

OW2 Aspire RFID

Sub Project: RFID Suite

User Guide

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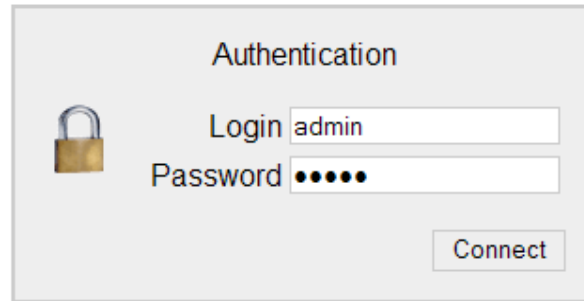
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1. LOGIN PAGE

Before using the AspireRFID Suite interface, you need to authenticate.



Authentication

Login admin

Password ●●●●●

Connect

Figure 1: Authentication form



Default account :
Login : admin
Pass : admin

Each account is linked to a “role”. The purpose of the role is to list the functions you can use. You can customize the interface for the different kind of people who use this application. You can refer to the appropriate chapter for more details.



For security reasons you need to change the default password.
See chapter 7.1.3 for this.

2. GENERAL STRUCTURE

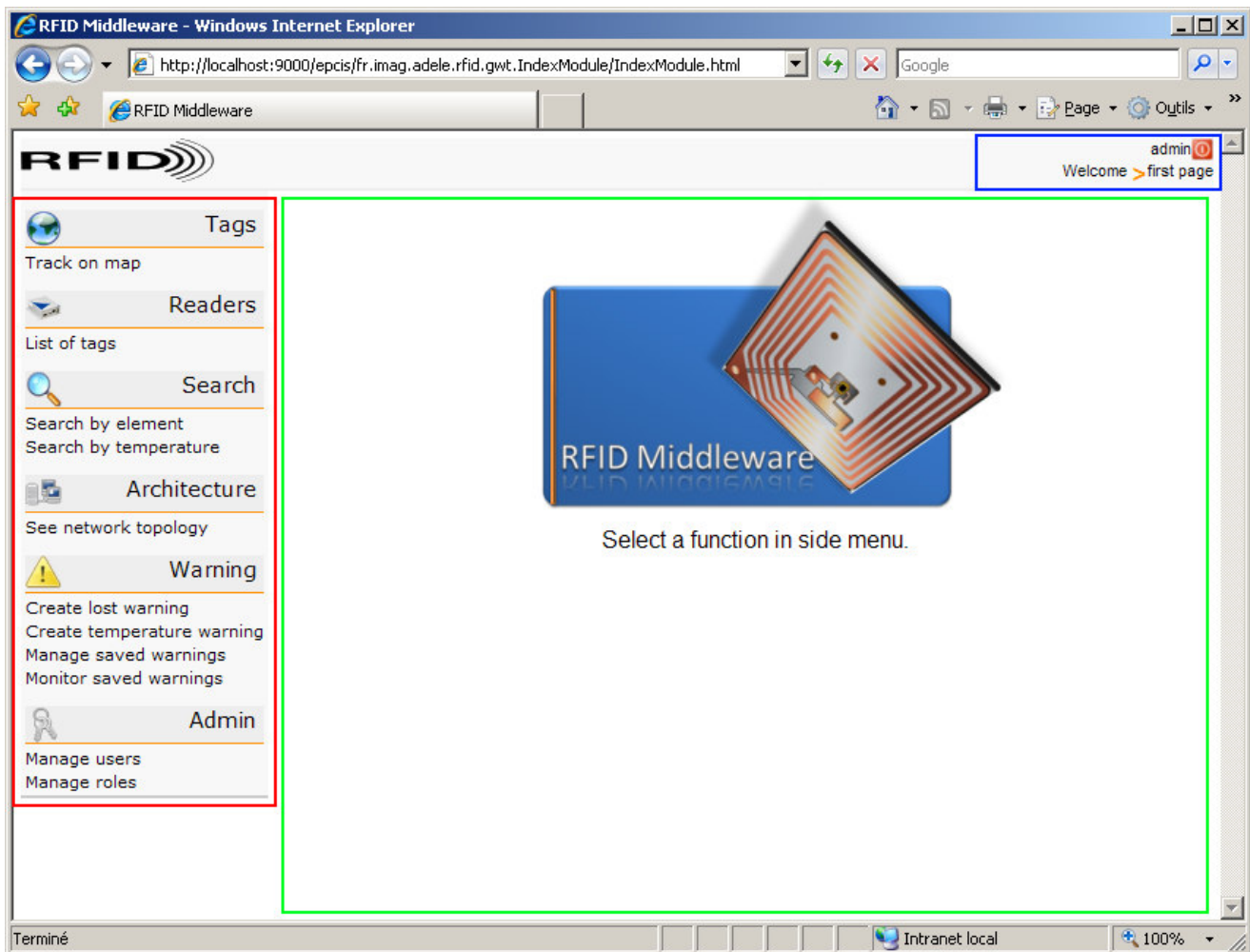




Figure 2: General structure

The web interface is split in three parts:

- **Menu:** List the functions which you can access.
- **Selected function:** This space is reserved for the currently selected function.
- **Banner:** See who is logged, and where you are on the application.

3. HEADER

On top right corner, on each page, you can see:

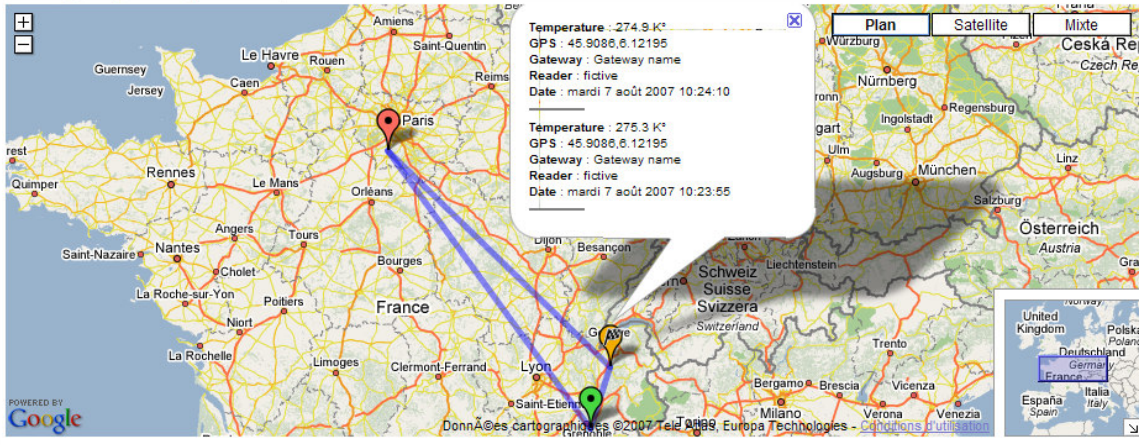
admin  Allows you to logout.
