Care@Home™ PERS

CMS

Reference Manual

ESUG05071

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Table of Contents

1. Overview

The Care@Home™ PERS CMS application provides a tool to configure the CP parameters that define the Care@Home™ PERS operating environment. Care@Home™ PERS CMS allows you to configure the Care@Home™ PERS CP parameters prior to the Care@Home™ PERS system installation at the resident's premises.

The user can modify the CP parameter values as well as update the CP software and the firmware for its peripheral devices. These modifications can be performed locally at the customer premises or remotely by the monitoring station.

NOTE: This reference manual refers to Care@Home™ PERS CMS version 5.10.23 released with Care@Home™ PERS version 2.2.3.

1.1. The CP Configuration File

Each CP contains a set of parameters defining the CP configuration and other information for the firmware of the CP and its peripheral devices. This data defines and controls the operation of Care@Home™ PERS.

CMS provides you with the tools to save this set of configured parameters in an external CP configuration file, with the extension ***.cpf***.

The purpose of the ***.cpf*** file is two-fold:

- The ***.cpf*** file may be used as an offline backup to store a given set of configuration parameters and peripheral firmware information. The ***.cpf*** file can be kept indefinitely.
- The ***.cpf*** file allows you to distribute a given set of configuration parameters and peripheral firmware information to be used by multiple CPs, using the PERS CMS warehouse.

  For information on creating predefined CP configuration files to update multiple CPs, refer to Appendix B Care@Home™ PERS CMS Warehouse on page 133.

The tools to manage the CMS configuration file are:

-  - Transfer the data from the CP to CMS. Refer to 4.1 Main Action Icons on page 27.
-  - Transfer the data from CMS to the CP. Refer to 4.1 Main Action Icons on page 27.

- **Save** (in **File** menu): Saves the configuration parameter settings from CMS to a CP configuration file (***.cpf***). Refer to 4.2 File Menu Functions on page 29.
- **Open** (in **File** menu): Opens a CP configuration file (***.cpf***) and uploads the configuration parameter settings to CMS, and at the end of the session, automatically downloads to the CP. Refer to 4.2 File Menu Functions on page 29.

The data downloaded from the CMS application includes:

- The CP parameter values
- The peripheral device parameter values
- The operation-related configuration values

1.2. System Requirements

The following are the PC minimum requirements for the CMS application:

- 1 GHz processor
- 1 GB of RAM
- At least 1 Gb free disk space
- Windows XP, 7, 8, 8.1, and 10

2. CMS Implementation Process

Implementation of the Care@Home™ PERS CMS application includes:

- Running the installation
- Setting administrator privileges
- Identifying COM port
- Configuring a barcode reader

2.1. CMS Installation

Contact Essence professional services for the latest version of the CMS installation file.

To install Care@Home™ PERS CMS:

1. Copy the CMS installation execution file, ***setup<release number>.exe***, to the PC.
2. Run the CMS installation execution file and follow the on-screen instructions.

The Care@Home™ PERS CMS applications are installed and their icons appear on your desktop:

- 

Care@Home™ PERS CMS
- 

Care@Home™ PERS CMS Warehouse
- 

Care@Home™ PERS Remote Multiple Device Manager

2.2. Setting Administrator Privileges

Following the CMS installation, set the administrator property for the Care@Home™ PERS CMS application as follows:

1. Right click 

. A menu appears.
2. Click **Properties**. The **Care@Home™ CMS Properties** window appears.

3. On the **Compatibility** tab, under **Privilege Level**, mark **Run this program as an administrator**.

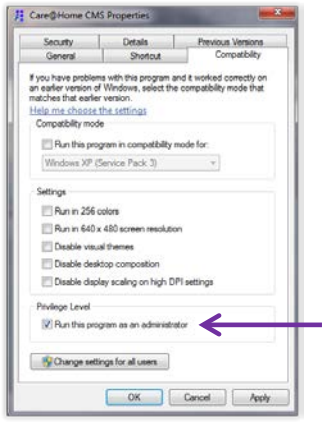


Figure 1: Properties Window Compatibility Tab

2.3. Identifying the Communications Port

Associate the communications (COM) port used to connect to the CP with the COM port selected in the **Connect** window of the Care@Home™ PERS CMS application.

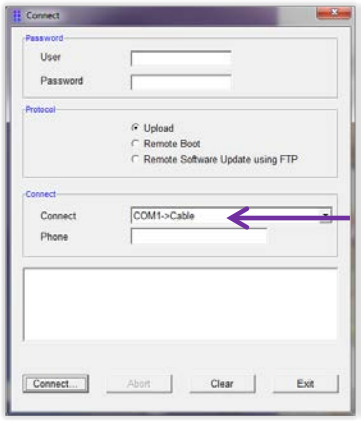
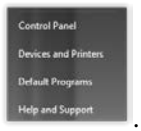
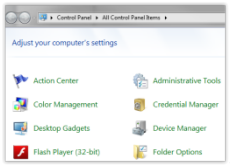


Figure 2: Care@Home™ PERS CMS Connect Window

To identify the COM port number used to connect to the CP:

1. Click  .
2. Click **Control Panel** option  .
3. Click the **Device Manager** option  . The **Device Manager** window appears, as in Figure 3 below.
4. Under **Ports (Com & LPT)**, locate the communications port to which the CP cable is to be connected.

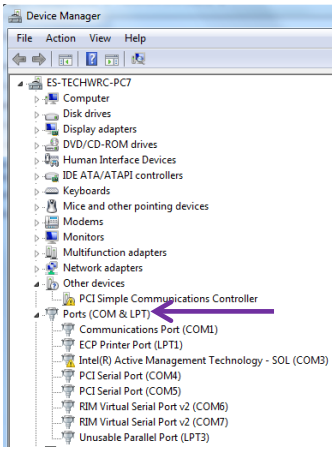


Figure 3: Ports Listed in the Device Manager

2.4. Configuring a Barcode Reader

To configure CMS to use a barcode reader as the default for adding devices, edit your configuration (***config.ini***) file, located at the following default path:

c:\Program Files (x86)\Essence\Care@Home CMS\

To edit the configuration file:

1. Open the ***config.ini*** file in **Notepad.**
2. Change the barcode parameter: **useBarcode** = 1.

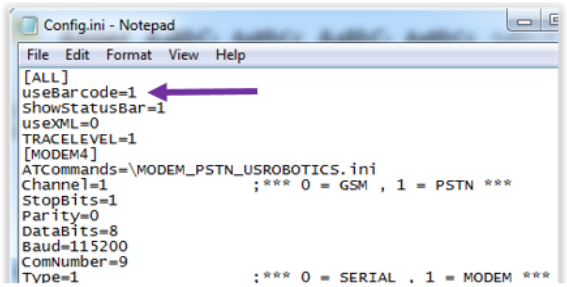


Figure 4: Barcode Parameter in the Configuration File

3. Save the changes.

3. Connecting to the CP

You connect to the CP using the **Connect** window of the Care@Home™ PERS CMS application. Configure Care@Home™ PERS CMS to ensure that the **Connect** window allows the connection your work environment supports:

- Local connection
- Remote landline connection
- Remote cellular connection

Edit your configuration file to define the work environment you require.

