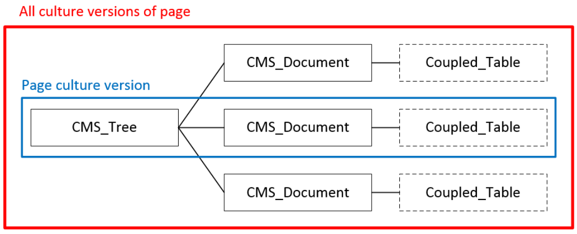
The Kentico database stores pages (nodes in the content tree of websites) in several interconnected tables:

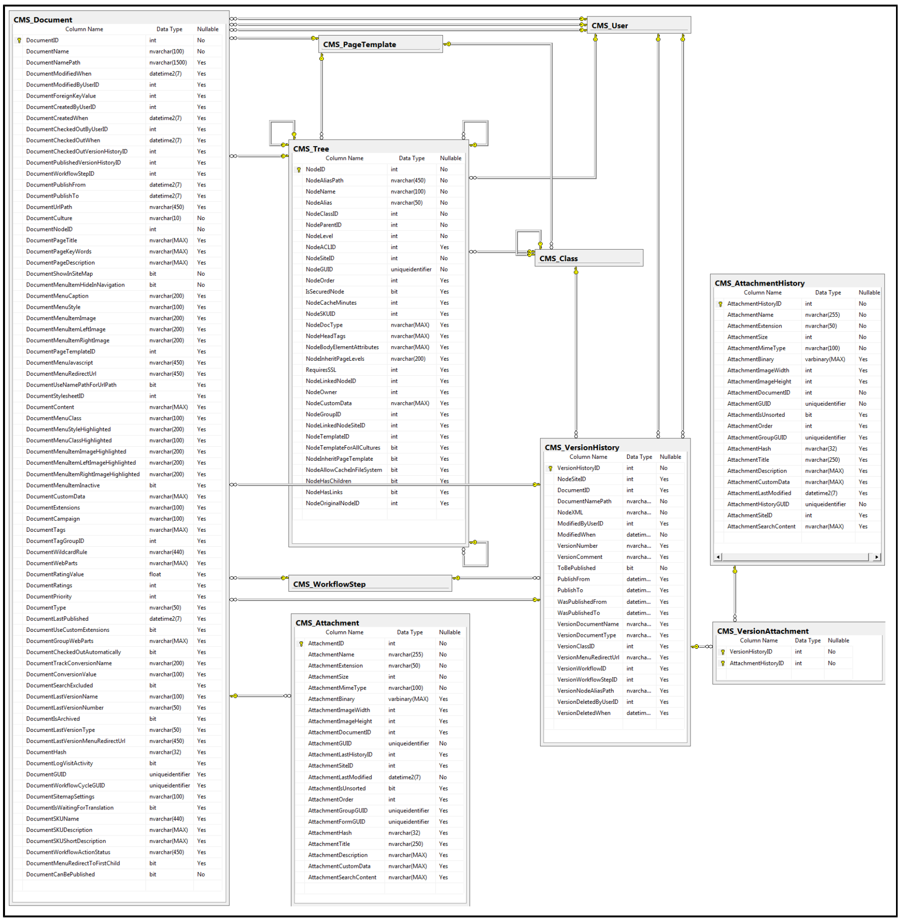
Database table	Description
CMS_Tree	Stores: • Data that determines the position of pages in the website content tree • Basic page properties that are shared between all language versions of the same page Contains **only one record for each page**, regardless of the number of language versions. The table doesn't store any versioned data.
CMS_Document	Stores: • Page properties that have unique values for each language version • The content of editable regions • The data of editor widgets May contain **multiple records per page**, one for each language version. Some of the page columns are versioned.
Coupled data tables (CONTENT_<doc type>)	Stores the fields of individual page types. For example, the *News* page type has the **CONTENT_News** coupled table with the columns defined for news pages, such as *NewsTitle*, *NewsSummary*, *NewsText*. • Records in the coupled data tables are bound to pages through the **DocumentForeignKeyValue** column of the **CMS_Document** table. • The page type of tree nodes is determined by the **NodeClassID** column in the **CMS_Tree** table. • Container page types, such as *Folder*, do not have a coupled table. • Every language version of a page has its own record in the corresponding coupled data table. • All columns in coupled data tables are versioned.



