

**The Regulatory Authority Information System**

**RAIS 3.1 WEB**

**Administrator's Guide**

**Part I**

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# 1 Introduction

## 1.1 Background

Within its statutory functions in providing for the application of Safety Standards, the International Atomic Energy Agency (IAEA) has been developing the Regulatory Authority Information System (RAIS) as part of a supporting set of actions designed to assist countries in managing their regulatory control programme in accordance with international standards and guidance, including the Code of Conduct on the Safety and Security of Radioactive Sources and supplementary Guidance.

RAIS promotes a consistent and common approach to the regulatory control of radiation sources, whilst offering flexibility to respond to specific needs of the countries, with due account of their national legislative framework, administrative structure and institutional and regulatory framework.

The previous version, RAIS 3.0, has been issued in 2004 in MS Access environment. In 2006, it was extended for implementation on SQL Servers. As of the date of this document, this version is in use, to varying degrees, in more than 63 countries.

The current version, RAIS 3.1 Web, is the most recent product in RAIS evolution series. It provides a web interface for RAIS 3.0 and incorporates additional features and enhancements. Compatibility with RAIS 3.0 is maintained. The reader is advised to refer to *RAIS 3.1 Web Regulatory Model* for a general description.

RAIS 3.1 Web is distributed with a full set of documentation. The installation package of RAIS 3.1 Web contains following documents:

- 1     ***RAIS 3.1 Web Regulatory Model:*** This document describes the underlying regulatory model and emphasizes its ability to be ‘tailored’ according to the national regulatory systems. This document has a pure regulatory character with no technical details.
- 2     ***RAIS 3.1 Web Administrator’s Guide:*** This is a technical document consisting of two parts: Part I describes the RAIS 3.1 Web installation process and its customization to satisfy national needs. Part II describes the advanced customization mechanisms in RAIS 3.1 Web using its internal tools.
- 3     ***RAIS 3.1 Web User’s Guide:*** A technical and regulatory document explaining the day-to-day work with RAIS 3.1 Web. It also contains tips for good practice and for resolving some typical regulatory situations in form of *How to’s*.

## 1.2 Objectives

This document is the first part of the two volumes RAIS 3.1 Web Administrator's Guide. Its aim is to provide RAIS Administrators with the necessary information for setting up RAIS 3.1 Web, including its customization according to the national regulatory systems.

## 1.3 Scope

This document covers:

- Installation of RAIS 3.1 Web components
- Migration of data from previous versions of RAIS (RAIS 3.0 or RAIS 3.0 with SQL Server Extensions) into RAIS 3.1 Web
- Customizing of RAIS 3.1 Web regulatory model
- Customization of regulatory system data.
- Defining functional and data roles
- Defining users and assigning access privileges.

## 1.4 Structure

Chapter 2 of this document addresses the installation process. Importing data from previous versions, i.e. RAIS 3.0 or RAIS 3.0 with SQL Server Extensions is described in Chapter 3.

Chapter 4 addresses the first level of RAIS 3.1 Web customization, namely the customization of the default regulatory model. It explains how to adjust data table structures as well as main interface functionalities through customization of queries.

Chapter 5 describes the second level of customization, i.e. how to modify the regulatory system data.

Chapter 6 describes reports customization.

Chapter 7 addresses the customization of the search tool.

Chapter 8 describes the translation mechanism of RAIS 3.1 Web interface.

The RAIS 3.1 Web user management features are addressed in Chapter 9.

## 1.5 Pre-requisite

This document is addressing RAIS administrators. With regard to the particular importance of their duties, RAIS administrators are supposed to be familiar with:

- The national regulatory system.
- RAIS 3.1 Web regulatory model. RAIS Administrator are advised to refer to *RAIS 3.1 Web Regulatory Model* for details.
- RAIS 3.1 Web interface. Detailed description is provided in section 2.2 of *RAIS 3.1 Web User's Guide*.

Additionally, it would be highly advantageous for RAIS administrators to be familiar with Relational Databases and, in particular, *Microsoft SQL server 2005*<sup>®</sup>.

## 2 Setting up RAIS 3.1 Web

### 2.1 Requirements

For the following system requirements it should be noted that installing the latest patches and service packs for all the listed items is highly recommended to ensure as much as possible error free usage of RAIS 3.1 Web.

#### 2.1.1 Server requirements

##### 2.1.1.1 Software

- .net Framework 3.5
- Microsoft Report Viewer 2008 Redistributable
- IIS5.1 or higher for Windows XP, IIS6 or higher for Windows Vista or IIS6 or higher for Windows Server 2003.
- Windows Server 2003 for multiple user access or Windows XP/Vista for single user access
- Microsoft SQL Server 2005 express or higher.
- The latest Service packs and updates from Microsoft are highly recommended.

The following windows service must be started manually for the first time and set to Automatic; this service is “off” by default.

- Distributed Transaction Coordinator (MSDTC)

##### 2.1.1.2 Hardware

- 256 MB RAM or more (Recommended)
- 1 GHz processor or higher (Recommended)

#### 2.1.2 Workstation requirements

##### 2.1.2.1 Software

- IE6 or newer

##### 2.1.2.2 Hardware

- 64 MB RAM or more (recommended)
- 256 MHz or higher (recommended)

#### 2.1.3 Development and testing requirements

##### 2.1.3.1 Software

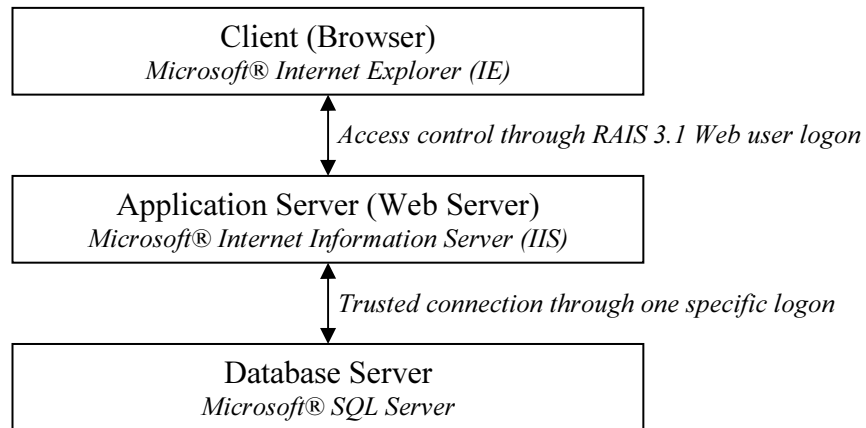
- All server software requirements (see 2.1.1.1)
- Visual Studio 2008

### 2.1.3.2 Hardware

- 768 MB RAM or more (recommended)
- 1.6 GHz or higher (recommended)

## 2.2 RAIS 3.1 Web application model

RAIS 3.1 Web is an ASP.net application. It follows the general scheme illustrated in Figure 1.



*Figure 1. RAIS 3.1 Web application model*

- Clients (web browser) login into the Application Server through RAIS 3.1 Web user management mechanism. On user entry events, the browser sends a query to the web server
- All data operations RAIS 3.1 Web are performed in the Application Server (IIS).
- Web server contacts and gets the information from the database (SQL Server) through a trusted connection using a specific database user on the SQL server. This database user is internal to RAIS 3.1 Web and must be specified during the installation process.
- Web server returns the result to the remote browser

*Note*

*The Client has no direct access to RAIS 3.1 Web database*

## 2.3 RAIS 3.1 Web set up process

Successful setting up RAIS 3.1 Web involves multiple steps:

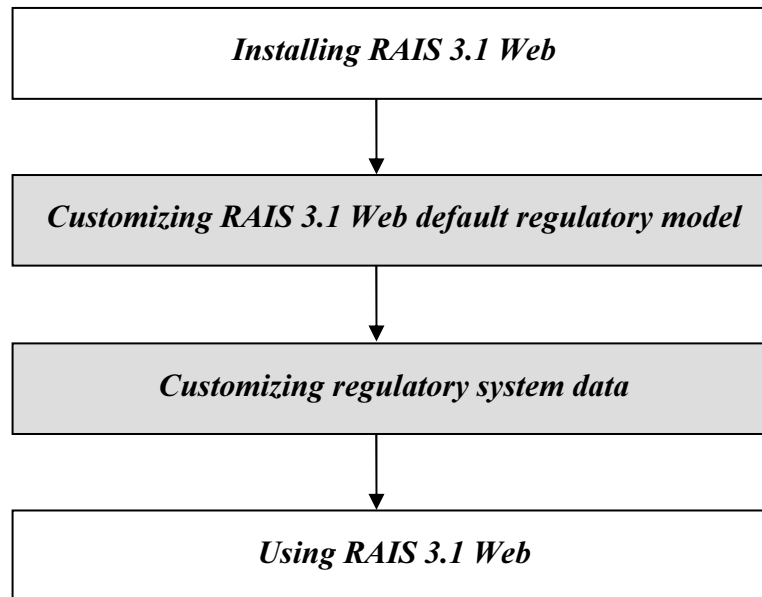


Figure 2. The set up process of RAIS 3.1 Web. Grey boxes represent optional steps

**Installing RAIS 3.1 Web** is the process of creating all files and folders required to run *RAIS 3.1 Web* on a server. In this step, RAIS 3.1 Web data base will be created on the SQL Server, and a web application will be installed in a virtual directory of the web server. The web application communicates with the database through a trusted connection to a specific database user which is created during the installation process.

This step is mandatory and common to installations in all countries. Detailed information about installing *RAIS 3.1 Web* may be found in section 2.4.

**Customizing RAIS 3.1 Web default regulatory model** is the process of defining information items, their attributes, and relations according to country-specific needs. This step is optional; the default model provided by the IAEA may be applied without adjustment. It complies with the international standards and might cover national needs.

To adjust the RAIS 3.1 Web regulatory model, sufficient knowledge about the national regulatory system and international standards is required. Details are provided in chapter 4.

**Customizing regulatory system data:** This step means the process of adjusting the regulatory system data according to specific needs of the national regulatory system.

This step is optional; the regulatory system data provided by the IAEA may be used as it is. Nevertheless, it is recommended to review and adjust the regulatory system data which might be specific to the national regulatory system. Detailed information about customizing regulatory system data may be found in section 5.

***Important Note***

*Although the two customization steps are optional, it is highly recommended to review the national regulatory system and to precisely analyze the need for customization in order to ensure optimal alignment of RAIS 3.1 Web to the national conditions.*

*Prior to customizing RAIS 3.1 Web, **RAIS Administrators** are advised to be acquainted in depth with RAIS 3.1 Web. It is highly recommended to ‘play around’ with RAIS, i.e. to enter test data for all information items and to run queries and statistics.*

*During this phase, RAIS Administrators have the opportunity to:*

- *Identify the potential differences between the RAIS 3.1 Web default regulatory model and the national regulatory system.*
- *Elaborate the need for customization*
- *Get familiar with RAIS interface. An extensive explanation of the RAIS 3.1 Web interface is provided in **RAIS 3.1 Web User’s Guide**.*

## **2.4 Installing RAIS 3.1 Web**

### **2.4.1 Package description**

The installation package includes:

- Installation files of RAIS 3.1 Web.
- RAIS 3.1 Web documentation.
- Migration Tool

### **2.4.2 Installation permissions**

The person intending to install RAIS 3.1 Web needs to have following permissions:

- Permission to create databases and users on the SQL server
- Permission to create virtual directories on the web server

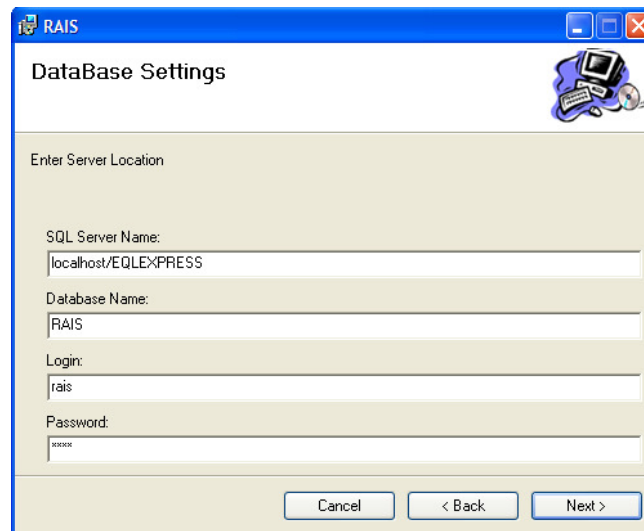
### **2.4.3 Installing RAIS 3.1 Web**

- 1 Locate the file “RAIS.msi” located on the root of RAIS 3.1 Web CD-Rom, double click to execute the file.



*Figure 3. Installation Wizard*

- 2 Click the “Next” button to proceed. The database settings screen appears.