3.1. The Connect Window

The **Connect** window enables the following functionality:

- To allow the technical support personnel to perform maintenance and error recovery.
- To enable supervisor-level access to configure the CP parameters.
- To upload configuration parameter values and monitoring information from the CP to Care@Home™ PERS CMS.
- To activate the **Remote Boot** feature.

  Refer to 13.1 The Remote Boot Feature on page 105.

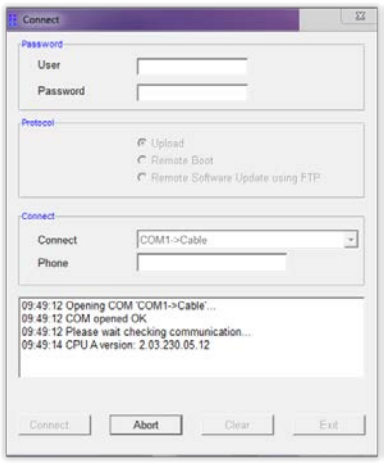


Figure 5: The Care@Home™ PERS CMS Connect Window

The **Connect** window appears automatically when you open Care@Home™ PERS CMS.

Table 1 below describes the **Connect** window parameters with instructions how to apply them.

Table 1: Connect Parameters

Name	Definition and Instructions	Required / Optional
User	Enter your supervisor-level username to enable configuration of supervisor-required CP parameters. **Note:** This is also for Essence technical support use.	Optional
Password	Enter your supervisor-level password to enable configuration of supervisor-required CP parameters. **Note**: This is also for Essence technical support use.	Optional
Protocol	**Upload** Select this protocol to establish a connection to the CP to maintain the CP settings.	Optional
	Remote Boot Select this protocol to activate the **Remote Boot** feature to update the software and firmware of the CP and the peripheral devices. **Note:** The **Remote Boot** window appears when this option is selected. See Figure 95 on page 106.	Optional
	Remote Software Update using FTP Select this protocol to perform a remote update of the software and firmware of the CP and the peripheral devices, using an FTP server. **Note:** The **Connect (RSU FTP)** box appears. See Figure 106 on page 116.	
Connect	Select the connection method. ■ For a cable connection, select a COM port. ■ For a dialer modem, select a PSTN modem port. ■ For a cellular connection, refer to 3.4.2 Remote Cellular Connection to the CP on page 22.	Required
Phone	Enter the phone number only for a remote connection.	Optional
(View system messages)	This field displays system messages and error messages issued during the connect process.	Display Only

NOTE: Consult Essence professional services to receive your supervisor-level user credentials.

Table 2 below describes the functionality of the action buttons at the bottom of the **Connect** window.

Table 2: The Connect Window Action Buttons

Name	Definition and Instructions
Connect	Click to establish a connection with the CP according to the protocol selected.
Abort	Click to abort the connection process. The button is disabled until the connection process begins.
Clear	Click to clear the message field of all displayed information, such as system messages and error messages.
Exit	Click to exit the **Connect** window. Care@Home™ PERS CMS enters "offline" mode, reserved for use by the Essence technical support personnel.

3.2. Configuring the Connection to the CP

The parameter values for the local COM port connection between the PC on which the Care@Home™ PERS CMS is installed and the CP are defined in the ***config.ini*** file.

If the COM port, used to connect the PC to the CP, is defined incorrectly, the configuration file must be edited, using **Notepad**, to correct the assignment statements accordingly.

For example, the user chooses to use serial port COM5 to connect the CP to the local PC.

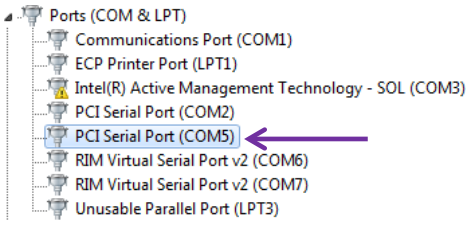


Figure 6: COM Ports on Local PC

In the configuration file, ***config.ini***, the SERIAL1 port is defined as COM1, as indicated in Figure 7.

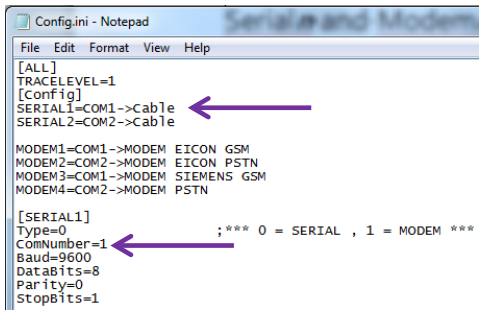


Figure 7: SERIAL1 Defined as COM1

The user must edit the configuration file, using the **Notepad** utility, to redefine the SERIAL1 port as COM5.

To edit the ***config.ini*** file, perform the following procedure, as illustrated in Figure 8:

1. Open the ***config.ini*** file in the **Notepad** utility.
2. For [Config], modify: SERIAL1=COM5->Cable
3. For [SERIAL1], modify: ComNumber=5
4. Save the file changes.

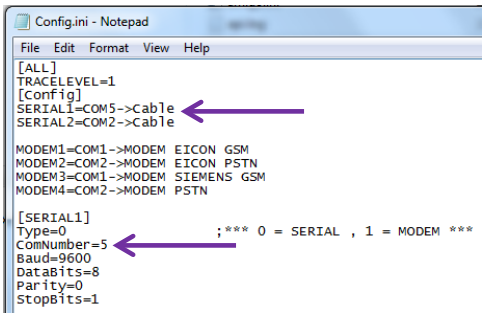


Figure 8: SERIAL1 Defined as COM5

When the user opens the **Connect** window, COM5 appears as the default COM port, as indicated in Figure 9.

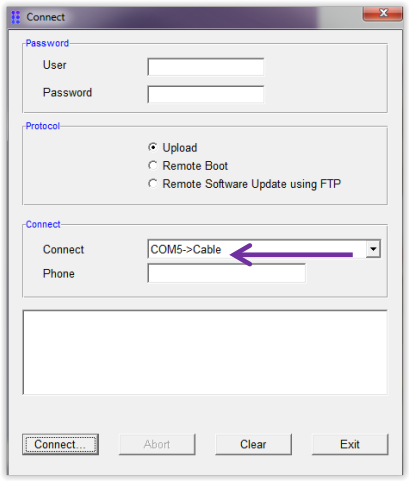


Figure 9: Connect Default Port COM5

3.3. Local Connection to the CP

The Care@Home™ PERS CMS can connect to the CP, using a local COM port.

To connect the CP to the local PC, use an Essence ES7000BACMS cable with a serial COM port (RS232). Contact Essence Professional Services personnel for information about this cable.

Figure 10: Essence ES7000BACMS Cable

When there is no RS232 COM port available on the PC, use an USB-RS232 adapter, such as:

- ESCL05019 mini-USB adapter
- USB Gear Serial adapter

For information about these adapters, see Appendix A on page 131.