Page attachments and versions

Database table	Description

CMS_Attachment	Stores files uploaded to the database as page attachments. Includes all types of page attachments: - Unsorted attachments added on the *Properties -> Attachments* tab in the *Pages* application. Such attachments are linked to the related page by storing its identifier (*AttachmentDocumentID* column). - Attachments uploaded through specific page fields (of either the *File* or *Attachments* data type) on the *Form* or *Content* tab in the *Pages* application. Such fields are represented by columns in the given page type's coupled data table. ○ Page type fields of the *File* data type store a GUID value, which identifies the corresponding attachment in the *CMS_Attachment* table. ○ For fields of the *Attachments* data type, the value in the database is always empty. Instead, the given records in the *CMS_Attachment* table store an identifier of the related page (*AttachmentDocumentID* column) and a GUID value that identifies the specific field in the page type's form definition (*AttachmentGroupGUID* column).
CMS_VersionHistory	Stores page versions, including older versions and versions that are being edited. When a version is published, the system updates the corresponding records in the **CMS_Tree** and **CMS_Document** tables using the data of the version record.
CMS_AttachmentHistory	Stores attachments of page versions. The main purpose of this table is to avoid redundancy for page versions that use the same attachments. When a page version is published, the system updates the records in the **CMS_Attachment** table using the data of the version record.
CMS_VersionAttachment	Stores relationships between page versions and their page attachments.



CMS_Document

	Column Name	Data Type	Nullable
🔑	DocumentID	int	No
	DocumentName	nvarchar(100)	No
	DocumentNamePath	nvarchar(1500)	Yes
	DocumentModifiedWhen	datetime2(7)	Yes
	DocumentModifiedByUserID	int	Yes
	DocumentForeignKeyValue	int	Yes
	DocumentCreatedByUserID	int	Yes
	DocumentCreatedWhen	datetime2(7)	Yes
	DocumentCheckedOutByUserID	int	Yes
	DocumentCheckedOutWhen	datetime2(7)	Yes
	DocumentCheckedOutVersionHistoryID	int	Yes
	DocumentPublishedVersionHistoryID	int	Yes
	DocumentWorkflowStepID	int	Yes
	DocumentPublishFrom	datetime2(7)	Yes
	DocumentPublishTo	datetime2(7)	Yes
	DocumentUrlPath	nvarchar(450)	Yes
	DocumentCulture	nvarchar(10)	No
	DocumentNodeID	int	No
	DocumentPageTitle	nvarchar(MAX)	Yes
	DocumentPageKeyWords	nvarchar(MAX)	Yes
	DocumentPageDescription	nvarchar(MAX)	Yes
	DocumentShowInSiteMap	bit	No
	DocumentMenuItemHideInNavigation	bit	No
	DocumentMenuCaption	nvarchar(200)	Yes
	DocumentMenuStyle	nvarchar(100)	Yes
	DocumentMenuItemImage	nvarchar(200)	Yes
	DocumentMenuItemLeftImage	nvarchar(200)	Yes
	DocumentMenuItemRightImage	nvarchar(200)	Yes
	DocumentPageTemplateID	int	Yes
	DocumentMenuJavascript	nvarchar(450)	Yes
	DocumentMenuRedirectUrl	nvarchar(450)	Yes
	DocumentUseNamePathForUrlPath	bit	Yes
	DocumentStylesheetID	int	Yes
	DocumentContent	nvarchar(MAX)	Yes
	DocumentMenuClass	nvarchar(100)	Yes
	DocumentMenuStyleHighlighted	nvarchar(200)	Yes
	DocumentMenuClassHighlighted	nvarchar(100)	Yes
	DocumentMenuItemImageHighlighted	nvarchar(200)	Yes
	DocumentMenuItemLeftImageHighlighted	nvarchar(200)	Yes
	DocumentMenuItemRightImageHighlighted	nvarchar(200)	Yes
	DocumentMenuItemInactive	bit	Yes
	DocumentCustomData	nvarchar(MAX)	Yes
	DocumentExtensions	nvarchar(100)	Yes
	DocumentCampaign	nvarchar(100)	Yes
	DocumentTags	nvarchar(MAX)	Yes
	DocumentTagGroupID	int	Yes
	DocumentWildcardRule	nvarchar(440)	Yes
	DocumentWebParts	nvarchar(MAX)	Yes
	DocumentRatingValue	float	Yes
	DocumentRatings	int	Yes
	DocumentPriority	int	Yes
	DocumentType	nvarchar(50)	Yes
	DocumentLastPublished	datetime2(7)	Yes
	DocumentUseCustomExtensions	bit	Yes
	DocumentGroupWebParts	nvarchar(MAX)	Yes
	DocumentCheckedOutAutomatically	bit	Yes
	DocumentTrackConversionName	nvarchar(200)	Yes
	DocumentConversionValue	nvarchar(100)	Yes
	DocumentSearchExcluded	bit	Yes
	DocumentLastVersionName	nvarchar(100)	Yes
	DocumentLastVersionNumber	nvarchar(50)	Yes
	DocumentIsArchived	bit	Yes
	DocumentLastVersionType	nvarchar(50)	Yes
	DocumentLastVersionMenuRedirectUrl	nvarchar(450)	Yes
	DocumentHash	nvarchar(32)	Yes
	DocumentLogVisitActivity	bit	Yes
	DocumentGUID	uniqueidentifier	Yes
	DocumentWorkflowCycleGUID	uniqueidentifier	Yes
	DocumentSitemapSettings	nvarchar(100)	Yes
	DocumentIsWaitingForTranslation	bit	Yes
	DocumentSKUName	nvarchar(440)	Yes
	DocumentSKUDescription	nvarchar(MAX)	Yes
	DocumentSKUShortDescription	nvarchar(MAX)	Yes
	DocumentWorkflowActionStatus	nvarchar(450)	Yes
	DocumentMenuRedirectToFirstChild	bit	Yes
	DocumentCanBePublished	bit	No

