



Aastra SIP-DECT™ System Installation & Configuration



Contents:

- » System Components & Architecture
- » Pre-installation planning
- » Installation & Configuration



Your Connection to the World.



Aastra SIP-DECT™ System Components & Architecture

Aastra SIP-DECT™ System Components



**Indoor Access
Point RFP 32**



**Outdoor Access
Point RFP 34**



**DECT 142
Handset**



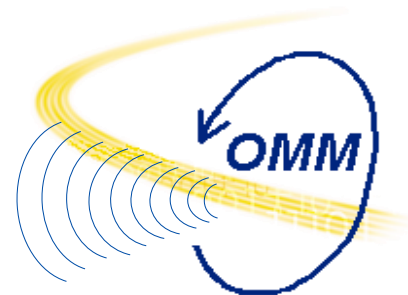
**DECT 610d
Handset**



**DECT 620d
Handset**



**DECT 630d
Handset**



**Open Mobility Manager
(OMM) Software**

Access Point Features



» Hardware RFP32 (Indoor Access Point)

- OPTIONAL 120v AC power adapter (NOT INCLUDED)
- Wall mounting kit
- 2 internal space diversity antenna's
- Operating Conditions: Temperature: 23°F to 113°F (-5°C to 45°C)

» Hardware RFP34 (Outdoor Access Point)

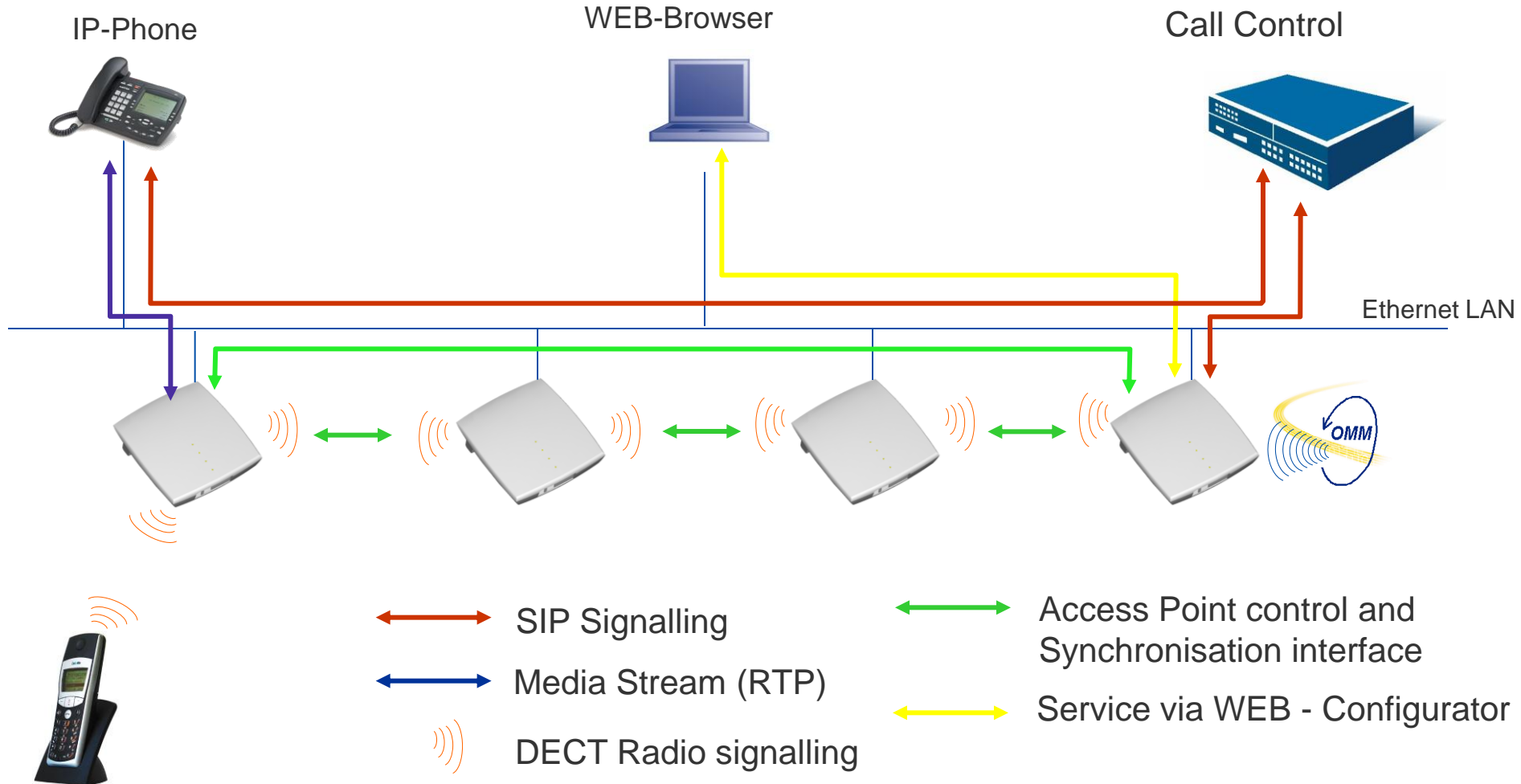
- 2 external space diversity antenna's
- Optional wall mounting or mast mounting kits
- PoE ONLY
- Operating Conditions: Temperature: -13°F to 131°F (-25° C to +55°C)

SIP-DECT Access Point Characteristics

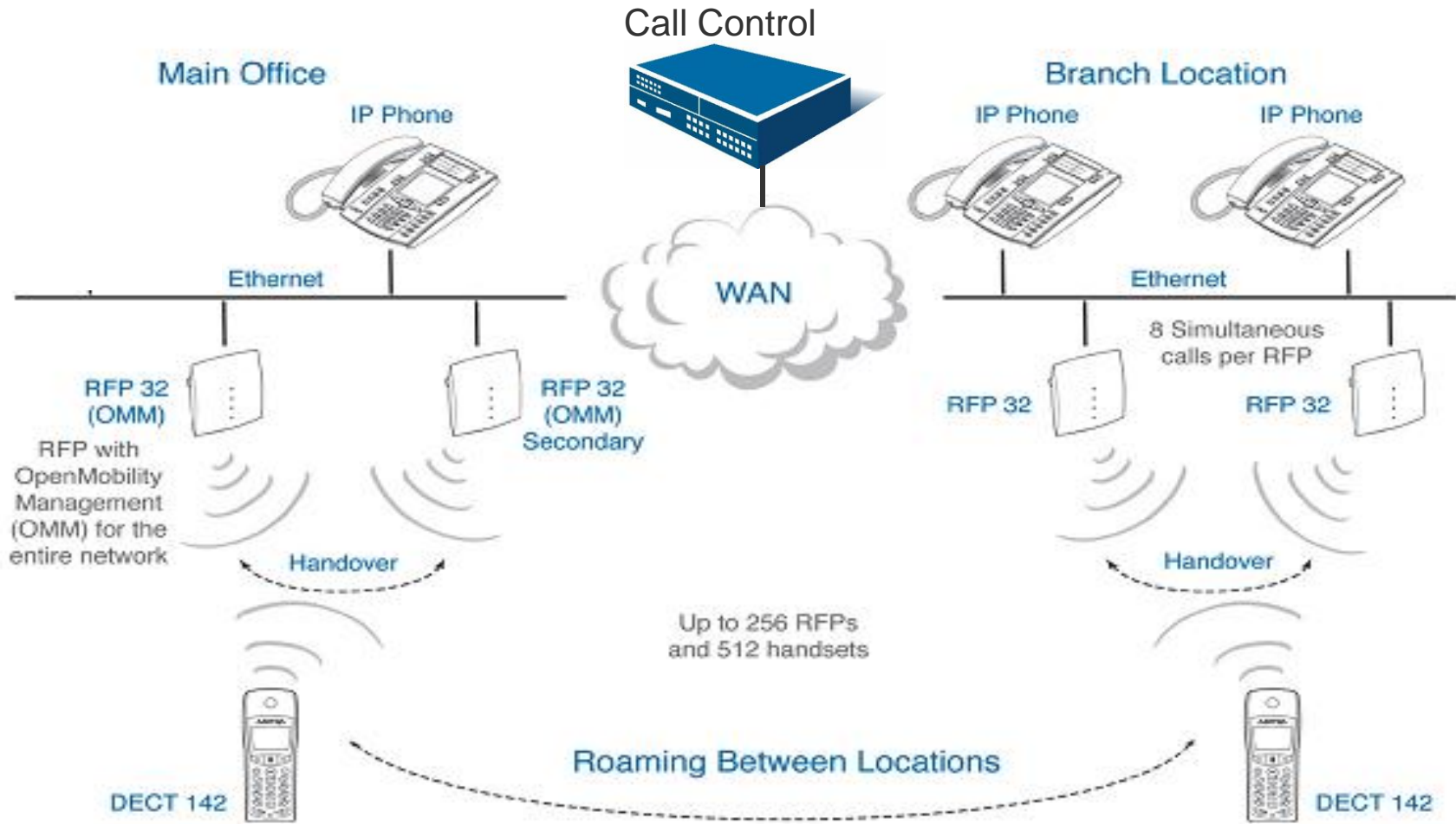
All Aastra DECT devices conform to FCC & Regulatory Canada directives.