NOTE: The CP must be turned on **before** connecting the cable to the RS232 COM port on the local computer.

For the RS232 COM port connection, there is a set of beeps that are sounded for different connect or disconnect actions as follows:

- A beep emitting a long rising pitch indicates a successful plug-in connection.
- A beep emitting a double low octave pitch indicates an unsuccessful plug in.
- A beep emitting a long falling pitch indicates a successful disconnect.

Refer to 3.7 Reconnecting to the CP on page 26.

3.4. Remote Connection

There are two ways to establish a remote connection between the Care@Home™ PERS CMS and the CP:

- Remote PSTN connection to the CP, using a landline (PSTN) Modem
- Remote Cellular connection to the CP, using a cellular (4G/3G/2G) Modem

3.4.1 Remote PSTN Connection to the CP

To connect to the CP remotely, use a PSTN landline modem.

Essence recommends that you use the USRobotics Dial-up External Modem (product code: USR5637), as shown in Figure 11.

Figure 11: USRobotics Landline Modem

For information about this modem, see the following link:

http://www.usr.com/en/products/56k-dialup-modem/usr5637/

The following example, using the USRobotics Landline Modem, describes the process of implementing a remote PSTN connection to the CP.

3.4.1.1 Installing the Landline Modem

To install a PSTN Landline modem, such as the USRobotics Landline Modem, perform the following procedure:

1. Plug the modem into an available USB port on the local PC. The Windows **Device Manager** identifies the device as a modem, as illustrated by Figure 12.

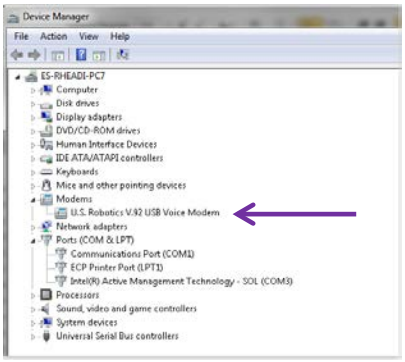


Figure 12: Device Manager Modem Recognition

2. Double-click on the U.S. Robotics line. The U.S. Robotics **Modem Properties** window appears.

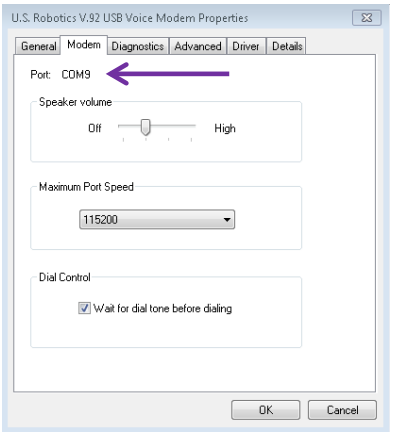


Figure 13: Properties Window Modem Tab

3. Click the **Modem** tab. The COM port to which the modem is assigned is displayed. In the example, in Figure 13 above, the **Device Manager** assigned the modem to **Port** "COM9".
4. If you want to change the COM port, perform the following procedure:
   a. Click the **Advanced** tab in the U.S. Robotics **Modem Properties** window. The **Advanced** window appears.

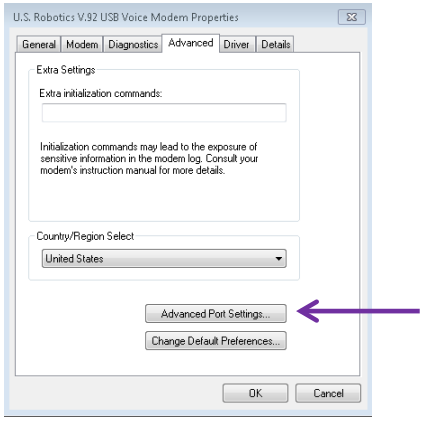


Figure 14: Properties Window Advanced Tab

   b. Click **Advanced Port Settings**. A window appears displaying the **Advanced Settings for COM9**.

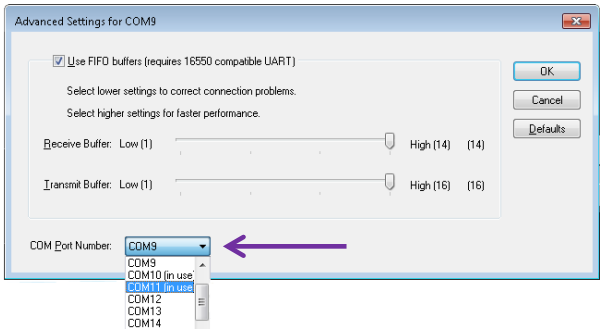


Figure 15: Advanced Settings for Modem COM Port

   c. Select the COM port you want to assign to the modem from the **COM Port Number** dropdown list.
   d. Click **OK** to save the re-assignment of the modem COM port.

3.4.1.2 Configuring Landline Modem COM Port

Continuing with the example of implementing the remote PSTN connection to the CP, COM9 is the COM port used by the PSTN Landline modem.

To edit the configuration file, ***config.ini***, to assign COM9 to the modem:

1. Open the configuration file, ***config.ini***, in the **Notepad** utility.
2. For [Config], modify: MODEM4=**COM9**->MODEM PSTN
3. For [MODEM4], modify: ComNumber=**9**
4. Save the file changes.

The figure below shows the configuration file, ***config.ini***, revised to assign the COM port, **COM9**, to the Landline PSTN Modem.

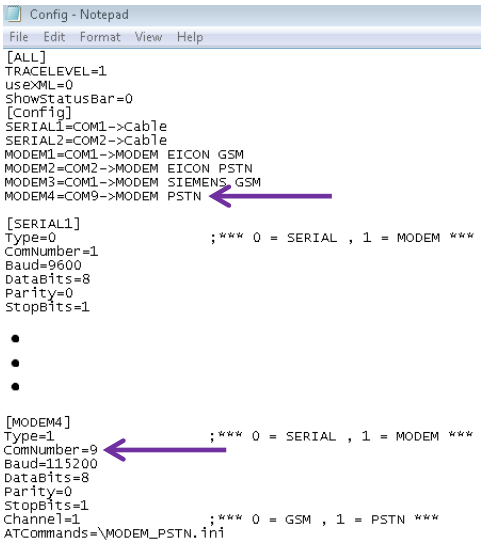


Figure 16: Configure Modem COM Port

3.4.1.3 Connecting the Remote Landline Modem

Continuing with the example of implementing the remote PSTN connection to the CP, connect the CP to the remote PSTN Landline modem.

