



SharePoint Connector – Setup and Configuration

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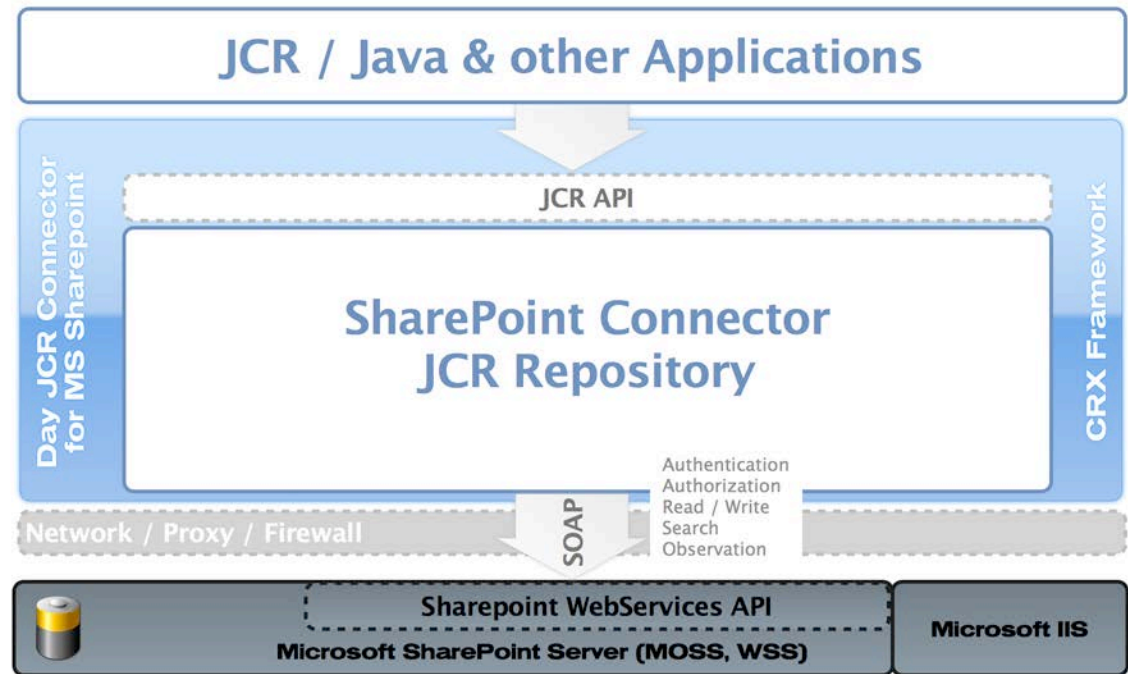


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SharePoint Connector - JCR Connector for Microsoft SharePoint

- Enables AEM applications to access content that resides in proprietary repositories in a standardized manner (JCR API)
- Designed to map content (metadata, documents, etc.) and content services (like search).
- The CRX provides Virtual Repository technology that allows SharePoint repository to be connected, **enabling access to the live data** as they would have been stored in a native JCR from the start.



SharePoint Connector – Requests Flow

An application executes a JCR call on the connector repository



The connector translates the call to a native call to the SharePoint web services



The web service calls are executed by the SharePoint server and the results are returned



The results are received by the connector and translated back to JCR space



The JCR call returns the results

SharePoint - Authentication Types

- SharePoint supports a variety of authentication methods for different authentication types.
- With CQ 5.6.0, we support the following authentication types:
 - **Windows (Basic Authentication)**
It takes advantage of the existing Windows authentication provider (AD DS) to validate the credentials of connecting clients. The credentials of the users are sent with every request, to the server, for authentication.
 - **Forms-based Authentication (NTLM - Token Based)**
Forms-based authentication validates users based on credentials that users type in a logon form (typically a web page). The system issues a token for authenticated requests that contains a key for reestablishing the identity for subsequent requests.

SharePoint Connector – Installation Requirements

- **CQ:** v 5.6.0 / 5.6.1
- **SharePoint:** v 2010 / 2013 installed with SharePoint Web Services available via network
- A URL to a SharePoint server (URL of Site collection – http://servername:port)
- SharePoint Connector Package (will be available from Package share)
- User credentials and permissions for CRX and SharePoint repositories

Creating a SharePoint Web Application

Create New Web Application

Create a new one to serve the Microsoft SharePoint Foundation application.