*Figure 4. Installation Wizard – Database settings screen*

- 3 Enter the required settings as shown in Figure 4.
  - **SQL Server Name:** Name of the SQL server, where the RAIS 3.1 Web database is to be installed.
  - **Database Name:** Name to be given to the RAIS 3.1 Web database on the SQL server. This should remain as “RAIS”.
  - **Login:** Name of the RAIS 3.1 Web database owner (dbo) on the SQL Server. If this user doesn’t exist on the server, then the installation program will create it.
  - **Password:** password of the dbo mentioned in the previous field.

*Note*

*The installation program will create a user on the SQL Server with the specified name and password. This user will be the dbo of RAIS 3.1 Web database and will be used to establish a trusted connection between the RAIS 3.1 Web application and the database.*

- 4 Click the “Next” button to continue. The “web config customization” settings screen appears:

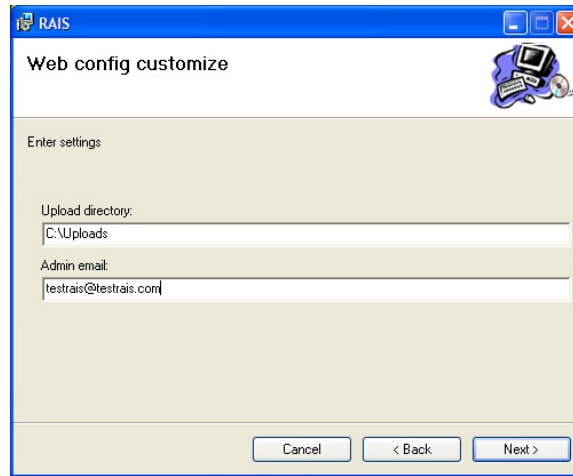


Figure 5. Installation Wizard – Web config customize settings

- **Upload directory:** Specify the directory you would like the documents/files uploaded to when using the Hyperlink feature of RAIS 3.1 Web.
- **Admin email:** Specify the administrator email address. This email address will be used for communication with online applicants of user accounts.

*Note*

*If no upload directory was specified during installation, then this will be “c:\Uploads”. The upload directory cannot be changed later.*

- 5 Click the “Next” button to continue. The web application settings screen appears:

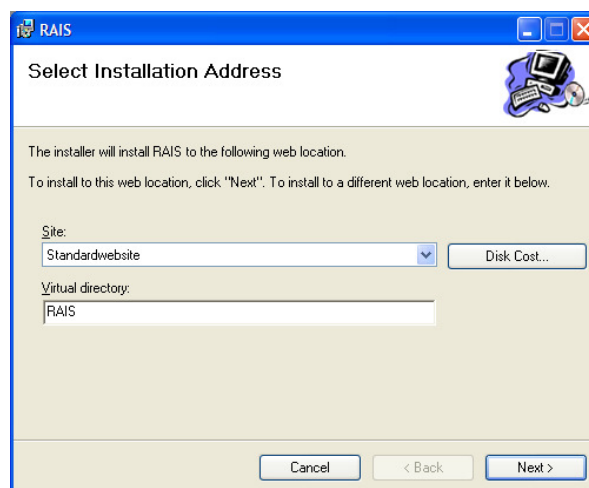


Figure 6. Installation Wizard – Web application settings

- **Site:** the web site where the RAIS 3.1 Web will be installed.
- **Virtual directory:** the name of the virtual directory where RAIS 3.1 Web is to be installed

The settings shown in Figure 6 are defaults, only change these if needed. Click the “Next” button to begin installing RAIS 3.1 Web.

*Note*

*The URL of the installed RAIS 3.1 Web will be then: “site URL/virtual directory name”.*

- 6 When the installation has finished, click the “Finished” button.

## 2.5 Starting up RAIS 3.1 Web

After successful installation, you can start up RAIS 3.1 Web by entering the appropriate URL (see section 2.4.3) in the address bar of Internet Explorer (IE6 or above).

The *Login Dialog* will be displayed.



*Figure 7. The Login Dialog*

This dialog provides for:

- Selection of the RAIS 3.1 Web interface and online help language (see chapter 6)
- Login by a user name and a password, or as a *Guest*
- Possibility to change the password after next successful login
- Requesting a new user account (see section 9.5)

## 2.6 Data security considerations

As regulatory data is often highly sensitive, access to this data must be both controlled and restricted. This is primarily achieved by RAIS 3.1 Web user management (see chapter 9). It is the responsibility of RAIS Administrators to ensure that access to RAIS 3.1 Web is only granted to the relevant persons and only at the lowest level necessary for their tasks.

Additionally, the system must be secured against potential intruders and hackers. Additional security measures should be considered by *IT systems administrators*, which could be in the form of the following:

- HTTPS access to ensure data transfer between client and the server is secure
- Hardware firewall to help prevent unauthorized access to the server

### 3 Migrating data from RAIS 3.0 to RAIS 3.1 Web

If your RAIS 3 database is a MS Access database (i.e. RAIS 3.0 backend), you need first to migrate it to MS SQL Server using RAIS 3.0 Consolidator. For this purpose, please refer to the relevant documents provided with *RAIS 3.0 with SQL server Extensions*.

*Note*

*Before starting the migration process, be sure to have a backup copy of your RAIS 3 database!*

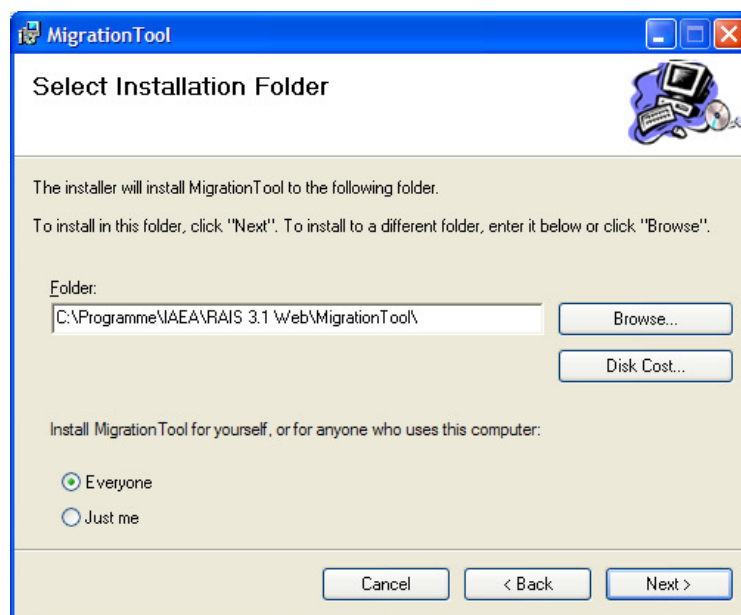
Once your RAIS 3 database is in MS SQL Server format,

- 1 Install RAIS 3.1 Web as described in section 2.4 (This process will install all the required web server files and a fresh RAIS database)

*Note*

*During installation, be sure to specify a database name, which is different from the RAIS 3 database!*

- 2 Install the migration tool located on the RAIS 3.1 Web CD-Rom (MigrationTool.msi)



*Figure 8. Installation screen of the migration tool*

- 3 Run the MigrationTool.exe from its installation folder. The following screen appears:

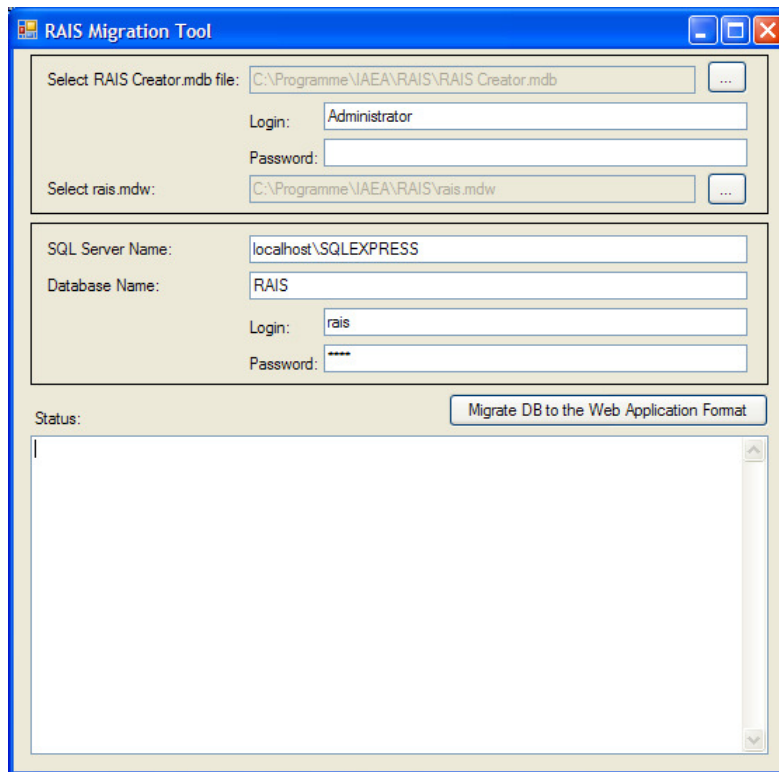


Figure 9. The Migration tool screen

4 Enter following information:

- The name (and path) of your *RAIS 3.0 Creator.mdb* file (This file contains the structure of customized tables and fields), your *rais.mdw* file, the user name and password for the creator.
- The name of SQL Server and the name of the RAIS 3 database which will be migrated to the RAIS 3.1 format.
- The username and password which were specified during the RAIS 3.1 Web installation in step 1.

5 Press “*Migrate DB to the Web Application Format*” button

The migration tool will modify the RAIS 3 database via the use of scripts, making it compatible with RAIS 3.1 Web.

*Note*

*The migration process maintains RAIS 3 data tables unaltered, including any customizations which might have been made to them. However it will not migrate any queries or functions that you have modified or created. Any customization that was not done using the RAIS 3.0 creator will not be directly accessible or visible from the RAIS 3.1 Web interface. This also includes any changes or translations of the treeview data and field labels.*

To complete the process, you need to manually replace the RAIS 3.1 Web database, which was installed in step 1, by the migrated RAIS 3 database.

Using *SQL Server Management Studio* or other appropriate methods,

6 Delete the RAIS 3.1 Web data base which was installed in step 1.

- 7 Rename your RAIS 3 database to the name of the deleted RAIS 3.1 Web database that has just been deleted in step 6.

*Note*

*If the RAIS 3 database is in a different language than English, the internal system language will be made up of the physical names of the fields, tables and menu items as it appears in the creator.*

## 4 Customizing RAIS 3.1 Web default regulatory model

Start up RAIS 3.1 Web and Login as a RAIS Administrator.

### 4.1 Customizing Tables

#### 4.1.1 Adding a new Table

RAIS 3.1 Web currently allows the creation of:

- Single tables
- Tables with history
- Authorization tables.

**Single Tables** are tables used for any kind of data, e.g. *nuclides* or *source status*. Single tables may appear only in either the **Input** menu or **Regulatory system** menu.

**Tables with History** are tables used for information items such as *Radiation Generators* or *Workers*, whose information include ‘details’ as well as ‘status’ data (see section 3.1.1 of *RAIS 3.1 Web Regulatory Model*). When creating a table with history, two tables will be created in fact: a single table and a history table. The history table will have by default a mandatory *status date* field. It allows for entering status information or any other kind of information that change with time. In RAIS 3.1 Web interface, these two tables will be accessible through two tabs on the related dynamic mask. Tables with history may appear only in the **Input** menu.

**Authorization Tables** are specifically used for new authorization types. Authorization tables incorporate three tables: A single table covering authorization ‘details’ and a history table describing the authorization ‘status’ will be created. Both tables will have default data fields according to the standard structure of authorizations in RAIS 3.1 Web and are not editable. Additionally, a third, authorization specific table will be created to host information which is specific to the authorization type. Initially, this table doesn’t contain any data fields. If not needed, this table may be left as is without defining data fields in it. Authorization tables appear in RAIS 3.1 Web interface under the submenu **Authorizations** in the **Input** menu. The three tables appear as three different tabs on the dynamic mask which related to that authorization type.

- 1 Click the “Administration” button on the menu bar
- 2 Click the “customization” submenu item to expand it
- 3 Click the “tables” menu item

The *Custom Tables mask* will be displayed.

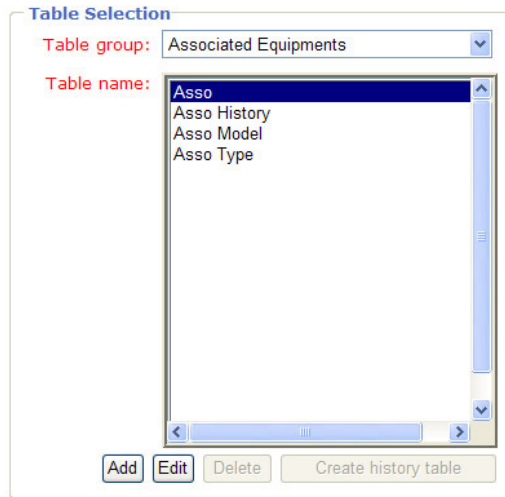


Figure 10. Tables groups mask

Tables of RAIS 3.1 Web are grouped by “Table Group”. For instance, the group **Authorizations** groups all tables related to authorizations by any means, as for example **Authorization Status** and different types of authorizations. Changing the drop down list will then filter the contents of the list “Table Name”.

