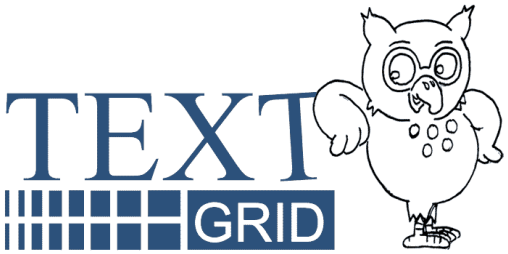
TEXT
GRID

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TextGrid 1.0

User Manual

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Contents

1 Getting Started **1**
- 1.1 Download . . . 1
- 1.2 Account . . . 1
- 1.3 Welcome Screen . . . 1

2 User Interface **5**
- 2.1 Bars . . . 5
  - 2.1.1 Menu Bar . . . 5
  - 2.1.2 Toolbar . . . 8
  - 2.1.3 Perspective Bar . . . 8
  - 2.1.4 Status Bar . . . 9
- 2.2 Views . . . 9
- 2.3 Perspectives and Editors . . . 10
- 2.4 Selection and Context Menu . . . 10
- 2.5 Shortcuts . . . 10

3 Project & User Management **13**
- 3.1 Open Project & User Management . . . 13
- 3.2 Project & User Management Perspective . . . 13
- 3.3 Navigator View . . . 13
- 3.4 User Management View . . . 14
- 3.5 Interaction with Other Components . . . 15

4 Navigator **17**
- 4.1 Open the Navigator . . . 17
- 4.2 Navigator View . . . 18
  - 4.2.1 Menu Bar . . . 18
  - 4.2.2 The Toolbar of the Navigator View . . . 18
  - 4.2.3 Context Menu . . . 19
- 4.3 Using the Navigator . . . 20
  - 4.3.1 Create New Projects . . . 20
  - 4.3.2 Create New Objects . . . 20
- 4.4 Interaction with Other Components . . . 21
  - 4.4.1 Navigator and Project & User Management . . . 21
  - 4.4.2 Navigator and Metadata Editor . . . 21
  - 4.4.3 Navigator and Aggregation Composer . . . 22

5 TextGrid Objects **23**
5.1 Objects . . . 23
5.2 Aggregations . . . 24
5.3 Items . . . 24
5.4 Editions . . . 25
5.5 Works . . . 25
5.6 Collections . . . 25

6 Import **27**
6.1 Open the Import Tool . . . 27
6.2 Import Tool . . . 27

7 Export **29**
7.1 Open the Export Dialog . . . 29
7.2 Export View . . . 29

8 Revisions **31**
8.1 Using Revisions . . . 31
8.2 Interaction with Other Components . . . 31

9 Metadata Editor **33**
9.1 Open the Metadata Editor . . . 33
9.2 Metadata Editor View . . . 33
9.2.1 Generic Metadata . . . 35
9.2.2 Item-specific Metadata . . . 35
9.2.3 Edition specific Metadata . . . 37
9.2.4 Work-specific Metadata . . . 39
9.2.5 Collection-specific Metadata . . . 40
9.3 Using the Metadata Editor . . . 41
9.4 Interaction with Other Components . . . 41

10 Metadata Template Editor **43**
10.1 Open the Metadata Template Editor . . . 43
10.2 Metadata Template Editor View . . . 43
10.3 Interaction with Other Components . . . 44

11 Unicode Character Table **45**
11.1 Open the Unicode Character Table . . . 45
11.2 Unicode Character Table View . . . 45
11.2.1 The Toolbar of the Unicode Character Table View . . . 45
11.2.2 The Table Area . . . 48
11.2.3 The Information Field . . . 48
11.3 Using the Unicode Character Table . . . 48
11.4 Interaction with Other Components . . . 49

12 XML Editor **51**
12.1 Open the XML-Editor . . . 51
12.2 XML Editor Perspective . . . 51
12.2.1 Features of the XML Editor . . . 52
12.2.2 Menu Bar . . . 54
12.2.3 Toolbar . . . 56
12.2.4 Status Bar . . . 57
12.2.5 Shortcuts . . . 57
12.3 Editor Field . . . 58
12.3.1 Design View . . . 58
12.3.2 Source View . . . 62
12.3.3 WYSIWYM View . . . 67
12.4 Outline View . . . 69
12.4.1 Title Bar . . . 69
12.4.2 Context Menu . . . 70
12.5 Properties View . . . 70
12.5.1 Title Bar . . . 71
12.5.2 Context Menu . . . 72
12.6 Using the XML Editor . . . 72
12.6.1 Open XML documents . . . 72
12.6.2 Create XML documents . . . 73
12.6.3 Associate an XML Schema and Validating XML Files . . . 73
12.7 Interaction with Other Components . . . 74
12.7.1 XML Editor and Navigator . . . 74
12.7.2 XML Editor and Metadata Editor . . . 74
12.7.3 XML Editor and Unicode Character Table . . . 74
12.7.4 XML Editor and Text-Image-Link Editor . . . 74

13 Text-Image-Link Editor **75**
13.1 Open the Text-Image-Link Editor . . . 75
13.2 Text-Image-Link Editor Perspective . . . 75
13.2.1 Menu Bar . . . 77
13.2.2 Toolbar . . . 77
13.3 Image View . . . 77
13.3.1 Features of the Image View . . . 77
13.3.2 Menu Bar . . . 81
13.3.3 Title Bar . . . 81
13.3.4 Status Bar . . . 82
13.3.5 Shortcuts . . . 83
13.3.6 Context Menu . . . 83
13.4 XML Editor View . . . 85
13.5 Thumb View . . . 85
13.6 Toolkit . . . 85

13.7 Using the Text-Image-Link Editor . . . 87
13.7.1 Open Images and Texts . . . 87
13.7.2 Select Workspace . . . 87
13.7.3 Create Links . . . 87
13.7.4 Correct and Delete Links . . . 88
13.8 Interaction with Other components . . . 89
13.8.1 The Text-Image-Link Editor and the Navigator . . . 89
13.8.2 The Text-Image-Link Editor and the Metadata Editor . . . 89
13.8.3 The Text-Image-Link Editor and the XML Editor . . . 89

14 Dictionary Search **91**
14.1 Open the Dictionary Search . . . 91
14.2 Dictionary Search Perspective . . . 92
14.3 Dictionary Search Mask . . . 93
14.4 Dictionary Search Results View . . . 93
14.5 Dictionary Grid View . . . 93
14.6 Interaction with Other Components . . . 94

15 Aggregation Composer **95**
15.1 Open the Aggregation Composer . . . 95
15.2 Aggregation Composer View . . . 96
15.2.1 Toolbar of the Aggregation Composer View . . . 96
15.2.2 Context Menu . . . 97
15.3 Using the Aggregation Composer . . . 97
15.4 Interaction with Other Components . . . 98

16 Publish **99**
16.1 Open the Publish View . . . 99
16.2 Publish View . . . 99
16.3 Using TextGrid Publish . . . 100
16.4 Interaction with Other Components . . . 101

17 Search **103**
17.1 Open the Search . . . 103
17.2 Search Perspective . . . 103
17.3 Search View . . . 103
17.3.1 Simple Search . . . 104
17.3.2 Advanced Search . . . 105
17.4 Search Results View . . . 106

18 Help **107**
18.1 Static Help . . . 107
18.1.1 Help Contents . . . 107
18.1.2 Cheat Sheet . . . 108

18.1.3 Dynamic Help 108
18.1.4 Keyword Search 109
18.2 Dynamic Help 110

List of Figures

1.1 The Welcome Screen . . . 2
1.2 Login Screen . . . 2
1.3 Userinformation Wizard . . . 3

2.1 Exemplary User Interface with Empty Search . . . 6
2.2 Menu Bar and Toolbar in Detail . . . 6

3.1 Project and User Management . . . 14

4.1 Navigator View . . . 17
4.2 Create a Project . . . 20
4.3 Create an Object . . . 21

6.1 Import . . . 28

9.1 Metadata Editor View . . . 34
9.2 Metadata Schema . . . 36

10.1 Metadata Template Editor . . . 44

11.1 Unicode Character Table . . . 46
11.2 Custom Charset Editor . . . 47

12.1 Associate a Schema . . . 53
12.2 Design View . . . 59
12.3 Source View . . . 63
12.4 As-you-type Validation . . . 64
12.5 Hover Help . . . 65
12.6 WYSISYM View . . . 68
12.7 Block and Inline Markers . . . 69
12.8 Outline View . . . 70
12.9 Properties View . . . 71

13.1 Text-Image-Link Editor Perspective . . . 76
13.2 Docking Line Settings . . . 79
13.3 Set Rotation Angle . . . 80
13.4 Layer Editor . . . 81
13.5 Working with Multiple Layers . . . 82

13.6 Thumb View 85
13.7 Toolkit 86
13.8 Linked Text and Image 88

14.1 Dictionary Search Perspective 92

15.1 Aggregation Composer 96
15.2 Refer to Revision 97

16.1 Publish 100

17.1 Search Perspective 104

1 Getting Started

1.1 Download

The current version of the TextGridLab is available as a free download from

`www.textgrid.de`

for various operating systems. Before you can use the software, you must install a Java Runtime Environment (JRE) version 6 or higher. You can download an appropriate version from

`http://java.com/download`

1.2 Account

A lot of functionality including read-only access to published information and working with local files is available without logging in. To be able to store your own data in the repository, however, you need to identify yourself and login. If your institution participates in the DFN Shibboleth federation, you may simply use your institutional login. Alternatively, you can request a specific TextGrid account from our web site

`www.textgrid.de`

1.3 Welcome Screen

After installing the TextGrid Laboratory you can start the software. The Welcome Screen (figure 1.1 on the following page) enables you to do different things:

- Login
- Start a tool: Search (→ chapter 17) and Dictionary Search (→ chapter 14) are available without login.

Figure 1.1: The Welcome Screen

Figure 1.2: Login Screen

Figure 1.3: Userinformation Wizard

If you click "Login", a new window opens (figure 1.2 on the preceding page). Use your login and password (→ section 1.2) or choose the login via DFN-AAI. If you have forgotten your password, use the button "Forgot Password?" further down. After your first login you are asked to complete your user attributes and to accept the TextGrid Terms of Use (figure 1.3). If you set the option "searchable", other TextGrid users can find you by your name, institution or e-mail-address. The fields with an * are mandatory. You can change your attributes at any time via "Help > Authentication" (→ section 2.1.1).

After a successful login the Welcome Screen appears again, now with your TextGrid login shown in the center of it. After this you can choose one of the tools presented on the screen:

 Usermanagement (→ chapter 3)

 Search (→ chapter 17)

 Text-Image-Link Editor (→ chapter 13)

XML Editor (→ chapter 12)

 Dictionaries (→ chapter 14)

 Aggregations (→ chapter 15)

How to use these tools is explained in separate chapters of the TextGrid Help. You can choose to visit the online help first or to use the functions possible via the menu bar that is explained as part of the user interface (→ chapter 2). In the chapter about the User Interface you will also find information about the surface structure of the Text Grid Laboratory working bench.

2 User Interface

The User Interface (figure 2.1 on the next page) consists of general bars and tool-specific perspectives.

2.1 Bars

The menu bar at the top of the screen offers hierarchical access to most of TextGrid-Lab's functionality. The toolbar below offers quick access to the most used tools and components plus some tool-specific functions (figure 2.2 on the following page). Use the perspective bar right to the toolbar to switch between already opened tools you have used in this session.

2.1.1 Menu Bar

The menu bar consists of several items: "File", "Edit", "XML", "Tools", "Window", and "Help'.

Under "File" you can manage:

- Aggregations (→ chapter 15)
- Opening, saving and closing projects, objects, and local files
- Revisions (→ chapter 8)
- Publish (→ chapter 16)
- Opening an object via its URI
- Metadata (→ chapter 9)

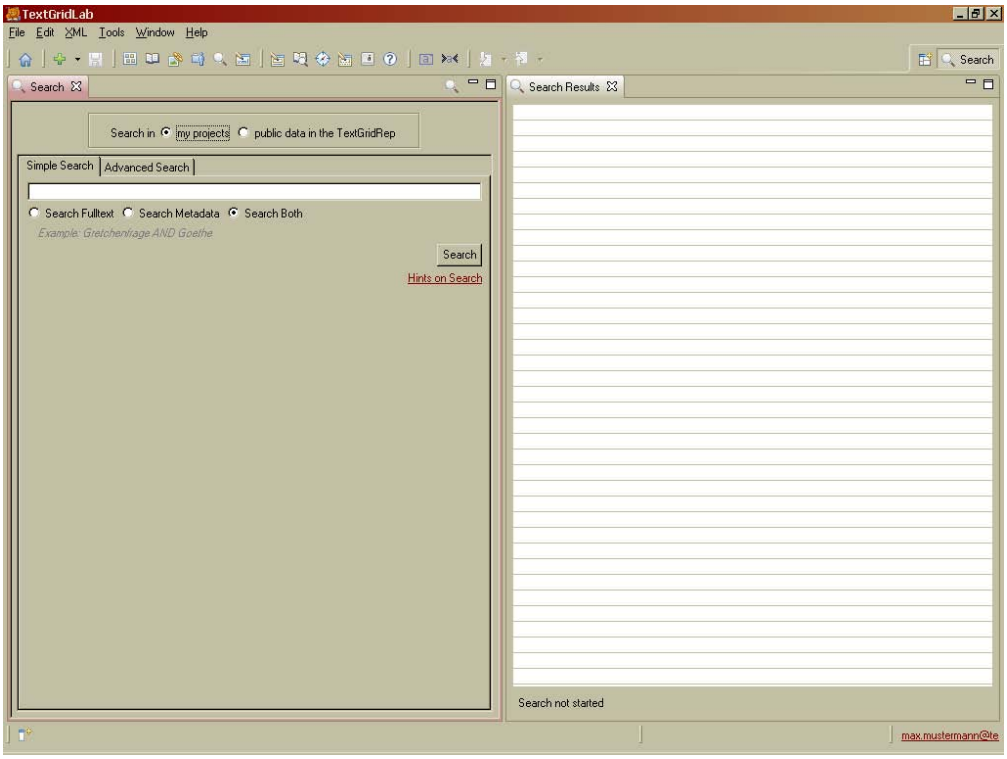

Figure 2.1: Exemplary User Interface with Empty Search

Figure 2.2: Menu Bar and Toolbar in Detail

- Import (→ chapter 6) and Export (→ chapter 7)
- Hide network warnings
- Restart the TextGridLab

"Edit" offers operations for the XML Editor and the Text-Image-Link Editor. Under "XML" you can find functions for working with XML code in the XML Editor (→ chapter 12 and chapter 13).

"Tools" allows you to open every tool at any time. With "Show" you can open the TextGrid views, i.e. the Navigator (→ chapter 4), the Dictionary Results View (→ section 14.4), the Metadata Editor (→ chapter 9) and the Unicode Character Table (→ chapter 11) but also others that are for the most part described in the Eclipse documentation:

`http://www.eclipse.org/documentation/`

"Window" gives you the possibility to open a new editor if one editor is already opened. Furthermore it has options to navigate through the Laboratory:

- Quick access defines the appearance of fast views when opened
- You can activate and switch between editors
- Activated editors can be minimized and maximized
- You can choose the previous perspective, editor or view

In "Window" you can also change the preferences. Most of the possibilities are described in the Eclipse documentation. But some preferences affect the TextGridLab directly:

- The "TextGrid Content Types and File Extension Mapping" configures the mapping between TextGrid Content Types (as regular expression matching the content type metadata field of objects) and the internal file extensions.
- In the "TextGridLab Dialog Settings" the user can choose if CRUD warnings should be shown to indicate Database problems.
- In "TextGridLab Server and Proxy"' proxy server and compressed data transfer can be configured.

Under "Help" in the menu bar you can

- open the Welcome Screen

- see and change your authentication data
- use the help (→ chapter 18)
- report a bug and save the logfile
- see keyboard shortcuts by clicking “Key Assist...”
- handle software updates
- get information about the currently used TextGrid version

2.1.2 Toolbar

The toolbar comprises some elements that are always enabled and elements that are only enabled if special tools are opened. The second kind of elements are described in the entries about these tools. The permanent elements are:

 opens the Welcome Screen (→ section 1.3)

 allows you to create new projects and aggregations (→ chapter 5)

 saves the currently opened document

 opens the Aggregation Composer (→ chapter 15)

 opens the Dictionary Search (→ chapter 14)

 opens the Text-Image-Link Editor(→ chapter 13)

 opens the Project and User Management (→ chapter 3)

 opens the Search (→ chapter 17)

 opens the XML Editor (→ chapter 12)

 opens the Metadata Editor (→ chapter 9)

 opens the Unicode Character Table (→ chapter 11)

 opens the Help (→ chapter 18)

2.1.3 Perspective Bar

The perspective bar allows access to perspectives that are currently open, as well as providing a way to open a new perspective by clicking  . By right-clicking it is possible to customize the perspective and the toolbar structure as well. (For more information see `http://www.eclipse.org/documentation/`).

2.1.4 Status Bar

The status bar always shows you in the left corner the icon to open new views. At the right corner the user currently logged in is presented. Depending on the views open there can be additional information in the status bar.

2.2 Views

There are components with a specific functionality that are re-used in various tools. Building blocks like this are called views. Views can be started from icons in the toolbar or by using the respective menu item from the "Tools" menu.

It is possible to detach a view by using the context menu so that it can be placed wherever needed. A view can also be compiled as a "fast view" via the context menu. They are represented by toolbar buttons on the bar initially on the bottom left of the workbench window. By clicking the button, the view opens in the current perspective. As soon as you click outside that view it is hidden again.

Each view has a title bar. They allows one to set several default options:

- You can move a view by dragging its title bar with the mouse.
- Resize views by dragging the border between screen components.
- Maximize or minimize or remove a view.

By right-clicking in the title bar a context menu is opened that gives you some more possibilities:

- You can determine a view as detached or fast view.
- You can restore and close the view.
- You can also move a tab group after selecting this option in "Move" of the view's context menu.
- You can select a border to change the size of the view.
- You can maximize and minimize the view.

Multiple views can be stacked on top of each other. Only the topmost one of these views is visible. Click a background view's title bar to make it visible. For example, the Navigator (→ chapter 4), the Metadata Editor (→ chapter 4) and the Unicode Character

Table (→ chapter 11) in the perspective of the XML Editor (→ chapter 12) are arranged in this way by default.

2.3 Perspectives and Editors

A specific arrangement of user interface components are defined as a perspective. Editors like the XML Editor (→ chapter 12) are close relatives to views, with a few differences:

Unless re-arranged, all editors open in a central area typically in the middle of the screen as tabs stacked on top of each other. While you typically have one view of a kind whose contents depend on the selected object, you can open a separate editor for each object you want to edit. The editor will stay open until you explicitly close it or the software. Editors can contain unsaved content. In this case their title is marked with an asterisk (*).

2.4 Selection and Context Menu

Large parts of the user interface's contents and functionality depend on the current selection. To select something in a list or tree, single-click it. To select multiple objects, control-click them or command-click them on a Mac, or use shift-click to select a range of objects. You can also combine the control and shift keys with the cursor and space keys to select without using the mouse. In a text editor, you can select by simply dragging the mouse or using shift and the cursor keys.

2.5 Shortcuts

[Alt+-]	Show System Menu
[Alt+Shift+Q,Q]	Show View
[Crtl+3]	Quick Access
[Crtl+F6]	Next editor
[Crtl+F7]	Next view
[Crtl+F8]	Next perspective
[Crtl+F10]	Show View Menu
[Crtl+M]	Maximize active editor or view
[Crtl+S]	Save

[Crtl+Shift+F6]	Previous editor
[Crtl+Shift+F7]	Previous view
[Crtl+Shift+F8]	Previous perspective
[Crtl+Shift+E]	Switch to editor
[Crtl+Shift+L]	Key Assist
[Crtl+Shift+S]	Save All
[Crtl+Shift+W]	Close All
[Crtl+W]	Close
[F12]	Activate editor

3 Project & User Management

The Project & User Management allows you to create and manage projects, to add users to a project and assign roles to them.

