

TheaterTool

Systems Design

Draft Version 0.4

Document Organisation

i Remarks

- Terms for toolbar, navigation tree and tabs are not finally fixed.
- At the moment German and English terms are still mixed; a choice button for integrating different languages (at least German/English) is planned.

ii Revision History

Version	Date	Type of change	Author
D0.1	18.01.2016	First edition	Elena Schilke
D0.2	27.01.2016	Change Repertoire-Tab, update relation diagram	Elena Schilke
D0.3	02.02.2016	Change tool bar and navigation tree, add descriptions for introduction and user interface design capture.	Elena Schilke
D0.4	05.02.2016	Update all mockups, relation diagram and db-structure.	Elena Schilke

TheaterTool	1
Document Organisation	2
i Remarks	2
ii Revision History	2
1 Introduction	5
2 User Interface Design	5
2.1 Toolbar	5
2.2 Navigation Tree	5
2.3 Tab View	6
2.3.1 „Repertoire“-Tab	7
2.3.2 „Quelle“-Tab	8
2.3.3 „Incipits“-Tab	8
2.3.4 „Facsimile“-Tab	9
2.3.5 „Spielpläne“-Tab	10
2.3.6 „Aufführungen“-Tab	11
2.3.7 „Personen“-Tab	12
2.3.8 „Karten & Abos“-Tab	13
2.3.9 „Linksammlung“-Tab	14
2.3.10 „Theaterjournal“-Tab	15
2.3.11 „Regiebücher“- and „Rollen- & Kostümbücher“-Tabs	16
2.3.12 „Ausgaben“-Tab	17
2.3.13 „Gagenbücher“-Tab	18
2.3.14 „Suchergebnisse“-Tab	19
2.3.15 „Erweiterte Suche“-Tab	20
3 Data Design	20
3.1 Relation-Diagram	20
3.2 DB-Structure	22
3.3 Property-Files	23
4 Process Design	23
4.1 Get Navigation Data	23
4.2 Get Navigation Data Details	24
4.3 Get Repertoire	24
4.4 Get Work File	25
4.5 Get Source File	26

4.6 Get RISM File	26
4.7 Get Person File	27

1 Introduction

The tool is designed for visualizing, loading and searching archived information about any theatre for a defined time period. The Informations are encoded in the formats of the Text Encoding Initiative and Music Encoding Initiative and saved in the XML-Database. Database structure and time period can be defined in the property files.

2 User Interface Design

The User interface contains three parts: toolbar, navigation tree with search function and tabview.

2.1 Toolbar

Revision History

Version	Date	Type of change	Aithor
D0.1	18.06.2015	first version	Elena Schilke
D0.3	02.02.2016	change menubar	Elena Schilke

Layout

Home	Detmolder Hoftheater 1825-1875
----------------------	--------------------------------

Action Paths and Results

Home-Icon selection -> get to „Detmolder Hoftheater“ home page

2.2 Navigation Tree

The Navigation Tree contains two subtrees preliminary called: „Öffentlichkeit“ and „Theaterleben“ and a group with search functions. The „Öffentlichkeit“ subtree contains information about the theater and its public relations work. The „Theaterleben“ tab contains any information about the inside organization of the theater.

Revision History

Version	Date	Type of change	Aithor
D0.1	18.01.2016	first version	Elena Schilke
D0.3	02.02.2016	add search-group	Elena Schilke

Layout

The screenshot shows a sidebar menu for the Detmolder Hoftheater website. The menu is organized into several sections, each with a header and a list of items. The 'Repertoire' section is highlighted in yellow. The 'Suche' (Search) section includes a text input field, an 'Ok' button, and a link to 'Erweiterte Suche' (Advanced Search).

- Öffentlichkeit**
 - ☐ **Repertoire**
 - ☐ Auber: Des Teufels Anteil
 - ☐ Isouard: Aschenbrödel
 - ☐ v. Winter: Der Bettelstudent
 - ☐ Programm
- Personen**
- Karten & Abos**
- ☐ Presse
- Theaterleben**
 - ☐ Theaterorganisation
 - ☐ Finanzwesen
- Suche**
 -
 - [Erweiterte Suche](#)

Action Paths and Results

Double click for end-node, repertoire-node or source node —> a new tab will be opened if no tab for this item was opened.

ok-button is pressed in search-field -> a new tab is opened with search results.

„Erweiterte Suche“ selection -> a new tab is opened with search options.

Validation and Constraints

Ok-button is enabled if „Suche“-field is not empty and at last three chars are entered.

Data sources and targets

Sources	getNavigationData.xql, getNavigationDataDetails.xql
Targets	-

2.3 Tab View

Revision History

Version	Date	Type of change	Aithor
D0.1	18.01.2016	first version	Elena Schilke
D0.2	27.01.2016	change Repertoire- tab	Elena Schilke
D0.4	05.02.2016	update all mockups	Elena Schilke

Execution

For each end-node, repertoire-node, work-node, source-node, search results and „Erweiterte Suche“ a new closable tab will be opened.

2.3.1 „Repertoire“-Tab

Overview of the entire repertoire for the theater in a specified time span.

Layout

Widgets description

„Werk“-group contains tree sections: „Personen“, „Spielpläne“ and „Werkbeschreibung“.

„Spielpläne“ and „Werkbeschreibung“ tabs contain a table and tabs for showing the text and the XML file.

„Quelle“-group contains two sections: „Personen“ and „Werkbeschreibung“.

„RISM“-group contains tabs for showing the text and the XML file.

Action Paths and Results

Select a row -> Werk-, Source- or RISM-Group will be opened.

Select icon in Incipits- or Details-Row: open a new tab for showing incipits for the selected work, or showing details and facsimiles for the source.

Double click on icon in XML-row -> a dialog is opened for saving the XML file.

Double click on icon in Incipits-row -> a new Incipit tab will be opened to show all incipits of this work.

Double click on icon in Details-row in repertoire tab in navigation tree-> a new tab will be opened with the source description and a link for showing details in facsimiles with the Edirom Online.

Double click on icon in Details-row in „Personen“ or „Spielpläne“ table-> a new tab with detailed information will be opened.

