The Loans module

1. INTRODUCTION

The loans of specimens is an important part of the valorisation of the collection. These loans can be divided into

- scientific loans for research (from internal or external scientists) or
- for exhibition (from internal or external requests)

The "Loan" module already existed in DaRWIN but it was not user friendly and not used by the curators. It concerns only the scientific loans as the Exhibition loans use specific templates.

The setup of the DiSSCO infrastructure will change the loans procedures and the developments made in the framework of the NaturalHeritage project are one step in this process even if the alignment phase is not achieved and that additional work needs to be done.

2. METHODOLOGY

The loans module of Darwin creates a dynamic list of the specimens included in the loan contract. This means that the data displayed in the contract are updated each time you print the contract. This can be an advantage as it displays the real time information of the specimens but it is also a disadvantage as it doesn't store the original information when the contract was established.

It is thus necessary to freeze the data or to print a pdf version of the contract and to store it independently, to save the contract as it was when the loan was made. This PDF version can be

stored directly in DaRWIN as a multimedia file or in an external Content Management System as Plone or in a Cloud Storage or external drive with url access.

3. INFRASTRUCTURE

The PDF of the loan is generated by an external software, Pentaho (https://www.hitachivantara.com/en-us/products/data-management-analytics/pentaho.html). It's located on a different internal server than DaRWIN. Data are sent to the program which can generate various reports, in various designs. For the loans, a pdf is chosen but DaRWIN uses it also to generate excel reports. It's based on templates used by the program to present data.

Pentaho is now a commercial application but RBINS and RMCA use the Pentaho Community Project which is an open-source version of the software with a reduced set of features and capabilities.

4. RESULTS AND RECOMMENDATIONS

The loan module has been improved to allow the loan of parts of specimens and to be more user-friendly.

The procedure to create a loan is now as follow:

4.1 Selection of the specimens

From the results of a search, pin the specimens you want to loan

Figure 1. Specimens pinned in the results list

Go to the view "Pinned specimens" to check that your chosen specimens are there
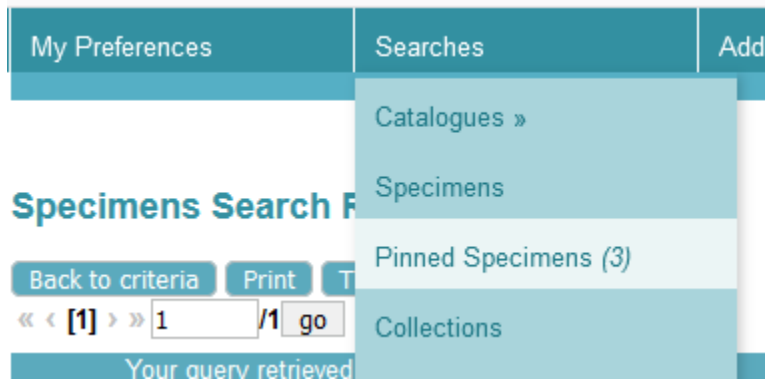

Figure 2. Menu to find pinned specimens.

4.2 Creation of a new loan

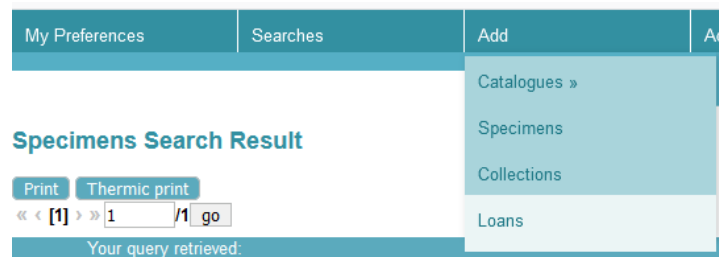- Choose Add – Loans in the menu. It will open the loan form.

Figure 3. Menu to create new loan

Figure 4. New empty loan form

- Choose a collection
- When you click in the field Code, the last value of a loan in that collection is shown and can be paste in the field when you click on "Paste to code of loan"

Figure 5. First section of the loan form

- Fill the date from and to fields
- Other fields in section "Loan" are filled in automatically but verify the data:

Figure 6. First section of the loan form, filled in.

- Enter people involved in the loan : sender, receiver and if necessary transporter. If the receiver has full info as institution and address, there are automatically filled in in the fields that appear when you choose the receiver and come back to the loan form.

Figure 7. People section of the loan form

- Loan status is New
- In properties, add some info about the way specimens will be sent. For example, choose sent_by_airmail or weight. You have to add a new property for each info you want to add.