To remotely connect the Care@Home™ PERS CMS to the CP:

1. Double click 

. Care@Home™ PERS CMS opens and the **Connect** window appears.
2. Click the dropdown list of the **Connect** field, as illustrated in Figure 17 below.
3. Select the COM port that connects to the PSTN Modem. In the example, the COM port for the PSTN Modem is COM9, as shown in Figure 18 below.
4. Enter the telephone (landline) number of the remote PSTN Landline CP. Enter the phone number in international telephone number format:

   Country code||Area code||Phone number

5. Click Connect....

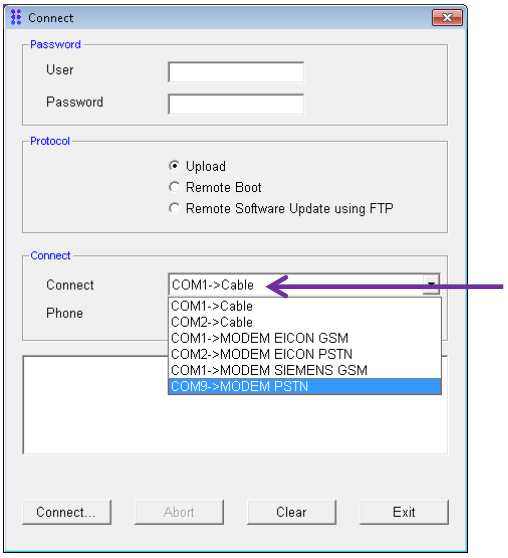


Figure 17: Choose COM Port to Connect to CP

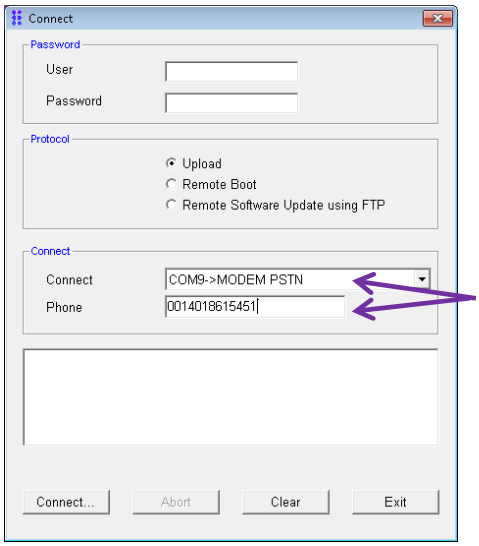


Figure 18: Connect via PSTN Modem

Refer to 3 Connecting to the CP on page 12.

3.4.2 Remote Cellular Connection to the CP

Connect to the CP remotely, using a remote cellular (4G/3G/2G) connection. This connection requires no modems or cables. The user must use the Windows **Remote Desktop** utility.

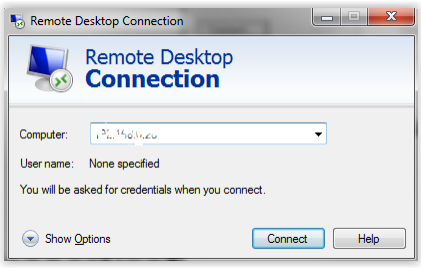


Figure 19: Remote Desktop Connection Window

The Windows **Remote Desktop** connection requires the user to connect to a server and to enter user credentials for accessing the server. The server connects to a cellular CP, using TCP protocol.

Figure 20: Enter User Credentials Window

NOTE: Consult Essence Professional Services personnel to receive the server IP address and the user credentials for accessing the server.

Following the successful remote connection to the Server, the **Remote Desktop** screen displays the Care@Home™ PERS CMS icon 

.

To establish a remote cellular connection from the CP to the CMS:

1. Connect to the Remote Server using the Windows **Remote Desktop** utility.
2. Double click 

. The Care@Home™ PERS CMS home page appears. The **Connect** window automatically appears.
3. Select the cellular (GPRS) connection method via "Amigo".
4. Enter the CP SIM phone number, without leading zeroes.
5. Enter the 4-digit CP DTMF code. The Default code is "1234".
6. Click Connect... . Following the successful completion of the connection procedure, the **Panel Info** window appears.

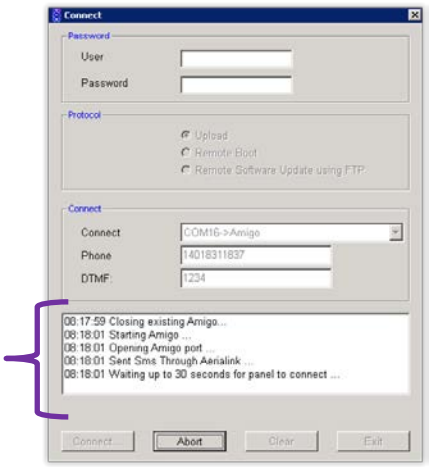


Figure 21: Remote Connection Successful

7. Click Upload << to upload the CP data to the CMS application.

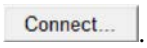
NOTE: All functionality is available using the remote connection. However, the response time for this type of connection is slower than direct connection types.

3.5. Establishing a CP Connection

To use the CMS application to manage your Care@Home™ PERS CP and peripheral devices functionality, you must first connect Care@Home™ PERS CMS to the CP.

To establish a connection to the CP:

1. Double click 

. Care@Home™ PERS CMS opens the home page. The **Connect** window automatically appears.
2. Select the **Upload** protocol option.
3. Select the COM port according to the connection method required:
   - **Local connection**: Refer to 3.3 Local Connection to the CP on page 16.
   - **Remote Landline connection**: Refer to 3.4.1 Remote PSTN Connection to the CP on page 17.
   - **Remote Cellular connection**: Refer to 3.4.2 Remote Cellular Connection to the CP on page 22.
4. If required by the connection method chosen, enter a phone number.
5. If required by the connection method chosen, enter the 4-digit CP DTMF code.
6. Click 

. Following the successful completion of the connection procedure, the **Panel Info** window appears.
7. Click 

to upload the CP data to the CMS application.

3.6. The Panel Info Window

Following the successful completion of the connection procedure, the **Panel Info** window appears. Click the buttons on the **Panel Info** window as needed.

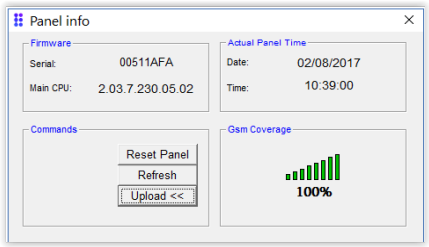
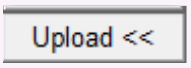
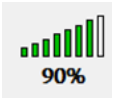


Figure 22: The Panel Info Window

Table 3 below describes the information and functionality of the **Panel Info** window.

Table 3: The Panel Info Data

Name	Data	Definition and Instructions
Firmware:	**Serial**	Serial number of the CP
	Main CPU	Firmware version of the CP

Name	Data	Definition and Instructions
Actual Panel Time:	**Date**	Date of the CP in DD/MM/YYYY format
	Time	Time of the CP in HH24:MI:SS format
Commands	**Reset Panel**	Click to restart the CP. The restart occurs at the end of the current session.
	Refresh	Click to load new status information of the CP to the **Panel Info** window.
		Click to upload the CP configuration parameter values to CMS from the CP. The **Remote Panel** window appears displaying a progress bar of the data transfer process.
GSM Coverage		Current strength of the GSM reception signal, for a 4G/3G/2G CP model only

When the connection is established, the connection information is displayed on the left-most part of the CMS home page.