Data sources and targets

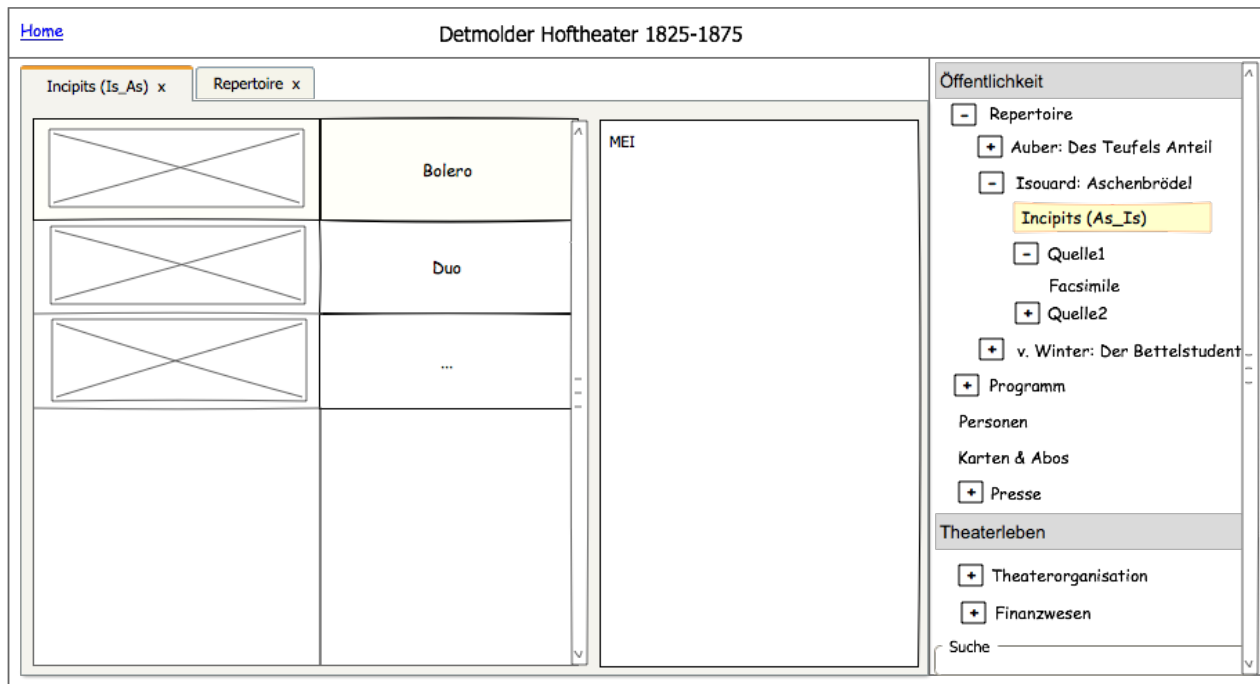
Sources	getRepertoire.xql, getWorkFile.xql, getSourceFile.xql, getRISMFile.xql, getPersonFile.xql, getPlan.xql, getXML.xql, getIncipits.xql, getPersonDetails.xql, getPlanDetails.xql
Targets	-

2.3.2 „Quelle“-Tab

Overview for selected source will be opened.

2.3.3 „Incipits“-Tab

Layout



Widgets description

First table column: incipit image of composition.
Second table column: name of composition

Action Paths and Results

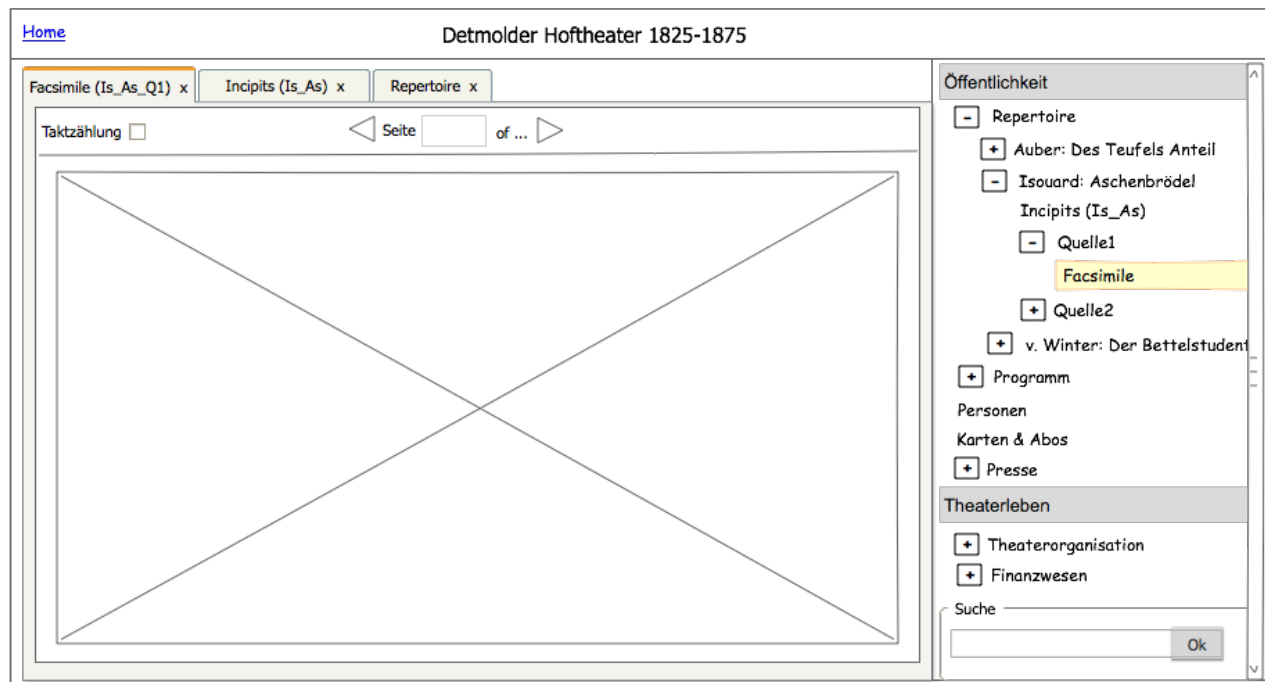
Select a row -> MEI-file will be shown for the encoding of this incipit.
Double click for image -> open entire incipit in a new window.