- 4 Select the Table group that you wish for the new table to belong to.
- 5 Click the **Add** Button

Figure 11. Custom Table Mask

- 6 Enter into the new table name field, this field will be the table name
- 7 Select the table type
- 8 If you wish to create a mask for data entry in the table, check the “Create dynamic mask” box and select the menu location and other properties of the new mask (see section 4.4).
- 9 Click the **Apply** button.
- 10 Add appropriate fields to the table (see section 4.2).
- 11 Click the **Apply** Button

*Note*

When a new table is created, RAIS 3.1 Web automatically creates two fields in it:

- A primary key: By convention, this primary key's name will be the string: “PK ” & [table name] & “ ID”.

- A date field named “RAIS\_TIME\_STAMP” to record the time when each record is created.

### 4.1.2 Editing a Table

- 1 Select the table group in which the table you wish to edit is located
- 2 Select the table to be edited
- 3 Click the **Edit** button.

The *Manage Field Mask* will be displayed (see section 4.2).

### 4.1.3 Deleting a Table

- 1 Select the table group that the table you wish to delete is located
- 2 Select the table to be removed
- 3 Click the **Delete** button.
- 4 Click **OK**

## 4.2 Customizing Fields

- 1 Edit the table whose fields you wish to customize.

The *Manage Field mask* will be displayed.

Figure 12. Manage Fields Mask

### 4.2.1 Adding a new Field

- 1 Click the **Add** button.
- 2 Enter the *field name*. This field name will be displayed on the RAIS user interface. This field is mandatory and must be filled in. All characters are accepted.
- 3 Enter the *field purpose*. This field is optional only and is used only for identification purposes. All characters are accepted.
- 4 Select the *field category* and *properties* (see section 4.2.1.1).
- 5 Select the *field necessity*. New fields may either be **mandatory**, **recommended** or **optional**. This field is mandatory and must be filled in.

*Note*

*New fields added to a table should not be set to mandatory if the table already contains data records.*

- 6 Check the *Multi-line* box if the field text box should have multiple lines
- 7 Check the *Large field* box if the field text box should have 10 lines
- 8 Check the *Unique* box if the values of this field should be unique.

*Note*

*New fields added to a table should not be set to unique if the table already contains more than one data record.*

- 9 Check the *Visible on forms* box if the field should be visible in the interface.
- 10 Check the *Read only* box if the field should not be editable but visible
- 11 Check the *System Field* box if you require this field to be protected from accidental editing.
- 12 Click the ***Apply*** button.

#### 4.2.1.1 Field Categories

##### 4.2.1.1.1 Text

RAIS 3.1 Web provides four types of text fields

- *Small* fields allow up to 50 characters
- *Medium* fields allow up to 128 characters
- *Large* fields allow up to 255 characters
- *Memo* fields allow up to 65535 characters.

RAIS 3.1 Web also allows the creation of multi-line fields and large fields for larger texts.

##### 4.2.1.1.2 Numeric

RAIS 3.1 Web provides five types of numeric fields:

- *Integer*: e.g. -2, 0 or 2
- *Rational*: e.g. -2.5, 0.0 or 2.5
- *Scientific*: numbers will be displayed in scientific format, e.g. 2.5 E00
- *Time Interval*: allow rational numbers to be entered, together with a time unit (e.g. seconds, minutes ... years)
- *Year*: allow year numbers to be entered, e.g. 1999, 2004. All four digits must be entered by users.

##### 4.2.1.1.3 Date

RAIS 3.1 Web provides only one type of date field, a general date.

##### 4.2.1.1.4 Single Lookup

A single lookup allows a single entry to be selected from an underlying table. If, for example, ***Source Status*** is selected as the underlying table, one entry from the ***Source Status*** table may be selected from a dropdown menu.

*Note*

*A single look up field represents a foreign key referring to the source table, from which its value is to be looked up. By convention, its name in RAIS 3.1 Web will be: “FK ” & [source table name] & “ ID”.*

*Caution*

*RAIS 3.1 Web permits tables to have two or more fields referring to the same source table. In such an exceptional case, the naming convention of single lookup fields would create an ambiguity. This is why in such case the field’s names will be altered as: “FK ” & [field name] & “ ID”.*

*For example, if the table has two foreign keys, referring to the same source table, then the foreign key names will be*

*“FK ” & [field1 name] & “ ID”*

*“FK ” & [field2 name] & “ ID”*

4.2.1.1.5 *Lookup plus Value*

It allows an integer or scientific value to be entered and, additionally, a single lookup entry to be selected from an underlying table. If, for example, **Time Unit** is selected as the underlying table, one rational value may be entered together with one known value selected from the **Time Unit** table from a dropdown menu.

4.2.1.1.6 *Multiple Lookup*

A multiple lookup allows for multiple entries to be simultaneously selected from an underlying table. If, for example, **Nuclides** is selected as the underlying table, multiple entries from the **Nuclides** table may be selected in a separate popup window.

*Note*

*A multiple lookup field is actually a n-n relationship in the database between the table accommodating the field (table1) and the table that it refers to (table2).*

*In fact, RAIS 3.1 Web creates a table named [table1 name] & “ ” & [table2 name] which has five fields*

- *A primary key named according to the standard RAIS 3.1 Web naming convention: “PK ” & [table1 name] & “ ” & [table2 name] & “ ID”*
- *RAIS\_TIME\_STAMP*
- *RAIS\_TEMP*
- *Foreign key to Table1: Its name is the string “FK ” & [table1 name] & “ ID”*
- *Foreign key to Table2: Its name is the string “FK ” & [table2 name] & “ ID”*

4.2.1.1.7 *hyperlink*

A hyperlink field allows the uploading and storing of documents on the server. The user adding a document will be able to select and choose a file, which will be, upon clicking the **Apply** button, uploaded to the server. A hyperlink will appear on the mask pointing to that file. When the hyperlink is clicked, the browser will open the file.

The upload directory can be specified during the installation of RAIS 3.1 Web (see Figure 5).

#### 4.2.1.1.8 Check Box

A check box field allows the user to see a simple check box on the screen, a check box can either be ticked or not ticked, similar to a simple yes or no.

#### 4.2.1.1.9 Label

A label field will show the field name on the mask and nothing else, this can be used to help separate the mask visually.

### 4.2.2 Editing a Field

#### *Note*

*Modifying existing fields should be avoided if possible as improper modification may lead to loss of data.*

- 1 Select the table from which the field is to be edited (see section [4.3](#)).
- 2 Click the **Edit** button.
- 3 Select the field to edit.
- 4 Click the **Edit** button.
- 5 Change the needed information
- 6 Click the **Apply** Button

### 4.2.3 Deleting a Field

- 1 Select the table from which the field is to be deleted (see section 4.1.2).
- 2 Click the **Edit** button.
- 3 Select the field to delete.
- 4 Click the **Delete** button.

### 4.2.4 Changing the field order

- 1 Select the table that you wish to change (see section 4.1.2).
- 2 Click the **Up or Down** button.

## 4.3 Customizing submenus

- 1 Select the “Administration” menu
- 2 Select the submenu “Customization”
- 3 Select the menu item “Submenus”

The submenus mask will be displayed

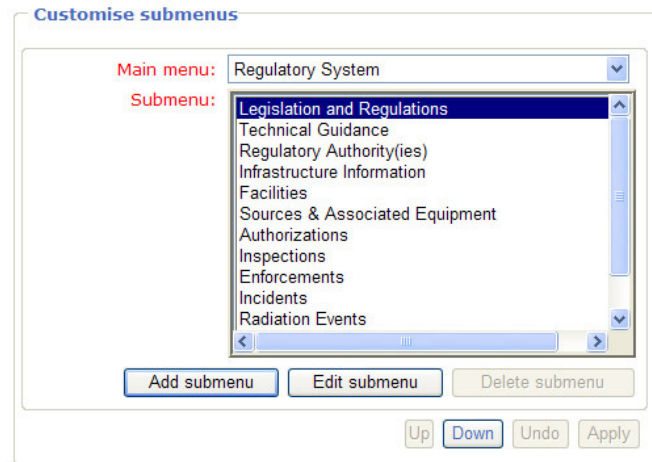


Figure 13. Submenus mask

#### 4.3.1 Adding a submenu

- 1 Select from the drop down list labeled “Main menu” the menu you wish the new submenu to be placed under.
- 2 Click the **Add** button
- 3 Enter the submenu *Name*. All characters are accepted. This field name will be displayed in the treeview

*Note*

*Submenus are not displayed in the treeview until a table has been assigned to the submenu item).*

- 4 Click the **Apply** button.

#### 4.3.2 Editing a submenu

- 1 Select from the drop down list labeled “Main menu” the menu, to which the submenu you wish to edit belongs.
- 2 Select the submenu you wish to edit.
- 3 Click the **Edit** button
- 4 Enter the new submenu Name. All characters are accepted.
- 5 Click the **Apply** button.

#### 4.3.3 Deleting a submenu

- 1 Select from the drop down list available the menu, to which the submenu you wish to delete belongs.
- 2 Select the submenu you wish to delete.

*Note*

*Only user created submenus can be deleted*

- 3 Click the **Delete** button.

*Note*

*Deleting a submenu will leave all menu items assigned to it inaccessible. The menu items themselves will not be deleted but will remain unassigned to any submenu*

- 4 Click **OK** to confirm deletion

#### 4.3.4 Changing the submenu order

- 1 Select from the drop down list labeled “Main menu” the required menu item, this will filter the available items which belong under the selected menu.
- 2 Select from the submenu list, the item you wish to move.
- 3 Click the **Up** or **Down** button until the selected submenu item has reached the required position.

## 4.4 Creating Custom Masks

RAIS 3.1 Web allows for automatic creation of masks for:

- Entering records to tables. In this case, the creating of custom masks is associated with the creation of tables by checking the “Create dynamic mask” box on the *Custom Table* mask.
- Assigning queries to reports. In this case, the creation of the mask is associated with the Query Assignment explained in section 4.6.2.

This section addresses the creation of dynamic masks for data entry, i.e. when new tables are being created. Creation of masks for reports is addressed in section 4.6.2.

New masks can be assigned either to new menu items or, optionally if input menu is selected, to existing ones. In the later case, the mask will appear as a new tab in the existing menu item’s mask.

*Note*

*The RAIS 3.1 Web mechanisms related to the preselection of facility and/or department, i.e. the global filtration, the default facility and the default department mechanisms do not apply automatically to custom masks. Appropriate customizations to the relevant preselection lists and entry filters will be needed to activate these mechanisms in custom masks.*

#### 4.4.1.1 Assigning masks to new menu items

In this case, the name of the new menu item will take the same name as of the created table

- 1 Create a new table (see section 4.1.1).
- 2 Check the “*Create dynamic mask*” box (See Figure 16).
- 3 Select the menu where the new mask is intended to be added.
- 4 Depending on your selection of the menu, you will have different options.
  - If the menu is “Regulatory System”:
    - i. Select the submenu where the mask is intended to be added.
  - If the menu is “input”
    - i. Select the submenu where the mask is intended to be added.
    - ii. Assign the mask to a new or existing menu item.

- iii. Select mask type (see section 2.2.2 of *RAIS 3.1 Web User's Guide*)
- 5 Click **Apply**.

#### 4.4.1.2 Creating tabs in existing masks

- 1 Create a new table (see section 4.1.1).
- 2 Check the box “*Create dynamic mask*”
- 3 Select “*Input*” as the menu where the new mask is intended to be placed

*Note*

*New tabs can be only added to the masks of the “Input” menu.*

- 4 Select the submenu where the mask is intended to be added.

Figure 14. A new mask can be assigned to an existing menu item under a submenu of the Input menu

- 5 For the menu item, select the option “*Existing (List with filter masks)*”.
- 6 Select the menu item, to which the new tab is to be added. The new mask will appear as the last tab in that menu item’s mask.
- 7 Select Mask Type (see section 2.2.2 of *RAIS 3.1 Web User's Guide*).
- 8 Click **Apply**.

## 4.5 Customizing Queries

In RAIS 3.1 Web, query customization means either adding a new query or altering existing ones by modifying their SQL statement and/or parameters, and then producing a compiled form of the query.

In section 4.6, the utilization of the customized queries through assignment to RAIS 3.1 Web functionalities will be explained.

- 1 Select the “Administration” menu
- 2 Select the submenu “Customization”
- 3 Select the menu item “Queries”

The Custom Query mask will be displayed.