If you select an existing IIS web site, that web site must exist on all servers in the farm and have the same name, or this action will not succeed.

If you opt to create a new IIS web site, it will be automatically created on all servers in the farm. If an IIS setting that you wish to change is not shown here, you can use this option to create the basic site, then update it using the standard IIS tools.

Create a new IIS web site

Name:

Port:

Host Header:

Path:

Security Configuration

Allow Anonymous

Yes

No

Use Secure Sockets Layer (SSL)

Yes

No

Claims Authentication Types

Choose the type of authentication you want to use for this zone.

Negotiate (Kerberos) is the recommended security configuration to use with Windows authentication. If this option is selected and Kerberos is not configured, NTLM will be used. For Kerberos, the application pool account needs to be Network Service or an account that has been configured by the domain administrator. NTLM authentication will work with any application pool account and with the default domain

Enable Windows Authentication

Integrated Windows authentication

Basic authentication (credentials are sent in clear text)

Enable Forms Based Authentication (FBA)

ASP.NET Membership provider name:

ASP.NET Role manager name:

Application Created

The Microsoft SharePoint Foundation Web application has been created.

If this is the first time that you have used this application pool with a SharePoint Web application, you must wait until the Internet Information Services (IIS) Web site has been created on all servers. By default, no new SharePoint site collections are created with the Web application. If you have just created a Forms Based Authentication (FBA) Web application, then before creating a new site collection, you will need to perform some additional configuration steps.

[Learn about how to configure a Web application for FBA.](#)

Once you are finished, to create a new site collection, go to the [Create Site Collection](#) page.

Creating a SharePoint Site Collection

Central Administration

- Application Management
- System Settings
- Monitoring
- Backup and Restore
- Security
- Upgrade and Migration
- General Application Settings
- Configuration Wizards

Web Application

Select a web application.

To create a new web application go to [New Web Application](#) page.

Title and Description

Type a title and description for your new site. The title will be displayed on each page in the site.

Web Site Address

Specify the URL name and URL path to create a new site, or choose to create a site at a specific path.

To add a new URL Path go to the [Define Managed Paths](#) page.

Template Selection

A site template determines what lists and features will be available on your new site. Select a site template based on the descriptions of each template and how you intend to use the new site. Many aspects of a site can be customized after creation. However, the site template cannot be changed once the site is created.

Primary Site Collection Administrator

Specify the administrator for this site collection. Only one user login can be provided; security groups are not supported.

Secondary Site Collection Administrator

Optionally specify a secondary site collection administrator. Only one user login can be provided; security groups are not supported.

Quota Template

Select a predefined quota template to limit resources used for this site collection.

To add a new quota template, go to the [Manage Quota Templates](#) page.

Web Application:

Title:

Description:

URL:

Select a template:

- Collaboration
- Meetings
- Enterprise
- Publishing
- Custom

Team Site

- Blank Site
- Document Workspace
- Blog
- Group Work Site
- Visio Process Repository

A site for teams to quickly organize, author, and share information. It provides a document library, and lists for managing announcements, calendar items, tasks, and discussions.

User name:

User name:

Select a quota template:

Storage limit:

Number of invited users:

Adding the User Policy

Policy for Web Application

OK

Add Users Delete Selected Users Edit Permissions of Selected Users

<input type="checkbox"/>	Zone	Display Name	User Name	Permissions
<input type="checkbox"/>	(All zones)	NT AUTHORITY\LOCAL SERVICE	NT AUTHORITY\LOCAL SERVICE	Full Read
<input type="checkbox"/>	(All zones)	Search Crawling Account	NT AUTHORITY\NETWORK SERVICE	Full Read
<input type="checkbox"/>	(All zones)	Search Crawling Account	i:0#.w nt authority\network service	Full Read
<input type="checkbox"/>	(All zones)	aemc	i:0#.f dapmember\aemc	Full Control
<input type="checkbox"/>	(All zones)	AEM Connector	i:0#.w adobenet\aemc	Full Control

Add Users

Zone
The security policy will apply to requests made through the specified zone.

Zone:
(All zones)

Choose Users
You can enter user names or group names. Separate with semi-colons.

Users:
taggarwa;
No exact match was found for taggarwa.