Data sources and targets

Sources	
Targets	-

2.3.4 „Facsimile“-Tab

Layout



Widgets description

„Seite“-field: show current loaded page.

Action Paths and Results

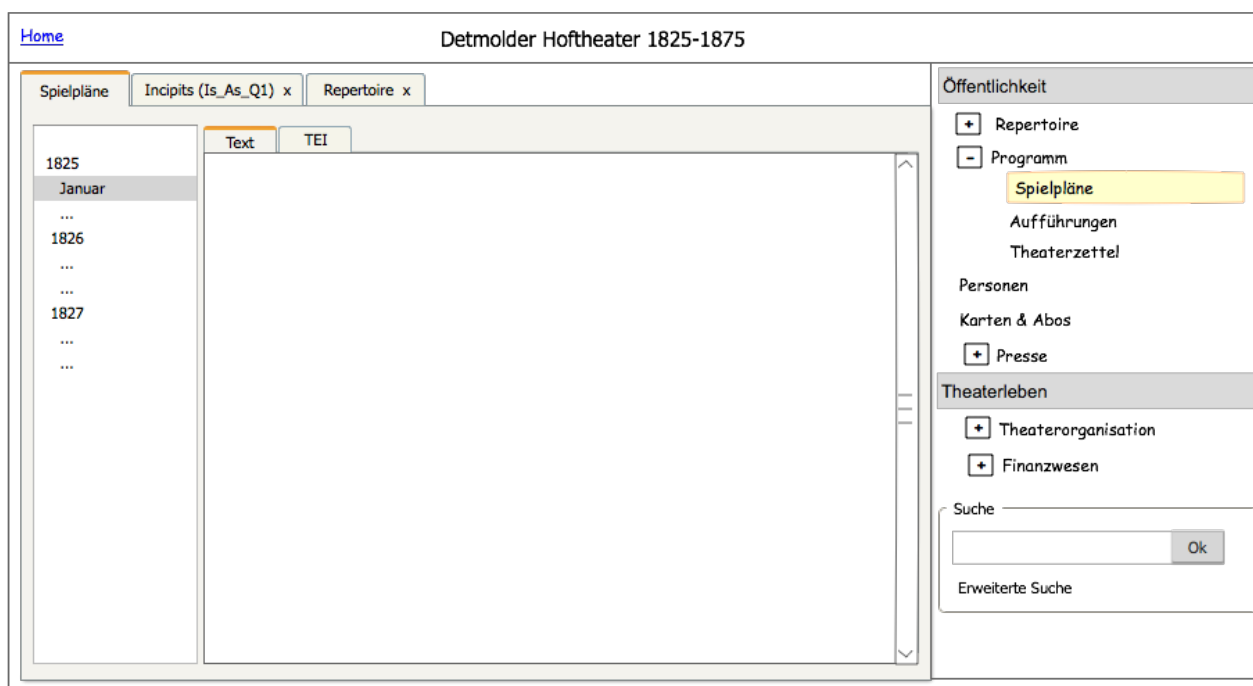
select/deselect checkbox -> enable/disable measure numbers.
select one of arrows -> go to prev. or next page.

Data sources and targets

Sources	
Targets	-

2.3.5 „Spielpläne“-Tab

Layout



Widgets description

tree: defined years with months.

Action Paths and Results

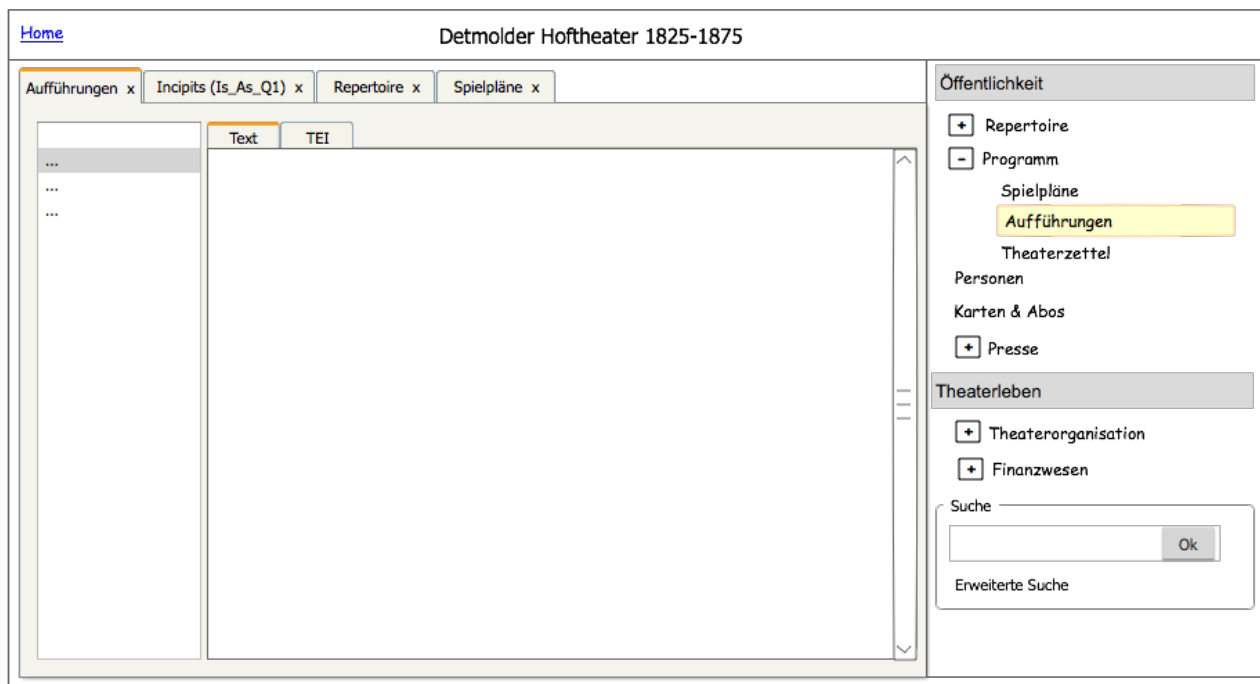
select a month -> show summary for selected month in text format.
select TEI-Tab -> TEI-file will be shown for the selected month.

