Airviro User's Reference

Working with the IADM

How to perform administrative task inside Airviro

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Amendments

Version	Date changed	Cause of change	Signature
3.11	Nov 2006	Manual for new Airviro module	GS
3.11	Nov 2007	Upgrade	GS
3.12	Feb 2009	Upgrade	GS
3.13	Feb 2009	Upgrade	GS
3.20	Dec 2010	Upgrade	GS
3.21	Dec 2010	Upgrade	GS
3.21	June 2012	Review	GS
3.22	March 2013	Upgrade	GS
3.23	May 2013	Upgrade	GS
3.23	Nov 2014	Review	GS

Contents

7.1 Introduction: What is it?

IADM is used to perform some administrative and configurations tasks in Airviro.

Only the **airviro** user has access to this module since changes made here may affect an entire installation.

7.1.1 How does the IADM client work?

Airviro is a web based user interface. Airviro can be used from a PC or any other device running Internet Explorer 6 or later and Firefox.

After logging in on Airviro the IADM module can be selected. All data processing is made on the Airviro server and the results are transferred to the web browser.

Please note that JAVA JRE (run time plugin) must be installed and enabled in the web browser.

7.2 Getting started

Once Airviro has been properly installed on the *server*, you can access it by typing the correct URL in your web browser over Intranet/Internet.

After logging in the application by entering a username and password (*Figure 7.2.1*), the user is presented with a list of all available Domains (if none has being previously selected and stored), By selecting a Domain the top menu list will be refreshed to show all available Airviro Modules

After selecting **IADM** module, the user can choose the **Domain** to work with, if needed.

Figure 7.2.1 Logging in Airviro.

In this section you will learn :

- How to add Airviro users to your system.

- How to add roles and privileges to the system.

- How to work with maps in Airviro.

- How to add scenarios to be used in dispersion calculations

Some of the examples shown here are based on real sources from the Airviro (Göteborg) Reference System, included in all delivered Airviro systems.

7.2.1. Selecting a Domain to Work with

After pressing the **Domain** menu a sub-window will appear (*Figure 7.7.2.),* Select a **Domain** from the list and press **Apply**.
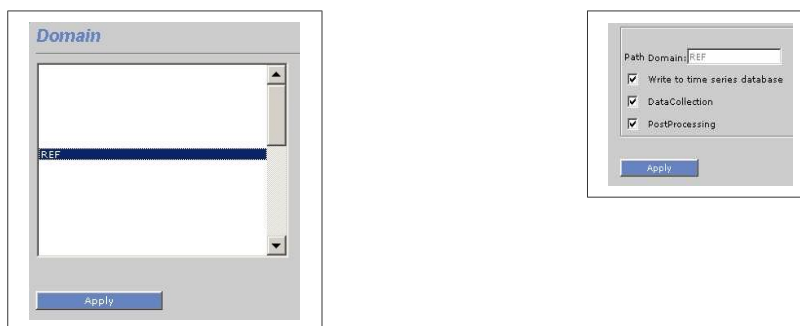
Figure 7.2.2 Select REF domain

After a domain has been selected, the user can enable/disable the following options:

- Write to time series database

- DataCollection

- PostProcessing

Note: As already said, only the **airviro** user can use this module since changes made here may affect an entire system. If you need to perform some administrative tasks like adding a new layer to a map or setting up a new user or role, contact you system administrator.

Note: Different users can have different privilege levels for different modules and menus. It is the task of the system administrator to ensure that the correct functionality is only available to those responsible and that other users cannot make changes in the Airviro configuration files. If you have problems to access modules that you think you should be able to access, ask your system administrator about your privilege levels.

7.3. Users

After selecting the **Users** menu a page will be shown in *Figure 7.3.1.*

When a user has been selected from the list, you can specify a **Full Name** for this user or change his **Password**.

