.

If you wish to set permissions differently from the existing site then you will need to select the second option – *Use unique permissions*. Selecting this means you will be prompted when the site is created to nominate who will have access to the *subsite*. More information about configuring this can be found below.

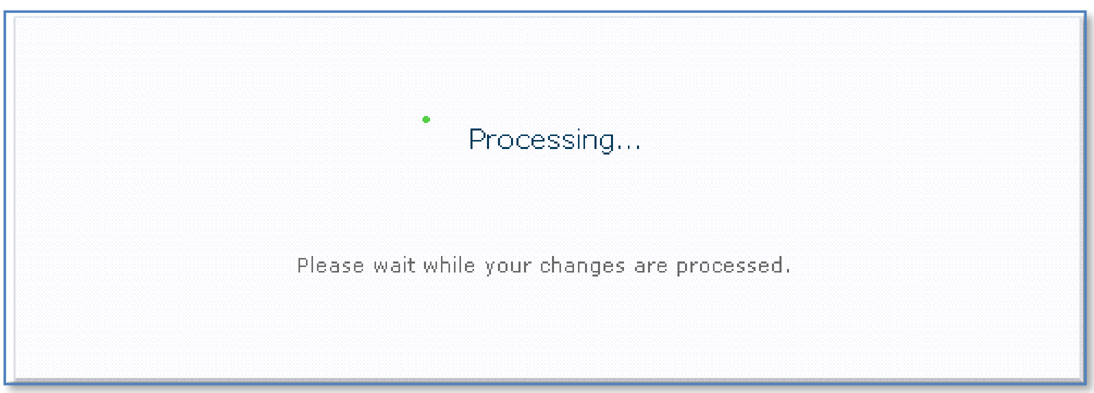
Next, you need to decide how the navigation for this *subsite* will be handled. If you want the *subsite* to appear on the *Quickstart* menu (which is the menu to the left of the page) of the parent site then select the *Yes* option. You can add the link later if you need to but generally the recommendation is to add to aid navigation unless you want users to visit the URL directly.



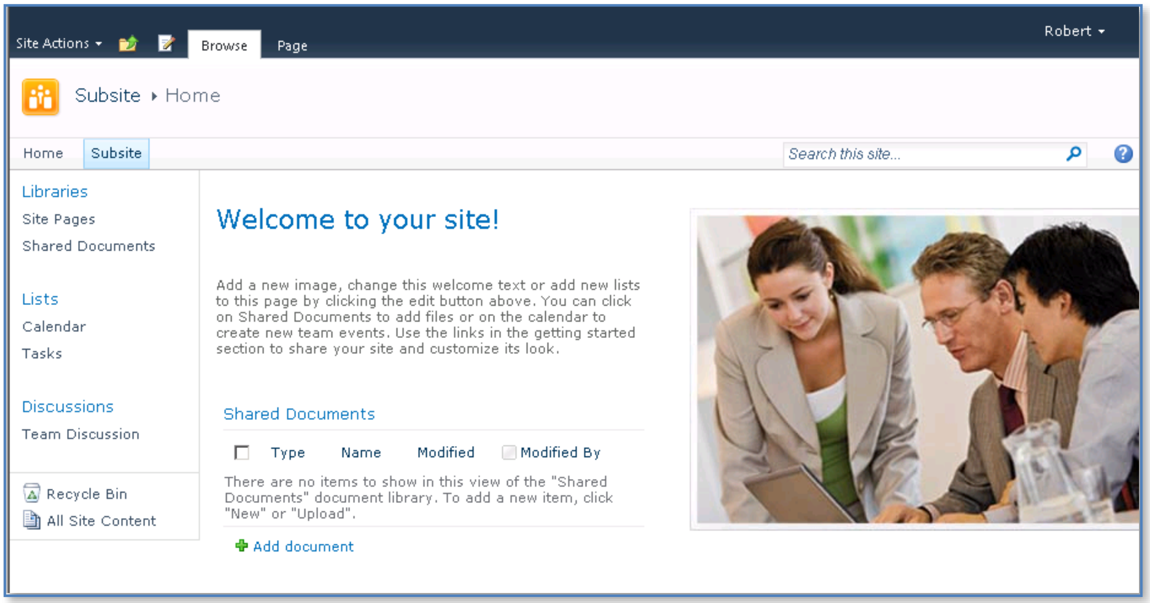
You can see above that the *subsite* created now appears as a link below a heading *Sites* on the *Quickstart* menu of the parent site.

You will also note in the above screen shot that an additional tab has also been created on the parent site *Top Link bar* called *Subsite*. The second option asks you whether you wish to create this tab. Again, it is generally better to create this tab, however it can always be recreated later on.

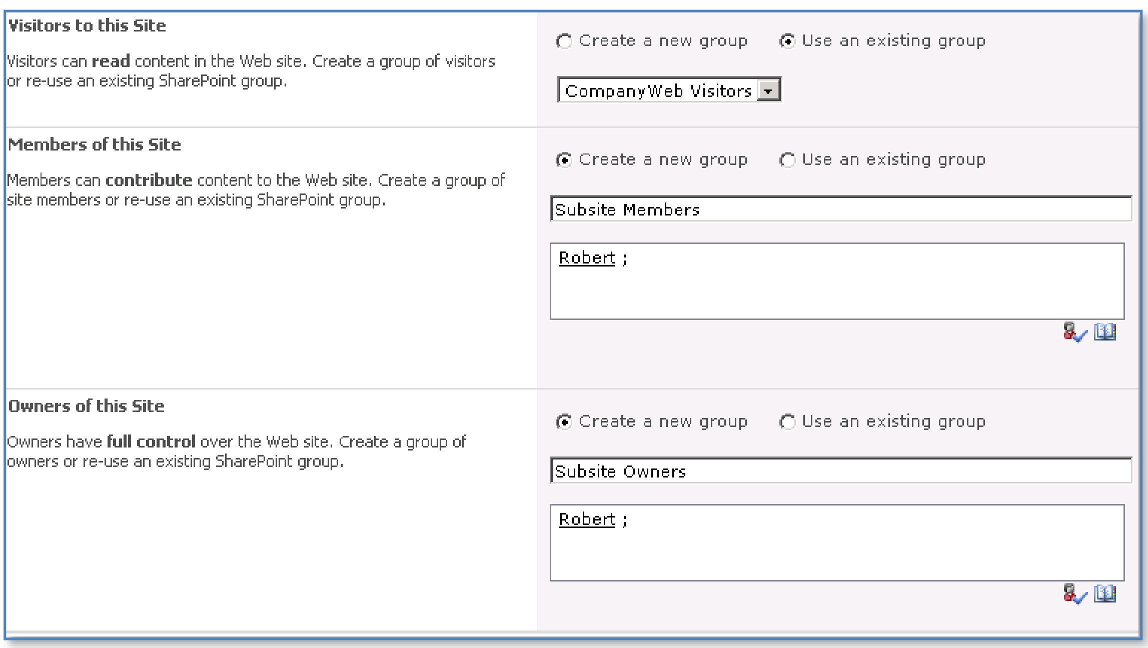
Finally, you need to decide whether you want to use the existing top link navigation bar, that appears on the parent site, to also appear in this *subsite*. Once again this option can be configured at a later stage if required.



Once you have selected your options scroll down to the bottom of the screen and press the **OK** button to create the *subsite*. When you do so you should see a *Processing* window appear like shown above.

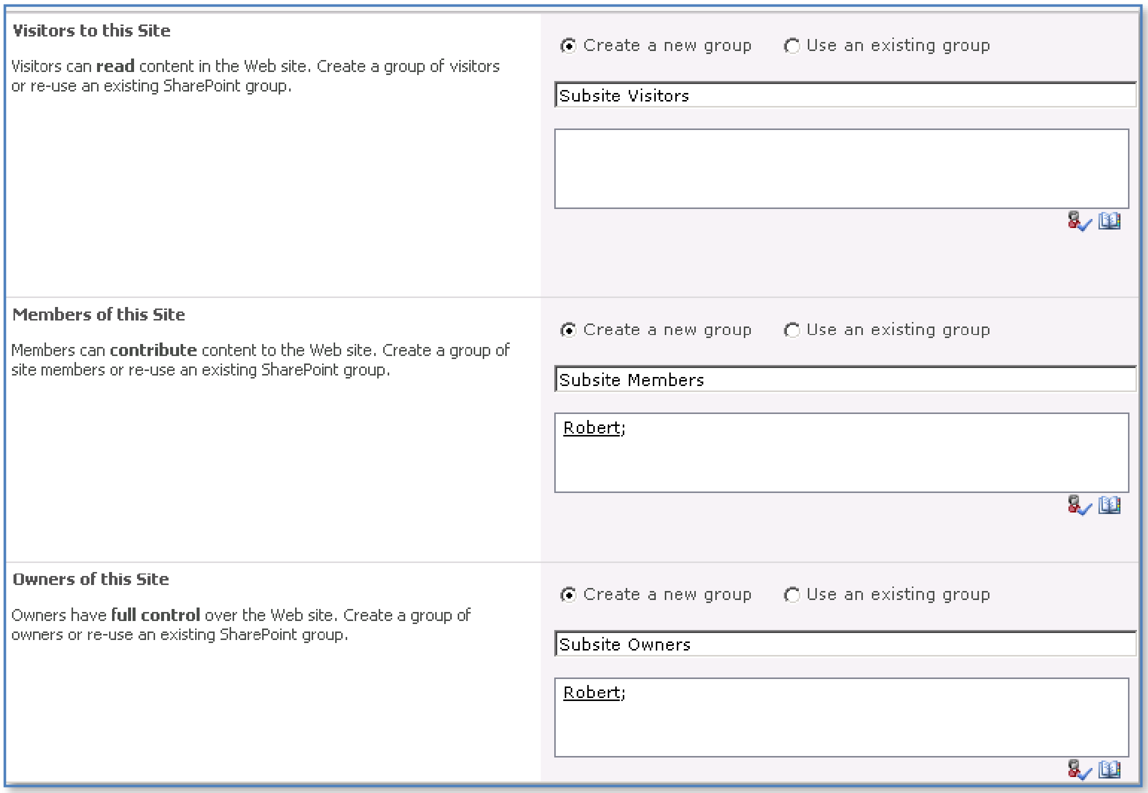


After a few moments you should see a site displayed based on the template you selected. However, if you selected to have unique permission there is one more step to complete.



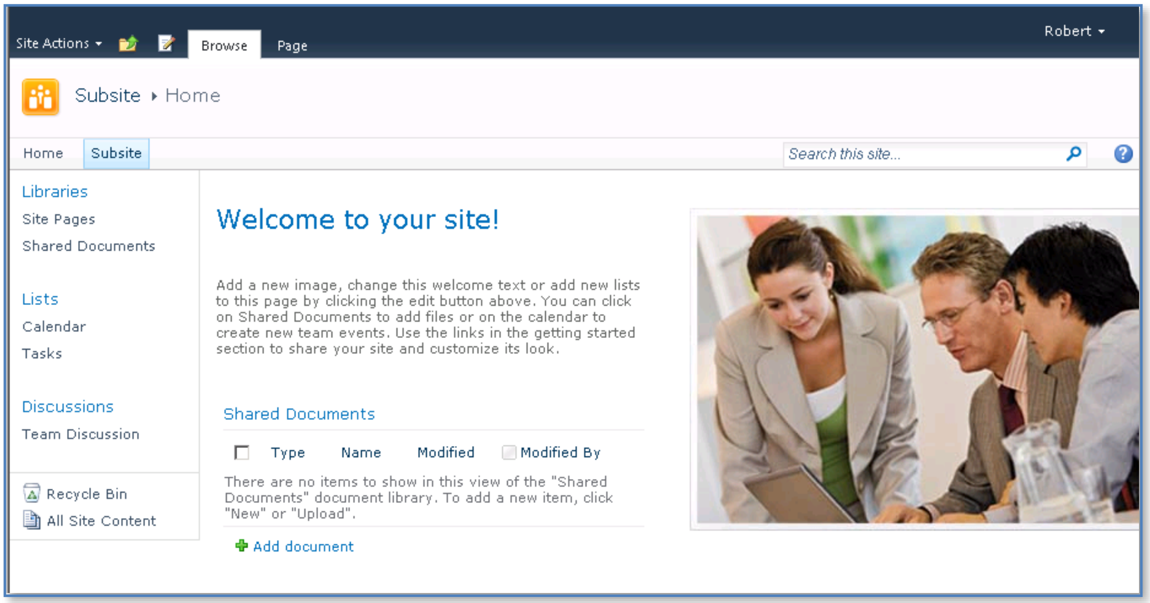
Because you selected the option to create unique permissions for your site you will need to configure those now. You will therefore be prompted to enter the names of the three standard SharePoint site groups *Visitors*, *Members* and *Owners*. You will also be able to enter user details into any of these groups (with the current user automatically being added as a site member and site owner as shown above).

By default, you will normally be prompted to use an existing visitors group for this *subsite*, however you can change this by selecting the **Create a new group** option in the *Visitors to this site* area at the top of the page. Doing so should display a page like:

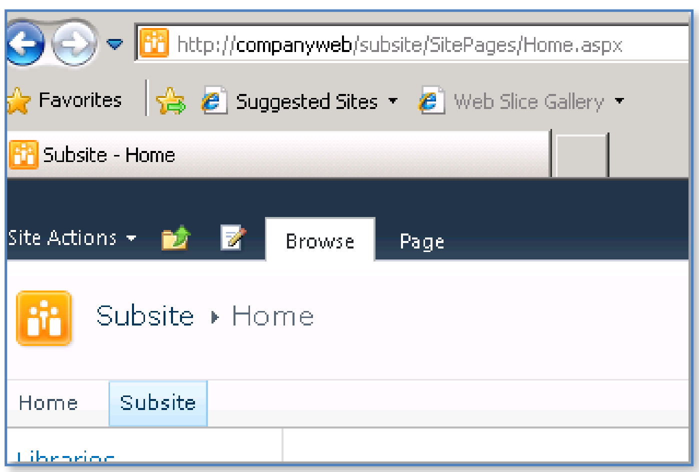


It is generally recommended that if you are going to create unique permission for this *subsite* that you create three unique security groups to avoid confusion.

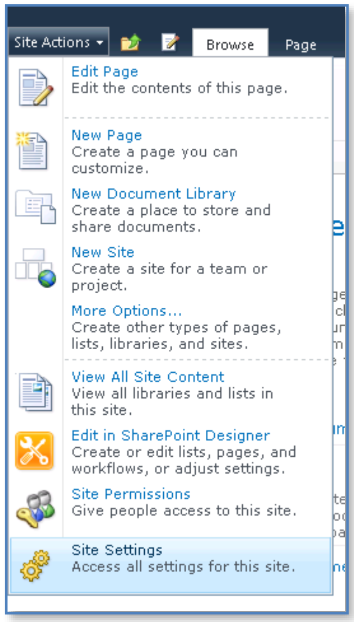
Once these groups have been set scroll down and press the **OK** button at the bottom of the screen to complete the configuration of your *subsite*. When complete you should see something like:



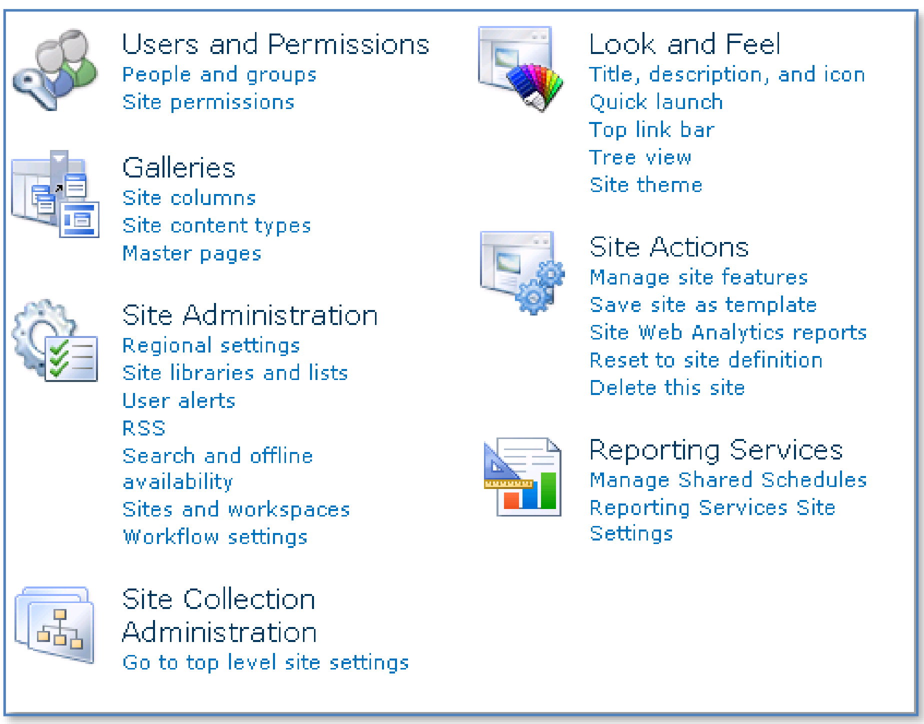
You should now see a *subsite* based on the template you selected during creation (in this case a team site). You are free to configure this *subsite* as required and note that you can access it directly (if need be) via its URL (in this case http://companyweb/subsite).



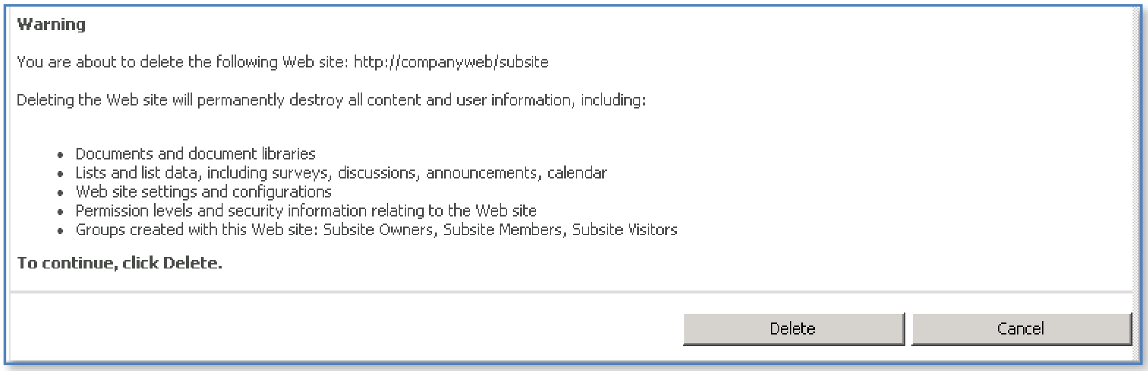
To delete a *subsite* (and all its contents) you firstly need to navigate to that *subsite*. Once there, select **Site Actions** in the upper left.



From the menu that appears select **Site Settings**.

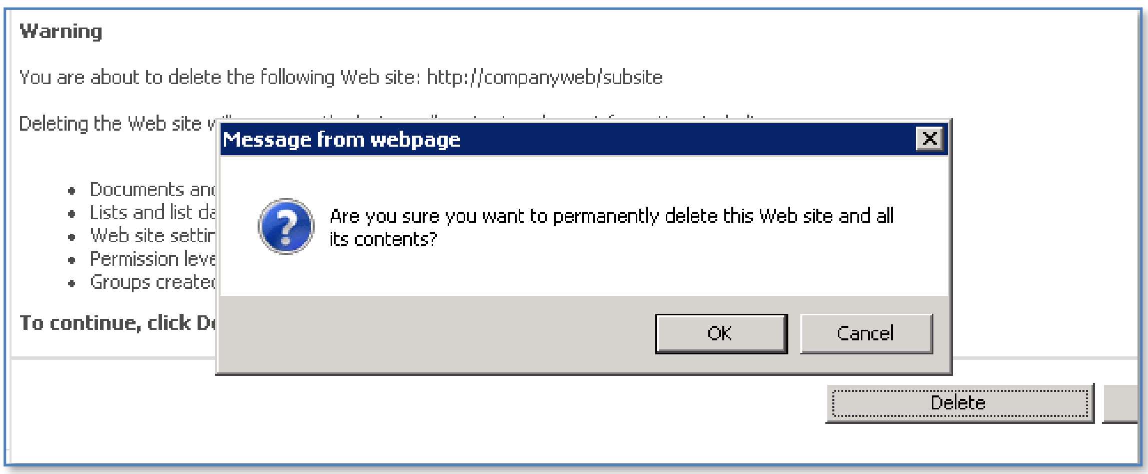


Select the option **Delete this site** from under the *Site Actions* section to the right.

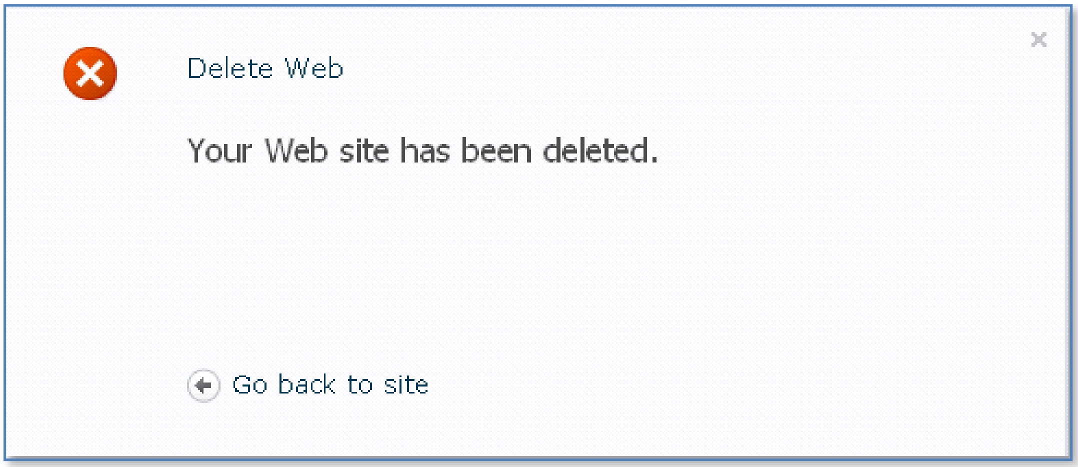


You will then receive a warning to confirm that you wish to delete the site and all its contents as shown above. Unless you have SharePoint Service Pack 1 installed on your system *subsites* are removed permanently once they are deleted.

When ready press the **Delete** button to remove the *subsite* and all its contents.

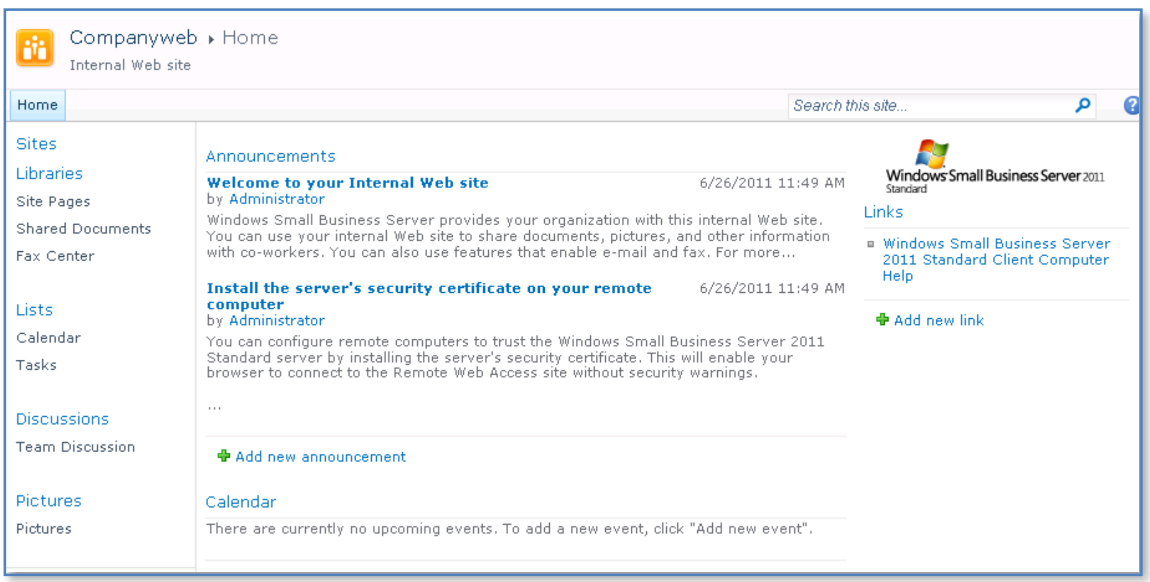


You'll then be asked for the final time whether you wish to delete the site. Press the **OK** button to proceed.



Depending on the size of your site you will see a *Processing* screen after which you will see the message shown above that the *subsite* has been deleted.

Press on the **Go back to site** link to return to the parent *subsite*.

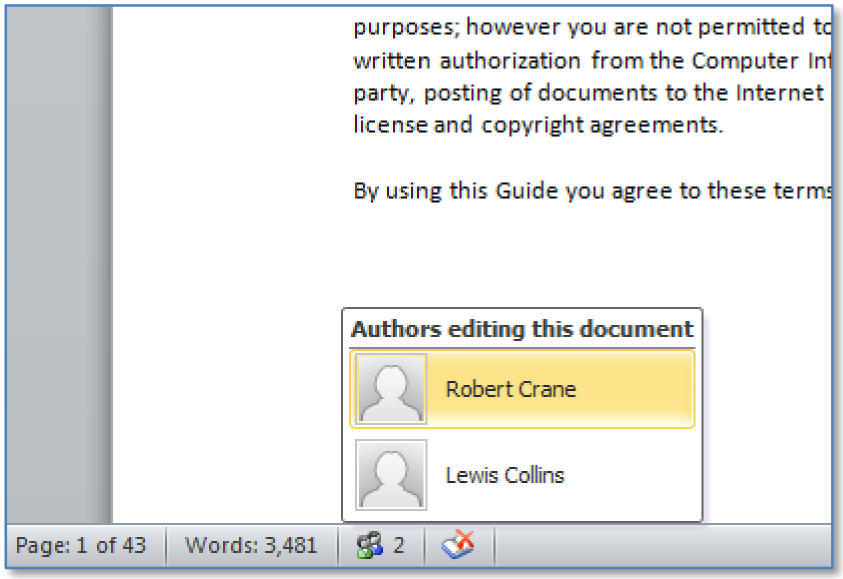


You should see that the *subsite* no longer appears on either the *Quickstart* menu or the *Top Link bar*.

16.12 Document Co-authoring

SharePoint 2010 supports the concept of document co-authoring with the latest version of desktop and web Office applications. Not every application directly supports document co-authoring at this point in time. This tutorial will cover how document co-authoring works and which Office applications support it.

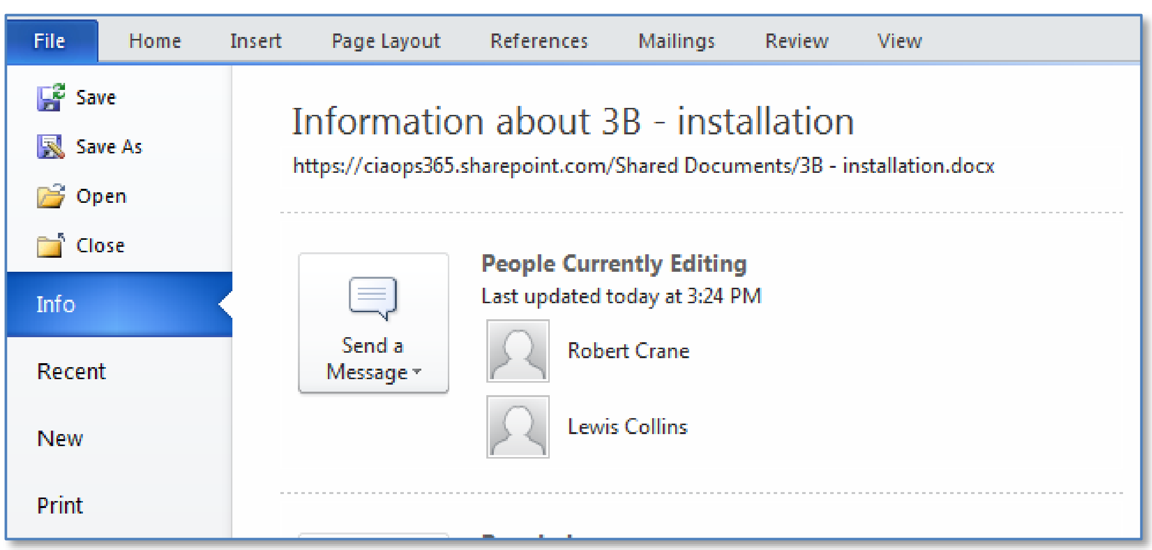
Word



Document co-authoring is only supported with the DOCX format for Word documents. When a DOCX document is saved to a SharePoint 2010 document library and then opened by multiple users using Word 2010, co authoring is automatically enabled.

When a document is being co authored you will see a list of authors in the lower left of the Word 2010 application. If you click on the icon it will reveal the current list of co-authors as shown above.

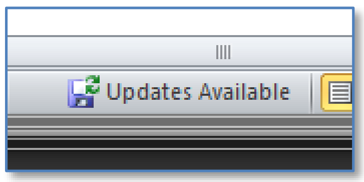
You can also view who is co-authoring a document by going into the backstage area of Word 2010 and selecting **Info** as shown below.



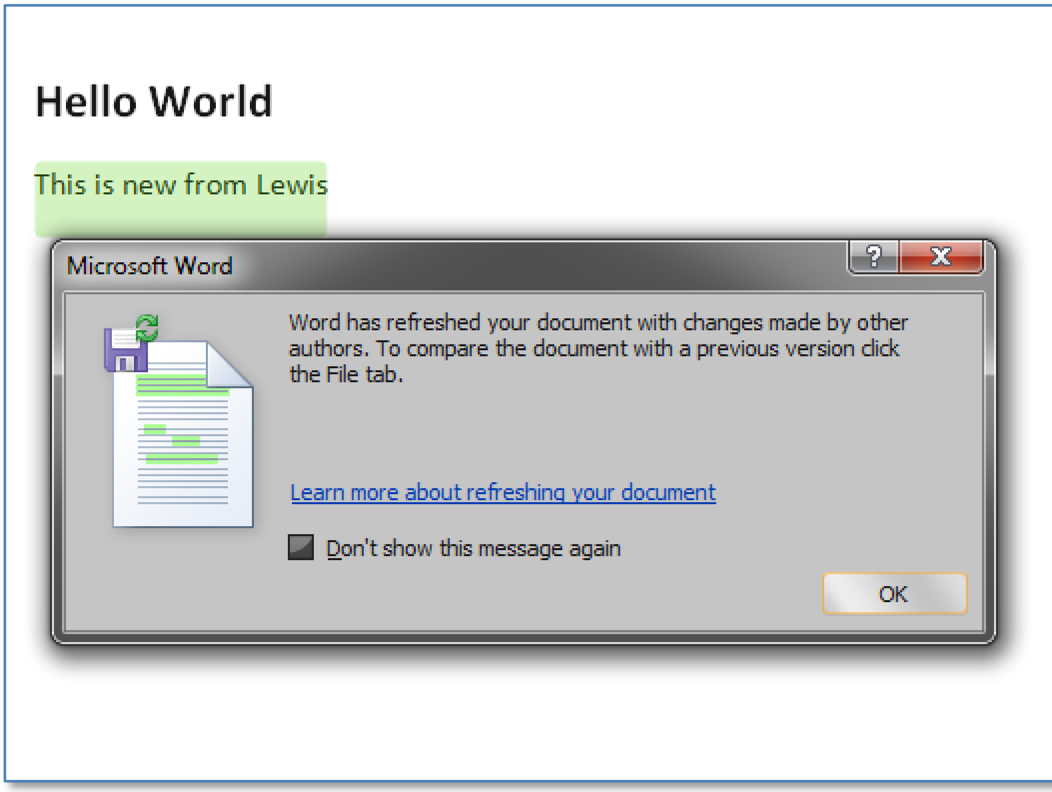
You can see who the co-authors are and even send them a message directly from Word 2010 if desired.

If your return to the Word 2010 document will notice that the *Save* button in the top right is a different from what you normally see. It actually is now a *Save and Refresh* button. This means that when you save a document the changes you have made locally will be uploaded to the server and at the same time you will receive any updates from co-authors sent down to your local version.

As multiple co-authors work on a document and make changes, those changes will not be visible to others until they save and refresh their local copy.



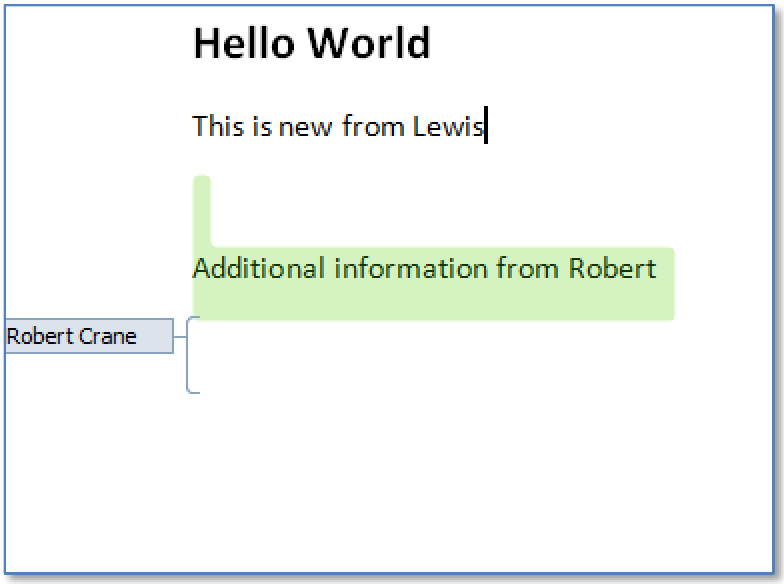
However, as updates are made in the background all co-authors will be notified that changes to the document have been made via the *Updates Available* status display in the lower part of the Word 2010 application. This gives a co-author an indication that they should save and refresh their local version of the document to receive the latest updates from other co-authors.



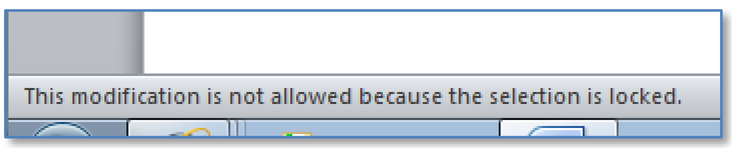
Once a co-author has pressed the *Save and Refresh* button, if there are any updates from other co-authors they will see a message like shown above (which can be disabled if desired).

They will also see the additional information incorporated by other co-authors highlighted (in this case in green).

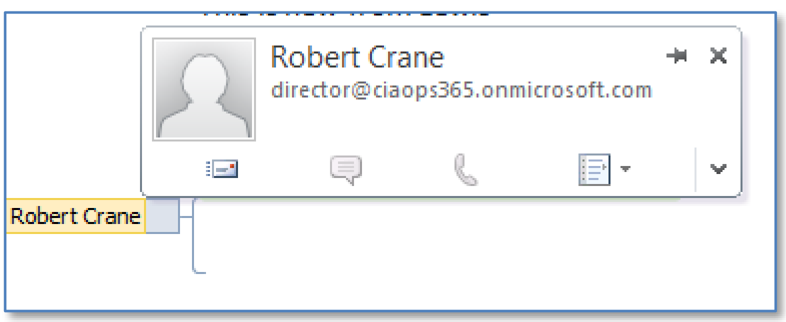
Co-authors may also see a refresh icon displayed in their document as shown above. This simply indicates to the local co-author that additional updates to the document are available.



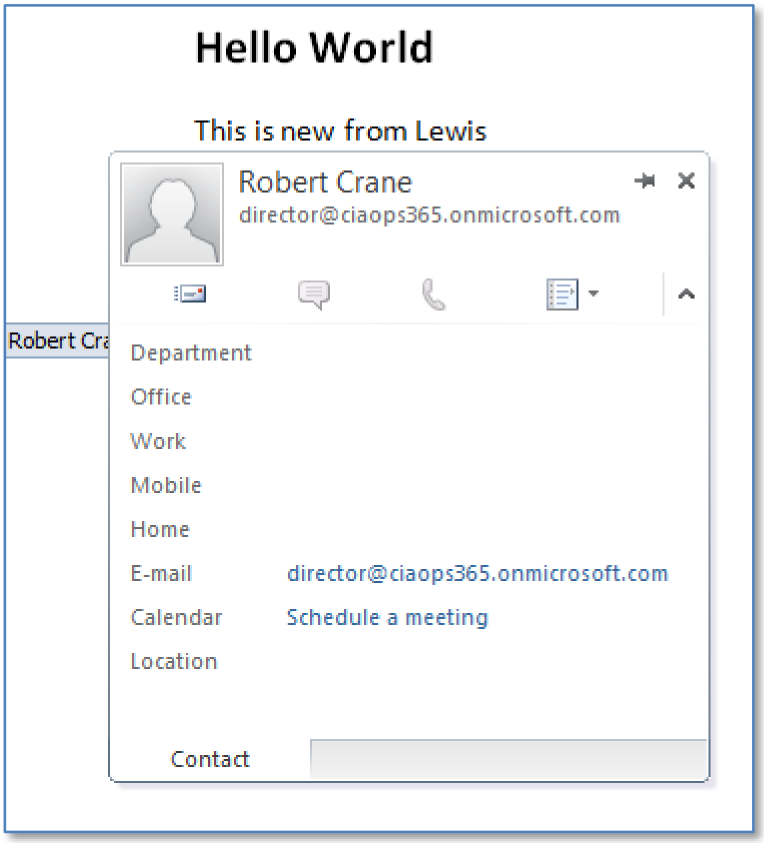
Co-authoring works by locking a paragraph for exclusive use. In the above example one co author (Robert Crane) has locked a paragraph for exclusive use. No information is currently displayed as the remote co-author has yet to update their changes.