3.1 Open Project & User Management

There are several possibilities to open the Project & User Management:

- Click "Project & User Management" in the Welcome Screen (→ section 1.3)
- Select the tool "Project/User Administration" from "Tools" in the menu bar
- Click the icon  in the toolbar below

3.2 Project & User Management Perspective

The perspective is subdivided in two views. The Navigator on the left, the User Management View on the right side (figure 3.1 on the next page).

3.3 Navigator View

Projects in TextGrid are used to manage access to objects. Any TextGrid object belongs to some project. Objects belonging to a project are listed in the Navigator. To manage an already existing project select it in the Navigator by left-clicking. The users associated with this project are shown in the User Management view. To handle objects and projects, use the Navigator (→ chapter 4).

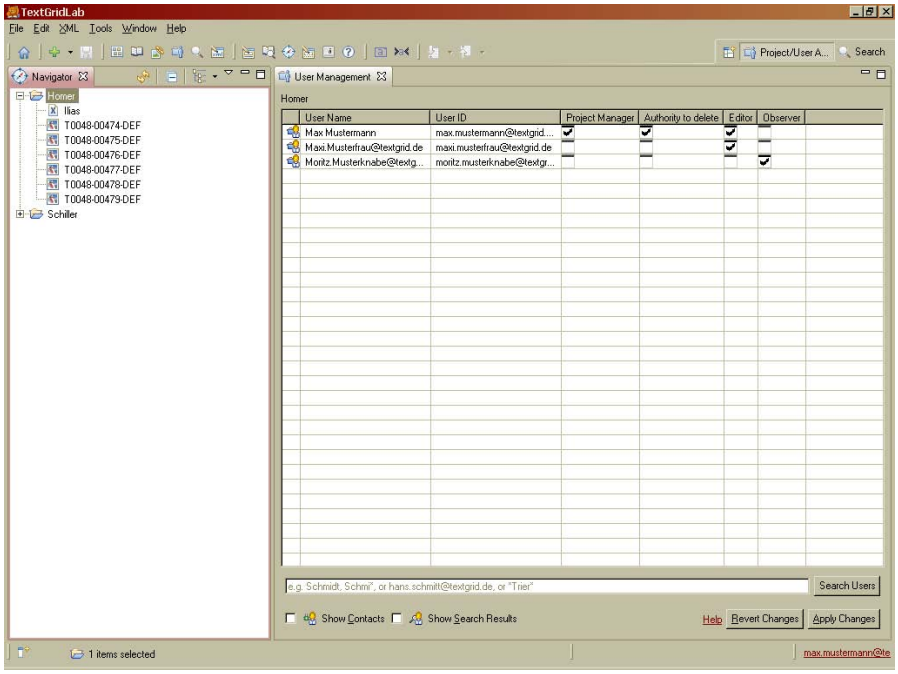

Figure 3.1: Project and User Management

3.4 User Management View

When a new project has been created, project users can be added and roles can be assigned to them. To be selected users must previously have logged into TextGridLab at least once. You can add new members to your project by searching for them by name, e-mail address or organization. * matches any letters. When clicking "Search Users" or pressing the enter key, the checkbox "Show Search Results" is automatically activated and the results are shown in the list of users above with the icon .

You can also add new members to your projects by listing users you were working with in previous projects. Mark "Show Contacts" to do this. Your contacts are marked with a special icon .

Choose the roles for the new user by marking the boxes and click "Apply Changes". The boxes become white and the icon in front of the names added to the project changes into another symbol . Click "Revert Changes" to remove changes that are not applied yet. Changes not yet applied are presented in red boxes. There are four possible roles for users in TextGrid and every role has specified rights:

Project Manager	Delegate, create rights for projects; delegate, publish rights for resources
Authority to delete	Delete rights for resources.
Editor	Read, write rights for resources.
Observer	Read rights for resources.

	Project Rights	Resource Rights
Delegate	Edit the user/role assignment for the project	Modify rights for the resource.
Publish		Publish a resource. The resource will be then world-readable and cannot be deleted or updated anymore.
Delete		Delete unpublished resources
Create	Create new projects	Create new resources in the project
Write		Write (i.e. update) unpublished resources.
Read		Read resources in the project.

Rights in TextGrid are non-hierarchical. If users are meant to have full rights, they must be assigned the roles “Project Manager”, “Authority to delete” and “Editor”.

Roles with their respective rights can be withdrawn from users by someone having the authority to do. Click at least one role of the user in question in the list of existing users and press “Apply Changes”.

3.5 Interaction with Other Components

The User Managements interacts with the Navigator (→ chapter 4) that is mainly used for managing projects and objects. The Navigator view is part of the Projects and User Management perspective. By right-clicking a project in the Navigator the User Management can be started.

4 Navigator

The Navigator is a project browser giving the users access to all materials related to the project on which they are working.

4.1 Open the Navigator

The navigator is, by default, part of the Project & User Management module and the Aggregation Composer perspective. The Navigator can be opened in all perspectives or re-opened:

- by selecting “Tools” in the menu bar and afterwards the items “Show View” and “Navigator”
- by clicking on the Navigator icon in the toolbar.

Using the Navigator view requires authentication. At least one perspective has to be opened to start the Navigator.

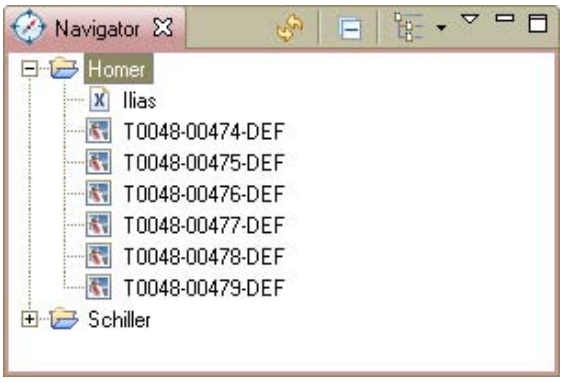

Figure 4.1: Navigator View

4.2 Navigator View

The Navigator View is used for handling TextGrid projects and objects. All projects the user is entitled to access are displayed in a tree view that can be expanded or collapsed by clicking on the nodes (figure 4.1 on the preceding page). The Navigator uses different icons for different types of objects, e.g.:

- XML file
- Image file
- Edition
- Work
- Collection
- Aggregation

4.2.1 Menu Bar

Some functions essential for managing projects and objects can also be found in the menu bar under the item “File”:

- Click “New Object” to create a TextGrid object and “New Project” to create a TextGrid project.
- Objects can be opened with “Open Object” but also with “Open URI”. This identifier can also be copied with “Copy URI”.
- Projects can be deactivated, reactivated or deleted by users having the rights to do this. (→ chapter 3)

4.2.2 The Toolbar of the Navigator View

The toolbar of the Navigator offers you a few functions. If someone else modifies the repository contents, you might need to refresh the Navigator view manually. Click at the top of the Navigator view to do so.

By using the other icons, you can collapse all nodes, or by clicking on the triangle next to , you can select between sorting the projects and objects by modification date, title, type or in their original order and if the sorting should be ascending or descending.

In the view menu, which is opened by clicking the white triangle, you can refresh and customize the view. The view can be customized by choosing a filter or selecting the content to be shown.

4.2.3 Context Menu

Context menus will pop up when right-clicking a project or an object in the object tree. This allows a user to manage objects or create new ones. The context menu is different for projects and objects and it varies depending on what kind of object has been selected.

If a project is preselected, you can deactivate, reactivate or delete it if you have the authority to do. The project will disappear from the project list until it gets reactivated. Its published resources will remain readable. You can deactivate, reactivate or delete a project also by choosing the items from "File" in the menu bar. The Project and User Management can be opened directly from here by right-clicking a project (→ chapter 3).

To open an object, double-click it or right-click it and select "Open". In accordance with its document type, the file will be opened in a default editor. Click "Open With" to choose another editor. To remove an object, right-click it and select "Delete". You must have the rights to do so (→ chapter 3.) All files can be exported from here (→ chapter 7). Click "Show revisions" to have a look at the files history (→ chapter 8). You can open or reload the corresponding metadata or have look at the technical metadata (→ chapter 9).

If an edition (→ section 5.4), work (→ section 5.5) or collection (→ section 5.6) is selected, the context menu offers "Edit". The Aggregation Composer (→ chapter 15) opens if you click here. In the case of editions and collections, you can also publish these objects via context menu (→ chapter 16).

The context menu allows you to associate an XML file with an adaptor (→ section 12.2.1). Images and XML documents can be added to the Text-Image-Link Editor via the context menu (→ chapter 13).

By right-clicking an object, you can select "Copy". By right-clicking a project, you can select "Paste" to import a copied file into another project. You can also copy the URI of a project or object to the clipboard, so that it can be used by other applications different from TextGridLab. If you select "Show CRUD warnings", you can see if there are problems with the database.

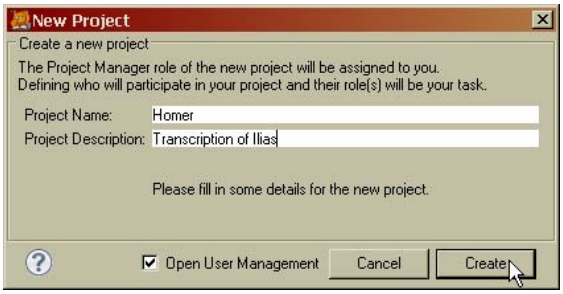

Figure 4.2: Create a Project

4.3 Using the Navigator

Some of the main tasks of the Navigator View are featured in the following passages.

4.3.1 Create New Projects

To create a new project, select "New > New Project" from "File" in the menu bar or from the context menu in the Navigator when a project is marked. Alternatively, you can use the arrow next to ✚ in the toolbar. The project manager role, the authority to delete and the editor role will be assigned to you (→ chapter 3).

Enter a name and a description of the project (figure 4.2). By default, the Project & User Management will be opened after finishing the process by clicking "Create". If you do not want that, click the check box to remove the hook.

4.3.2 Create New Objects

Click "File > New Object" in the menu bar or "New Object" in the context menu of the Navigator when a project is marked to create a TextGrid object.

To create an object, a project and an object type has to be chosen. If a project was preselected in the Navigator, this project is suggested in the "Create a New TextGrid Object" dialog box (figure 4.3 on the facing page). After clicking "Next" the Metadata Editor (→ chapter 9) interface is opened. Complete the metadata and click "Next". Depending on the document type the following steps differ. If it is an XML file, you can select a schema (→ chapter 12). After all necessary informations are entered, click "Finish" to complete the operation.

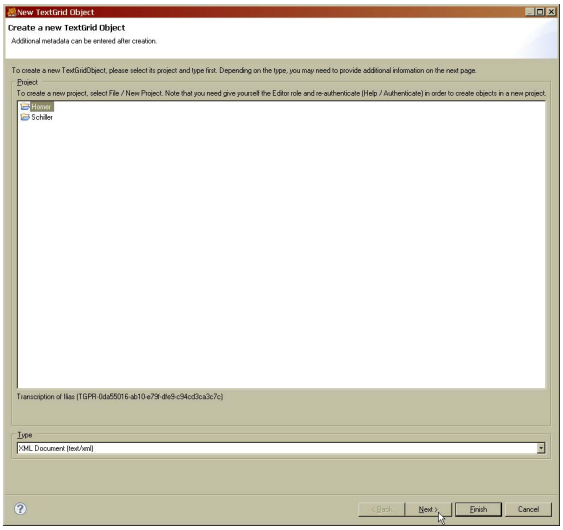

Figure 4.3: Create an Object

4.4 Interaction with Other Components

Since the Navigator is a tool for managing projects and objects, it interacts with the Project & User Managment (→chapter 3), the Metadata Editor (→chapter 9), and the Aggregation Composer (→chapter 15).

4.4.1 Navigator and Project & User Management

The chapter 3 can be opened directly from the context menu of the Navigator view. The Project & User Management will also be started by default after creating new projects.

4.4.2 Navigator and Metadata Editor

The Metadata Editor (→ chapter 9) can be opened directly from the context menu of the Navigator view as well as metadata can be reloaded. The Metadata Editor interface is part of the dialog for creating new objects.

4.4.3 Navigator and Aggregation Composer

The Navigator is, by default, part of the Aggregation Composer perspective (→ chapter 15). It is used especially for creating references between objects and aggregations, like editions or collections. If you right-click an edition, a collection, or another aggregation and select "Edit", the Aggregations Composers is opened.

5 TextGrid Objects

TextGrid manages objects and types of relations between them. These relations are called aggregations, editions and collections, which are themselves new TextGrid objects. To create relations between objects every object has to be identifiable. To make possible a further identification of the objects and a cross-project search, the objects have to be described by metadata (→ chapter 9 and chapter 17).

5.1 Objects

Objects are the basic building blocks and smallest unit of data in TextGrid. If you store something in TextGrid - be it an XML document, an image, or any other kind of data -, it will finally live in one or more objects.

An object consists of a metadata record (→ chapter 9) and some content. Both will be handled together: When you edit an object's contents in an editor, you can always switch to the metadata editor to modify the object's metadata, and the metadata record will be saved whenever you save the object. You can view and edit mainly descriptive, bibliographic metadata using the Metadata Editor (→ chapter 9), all metadata of an object can be reviewed in a dialog opened by "Show technical metadata" in the context menu of the object, e.g. in the Navigator (→ chapter 4).

Each object is identified by an URI in a form like textgrid:74k0.1. The URI is automatically generated when an object is saved to the repository for the first time. New objects that have not been saved yet will be identified by a temporary URI. You can copy the URI to the clipboard using "Copy URI" from the object's context menu, or you can review it in the aforementioned "Show technical metadata" dialog.

Every object has a format or content type: This is a required metadata field that specifies the (technical) format of the content. Examples are XML and JPEG, but there are also some special TextGrid-specific content types like aggregations (→ section 5.2). Each object lives in exactly one project. Projects are containers for the user rights management (→ chapter 3). Each TextGrid object is either an item (→ section 5.3), an editon

(→ section 5.4), a work (→ section 5.5) or a collection (→ section 5.6) - these object classes have different metadata and semantics.

5.2 Aggregations

An aggregation is a TextGrid object that consists of an ordered list of references to other TextGrid objects which can be aggregations themselves.

Aggregations are used to organize TextGrid objects. They can be used similar to file system folders, but are more flexible: An object can be referred to from multiple aggregations, you can collect objects in your aggregation that belong other people and that you can only read, and when you delete an aggregation, the aggregated objects will usually prevail – unless you explicitely ask to delete them. There is a checkbox in the delete dialog.

There are different kinds of aggregation objects which differ in their semantics and their metadata, but all have the same sort of content: Simple aggregations, which just have item metadata (→ section 5.3) and can be used, e.g. to represent a chapter in a book, split across various files. But also editions (→ section 5.4) or collections (→ section 5.6) are aggregation defined by a characteristic set of metadata. Use the Aggregation Composer (→ chapter 15) to arrange existing objects to a nested set of aggregations.

5.3 Items

Items are the simplest, but also most common entities in TextGrid. An item may be e.g. an XML document or an image, like a page scan or a chapter of an edition in the form of an XML document. Descriptive metadata for an item consists of one or more titles, notes, a rights holder, a format, and the technical metadata that is available for all objects. To associate more sophisticated metadata like an author or a source description with an item, put it into an edition (→ section 5.4) and optionally associate a work (→ section 5.5). Items are dependent objects: They can only be published as part of an edition or collection but not by themselves (→ chapter 16).

5.4 Editions

An edition is the manifestation of a work. An edition is a special kind of an aggregation (→ section 5.2), its metadata contains fields to describe, e.g. the people and organisations involved in preparing the edition or the source (outside TextGrid, e.g. a book) that the electronic edition represents (→ section 9.2.3). An edition is usually associated with a section 5.5 and it has to be so for publication. The actual content of an edition is stored in the item objects the edition aggregates. Editions can be published if they have correct metadata, are associated with a work, and contain at least one item. It provides the precise structure for the publishing of items.

5.5 Works

A work is an individual creation, for example a literary opus, which can be available in various editions, e.g. as pocket edition, as part of collected works, as theatrical performance or as audio book. An edition (→ section 5.4) is always a particular edition of a work. To describe a work, TextGrid offers work objects: These are metadata-only objects that contain work specific metadata like the uniform title, the date of creation or keywords describing the work (→ section 9.2.4). By the time of publication, every edition must be linked to a work object (→ chapter 16).

5.6 Collections

The collection is an aggregation of TextGrid objects formed by the membership of a particular organisation and/or topic. Collections are intended for two use cases: In an organizational context an edition may be part of a collection (e.g. the combination of editions from the Blumenbach project under the "Blumenbach" label or the combination of digitized prints of the 18th century under the label VD 18). Additionally, collections can be used to aggregate items for which the edition/work concept is not applicable, i.e. digitizations of museum pieces. Collections are valid starting points for publication (→ chapter 16).

6 Import

The import function is used to open and save files in TextGrid originally not created in the Laboratory or objects that have been previously exported from the repository and maybe stored locally.

While files are identified using file names and paths, each TextGrid object is identified by an URI that will be generated on import. If a set of files that link to each other is to be imported, these links will have to be rewritten to use TextGrid URIs instead of file names to work. The TextGridLab comes with a set of configuarations for common file types which you can choose in the import and export tool.

You can re-import objects that have been exported before together with their metadata. If you have a file called "filename.ext.meta" which conforms to the TextGrid metadata format besides "filename.ext", metadata will be read from it and the old object will be identified. By choosing from the target project dropdown box, the object can either be re-imported as completely new objects with a new URI or as a new revision of the original object.

6.1 Open the Import Tool

Any view has to be opened. Click "File" in the menu bar and choose the menu item "Import local files" (figure 6.1 on the next page).

6.2 Import Tool

Select a target project into which the files should be imported in the pull down menu at the bottom of the tool. Drag files or folders from the file management application of your operating system in the import tool's list. Alternatively to dragging and dropping, click "Add" on the top of the import tool view to replenish the list below with a file. Use the "Remove" button to take out a file from the list.

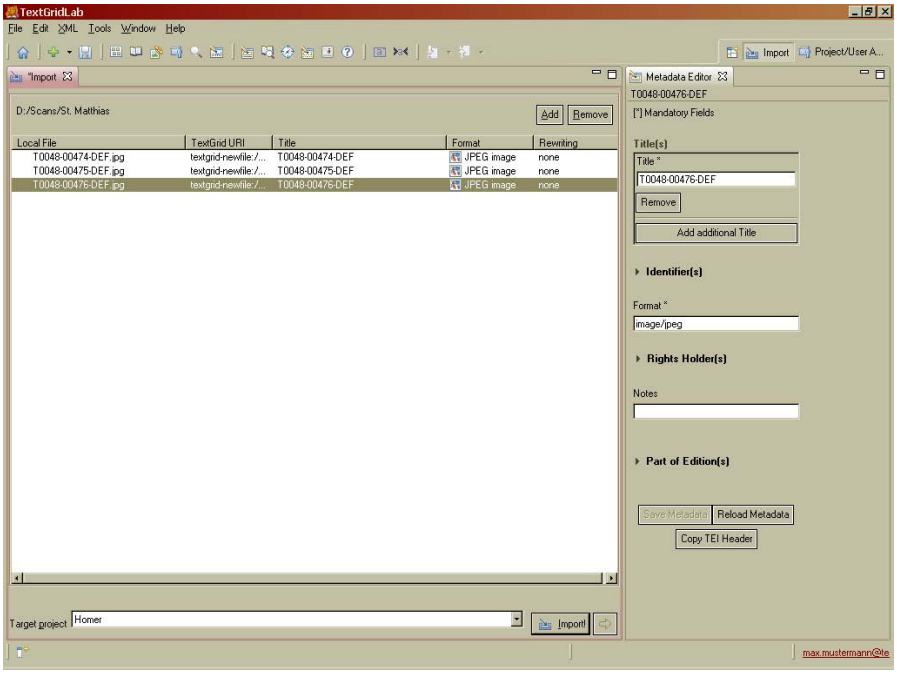

Figure 6.1: Import

The import tool suggests a content type, object title, and rewrite method. You can modify the guessed title, content type or rewrite method of an entry by directly clicking the appropriate entry in the table, or adjust additional metadata by selecting an entry in the list and using the Metadata Editor (→ chapter 9).