Press the **Add** button to add new users. Pressing the **Deactivate/Activate** button you can activate/deactivate existing Airviro users.
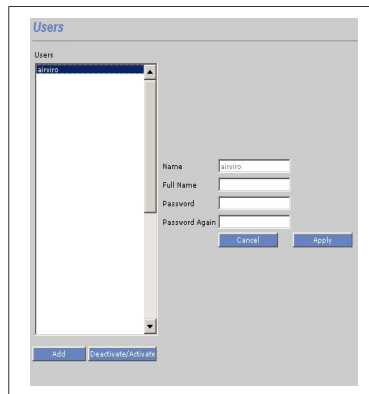

Figure 7.3.1. Select Users

7.4. Privileges

This section manages the user privileges regarding the access and functions that can be perform for a specific domain or module.

Now, there are **Roles** available in Airviro, useful for configuring groups of users that need to have the same privileges, according to the modules or functions they can access or execute.

This menu has three sub-menus: **ROLES**, **EDIT** and **EDB**.

7.4.1 Roles

As said before, all users that belong to the same ROLE, will share the same privileges.

Before defining roles inside the Airviro system it is important to know how different users will work with the system.
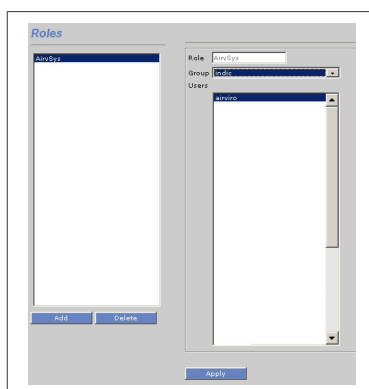
Figure 7.4.1. Privileges: Roles

Also it is important to know that:

- A role can contain one or multiple users.

- A user cannot belong to more than one role.

- Users can be added to an existing role.

To add a Role, press the **Add** button and enter a name for the new Role in the **Role** text box, then select the users that will be included in this new Role and finally press the **Apply** button.

7.4.2 Edit

Privileges exist on two different levels: A global level and a domain specific level. If a role doesn't have any privileges defined for a certain domain it will use the global definition for that role. If the global definition for the role doesn't exist it will use the definition for the global role DEFAULT. The global role DEFAULT always exists and should give no access to anything. In this way one must define privileges for a role, otherwise that role won't have access to anything.

Again, the privileges are matched in the following order (until privileges are found):

1. Domain specific privileges for the role

2. Global privileges for the role

After having defined roles inside the Airviro system, the administrator can configure the different roles:

- Setting access to an specific domain.

- Setting access to the different Airviro modules.

- Assigning READ/WRITE privileges to modules and time series keys.

- Defining the maps that will be available for each specific Domain.

- Dispersions models that will be available for each Domain.

- Check if Role/User are allowed to run Dispersion Calculations.

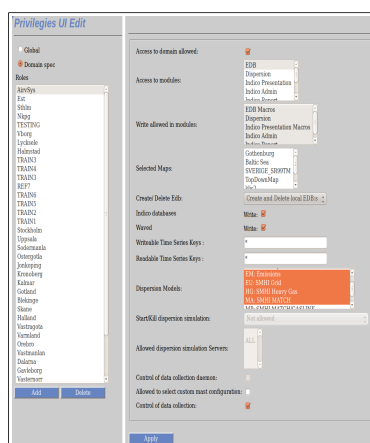- Allowed to select custom mast configuration.

- And more.

Figure 7.4.2. Privileges .Edit

In addition, the administrator can configure the following roles:

- Configure access to a specified Domain.

- Configure access to different Modules.

- Assign privileges to read-write Modules.

- Define maps available for each Domain.

- Dispersion models available for each Domain.

- Define which roles / users can run dispersion calculations.