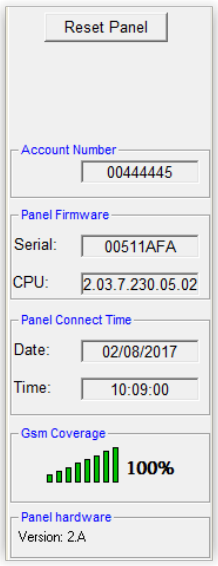


Figure 23: CMS Home Page Connection Data

The connection data includes the data displayed on the **Panel Info** window. The **Account Number** displayed is the account number currently assigned to the CP.

You can update the configuration parameter values of the CP by one of the following actions:

- Clicking **Reset Panel** on the **Panel Info** window
- Clicking **Reset Panel** on the left side of the CMS Home page
- Selecting the **Open** function in the **File** menu on the CMS Home page

At the end of the CMS session, the CP integrates the updated configuration parameter values into the CP functionality.

3.7. Reconnecting to the CP

When the connection to the CP fails, you must re-establish the connection to the CP.

There are several instances when it is necessary to reconnect to the CP:

- The CP is not connected to a working USB cable.

  The messages in the **System Messages** window show the communication checking process. This process terminates with an **Authentication Time-Out** message.

  Care@Home™ PERS CMS issues the **Authentication Time-Out** message.

- The user does not wait the acceptable time-period before attempting to reconnect to the CP.

  As in the previous instance, the connection process terminates with an **Authentication Time-Out**. Care@Home™ PERS CMS issues an error message.

- The COM port chosen in the **Connect** window is invalid.

  The COM port chosen, from the dropdown list in the **Connect** field, in the **Connect** window, is incorrectly defined in the configuration file.

  As in the previous instance, the messages in the **System Messages** window show that the attempt to access the COM port failed.

To reconnect the CP to the local PC:

1. Click  .
2. Remove the USB cable from the USB connection on the CP and **wait at least 40 seconds**. This allows the CP to reset itself.

NOTE: It is crucial to wait at least 40 seconds.

3. Reattach the USB cable to the USB connection on the CP. A successful plug-in beep is sounded. If the beep is not sounded, try again.

   For information about the CP beeps, refer to 3.3 Local Connection to the CP on page 16.

4. Click  .

4. Getting Started

Double click 

to open the Care@Home™ PERS CMS application. The CMS home page appears.

The Care@Home™ PERS CMS home page provides a **File** menu, action icons, and the **Main** navigator menu to operate within the application.

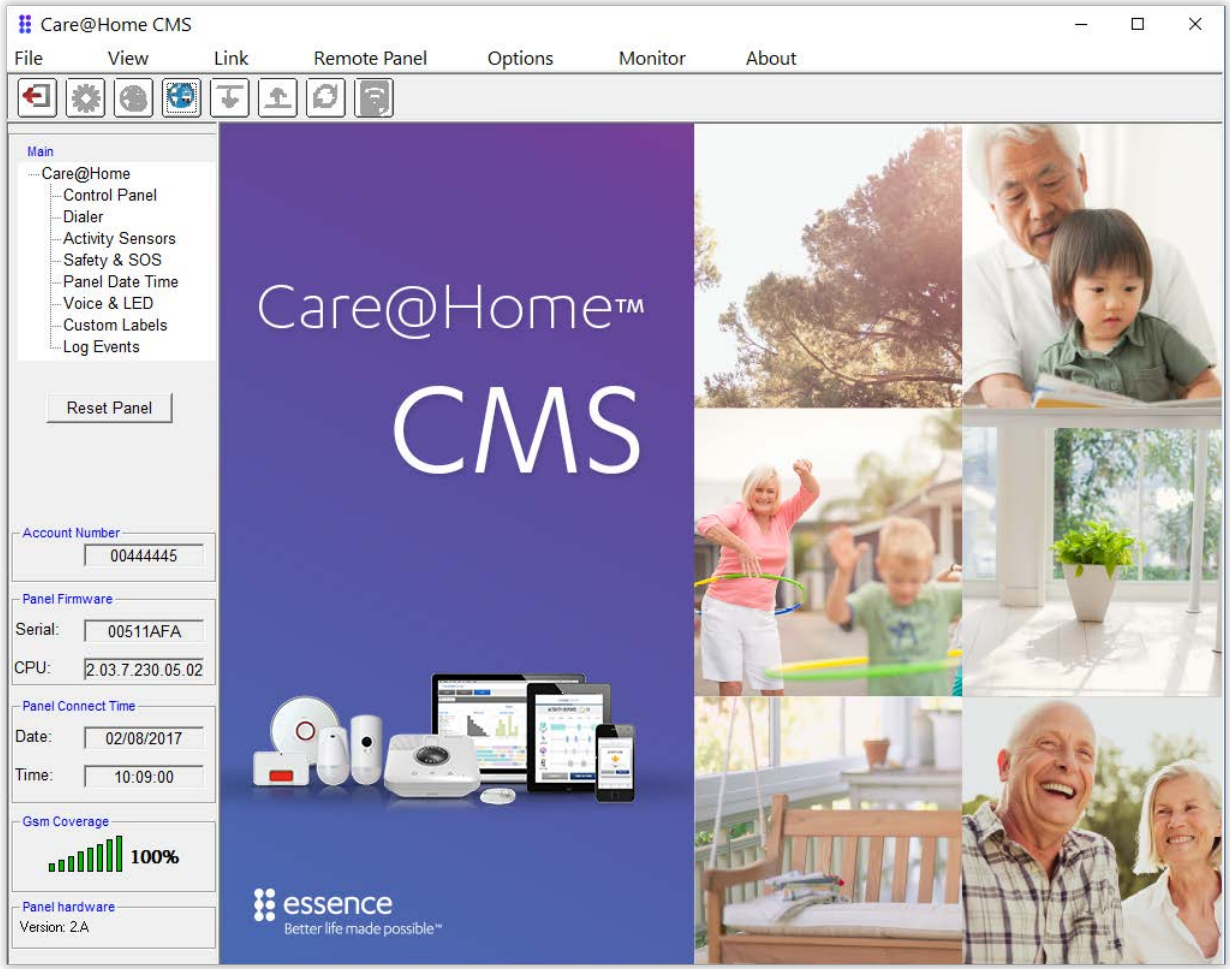


Figure 24: The Care@Home™ PERS CMS Home Page

4.1. Main Action Icons

The following is a list of the action icons on the CMS toolbar including the functionality description of each icon.

Table 4: Main Action Icons

Action Icon	Action Definition and Instructions
	Exit the Care@Home™ PERS CMS application.
	CMS properties: Revising COM port properties is reserved for Essence technical support personnel use only.
	Disconnect from the CP.
	Connect to the CP: Opens the **Connect** window. Refer to 3 Connecting to the CP on page 12.
	Download the configuration parameter settings from CMS to the CP.
	Upload the configuration parameter settings from the local configuration file (.***cpf*** file) to the CMS.
	Refresh: Load new status information to CMS.
	Monitor activity sensors, safety devices, and emergency devices connected to the CP.