Click “import” to finish. After the import has finished, a result screen lists every file that you tried to import together with messages of warning, error or success.

You can optionally save the import specification (that is the list of original file names imported together with their associated TextGrid URIs and rewriting methods) in order to make it simple to re-export the same set of objects later. The specification can be saved as TextGrid or as local file. Use the buttons at the bottom of the view.

7 Export

The export function can be used to export TextGrid objects and their metadata to a local hard disk.

7.1 Open the Export Dialog

Click “File” in the menu bar and choose “Export from TextGrid” or select one or more objects in the navigator or search results and choose “Export from TextGrid”. If you add an aggregation, all aggregated objects will also be added to the list, and appropriate link rewriting options will be selected.

7.2 Export View

Via the drag and drop function you can add objects from the Navigator (→ chapter 4) to the export view. Use the “Remove” button to take an object out from the list. Below the list of objects, the target directory has to be selected. Use “Browse” to specify the target directory.

Click “Export” to finish. After the export has finished, a result screen lists everything that has been exported as well as warning or error messages if anything went wrong.

The export tool will create two files for every object that has been exported to the target directory, one for the data named with the object’s URI and an additional file that contains the object’s metadata in XML form. For complex objects like editions directories are created that lists its contents.

You can optionally save the export specifications (i.e. the list of all objects exported together with the rewriting methods and file names used) from the result screen. Despite the export of a file, the exported file or object remains in the TextGrid Repository and therefore in the project it has been exported from.

8 Revisions

Revisions are a means to save a specific state of a document, e.g. as an interim result of a digtial edition. New revisions are explicitly created by the user, and all revisions of the same base object are in the same project.

8.1 Using Revisions

A new revision of an opened document can be created by selecting "Save as new Revision" under the "File" item in the menu bar. If a user wants to save a file that has been changed by another user, TextGrid sends a warning. Then he can save his document as a new object or a new revision.

All revisions of an object can be seen by right-clicking it in the Navigator or the Search Result View and selecting "Show Revisions". A list appears with all revisions, the title of the document, the corresponding project, the contributor and the creation date of the revision. Every revision can be referenced by an URI that contains the revision nummer (e.g. textgrid:15k34.2). To refer to the latest available revision, use the URI without the revision number (e.g. textgrid:15k4).

8.2 Interaction with Other Components

In the cases of editions, collections and other aggregations you can right-click these objects and select "Edit" (→ chapter 5). The Aggregation Composer (→chapter 15) opens. If you right-click the object in question again, you have the possibility to refer to the latest revision, the revision the selected object corresponds to or any other revision from a list.

9 Metadata Editor

The Metadata Editor is used to create and manage the baseline metadata elements of TextGrid objects. These metadata are used in TextGrid for cross-project searches. The metadata input form can be adjusted to individual needs with the Metadata Template Editor (→ chapter 10).

9.1 Open the Metadata Editor

The Metadata Editor is, by default, part of the XML Editor (→ chapter 12) and the Aggregation Composer perspective (→ chapter 15) and can be accessed in other perspectives

1. by selecting "Tools > Show View > Metadata" in the menu bar, or
2. by clicking on the Metadata Editor icon  in the toolbar.

In order to load object's metadata into the Metadata Editor, you must authenticate and select a TextGrid object for editing.

9.2 Metadata Editor View

Some fields in the Metadata Editor are generic, others are specific for items, editions, works and collections (→ chapter 5). Depending on the selected object the fields displayed vary. A few fields are shown collapsed. Click the black triangle in front of the element's name to open it.

Some fields in the Metadata Editor belong to one of the following groups: identifiers, keywords, dates, persons or agents. These groups do not correspond to any individual field displayed but the fields of the elements belonging to one of these groups have the same structure.

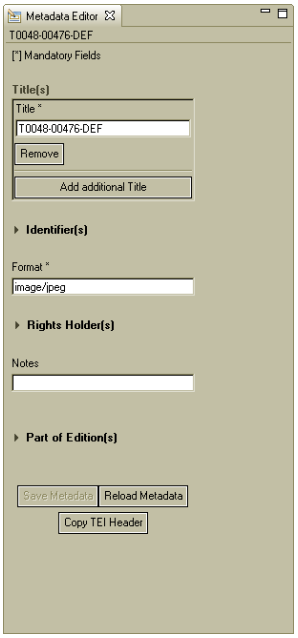

Figure 9.1: Metadata Editor View

Identifiers are of a special type and they have a characteristic value. The type maybe the ISBN, ISSN or URL. The value is the specific number code or address of the object.

Keywords have an “id” attribute and a value. The “id” attribute is an identification in some controlled vocabulary. The value is the information that will be displayed.

Dates have the attribute “date” or the attributes “notBefore” and “notAfter”. The attribute “date” is used for the information when an event occured. Additionally, the original form given in a document can be added in the second field. Click “Switch to Data Range” in order to use the attributes “NotBefore” and “NotAfter” for the start and the end of the era denoted. Use the “Switch to Approx Date” button to get back.

The mandatory “Approximate Gregorian Date” field needs to contain at least four numerals specifying a year. Possible values for approximate Gregorian date fields:

- year (four digits)-month (two digits)-day (two digits), e.g. 2009-01-21
- year (four digits)-month (two digits), e.g. 2009-01
- year (four digits), e.g. 2009

Fields of the type person have the attributes “id” and “corporate body”. Use “is” for an identifying URI, e.g. PND or FOAF. “Is corporate body?” can be chosen if wanted. The value to be inserted in the field is the person’s name.

Agents are specified with their name as value and the attributes “role” and “id”. “role” means a Dublin Core relator term you can choose from the drop down menu. The “id” attribute is used for an identifying URI like PND or FOAF.

Some fields are repeatable. They can be opened by clicking the arrow besides the designation of the different groups. To add another field, click the appropriate “Add additional” button. Entries that are not required can be removed by clicking the corresponding “Remove” button.

9.2.1 Generic Metadata

The following metadata are generic:

1. object’s title
2. identifiers
3. format of object
4. notes

The mandatory title element should be used for the title and subtitles of the object. Remove a title or add an additional title by click on the appropriate buttons.

Chose between ISBN, ISSN and URL in the drop down menu to add some kind of identifier for the object in some controlled vocabulary. ISBN, ISSN and URI are common default values but other types can be added if wished. Further identifiers can be added or removed by clicking the corresponding buttons.

Use the format element to fill in the required information about the MIME type. In the cases of editions, works and collections a default value is proposed.

The field “notes” is usable for every other kind of information.

9.2.2 Item-specific Metadata

In the case of items, names of rights holders (e.g author, contributor, editor) can be attached. They can be identified with a name and an URI. Further rights holders can

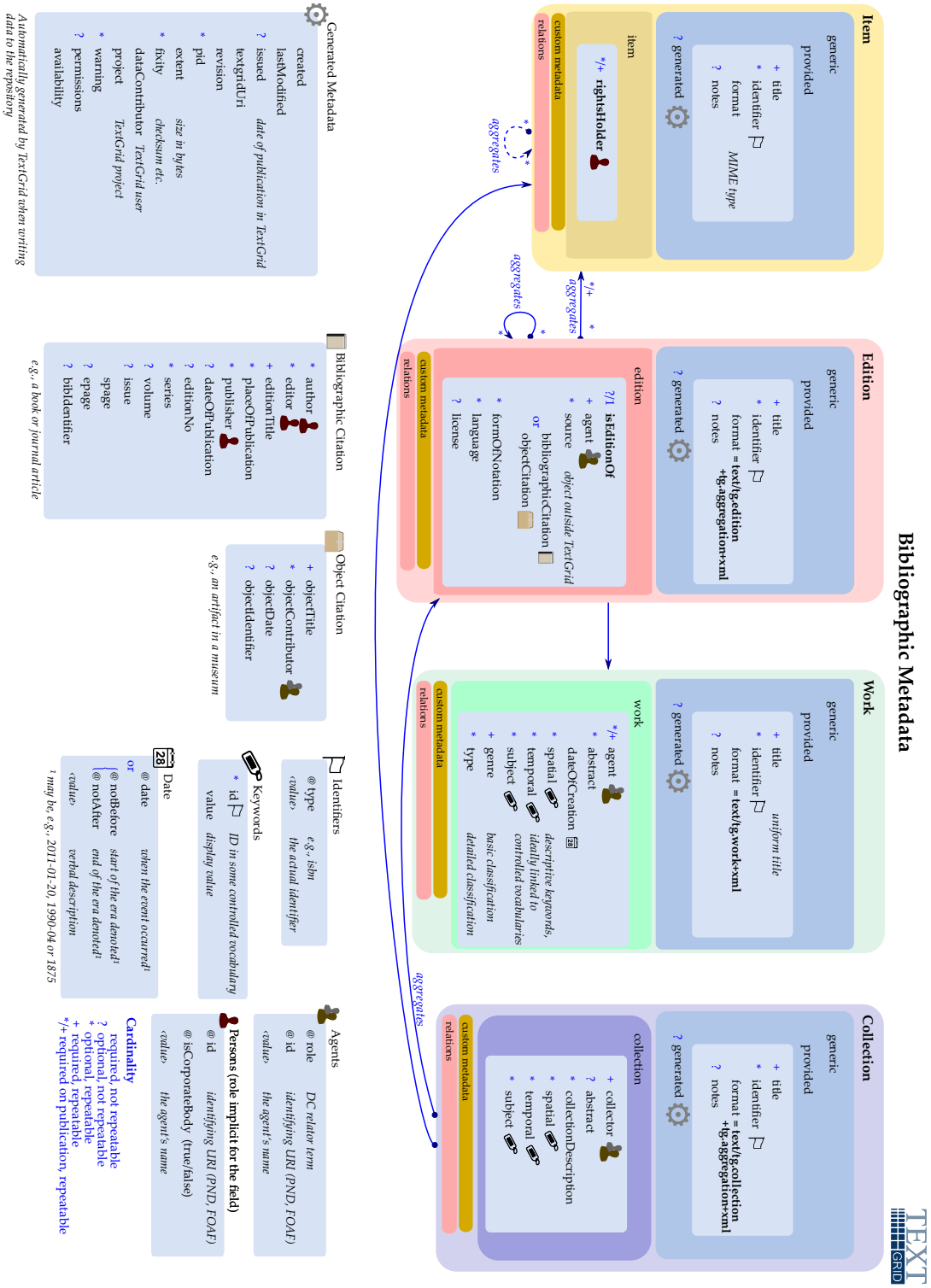

Figure 9.2: Metadata Schema

be added by clicking the appropriate button. Rights holders can be removed by clicking the corresponding button. Mark the box if it is a corporate body.

9.2.3 Edition specific Metadata

If you create an edition, the metadata form contains the following fields:

1. Edition of
2. Agent(s)
3. Source(s)
4. Form(s) of Notation
5. Language(s)
6. License/Copyright

Edition of

The "Edition of" element names the related work object with a TextGrid URI. Use the link to open the object and the button to browse the projects and select an appropriate work object for the edition.

Agent

The Agent element is repeatable. Add further agents by clicking the "Add additional Agent" button. Type in the agent's name as value and select the appropriate Dublin Core role from the drop down menu. Agents are identified with a URI, e.g. PND or FOAF. Personal names should be typed in the form: "surname, first name middle name".

Source

The source element can be an object citation or a bibliographic citation. An object citation is used for example in the case of an artifact in a museum. Bibliographic citation is used for example in the cases of books or journal articles. Click one of the buttons to add this information. Use the corresponding buttons to remove source metadata.

Object Citation: An object citation can consist of a title, information as well about contributor as about the date and a special identifier. “Title” is a required and repeatable element. The contributor element follows the structure of all agent elements as well as date follows the structure of all date elements and object identifier the structure of all other identifiers (→ section 9.2).

Bibliographic Citation: A bibliographic citation consists of the elements

1. Author(s)
2. Editor(s)
3. Place(s) of Publication
4. Publisher(s)
5. Date of Publication
6. Edition Nr.
7. Series
8. Volume
9. Issue
10. StartPage
11. EndPage
12. Bibliographic Identifier

Only the edition title element and the StartPage element are required. Edition title, Author, Editor, Place of Publication, Publisher and Series are repeatable by clicking the “Add” button.

Author, editor and publisher are identified with an URI, e.g. PND or FOAF. Mark the box if they are corporate bodies. Use the value field for the person’s name. Personal names should be typed in the form surname, first name middle name. For date of publication all possibilities used for date elements can be applied (→ section 9.2).

Edition Nr., Series, Volume and Issue are free fields used like their bibliographic equivalents. “StartPage” is required but “EndPage” is not. “Bibliographic Identifier” is a repeatable element. Choose ISBN, ISSN or URL as type from the drop down menu. The value has to be inserted in the “Identifier(s)” field.

Form(s) of Notation

Chose the notation system from the drop down menu. For cases with more than one notation system the element is repeatable.

Language(s)

The "Language(s)" element is repeatable for documents with more than one language.

License/Copyright

The license type or description can be specified in the "License/Copyright" field. The license itself can be identified with an URI.

9.2.4 Work-specific Metadata

"Works" are objects (→ chapter 5) that are essentially defined by its metadata. In contrast to editions and collections they do not include other objects. The metadata form of works contains the following elements:

1. Title(s)
2. Identifier(s)
3. Agent(s)
4. Abstract
5. Date of Creation
6. Spatial(s)
7. Temporal(s)
8. Genre(s)
9. Type(s)
10. Notes

The agent element for works is required on publication and it is repeatable. It consists of a role attribute for which a Dublin Core (DC) relator term can be chosen from the

drop down menu. In the “id” attribute an identifying URI like PND or FOAF might be added. The agent’s name can be given as value of this element. The abstract element is optional and repeatable. It is used for any comprehensive description of the work.

The date of creation element is mandatory. Is has to be entered on the form TextGrid supports (→ section 9.2). Spatial, temporal and subject keywords can be added. Their IDs are ideally linked to controlled vocabularies. With “Value” the display value can be influenced.

The genre element is required and repeatable. It is used for some basic classification. For a more detailed classification than genre the type element can be applied. It is optional and repeatable.

9.2.5 Collection-specific Metadata

The metadata form for collections contains the following elements:

1. Title(s)
2. Identifier(s)
3. Collector(s)
4. Abstract
5. Collection Description(s)
6. Spatial(s)
7. Temporal(s)
8. Subject(s)
9. Notes

Use the collector element for a DC relator term as role attribute, an identifying URI as id attribute and the agent’s name as value. The element is required and repeatable.

The abstract element for comprehensive informations about an object is optional and not repeatable. The collection description field is optional and repeatable.

Spatial, temporal and subject keywords can be added. They consist of an identifier ideally linked to a controlled vocabulary and a value as it should be displayed. These fields are repeatable by clicking the “Add additional Identifier” button.

9.3 Using the Metadata Editor

After completing all required metadata, the record set can be saved by clicking on the "Save Metadata" button at the bottom of the Metadata Editor view. Reload all the entries by clicking the "Reload Metadata" button beside the "Save" button.

To copy the external metadata into the header of a TEI object, click the "Copy TEI Header" button at the bottom of the Metadata Editor view. The Header can be pasted into the source code presented in the XML Editor (→ chapter 12).

9.4 Interaction with Other Components

The Metadata Editor is part of the XML Editor (→ chapter 12) and the Aggregation Composer perspective (→ chapter 15). It shows the metadata of the currently focussed objects (→ chapter 5). The structure of the metadata depends on the kind of object it relates to. It can adapted to special needs by using the Metadata Template Editor (→ chapter 10).

10 Metadata Template Editor

The Metadata Template Editor enables the user to create new own fields in the Metadata Editor for his project. You need to have the Project Manager role in order to work with it.

10.1 Open the Metadata Template Editor

To open the Metadata Template Editor choose it from "Tools" in the menu bar. Alternatively, you can click on this  in the toolbar. You can also right-click a project in the Navigator (→ chapter 4) and select "Edit Metadata Description".

10.2 Metadata Template Editor View

Initially a project has to be selected. Click "Next" and "Add new Element". Afterwards a new element name has to be chosen. Then select a data type for this element from the drop down menu. The element can be

- a string: strings range from a single word or character to large blocks of text.
- a date
- an integer
- boolean: that means "false" and "true" values and has to be written as "0" and "1"
- time
- decimal: to be written with a point like in "1.5"

Mark the checkboxes "Repeatable" or "Mandatory" if wanted. An element can be removed if you click the corresponding "Remove" button. Another element may be

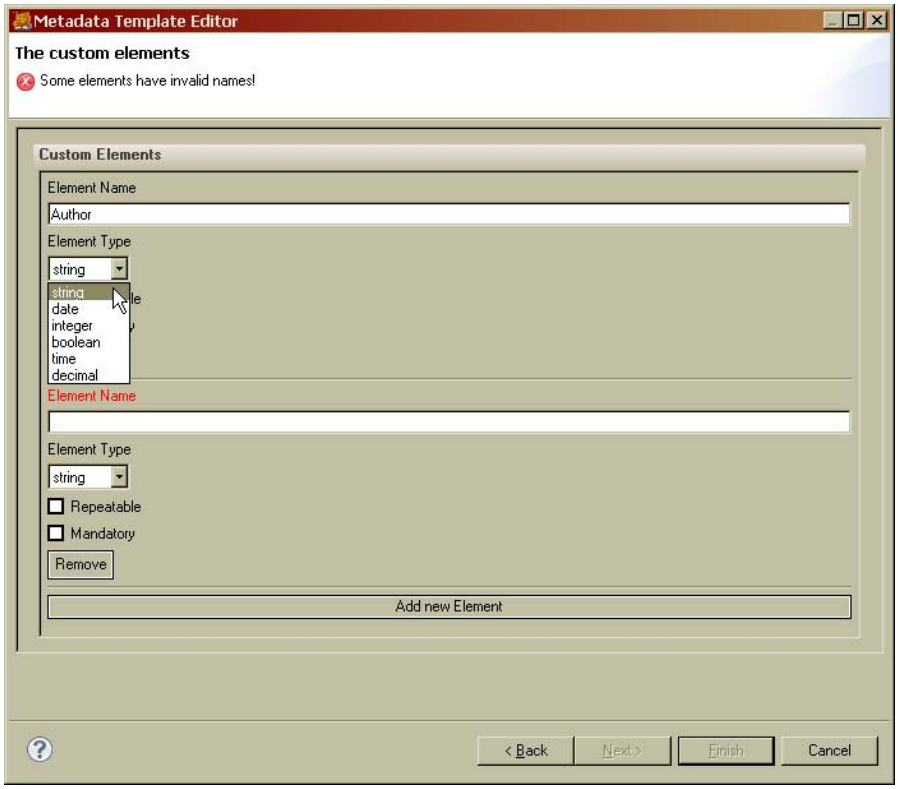

Figure 10.1: Metadata Template Editor

added by clicking the "Add new Element" button. Click "Finish" to save your input or "Cancel" to close the editor. Click "Back" if you want to select another project.

10.3 Interaction with Other Components

The Metadata Template Editor enables the user to adapt the metadata to the needs of a project. The surface of the Metadata Editor (→ chapter 9) changes according to the adjustments made in the Metadata Template Editor.