If the local co-author attempts to navigate to this 'locked' area and make changes they will be prevented from doing so. A message will display at the bottom of the Word 2010 window explaining that the section is locked.

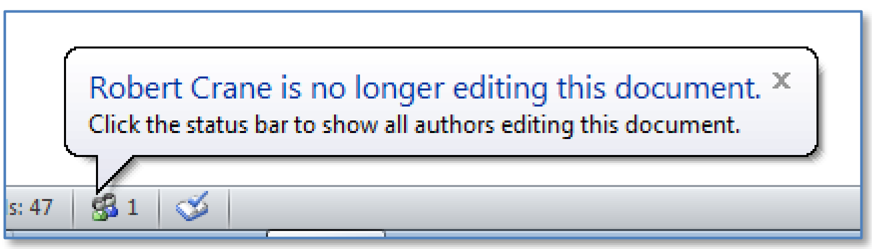


If the local co-author clicks on the name of the remote co-author they will see their contact card as shown above. From here it is possible to contact the remote co-author via email, chat or phone if appropriately configured.



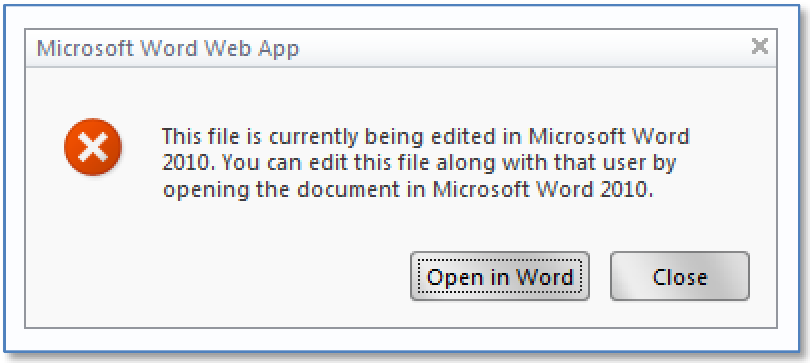
Pressing the button on the far right of the contact card reveals the full contact card for that remote co-author.

If the remote co-author has signed to Lync then their status will also be displayed.

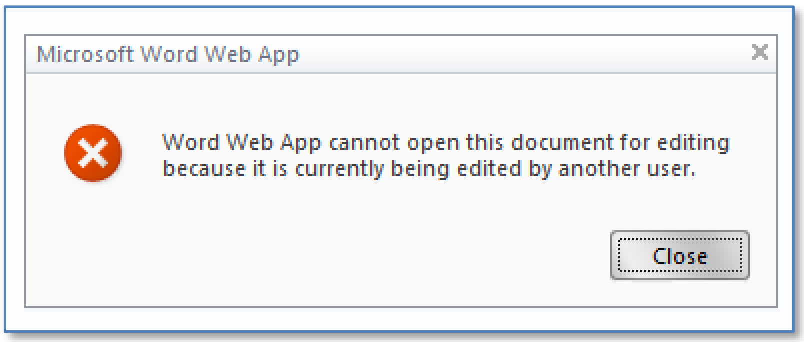


When a remote co-author closes the document a message like that shown above will be displayed. The count of co-authors will also decrease.

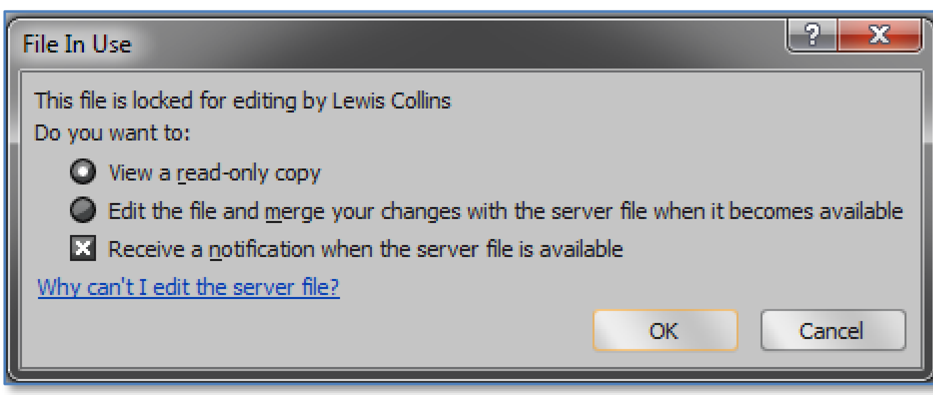
The above example demonstrates what happens when a Word document (DOCX) is open simultaneously using the Word 2010 application on the local desktop. Many SharePoint installations also support Word Web Apps, which allows the viewing and editing of documents in a browser.



If the document is currently open with Word 2010 desktop application remotely and a local user attempts to edit that document with Word Web App they will see the above message indicating that they are unable to edit the document while it is open in Word 2010. They can always open the document for viewing in Word Web App.



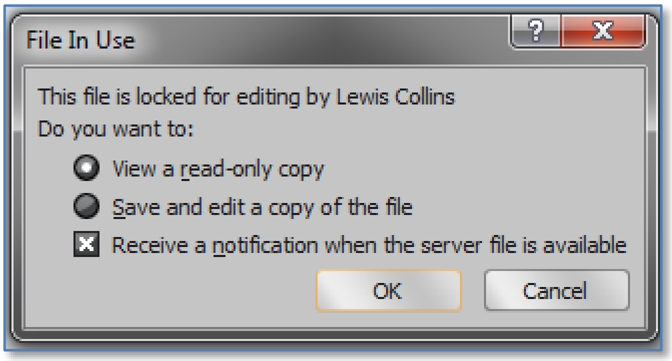
If the document is currently open with Word Web App remotely and a local user attempts to also open the document locally with Word Web App, they will be prevented from doing so as shown above.



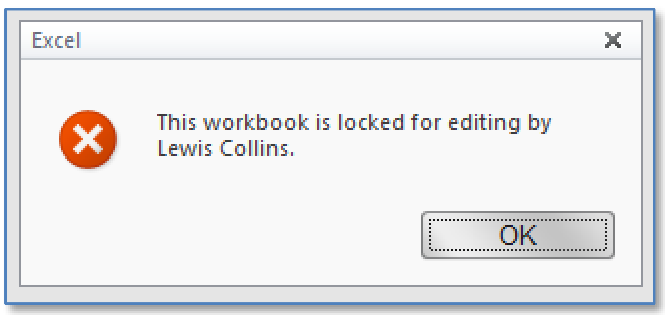
If the document is currently open with Word Web App remotely and a local user attempts to also open the document locally with Word 2010, they will be prevented from doing so as shown above.

Excel

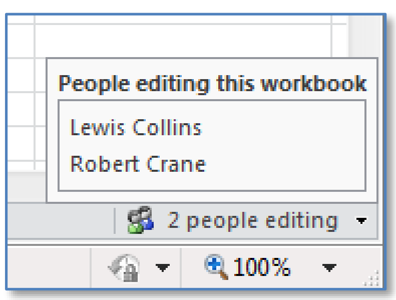
Excel 2010 has a more limited number of document co-authoring options than does Word 2010.



If the spreadsheet, saved in a SharePoint 2010 document library, is currently open with Excel 2010 remotely and a local user attempts to also open the spreadsheet locally with Excel 2010, they will be prevented from doing so as shown above.



If the spreadsheet is currently open with Excel 2010 remotely and a local user attempts to also open the spreadsheet locally for editing with Excel Web App, they will be prevented from doing so as shown above.



If the spreadsheet is currently open with Excel Web App remotely and a local user attempts to also open the spreadsheet locally with Excel Web App, they will be able to co -author the spreadsheet. The co-authors will be displayed in the lower right of the browser window.

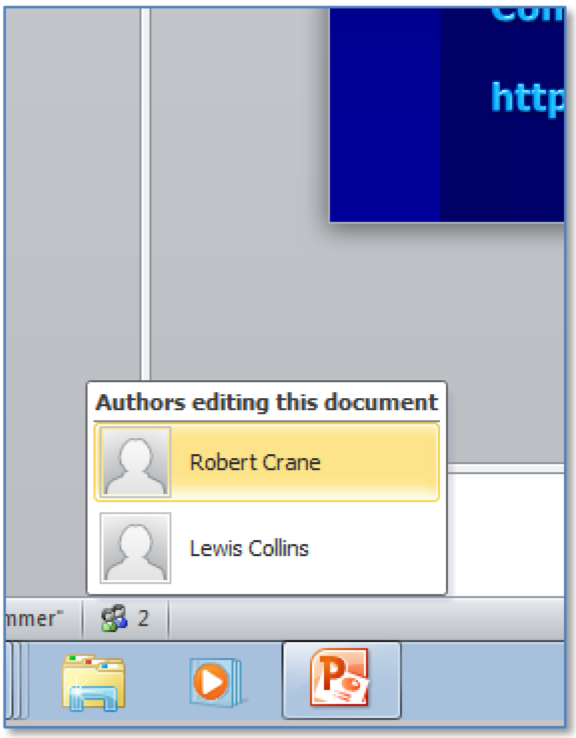
Document co-authoring is only supported with the XLSX format for Excel spreadsheets. When an XLSX spreadsheet is saved to a SharePoint 2010 document library and then opened by multiple users using Excel Web App, co authoring is automatically enabled.

The reason that co authoring is supported in the Excel Web Apps is that this version has a more limited amount of functionality when compared to the desktop version of Excel 2010.

When using co authoring via Excel Web App any changes are automatically saved to SharePoint and all the remote spreadsheets get updated automatically with any changes. It is also important to note with Excel Web App that there is no cell, column or row locking. Whoever makes the last change to a cell is the one that is saved. This means that it is possible to over write a remote co authors updates without receiving any notifications.

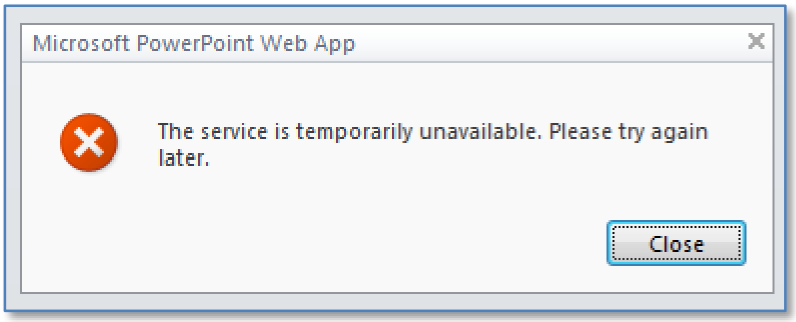
PowerPoint

The way co-authoring works in Power Point 2010 is very similar to that found with Word 2010.

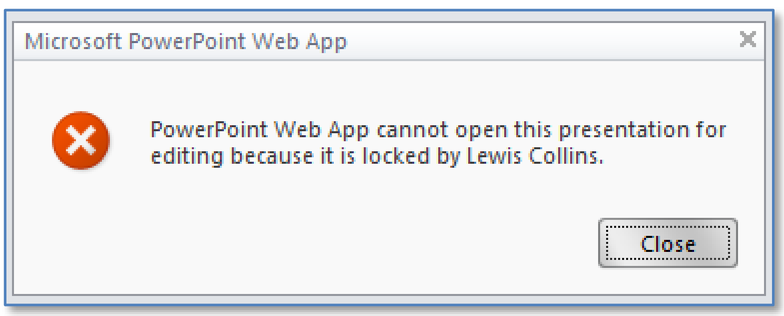


When a PowerPoint 2010 presentation is opened using PowerPoint 2010 on the desktop by multiple co authors, they will be shown in the lower portion of the PowerPoint 2010 application. Click on this icon will reveals the names of the co authors.

Document co-authoring is only supported with the PPTX format for PowerPoint 2010 presentations. When a PPTX document is saved to a SharePoint 2010 document library and then opened by multiple users using PowerPoint 2010, co authoring is automatically enabled.



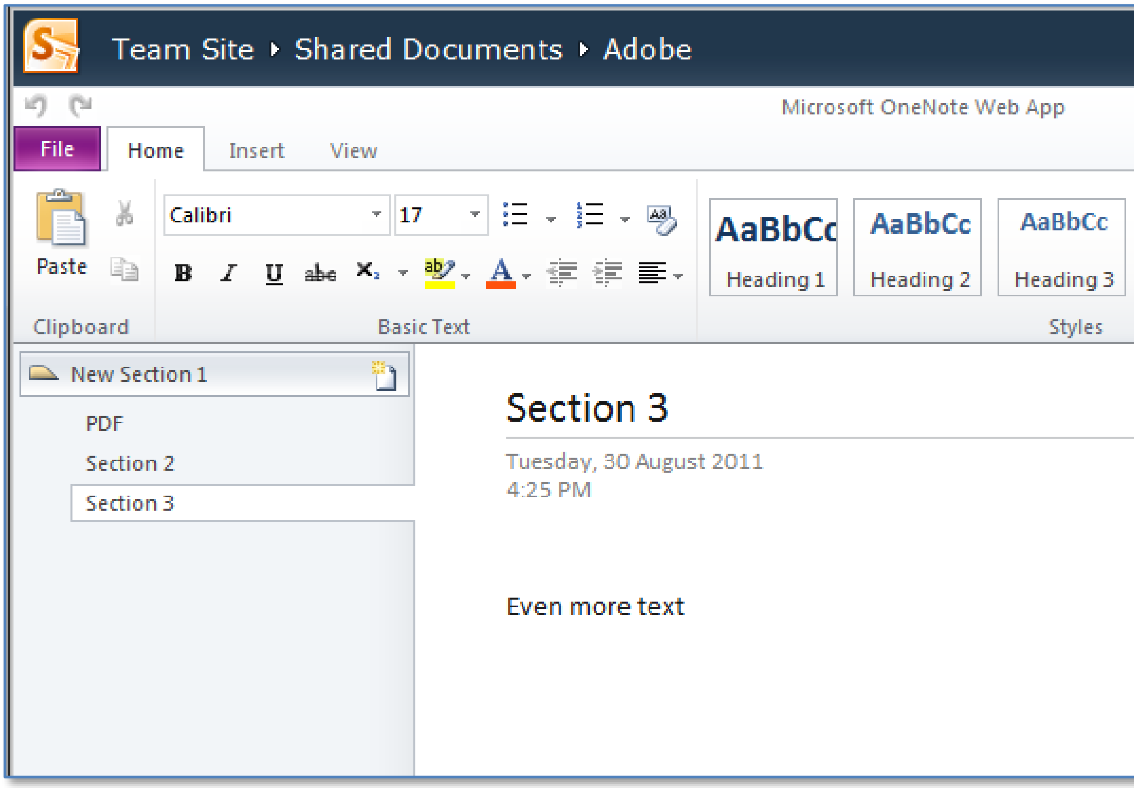
If the presentation is currently open with PowerPoint 2010 remotely and a local user attempts to also open the spreadsheet locally with PowerPoint Web App, they will be prevented from doing so as shown above.



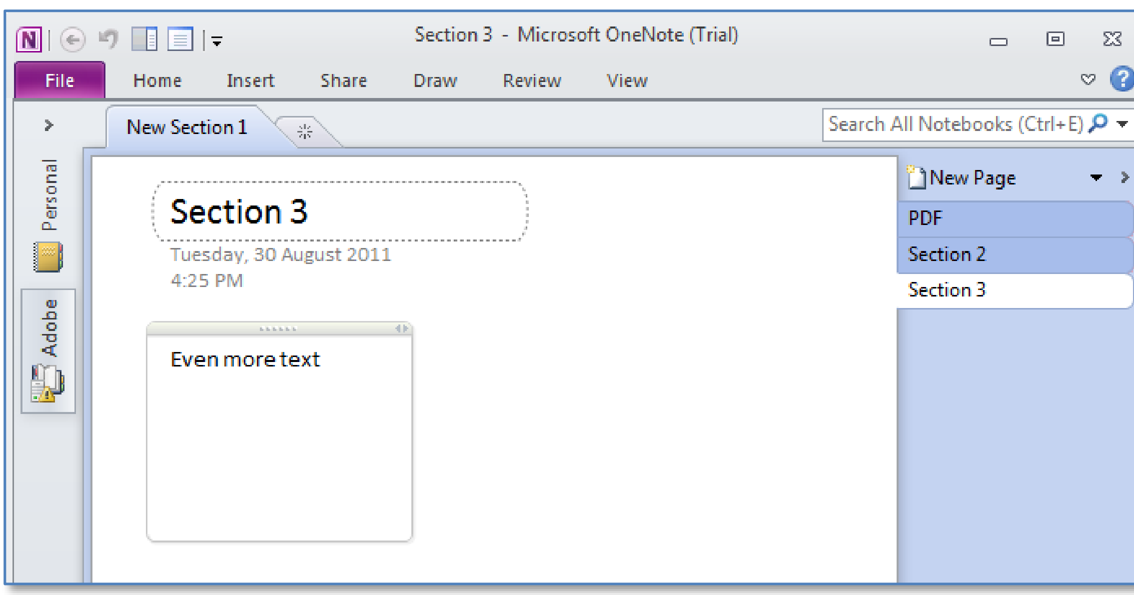
If the presentation is currently open with PowerPoint Web App remotely and a local user attempts to also open the spreadsheet locally with PowerPoint Web App, they will be prevented from doing so as shown above.

OneNote

Probably the application that provides the greatest co authoring flexibility is OneNote 2010.



Opening OneNote 2010 notebooks using OneNote Web App as shown above or



opening with OneNote 2010 co-authoring is supported. Thus, co-authoring with OneNote is supported whether the notebooks are opened up remotely in OneNote Web App or OneNote 2010 not matter how it is opened locally.

Document co-authoring with OneNote Web Apps is only supported with the 2010 format for OneNote notebooks. When a OneNote 2010 notebook is saved to a SharePoint 2010 document library and then opened by multiple users using OneNote 2010 or OneNote Web App, co-authoring is automatically enabled. Previous versions of OneNote notebooks support document co-authoring with OneNote 2010 only.

One of the other great things about OneNote is that is included with every version of Office 2010.

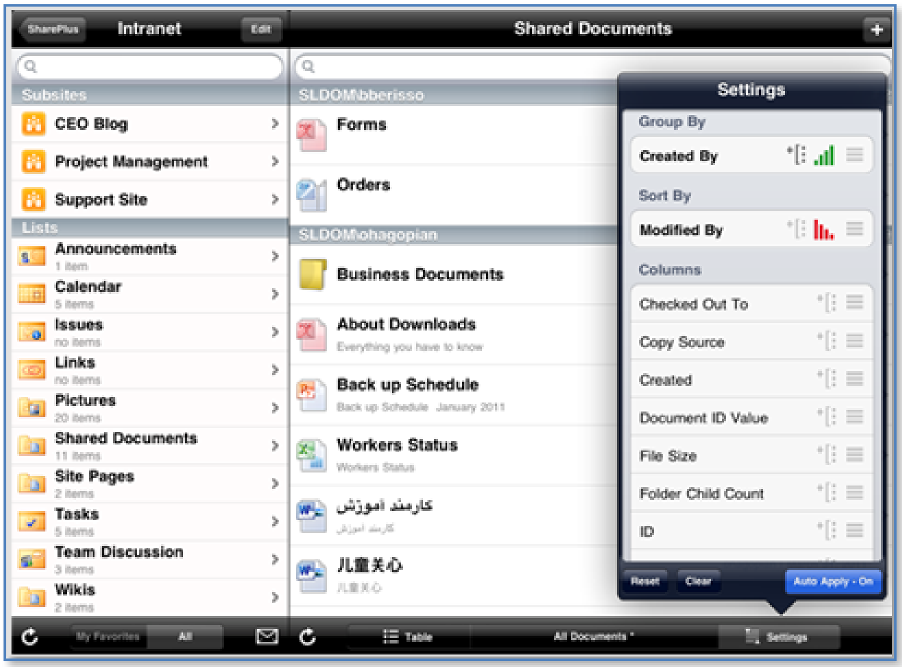
16.13 SharePoint with an iPad

The Apple iPad is a very common device that people wish to use with SharePoint. The greatest value of using the iPad with SharePoint is when it used as a “viewing” device rather than an “editing” or “creating” device. This is mainly due to the limitations of directly editing documents on an iPad given the inbuilt restrictions.

The biggest limitation with the iPad is the fact that iPad applications do not have the ability to share documents. Each generally has a local file storage area, however that area is restricted to only being used by that application. Thus, if you have an application that allows Office document editing it generally can’t share its storage area with an application that works with SharePoint. There are ways around this but they are extremely cumbersome as this article will demonstrate.

The most beneficial iPad apps for use with SharePoint include:

SharePlus (http://www.shareplusapp.com/). This app comes in both a lite and full version. The lite version allows you to view SharePoint sites but not make any changes but is free to download. To make changes you will require the full version which costs around $15.



SharePlus allows you to configure access to multiple SharePoint sites (including those using Office 365). It then allows you to browse the content of the sites via a menu on the left hand side as shown above. As you click into each area the content is displayed on the right. Clicking further on the content allows you to view the information contained in that content, such as files.

Filemente (http://www.aircreek.com/home/). This app is very similar to SharePlus in that it allows you to directly navigate SharePoint sites. It too comes in a free Lite and paid Full version. The Full version cost around $13.

Where it is perhaps stronger than SharePlus is when it comes to working with the different SharePoint library views. It is still not fantastic but it is a little better than

SharePlus. However, the look, feel and functionality is very similar to SharePlus and it also supports Office 365.

Dropbox (www.dropbox.com). With Dropbox you are able to sign up for 2GB of cloud storage for free. You can then synchronize information between your PC, MAC, mobile, iPhone, iPad and other devices.

The reason that Dropbox is a recommended app for SharePoint is that it allows the sharing of information between iPad apps. Thus, you can use Dropbox as transfer method of moving files that you want to work on between SharePoint and apps to edit documents. The process is rather cumbersome but at this stage it is the best option that is available.

You can purchase additional storage beyond the free 2GB limit if you desire and unfortunately during the transfer process you end up with copies of files in Dropbox and potentially SharePoint, so good file management is required.

Office^2 HD (http://www.bytesquared.com/products/office/ipad/). This app comes in a free and paid version (which costs around $15) and allows you to view and edit (paid version only) Microsoft Office documents on your iPad.

The major limitation is that the app generally only works with files in its own local store, much like other iPad apps. However, it does support the connection to other cloud based services, of which Dropbox is one. As mentioned above, you can therefore use Dropbox as a transfer mechanism between iPad apps when editing Office documents from SharePoint.

Documents to Go (http://www.dataviz.com/products/documentstogo/iphone/). An app, again very similar to Office^2 HD in that it allows you to edit Microsoft Office documents. Unfortunately, this app does not have a free version, it has a standard and premium version starting from about $10.

Importantly, Documents to Go also has the ability to connect to cloud storage, including Dropbox, which you are going to need if you plan to edit Office documents from SharePoint.

Quickoffice Prod HD (http://www.quickoffice.com/quickoffice_pro_hd_ipad/). Another app that allows the editing of Office documents. Unfortunately, there is again no free version here and app starts at around $21 for the iPad version. It currently doesn't use Dropbox as a storage option but there are other apps that can be used for sharing.

Using Office Web Apps on an iPad

There are no issues browsing through SharePoint sites using the Safari browser that comes with the iPad, however issues arise when you attempt to edit documents using Office Web Apps.

If you open an Office document in Office Web Apps and then try to also edit that document in the Safari browser you find that you are unable to get cursor focus. When you select a region to edit all you can select is a block of the page. Doing so does not allow you to edit the page.

If you again use Office Web Apps with third party browsers, which can be installed on the iPad, you still end up with the same issue. The conclusion here would be that all the browsers are using the same rendering engine and thus preventing editing of the page. So the end result is that although Office Web Apps can be put into “browser edit mode” due to the limitations of the iPad browser, editing is not currently possible.

Process of editing Office documents saved in SharePoint with an iPad

One of the most surprising challenges with SharePoint is to get it working effectively on an iPad. The issues lie with both Apple and Microsoft, however there are certainly ways that you can overcome the problems. It must be said that such solutions are by no means easy or straightforward and more importantly there is going to be some costs involved.

Probably the most important piece of technology that you'll need to get documents to and from SharePoint is Dropbox.

Next you'll need an iPad App that supports the ability to edit Office documents as well as access these documents from Dropbox. There are a few of these around but that one chosen here will be Office^2 Plus.

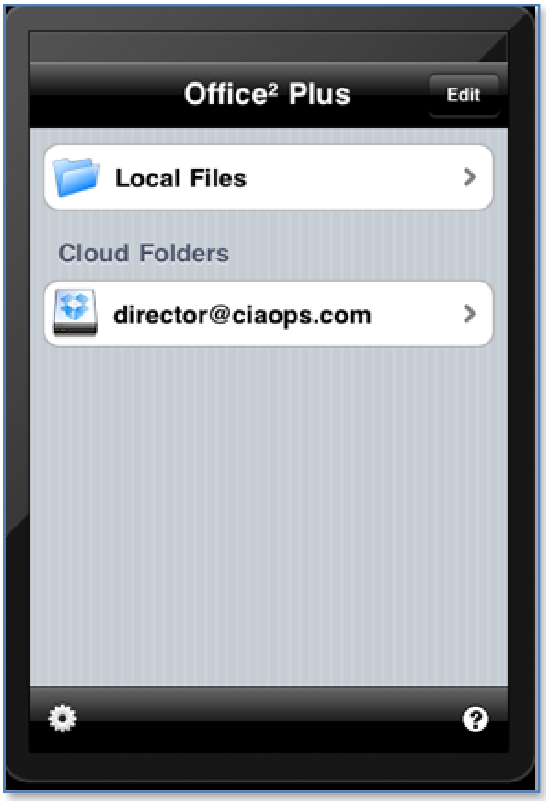
Finally, you are going to need an app that allows you to access your SharePoint site. Again, there are a few of these but the one chosen here is called SharePlus. Again, to make changes to SharePoint you are going to need to purchase the Pro version as the Lite version only allows navigation and read access.

Now with the apps in place on our iPad (Dropbox, Office2 Plus and SharePlus) we can configure our environment. First start by logging into your account with the Dropbox app. Ensure that you can see any files that you have transferred in there. If you open any Office document from your Dropbox you should see the contents displayed by Dropbox. In many cases a complex document may not display as expected and large graphics can have trouble being displayed.

With the document open in Dropbox you should notice an "*Open In*" icon in the top right (appears as an arrow out of a box). Clicking this will provide you with a list of apps on the iPad that allow you to open the document. You should see Office[2] Plus and SharePlus in this list. Select Office[2] Plus to open the document and start editing.

If you now go to save your edited document you will be greeted with a message that the Save Failed as the folder is read only. By default iPad Apps can only save to their own local storage which is independent of any other application on the iPad. So the only option you'll have is to save the application to the local file storage.

If you now close the document and return to the front screen of the Office[2] Plus App you'll find that only the Local File store is available. However, if you hit edit in the top right of the screen you can add a service. One of the services presented is Dropbox, so go ahead and configure your Dropbox account details here. Once complete the front page of Office[2] Plus should now display your Dropbox under the cloud folders heading.



If you open your Dropbox folder from Office^2 Plus now, locate the document you just attempted to change, edit and save the document you won't receive the nasty unable to save message as the file is saved directly to Dropbox by Office^2 Plus. So what we have now done is configure Dropbox as a sort of central location for files between apps on the iPad.

We now need to configure SharePlus to access our SharePoint site. To do this simply open the SharePlus app and add a configuration for your SharePoint site. Once you have configured this you should be able to browse your site using SharePlus. Once you have located a file in SharePoint you wish to work on, you can again select the "*Open In*" button and select from a range of applications on your iPad. If you select Office^2 Plus here you will again be able to edit the document but you will be unable to save it back to SharePlus and your SharePoint site. The trick is to open it with Dropbox.

Doing so will open the Dropbox app and ask you where you want the file uploaded to in Dropbox. Make your selection and upload. To edit and save the file we have to close Dropbox and open Office^2 Plus. At the front screen we need to open the Dropbox cloud folder configured previously, navigate to the location where we just uploaded the document from SharePlus and click on it to edit. When we finish we save the file and it is updated in our Dropbox.

We now need to return to our Dropbox app and locate the file just edited in Office^2 Plus. If you click on the file to view it you should see any changes. If you now select the "*Open In*" button on the top right you should be able to select SharePlus. Doing so will copy the file from Dropbox to the Local Files in SharePlus.

If you now use SharePlus to navigate to the location where you wish the updated file to be loaded you can press the "+" key in the top right. You then select **Add Document**. If you then click **Select document** you will see a menu displayed, of which one of the items will be "*Local Files*". If you select this you should see the file you just edited displayed. Select this file and then select **Save** in the top right and you are all done.

In summary, what we have done is configured Dropbox as a temporary storage and sharing area between iPad apps. We then export the file (via Dropbox) to Office^2 Plus to allow editing. We then imported (from Dropbox) the file into SharePlus and then uploaded into SharePoint.

The conclusion here is that it really shouldn't be this difficult to edit a file from SharePoint. The major issue probably lies at the feet of the iPad which doesn't allow apps to share their local storage. If they did, chances are we could everything via SharePlus. It would also help if Office Web Apps in edit mode worked as it does on a PC allowing full document updating from a web browser. If you really want to point the finger at anyone for these restrictions you really have to point it at Apple.

So even though editing documents from SharePoint is possible it is not something that you would be doing on a regular basis, it is really only in "case of emergency" stuff. This leads to the conclusion that as it stands at the moment the iPad is more a SharePoint viewing device than a document editing device. Applications like SharePlus certainly make viewing SharePoint on an iPad much easier and editing other SharePoint information like lists, calendars and tasks is straightforward, it is only when we start trying to edit documents that we begin to have complications.

Hopefully the future will bring a reduction in these complications and a more integrated editing solution for SharePoint but having two competing software businesses having to resolve the issues may mean a long wait until users realize the promise of SharePoint functionality via an iPad.

OneNote on the iPad

The application that probably lends itself most to the iPad is OneNote. Fortunately, there is a native OneNote application for the iPhone (which also runs on the iPad) from Microsoft (http://itunes.apple.com/au/app/microsoft-onenote/id410395246?mt=8). Unfortunately, this native app only currently allows connection to Windows Live Skydrive (http://skydrive.live.com) and not SharePoint. Thus, you can sync OneNote notebooks that live on Skydrive but not on a SharePoint site (not even Office 365 SharePoint online) with this native app.

A third party alternative worth considering is Mobilenoter (http://www.mobilenoter.com/). With this application you install a version of Mobilenoter on your Windows desktop. You can select which OneNote files you wish to synchronize. To provide the flexibility to the iPad you will need to subscribe to the Mobilenoter Cloud edition (for about $15 per year). What this enables you to do is synchronize from your desktop OneNote to the Mobilenoter cloud service (up to 600MB of storage). If you then install the Mobilenoter app on your iPad you can synchronize these OneNote file back from the Mobilenoter cloud to the iPad.

Now if you make changes to your OneNote files on your desktop or iPad they will be synchronized by Mobilenoter. What makes this solution even more powerful is if the OneNote files are saved on a SharePoint site (local or hosted). In that case they can be shared with multiple people via OneNote on the desktop as will via Mobilenoter to mobile devices.

It is important to remember that Mobilenoter needs to be running on the desktop in the background to update OneNote files to the cloud but is does provide a handy way to sync a OneNote file saved on SharePoint to an iPad

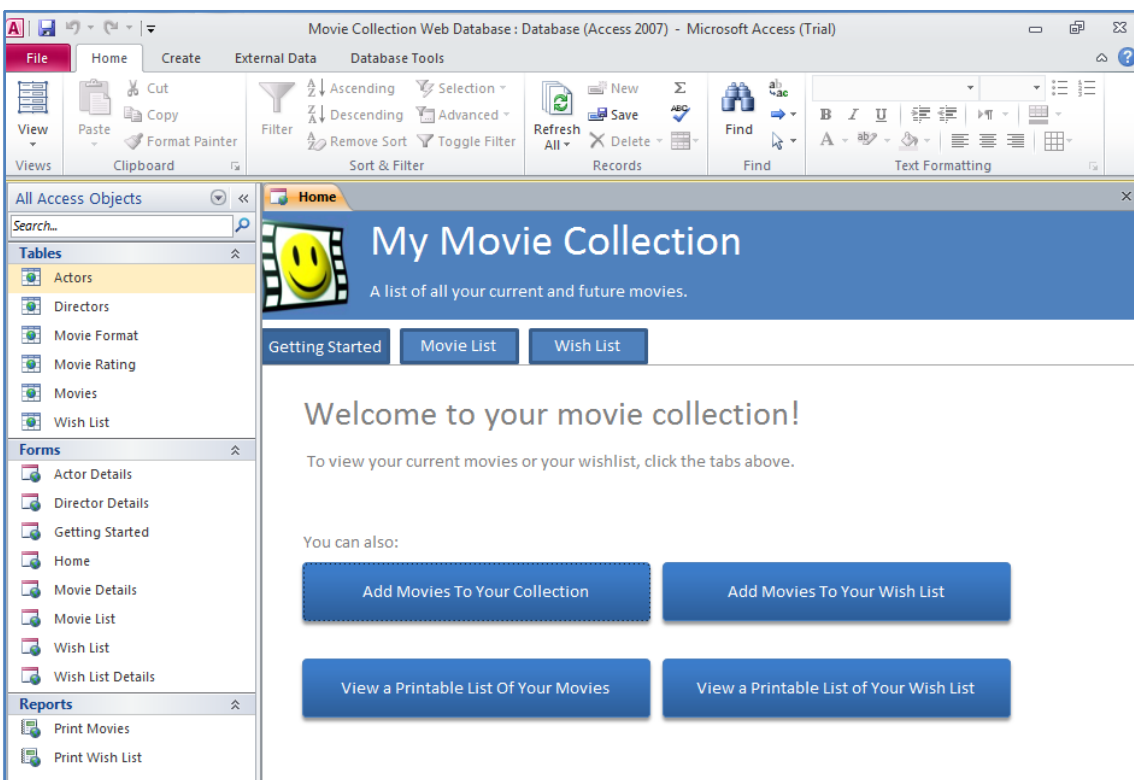
16.14 Publishing an Access database

Microsoft provides the ability to "publish" an Access database to SharePoint 2010. To do this you require Access services installed and enabled on SharePoint Server Enterprise 2010.

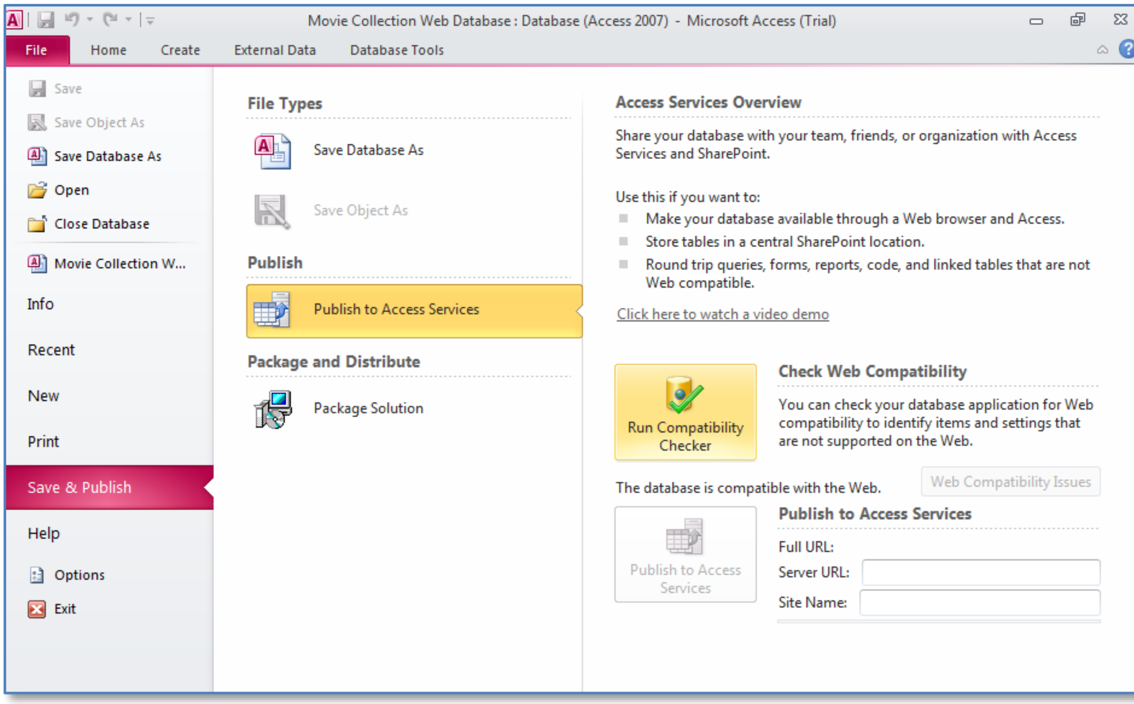
It is important to note that not all Access databases can be 'published' to Access Services on SharePoint. Some of the high end functionality around Access is not supported (typically complex Visual Basic code). It is therefore in important to test the computability of any Access database with Access services before attempting to 'publish' it. This facility is built into Access 2010 and will be illustrated in this example.