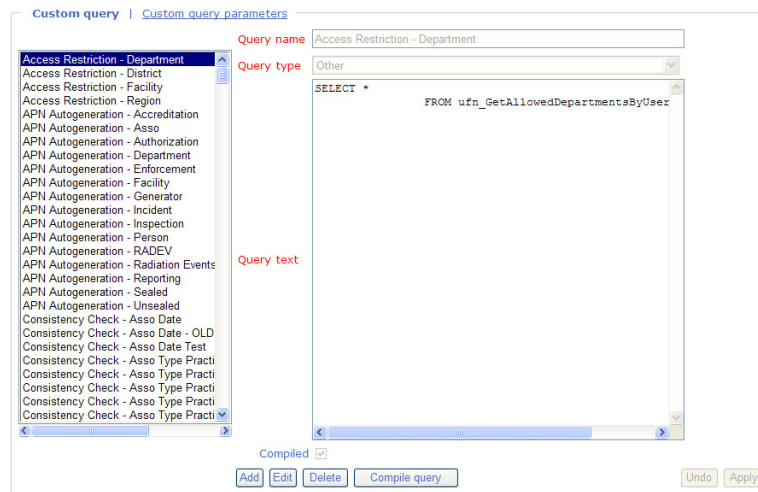


Figure 15. Custom Query mask

#### 4.5.1 Adding a new Query

- 1 Click the **Add** button
- 2 Enter the Query name
- 3 Select the Query type (see section 4.5.4.1)
- 4 Enter the query SQL statement in the field “*Query text*” (Please note that the Query SQL statement must be correct).
- 5 Click the **Apply** button

At this stage, the query string will be saved, but the query is not yet produced as a database object.

- 6 Specify the Query Parameters; if applicable (see section 4.5.4.2).
- 7 Click the **Compile Query** button.

#### 4.5.2 Editing a Query

*Note*

*Only unassigned queries are editable. If you wish to edit a query, which is assigned to some functionality in RAIS 3.1 Web, you need to un-assign it first following the steps described in section 4.6.5*

- 1 Select a query from the list of available queries
- 2 Click the **Edit** button
- 3 Change the required data
- 4 Click the **Apply** button
- 5 Edit the Query Parameters; if applicable (see section 4.5.4.2).
- 6 Click the **Compile Query** button.

#### 4.5.3 Deleting a Query

- 1 Select a Query from the list of available Queries
- 2 Click the **Delete** button

## 4.5.4 Additional Information

### 4.5.4.1 Query Types

The query type is primarily related to the utilization options of the query in RAIS 3.1 Web. This subsection provides a brief overview on the possible uses of queries in RAIS 3.1 Web. Additional technical details and examples thereof are provided in *RAIS 3.1 Web Administrator's Guide – Part II*.

For convenience, query types are associated with a naming convention based on prefixing the query name according to its type.

#### 4.5.4.1.1 Consistency Check

This query type is a SQL function. Consistency Checks are used to verify correctness of the entered data by evaluating it against some criteria. If the returned query result is not empty, then the verification failed and a warning is presented to the user. If the verified data is correct, the Consistency Check does not return any results and no warning is displayed.

Consistency Checks names usually have the prefix “Consistency Check –”

#### 4.5.4.1.2 Entry Filter

This query type is a SQL function. Entry Filters are used for populating Single Lookup fields in the data entry masks. This function is required to return a Primary Key of a record and a textual value.

Entry Filter names usually have the prefix “Entry Filter –”

#### 4.5.4.1.3 Preselection Filter

This query type is a SQL function. Preselection Filters are used for filtering the data in Preselection Lists which are commonly found on ListWithFilter masks. This function is required to return a Primary Key of a record and a textual value.

Preselection Filter names usually have the prefix “Preselection Filter –”

#### 4.5.4.1.4 Preselection List

This query type is a SQL function. Preselection Lists are used for populating DataGridView on ListWithFilter masks. This function is required to return the columns that will displayed.

Preselection List names usually have the prefix “Preselection List –”

#### 4.5.4.1.5 Query

This query type is a SQL function. Query's are used for creating reports.

Query names usually have the prefix “Query –”

#### 4.5.4.1.6 RAN Autogeneration

This query type is a SQL stored procedure. RAN Autogeneration's are used for the automatic creation of RAN numbers according to a prescribed algorithm by the regulatory body. Upon adding a new record, the auto-calculated RAN value will be entered automatically. This query type is very useful for maintaining a standard format.

RAN Autogeneration names usually have the prefix “RAN –”

#### 4.5.4.1.7 *Statistic*

This query type is a SQL function. Statistics are used for creating statistical reports.

Statistic names usually have the prefix “Statistics –”

#### 4.5.4.1.8 *Other*

This is a generic query type for SQL functions which may have other uses in RAIS 3.1 Web such as auxiliary functions and sub-queries like, for example, the helper queries.

Several prefixes are used in RAIS 3.1 Web for such queries such as: “Helper”, “Display”, “Mini-display”, “Item selection”, etc.

### 4.5.4.2 Query Parameters

- 1 Select the query whose parameters you wish to modify
- 2 Switch to the Custom Query Parameters tab

The Custom Query Parameters mask will be displayed, showing the parameters of the selected query.

The screenshot shows the 'Custom query parameters' mask. On the left, a list of parameters is shown, with 'par' selected. On the right, the details for the selected parameter are displayed in a form. The form includes fields for 'Query name' (00 HS test Query), 'Query parameter name' (par), 'Query parameter type' (Text), and 'Source field name' (Title). At the bottom of the form, there are three buttons: 'Edit', 'Undo', and 'Apply'.

Figure 16. Custom Query Parameters mask

- 1 Select a parameter from the query parameters list
- 2 Click the **Edit** button
- 3 Change the required data
- 4 Click the **Apply** button

## 4.6 Query Assignment

- 1 Select the “Administration” menu
- 2 Select the submenu “Customization”
- 3 Select the menu item “Query Assignment”

**Assign Query**

Type of customization: List With Filter Mask

Main menu: Input

Submenu: Facilities and Departments

Menu item: Departments

Dynamic mask name: Select Department

Custom query name: Preselection List - Department

Select custom query

Undo Apply

Figure 17. Query Assignment mask

### 4.6.1 Assigning a query to a List with Filter mask

- 1 Select the Type of customization to “List with Filter mask”
- 2 Select the menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name
- 6 Click **Select custom query** button
- 7 Select the custom query name from the available list
- 8 Click the **Apply** button

### 4.6.2 Assigning a query to a Query or Statistics Report

#### 4.6.2.1 Adding a Query or Statistics Report

- 1 Select the Type of customization to “Query Report” or “Statistics Report” as appropriate
- 2 Select the menu
- 3 Select the appropriate submenu
- 4 Click the **Add Report** button
- 5 Enter the name of the menu item that you wish to appear in the treeview
- 6 Enter the name of the dynamic mask. This name will appear as a report title.
- 7 Select the custom query name from the available list

For formatting the report, RAIS administrators can specify the levels of grouping as well as the width of the report columns.

- 8 Enter the column numbers which will be used for grouping data in the report. Up to 4 column numbers can be entered.

- 9 Enter the widths of the report columns in percent of page width.
- 10 Click the **Apply** button

#### 4.6.2.2 Editing a Query or Statistics Report

- 1 Select the Type of customization to “Query Report” or “Statistics Report” as appropriate
- 2 Select the menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name.
- 6 Click **Edit Report** button
- 7 Select the custom query name from the available list

RAIS 3.1 Web administrators have a few options for formatting the report:

- 8 Enter the column numbers which will be used for grouping data in the report. Up to 4 column numbers can be entered.
- 9 Enter the widths of the report columns in percent of page width.

*Note*

*No check is made by the system to ensure you have valid percentages*

- 10 Enter Additional footer text. This will be displayed at the bottom of the report.
- 11 Click the **Apply** button

#### 4.6.2.3 Deleting a Query or Statistics Report

- 1 Select the Type of customization to “Query Report” or “Statistics Report” as appropriate
- 2 Select the menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name
- 6 Click **Delete Report** button
- 7 Click **OK**

*Note*

*Deleting a report only removes that report’s menu item and the association to a query. The query itself will not be deleted.*

### 4.6.3 Assigning a query as a Consistency Check

#### 4.6.3.1 Adding a Consistency Check

- 1 Select the Type of customization to “Consistency Check”
- 2 Select the appropriate Menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name
- 6 Click the **Add Consistency Check** button
- 7 Select the Custom query name from the available list
- 8 Enter the Message to be displayed in case of inconsistency

- 9 Select which records to be checked from the available list
- 10 Click the ***Apply*** button

*Note*

*Multiple consistency checks may be assigned to a dynamic mask.*

#### 4.6.3.2 Editing a Consistency Check

- 1 Select the Type of customization to “Consistency Check”
- 2 Select the appropriate Menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name
- 6 Select the consistency check to be edited
- 7 Click the ***Edit consistency check*** button
- 8 Select the Custom query name from the available list
- 9 Enter the Message to be displayed in case of inconsistency
- 10 Select which records to be checked from the available list
- 11 Click the ***Apply*** button

#### 4.6.3.3 Deleting a Consistency Check

- 1 Select the Type of customization to “Consistency Check”
- 2 Select the appropriate Menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name
- 6 Select the consistency check to be edited
- 7 Click the ***Remove consistency check*** button
- 8 Click ***OK***

*Note*

*Deleting a consistency check only removes its association to a query. The query itself will not be deleted.*

#### 4.6.4 Assigning a query to a Dynamic Mask Field

- 1 Select the Type of customization to “Dynamic Mask Field”
- 2 Select the appropriate Menu
- 3 Select the appropriate submenu
- 4 Select the appropriate menu item
- 5 Select the appropriate Dynamic Mask name
- 6 Select the appropriate Field Name
- 7 Click the ***Select custom query*** button
- 8 Select the Query name from the available list
- 9 Click the ***Apply*** button

#### 4.6.5 Un-assigning a query

To un-assign queries associated with Consistency Checks, Query Reports or Statistics reports, delete the consistency check or the report following the steps described in 4.6.3.3 and 4.6.2.3 respectively.

To un-assign queries associated with ListwithFilter Mask, Dynamic mask Fields or RAN Autogeneration, proceed as following:

- 1 In the Query Assignment Mask, select the appropriate entries in the drop down lists as applicable to the assignment of the query of concern. The query name will be displayed in the field “*Custom query name*”
- 2 Click ***Select custom query*** button
- 3 Select the blank entry. The existing assignment will be removed.

## 5 Customizing RAIS 3.1 Web Regulatory System Data

Regulatory system data are characteristic for the regulatory system itself. There are three types of regulatory system data:

- **Specific to the national regulatory system:** e.g. country's administrative infrastructure (regions and districts) or the national classification of practices, classification of radiation sources, task alignment to the regulatory body officers;
- **International standards based:** e.g. transport package categories or categorization of sealed radioactive sources;
- **Scientific based:** e.g. nuclides and their half-lives, radioactivity units.

Only members of the ***RAIS Administrators*** group are allowed to customize, i.e. to add, edit or delete regulatory system data. Customizing is done from the *Regulatory System* menu in the RAIS 3.1 Web interface.

While it is probably not needed to customize scientific based regulatory system data, it is highly recommended to review the national regulatory system and to analyze the need for customizing the other regulatory system data, particularly the national specific ones in order to optimally align RAIS 3.1 Web to the national circumstances.

Some of the regulatory system data are vital for proper operation of RAIS 3.1 Web. Those data are protected from being edited or removed. The protection mechanism is described in *RAIS 3.1 Web Administrator's Guide – part II*. RAIS 3.1 Web Administrators are responsible for protecting any other regulatory system data as might be needed in the national regulatory system.

Care must be taken when deleting regulatory system data. Before deleting any regulatory system data, RAIS administrators should verify how deletions are cascaded to other tables. Similarly, modifying a regulatory system value will affect all data records involving reference to that value.

### 5.1 Regulatory System data

The regulatory system data which are incorporated by default into RAIS 3.1 Web cover the areas listed below. A complete list is given in Annex A. The document *RAIS 3.1 Web Regulatory Model* provides detailed explanation from the regulatory point of view.

- Regulatory references such as laws, regulations, codes of practice, etc.
- Coordination and cooperation such as international conventions and memoranda of understanding with other national or international authorities.
- The national authorities, including their officers and the tasks associated to them.
- Administrative infrastructure information
  - Regions and districts
- Classification of practices
- Status of facilities and departments

- Radiation generators: e.g. types, status, wave forms, related practices, if any
- Sealed sources: e.g. status, categories, security groups, nuclides
- Unsealed sources: status, physical form, nuclides
- Associated equipment: e.g. type, status, related practices, if any
- Transport of radioactive material: e.g. package types, package category, transport modes
- Physical protection: e.g. physical barriers
- Authorization system: e.g. authorization stages
- Inspection system: e.g. inspection process stages, periodicity of regular inspections, classification of non-compliances
- Enforcement: e.g. classification of enforcement actions, facility responses
- Occupationally exposed workers: e.g. status, academic and professional qualification, radiological monitoring requirement
- Preparedness and response to radiological events: e.g. extent of events, emergency response levels, causes of events, radiological consequences, health consequences, list of possible deterministic effects

Additionally there is a set of common data such as lists of countries, radio nuclides, units of various quantities (time, radioactivity, doses, voltage, etc.)