Data sources and targets

Sources	
Targets	-

2.3.6 „Aufführungen“-Tab

Layout



Widgets description

list: show all items.

Action Paths and Results

select an item -> show summary in text format.

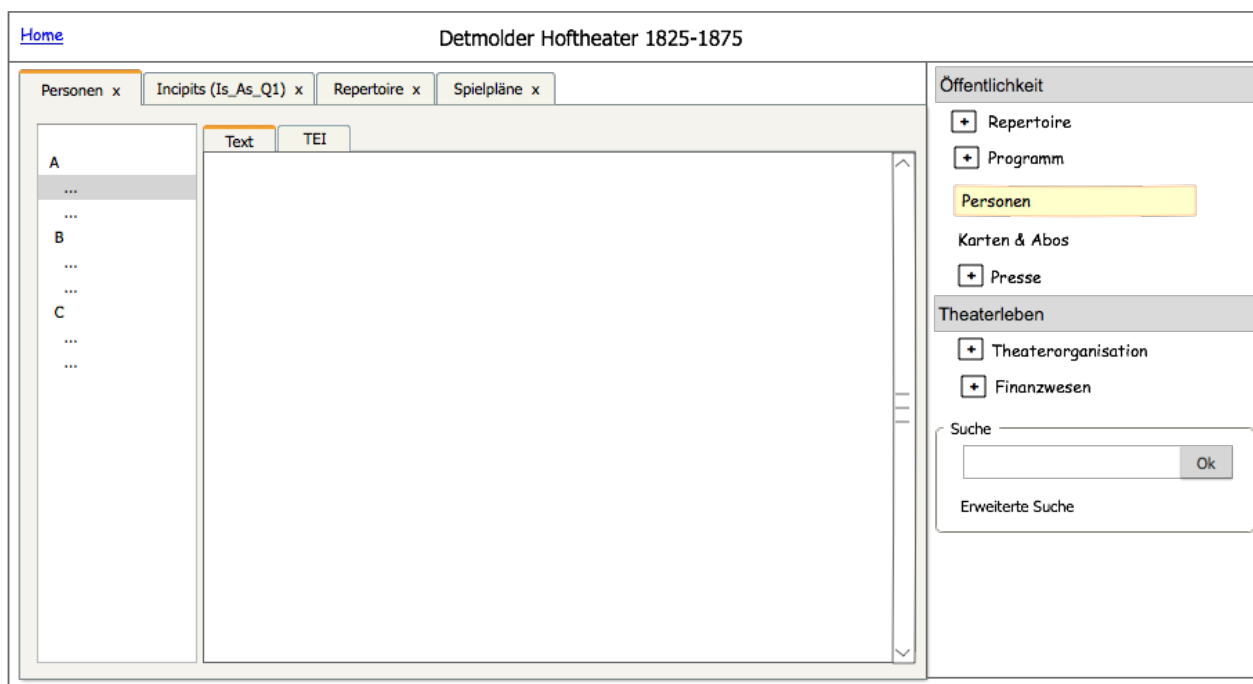
select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.7 „Personen“-Tab

Layout



Widgets description

tree: show all persons sorted alphabetical.

Action Paths and Results

select an item -> show summary in text format.

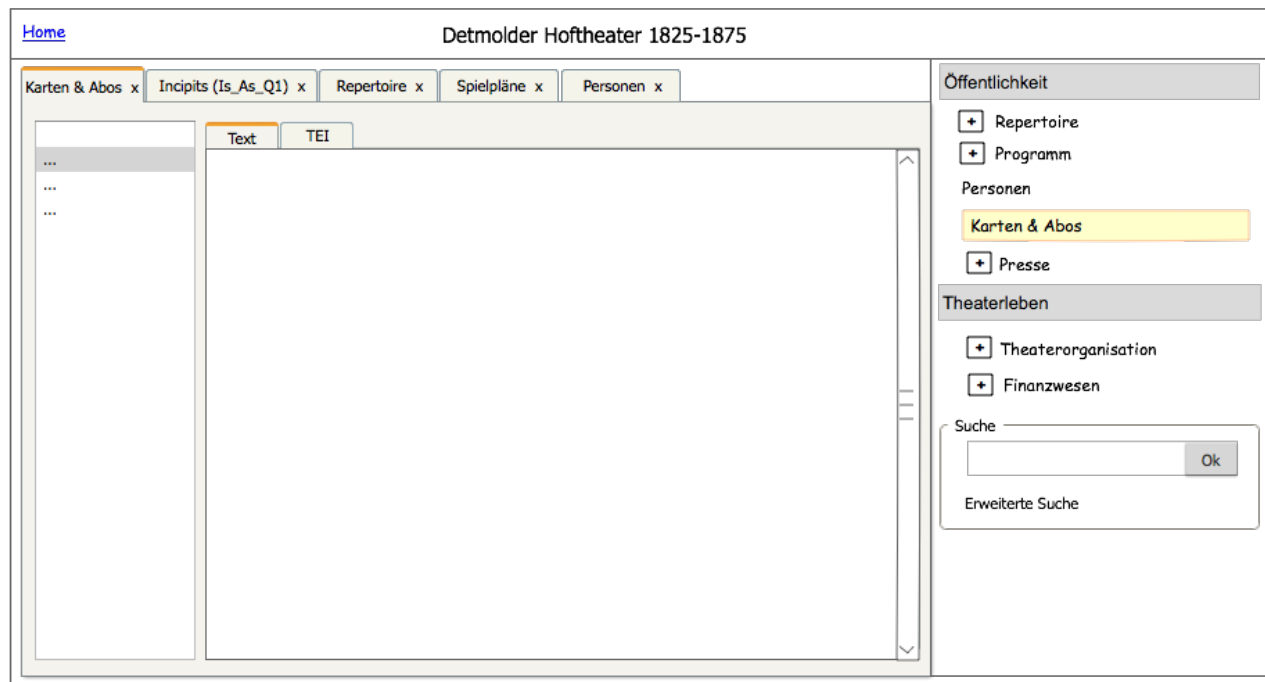
select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.8 „Karten & Abos“-Tab

Layout



Widgets description

list: show all items.