CMS_Tree

	Column Name	Data Type	Nullable
🔑	NodeID	int	No
	NodeAliasPath	nvarchar(450)	No
	NodeName	nvarchar(100)	No
	NodeAlias	nvarchar(50)	No
	NodeClassID	int	No
	NodeParentID	int	No
	NodeLevel	int	No
	NodeACLID	int	Yes
	NodeSiteID	int	No
	NodeGUID	uniqueidentifier	No
	NodeOrder	int	Yes
	IsSecuredNode	bit	Yes
	NodeCacheMinutes	int	Yes
	NodeSKUID	int	Yes
	NodeDocType	nvarchar(MAX)	Yes
	NodeHeadTags	nvarchar(MAX)	Yes
	NodeBodyElementAttributes	nvarchar(MAX)	Yes
	NodeInheritPageLevels	nvarchar(200)	Yes
	RequiresSSL	int	Yes
	NodeLinkedNodeID	int	Yes
	NodeOwner	int	Yes
	NodeCustomData	nvarchar(MAX)	Yes
	NodeGroupID	int	Yes
	NodeLinkedNodeSiteID	int	Yes
	NodeTemplateID	int	Yes
	NodeTemplateForAllCultures	bit	Yes
	NodeInheritPageTemplate	bit	Yes
	NodeAllowCacheInFileSystem	bit	Yes
	NodeHasChildren	bit	Yes
	NodeHasLinks	bit	Yes
	NodeOriginalNodeID	int	Yes

CMS_Attachment

	Column Name	Data Type	Nullable
🔑	AttachmentID	int	No
	AttachmentName	nvarchar(255)	No
	AttachmentExtension	nvarchar(50)	No
	AttachmentSize	int	No
	AttachmentMimeType	nvarchar(100)	No
	AttachmentBinary	varbinary(MAX)	Yes
	AttachmentImageWidth	int	Yes
	AttachmentImageHeight	int	Yes
	AttachmentDocumentID	int	Yes
	AttachmentGUID	uniqueidentifier	No
	AttachmentLastHistoryID	int	Yes
	AttachmentSiteID	int	Yes
	AttachmentLastModified	datetime2(7)	No
	AttachmentIsUnsorted	bit	Yes
	AttachmentOrder	int	Yes
	AttachmentGroupGUID	uniqueidentifier	Yes
	AttachmentFormGUID	uniqueidentifier	Yes
	AttachmentHash	nvarchar(32)	Yes
	AttachmentTitle	nvarchar(250)	Yes
	AttachmentDescription	nvarchar(MAX)	Yes
	AttachmentCustomData	nvarchar(MAX)	Yes
	AttachmentSearchContent	nvarchar(MAX)	Yes

