

Taking SharePoint® Offline

White Paper

Introduction

The Offline SharePoint® Problem

For many corporations, SharePoint is becoming the centerpiece of collaboration for their business processes. However, since it can only be accessed through a browser and requires a constant connection to the server, it can only be used by people when they are "online". This means that users working on a plane or at a client site cannot utilize the business process management capabilities of SharePoint until they are able to connect. It also means that the user experience is limited by the browser paradigm which significantly restricts the performance and usability of the application. To understand this restriction better, imagine only being able to access email through a browser on an Internet connection. This is probably fine for personal use but would not be accepted by enterprises for serious business use.

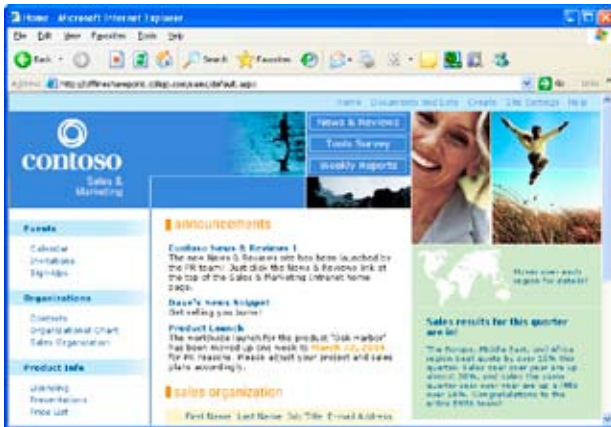
What is SharePoint?

Microsoft SharePoint is a product that enables users to easily deploy and modify document libraries and collaborative workspaces through portals on the Internet or corporate Intranet. It is the fastest growing product in Microsoft's history with over 40 million paid corporate user licenses (SharePoint Portal Server) plus many more of a version bundled for free with Windows Servers (Windows SharePoint Services).

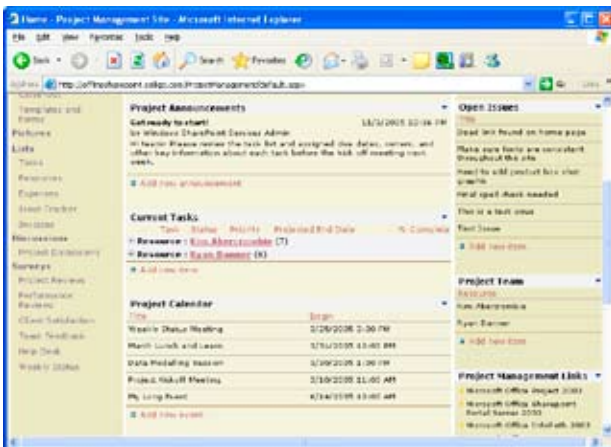
Types of SharePoint Sites

Microsoft SharePoint Technologies can be used to create many types of websites. Two of the most common types of sites in use in corporations today are as follows:

SharePoint Portal Example



SharePoint Collaborative Workspace Example



- Portals** – Portals are intranet and extranet sites that are used to aggregate content for easy viewing by a broader audience. They can be deployed on Windows SharePoint Services only, but are commonly grouped and managed using SharePoint Portal Server also in larger deployments. Typical examples are Finance, Sales, HR, and other departmental portals. For example, a sales portal (see below) might include a variety of information of interest to the sales force, including brochures, price lists, etc. Generally portals are maintained by a few site content contributors (e.g. sales ops staff), and they are read by a much larger number of people (e.g. entire sales force). Therefore it is common for most portal content to be read-only except for the handful of people maintaining the site.
- Collaborative Workspaces** – Collaborative workspaces in SharePoint are used to literally “keep everyone on the same page”. The workspaces are usually set up by a project manager and make extensive use of the collaboration features in SharePoint such as metadata in document libraries, custom lists, issue lists, etc. In many cases the collaboration workspace is a sub-site of a portal. E.g. a sales team may create a collaboration workspace for working on proposals, etc. A key feature of these workspaces is that virtually all of the members (usually 5-50 people in a project) are adding and editing content on the site (i.e. have contributor site permissions). An example of a collaboration workspace is shown in the figure to the left.