Action Paths and Results

select an item -> show summary in text format.

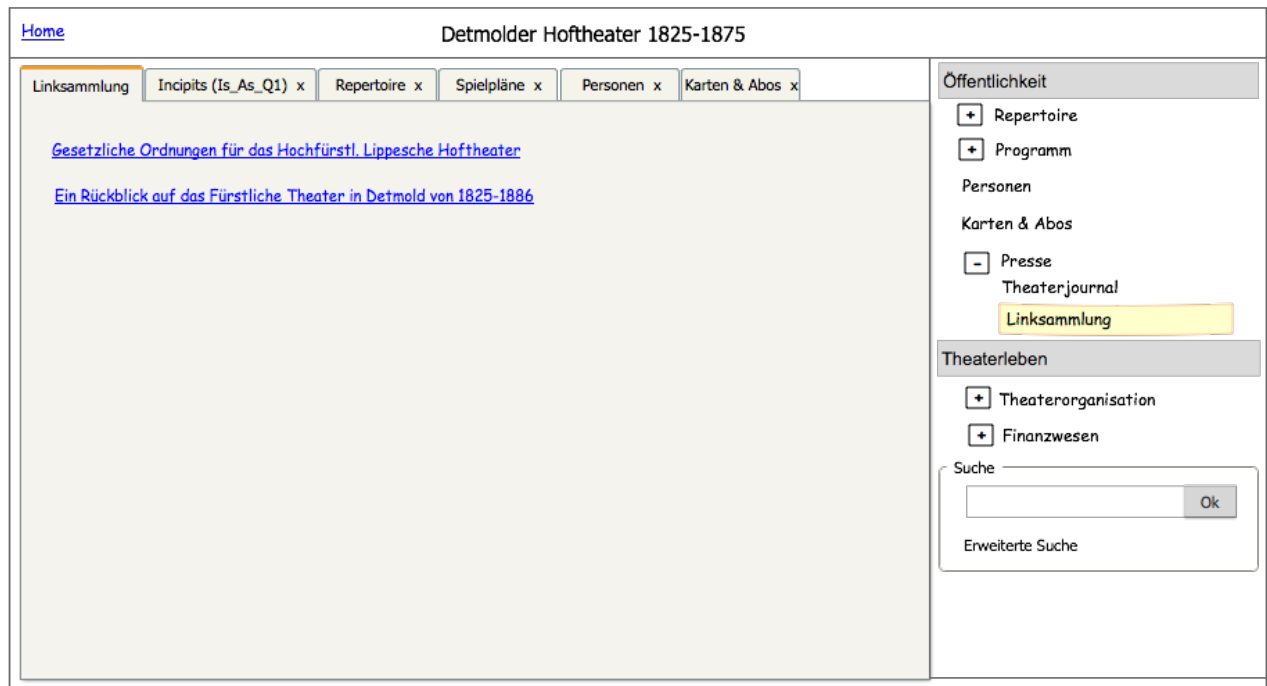
select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.9 „Linksammlung“-Tab

Layout



Action Paths and Results

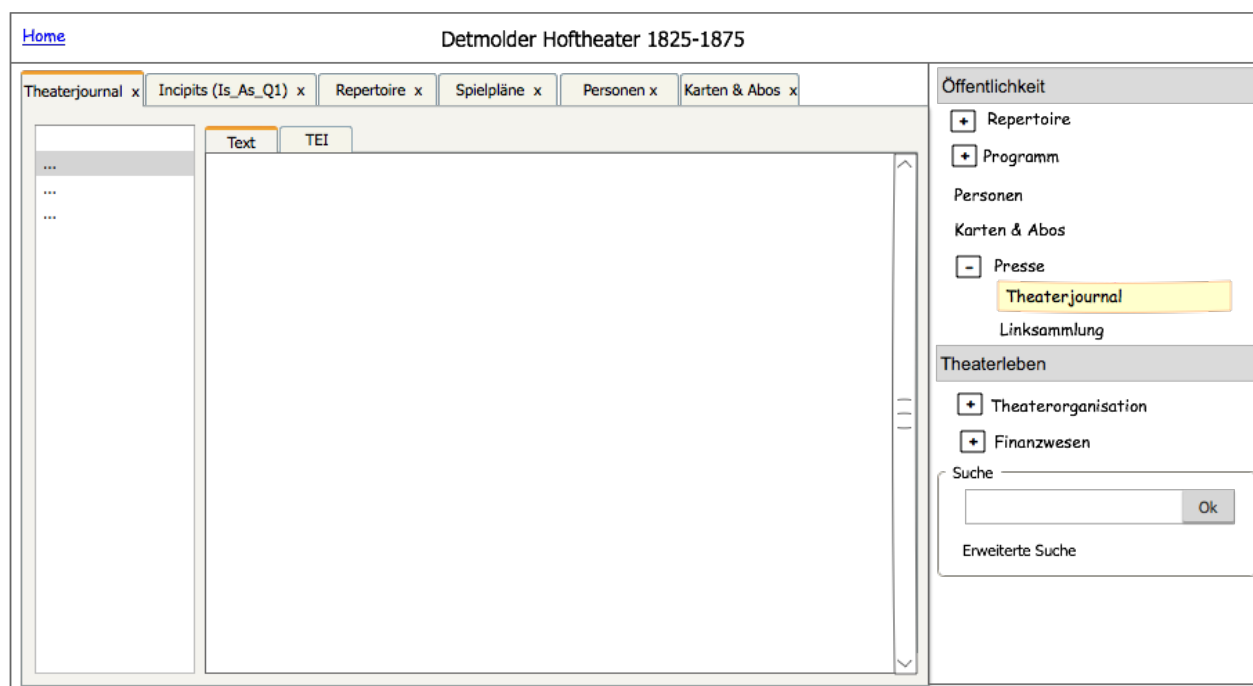
select a link -> a new tab in the web browser will be opened with the selected link.