CMS_VersionHistory

	Column Name	Data Type	Nullable
🔑	VersionHistoryID	int	No
	NodeSiteID	int	Yes
	DocumentID	int	Yes
	DocumentNamePath	nvarcha...	No
	NodeXML	nvarcha...	No
	ModifiedByUserID	int	Yes
	ModifiedWhen	datetim...	No
	VersionNumber	nvarcha...	Yes
	VersionComment	nvarcha...	Yes
	ToBePublished	bit	No
	PublishFrom	datetim...	Yes
	PublishTo	datetim...	Yes
	WasPublishedFrom	datetim...	Yes
	WasPublishedTo	datetim...	Yes
	VersionDocumentName	nvarcha...	Yes
	VersionDocumentType	nvarcha...	Yes
	VersionClassID	int	Yes
	VersionMenuRedirectUrl	nvarcha...	Yes
	VersionWorkflowID	int	Yes
	VersionWorkflowStepID	int	Yes
	VersionNodeAliasPath	nvarcha...	Yes
	VersionDeletedByUserID	int	Yes
	VersionDeletedWhen	datetim...	Yes

CMS_AttachmentHistory

	Column Name	Data Type	Nullable
🔑	AttachmentHistoryID	int	No
	AttachmentName	nvarchar(255)	No
	AttachmentExtension	nvarchar(50)	No
	AttachmentSize	int	No
	AttachmentMimeType	nvarchar(100)	No
	AttachmentBinary	varbinary(MAX)	Yes
	AttachmentImageWidth	int	Yes
	AttachmentImageHeight	int	Yes
	AttachmentDocumentID	int	No
	AttachmentGUID	uniqueidentifier	No
	AttachmentIsUnsorted	bit	Yes
	AttachmentOrder	int	Yes
	AttachmentGroupGUID	uniqueidentifier	Yes
	AttachmentHash	nvarchar(32)	Yes
	AttachmentTitle	nvarchar(250)	Yes
	AttachmentDescription	nvarchar(MAX)	Yes
	AttachmentCustomData	nvarchar(MAX)	Yes
	AttachmentLastModified	datetime2(7)	Yes
	AttachmentHistoryGUID	uniqueidentifier	No
	AttachmentSiteID	int	Yes
	AttachmentSearchContent	nvarchar(MAX)	Yes

CMS_VersionAttachment

	Column Name	Data Type	Nullable
🔑	VersionHistoryID	int	No
🔑	AttachmentHistoryID	int	No

Products

Products represent merchandise or services in online stores. The system associates product objects (SKUs) with pages representing product types.