Figure 8. Properties section of the loan form. Popup to edit property.

Figure 9. Screen to add property Sent by airmail.

Figure 10.Screen to add property Weight

Figure 11. List of properties in the loan form

- Other sections may be filled in if necessary (comments, related files, maintenances)
- When this first tab "Edit loan" is filled in and saved, go to the second tab to add the specimens :
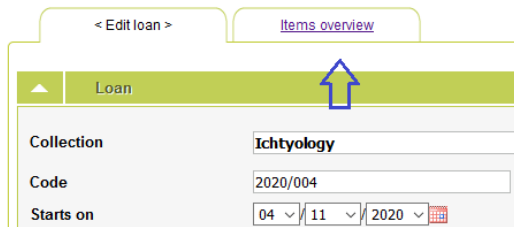
Figure 12. Second tab "Items overview"

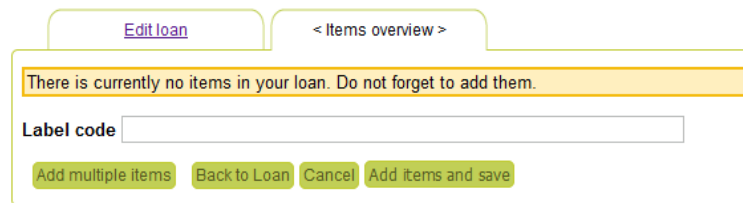Tab is empty when you open it for the first time.

Figure 13. Empty tab Items overview

- Click on the button "Add multiple items". A popup window will show you the specimens you pinned. Click on the button "Choose" to select some of them or on button "Choose all" to select all items.
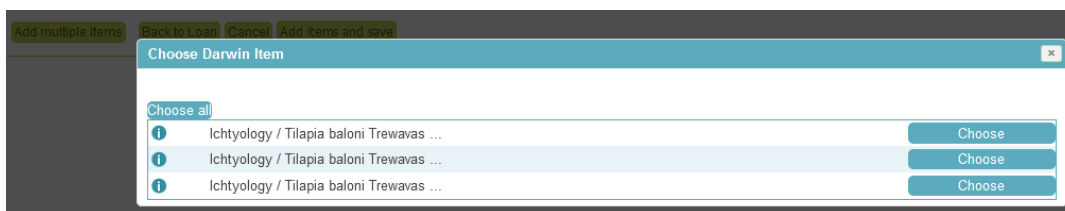

Figure 14. Popup with list of pinned specimens

The specimens are added to the tab "Items overview"

Figure 15. Specimens added to the loan form

- Click on button "Add items and save" to save the loan
- If there are multiple parts in a specimen or several specimens in the container, you can choose which part of the specimen or how many specimens you want to loan,
- after the list has been saved. Click on 'Export only part of package"

Figure 16. Button to specify part or amount of specimens

And in the table that appears, choose the parts or enter a number of specimens:

Figure 17. Fields to specify part or amount of specimens

Again, save by clicking on "Add items and save".

4.3 Create a PDF of the loan contract

When you're ready with the specimens, click on "Back to loan" and on the first tab, click on "Print loan" to generate a pdf that can be printed.
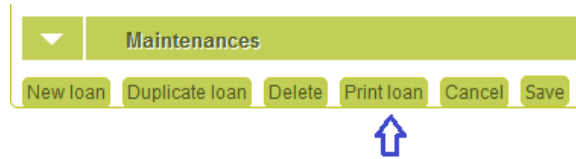

Figure 18. Button to print loan (generate pdf)

The generated pdf contains several sheets for internal administration, for the sender and the receiver. Here are the various sheets. Some data are automatically inserted, as email or phone of the receiver and sender.

Figure 19. Sheet 1 of loan pdf

The Royal Museum for Central Africa, Tervuren - Belgium

SHIPMENT INVOICE

Date:	04.11.2020
Ship to:	Semal P. (Mr)
Institution:	**Royal Belgian Institute of natural sciences**
Address:	rue Vautier, 29, 1000, Brussels
	Belgium
Phone:	
E-mail:	psemal@naturalsciences.be
Airbill number:	
Carrier:	
Nbr of pieces:	
Total weight:	
Dimensions:	

Full description of goods:

Scientific content, not restricted (Special provision A180 applies):
Content: research specimens / tissue samples (delete where applicable)
Preservative liquid: ethanol/glycerin (delete where applicable)
Taxa : *Gorilla beringei*; *Tilapia baloni Trewavas & Stewart,1975*
Content is packaged in exempted quantities (less than 0,5 liters) of liquid, and are of scientific value only.
The specimens are **non-hazardous, non-pathogenic, non-CITES** and **non-commercial**. They must be kept wrapped in cloth and plastic to stay preserved; compromising their packaging could damage them and ruin their scientific value.