Data sources and targets

Sources	
Targets	-

2.3.10 „Theaterjournal“-Tab

Layout



Widgets description

list: show all items.

Action Paths and Results

select an item -> show summary in text format.

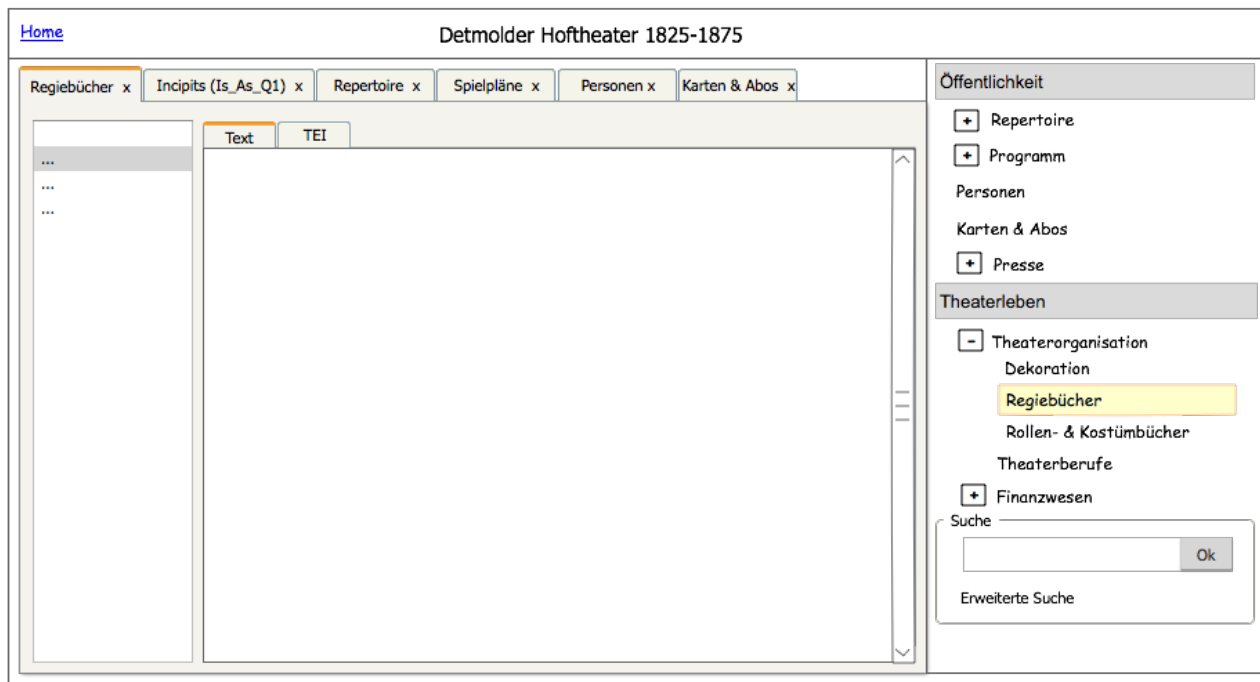
select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.11 „Regiebücher“- and „Rollen- & Kostümbücher“-Tabs

Layout



Widgets description

list: show all items.

Action Paths and Results

select an item -> show summary in text format.

select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.12 „Ausgaben“-Tab

Layout

Widgets description

combobox: contains defined years.

tree: show all items sorted for „Auszüge“, „Belege“, „Gagen“, „Sonstige“.

Action Paths and Results

select a year and select an item -> show summary in text format.

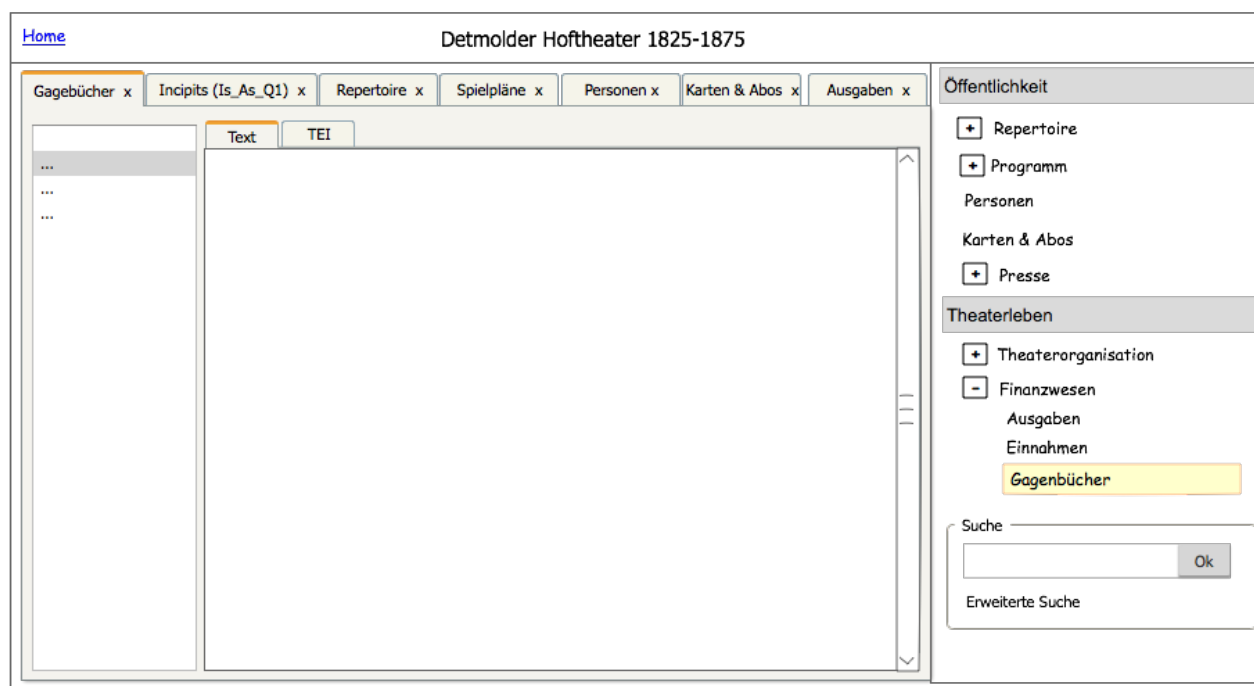
select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.13 „Gagenbücher“-Tab

Layout



Widgets description

list: show all items.

