



Administrators Guide

Colligo for SharePoint v4.1

Target Audience

- IT Administrator
- Technical Evaluator
- Deployment Manager

Introduction

This document is split into three parts:

- Part 1 provides a technical overview of the product, its capabilities and usages.
- Part 2 details the system requirements and deployment considerations.
- Part 3 addresses some common technical questions.

This document aims to provide sufficient detail to the target audience to allow them to understand the product from a technical perspective and to plan their deployment process.

User documentation is provided on the Contributor support website: <http://support.colligo.com>, including a series of short screencasts introducing the product <http://support.colligo.com/lists/screencast>.

A comprehensive list of features is available on the support site here: <http://support.colligo.com/lists/features>.

For any further technical details please contact Colligo Technical Support at support@colligo.com, or for sales related question please contact sales@colligo.com.



Contents

| | |
|---|-----------|
| COLLIGO FOR SHAREPOINT v4.1 | 1 |
| TARGET AUDIENCE | 1 |
| INTRODUCTION..... | 1 |
| CONTENTS..... | 2 |
| PART 1 – CONFIGURABILITY | 3 |
| OVERVIEW | 3 |
| EDITIONS | 3 |
| LOCALIZATION | 3 |
| COMMUNICATIONS | 3 |
| WEB PROXY CONFIGURATION..... | 3 |
| SHAREPOINT SECURITY & PRIVILEGES..... | 3 |
| CACHE LOCATION AND ENCRYPTION | 3 |
| USER-DRIVEN & ADMINISTRATIVELY-SPECIFIED CONTENT SELECTION | 4 |
| SYNCHRONIZATION..... | 4 |
| OFFICE 2007 METADATA INTEGRATION | 4 |
| METADATA PROMPTING..... | 4 |
| OUTLOOK INTEGRATION AND EMAIL METADATA MAPPING | 4 |
| SUPPORT FOR API APPLICATIONS AND UI COMPONENT CUSTOMIZATION | 4 |
| SIMPLE SHELL SCRIPTING | 4 |
| PART 2 – DEPLOYMENT | 5 |
| PREREQUISITES..... | 5 |
| <i>Operating Systems Supported:</i> | 5 |
| <i>Client Software Requirements:</i> | 5 |
| <i>Server Software Requirements:</i> | 5 |
| <i>Hardware Requirements:</i> | 5 |
| INSTALLERS..... | 5 |
| <i>EXE Installer</i> | 5 |
| <i>MSI Installer</i> | 5 |
| CONFIGURATION OPTIONS | 6 |
| EDITING THE MSI | 7 |
| <i>Getting the Orca MSI editor</i> | 7 |
| <i>Using Orca to edit an MSI</i> | 7 |
| <i>Note: When using Orca MSI Editor</i> | 8 |
| POST-INSTALL CONFIGURATION/CONTRIBUTOR SETTINGS | 9 |
| <i>Registry Configuration Editor</i> | 9 |
| <i>Example: Disable the user's ability to edit the Storage Location</i> | 9 |
| INSTALLATION OPTIONS..... | 9 |
| <i>Use msixec silent install and uninstall</i> | 9 |
| <i>Batch-file silent installation</i> | 9 |
| TERMINAL SERVER INSTALLATION CONSIDERATIONS | 10 |
| <i>Activation and Licensing</i> | 10 |
| <i>Cache Location</i> | 10 |
| <i>Outlook Folder Storage</i> | 10 |
| <i>Multi-Session Behaviors</i> | 10 |
| PART 3 – MISCELLANEOUS | 11 |
| SERVER-SIDE EVENTS..... | 11 |
| WORKFLOW | 11 |



Part 1 – Configurability

Overview

Colligo Contributor™ is an easy-to-deploy .NET client-only application - no server modifications are required. The installer package is just 5 MB in size. Installed, it consumes roughly 11 MB of disk space, not including content. Colligo Contributor for SharePoint is IT-department friendly. It supports customized installations and can be deployed using your choice of deployment tools. Contributor supports SharePoint sites based on both the 2003 and 2007 system, and includes an add-in to integrate with Outlook 2003 and 2007.

Editions

Colligo issues a number of SKUs of the product. Along with the standard full product, a read-only version (Viewer) and an online-only version with no caching (Outlook Online) are available. Switching between editions is simply a case of registering a new license key.