7.4.2 EDB

Roles are not used for setting privileges for EDB. The privileges are set per user. Privileges exist on two different levels: A global level and a domain specific level. One can

specify which users that can access the EDB:s owned by a user. It is possible to use the user DEFAULT which will be used if a privilege is not set for a combination of user that wants to access the EDB and the owner. The table below indicates the precedence of rules that will be used to determine the level of access. In the example the user karl wants to access an EDB owned by carolina:

Domain EDB.RW.carolina.karl

Global RW.carolina.karl.

Domain RW.carolina.DEFAULT.

Global RW.carolina.DEFAULT.

Domain RW.DEFAULT.karl

Global RW.DEFAULT.karl

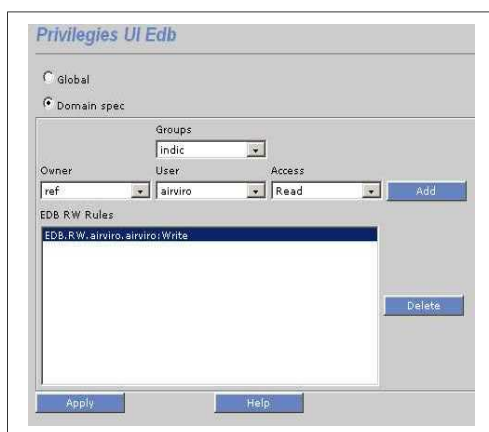Domain RW.DEFAULT.DEFAULT

Global RW.DEFAULT.DEFAULT

Figure 7.4.3. Privileges:EDB.

Using this page, the administrator can specify:

Access level (read / write / write sources only) that different users will have to other users´s Edbs.

In the example shown here, only the user airviro is allowed to read his own edbs.

7.5 Map Areas

This section deals with four sub pages: **Map Import, Map, Viewport and Order.**

This section will help the responsible for preparing Airviro maps to import maps and configure the looks of the maps. The maps are high quality digital and have normally been created using GIS or CAD systems.

All Airviro modules obtain information about map files from a resource file named **modell.par.**

modell.par can contain references to several maps, there is one **modell.par** per domain.

7.5.1 Map Import

This menu allows the user to import map files into the Airviro server, specifying the directory where the information should be saved.
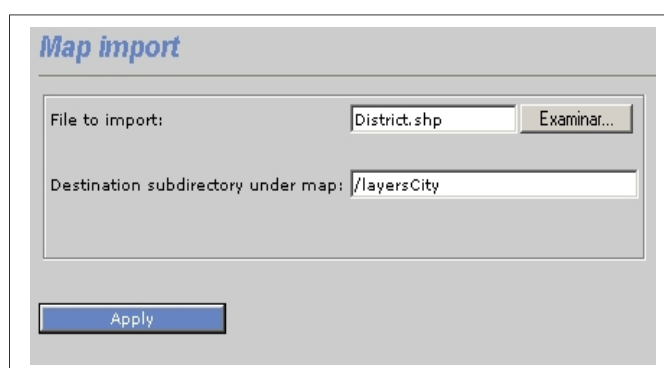

Figure 7.5.1. Map import.

The **Browse** button can be use to locate the directory where the shape files are located.

After filling in the directory path where the map will be stored, use the **Apply** button to confirm the import of the map file.

7.5.2 Map

This interface helps the Airviro administrator to configure maps that will be used when working with Airviro using a specific domain.

Using **Add** or **Delete** buttons the user can add one or several maps, or delete them.

The **Map Name** text box is used to enter the name that you will assign to the new map.

The **layers** list box show all the available map files (layers) that are included in a map.

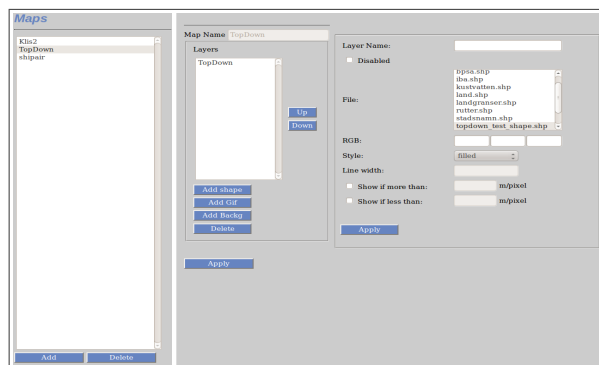It is possible to disabled a layer activating the Disabled check mark.