- ◆ **FCC 15.323 & FCC 15.319 measured and released.**
- ◆ **US: NTP = 100mW (+20dBm)**
- ◆ **Frequency range: 1920 - 1930 MHz**
- ◆ **5 Carriers available in the FCC / IC permitted band of 1920-1930Mhz**
- ◆ **DECT-channel TX Frequencies**
 - 0 1928,448
 - 1 1926,720
 - 2 1924,992
 - 3 1923,264
 - 4 1921,536
- ◆ **24 slots per carrier**
 - ◆ 8 slot-pairs or channels for voice
 - ◆ 2 slot-pairs or channels for Hand-in,
 - ◆ 2 slot-pairs for Signalling/Synchronization

Call Control and Media Paths



SIP-DECT System Architecture





Aastra SIP-DECT™ Pre-Installation Planning

Pre-Installation

» Preparation

- Systematically collect a reference set of information to determine
 - Coverage requirements
 - Capacity Requirement
 - Unique issues
 - Network topology and configuration requirements
 - Look to maximize synchronization redundancy where possible
 - Go on site, verify and redesign as required
- Initial Admin Info:
 - Site address
 - Site contact name, number, and email
 - Technical (IS / IT) contact name, number, and email

Pre-Installation

– Coverage Details

- 2 copies of scaled floor plan drawings with 1 copy showing:
 - Areas where coverage is required
 - Special areas of coverage (elevators, stairwells, washrooms, outdoors, etc)
 - Areas where coverage is not necessary
 - Areas of high handset density/ traffic
- Construction Materials
 - Exterior material type (metal, wood, concrete, etc)?
 - Interior walls, type and height (metal, wood, concrete, drywall, tile, etc)?
 - Ceiling, type and height (metal, wood, concrete, drywall, etc)?
 - Door type (metal, wood, glass, etc)?
 - Number of floors?
- Environment
 - Proximity to high power transmitters (Radio, TV, Cellular, etc.)
 - Nature of the environment
 - Other existing wireless systems? (WLAN, Bluetooth, other DECT systems, etc)
 - Office, conference, warehouse, store, etc

Pre-Installation

– Capacity Details

- Number of Handsets required for initial deployment
- Busy Hour Traffic estimates if available

– Network information

- SIP Server IP Address/Host Name and port number
- TFTP Server IP Address/Host Name
- Gateway/Router IP Address
- OMM Base Station IP Address
- OMM Secondary Station IP Address (if configuring resiliency)
- Subnet Mask
- Domain Name (optional)
- Domain Name Server (optional)
- Other RFP IP Addresses (if required)
- PoE Switches installed in the network infrastructure (or PoE injectors)?
- CAT5 Ethernet cabling?



Your Connection to the World.



Aastra SIP-DECT™ Installation

Synchronization of Access Points

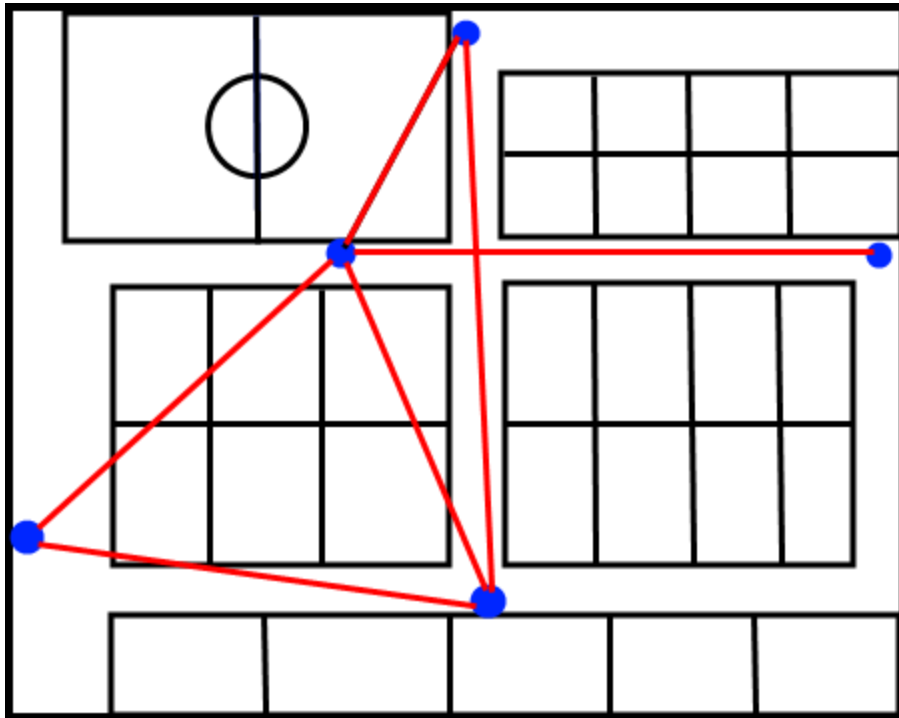
- » Access points synchronize with each other to enable calls to complete a seamless handover between access points.
- » Synchronization is via signaling over the wireless connections between access points.
- » Access points only need to sync with one other access point – ie they relay synchronization between access points.
- » Only access points that are synchronized together support call handover – ie allows users to roam across synchronized access points.
- » A group of synchronized access points is called a **CLUSTER**

Clusters

- » Access points can not always synchronize – ie different building, different floors.
- » Calls can be originated and terminated from all Clusters but handover can not occur between Clusters.
- » When access points are provisioned, they are grouped into designated Clusters

Installation (con't)

RFP Synchronization and Redundancy



- One cluster with 5 RFPs.
- Each RFP has RF visibility (red line) to at least one other RFP.
- Visibility to more than 1 RFP provides redundant synchronization links and improve reliability.
- If a RFP loses synchronization, it will go “Inactive” unless it has redundant synchronization links that it can utilize.
- Once all active calls are released, inactive RFP’s automatically attempt to re-sync.

Installation

» Site RF Survey

– Objective

- The purpose of the RF survey is to determine the number and positions of the RFP's in order to provide radio coverage in the customer defined areas.
- The result of a RF survey will provide an overview of the cell boundary locations. Voice quality will be maximized and Frame Errors will be minimized within these boundaries.

– RF Survey Equipment Kit

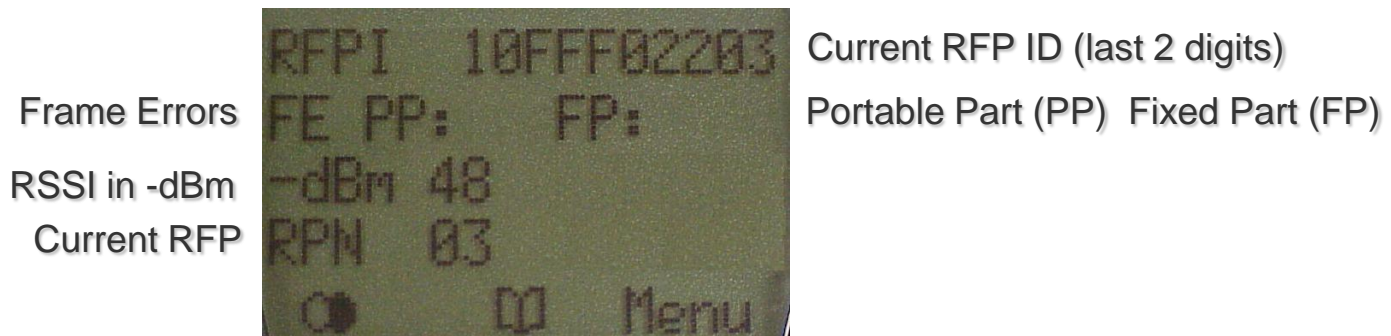
- Aastra Access Point (RFP-32 NA)
- PoE Injector for RFP
- Tripod (extendable to 10 feet or more)
- UPS (fully charged)
- 2 x Aastra DECT 142 Handsets (fully charged)
- TFTP server (Aastra 53i IP phone)
- All required s/w pre-installed & configured
- Cross-CAT cable



Installation (con't)

» Site RF Survey

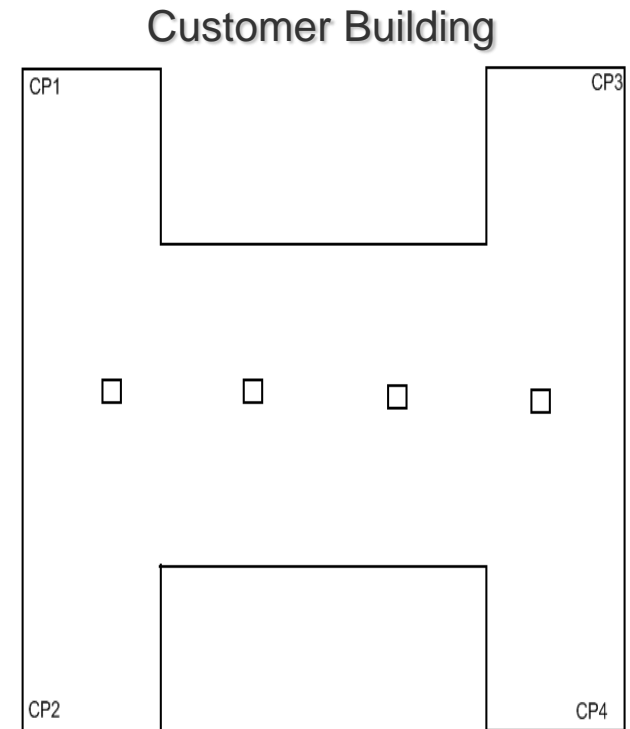
- Execution
 - Turn on the Aastra DECT 142 handsets and place them in “Site Survey” mode by pressing:
 - Menu R * * * 7 6 #
 - Use the up/down scroll keys to select the menu item “Site Survey”
 - Press the “OK” softkey and you will be presented with the “Site Survey” screen.
 - The handset will measure and report the signal strength received from the RFP in units of -dBm. A RSSI (Received Signal Strength Indicator) value of -30 is better than a value of -40.



Installation (con't)

» Site RF Survey

- Execution
 - On the customer provided site plans, identify critical points in the areas of desired coverage.
 - Setup the equipment as illustrated in the previous slide at one of the identified critical points. For this example, we will start at CP1.
 - Turn on the laptop and ensure that the TFTP service is running.
 - Connect power to the RFP. Once it has fully completed the boot-up cycle, the green LED will be illuminated.