In this example we will take an Access database from the Office templates and publish it to Access Services.

To start the process open the Access database you wish to publish. In this case we will be working with a movie collection database.



You can see that the database contains tables, forms and reports.



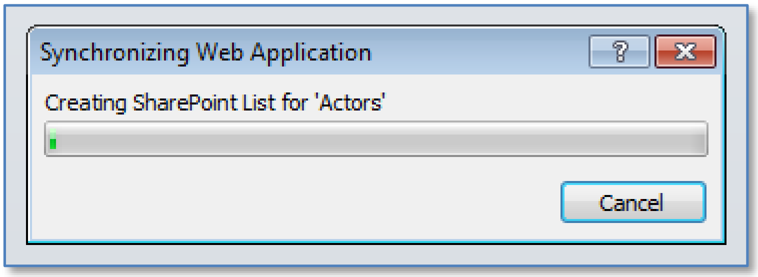
To publish the database select the **File** tab which takes you to the Office backstage. From there select **Save & Publish**, then **Publish to Access Services**.

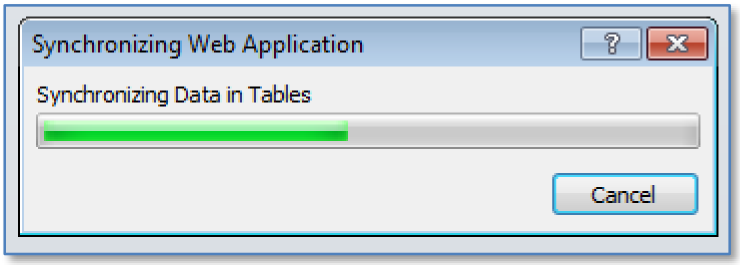
You should then see a button *Run Compatibility Checker* which you should click to ensure that you database can be 'published' to Access Services.

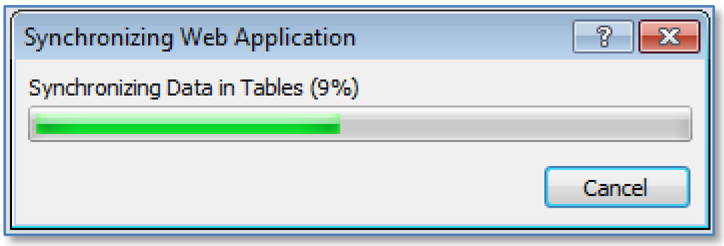
If no messages are returned from the Compatibility Checker enter the URL of the SharePoint Server site you wish to use and the site name for this database. When a database is 'published' to Access Services it is done so via a complete subsite. Thus, when complete, the site you entered in the *Server URL* field will have an additional subsite of name *Site Name*.

When you have completed all the details press the **Publish to Access Services** button.

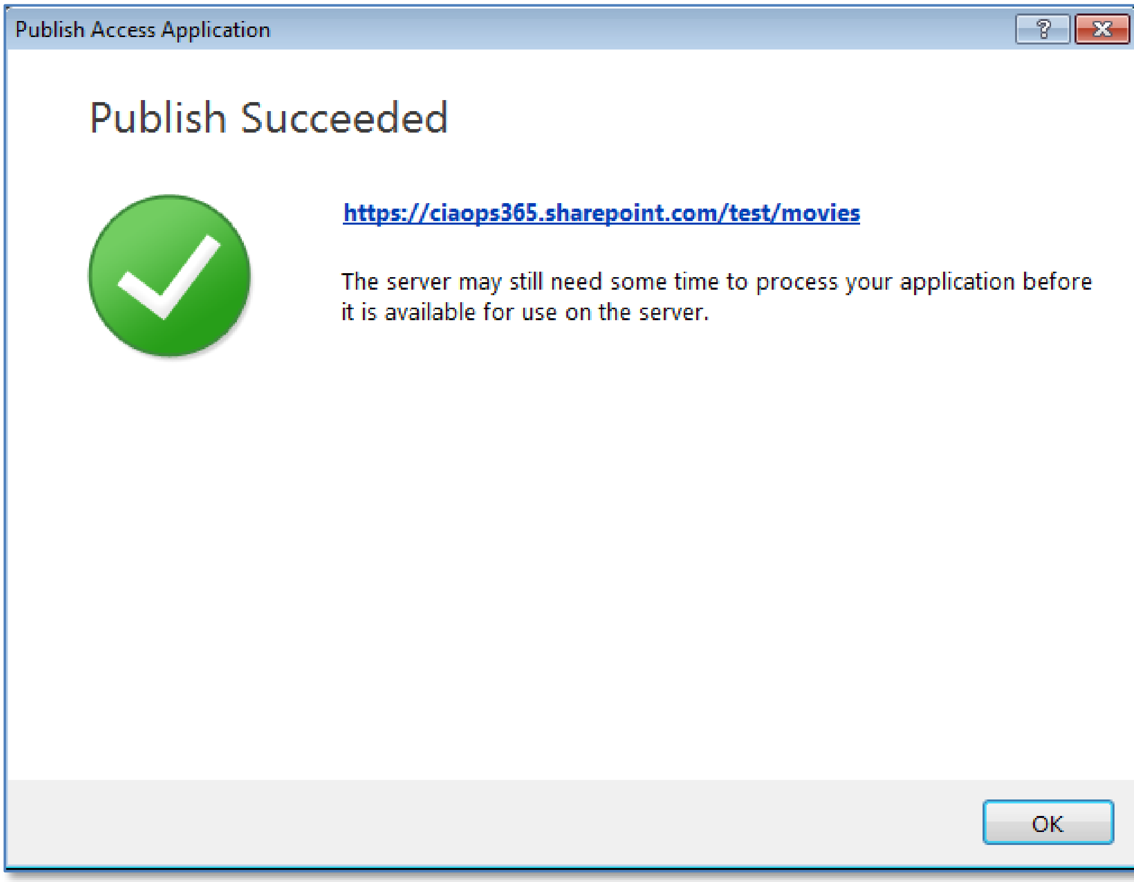
You may be prompted to login to your SharePoint site. The login that use here will need the rights to create a subsite in SharePoint so it is generally best to use an administrator login.



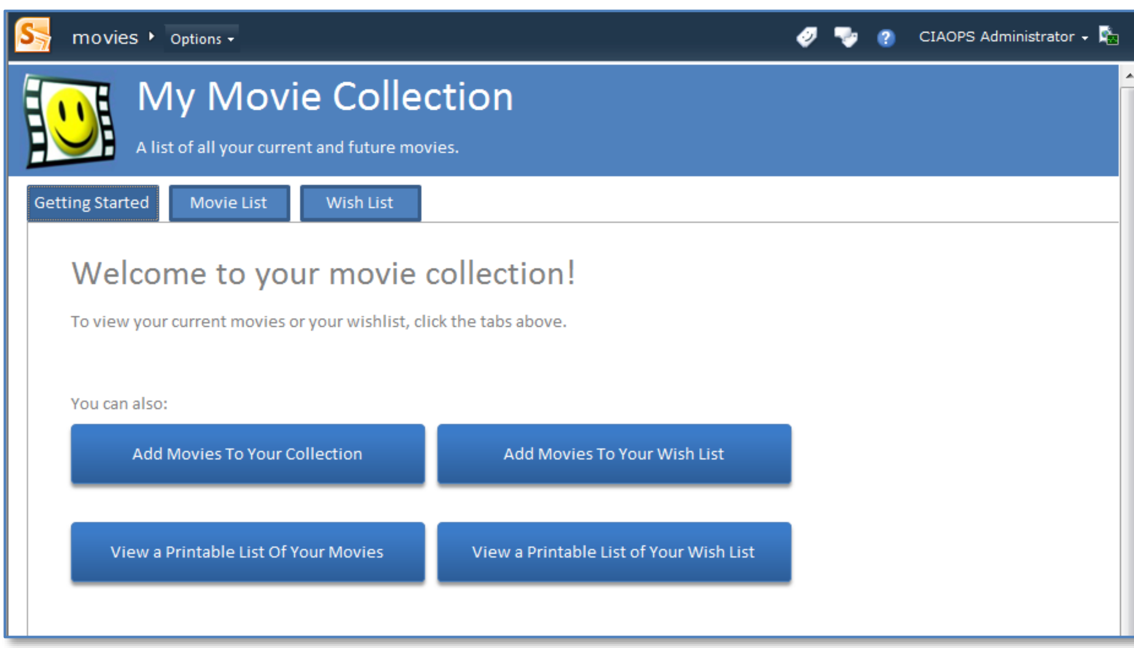




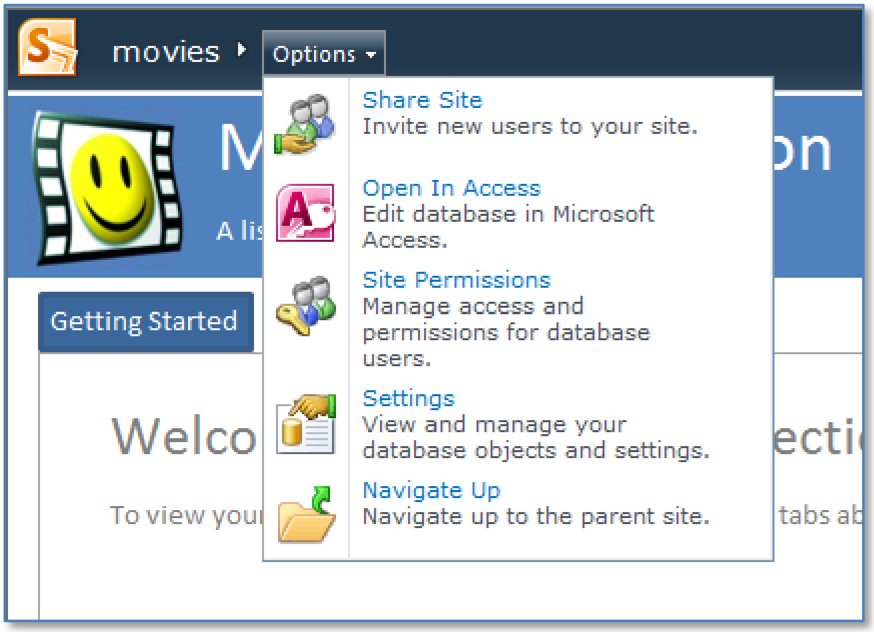
You should now see the site being published to SharePoint. This process may take several minutes as information is transferred to SharePoint.



Once the process is complete you should see a message like that shown above indicating success. Click on the displayed URL to visit the location of the 'published' database.



You should now see your database displayed through a web page like shown above. In this case you can click on the tabs or the buttons and enter information as you can with the local application.



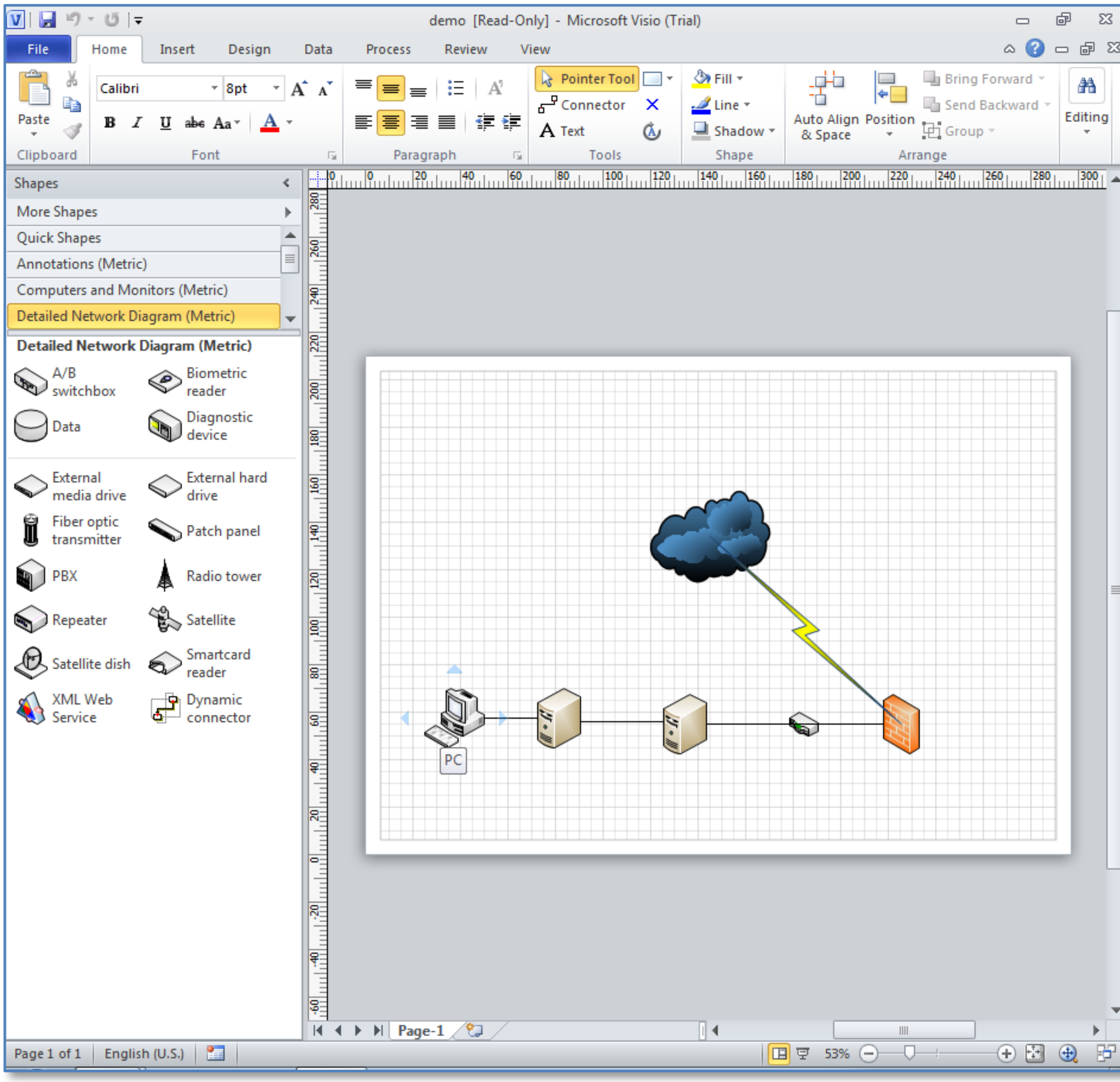
As indicated, the database has been published to a separate SharePoint site. If you select the *Options* menu at the top of the screen you will see a number of site level commands.

All the database information is now saved in this SharePoint site and it continues to operate like the local copy of the Access database would.

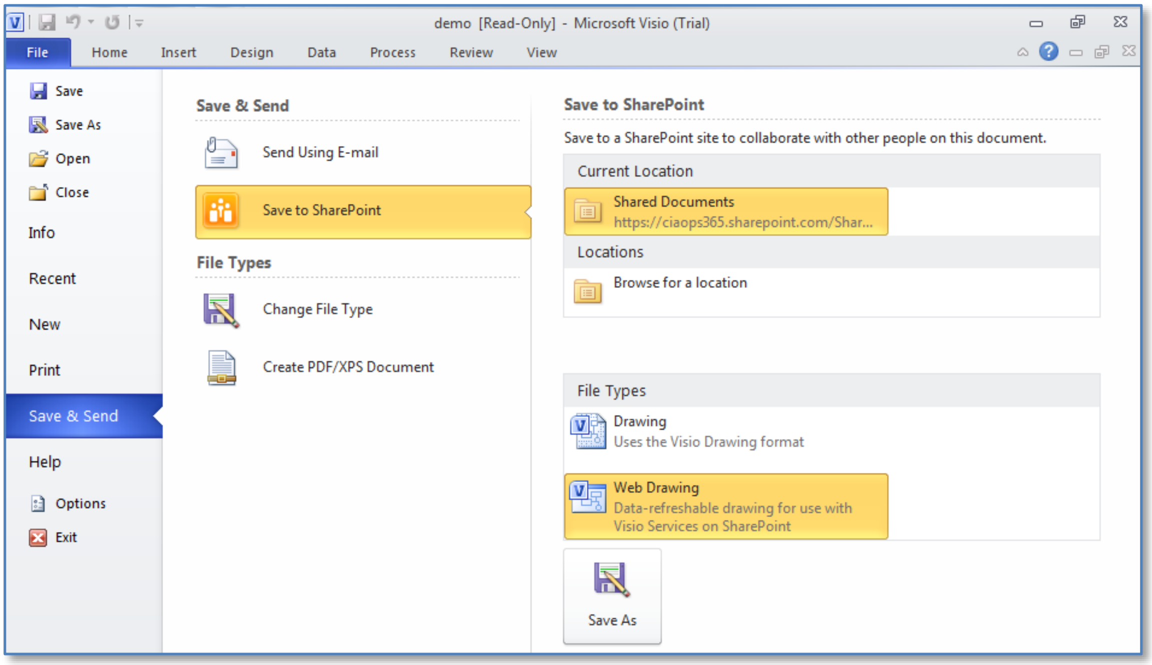
16.15 Publishing an Visio diagram

SharePoint Server Enterprise 2010 supports the ability to publish Visio diagrams. This is especially handy for things like layouts and diagrams as it provides an interactive way of anyone viewing these diagrams. This tutorial will cover how to publish and display a Visio diagram using SharePoint Visio services.

SharePoint Visio Services is part of SharePoint Server Enterprise. To publish a diagram to SharePoint open that document with Visio on the desktop.



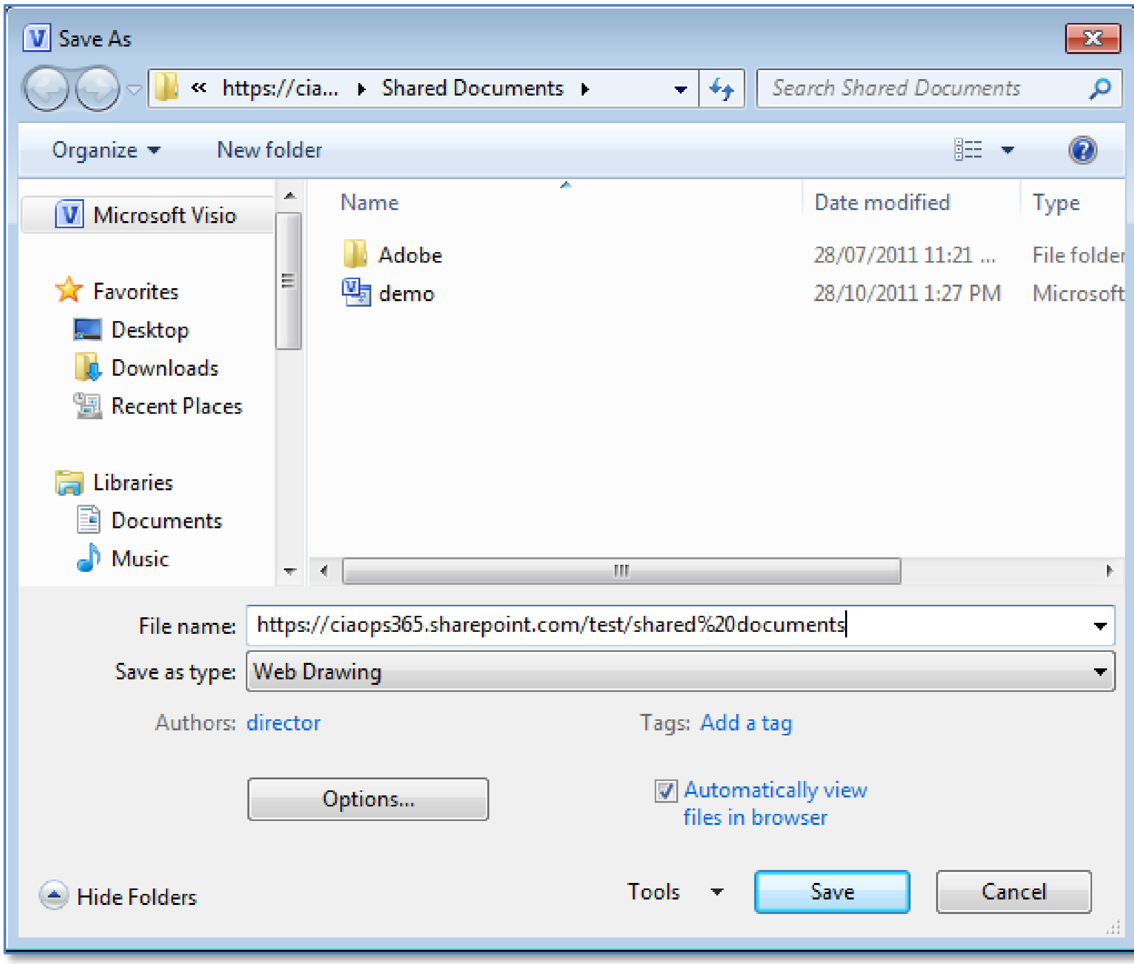
The original Visio diagram will remain in a separate file to that 'published' to SharePoint. It can thus remain on the local drive or saved into a Document Library on SharePoint.



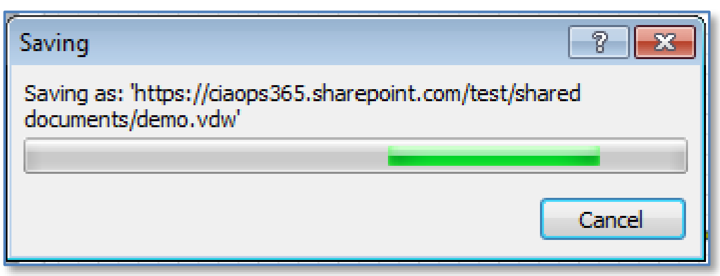
When you are ready to 'publish' the diagram select the **File** tab to display the Office backstage area as shown above.

Select the option **Save & Send**, then **Save to SharePoint**. You will then to select a location or *Browse for a location*. The editable Visio diagram (i.e. *.vsd) can be saved in any normal file location, including SharePoint document library.

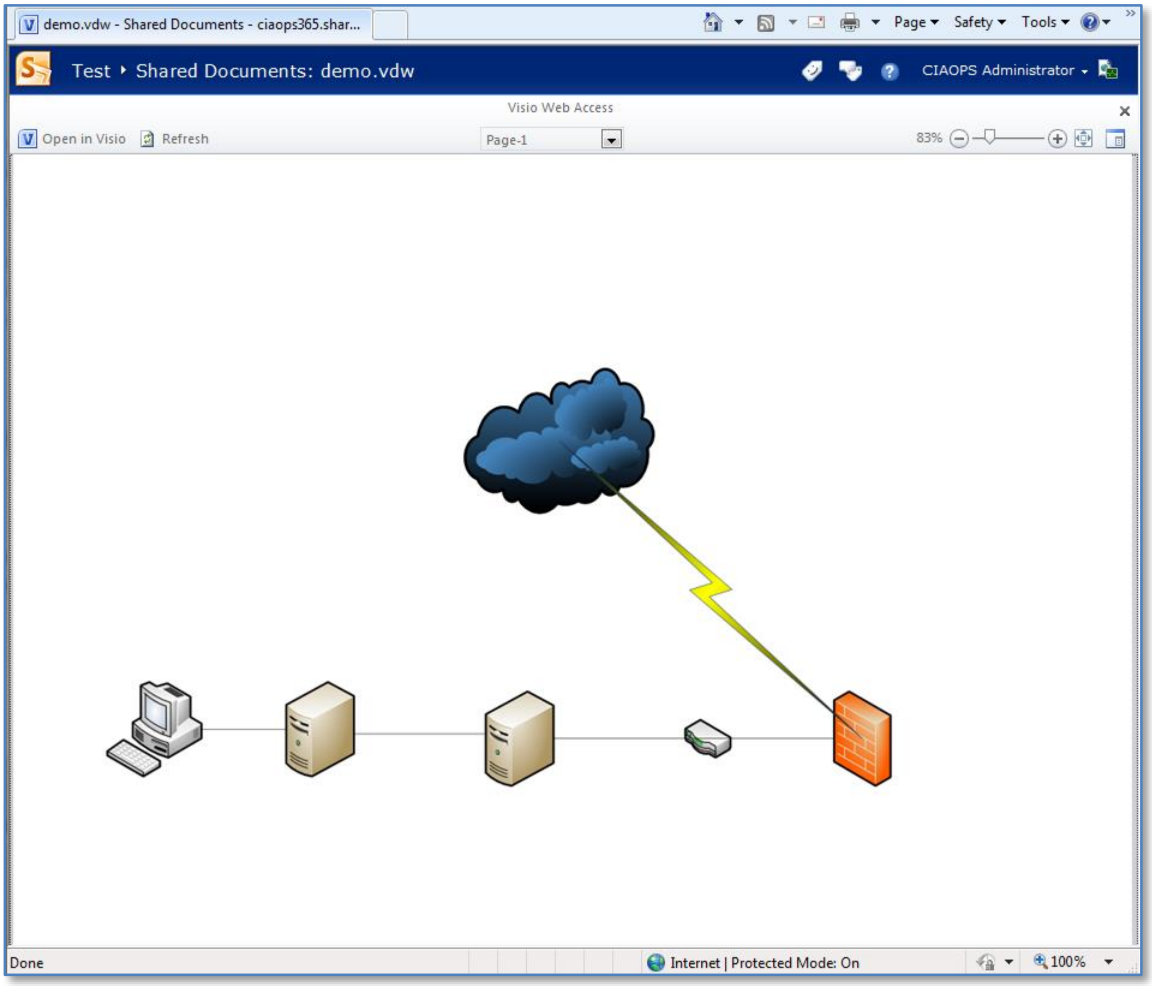
Once you have completed the required information press the **Save As** button to publish the drawing.



You should then be prompted to complete the process by press the **Save** button.

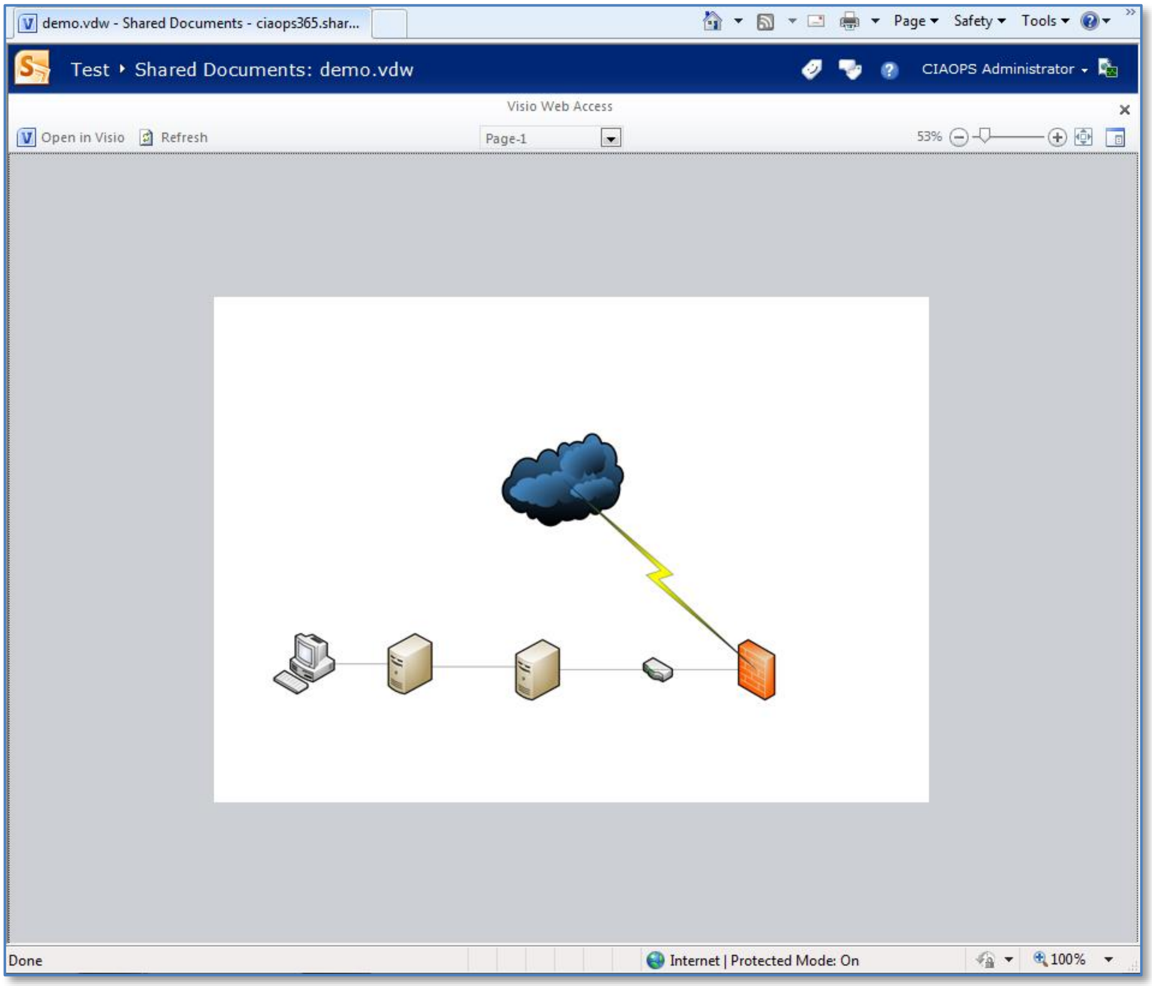


You should then see the file being transferred to SharePoint as shown above.



When complete, you should be taken to the published Visio drawing in SharePoint. It should appear in a web page like shown above.

Here you notice a number of controls at the top of the screen including the ability to change the zoom.



Selecting the zoom allows you to easily change the resolution of Visio drawing all through a web interface. You can also open the drawing in Visio if you choose.

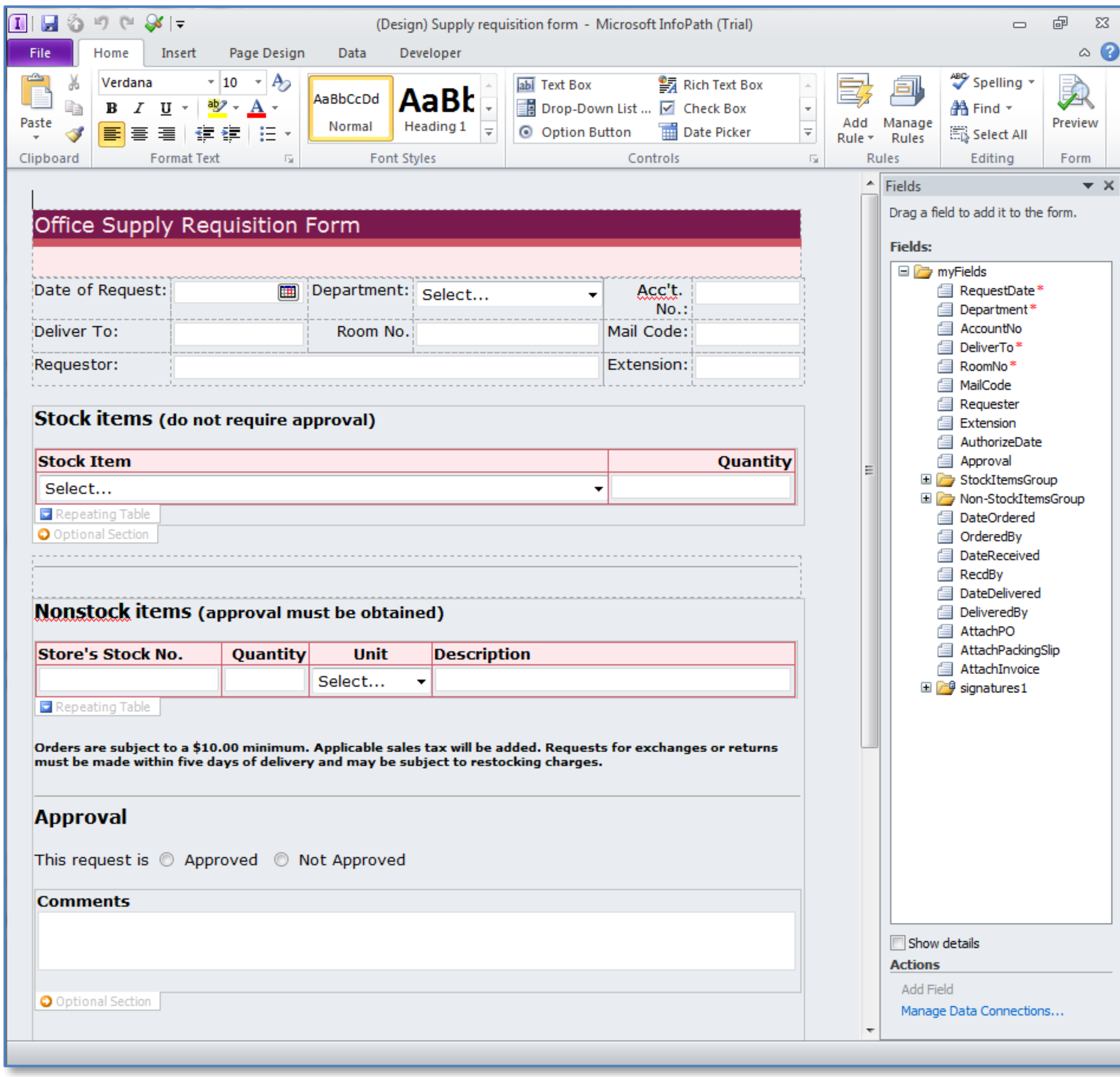
When you close the Visio diagram and return to the publish location you will see the Visio file like any other file in a library. You will however notice that the diagram has the extension .VDW to indicate a Visio drawing.

16.16 Publishing an InfoPath form

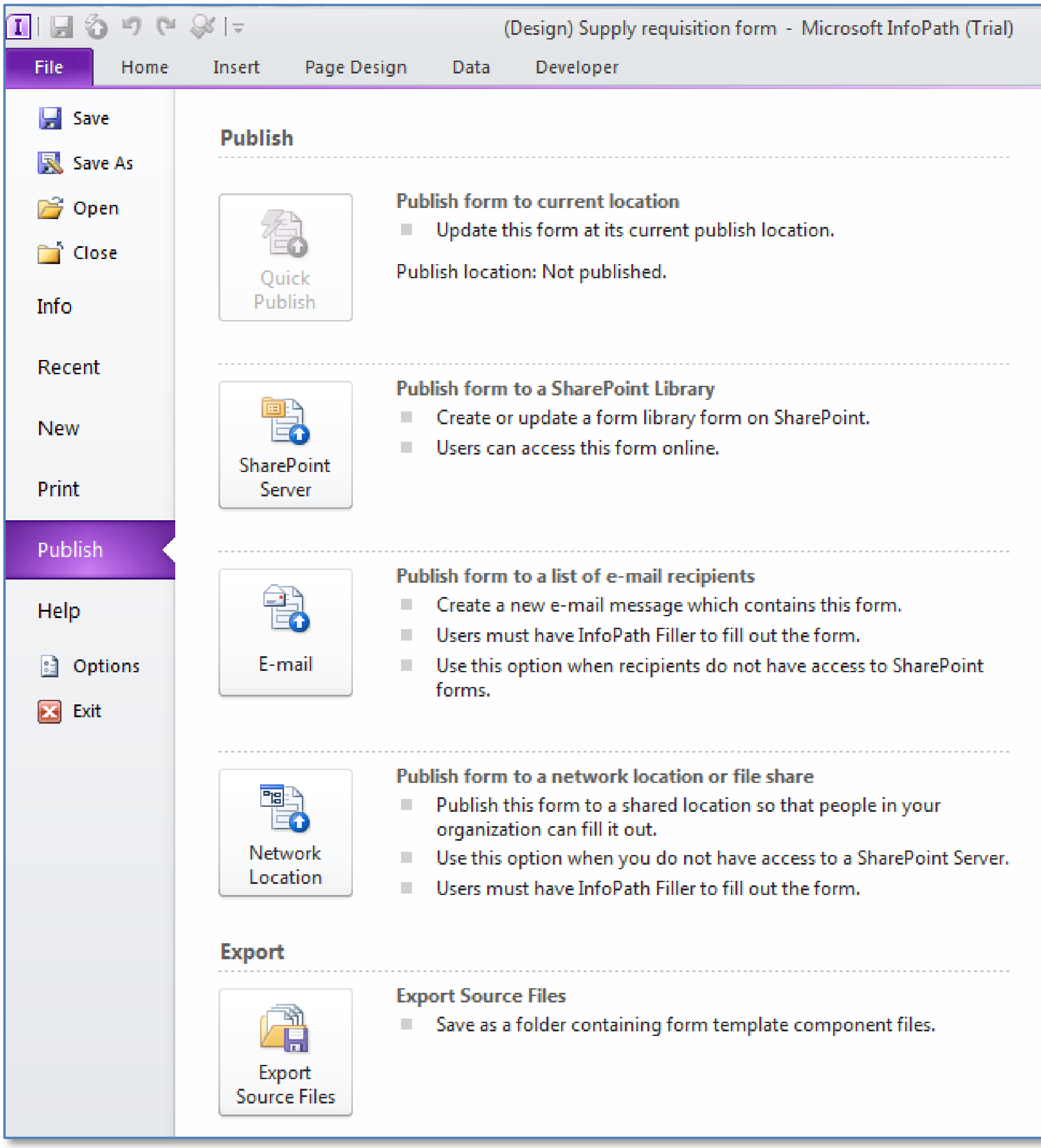
InfoPath is a technology from Microsoft that allows you create ‘intelligent forms’ What is meant by intelligent forms is that fields can have a mask that requires them to be entered in a certain way, other fields can be multiplied together to form other fields and so on.

