SAP NetWeaver IT Scenario
Enterprise Knowledge Management
Level 3

Process:
Creating Documents

SAP NetWeaver Product Management, SAP AG
Position of process in SAP NetWeaver IT Scenarios

Creating Documents in detail

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## IT Scenario – Enterprise Knowledge Management

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Benefits

- Set up an easy-to-use authoring environment
- Easily author template-based content
- Benefit from automatic classification
- Access alternative viewing formats
- Find information with advanced retrieval functionality
- Receive notifications about information
- View information from different sources in one UI
- Handle information from different sources with a set of common services
- Put information into a business context
- Easily share information
## Content Creation, Publication and Access – 5 processes, 2 usages

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<tr>
<td>(5) Create file templates</td>
<td>(8) Upload document via WebDAV</td>
<td>(22) Create entry points</td>
<td>(26) View document details</td>
<td>(27) Perform file operations (copy, move, delete, download, rename, edit)</td>
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<td>(9) Fill in template</td>
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<tr>
<td>EP KM Flex UI</td>
<td>(6) Create XML forms</td>
<td>(10) Fill in XML form</td>
<td>(23) Search and find document and view HTML or native format</td>
<td>(24) Browse for document and view HTML or native format</td>
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<td>EP KM Services</td>
<td>(4) Set up time-dependent publishing</td>
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<td>(3) Set up approval process</td>
<td>(13) Tag document with metadata</td>
<td>(19) Maintain sponsored links</td>
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<tr>
<td>(2) Set permissions</td>
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<td>(18) Manually assign document to taxonomy</td>
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<td>(17) Automatically classify document</td>
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The folder structure for your different repositories has been determined within your Knowledge Management system.

Permissions have been defined for the folder structure.

Templates have been created and assigned to folders

XML form templates have been created and are ready for use.

Time dependent publishing has been activated and an approval workflow has been created with the workflow steps and approvers assigned.
Creating Documents - Purpose

The purpose of this process is to explain the various ways documents can be created within knowledge management.

Documents in Knowledge Management can be created by:
- Uploading documents through the Portal Drive
- Creating documents from Templates
- Entering data into XML Forms
- Uploading documents through the KM user interface
- Approving or rejecting documents
- Tagging Documents
- Document Storage
Creating Documents – In the architecture

Documents created in KM

- Upload Documents via WebDAV
- Templates
- XML Forms
- Uploading Documents Via UI

KM WebDAV server

Knowledge Management

SAP Enterprise Portal

Connection via WebDAV protocol

Client PC with portal drive installed

KM Repositories

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Creating Documents – In the architecture

Connection via WebDAV protocol

Client PC with portal drive installed

KM WebDAV server

Knowledge Management

SAP Enterprise Portal

Documents Created in KM

Uploading documents via WebDAV

Templates

XML Forms

Uploading documents via UI

KM Repositories

show relationship of Portal Drive on local client to KM to Repositories
Creating Documents – Process Steps

- Upload document via WebDAV
- Fill in template
- Fill in XML form
- Upload document
- Approve or reject documents
- Tag document with metadata
- Document storage
WebDAV (Web-based Distributed Authoring and Versioning) is comprised of a set of extensions to the HTTP protocol. WebDAV allows collaborative editing and managing of files on remote Web servers.

- Folders and documents in Knowledge Management can be accessed using WebDAV.

- Documents can be edited directly on the server without downloading them. WebDAV also enables imports of large numbers of documents into KM folders.

- Using WebDAV to upload documents can simplify the effort. It allows mass documents to be uploaded into Knowledge Management. There are two options for transmitting large numbers of files to KM:
  - Portal drive application (SAP recommendation)
  - MS Webfolder
The Portal Drive enables KM folders to connect to Windows file explorer as a mapped network drive.

- The Portal Drive is a desktop application that needs to be installed on each computer where it will be used. It can be deployed via the standard SAP installation.