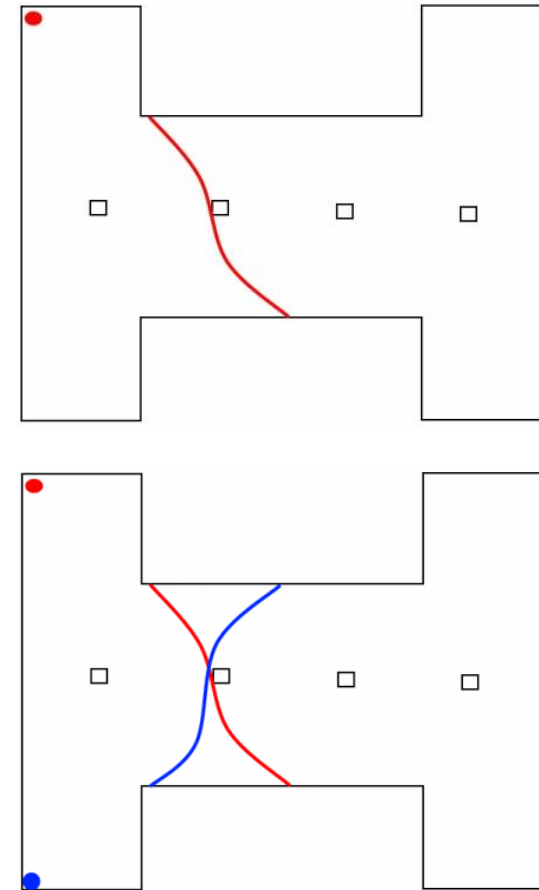


Installation (con't)

» Site RF Survey

– Execution

1. Raise the RFP to the desired height, maintaining at least 1 foot or more spacing from the ceiling or metallic objects.
2. While monitoring the RSSI, walk away from the RFP.
3. When an RSSI level of -70 dBm is obtained, mark the location on the customer supplied site plans.
4. Continue to find other -70 dbm locations so that a -70 contour boundary can be mapped out on the site plans.
5. Move the RF survey equipment kit to the second critical point previously identified.
6. Repeat the steps 1 to 4 in order to map out the -70 dBm contour for CP2.
7. Identify the location where both contours intersect. This intersection is the most ideal location for the first RFP.

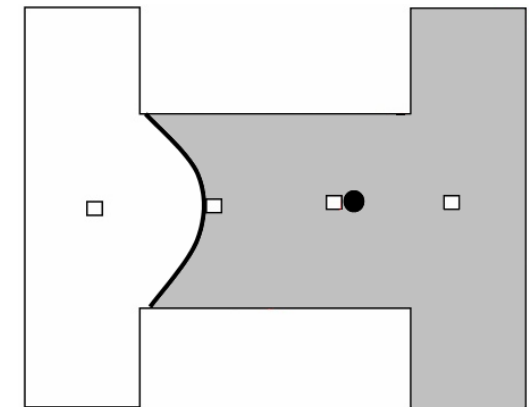
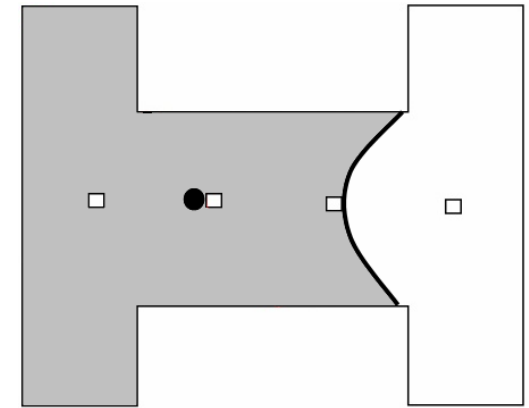


Installation (con't)

» Site RF Survey

– Execution

8. Move the RF survey equipment kit to the first RFP installation location (intersection point).
9. Repeat the steps 1 to 4 in order to map out the -70 dBm coverage contour for the first RFP.
10. If a second RFP is required, it's location must be on or within the -70 dBm contour of the first RFP to ensure reliable synchronization.
11. Move the RF survey equipment kit to the second RFP installation location.
12. Repeat the steps 1 to 4 in order to map out the -70 dBm coverage contour for the second RFP.
13. Install the RFP's in the locations tested provided that:
 - The RFP's have a reliable synchronization link (>-70dBm)
 - The customer's RF coverage requirements are met
 - The customer's traffic requirements are met





Aastra SIP-DECT™ Installation & Configuration

» What's in the box?

Included In Box Items (RFP32)

- Access Point RFP 32 (For indoor use)
- Screw and anchors for Wall Mounting
- Paper Drilling Template
- Regulatory and Safety Information
- **NOTE: Not Included: AC Adapter**



Included In Box Items (RFP34)

- Access Point RFP 34 (Outdoor Use)
- Antennas – 2 Black antennas screw on assemblies
- Paper Drilling Template
- Regulatory and Safety Information
- *NOTE: Requires the use of a Wall Mounting Kit (Aastra Part # D4602-286D-00-00) – (Verizon MC # 73196677)*



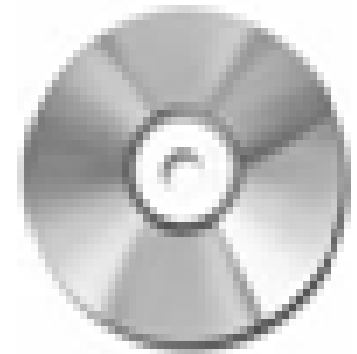
Included In Box Items (DECT 142 Handset)

- DECT 142 Handset
- 3 AAA rechargeable batteries
- Memory Card (Pre installed)
- Charging Cradle
- Belt Clip
- 120 VAC Power Adapter
- Quick User Guide



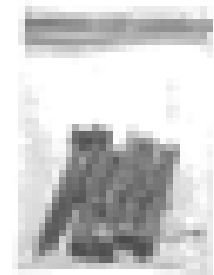
Included In Box Items (OMM Activation Kit)

- PARK Key code (Portable Access Rights Key)
- OMM Software – “**omm_ffsip.tftp**” file
- Configurator Tool – “**OMM_Configurator.jar**” file
- OMM Installation Administration and Maintenance Document
- DECT 142 Handset Quick Guide
- DECT 142 Handset User Manual
- **NOTE:** *An OMM Activation Kit must be ordered when installing a new system*



Optional Equipment

- **AC Adapter for RFP32**
- **Wall Mount kit for RFP34**
- Includes
 - 3 sealing washers
 - 3 anchors for wall mounting
 - 3 screws





Aastra SIP-DECT™ Installation & Configuration

Components/Tools needed for installation

- » RFP32(s) or RFP34(s)
- » DECT 142 Handset(s)
- » A/C Adapter if not using PoE (RFP32 ONLY)
- » OMM Activation Kit CD
 - OM Configurator Tool
 - omm_ffsip.tftp file
 - PARK Code
- » TFTP Server

System Installation - Overview

» Overview

- Configuring RFPs via the Java OM Configurator Tool
- RFP Boot Process
- Configuring the OMM via the WEB UI

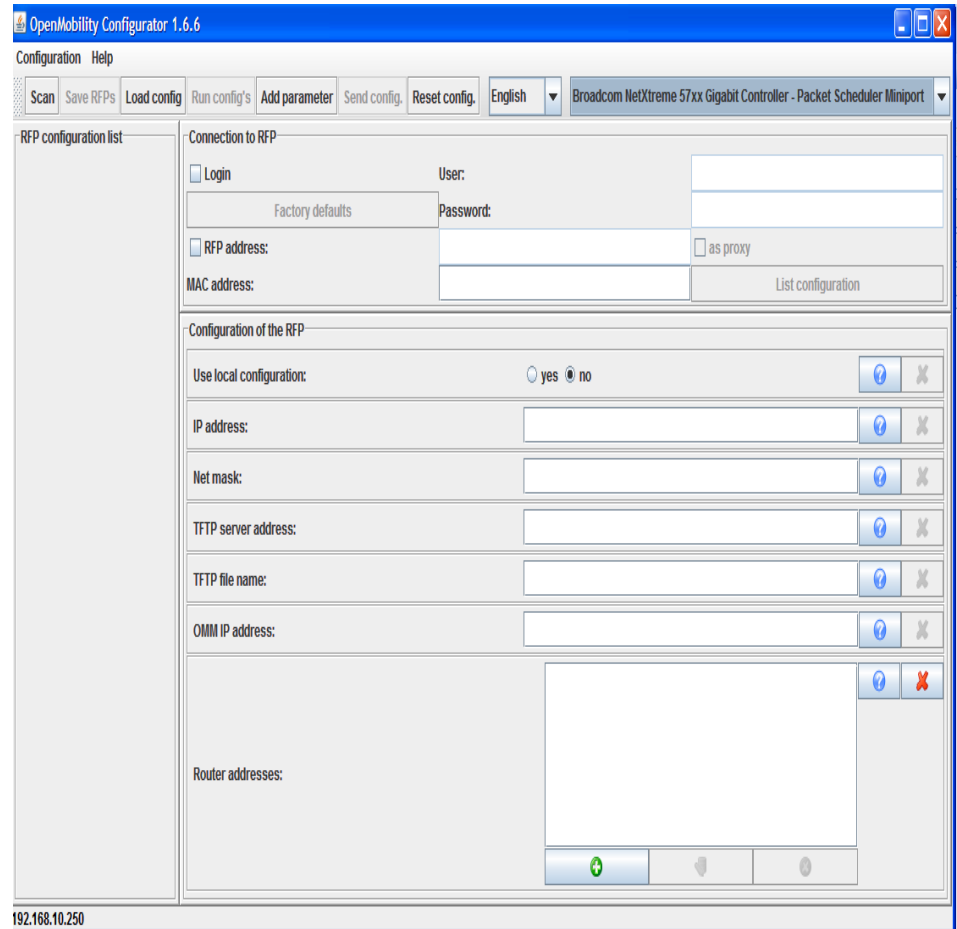
System Startup – OM Configurator (Main Screen)

(view in slide show)

» OM Configurator Tool

- The OM Configurator is used to discover and manually configure network settings on the RFPs.
- Requires Java Runtime Environment version 1.6 or higher.
- Additional network parameters are available via the “**Add parameter**” button.
- All settings are stored on the RFP’s internal flash.