Once InfoPath forms have been created they need to viewed with either InfoPath Designer or InfoPath filler. Unfortunately, unlike Word and Excel viewers the basic InfoPath Filler is part of the full InfoPath package and cannot be obtained separately.

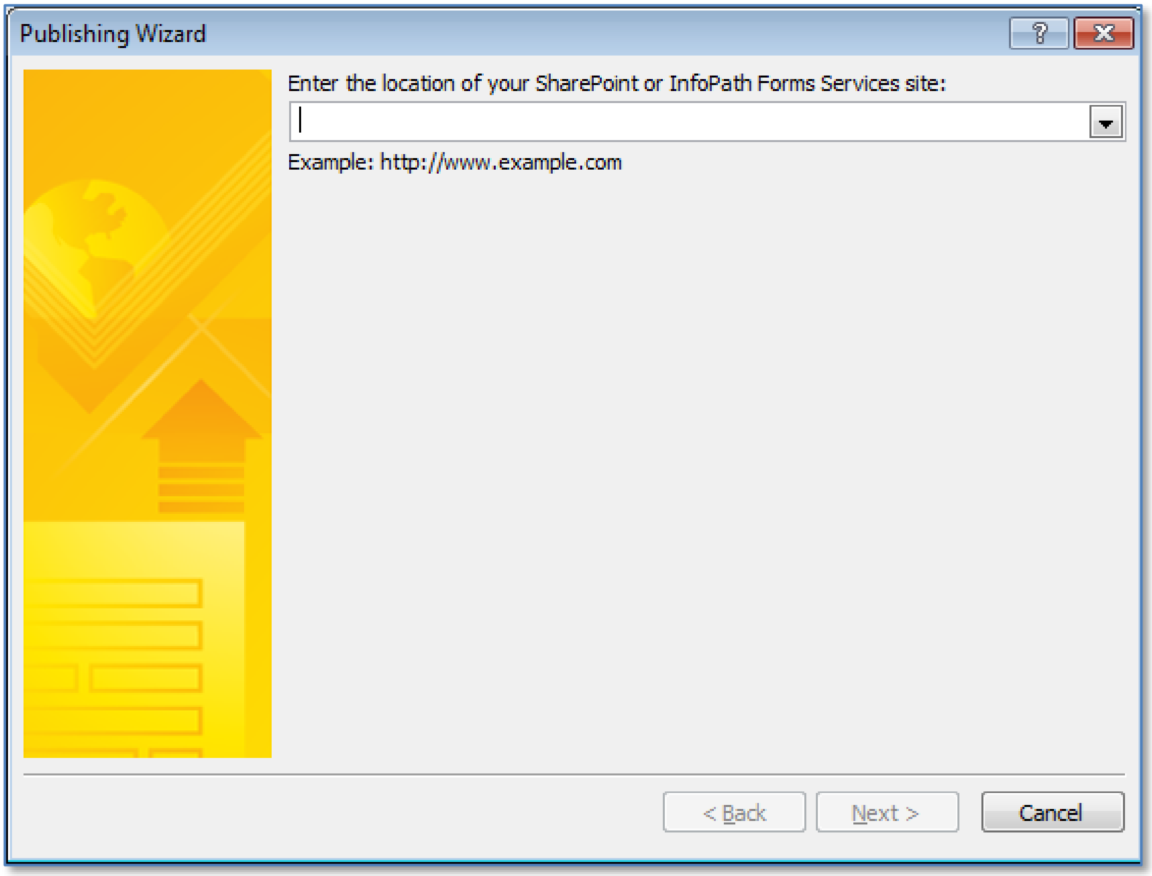
However, with SharePoint Server 2010 you can use Form Services to display 'published' InfoPath forms on a web page. You simply create the form using InfoPath Designer and then 'publish' it up to a SharePoint Form library. This tutorial will show you how to complete this process.



Once you have created the InfoPath form in InfoPath Designer, select the **File** tab from across the top of the screen.

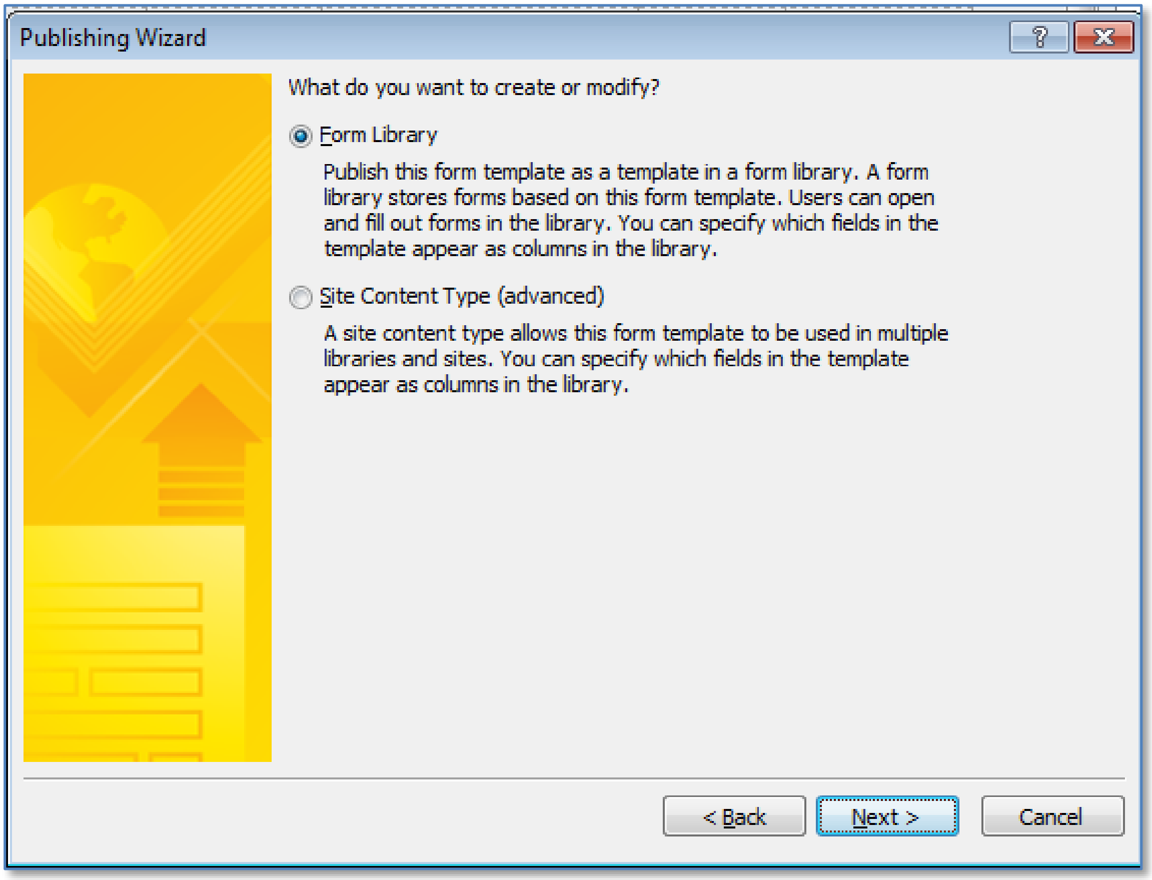


From the Microsoft office backstage select **Publish**, then the **SharePoint Server** button.

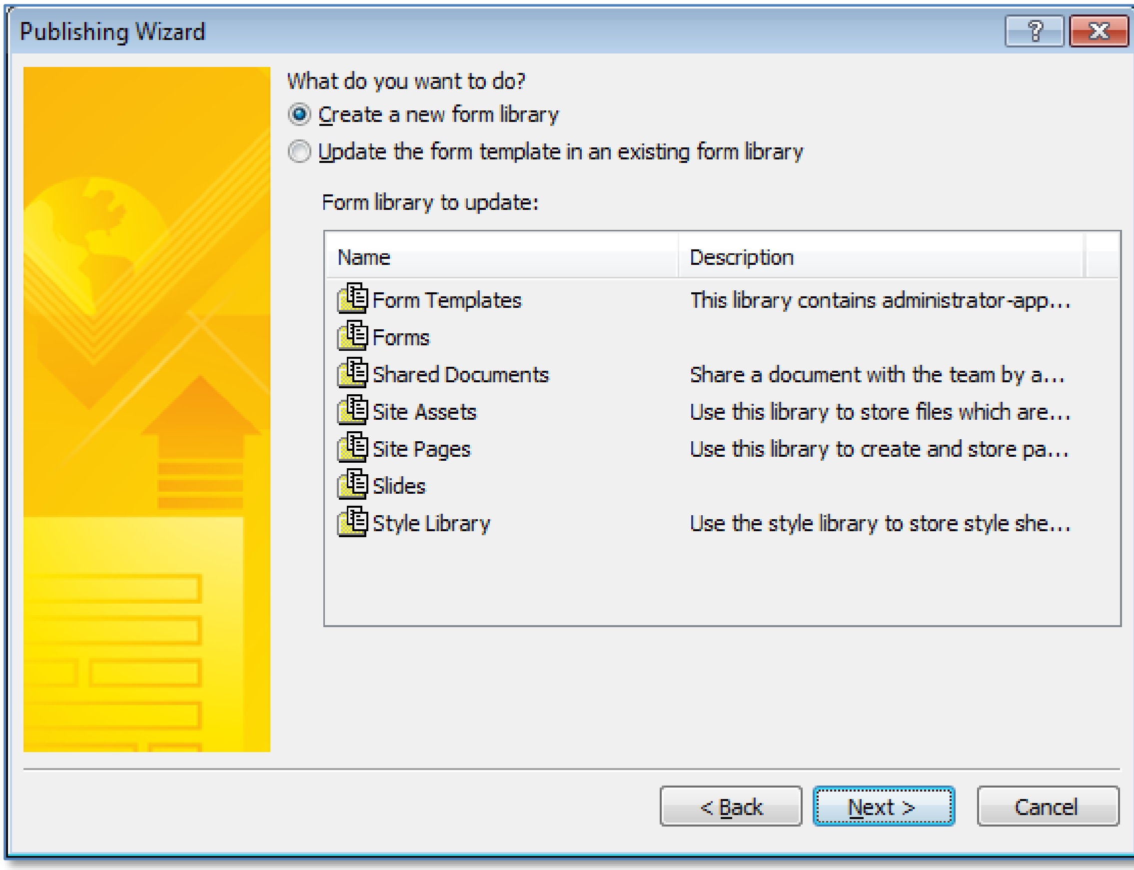


You will then be prompted to enter the URL of your SharePoint site.

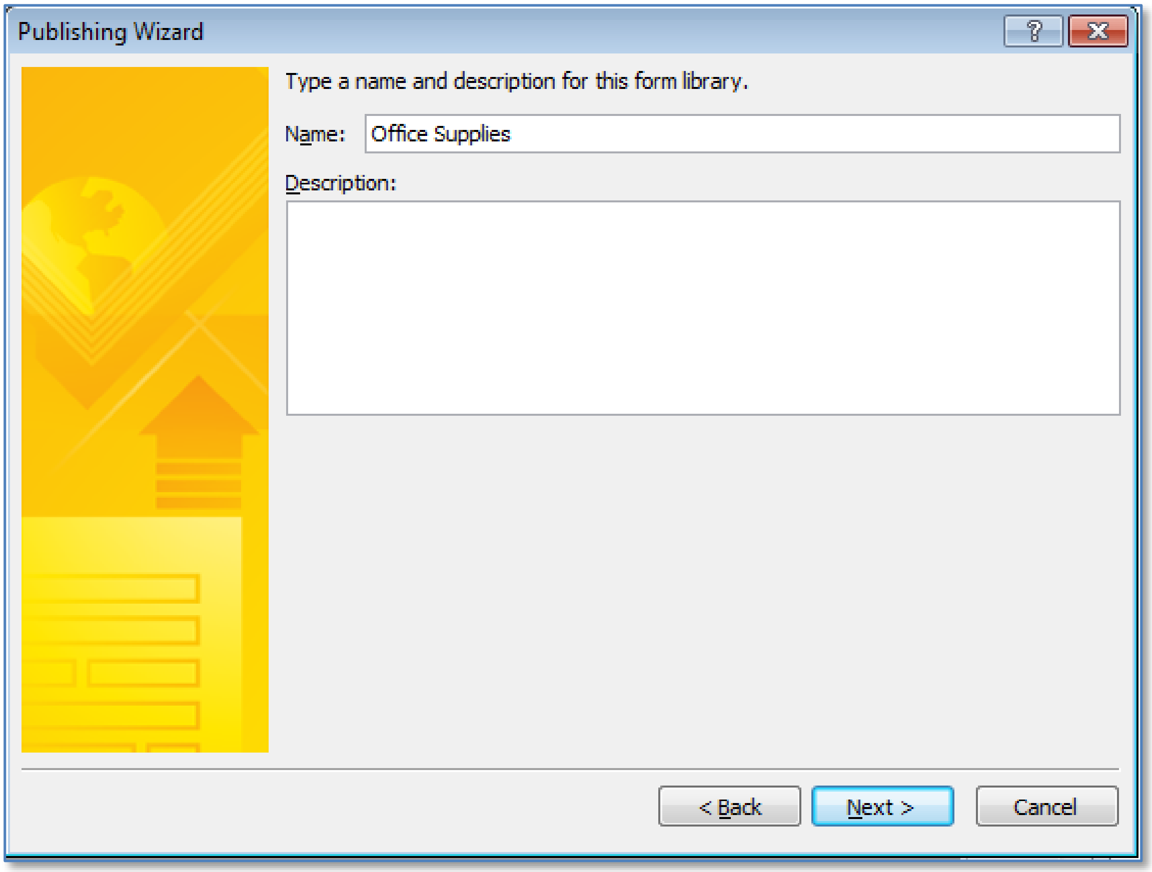
When this is complete press **Next** to continue.



Next, you will asked where you store the form in SharePoint. You can either store it in a *Form Library* (the default) or in a *Site Content Type*. In this example we'll use a *Form Library* so leave the default option set and press the **Next** button.

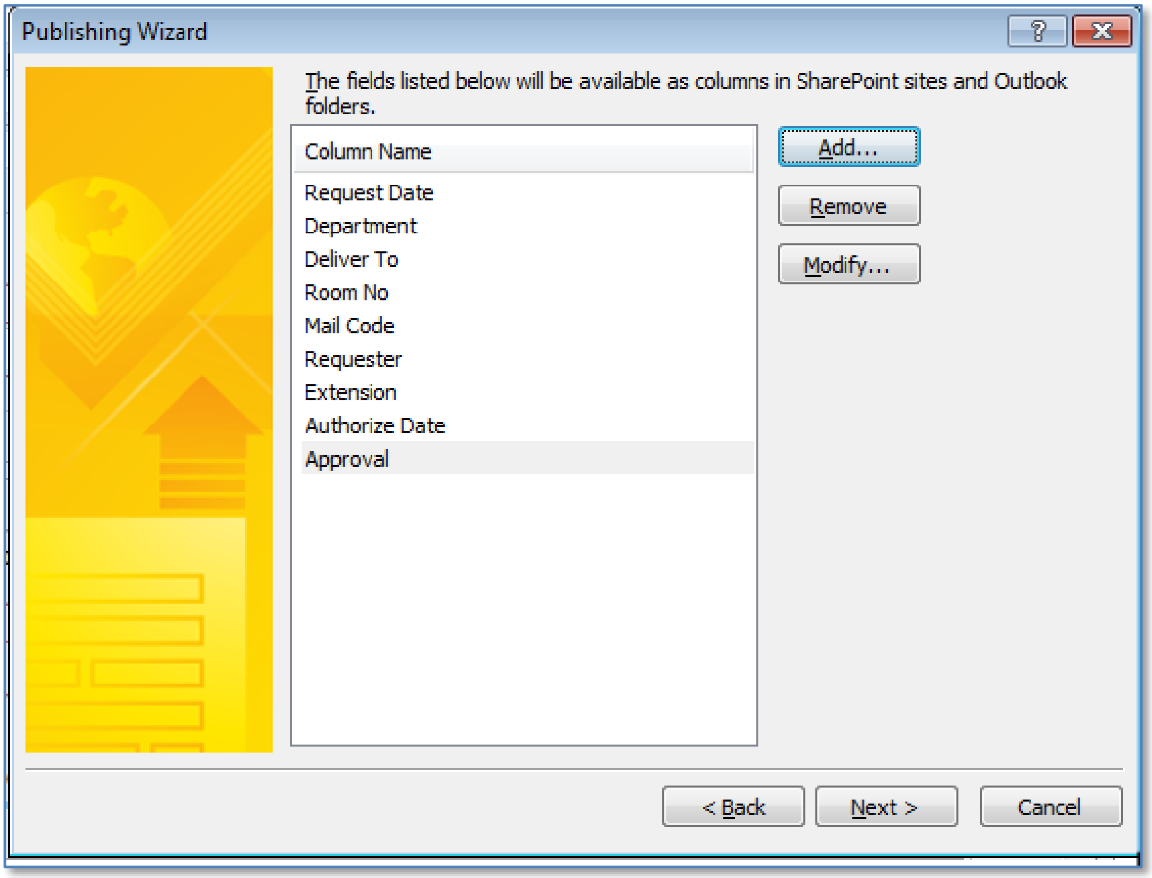


You can now select whether you wish to create a new form library (the default) or update an existing form library. In this case we'll select to create a new *Form Library* in our SharePoint site, so press the **Next** key to continue.



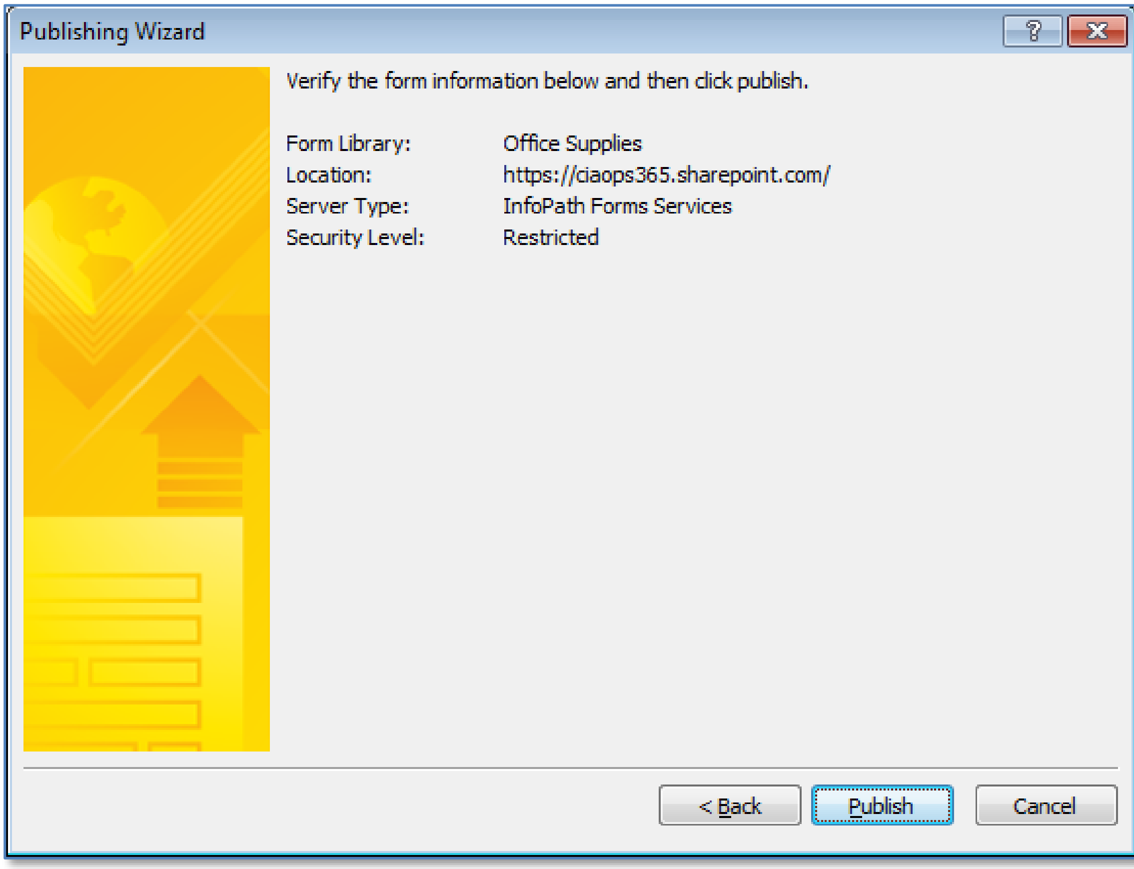
Since we are creating a new Form Library we need to give the library a name, in this case **Office Supplies**.

When this is complete press the **Next** button to continue.

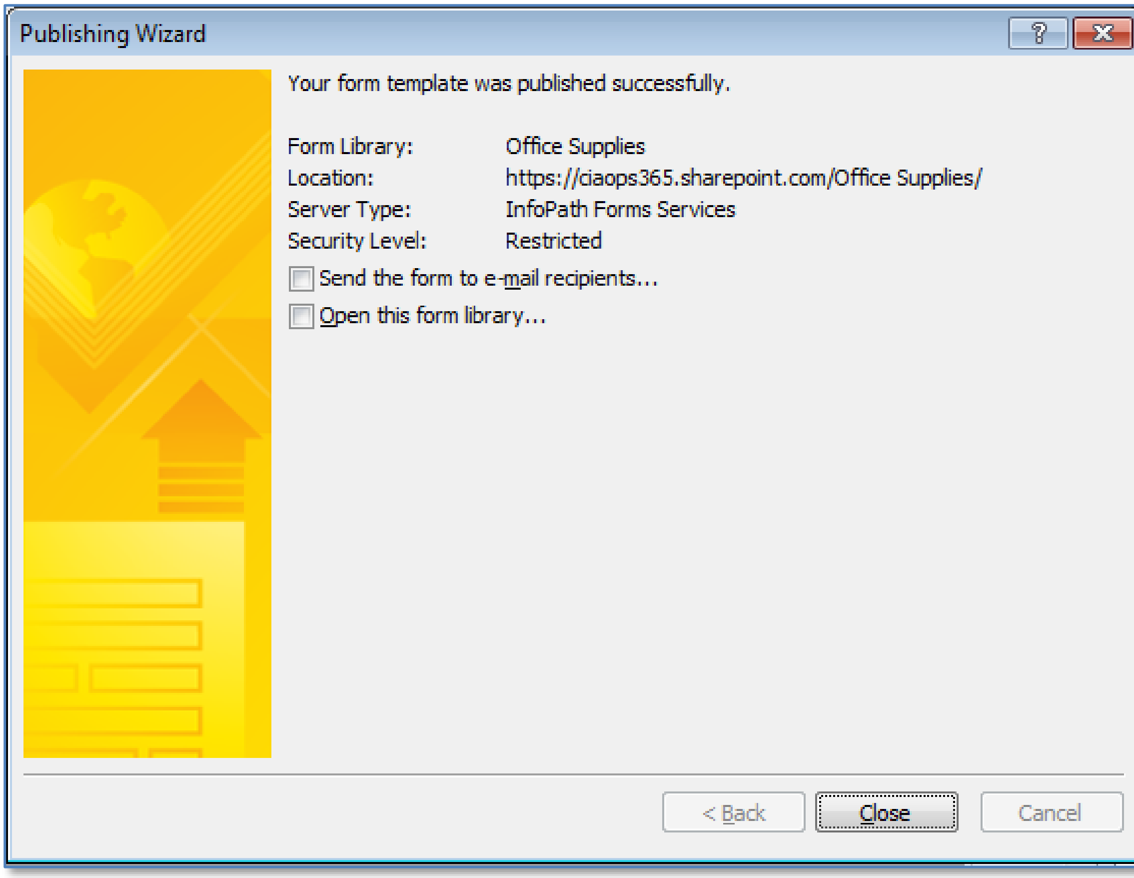


You may now need to add the fields from InfoPath to the columns in SharePoint. You do so by using the **Add** button.

Press the **Next** button when this process is complete.

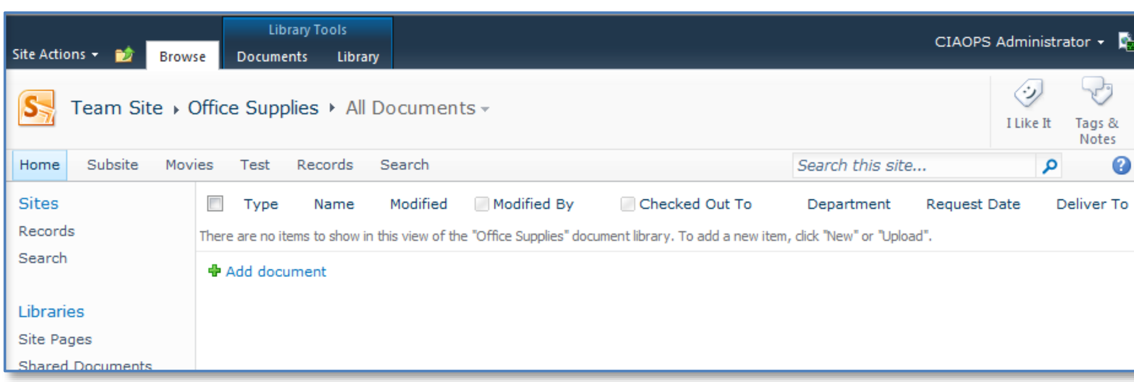


You are now shown a summary screen. If everything is correct here press the **Publish** button to upload the form to SharePoint.



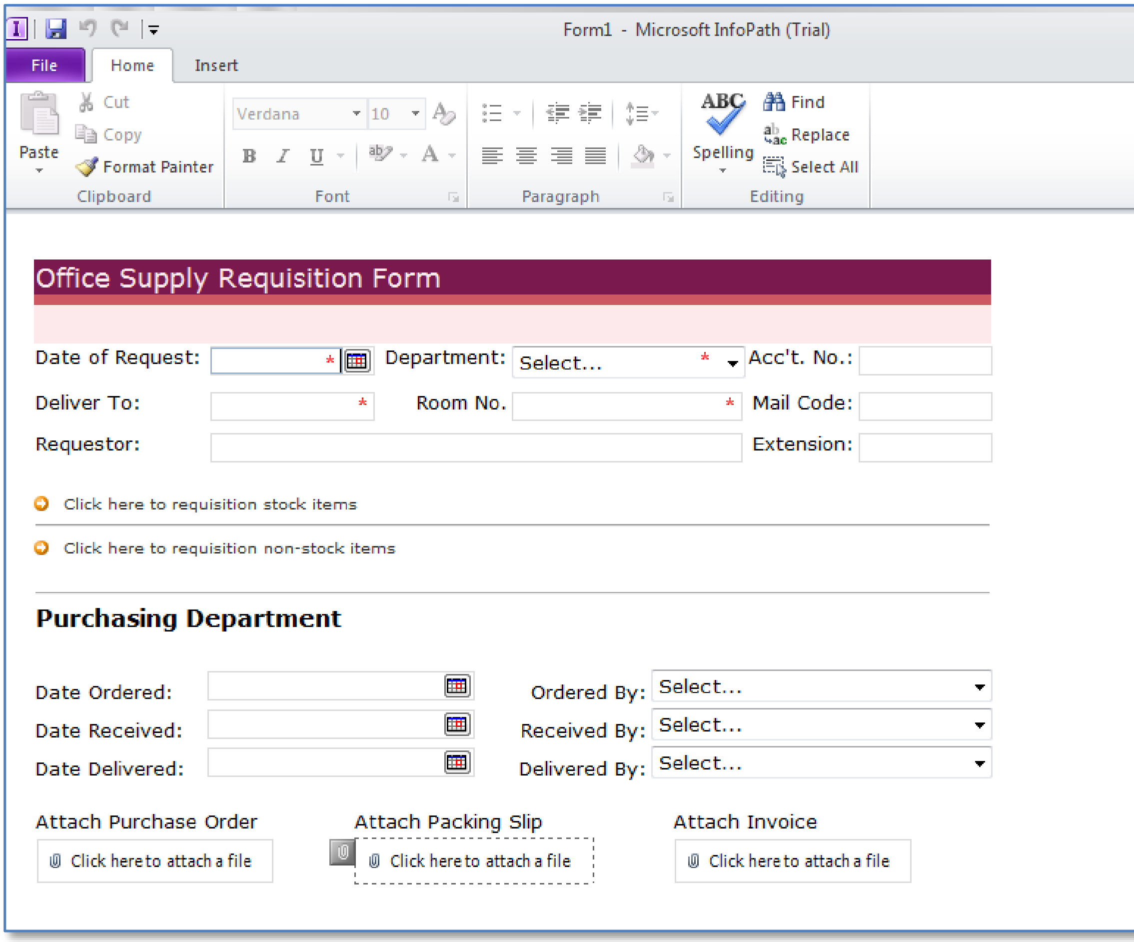
When the 'publish' process is complete you should see a summary screen like shown above indicating success.

Press the **Close** button to complete the process.

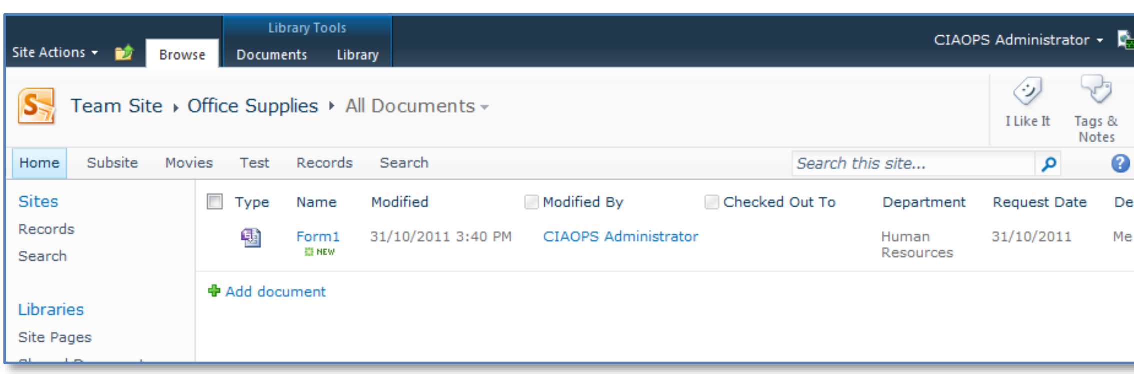


If you now visit the SharePoint site you should see a new *Form Library* in the *Quickstart menu*. You will also notice that it contains no items but has columns matching the items you added when you published the InfoPath form.

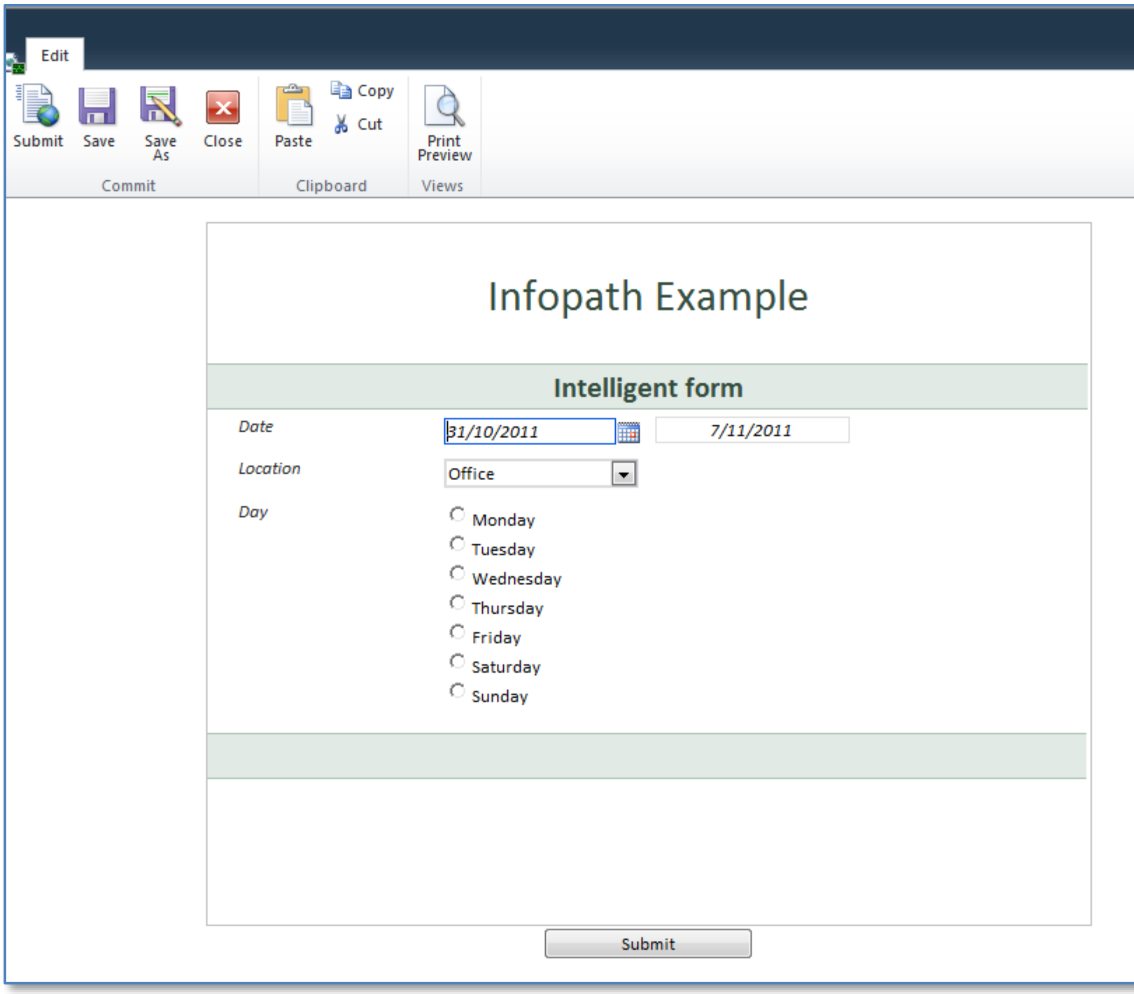
If you click the Add document link at the bottom of the list one of two things will happen.



If you InfoPath installed on your system the form maybe displayed here. This either means you do not have Form Services installed on your SharePoint server or the form you published was too complex to be displayed by SharePoint Form Services.



If you complete the form and save it and then view the SharePoint library you will see the item displayed as shown above.



However, if you have Form Services running and have created a suitable form you should see it displayed in a web page, as shown above, when you select the *Add document* link in the form library.

Once you complete the form here you can click the **Submit** button to save the form information back to SharePoint and close the window displaying the form.

16.17 Using Powershell to do an automated installation

One of the things that you can use Powershell to do is automate the installation of your SharePoint environment. The following example details how to complete an installation of SharePoint up to the point of creating a web application.