## 5.2 Customizing regulatory system data

Regulatory system data listed in section 5.1 are always accessible through a list mask. The customization of any regulatory system data follows therefore the operation logic of list masks as described below.

### *Note*

*List masks are described in chapter 2 of RAIS 3.1 Web User's Guide*

### 5.2.1 Entering new Regulatory System Data

Adding regulatory system data in RAIS 3.1 Web could involve entering **new information** as well as using **existing information** already known to RAIS. The existing information is selected either from dropdown menus or from a multiple selection list.

### *Note*

*RAIS administrators have to pay attention to the correct ordering of data entry if relational dependency exists. Annex A provides details on the data dependencies*

- 1 In RAIS 3.1 Web menu bar, click **Regulatory System** menu.
- 2 In the treeview, expand the appropriate submenu.
- 3 Click the menu item where the new system data are to be added.

A list mask appears. The list box on the left side contains the regulatory system data related to the selected menu item.

- 4 Click the **Add** button.
- 5 Enter the new data. All mandatory fields must be filled in.
- 6 Click the **Apply** button.

### 5.2.2 Editing Regulatory System Data

- 1 Select the appropriate menu item. The related list mask appears.
- 2 Click the *Edit* button.
- 3 Modify the data as appropriate.
- 4 Click the *Apply* button.

### 5.2.3 Deleting Regulatory System Data

- 1 Select the appropriate menu item. The related list mask appears.
- 2 Click the *Delete* button.
- 3 Click *OK*

## 6 Customizing Reports

Reports are produced by the menu items of the “Query” and “Statistics” menus of RAIS 3.1 Web. All reports are based on specific templates.

Customization of the RAIS 3.1 Web reports include:

- Customization of the logo, which appears on the report header.
- Customizing of report title
- Customization of report data grouping
- Formatting of the report column width

While the first customization is global, i.e. it applies to all reports, the customization of report title, grouping and column width apply to each report individually.

Report formatting is primarily done when its data source query is assigned to a Query or Statistics report as explained in section 4.6.2.

### 6.1 Customizing report logo

Report logo is a jpg file named “iaea.jpg”. To change the reports logo, you need simply to replace it by your own.

- 1 Access the installation folder of RAIS 3.1 Web
- 2 Switch to the subfolder “images”.
- 3 Appropriately rename the file “iaea.jpg”.
- 4 Copy your own logo to the “images” subfolder and rename it to be “iaea.jpg”

Your new logo will appear on all RAIS 3.1 Web reports

### 6.2 Customizing report title

To modify a report title, you need first to delete the report following the steps explained in section 4.6.2.3, and then to reproduce it following the steps explained in section 4.6.2.1.

While reproducing, the report be sure to specify the customized report title in the mask field “*Dynamic Mask Name*”

### 6.3 Customizing report grouping

- 1 Follow the steps explained in section 4.6.2.2 to access the report of concern.
- 2 Click ***Edit report***

- 3 In the mask field “*Grouping*”, specify the numbers of the data columns which will be used for data grouping in the report. Up to four columns can be specified. They must be separated by a semi-colon.

The formatting style of each grouping header is prescribed by the report template.

*Note*

*Column numbers start at zero.*

## 6.4 Formatting of column widths in reports

- 1 Follow the steps explained in section 4.6.2.2 to access the report of concern.
- 2 Click **Edit report**
- 3 In the mask field “*Grouping*” specify the numbers of fields of the report Query which will be used for report grouping. Numbers of fields could be separated by a semi-colon if the grouping of the report by several fields is needed. For example, if grouping is specified as “3;5” it means that data will be grouped by the field number 3 first and by the field 5 after that. All the columns from the mask field “*Grouping*” are not used for the columns widths calculations (see below).
- 4 In the mask field “*Widths*”, specify the width of the columns in the report. The width is to be given in percentage of the total report width. They must be separated by a semi-colon.

All the fields from the report Query except fields which are in the grouping list will be shown in the report as columns. Number of columns in the report is calculated as number of fields in the report Query minus number of the fields in the mask field “*Grouping*”.

The widths of the report columns could be defined implicitly or explicitly. If the mask field “*Widths*” specified as “0”, the widths of the columns will be the same and will be calculated as width of the report divided by the number of columns.

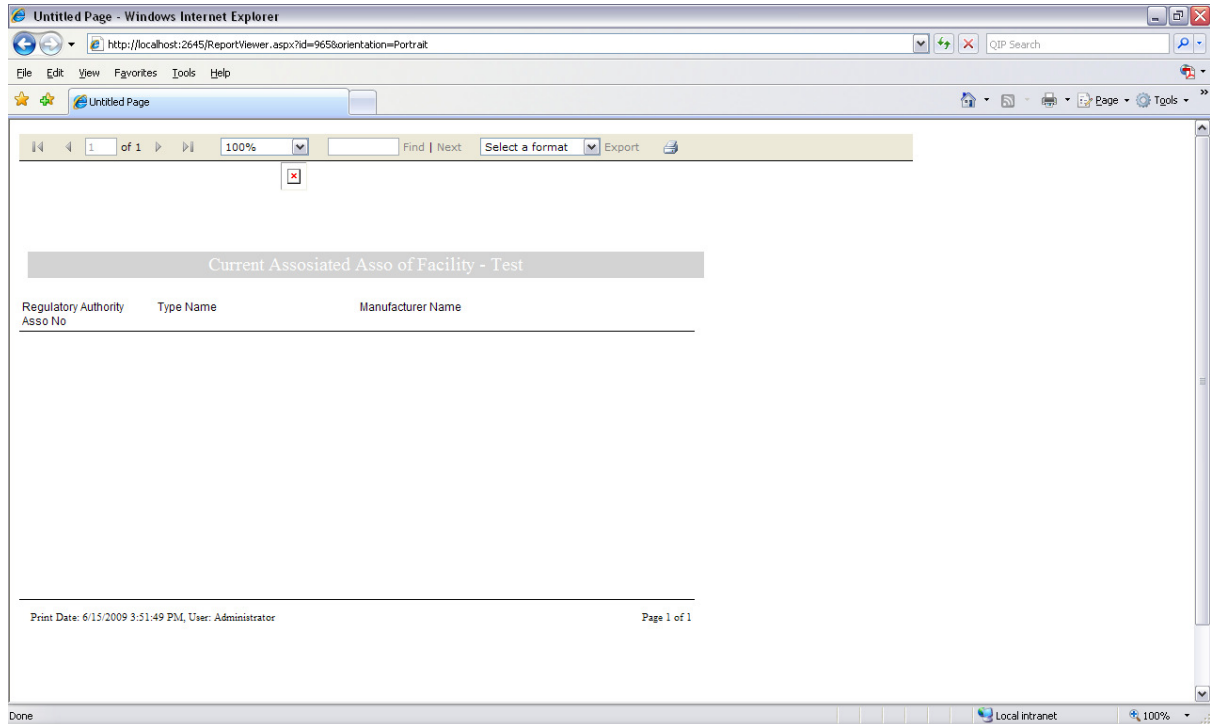
Width of columns could be defined explicitly for example like this: “20;;30” (or like “20;0;30” what is the same). This means that the width of the first column will be 20% of the report width, the width of the third column will be 30% of the report width. The widths of the other columns, including the second column which was skipped in the widths definition (two semi-colons in row or 0) will be calculated as width of the report minus width of the rows defined explicitly divided by the number of columns which were not defined in the width.

No check is made for validation of the number of report columns in the “*Widths*” list.

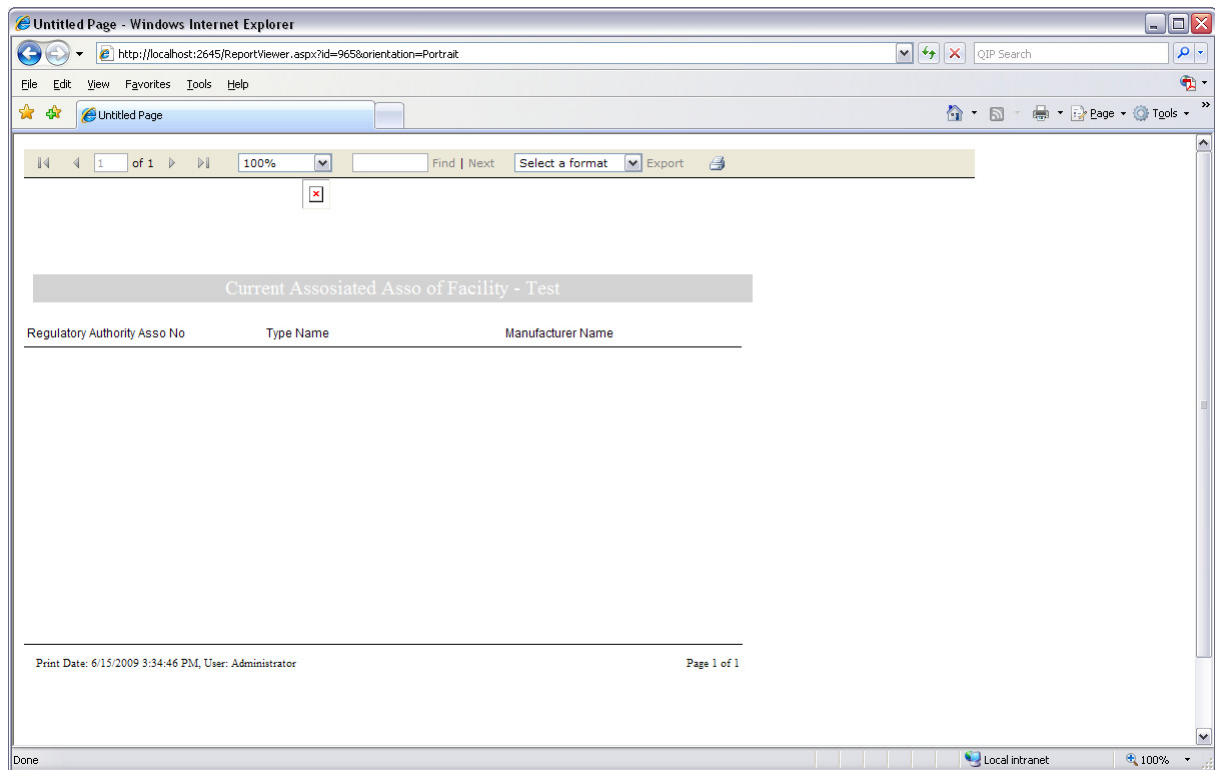
If the number of report columns in the “*Widths*” list is less, than the number of fields in the report data the width for the fields which are not in the Widths list will be supposed as defined implicitly.

If the number of report column in the “*Widths*” list is greater, than the number of fields in the report data the trailing excessive columns will be ignored.

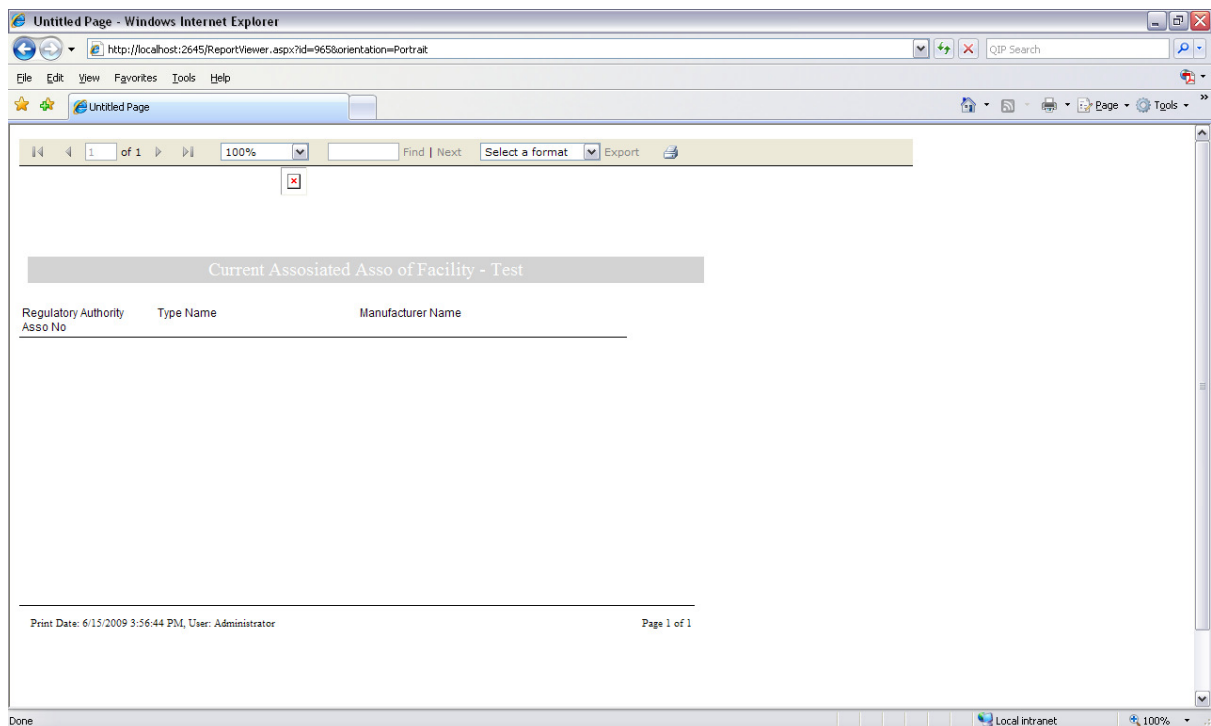
The sum of the widths is supposed to make up 99%. In such case, the column widths in the report are set as the specified widths fractions of the available area. For example, if the column widths are specified as “20;30;49”(or “20;30” what is the same), then report columns will be formatted as in the figure below:



If the sum of the widths is equal or exceeds 100%, for example, 30;30;50, then the widths of columns will be supposed as defined implicitly and all the columns will have the same width and report columns will be formatted as in the figure below:



If the sum of the widths is less than 99%, for example, “20;30;40”, then the sum of the column’s widths will be less than the width of the page and report columns will be formatted as in the figure below:



The best practice would be not to specify the width of the last column so that it is considered implicit and occupies the remaining page width.