Note: The PC running OM Configurator must be on the same LAN as the RFP for successful connection.



System Installation - Overview

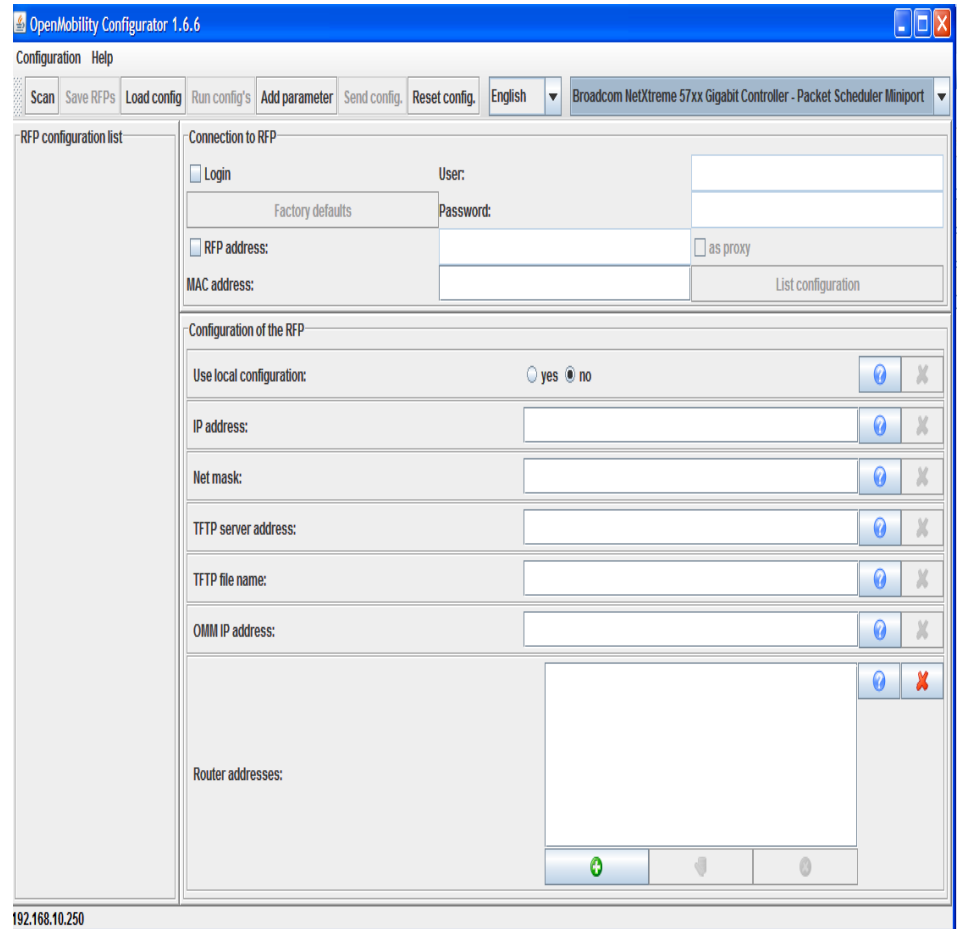
(view in slide show)

» Using the OM Configurator tool

- Copy the “**OMM_Configurator.jar**” file from the CD over to your PC

Name ▲	Size	Type
OM_Configurator.jar	142 KB	Executable Jar File

- Double click the file to launch the tool



System Installation – OM Configurator (Main Screen)

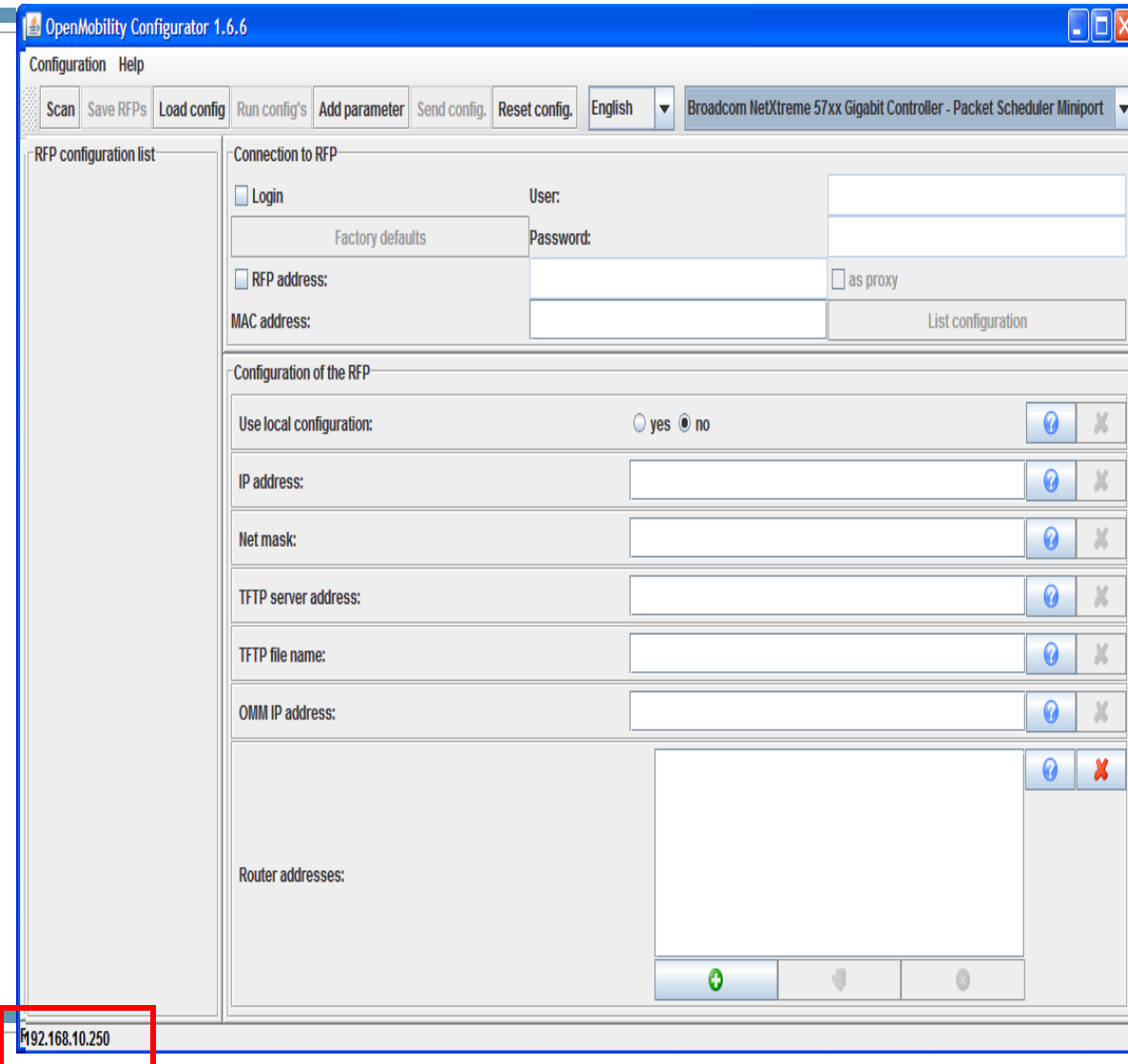
(view in slide show)

» OM Configurator Tool

- Open the Ethernet adapter drop down box on the top right (If your PC has multiple adapters)

