

SIP - DECT  
OM Locating Application

Installation, Administration & User Guide

# Welcome to Aastra

Thank you for choosing this Aastra product. Our product meets the strictest requirements with regard to quality and design.

The following user guide will assist you in using your SIP - DECT OM Locating Application and provide answers to all your most important questions.

If you should require further technical support or information about other Aastra products, please contact the person responsible for your system or get in touch with your local dealer.

You can also find information about this device and other products on our website at **<http://www.aastra.de>** or **<http://www.aastra.com>**.

We hope you enjoy using your SIP - DECT OM Locating Application.

# Contents

<b>OpenMobility Locating Application</b> .....	<b>1</b>
Features and Benefits .....	2
Use Cases .....	3
Other Valid Documentation .....	4
Scope of Delivery .....	4
Notes on Licences .....	4
Notes on GAP / Aastra 142d Handsets .....	5
Notes on Operating Conditions .....	6
<b>Installation</b> .....	<b>7</b>
Installing Red Hat Enterprise Linux Server 5.4 .....	7
Prerequisites .....	7
Installing the Operating System .....	9
Installing the OM Locating Application .....	11
Backup and Restore .....	16
Upgrading OM Locating from Previous Version .....	17
<b>Configuration</b> .....	<b>18</b>
Configuring the OMM Connection .....	18
OMM Configuration Prerequisites .....	21
Configuring the Portable Parts .....	22
Adding Site / Location Pictures .....	24
Configuring the Workstation Computers .....	25
<b>Operation and Daily Usage</b> .....	<b>26</b>
Login / Logout .....	26
Checking OMM Connection .....	27
Handling Events .....	28
Event Types and Event Information .....	28
Performing Actions on Events .....	30
Sending a Locating Alert Message .....	32
Viewing Event History .....	33
Exporting Event Data .....	34
Locating Handsets .....	34
Calling up the Location History .....	37
Checking RFP Visibility .....	39

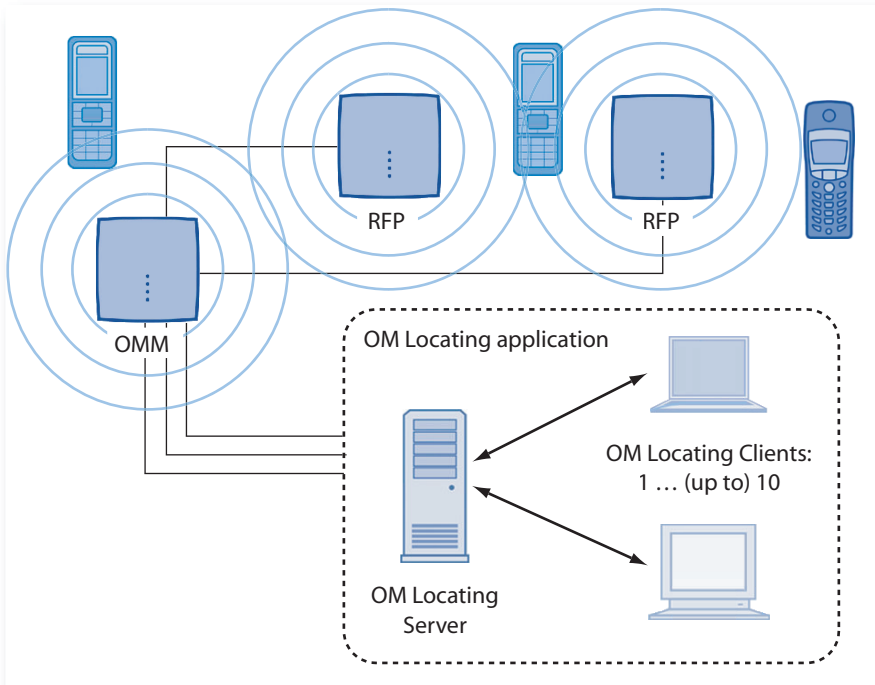
Managing Messages .....	40
Sending Messages .....	42
Deleting Messages .....	43
Message Receipt on the Handset .....	43
Handling Table Views .....	44
Sorting Tables .....	45
Showing / Hiding Table Columns .....	45
Browsing through Multiple Page Tables .....	45
Searching for Table Entries .....	46
<b>Administration .....</b>	<b>47</b>
Managing Users .....	47
Creating a New User .....	48
Editing User Data .....	49
Deleting a User .....	50
Changing the OMM Configuration .....	50
Version Information .....	51
<b>Short User Guide .....</b>	<b>52</b>
Login / Logout .....	52
Handling a ManDown Call .....	53
Locating a Handset .....	55
Editing Own User Data .....	57
<b>Appendix .....</b>	<b>58</b>
Technical Data .....	58
Abbreviations .....	58
Trademarks .....	59
<b>Index .....</b>	<b>60</b>

# OpenMobility Locating Application

The **OpenMobility Locating** application (in the following “OM Locating application”) enables customers to comfortably manage and locate a large amount of DECT handsets, also in diversified environments. The application is designed for use by e.g. the following target groups: hospitals, hotels, security staff, jailhouses, care facilities.

The OM Locating application offers an integrated message and alerting service. It manages ManDown and SOS calls and provides locating information of the handset which initiates the call.

The application has a Web-based client server architecture and supports up to 10 OM Locating clients. The OM Locating server records all relevant locating information provided by the OpenMobility Manager (OMM) and presents it via the client’s Web interface to the user/operator. The information presented by the OM Locating client is updated as soon as an update is generated by the OMM.



Architecture of the OM Locating application

The OM Locating application can be run within the SIP - DECT OpenMobility solution since release 2.0.

Aastra provides the following handsets for use with the OM Locating application:

- Aastra 610d
- Aastra 620d
- Aastra 630d

These DECT terminals provide comfortable messaging features and are particularly suitable for use with the locating application. It is also possible to use Aastra 142d handsets and standard GAP phones with a limited feature set.

The OM Locating application can be extended by the “OM Integrated Messaging & Alerting service (OM IMA)” application and thus be connected to an external (messaging and alerting) server solution. The OMM provides an XML-based interface for transferring messages and alarms between the handsets, the RFPs, the OMM, and 3rd-party applications. For more information on the “OM Integrated Messaging & Alerting service (OM IMA)” application, please contact your Aastra representative.

Automatic escalation via an alarm server is possible if a new ManDown/SOS call is not treated by an operator in time.

## Features and Benefits

### **Distress Event handling (ManDown and SOS calls)**

ManDown and SOS calls are logged by the OM Locating server and operators are notified via the OM Locating client. All connected clients present ManDown and SOS calls and their state. It is possible to assign an event to an operator very easily:

- by answering the ManDown/SOS call by phone,
- just one key click in the OM Locating application.

The operator's activities are logged and can be seen on all connected OM Locating clients. It is possible to forward an event between operators even if the event is already assigned to someone else.

The operator can initiate a locating alert to trigger an audible alarm on the handset which sent the ManDown/SOS call. In addition, the operator can send messages to other handset users to inform them about the event and e.g. to request them to bring help to the person who sent the ManDown/SOS call.

The history function stores information on each event hold in the OM Locating server database.

## Locating features

With the OM Locating application, the time for finding a person will decrease. Handsets (persons) can be located with their RFP position. A search/filter function enables to search for handsets/persons and their location.

For each handset, information on the current location (the currently used RFP as well as the visible RFPs) and the visited RFPs is available via the OM Locating clients. Also the RFP position history can be shown (e.g. log of security walks).

## Use Cases

The OM Locating application is designed for a extensive range of use cases. Localization scenarios can be e.g.:

### ■ Lone worker

The service staff can work alone and can call help when in trouble. Help can be sent to the determined position.

### ■ Search next cleaner

In a hospital a service coordination center searches for the nearest staff for cleaning an operating theatre.

### ■ Security Guards

The locating application shows the position of security staff during checkup rounds. It is possible to log security walks and to get confirmation via message from the security guards.

The following two examples illustrate some typical situations of use:

### **SOS – a handset user presses a button**

The DECT handset user presses a button to signal an alarm condition. The SOS automatically triggers a phone call to the operator. The operator who is using the OM Locating application is able to locate the current position of the DECT handset user.

### **ManDown – a person loses consciousness**

The DECT handset sensor detects "ManDown" and the handset automatically sets up a call in the hands-free mode. The operator who is using the OM Locating application answers the call and gets the locating information from the application. If the handset owner does not respond, the operator may initiate a locating alarm to request help. The alarm forces the handset to generate a specific audible signal which helps to find the handset owner.

## Other Valid Documentation

This user guide describes installation, administration, and usage of the OM Locating application. Please observe also the information given in the documentation to other parts of your OMM SIP - DECT installation:

- SIP - DECT; OM System Manual  
Describes the installation, administration, and maintenance of the SIP - DECT system.
- SIP - DECT; OM Integrated Messaging & Alerting Application  
This user guide describes the messaging features and the integrated messaging solution.
- SIP - DECT; OM Handset Sharing & Provisioning  
This user guide describes the enhanced user and handset management features and the OM provisioning concept.
- SIP - DECT; Aastra 610d, 620d, 630d Messaging & Alerting Applications  
This user guide describes the special messaging features of the Aastra 6x0d DECT terminal series and how to use them.

## Scope of Delivery

The following components are included in the scope of delivery:

- The licence confirmation for the OM Locating application.
- The installation CD.
- The user guide entitled "SIP - DECT; OM Locating Application" (included in PDF format on the CD).
- The "SIP - DECT; Aastra 610d, 620d, 630d; Messaging & Alerting Applications" user guide (included in PDF format on the CD).

## Notes on Licences

### Application licence

In order to use the OM Locating application, you need the appropriate Licences to configure and use the application. Upload the received licence file either in the "OM Management Portal" (Java tool) or via the OMM Web service. To operate the OM Locating application, the following licences are required:



- OM System Licence [Number]: Enables telephony for a number of RFPs
- OM Locating Server Licence and OM Locating Licence [Number]: Enables locating for a number of handsets
- OM Messaging & Alerting System Licence and OM Messaging Licence [Number]: Enables messaging for a number of handsets

It is possible to operate the OM Locating application without using the handset messaging, e.g. if you plan to use DECT GAP / Aastra 142d handsets only. Refer to Notes on GAP / Aastra 142d Handsets below.

The licence confirmation you received contains detailed information on activating the application. Note, that you can also start with the automatically applied demo license, which is valid for 72 hours.

### **EULA**

With the first login into a new installed OM Locating application the user has to accept the End User Licence Agreement (EULA).

### **Open Source Components**

The OM Locating application uses Open Source components. Information on these components and the related licences can be read in the **About: Versions** menu of the application, see page 51.

## **Notes on GAP / Aastra 142d Handsets**

While handover between different RFPs is possible for DECT GAP or Aastra 142d handsets, the messaging function is not supported on these devices. For this reason, only a limited feature set can be used together with these devices:

- Basic handset locating based on RFP is possible.
- Triggering an SOS alarm is possible with the Aastra 142d handset.
- The RFP visibility feature is not supported.
- Confirmed alarm scenarios are not supported.
- Sending a locating alert via the OM Locating GUI is not supported.
- Sending text messages via the OM Locating GUI is not supported.

## Notes on Operating Conditions

The OM Locating application is designed to work straightforward, secure, and reliable. However, it should be noted that you need to ask your data protection officer to ensure compliance to your company or country data protection rules. You also should not rely on this application for live-critical applications without further measures, such as an evaluation and certification by an information systems security professional when planning, deploying and running the system.

## Installation

The OM Locating application is realized as a Java application to be run under the Apache Tomcat application server environment. In order to install and run the OM Locating application, you need to setup a Sun/Oracle Java 1.6runtime environment and the Apache Tomcat 5 server on a PC running “Red Hat Enterprise Linux Server 5.4”.

### Hardware Requirements

While the computing resources required by the OM Locating application are moderate, you should keep in mind that any Java application requires a decent amount of system memory during execution. A standard PC with a 2 Ghz CPU, at least 1 Gb of RAM and a 100 Mbit/s Ethernet adapter is sufficient. A hard disk with at least 20 Gb and a DVD-ROM optical drive to read/start the installation DVD is also required. To ensure responsiveness of the OM Locating application, the dedicated server PC should not be used to run user programs concurrently on a day-by-day basis.

Please always check the most recent release notes for updated requirements.

## Installing Red Hat Enterprise Linux Server 5.4

This section gives a brief overview on how to install the “Red Hat Enterprise Linux Server 5.4” operating system on a dedicated PC. This section does not replace the documentation that you received when purchasing the Red Hat license / installation media. If you are not familiar with setting up “Red Hat Enterprise Linux Server 5.4”, you should at least read the “Red Hat Enterprise Linux 5 - Installation Guide” that is also available in the “Support” section of the Red Hat public web site.

### Prerequisites

Besides the PC system (refer to Hardware Requirements on page 7), the following prerequisites should be met:

- The PC system is ready for operation with attached keyboard, mouse and monitor. The PC’s hard disk does not contain any valuable data. The PC system is connected to the company LAN. Internet/Web access via the company LAN is also required.
- The – downloaded or purchased – “Red Hat Enterprise Linux Server 5.4” operating system installation DVD is available. Alternatively, a set of 5 CD-ROM installation disks is available.