- Features of the Portal Drive include:
  - Works with Windows Explorer
  - Offline usage and synchronization
  - Sharing files and folders
  - Locking files
  - Versioning

- Any application (e.g. Notepad) or process (e.g. a batch upload) can access a portal drive

- Single-Sign-On to portal (via SAP logon tickets and NTLM)
Portal Drive – Details (2)

Architecture

- Portal client installs a WebDAV client on local PC
- KM acts as WebDAV server for read and write access
- Portal drive will only connect to SAP NetWeaver Knowledge Management (other WebDAV servers are blocked)

- User Management / Security
  - KM ACLs are respected
  - SSO via SAP logon tickets and via NTLM

- Technical details on WebDAV
  - [http://www.webdav.org](http://www.webdav.org)
Portal Drive – Details (2)

Architecture

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Connection via WebDAV protocol

Client PC with portal drive installed

KM WebDAV server

Knowledge Management

SAP Enterprise Portal

Upload document via WebDAV

Fill in template

Fill in XML form

Upload document

Approve or reject documents

Tag document with metadata

Document storage
Mapping a KM Folder as Network Drive (1)

1. Select Portal Drive from task bar
2. Select new service
3. Create new service
A new window is opened with the KM folder mapped to a network drive.
Since SAP Knowledge Management is WebDAV enabled, KM folders can be included as a Web folder in Windows® Explorer.

- This enables KM folder hierarchy to be directly accessed from the desktop of a PC as a Webfolder.

- The KM Webfolder can be accessed from the My Network Places icon.

- Files can be copied, dragged and dropped from Windows Explorer to KM folder.

- Documents can be directly accessed on the server and edited. They do not need to be downloaded first.

- Features of uploading documents via MS Webfolder:
  - Works with Windows Explorer
  - Sharing files and folders
  - Locking files
  - Versioning
1. Documents can be uploaded into Knowledge Management via a Web Enabled folder. From the Properties, select the Access Links tab and copy the WebDAV URL.

Question: Should I show the screen shot in the auto shape?
2. Documents can be uploaded into Knowledge Management via a Web Enabled folder. From the Properties, select the Access Links tab and copy the WebDAV URL.
3. Open a new document in a WebDAV enabled application such as Microsoft Word and paste the WebDAV URL copied from Step 1 and hit Open.
## Portal Drive vs. MS Web Folders

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<th>MS Webfolder</th>
<th>Portal Drive</th>
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<td>In Windows file explorer, the portal is listed as a Web Folder underneath My network places</td>
<td>In Windows file explorer, the portal is listed as a standard mapped drive</td>
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<tr>
<td>Only WebDAV compatible authoring applications can access Web Folders</td>
<td>Any application (e.g. Notepad) or process (e.g. a batch upload) can access the portal drive</td>
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<tr>
<td>Offline synchronization is not possible</td>
<td>Offline synchronization is possible</td>
</tr>
<tr>
<td>User authorization per initial access to a web folder is needed</td>
<td>Single-Sign-On to portal (via SAP logon tickets and NTLM)</td>
</tr>
<tr>
<td>Only viewing of Windows attributes is possible (file type, size, date created/modified)</td>
<td>Viewing and changing (without check for allowed values) of all possible KM attributes</td>
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</table>
Templates can be created and made available in KM folders. Users can use templates to create standardized documents with predefined content and properties.

- Once templates are created and activated in KM folders, documents can be created from templates for a predefined format and properties.
- When an item is created using a template, a copy of the template is created along with its properties.
1. Templates can be activated for a particular folder via the details screen -> Settings -> Templates.
2. Select the templates that should be activated for a folder.
Once a template is activated for a folder it is then available to be selected by a user.
By using a template the properties are automatically defaulted. A user can also enter a Name and Description for the document.
Form based publishing enables a simple way of creating and publishing similar structured XML documents with HTML forms.

- Form based publishing can be used to create documents that have a common structure, or for collecting data with a form.
- The documents are stored as XML documents, however they are edited and viewed in the browser using HTML forms.
- The transformations between XML and HTML are performed by XSL stylesheets which define which transformations are to be performed and how to render the document content.

The advantages of form based publishing are:

- The separation of layout and content
- Different presentation of the same content using different XSL stylesheets
- The option of making browser/client-specific modifications
The XML Forms Builder is the tool within Knowledge Management used for form based publishing.

- The XML Forms Builder can be used to create forms, stylesheets, and form specific configuration files. It enables the creation and publishing of XML documents with HTML forms.

- XML forms can be used to create and publish documents that have a common structure. It is used to structure unstructured content.