Script

```
cls
write-host -foregroundcolor green "Commencing installation"
## Create Stopwatch
$stopwatch=new-object system.diagnostics.stopwatch
$stopwatch.start()
## Create directory uses c:\wsf
write-host -foregroundcolor green "Creating directory"
$create=[IO.Directory]::CreateDirectory("c:\wsf")
## Extract files – assumes install file in c:\ and will extract to c:\wsf
write-host -foregroundcolor green "Extracting files"
$extract = "c:\sharepointfoundation.exe"
$args = "/extract:c:\wsf /passive /quiet"
$result = start-process $extract $args -wait
## Run perquisites – assumes location in c:\wsf
write-host -foregroundcolor green "Installing Prerequisites"
$execute="c:\wsf\prerequisiteinstaller.exe"
$args="/unattended"
$result = start-process $execute $args -wait
## Install binaries – assumes location in c:\wsf and c:\config.xml
write-host -foregroundcolor green "Installing Binaries"
$execute="c:\wsf\setup.exe"
$args="/config c:\config.xml"
$result = start-process $execute $args -wait
## Add snap ins
write-host -foregroundcolor green "Adding Snap Ins"
if((Get-PSSnapin | Where {$_.Name -eq "Microsoft SharePoint Powershell"}) -eq
$null){  add-pssnapin Microsoft.SharePoint.Powershell; }
## Configure Admin site – assumes SQL instance = server\sqlexpress
write-host -foregroundcolor green "Creating Admin databases"
new-spconfigurationdatabase -databasename "sharepoint_config" -
databaseserver "serverb\sqlexpress" -administrationcontentdatabasename
"config_database" -passphrase (convertto-securestring "p@ssw0rd" -asplaintext
-force)
## Initialize Central Admin site
write-host -foregroundcolor green "Initializing Central Admin site"
install-sphelpcollection -all
initialize-spresourcesecurity
install-spservice
install-spfeature -allexistingfeatures
## Create Central Admin site
write-host -foregroundcolor green "Creating Central Admin site"
new-spcentraladministration -port 5555 -windowsauthprovider "ntlm" install-
spapplicationcontent
## Elapsed time
```

```
$stopwatch.stop() $ts=$stopwatch.elapsed
$elapsedtime = [system.string]::format("{0:00}:{1:00}:{2:00}:{3:00}",$ts.hours,
$ts.minutes, $ts.seconds, $ts.milliseconds/10);
"Runtime = $elapsedtime"
## End
write-host -foregroundcolor green "Installation complete"
```

Config.xml

```
<Configuration>
  <Package Id="sts">
    <Setting Id="SETUPTYPE" Value="CLEAN_INSTALL" />
   <Setting Id="SERVERROLE" Value="APPLICATION" />
 </Package>
  <DATADIR Value="%CommonProgramFiles%\Microsoft Shared\Web Server
Extensions\14\Data" />
 <Logging Type="verbose" Path="%temp%" Template="Microsoft Windows SharePoint
Services 4.0 Setup *.log" />
  <!--PIDKEY Value="PIDKey Value" /-->
  <Setting Id="UsingUIInstallMode" Value="0tor" />
 <Setting Id="SETUP_REBOOT" Value="Never" />
 <Setting Id="AllowWindowsClientInstall" Value="True"/>
  <Display Level="Basic" CompletionNotice="No" AcceptEULA="Yes" />
</Configuration>
```

Pre-requisites

Windows Server 2008 R2
- Server name = serverb

SQL 2008 Server Express R2
- Instance = SQLEXPRESS

SharePoint Foundation installation file
- Located in c:\

Config.xml file
- Located in c:\

Script walk through

```
cls
write-host -foregroundcolor green "Commencing installation"
```

These commands will clear the screen and output the text “Commencing installation” in green.

```
## Create Stopwatch
```

```
$stopwatch=new-object system.diagnostics.stopwatch
$stopwatch.start()
```

This command creates a variable that can be used as a timer. The second command starts the timer running so that the duration of the process can be tracked.

```
## Create directory uses c:\wsf
write-host -foregroundcolor green "Creating directory"
$create=[IO.Directory]::CreateDirectory("c:\wsf")
```

These commands will first out more text to the screen and then create a directory c:\wsf.

```
## Extract files – assumes install file in c:\ and will extract to c:\wsf
write-host -foregroundcolor green "Extracting files"
$extract = "c:\sharepointfoundation.exe"
$args = "/extract:c:\wsf /passive /quiet"
$result = start-process $extract $args -wait
```

Information about the process will again be written to screen. The following commands will execute the program *c:\sharepointfoundation.exe* with arguments */extract:\wsf /passive /quiet*. This will extract all the required SharePoint Foundation installation files to a directory (which has already been created earlier) called c:\wsf. No output will be displayed on the screen.

```
## Run perquisites – assumes location in c:\wsf
write-host -foregroundcolor green "Installing Prerequisites"
$execute="c:\wsf\prerequisiteinstaller.exe"
$args="/unattended"
$result = start-process $execute $args –wait
```

More status information is displayed before the SharePoint prerequisite installer is run from c:\wsf in quiet mode (i.e. with no output).

```
## Install binaries – assumes location in c:\wsf and c:\config.xml
write-host -foregroundcolor green "Installing Binaries"
$execute="c:\wsf\setup.exe"
$args="/config c:\config.xml"
$result = start-process $execute $args –wait
```

The SharePoint setup program will now be run and it will use the configuration parameters found in the file c:\config.xml.

```
## Add snap ins
```

```
write-host -foregroundcolor green "Adding Snap Ins"
if((Get-PSSnapin | Where {$_.Name -eq "Microsoft SharePoint Powershell"}) -eq
$null){  add-pssnapin Microsoft.SharePoint.Powershell; }
```

Once the setup has completed the SharePoint Powershell cmdlets will be available on the system so these are now loaded so that they can be utilized by the script.

```
## Configure Admin site – assumes SQL instance = server\sqlexpress
write-host -foregroundcolor green "Creating Admin databases"
new-spconfigurationdatabase -databasename "sharepoint_config" -
    databaseserver "serverb\sqlexpress" -administrationcontentdatabasename
    "config_database" -passphrase (convertto-securestring "p@ssw0rd" -
    asplaintext -force)
```

A new set of SharePoint databases is now created on the instance server\sqlexpress. These databases are *sharepoint_config and config_database*. The passphrase for the SharePoint farm is set as p@ssword.

```
## Initialize Central Admin site
write-host -foregroundcolor green "Initializing Central Admin site"
install-sphelpcollection -all
initialize-spresourcesecurity
install-spservice
install-spfeature –allexistingfeatures
```

All the standard SharePoint features are configured into the SharePoint farm with their defaults.

```
## Create Central Admin site
write-host -foregroundcolor green "Creating Central Admin site"
new-spcentraladministration -port 5555 -windowsauthprovider "ntlm" install-
spapplicationcontent
```

A new SharePoint Central Administration site is created on port 5555 with NTLM autenication.

```
## Elapsed time
$stopwatch.stop() $ts=$stopwatch.elapsed
$elapsedtime = [system.string]::format("{0:00}:{1:00}:{2:00}:{3:00}",$ts.hours,
$ts.minutes, $ts.seconds, $ts.milliseconds/10);
"Runtime = $elapsedtime"
```

The time is now stopped and the difference in time between start and finish is now displayed in an easy to read format.

```
## End
write-host -foregroundcolor green "Installation complete"
```

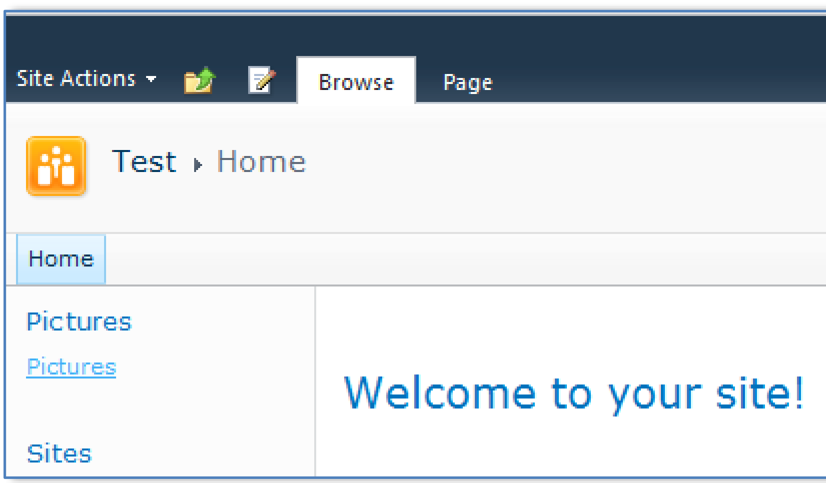
16.18 Look and feel modifications

The first thing that many people want to customize is the look and feel of their SharePoint site. There are a number of ways of achieving this, via the Windows interface right through to using Visual Studio and creating custom code.

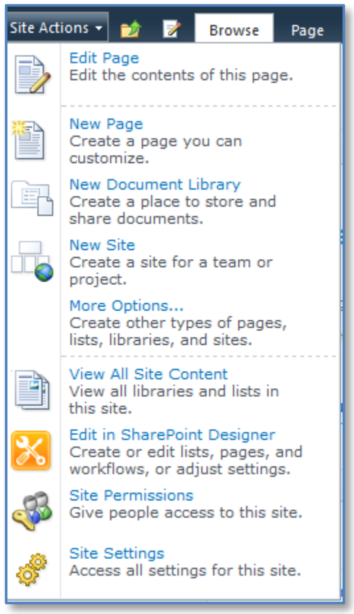
The most important thing that you need to as before diving into major modifications is really whether such modifications are going to make it better for the average end user. What may seem as a good idea to 'pretty' up a site can in fact dramatically slow it down and make it far more difficulty for end users to use and thereby get their jobs done. It is important to remember, that in most cases SharePoint has been implemented as a productivity and collaboration tool rather than simply a web site. For reason it is extremely important to keep in mind the end user when making any site alterations.

Title, description and icon

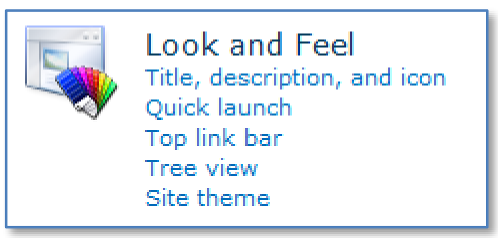
The first place to start any customizations is to alter the information in the top left of the SharePoint site. By default it will appear something like:



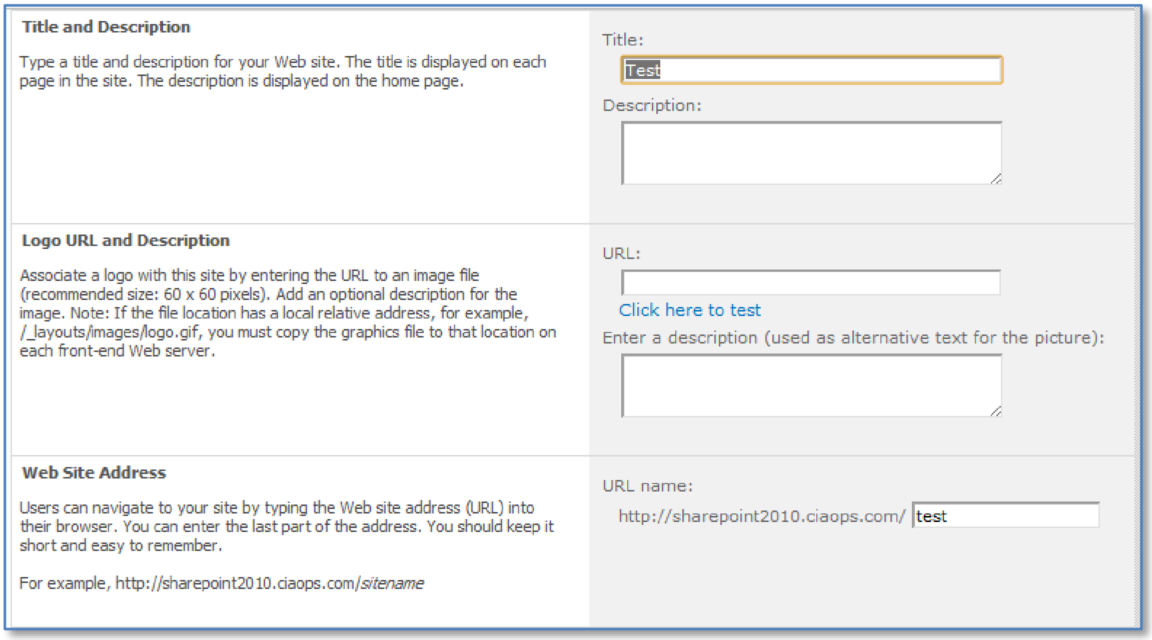
Before making any changes to SharePoint sites you will need to login to SharePoint as an administrator. Once you have done this select **Site Actions** from the top left and then **Site Settings** from the drop down menu that appears.



This will take you to the *Site Settings* for that SharePoint site. Here you will find a subsection called *Look and Feel*.

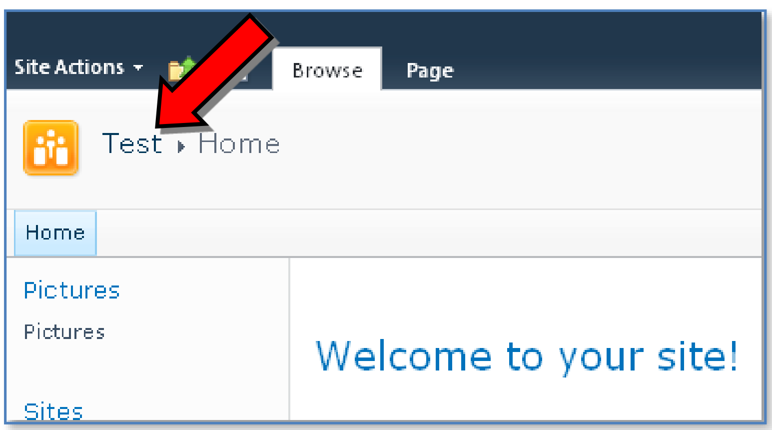


Click the first link in the list is **Title, description and icon**.

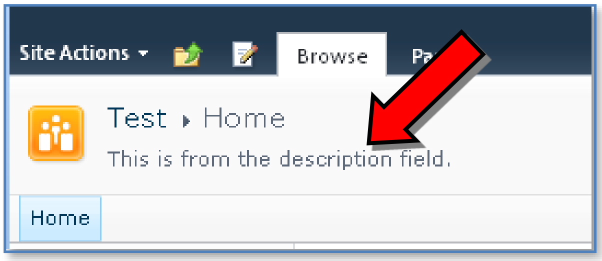


You should see three sections displayed, *Title and Description*, *Logo URL* and *Description and Web Site Address*.

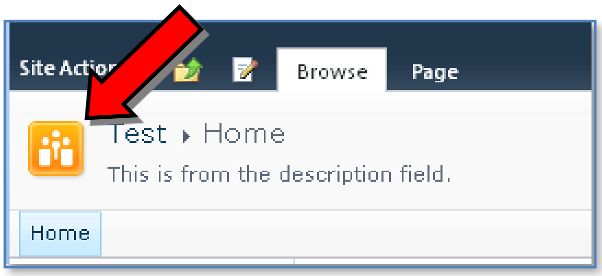
Title and Description – The text in the *Title* field is the title of the site and what is displayed in the top left of your site like so and appears on every page in the site:



The text in the description field is the text that appears just below the *Title* on the home page like so:



The other important thing to consider when entering information into these fields is that both are used with search. It is therefore always best practice to ensure that you enter meaningful information here to help end users find the information they are searching for. This is especially true if you are creating a hierarchy of sites and subsites. Logo URL and description – The default logo that appears in the top left is:



If you wish to utilize something different you will need to insert a link to that graphic in the *URL* field. It is important to note that no scaling options are available and the recommended size of the icon is 60 x 60 pixels. You can link to graphics that are located anywhere, even on the Internet, however it is important to ensure that all users have access to these linked graphics and consider what may happen is the link to any external source is not available. In that case any externally linked graphic will not display and all you see is a broken link icon like so:

A much better option is to upload the desired graphic into SharePoint (into the *Site Assets* library say) and then use the link to that location. This will ensure that provided your users have access to SharePoint they will also be able to see the graphic.

You can also enter a description for this graphic and it is recommended that you use the field to enter information about the location where the graphic has been obtained or is stored simply to make it easier to edit in the future.

Once you make a change you should see the new graphic displayed in the top left of each page of that SharePoint site like so:

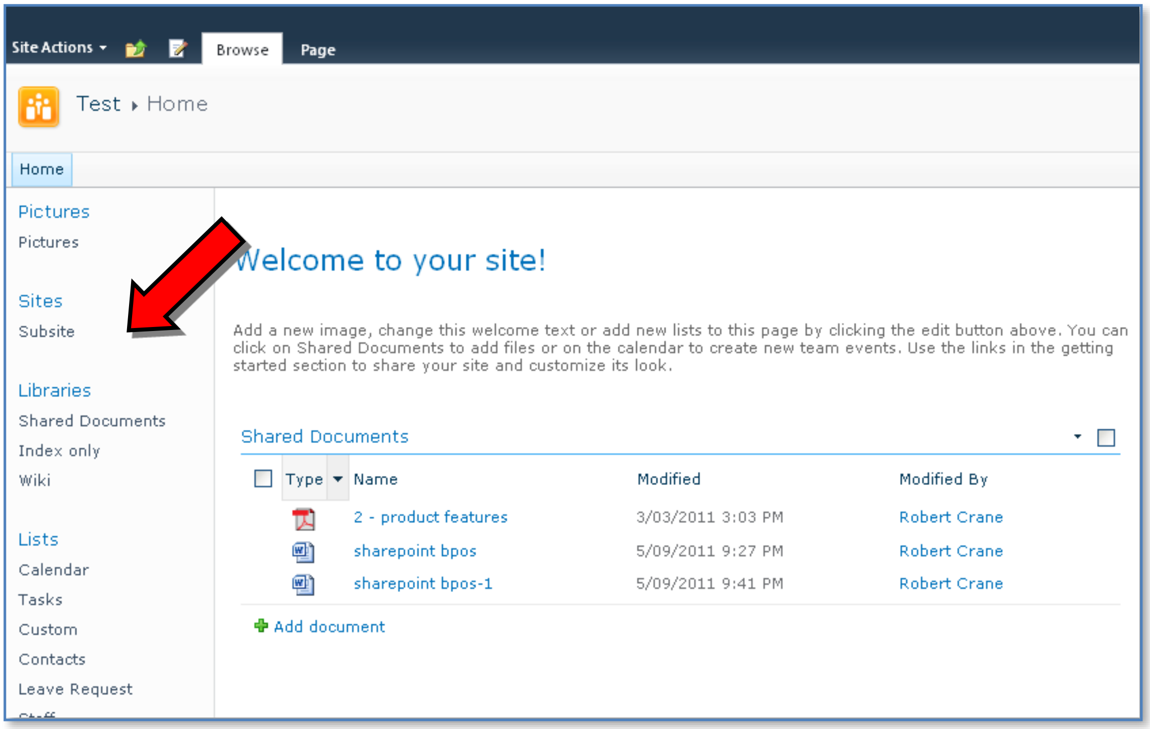
Web site address – If you are not at the top (or root) of your SharePoint hierarchy then you will have the ability to change the address of the site. You will notice that you only have the option to change the last part of the address and it should be done with care because any change here will break any manual or absolute links to this location (SharePoint will update its links automatically but not if you have manually typed these in somewhere like a menu bar).

Best practice here is to ensure that the address is kept as short as possible and does not include special characters and importantly does not contain any spaces (even though they are accepted).

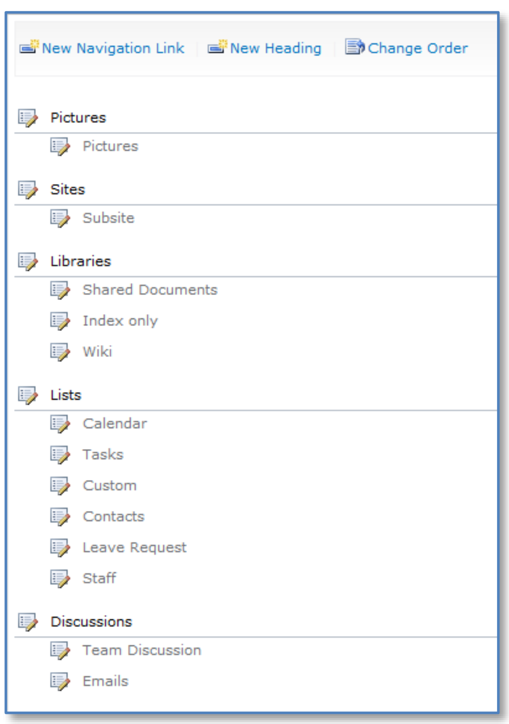
Once you have made the changes you desire press the **OK** button to save these and return to the *Site Settings* page.

Quick Launch menu

The next area that you can modify from the *Look and Feel* section in the *Site Settings* page is the *Quick Launch* menu that appears down the left hand side of the site.

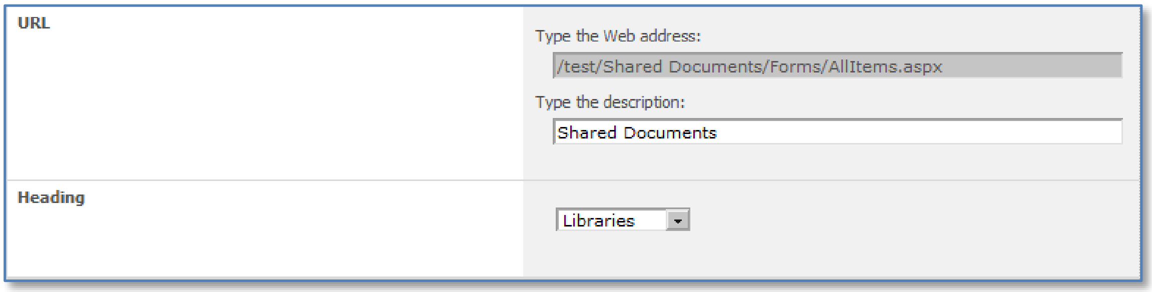


If you click on the **Quick Launch** menu in *Site Settings* under the *Look and Feel* section you should now see the following options:

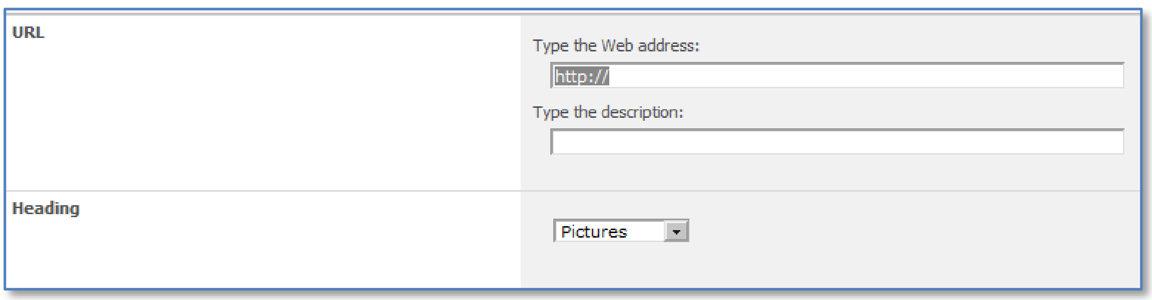


It is important to remember that what you see here will be the *Quick Launch* menu from the SharePoint site you are working with.

If you click on any of the edit icon next to any of the heading you see displayed you will be taken to a screen that allows you to change the web address, the description for that option like so:



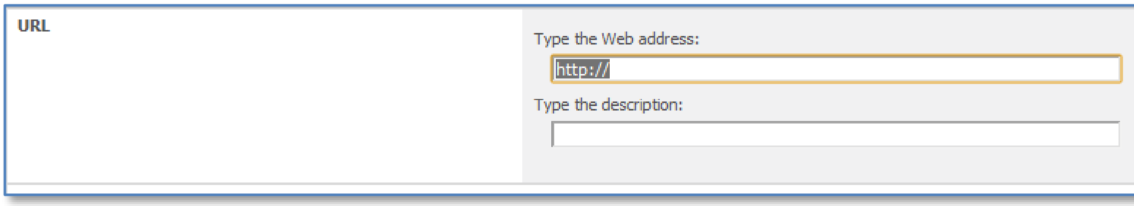
If the option that you select is a not a heading you will also see the pull down option *Heading* which allows you to locate that option under that location in the menu.
When you have finished making changes simply press the **OK** button to save. You can also remove the option from the *Quick Launch* menu by pressing the **Delete** key.
If you click the **New Navigation Link** from the menu at the top of the page you will taken to area that looks very similar to edit screen just mentioned.



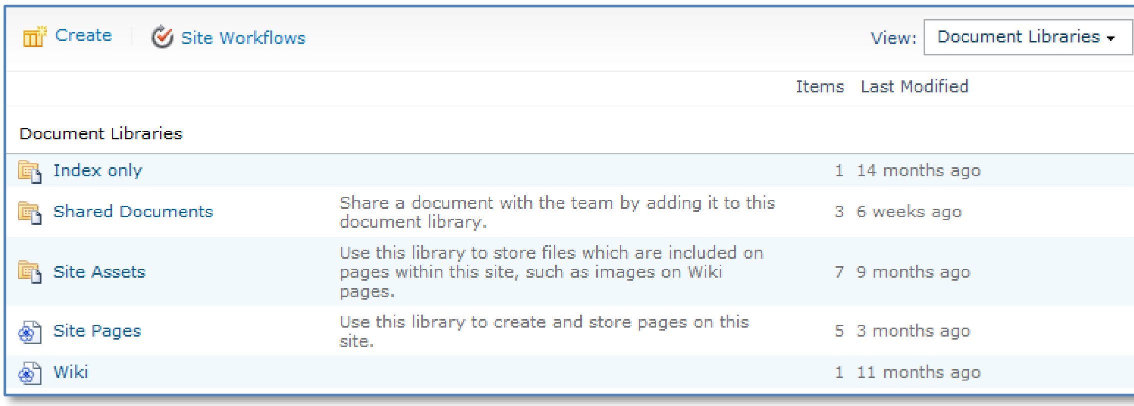
In here you can enter the details for a new item on the *Quick Launch* menu. The information that you enter here doesn't necessarily have to point to a location within the SharePoint site. It can point to another SharePoint site, a web site, external URL or link that is viewable through a web browser.

Once you have entered in the *Web address* and the *Description* you can also select under which heading the item will appear in the *Quick Launch* menu.
Press the **OK** button to save any changes.

If you press the **New Heading** link at the top of the screen you will be taken to screen where you can enter the details for a new heading on the *Quick Launch* menu.



The Web address field can point to any valid web address again but in the case of SharePoint content it will normally point to a summary of those items. So for example, click on the *Libraries* heading in a SharePoint site will reveal:



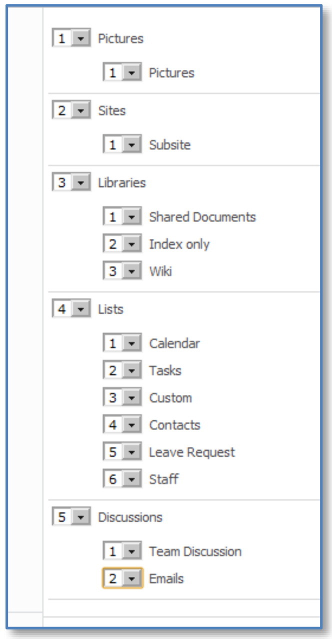
The URL for this will look something like:

/test/_layouts/viewlsts.aspx?BaseType=1

Thus, if you ever want to recover a deleted SharePoint heading in the *Quick Launch* menu then it will have to be similar to the format shown above for the appropriate location. However, it is important to remember that you can insert any valid web address into this field.

Press the **OK** when complete to save the changes.

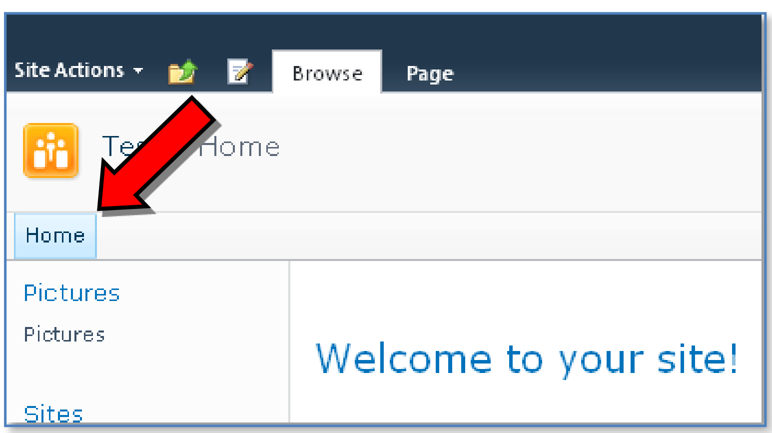
If you select the **Change Order** link from the menu bar at the top you will now see the layout of the *Quick Launch* menu displayed something like:



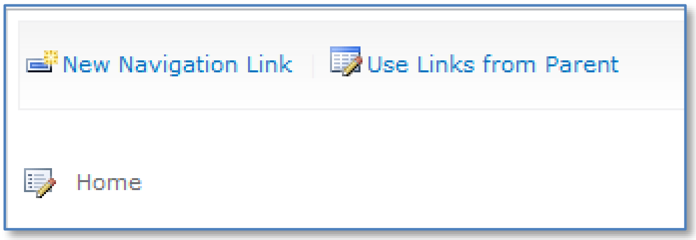
Each of the numerical entries to the left of the menu items can be altered via the pull down option. This means you can arrange the order in which the items appear in the *Quick Launch* menu. You will also see that you can the ordering is hierarchical so that you can change the ordering of the major headings as well as each sub item beneath. When you have completed your changes press the **OK** button to save the changes.

Top Link Bar

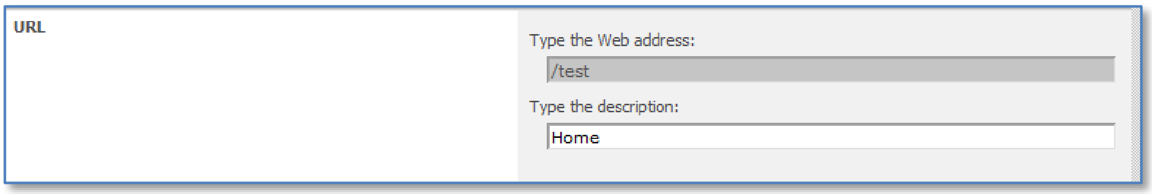
The *Top Link Bar* is the group of links that appear across the top of a site commencing with *Home*.



Top Link Bar items are normally created when you create a subsite. However, it is possible to edit what appears here. To do so, select the **Top Link Bar** option from the *Look and Feel* section of the *Site Settings*.

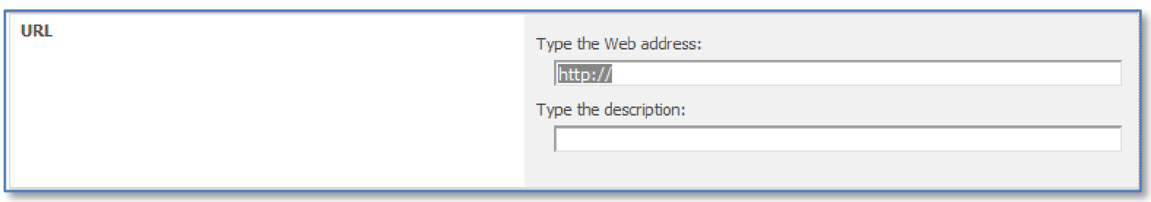


You can edit any items that already appear by clicking on the edit icon which appears to the left of the item. Doing so will take you to an edit screen for that item, like so:



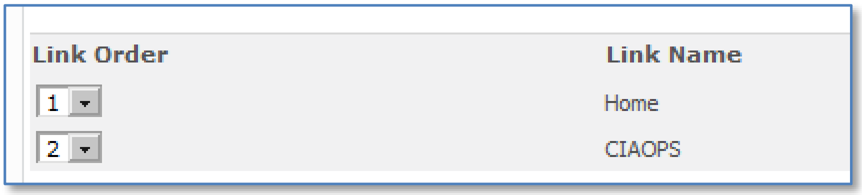
You can now generally edit the *Web address* and *Description* (you can't in this case because it refers to the default Home item).

You will also notice that you can delete the item by selecting the **Delete** button.
Once you have made any changes press the **OK** button to save and exit the screen.
In most cases you will probably not see a lot of entries here. However, if you select the **New Navigation Link** from the menu bar you will be taken to a section where you can manually add a new item.



Much like the *Quick Launch* options discussed above you can now enter a valid URL and a description. The text that you place in the description field is what will be displayed in the new item in the *Top Link Bar*.

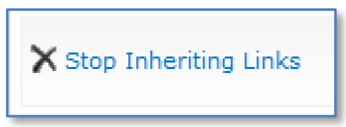
When you have completed any changes press the **OK** button to save and continue.
If you have more than one item in the Top Link Bar you will also see an option at the top *Change Order*. Pressing that will take you to a screen that allows you to reorder how the items appear on the *Top Link Bar* like so:



To change the order simply alter the number in the drop down box to the left of the item. The screen will automatically update.

When you have finished making your changes select the **OK** button to exit and save. The final menu item, *Use Links from Parent* allows you to display the *Top Link Bar* from the parent site (if one exists). This is used in many cases to preserve a single navigation interface through a hierarchy of sites and subsites. Each new subsite you create generally receives its own *Top Link Bar* with items only valid for that site and not the parent. However, using this option allows you to over write that.

If a site is using the Top Link Bar from its parent you will instead see the following option:

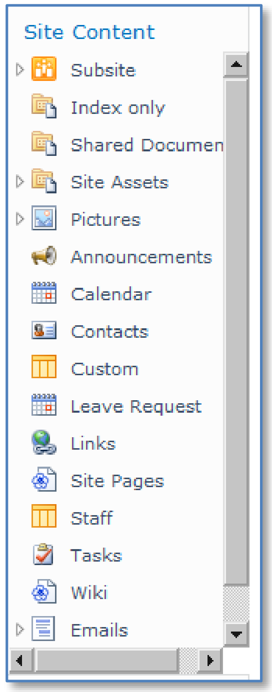


Clicking this will cease the inheritance and allow you to create individual menu items. Note that if you edit the *Top Link Bar*, *Use the links from the parent site* and then stop inheriting any item you have created will not reappear as they are removed during the inheritance process.

<u>Tree View</u>

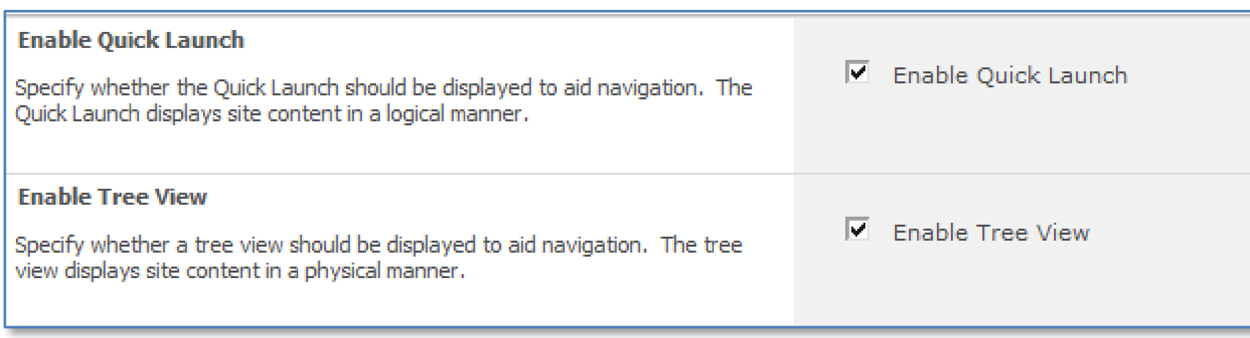
When the hierarchy of a SharePoint site increases navigation can become difficult for end users to locate information. To potentially overcome this issue you can enable what is known as *Tree View* for your site.

When *Tree View* is enabled for the site you will see an expanded menu of your site appear at the bottom of the *Quick Launch* menu that appears like:

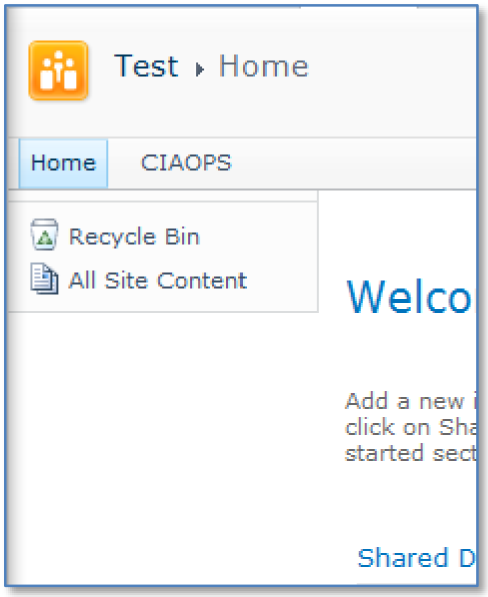


You can then select which item you want to navigate tp by directly clicking on that item in the *Tree View*.

The *Tree View* display option is enabled from the **Tree View** item in the *Look and Feel* section of the Site Settings.



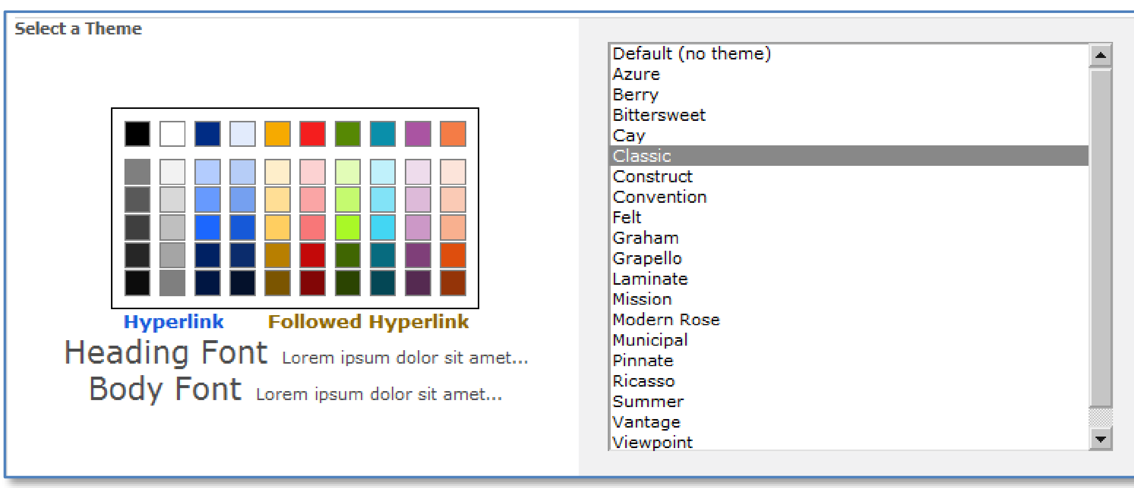
In this area you will see that you can not only enable *Tree View* but also the *Quick Launch* menu. If the *Quick Launch* menu is disabled all you will see on the left hand side of your site will be the *Recycle Bin* and the all *Site Content* links by default.