## Installation

- The Red Hat “Installation Number” is available that you received when purchasing the license.

### Note

It is possible to skip entering the purchased Red Hat “Installation Number” when installing the operating system. However, the operating system does not receive any software updates and you cannot download/install additional software using the Red Hat package manager without this number. This also applies to the “Tomcat” runtime environment software: if you do not enter the Red Hat “Installation Number”, make sure to select the necessary packages during installation (see below) because you cannot install the software later on.

## Installing the Operating System

With the following steps, you install the “Red Hat Enterprise Linux Server 5.4” operating system on the PC. The steps emphasize on a standard installation sufficient to setup and run the OM Locating application.

1. Switch on the PC and enter the BIOS setup. Refer to the BIOS setup documentation available for your PC for this. You need to change the boot sequence in order to start the PC from the DVD/CD optical drive.
2. Insert the “Red Hat Enterprise Linux Server 5.4” DVD / CD-ROM into the optical drive and restart the PC. The following startup screen from the DVD/CD-ROM is displayed.



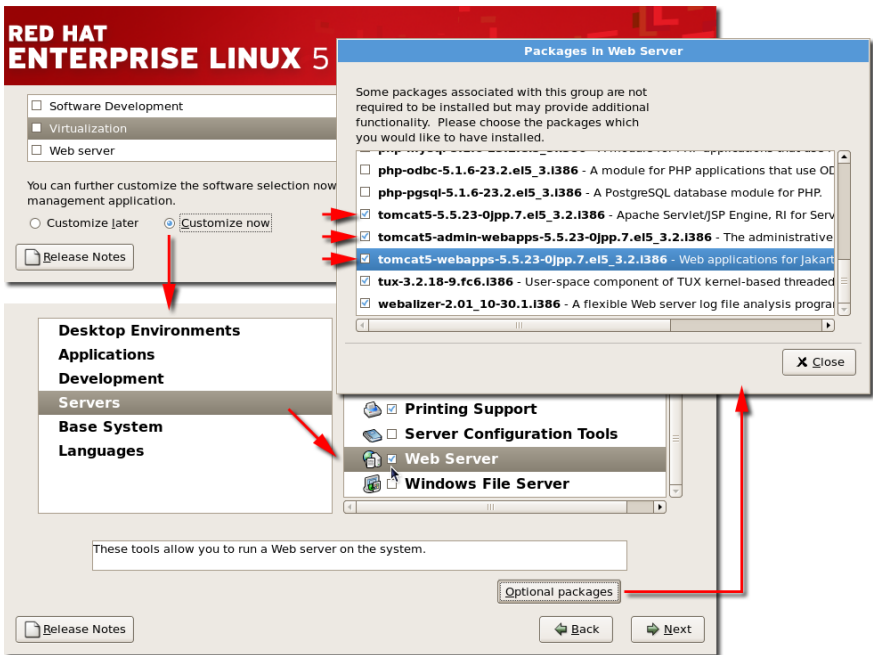
*Red Hat DVD/CD-ROM Startup Screen*

3. Press the [Enter] key to start the graphical installation wizard. Follow the steps of the wizard. For most of the wizard’s pages, it is fine to accept the default settings:
  - Scan the installation media DVD/CD-ROM for errors.
  - Select your preferred language and keyboard layout setting.
  - Enter the Red Hat “Installation Number” or skip this step.
  - Accept the default “Install Red Hat Server” option.
  - Select “Remove all partitions” to overwrite the complete hard disk.
  - Adapt the network setup to your LAN or accept the DHCP default.
  - Set the time zone to match your location.
  - Enter a password for the administrative “Root” user account.

- 4. The next page allows you to customize the software setup. If you have entered the Red Hat "Installation Number", the default installation includes the **Virtualization** option. Disable the **Virtualization** option if you do not plan to run XEN virtual machines or if you have an older CPU without virtualization support.

Select the **customize now** option. Click the **Next** button to bring up the package selection screen. Select the **Servers** entry from the left list. Activate the **Web Server** entry in the right list. Click the **Optional packages** button to open the **Packages in Web Server** dialogue. Activate all three list entries starting with "tomcat5". Click the **Close** button to apply your package selection.

Click the **Next** button to continue the setup wizard.



Red Hat Installation: Customize Software Screens

- 5. Complete the wizard by clicking the **Next** and **Continue** buttons. After this, the installation of the operating system starts. This will need 5 to 10 minutes depending on the PC. After this operation, remove the optical disk from the drive. Click the **Reboot** button to restart the PC.
- 6. The Linux operating system starts and presents the Red Hat "Welcome Wizard". You can accept the defaults with every step, but you need to create a non-

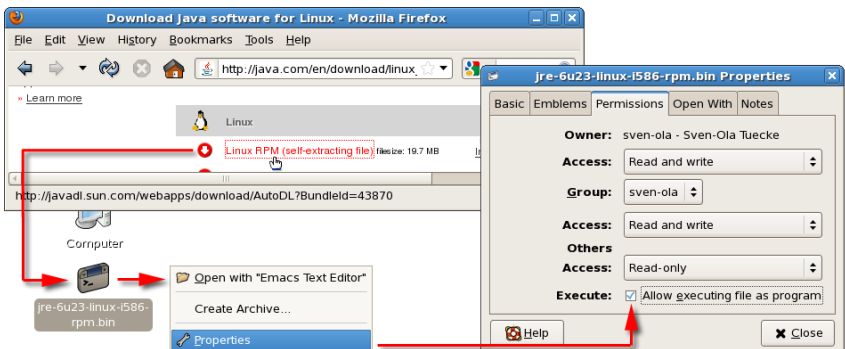
administrative user account for logging in. Click the **Finish** button to complete the “Welcome Wizard”. After this, the operating system login prompt is displayed. You should be able to log in using the credentials of the user account created in this step.

## Installing the OM Locating Application

To start the installation of the runtime environment and the OM Locating application, the PC’s operating system should be already installed and running. The PC should be connected to your LAN and it should be possible to download software from the Internet. You also need administrative access such as the login password for “root” user account.

**Tip:** For the experienced administrator: install Java and Apache Tomcat. Drop the “OML.war” file to the “webapps” folder and restart Apache Tomcat. Browse to “http://localhost:8080/OML/”. Login with “admin” and “OpenMob”. Continue reading with Backup and Restore starting on page 16.

1. Log in to the Red Hat Linux operating system as normal (non-root) user.
2. You need to install the Sun/Oracle Java 6 Runtime Environment. For this, start a web browser: open the **Applications** system menu and select the **Internet: Firefox Web Browser** menu command. Enter “http://java.com” in the browser’s address bar. Download the Linux version (RPM) of the “Java SE Runtime Environment (JRE)” (Version 1.6 entitled as “Version 6”) package.



### Downloading Sun Java JRE, setting file properties

After the download finishes, right click the downloaded file on the desktop. Select the **Properties** command from the context menu. In the **Properties** dialogue, switch to the **Permissions** tab. Activate the **Execute** option. Confirm by clicking the **Close** button.

3. You need to start the downloaded package as “root” user. Open the **Applications** system menu and select the **Accessories: Terminal** command. Enter “su” and confirm with the [Enter] key. Start the Java installation with the “./Desktop/jre\*” command.



*Starting the Sun Java JRE installation package*

Read the displayed software licence. Press the [Space] key to read the next page. At the end of the licence text, type in “yes” to agree. Confirm with the [Enter] key.

4. Integrate the Sun Java package into the Red Hat “alternatives” mechanism. For this, copy and paste the following command to the “root” prompt:

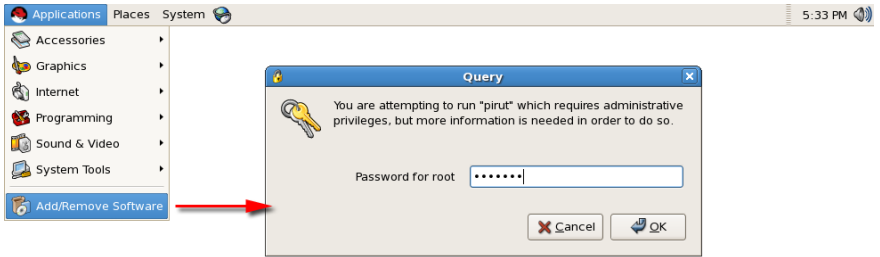
```
/usr/sbin/alternatives \  
--install /usr/bin/java java /usr/java/latest/bin/java 999 \  
--slave /usr/bin/keytool keytool /usr/java/latest/bin/keytool \  
--slave /usr/bin/rmiregistry rmiregistry /usr/java/latest/bin/rmiregistry \  
--slave /usr/lib/jvm/jre jre /usr/java/latest \  
--slave /etc/alternatives/java_sdk java_sdk /usr/java/latest
```

To switch the Java package to be used, enter “/usr/sbin/alternatives --config java”. Type in the desired alternative number and confirm with the [Enter] key. You may verify the Java version with the “java -version” command. This should display: “java version 1.6.0...; Java(TM) SE Runtime Environment...”.

5. If you already installed the Tomcat software with the operating system (see Installing the Operating System starting on page 9) skip to step 7. Start the Red Hat package manager. Open the **Applications** system menu and select **Add/Remove Software**.

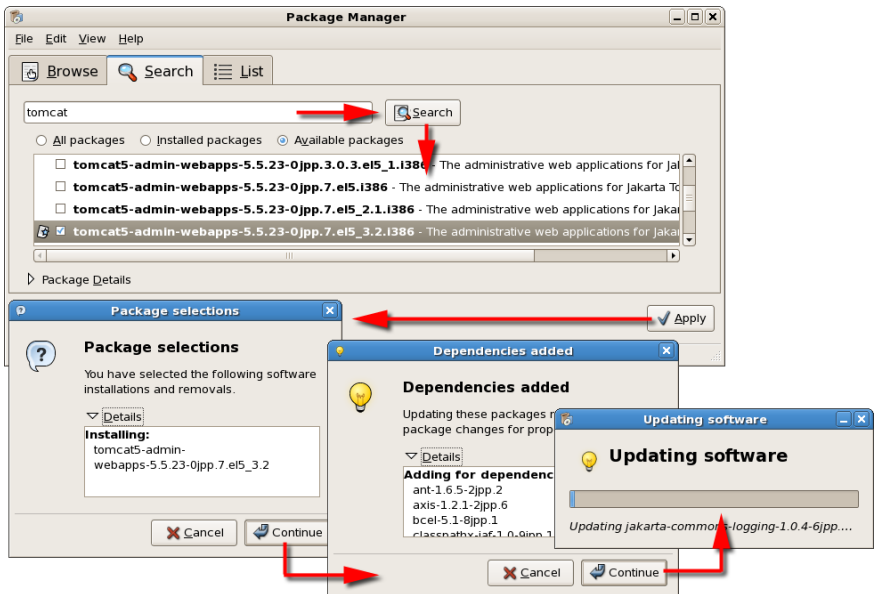
A password query dialogue is displayed. Enter the password for the “root” user.





*Calling up the Red Hat Package Manager (“Pirut”)*

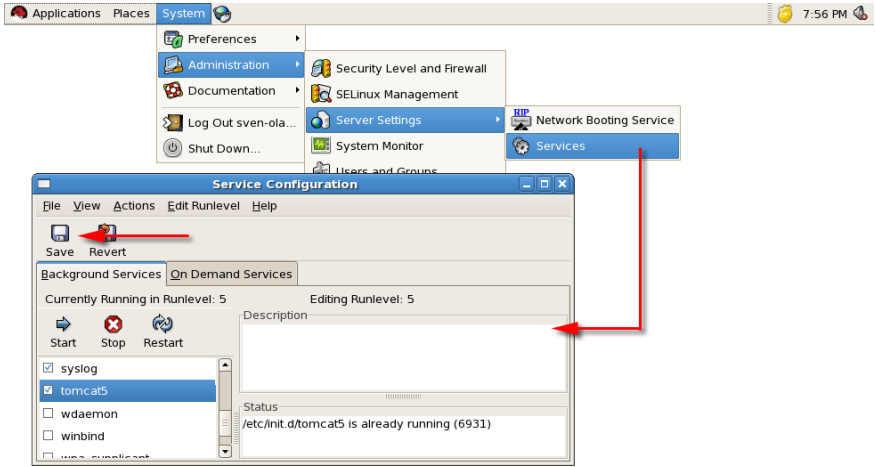
6. In the **Package Manager** window, select the **Search** tab. Enter “tomcat” in the text input field. Press the **Search** button.



*Red Hat Package Manager: download and install Apache Tomcat*

Select the latest “tomcat5-admin” package for installation. Click the **Apply** button. This will select additional packages for installation, such as the Apache Tomcat base package. After setting up Apache Tomcat, start a new search for the “xml-commons-apis” package. Again click the **Apply** button to install.

7. Verify, that the Apache Tomcat service is automatically started with the Red Hat Linux operating system. Select the **System: Administration: Server Settings: Services** menu command.

