

## PRODUCT FACT SHEET for DITA Exchange Server™

The table below describes the (configurable) DITA Exchange features available for the User:

Feature	Description
<b>Microsoft SharePoint 2010 base</b>	
Microsoft SharePoint application	<p>DITA Exchange is a SharePoint 2010 solution, based on the OASIS managed DITA standard. Apart from the SharePoint server modules, the product has a number of client applications (see separate fact sheets for details):</p> <ul style="list-style-type: none"> <li>• DITA Exchange Word Editor™</li> <li>• DITA Exchange TopicPicker™</li> <li>• DITA Exchange Word Publisher™ client</li> <li>• DITA Exchange Transformation Service™ client</li> <li>• DITA Exchange Reader™ (Dynamic Map Viewer)</li> </ul> <p>The server modules fully comply with standard SharePoint guidelines and are completely transparent for all standard SharePoint features, including but not limited to the following (for more details, see <a href="#">here</a>):</p> <ul style="list-style-type: none"> <li>• Authentication</li> <li>• Workflows</li> <li>• Records management</li> <li>• Version management</li> <li>• Approval</li> <li>• Check-in and Check-out</li> <li>• Document Converters</li> <li>• Business Connectivity Services (BCS)</li> <li>• Managed Metadata (Term Store)</li> <li>• Office client integration</li> <li>• Audit trail features</li> <li>• Search (including FAST)</li> <li>• Backup architecture</li> <li>• Web Services</li> <li>• Development API's</li> </ul>
Scripted Installation	DITA Exchange can be installed on one or more existing site collections, on one or more SharePoint front-end server using a PowerShell installation script.
Enterprise scalability with SharePoint	<ul style="list-style-type: none"> <li>• As DITA Exchange is a SharePoint solution, DITA Exchange scales <i>with</i> SharePoint.</li> <li>• DITA Exchange effortlessly scales from 1 to for example 50,000 users.</li> <li>• DITA Exchange has full support for SharePoint farm topologies, including</li> </ul>

	multiple front-end servers, load balancing, separate indexing servers etc.
Customize, develop and enhance using standard SharePoint tools	DITA Exchange is furthermore transparent to standard SharePoint customization and development APIs, including: <ul style="list-style-type: none"> <li>• SharePoint 2010 Class Libraries</li> <li>• Managed Client Object Model</li> <li>• SharePoint 2010 Web Services</li> <li>• SharePoint Foundation REST Interface</li> </ul>
<b>Special DITA Exchange libraries, sub-sites, and lists</b>	
Topics library	This is the core DITA Exchange content repository containing DITA XML topics and Office documents.
Maps library	Contains DITA XML map files (defining publication structures)
Publications library	This library contains the output files from the DITA Exchange Word Publisher feature.
Ditaval library	Contains special, optional DITA XML filtering files, used in publishing and/or online reading
Reusable Fragments library	Contains content fragments that can be inserted in the topic editing process.
Variables library	Contains DITA XML topics used to resolve variables (a special DITA Exchange feature) in publishing/reading – similar to Mail Merge in Microsoft Word.
Hidden working libraries	On top of the above mentioned, we use a number of (normally hidden) working libraries.

CT sub site	<p>Unlike the above libraries that can basically be installed on any pre-existing site, DITA Exchange requires a special configuration sub-site, “CT”. This sub site contains a large number of DITA Exchange XML/XSLT configuration files, lists, and libraries. A few of these are listed below:</p> <ul style="list-style-type: none"> <li>• Doctypes.xml: Configuration of the XML DTDs and Schemas to use</li> <li>• DxMetadataSettings: Configuration of the promotion and demotion between SharePoint columns and XML metadata elements</li> <li>• Word Publisher Configuration: Provide preview images, XSLT stylesheets and Word templates to use</li> <li>• Custom Publishing options: Configure custom Publishing options to appear directly on drop-down menus for maps</li> <li>• DITA Exchange Word Editor Roles configuration: Configure toolbar buttons to appear in DITA Exchange Word Editor for various ACLs (user groups or roles)</li> <li>• DxLogs: Logging specific DITA Exchange events. This is an addition to the normal SharePoint logging mechanisms making it easier to see DITA Exchange events and reports.</li> </ul>
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**DITA Exchange fields, content types, and metadata**