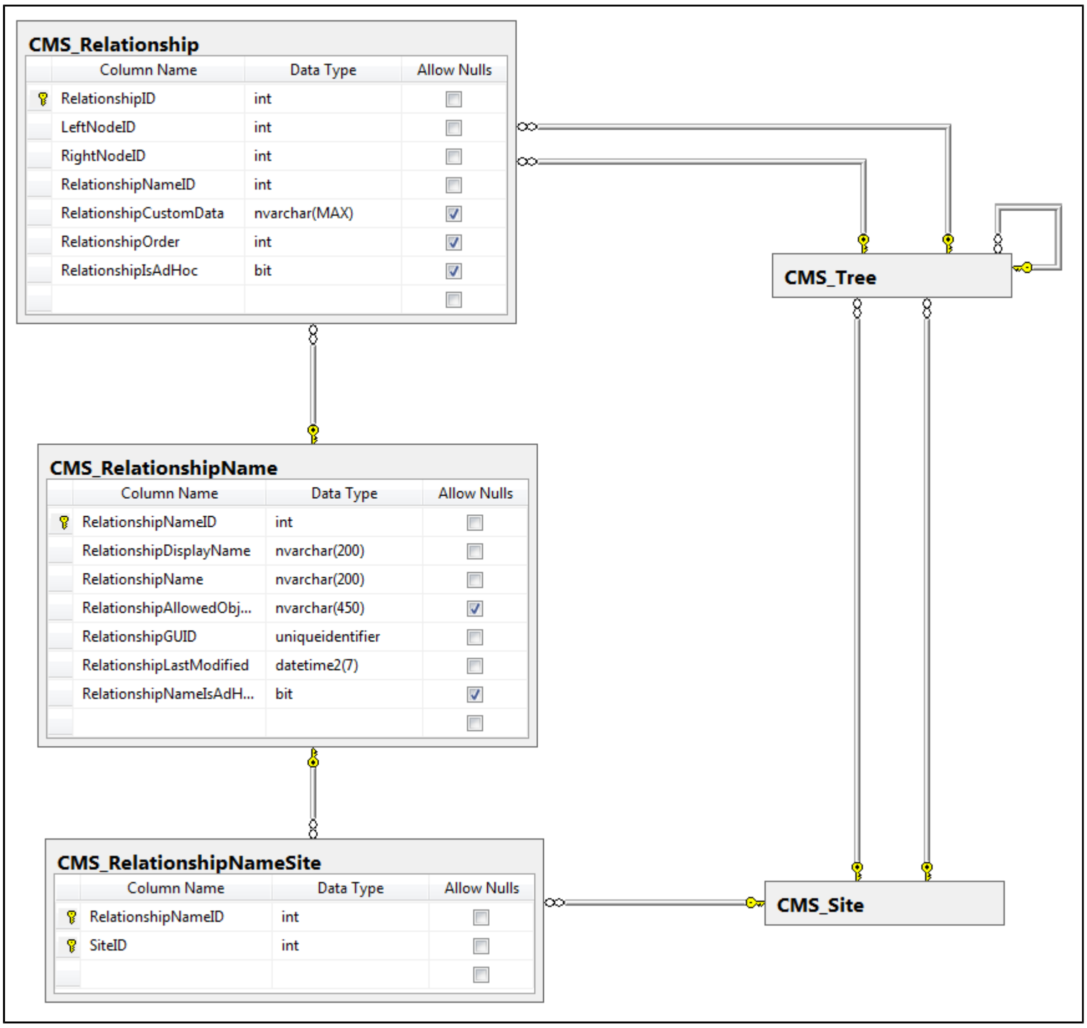
The primary product data is stored in the **COM_SKU** database table.

- Pages representing products are bound to the related SKU through the **NodeSKUID** column of the **CMS_Tree** table.
- Most product columns are versioned and covered by workflow (exceptions include the product image, as well as the *Track inventory* and *Available items* properties).
- If a product page is available in multiple language versions AND covered by workflow, the versioned product properties are **NOT shared between different language versions** of a single product. Any updates of the product **Price** (or other key properties) need to be made separately for each language version.

Page relationships

Database table	Description
CMS_Relationship	Stores records representing relationships between two pages. Used for both: • Standard named relationships • Ad-hoc relationships that represent re-use of a page's content within a *Pages* field of another page (see Advanced content modeling)
CMS_RelationshipName	Stores the relationship names (types) defined in the system.

CMS_RelationshipNameSite	Binding table that connects relationship names to websites. Each entry indicates that a relationship can be used on a given site.



CMS_Relationship

	Column Name	Data Type	Allow Nulls
🔑	RelationshipID	int	☐
	LeftNodeID	int	☐
	RightNodeID	int	☐
	RelationshipNameID	int	☐
	RelationshipCustomData	nvarchar(MAX)	☑
	RelationshipOrder	int	☑
	RelationshipIsAdHoc	bit	☑
			☐

CMS_RelationshipName

	Column Name	Data Type	Allow Nulls
🔑	RelationshipNameID	int	☐
	RelationshipDisplayName	nvarchar(200)	☐
	RelationshipName	nvarchar(200)	☐
	RelationshipAllowedObj...	nvarchar(450)	☑
	RelationshipGUID	uniqueidentifier	☐
	RelationshipLastModified	datetime2(7)	☐
	RelationshipNameIsAdH...	bit	☑
			☐

CMS_RelationshipNameSite

	Column Name	Data Type	Allow Nulls
🔑	RelationshipNameID	int	☐
🔑	SiteID	int	☐
			☐