11 Unicode Character Table

The Unicode Character Table enables the user to search, to copy and insert symbols from the unicode character set into the active editor or the system clipboard. Users can create their own custom sets of unicode symbols for use in the unicode character table.

11.1 Open the Unicode Character Table

The Unicode Character Table is started automatically as part of the default XML Editor perspective. Additionally, it can be opened in the following ways:

- click  in the toolbar
- via "Window > Show View > Unicode Character Table" in the menu bar

The unicode character table is also started automatically together with the XML Editor and can be found as a hidden tab behind the Navigator (→ chapter 4) on the left side.

11.2 Unicode Character Table View

The character table consists of a toolbar in the head area, a table in the body area and an information field with function buttons in the footer (figure 11.1 on the following page).

11.2.1 The Toolbar of the Unicode Character Table View

The toolbar in the head area offers a selection range of all unicode symbols that is sorted by association to blocks or scripts. By default, Unicode arranges groups of characters together in blocks. A script in Unicode is a collection of written signs used to represent textual information in one or more writing systems. For more information see

Figure 11.1: Unicode Character Table

Figure 11.2: Custom Charset Editor

`http://unicode.org/`

For selecting the block range, press the button for the "Toggle Block Mode" in the toolbar and choose the intended entry in the combo box on the right-hand side of the toolbar. For selecting the script sector, press the "Toggle Script Mode" button instead.

To jump to a symbol at a known Unicode point, enter the Unicode into the textbox. After that click "Filter" (on Windows) or press "Enter". As an additional feature, the user can enter a Unicode symbol into the textbox and the view will jump to its code point, which is helpful for identifying a symbol or accessing additional information on it.

Use to look for mathematical symbols and to look for musical symbols. After you have opened the view menu of the Unicode Character Table View you can open the mathematical and musical symbols. You can also initialize the "Custom Charset Editor" for creating and modifying user-defined character sets.

This editor shows a list of currently existing character sets in the head area. The body area contains a toolbar for inserting, deleting and saving the character sets. The footer

area displays the values of the currently selected character set and allows its modifications (figure 11.2 on the previous page).

Click the "+" button to create a new set. To remove a set click "-" or right-click the set to remove it from the list. Use the twister arrows to refresh the list. Furthermore you can save the set outside TextGrid and import external sets by clicking  or  .

The name and icon of the character set can be changed as well as the content, which consists of either a predefined unicode blockset or a custom list of Unicode characters. These characters can be entered either as a decimal Unicode character codepoint (e.g. "56789"), as a Unicode hexadecimal codepoint with a leading sign (e.g. "U+1D100") or as a directly inserted symbol from the system clipboard. The selected signs have to be separated by semicolons. Click "Close" to save the charset.

11.2.2 The Table Area

The table area displays all symbols contained in the selected character set and enables the user to select any of these by a single mouse click. Executing a right mouse click on the selected symbol opens a context menu for copying the selected character into the operating system's clipboard.

11.2.3 The Information Field

The information field shows the unicode codepoint as well as the description text of the currently selected symbol and displays a magnified view of the selected symbol for a more detailed view. The "Insert" button on the right-hand side immediately inserts the selected symbol into an open XML Editor document if one exists.

11.3 Using the Unicode Character Table

A typical case for using the Unicode Character Table is to insert special characters, e.g. Σ (u+2211) in an XML document. The course of action could be this:

1. Start the XML Editor perspective (→ chapter 12) in the TextGridLab.
2. Double-click the wanted XML document in the Navigator (→ chapter 4) to open it.

3. Click or double-click the tab “Unicode Character Table” next to Navigator and Metadata Editor. (→ chapter 9) to open the Unicode Character Table view.
4. Place the mouse pointer in the XML document where the special character is needed.
5. Select Σ from the table with mathematical operators and click “Insert”.
6. Σ is added in the XML document.

11.4 Interaction with Other Components

The Unicode Character Table View is automatically opened when executing the XML Editor (→ chapter 12). In this manner symbols can be included in an XML text without opening a new view.

12 XML Editor

The XML Editor is an interactive tool for viewing XML documents and for creating new data or annotating text retrospectively in XML language. XML is not a programming language like HTML. It is a markup language. That means: XML can work outside the web and sets the meaning of the elements and (optionally) their presentation. XML is able to organize and classify data in a text. Therefore, XML is able to facilitate the exchange of data and information as well as to make it searchable. Additional details on XML are not explained here. Please See

`http://www.w3.org/XML/`

for more information. TextGrid's XML Editor is based on "Eclipse Web Tools Platform Project" and "Vex" by John Krasnay et. al.:

`http://www.eclipse.org/webtools` and `http://wiki.eclipse.org/Vex`

The TextGrid help explains the XML Editor perpective (→ section 12.2) and its parts in detail and gives you some examples for using the XML Editor (→ section 12.6).

12.1 Open the XML-Editor

You can open the XML-Editor

- by clicking "XML Editor" on the Welcome Screen of the TextGridLab.
- by clicking the symbol  in the toolbar.
- by selecting "Tools > XML-Editor" in the menu bar.

12.2 XML Editor Perspective

As soon as you have opened the editor, you can see three main parts:

1. the Navigator (→ chapter 4) on the left
2. the Editor Field (→ section 12.3) in the middle, which is blank till such time as an XML file is opened or created
3. a separated view on the right which is split into two different tabs 'Outline' and 'Properties'. These are blank at the outset (→ section 12.4 and section 12.5).

12.2.1 Features of the XML Editor

The XML Editor in general offers some features that should make working on XML documents easier.

Show Validation Errors

Clicking "Show Validation Errors" under the item "XML" in the menu bar opens a new view in which error messages are listed with information about invalid XML and offset.

Associate a Schema

If an XML file is opened, you can associate a schema to it. After clicking "Associate a Schema" under the item "XML" in the menu bar the "Select a new schema" dialog opens (figure 12.1 on the facing page).

Above a list of schemas there is a display of summary information if the file is associated to any schema and, if it is, to which. You can choose one of the schemata listed with some information about the schema name, the corresponding project, its contributor and its creation date. Click a schema to select it and "OK" to associate it to the XML file.

If no schema is associated, the radio button below the list is marked. A document's schema association will only be made persistent when the document or its metadata is saved.

Associate a CSS Stylesheet

A Cascading Stylesheet can be added to an XML file when it is opened and "Associate a CSS Stylesheet" is selected from the item "XML" in the menu bar.

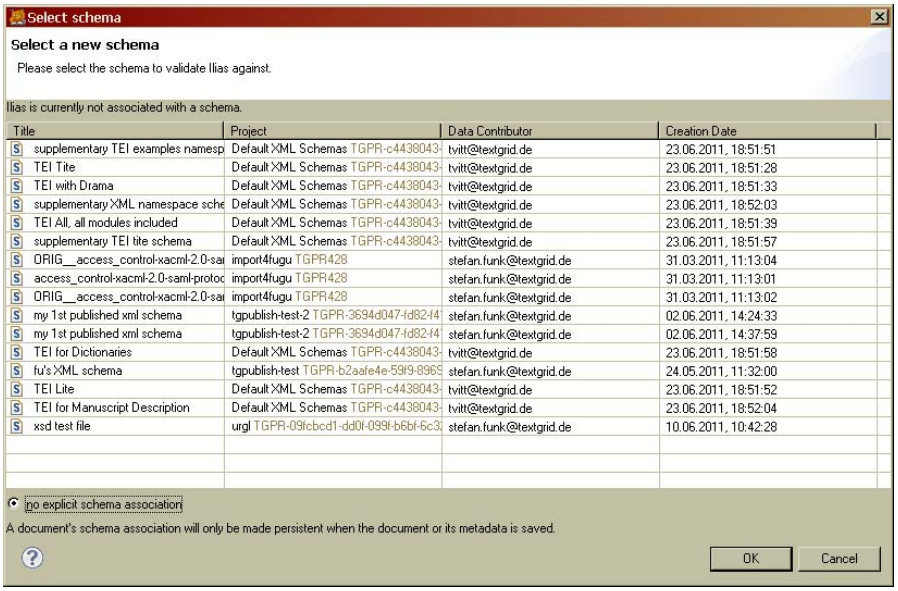

Figure 12.1: Associate a Schema

The CSS will be used for displaying the XML file in the WYSIWYM View (→ section 12.3.3). You can select a CSS from the list by clicking on it. By default, aTEI stylesheet build into the editor is used. To reactivate this option mark the radio button below the list of CSS files.

Associate an Adaptor

If a file is or more files are selected in the Navigator or opened in an Editor, an adaptor can be associated to translate the given document to the TextGrid Baseline Encoding. To open it, please select “Associate an Adaptor...” under the item “XML” in the menu bar.

In the upper list the selected files are presented with information about title, project, contributor and creation date. You can mark the box under this list to make the assignement persistent when clicking “OK”.

In the lower list you can select the adaptor by clicking on it. Here you can also get additional information about the adaptors. To annul your selection, you can mark the radio button under this list.

XML Editor Debugging

The debugging is intended to find and reduce the number of problems. The XML Editor Debugging works with the WYSIWYM View (→ section 12.3.3). Via "XML Editor Debugging" in "XML" in the menu bar you have the possibility to reload the WYSIWYM View.

By selecting "Debug XML Document" you can save the WYSIWYM Debug Output. You can also open the WYSIWYM Debugging View by clicking "Layout Debugging".

12.2.2 Menu Bar

When you open the XML Editor, some items in the menu bar are activated. Some you can find in "Edit", some in "XML".

Edit

If the XML Editor is opened, options from "Edit" in the menu bar can be used, depending on the view opened in the Editor Field (→ section 12.3).

Undo and Redo: To undo or redo a change made to a document click "Edit > Undo" or "Edit > Redo" in the menu bar above.

Cut, Copy and Paste: Use "Edit > Cut", "Edit > Copy" and "Edit > Paste" in the menu bar to arrange parts of the source code.

Delete and Select All: For removing code parts use "Edit > Delete". Use "Edit > Select All" to mark all souce code of a file.

Find and Replace: To open the "Find and Replace" dialog box, click "Edit > Find and Replace" in the menu bar on top. You can specify text to search for and optionally replacement text in this dialog box. You can set:

- the search direction ("Forward" or "Backward" from the current caret position)
- the scope ("All" or "Selected lines" to search within a selected area)
- whether your search should be "Case sensitive" or not

- "Whole word" to match the entire search string
- "Wrap search" at the end of the file
- "Incremental" which causes the editor focus to move to the first complete occurrence of the text you are typing
- the "Regular expressions" checkbox to activate the Regular Expressions mode. Type [Ctrl+Space] over the text field to get content assistance that lists all possible expressions

Expand selection to: For marking up passages in the Source View "Expand selection to" offers you the option to select the enclosing, the next or the previous element. In addition, you can restore the last selection.

Content Assist: For more information see the explanation about the Source View (→ section 12.3.2).

Show Tooltip Description: Displays tooltip description, where applicable. It shows the value of a hover that would appear at the current cursor location.

Word Completion: Use this to get suggestions from the program for completing a word.

Quick fix: For more information see the explanations about the Source View (→ section 12.3.2)

Smart Insert Mode: For more information please see the explanation about the Source View (→ section 12.3.2).

XML

Some operations can be started from the menu bar item "XML":

- Insert Elements
- Rename Current Element to

- Source: Used for comment handling and code-formatting
- Show Validation Errors (→ section 12.2.1)
- Associate a Schema (→ section 12.2.1)
- Associate a CSS (→ section 12.2.1)
- Associate an Adaptor (→ section 12.2.1)
- Copy URI-Fragment: Clones an URI-Fragment for local addressing.
- XML Editor Debugging (→ section 12.2.1)

12.2.3 Toolbar

When the XML Editor is opened, some additional functions in the toolbar are active depending on the View that is currently selected.

Show Block Markers and Inline Markers (WYSIWYM View)

Click to show block-markers and click to see all inline-markers in the WYSIWYM View (→ section 12.3.3).

New and Previous Annotation (Source View)

By clicking on or , the next or the previous annotation in the source code can be found. By clicking the small triangle next to this symbols a list of entities is presented that can be checked off. Only the marked kinds of objects will be found. You can select additions and changes as well as errors, warnings and infos. You have also the possibiliy to jump to the next or previous.

Turn Grammar Constraints on and off (Source View)

When you edit an XML file that has a set of constraints or rules defined by a DTD or an XML schema, you can turn the constraints on and off by clicking or . When the constraints are turned on, the XML Editor prevents you from inserting elements, attributes, or attribute values not permitted by the rules of the XML schema or DTD, and from removing necessary or predefined sets of tags and values (→ section 12.3.1 and section 12.2.1).

Reload Dependencies (Source View)

If your XML file is associated with a DTD or XML Schema that has changed, you can reload the dependencies by clicking  (→ section 12.3.1 and section 12.2.1).

Available Tags (WYSIWYM View)

If the WYSIWYM View (→ section 12.3.3) is selected, a few more icons are shown: You can click on  to get a suggestion of available tags that can be added as your favorites to the toolbar. By double-clicking them, they are added to the XML file. To remove tags from the toolbar favorite list again, click  .

12.2.4 Status Bar

When a file is opened in the XML Editor the bar at the bottom of the view informs the user if it is writable, if the smart insert mode (→ namerefxml-editor:editor-field:source-view:features) is active and lists the current coordinates of the cursor.

12.2.5 Shortcuts

[Alt+/]	Word Completion (→ section 12.2.2)
[Alt+Shift+Down]	Restore Last Expanded Selection
[Alt+Shift+Left]	Expand Selection to Previous Element
[Alt+Shift+Up]	Expand Selection to Enclosing Element
[Alt+Shift+Right]	Expand Selection to Next Element
[Alt+Shift+W]	Show passage in Navigator (→ chapter 4), Outline and Properties View (→ section 12.4 and → section 12.5)
[Crtl+1]	Quick Fix (→ section 12.3.2)
[Crtl+A]	Select All
[Crtl+C]	Copy
[Crtl+F]	Find and replace
[Crtl+I]	Format Active Elements (→ section 12.3.2)
[Crtl+Shift+/]	Add Block Comment (→ section 12.3.2)
[Crtl+Shift+\]	Remove Block Comment (→ section 12.3.2)
[Crtl+Shift+C]	Toggle Comment (→ section 12.3.2)
[Crtl+Shift+F]	Format (→ section 12.3.2)

[Crtl+Shift+Insert]	Smart Insert Mode (→ section 12.3.2)
[Crtl+V]	Paste
[Crtl+X]	Cut
[Crtl+Y]	Redo
[Crtl+Z]	Undo
[Delete]	Delete
[F2]	Show Tooltip Description

12.3 Editor Field

This section shows how to work with the Editor Field in the center when a document is opened. At the bottom of the Editor Field you can choose between three different editing views of the content: “Design”, “Source” and “WYSIWYM”. The Design View shows the hierarchic structure of the document. The Source View shows the document in XML language. It allows you to access its structure and modify it. The WYSIWYM (=“What You See Is What You Mean”) View shows the final display and formatting of the content for the web. You can switch between the editing views by clicking on the tabs at the bottom of the Editor. The * in the title bar of the Editor Field shows that the file is not saved yet.

12.3.1 Design View

The Design View provides an overview of the tree-structure of the document in the left node column (figure 12.2 on the next page). The content column on the right side shows the content model of elements, the values of attributes and text content.

Nodes can be opened and closed by clicking the “+” or “-” button in front of them. You can edit the values of attributes, the content of processing instructions and the text-content of elements by typing directly in the appropriate text-field in the ‘Content’ column. You can change the position of XML objects by left-clicking them permanently, moving the cursor to the target and stop clicking when the line marking the new position is highlighted.

Features of the Design View

The Design View has some special features:

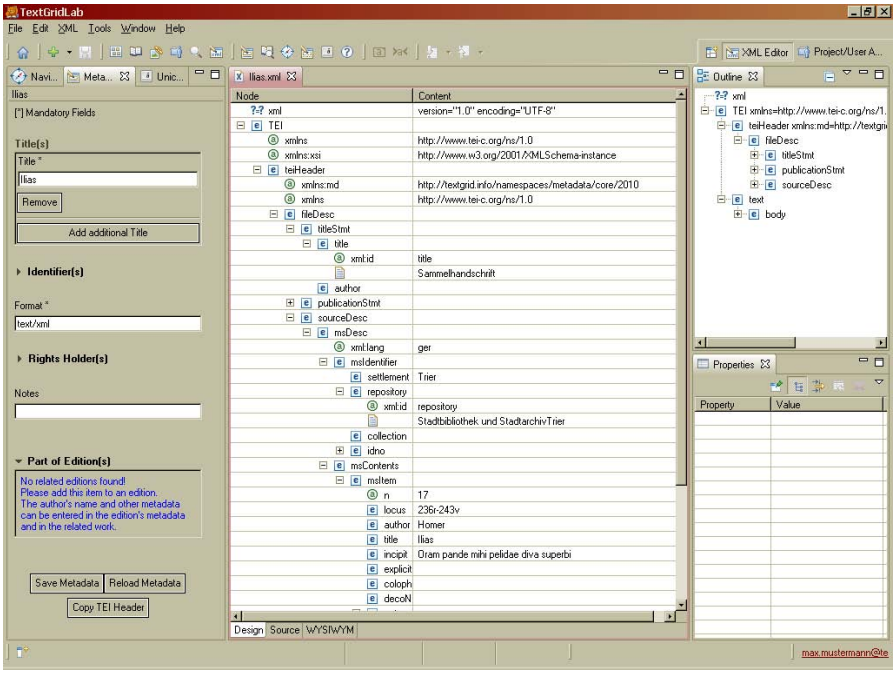

Figure 12.2: Design View

Add and Edit DTD Information: A DTD can be added by right-clicking an XML object in the Design View. Enter the name of the root element with which the DTD should be associated. Add a Public or System ID. If a Public ID is browsed, a window opens to select an XML catalog entry. The catalog can be specified by key or URI.

Finish with "OK" or "Cancel". If a System ID is browsed, a window opens to specify the system ID. Use the radio buttons to choose between a file from the workspace or an XML catalog entry.

To select a file from the workspace, use the "Import files" button. In the pop-up window you can select a local directory via the "Browse" button. Previously imported workspace files are suggested. Use to expand or to collapse all folders.

In a new window you can select the directory by clicking the directory and "OK". Back in the import dialog you see the chosen directory in the left column and its content on the right. Chose all files in the directory by marking the box before the name of the directory or clicking "Select All". "Deselect All" removes all marks in the boxes. To select one file, click the box in front of it. You can use "Filter Types..." so that only selected file types are shown. You can use "Select All" or choose file types by clicking the boxes left to them. "Deselect All" annuls your choice.

You can use “Select All” or choose file types by clicking the boxes on their left. “Deselect All” annuls your choice. Use the field “Other extensions” if the document type is not offered. Click “OK”. Afterwards a folder has to be chosen in which the file will be imported. Use “Browse” for this purpose.

Optionally, you can overwrite existing resources without warning or create a complete folder structure. In the advanced options you can create links to the workspace. Using this option will create virtual folders. You can create link locations relative to a selected reference can be created. Click the red button to cancel the ongoing operation. You can also import an XML catalog entry after selecting them on the basis of key or URI.

A DTD can be worked on by right-clicking it in the Design View and selecting “Edit DOCTYPE...” The window popp-up up has the same structure as the “Add DTD Information” window. The public or system ID can also be changed by left-clicking the corresponding field in the content column.

Add and Edit Schema Information: A namespace can be chosen with the context menu in the Design View. Select “Edit Namespaces...” and the “Edit Schema Information” window opens. The Namespace Declarations consist of a prefix, the namespace name and a location hint.

Click “Add” to continue. In the “Add Namespace Declarations” window you can choose between selecting from a registered namespace or specifying a new one by using the radio buttons.

Select registered namespaces by marking the boxes in front of them and clicking “OK”. Alternatively, a new namespace can be specified.