» Choose your adapter

» IP address of your PC appears on bottom left of screen

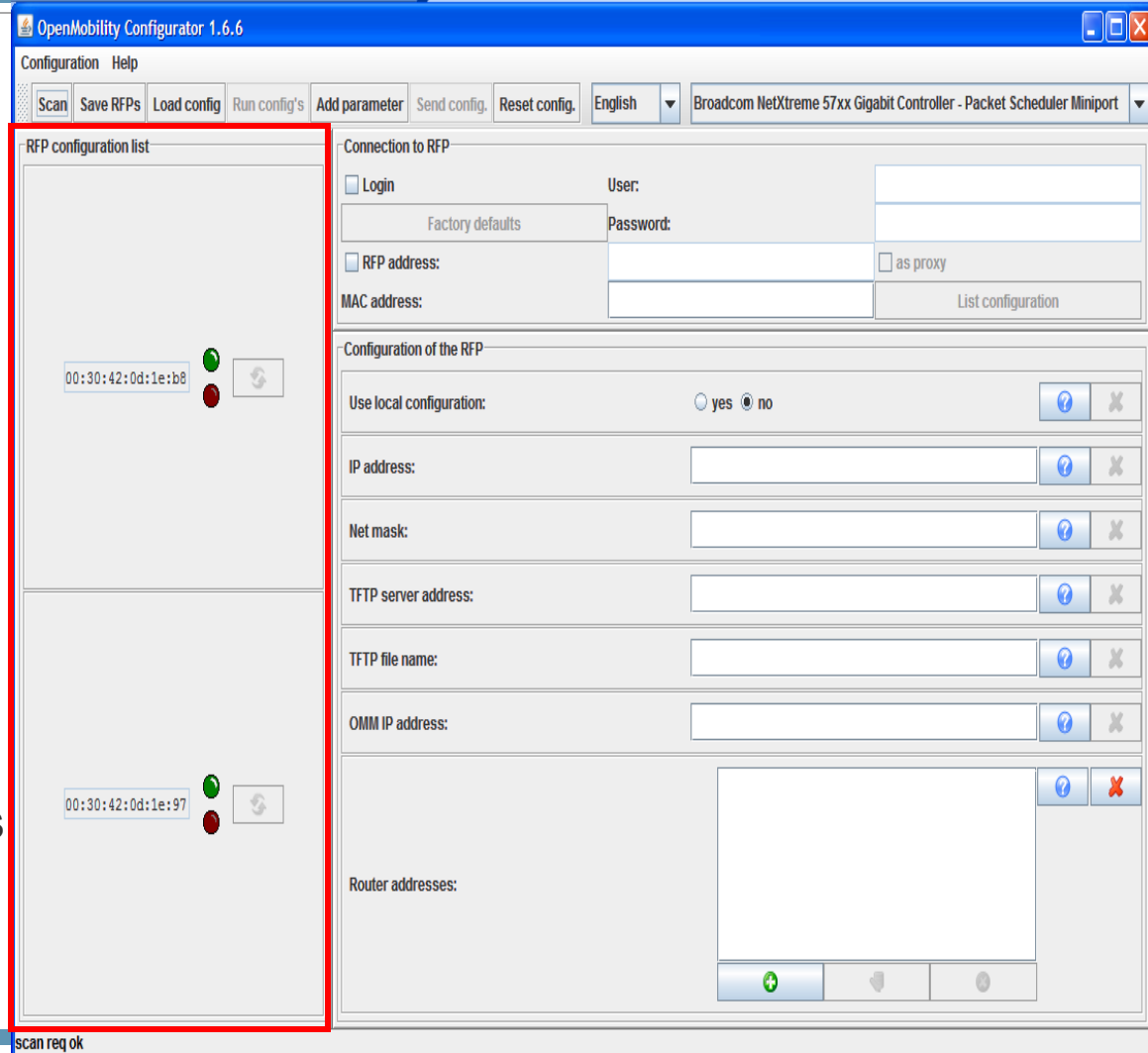


System Installation– OM Configurator (Scan)

(view in slide show)

» Scan

- Clicking the “**Scan**” button causes the OM Configurator to search for RFPs on the local LAN network.
- At the bottom left corner the “**send scan command to “FF:FF:FF:FF:FF:FF”**” is sent.
- The “**send req ok**” appears and the list of RFP’s are shown.

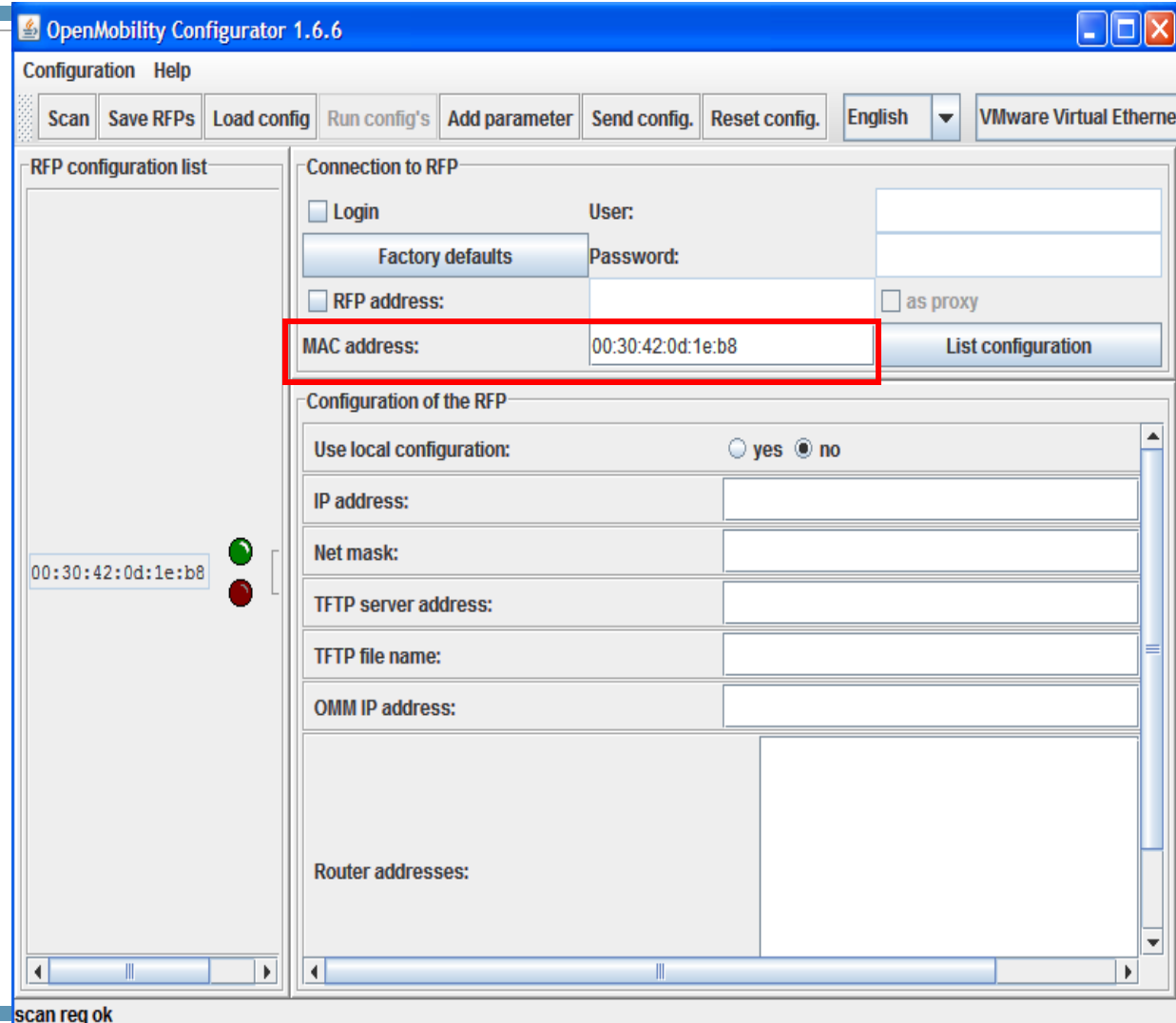


System Installation– OM Configurator (Scan)

(view in slide show)

» Open Mobility Configurator

- Click on the RFP MAC address
- The RFP “**MAC address**” field gets populated
- **You are now ready to configure the RFP!!**



System Installation– OM Configurator Parameters

» Configuring the RFP

• The following parameters need to be setup on the RFP and are on the initial screen.

- **Use Local Configuration = “YES”**
- **IP Address**
 - Assign an IP Address for this RFP
- **Net Mask**
- **TFTP Server Address**
- **TFTP File Name = “omm_ffsip.tftp”**
- **OMM IP Address**
 - Enter the primary RFP-32/34 OMM IP Address. If the installation does not call for multiple RFP-32/34 units, then this is IP address of this RFP-32/34.
- **Router Address**

The screenshot displays the OpenMobility Configurator 1.6.6 application window. The interface includes a menu bar with 'Configuration' and 'Help', and a toolbar with buttons for 'Scan', 'Save RFPs', 'Load config', 'Run config's', 'Add parameter', 'Send config.', and 'Reset config.'. A language dropdown is set to 'English', and the platform is identified as 'VMware Virtual Etherne'.

The main configuration area is divided into two sections:

- Connection to RFP:** This section contains a 'Login' checkbox, a 'User:' field, a 'Password:' field, an 'RFP address:' field, a 'MAC address:' field (displaying '00:30:42:0d:1e:b8'), and an 'as proxy' checkbox. A 'Factory defaults' button and a 'List configuration' button are also present.
- Configuration of the RFP:** This section includes a 'Use local configuration:' radio button group with 'yes' selected and 'no' unselected. Below this are several input fields: 'IP address:' (169.254.46.234), 'Net mask:' (255.255.0.0), 'TFTP server address:' (169.254.46.233), 'TFTP file name:' (omm_ffsip.tftp), and 'OMM IP address:' (169.254.46.234). A larger 'Router addresses:' field contains the value '169.254.46.1'.

On the left side, there is an 'RFP configuration list' pane showing a single entry with the MAC address '00:30:42:0d:1e:b8' and two status indicators (a green light and a red light).

At the bottom of the window, a status bar displays the text 'scan req ok'.