Welcome > first page  Displays where you are.

4. TRACK ON MAP

You can follow the path of a specific tag on a map.

Tag: Valid




Tracking Complementary information



Information :

- Path
- Marker
- Partner information
- Display
- Focus
- Clear map

Legend :

- Start 
- Intermediate 
- Finish 

Pos	Gateway	Reader	Date
1	Gateway name	fictive	mardi 7 août 2007 10:25:34
2	Gateway name	fictive	mardi 7 août 2007 10:25:01
3	Gateway name	fictive	mardi 7 août 2007 10:24:40
4	Gateway name	fictive	mardi 7 août 2007 10:24:10
5	Gateway name	fictive	mardi 7 août 2007 10:23:55
6	Gateway name	fictive	mardi 7 août 2007 10:23:49

Figure 3: Track on map (first page)

4.1. TAG INPUT

If you want to track a specific tag, you need to write it yourself.

There are two ways:

- Type the full tag number (**Manual mode**).
- Use the input helper (**Helper mode**).

4.1.1. MANUAL MODE

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Tag :

Figure 4: Tag input



If the tag is written in “red”, it means that the content of the “track on map” isn’t synchronized with the new tag. Click on “Enter” or click on “Valid” to synchronize with the new tag. Now the tag written in “green” means that the content is synchronized.