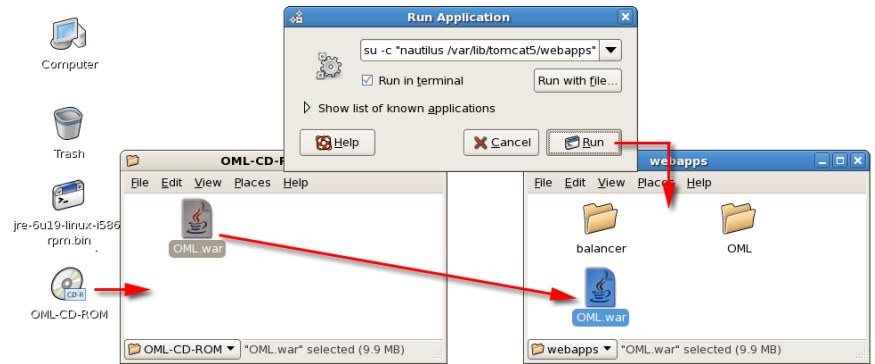


*Red Hat Service Configuration: start the Apache Tomcat service*

Activate the option next to the “tomcat5” service entry. Click the **Save** button. If the **Apache Tomcat** service is stopped, click the **Start** button.

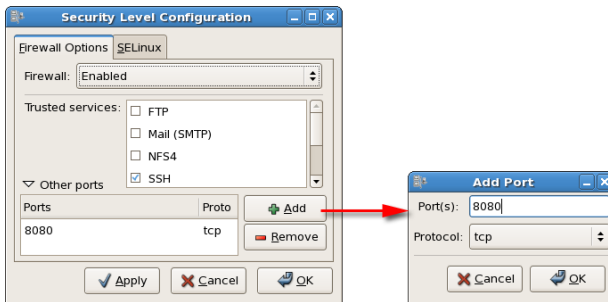
- 8. To install the OM Locating application’s servlet, you need to copy the “OML.war” file from the OM Locating installation media to the “webapps” folder below the Apache Tomcat working directory (usually “/var/lib/tomcat5/webapps/”). Do not change the uppercase “OML” of the web archive file name to lowercase.

Press the [Alt]+[F2] keyboard combination. In the **Run Application** dialogue, activate the **Run in terminal** option. Enter “su -c “nautilus /var/lib/tomcat5/webapps” ” and confirm with the [Enter] key. Enter the password for the “root” user. Copy the “OML.war” file via drag-n-drop from the installation media to this location.



*Copy the “OML.war” file to the “webapps” folder*

9. After copying the “OML.war” file, the **Apache Tomcat** service (which is already running) detects the new web archive file, and unpacks it below the “webapps” folder. It then starts the OM Locating application’s servlet in the background.
10. To verify the installation, browse to `http://localhost:8080/OML/` in order to display the OM Locating application’s login dialogue. Login with the default “admin” user name and the default “OpenMob” password.
11. To enable access from other PCs in your LAN, you need to add port 8080 to the firewall’s trusted port list. Select the **System: Administration: Security Level and Firewall** menu command.



*Add port 8080 to the firewall’s trusted ports list*

In the **Security Level Configuration** dialogue, unfold the **Other Ports** section. Click the **Add** button. Enter “8080” and confirm with **OK**. Change the firewall settings by clicking the **Apply** and **OK** buttons.

## Language Setting

The language of the OM Locating web GUI is determined by the browser’s preferred language setting. However, the Linux system’s language/locale setting also determines the date format as well as the language of some system error messages. If you selected the wrong language while installing the operating system, you can adapt this setting in the Tomcat configuration later on. Open a terminal and enter the “su” command to switch to the “root” user. Enter “nano /etc/tomcat5/tomcat5.conf” to open the configuration file in a text editor.

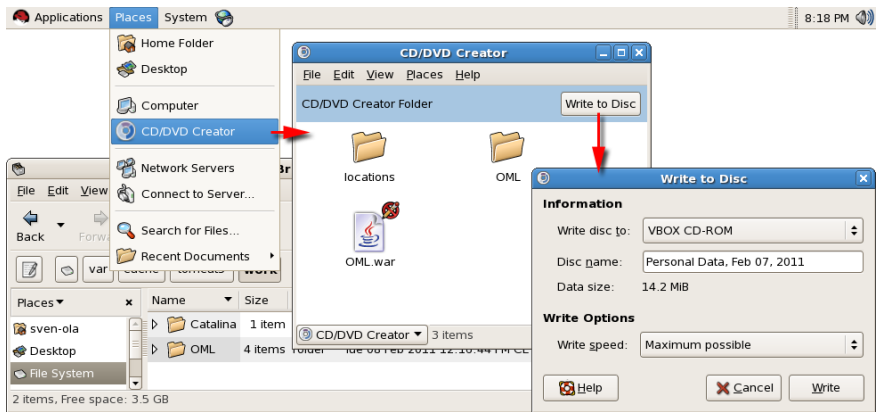
Locate the line that reads “#LANG=”. Remove the leading hash character and substitute the desired Linux locales code. Press the [Ctrl]+[X] key combination and confirm the queries to save the file. Restart the Tomcat service (see Step 7 on page 13).

## Backup and Restore

The OM Locating application stores configuration data as well as acquired location data below a data folder. To prepare for disaster recovery, you should make at least a copy the respective folders on a regularly basis.

1. Stop the Tomcat service. To do so, select the **System: Administration: Server Settings: Services** menu command (see step 7 on page 13). In the **Service Configuration** window, select the “tomcat” entry and click the **Stop** button.
2. If you plan to backup to an optical disc, select the **Places: CD/DVD Creator** menu item. Alternatively, you may insert an USB flash drive which automatically opens a destination window.
3. Copy to following files and folders to the destination window:
  - “/var/cache/tomcat5/work/OML” (OM Locating configuration folder)
  - “/var/lib/tomcat5/webapps/OML/images/locations” (Location images folder)
  - “/var/lib/tomcat5/webapps/OML.war” (OM Locating program file)

To do so, select the **Applications: System Tools: File Browser** command. Navigate within the **File System** to the indicated sub-folders. Copy the files and folders to be backed-up via drag-n-drop to the destination window.



### Backup to CD/DVD

4. Switch to the **CD/DVD Creator** window. Click the **Write to Disc** button. Confirm the settings in the following dialogs to create the backup.
5. Switch back to the **Service Configuration** window. Click the **Start** button to restart the Tomcat service.

If you need to restore the OM Locating application from your backup, stop the Tomcat service and restore the files. To do so, press the [Alt+F2] keyboard combination and run the “su -c "nautilus /var" ” command in a terminal (see step 8 on page 14). You also need to change the restored files ownership after copying. To do so, run the “su -c "chown -R tomcat /var/cache/tomcat5/work/OML/" ” in a terminal.

## Upgrading OM Locating from Previous Version

If you already run an older version of the OM Locating application, you can upgrade to a newer version with the following steps.

Note, that the configuration database (located in the data folder, see Backup and Restore on page 16) of the OM Locating application is silently updated to the newer version. Downgrading of the configuration database from a newer version to an older version is not supported by the OM Locating application.

1. Make a backup copy of the OM Locating application (see Backup and Restore on page 16). Take extra care to backup the configuration database located in the data folder under “/var/cache/tomcat5/work/OML” and the site location images located in the “/var/lib/tomcat5/webapps/OML/images/locations” folder.
2. Stop the Tomcat service. To do so, select the **System: Administration: Server Settings: Services** menu command (see step 7 on page 13). In the **Service Configuration** window, select the “tomcat” entry and click the **Stop** button.
3. Remove the /var/lib/tomcat5/webapps/OML folder. To do so, press the [Alt+F2] keyboard combination and run the “su -c "nautilus /var/lib/tomcat5/webapps" ” command in a terminal (see step 8 on page 14). Right click the “OML” folder icon and select the **Move to trash** context menu command.
4. Copy the newer “OML.war” file to the “webapps” folder, thereby overwriting the old “OML.war” file (see also step 8 on page 14).
5. Switch back to the **Service Configuration** window. Click the **Start** button to restart the Tomcat service. The Tomcat service re-creates the “OML” folder from the “OML.war” file.
6. Restore the site location images into the “/var/lib/tomcat5/webapps/OML/images/locations” folder.

**Please note:** Some Tomcat installations support auto-deploy by simply dropping a new “\*.war” file into the “webapps” folder. This is not supported officially because it may not function properly. The auto-deploy feature also erases the site location images automatically.

# Configuration

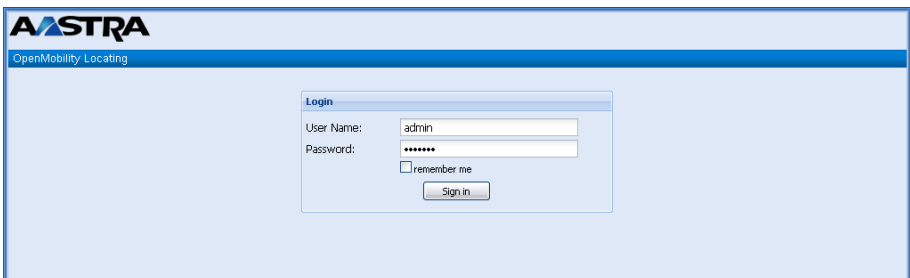
The configuration of the OM Locating application takes place in three logical steps, described in the following sections:

- Configuring the OMM Connection starting on page 18: describes how to establish a connection between the OM Locating application and the OMM.
- Configuring the Portable Parts starting on page 22: describes how to enable portable parts (DECT phones) to be located.
- Adding Site / Location Pictures starting on page 24: describes how to integrate floor plans and zoomed detail views of your site.
- Configuring the Workstation Computers starting on page 25: describes how to setup a user PC for working with the OM Locating application.

## Configuring the OMM Connection

The OM Locating application communicates to the OMM, to query the necessary data, and to control the OMM's functions. For this, the OM Locating application utilizes the OM Application XML Interface (OM AXI) that the OMM provides via an SSL-encrypted TCP connection at port 12622. To establish the connection, the OM Locating application needs to know the OMM's IP address, a valid user name and a password. To configure the OM Locating application, proceed as follows:

1. Login to the OM Locating application Web console as "admin" user. Start a web browser on the PC running the OM Locating application. Browse to <http://localhost:8080/OML/> and login with the default "admin" user name and the default "OpenMob" password.



*Administrative login to the OM Locating application*

Alternatively, start a web browser on another PC in your LAN and enter the DNS-Name or IP address of the PC running the OM Locating application:

http://192.168.1.1:8080/OML

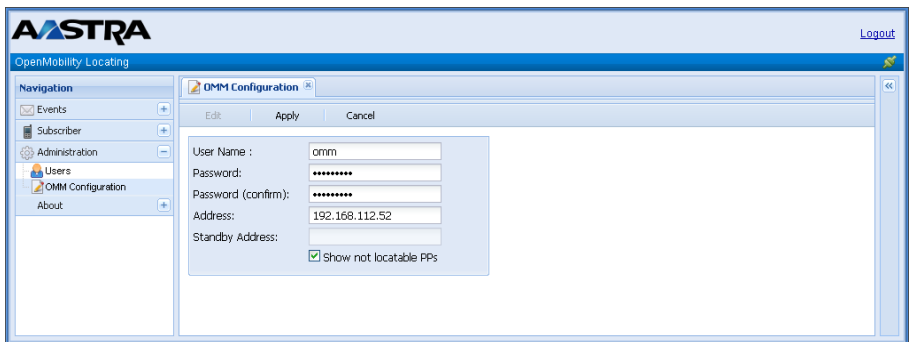
or

http://dns-name-of-pc:8080/OML

### Note

Your browser needs to accept cookies from the OM Locating application in order to complete the login.

2. If this is your first login to the OM Locating application, the **OMM Configuration** tab is displayed automatically. Otherwise unfold the **Administration** menu in the navigation tree and click the **OMM Configuration** menu item.



### OMM Configuration tab

3. In the **OMM Configuration** tab, click the **Edit** button. Fill in the necessary data:

**User Name:** Enter the user name that is configured at the OMM for the “Full access” account type. This is “omm” by default, but you may have changed this setting at the OMM.

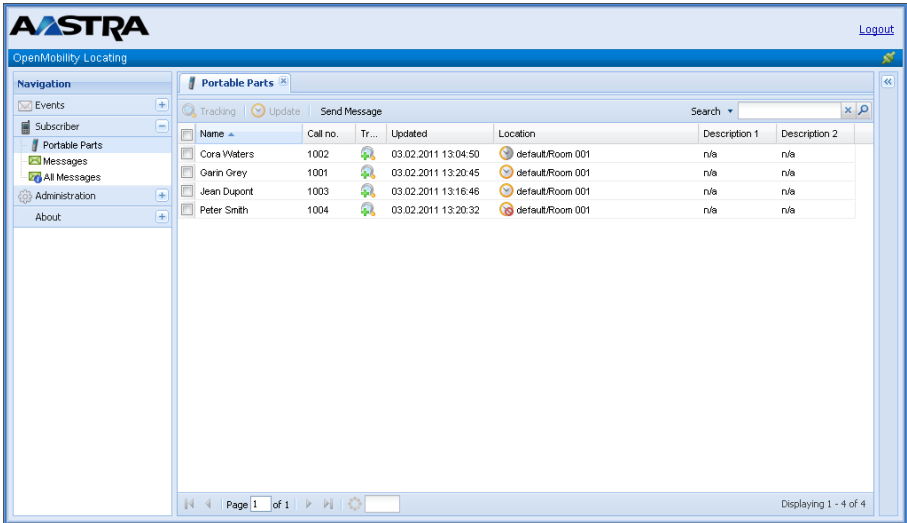
**Password:** Enter the password for the OMM. You need to enter the same password again into the **Password (confirm)** input field.