## 7 Customizing the Search Tool

As explained in section 6.1 of *RAIS 3.1 Web Users Guide*, the search tool allows for searching information items such as facilities, sources and workers. The search criteria are related to the regulatory authority number, the name of serial number as applicable.

Search results will be displayed in the result window of the *Search* mask. Double-clicking on any entries of the result list then allows switching to the selected record.

Search is performed using customizable SQL statements. They are defined in the table [System – Search].

To customize the search tool:

1. Click the *Administration menu*
2. Click the *Customization submenu*.
3. Click the *Search Tool menu item*

The *Custom Search Tool* mask appears.

The screenshot displays the 'Custom Search Tool' configuration window. On the left, a list of search items is shown, with 'Associated Equipment(Regulatory Authority Number)' selected. The main configuration area on the right includes the following fields:

- Search Item:** Associated Equipment
- Search Field:** Regulatory Authority Number
- Search SQL:**

```
select
    [PK Asso ID]
    , [Regulatory Authority
    Asso No]
from [Asso]
    join [Asso History]
        on [FK Asso ID] =
        [PK Asso ID]
    join
        ufn_GetAllowedFacilitiesByUserID
        (@UserID) Facility
    on
        Facility [PK_Facility ID] = [FK
```
- Main Menu:** Input
- Menu Item:** Associated Equipment
- Tab Name:** Associated Equipment Details

At the bottom, there are buttons for 'Add', 'Edit', 'Delete', 'Undo', and 'Apply'.

Figure 18. The Custom Search Tool Mask

The *Search Item* field represents what is searched for, the *Search Field* represents the field that will be used in the search criteria and the *Search SQL* is the SQL statement, which will be used to perform the search.

The Search SQL statement should have a condition related to *Search Field* and a parameter named @SearchText.

**Example** To search for a facility by part of its name, use the following statement for Search SQL:

```
SELECT [PK Facility ID], [Facility Name]
FROM ufn_GetAllowedFacilitiesByUserID(@UserID) Facility
WHERE [Facility Name] LIKE '%' + @SearchText + '%'
```

Note that the function *ufn\_GetAllowedFacilitiesByUserID* is used to implement the data role in the search tool (see section **Error! Reference source not found.**).

### 7.1.1 Adding a new search filter

- 8 Click the **Add** button
- 9 Enter a name for the Search item. This name doesn't need to match physical name of the object to be searched for.
- 10 Enter a name for the Search Field. This name doesn't need to match physical name of the data field used in the search criteria.
- 11 Enter the SQL statement for the search.
- 12 From the drop down lists; Results menu, Results mask and Dynamic mask ID, select the mask which will be displayed after double clicking an item in the search results.
- 13 Click the **Apply** button

### 7.1.2 Editing a search filter

- 7 From the search filters list, select the one which you would like to edit.
- 8 Click the **Edit** button
- 9 Change the required data
- 10 Click the **Apply** button

### 7.1.3 Deleting a search filter

- 3 From the search filters list, select the one which you would like to delete.
- 4 Click the **Delete** button

## 8 RAIS 3.1 Web Interface Language

RAIS 3.1 Web is designed as a multi-lingual system, i.e. the language, in which all labels and captions in its interface and online help will be displayed, can be selected according to the user preferences, provided that this language has been installed (see section 8.1)

*Note*

*The language of the regulatory system data as well as all other data stored in RAIS 3.1 Web is, obviously, not covered by the multi-lingual capability of the system*

*Note*

*The default language of RAIS 3.1 Web is called “English (Internal System)”.*

The RAIS 3.1 Web interface language can be selected from the login dialog (see Figure 7).

### 8.1 Installed Languages

- 1 Select the menu “Administration”
- 2 Select the submenu “Customization”
- 3 Select the menu item “Language Selection”

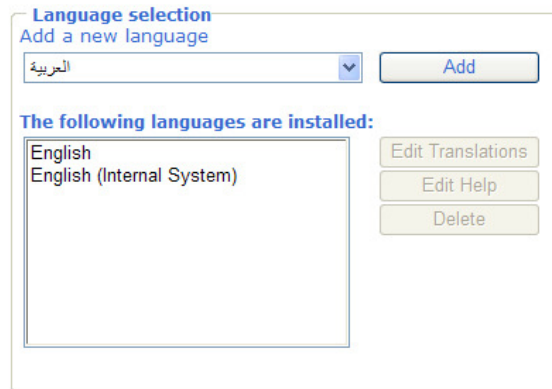


Figure 19. Language selection mask

#### 8.1.1 Adding a language

- 1 Select from the drop down list of all world languages the language you wish to add to RAIS 3.1 Web.
- 2 Click the **Add** button

*Note*

*The added language is now installed and will be listed under the available languages in the login dialog. However, up to this point no translations into this language have been added to the system.*

### 8.1.2 Deleting a language

- 1 Select from the list of currently installed languages that you wish to delete.
- 2 Click the **Delete** button

## 8.2 Translations

- 1 Select the menu “*Administration*”
- 2 Select the submenu “*Customization*”
- 3 Select the menu item “*Language Selection*”
- 4 In the installed languages list, select the language for which you wish to edit translations.
- 5 Click the **Edit translation** button.

The Translation mask appears. The “*Destination language*” field will be automatically populated by the selected language.

**Edit Translations**

☒ Show all
 ☐ Show only untranslated entries
 ☐ Show all contexts
 Context: Account Request
Edit Delete

**Source language**: English (Internal System)
**Destination language**: English

| Source               | Translation          |
|----------------------|----------------------|
| Account request form | <input type="text"/> |
| Address:             | <input type="text"/> |
| City:                | <input type="text"/> |
| Comments:            | <input type="text"/> |
| Confirm password:    | <input type="text"/> |
| E-Mail:              | <input type="text"/> |
| Full name:           | <input type="text"/> |
| Password:            | <input type="text"/> |

Edit Save Discard changes Auto-complete

Figure 20. Translation mask

RAIS 3.1 Web provides for context sensitive translation, i.e. the translated term of a given English word/expression may vary depending on its position in the interface.

Annex B lists the existing contexts in RAIS 3.1 Web. The contexts include, inter alia: dynamical masks, menus and reports.

The contents of a context is the set of words/expressions which appear on the interface as part of that context, including those expressions that only appear in specific situations such as the system messages which are displayed in some situations on the dynamic masks.

*Note*

*For some contexts, the contents list is dynamically populated, i.e. the contents items are only listed once they have been displayed.*

*For example, the contents of the context “Reports” include the report’s column captions. These items will only be listed if the report has been run at least once. The same applies for system messages on dynamic masks.*

## 8.2.1 Context selection options

The translation mask offers two options for selecting contexts:

- An option to select a specific context. In this case the list of expressions will be restricted to the contents of the selected context.
- The option “*Show all contexts*”: If this option is selected, then the list will include every translatable expression in RAIS 3.1 Web. Additionally, the command button ***Auto-complete*** will be activated (see 8.2.3)

If a context is selected, it can be renamed or removed from the list of contexts.

To rename the selected context:

- 1 Click the ***Edit*** button
- 2 Specify the new name and Click ***OK***.

To remove the selected context from the list, click the ***Delete*** button.

*Note*

*If a context is deleted all translations done for this context will also be deleted. The context will remain deleted until a translation request is done by the system for an item within this context. At this point the system will automatically read the context to the list, but all previous translations done for this context will be gone.*

## 8.2.2 Expression selection options

On the translation mask you may select:

- “*Show only untranslated entries*”. In this case, only those expressions of the selected context(s), that have not been translated yet, will be shown in the expressions list.
- “*Show all*” to list all contents of the selected context(s), irrespective of being already translated or not

## 8.2.3 Editing translations

- 1 Set the desired options of the translation mask and then click the ***Edit*** button
- 2 Enter the translate terms as appropriate

*Note*

*When “all contexts” is selected, an ***Auto-complete*** button will become active. This button is very convenient when duplicates of a particular term exist. It will automatically fill in the translated term for all the duplicates*

- 3 Click the **Save** button

*Note*

RAIS 3.1 Web displays 50 expressions per page. After Editing a translation of an expression, be sure to click **Save** before switching to another page, otherwise, your translation would be lost.

*Note*

RAIS 3.1 Web will use the original phrases of the “English (Internal System)” language where ever it does not find a corresponding phrase in the selected language

*Note*

Changes made to submenu and menu item names through the Administration menu only affect the “English (Internal System)” language; and not the currently used interface language or any other installed language in RAIS 3.1 Web.

## 8.3 Mask based help

- 1 Select the menu “Administration”
- 2 Select the submenu “Customization”
- 3 Select the menu item “Language Selection”
- 4 In the installed languages list, select the language for which you wish to edit translations.
- 5 Click the **Edit Help** button. The Edit Help mask appears.

Figure 21. Edit help mask

The Edit help mask has a set of drop down lists to select menu items and two text boxes: one to display the existing help text in English (Internal System), and the other to specify the help text in the selected language.

### 8.3.1 Editing mask based help

- 1 Select the menu item that contains the mask you wish to edit the help for
- 2 Select the submenu that contains the mask you wish to edit the help for
- 3 Select the menu item that you wish to edit the help for

The existing help text related to the selected menu item will be displayed in the box “*Help in English*”.

- 4 Click the **Edit** button
- 5 Enter the text you would like to appear as help for the masks related to the selected menu item in the “*Help in [Selected Language]*” box.
- 6 Click the **Apply** button

*Note*

*To change the “Help in English” text located in the top box, select the language “English (Internal System)” on the language selection screen and click “Edit Help”.*

## 9 User Management

### 9.1 Overview

Access to RAIS 3.1 Web is subject to an authentication process (user name and password) which provides for:

- Data confidentiality
- Operation tracking.

#### 9.1.1 Data Confidentiality

Data confidentiality is ensured by restricting the access to RAIS 3.1 Web to users having specific permissions. The concept of assigning user permissions in RAIS 3.1 Web is based on functional roles and data roles:

**Data roles:** A data role basically filters data from the database. Any data that is not covered by the permissions of the data role will be filtered out and therefore will not be accessible by the user assigned to that data role.

**Functional roles:** A functional role controls which masks the user can access and what operations (view, add, edit and delete) he can perform on each of the masks. Additionally functional roles specify the level of validation required for the data entered by the user (see section 9.4.3)

##### 9.1.1.1 User Types

RAIS 3.1 Web provides five preconfigured combinations of data roles and functional roles in form of built-in *User types*. These user types are built-in and can't be modified.

**Administrator:** Users of this type have full access in RAIS 3.1 Web, including adding, modifying, deleting and viewing all data, modifying regulatory system model and modifying regulatory system data. Additionally, RAIS administrators are allowed to define users into the RAIS 3.1 Web system and assign access permission.

**Regulator:** Users of this type have full access to the “*Input*” menu, allowing them to view, modify, add and delete all regulatory data. They have only view permissions to the “*Regulatory System*” menu. They are not allowed to alter regulatory system data. The menu “*Administration*” is not accessible to RAIS 3.1 Web Regulators.

**Restricted Access Regulator:** Users of this type have similar access permission as the Regulator user type with the additional constraint, that their access to the “*Input*” menu is restricted to view only.

**Licensee:** Users of this type are authorized representatives of facilities. They have full permissions in the “*Input*” menu masks, however, they are only allowed to access data related to their own facility. Adding, editing and deleting any data related to their facility is subject to a validation process by the regulatory body (see chapter 7 of *RAIS 3.1 Web User's Guide*).

Additionally, this user type has “view” access to the global and public information; but no access to the “*Administration*” menu and non-public regulatory system data.

**Guest:** This user type is only allowed to view global and public information. By default, the public data are collected in the “*Statistics*” menu and the two menu items: “*Cooperation and Coordination*” and “*Regulatory Reference*” of the submenu “*Regulatory System/Regulatory Reference*”.