Taking SharePoint Portals Offline

Since portals are typically being used in a read-only fashion, a read-only offline solution is often sufficient to meet the needs of most users. For example, a sales person who is traveling away from the office and therefore working offline may wish to browse a price-list on the sales portal in order to draft an email response to a customer while on the plane. All they require in this scenario is the ability to maintain a current copy of the sales portal on their laptop that they can browse while offline.

What SharePoint content is needed offline? Of course this depends a lot on how the portal has been designed. In many cases the core information is contained in document libraries (e.g. brochures, presentations, etc.) and custom lists (e.g. price lists, lead assignments, etc.). Other information such as dashboard web-parts may be useful offline but is often not required.

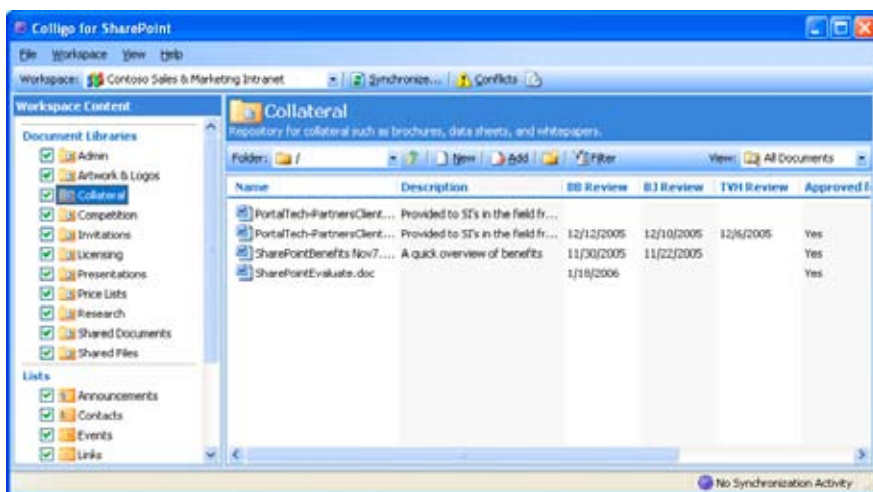
Colligo Reader™ for SharePoint® provides an easy solution for SharePoint site administrators to offer offline access to those that need it for their core site information. Reader is a lightweight (3.3MB download) .NET application that will work with any Windows SharePoint Services or SharePoint Portal Server site. It is also free. A site administrator can simply place a link to the Reader download on their site and then let users decide for themselves when and if they need offline access. The application is simple enough that it tends to require no training for most users. No seat planning, no budgeting, no training, no server changes – **simple!**



An example of a document library from a sales portal that has been downloaded to Colligo Reader is shown in the figure to the left. Note that all of the metadata and views are available offline which enables the sales person to easily sort the documents to quickly find what they are looking for.

While many portal users will be happy with read-only capabilities, there may be some scenarios where users need to contribute content back to the SharePoint site while they are offline. For example, if a sales portal requires new leads to be entered using an InfoPath form, it may be desirable to provide both read and write capability offline so sales people can fill out these forms while traveling, thus improving their overall productivity. Scenarios that require portal users to contribute content offline can be met using **Colligo Contributor™ for SharePoint®** which will be discussed further in the section below on Collaboration Workspaces.

Colligo Reader Interface to a SharePoint Portal



Taking Collaboration Workspaces Offline

Unlike portal content which is mostly read-only, collaboration workspaces typically involve all users contributing content to the site. Users that are frequently outside the office can derive significant productivity benefits if they are able to edit SharePoint content offline. In addition to documents, collaboration workspaces tend to make full use of SharePoint features such as metadata for process/version control and custom lists, so it is imperative that these features also must be available for editing offline in an easy fashion. If the collaboration workspace is used as the primary hub of activity for the project team members, there will inevitably be a lot of changes made offline - e.g. a team member might make 30+ changes to different documents, metadata, lists, etc. just while traveling on a 4 hour flight.