Value for customs:	5 euros
Name and address of sender:	Parrent Miguël Department of African Zoology Royal Museum for Central Africa Leuvensesteenweg 13 B-3080 Tervuren Belgium
Reason for export:	Loan for scientific study This material remains property of RMCA

Declaration: I declare that the above information is true and correct to the best of my knowledge.

For and on behalf of the above-named institution:

Name (in print):	Parrent Miguël
Signature:	
Position in company:	Collection manager - Ichtyology

Figure 20. Sheet 2 of loan pdf

Figure 21. Sheet 3 of loan pdf

In the Details column of the list of specimens, you can find back which part of the specimen is sent.

Africa Africa
TERVUREN

KONINKLIJK MUSEUM
VOOR MIDDEN AFRIKA
MUSÉE ROYAL
DE L'AFRIQUE CENTRALE

BIOCOL
13 Leuvensesteenweg
3080 Tervuren
Belgium

LOAN N°   2020/004

To: Semal P. (Mr)

Shipping date: 2020-11-04
Sent by airmail
Handcarried by:
Registered: 2020-11-04
Insured:
Nr. of package: 1
Weight: 400 gr

Royal Belgian Institute of natural sciences
rue Vautier, 29, 1000, Brussels
Belgium

Date for return 2021-12-01

☐ NON-CITES specimen

☐ Loan at your request   ☐ Return of material sent for ID

☐ Loan for identification at our request ☐ Return of borrowed material

☐ In exchange   ☐ Gift

Contents

	Reg n°	Item names	Details	Remarks
1	1001	Gorilla beringei	Part nr 2:Name =p+cr+sq	physical, p+cr+sq
2	1998.007.P.0040-0041	Tilapia baloni Trewavas & Stewart,1975		physical, alc
3	1998.007.P.0042-0043	Tilapia baloni Trewavas & Stewart,1975		physical, alc
4	1998.007.P.0100-0102	Tilapia baloni Trewavas & Stewart,1975		physical, alc

Supervised by : Didier van den Spiegel   didier.van.den.spiegel@africamuseum.be
Contact :   Parrent Miguël, miguel.parrent@africamuseum.be

Sender's signature	**Received in good order Signature**

Loan n°. 2020/004 page 1

Figure 22. Sheet 4 of loan pdf.

Africa KONINKLIJK MUSEUM
VOOR MIDDEN AFRIKA
MUSÉE ROYAL
TERVUREN DE L'AFRIQUE CENTRALE

BIOCOL
13 Leuvensesteenweg
3080 Tervuren
Belgium

LOAN N°   2020/004

To: Semal P. (Mr)

Shipping date: 2020-11-04   Royal Belgian Institute of natural sciences
Sent by airmail
Handcarried by: rue Vautier, 29, 1000, Brussels
Registered: 2020-11-04
Insured: Belgium
Nr. of package: 1
Weight: 400 gr

	Date for return 2021-12-01

		☐ NON-CITES specimen	
☐ Loan at your request		☐ Return of material sent for ID	
☐ Loan for identification at our request		☐ Return of borrowed material	
☐ In exchange		☐ Gift	

Contents

	Reg n°	Item names	Details	Remarks
1	1001	Gorilla beringei	Part nr 2:Name =p+cr+sq	physical, p+cr+sq
2	1998.007.P.0040-0041	Tilapia baloni Trewavas & Stewart,1975		physical, alc
3	1998.007.P.0042-0043	Tilapia baloni Trewavas & Stewart,1975		physical, alc
4	1998.007.P.0100-0102	Tilapia baloni Trewavas & Stewart,1975		physical, alc

Supervised by : Didier van den Spiegel   didier.van.den.spiegel@africamuseum.be
Contact :   Parrent Miguël, miguel.parrent@africamuseum.be

Sender's signature	**Received in good order. Please sign this copy and send it back Signature**

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Figure 23. Sheet 5 of loan pdf