Figure 7.5.2. Maps

The **Up** and **Down** buttons allows you to change the order the layers will be displayed in map.

Inside the *Layers* section the following functionalities are available:

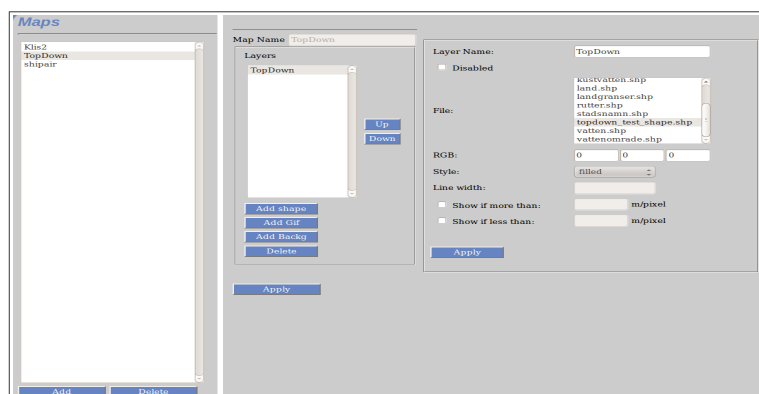**Add Shape:** Allows you to add new layers to the map

Figure 7.5.3. Add shape.

The user must enter the name of the Layer in the **Layer Name** text box. Then a **File** must be selected from the list showing all the available shape files that can be used to create the layer.

In the **RGB** text boxes, you can enter the RGB color code for the active layer.

The **Style** combo box allows you to select the style (linear or filled) that will be applied to the layer that is being added to the map

Additional options can be added to the layer using the **Line width** function and show restrictions (**Show if more than & Show if less than)** for specifying when to display a layer (after or before a zoom execution) according to its definition in m/pixel,

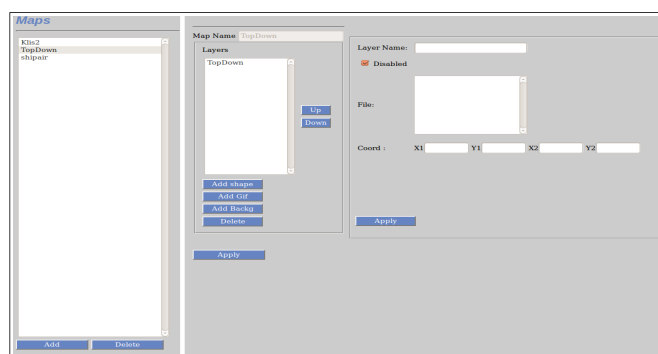*Figure 7.5.4. Add Gif.*

Add Gif: With this option a Gif file can be added to the map, for example a satellite image.

Add Backg: Adds a background color.

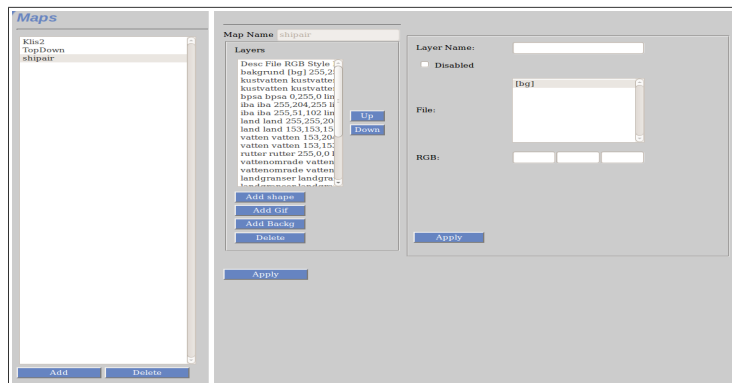All these features help to create colorful and attractive maps.