Localization

Contributor is available in English, French and German language. Contributor localizes to the base-language of the running machine, defaulting to English.

Communications

Contributor communicates with the SharePoint through the web-services, details of which are available on MSDN here: <http://msdn2.microsoft.com/en-us/library/aa979690.aspx>. These web-services calls are transmitted over HTTP (or HTTPS) using TCP. Contributor also uses FrontPage RPC methods to communicate with the SharePoint server; FrontPage RPCs are also transmitted over HTTP(S) and TCP. Details of the FrontPage RPC protocols can be found on MSDN here: <http://msdn2.microsoft.com/en-us/library/ms954084.aspx>.

The services described above are installed and enabled on SharePoint by default. As they are layered on top of TCP/HTTP, communication works over most WAN/VPN and/or wireless connections as well as a standard LAN.

Web Proxy Configuration

Contributor can be configured to use a web proxy. Proxy options are either:

- Direct connection (No Proxy)
- IE's default proxy
- Other proxy

The other proxy is defined in the CFS.exe.config file according to the specifications listed on msdn here:

[http://msdn2.microsoft.com/en-us/library/kd3cf2ex\(vs.80\).aspx](http://msdn2.microsoft.com/en-us/library/kd3cf2ex(vs.80).aspx)

SharePoint Security & Privileges

By using SharePoint's web-services to access SharePoint data, Contributor will respect all the privileges defined on the site. A user needs at least read access to an item in order to cache it. Contributor supports most standard sign-on processes supported by SharePoint, including support for 'default credentials' and other, specified, credentials. Passwords are stored in a secure manner using the Windows Cryptographic API.

The following standard Windows IIS authentication types are supported: Basic; Digest; Kerberos (Integrated Windows); and NTLM (Integrated Windows). SharePoint by default does not provide web service permissions to anonymous users, so this permission level cannot be used for taking sites offline. Client certificates, ASP.NET forms-based authentication, and single-sign-on (SSO) based on Active Directory Federation Services (ADFS) or similar identity management systems are not currently supported.

Cache location and Encryption

Contributor caches SharePoint content on the local machine. The default cache location is in the users local profile area¹; the location can be changed. It can be moved to any other valid path, including: the local file-store; network location; or other (for example, USB drive). For performance and connectivity reasons the local file-system is the preferred location for the cache. Contributor can be configured to secure data using the Windows Encrypting File System (EFS); a good introduction to Windows EFS can be found on Wikipedia: http://en.wikipedia.org/wiki/Encrypting_File_System. EFS can be configured to be compliant with the Federal Information Processing Standard (FIPS 140-1 and FIPS 140-2).

Microsoft TechNet published an evaluation of EFS for FIPS compliance here:

<http://www.microsoft.com/technet/archive/security/topics/issues/fipseval.aspx>.

¹ On XP: %UserProfile%\Local Settings\Application Data\ColligoOfflineClient\Storage5



User-Driven & Administratively-Specified Content Selection

Content for synchronization can be pre-configured by central IT by pushing site configuration XML files to the Contributor configuration location. The configuration location may be in an individual user's profile or under the all-users profile. For security purposes, site configuration files do *not* allow specification of credentials; the user's Windows login credentials are used. Manual selection of content by users is supported in a number of ways, including simply navigating to a SharePoint site and clicking a button on the IE toolbar.

More details about site configuration files are available here: <http://support.colligo.com/Lists/Features/DispForm.aspx?ID=59>

Synchronization

Contributor utilizes differential synchronization, with the minimum granularity of synchronization being a file (binary differential synchronization is not currently supported). Synchronization can be configured to be initialized in a number of ways: when content is modified locally; when content is viewed; and periodically. Once-a-day Contributor synchronizes full content (including views and list definitions); subsequent synchronizations synchronize only changed (including new) content.

Network bandwidth overhead associated with synchronization is minimal, typically being a small percentage of any content being synchronized; the overhead is typically less than a page-view in IE.

Office 2007 Metadata Integration

Contributor Integrates with the Office 2007 OpenXML formats. SharePoint embeds metadata into documents when accessed and extracts metadata from documents when uploaded/changed. Contributor performs similar actions locally; Changes to SharePoint columns are mapped into the Office OpenXML documents, Changes made within the document are mapped into Contributor columns when the document is saved.

