

Digital Repository

Inhalt

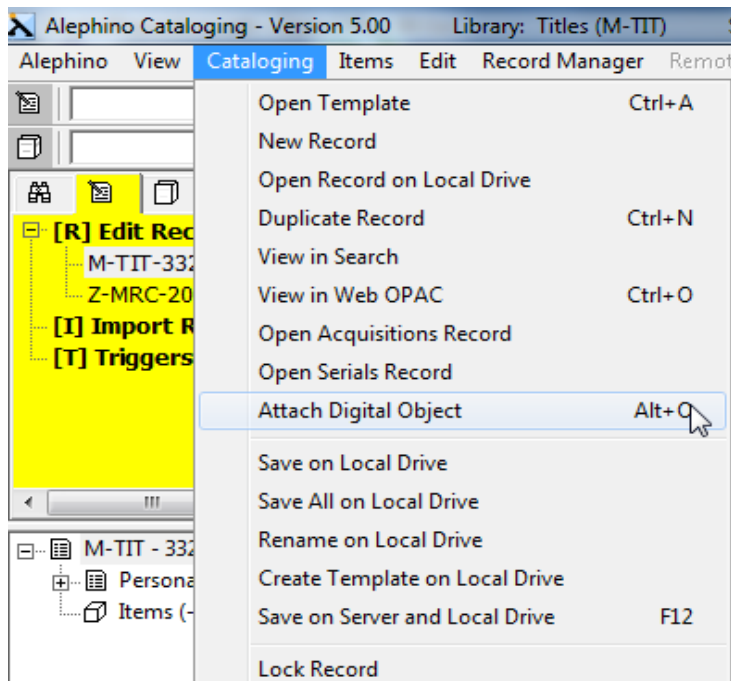
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The Alephino Digital Repository

With Release 4.1 Alephino was equipped with a digital repository as an integral part, which enables management and presentation of any type of digital material along with the bibliographic metadata.

With that the cataloger can attach one digital object, be it graphics, text documents, audio, video... to the bibliographic record that is currently processed in the Alephino catalog editor. In case of multi-part material or various representations of the same material, it can also be attached to the items level the exact same way.

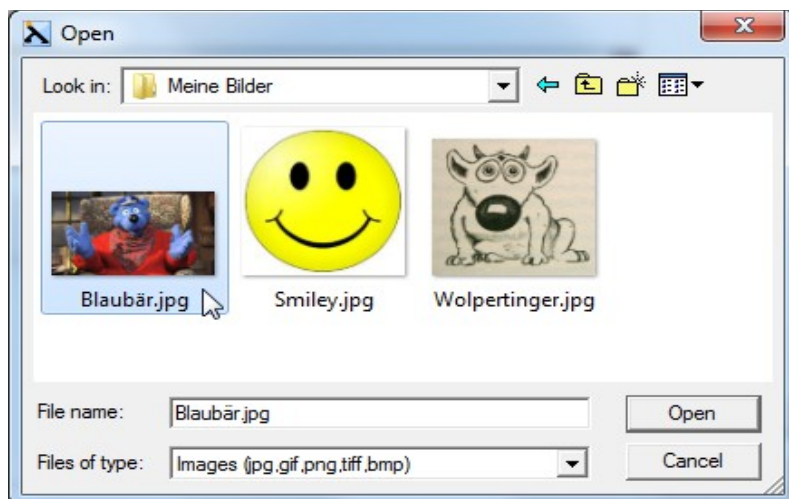
After the respective title (or item) metadata have been saved, the dialog „Cataloging→Attach Digital Object“ becomes active, enabling addition, processing or deletion of digital material:



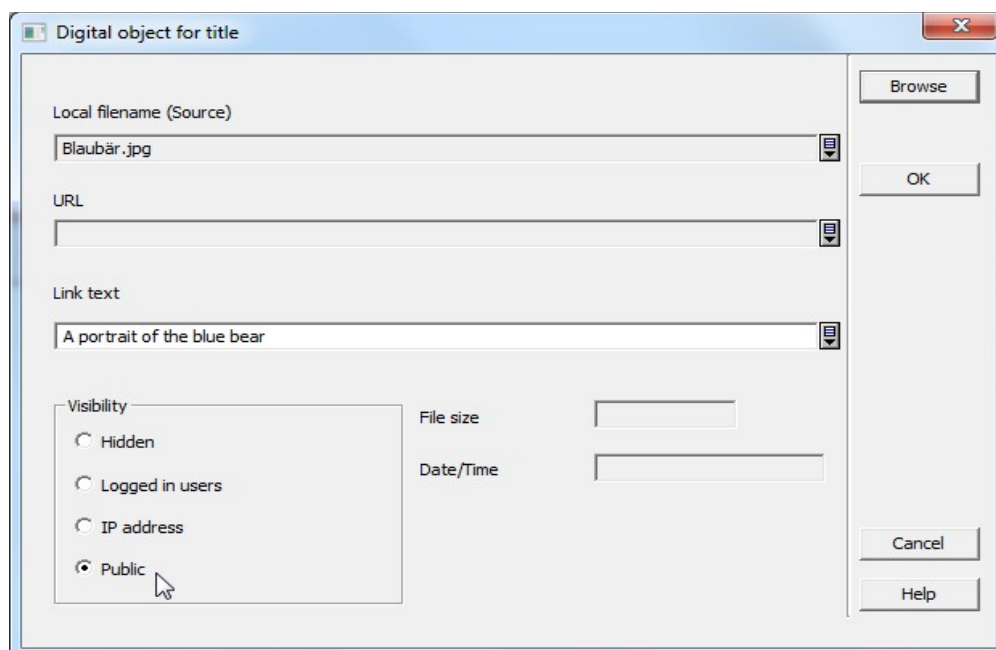
The below form appears:

A screenshot of the 'Digital object for title' dialog box. The dialog has a title bar with a close button. It contains several input fields: 'Local filename (Source)', 'URL', and 'Link text'. To the right of these fields is a 'Browse' button. Below the input fields is a 'Visibility' section with four radio buttons: 'Hidden', 'Logged in users', 'IP address', and 'Public'. To the right of the visibility section are two input fields: 'File size' and 'Date/Time'. At the bottom right of the dialog are 'Cancel' and 'Help' buttons.

Push „Browse“ and pick a document from your PC / your local file system, i.e.:



Complete the data for „Link text“ (text that, if present, will be displayed instead of the raw URL) and visibility. The latter allows to control under which conditions the respective material becomes visible and accessible via the OPAC.



Confirm by pushing „OK“.

The selected document will be transferred to the server and stored in a self-organizing directory, also called the digital repository. Fields URL, File size and Date/Time are populated automatically by the system and become visible on repeated invocation of the dialog.

Regardless of the above procedure the „classic“ method of linking external material to bibliographic metadata by use of subfield \$u of MARC tags 856 (also 505, 506, 514, 520 etc.) remains applicable.

When creating a local repository with the usual method, that means usage of the MARC URL-tags, the library staff is responsible for organization of the data in a structured way, the assignment of names to the files and eventually the validity of URL's pointing to it. This indeed implies a lot of potential sources for errors, that otherwise can easily be avoided by use of the digital repository.

As already mentioned, another advantage of the digital repository is the possibility to control the visibility of digital material.

With the buttons arranged in section „Visibility“ you can define whether the respective digital object will become visible for OPAC users within the title full display. An object labelled **Hidden** will never appear in OPAC while a **Public** object is always shown. If you want to limit the access to users who have authenticated themselves in the OPAC, click on button **Logged in users**. If the visibility should be limited to certain IP-adresses, then choose **IP address**. The respective IP-adresses or -ranges need to be configured at the server beforehand.

Examples for presentation of digital material:

SYSID	003327587
Control no. / ID	003327587
Latest transaction	02/03/2017
LC Control No.	2008540173
NB no.	GBA0-X4271
System control no.	(OCoLC)ocm44483796
Cataloging source	Cataloging agency: UKM Transcribing agency: UKM Modifying agency: OCL Modifying agency: IXA I
Language code	eng ger
Authentic. code	pcc
LC Call No.	PT2673.O293 A61313 2000
Personal name	Moers, Walter,
Uniform title	13 1/2 Leben des Käpt'n Blaubär. English
Main Title	The 13 1/2 lives of Captain Bluebear : being the demibiography of a seagoing bear ... and excerpts from its environs,' by Professor Abdulla Nightingale / Walter Moers ; translated by John Brownjohn.
Varying form	Thirteen and a half lives of Captain Bluebear
Imprint	London : Secker & Warburg, 2000.
Physical description	702 p. : ill. ; 24 cm.
General note	Maps on lining papers.
Genre/Form	Fantasy fiction.
Genre/Form	Humorous stories.
AE - personal name	Brownjohn, John.
ISBN	0436275007
ISBN	9780436275005
URL Link	http://www.loc.gov/catdir/enhancements/fy0838/2008540173-b.html
Digital object	http://aspi00.exl.de/repository/DOC000001/M03327587.jp
Book cover	

<http://images.amazon.com/images/P/0436275007.01.LZZZZZZZ.gif>

Fig.: GUI – Representation in the navigation view

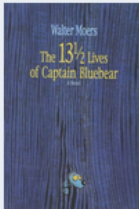

Book cover		
The 13 1/2 lives of Captain Bluebear : being the demibiography of a seagoing bear ... and excerpts from the 'Encyclopedia of the marvels, life forms and other phenomena of Zamonia and the its environs,' by Professor Abdulla Nightingale / Walter Moers ; translated by John Brownjohn.		
Digital object	A portrait of the blue bear 	
LC Control No.	2008540173	
LC Call No.	PT2673.O293 A61313 2000	
Personal name	Moers, Walter, Personal dates: 1957-	
Uniform title	13 1/2 Leben des Käpt'n Blaubär. English	
Main Title	The 13 1/2 lives of Captain Bluebear : being the demibiography of a seagoing bear ... and excerpts from the 'Encyclopedia of the marvels, life forms and other phenomena of Zamonia and the its environs,' by Professor Abdulla Nightingale / Walter Moers ; translated by John Brownjohn.	
Varying form	Thirteen and a half lives of Captain Bluebear	