Fields (columns)	<p>DITA Exchange defines the following fields (for more information, please see the separate document “Content Types and Metadata Architecture in DITA Exchange”):</p> <ul style="list-style-type: none"> <li>• DxTitle (Title)[Single line of text]</li> <li>• DxAuthor (DxAuthor)[Single line of text]</li> <li>• DxSource (Source)[Single line of text]</li> <li>• DxPublisher (Publisher)[Managed Metadata]</li> <li>• DxCopyRYear (Copyright Year)[Single line of text]</li> <li>• DxCopyRHolder (Copyright Holder)[Single line of text]</li> <li>• DxCritDatesCreated (CritDatesCreated)[Single line of text]</li> <li>• DxCritDatesRevised (CritDatesRevised)[Single line of text]</li> <li>• DxPermissionsView (Permissions View)[Managed Metadata]</li> <li>• DxAudienceType (Audience Type)[Single line of text]</li> <li>• DxAudienceOtherType (Audience Other Type)[Single line of text]</li> <li>• DxAudienceJob (Audience Job)[Single line of text]</li> <li>• DxAudienceOtherJob (Audience Other Job)[Single line of text]</li> <li>• DxAudienceExperienceLevel (Audience Experience Level)[Single line of text]</li> <li>• DxAudienceName (Audience Name)[Single line of text]</li> <li>• DxCategory (Category)[Single line of text]</li> <li>• DxKeyWords (DxKeyWords)[Single line of text]</li> <li>• DxProductName (Product Name)[Managed Metadata]</li> <li>• DxProductVersion (Product Version)[Managed Metadata]</li> <li>• DxProductRelease (Product Release)[Managed Metadata]</li> <li>• DxProductModification (Product Modification)[Managed Metadata]</li> <li>• DxProductBrand (Product Brand)[Managed Metadata]</li> <li>• DxProductComponent (Product Component)[Managed Metadata]</li> </ul>
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	<ul style="list-style-type: none"> <li>• DxProductFeatNum (Product Feat Num)[Managed Metadata]</li> <li>• DxProductPlatform (Product Platform)[Managed Metadata]</li> <li>• DxProductProgNum (Product Program Num)[Managed Metadata]</li> <li>• DxProductSeries (Product Series)[Managed Metadata]</li> <li>• DxOtherMeta (Other Metadata)[Single line of text]</li> <li>• DxResourceId (Resource Id)[Single line of text]</li> <li>• DxResourceAppName (Resource App Name)[Single line of text]</li> <li>• DxId (DxId)[Single line of text]</li> <li>• DxXmlLang (Xml Language)[Managed Metadata]</li> <li>• DxProps (DxProps)[Single line of text]</li> <li>• DxBase (DxBase)[Single line of text]</li> <li>• DxImportance (Importance)[Managed Metadata]</li> <li>• DxRev (DxRev)[Single line of text]</li> <li>• DxStatus (Status)[Managed Metadata]</li> <li>• Dx additional basic metadata fields:</li> <li>• DxBusinessUnit (Business Unit)[Managed Metadata]</li> <li>• DxBusinessProcess (Business Process)[Managed Metadata]</li> <li>• DxMarket (Market)[Managed Metadata]</li> <li>• DxRegion (Region)[Managed Metadata]</li> <li>• DxResource (Resource)[Managed Metadata]</li> </ul> <p>All of these fields are available for including as SharePoint managed properties – and for use in enhanced (faceted) search.</p>