Press the **OK** button to save the changes and exit these options.

Site Theme

Using the **Site Theme** option from the *Look and Feel* section of *Site Settings* it is possible to customize the colours of the site.



When you select this option you will be taken to page that displays a list of different themes on the right hand side. If you click on any of these themes you will see the scheme change on the left hand side giving you an indication of the appearance of that theme.

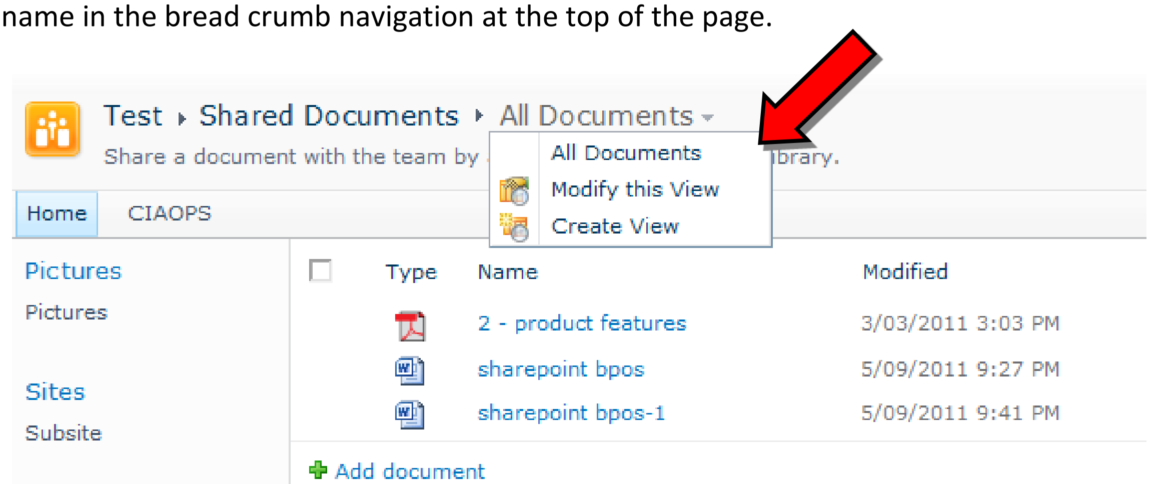
Once you have select a desired theme press the **OK** button to save the changes.

One of the benefits of using different themes is that it allows end users to distinguish between which area they current are in within SharePoint. If all sites have the same default theme then navigating through a hierarchy of sites can become confusing. With SharePoint Server 2010 there are lot more options for customizing the theme. It is also possible to use Microsoft PowerPoint to create new themes that can be applied to all versions of SharePoint. However, doing this also requires access to the SharePoint server.

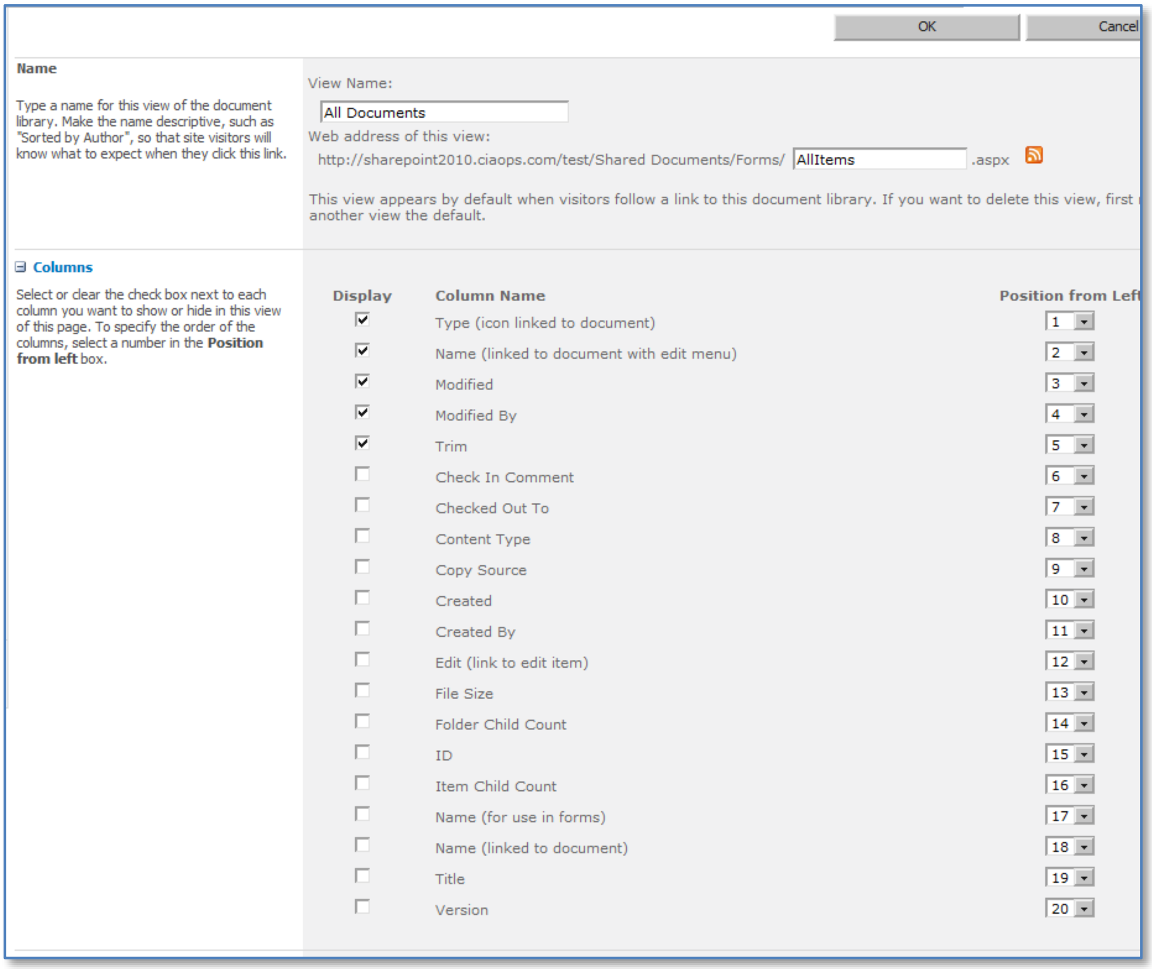
Views

When you create an item in SharePoint like a list, document library, calendar and so on, this process also creates a number of standard 'views' of that item. A view is simply a custom method of looking at the data contained in that item. Importantly you can not only customize the views that already exist but you can create new views.
In this case we will examine the views on a standard document library.

When you view the document library you will see a list of files in that library. You will also see a list of fields displayed including type, name, modified etc. What you are seeing is what is known as the default view for that library. This is the view that is displayed when you first enter the library. You can see whether there are any more views for the item available by selecting the pull down arrow to the right of the library name in the bread crumb navigation at the top of the page.

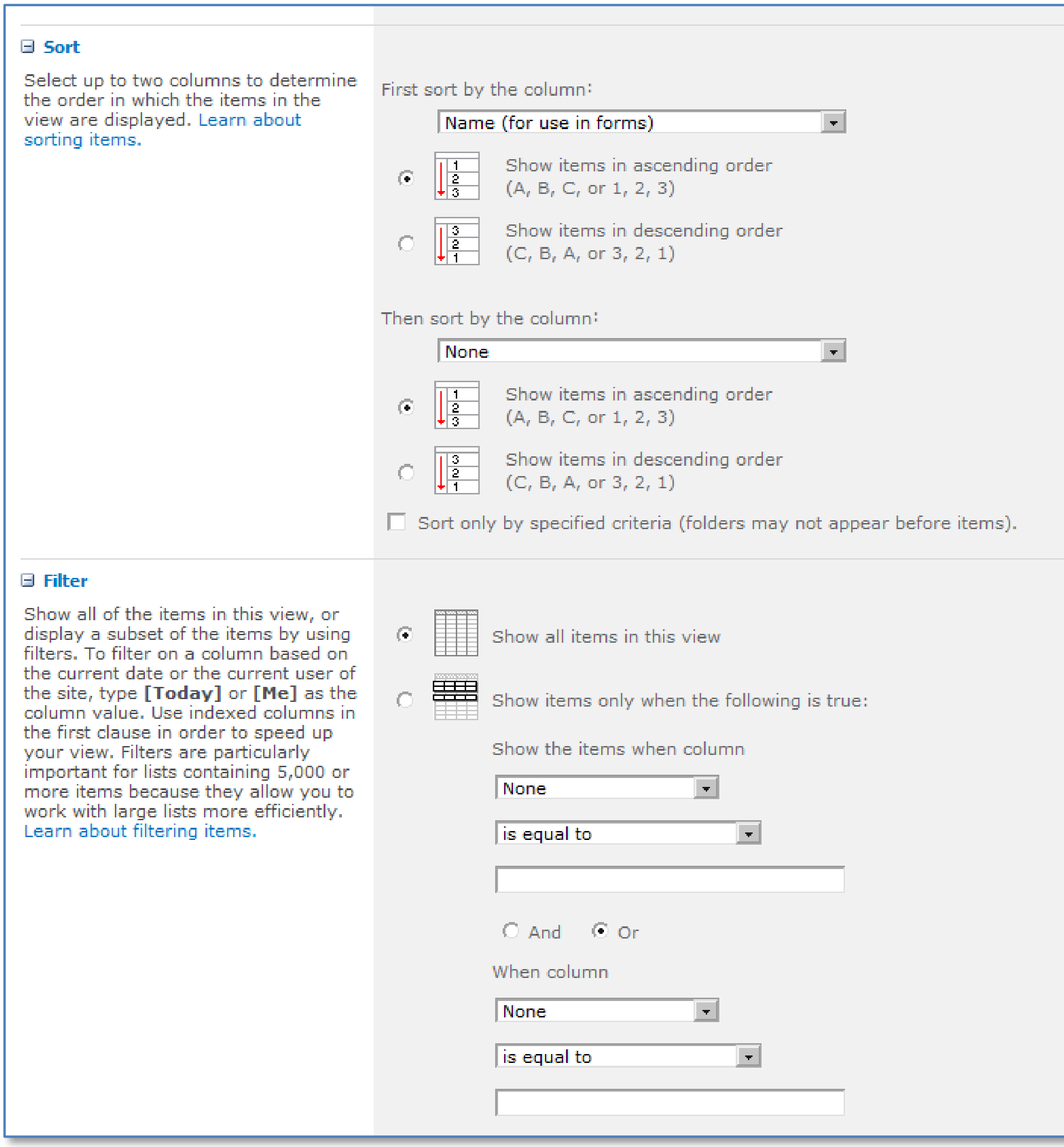


In the case above you can see that there is currently only one view called All Documents. If there were additional views then you could select them here.
To start with we will select option from the menu to **Modify this View**.



You will now be taken to a screen that allows you to make changes to the current view. The *Name* area allows you to not only change what the view is called but also change the URL.

The *Columns* area allows you to select which columns will be displayed in the view and in what order that will appear across the screen. To allow a column to display simply place a check in the box to the left of the column name. To position where the field will be displayed from the left simply pull down the options box to the right of the column and select a number (which represents the position from the left).
Scroll down to view further options.

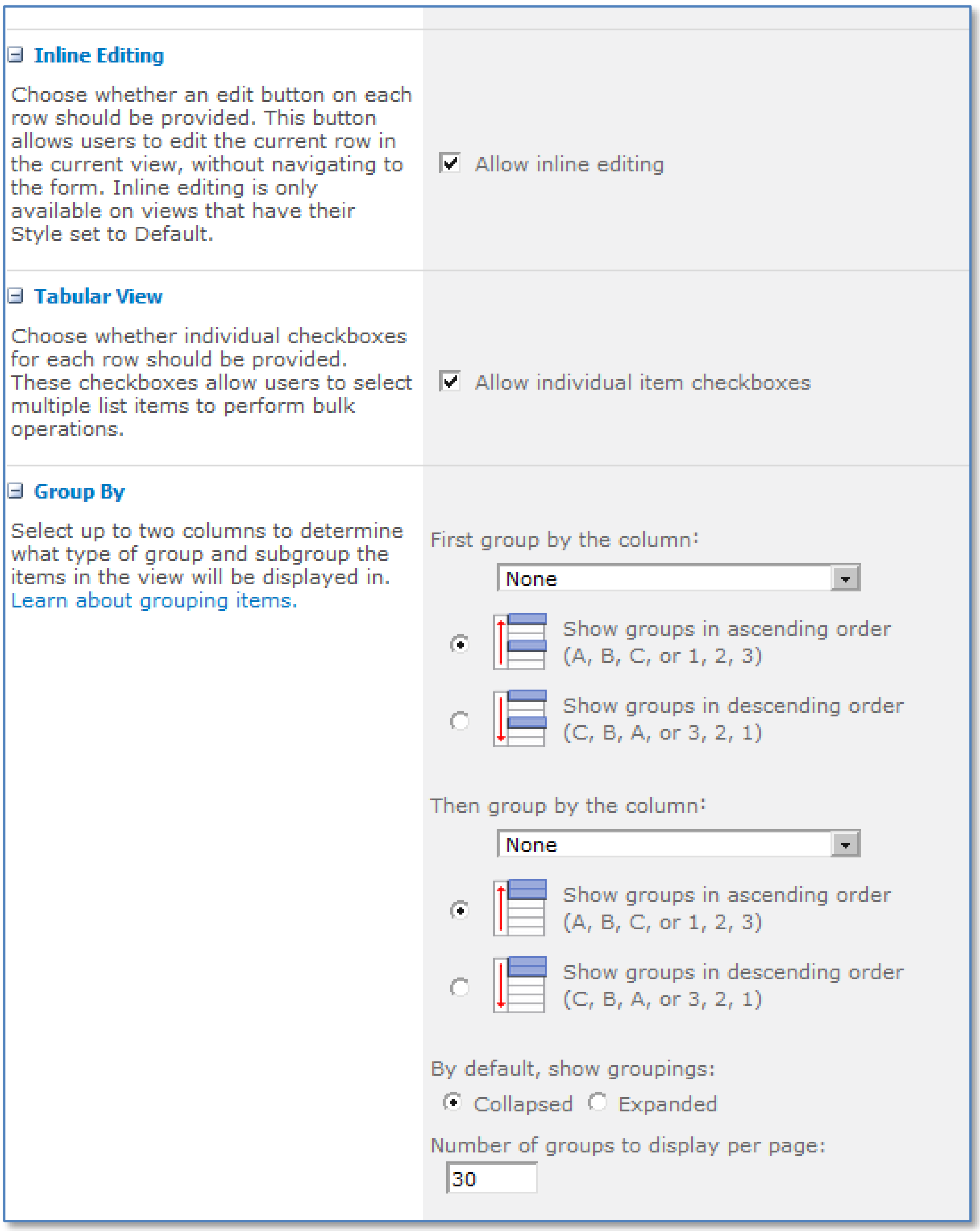


The *Sort* area allows you to determine the order in which the items will appear in this view. You may select up to two columns to sort by. Use the selector to the right of the sort by the column fields to select which column you require. You can then select whether you wish the sort order to be ascending or descending by making a selection from the options below.

The *Filter* area allows you to determine which items will actually be displayed. By default all items are shown but using the fields here you can elect to only show a restricted set of items.

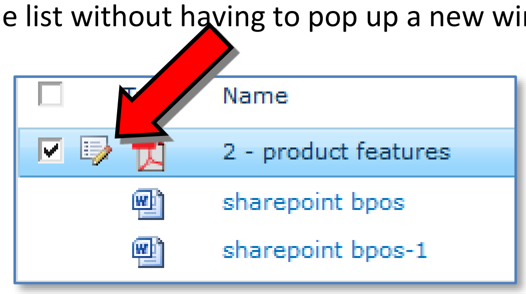
To restrict the items that are displayed select the option **Show items only when the following is true:** then use the selector to locate the field(s) you wish to filter on. Next select the condition you require the filter to meet. For example (is equal to, is not equal to, etc. finally enter the value in the last option box. You can continue to string condition together using the and/or condition.

Scroll down for more options

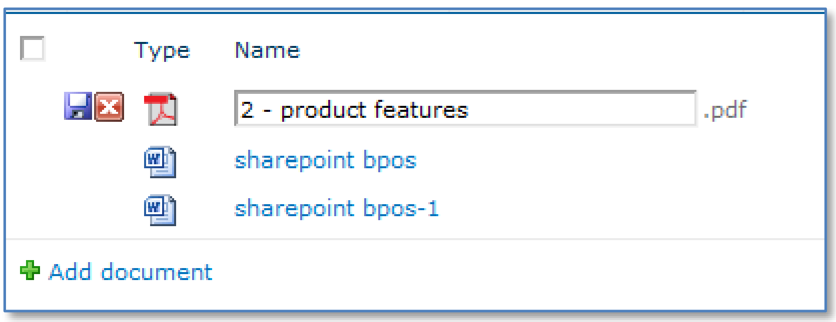


The next set of options will need to be expended so you can view them. To do this click the [+] box to the left of the option name.

The option *Inline Editing* allows you to select an item in the view and then edit its properties directly in the list without having to pop up a new window.

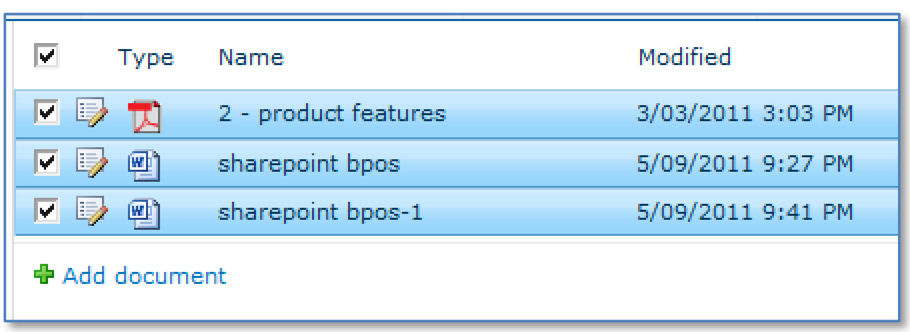


With *Inline Editing* enabled you should see a small edit icon appear when you select the item. Click that edit icon will place that item into edit mode.

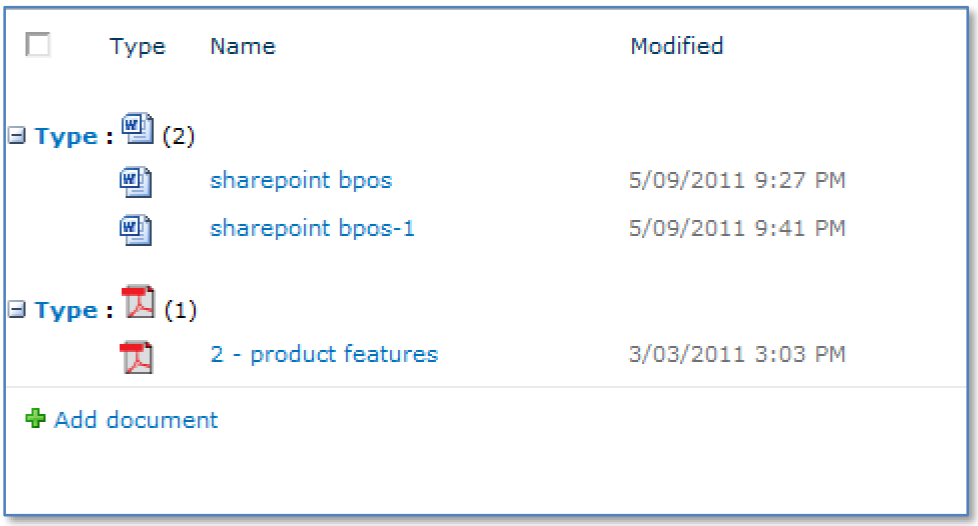


In edit mode you see the edit icon change to a *Save / Cancel* icon and the first field will be editable like shown. You can now make changes to these fields and tab through them on the screen. When you are complete simply press the *Save* icon to update the information.

The option *Tabular View* provides the ability for a checkbox to appear to the left of the entry which can be selected. This then allows the ability to work with multiple records in the view like so:

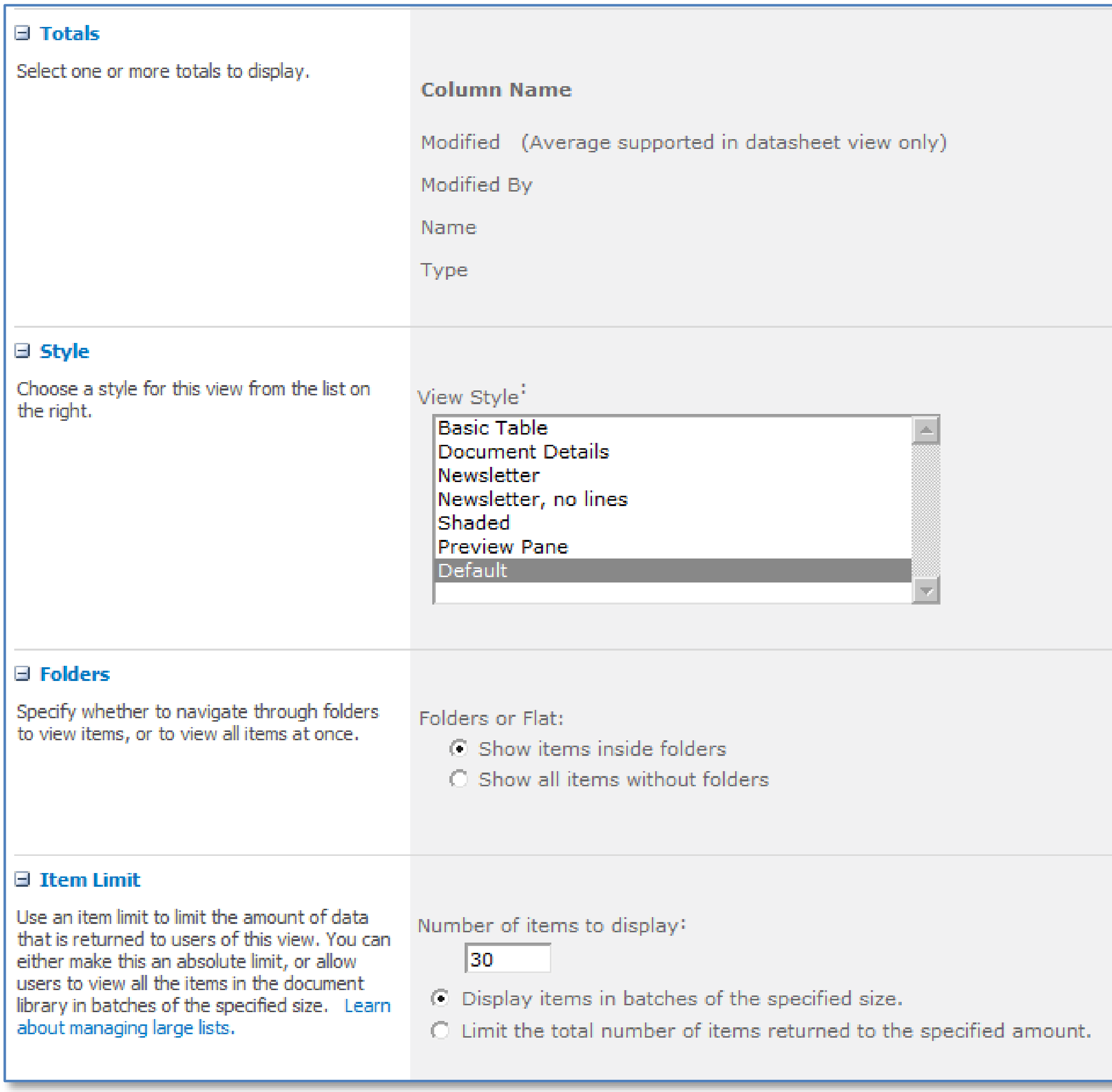


The option *Group By* allows you to collect like items together and display them under a common heading. This makes working with large groups of items much easier. All you need to do is select the columns that you wish to *Group By* and then the order in which they will be grouped (ascending or descending). You can also select whether you wish these groups to be displayed *Collapsed* or *Expanded* by default as well as the limit on how many groups to display per page. Once *Group By* has been enabled and configured it will appear like:

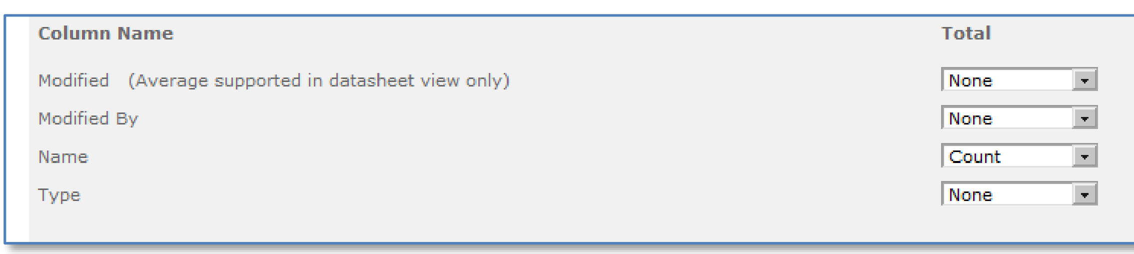


Here we can see that the items are grouped by their file type and are displayed expanded by default. To close any group simply click on the – box next to the word *Type* at the start of the grouping. To expand any group press the + box when it is displayed. To clear grouping simply select to group by *None*.

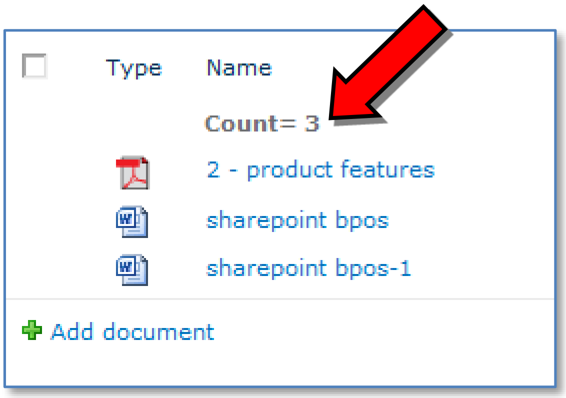
Scroll down the page for more options.



The Totals option allows you to produce a mathematical result on a column, depending on the contents of that column. In here you should see a list of all the suitable columns with a pull down menu for each like so:



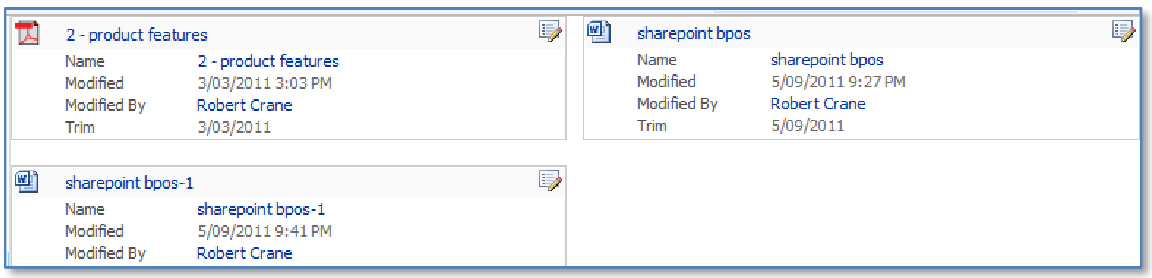
When you pull down the *Total* option you will see a list of functions that can be performed with that column. Depending on the column these include: count, average, sum, total. With a Total field selected for a column you view should look something like:



You should see the *Total* displayed at the top of the page just under the column name as shown above.

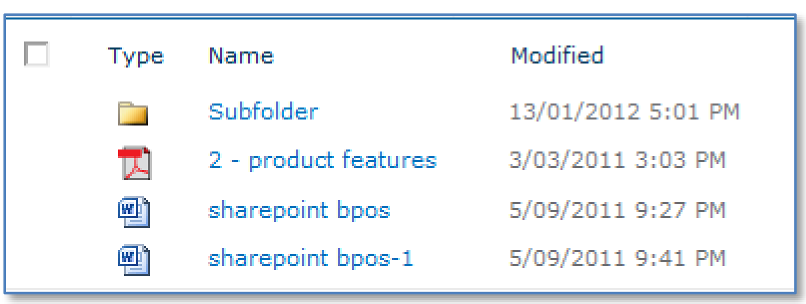
To remove the *Totals* from a view simply select the option **None**.

The option Style alters how items are displayed on the page. For example if you select **Document Details** from the list provided the display will now appear like:



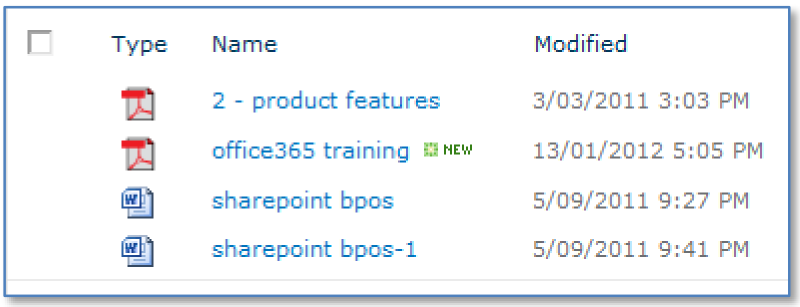
It is important to remember that not all styles work for all lists.

With the *Folders* options you can determine whether users have to navigate through any folders that exist. If the option **Show items inside folders** is selected you will see the normal files and folders structure that was created originally like so:



If however you select the option **Show all items without folders** then the display will show all the files from all the locations (including those inside folders) as a single list of files.

So from the previous example, there is a single file in the folder Subfolder. When the **Show all items without folders** is selected for the view instead of seeing 3 files and 1 folder as above you will see 4 files and no folders like so:



This allows you to create a traditional folder hierarchy in your library but then allows end users to see all the files in that hierarchy without folders. This option when combined with the power of SharePoint to natively filter and sort makes it much easier to locate information while still catering to users who prefer the traditional folders arrangement method. Importantly, you can have multiple view of the same data, thus satisfying both types of users.

As the information in SharePoint grows there becomes a need to control how much of it is displayed at any one time, this is where the *Item Limit* option for views comes in. With this option you can control either how many items appear on a page or alternatively restrict the display to only that number of items in total. Simply set a value for the limit desired.

Just about every component of SharePoint has the ability to be displayed via a special ‘cut-down’ version of the site for use with mobile device. In most cases this ‘cut-down’ version will automatically display on mobile devices but is visible via any browser if you append /m to the end of the location (i.e. http://sharepointsite.com/m). The *Mobile* area of the view will allow you to customize the settings for how this view appears on mobile devices.

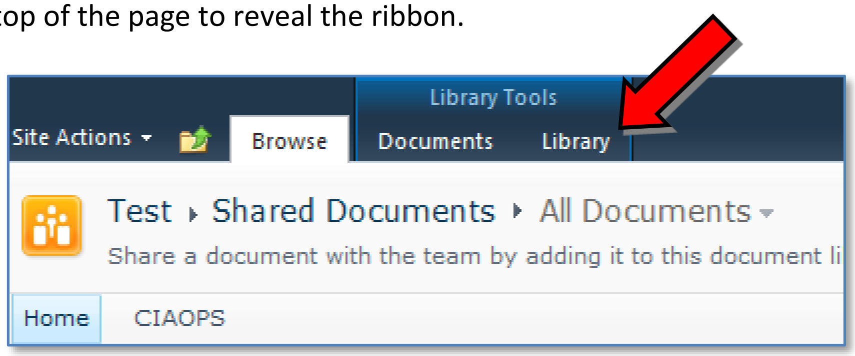
Firstly, the *Mobile* view is enabled by default. Unselecting the Enable this for mobile access will disable the ‘cut-down’ of this list and display the full list when browsed to on any device. You can also determine whether this *Mobile* view is the default that will be displayed on a mobile device when this area is accessed. You can also control how many items will be displayed on screen (a much lower number due to the restricted screen size on mobile devices) and finally you can choose which field to be displayed in the mobile view, again due to screen size restrictions.

Once you have completed any changes press the **OK** button to save and you will be returned to the view of your information but now it will appear with all the settings you have just completed.

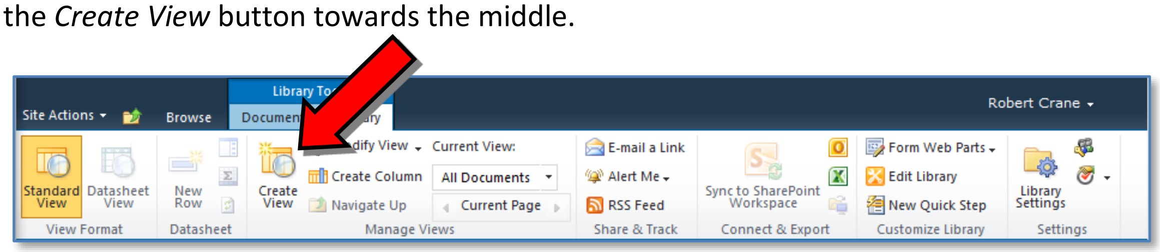
Creating new views

SharePoint allows you to not only modify an existing view it also allows you to create new views of the data. You can generally have as many views you want allowing you to easily swap between them.

Views can also be created and edit from the ribbon interface. Simply click the **Library** tab at the top of the page to reveal the ribbon.

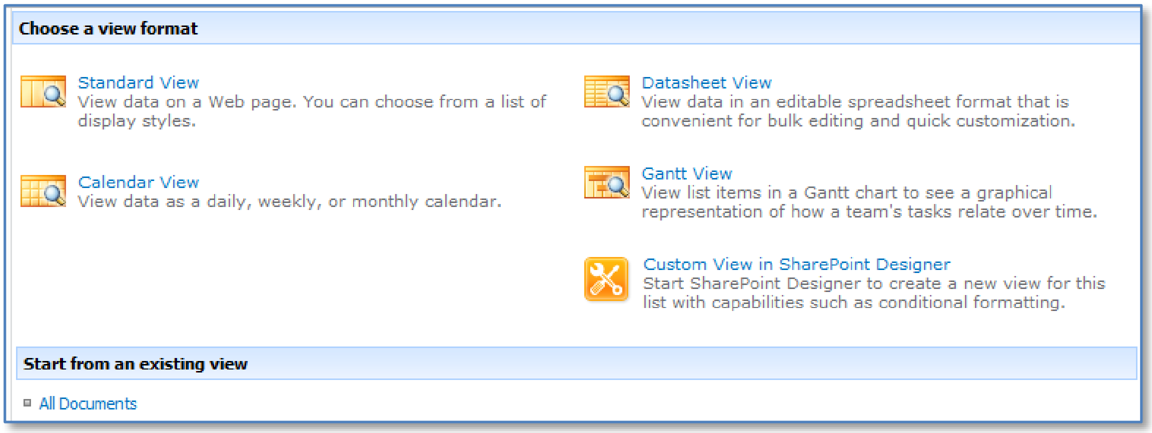


Once you do so you should see the ribbon and provided you have the rights you will see the *Create View* button towards the middle.



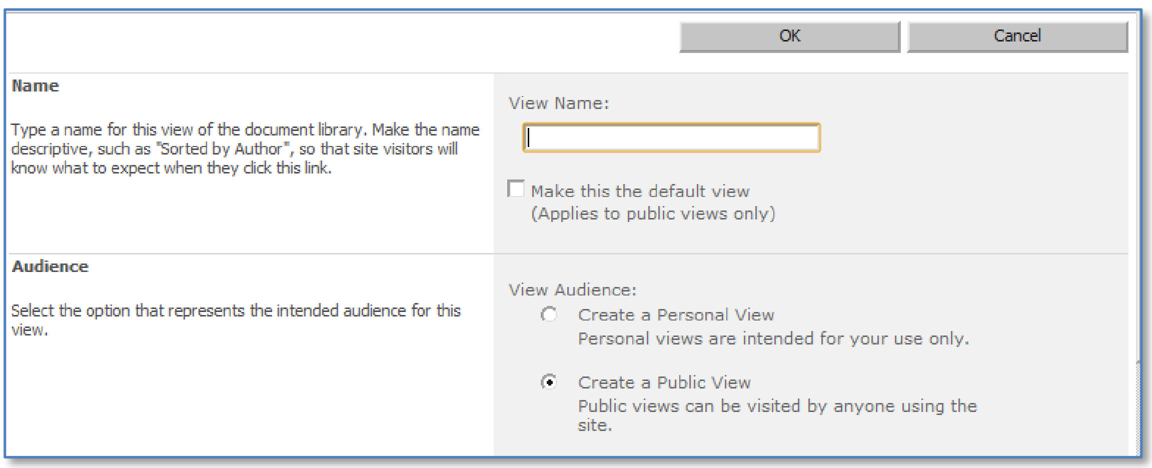
You will also notice just to the right of the *Create View* button the *Modify View* button which takes you through the identical process that was detailed above.