The chosen namespace declarations are now shown in the “Edit Schema Information” window. Please click “Edit...”. Enter the required prefix and namespace URI for the namespace declaration. Click “Browse” for a location hint. The “Select File” window will open. Click “OK” or “Cancel” to finish and get back to the “Add Namespace Declarations” window.

When the namespace is specified, finish the operation with “OK”. If no specified namespace should be added, click “Cancel”. This will return you to the “Edit Schema Information” dialog in which the previously added specified namespace is now visible.

Use “Add” to enclose further namespaces. Select “Edit” to change the particulars of already added namespaces. Use “Delete” to remove them. Finish the dialog with “Cancel” or “OK” . Once added namespaces can be edited by right-clicking them and selecting

"Edit Namespaces..." The namespace name can also be changed by left-clicking the corresponding field in the Design View (→ section 12.3.1).

Add and Edit Processing Instructions: Processing Instructions can be included by right-clicking the place where it should be added and selecting "Add Child", "Add Before" or "Add After" and afterwards "Add Processing Instruction". This is not possible by right-clicking attributes.

A processing instruction is specified with its target and its data. The Target field is used to identify the application to which the instruction belongs. The Data field contains the instructions. Click "OK" to add the instruction. An already existing processing instruction can be worked on after right-clicking it and choosing "Edit Processing Instruction". The window pop-up has the same format as the "Add Processing Instruction" window. The data can also be changed by left-clicking the corresponding field in the content column.

Add Elements: Right-click the element where a new element should be added. Choose if the new element should be added before or after the right-clicked element or if it should be its child element. Then click "New Element...". Enter the element's name and press "OK".

Add and Edit Attributes: Right-click an element and select "Add Attribute" and "New Attribute". Enter the name and the value of the attribute and click "OK". An already existing attribute in the Design View Editor Field can be worked on after right-clicking it and choosing "Edit Attribute". The popping-up window has the same structure as the "Add Attribute" window. The value of the attribute can also be changed by left-clicking the corresponding field in the content column.

Context Menu

- To delete an XML object, right-click it and select "Remove".
- To insert a DOCTYPE declaration in your document, right-click at any position in the Editing View and select "Add DTD Information".
- To add new or edit existing namespaces in the document, right-click at any position in the Editing View and select "Edit Namespaces".

- Processing instructions can be edited in a window popp-up after “Edit Processing Instruction” has been selected.
- To add an element at a certain position relative to an element in the document, right-click it and choose one of the elements proposed. when selecting “Add Child”, “Add Before” or “Add After”:
  - a comment
  - a processing instruction
  - PCDATA
  - a CDATA section
  - a new element
- You can add attributes to an element by right-clicking it and selecting from the list proposed after selecting “Add Attribute”.
- To edit attributes, right-click the attribute and select “Edit Attribute”.

The lists of proposed elements and attributes are provided by Content Assist. Proposals come from a referenced content model if a schema is specified for the document, or else through the XML Catalog. This will give you “smarter” proposals, such as specific child element proposals within a given element, or required attribute proposals.

12.3.2 Source View

You can edit a document’s source code in the Source View directly by manually editing, inserting or deleting elements and attributes. Lines can be opened and closed by clicking the +/- button on the left side. Schema-driven Content Assist will support you with a Hover Help and lists of proposals when adding new elements (→ section 12.3.2).

Features of the Source View

The Source View offers you some features for working with XML source code.

Syntax Highlighting: Tag elements (attributes, values, etc.) as well as comments in the Source View are highlighted differently to facilitate orientation in the document and

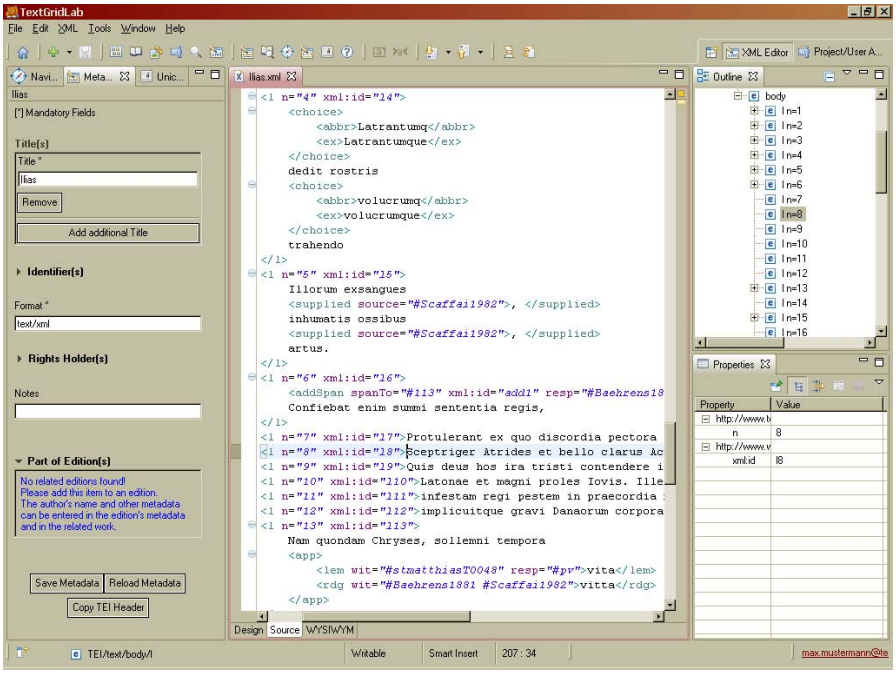

Figure 12.3: Source View

detection of syntax errors. You can customize the syntax highlighting in the editor-relevant preferences.

Unlimited Undo and Redo: To undo or redo a change made to a document, click "Edit > Undo" or "Edit > Redo" in the menu bar above. Alternatively, right-click in the Editor Field and select the corresponding entry "Undo Text Change". You can undo and redo every change made to a file for the entire editing session.

Node Selection: Depending on the position of the caret in the editor, the node selection indicator highlights the corresponding tags as well as the lines that include a node in the vertical ruler in the left area of the Source view

Comment toggling and block commenting and uncommenting: You can toggle an XML comment on and off by right-clicking and selecting "Source > Toggle Comment". To comment out a section of source code, right-click on the selected area and select "Source > Add Block Comment", to uncomment, select "Source > Remove Block Comment."

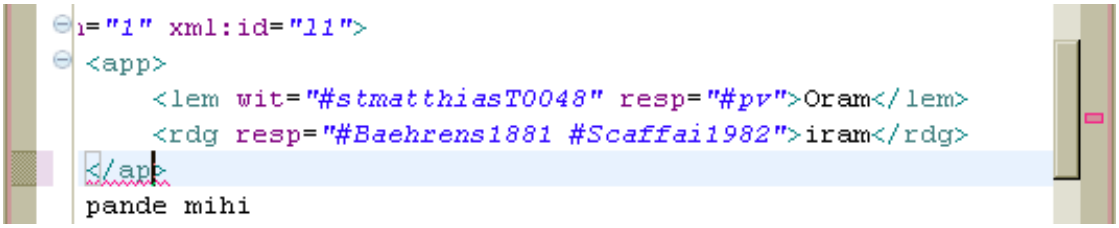

Figure 12.4: As-you-type Validation

As-you-type Validation: While editing the document, errors found in the general XML syntax (missing quotes, missing brackets, missing end tags) as well as validation errors (in case a schema is specified) are indicated with red wavy underlines. A red icon at the top of the vertical ruler in the right area of the Source view will show up if the Document contains any errors (figure 12.4). To find a description of the error, mouse over the red marks shown in the vertical ruler in the right area of the Source view. A yellow icon indicates a warning.

Smart Insert: Typing elements and comments is supported by a Smart Insert mode: When you type an element, Smart Insert completes the corresponding closing tag automatically. Likewise, when you type the beginning of an XML comment <!–, Smart Insert completes the ending of the comment –>. The caret is left in the middle of the comment tag so you can proceed directly typing the comment text. In the same line, opening quotes in attributes are completed with closing quotes while the caret is left between them so you can directly start typing the value of the attribute. To toggle the Smart Insert mode on and off, click "Edit > Smart Insert Mode" in the menu bar and tick or untick the check mark.

Hover Help: Hover Help is displayed when users mouse over an element or an attribute. It displays the content model of the current element or attribute and additional documentation information if included in the associated schema (figure 12.5 on the next page). Mousing over text that is indicated to be erroneous with red wavy underlines displays a description of the current problem. You can modify the Hover Help preferences in the relevant editor preferences.

Content Assist: When typing the opening bracket < of an element in the Source View field, Content Assist provides you with a list of suggested elements allowed at this position. You can activate Content Assist clicking "Edit > Content Assist" in the menu bar at the top. When activating Content Assist while the caret is at an attribute position, a

Figure 12.5: Hover Help

list of suggested attributes allowed at this position is provided. Proposals come from a referenced content model if a schema is specified for the document, or possibly through the XML Catalog. You can modify the Content Assist preferences in the editor relevant preferences.

Quick Fix: Select "Edit > Quick Fix" in the menu bar on top to see a list of suggested corrections when positioning the caret on a text that with red wavy underlines is indicated to be erroneous with red wavy underlines. Alternatively, right-click on the underlined text and select "Quick Fix". If there are no problems or warnings at the selected position, Quick Assist proposals are not available.

Formatting: To make the XML document easier to read and better for printing, you can change the formatting options in the editor relevant preferences. You can apply formatting to the whole document by right-clicking in a non-highlighted area in your document and selecting "Source > Format". To apply formatting to a highlighted area only, right-click in the selected area and select "Source > Format Active Elements".

Cleanup: Simple errors in the XML-document such as missing required attributes, missing begin or end tags or unquoted attributes can be corrected with XML Cleanup. You can open the "Cleanup" dialog box by right-clicking in the Editor and selecting "Source > Cleanup Document". Alternatively, you can find it in the menu bar: "XML > Source > Cleanup Document". Afterwards set your Cleanup preferences in the dialog box; you can further select 'Format source' in the box to apply formatting to the document.

Team and Local History: A local edit history of a file is maintained when you create or modify a file. This history is accessible via "Team > Show Local History" in the context menu. Each time you edit and save the file, a copy is saved so that you can replace the current file with a previous edit or even restore a deleted file. You can also compare the contents of all the local edits. You can also "Apply Patch(es)" after selecting "Team" in the context menu. Select the resource that the patch was generated on in the "Patch Input Specification" dialog. This resource should contain the same file revisions as the line-up on which the patch was generated (→ chapter 8). For more information see the Eclipse documentation

`http://www.eclipse.org/documentation/`

Preferences: You can edit XML Editor-relevant Preferences by right-clicking in the Source View editor and selecting "Preferences". Editable are amongst other things:

- Highlighting of the syntax elements: Expand the tree "XML > XML Files > Editor" on the left of the dialog box "Preferences" and select "Syntax Coloring".
- Hover Help: Expand the tree "General > Editors" on the left of the dialog box "Preferences" and then select "Structured Text Editors". In the "Structured Text Editors" dialog box select the "Hovers" Tab and tick off the requested modifier preferences.
- Content Assist: Expand the tree "XML > XML Files > Editor" on the left of the dialog box "Preferences" and select "Content Assist". There you can choose the appropriate settings.
- Formatting, please expand the tree "XML > XML Files" on the left of the dialog box "Preferences" and select "Editor". In this dialog box you can choose and tick off the respective settings of the formatting function.

For more information see the Eclipse documentation:

`http://www.eclipse.org/documentation/`

Context Menu

The context menu of the Source View allows the user to realize most of the view's features via right-click.

- Undo changes and to revert the file to the last saved state, the current state can also be saved

- Highlight the file or part of the file in the Navigator (→ chapter 4), Outline View (→ section 12.4) or Properties View (→ section 12.5) by selecting "Show In"
- Select Cut, Copy and Paste
- Start Quick Fix
- Manage your comments, format or clean up your source code by selecting "Show In".
- Open the Properties View (→ section 12.5)
- Use Eclipse's Subversive options by selecting "Team", "Compare With" or "Replace With" (→ section 12.3.2).
- Associate an Adaptor (→ section 12.2.1), to copy an URI or URI fragment, to delete the file, to show or reload metadata (→ chapter 9), to show revision (→ chapter 8) and CRUD Warnings that inform you about database problems
- Selecting preferences

12.3.3 WYSIWYM View

The WYSIWYM (="What You See Is What You Mean") Editing View provides a word processor-like interface and hides the raw XML tags from the user. It uses the TEI schema and a standard CSS stylesheet to define the document layout (figure 12.6 on the following page).

To edit other XML formats or define a custom layout you can use your own schema and CSS stylesheet. Your stylesheet should declare paragraph-type elements as "display:block".

If your document was not recognized as a TEI document, and no stylesheet association was found, you have the alternative to associate a stylesheet (→ section 12.2.1) before proceeding. Use the Import Tool (→ chapter 6) to import a CSS first or to proceed at your own risk.

Features of the WYSIWYM View

The main features of the WYSIWYM View are:

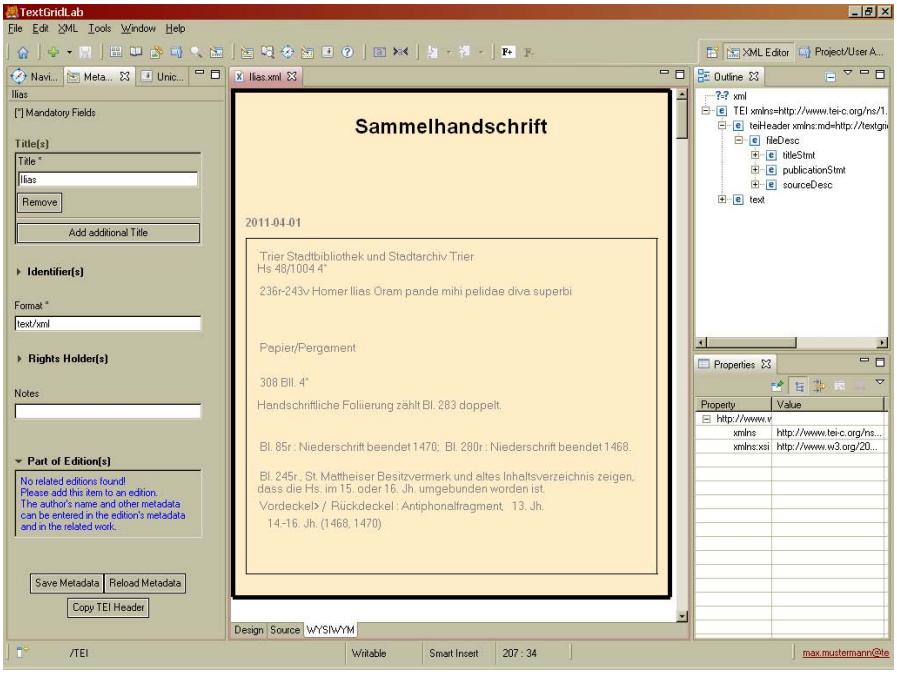

Figure 12.6: WYSISYM View

Block and Inline Markers: In the default setting no tags are displayed in the WYSIWYM Editing View. To show the Block Markers, which mark nested divisions of an XML-file, select in the main toolbar. To show the Inline Markers, which mark the single elements of an XML-file, select in the main toolbar (figure 12.7 on the next page).

Insert Elements: You can insert new elements by right-clicking at a certain position in the editor and selecting "Insert Element" (alternatively select "XML > Insert Element(s)" in the menu bar). In case some text is highlighted in the editor when selecting "Insert Element(s)", the new element will surround the highlighted text fragment. In both cases after selecting 'Insert Element(s)' a list of suggested elements allowed at this position will appear. You can use the Up ↑ and Down ↓ keys on your keyboard to select an element and press "return" to insert it or double-click on an element in the list.

To insert an element not provided in the proposal list, enter the elements name in the editing field and click "Insert New". To rename an element in the proposal list enter the new elements name in the editing field and click "Rename". Placing the caret in the WYSIWYM Editor is supported by the XPath shown in the TextGridLab status bar at the bottom of the whole TextGridLab window. You can change the font size and weight

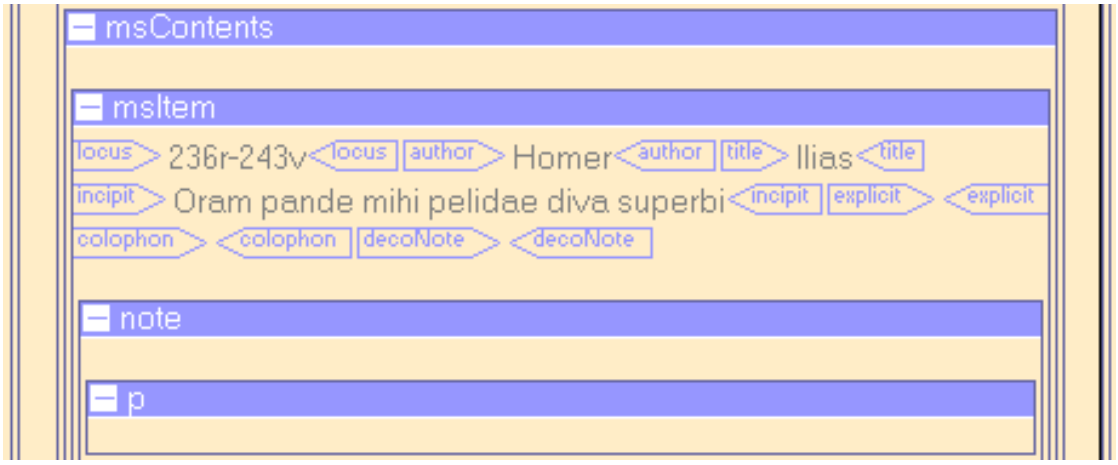

Figure 12.7: Block and Inline Markers

clicking 'Fonts' in the main toolbar (→ section 12.2.3) and select your settings in the dialog box.

Context Menu

The Context Menu in the WYSIWYM View is similar to the Source View (→ section 12.3.2). But some options you can only find here: So you can add elements to the WYSIWYM view (→ section 12.3.3).

12.4 Outline View

The Outline View facilitates navigation in large XML-documents providing an overview of the tree-structure of the document (figure 12.8 on the following page).

12.4.1 Title Bar

By clicking , you can collapse the nodes in the view. By clicking the white downward triangle, the View Menu is opened. It offers two operations: "Link with Editor" and "Show Attributes". Use the both remaining icons to minimize and to maximize the view.

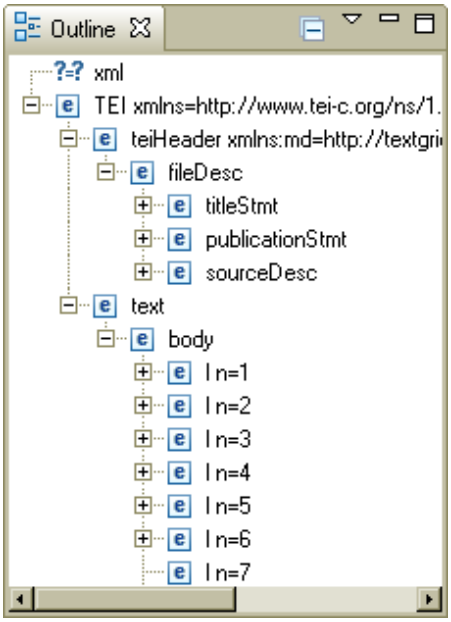

Figure 12.8: Outline View

12.4.2 Context Menu

The context menu in the Outline View allows you to

- Associate an Adaptor (→ section 12.2.1)
- Copy an URI or an URI fragment
- Delete, show metadata (→ chapter 9), revisions (→ chapter 8) and CRUD warnings
- Carry out the operations that can be performed with the context menu of the Design View (→ section 12.3.1)

12.5 Properties View

The Properties View shows in two columns the attributes and the corresponding values (figure 12.9 on the next page). You can edit values by selecting an element in the Design/Source/WYSIWYM Editing View or the Outline View and typing directly in the appropriate text field into the value column. Press “Enter” to confirm changes made to the attributes. It is recommended that you edit attributes in the Properties View

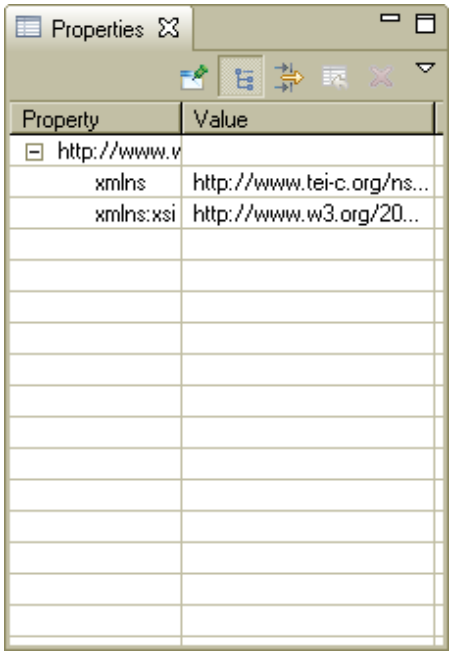

Figure 12.9: Properties View

when working in the WYSIWYM View (→ section 12.3.3), as attributes will not be displayed in the WYSIWYM Editing View.