Action Paths and Results

select an item -> show summary in text format.

select TEI-Tab -> TEI-file will be shown for the selected item.

Data sources and targets

Sources	
Targets	-

2.3.14 „Suchergebnisse“-Tab

Layout

Widgets description

Action Paths and Results

Data sources and targets

Sources	
Targets	

2.3.15 „Erweiterte Suche“-Tab

Layout

Widgets description

Action Paths and Results

Data sources and targets

Sources	
Targets	

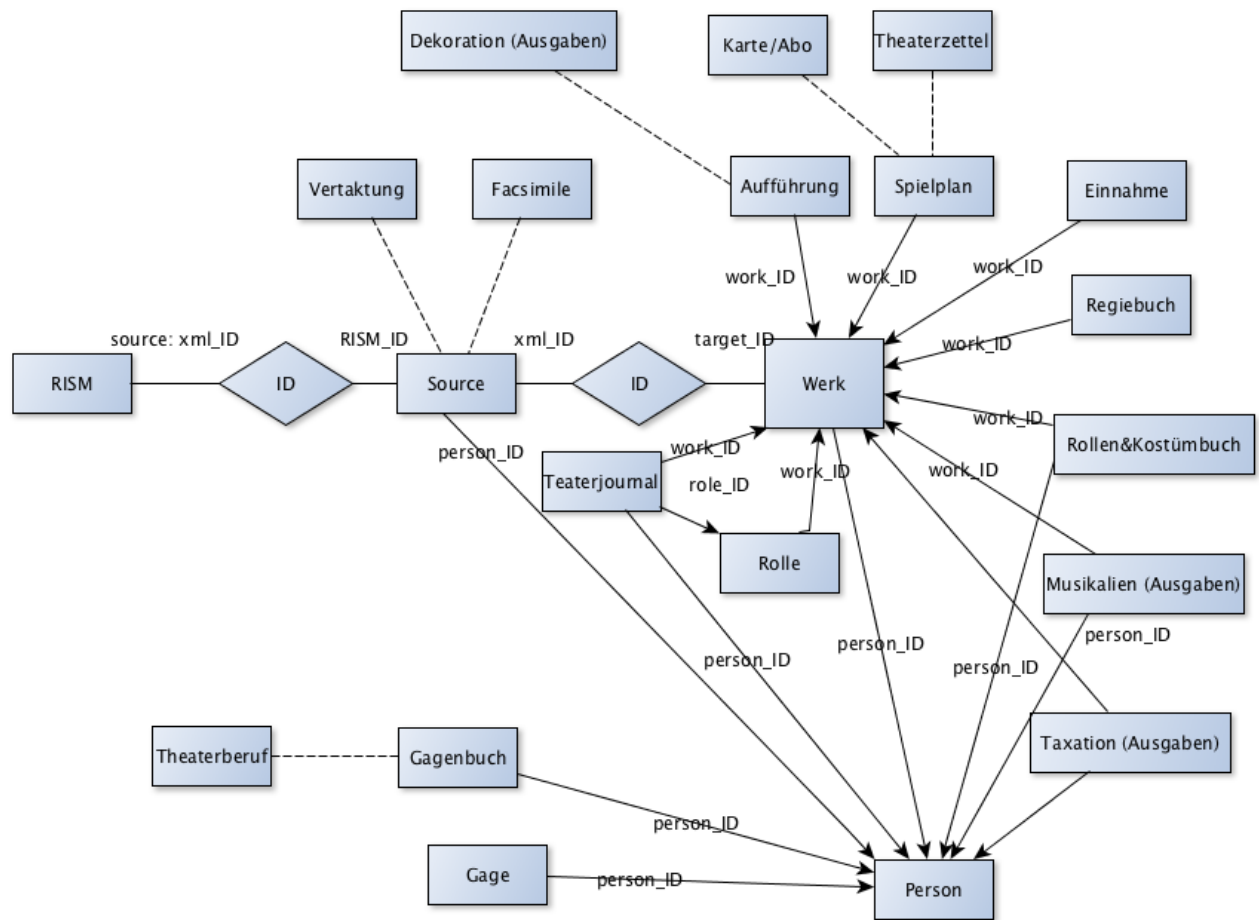
3 Data Design

Revision History

Version	Date	Type of change	Aithor
D0.1	21.01.2016	first version	Elena Schilke
D0.4	05.02.2016	update relation diagram and db-structure	Elena Schilke