Additionally, a generic user type, named **Other**, is applicable to all users, for whom different combination of data roles and functional roles is desired.

### 9.1.2 Tracking of user operations

Currently, RAIS 3.1 Web tracks what a user has added, deleted or modified. It maintains a log for the operation, its time and date, the table involved and the identifier of the affected record.

The logs related to a particular record can be viewed by clicking the **View Log** button, which is available on the mask displaying the record in *view mode* (see Figure 22).

The screenshot shows a web form titled "Facility Details | Facility Status". It contains several input fields and dropdown menus. The fields are labeled: Regulatory Authority Number (with value FAC-001), Facility Name (with value Facility1), Facility Status (with value In Operation), Legal Person, Practices (with value Calibration Services), Region, District, Address, phone, and Fax. At the bottom of the form, there is a row of buttons: Back To List, Add, Edit, Delete, View log, Undo, and Apply.

Figure 22. The **View Log** button is available on the details mask (The example shown is for facility)

Once the View Log button has been clicked, a pop up will appear displaying the operations that have been undertaken to the particular record.

*Note*

*In order to be able to view the logs, pop-ups must be enabled in the internet browser.*

| Date              | Username      | Operation | Field Name                  | Field Value          |
|-------------------|---------------|-----------|-----------------------------|----------------------|
| 26.03.09<br>08:24 | Administrator | Add       | Address                     |                      |
| 26.03.09<br>08:24 | Administrator | Add       | Facility Name               | Facility1            |
| 26.03.09<br>08:24 | Administrator | Add       | Fax                         |                      |
| 26.03.09<br>08:24 | Administrator | Add       | District                    |                      |
| 26.03.09<br>08:24 | Administrator | Add       | Facility Status             | In Operation         |
| 26.03.09<br>08:24 | Administrator | Add       | Region                      |                      |
| 26.03.09<br>08:24 | Administrator | Add       | Legal Person                |                      |
| 26.03.09<br>08:24 | Administrator | Add       | Phone                       |                      |
| 26.03.09<br>08:24 | Administrator | Add       | Regulatory Authority Number | FAC-001              |
| 26.03.09<br>08:28 | Administrator | Add       | Practices                   | Calibration Services |

Figure 23. the log pop-up

## 9.2 Users

Users accounts are stored in a table within a Microsoft SQL Server database<sup>®</sup>, called **User**.

By default, two user accounts are created in the User table of RAIS 3.1 Web database, ‘Administrator’ and ‘Guest’

### *Note*

*The initial passwords for these two users are blank. It is highly recommended to set the RAIS administrator password immediately after installation (see section 9.2.6)*

### *Note*

*Every RAIS 3.1 Web user should have his own account. Account sharing or the use of default users should be avoided.*

To access the user management mask,

- 1 Select the menu “Administration”
- 2 Select the submenu “User Management”
- 3 Select the menu item “Users”

The screenshot displays the 'Add/Edit Users' web interface. On the left, a sidebar lists existing users: 'Administrator' and 'guest'. The main area contains a form for adding or editing a user. The form fields are as follows:

- User name:** Administrator
- Complete Name:** Administrator
- E-mail Address:** No email needed
- Address:** (empty text box)
- User type:** Other (dropdown menu)
- Functional Role:** Administrator (dropdown menu)
- Is user connected to a facility?:** No (dropdown menu)
- Select data role:** All data (dropdown menu)
- New Password:** (empty text box)
- Confirm Password:** (empty text box)
- Comments:** (empty text box)

At the bottom of the form, the **User Status** is indicated as 'Logged On'. Below the form are several action buttons: 'Add', 'Edit', 'Activate', 'Reject', 'Lock', 'Undo', and 'Apply'.

Figure 24. Users mask

### 9.2.1 Adding a User

- 1 Click the **Add** button
- 2 Enter the user name. This field is mandatory and must be filled in
- 3 Enter the complete name of the user
- 4 Enter the email address. This field is mandatory and must be filled in
- 5 Enter the address
- 6 Select the “User type” from the drop down list (see section 9.1.1.1).
- 7 Depending on the selected *User type*, different options will be available:
  - If the user type is “Administrator”, “Regulator”, “Restricted access regulator” or “Guest”, continue with step no. 8
  - If the user Type is “Licensee”:
    - i. Select the facility which he represents.
    - ii. Continue with step no. 8
  - If the User type is “Other”:
    - i. Select the functional role for the new user account
    - ii. Specify if the new user is representing a facility. If *yes*, select the facility. The built-in data access restrictions for the “licensee” user type will be applied to the new user. If *no*, select the data role to be assigned to the user.
    - iii. Continue with step no. 8
- 8 Enter a New password. This field is mandatory and must be filled in
- 9 Enter the password again to confirm. This field is mandatory and must be filled in
- 10 Click the **Apply** button

#### Note

*At this step, the new user account is created but not yet activated.*

- 11 To activate the user account, click the **Activate** button.

### 9.2.2 Editing a User

- 1 Select a user from the users list
- 2 Click the **Edit** button
- 3 Modify the data, as needed

*Note*

*If the “New Password” field is left blank, then the existing password will not be changed.*

- 4 Click the **Apply** button

### 9.2.3 Locking a User

- 1 Select a user from the users list
- 2 Click the **Lock** button

### 9.2.4 Activating a User

- 1 Select a user from the users list
- 2 Click the **Activate** button

### 9.2.5 Deleting a User

Deleting a user directly from RAIS 3.1 Web has been disabled because it may have side effects that could harm system integrity. For instance, if the user has modified or added data to the system, deleting this user may cause many conflicts within the logging system.

If deleting a user is nonetheless desired, e.g. due to an error in entering its user name, then the following steps must be done in the database directly using SQL Server Management Studio.

Please also note that this should be the responsibility of the administrator and should not be done unless absolutely necessary.

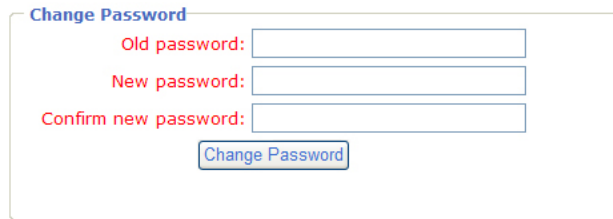
- 1 Access the SQL server using the Server Management Studio
- 2 Access the RAIS 3.1 Web database. The database name was specified during the installation of RAIS 3.1 Web (see section 2.4.3)
- 3 Open the table *[Users]*
- 4 Select the user you wish to delete
- 5 Press “delete”

### 9.2.6 Changing a user password

RAIS Administrator can change the password of users by editing their accounts as described in section 9.2.2.

Additional, any user can change his password upon login:

- 1 In the login dialog, check the box “*Change password after successful login*” (see Figure 7)
- 2 After login, RAIS 3.1 Web will display a mask for changing the password.



The 'Change Password' mask features a title 'Change Password' in blue. Below it are three red labels: 'Old password:', 'New password:', and 'Confirm new password:'. Each label is followed by a white text input field with a blue border. At the bottom center is a blue button with the text 'Change Password'.

Figure 25. Change password mask

- 3 Enter the old password
- 4 Enter the new password
- 5 Re-type the new password to confirm
- 6 Click **Change Password**

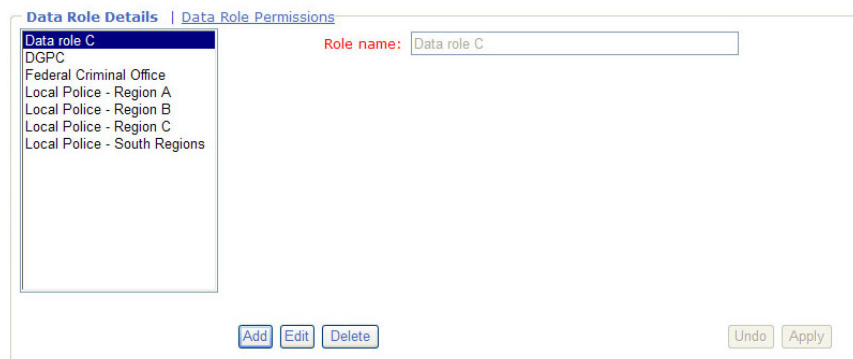
## 9.3 Data roles

Currently, data roles are implemented in RAIS 3.1 Web to restricted access to data of a facilities, districts and regions.

To access data roles

- 1 Select the menu “Administration”
- 2 Select the submenu “User Management”
- 3 Select the menu item “Data roles”

### 9.3.1 Data role details



The 'Data Role Details' mask has a title bar with 'Data Role Details' and a link 'Data Role Permissions'. On the left is a list box containing 'Data role C' (highlighted), 'DGPC', 'Federal Criminal Office', 'Local Police - Region A', 'Local Police - Region B', 'Local Police - Region C', and 'Local Police - South Regions'. To the right of the list box is a red label 'Role name:' followed by a text input field containing 'Data role C'. At the bottom left are three buttons: 'Add', 'Edit', and 'Delete'. At the bottom right are two buttons: 'Undo' and 'Apply'.

Figure 26. Data role details mask

#### 9.3.1.1 Adding a new data role

- 1 Click the **Add** button
- 2 Enter the new Role name
- 3 Click the **Apply** button

#### 9.3.1.2 Editing a data role

- 1 Select the data role you want to edit from the list of available data roles

- 2 Click the **Edit** button
- 3 Make any needed adjustments
- 4 Click the **Apply** button

### 9.3.1.3 Deleting a data role

- 1 Select the data role you want to delete from the list of available data roles
- 2 Click the **Delete** button

## 9.3.2 Data role permissions

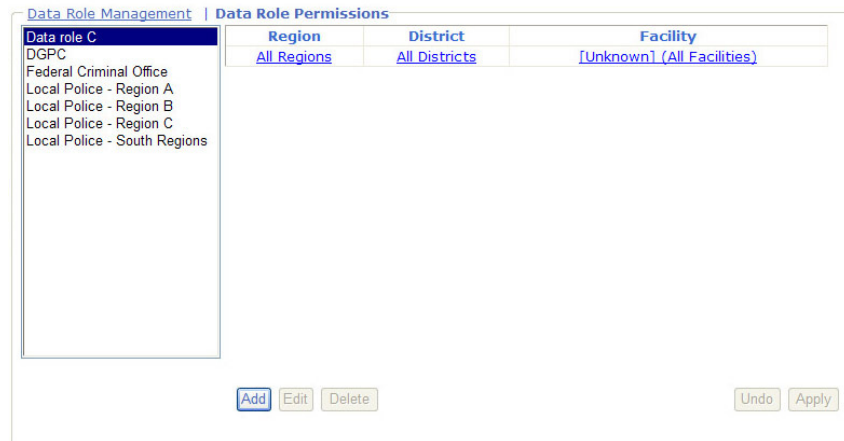


Figure 27. Data role permissions mask

### 9.3.2.1 Adding a new data role permission

- 1 Select the data role permissions tab
- 2 Select the data role from the list of available data roles
- 3 Click the **Add** button
- 4 Select the Region
- 5 Select the District, if applicable
- 6 Select the Facility, if applicable
- 7 Click the **Apply** button

### 9.3.2.2 Editing a data role permission

- 1 Select the data role permissions tab
- 2 Select the data role from the list of available data roles
- 3 Select the data role permission you wish to edit.
- 4 Click the **Edit** button
- 5 Make the needed changes
- 6 Click the **Apply** button

### 9.3.2.3 Deleting a data role permission

- 1 Select the data role permission you wish to delete.
- 2 Click the **Delete** button

## 9.4 Functional roles

Functional roles have two main objectives:

- To specify the access permission to the masks
- To specify the data validation property (see section 9.4.3)

To access functional roles:

- 1 Select the menu “Administration”
- 2 Select the submenu “User Management”
- 3 Select the menu item “Functional roles”

### 9.4.1 Functional role details

Figure 28. Functional role details mask

#### 9.4.1.1 Adding a new functional role

- 1 Click the **Add** button
- 2 Enter the new Role name
- 3 Select the validation property of this role (see section 9.4.3)
- 4 Click the **Apply** button

#### 9.4.1.2 Editing a functional role

- 1 Select the functional role you want to edit from the list of available functional roles
- 2 Click the **Edit** button
- 3 Make any needed adjustments
- 4 Click the **Apply** button

#### 9.4.1.3 Deleting a functional role

- 1 Select the functional role you want to delete from the list of available functional roles
- 2 Click the **Delete** button