Metadata Prompting

Contributor prompts users to enter metadata when content is uploaded. The process helps maintain SharePoint metadata and drives user-adoption by simplifying the process of entering metadata.

The metadata prompt may be customized (see Support for API applications and UI Component customization).

Users may extend the SharePoint-defined default-values scheme in the client to represent their business process. The finest granularity support is at the 'per-folder' level. The user-specified default values are implemented as a tree inherited through the folder tree. As part of the user-specified default values it is possible to enable or disable prompting on a 'per-folder' level.

Outlook Integration and Email Metadata Mapping

Contributor includes an Outlook add-in. The add-in allows users to upload emails and attachments directly from their inbox. The add-in is written in .NET using Visual Studio Tools for Office (Second Edition), also known as VSTO. More information regarding VSTO is available on MSDN here: <http://msdn2.microsoft.com/en-us/office/aa905535.aspx>.

Deployment of the Contributor requires that the VSTO runtime and the Office Primary Interop Assemblies (PIAS) be pre-installed. An Office PIA primer is available on MSDN here: [http://msdn2.microsoft.com/en-us/library/aa201322\(office.11\).aspx](http://msdn2.microsoft.com/en-us/library/aa201322(office.11).aspx).

Contributor can map email header information (From, Sent, Subject, etc) to SharePoint columns. The default column names can be overridden using an XML configuration file. More details can be found on the Colligo support site here:

<http://support.colligo.com/Lists/Features/DispForm.aspx?ID=65>.

Support for API applications and UI Component customization

Contributor installs specified core-functional libraries into the Global Assembly Cache (GAC) to allow development of API-based applications by registered developers. The API allows 3rd party components to be developed leveraging the core Contributor functionality. Contributor supports the development of custom editors to provide customer-specific editors, allowing data to be drawn from external sources (for example: a CRM or webservice).

API and Editor functionality requires .Net development. For details of the SDK please contact sales@colligo.com.

Simple Shell Scripting

Contributor provides an AdminShell application to enable administrators automate common administrative steps such as: Adding/Removing SharePoint sites; Adding/Removing Outlook folders; Enable/Disable Lists for synchronization; Reviewing/Modifying Site Content.

AdminShell can be used with: single or batched commands; command script; or interactively.



Part 2 – Deployment

Prerequisites

Operating Systems Supported:

- Microsoft® Windows® XP Professional
- Microsoft® Windows® 2000 Service Pack 2 or greater
- Windows® Vista®
- Windows® 7

Client Software Requirements:

- Microsoft® .NET framework 2.0 Runtime
- Microsoft® .NET framework 3.0 Runtime (Optional - Required for Office 2007 Metadata Integration)
- Integration with Microsoft Office requires Office 2003 or later
- Microsoft® Office 2003 SP2 or 2007 required if you wish to make use of InfoPath forms libraries
- Microsoft® Office Primary Interop Assemblies (PIAs). Different versions of Office have different PIAs. PIA's must be deployed corresponding with the version of Office installed
- Microsoft Visual Studio 2005 Tools for Office Second Edition (VSTO 2005 SE) Runtime
- Microsoft Visual C++ 2008 SP1 Redistributable Package

Server Software Requirements:

- Microsoft® Office SharePoint® Server (MOSS) 2007, or
- Microsoft® Windows® SharePoint® Services (WSS) 3.0, or
- SharePoint® Portal Server (SPS) 2003, or
- Microsoft® Windows® SharePoint® Services (WSS) 2.0

Hardware Requirements:

- Windows-based PC (with Pentium® II 450 MHz minimum, 20MB of free disk space, 64MB RAM)

Installers

Colligo provides two installers for Contributor. The installers are: an .exe installer and an .msi installer:

EXE Installer

The simple installer package is an executable file. Its key features follow:

- Interactive install only - does not support silent install
- Automatically installs software prerequisites (downloaded from www.colligo.com)
- Not customizable

MSI Installer

Contributor also provides an MSI installer package, with these features:

- Supports silent and interactive installs
- Does not install prerequisites - these must be downloaded and pre-installed
- Customizable