If you press the **Create View** button you will then be prompted to select from a number of different view formats like so:



Consider these like templates for your view. You will also notice at the bottom a list of existing views. The advantage with selecting an existing view is that it will take the settings and configurations already in place and allow you to edit these and save them as a new view. In most cases this is the recommended best practice.

In this case we will select the **All Documents** view at the bottom to proceed.

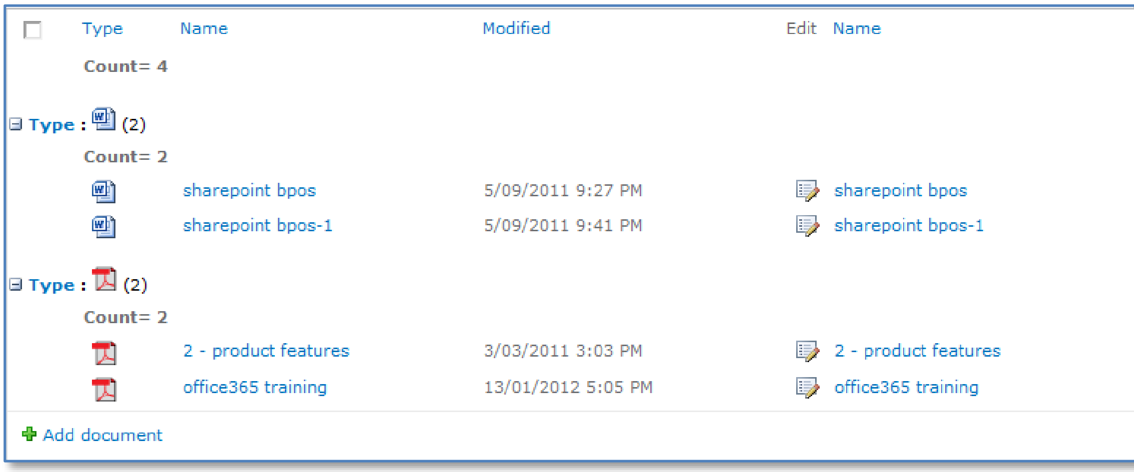


You will be taken to a screen that looks very similar to the *Modify View* options mentioned previously. The major difference is the top selection of the page. Here you are prompted for a *View Name*. This will appear in the list of views so it is important to give it a descriptive title. You can also select whether you wish to make this the default view by place a check in the box provided.

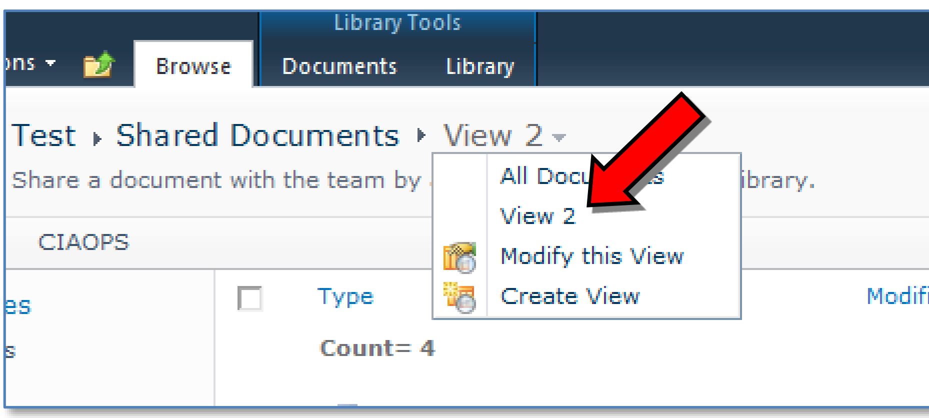
As mentioned before each item in SharePoint has a default view that is displayed when you first enter that area. Once more than a single view exists in any area you can select any view to be the default.

The final option at the top allows you to specify whether the new view you are creating will be *Personal* or *Public*. A *Personal* view is only available to the user who created that view, while a *Public* view is available to all SharePoint users. By default the option will be to have a *Public* view.

Once you have completed the desired changes press the **OK** button to save. You will then be returned to the SharePoint item and the new view options will be displayed.

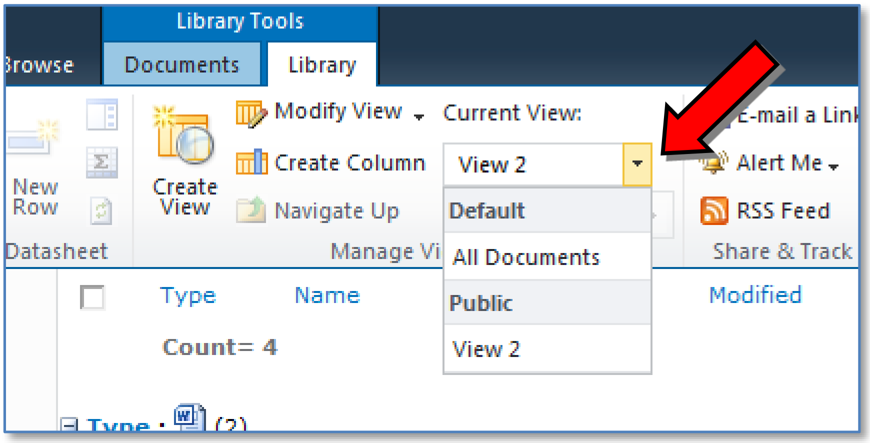


You will now see that if you pull down the arrow from the end of the breadcrumb navigation there is an additional view (here View 2).



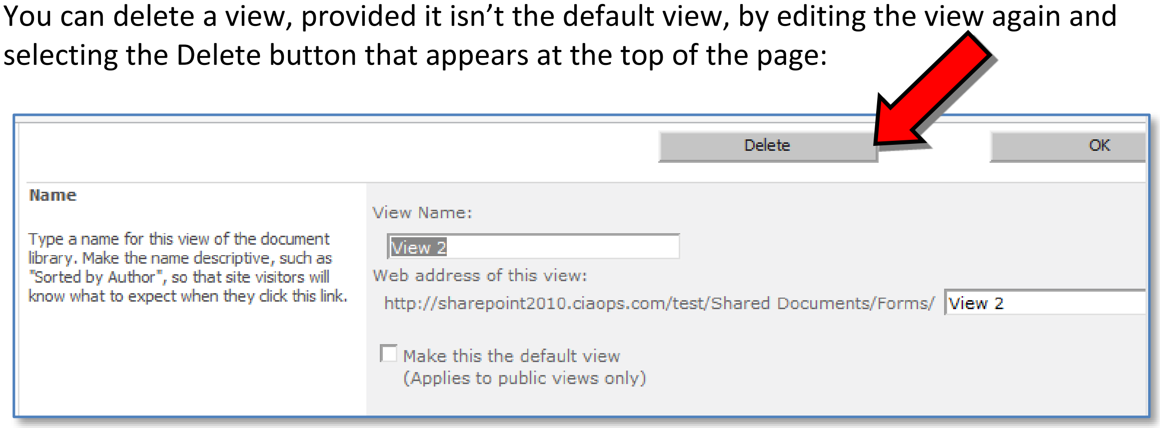
Selecting any of the views here will display that view.

You will see something similar if you pull down the views option form the ribbon like so:

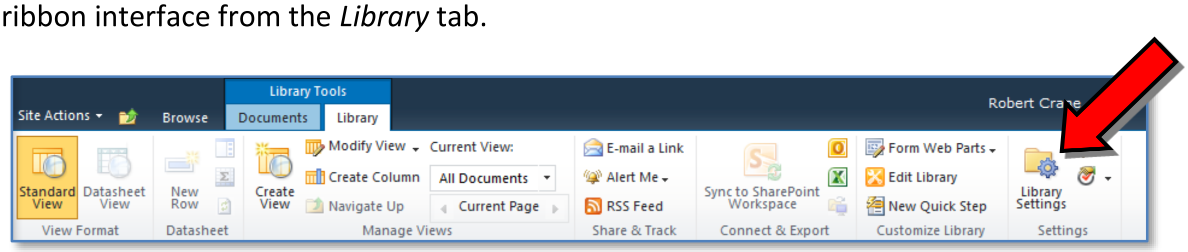


Using the ribbon you can easily see which view is default.

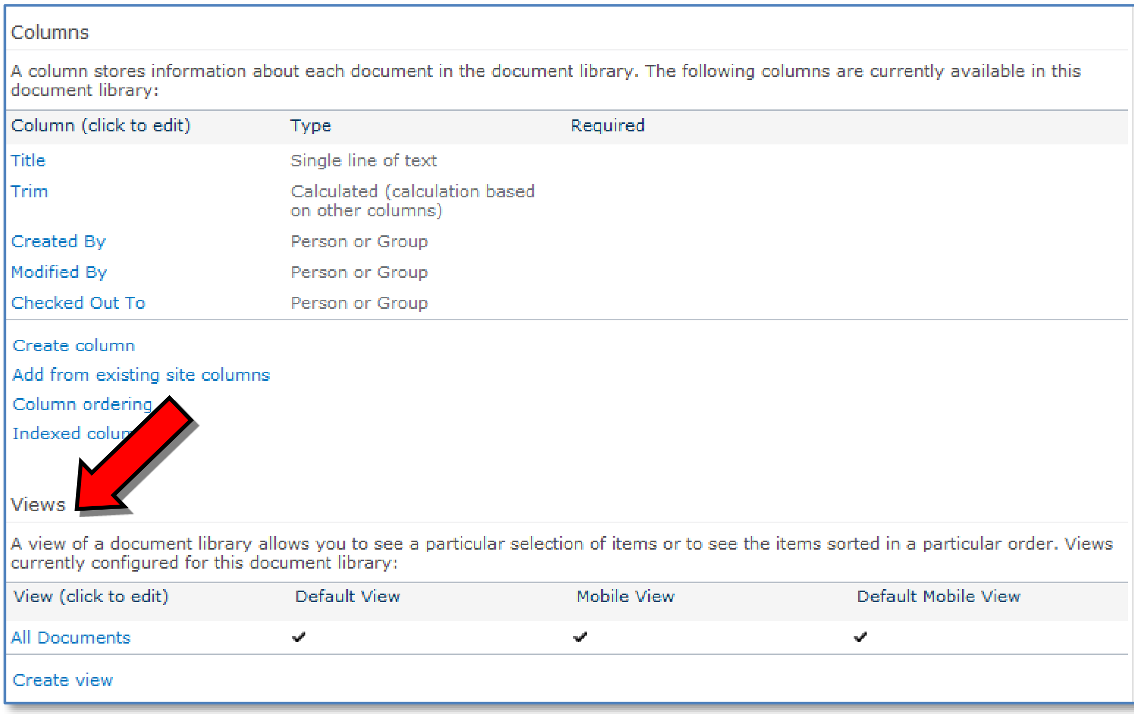
You can delete a view, provided it isn't the default view, by editing the view again and selecting the Delete button that appears at the top of the page:



You will be prompted to ensure that you wish to delete the view. If you select the **OK** button the view will be removed and is generally not recoverable via the *Recycle Bin*. The final way that you can work with *Views* is via the *Library Settings* option in the ribbon interface from the *Library* tab.



Scrolling down to the bottom of the page will reveal the *Views* area where you can edit existing views, by clicking on them, and also create new *Views*.

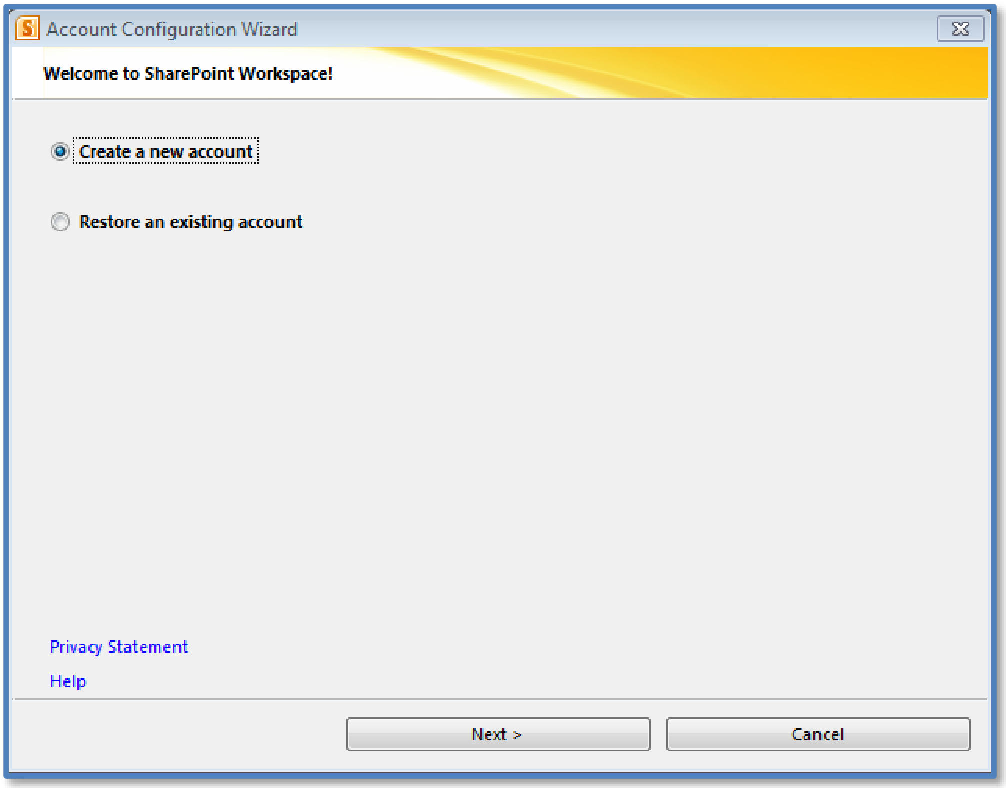


16.19 SharePoint Workspace 2010

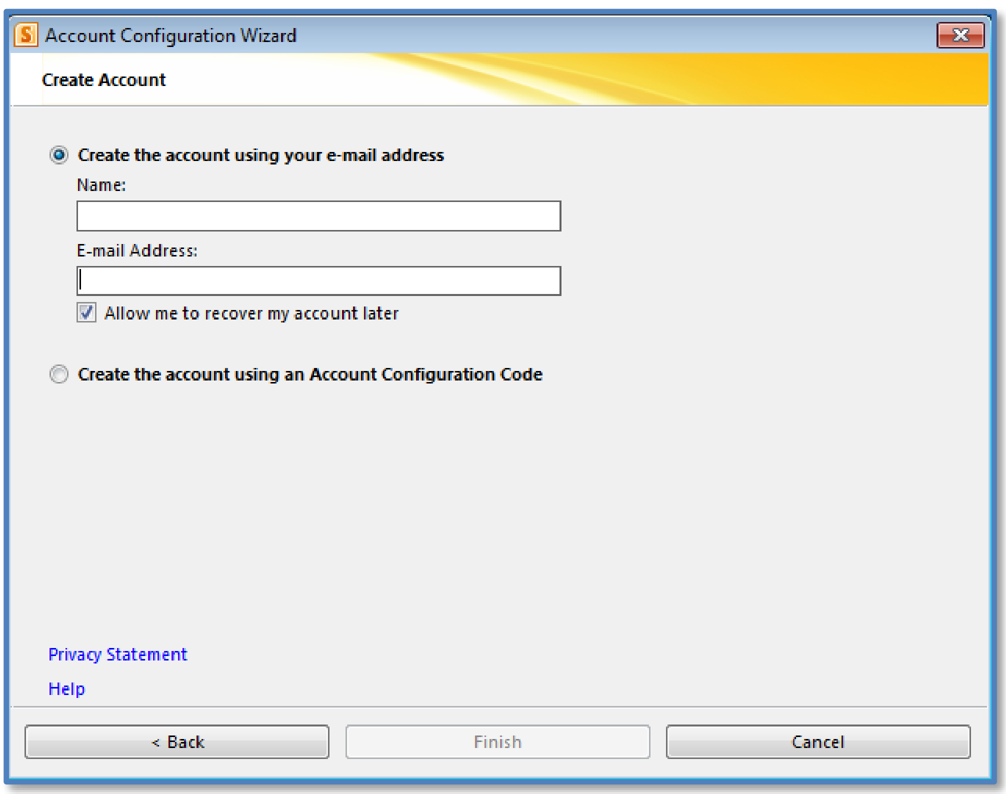
SharePoint Workspace 2010 is an Office 2010 desktop application that can be used to save a local copy of many (but not all) of the elements in a SharePoint site. It is not designed as a backup solution merely an off-line client.

SharePoint Workspace 2010 is included with Office 2010 Professional Plus 2010. It will only sync information from SharePoint 2010 sites.

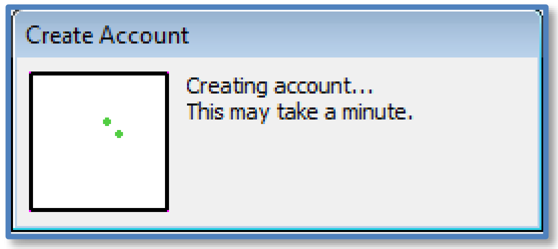
When you run SharePoint Workspace 2010 for the very first time you will be asked to create an account.



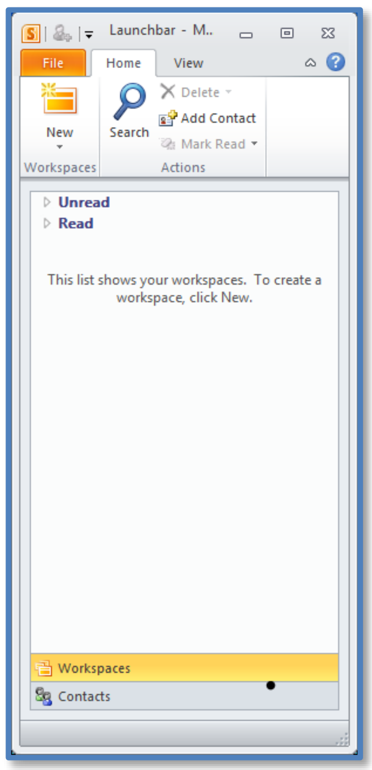
Select the **Create a new account** and press the **Next** button.



Enter and **Name** and **E-Mail Address** into the fields and press the **Finish** button.

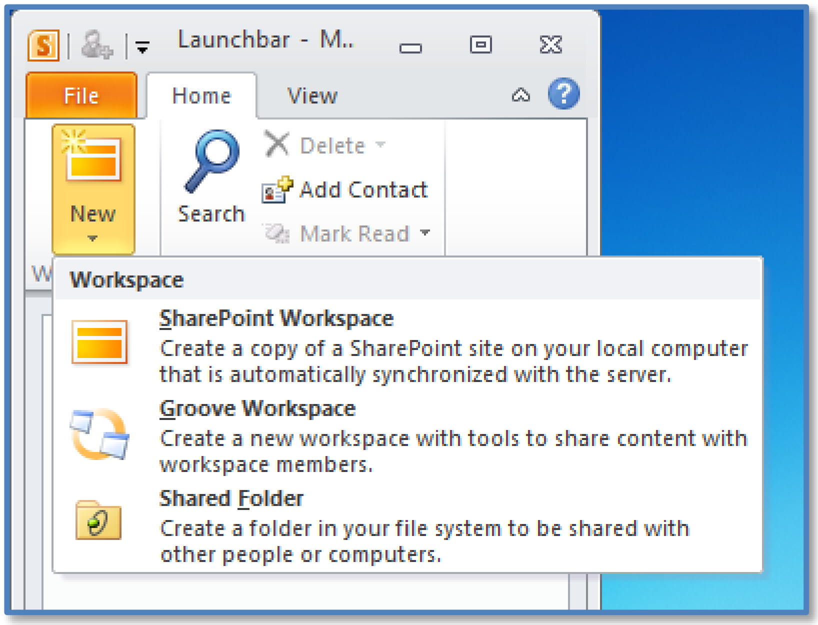


After a few moments the account will be created and you will be taken to the Launchbar.



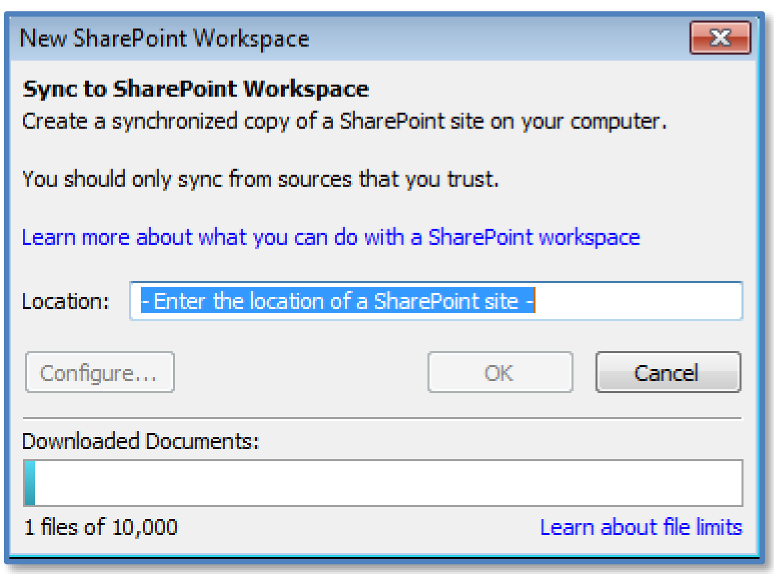
SharePoint 2010 Workspace is an upgrade from a peer to peer collaboration product known as Groove. You can therefore not only sync to SharePoint 2010 sites but you can also create independent collaborative Groove workspaces. The text here will focus only on the SharePoint component of this product.

There are a number of different ways to sync a SharePoint 2010 workspace. The first of these is via SharePoint Workspace 2010 itself.

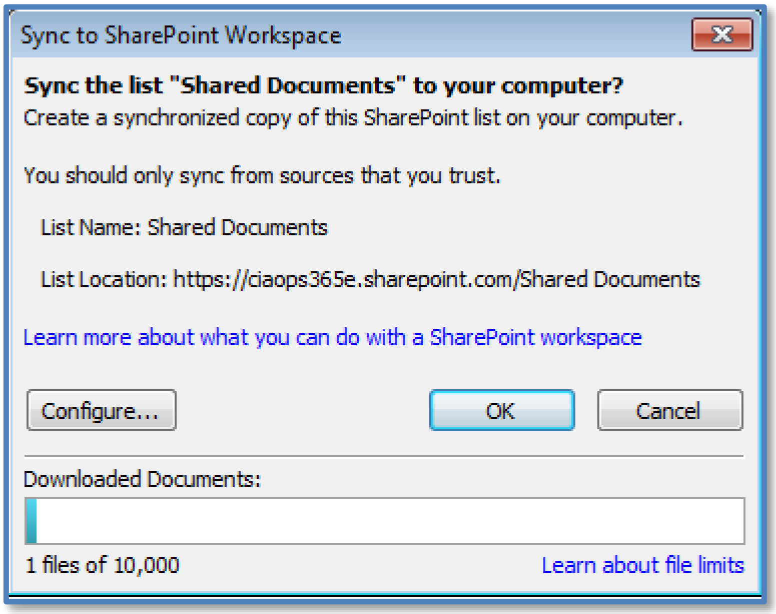


If you pull down the **New** option you will see that you have a choice of creating:

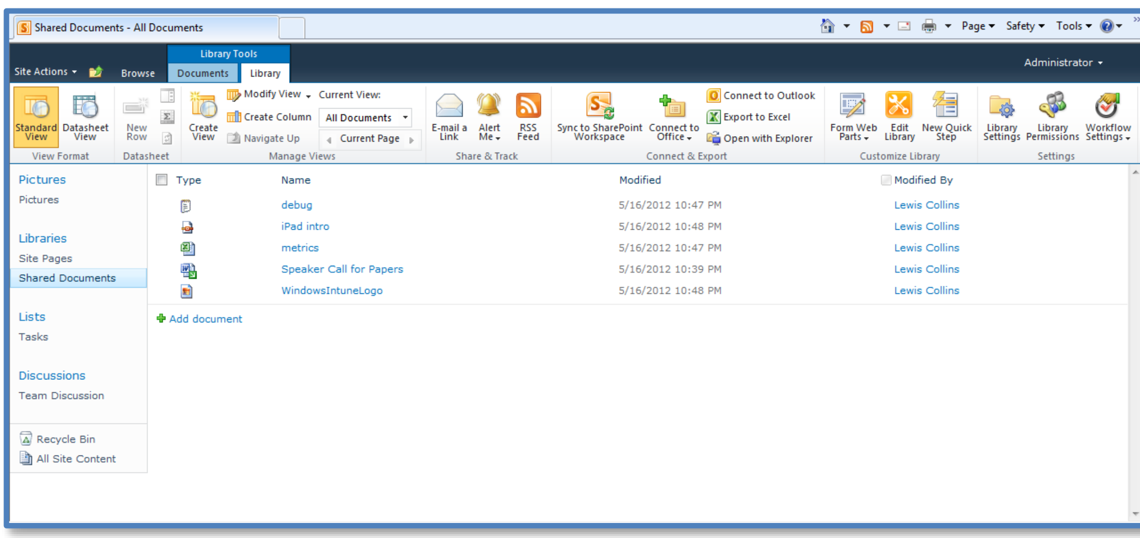
- SharePoint Workspace
- Groove Workspace
- Shared Folder



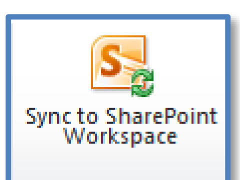
Selecting the **SharePoint Workspace** option will then prompt you for the location of your SharePoint 2010 site. Simply type the URL of the site into this location.



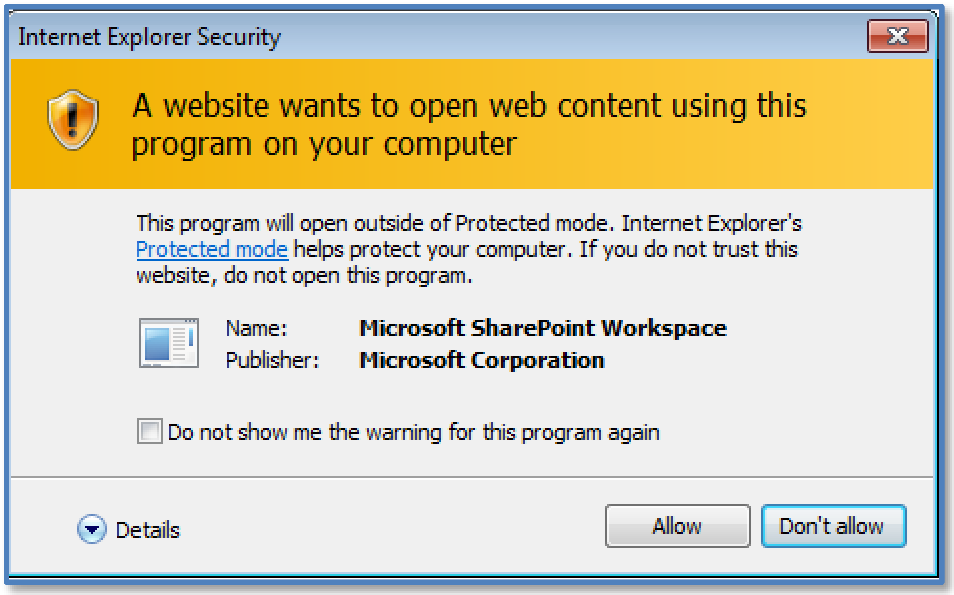
You can also press the **Configure** button once you have enter the SharePoint 2010 site address to select which parts of the SharePoint 2010 site you wish to sync.



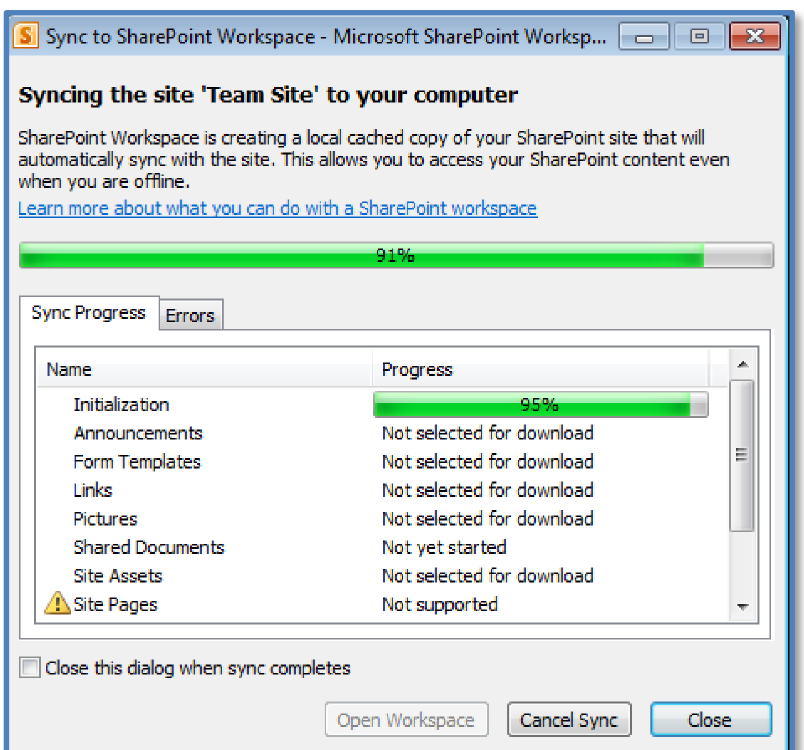
The next way that you can sync something from SharePoint 2010 is to firstly navigate to that location in SharePoint 2010. In this case a document library.



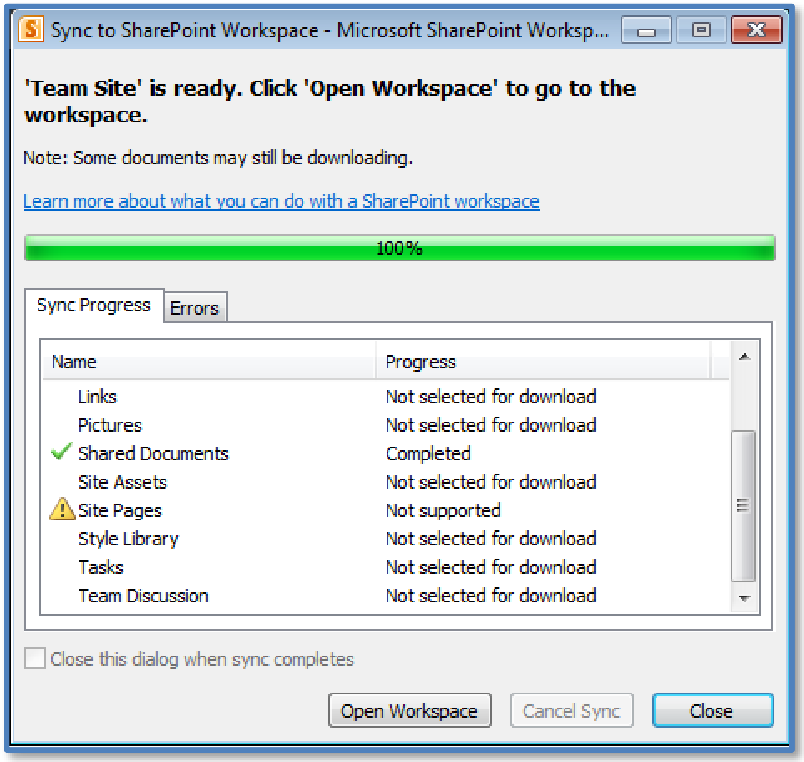
Provided you are using SharePoint 2010 server you will find a **Sync to SharePoint Workspace** button in the ribbon bar when you select the Library tab.



If you select the **Sync to SharePoint Workspace** button you might next be prompted with a firewall warning message as shown above. Select the **Do not show me the warning for this program again** option and press the **Allow** button to continue.

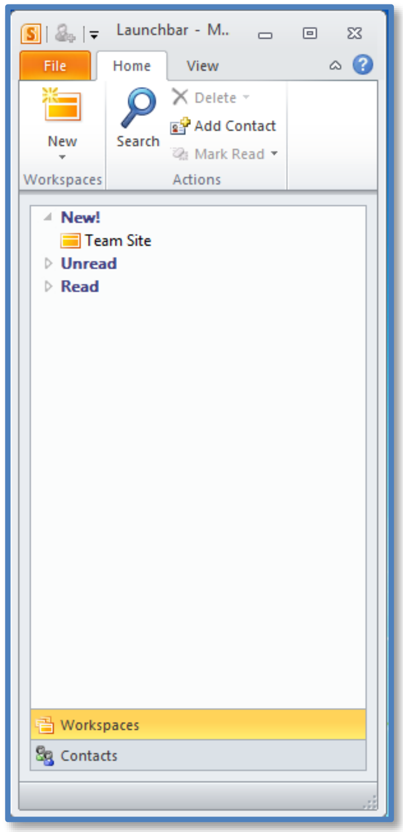


You should now see the SharePoint items start to synchronize. A progress bar will be displayed as shown above.

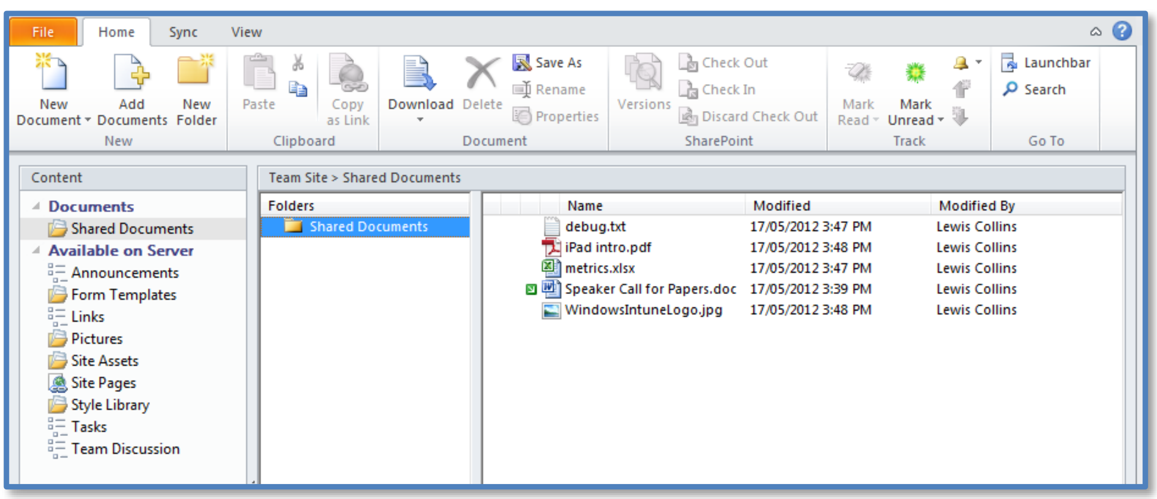


When the process is complete you will be prompted to **Close** this window or **Open Workspace**.

In this case select the **Close** button to continue.

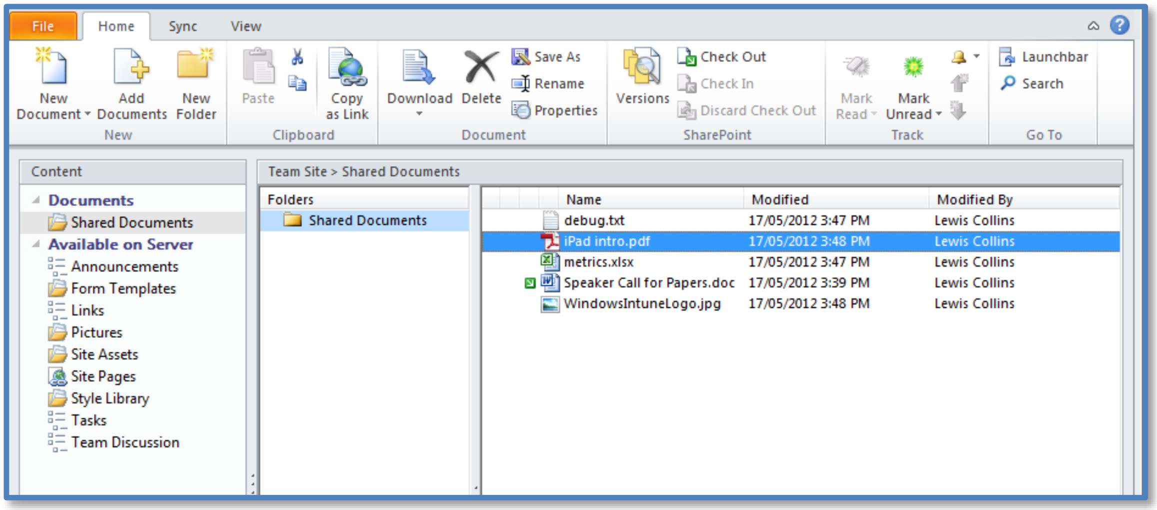


You should now see that the SharePoint 2010 site or location you have selected has been added to the Launchbar under the *New!* section. If you double click on this it will open into the workspace.