Figure 7.5.5 Add background.

Delete: Using the **Delete** button the user can eliminate layers in the map.

7.5.3 Viewport

This interface allows the user to configure which areas of a map will be available in Airviro and to configure a map for dispersion calculations. This information is saved in the **modell.par** file.
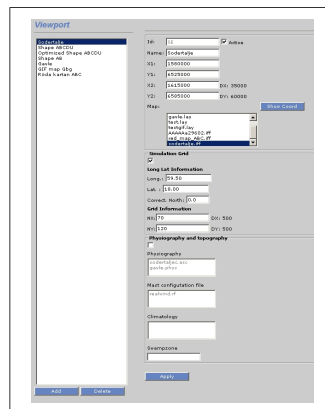

Figure 7.5.6 Viewport

The map **Id** is a unique identifier. The **Active** check box indicates if the selected map is available in Airviro or not. In **Name** the text that is shown in Airviro for the view port is specified. The **X1, X2, Y1, Y2** specifies the lower left and upper right corner of the viewport. **DX** and **DY** shows the width and height of the view port. Pressing **Show Coord** shows the bounding box of the map.

The **Map** list shows all available maps with the selected one highlighted.

If **Simulation Grid** is checked the viewport can be used for dispersion calculations. The **Lat**itude and **Long**itude is specified here as well as the default **Grid** size for the map. The default Grid size is used for dispersion calculations.

Under the **Physiography** and **Topography** section, files containing that information is displayed in the corresponding list box. The selected topography and physiography is used for dispersion calculations.

Svampzone defines the number of grid squares outside of the simulation area that should be included in a dispersion calculation. A normal number is 3.

7.5.4 Order

This page is used to change the order in which the maps are displayed in the map list for the different Airviro modules. For this you have to use the **Up & down** buttons.
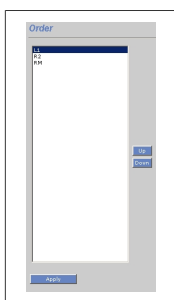

Figure 7.5.7 Order.

7.6 Mast

This interface provides access to configure files used in the Dispersion Module. When Dispersion is installed two configuration files are created: realwind.rf and climSH.rf. These contains the default configuration file for the meteorological mats(s) and the deafult setup for climatologies. Additional mast configurations and climatologies can be created using realwind.rf, or one of the additional mast configurations, as a template.

7.6.1 Configuration

Additional mast configuration files are created in the interface. Select a realwind(XX).rf file as a template and a additional mast configuration file can be created. When starting a dispersion calculation the mast configuration that is used for the calculation can be selected if the user has priviligies to do so.

The new config file has a unique two letter identifier and is called mastcfg_XX.rf where XX is the two letter identifier.

The meteorological parameters to use can be changed including, temperature, differential temperature, wind direction, wind speed, precipitation, global radiation, humidity, standard deviation wind direction, standard deviation for vertical wind and pressure.

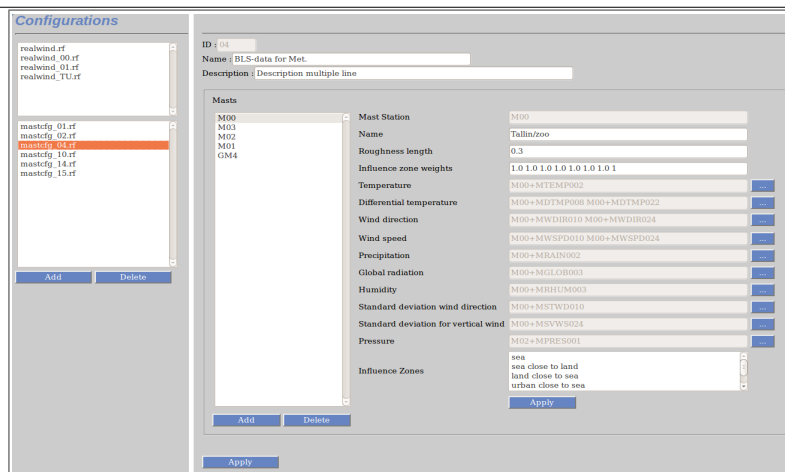The roughness lengh and influence zones can be changed as well.