Configuration Options

Contributor offers administrators the ability to configure a number of settings at install- or post-install-time. An overview of the settings is in the following table. A detailed list of settings is maintained on the Colligo website at [http://support.colligo.com/Lists/Contributor Settings](http://support.colligo.com/Lists/Contributor%20Settings)

| Contributor Core Settings | |
|---|--|
| License Key | The license key can be embedded in the installer |
| Silent Activation | Contributor may be configured to silently activate the product in startup allowing enterprises to ensure the product is activated with minimal user interaction. |
| Storage Root | Location of Contributor's cache |
| Storage Encryption | Contributor can be configured to store its cache in encrypted form (using Windows Encrypting File system). |
| Web Proxy | You can configure Contributor to use: no proxy; the IE default proxy; or another explicitly-defined proxy. |
| Use Synchronization Locking (New) | A network database lock feature has been added that permits network users in Terminal Services environments to be logged-into CFS in multiple locations. This facilitates the usage of a common database file stored on the network by allowing all of the clients to negotiate which one has current control. This functionality can be found in the main toolbar of both the Contributor Client and the Outlook AddIn. |
| Disable SaveAs Prompting (New) | Disable Prompt for Metadata using the FileManager when using the SaveAs function in an application. |
| User-Interface Settings | |
| Language | Override Contributor's language setting (English, French, or German, or new in R4.1 - Spanish (Castilian) or Spanish (Mexican)). |
| Metadata Prompt | When content is added to Contributor, users are prompted to enter metadata. This can be disabled. |
| Disable Options Window | IT can completely disable user access to the options panel. |
| Custom Metadata Editor | Contributor supports 3 rd -party developed metadata editors. (For details contact sales@colligo.com) |
| Use Windows appearance | Contributor can be configured to integrate with the current appearance. Default appearance is similar to SharePoint. |
| Synchronization Settings | |
| Start Contributor on Windows startup | A shortcut to Contributor is placed in the user's "Start -> Programs -> Startup" folder. |
| Sync-On-Startup | Contributor will synchronize its cache when it starts up This may be disabled, e.g. in a large deployment to avoid a start-of-day peak in network traffic. |
| Sync-On-Change | Content is synchronized when it is changed. |
| Sync-On-Navigate | Contributor synchronizes the contents of a list when it is viewed |
| Background Sync | Can be disabled altogether. |
| Background Sync Interval | Default value is 30 minutes; minimum 15; maximum 1440 (1 day). |
| Download Lookup Lists | Content may use Site Columns to lookup data from another web within the Site Collection. |
| Create Documents in Single Transaction (New) | Use a single transaction put to upload new content and set metadata. Default behaviour uploads content then separately sets metadata. The two-step |



| | |
|------------------------------------|---|
| | approach may cause issues with event handlers, workflow or versioning. This setting affects only the initial upload of content, not content changes. |
| Office Integration Settings | |
| Require Framework 3.0 | The .Net Framework 3.0 runtime is required to integrate with the Office 2007 OpenXML file-format (for metadata mapping). The installer can be configured to *not* require the 3.0 Framework. This will silently stop integration with the OpenXML documents. |
| Outlook Add-In Settings | |
| Enable Outlook Add-In | The Installer can be configured to not install the Outlook Add-in (install-time setting) |
| Enable Outlook Lists | By default Contributor does not allow connecting SharePoint lists to Outlook. This feature is disabled due to a bug in Outlook 2007. Customers using Outlook 2003 can choose to enable support for SharePoint lists. |
| Enable Outlook Timer | When a large number of items are added to an Outlook folder the ItemAdd event does not fire. This is a well-documented Outlook issue. To resolve this issue Contributor can be configured to poll the Contributor folders. Enabling this option will cause a small CPU spike every 10 seconds. |
| Enable stssync | Office 2007 integrates with SharePoint 2007 sites to offer a "Connect to Outlook" option in the Actions menu. This option overrides the Outlook 2007 handler to connect to Contributor. NOTE: Office Updates may override the protocol handler. If the stssync handler is enabled we recommend testing compatibility before deploying updates. |
| Email Drag-and-Drop filename | Items added to a SharePoint document library must have a valid filename. When an email is drag-and-dropped in Outlook, Contributor must generate a filename. The format of this filename can be customized. |
| Force Send and File (New) | The setting forces the use of the Outlook Send and File function and prevents the use of Outlook Send function. |
| Outlook folder-name | It is possible to change the name and home-page of the Colligo for SharePoint folder in Outlook. |
| Outlook folder-url | |

Editing the MSI

To edit the MSI installer package you will need an MSI database editor. Colligo recommend the Orca database editor. Orca is a Microsoft utility for modifying and validating Windows Installer packages. It is intended to allow setup authors and administrators to manipulate databases compatible with the Windows Installer Service. This utility is a part of the Windows Installer SDK download along with other MSI related tools.