4.1.2. HELPER MODE

Click on “Input helper” to display the popup window below.

Tag Input Helper :

EPC :

Tag format :

General manager :

Object class :

Serial number :

Figure 5: Tag input helper

- EPC:** Previews the tag.
- Tag format:** Many tag formats exist, but only GID-96 is supported in this version.
- General Manager:** Number which defines the company.
- Object class:** This number defines the kind of object.
- Serial number:** Allows us to distinguish between two tags with the same “General Manager” and “Object class”.



To customize « General manager » and « Object class » list box content, edit “**editor.properties**” file.

Current content:

```
editor.inputhelper.generalmanager.count=2
0.editor.inputhelper.generalmanager=MyCompany-6543210
1.editor.inputhelper.generalmanager=PartnerCompany-000000000
```

Add a new General Manager:

```
editor.inputhelper.generalmanager.count=3
0.editor.inputhelper.generalmanager=MyCompany-6543210
1.editor.inputhelper.generalmanager=PartnerCompany-000000000
2.editor.inputhelper.generalmanager=NewGeneralManager-0123456
```

4.2. ARRAY OF RESULT

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Pos	Gateway	Reader	Date
1	Gateway name	fictive	mardi 7 août 2007 10:25:34
2	Gateway name	fictive	mardi 7 août 2007 10:25:01
3	Gateway name	fictive	mardi 7 août 2007 10:24:40
4	Gateway name	fictive	mardi 7 août 2007 10:24:10
5	Gateway name	fictive	mardi 7 août 2007 10:23:55
6	Gateway name	fictive	mardi 7 août 2007 10:23:49

▲ Sort increasing

▼ Sort decreasing



Go to previous page



Go to next page

4.3. GENERAL INFORMATION FROM ONS

ONS provides some functionality such as getting general information for a specific tag.

How to access this functionality

1. Click on "Track on map"

2. Click on

4.3.1. RESULTS SCREENSHOTS

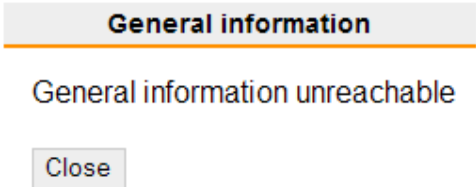


Figure 6: ONS is unreachable

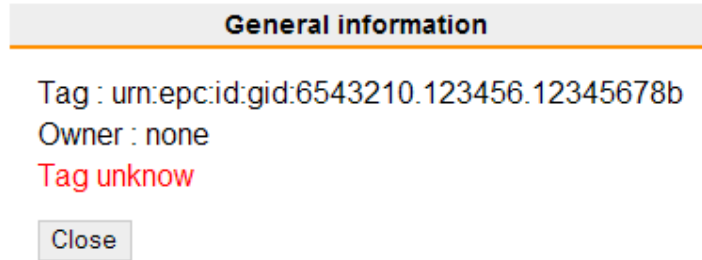


Figure 7: Tag is unknown

General information

Tag : urn:epc:id:gid:6543210.123456.123456789

Owner : none

Creation date : 2007-07-20 08:00:00.0

Description : none

Close

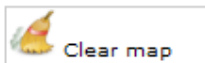
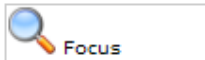
Figure 8: Tag is know

4.4. GOOGLE MAP




4.4.1. MAP MENU

Information :

- Path
- Marker
- Partner information



Select what you want to display:

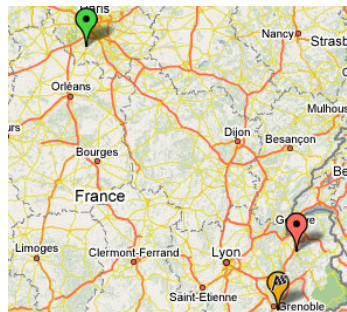
- **Path:** path of the tag.
- **Marker:** display markers (,  or ) which provide more information after clicking them.
- **Partner information:** display full path of the tag, of all partners which share their tag information by the ONS.

Display: Draw or redraw the information selected above.

