# Visma Case

DATABASE DESCRIPTION VISMA IMS





#### **Databasebeskrivelse Visma Case**

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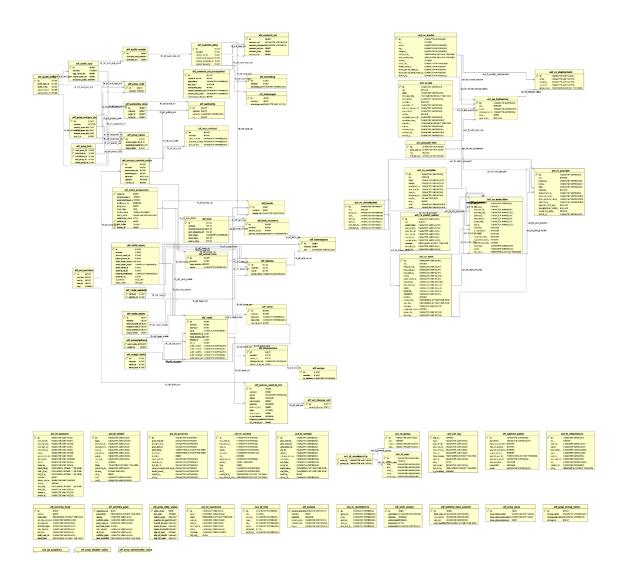
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# Database E/R diagram

#### Useful links:

http://www.lionsgatesoft.com/understanding-alfresco-content-data-model/



 $The information is based on Alfresco Community \ Edition 5.2 \ with meta \ database \ on \ PostgreSQL \ 9.4.12.$ 

There are 71 entities in the data model.

The data model consists of the following modules (with main tables):

Core Content Module

alf\_namespace

alf\_qname

```
alf_node
alf\_node\_properties
alf\_node\_assoc
alf_node_aspects
alf\_child\_assoc
alf_store
alf_transaction
alf\_subscription
alf_locale
Access Control Module
alf_access_control_entry
alf_authority
alf_authority_alias
alf_ace_context
alf\_permission
alf_acl_member
alf\_access\_control\_list
Auditing and Content Data Module
alf_audit_model
alf_audit_app
alf_audit_entry
alf\_content\_data
alf\_content\_url\_encryption
alf_content_url
alf_encoding
alf_mimetype
Activity / Workflow Module
act_ru_execution
act_ru_task
act_ru_variable
act_ru_event_subscr
act_ru_identitylink
```

act\_ru\_job

 $act\_re\_model$ 

act\_re\_procdef

 $act\_re\_deployment$ 

#### **Notifications module**

alf\_activity\_feed

alf\_activity\_post

Patches module

alf\_applied\_patch

Multi-tenancy module

alf\_tenant

## **Other Orphan Tables**

act\_hi\_taskinst

act\_hi\_detail

act\_hi\_procinst

act\_hi\_varinst

 $act\_hi\_actinst$ 

 $act\_hi\_attachment$ 

 $act\_id\_membership$ 

act\_id\_group

act\_id\_user

 $alf\_auth\_status$ 

## Database schema description

This page provides description of some important database tables.

For the reference you can use the Alfresco for Administrators book by V. Pal, Packt Publishing

# Schema of the alf\_namespace table

This table stores information of all the namespaces used for content model in the Alfresco repository.

- id: This is the unique database ID for each namespace. This ID is referenced in other tables
- uri: This the namespace value in URI format

#### Schema of the alf\_qname table

This table stores information of all the qualified names (qnames) used for content model in the Alfresco repository. The qualified names reference node types, aspects and properties as well as association types. Each qualified name consists of a namespace and a name.

- id: This is the unique database ID for each qualified name. This ID is reference in other tables.
- ns\_id: This ID refers to the unique ID from the alf\_namespace table. This ID signifies to which namespace this qualified name belongs to.
- local\_name: This is the name value for the qualified name

#### Schema of the alf node table

This table is the main primary reference of the node. All the node entries are present in this table.

It contains primary node information like UUID, created date, modified date, creator, transaction ID , permission information, and so on.

Here are the details about some of the columns of this table.