Choose Permissions
Choose the permissions you want these users to have.

Permissions:
 Full Control - Has full control.
 Full Read - Has full read-only access.
 Deny Write - Has no write access.
 Deny All - Has no access.

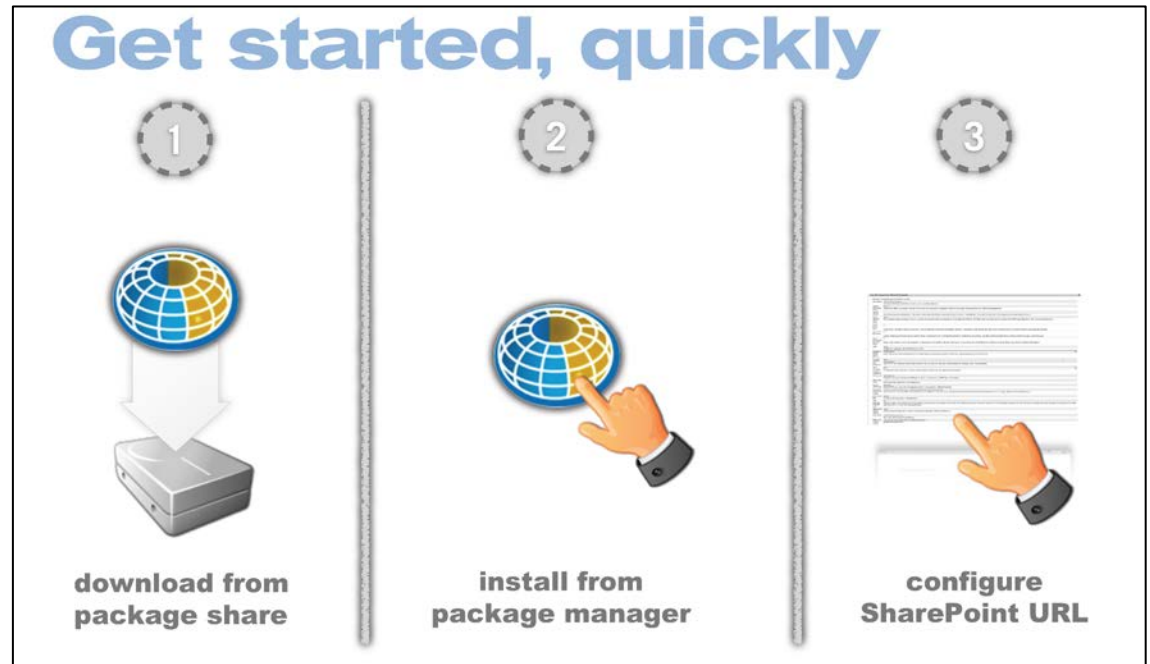
Choose System Settings
System accounts will not be recorded in the User Information lists unless the account is directly added to the permissions of the site. Any changes made by a system account will be recorded as made by the system instead of the actual user account.

Account operates as System

< Back Finish

SharePoint Connector – Get Started

1. Start the CQ
2. Download the connector from Package Share.
3. Install the connector package from Package Manager
4. Configure the connector options
5. Login into Content Explorer and check that your SharePoint instance is mounted