12.5.1 Title Bar

The view's title bar offers you several icons to perform a range of operations:

- Click to pin this property view to the current selection.
- Click to show categories like "Attributes" in the view.
- Click to show advanced properties.
- Click to restore the default value.
- Click to remove the selected property.
- Click the white triangle to open the view menu. The view menu allows you
  - to open a new properties view
  - to pin a property to a selection

  - to show categories and advanced properties
  - to remove a selected property
  - after clicking “Columns”, you can define the width of the two columns “Property” and “Value”
- Click the both remaining icons to minimize and maximize the view.

12.5.2 Context Menu

The context menu in the Properties View allows you to copy and to restore the value of a given property. If you click in the text field of the value column, the context menu will be borrowed from your operating system.

12.6 Using the XML Editor

Some of the main operations for which the XML Editor is intended are explained in the following sections.

12.6.1 Open XML documents

To open XML documents from the repository in the XML-Editor, either double-click the document in the Navigator (→ chapter 4) or right-click on the document in the Navigator and select “Open”. To open XML-documents from your local system in the XML-Editor, click “File > Open Local File” and choose the document you want to open from the “Open File” dialog of your local system.

Once a document or file is opened,

- the Metadata Editor (→ chapter 9) shows the metadata related to the document
- in the Editor Field (→ section 12.3) the document content is shown in XML language,
- in the separated Outline View (→ section 12.4) on the right, the document is represented as a tree or hierarchic structure
- if you click on an element in the XML view, its attributes and their values are then listed in a table within the Properties View (→ section 12.5)

At the bottom of the Editor Field in the center you can choose between three different editing views of the document: Design, Source and WYSIWYM view. The Design View (→ section 12.3.1) shows only the hierarchic structure of the document. The Source View (→ section 12.3.2) shows the document in the XML language. It allows you to access its structure and modify it. The WYSIWYM View (→ section 12.3.3) (= "What You See Is What You Mean" view) shows the final display and format of the content for the web. You can switch between the editing views by clicking on the tabs at the bottom of the Editor.

12.6.2 Create XML documents

You can create a new XML document either by selecting "File > New Object" in the menu bar or via right-clicking a project in the Navigator (→ chapter 4) and selecting "New Object". In the opening dialog box "New TextGrid Object" select a target project and the document type (XML Document, XML Schema, XSLT Stylesheet). Click "Next" and assign metadata in the metadata form. Metadata can also be added later (→ chapter 9). You can click "Next" to associate a schema with your XML document or click "Finish" to leave the dialog box.

For associating a schema, you can choose between schemas that are located in projects you have access to in the repository or schemas stocked in the built-in XML catalog. To import your own schemas to the repository, see Import (→ chapter 6). Currently only W3C Schemas are supported in the TextGridLab. To save the document, click "File > Save", use the  in the toolbar, or right-click in the document and select "Save".

12.6.3 Associate an XML Schema and Validating XML Files

While working in the Source View (→ section 12.3.2) it is possible to associate a schema with your XML document. Please click "XML > Associate a Schema" in the menu bar on top and choose one of the schemas listed in the "Select Schema" dialog box. Click "OK" to associate the schema. To import your own schemas to the repository, see Import (→ chapter 6). In the Source View errors in the general XML syntax (missing quotes, missing brackets, missing end tags) are indicated as well as validation errors (in case a schema is specified) with red wavy underlines.

To check if your XML document is well-formed and valid, you can validate it. You can validate your document in any View by clicking "XML > Show Validation Errors" in the menu bar on top. The validation errors view will pop up below the Editor view showing an error message and identifying the invalid XML provided that there is an error.

12.7 Interaction with Other Components

The XML editor interacts predominantly with the Navigator, the Metadata Editor the Unicode Character Table and the Text-Image-Link Editor.

12.7.1 XML Editor and Navigator

The Navigator (→ chapter 4) is used for opening and organizing projects and objects. By clicking on XML files, they will be opened, by default, in the XML Editor.

12.7.2 XML Editor and Metadata Editor

The Metadata Editor (→ chapter 9) is used for organizing the metadata of projects and objects. For searching XML files this information is helpful. The Metadata Editor is able to produce a TEI Header from the metadata that can be copied into your XML source code.

12.7.3 XML Editor and Unicode Character Table

The Unicode Character Table (→ chapter 11) view can be used to insert unicode signs into an XML document.

12.7.4 XML Editor and Text-Image-Link Editor

The Text-Image-Link Editor (→ chapter 13) allows you to combine images and texts. The text has to be given in XML and the XML Editor is used by default.

13 Text-Image-Link Editor

The Text-Image-Link Editor can be used to link text segments to corresponding image sections within TextGridLab. A typical application is linking of facsimile and transcriptions, whereas these texts can also be created during the linking process, which allows the use of further tools like e.g. image annotations.

XML texts and images can be opened in the their corresponding views. The corresponding components are then marked by pairs and the linkage is confirmed. The results can be saved as a new object, which contains the link information (text and image coordinates, path of used XML and image files). Once a file is saved, double-clicking it suffices to reload XML texts, images and links to continue editing.

13.1 Open the Text-Image-Link Editor

The Text-Image-Link Editor can either be started

- by clicking its icon on the initial Welcome Screen (→ section 1.3), or
- as a tool from the menu bar in the TextGridLab, or
- by clicking its icon  on the toolbar.

13.2 Text-Image-Link Editor Perspective

The editor contains the Navigator (→ chapter 4) on the left whose context menu allows you to open images or texts - depending on the user rights in particular. On the right-hand are two views, one above the other which are blank if no file is selected. As soon as an image is opened, it can be seen in the Image View (→ section 13.3), the upper view on the right side. Automatically, you will also see the Image View below the Navigator and the detached Toolkit (→ section 13.6). As soon as an XML file is opened, it can be seen in the XML Editor (→ chapter 12) below the Image View. In summary, this perspective

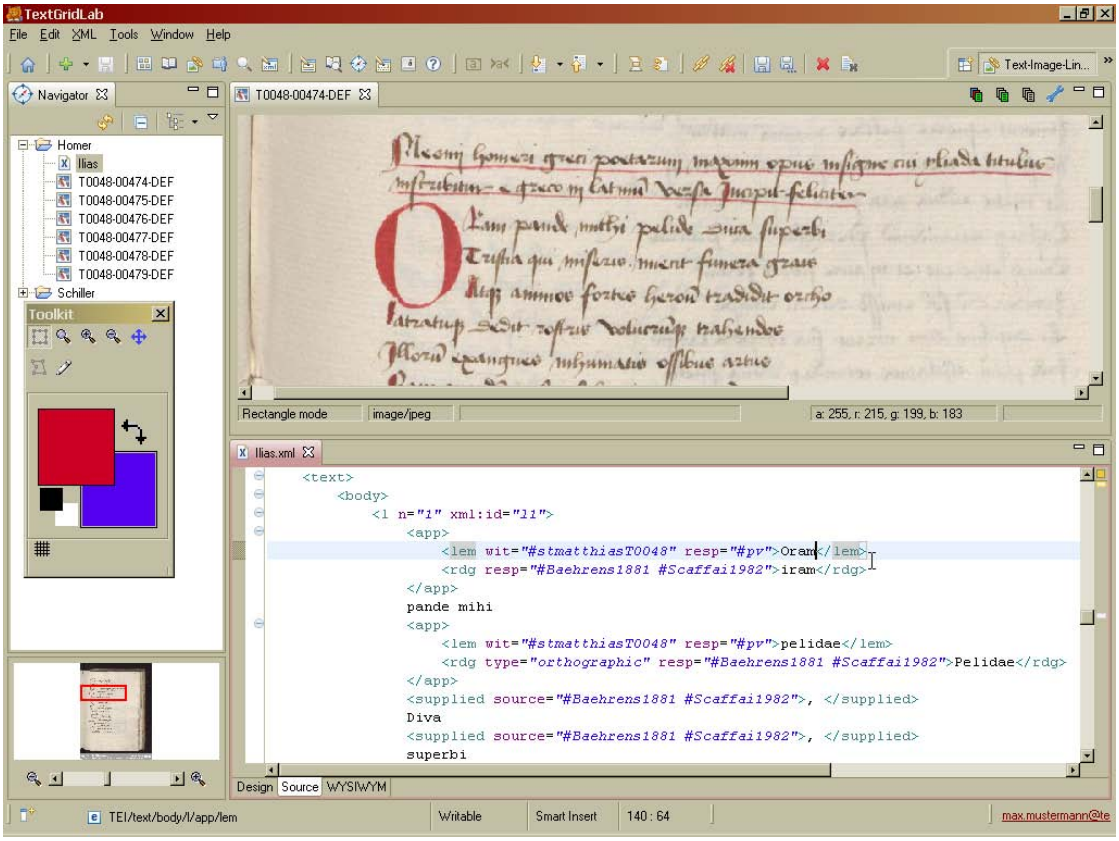

Figure 13.1: Text-Image-Link Editor Perspective

consists of a Toolkit, two specific views and the Text-Image-Link Editor (→ section 13.4) in addition to the generic Navigator:

- Image View: shows the image or an image detail to be linked and enables the marking of image segments
- Thumb View (→ section 13.5): shows a reduced version of the entire image and the active image detail which can easily be moved and zoomed and that is enlarged in the Image View
- XML Editor: allows you to open or create texts as well as the mark of text parts
- Toolkit: provides functions to work in the Image View

13.2.1 Menu Bar

If the Image View is activated, “Undo”’ and “Redo” in “Edit” of the toolbar are usable. If the XML Editor is opened, all functions are enabled (→ chapter 12).

13.2.2 Toolbar

If the Image View (→ chapter 12) is activated, some special elements in the toolbar are usable:

- Click  to delete active selections
- Click  to reset the Text-Image-Link Editor

If a file has been opened in the XML Editor (→ chapter 12) additionally, some more buttons in the toolbar are activated:

-  links a selected text segment to a selected shape
-  unlinks selected link(s)
-  next to the linking icons saves the Text-Image-Link Object
-  saves the Text-Image-Link Object as...

13.3 Image View

The Image View is the TextGridLab working space for editing pictures. Some of its functions are also usable for connecting image and text elements.

13.3.1 Features of the Image View

For editing pictures the Image View provides you with several functionalities: selections, docking lines, writing mode, rotation function and the Layer Editor. Most of them are accessible via context menu by right-click.

Selections

A main feature of the Image View is creating and handling different selections of an image. You can create rectangles and polygons to select areas of a picture (→ section 13.6). An existing selection can be selected by double-click it. You can choose more than one selection by double-clicking the created shapes while [Ctrl] is pressed.

Docking Line Settings

You can set docking lines as an optical help after selecting the docking line mode in the Toolkit (→ section 13.6). These can be aligned horizontally or verticaly by [Shift+H] or [Shift+V] or via the context menu. Click [Ctrl+V] to clone a docking line. The appearance of docking lines can be modified by using the Docking Line Settings (figure 13.2 on the facing page):

1. Right-click in the Image View.
2. Select “Docking lines”.
3. Select “Settings”.
4. You can choose various line styles.
5. There are five grades of line width for docking lines. The larger the number, the thicker the line.
6. The line spacing between cloned docking lines can be defined by selecting a new value between “10” and “150”.

The colours of active and not active docking lines can be selected by clicking on this figure. By clicking on the squares, a palette pops up. Use the arrow to change the colours of active and not active docking lines.

Writing Mode

In writing-mode, you can add information about the text direction to the selected sections on a facsimile. Use [Shift+S] to show or hide the writing mode of a selected shape. The writing mode for the active selection(s) or for the active document can be changed by right-clicking in the Image View. The following options can be chosen:

- none: this is the default value

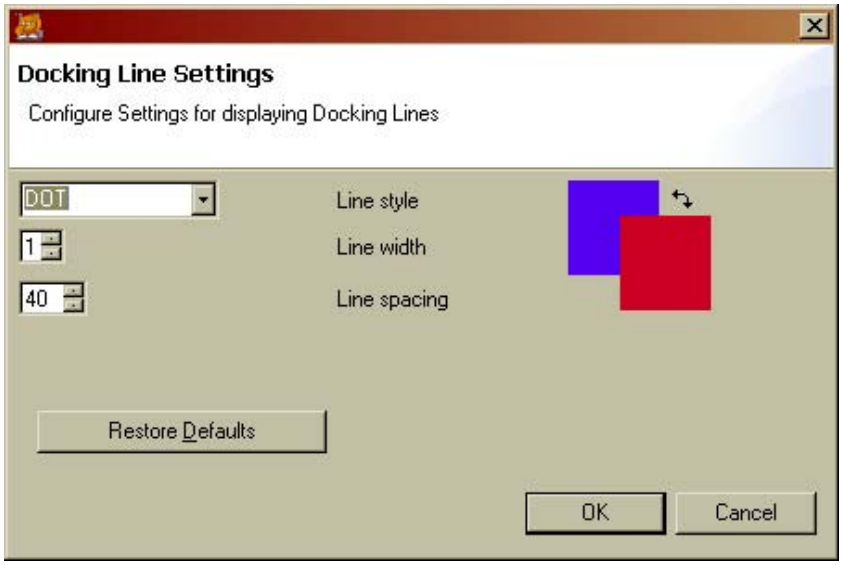

Figure 13.2: Docking Line Settings

- lr: from left to right
- lr-tb: from left to right and from top to bottom
- rl: from right to left
- rl-tb: from right to left and from top to bottom
- tb: from top to bottom
- tb-rl: from top to bottom and from right to left

If you want to set the writing mode for the whole document, then select "Writing Mode > Set writing mode for active document" before creating the shapes. This changes the writing mode for all selections which have no writing mode yet. All shapes created afterwards will use this value. You may change it again for every single selection with "Writing Mode > Set writing mode for active selection(s)".

Set Rotation Angle

The "Set Rotation Angle" dialog can be opened by

- right-clicking a selection in the Image View, selecting "shape rotation" and "Set shape rotation for active selection(s)"

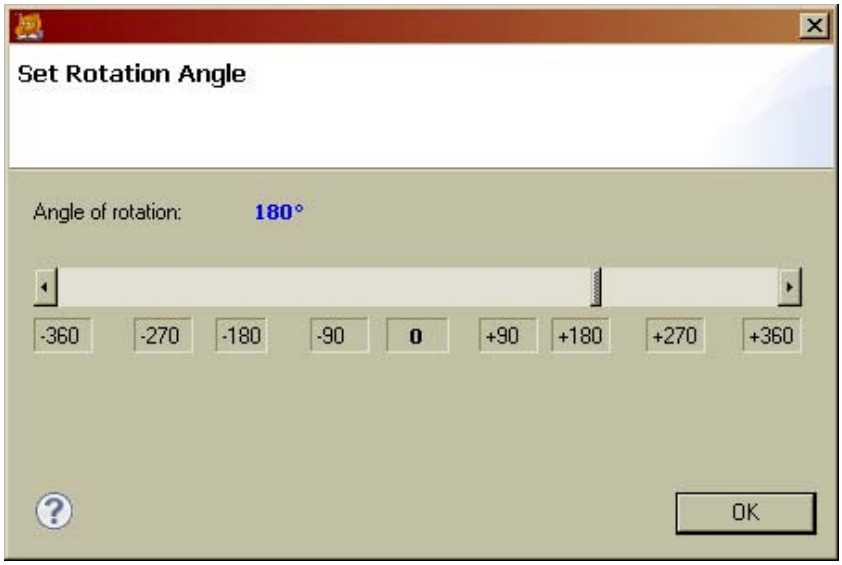

Figure 13.3: Set Rotation Angle

- clicking the box with information about the rotation angle in the status bar (→ section 13.3.4)

The angle can be set via the scrollbar (figure 13.3). Via context menu or [Shift+R] you can active or deactivate the shape rotation mode. Select a created shape by double-click it. If the rectangle, polygon or docking line mode is chosen (→ section 13.6), you can rotate the shape with your mouse. Via context menu or [Shift+P] you can show or hide the rotation angle in the status bar of the Image View.

The Layer Editor

It is possible to create logical groups of links (e.g. verses, comments) using the Layer Editor. By clicking the box with information about layers in the status bar (→ section 13.3.4) at the far right of the Image View, you open the Layer Editor. Alternatively, you can select “Text Layers” and “Edit Layers” from the context menu in the Image View.

It the upper part of the editor all created layers are listed. In the lower part of the editor new layers can be created. To create a new layer, click “New/Assume”. The layer automatically gets a number. Click in the “Name” text field to add the name of the layer. By clicking “Color”, a palette opens from which a color can be chosen. By default, this layer is visible. Check the second box to activate the layer. Only one layer can be active at any time. To delete a layer, click the “Remove” button.

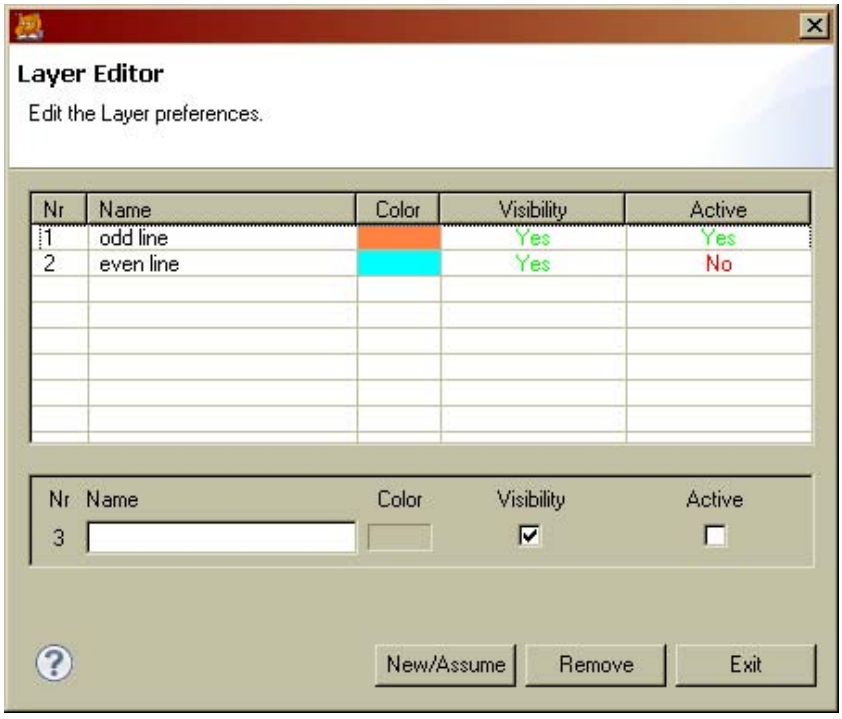

Figure 13.4: Layer Editor

You can hide or show layers via the title bar of the Image View (→ section 13.3.3). Press [Shift+L] to show all layers.