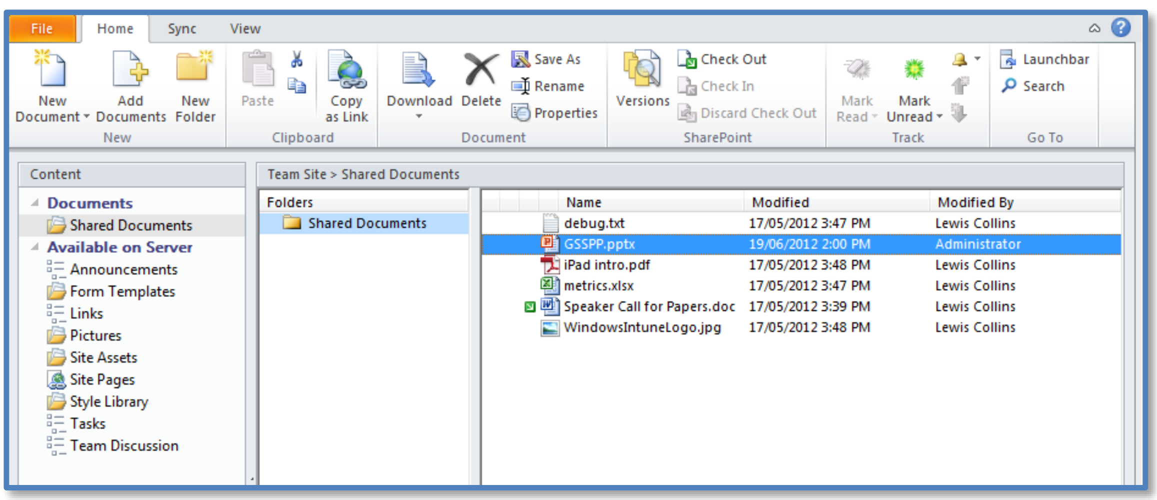
When the workspace opens you will a familiar navigation layout to other Office 2010 products, with Ribbon across the top and the content at the bottom.

Under the Ribbon on the left hand side you will find a navigation tree while on the right you will see the individual items within the tree.



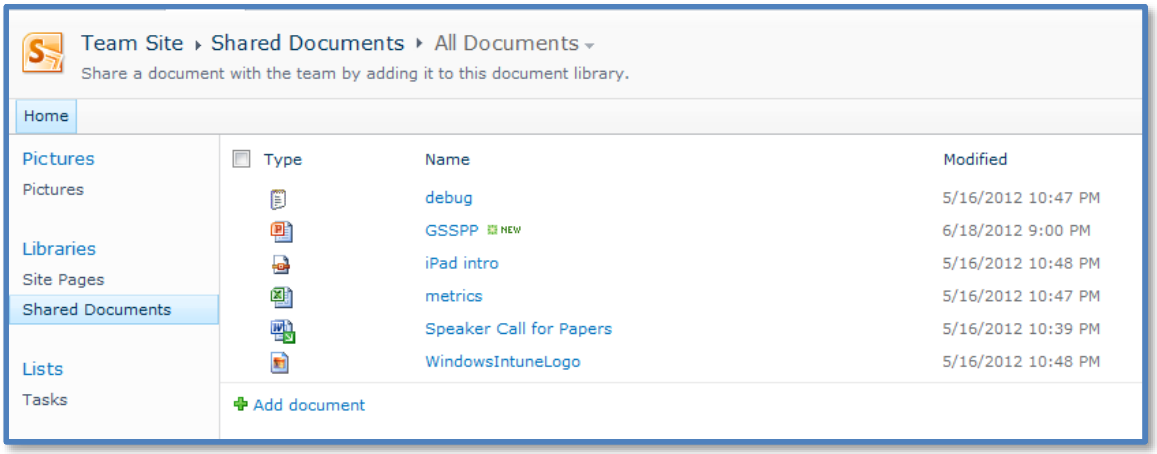
You notice that if you select an item on the right hand side that different buttons in the ribbon will become active.

If you wish to view an item from the right hand side, in this case from a Document Library, simply double click to open it.

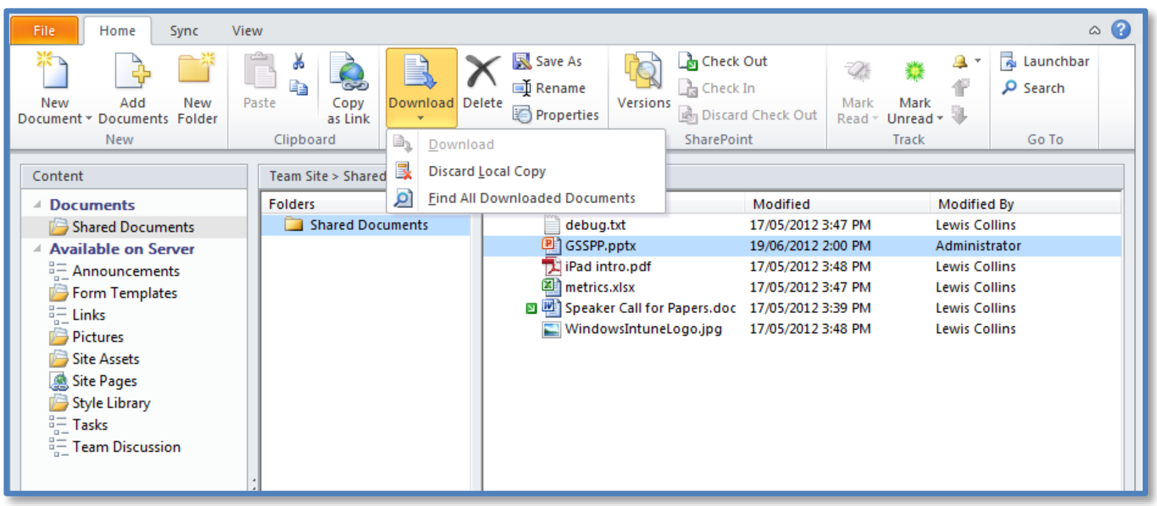


If you drag and drop an item (typically a file) from your local machine to the item list on the right hand side it will copy that item into the workspace but then also automatically sync that item to the SharePoint 2010 site that is connected to the workspace (providing it is available).

In this case the PowerPoint GSSPP.pptx has been copied to the workspace area.

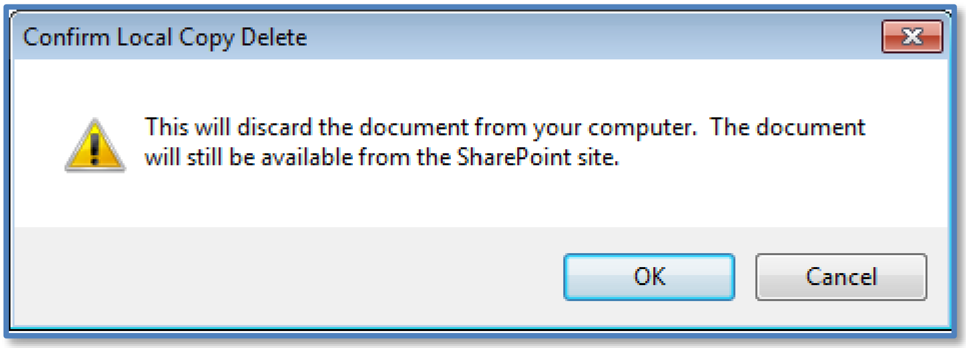


When the SharePoint site is checked you will find that document has indeed also been uploaded here (as noted by the *New* logo next to the filename).



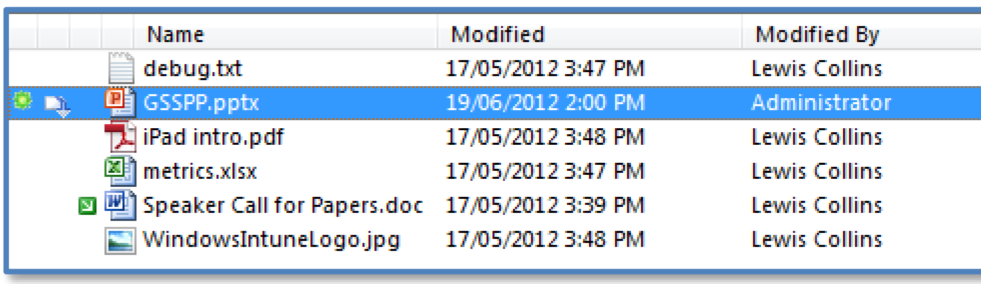
If you wish to remove the copy that is located locally in the workspace (without removing the copy that is in SharePoint), simply select that item then select from the **Download** options as shown above on the Ribbon bar.

In the menu options you will find an item **Discard Local Copy**.



Selecting this item will then prompt you to confirm that you wish to discard only the local copy of the document.

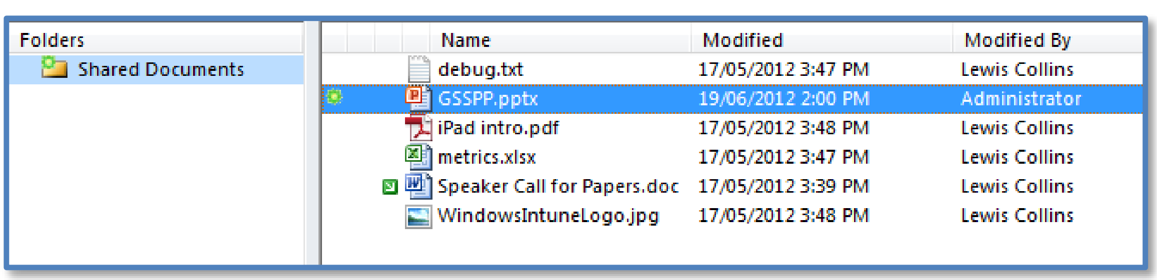
Press **OK** to continue.



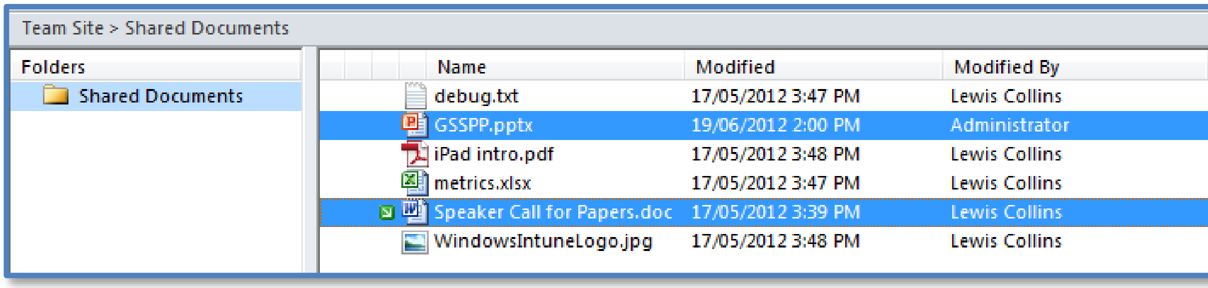
You will then see a small icon with an arrow appear to the left of the item name as shown above. This indicates that the item is in the SharePoint 2010 site but not stored locally in the SharePoint workspace.

If you have configured SharePoint workspace to only download items on demand that icon will remain. To download a local copy of the file from SharePoint 2010 simply click this icon.

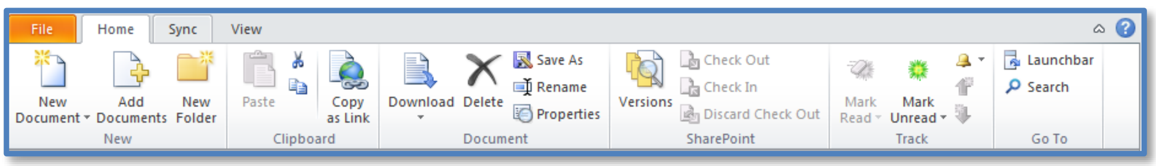
If however, you have configured SharePoint Workspace 2010 to automatically sync a copy of all SharePoint items the icon will disappear once a local copy has been automatically brought down to the desktop.



Once a copy has been re-synced to SharePoint Workspace locally you will notice that a small green star appear to the right of the item as shown above. A similar green star also appears on the folder name at the extreme left as well as back in the Launchbar when you navigate there. This allows you to easily see what synced content has been updated after a synchronization.

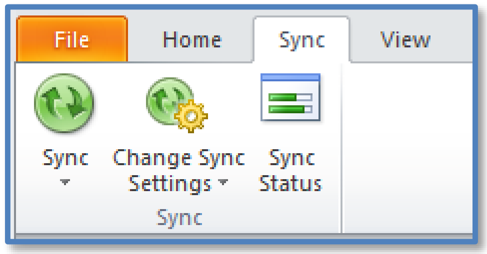


SharePoint Workspace 2010 also allows you to work on multiple items, much like you can with Windows Explorer.



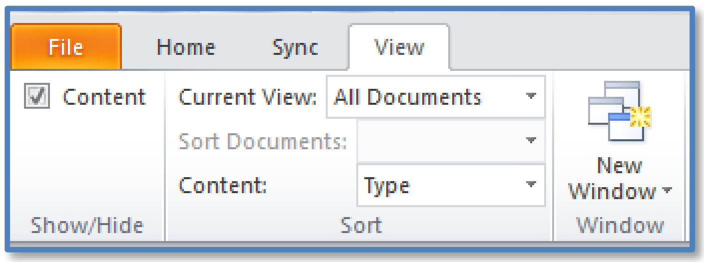
The *Home* tab provides command to work on items with SharePoint Workspace. You will see that you have the options to:

- Create a New Document
- Add Documents
- Create a Folder
- Copy, Cut and Paste
- Copy as Link
- Download
- Delete
- Save As Rename and view the properties
- Manage Versions
- Check in Check out
- Mark as Read
- Etc

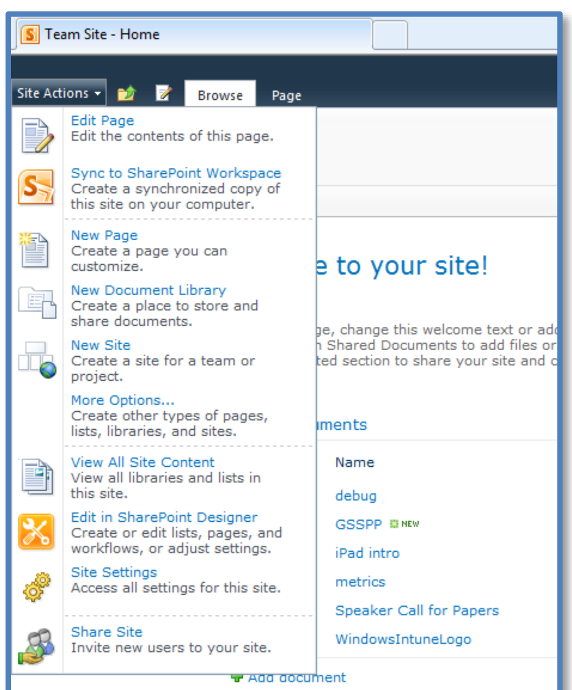


If you select the **Sync** tab you will see:

- Sync
- Change Sync Settings
- View Sync Status

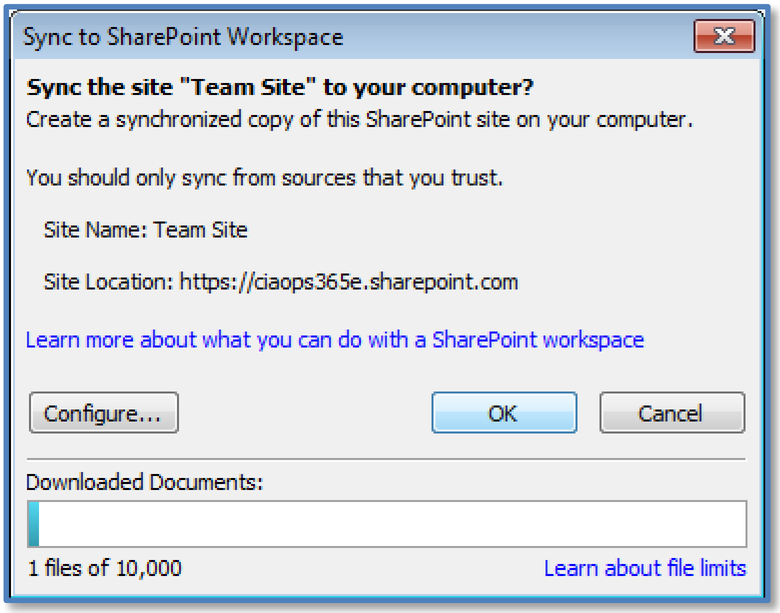


The final **View** tab allows you to chance the view of the items, much like in SharePoint, as well create a window to work with (handy for dragging and dropping files between locations).

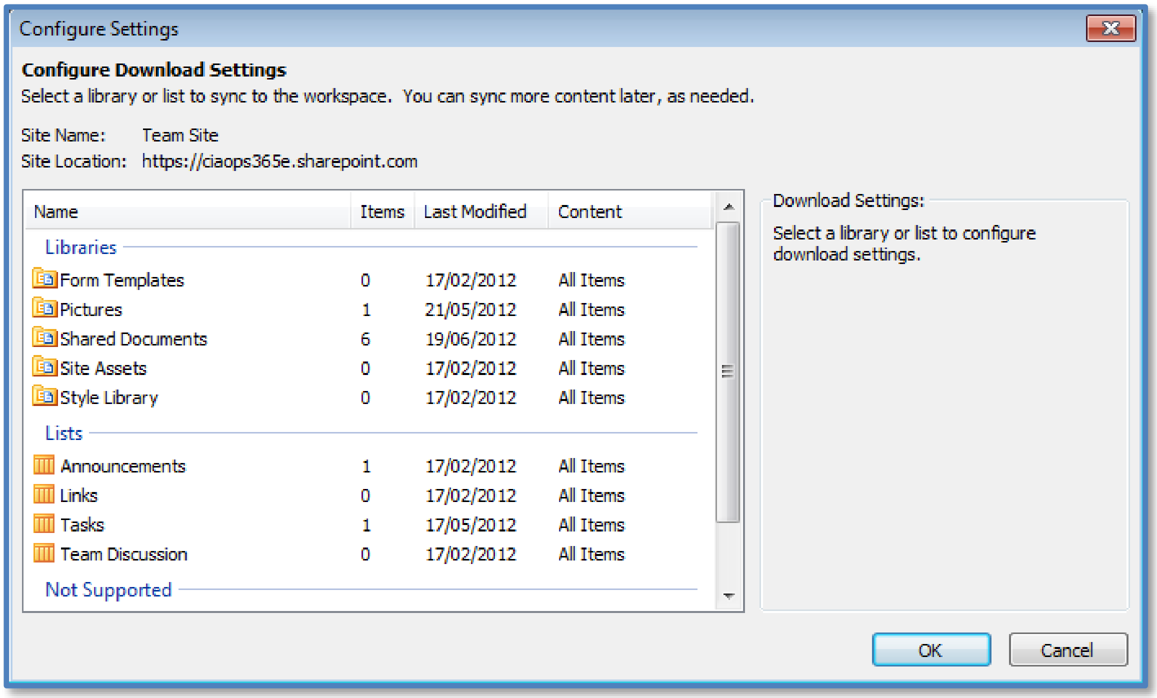


The easiest way to sync a complete SharePoint 2010 site to SharePoint Workspace 2010 is navigate to the home page of the SharePoint 2010 site and select **Site Actions** from the upper left.

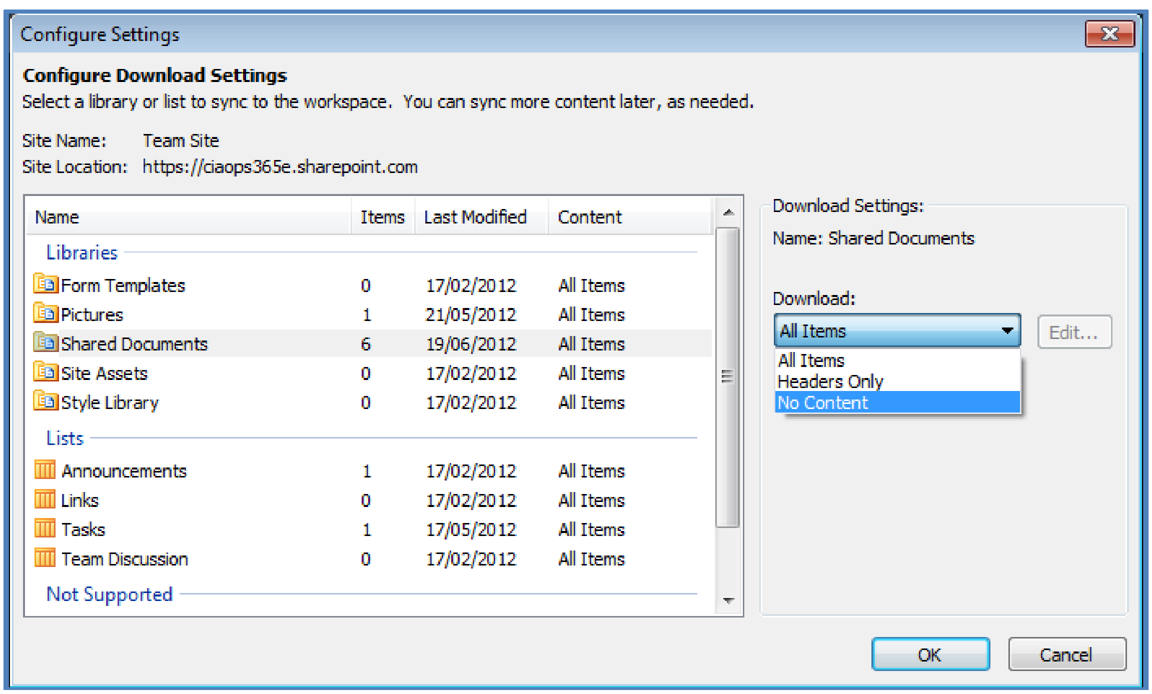
From the menu that appears you should see an option **Sync to SharePoint Workspace**. This option may not appear if you have not been given the rights to synchronize. If you have select this menu option to proceed.



You will then be given the option to configure what you wished to be synchronized. Press the **Configure** button to view the synchronization options.

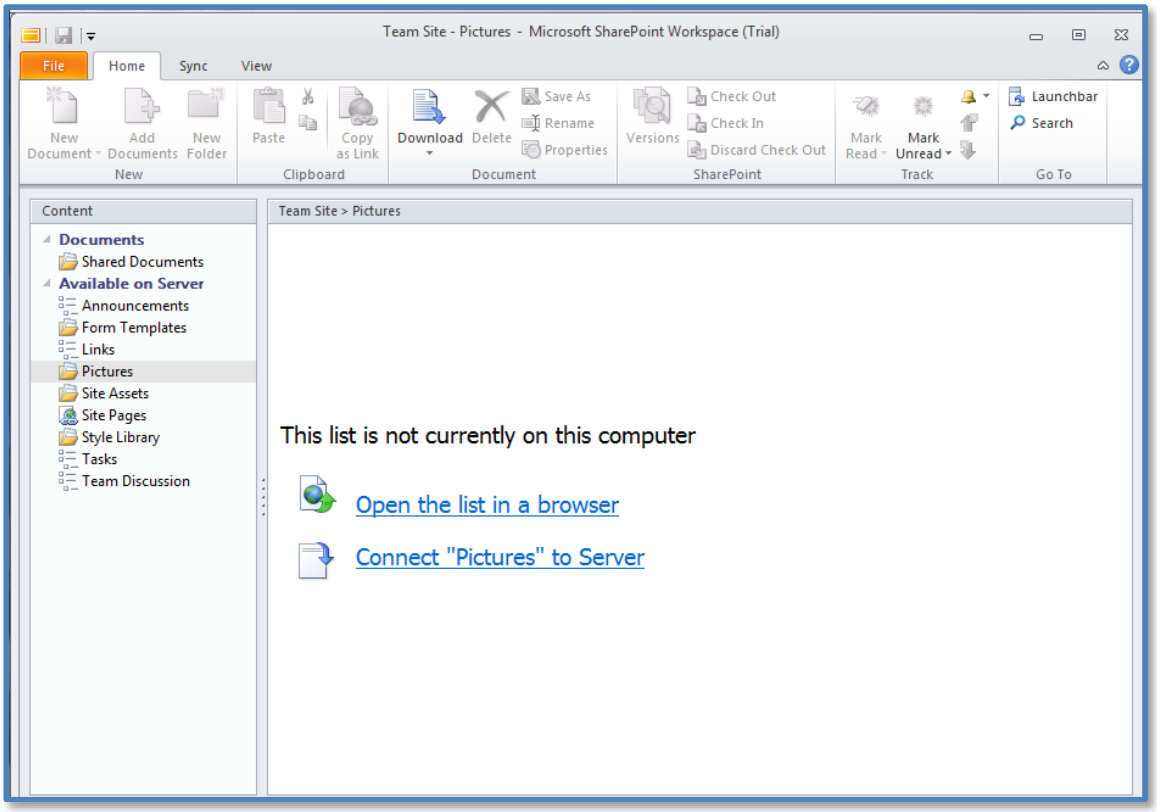


You will now see a list of items in that SharePoint site as shown above as well as the total amount of contents each contains.

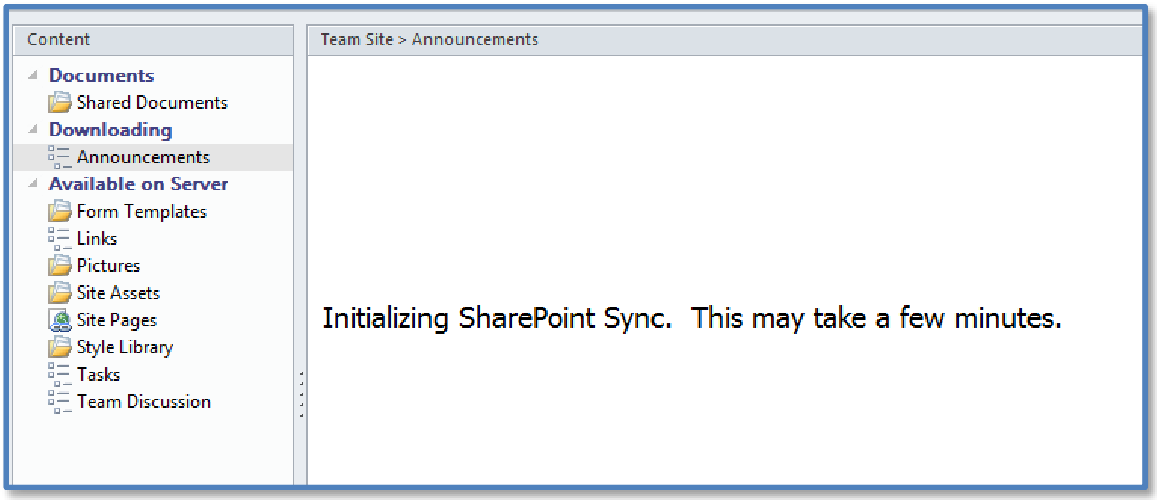


You can select an item and then from the options that appear on the right you can elect how you wish this items synchronization to be handled. The options available are:

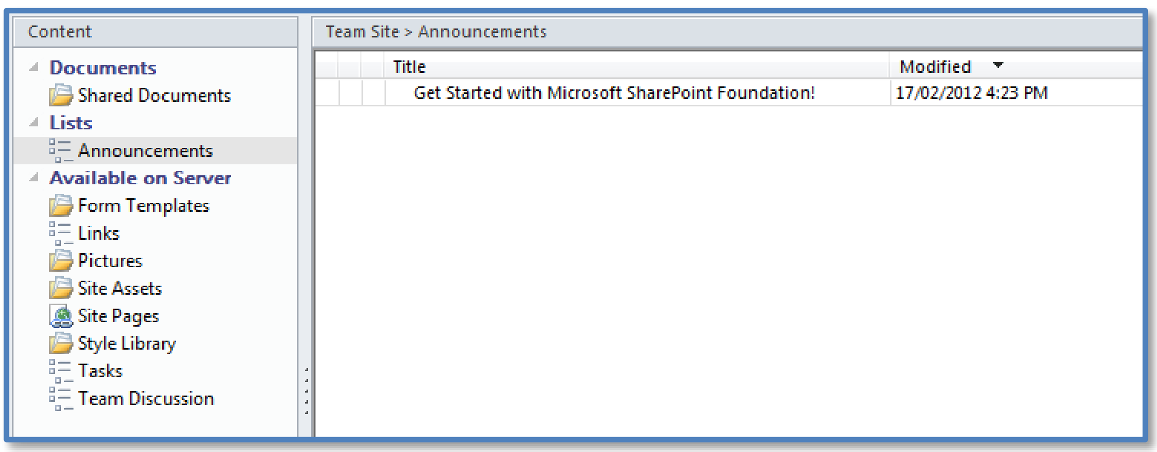
- *All items*: everything will be copied to the local SharePoint Workspace 2010 and saved locally and in SharePoint.
- *Headers only*: a listing of the contents of the item will be synchronized to SharePoint Workspace 2010 but the item will remain in the SharePoint 2010 site. If you want to have the item locally or for off line usage you will need to download the contents manually.
- *No Content*: Not information about the contents, listing or item will be synchronized with SharePoint Workspace 2010. This allows you reduce the amount of information that needs to be synchronized with SharePoint.



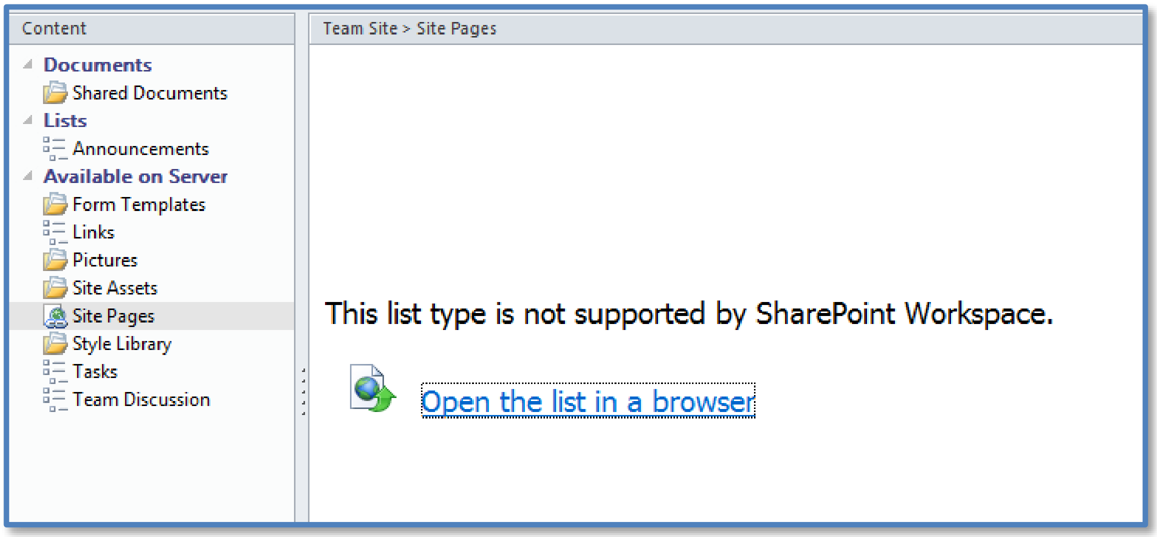
If you configure an area not to synchronize with SharePoint Workspace 2010 it will still appear the navigation list on the left hand side, however they will appear under the *Available on Server* heading. When you click on that item, as shown above, you will be given the option to either open the item in a browser or connect to server (i.e. synchronize to SharePoint Workspace 2010).



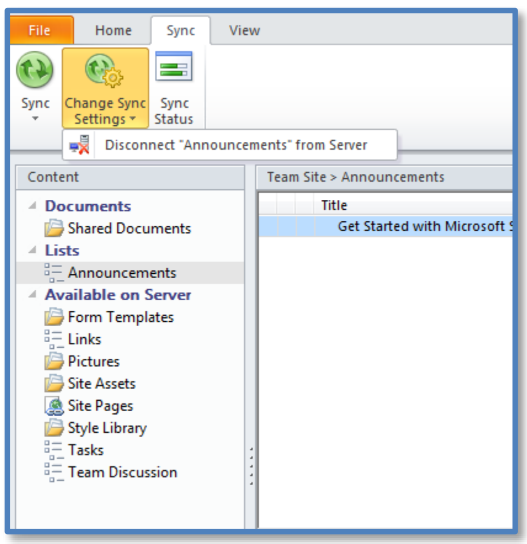
If you click the connect to server option you will see the item move to the *Downloading* heading and then finally up to the top part of the navigation once downloading of the content is complete.



Different items in SharePoint appear different in SharePoint Workspace 2010. The above example is from a list where you can view each record. You will also notice that different items appear under different headings such as Documents or Lists.

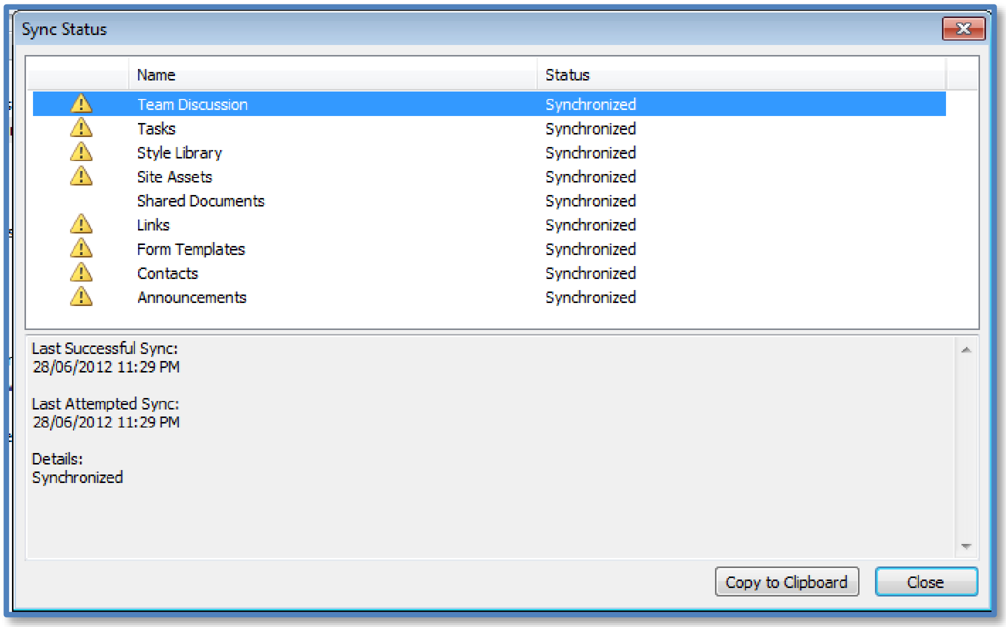


You will also find some items that are not supported by SharePoint Workspace 2010. Some of these include Site Pages and Wikis. When you navigate to these you will see the above message noting that the item is not supported but providing you with a hyperlink to open in in your browser.



SharePoint Workspace 2010 bi-directionally syncs information between the desktop and SharePoint sites. You can control this syncing ability via the options in the **Sync** tab. The **Sync** button allows you to force a sync and update all the information between locations.

The **Change Sync Settings** button allows you to disconnect the item from SharePoint Workspace 2010 so it is no longer linked with SharePoint Workspace 2010.



The final button, **Sync Status**, allows you to see the progress and results of any recent syncs as shown above.

Where SharePoint Workspace 2010 works really well is when users are working in an area of SharePoint 2010 that has many large files. Having them synced to their desktop at all time and working from with SharePoint Workspace 2010 at all times, rather than via the web interface, is a much better experience for users. This is even more the case where SharePoint 2010 is in a hosted environment.

SharePoint Workspace 2010 can provide a lot of additional functionality and flexibility to SharePoint 2010 and can make the experience of using SharePoint more that of traditional files and folders. This is especially handy if a user has many files to work with or files that are large.

Reference

Video: Creating a SharePoint workspace - http://office.microsoft.com/en-us/sharepoint-workspace-help/video-creating-a-sharepoint-workspace-VA102043699.aspx

Video: Changing synchronization settings in SharePoint Workspace 2010 - http://office.microsoft.com/en-us/sharepoint-workspace-help/video-changing-synchronization-settings-in-sharepoint-workspace-2010-VA102098608.aspx

Video: Getting Started with SharePoint Workspace - http://office.microsoft.com/en-us/sharepoint-workspace-help/getting-started-with-sharepoint-workspace-2010-HA010379248.aspx

Basic tasks in SharePoint Workspace 2010 - http://office.microsoft.com/en-us/sharepoint-workspace-help/basic-tasks-in-sharepoint-workspace-2010-HA101830011.aspx?CTT=5&origin=HA010379248

SharePoint Workspace 2010: An introduction - http://office.microsoft.com/en-us/sharepoint-workspace-help/sharepoint-workspace-2010-an-introduction-RZ101972732.aspx?CTT=5&origin=HA010379248

16.99 Conclusion

The aim of this chapter is to show you better understand some of the ways that you can actually use SharePoint 2010 in practice.

If you have any suggestions or comments about the information here please contact director@ciaops.com.