SharePoint Connector – Configuration

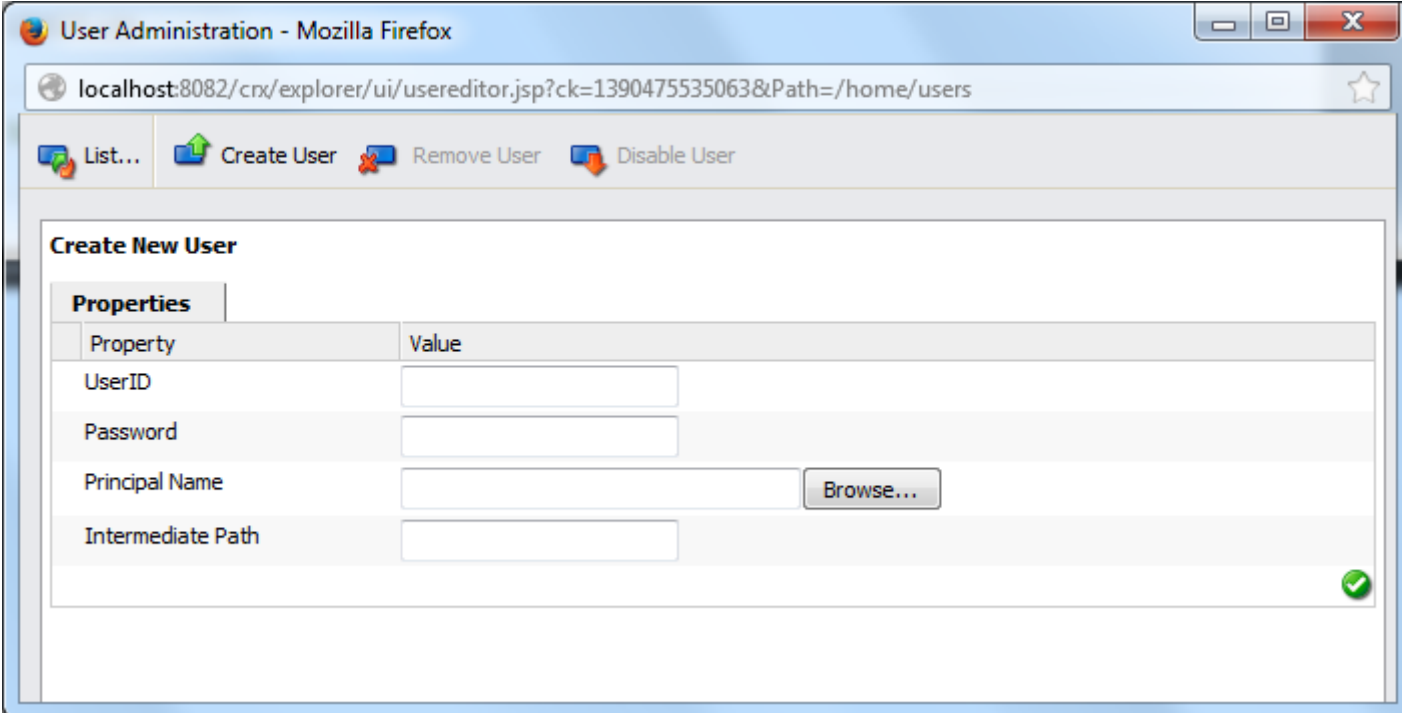
Day JCR Connector for Microsoft Sharepoint ✕

Exposes Microsoft Sharepoint content to via JCR

Workspaces	default=http://localhost Workspace definitions in the form <name>=<url>. (workspaceNames)	+ -
Default Workspace Name	default Name of the default workspace. Required if more than one workspace is configured. Defaults to the single workspace otherwise. (defaultWorkspaceName)	
Default Domain		
	The domain name for authentication. This value is used unless the domain is specified at login in the form 'user@domain'. If not set, the host part of the Sharepoint url is used. (defaultDomain)	
Query Maximal Result Count	1000 The maximum number of results to return in search. Corresponds to the count element in Sharepoint's QueryPacket. See http://msdn.microsoft.com/en-us/library/ms409102.aspx Defaults to 1000. (queryMaxResultCount)	
Query Ignore Noise	<input type="checkbox"/> Noise words in the search results are ignored if true. Corresponds to the IgnoreAllNoiseQuery element in Sharepoint's QueryPacket. See http://msdn.microsoft.com/en-us/library/ms455211.aspx (queryIgnoreNoise)	
Query Trim Duplicates	<input type="checkbox"/> Enables collapsing of duplicate results in search if true. Corresponds to the TrimDuplicates element in Sharepoint's QueryPacket. See http://msdn.microsoft.com/en-us/library/ms457559.aspx . (queryTrimDups)	
Query Include Non Full Text Items	<input type="checkbox"/> Items whose content is not full text indexed by Sharepoint are not included in the result set if true. For such items only the NodeId of its containing list can be determined. (queryIncludeNonFullTextItems)	
LCID	1033 Sharepoint's Language Code Identifier (LCID). (lcid)	
Sharepoint Server Search Service	MOSS Search Either WSS search service (spsearch.asmx) or MOSS search service (search.asmx) or DETECT for auto detection (searchServiceVersion)	▼
Managed paths for site collections	sites managedpath1 Used to filter out unmounted search result contents from sub sites. See Sharepoint documentation for Managed Paths. (managedPaths)	+ - + -
Query Language to query Sharepoint	KQL For Sharepoint 2007, use SQL. For higher version (2010 and 2013) use KQL. (searchQueryLanguage)	▼
MIME types	log=text/plain Mapping of file name extension to MIME type in the form <extension>=<MIME type>. (mimeMap)	+ -
Observable paths		+ -
Default MIME Type	text/plain Default MIME type. Used when no mapping exists for a file extension. (defaultMimeType)	
Sharepoint Connection Factory	com.day.crx.spi.sharepoint.security.WindowsAuthenticationConnectionFactory Name to look up a SharepointConnectionFactory service. Defaults to com.day.crx.spi.sharepoint.security.WindowsAuthenticationConnectionFactory if left empty. (sharepointConnectionFactory)	
Item Cache Size	50000 Size of the JCR item cache. (itemCacheSize)	
LIKE predicate character limit	64 Maximal number of characters the LIKE predicate (Sharepoint query) can handle. Currently the limit is 64 characters. For JCR queries resulting in LIKE predicates exceeding this limit, the query is rewritten and a post processor is employed on the client side. Set to 0 for no limit. (likePredicateCharLimit)	
Observation polling interval	2000 Polling interval for observation events in milliseconds. Defaults to 20000. (pollTimeout)	
JNDI Name	crx2sharepoint.repository JNDI name of the repository (jndiName)	
JNDI Initial Context Factory	com.day.util.jndi.provider.MemoryInitialContextFactory (jndiInitialContextFactory)	