Click  or the **Monitor** sub-menu on the menu bar to access the monitoring windows. The monitoring windows display the status information for the devices connected to the CP:

- The **Activity Sensors - Monitor** window is a consolidated view of the information about the sensor devices as displayed in the **Activity Sensors** module.

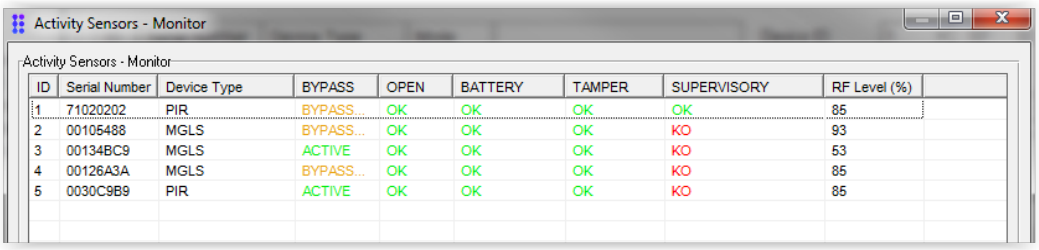


Figure 25: The Activity Sensors Monitoring Window

- The **Safety & SOS - Monitor** window is a consolidated view of the information about the safety and emergency devices as displayed in the **Safety and SOS** module.

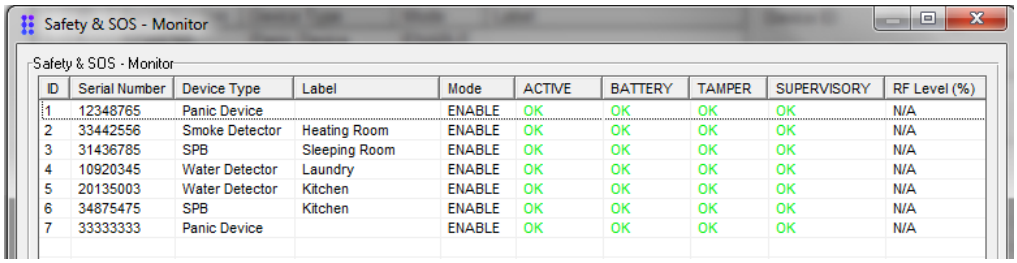


Figure 26: The Safety and SOS Monitoring Window

4.2. File Menu Functions

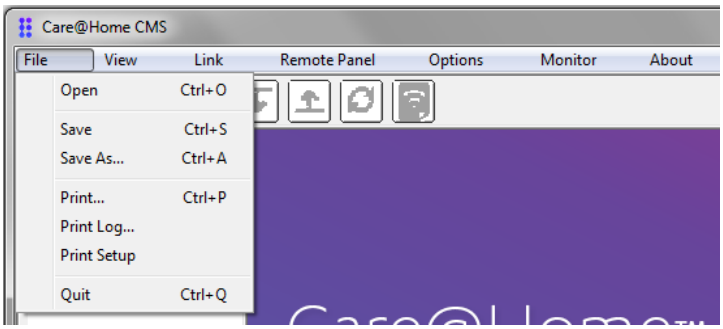


Figure 27: File Menu on Care@Home™ PERS CMS Home Page

Table 5 explains the functions in the **File** menu which allow management of the CMS parameters file (***.cpf*** file) for Care@Home™ PERS CMS.

Table 5: File Menu Parameters

Name	Definitions and Instructions
Open	Locate and "open" the local *.**cpf*** file on the PC to be uploaded to CMS, using the **Windows CMS File Dialog** box.
Save	Save the current configuration parameter settings to a local ***.cpf*** file using the same file name. If the ***.cpf*** file is a new file, use the **Save As...** function.
Save as	Save the current configuration parameter settings to a new local ***.cpf*** file with a new file name.
Print...	Produce an external file or hardcopy of the configuration parameter settings. Refer to 4.2.3 Print... Function on page 31.
Print Log...	Refer to 12.7 Print Log on page 103.
Print Setup	Set the printer settings to produce a hardcopy of the configuration parameter settings. Refer to 4.2.5 Print Setup Function on page 31.
Quit	Select this function to exit Care@Home™ PERS CMS. A window appears to confirm the exit request. Refer to 4.2.2 Quit Function on page 30

4.2.1 Open Function

The **Open** function not only locates and opens the ***.cpf*** file but also automatically uploads the configuration parameter settings to the CP, at the end of the session.

4.2.2 Quit Function

The **Quit** function verifies that the changes made during the CMS session were updated and/or saved, before allowing you to exit CMS.

To exit CMS:

1. In the file menu, click **Quit**.
2. If you are connected to a CP, a message appears prompting you to confirm the exit request. Click **Yes** to exit CMS.
3. If open issues remain, the application displays several caution messages to prompt you to confirm that you are aware of these issues.
   Click **OK** to close these messages and exit CMS.

4.2.3 Print... Function

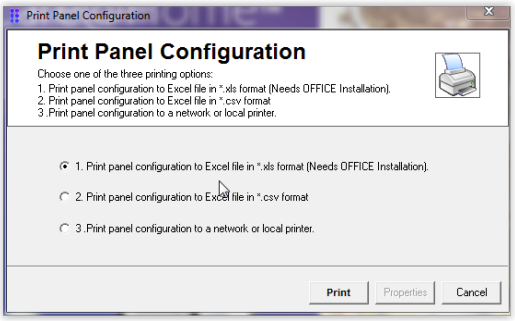


Figure 28: The Print Panel Configuration Window

The **Print...** function opens the **Print Panel Configuration** window. This function provides the tools to choose the media format to print the CP data. You can choose whether to produce an Excel file, a ***.csv*** (comma separated values) file, or a hardcopy of the configuration parameter settings.

4.2.4 Print Log... Function

The **Print Log...** function has same functionality as in the **Log Events** module. Refer to 12.7 Print Log on page 103.

4.2.5 Print Setup Function

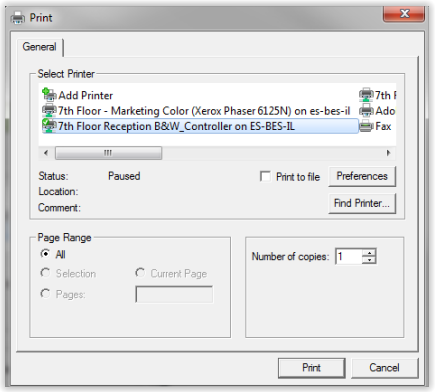


Figure 29: The Print Setup Window

The **Print Setup** function opens the **Print** setup screen, as shown in Figure 29. Select the printer and the other print-related settings to produce a hardcopy of the configuration parameter settings and other information.

4.3. The Main Navigator Menu

The **Main** navigator menu provides a user-friendly guide to access the modules in Care@Home™ PERS CMS.