This high level of site editing while offline creates two key requirements:

- a) **WYSIWYG offline** - The changes they make offline must be immediately visible in the UI. This seems obvious, but some approaches to taking SharePoint offline involve storing web content for local browsing (similar to IE offline capability), but changes made while offline are not represented in the same UI, they are stored separately and only visible in the site after the user comes back online and syncs with the server. This approach may work fine for a couple changes while offline, but becomes completely unusable in a collaboration workspace with heavy offline editing.
- b) **Simple resolution to version conflicts** - When multiple people are working on the same documents and lists with some online and others offline there will be a high probability of version conflicts. For example, if Bob edits a document offline and Sally edits the same document online, when Bob returns online and tries to sync his changes back to the server there will be a version conflict. This can be avoided for documents by using the check-out feature of SharePoint; however using this feature severely limits the flexibility of users because it can lock up many of the documents in a busy collaboration workspace. Also, there is still the problem of list editing which has no check-out capabilities in SharePoint.

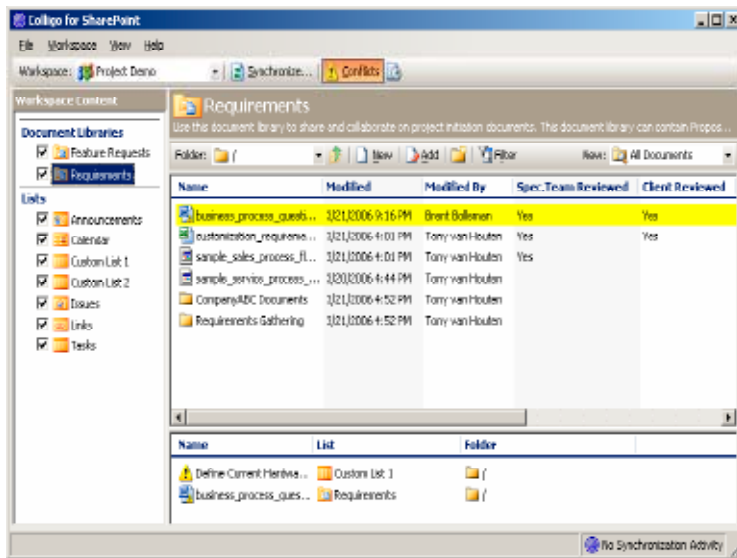
Colligo Contributor™ for SharePoint® solves these problems in a simple and easy to use application. Like Reader, Contributor is a .NET application that works with any Windows SharePoint Services or SharePoint Portal Server site with no server components required.



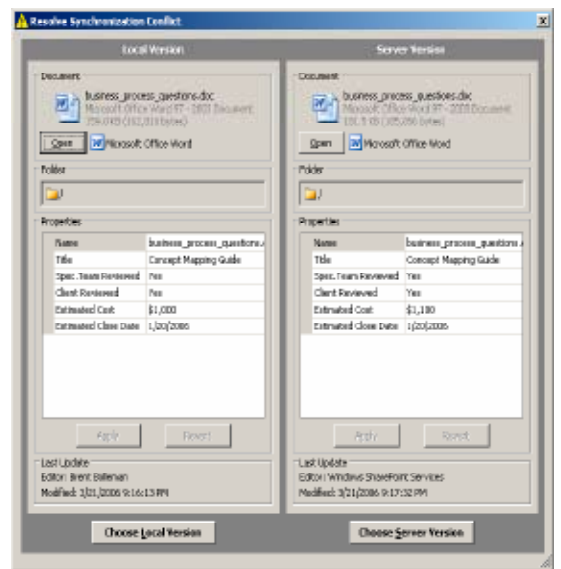
Contributor leverages Colligo's experience with database synchronization to create an offline solution for SharePoint to meet the requirements for collaboration workspaces. In particular, the company has made use of its award-winning technology to create a sophisticated synchronization capability with a simple-to-use version conflict resolution mechanism. An example of synchronization results using Contributor are shown in the figure below. Note the version conflict is highlighted in yellow in the document library, and is also shown in version conflict pane at the bottom.