SharePoint Connector – Configuring Users

We need to create users in CQ with the same credentials recognized by the SharePoint server:



The screenshot shows a web browser window titled "User Administration - Mozilla Firefox". The address bar displays the URL: `localhost:8082/crx/explorer/ui/usereditor.jsp?ck=1390475535063&Path=/home/users`. Below the address bar, there is a navigation bar with four buttons: "List...", "Create User", "Remove User", and "Disable User". The main content area is titled "Create New User" and contains a "Properties" section. This section is a table with two columns: "Property" and "Value".

Property	Value
UserID	<input type="text"/>
Password	<input type="text"/>
Principal Name	<input type="text"/> <input type="button" value="Browse..."/>
Intermediate Path	<input type="text"/>

A green checkmark icon is visible in the bottom right corner of the form area.

SharePoint Connector – Verify that the setup works

Content Explorer - UserID: labuser | Workspace: crx.default - Windows Internet Explorer

Save All Refresh All Revert All

Path /mnt/sharepoint

- bin
- rep:repoPolicy
- rep:policy
- jcr:system
- var
- libs
- etc
- apps
- home
- tmp
- content
- mnt
 - sharepoint
 - sp:Site
 - sp:RootWeb
 - sp:SiteTemplates

Name	Type	Value
.	rep:root	
jcr:created	Date	
jcr:mixinTypes	Name[]	
jcr:primaryType	Name	rep:root
sp:Site	sp:Site	

Node

Name sharepoint
Path /mnt/sharepoint
UUID N/A (node not referenceable)
Depth 2
of child nodes 1
Is New false
Is Modified false
Is Locked false
Is CheckedOut true

Primary Node Type rep:root
Mixin Node Types
Orderable Child Nodes false

100%

SharePoint Connector – Capabilities & Demo

- Read content and metadata from SharePoint
- Writing files and folders to the SharePoint document libraries
- Executing queries against the SharePoint repository
- Respecting SharePoint security settings for accessed content
- Content Integration using Content Finder
- Utilizing AEM components like External Resource to display SharePoint Announcements etc.
- DAM Asset Synchronization

SharePoint Connector – Release Plan

- Scheduled for 15th Feb 2014 with CQ 5.6.0 & 5.6.1

- Known Issues:
 - Sub Sites Search
 - SAML Authentication

References

- **SharePoint Connector 2.0 Documentation**
<http://dev.day.com/docs/en/crx/connectors/sharepoint/current.html>

- **Authentication overview for SharePoint**
<http://technet.microsoft.com/en-us/library/jj219571.aspx>

- **Create a web application in SharePoint**
<http://technet.microsoft.com/en-us/library/cc261875.aspx>

- **CRX Virtual Repository**
http://dev.day.com/content/docs/en/crx/current/administering/virtual_repository.html



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