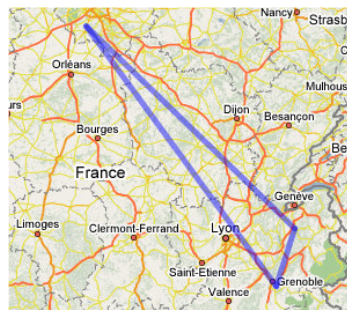
Focus: set the map camera to see the whole tag path.

Clear map: clear all markers and paths on the map.

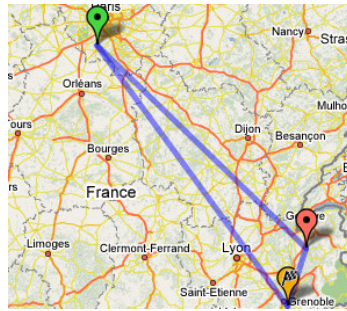
4.4.2. MAP INFORMATION



- : Path
- : Marker
- : Partner

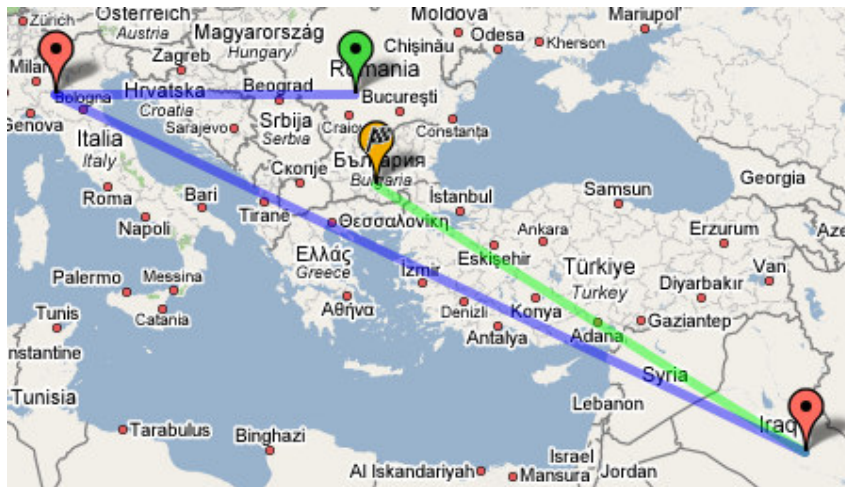


- : Path
- : Marker
- : Partner



- ✓ : Path
- ✓ : Marker
- ✗ : Partner

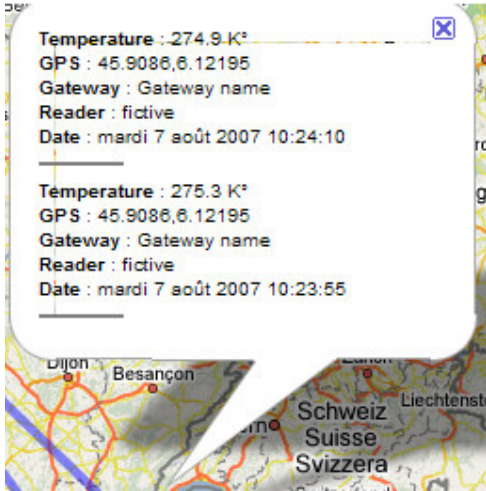
In the next example we use information from 2 different EPCIS. This information is shared through the ONS.



- ✓ : Path
- ✓ : Marker
- ✓ : Partner



- ✓ : Path
- ✓ : Marker
- ✗ : Partner

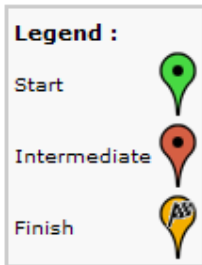


Marker extended information:

When you click on a Marker (, or) you have access to a list of complementary information.

Temperature, GPS position, Gateway name, Reader name, and Date.

4.4.3. MAP LEGENDS



Start: represents the beginning of the tag ride.

Intermediate: represents the intermediate point.

Finish: represents the last position of the tag.

4.5. COMPLEMENTARY INFORMATION

How to access this functionality

1. On the "Reader" menu click on "Track on map"
2. Click on the tab named "Complementary information"

Tracking Complementary information

Switch map to temperature chart.