Clicking on the version conflict will launch a window (see below) that enables the user to open the two versions and determine the appropriate course of action. For example, they might take both versions and use the merge-changes capability in Word to create a new version that they post to the server. Or, they may decide to manually add the edits from one version to the other. Or they may simply decide to overwrite one version with the other. The key is that they can easily spot the conflicts and resolve them.

Colligo Contributor Document Version Conflict Highlighted



Colligo Contributor Version Conflict Resolution Window



Selecting the Right Solution

For portals that are mostly read-only, Colligo Reader is recommended. By posting a link to the Reader download on the SharePoint site, users can easily self-provision the application as needed with no involvement required from IT. Once users start using Reader, you may find that some portal users also want to contribute offline, and these can then be upgraded to Contributor as needed.

For users of collaboration workspaces that are frequently offline (e.g. project teams in sales, professional services, engineering, IT, etc.) it is recommended that Contributor be deployed out of the gate as most of these users will need the ability to edit content offline.



A feature matrix comparing the two solutions is given in the table below.

FEATURE	Colligo for SharePoint	
	Reader	Contributor
Document Library Support		
o Standard document libraries	✓	✓
o InfoPath form libraries	✓	✓
o Custom metadata	✓	✓
o Custom views, including sorting rules	✓	✓
o Folder-level synchronization	✓	✓
o File structure supports embedded document references (x-ref)	✓	✓
List Support		
o Custom lists	✓	✓
o Tasks	✓	✓
o Issue List	✓	✓
o Events	✓	✓
o Announcements	✓	✓
o Contacts	✓	✓
o Links	✓	✓
o Agenda	✓	✓
Synchronization		
o Maintain default site credentials	✓	✓
o Multi-site synchronization	✓	✓
o Two-way synchronization	-	✓
o Conflict resolution	-	✓
Editing Offline		
o Create new documents from default document library template	-	✓
o Create new infopath forms from default form library template	-	✓
o Drag-and-drop to add files into document libraries	-	✓
o Edit documents and save back directly to document library	-	✓
o Edit item properties, including attachments	-	✓

For more information go to www.colligo.com. To download individual copies of Colligo Reader, go to www.colligo.com/products/sharepoint/reader.asp. To obtain a free corporate license for Colligo Reader, please contact sales@colligo.com or call **604-685-7962 x230**.

Note: the free version of reader does not include annual maintenance and support. This can be purchased separately by contacting sales@colligo.com or calling **604-685-7962 x230**.



Colligo is a leading provider of offline collaboration solutions for mobile workers. Its software extends the use of applications such as Microsoft SharePoint, IBM Lotus Notes, and CaseWare into offline settings where users often have no access to the Internet or corporate servers. Colligo is a Microsoft Gold Certified ISV partner and IBM Business Partner. Its solutions are deployed in many large enterprises, such as PricewaterhouseCoopers, General Motors, Qualcomm and Grant Thornton in North America, Europe and Asia. For more information visit <http://www.colligo.com>.

Suite 320 1333 Johnston St., Vancouver, B.C. Canada V6H3R9

t +1 604 685 7962 x230 f +1 604 685 7969 www.colligo.com email: sales@colligo.com

Copyright © 2001-2006 Colligo Networks, Inc. All rights reserved. Colligo is a trademark of Colligo Networks, Inc. All other corporate names and / or product names are trademarks or registered trademarks of their respective companies. Colligo Networks reserves the right to modify or discontinue any product or piece of literature at anytime without prior notice.