**Address:** Enter the IP address of the OMM. Alternatively, enter the DNS-Name of the OMM. Note, that you cannot change the **Standby Address** field which is updated automatically later on. This information field shows the resilient or stand-by OMM’s IP address.

**Show not locatable PPs:** Activate this option to also display those portable parts in the OM Locating application for which the **Locatable** option is disabled (see page 23).

Click the **Apply** button to confirm your configuration changes.

- 4. You should verify your settings. On the upper right, a green icon shows the “Connection to OMM is established” status. Also, unfold the **Subscriber** menu in the navigation tree and click the **Portable Parts** menu item. If your settings are correct, the portable parts registered with the OMM are displayed. Otherwise correct your settings in the **OMM Configuration** tab.



*Verify configuration: Portable Parts tab*

If you change the OMM’s IP address, the user name or the password for the “Full access” account type later on, you also need to update the configuration of the OM Locating application accordingly. The OM Locating application automatically switches to the resiliency or stand-by OMM if the OMM is not available. You may verify this by examining the **Standby Address** in the **OMM Configuration** tab.

Detailed information on the OMM account data, account types, and OMM resiliency is given in the manual entitled “SIP - DECT; OM System Manual; Installation, Administration, Maintenance; Release 2.1”.



## OMM Configuration Prerequisites

Please observe the following OMM configuration prerequisites to ensure that the OM Locating application features work:

### **Sending messages**

The **OM Integrated Messaging and Alerting service** feature must be enabled, otherwise messages sent by the OM Locating application can not be retrieved on the portable parts of the recipients. This feature is activated in the OMM Web service (**System: System settings** page) or via the “OM Management Portal” (OMP) tool in the **System: System settings** menu, **General** tab.

For details see the “SIP - DECT; OM System Manual”.

### **Locating handsets**

The RFPs which are used to locate the handsets have to be installed in the same cluster. Within a cluster, RFPs are synchronized to enable a seamless handover when a handset user crosses from one RFP area of coverage to another. RFP clusters are build when configuring the RFPs in the OMM Web service (**Radio fixed parts** page) or via the OMP in the **Radio fixed parts: Device list** menu.

For details see the “SIP - DECT; OM System Manual”.

### **Escalating events**

The OM Locating application typically runs fine without an IMA configuration file. However, it is possible to configure an automatic reaction for escalated events. For this, you need to create the desired alarm scenario in an IMA configuration file. The alarm scenario configuration should use the `DISTRESS_OPERATOR_TIMEOUT` alarm trigger for this purpose. In addition, the alarm scenario should define a confirmation or timeout to ensure proper reaction on the escalated event.

For details see the “SIP - DECT; OM Integrated Messaging & Alerting Application” user guide.

You also need to add the file download URL to the system settings. This is done in the OMM Web service (**System: System settings** page) or via the “OM Management Portal” (OMP) tool in the **System: System settings** menu, **General** tab.

For details see the “SIP - DECT; OM System Manual”.

## Configuring the Portable Parts

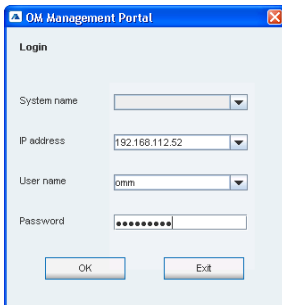
For privacy protection reasons, all portable parts / DECT phones are not enabled to be located by default. You need to switch on this feature for an arbitrary set portable parts first. The OM Locating application determines the location only for portable parts that are configured to be located.

### Note

At the time of writing, the locating features of the portable parts cannot be enabled on the Web console of the OMM. However, it is possible to change this with the Java-based “OM Management Portal” (OMP) tool (“OMP.jar”).

To change the locating feature for a set of portable parts proceed as follows:

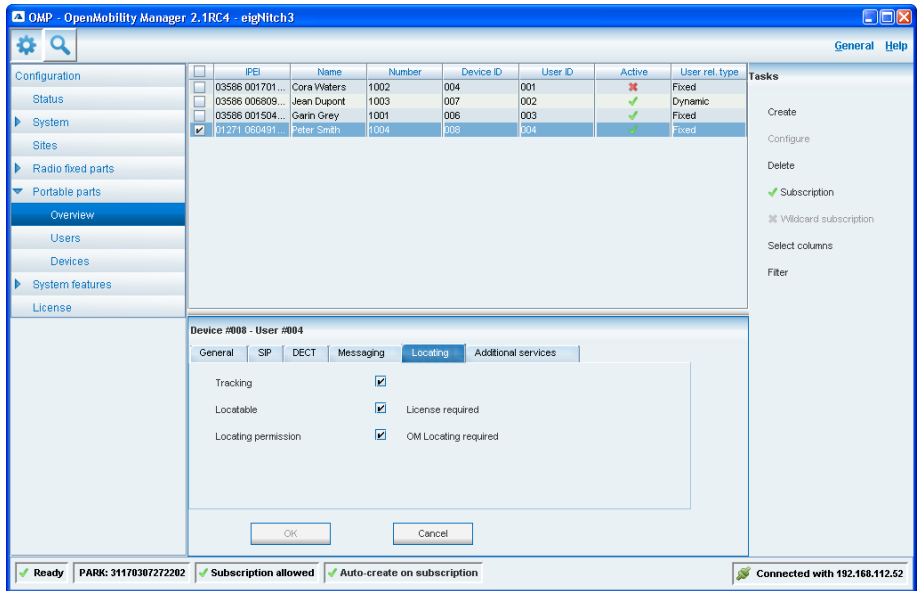
1. Start the OM Management Portal (OMP). Browse the OpenMobility installation media for a file named “OMP.jar”. Right click the file and select the **Open with Sun Java 6 Runtime** menu item from the context menu. Note for Linux users: the Java application requires AWT, a software component only available with the Sun implementation of Java.
2. The OMP tool starts and opens a login dialogue.



*OM Management Portal (OMP) tool: login*

Enter the **IP address** of the OMM. Enter the **User name** that is configured at the OMM for the “Full access” account type. This is “omm” by default. Enter the corresponding **Password**. Confirm with **OK**.

3. The **OpenMobility Manager** window opens, giving access to the OMM’s configuration.



## OpenMobility Manager window: changing a portable part

Open the **Portable parts** menu and select the **Overview** menu item. A list of registered portable parts / DECT phones is displayed on the right side of the **OpenMobility Manager** window.

4. Double-click an arbitrary portable part from the list. This opens a tabbed details view for the selected portable part on the lower right part of the **OpenMobility Manager** window.
5. Switch to the **Locating** tab. Select or de-select one of the following options to change the configuration:

**Tracking** option: If enabled, the operator of the OM Locating application is able to use the constant tracking feature for the portable part. Note, that this feature consumes more of the portable part's battery power.

**Locatable** option: If enabled, the portable part is locatable. Either with the OM Locating application or by querying its location from other portable parts.

**Locating permission** option (Aastra 610d/620d/630d only): If enabled, the portable part is able to determine the location of other portable parts. The main menu of the Aastra 610d/620d/630d phones provides an extra menu entry **Locating** for this.

Switch to the **Messaging** tab. Activate the **Sending messages permission** option. This enables the handset to send messages and to reply messages

received from the OM Locating application. Note, that this function has to be supported by the device (Aastra 600d DECT terminals provide this function).

6. Switch to the **Additional services** tab to configure extra configuration items for the handset.
  - **SOS number**: This number is called if the user presses the SOS key on the phone (e.g. on an Aastra 142d).
  - **ManDown number**: This number is called if the DECT handset (e.g. an Aastra 630d) determines the ManDown condition.
7. Confirm your settings with **OK**. Continue with Step 4 to change the configuration of other portable parts.

## Adding Site / Location Pictures

The OM Locating application's user interface displays the location of the RFP where the portable part is detected. The location is presented with two graphical views:

- The upper view shows the overall floor plan, for example an overview with the highlighted RFP and the covered area.
- The lower view shows the RFP's detailed location. The display is overlaid by a centred radio wave animation.

You need to provide two bitmap graphic files for any RFP managed by the OMM with the following properties:

- The uppercased MAC address of the RFP determines the file name. An overview graphic is named "[MAC].png" and the detailed graphic is named "[MAC]-zoom.png".

Examples: "0030420D102E.png", "0030420D102E-zoom.png"

- The file is formatted as Portable Network Graphics (PNG) file with a fixed size of 256x256 pixels. You can use any colour depth, but you should not use an alpha channel or the animation extension to ensure compatibility with older browser versions.

The resulting graphic files needs to be copied to the "webapps/OML/images/locations/" directory of the Tomcat server running the OM Locating application. To do so, start a file manager application with administrative write access to this directory (for details see Step 8 on page 14 for Red Hat Linux).

**Tip:** You may be able to re-use the RFP floor plan created during the radio site survey made before deploying the OMM-SIP solution.

**Please note:** You should backup the graphic files on a regularly basis (see Backup and Restore starting on page 16).

## Configuring the Workstation Computers

For using the OM Locating application user interface, the desired operator needs access to a standard PC with a web browser. Please mind the following points when configuring and operating the workstation:

- The workstation and the PC running the OM Locating application should be connected with a reliable and secure network connection. Do not redirect the unencrypted HTTP traffic via an unsecured public data connections such as the Internet
- Install a recent version of Mozilla Firefox or Microsoft Internet Explorer on the workstation PC.
- To play audible alarms, the workstation should be equipped with a sound card and a set of speakers. You may need to ensure that the browser can play a sound, for example by instructing the operator to play a test sound file when starting a work session. Depending on your browser's multimedia capabilities, you may need to install for example the Adobe Flash plug-in. Note, that a sound is played when you login to or log-out from the OM Locating application's user interface.
- The web browser's language setting also determine the language that is presented by the OM Locating application's user interface. Note, that the date format as well as the language of some system error messages is determined by the language setting of the server. Thus, the browser settings do not change the presented date format.
- Do not change the web browser's standard security, view or multimedia settings. For proper operation, the OM Locating application's user interface requires JavaScript, Cookies, DHTML, and CSS to stay active.

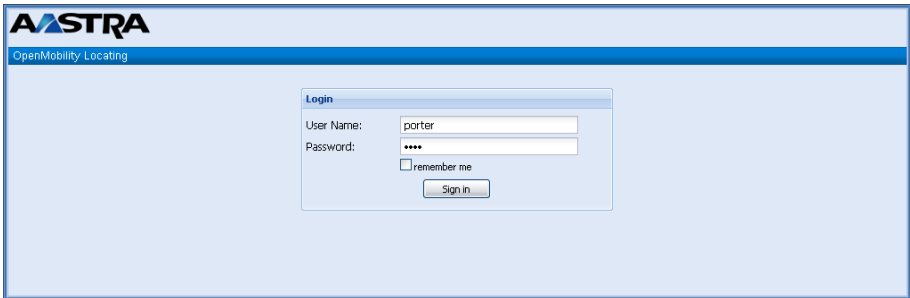
The above points are true for operating the OM Locating application with the "admin" and with normal user accounts. Note, that you need to create user accounts for any operator (see Managing Users starting on page 47).

# Operation and Daily Usage

This chapter describes the components of the OM Locating application and how to operate it in daily usage. It addresses normal users (operators) as well as the administrator.

**Tip:** For quick information access, it is recommended to prepare an individual short user guide which is tailored to your organization. A template can be found in the chapter entitled Short User Guide on page 52.

## Login / Logout



Login page

### Login procedure

1. Open the web browser and type in the URL of the OpenMobility Location application.

Example 1: <http://172.30.206.29:8080/OML/>

Example 2: <http://locating-server.com:8080/OML/>

2. **User Name, Password:** Enter your access data in these fields.

The default settings on delivery are:

Username: admin

Password: OpenMob

**Note:** Users will obtain their initial access data from the administrator who set them up during configuration. See also the chapters entitled Managing Users on page 47 and Editing Own User Data on page 57.

3. **remember me:** Activate this check box if you want to save your input for your next login.

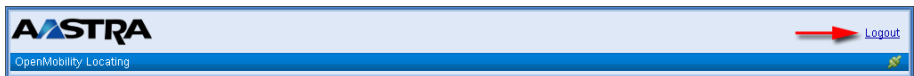
**Please note:** It is recommended that you do **not** activate the **remember me** option in order to prevent third parties to log in under your user name in case you temporarily logged out.

#### 4. Click **Sign in**.

The OM Locating application now connects the OpenMobility Manager (OMM). The OMM manages the DECT handset locations and the alarm messages which are sent by the DECT handset users.

#### **Logout**

In order to prevent misuse of the OM Locating application by third parties, a user should logout after he/she finishes using the application.



*Logout command*

#### 1. Click **Logout**.

The **Login** dialogue opens for the next login.

2. If you leave your workplace computer, you should also close the web browser running the OM Locating application for safety reasons.