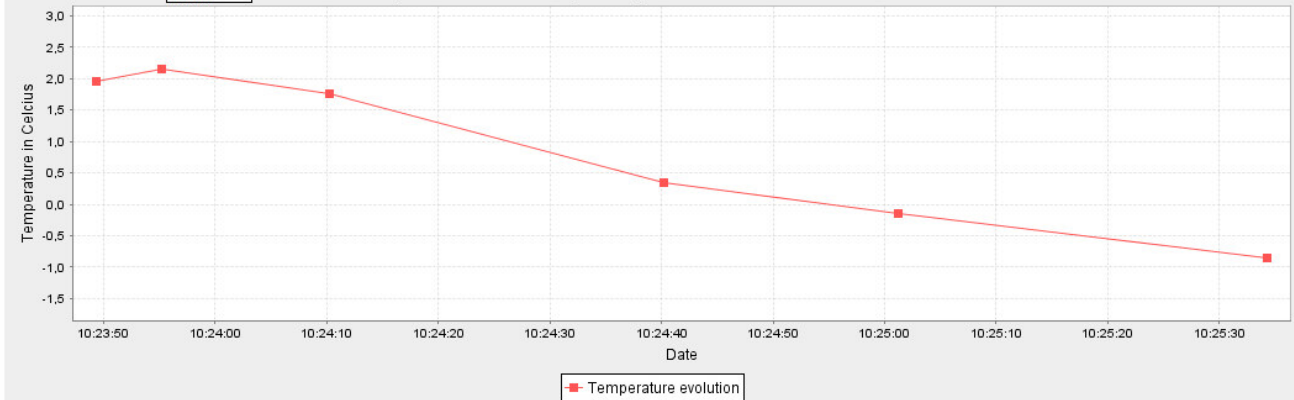
Tracking **Complementary information**

Informations :

Temperature unit :

- Celcius
- Kelvin

Temperature of urn:epc:id:gid:6543210.123456.12345678b



Pos	Gateway	Reader	Date
1	Gateway name	fictive	mardi 7 août 2007 10:25:34
2	Gateway name	fictive	mardi 7 août 2007 10:25:01
3	Gateway name	fictive	mardi 7 août 2007 10:24:40
4	Gateway name	fictive	mardi 7 août 2007 10:24:10
5	Gateway name	fictive	mardi 7 août 2007 10:23:55
6	Gateway name	fictive	mardi 7 août 2007 10:23:40

Figure 9: Track on map (second page)

On this page you can follow the temperature evolution for a specific tag in Kelvin or Celsius.