13.3.2 Menu Bar

If the Image View is opened, the operations “Undo” and “Redo” in the item “Edit” of the menu bar are activated. If the XML Editor (→ chapter 12) is focussed, all other operations are enabled, too.

13.3.3 Title Bar

The * symbol in the title bar of the Image View means that changes are not saved yet. There are several buttons in the title bar of the Image View:

- shows all layers (if there are layers that were previously invisible)
- shows layers

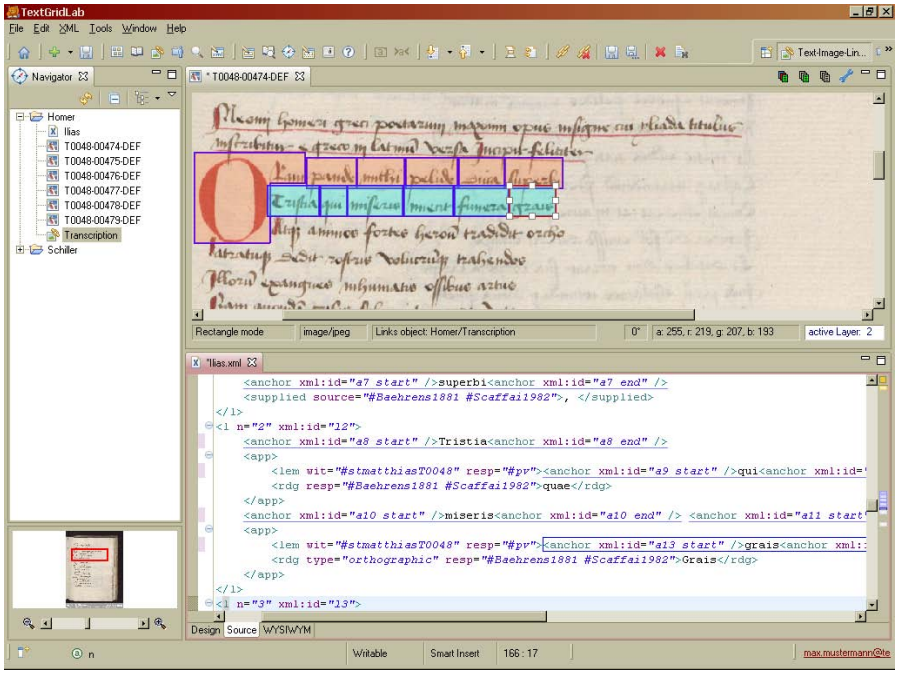

Figure 13.5: Working with Multiple Layers

- hides layers (→ section 13.3.1)
- Open or close the Toolkit (→ section 13.6)

13.3.4 Status Bar

The Image View status bar displays information on

- the activated mode (→ section 13.6)
- the file format
- a warning signal if there are unlinked objects
- the rotation angle of the selected shape that can be changed in the "Set Rotation Angle" dialog (→ section 13.3.1) after clicking this field.
- the coordinates of the mouse pointer
- enabled or activated layers (→ section 13.3.1)

13.3.5 Shortcuts

The following shortcuts are available:

[Page Up]and [Page Down]	Move image up or down
[+]	Zoom in
[-]	Zoom out
[0]	Zoom original
[C]	Clone active rectangle horizontally
[Ctrl+A]	Select all shapes (→ section 13.3.1)
[Ctrl+T]	Open or close the Toolkit (→ section 13.6)
[Ctrl+V]	Clone active docking line (→ section 13.3.1)
[Ctrl+Y]	Redo
[Ctrl+Z]	Undo
[Shift + C]	Clone active rectangle vertically
[Shift + H]	Horizontal alignment for active docking line (→ section 13.3.1)
[Shift + L]	Show all text layers(→ section 13.3.1)
[Shift + P]	Show or hide shape rotation (→ section 13.3.1)
[Shift + S]	Show or hide writing mode (→ section 13.3.1)
[Shift + R]	Activate or deactivate shape rotation mode (→ section 13.3.1)
[Shift + V]	Vertical alignment for active docking line (→ section 13.3.1)
[Space + Mouse-Left]	Move Image
[Tab]	Transverse between selections (→ section 13.3.1).

13.3.6 Context Menu

The Image View context menu allows several operations:

- Center selection: places the selected part of the image in the center of the view
- Link text to selected shape: connects the selected parts of the image and the text
- Unlink selected link(s): disconnects the selected link between image and text
- Delete active selection(s): removes the current selections
- Delete all shapes/links: removes all shapes and all links in an image
- Jump to linked text: selects the corresponding part in the text file
- Clone active rectangle horizontally: produces a copy of the active rectangle on the right of it.

- Clone active rectangle vertically: produces a copy of the active rectangle below it.
- Docking lines
  - Alignment of active docking line
    - Horizontal: aligns the active docking line horizontal
    - Vertical: aligns the active docking line vertical
  - Save all lines: saves all docking lines
  - Delete all lines: removes all docking lines
  - Show or hide all lines: shows all docking lines if hidden or vice versa
  - Settings: opens the Docking Line Settings (→ section 13.3.1)
- Writing Mode section 13.3.1
  - Show or hide writing mode: shows writing mode if hidden or vice versa
  - Set writing mode for active selection(s): changes writing mode for selected object
  - Set writing mode for active document: changes writing mode for all selections which have no writing mode and for new created selections
- Shape rotation (→ section 13.3.1)
  - Activate or deactivate shape rotation mode for rotating a shape with your mouse
  - Show or hide shape rotation mode in the status bar (→ section 13.3.4)
  - Set shape rotation for active selection(s) via scrollbar
- Text Layers
  - Edit Layers: opens the Layer Editor (→ section 13.3.1)
  - Edit Layers for selected shapes only: you can shift a selection to another layer here
  - Show all Layers: all layers will be visible
- Image Size
  - Show original: presents the image in original size

Figure 13.6: Thumb View

- Fit Vertically: sets the height of the image to the height of the view
- Fit Horizontally: sets the width of the image to the width of the view
- Fit Window: sets the height and the width of the image to the height and the width of the view

13.4 XML Editor View

In order to link images and XML files, the XML Editor (→ chapter 12) has to be opened. It is part of the the Text-Image-Link Editor perspective by default.

13.5 Thumb View

The Thumb View opens simultaneously with the Image View. It consists of a a slide control bar to adjust the zoom factor in Image View and a selection frame to navigate the active detail in Image View via mouse. Click on the part of the image on which you want to focus.

13.6 Toolkit

All functions of the Toolkit apply to the Image View.

- Magnifier: click and drag to enlarge the selected screen area temporarily (the range can be modified with the Ctrl key)

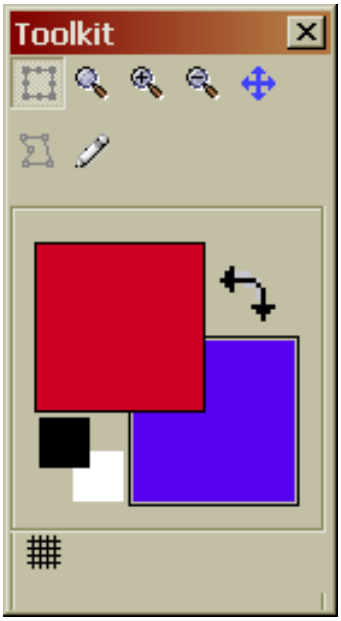

Figure 13.7: Toolkit

- Magnifier "+": clicking the desktop zooms in and centers the workspace at the selected position
- Magnifier "-": zooms out
- The sliding tool allows you to move the work space
- Rectangular selection : click and drag to select a rectangular area
- Polygonal selection : click and drag to create the edge of a polygon which can be completed by double clicking
- changes to docking line mode (→ section 13.3.1)
- Choose color: modifies foreground (= selected, active marking) or background (= inactive marking) color, both can be modified by clicking the big colored squares
- Swap colors : interchanges fore- and background color
- Reset color: clicking the smaller pair of squares resets fore- and background color to default colors black and white
- Raster : activates line raster to facilitate the alignment of the marking

13.7 Using the Text-Image-Link Editor

The following description describes the linking of images and texts as a typical task for the Text-Image-Link Editor is developed.

13.7.1 Open Images and Texts

Double-clicking XML and image files in the Navigator (→ chapter 4) opens the XML files in the XML Editor and the images in the Image View. Alternatively, XML files can be opened by selecting "Add to Text-Image-Link Editor" in the context menu of the Navigator.

13.7.2 Select Workspace

The displayed detail can be selected with the selection rectangle in the Thumb View and the scrollbars. The zoom factor can be changed using the slide control in the Thumb View or the magnifier tools.

13.7.3 Create Links

Follow these steps to create links:

- The selection in the image can be selected in rectangular (default) or polygonal mode. In rectangular mode clicking the image at one corner of the area to select suffices to draw the rectangular selection by keeping the left button pressed. In polygonal mode an edge can be drawn by clicking and dragging. Releasing the left button determines the next corner of the polygon which can be completed by double clicking. A mark which is not yet linked to a text is displayed with a dashed border.
- Text can be selected by clicking and dragging or by double-clicking (single word) respectively triple-clicking (whole line) or with one click on the XML tag to select the whole XML element.
- The creation of a link can be effected using the symbol  in the toolbar.
- Marked texts and images does not have to be effected in sequence. It is also possible to mark a larger quantity of image sections and then link them successively later.

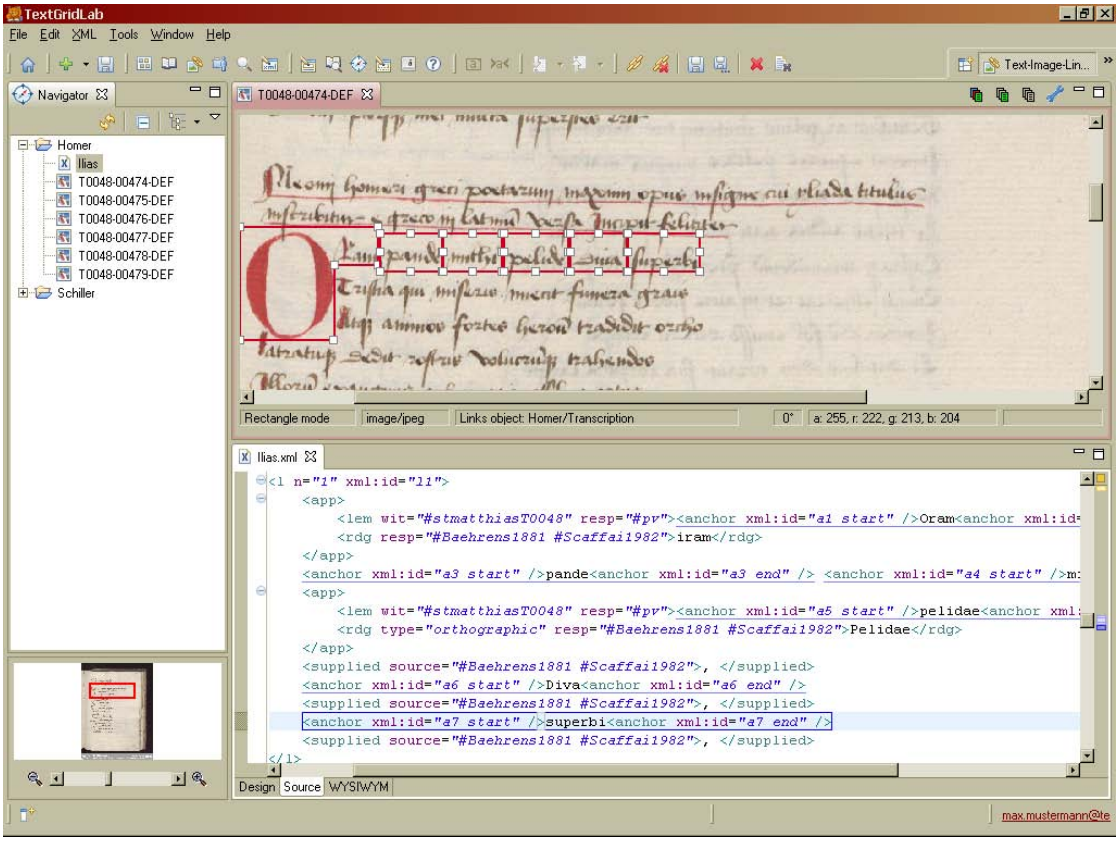

Figure 13.8: Linked Text and Image

- The results can be saved as a new object, which contains the link information (text and image coordinates, path of used XML and image files). You can use the button next to save this text-image-link object. Once a file is saved, double-clicking it suffices to reload XML texts, images and links to continue editing.

13.7.4 Correct and Delete Links

Links can be corrected or deleted afterwards.

- The selection of a link can be carried out by double-clicking both in the graphic and in the text field.
- In the Image View selected links or marks are displayed in the potentially modified fore- and background color.

- Selected links (i.e. marks in text and image and their link) can be deleted by right clicking using the context menu or by clicking the button.
- Marks in the Image View can be edited subsequently. When moving over an active marking, the cursor and its icon change: In the center it becomes a sliding tool (four way arrow) that allows you to change the position of the marking by clicking and dragging. Close to the boundaries it allows you to reposition the edges (two-way arrow) or the corners (diagonal two-way arrow) in a similar way. Polygons changes can be realized in a similiar manner with the exception that single edges of polygons can not be moved.

13.8 Interaction with Other components

13.8.1 The Text-Image-Link Editor and the Navigator

As described above, texts, images and linking objects can be opened in the Navigator (→ chapter 4).

13.8.2 The Text-Image-Link Editor and the Metadata Editor

The Metadata Editor (→ chapter 9) is used to edit and save metadata of TextGrid objects. Images as well as text image link objects have to be associated with such metadata to be searchable.

13.8.3 The Text-Image-Link Editor and the XML Editor

The XML Editor (→ chapter 12) is by default a part of the Text-Image-Link Editor perspective.

14 Dictionary Search

The Dictionary Search Tool allows for browsing the dictionary network

`www.woerterbuchnetz.de`

at the Center for Digital Humanities at the University of Trier. The following dictionaries may be browsed:

- General dictionaries: German Dictionary by Jacob and Wilhelm Grimm; Grammatical-Critical Dictionary of the High German Dialect by Johann Christoph Adelung
- Author's dictionaries: Goethe Dictionary
- Dialect dictionaries: Dictionary of the Alsatian Dialect by Ernst Martin and Hans Lienhart; Dictionary of German-Lorrainese Dialects by Ferdinand Follmann; Dictionary of the Palatine Dialect by Ernst Christmann et al.; Rhenish Dictionary; Supplement to the Rhenish Dictionary
- Middle High German dictionaries: Middle High German Dictionary by Matthias Lexer; Middle High German Dictionary by Georg Friedrich Benecke, Wilhelm Müller and Friedrich Zarncke; Supplement to the Middle High German Dictionary by Matthias Lexer
- Luxembourgian dictionaries: Luxembourgian Dictionary, Dictionary of the Luxembourgian colloquial speech; Dictionary of the Luxembourgian dialect

14.1 Open the Dictionary Search

To open the Dictionary Search perspective

- choose the Dictionary Tool from the Welcome Screen, or
- select "Tools" from the menu bar and click "Dictionary Search", or
- click the icon  in the toolbar

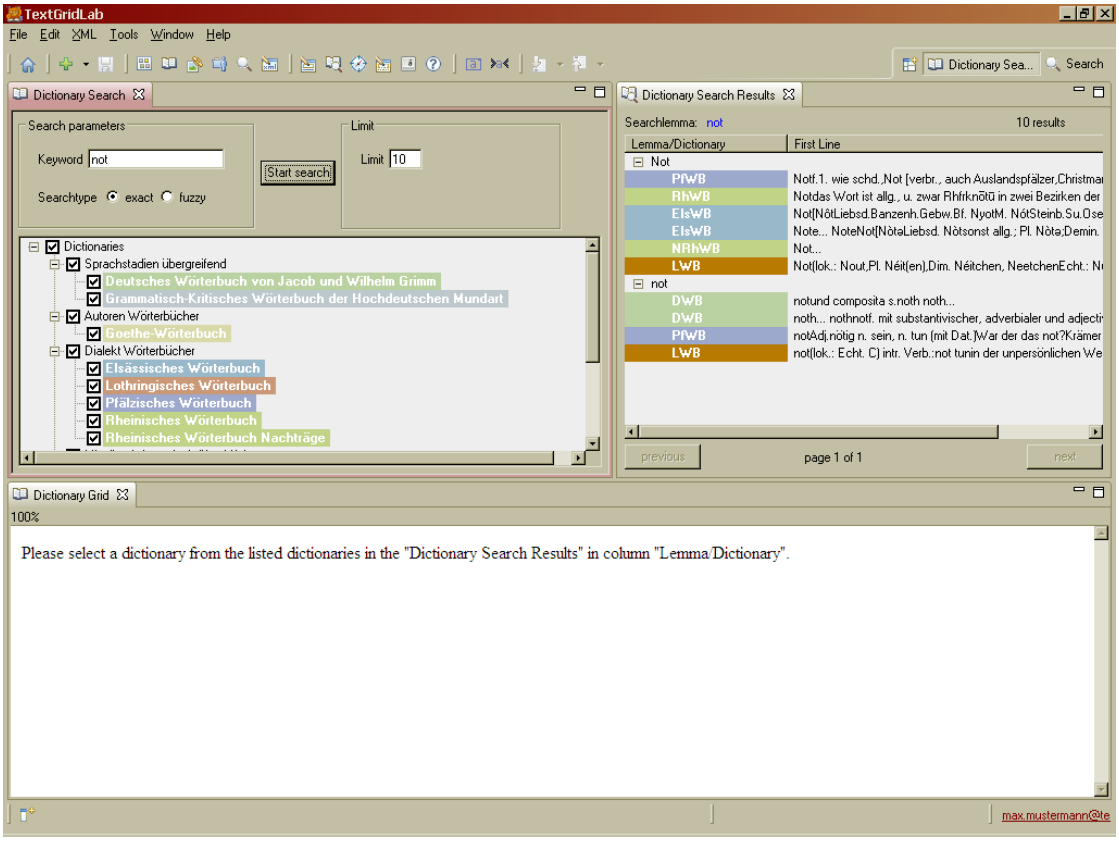

Figure 14.1: Dictionary Search Perspective

The Dictionary Search Results view, which is part of the Dictionary Search, can also be opened separately by

- selecting “Tools>Dictionary Search” in menu bar, or
- clicking in the toolbar

14.2 Dictionary Search Perspective

The perspective is subdivided into three views: the Dictionary Search mask view on the upper left, the Dictionary Search Results view on the upper right and the Dictionary Grid view at the bottom.

14.3 Dictionary Search Mask

To look up a word, fill in the Dictionary Search Mask as follows:

- Insert a keyword in the first input field. The search is not case sensitive.
- You can limit the number of results displayed. By default, the first 10 results will be displayed.
- Choose between exact or fuzzy search. In fuzzy search similar strings will also be found.
- Mark the box or boxes of the dictionaries to be searched.
- To start the search, click the icon “Start search”.
- You can use wildcards. The asterisk (*) substitutes any zero or more characters, and the question mark (?) substitutes exactly one character. You can combine these search methods.

14.4 Dictionary Search Results View

You see the number of results in the upper right corner of the view. For orientation, the first line of the article (up to 13 words of the lemma) is displayed. If the number of results exceeds the display limit, you can view the remaining results by clicking the “Next” or the “Previous” button.

14.5 Dictionary Grid View

To look up the entry in the dictionary, click the short form listed in the Dictionary Search Results view. The entry will be opened the Dictionary Grid view. The tabs in the head of the Dictionary Grid View lead to further information about the online dictionary and the project into which the online dictionary is embedded. The field at the top of the left column is used for searching lemmas. This quick view starts with the article in question. It lists the following articles as well, depending on their length. You can use all options the online dictionaries offer to go into more detail.