## Checking OMM Connection

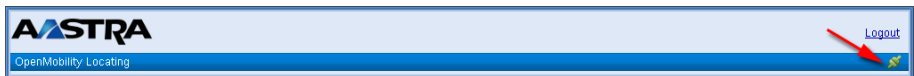
After login, the following icons in the title bar of the OM Locating application indicate the OMM connection status.



Connection to OMM is established.



Connection to OMM is interrupted.



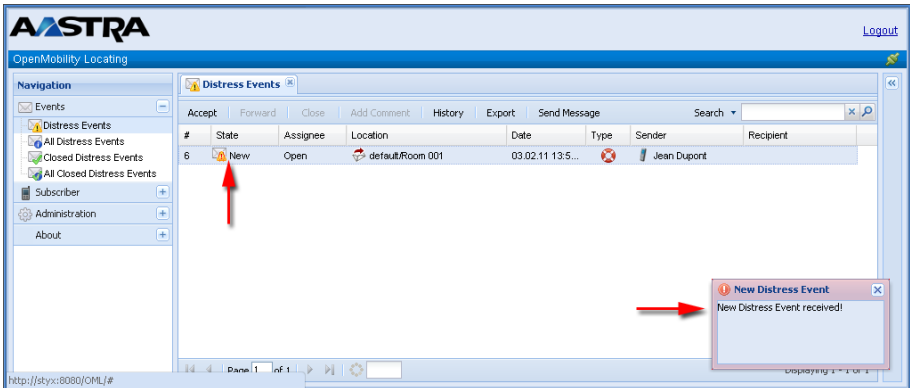
*OMM connection is established*

Locating is reliable if the green connected icon is displayed. If the red disconnected icon is displayed, the connection will normally be established after a few seconds automatically.

## Handling Events

Alarm messages (ManDown or SOS calls) which have been triggered by the DECT handsets are listed in the **Events** menu of the OM Locating application. The users (operators) are thereby notified about each event and requested to call attention to this event or incidence and to initiate an action or a chain of actions.

## Event Types and Event Information



Events menu: Distress Events tab




### Event types

- The **Events: Distress Events** menu item displays the incoming alarm messages. All events which have currently not been closed are listed in the **Distress Events** tab. The logged-in operator has now to handle these events according to the organization rules.
- The **Events: All Distress Events** menu item contains the distress events overview for all operators. This menu item is only available for users which belong to the administrators user group (see also the chapter entitled Managing Users on page 47).
- The **Events: Closed Distress Events** menu item lists all events for which the logged-in operator performed all requested actions and thus declared them as closed.
- The **Events: All Closed Distress Events** menu item contains the closed events overview for all operators. This menu item is only available for users which belong to the administrators user group (see also the chapter entitled Managing Users on page 47).



## Event information

For each event the following information is displayed:

- **#:** Events are automatically numbered. This number serves as an internal identifier of the event and can not be edited.
- **State:** indicates the current event state.
  - A new event is marked as **New** with a blinking  icon. When the event comes in, a small information window pops up at the bottom of the screen. Depending on the equipment and settings of the workplace computer, new events are also indicated by sound (see also page 25).
  - **Assigned:** the event was accepted by an operator and thus is assigned to him for further actions.
  - **Forward Request:** the event was forwarded to another operator to request him to handle the event.
  - **Closed:** the event was completely handled and closed by the operator.
  - **Escalated:** the event was not treated by an operator within one minute.
- **Assignee:** the operator who accepted the event.
- **Location, Date:** indicated the location from which the DECT handset triggered the alarm and the alarm date/time.
- **Type:** the icons in this column indicates the alarm type:
  -  SOS call
  -  ManDown call / Escape alarm / No-Movement alarm
- **Sender:** displays the name of the DECT handset which triggered the alarm message.
- **Recipient:** the event has been forwarded to the operator displayed here.


## Performing Actions on Events

The upper part of the events tab contains a several command buttons to handle the events.

**Note:** The rules for handling events will be established by the company safety officer of your organization.

### Accepting an event

When an event (alarm message) comes in, it has to be accepted by the operator. Also events which have been forwarded to you (see next section), must be accepted. Escalated events which arrived within the last 24 hours can be accepted also. Escalated events which are older than 24 hour remain in this state forever.

1. Select the appropriate event entry. You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries.
2. Press the **Accept** command button.
3. The **Comment – Accept** dialogue opens. You can enter a comment in this dialogue (optional).
4. Click **OK** to close the dialogue. If you want to cancel the action, click on the  icon.


You are now the **Assignee** and responsible for the further process of event handling!

**Note:** The administrator of the OMM may have configured an automatic reaction to an escalated event. This is done by an IMA alarm scenario, that for example automatically sends an emergency message to a group of people. These IMA alarm scenarios typically need confirmation, e.g. 2 out of 5 people need to respond to the alarm. However, even if you accept the escalated event, the IMA alarm scenario is not stopped automatically. If you cannot accept the escalated event and the alarm sound is played forever, the IMA alarm scenario is configured without any confirmation. In this case you should ask your OMM administrator to fix the IMA configuration.

### Forwarding an event

The **Assignee** can request another operator to handle one or more events.

1. Select the appropriate event entry. You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries.
2. Press the **Forward** command button.
3. The **Comment – Forward** dialogue opens.


4. From the **Forward to** drop-down list, select the user (operator) to whom you want to forward the event.
5. Enter a comment in the input field to inform the recipient about the reason of forwarding.
6. Click **OK** to close the dialogue. If you want to cancel the action, click on the  icon.

The operator to whom the event was forwarded is indicated in the events table in the **Recipient** column.

**Note:** It is possible to reverse the forwarding by pressing the **Accept** command button.

### Closing an event


When an event was completely handled, it can be closed by the responsible operator (**Assignee**).

1. Select the appropriate event entry. You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries.
2. Press the **Close** command button.
3. The **Comment – Close** dialogue opens. You can enter a comment in this dialogue (optional).
4. Click **OK** to close the dialogue. If you want to cancel the action, click on the  icon.

The event is moved in the **Closed Distress Events / All Closed Distress Events** lists (see page 28).

### Adding a comment

You can add a comment on a selected event.

1. Select the appropriate event entry.
2. The **Comment – Accept/Forward/Close** dialogue opens. Enter the comment.
3. Click **OK** to close the dialogue. If you want to cancel the action, click on the  icon.

### Viewing the event history

For each event, a history is saved, see the chapter entitled page 33.

### Exporting event data

The events data can be exported, e.g. for archiving, see the chapter entitled page 34.

### Sending messages


It is possible to send a message to one or multiple recipients. In case of a ManDown call, it is recommended to initiate a locating alert, see page 32. Messages can also be sent to trigger follow-up activities in connection with a ManDown/SOS call, see page 42.

### Searching for an event

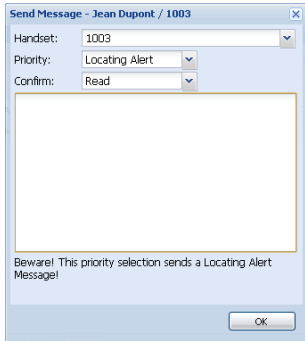
To search for a specific event in a large table, use the search input field (see page 46). You can also browse through the pages of a multiple page table (see page 45). Furthermore, you can adapt the table display to your needs (see page 44).

## Sending a Locating Alert Message

It may be necessary to direct the attention of third parties to the location of the handset which triggered the event. Example: the event was a ManDown call and the sender may have lost consciousness.

1. Select the appropriate event entry. You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries.
2. Click on the  icon next to the **Location** column.

The **Send Message** dialogue opens.



3. **Handset:** The call number of the sender is preselected. If required, you can select another call number from the drop down list.
4. **Priority:** Accept the preselected **Locating Alert** setting.

**Please keep in mind that only the Locating alert message will cause a signalling which helps to locate a handset/person in unclear, diversified environments!**

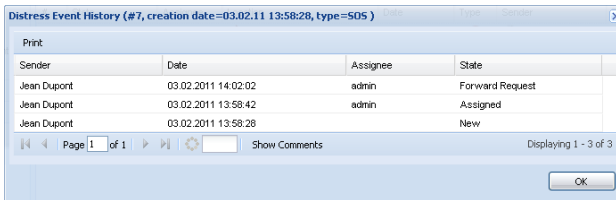
5. **Confirm:** Accept the preselected **Read** confirmation type or select another one from the drop down list (**Complete, Order**). The selected confirmation type defines the confirmation sequence that has to be performed on the handset that receives the locating alert (see also the chapter entitled Message Receipt on the Handset starting on page 43).
6. Optional: You can enter a message text in the input field. This text will be displayed on the located handset in addition to the locating alert message which is automatically generated by the OM system.
7. Click **OK** to send the locating alert.

## Viewing Event History

For documentation purposes, a history log is created for each event in the OM Locating server database. The history saves the event's data and all actions which have been performed on the event.

1. Select the desired entry in the events table.
2. To call up the event history, click the **History** command button above the events table.

The **Event history** dialogue is displayed and shows the history of the selected event.



The dialogue title contains basic information on the event: the event's number, the creation date and the event type. For each action item the history displays a separate entry, consisting of sender, date, assignee and event state. In case of a large event, the information is spread over multiple pages (see also page 45).

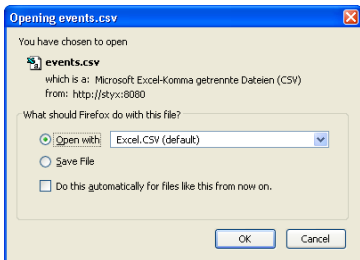
3. In order to show or hide comments stored within the event, click the **Show Comments** button.
4. To print the event history, click the **Print** command button in the upper part of the dialogue.
5. To close the dialogue, click **OK** or click on the icon.

## Exporting Event Data

The complete events data stored in the in the OM Locating server database can be exported to a \*.csv file, e.g. for archiving or for analysis. This feature is only available for users which belong to the administrators user group (see also the chapter entitled Managing Users on page 47).

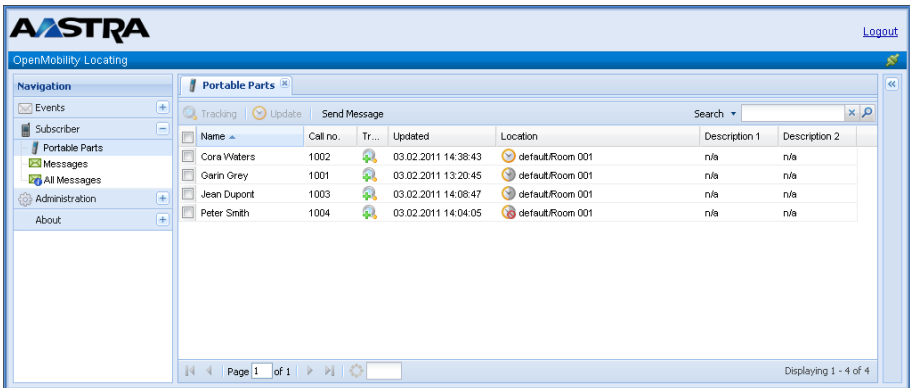
**Please note:** Make sure to observe regulations regarding data protection when archiving event data!

1. Click the **Export** command button above the events table.
2. Depending on the used browser and the browser settings, a dialogue opens where you can select the desired export options. Confirm with **OK**.



Example: "Firefox" Browser – Event Export Options

## Locating Handsets



Subscriber menu: Portable Parts tab

The **Portable Parts** tab of the **Subscriber** menu provides an overview of the handset locations. Using this menu, you can identify the current position of a handset, track a handset's location over time (see page 37), check the RFP visibility for selected handsets (see page 39), and send messages to selected handsets (see page 42).

For each handset the table displays the following information:

- **Name, Call no., Description 1, Description 2:** the handset's data
- **Tracking:** indicates the current tracking mode, see section Setting the tracking mode on page 35
- **Updated:** indicates the time stamp of the last location update, see section Updating location information on page 36
- **Location:** currently known location. An "unknown" entry in the **Location** column indicated that the handset can not be located, e.g. because the handset is switched off.

### Searching for a handset

To search for a specific handset in a large table, use the search input field (see page 46). You can also browse through the pages of a multiple page table (see page 45). Furthermore, you can adapt the table display to your needs (see page 44).

### Setting the tracking mode

The handset sends its location information on each interaction with an RFP (e.g. during a phone call or when the DECT handset software is updated). It is possible to direct the OMM to "ask" the handset periodically for its current location even if the handset is not in interaction with an RFP. Its advantage is that the location information displayed in the portable parts table is always current but this will cause a high battery consumption and thus reduce the handset's stand-by time. The current tracking mode is indicated by the following icons:



Tracking mode is activated. The OMM polls for handset location information periodically.



Tracking mode is deactivated. The history location might not show current position information since the history has been updated manually (see page 36).

1. To switch the tracking mode for a handset, select the respective handset entry. You can also select multiple entries: press and hold the **[CTRL]** key and then

click the appropriate entries. To select all entries, activate the check box in the first column of the table header.







2. Click the **Tracking** command button above the portable parts table. Alternatively, you can click on the tracking status icon behind each handset entry to switch the mode.