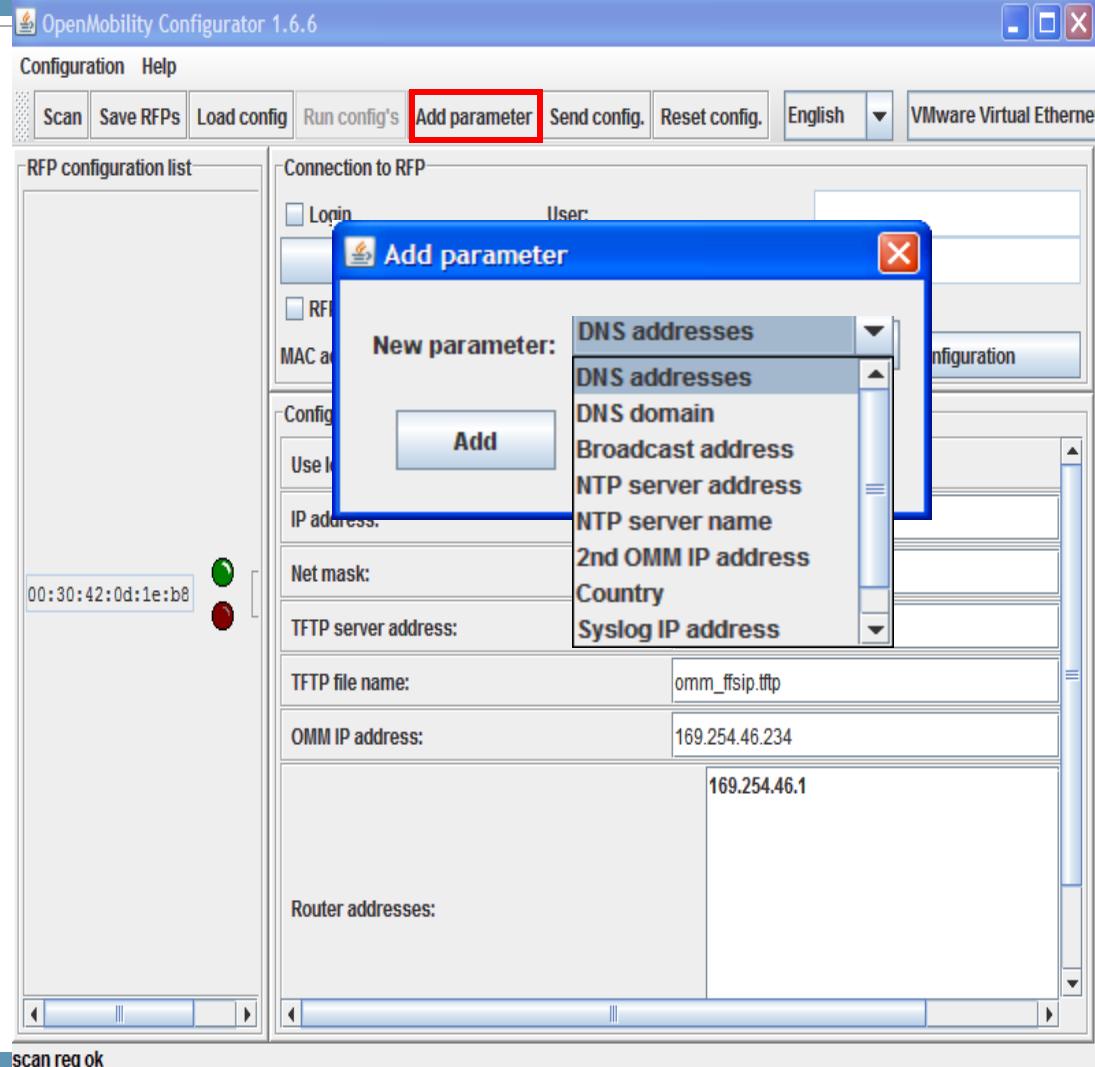
System Installation– OM Configurator Parameters

(view in slide show)

» Configuring the RFP

• The following parameters need to be added by using the “**Add Parameter**” button.

- **DNS Addresses**
- **DNS Domain**
- **Broadcast Address**
- **NTP Server Address**
- **NTP Server Name**
- **Country = 100**
- **2nd OMM IP Address**

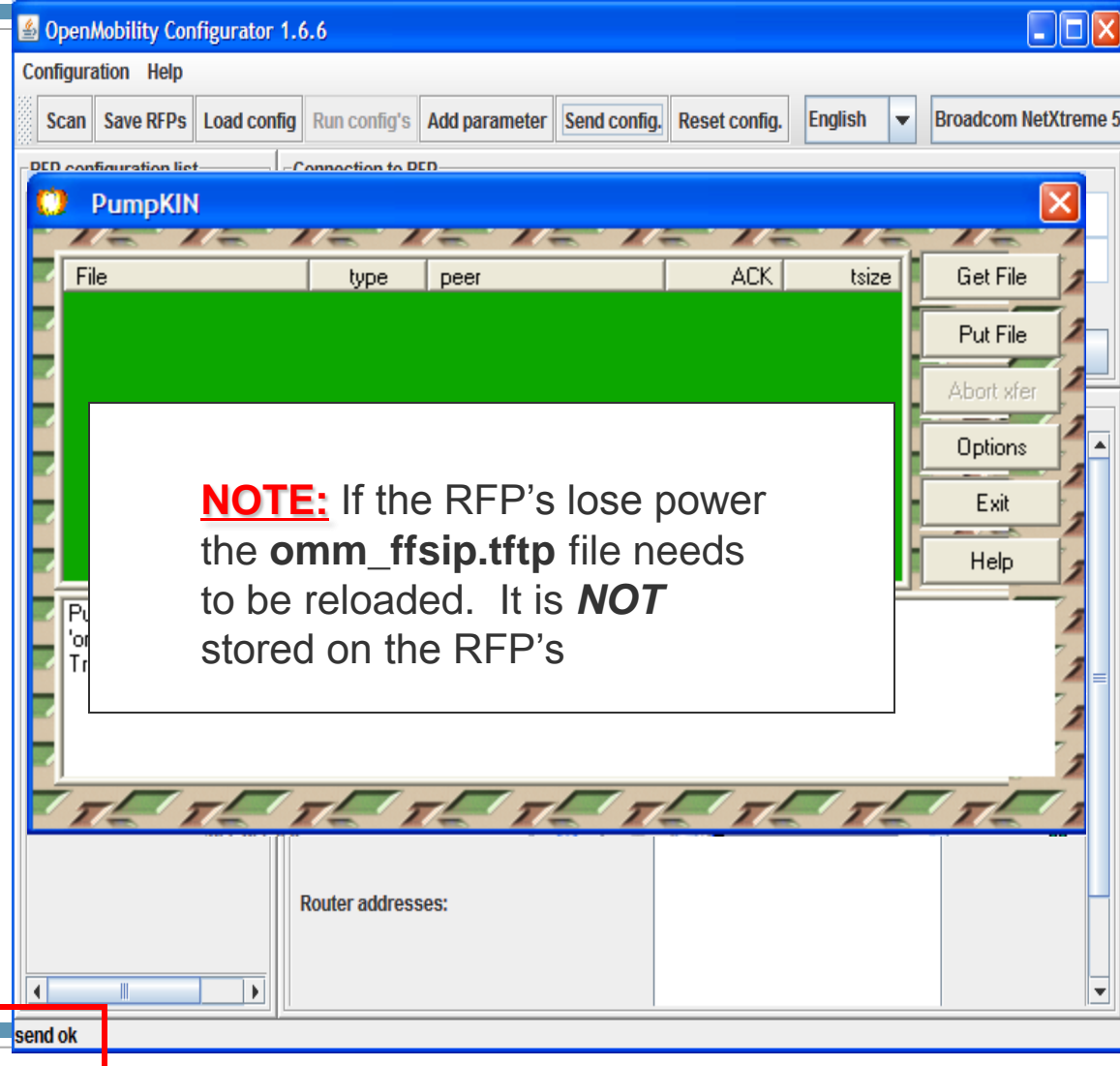


System Installation– OM Configurator Parameters

(view in slide show)

» Sending the Configuration

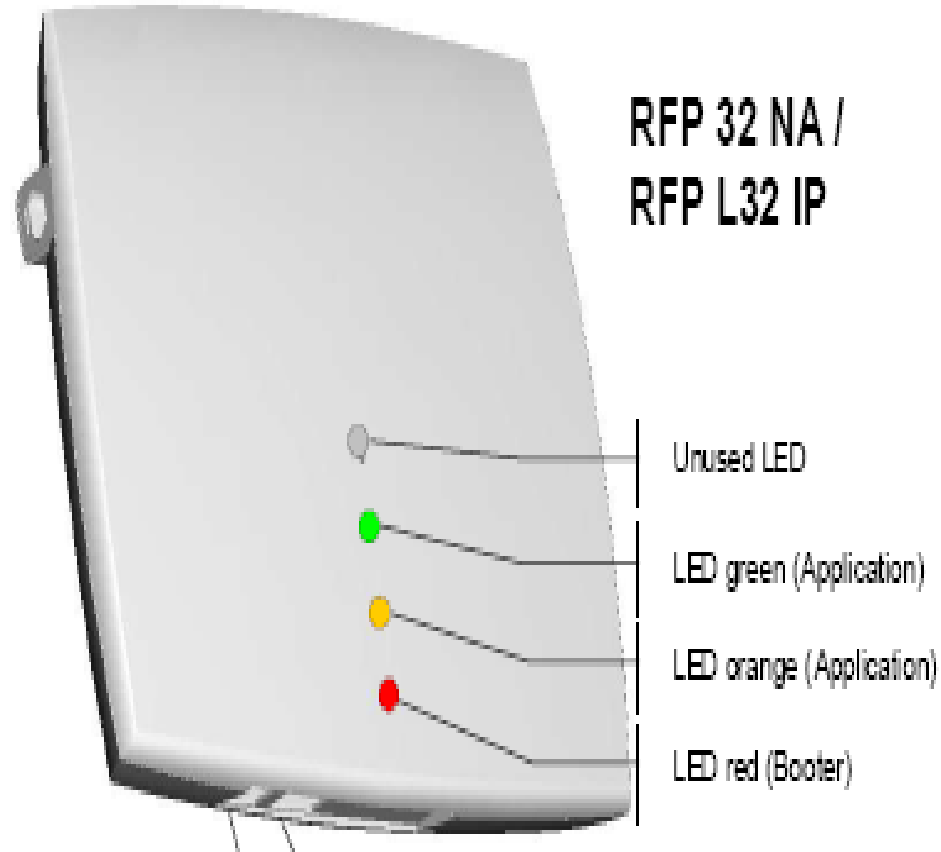
- Once all the fields are configured you press the “**Send config**” button to load the information into the RFP.
 - Make sure that the “**omm_ffsip.tftp**” file is loaded on the TFTP server
 - The “**send ok**” message appears at the bottom left corner when successful.
 - The RFP will download the “**omm_ffsip.tftp**” file from the TFTP server.
 - The **GREEN** LED on the RFP will then begin blinking.