A quick introduction to Orca can be found on the Microsoft site:

<http://support.microsoft.com/kb/255905/EN-US/>

Getting the Orca MSI editor

To save downloading the entire Windows Installer SDK, Orca can be downloaded from Colligo:

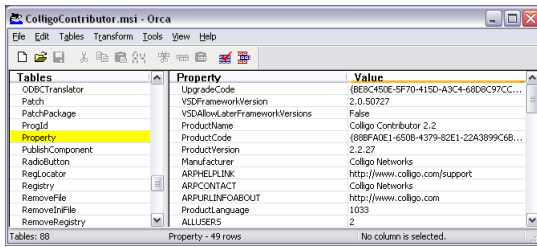
<http://support.colligo.com/Lists/Knowledge%20Base/DispForm.aspx?ID=4>

Using Orca to edit an MSI

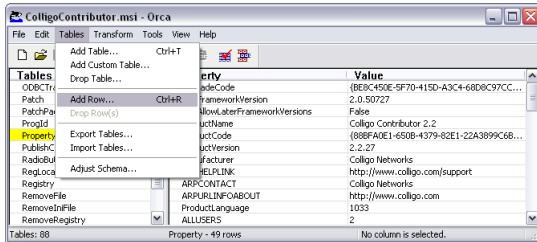
Once you have installed Orca you can start editing the ColligoContributor.msi file. We recommend copying the MSI file and working on the copy (since 'Save As' in Orca does not save the entire MSI package).

The properties that can be set in the MSI installer are detailed in [Appendix A \(Detailed Configuration Properties\)](#). To edit an MSI file:

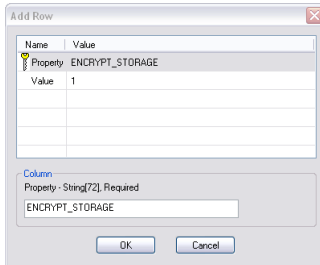
1. Open the MSI file in Orca
2. Navigate to the 'Property' table in the 'Tables' list.



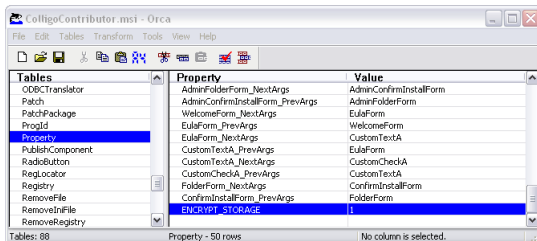
3. Select Tables -> Add Row



4. Enter the Property name and value. Click OK. (Make sure you are using the exact same property names as specified in the Appendix A. The property names are case sensitive.)



5. The new property is displayed in the Property Table



Note: When using Orca MSI Editor

When editing an MSI database using Orca it is important to note there are extra steps required if you perform a 'Save As...'. For simplicity it is advisable to edit an MSI database and 'Save' the file being edited.



Post-Install Configuration/Contributor Settings

Contributor saves settings in the registry. Many settings can be configured post-install by pushing out settings to the registry. Details of settings and their related registry keys are maintained on the Colligo website at <http://support.colligo.com/Lists/ContributorSettings>.

Registry Configuration Editor

A Registry Configuration Editor is available with Contributor to easily change registry settings, create registry files for deployment and to provide explanation, information on the registry settings. This editor, described in [Configuration Editor User Guide](#) is available in the Contributor Programs area in the Start toolbar.

Contributor saves settings in the Registry. Per-user settings are saved in the following key:

```
HKEY_CURRENT_USER\SOFTWARE\ColligoOfflineClient
```

All the settings keys can also be accessed from the equivalent location in the Local Machine Hive:

```
HKEY_LOCAL_MACHINE\SOFTWARE\ColligoOfflineClient
```

- Settings saved under the Local Machine hive are not editable by a standard user.
- Settings in the Local Machine will take priority over settings in the Current User Hive.
- Settings that are displayed in the Configuration Options and have a value specified in the Local Machine Hive will be grey-out (disabled) in the Configuration Options panel.