The following is a list of the modules in the Care@Home™ PERS CMS application, including a description of each module's purpose:

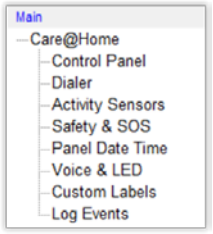


Figure 30: The Main Navigator Menu

- **Control Panel** – This module provides the tools to configure the CP's main parameters.

  Refer to 5 The Control Panel Module on page 34.

- **Dialer** – This module provides the tools to define the communication methods, such as phone numbers, IP addresses, and ports, and to manage the flow required to communicate with a monitoring station.

  Refer to 6 The Dialer Module on page 53.

- **Activity Sensors** – This module provides the tools to manage and control the activity sensors installed on the customer premises.

  Refer to 7 The Activity Sensors Module on page 61.

- **Safety and SOS** – This module provides the tools to manage and control the safety and emergency devices installed on the customer premises.

  Refer to 8 The Safety & SOS Module on page 68.

- **Panel Date Time** - This module allows the operator to set the local time of the CP internal clock.

  Refer to 9.4 Manual Update Using the Panel Date Time Module on page 82.

- **Voice & LED** – This module provides the operator with a tool to define which type(s) of announcements are to be used, to manage the vocal announcements for the resident, and to control the CP LEDs.

  The reminders announce:

- When the residents should take their medication
- The schedule time of an appointment
- The time transportation should arrive to take a resident to an appointment or meeting
- Wake-up calls like an alarm clock
- Random requests from the operator for the residents to test their emergency pendants

Refer to 10 Voice & LED Module on page 85.

- **Custom Labels** - This module provides the tools to define and manage the personalized labels, defined by the user, to label areas on the customer premises not included in the list of possible areas provided by the application.

  Refer to 11 Custom Labels Module on page 97.

- **Log Events** – This module provides the tools to view the log of events and activities recorded by the CP for a given time-period.

  Refer to 12 The Log Events Module on page 100.

5. The Control Panel Module

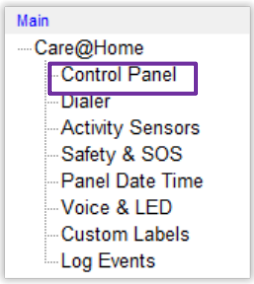


Figure 31: Access to the Control Panel Module

Click **Control Panel** on the **Main** navigator menu. The **Control Panel** module is the tool that allows you to configure the settings for the Care@Home™ PERS CP installed on the resident's premises.

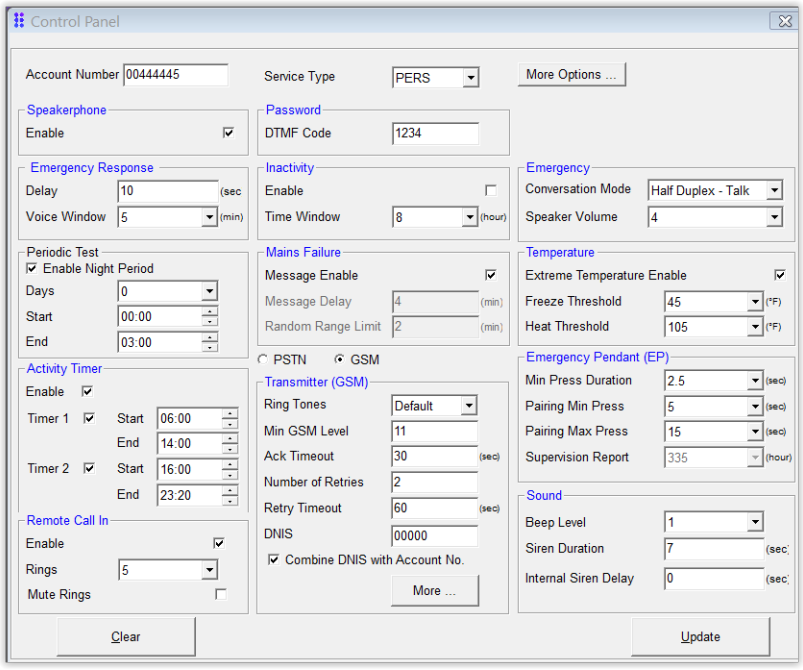


Figure 32: The Control Panel Module

5.1. Account Number

The **Account Number** is a unique 8-digit integer, used as the required CP identification number, assigned to a CP by the monitoring station.

5.2. Service Type

The PERS service type is the product offering of Care@Home™ PERS.

When a PERS ***.cpf*** file is uploaded or a PERS CP is connected to the CMS:

- The **Service Type** parameter displays **PERS**.
- The CMS user interface settings are configured to accommodate PERS functionality.
- The More Options ... window displays an extension of the CP configuration specific to PERS functionality

Caution: For Care@Home™ PERS CMS, the PERS service type must be selected.

The CMS application described in this reference manual is for the PERS service type.

Other service types are associated with the Care@Home™ analytics functionality. When one of these service types is selected, CMS activates functionality specific for a cellular (4G/3G/2G) centric configuration. The CMS user interface changes to accommodate the Care@Home™ analytics functionality.

For information about the Care@Home™ analytics functionality in CMS, see the ESUG05074 Care@Home™ CMS Reference Manual.

5.3. More Options...

The CP extended configuration includes the following parameter categories:

- PERS configuration including debug logging
- DTMF configuration
- VPD configuration
- EPA configuration

To revise the CP configuration:

1. Click More Options ... . The **Control Panel Configuration Extension** window appears.

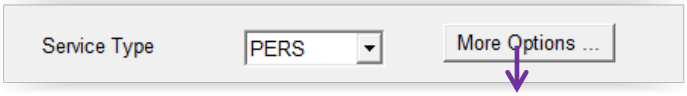


Figure 33 – Access the Control Panel Configuration Extension

2. Click the tab you want to edit and enter the values for the parameters on the tab.
3. Click **Update** to add the revised configuration parameter values to the CP configuration.
4. Click **Close** to exit the **Control Panel Configuration Extension** window.

5.3.1 PERS Parameters

The PERS parameters define PERS functionality at CP level.