Design of the pdf and link to data is done in Pentaho which is installed on a different server than DaRWIN. A client is installed on the pc of the user and a connection to the repository of the server is done to modify the templates. In the repository, several templates can be used to create reports or create the pdf for loans. These can easily be modified by adding fields, sections, linking fields to data,...
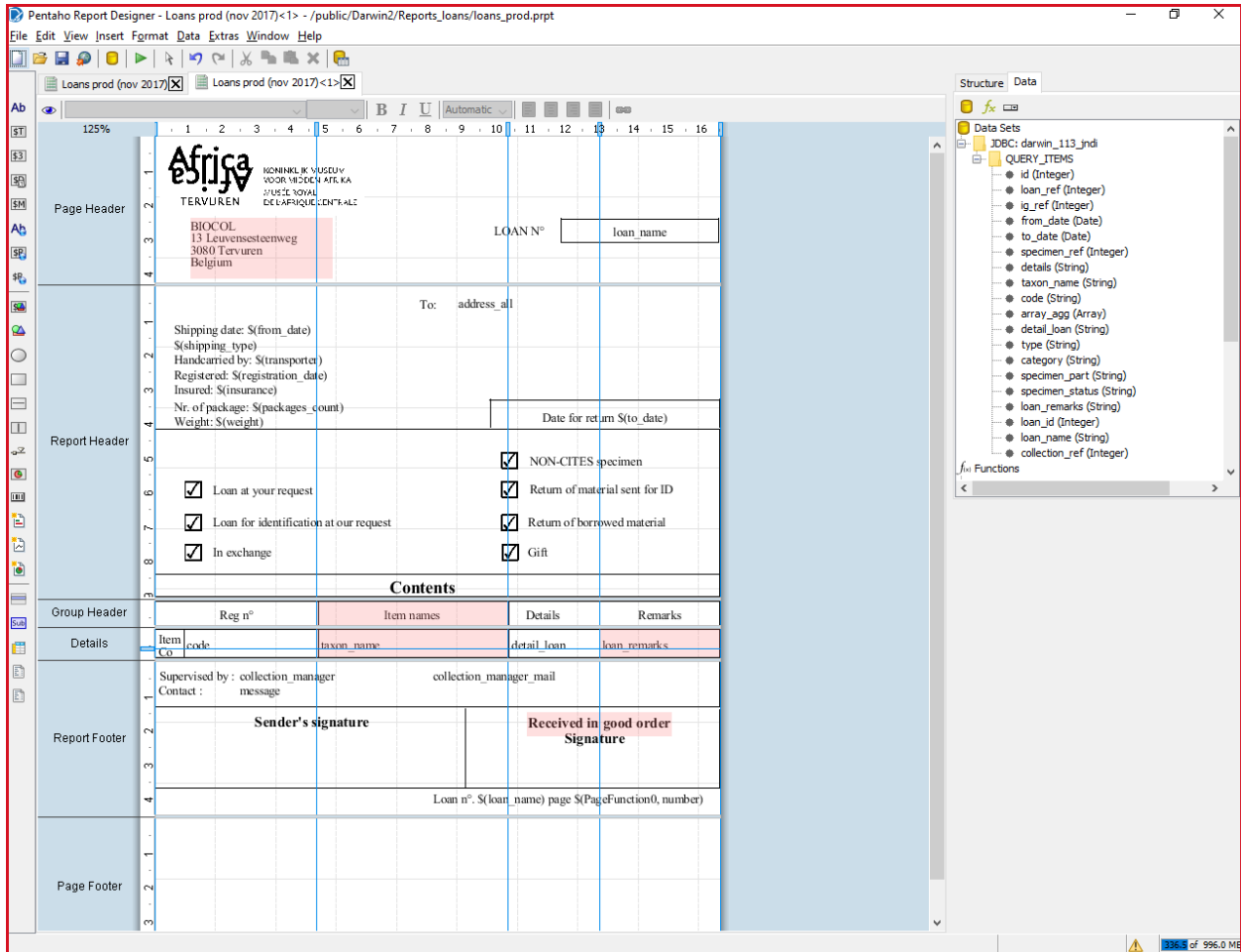

Figure 24. Designer interface of Pentaho

4.4 Add the PDF of the loan contract as a related file

The PDF file can then be added to the loan as a "related file" . It could be the PDF printed version or the scan of the contract with the signatures of the Institution and the third party.

Figure 25. New Darwin interface in NH Portal to add the PDF as a "Related file".

4.5 Recommandation

In order to align the processes between RBINS, RMCA and with future developments of DISSCO and ELVIS, a more flexible system should be used for the final step of the process,export of the data in a generic format, for example a csv file, that could be used in other programs to format the final report correctly and save it as pdf or to import these data in the future ELVIS platform.

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