## 9.4.2 Functional role permissions

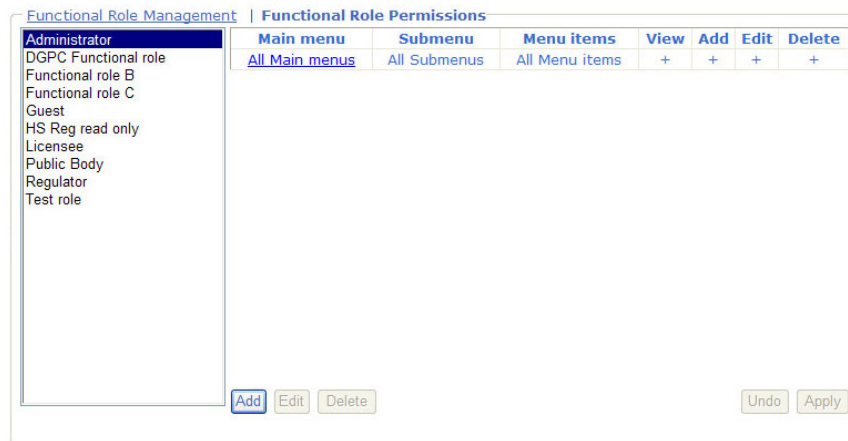


Figure 29. Functional role permissions mask

### 9.4.2.1 Adding a new functional role permission

- 1 Select the functional role permissions tab at the top
- 2 Select the functional role from the list of available functional roles
- 3 Click the **Add** button
- 4 Select the Menu
- 5 Select the submenu, if applicable
- 6 Select the menu item, if applicable
- 7 Check the access permissions to be granted
- 8 Click the **Apply** button

*Note*

Access permissions are specified at the menu item level. If there is more than one mask associated with the selected menu item, i.e. tabs, all of them will be subject to the same permissions

### 9.4.2.2 Editing a functional role permission

- 1 Select the functional role permission you wish to edit.
- 2 Click the **Edit** button
- 3 Make the needed changes
- 4 Click the **Apply** button

### 9.4.2.3 Deleting a functional role permission

- 1 Select the functional role permission you wish to delete.
- 2 Click the **Delete** button

## 9.4.3 Data validation levels

The functional roles' data validation property helps ensuring the correctness of data entered by users. Three data validation levels are available:

- **Level I: "Data changes by this role need validation":** Whenever a record is added, modified or deleted by a user whose functional role is set to this level, then this

modification will only be committed in the database after being accepted (i.e. “validated”) by a user whose functional role empowers him to do so, i.e. who is set to data validation level III.

- **Level II: “This role doesn’t need any validation”:** Data added, modified or deleted by users whose functional role is set to this level will be directly made in the database without further validation.
- **Level III: “This role validates data changes”:** This data validation level implies level II and, additionally, empowers to accept (i.e. validate) data modifications made by users whose functional role is set to level I.

The validation process is described in see chapter 7 of *RAIS 3.1 Web User’s Guide*.

*Note*

*RAIS 3.1 Web sets, by default, the functional roles of the user types “Licensee”, “Administrator” and “Regulator” to the data validation levels I, II and III respectively.*

## 9.5 Online request of user account

RAIS 3.1 Web offers the possibility for online account requesting.

A new user may request a user account from the Login Dialog (see Figure 7). In addition to his personal details, the new user needs to indicate a user name, password and the user type his wish to be assigned to.

After submitting an online request by a new user, RAIS Administrator will be able to see the account request within the message box.

- 1 In the RAIS 3.1 Web menu bar, click “Message Box”. The message box shows the account request.
- 2 Click “Validate Data”.

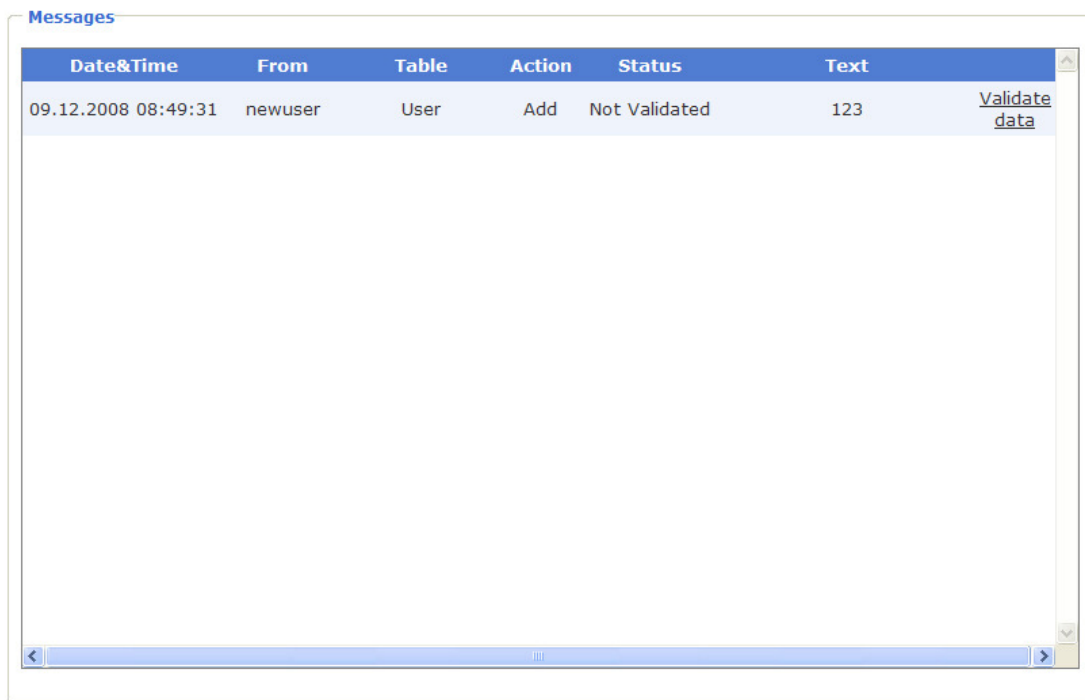
The user mask will be displayed with the details of the requested account (see Figure 24).

- 3 Review the data. Click **Edit** to make changes, if necessary
- 4 Click **Activate** to accept the request and grant access to this user, or **Reject** to deny the account request.

In both cases, an email will be auto-generated and sent to the email address specified by the applicant on the result of his request.

Messages

| Date&Time           | From    | Table | Action | Status        | Text |                               |
|---------------------|---------|-------|--------|---------------|------|-------------------------------|
| 09.12.2008 08:49:31 | newuser | User  | Add    | Not Validated | 123  | <a href="#">Validate data</a> |

The image shows a web-based message box titled "Messages". It contains a table with columns: Date&Time, From, Table, Action, Status, Text, and an empty column for links. A single message is listed: Date&Time: 09.12.2008 08:49:31, From: newuser, Table: User, Action: Add, Status: Not Validated, Text: 123. A link "Validate data" is present in the empty column. The interface includes a scrollbar on the right and a horizontal scrollbar at the bottom.

*Figure 30. RAIS Administrator Message Box showing an account request*

## Annex A Regulatory System Data: An Overview

The table below lists the regulatory system data and their type: (A) *national specific*, (B) *international standards based* or (C) *scientific based*.

The data are grouped and listed in the same ordering as they appear in the *treeview* of the *Regulatory System* menu.

| menu item                        | Regulatory System Data        | Type | Dependency                                                 |
|----------------------------------|-------------------------------|------|------------------------------------------------------------|
| Regulatory references            | Coordination and Cooperation  | A    |                                                            |
|                                  | Regulatory Reference          | A    | Regulatory References Status<br>Regulatory References Type |
|                                  | Regulatory References Status  | A    |                                                            |
|                                  | Regulatory References Type    | A    |                                                            |
| Infrastructure Information       | Regions                       | A    |                                                            |
|                                  | Districts                     | A    | Regions                                                    |
|                                  | Authorities                   | A    |                                                            |
|                                  | Officers                      | A    | Authorities<br>Officer Tasks<br>Gender                     |
|                                  | Officer Tasks                 | A    |                                                            |
|                                  | Practice Categories           | A    |                                                            |
|                                  | Practices                     | A    | Practice category<br>time units                            |
|                                  | Dose Limits                   | B    | Dose units                                                 |
| Facilities                       | Facility Status               | A    |                                                            |
| Sources and Associated Equipment | Sources Status                | A    |                                                            |
|                                  | Types of Radiation Generators | A    | Practice                                                   |
|                                  | Wave Forms                    | C    |                                                            |
|                                  | Categories of Sealed Sources  | B    |                                                            |
|                                  | Security groups               | B    |                                                            |
|                                  | Nuclides                      | C    |                                                            |
|                                  | Physical Forms                | C    |                                                            |
|                                  | Physical Barriers             | A    |                                                            |
|                                  | Package Categories            | B    |                                                            |
|                                  | Package Types                 | B    |                                                            |
|                                  | Types of Associated Equipment | A    | Practice                                                   |
| Authorizations                   | Authorization Status          | A    |                                                            |
|                                  | Source Transfer Type          | A    |                                                            |
|                                  | Transport Modes               | A    |                                                            |

| menu item        | Regulatory System Data          | Type | Dependency                         |
|------------------|---------------------------------|------|------------------------------------|
| Inspections      | Inspection Status               | A    |                                    |
|                  | Non-compliance Major Categories | A    |                                    |
|                  | Non-compliance Categories       | A    | Non-compliance Major Categories    |
|                  | Non-compliances                 | A    | Non-compliance Categories Practice |
| Enforcement      | Types of Enforcement Actions    | A    |                                    |
|                  | Responses                       | A    |                                    |
| Radiation Events | Deterministic Effects           | A    |                                    |
|                  | Dose Types                      | C    |                                    |
|                  | Emergency Response Level        | A    |                                    |
|                  | Event Cause                     | A    |                                    |
|                  | Extent of Event                 | A    |                                    |
|                  | Health Consequences             | A    |                                    |
|                  | Radiological Consequences       | A    |                                    |
|                  | Report Type                     | A    |                                    |
|                  | Medical Exposure Type           | A    |                                    |
| Workers          | Worker Status                   | A    |                                    |
|                  | Monitoring Status               | A    |                                    |
|                  | Academic Degrees                | A    |                                    |
|                  | Professional degrees            | A    |                                    |
|                  | Fields                          | A    |                                    |
|                  | Branches                        | A    | Fields                             |
| Common Tables    | Time Units                      | C    |                                    |
|                  | Activity Units                  | C    |                                    |
|                  | Dose Units                      | C    |                                    |
|                  | Voltage Units                   | C    |                                    |
|                  | Amperage Units                  | C    |                                    |
|                  | Gender                          | C    |                                    |
|                  | Booleans                        | C    |                                    |
|                  | Countries                       | C    |                                    |

## Annex B Translation Contexts

The following table lists the set of contexts that are available by default in RAIS 3.1 Web. For convenience, the list of contexts is presented in relationship to the menu structure of RAIS 3.1 Web.

| Menu              | Submenu                  | Menu item          | Tab                         | Relevant context            |
|-------------------|--------------------------|--------------------|-----------------------------|-----------------------------|
| Administration    |                          |                    |                             | Administration              |
|                   | Customization            | Assign Query       |                             | Assign Query                |
|                   |                          | Language selection |                             | Regional Settings           |
|                   |                          |                    | Edit Translations           | Edit Translations           |
|                   |                          |                    | Edit Help                   | Edit Help                   |
|                   |                          | Queries            |                             | Custom query                |
|                   |                          |                    | Custom query parameters     | Custom query parameters     |
|                   |                          | Search Tool        |                             | Custom Search Tool          |
|                   |                          | Submenus           |                             | Customise menu nodes        |
|                   |                          | Tables             |                             | Table Selection             |
|                   |                          |                    | Add table                   | Add table                   |
|                   |                          |                    | Edit table                  | Edit table                  |
|                   | User Management          | Data roles         |                             | Data Role Details           |
|                   |                          |                    | Data Role Permissions       | Data Role Permissions       |
|                   |                          | Functional roles   |                             | Functional Role Details     |
|                   |                          |                    | Functional Role Permissions | Functional Role Permissions |
|                   |                          | Users              |                             | Add edit users              |
|                   |                          |                    | User status                 | User status                 |
| Regulatory System | All                      | All                | Single Row Mask with List   | Single Row Mask with List   |
| Input             | Manufacturers and Models | Connect to ICSRS   |                             | ICSRS Connection            |
|                   |                          |                    | Result                      | ICSRS Import                |
|                   | Other                    | All                | Single Row Mask with List   | Single Row Mask with List   |
|                   |                          |                    | List With Filter            | List With Filter            |
|                   |                          |                    | Single Row Mask with List   | Single Row Mask with List   |
| Query             |                          |                    |                             | Query                       |
|                   | Radiation Events         | Radiation Events   |                             | Radiation Events report     |
|                   | Other                    | All                |                             | Reports                     |
| Statistics        |                          |                    |                             | Statistics                  |
|                   | All                      | All                |                             | Reports                     |

|             |                 |                              |  |                                            |
|-------------|-----------------|------------------------------|--|--------------------------------------------|
| Tools       |                 |                              |  | Tools                                      |
|             | Tools           | Calculations                 |  | Calculation of sealed source radioactivity |
|             |                 | Radiation Events Search Tool |  | Radiation Events Search Tool               |
|             |                 | Search Tool                  |  | Search Tool                                |
| Message Box |                 |                              |  | Message Box                                |
| Login       |                 |                              |  | Login                                      |
|             | Account Request |                              |  | Account Request                            |