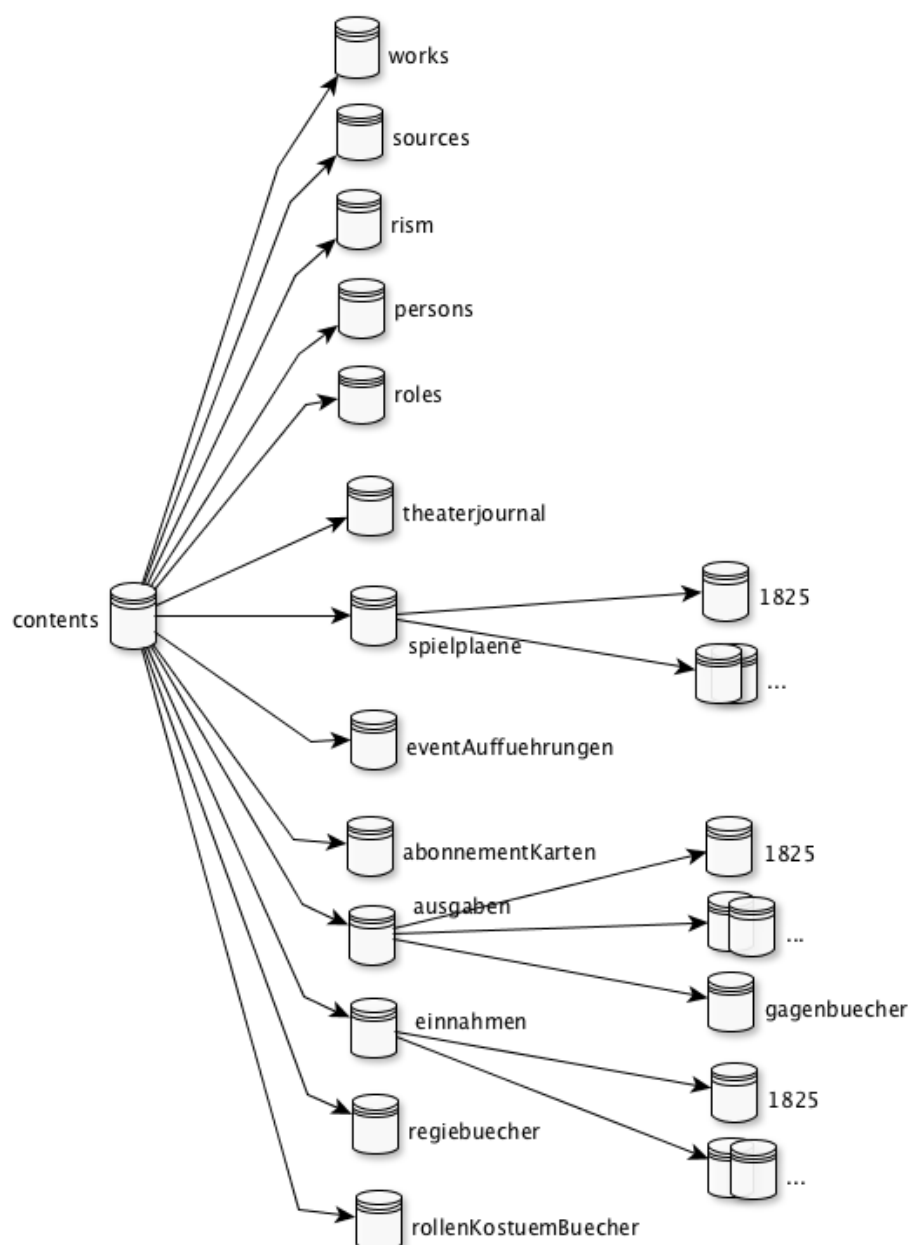
3.1 Relation-Diagram

The diagram shows relations between entities in the database. The entities are „tables“ in the XML-DB and relations/references between tables are entity_id.



3.2 DB-Structure

The DB-Structure should ensure an efficient search with entity_id.



3.3 Property-Files

For show information data for any theatre, that saved in a XML-DB, with GUI two property files will be defined based on XML standards.

DB-Structure-File

Defined db structure is described in contents/structure.xml

```
<prefs>
  <entries>
    <entry key="works" value="contents/works"/>
    <entry key="sources" value="contents/sources"/>
    ...
  </entries>
</prefs>
```

Works-File

Extended works and period time are described in contents/extended.xml

```
<prefs>
  <entries>
    <entry key="H020149" value="Isouard:Aschenbrödel"/>
    ...
  </entries>
</prefs>
```

4 Process Design

Revision History

Version	Date	Type of change	Aithor
D0.1	22.01.2016	first version	Elena Schilke

4.1 Get Navigation Data

Get extended works data from extended.xml in eXist-db.

Service Name:

getNavigationData.xql

Input Parameter

Name	Type	Description	Mandatory/Optional
------	------	-------------	--------------------

Output Data

list of works:

Name	Type	Mandatory/Optional	Description
name	Array({string, string})	M	work value and key

4.2 Get Navigation Data Details

Get extended works data from extended.xml in eXist-db.

Service Name:

getNavigationDataDetails.xql

Input Parameter

Name	Type	Mandatory/Optional	Description
WorkID	char	M	

Output Data

list of extended works:

Name	Type	Mandatory/Optional	Description
composerName	string	M	name of composer
workName	Array({string, string})	M	work name and id
sources	string	M	name of copyist
workID	char	M	

4.3 Get Repertoire

Get complete repertoire from eXist-db.

Service Name:

getRepertoire.xql

Input Parameter

Name	Type	Description	Mandatory/Optional
------	------	-------------	--------------------

Output Data

list of works:

Name	Type	Mandatory/Optional	Description
authorNames	Array({string, string}, {string, string})	M	name and id of composer and librettist
workName	string	M	
sources	list	M	Information for source

list of sources:

Name	Type	Mandatory/Optional	Description
sourceTitel	Array({string, string})	M	name and id of source
RISM_ID	char	M	Identification for RISM online catalog
persons	list	O	information for persons

list of persons:

Name	Type	Mandatory/Optional	Description
persName	Array({string, string})	M id is optional	name and id of person

4.4 Get Work File

Get work TEI-file from eXist-db.

Service Name:

getWorkFile.xql

Input Parameter

Name	Type	Mandatory/Optional	Description
WorkID	char	M	

Output Data

Name	Type	Mandatory/Optional	Description
work	TEI-file	M	

4.5 Get Source File

Get source TEI-file from eXist-db.

Service Name:

getSourceFile.xql

Input Parameter

Name	Type	Mandatory/Optional	Description
SourceID	char	M	

Output Data

Name	Type	Mandatory/Optional	Description
source	TEI-file	M	

4.6 Get RISM File

Get RISM TEI-file from eXist-db.

Service Name:

getRISMFile.xql

Input Parameter

Name	Type	Mandatory/Optional	Description
RismID	char	M	

Output Data

Name	Type	Mandatory/Optional	Description
rism	TEI-file	M	

4.7 Get Person File

Get person TEI-file from eXist-db.

Service Name:

getPersonFile.xql

Input Parameter

Name	Type	Mandatory/Optional	Description
personID	char	M	

Output Data

Name	Type	Mandatory/Optional	Description
person	TEI-file	M	