### Note

Note, that the **Tracking** option has to be enabled for the respective handset (see the chapter entitled Configuring the Portable Parts starting on page 22).

### Updating location information

The **Updated** column indicates the timestamp of the last location update. In addition, the icons in the **Location** column indicate the following:

-  Location was recently updated.
-  Location was recently updated but RFP visibility (see page 39) is not possible.
-  Last location update is more than 20 minutes ago.
-  Last location update is more than 20 minutes ago, RFP visibility is not possible.
-  No active location information is available.
-  No active location information is available, RFP visibility is not possible.

1. To obtain current location information, select the respective handset entry. You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries. To select all entries, activate the topmost check box in the table header.
2. Click the **Update** command button above the portable parts table. Alternatively, you can click on the update status icon in the appropriate **Location** column. This updates the location information and concurrently opens the **RFP visibility** dialogue (see also the chapter entitled Checking RFP Visibility starting on page 39).

### Sending messages

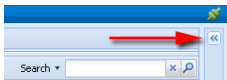
The **Portable Parts** tab of the **Subscriber** menu also provides the possibility to send messages to one or multiple recipients. The procedure is described in the section entitled Sending Messages on page 42.



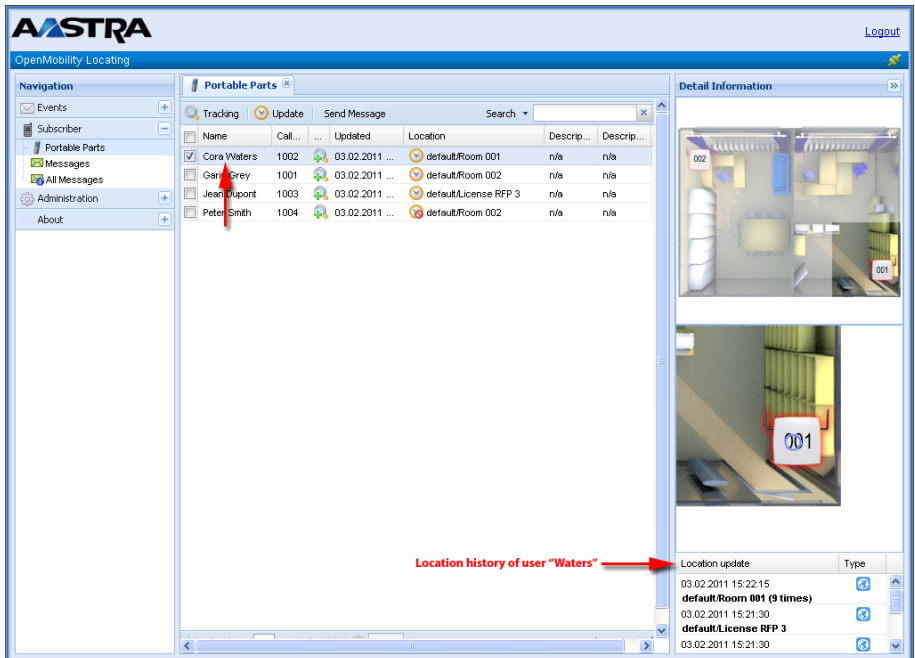
## Calling up the Location History

You can track a handset's location over time. The location history displays information on the RFP's to which the handset has been connected. A maximum of 50 entries are available. Using this feature, you can view the current position of a person and also the person's movement in your organization as long as he/she carries the handset.

1. Select the desired handset entry in the portable parts table.
2. To call up the location history, click on the icon on the right side of the **Portable Parts** tab.



The **Detail Information** window is displayed and shows the location history of the selected handset.



The screenshot shows the AMSTRA OpenMobility Locating interface. On the left is a navigation pane with options like Events, Subscriber, Portable Parts, Messages, All Messages, Administration, and About. The main area is titled 'Portable Parts' and contains a table with columns: Name, Call..., Updated, Location, Descrip..., and Descrip... The table lists four entries, with 'Cora Waters' selected. A red arrow points to the location history icon in the 'Location' column for Cora Waters. To the right, the 'Detail Information' window is open, showing a 3D rendering of a room and a table of location updates.

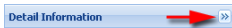
Location update	Type
03.02.2011 15:22:15	
<b>default:Room 001 (3 times)</b>	
03.02.2011 15:21:30	
<b>default:License RFP 3</b>	
03.02.2011 15:21:30	

The **Location update** column lists the current handset location (the currently used RFP) and the history of visited RFPs. For each location entry RFP-related information is given, e.g. site, building, floor, room, name of the RFP. The

tracking data contains connection date, time and location for the current day. The **Type** column indicates why the handset position data was updated.

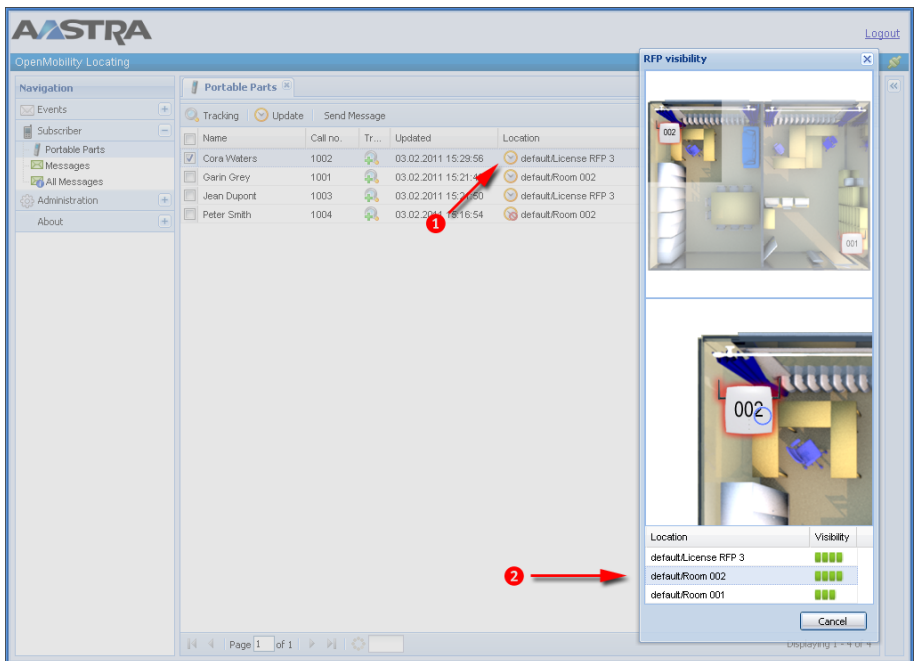
**Note:** To view the current location information of a handset for which the tracking mode is deactivated (see page 35), click the **Update** command button above the portable parts table.

3. In order to view handset location at a particular time in the graphics on the upper part of the **Detail Information** window, click on the appropriate tracking entry in the lower list.
4. You can switch to the display of another handset's location history by simply clicking the respective handset's table entry.
5. To hide the location history, click on the icon on the right of the **Detail Information** window.



## Checking RFP Visibility

Depending on the RFP arrangement in your organization, a handset might be in the visibility radius of multiple RFPs. To identify the RFP nearest to the handset, you can use the RFP visibility feature. This helps to determine the concrete handset user's location, e.g. if the user does not answer a call or message. For this function, the DECT portable part is queried by the OMM. The DECT portable part sends back a list of visible RFPs and their respective signal strength values. Note, that this function is only available for Aastra 6x0d DECT handsets.



### RFP visibility dialogue

1. In the **Portable Parts** table, click on the location status icon of the respective handset.


The **RFP visibility** dialogue opens. This process may take some seconds because the handset location information is updated. If you wish to abort the process, click **Cancel**.

In the **RFP visibility** dialogue, the **Location** column contains a list of all RFP locations, the handset currently "sees". The icons in the **Visibility** column indicate the quality of the connection between handset and RFP. The better the quality, the nearer the handset is located to the RFP.

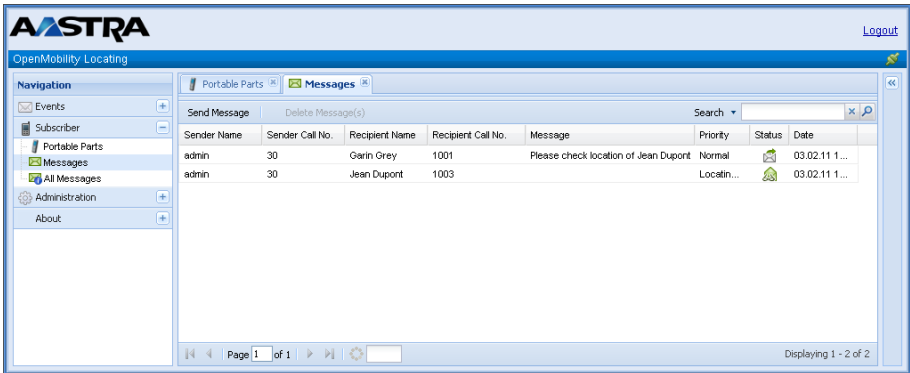
-  Best visibility
-  Good visibility
-  Acceptable visibility
-  Bad visibility
-  Worst visibility

2. In order to locate the handset in the graphics on the upper part of the dialogue, click on the appropriate location entry in the lower list.

If the handset is of the type Aastra 6x0d, the graphic will also show a field strength indicator.

3. To close the dialogue, click on the  icon.

## Managing Messages



### Subscriber menu: Messages tab

Messages which have been sent via the OM Locating application are displayed in the **Subscriber** menu where users can view their status and details and manage them.

- The **Subscriber: Messages** menu item lists the messages that have been sent by the currently logged-in user.
- The **Subscriber: All Messages** menu item lists the messages that have been sent by all users. This menu item is only available for users which belong to the administrators user group (see also the chapter entitled Managing Users on page 47).

## Message status overview

The messages table displays information on the status of each message.



The message has been sent.



The message was delivered.



The recipient has read the message.



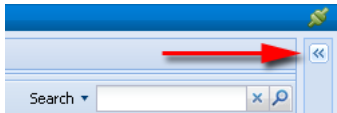
The recipient has completed the message order (see page 43).



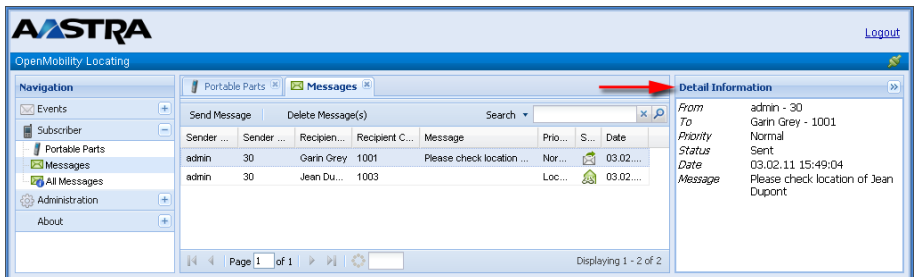
The sending of the message failed. In this case send the message again (see page 42).

## Viewing details of a message

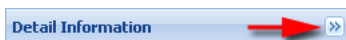
1. You can view details of a selected message. Select the appropriate entry in the message table.
2. Click on the icon on the right side of the **Messages** tab.



The **Detail Information** window is displayed and shows the message details.



3. To hide the window, click on the icon on the right of the **Detail Information** window.



### Searching for a message

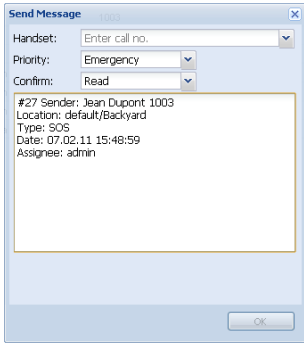
To search for a specific message in a large table, use the search input field (see page 46). You can also thumb through the pages of a multiple page table (see page 45). Furthermore, you can adapt the table display to your needs (see page 44).

## Sending Messages


You can send a message to one or multiple recipients which are equipped with a message-capable device, e.g an Aastra 600d handset. (Aastra 142d or DECT GAP handsets do not support this feature.)

1. Click the **Send Message** command button above the table. If you want to send a message to one of the listed recipients, select the appropriate table entry before. To select multiple recipients, press and hold the **[CTRL]** key and then click the entries.

The **Send Message** dialogue opens, displaying the last distress event.



2. **Handset:** Select the recipient's call number from the list. This field is not displayed if you send a message to multiple recipients.
3. **Priority:** Select the message type:
  - **Normal:** The message is sent as a normal text message.
  - **High:** The message is sent as a high priority message.
  - **Emergency:** The message is sent as an alarm message.
  - **Locating Alert:** The message will be signalled acoustically on the recipient's handset with an increasing alarm tone. This message type can be used to indicate the handset location for third parties (e.g. if the recipient made a ManDown call and should now be searched by security staff).

- 4. Confirm:** Select the confirmation type (**Read, Complete, Order**). The selected confirmation type defines the confirmation sequence that has to be performed on the handset that receives the message (see also the chapter entitled Message Receipt on the Handset starting on page 43).
- 5.** In the message input field, the content of the last distress event which is currently not closed is displayed. You can edit this text or overwrite it with an own text, e.g. "fire alarm, leave building".
- 6.** Click **OK** to send the message. If you want to cancel the action, simply close the dialogue by clicking on the  icon.