System Startup – RFP Boot Process

» RFP Boot Process

Process State	LED Status
Booter (startup)	Red on
Booter (DHCP)	Red flashing (one flash every 2 seconds)
Booter (TFTP)	Red flashing (5 flashes every 2 seconds)
Application (DHCP)	Orange on
Application	Green flashing (one flash every 2 seconds)
Application	Green flashing (one flash per second)
Application	Green flashing (2 sec. on, 0.5 sec off)
Application	Green on



System Setup – OMM WEB UI

» System Setup – Open Mobility Manager

- The OMM is responsible for the call set-up and management of the Aastra SIP-DECT™ solution.
- There is only one OMM controlling a DECT cluster at one time.
- The OMM performs the following tasks:
 - Signaling gateway (SIP <-> DECT)
 - Facilitates system configuration modifications
 - DECT Management with:
 - Subscription
 - Registration
 - Authentication
 - Support for Handover, Roaming
 - Management of media streams between Radio Fixed Parts (RFP's)
 - Control of synchronization of the RFP's

OMM WEB UI - Login

» OMM Login

- Connection to the OMM is via a web browser (Explorer 6.0 or Mozilla Firefox 1.5 with frame support, JavaScript and cookies enabled)
- Enter the OMM IP address into a browser.
- The default username is “**omm**” and the password is “**omm**”
- Press the “**OK**” button
- The OMM service access is restricted to one active session at a time.
- The connection will automatically be dropped if the maintainer/installer stays connected for 5 minutes without any activity.

ASTR~~A~~

OpenMobility Manager
v1.6.6



Login

User name:

Password:

OMM WEB UI - Login

» OMM Login

- Press the “**Accept**” button for the End-user license agreement.

Aastra

Home Logout

System
Radio fixed parts
Portable parts
WLAN
System features
Info

End-user license agreement

BY CLICKING "ACCEPT", INSTALLING, COPYING, OR OTHERWISE USING ANY PART OF THE SOFTWARE (AS DEFINED BELOW), YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA. IF YOU DO NOT AGREE WITH THE TERMS OF THIS EULA, DO NOT INSTALL OR USE THE SOFTWARE.

Aastra Software End User License Agreement (EULA) for
OpenMobilityManager
2008/05/14

These license terms are an agreement between Aastra Telecom Schweiz AG or one of its affiliates (Aastra) and you. By downloading or installing the Software, or using the product containing the Software, you represent and warrant that you have read, understand, have the legal capacity to, and hereby agree to be legally bound by these terms and conditions. If you do not agree to all of these terms, then you may not download, install or use the software.

1. License. Subject to the terms and conditions of this Agreement, Aastra grants the original end user purchaser of the Software or the Aastra product containing the Software ("You") a nonexclusive license to use the Software in object form solely with the equipment for which the Software was intended or (where authorized in the applicable documentation) for communication with such product. This license may not be sublicensed, and is not transferable except to a person or entity to whom you transfer ownership of the

Accept

OMM WEB UI - Login

» OMM Login

- Enter a **“Full access”** password
- Choose the **“Password aging”** option.
 - None
 - 3 Months
 - 6 Months
- Press the **“OK”** button




Home Logout

System

- System settings
- SIP
- User account**
- Time zones
- Backup
- Radio fixed parts
- Portable parts
- WLAN
- System features
- Info

User account

Change passwords

 Currently the default password for 'Full access' is active! Please change the password first.

Local user account

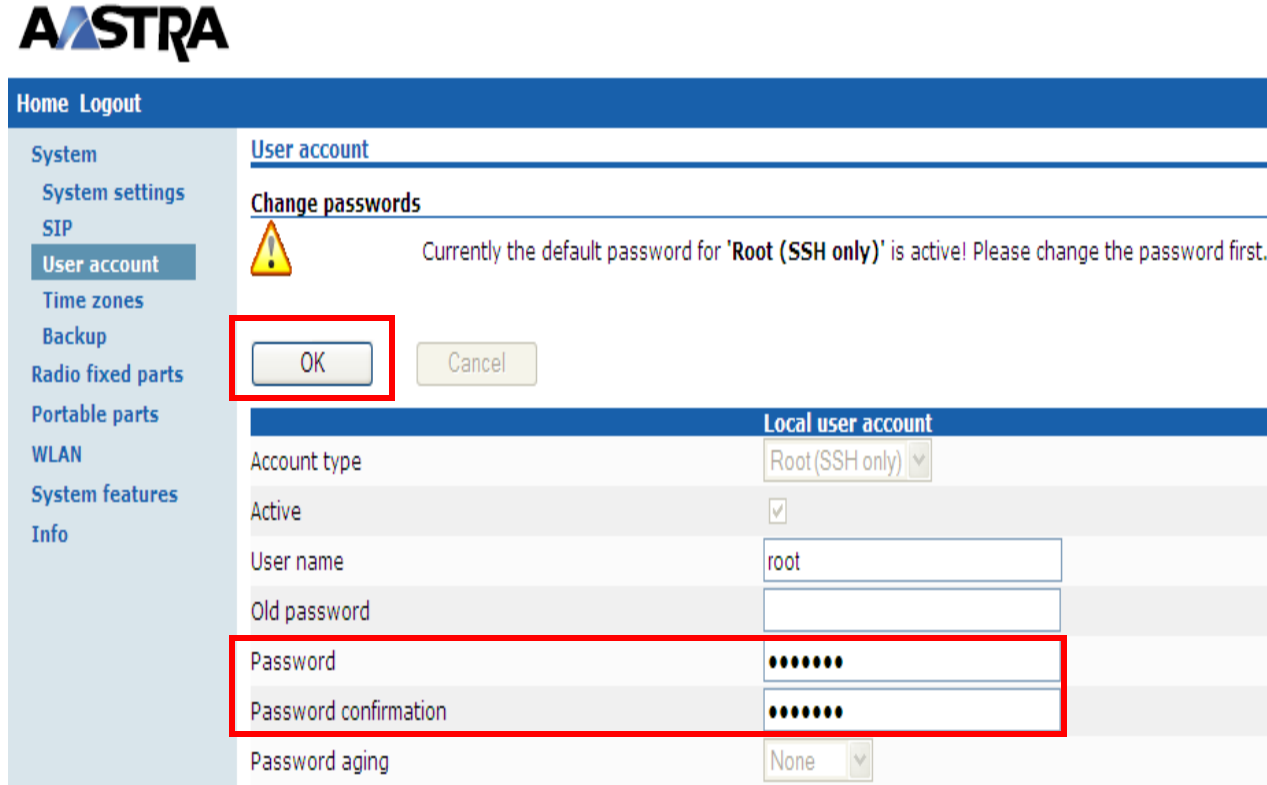
Account type	Full access
Active	<input checked="" type="checkbox"/>
User name	omm
Old password	
Password	••••••
Password confirmation	••••••
Password aging	None

None
3 Months
6 Months

OMM WEB UI - Login

» OMM Login

- Enter a **“Root (SSH only)”** password
- For diagnostic purposes only
- Choose the **“Password aging”** option.
 - None
 - 3 Months
 - 6 Months
- Press the **“OK”** button




Aastra

Home Logout

System
System settings
SIP
User account
Time zones
Backup
Radio fixed parts
Portable parts
WLAN
System features
Info

User account

Change passwords

 Currently the default password for 'Root (SSH only)' is active! Please change the password first.

Local user account

Account type	Root (SSH only) ▾
Active	<input checked="" type="checkbox"/>
User name	root
Old password	
Password	••••••
Password confirmation	••••••
Password aging	None ▾

OMM WEB UI – Main Screen

» OMM WEB UI Main Screen

– After login, the following options are available:

- System
- Radio Fixed Parts
- Portable Parts
- **WLAN – NOT USED**
- System Features
- Info

The screenshot displays the Aastra OMM WEB UI Main Screen. At the top, the Aastra logo is visible. Below it, there is a navigation bar with 'Home' and 'Logout' links. A sidebar menu on the left contains the following options: System, Radio fixed parts, Portable parts, WLAN, System features, and Info. The main content area is divided into several sections:

- Home**: A section with a warning icon and the text 'No standby OMM' and 'There is no OpenMobility Manager in standby mode configured'.
- System**: A section with a server icon and the text 'OpenMobility Manager system settings.'
- Radio fixed parts**: A section with a laptop icon and the text 'Adding, changing and deleting the radio fixed parts.'
- Portable parts**: A section with a mobile phone icon and the text 'Configuration of the portable parts.'
- WLAN**: A section with a WLAN icon and the text 'WLAN parameter configuration.'
- System features**: A section with a star icon and the text 'System features like digit treatment and directory.'

OMM WEB UI – System Settings

(view in slide show)

» OMM WEB UI

– System


▪ System settings

– Configure the following fields

- Assign a **“System Name”**
- Enter the **“PARK”** code that came with the unit on the CD with the dashes
- The DECT **“Regulatory domain”** should be **“US (FCC/IC)”**
- Select an optional **“DECT authentication code”** (any numeric code up to 8 digits)
- Set **“Date and Time”** (If the NTP server is available, then this step is not required. Even with an NTP server it is still ok to set it manually.)
- Press the **“OK”** button

System settings

No standby OMM

 There is no OpenMobility Manager in standby mode configured!

General settings


System name	Verizon
Remote access	<input type="checkbox"/>

IP parameters

ToS for voice packets	B0
ToS for signalling packets	B0
TTL (Time to live)	32

Standby OMM

IP address	-
Synchronized	-


 When changing the DECT regulatory domain all radio fixed parts will be reset.

DECT settings

PARK	1F-10-18-71-1F	(000)
Encryption	<input type="checkbox"/>	
DECT monitor	<input type="checkbox"/>	
Regulatory domain	US (FCC/IC) <input type="button" value="v"/>	
DECT authentication code		

Syslog

IP address	
Port	0 <input type="button" value="Default"/>

 When changing the WLAN regulatory domain all access points will be deactivated.

WLAN settings

Regulatory domain	None <input type="button" value="v"/>
-------------------	---------------------------------------

Date and time

Time zone	Eastern (EST UTC-5 DST) <input type="button" value="v"/>		
Local time in HH:MM:SS format	10	: 38	: 36
Local date in DD-MM-YYYY format	07	- 04	- 2009

OMM WEB UI – Standby OMM

» OMM WEB UI

– System

- **System Settings**
- **“IP Address”** displays the IP address of the standby OMM, if resiliency has been configured
- **“Synchronized”** Displays the communication status of the Master and Standby OMM. The green checkmark shows they are synchronized.