Content types	<p>Using the fields listed above, DITA Exchange defines the following content types (for more information, please see the separate document “Content Types and Metadata Architecture in DITA Exchange”):</p> <ul style="list-style-type: none"> <li>• DxDocument (child of the default SharePoint “Document” content type) <ul style="list-style-type: none"> <li>○ DxDITA <ul style="list-style-type: none"> <li>▪ DxTopic <ul style="list-style-type: none"> <li>• DxTask</li> <li>• DxConcept</li> <li>• DxReference</li> </ul> </li> <li>▪ DxMap</li> <li>▪ DxPublication</li> <li>▪ DxDITAVAL</li> </ul> </li> <li>○ DxMedia <ul style="list-style-type: none"> <li>▪ DxImage</li> <li>▪ DxVideo</li> <li>▪ DxMath</li> <li>▪ DxPDF</li> </ul> </li> <li>○ DxOffice <ul style="list-style-type: none"> <li>▪ DxExcel</li> <li>▪ DxPowerPoint</li> <li>▪ DxWord <ul style="list-style-type: none"> <li>• DxWordTopic <ul style="list-style-type: none"> <li>○ DxWordConcept</li> <li>○ DxWordTask</li> <li>○ DxWordReference</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ DxWordMap</li> <li>• Dx Word DITA Topic (child of "Document")</li> <li>• DxInvalid (child of "Document")</li> </ul>
Default Term Store Metadata	<p>DITA Exchange provides a default Term Store metadata set, corresponding to the fields listed above, marked [Managed Metadata].</p> <p>The metadata default set can easily be customized, before, during or after the installation of DITA Exchange on a SharePoint farm.</p>
<b>Special DITA Exchange Managed Search Properties</b>	
ImageRef	Used for internal DITA Exchange processing
MapRef	Used for internal DITA Exchange processing
TopicRef	Used for internal DITA Exchange processing
DxMRelTabRef	Used for internal DITA Exchange processing
DxMXRef	Used for internal DITA Exchange processing
DxMLinkRef	Used for internal DITA Exchange processing
DxMConRef	Used for internal DITA Exchange processing
DxParentInfo	Used for internal DITA Exchange processing
<b>DITA Exchange SharePoint EventHandlers</b>	
Topics library EventHandler	<p>The special eventhandler will:</p> <ul style="list-style-type: none"> <li>• Post-process XML topics edited using the DITA Exchange Word Editor</li> <li>• Validate XML files against the configured DTDs/Schemas</li> <li>• Promote and/or demote SharePoint properties (columns) and DITA XML metadata elements, using the metadata configuration settings. This will make all XML metadata directly crawled and indexed in SharePoint</li> <li>• Assign correct content type to files, based on XML elements</li> <li>• Mark invalid XML files as content type "DxInvalid"</li> </ul> <p>The processing will take place on:</p> <ul style="list-style-type: none"> <li>• Uploading files</li> <li>• Uploading existing files</li> <li>• New DITA Exchange Word Editor file</li> <li>• Edit existing DITA Exchange Word Editor file</li> <li>• Edit Document</li> <li>• Edit Properties</li> </ul>
Maps library EventHandler	<p>The special eventhandler will:</p> <ul style="list-style-type: none"> <li>• Validate DITA XML map files against the configured DTDs/Schemas</li> <li>• Promote and/or demote SharePoint properties (columns) and DITA XML metadata elements, using the metadata configuration settings. This will make all XML metadata directly crawled and indexed in SharePoint</li> <li>• Assign correct content type to files, based on XML elements</li> <li>• Mark invalid XML files as content type "DxInvalid"</li> </ul> <p>The processing will take place on:</p> <ul style="list-style-type: none"> <li>• Uploading files</li> </ul>