Figure 7.6.1 Mast. Configuration.

7.6.2 Climatologies

This interface allows you to configure climatologies. These are used in the module Dispersion when selecting Scenario in the **Model Settings**

Climatologies can be reconfigured and recalculated for existing mast configuration files.

The available mast configuration files are listed in the list to the right. By selecting it it is possible to change the scenario and recalculate it. A scenario consists of a number of Season Specifications. New ones can be added and old ones deleted. A Season Specification consists of a name and a period within the year show meteorological data will be used for the scenario.
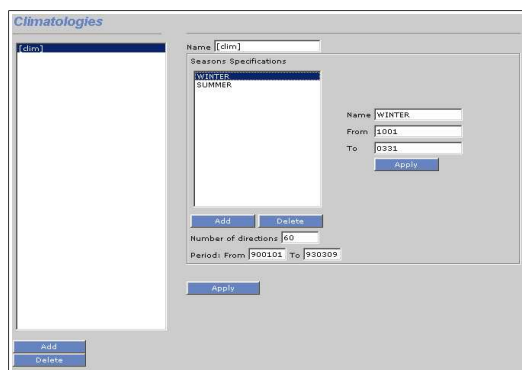

Figure 7.6.2. Climatologies

The number of wind directions to use for the scenario is shown under the Season Specification list. The period for which meteorological data will be used for the scenario calculation is below.

After changes have been made, press the **Apply** button to save and recalculate the climatology.

Appendix 7A: Privileges

7A.1 User Privileges

A privilege database is used to control access to functions within Airviro. The access is normally controlled per user based on the log in identity. Global privilege settings as well as settings per domain can be made.

Access to domains can be granted per user.

7A.1.1 EDB

Access to EDB can be granted per user.

The possibility to save macros can also be granted per user.

For usage of the global EDBs or personal EDBs belonging to a specific user, four privilege levels are available:

1 - No access is allowed to any EDBs.

2 - EDBs can be viewed but no changes can be made.

3 - EDBs may be viewed and altered.

4 - EDBs may be viewed and sources altered.

In addition another privilege set is available concerning the creation and deletion of EDBs which also has three levels:

1 - No EDBs may be created

2 - Personal EDBs may be created and deleted

3 - Personal EDBs may be created, all EDBs may be deleted including those belonging to other users.

7A.1.2. Indico Presentation

Access to the module can be granted per user.

The possibility to save macros can also be granted per user.

7A.2 Indico Administration

Access to the module can be granted per user.

The possibility to save macros can also be granted per user.

For the edit functions in the Indico Administration module (excluding editing of time series data), there are two privilege levels:

1- Other users may view the contents of the station and parameter databases, but may not edit them.

2- The user may edit the station and parameter databases.

7A.3 Indico Report

Access to the module can be granted per user. The possibility to save reports can also be granted per user.

7A.4 Indico Validation

Access to the module can be granted per user. The possibility to edit or delete data can be granted per user.

7A.5 Dispersion

Access to the module can be granted per user. The possibility to save macros can also be granted per user.

7A.6 Time series data

The possibility to add or modify time series data can be granted per user and station.

7A.7 Map areas

The possibility to see and use a particular map area can be granted per user.

7A.8 Waved

The possibility to write data to the airviro time series database using waved.