5. NETWORK TOPOLOGY

How to access this functionality

1. On the “Architecture” menu click on “Network topology”

5.1. LEGENDS



5.2. RENDERING EXAMPLE

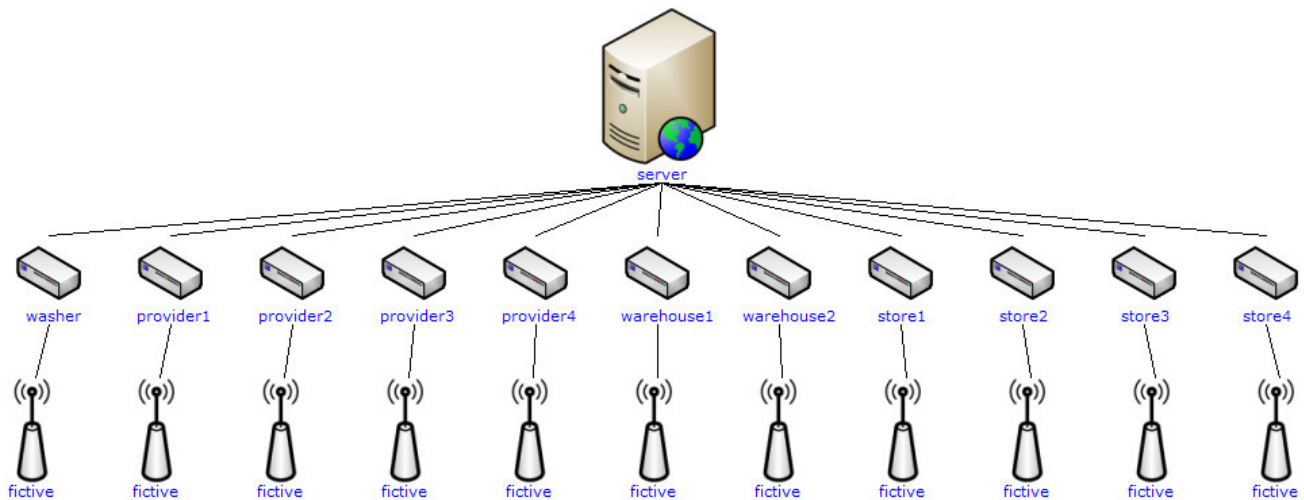


Figure 10: Topology example rendering



If your LDAP server is offline or if your configuration file isn't correct, you will see this message :
LDAP server is unreachable,
See if your 'server.properties' is correct.

For more details on how to configure the configuration file 'server.properties', see installation guide.

6. SEARCH

6.1. BY ELEMENT

It is possible to search by 3 kinds of elements:

- Gateway
- Reader
- Tag



The wildcard * and % are supported, both mean: "whatever string".

Search by element

Search a :
Name :

Gateway

Gateway name

Search by element

Search a :
Name :

Reader

fictive

Search by element

Search a :
Name :

Tag

urn:epc:id:gid:6543210.000001.123456789
urn:epc:id:gid:6543210.123456.123456789
urn:epc:id:gid:7654321.000001.123456789
urn:epc:id:gid:7654321.123456.123456789

6.2. BY TEMPERATURE

You can find a tag read by a specific reader with a specific temperature.

Search by temperature

Variable :

Operator :

Value :

Select reader to monitor :

▼ **Advanced settings**

Beginning date : h m s

Ending date : h m s

or

Live result : Refresh timer :

Tag	Temp	Date
urn:epc:id:gid:6543210.000001.12345678d	272.9	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.000001.123456789	272.3	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.000001.12345678c	273.1	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.123456.123456789	273.1	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.123456.456789abc	272.3	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.000001.12345678b	272.3	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.123456.12345678b	272.3	mardi 7 août 2007 10:25:34
urn:epc:id:gid:7654321.123456.12345678a	272.3	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.123456.456789abc	272.3	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.123456.12345678a	272.3	mardi 7 août 2007 10:25:34

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7. ADMINISTRATION

7.1. USERS MANAGEMENT

7.1.1. LIST OF USERS

How to access this functionality

1. On the "Admin" menu click on "Manage user" or "List users".

List of users

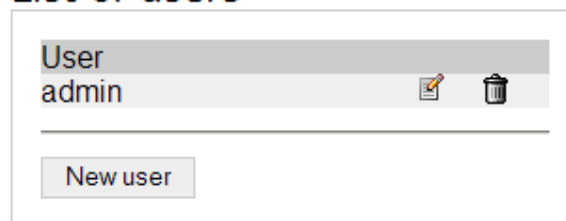
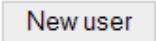


Figure 11: List of users

7.1.2. ADD A USER

1. Select menu “*manage users*”
2. Click on 
3. The window below is shown


Add a user		
Login :	<input type="text" value="newLogin"/>	Login: User login, this login must be unique.
Pass :	<input type="text" value="newPass"/>	Pass: User password
Mail :	<input type="text" value="newMail@mail.com"/>	Mail: The mail of the user
Roles :	<input type="text" value="ROOT"/>	Roles: The role of the user
<input type="button" value="Add"/>	<input type="button" value="Cancel"/>	Then click “ Add ” to save this new user.



You CAN'T modify the login after user creation.

7.1.3. MODIFY A USER


How to access this functionality

1. To modify a user, go to “*List of users*”
2. And click on 

Modify a user		
Login :	<input type="text" value="admin"/>	Login: can't be modified.
Pass :	<input type="text" value="admin"/>	Pass: type new password
Mail :	<input type="text" value="mail@mail.com"/>	Mail: type new mail.
Roles :	<input type="text" value="ROOT"/>	Roles: Change the role.
<input type="button" value="Modify"/>	<input type="button" value="Cancel"/>	Then click “ Modify ” to save changes.