- Once an XML template is created, content can be created by filling in an XML form. Two example templates are delivered in the standard system.
An XML form provides a standardized input UI. News and FAQ forms are delivered in the standard system. New forms can be created using the XML Forms Builder.
Documents are able to be uploaded via the user interface into the Knowledge Management system.

- Documents can be uploaded from a local PC to a Knowledge Management folder.
- Via the KM user interface, the *Upload* option is made available to users to upload documents to a particular folder.
- Upon uploading, document properties can be specified.
Documents can be uploaded within a particular folder of a repository.
For the document to be uploaded, you can enter a new name, type and description. Browse to where the document is located. Properties can also be added here. Show Properties enables you to enter metadata for the document.
The publishing approval process allows a document to be checked by one or more people before it is published.

- A multi-step approval process or workflow can be defined along with the user(s), group(s) or role(s) needed to approve each step.

- The status of a document as well as the progress of the approval process can be tracked at any time.

- In each step, the user or the users who are identified as the approver of the document are notified by e-mail and get an item in their UWL.

Prerequisites: The approval process must be activated for the folder where approval process is to be followed.
Publishing Approval Process Flow

**Author**

- Create Document
  - Document Status: In Progress

**Approver(s)**

- Submit For Approval
  - Document Status: For Approval

- Approve
  - Document Status: Released

- Skip
  - Document Status: Released

- Reject
  - Document Status: In Progress

**Document Storage**

- Upload document via WebDAV
- Fill in template
- Fill in XML form
- Upload document
- Approve or reject documents
- Tag document with metadata

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A publishing workflow can be enabled by selecting “Enable Approval Process” on the folder level.
A document can be Submitted for approval. The approver him- or herself has the option to skip the approval process.
Metadata can be assigned to documents when a document is created or uploaded to knowledge management.

- Standard properties or meta data are delivered with the standard knowledge management system.

- Customers have the opportunity to create their own predefined properties or metadata.

- Property renderers enable properties to be displayed within the knowledge management interface.

Diagram:

- Upload document via WebDAV
- Fill in template
- Fill in XML form
- Upload document
- Approve or reject documents
- Tag document with metadata
- Document storage
Standard meta data such as size, status, created, modified and read are visible on the details screen. Customers can also create their own metadata which can be assigned to a resource.
The user can select values for the assigned meta data. In this example, the user assigns custom meta data for this document. Properties for example can be defined as multi-valued, free text or property values can be defaulted.
Documents created in the Knowledge Management system are stored in the repository where the document was created or uploaded.

- Content and meta data are stored based on the configuration for the repository data source. The storage can technically take place in a database or in a combination of file system and database.

- Users who have write access to a folder will be able to create new documents within a repository.

- In the standard knowledge management system, the documents repository manager is delivered for managing content.

- In addition to the default repository, the “CM Store”, documents can be saved to any repository that is connected with a “read/write” enabled repository manager.

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**Document Storage – Details**

- Upload document via WebDAV
- Fill in template
- Fill in XML form
- Upload document
- Approve or reject documents
- Tag document with metadata
- Document storage
Documents can be stored in various types of repositories. Via repository managers the documents can be accessed via Knowledge Management. SAP delivers the documents repository in the standard system.
Position of process in SAP NetWeaver IT Scenarios
Creating Documents in detail
Summary
As a result of completing this process, you are now able to explain how documents can be created in knowledge management system. You can now:

- Upload documents through the Portal Drive
- Create documents via Templates
- Create XML Forms with content
- Upload documents through the KM user interface
- Approve or reject documents in an approval process
- Tag documents with meta data
- Decide where your documents should be stored
Further Information

Documentation

Scenario:
http://help.sap.com/saphelp_nw04s/helpdata/en/bb/d95a42ea221153e10000000a155106/frameset.htm

Creating and Changing Documents:
http://help.sap.com/saphelp_nw04s/helpdata/en/05/35e13d8ee48f5ee10000000a114084/frameset.htm

SDN

Knowledge Management (KM):
https://www.sdn.sap.com/irj/sdn/developerareas/km

KM Code Samples:

SAP Service Marketplace

Knowledge Management:
http://service.sap.com/nw-km

Knowledge Management How-To Guides:
http://service.sap.com/~form/sapnet?_SHORTKEY=01100035870000600345&