**Note:** It is also possible to directly react on an event by sending a message of the **Locating Alert** type, see the chapter entitled Sending a Locating Alert Message on page 32.

**Please note:** If no RFP visibility is given (see page 39), it is not possible to send a message to the respective handset! In this case, you should update the location information first (see page 36).

## Deleting Messages

- In the **Messages** table, click on user entry you want to delete.  
You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries.
- Click the **Delete Message(s)** command button above the messages table.  
A confirmation dialogue opens.
- Click **Yes** to confirm the deletion. **No** cancels the process.


## Message Receipt on the Handset

Messages can only be received (displayed) on message-capable handsets, such as the Aastra 610d/620d/630d. Aastra 142d or DECT GAP handsets do not support this feature.

Depending on the type, messages are signalled different on the recipient's handset (e.g. one attention tone for normal messages, two tones for messages of high priority). The handset users can configure the message signalling individually at their device.




The OM Locating application automatically generates a message text. This text contains information on the last distress event which is currently not closed (call number, location, call type (SOS, ManDown), assignee, date and time). The operator who sends the message can edit or overwrite this text.

### Callback to the operator

The call number of the operator who has sent the message is displayed within the message. To call back the operator, the handset user must simply press the call key .

### Message confirmation

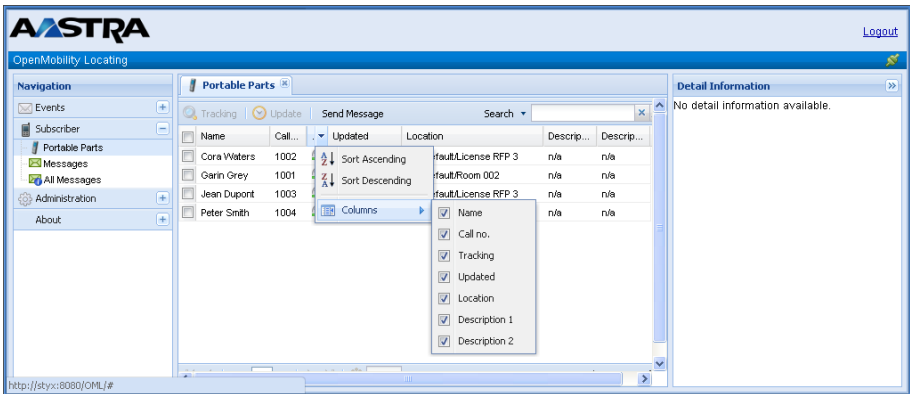
Depending on the confirmation type the operator applied to the message, the handset user has to perform one or more confirmation steps. Confirmation on the handset is done by pressing the appropriate softkey.

Confirmation type	Confirmation on the handset	Status indication (see page 40)
Read	Read	
Complete	Read, Accept	
Order	Read, Accept, Done	

If the operator’s phone is an Aastra 610d/620d/630d handset, he will also receive a confirmation message on his phone. For more information on using the special messaging features of the Aastra 6x0d DECT terminal series, see the “SIP - DECT; Aastra 610d, 620d, 630d Messaging & Alerting Applications” user guide.

## Handling Table Views

Various pages of the OM Locating application offer table views. You can adapt these views according to your individual requirements.





Example of table view – Portable Parts table




## Sorting Tables

1. You can sort entries in ascending or descending order. Click on the column header of the column you wish to use as your sorting criterion.

The small icon in the respective table header indicates the sorting criterion;  table is sorted ascending,  table is sorted descending.

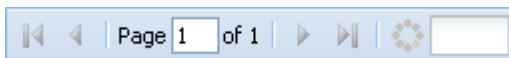
2. To reverse the order of the entries, simply click the column once again.

## Showing / Hiding Table Columns

1. You can show and hide single table columns. Move the mouse over a column's table header.
2. Click on the  button which is now shown to the right of the column. A pop-up menu opens.
3. In the pop-up menu, select the **Columns** entry to open the submenu.
4. Deactivate the check boxes of the columns that should be hidden or activate hidden columns; : column will be hidden, : column will be shown.
5. In addition, you can use the **Sort Ascending** and **Sort Descending** commands from the pop-up menu to sort the table.

## Browsing through Multiple Page Tables

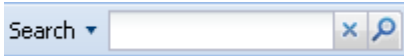
If there is a high amount of data (events, portable parts, etc.), a table view will provide multiple pages. The bar on the lower part of the screen provides commands to browse through these pages.



*Browse bar*



1. Use the arrow icons to browse the pages.
2. To go to a specific page, enter the number in the **Page** field.
3. To resize the page, enter a value in the input field on the right and confirm with the **[Enter]** key.

## Searching for Table Entries



### *Search input field*

In large tables, you can search for a specific entry.

1. In the **Search** input field on the upper part of the screen enter a search string, e.g a text, a phone number, or a date (complete string or part of it). The text search is not case-sensitive.
2. Press the **[Enter]** key or click the  button to start the search.
3. Clicking on the  button removes the search text.

# Administration

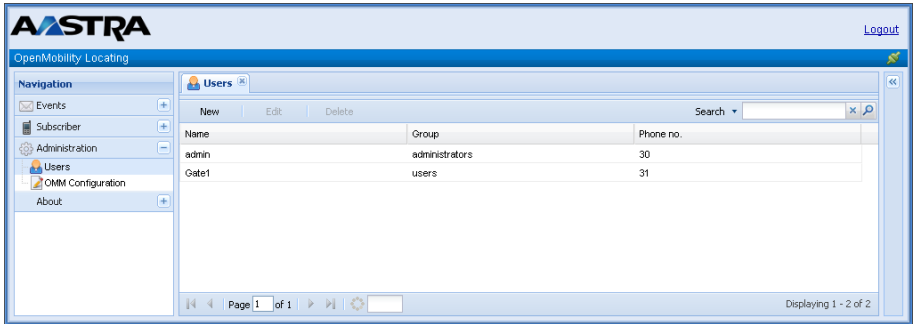
This chapter describes the administration of the OM Locating application, such as adding and removing user accounts and viewing the software versions. It addresses the administrator.

**Please note:** The functions described in this section are available for the administrator only.

## Note

The configuration database of the OM Locating application is stored in a separated directory below the Apache Tomcat installation (see Backup and Restore starting on page 16 for details).

# Managing Users



### Users tab

The administrator manages the users (operators) of the OM Locating application. He can create new users, edit access data of existing users, and delete users from the database.

1. Select the **Administration: Users** menu item.

You see a table listing the configured users in alphabetical order. The assigned user group and the contact phone number are displayed for every user. The sorting criterion is the user name.

**Note:** You can search for a specific entry, e.g. in a large user table, see Searching for Table Entries on page 46. You can also thumb through the pages of a multiple page table (see page 45). Furthermore, you can adapt the table display to your needs (see page 44).

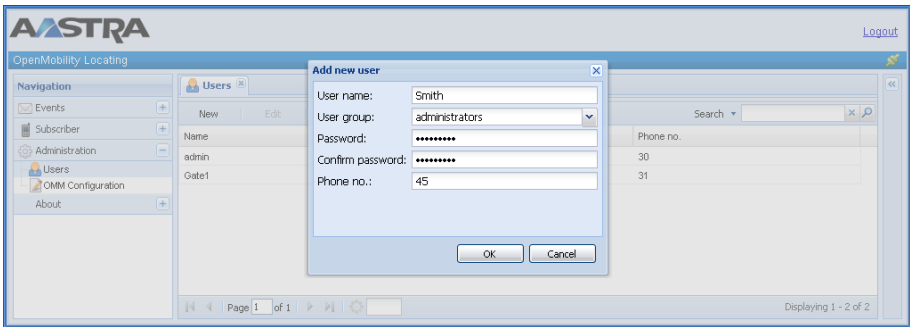
2. Select the appropriate command button above the table:

**New:** creates a new user, see page 48.

**Edit:** edits the data of an existing user, see page 49.

**Delete:** deletes an existing user, see page 50.

## Creating a New User



### Add new user dialogue

1. Click the **New** command button above the user table. The **Add new user** dialogue opens.

2. **User name:** Enter a name. This is the name under which the user logs in to the OM Locating application. The user name is also displayed in text messages sent. At the same time, the user name serves as an internal identifier for administration of the data record. This name must therefore be unique, i.e. it must not exist more than once in the system.

3. **User group:** This setting determines which menu items (and thus application features) are available for the user.

– Select the **users** group if the user should be able to use the locating features of the application. This setting is normally applied e.g. to operators.

– Select the **administrators** group if the new user should also be able to administrate the application and the users.

4. **Password, Confirm password:** Type in the user password in these fields.

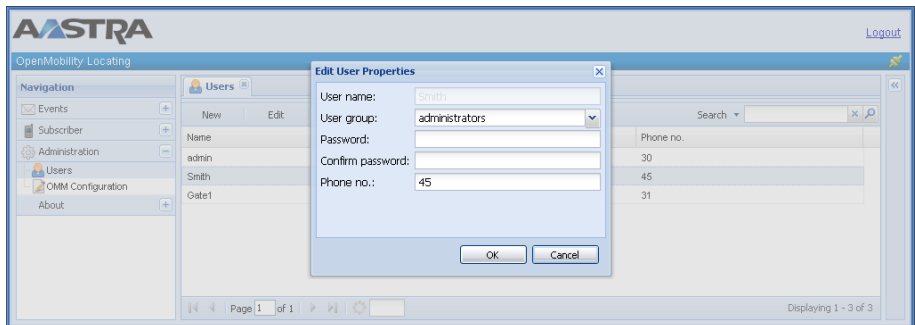
**Note for the administrator:** Inform the users about their passwords. It is recommended to advise users to periodically change their password for security purposes.

- 5. Phone no.:** Enter the user's contact phone number. If the user sends a message (e.g. in case of a a distress event (ManDown or SOS call), this number will be displayed as callback number within the message.

Note, that the SOS phone number and the **Phone no.** setting configured here should match. If this phone number has also been defined as SOS or ManDown call number on the portable parts (see page 22), it will be called in case of an ManDown or SOS call.

- Tip:** To evaluate the function, trigger an SOS call which should reach the operator's phone. Check the respective entry in the **Distress Events** history. The phone number logged with the event should be assigned to the operator's user account.
- 6.** Click **OK** to confirm the settings and to close the dialogue. Clicking **Cancel** discards the settings.

## Editing User Data



### *Edit User Properties dialogue*

- 1.** In the **Users** table, click on user entry you want to edit.
- 2.** Click the **Edit** command button above the user table. The **Edit User Properties** dialogue opens.
- 3. User name:** This field indicates the current user name. The setting can not be changed. If you want to rename a user, you have create a new user (see page 48) and to delete the redundant user entry.
- 4. User group:** If required, change the group setting.

- 5. Password, Confirm password:** Type in the new user password in these fields. If the password should not be changed, type in the existing user password and confirm it.
- 6. Phone no.:** If the contact phone number was changed, enter it here. This number will be displayed as callback number within a message that the user has sent.
- 7.** Click **OK** to confirm the settings and to close the dialogue. Clicking **Cancel** discards the settings.

#### Note

Each user can change his/her **personal** password, see also page 57 whereas the administrator can manage the access data of all existing users.

### Deleting a User

- In the **Users** table, click on user entry you want to delete.  
You can also select multiple entries: press and hold the **[CTRL]** key and then click the appropriate entries.
- Click the **Delete** command button above the user table.  
A confirmation dialogue opens.
- Click **Yes** to confirm the deletion. **No** cancels the process.  
A deletion confirmation (one per user) is displayed on the lower part of the screen.

#### Note

The user **admin** can not be deleted.

### Changing the OMM Configuration

The settings available in the **Administration: OMM Configuration** menu need to be changed only if you have changed the IP address, user name and password of the OMM. For details, refer to Configuring the OMM Connection on page 18.

## Version Information

The **About: Versions** menu item gives you information about the versions of the OpenMobility components and the used licences.