System settings

OK

Cancel

General settings

System name
Remote access

IP parameters

ToS for voice packets
ToS for signalling packets
TTL (Time to live)

Standby OMM

IP address
Synchronized



When changing the DECT regulatory domain all radio fixed parts will be reset.

DECT settings

PARK (31100303421740)
Encryption
DECT monitor
Regulatory domain
DECT authentication code

OMM WEB UI - SIP

(view in slide show)

» OMM WEB UI

- System
 - SIP
- Configure the following fields:
 - Proxy Server Address
 - Proxy Port of
 - Registrar Server Address
 - Registrar Port of
 - Registration Period = 3600
 - Outbound Proxy Address
 - Outbound Proxy Port
 - Check “User Agent info”
 - Select Codec Priority
 - Preferred codec 1 = G.729A
 - Preferred codec 2 = G.711u-law
 - Preferred codec 3 = G.711a-law
 - Select the “Preferred packet time”
Default = 30 msec
 - Check “Out-of-Band”
 - Select “Payload type” of 101
 - Press the “OK” button

SIP



Changing these settings may cause the OpenMobility Manager to

No standby OMM



There is no OpenMobility Manager in standby mode configured!

OK

Cancel

Basic settings

Proxy server	127.0.0.1
Proxy port	5060



Restart

Please be patient until the OpenMobility Manager has been restarted.



Preferred codec 4	None
Preferred codec 5	None
Preferred packet time	20 msec
Silence suppression	<input checked="" type="checkbox"/>

DTMF settings

Out-of-band	<input checked="" type="checkbox"/>
Method	RTP(RFC 2833)
Payload type	101

OMM WEB UI – Time Zones

(view in slide show)

- » OMM WEB UI
 - System
 - Time Zones
 - Provides the ability to customize the settings of a time zone, including daylight savings time
 - With the “**Configure Time Zone**” dialog the standard time and the daylight savings time (DST) of a time zone can be changed.

Time zone		
Name	Eastern	✓
ID	EST	✗
Standard Time		✓
UTC difference	-300 min	✓
Month	11 (0 = Not used)	✓
Day	0 (0 = Not used)	✗
Day of week	1 (0 = Not used 1 = Sunday 7 = Saturday)	✗
Week	1 (0 = Not used, 1 = First, 5 = Last)	✗
Hour	1	✓
Minute	0	✗
Daylight savings time		✗
Standard time difference	60 min	✓
Month	3 (0 = Not used)	✗
Day	0 (0 = Not used)	✓
Day of week	1 (0 = Not used 1 = Sunday 7 = Saturday)	✗
Week	2 (0 = Not used, 1 = First, 5 = Last)	✓
Hour	2	✓
Minute	0	✓

OK Cancel

OMM WEB UI – Backup & Restore

(view in slide show)

- » OMM WEB UI
 - System
 - “Backup”
 - Click on the “Save” button
 - “Restore”
 - Press the “Browse” button to find the file
 - Press the “Restore” button

The screenshot shows the Aastra OMM Web UI interface. The top navigation bar includes 'Home' and 'Logout'. A left sidebar menu lists various system settings: System, System settings, SIP, User account, Time zones, Backup (highlighted), Radio fixed parts, Portable parts, WLAN, System features, and Info. The main content area is titled 'Backup' and displays a warning message: 'No standby OMM' with a yellow warning icon and the text 'There is no OpenMobility Manager in standby mode configured!'. Below this, there are buttons for 'Save', 'Restore', and 'Re'. A 'File Download' dialog box is overlaid on the screen, asking 'Do you want to open or save this file?'. The dialog shows a file icon, the name 'config.omn.gz', the type 'WinZip File', and the source 'From: 169.254.46.234'. It includes 'Open', 'Save', and 'Cancel' buttons, and a checked checkbox for 'Always ask before opening this type of file'. A security warning at the bottom of the dialog states: 'While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. [What's the risk?](#)'

OMM WEB UI - Radio Fixed Parts

(view in slide show)

- » OMM WEB UI
 - Radio fixed parts
 - Press the “**New**” button
 - Enter the following information
 - RFP “**MAC address**” (6 bytes hex format, colon separated)
 - Location
 - Check the “**DECT settings**” box
 - Set the “**DECT cluster**” to “**1**”
 - Press the “**OK**” button

New radio fixed part

Please configure the WLAN regulatory domain on the system settings page.

Please configure a WLAN profile for this RFP type.

General settings	
MAC address	00:30:42:0d:1e:b8
Location	Confroom

DECT settings	
<input checked="" type="checkbox"/>	DECT cluster: 1

WLAN settings	
WLAN profile	[v]
Antenna diversity	<input checked="" type="checkbox"/>
Antenna	1 [v]
802.11b/g channel	1 [v]
Output power level	Full [v]

OK Cancel

OMM WEB UI - Radio Fixed Parts

(view in slide show)



OpenMobility Manager
v1.6.6

Home Logout



- System
- Radio fixed parts**
- DECT cluster 1
- Portable parts
- WLAN
- System features
- Info

Radio fixed parts

No standby OMM



There is no OpenMobility Manager in standby mode configured!

New

Import

Sorted by DECT clusters

Capturing unconfigured radio fixed parts

Start

Capture allowed:

DECT cluster 1: 1 Radio fixed part

	RFP-ID	Location	MAC address	IP address	HW type	Connected	Active
	00	Conf room	00:30:42:0D:1E:B8	169.254.46.234	RFP32 US	✓	✓


- The “**Connected**” and “**Active**” green checkmarks need to appear on all RFPs
- Add additional RFP’s to the cluster if required
- Also the 3rd LED from the top will turn solid green on ALL RFP’s that are added



OMM WEB UI - Radio Fixed Parts States

» States of an RFP



- **Synchronous**
 - The RFP is up and running. The RFP is synchronized with other RFPs in its cluster.
- **Active but Asynchronous**
 - The RFP has been able to contact the OMM but has not been able to synchronize to its neighbours yet. No DECT communication is possible. This phase should usually last only for a few seconds
- **Searching**
 - The RFP has lost synchronization to its neighbours. No DECT communication is possible. This phase should usually last only for a few seconds after starting up the RFP or the OMM. If this state lasts longer or is re-entered after being in a synchronous state this is an indication for a bad location of the RFP.
- **Inactive**
 - The RFP has connected to the OMM but the air interface has not been switched on yet. This phase should last only for a few seconds after starting up the RFP.
- **Not connected**
 - The RFP was configured but has not connected to the OMM yet.

	RFP-ID	Location	MAC Address	IP Address	HW Type	Active	Synchronous
 	00	Lab 1	00:30:42:0C:BD:41	172.30.206.120	RFP32	✓	✓

	RFP-ID	Location	MAC Address	IP Address	HW Type	Active	Synchronous
 	00	Lab 1	00:30:42:0C:BD:41	172.30.206.120	RFP32	✓	✗

	RFP-ID	Location	MAC Address	IP Address	HW Type	Active	Synchronous
 	00	Lab 1	00:30:42:0C:BD:41	172.30.206.120	RFP32	✓	🔍

	RFP-ID	Location	MAC Address	IP Address	HW Type	Active	Synchronous
 	00	Lab 1	00:30:42:0C:BD:41	172.30.206.120	RFP32	✗	-

	RFP-ID	Location	MAC Address	IP Address	HW Type	Active	Synchronous
 	00	Lab 1	00:30:42:0C:BD:41	-	-	-	-

OMM WEB UI – Portable Parts

(view in slide show)

» OMM WEB UI

- System
- **“Portable parts”**
- Press the **“New”** button
- Enter the following information
 - **Name**
 - **Number**
 - **IPEI**
 - Located on Handset under System Menu
 - **User Name**
 - Subscriber Line/Port from ICP
 - **Password**
 - Device password from ICP
- Press the **“OK”** button

New portable part

General settings	
Name	John Doe
Number	9782254000
IPEI	01271 0613665 7
DECT authentication code	
Additional ID	

SIP authentication	
User name	5262
Password	•••••
Password confirmation	•••••

OK Cancel

Do this for each DECT handset being added


OMM WEB UI – Portable Parts

(view in slide show)

- » OMM WEB UI
 - System
 - “Portable parts”
 - Press the “Start” button under “Subscription with configured IPEIs”
 - The “Subscription allowed” now has a green checkmark

Portable parts

No standby OMM

 There is no OpenMobility Manager in standby mode configured!

Subscription with configured IPEIs



Wildcard subscription

2 min

PARK: 31100303421740

Subscription allowed: ✓

1 (1) Portable part

	Name	Number	IPEI	Subscribed
 	John Doe	9782254000	01271 0613665 7	✗

You are now ready to subscribe the DECT handsets

Write down this PARK code. It is needed to complete the subscription on the DECT handsets

DECT 142 Handsets – Subscriptions Instructions

(view in slide show)

Portable parts

No standby OMM



There is no OpenMobility Manager in standby mode configured!

New

Import

Search

Subscription with configured IPEIs

Stop

PARK: 31100303421740

Wildcard subscription

2 min

Start

Subscription allowed: ✓

1 (1) Portable part

	Name	Number	IPEI	Subscribed
 	John Doe	9782254000	01271 0613665 7	✓

- When successful the green checkmark will show up next to the portable part in the OMM WEB UI

OK  Esc

Post-Installation

» Coverage Verification

- After the installation and system startup have been successfully completed, a coverage verification test should be completed.
 - Qualitative assessment of call quality under mobility
 - Call a second person on a land line, or a stationary handset located near the RFP
 - Verification of coverage by walking all critical areas
 - Verification of coverage in hand-off locations
 - Hand-offs should be seamless and unperceivable to the user



Thank you. Questions?