Fig.: OPAC – Representation in full record display

Item list

[Get it](#)

Location	Description	Collection	Barcode	Status	Due at	Hold req.	Note
 M/0815-4711	Audio book for children Audio track (MP3) 	Handout stack	08154711	on loan	03/07/2017		
 M/0815-4712	Paperback Cover picture 	Reading room	08154712	available			

Fig.: OPAC – Representation in items list

Basic configuration

1. Definition of the location in the local file system denoting the origin of the digital repository, also called the root directory.:
File **etc/alephino.cfg**

```
(Directories)
Temp = ../temp
Print = ../print
Scratch = ../temp
Backup = ../backup
ClientVersion = ../version
BorPict = ../data/photo
Upload = ../temp
Objects = ../data/objects
```

It is required that the Alephino server process „alephino(.exe)“ has unlimited access permissions to that directory.

2. Definition of an alias name for masking the physical directory from the web perspective. This is the base URL for digital objects in Alephino, used by the Alephino server for composition of a fully qualified URL based on the physical location of the respective object. The alias name is expected to point to the physical directory denoted by parameter *Objects* in parameter section (*Directories*).
File **etc/alephino.cfg**

```
(Templates)
ObjectAlias = http://alephino.exl.de/repository
```

3. Assignment of an alias name to the physical directory in the web server configuration.
File **vhost.alephino**

```
# Alephino OPAC
<VirtualHost *:80>
AddDefaultCharset UTF-8
...
Alias /download "/home/exlibris/alephino_50/temp"
Alias /pix "/home/exlibris/alephino_50/htdocs"
Alias /repository "/home/exlibris/alephino_50/data/objects"
...
<VirtualHost>
```

Enhanced configuration with Unix/Linux

With Alephino 5.0, Service Pack 3 a functional enhancement of the repository has been introduced. In addition to the capability of controlling the visibility of digital material Alephino now allows to also control the access effectively.

Up to now only the process of editing for data fields related to digital material could be controlled depending on the access permissions of the OPAC user. In fact the URL of digital material stored in the Alephino repository was always valid regardless of the user's permissions, meaning that everyone who knew about such a URL could get access even to restricted material via the OPAC.

Unix/Linux files systems have methods at disposal that allow linking to build references to files in a performant and flexible way. Unfortunately the Windows OS does not have comparable capabilities, and hence the configuration introduced in the below is not applicable there.

1. Definition of an alternative alias name for masking a physical directory from the web perspective. This is the base URL for digital objects in Alephino, used by the Alephino server for composition of a fully qualified URL in the OPAC view based on the physical location of the respective object. The alias name is expected to point to the physical directory denoted by parameter *Temp* in parameter section (*Directories*).

File **etc/alephino.cfg**

```
(Templates)
ObjectAlias = http://alephino.exl.de/repository
SymbolAlias = http://alephino.exl.de/download
```

If this parameter exists, Alephino will create virtual files referring to objects stored in the repository that, opposed to the ones addressed via *ObjectAlias*, are only valid temporarily. The references respectively URL's are consequently only valid during the OPAC session. Once a session had ended, be it the user closed it explicitly or because of time-out, access to the object is not longer possible.

2. The assignment of an alias name to a physical directory, according to 1) is already present in the default configuration of the Alephino OPAC web service:

File vhost.alephino

```
# Alephino OPAC
<VirtualHost *:80>
AddDefaultCharset UTF-8
...
Alias /download "/home/exlibris/alephino_50/temp"
Alias /pix "/home/exlibris/alephino_50/htdocs"
...
</VirtualHost>
```

3. Finally the OPAC user must be locked out from access to persistent object URL's that are still valid after all and accessible via virtual directory */repository*. These URL's should only be available for library staff accessing digital material via the Alephino GUI.

File vhost.alephino

```
# Alephino OPAC
<VirtualHost *:80>
...
# Block access to Digital Repository
<DirectoryMatch "objects/*">
  Order deny,allow
  Deny from all
</DirectoryMatch>

# Restricted access to Digital Repository
<Location /repository>
  Order deny,allow
  Deny from all
  Allow from 10.1.58.0/24
</Location>
...
</VirtualHost>
```

Protection against unwanted access to the OPAC site by web crawlers by implementation of a *robots.txt* requires declaration of a basic directory using directive *<DirectoryRoot>*. The drawback indeed is that physical pathnames starting from that directory can be used to get access to any files.

In order to prevent this for files stored in the digital repository, the above *<DirectoryMatch>* directive is used.

The *<Location>* directive is an easy way to explicitly enable access to digital objects for a certain range of IP addresses. It is assumed that these IP addresses are the ones of the workstation PC's used by library staff.