The screenshot shows the AMSTRA OpenMobility Locating web interface. The 'Versions' tab is active, displaying the following data:

Component	Version Number	Lizenz
OM Locating Server	2.1RC4 Build 0	<a href="#">EULA</a>

Component	Licence
<a href="#">oml-V1.7.0</a>	<a href="#">Apache 2.0</a>
<a href="#">oml-ext-V2.0.5</a>	<a href="#">LGPL</a>
<a href="#">oml-eventservice-V1.0.1</a>	<a href="#">LGPL</a>
<a href="#">oml-voices-V1.6.0</a>	<a href="#">Apache 2.0</a>
<a href="#">oml-loc-V2.6.2</a>	<a href="#">Apache 2.0</a>
<a href="#">hspdb-V1.8.0.10</a>	<a href="#">HyperSonic</a>
<a href="#">Axialis Icon Pack</a>	<a href="#">Creative Commons 2.5</a>
<a href="#">LED24 Icon Pack</a>	<a href="#">Free for use and modifications.</a>

### Versions tab

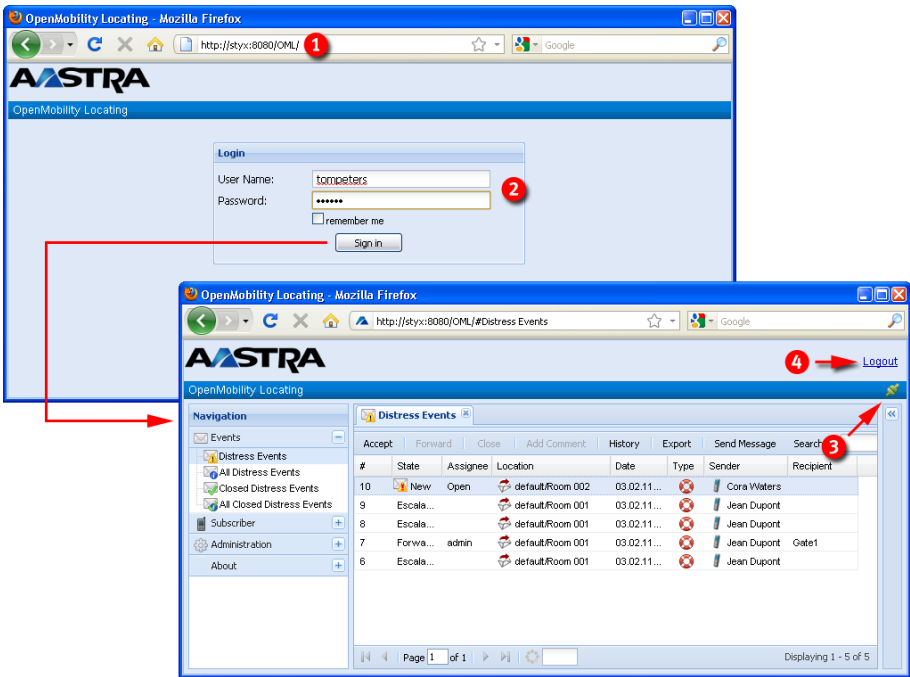
1. Select the **About:Versions** menu item.
2. To view detailed information on a component, click the appropriate component entry in the **Versions** table.
3. To get licence information, click the appropriate hyperlink in the **Licences of Used Components** table. The related website will open in a separate browser tab.


**Note:** Please observe the information given in the chapter entitled Notes on Licences on page 4.

# Short User Guide


The following operating information is intended for the OM Locating application users (operators with the **users** user group authorization). It sums up important actions which these operators will perform in daily usage. The administrator can use these instructions as a template to create an individual short user guide for the OM Locating application in his/her organization.

## Login / Logout



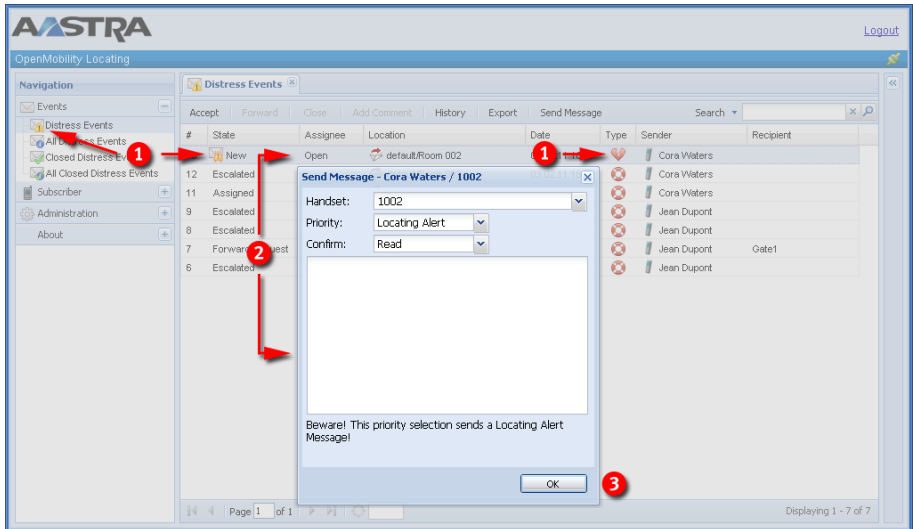
1. Open the web browser and type in the URL of the OpenMobility Location application.
2. **Login:** Enter your **User Name** and your **Password** and click **Sign in**.
3. After login, the  icon in the title bar indicates that the application is connected to the OMM.





**Note:** A red icon  indicates that the connection to the OMM is interrupted. If the connection is not re-established after some seconds, contact your administrator for help.

**4. Logout:** Logout after you finished using the application.

## Handling a ManDown Call

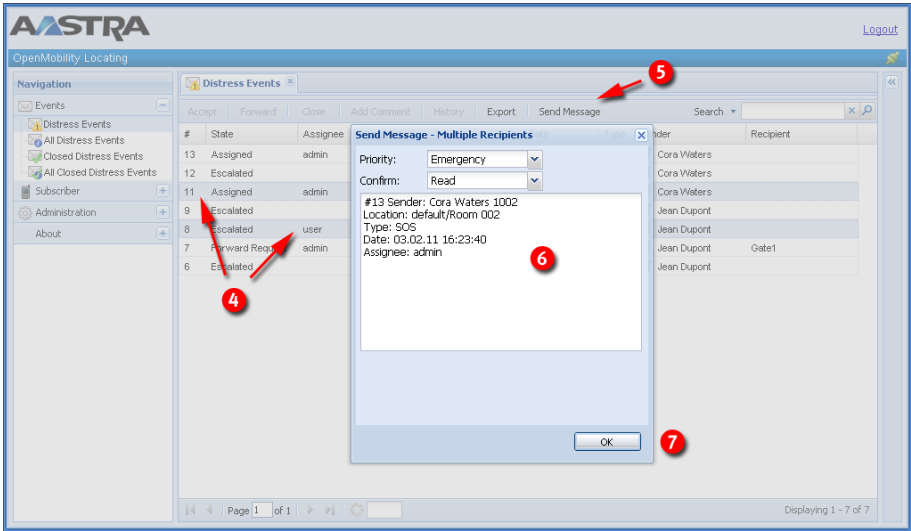


1. Incoming events are displayed in the **Events: Distress Events** menu. A ManDown call is indicated with a blinking  and the  icon. If the ManDown call was sent from an Aastra 600d, you can now trigger an audible alarm on this handset to help third parties to locate it. (On Aastra 142d or a DECT GAP handsets, the locating alert will not be signalled.)

2. Click on the  icon next to the **Location** column. The **Send Message** dialogue opens.

Simply accept the **Locating Alert** message type which is preset in the **Priority** drop down list. In the **Confirm** drop down list, accept the preselected **Read** confirmation type. Optionally, you can select another one from the drop down list (**Complete, Order**). The selected confirmation type defines the confirmation sequence that has to be performed on the handset that receives the locating alert.

3. Click **OK**.



4. Send a message to one or more recipient. Select the appropriate table entry before. To select multiple recipients, press and hold the **[CTRL]** key and then click the entries.
5. Click the **Send Message** command button above the table. The **Send Message** dialogue opens.
6. Select the **Emergency** message type in the **Priority** field. Select the conformation type (**Read, Complete, Order**) from the **Confirm** drop down list. In the message input field, the content of the last distress event which is currently not closed is displayed. You can edit this text or overwrite it with an own text, e.g. "fire alarm, leave building".
7. Click **OK**.

## Locating a Handset

The screenshot shows the Aastra OpenMobility Locating interface. The interface includes a navigation pane on the left, a main table of portable parts, and a detail information pane on the right. A red box highlights the 'RFP visibility' window, which displays a 3D floor plan and a table of location updates.

Location	Visibility
defaultLicense RFP 3	■■■■
defaultRoom 002	■■■■
defaultRoom 001	■■■■

The 'Detail Information' window also displays a location history table:

Location update	Type
03.02.2011 16:36:56	
defaultRoom 002	
03.02.2011 16:36:56	
defaultLicense RFP 3	
03.02.2011 16:36:56	
defaultRoom 002	
03.02.2011 16:36:53	
defaultRoom 002 (43 -fach)	
03.02.2011 15:29:56	
defaultLicense RFP 3	
03.02.2011 15:29:56	
defaultLicense RFP 3 (6 -fach)	


1. Select the **Subscriber: Portable Parts** menu item.
2. Select the desired handset entry in the portable parts table.
3. Click on the icon on the right side of the **Portable Parts** tab.

The **Detail Information** window is displayed and the current location of the handset in graphics on the upper part. The lower list of the window displays the location history which shows the user's movement through your organization.

4. To identify the RFP nearest to the handset, click on the location status icon of the respective handset in the **Portable Parts** table.

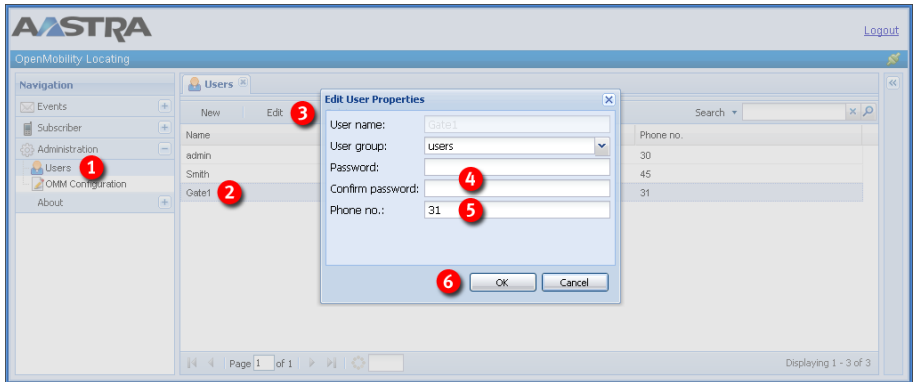
The **RFP visibility** dialogue opens. This process may take some seconds because the handset location information is updated. The icons in the **Visibility** column indicate the quality of the connection between handset and RFP. The better the quality, the nearer the handset is located to the RFP.

-  Best visibility
-  Good visibility
-  Acceptable visibility
-  Bad visibility
-  Worst visibility

5. To close the **RFP visibility** dialogue, click on the  icon.

## Editing Own User Data

You can change your password for accessing the OM Locating application.



1. Select the **Administration: Users** menu item.
2. In the **Users** table, click on your user entry.
3. Click **Edit** to call up the **Edit User Properties** dialogue.
4. **Password, Confirm password:** Type in your new password in these fields.
5. **Phone no.:** If your contact phone number was changed, enter it here. This number will be displayed as callback number within a message you have sent.
6. Click **OK** to confirm the settings and to close the dialogue.

**Note:** If you forgot your password and can not log in into the OM Locating application, contact your administrator for help.

# Appendix

## Technical Data

Number of application users:	10
OM Locating server	<p>Server PC:</p> <ul style="list-style-type: none"> <li>– 2 Ghz CPU</li> <li>– 1 GB RAM</li> <li>– 10 GB hard disk space</li> <li>– 100 MBit/s Ethernet adapter</li> </ul> <p>Operating system:</p> <ul style="list-style-type: none"> <li>– Red Hat Enterprise Linux 5.4 Server</li> </ul>
OM Locating clients / workstation computers	<ul style="list-style-type: none"> <li>– PC capable of running a recent browser with JavaScript, Cookies, and DHTML</li> <li>– Adobe Flash plugin must be installed</li> <li>– Sound card and set of speakers is recommended</li> <li>– Ethernet connection to OM Locating server</li> <li>– Screen resolution of 1280x1024 pixels</li> </ul>

## Abbreviations

DECT	Digital Enhanced Cordless Telecommunication
GAP	Generic Access Profile
OM	OpenMobility
OM AXI	OM Application XML Interface
OMC	OM Configurator
OM IMA	OM Integrated Messaging & Alerting service
OML	OM Locating
OMM	OpenMobility Manager

OMP	OM Management Portal
PP	Portable Part
RFP	Radio Fixed Part
SIP	Session Initiation Protocol
URL	Uniform Resource Locator

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# Index

## A

All Closed Distress Events 28  
Alternatives 12  
Architecture 1

## B

Backup 16

## C

Closed Distress Events 28  
Configuration 18  
    OMM prerequisites 21  
Connection 20

## D

Distress Events 28  
DNS-Name 19  
Download 11

## E

Event  
    accept 30  
    actions 30  
    close 31  
    forward 30  
    search 32  
Events  
    history 33  
    information 29  
    types 28

## F

Firewall 15

## H

Handsets  
    Aastra 142d 5  
    Aastra 600d 2  
    DECT GAP 5  
Hardware Requirements 7

## History 2

    events 33  
    location 37

## I

Installation 7

## J

Java 7  
Java installation 12  
JRE 11

## L

Locatable (option) 23  
Locating permission (option) 23  
Location  
    history 37  
    RFP visibility 39  
    tracking mode 35  
    updating information 36  
Location Pictures 24

## M

ManDown 1, 3  
ManDown number 24, 49

## O

OM Management Portal (OMP) 22  
OML.war 14  
OpenMobility Manager 22

## P

Password  
    user 48, 50, 57  
Portable Parts 22

## R

RFP visibility 39



## Index

### **S**

SOS 3

SOS call 1

SOS number 24, 49

SSL 18

### **T**

Tomcat Service 13

Tracking (option) 23

Tracking mode 35

### **U**

Use Cases 3

# Notes