For security reasons you need to change the default password.

Click on «  » on the line of « admin » user.
Type the new password. Update the mail, without changing the role.
Click on « modify » to save your modifications.

7.1.4. DELETE A USER

How to access this functionality

1. To delete a user, go to “List of users”
2. And click on 

7.2. ROLE

7.2.1. LIST OF ROLES

How to access this functionality

1. On the “Admin” menu click on “Manage role”.

Roles management

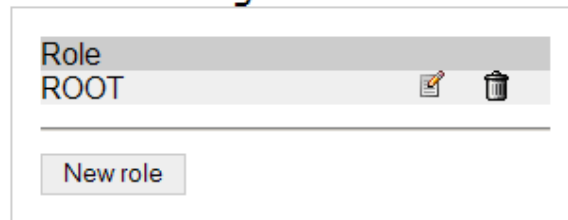
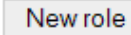


Figure 12: List of Roles

7.2.2. ADD ROLE

1. Go to “List of roles”
2. Click on 
3. Type the role name

Modify role

User role name:

<p>Readers</p> <ul style="list-style-type: none"> ✓ Number of tags ✓ List tags <p>Tags</p> <ul style="list-style-type: none"> ✓ Track on map <p>Administration</p> <ul style="list-style-type: none"> ✓ Manage users ✗ List users ✓ Manage roles 	<p>Architecture</p> <ul style="list-style-type: none"> ✓ See network topology <p>Search</p> <ul style="list-style-type: none"> ✓ Search tag ✓ Search reader ✓ Search gateway ✓ Search by temperature <p>Warnings</p> <ul style="list-style-type: none"> ✗ Manage warnings ✓ Warning temperature ✓ List of lost objects ✓ Monitor warnings
---	---


✓ : Access granted.
✗ : Access forbidden.

Figure 13: Add role form

4. Select the privileges you want to grant access to
5. Click on **“Save”** to store the new role in the database

7.2.3. MODIFY ROLE

How to access this functionality

1. Go to *“List of roles”*
2. Click on 
3. Change settings
4. Click on *“Save”*

7.2.4. DELETE ROLE

How to access this functionality

1. Go to *“List of roles”*
2. Click on 

8. LIST OF TAGS

With this function you can have a list of the tags detected by all the readers between two dates based on your EPCIS.

Beginning date : 08/04/2007 0 h 0 m 0 s

Ending date : 08/07/2007 11 h 0 m 0 s

Live result :

Tags found : 145

	gateway	reader	Date
urn:epc:id:gid:6543210.000001.12345678d	Gateway name	fictive	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.000001.123456789	Gateway name	fictive	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.000001.12345678c	Gateway name	fictive	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.123456.123456789	Gateway name	fictive	mardi 7 août 2007 10:25:37
urn:epc:id:gid:7654321.123456.456789abc	Gateway name	fictive	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.000001.12345678b	Gateway name	fictive	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.123456.12345678b	Gateway name	fictive	mardi 7 août 2007 10:25:34
urn:epc:id:gid:7654321.123456.12345678a	Gateway name	fictive	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.123456.456789abc	Gateway name	fictive	mardi 7 août 2007 10:25:34
urn:epc:id:gid:6543210.123456.12345678a	Gateway name	fictive	mardi 7 août 2007 10:25:34

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Figure 14: List of tags form

1. Select a "Beginning date"
2. Select an "Ending date" or a "Live result"
3. Search

Select a date:

<< < Aug-2007 > >>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Today

Navigation:

- << previous years
- < previous month
- > next month
- >> next years

Selection:

Click on the date you want to select.

Select hours:

0 h 0 m 0 s

1. Select hours on European format (0h to 23h)
2. Select minute
3. Select second

Finally click on *“Search”*.

9. WARNING

9.1. CREATE CONSTRAINTS

9.1.1. TEMPERATURE

Some kind of objects, like food, need to be kept in a specific temperature. This function allows us to check if the temperature has been acceptable during the product's life.