- id: This is the unique database ID for each node in Alfresco. This same ID is being referenced in other tables
- store\_id: This ID refers to the unique ID from the alf\_store table. This ID signifies which store this node belongs to, like workspacesStore, archivespacesStore, or usersStore, and so on.
- uuid: This is the unique node ID which is used in all the services and interfaces that refer to this node. This UUID never changes for a node as long as a node is present in the Alfresco system.
- transaction\_id: This refers to the ID column in the alf\_transaction table. Any write operation in Alfresco is considered to be processed within a transaction. Every node is part of a transaction. If you do a batch operation, there is a possibility that all nodes will have the same transaction ID. While indexing in Alfresco, based on these transaction IDs, all nodes are fetched from the database and indexed in Solr. So, this transaction ID is also a very important column.
- type\_qname\_id: This column is the foreign key reference ID from the alf\_ qname table. It defines the type of node like content, folder, person, and so on.
- acl\_id: This ID refers to the unique ID in the alf\_access\_control\_list table related to permission. Permission in Alfresco can be considered a map; all this information is stored in a different table structure. acl\_id will lead to all permissions available on this node.
- auditor\_creator: This column captures information about the user who created this node.
- auditor created: This column captures the time this node was created in the system.
- auditor\_modified: This column captures the time this node was modified.

### Schema of the alf\_node\_properties table

This table stores metadata information about the node like its name, description, and content store path ID.

All the node properties are stored in this table.

Here is the list of a few important columns in this table:

- node\_id: This column refers to the unique database ID of the node defined in the alf\_node table.
- actual\_type\_n: This column defines the property type.
- boolean\_value: This column stores the values of any Boolean value metadata of node.
- string\_value: This column stores the values of any string valued metadata of the node.
- long\_value: If the metadata value is referring to some other table, the ID of that table will be in this column. For example, the binary file location of an asset is captured in different tables. The ID referring to that entry is stored in this column.
- qname\_id: This column stores the namespace and property name referring to its ID in the alf\_qname table.

#### Schema of the alf child assoc table

This table stores all the parent-child association information. With this table, you can identify the child and parent of any node.

- parent\_node\_id: This column stores the unique node database ID referring to the ID column of the alf\_node table. As the name suggests, this would represent the parent node ID.
- child\_node\_id: This column stores the unique node database ID referring to the ID column of the alf\_node table. This provides the node information of the child under the associated parent node ID.
- child\_node\_name: This column stores the names of the children nodes.
- type\_qname\_id: This column specifies the type of the association.
- qname\_ns\_id: This column refers to the ID column of the alf\_namespace table.
- is primary: This column indicates whether the parent association is primary for the underlying child node.

#### Schema of the alf node assoc table

This table stores all the peer-to-peer association information.

- source\_node\_id: This column stores the unique node database ID referring to the ID column of the alf\_node table. This column represents the source node ID.
- target\_node\_id: This column stores the unique node database ID referring to the ID column of the alf\_node table. This provides the node information of the target node ID.
- type\_qname\_id: This column specifies the type of the association.

#### Schema of the alf content data table

This table stores the mapping of node and binary file location.

All the required information related to binary content is stored in this table.

- id: This column stores the unique row ID; this ID is being used to map the node and binary content. The alf\_node\_properties file defining the cm: content property will have this unique ID.
- content\_url\_id: This refers to the ID in the alf\_content\_url table. This ID will lead to the actual path of content in the filesystem.

- content\_mimetype\_id: This column specifies the mime-type of the content, which will be required for readwrite operations on content.
- content\_encoding\_id: This column specifies the encoding of content.

### Schema of the alf\_content\_url table

This table has the actual filesytem path information about the binary file.

Here is the information about each of the columns:

- id: This column stores the unique row ID. This same ID is a reference point to fetch the URL information.
- content\_url: This contains the actual filesystem location of the binary file under the contentstore directory. A sample entry would be store://2015/2/10/20/30/xxxx-xxxx-xxx.bin.
- content\_size: This stores the specified size of the content.
- orphan\_time: This column is very important. When content is permanently deleted from the Alfresco system, this column will have orphan time. Based on this time, the cleanup process cleans up all the orphaned content from the file system.

#### Schema of the alf\_node\_aspects table

This table contains information of the node aspects.

- node\_id: This column stores the unique node database ID referring to the ID column of the alf\_node table.
- qname\_id: This column stores the namespace and aspect name referring to its ID in the alf\_qname table.