Example: Disable the user's ability to edit the Storage Location

Save the General\StorageRoot registry setting into the HKEY_LOCAL_MACHINE hive:

Registry key settings file (storage.reg):

```
Windows Registry Editor Version 5.00
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\ColligoOfflineClient\General]
"StorageRoot"="%UserProfile%\Local Settings\Application Data\ >
ColligoOfflineClient\EncryptedStorage5"
```

Command:

```
RegEdit /s storage.reg
```

Installation Options

Use msixec silent install and uninstall

You can use the msixec utility to install or uninstall silently. The command line to perform a silent install is as follows:

```
msiexec /i <Installer.msi> /qn
```

For example:

```
msiexec /i ColligoContributor.msi /qn
```

To perform a silent uninstall, the command line is as follows:

```
msiexec /x <Installer.msi> /qn
```

Batch-file silent installation

Customized Contributor can be installed using the msi installer. When using a batch file to install a customized msi package, it is important to ensure the prerequisites are installed before attempting to install Contributor.



An example batch file is listed below:

```
msiexec /i \\server\ContributorInstall\PreReq\O2007PIA.MSI /qn
\\server\ContributorInstall\PreReq\vstor.exe /q
msiexec /i \\server\ContributorInstall\CustomColligoContributor.msi /qn
```

Terminal Server Installation Considerations

There are a number of specific issues which must be considered when installing Contributor in a terminal server environment. Each of these requires specific installation and configuration affects the product operation.

Activation and Licensing

Contributor is normally licensed on a per user / per machine basis and the activation system is used to enable and authorize client installation. Each Contributor client will perform an activation request to the Colligo Activation servers to gain the necessary authorization for execution. The results of this activation are recorded in a special file which is stored in the installation area of Contributor.

In a terminal server environment, where the users profile and storage may be located on network storage or may be created on demand, this activation file may not be maintained between sessions leading to unnecessary and repeated activation requests.

There is special licensing and license keys available for use with a terminal server environment which eliminates this activation request traffic. For further information contact [Colligo Sales](#).

Cache Location

Contributor uses a local database and cache to hold SharePoint configuration and content. Normally this is stored in the local PC file system but in a terminal server environment this must be moved to a network accessible location.

When installing using a customized MSI the field to specify the cache location is STORAGE_ROOT
The registry setting to specify the cache location is General\Storage_Root

The cache should be on a commonly accessible network location which is available to all of the servers which a user could login and receive a terminal session.

Outlook Folder Storage

Contributor's default behavior is to create a set of Outlook storage folders based on the local machine name. This allows the user to have multiple machines and multiple instances of Colligo which are using different caches and configurations. Because Microsoft Exchange and Outlook reflect the Exchange folders to each Outlook client the various Colligo for SharePoint folders each are displayed in the users Mailbox and Colligo distinguishes between them by appending the machine name on which the cache and configuration is locally resident.

In a terminal server environment where multiple machines (servers) are used but the user has only one networked cache location and configuration this behavior should be suppressed and a single Colligo for SharePoint root folder displayed and used by all instances of Colligo.

When installing using a customized MSI the field to suppress the machine name is DISABLE_OUTLOOK_MACHINE_ID
The registry setting to suppress the machine name is General\DisableMachineId should be set to 1 Enabled

Multi-Session Behaviors

Contributor uses a database and a cache to store the SharePoint configuration and content. Having multiple sessions simultaneously access this shared resource can lead to conflicts, unexpected database results and general user confusion. To help control this Contributor has a mechanism to suppress operations at all sessions except at the session where the user is currently located.

When installing using a customized MSI the field to support single session operation is USE_SYNC_LOCK
The registry setting field to support single session operation is General\UseSyncLock should be set to 1 Enabled



Part 3 – Miscellaneous

Server-side events

SharePoint may have server-side event-handlers defined. Typically event handlers may be added to the ItemAdding or ItemAdded events. These events are triggered when Contributor performs content operations. The event-handlers may operate synchronously or asynchronously (typically ItemAdding would be synchronous, ItemAdded would be asynchronous). Event handlers that perform asynchronously and change the content must be sure to increment the internal item version to ensure Contributor is notified of the content updates.

Workflow

Workflows are typically started or progressed by content changes. For example the 'Get Approval' workflow starts when a document is changed and requires approval. Contributor works with workflow such that content changes will initialize workflows *on the server*, there is no support for local workflows on the client.