In this view the context menu corresponds to the context menu of your operating system.

14.6 Interaction with Other Components

The functionality of the Dictionary Search Tool can also be used while working on an XML document. Open the Dictionary Results view. Look up any word of your text by double-clicking it in the XML Editor (→ chapter 12).

15 Aggregation Composer

The Aggregation Composer is used for handling TextGrid Aggregations (→ chapter 5).

15.1 Open the Aggregation Composer

The Aggregation Composer can be opened by

- choosing "New" from "File" in the menu bar and selecting a kind of aggregation
- clicking in the toolbar
- right-clicking an aggregation, edition or collection in the Navigator (→ chapter 4) and selecting "Edit"

If "File > New" in the menu bar or are selected, then the "Create a new TextGrid Object" dialog box is opened. Afterwards, the Aggregation Composer appears.

You can also open the Aggregation Composer by using

- the icon on the Welcome Screen
- "Aggregations" from "Tools" in the menu bar
- the icon in the toolbar

In these cases, a perspective opens with the navigator, the empty Metadata Editor and the empty Aggregation Composer. To add a new aggregation, choose "New" from "File" in the menu bar or click in the toolbar. To edit an aggregation, right-click it in the Navigator and select "Edit".

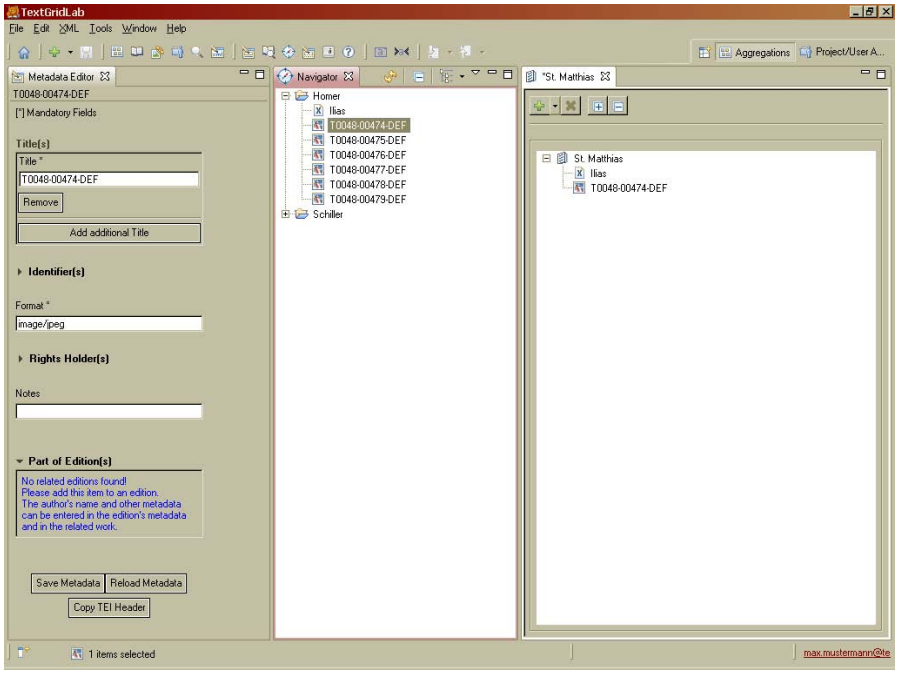

Figure 15.1: Aggregation Composer

15.2 Aggregation Composer View

The Aggregation Composer is part of a perspective with the Navigator (→ chapter 4) and the Metadata Editor (→ chapter 9). If an aggregation is edited, the toolbar and the context menu of the Aggregation Composer can be used.

15.2.1 Toolbar of the Aggregation Composer View

To manage aggregations, the Aggregation Composer provides several functions in its toolbar:

- Click to create a new aggregation, edition or collection that is subordinated to an existing one
- Click to remove a selected object from the list below
- Click or to expand or collapse all branches

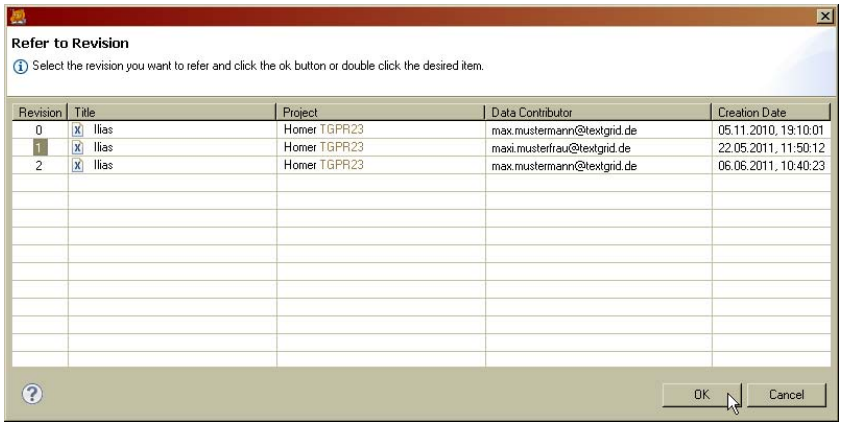

Figure 15.2: Refer to Revision

15.2.2 Context Menu

The context menu in the Aggregation Composers offers you same options as the toolbar of the Composer as well as two more options:

- "Rename Item": any item can be renamed
- "Revision": you can refer to this revision, to the latest revision or to any other existing revision

If you choose the last option, a new "Refer to Revision" window opens that lists all revisions of an object with the number of the revision, the title, the corresponding project and the data contributor (figure 15.2). Select the revision you want to revert to and confirm with "OK" or double-click the desired item.

15.3 Using the Aggregation Composer

To create a reference to an object in an aggregration, collection, or edition, use the Navigator (→ chapter 4) to drag it from there and drop it in the tree shown the Aggregation Composer. Save the changes by using [Crtl+S], the in the toolbar or "File > Save" in the menu bar. Otherwise a dialog box opens that reminds you to save changes if you quit the Aggregation Composer.

15.4 Interaction with Other Components

The Aggregation Composer is based on the conception of objects (→ chapter 5) and interacts with the schema that underlies the Metadata Editor (→ chapter 9). To enable linking objects and aggregations, the Navigator (→ chapter 4) is opened with the Aggregation Composer by default.

16 Publish

Only editions and collections can be published (→ chapter 5). Project Managers have the sole right to publish them (→ chapter 3).

16.1 Open the Publish View

To publish an edition or collection, right-click it in the Navigator (→ chapter 4) and select "Publish in TextGridRep". Afterwards, the Publish view opens on the right side.

16.2 Publish View

The Publish View consists of four levels (figure 16.1 on the next page).

The uppermost level informs you about the status. After initializing the view, it tells you that the edition or collection can be proofed now. The bottommost level allows you to "Proof", to "Publish"(if proofed), and to "Cancel".

After clicking "Proof", the information in the uppermost level changes. On the next level beyond, which is separated into three columns ("Name", "Status" and "Actions"), you can see how many warnings, errors and permissions have occurred and below this some details are presented.

If some warning or error have occurred, more detailled information can be found in the "Action" column of the list below the statistic. By clicking on an entry in the field "Actions" of an error message, a "Call action" button appears. Click on it and you are guided to the critical position.

If no warnings or errors appear, there is an "OK" appears in the status column line and the "Publish" button at the bottom is activated. Click "Publish" to finish the operation.

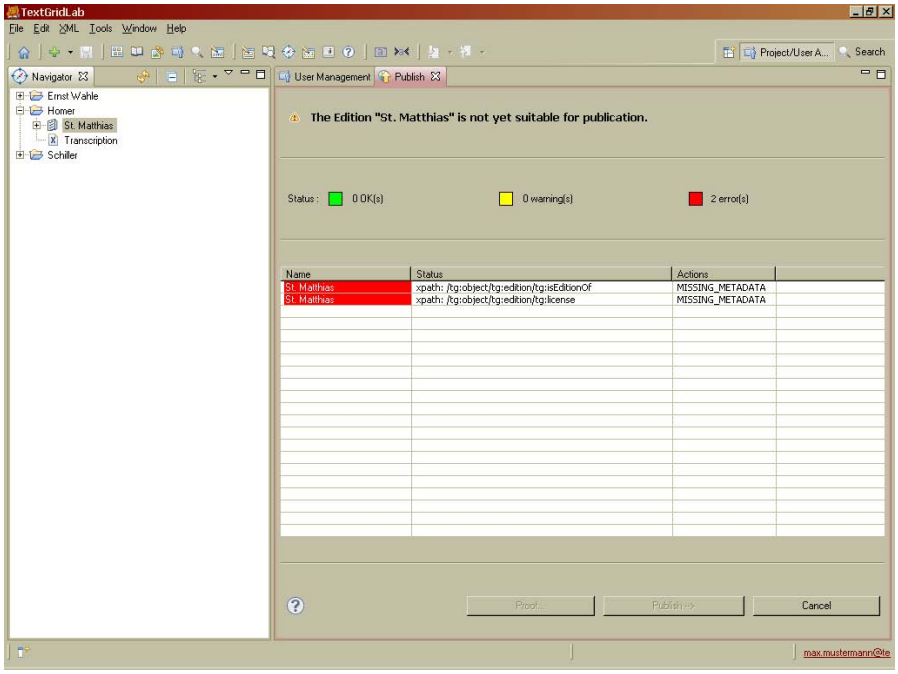

Figure 16.1: Publish

16.3 Using TextGrid Publish

Before you publish an object, you should know that only editions and collections can be published. For publishing they must contain a TextGrid "work" (→ chapter 5). If an edition is to be published, some metadata become mandatory that are optional for an edition as such: "Edition of" and "License" (→ chapter 9).

If a project with a least one object to be published has been created in the TextGridLab, an edition of this object can be published in a few steps by using the Aggregation Composer (→ chapter 15) and the Metadata Editor (→ chapter 9):

1. Create and save a work.
2. Create an edition.
3. Copy the object to be published and the work with the metadata in the edition.
4. Complete the metadata of the edition: "Edition of" and "License" are required for publishing.
5. Save the edition.

6. Publish the edition.

This edition is public now. This action is irreversible.

16.4 Interaction with Other Components

The Publish View can be opened directly from the Navigator (→ chapter 4). “Publish” checks the information of the Project & User Management (→ chapter 3) and the object type (→ chapter 5) as well as the metadata (→ chapter 9) before a TextGrid object is published in the Repository.

17 Search

The Search Module allows you to search the contents (e.g. TEI-encoded documents) and the object metadata in the TextGrid Repository simultaneously.

17.1 Open the Search

The Search perspective can be opened in different ways:

- Click the icon on the Welcome Screen (→ section 1.3)
- Select "Tools > Search Tool" in the menu bar
- Click 🔍 on the tool bar

17.2 Search Perspective

The Search Perspective consists of two views: Search and Search Results (figure 17.1 on the following page).

17.3 Search View

The Search View consists of the declaration of a search endpoint and a simple or advanced search.

"Search Endpoint" declares against which search repository the request is raised. The two possibilities are:

- "my projects": repository that can only be used after authentication.
- "public data in the TextGrid Repository": the public repository contains only published objects and is also searchable without authentication.

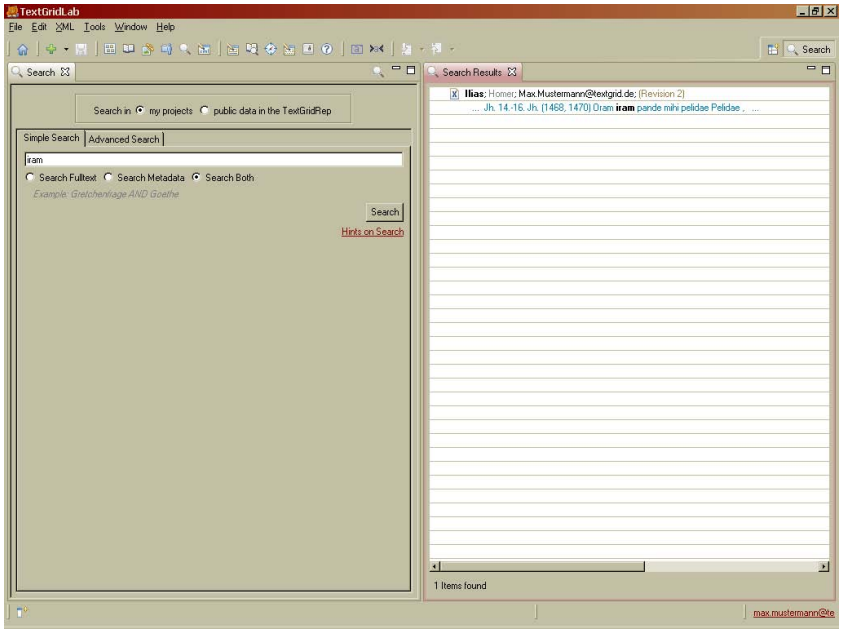

Figure 17.1: Search Perspective

In simple as in advanced search wildcards can be used in the middle and at the end of a word: * for any number of signs, ? for exactly one sign.

17.3.1 Simple Search

In the input field of the simple search that is opened by default you can enter your search terms. There are three different search modes:

- Search Fulltext: only the fulltext section of an object is searched
- Search Metadata: only the metadata section of an object is searched
- Search Both: both the fulltext and the metadata section of an object are searched

In the simple fulltext search the search strings can be combined with “and” respectively “or”. Words without conjunction are interpeted as “and”.

The simple metadata search works just like the fulltext search. The search strings can be combined with “and” respectively “or”. Another way to search for metadata results is to specify the type of metadata. The notiation is: metadata-tag:search-term. All possible metadata tags can be used with this option.

17.3.2 Advanced Search

In the advanced search mode you can raise a search request with the help of a given form. This form consists of three different sections: METADATA, FULLTEXT, BASELINE ENC. Each section can be selected via a checkbox. Selected sections sre used for the search request. The metadata and the fulltext search can be combined by ticking off both boxes, otherwise the baseline encoding search can also be executed separately.

In the advanced FULLTEXT search only the text section of an object is searched. In the input field you can enter the search term. If you fill in more than one word, the words will be "and" related for the search. By specifying the word distance you can declare whether the words should only be found in one document or whether they should occur within a specific word distance of each other.

The METADATA section in advanced search offers the possibility to search across different fields. This form is organized as a matrix. Each row represents the search for one metadata field. The field can be selected by a combo box at the beginning of the line. The search strings can be entered in the text boxes behind. These text boxes are "or" related. The different lines are "and" related. The searchable metadata fields are:

- Data Contributor: a person who submits data in TextGrid, identified by its user ID (e.g. testuser@textgrid.de)
- Identifier: an identifier in non-TextGrid context (e.g. a ISBN or ISSN, a shelf mark, a registration or an inventory number)
- Notes: some additional information concerning the object
- Project: the TextGrid project to which the object is assigned
- Rights Holder: person or organization with copyright for an item
- TextGrid URI: the internal Uniform Resource Identifier of an object
- Title: the title of an object

The expandable labels "Text types", "Content types" and "Languages" contain checkable tree controls, which can be used to define the search closer. With the assistance of the "Date field" you can be set a time frame.

Only baseline encoded TextGrid objects can be found by using the BASELINE ENCODING search (→ http://www.textgrid.de/fileadmin/TextGrid/reports/baseline-all-en). This search form is organized as a matrix. In the first text box of a line the searched tag should be filled in. In the following text boxes of this line the searched

content can be filled in. The text boxes of a line are “or” related. The different lines, one below the other, are “and” related. To submit a search, click the button at the bottom of the Search view labelled “Search” or click the magnifying glass in the upper bar of the view.

17.4 Search Results View

This view lists the search hits. It initially shows the titles of the documents and the matches in their context. The title is given with additional information about the document type, the revision, the project, and the editor.

The items in the list can be chosen by mouse-click. A double-click opens these with the default editor. Right-clicking allows for further actions to be applied to the document, e.g. selecting another open action, displaying the metadata, or copying the URI to the clipboard. The context menu is in most parts identical to that in the Navigator (→ chapter 4).

18 Help

Part of the TextGridLab is an integrated help system, which can be opened en bloc and be searched by keywords. The TextGrid Laboratory also offers you to start a context-sensitive help.

18.1 Static Help

The general, unspecialized help can be opened by selecting “Help” in the menu bar. You can also choose “Help Contents”, “Open Cheat Sheet”, “Dynamic Help” and “Keyword Search”.

18.1.1 Help Contents

After clicking “Help Contents”, the general help is shown in a new window of your standard web browser. This new window contains a header, where you can enter a keyword a search. If you click “Scope”, you can select an area that the search should be restricted to. By default, all topics are searched.

The main window is separated into two parts. The left one is similar to the Navigator view. In the toolbar you can choose different operations:

- Print  the selected topic with or without all subtopics.
- Click  to search for a keyword in the selected topic with or without all subtopics. The choice between searching in a topic with or without subtopics can be made after clicking the downward-pointing triangle for the pull down menu.
- Furthermore, you can collapse all nodes in the list below with  , minimize and maximize the window.
- Clicking  keeps the navigation tree synchronized to the current topic.

The list below shows the contents in a tree structure. Clicking "+" or "-" button the subcontents can be expanded or collapsed. On clicking a tree item, the corresponding content is shown in the windows right area.

In the footer you can select between

- a table of contents
- a listing of the search results
- a view of the bookmarks that can can be deleted with and it the toolbar of the view.
- In principle you can also choose a view to search the index, but the TextGrid Help currently has no index. Instead of this you can use the keyword search for help contents.

The right-hand part of the "Help Contents" window shows you the selected entry of the Help. Use the backward and forward button to navigate and to get back to the starting point. Click to show the selected topic in the table of contents in the left-hand part of the window. You can bookmark a document or print the page.

18.1.2 Cheat Sheet

Cheat sheets can be designed to help a user complete some task, and it lists the sequence of steps required. Currently no cheat sheets are provided for the TextGridLab. But you have the possibility to select cheat sheets from a local file or an URL. For more information see

`http://www.eclipse.org/documentation/`

18.1.3 Dynamic Help

It is possible to initiate the dynamic help, a type of context-sensitive help from the menu bar. A view opens with a forward and a backward button to navigate and the short description to the currently focussed view or editor. If you change to another view, the content of the help view changes simultaneously.

18.1.4 Keyword Search

The keyword search can be started by a separate menu item. Enter a word or some words in the input box and click “Go”. Click the hook in the right corner of the input field to open a menu with the recent terms that have been searched for. You can use wildcards (* for any string, ? for any single character and ” ” to demarcate a phrase) and logical operators (AND, OR and NOT).

- Click to show result categories
- Click to show result descriptions.
- With and you can navigate.

Click the downward triangle in the toolbar of the view to choose between different options available during the keyword search:

- If you select “Contents”: The result is presented in a tree structure. Use the “+” and “-” button to open or close a branch. Click to close them all.
- By clicking “Related Topics” entries are selected in which the view or editor currently focussed is discussed.
- Click “Bookmarks” to browse you bookmarked entries.
- You can search in the Index but currently the TextGrid help has no index.

The result of the search is listed below. You can click on the title of an entry to open it. If an entry of the Help is opened, the toolbar of the view offers you

- to show this in an external window that will open in the “Help Contents”.
- to see the item in the tree-structured table of contents
- to print and to bookmark it
- to highlighten the search term in the entry by clicking
- to navigate with the forward and backward buttons

The footer of the Keyword Search View gives you the same options as the downward triangle in the header: “Related Topics”, “Contents”, “Index”, “Search” and “Bookmarks”.

18.2 Dynamic Help

In most views you will find an icon with an question mark to open the context help. Alternatively, you can always open it via “Help > Dynamic Help” in the menu bar or by clicking on the help symbol in the toolbar. For example: The blue button in the User Management leads you to information about the handling of role assignment.