

Function Description

Device Management in Ascom Systems

Contents

1 Introduction	1
1.1 Device types	2
1.2 Abbreviations and Glossary	3
2 Overview	4
2.1 WinPDM	4
2.2 IMS2/UniteCM	4
3 Examples	5
3.1 Example: Create templates	5
3.2 Example: Change a Parameter Value for several handsets using a template	5
3.3 Example: Software Upgrade of all Devices	6
3.4 Example: Register new Handsets using a Bar Code Reader	6
3.5 Example: Replace a portable at breakdown	7
4 Operating Instructions.....	8
5 Related Documents	8
6 Document History	8

1 Introduction

Device Management makes it possible to handle parameters and software for devices in Ascom DECT and WLAN systems on-site on a central workstation or remotely.

This document gives a brief description of the functions provided by Device Management. It describes the Device Manager versions, the stand-alone Windows application (WinPDM), and the server-based application delivered in Ascom Elise products such as Integrated Wireless Messaging and Services (IMS2) and Unite Connectivity Manager (Unite CM), and how they are intended to be used.

Device Management is the general term of managing devices. Centralized Management implies that devices are managed from a central application. This means that both WinPDM and IMS2/Unite CM are Device Management applications, but only IMS2/Unite CM is a Centralized Management application.

Managing devices is important for anyone being responsible for portables and other devices. It should be simple to handle, and there are some typical situations often associated with managing portables and other devices in a wireless system. Typical situations are:

- Changing settings for devices
- Updating software for devices
- Replacing faulty handsets
- Adding new devices

Sometimes, this can result in problems such as:

- A large number of devices to keep control of
- Users are without a communication device for considerable time
- Time-consuming to upgrade
- All devices may not be upgraded
- Difficult to get an overview of the status of all devices

WinPDM and IMS2/Unite CM can manage large sets of devices that are identical apart from their call numbers and contains a solution for:

- Upgrade of device software
- Configuration of devices
- Database for storing device settings
- Upgrading without needing to collect all devices (IMS2/Unite CM)

A Device Management system with WinPDM or IMS2/Unite CM can be set up in many ways. The following two figures shows examples where chargers and portable devices are managed via WinPDM and IMS2/Unite CM.

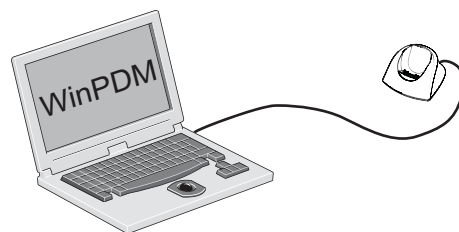


Figure 1. Desktop charger connected to a pc running a WinPDM.

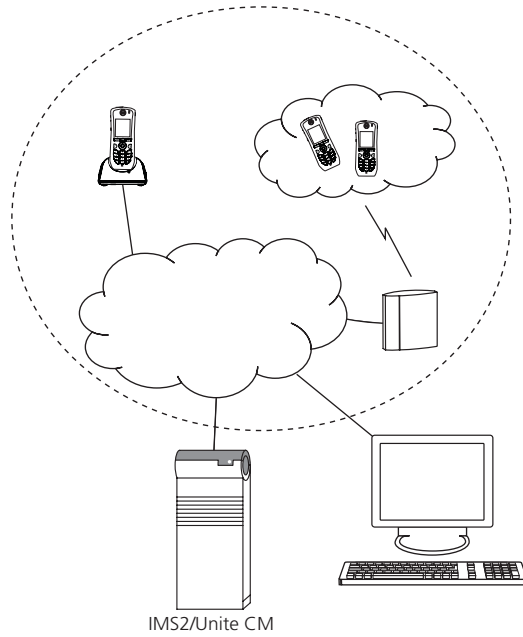


Figure 2. Centralized Management system with IMS2/Unite CM as Device Manager. |

1.1 Device types

Several kinds of devices can be used with the WinPDM and IMS2/Unite CM such as:

- Portable devices
- Chargers

Portable devices are for example:

- Cordless telephones
- Pagers and Alarm transmitters (WinPDM)

1.2 Abbreviations and Glossary

Centralized Management	Device management that is done from a central device manager.
DECT	Digital Enhanced Cordless Telecommunications
Device	Can be a portable device, desktop charger or charging rack.
Device Manager	An application that handles devices such as handsets and chargers. It exists in two variants; one stand-alone Windows application (WinPDM), and one server-based (delivered in Ascum Elise products like IMS2 and Unite CM).
ELISE	Embedded Linux SErver.
IMS2	Integrated Wireless Messaging and Services: a Unite module that enables wireless services to and from portable devices and chargers. It also includes the Device Manager.
Portable device	Cordless telephone, handset, alarm transmitters/transceivers etc.
Softkey	A pre-programmed key with the current function shown in the display.
Unite CM	Unite Connectivity Manager: Unite module that enables messaging and alarm handling in a system. It also includes the Device Manager.
WinPDM	Portable Device Manager Windows version a software application for initial configuration of the handsets.

2 Overview

2.1 WinPDM

Typical environments are a small site run by the customer or a multisite system run by a local representative.

Connection over RS-232 or USB in the case of portables connected via a charger.