Temperature warning

Variable :	Temperature (K) ▾
Operator :	= ▾
Value :	272
Select reader to monitor :	fictive
Warning saving name :	272K
<input type="button" value="Test request"/> <input type="button" value="Save warning"/>	

Tag ▼▲	Temp ▼▲	Date ▼▲
urn:epc:id:gid:6543210.000001.12345678c	272	mardi 7 août 2007 10:25:13
urn:epc:id:gid:6543210.000001.12345678a	272	mardi 7 août 2007 10:25:13

Figure 15: Temperature warning form

How to use this function:

1. Select the variable that you want to monitor, for the moment only temperature is implemented
2. Define a constraint
3. Select the reader associated to this constraint
4. Give a name to your warning
5. Save warning

9.1.2. LOST OBJECT

An object is said to be lost if after a specific duration no other readers have detected it. To list lost objects, you need to follow these instructions:

How to use this function:

1. On the “Warning” menu click on “Lost object”

Lost objects warnings

Time elapsed before an object is lost :

Select reader to monitor :

Warning saving name :

EPC	Last appearance
urn:epc:id:gid-96:7654321.000001.12345678b	mardi 7 août 2007 10:25:01
urn:epc:id:gid-96:6543210.000001.12345678a	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:7654321.123456.123456789	mardi 7 août 2007 10:25:37
urn:epc:id:gid-96:7654321.123456.12345678b	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:7654321.123456.12345678c	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:7654321.000001.12345678d	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:7654321.000001.12345678a	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:6543210.123456.12345678c	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:6543210.123456.123456789	mardi 7 août 2007 10:25:34
urn:epc:id:gid-96:6543210.000001.123456789	mardi 7 août 2007 10:25:34



Figure 16: Lost object form

2. Specify the duration after the object is said to be lost
3. Select the reader you want to check
4. Give a name to your “warning”
5. Test your request, and if you are satisfied, save it

9.1.3. MANAGE CONSTRAINTS

Now that you are able to add and store constraints, it’s time to learn how to list and delete them.


Warnings management

Warning name	
LOST_40min	
TEMP_272K	

Create temperature warning

Create lost warning

With the Manager you can:

- List constraints
- Delete a warning ()
- Create new constraints

9.2. MONITOR WARNING

Monitor warning checks in real time if all constraints are Ok. If a problem is detected an alert is shown in the interface.

10 sec Status: **Stopped**

Lost Objects

Temperature warnings

Figure 17: Monitor warning stopped

Click on **“start”** to run the monitoring



The monitoring runs in the background, you can see other pages while the monitoring keeps running.

10 sec Stop Status: **Running**

Lost Objects

Last appearance	On	Warning	tag
mardi 7 août 2007 10:25:37	fictive	40min	urn:epc:id:gid:6543210.000001.12345678d
mardi 7 août 2007 10:25:37	fictive	40min	urn:epc:id:gid:7654321.000001.123456789
mardi 7 août 2007 10:25:37	fictive	40min	urn:epc:id:gid:7654321.000001.12345678c
mardi 7 août 2007 10:25:37	fictive	40min	urn:epc:id:gid:7654321.123456.123456789
mardi 7 août 2007 10:25:34	fictive	40min	urn:epc:id:gid:7654321.123456.456789abc
mardi 7 août 2007 10:25:34	fictive	40min	urn:epc:id:gid:6543210.000001.12345678b
mardi 7 août 2007 10:25:34	fictive	40min	urn:epc:id:gid:6543210.123456.12345678b
mardi 7 août 2007 10:25:34	fictive	40min	urn:epc:id:gid:7654321.123456.12345678a
mardi 7 août 2007 10:25:34	fictive	40min	urn:epc:id:gid:6543210.123456.456789abc
mardi 7 août 2007 10:25:34	fictive	40min	urn:epc:id:gid:6543210.123456.12345678a

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Temperature warnings

Date	Temperature	On	Warning	tag
mardi 7 août 2007 10:25:13	272	fictive	272K	urn:epc:id:gid:6543210.000001.12345678a
mardi 7 août 2007 10:25:13	272	fictive	272K	urn:epc:id:gid:6543210.000001.12345678c

Figure 18: Warning monitor started