	<ul style="list-style-type: none"> <li>• Uploading existing files</li> <li>• Upload zip map</li> <li>• Upload zip map, existing</li> <li>• New Publication Editor map</li> <li>• Edit existing map in Publication Editor</li> <li>• Edit Document</li> <li>• Edit Properties</li> </ul>
<b>DITA Exchange User Features for Topics</b>	
Preview in SharePoint	Shows a quick HTML preview of a DITA XML topic, using a configurable stylesheet
Clone Topic	Creates a clone of the selected topic, maintaining family-tree information
New DITA Exchange Word Editor topic	Initializes a new DITA XML topic for editing in DITA Exchange Word Editor, based on a configurable template file, defining which metadata fields should be shown in the Document Information Panel in Word
Edit in DITA Exchange Word Editor	Processes (resolves references etc.) and opens current DITA XML topic in the DITA Exchange Word Editor
Where Used	Shows a report of where the current topic is used
Family Tree View	Shows the family tree (parent and children, any number of levels) – actually graphically depicts “cloning” relationships
Version Differences	Shows a detailed, XML-based analysis of modifications from version to version and/or from topic to topic
<b>DITA Exchange User Features for Maps</b>	
New Map	<p>Initializes a new DITA XML map file (structure of a publication), based on a configurable template file.</p> <p>The DITA Exchange Publication Editor is a drag-and-drop tree editor web part that specifically processes valid DITA XML map files. You can:</p> <ul style="list-style-type: none"> <li>• Restructure by dragging and dropping individual references or entire branches</li> <li>• Add references</li> <li>• Add headings</li> <li>• Delete references, headings or branches</li> <li>• Edit metadata properties for individual references or headings</li> </ul>
Edit in Publication Editor	Opens an existing DITA XML map file for editing in the DITA Exchange Publication Editor
View in Dynamic Map Viewer	<p>The DITA Exchange Reader (Dynamic Map Viewer) is actually a Silverlight-based client application that runs inside a SharePoint web part. It presents a DITA map in a three panel window (similar to what SME users are used to in a PDF document navigation panel):</p> <ul style="list-style-type: none"> <li>• Navigation tree: <ul style="list-style-type: none"> <li>○ Select topics</li> <li>○ Expand/contract branches in the tree structure</li> </ul> </li> <li>• Content <ul style="list-style-type: none"> <li>○ Presenting the actual DITA content files (with resolved content), using a configurable XSLT stylesheet</li> </ul> </li> <li>• Tools <ul style="list-style-type: none"> <li>○ Edit in DITA Exchange Word Editor</li> <li>○ Rating (5 star-system) and rating comments. Comments are signed, time-stamped and collected in a special list for further processing or analysis</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Local search in publication</li> <li>○ 'Email Topic' allowing the user to forward a link to the topic</li> </ul> <p>As the DITA Exchange Reader is actually a client application (running in the user's browser), it uses a custom WCF web service to communicate with DITA Exchange server.</p>
Where Used	Shows a report of where the current map is used
Clone Map	Creates a clone of the selected map, maintaining family-tree information
Family Tree View	Shows the family tree (parent and children, any number of levels) – actually graphically depicts "cloning" relationships
Version Differences	Shows a detailed, XML-based analysis of modifications from version to version and/or from map to map
Download Map for Editing	<p>Collects a map file, all referenced topics (including topics cross-referenced or linked from other topics), and all referenced graphics resources and creates and downloads a zip file containing all the files.</p> <p>This zip files can be unzipped on any client PC and processed for example using a DITA XML editor.</p>
Download Map for Editing – Check Out	As above, but all files are checked out on the server.
Upload Zipped Map	<p>The reverse process of the Download Map for Editing feature.</p> <p>Together, these features can be used to very quickly export and/or import any DITA content, and the EventHandler-based demotion of metadata can ensure, that all required SharePoint metadata are passed through correctly.</p>
Approve Map	This feature is a quick alternative to make sure that <i>all</i> topics related to a certain map is approved, if this is not already the case.
Clone Publication	Clone publication clones a DITA XML map file <i>and</i> all referenced topics maintaining family-tree information for both the cloned DITA XML map file and the referenced topics.
DITA Exchange Word Publisher	<p>The DITA Exchange Word Publisher is a unique publishing facility that makes it possible to create high-quality publications in Word (Open XML) format from a DITA XML map and DITA XML topics – or Word documents.</p> <p>It uses a highly configurable six stage process:</p> <ol style="list-style-type: none"> <li>1. Variables in the DITA XML content are resolved (optional)</li> <li>2. Filtering, using ditaval filtering XML, is applied (optional)</li> <li>3. DITA XML content is transformed into Word (Open XML) format</li> <li>4. Image references are resolved and inserted into the Word output</li> <li>5. This transformed content is merged with a standard (possibly very sophisticated) Word template, including table of content, table of tables, table of figures, and index – if specified</li> <li>6. An optional custom stylesheet can be applied to the final output</li> </ol> <p>The DITA Exchange Word Publisher can output other formats than Open XML if a custom XSLT is injected in the process. The user can freely publish to XML, HTML etc. using this feature.</p>

	The DITA Exchange Word Publisher is also available as a client application, and both the server and the client version supports publishing <i>Hybrid DITA</i> content (a mix of DITA XML content and normal Word content).
<b>DITA Exchange Overall Features</b>	
Orphan Detection	Presents a report of any topic <i>that is not being referenced from anywhere else</i> .
Broken Links Report	Presents a report showing all the links in DITA XML topics that cannot be resolved correctly.
<b>DITA Exchange Server Online Help</b>	
Introduction	This List holds the standard DITA Exchange Server standard documentation. <ul style="list-style-type: none"> <li>• A list for the online help ditamap</li> <li>• A list for the referenced topics and</li> <li>• A list for the graphics referenced</li> </ul>
Purpose	Customer may customize the DITA Exchange Server standard documentation simply by adding new topic references to the map and writing new topics. The final result will show up for the End User when clicking >?< in the DITA Exchange Server Interface.