Note: WinPDM is required for setting network authentication keys for WiFi handsets.

Paging is only available for WinPDM.

2.2 IMS2/Unite CM

Typical environments are medium and large sites, giving efficiency and full control.

IMS2/Unite CM is typically used in the following situations:

- IP direct in the case of chargers
- IP indirect in the case of portables placed in chargers or charging racks
- Over the air in the case of handsets supporting this technology

3 Examples

Descriptions of typical scenarios in which the Device Management products can be used follow below. These descriptions show how Device Management fits into and is used in a given system.

Please note that your Device Management application may be of another version than described here. Also, for the following use cases, there may be minor differences between WinPDM and IMS2/Unite CM.

3.1 Example: Create templates

Typical: Any system size.

A customer wants all handsets to have the same basic settings for all personnel such as ring signals, software keys etc.

When handling many devices it is convenient to set up a template that can be applied to many devices.

Use this procedure to set up the parameters that are to be used for several devices of a certain device type.

- 1 Create a new template in the WinPDM or IMS2/Unite CM.
- 2 Edit the parameters in the template and save the template.

The template can now be used for the chosen device type.

3.2 Example: Change a Parameter Value for several handsets using a template

Typical: Any system size.

It is sometimes necessary to change the behaviour of devices, for example a standardized ring signal, or setting up a functionality for a softkey for a certain category of personnel.

Example: All technicians on a site need a softkey on their portables to be reprogrammed. The softkey will be used to check the temperature in a stage of a process in a chemical plant. The parameter change in the portables is done over the air or when the portable is in the charger.

- 1 Create a new template in the WinPDM or IMS2/Unite CM.
- 2 Edit the parameters in the template.
- 3 Run the template on selected devices.
- 4 The handset will be synchronized at the next connection, either over the air or when placed in the charger.

Note: If you are using WinPDM, the synchronization has to be done one by one.

3.3 Example: Software Upgrade of all Devices

Typical: IMS2/Unite CM.

New software upgrades with improved functionality are sometimes provided for devices and therefore all devices of that device type need to be upgraded.

When new software for a portable is available, all portables can easily be upgraded to take advantage of the new functionality provided. For IMS2/Unite CM this is done for all handsets at the same time. For WinPDM these steps have to be repeated for each handset.

The following list shows the work flow in the IMS2/Unite CM.

- 1 In the IMS2/Unite CM, select the portable devices that are to be upgraded.
- 2 In the IMS2/Unite CM, use the feature "Upgrade software".
- 3 The portables are either upgraded automatically, or users with portables that are to be upgraded are requested to place their portables in the charger for start of upgrade.
- 4 In the IMS2/Unite CM in the Upgrade status column, it is shown which devices that are in status Downloading.
- 5 When the download is complete, the portables will reboot. On the display of the portable it will show that it is rebooting.
- 6 When the portables have rebooted and are online, they will report to the IMS2/Unite CM which software version they are using.

3.4 Example: Register new Handsets using a Bar Code Reader

Typical: Large System, IMS2/Unite CM.

When registering a large number of devices for a large system, a bar code reader simplifies the registration procedure and saves time. The purpose of this procedure is to register handsets in advance as a preparation for the next step, to associate numbers with devices.

- 1 Start IMS2/Unite CM and open the Create New Device feature.
- 2 Use the bar code reader to register a new device.
- 3 Repeat step 2 to register more devices and continue until no more devices are to be registered.

It is now possible to continue with the steps that are remaining to make the telephone operating in your system:

- Create Numbers for the devices
- Edit the parameters for the Numbers
- Associate Numbers with the devices

3.5 Example: Replace a portable at breakdown

Typical: Any system size.

If a portable device is to be replaced with a new device, it is possible to transfer its associated Number together with all its settings to a new device. The new device must be of the same model as the replaced device.

The "Associate with device" procedure transfers the information from one device to another.

- 1 If the device to be replaced is still working, make sure it is synchronized.
- 2 Turn off the old device.
- 3 Connect the new device to the WinPDM or IMS2/Unite CM.
- 4 Associate the number of the faulty device to the new device in the WinPDM or IMS2/Unite CM.
- 5 If a DECT PBX is used, register the new device in the PBX.

If the new device is online, it will immediately be updated with the selected Number and its settings. If the new device is not online, it will be updated the next time it is online.

4 Operating Instructions

See Installation and Operation Manual, PDM Windows Version, TD 92325GB, Installation and Operation Manual, IMS2, TD 92586GB, or Installation and Operation Manual, Unite CM, TD 92735GB, for a description on how to operate the WinPDM and IMS2/Unite CM respectively.

5 Related Documents

Installation and Operation Manual, IMS2	TD 92586GB
Installation and Operation Manual, Unite CM	TD 92735GB
Installation and Operation Manual, PDM Windows Version	TD 92325GB
Data Sheet, IMS2	TD 92585GB
Data Sheet, Unite CM	TD 92739GB
Data Sheet, PDM Windows Version	TD 92324GB

6 Document History

For details in the latest version, see change bars in the document.

Version	Date	Description
A	5 November 2008	First released version.
B	13 December 2010	• Replaced PDM Windows version with WinPDM, and PDM System version with IMS2/Unite CM throughout.