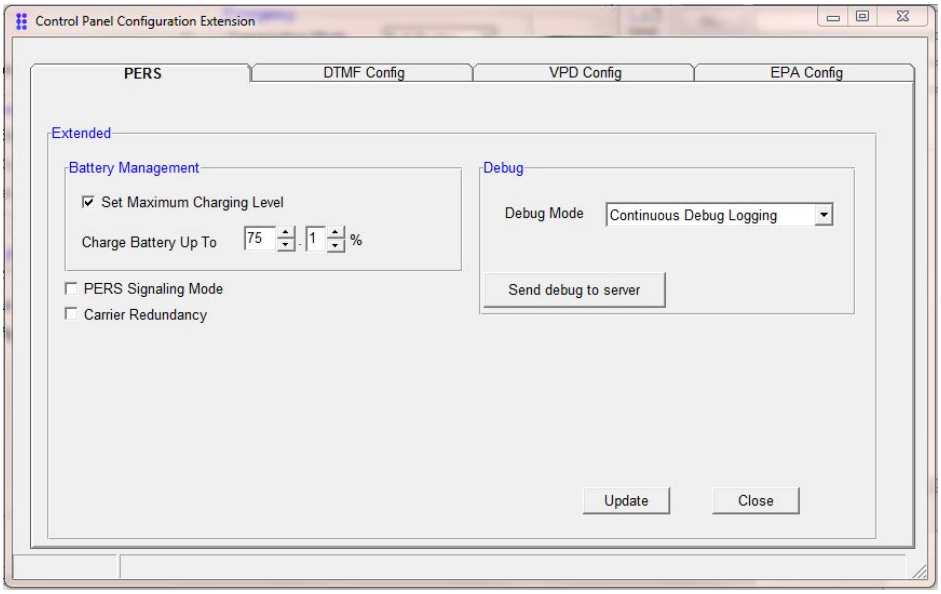


Figure 34: PERS Configuration Parameters

The following table describes the CP parameters specific to the PERS service type.

Table 6: PERS Parameters

Name	Definition and Instructions		Data Values
Battery Management	**Set Maximum Charging Level**	Mark to allow setting the maximum battery charging level. Clear to allow the default maximum battery charging level.	Set level = Marked Use default level = Cleared
	Charge Battery Up To	Select the maximum battery charging level.	
PERS Signaling Mode	Note: For **PSTN** communications channel only Mark to force the CP to use only the **Voice Signaling** dialer. This option is used when only the **Voice Signaling** dialer can reach the monitoring station. Note: The CP sends only medical alarm (MA) messages.		Enable = Marked Disable = Cleared
Carrier Redundancy	Note: For CP **GSM** models with **GPRS SIA IP** communications channel only Mark to enable the CP to send messages to the same third-party receiver, using two different IP addresses.		Enable = Marked Disable = Cleared
Debug For Essence Professional Services personnel only	**Disable** Select this option to exit debug mode and resume regular operations.		Dropdown list
	Continuous Debug Logging: Select this option to enable the CP to log events continuously, sending the log files to the debug server whenever the buffer is full.		
	One-time Debug Logging: Select this option to enable the CP to log events only until the buffer is full. The CP sends the log file to the debug server and stops logging events.		
	Click to trigger the CP to: ■ Send the current log file to the debug server ■ Stop logging events.		Send debug to server

5.3.2 DTMF Configurations

When you:

- Upload information from a CP, you see the DTMF keys as configured in the CP
- Download information to a CP, the downloaded information is from the **DTMFConfig.ini** file
- Open a **.cpf** file, the default is shown for each DTMF configuration setting.

The purpose of the **DTMF Configurations** tab is to configure DTMF-related functionality:

- To define the telephone keys to use for the conversation flow, through the CP, between the service provider operators and the resident
- To set the period when the DTMF is blocked for emergency alarm calls through the CP

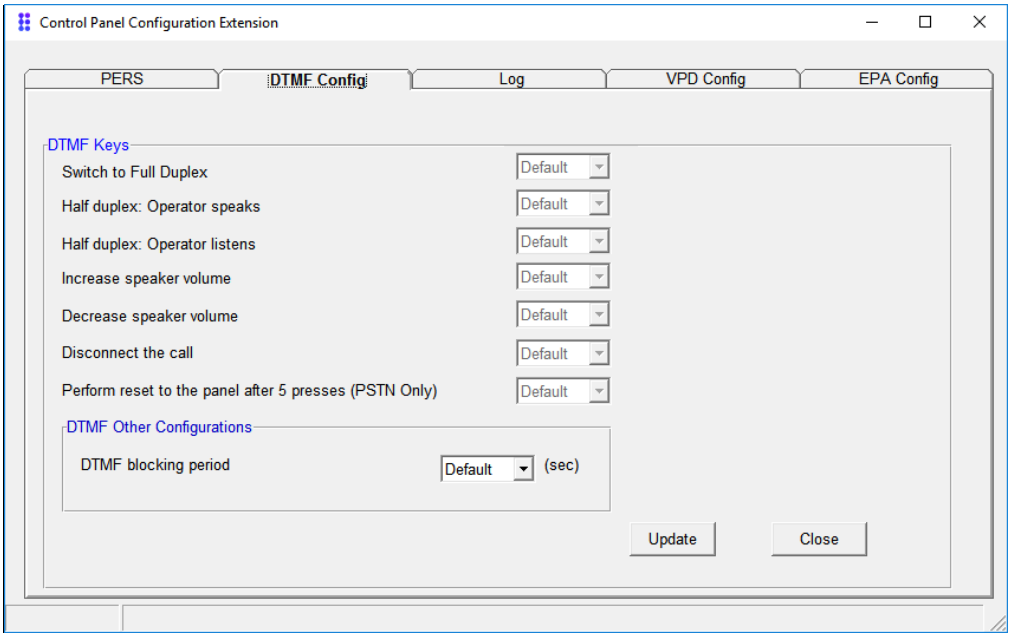


Figure 35: DTMF Parameters

The DTMF configuration file (***DTMFConfig.ini***) file is located at the following default path:

c:\Program Files (x86)\Essence\Care@Home CMS\

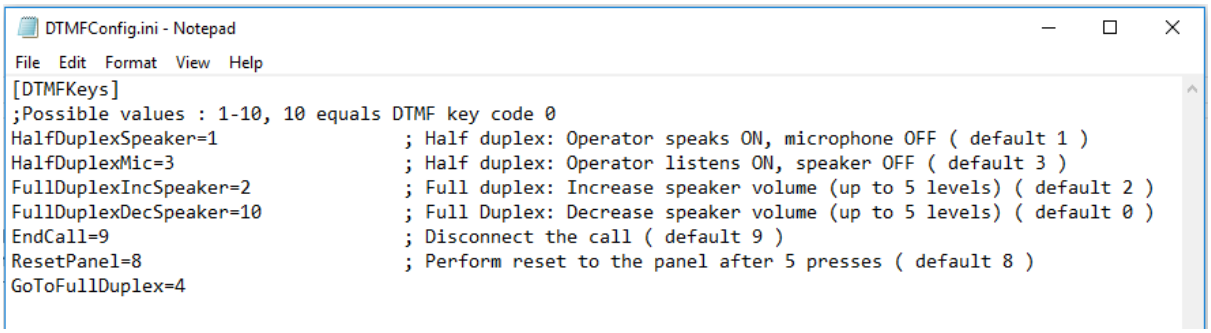


Figure 36: DTMF Configuration File

The following table describes the DTMF configuration parameters.

Table 7: DTMF Configuration Parameters

Name	Definition and Instructions	Data Values	Required / Optional	Default
DTMF Keys	Switch to Full Duplex	Number (1), Possible values: 1-10 **Note:** 10 equals DTMF key code 0	Display Only **Note:** Data values are set via the ***DTMFConfig.ini*** file	4
	Half duplex: Operator speaks			1
	Half duplex: Operator listens			3
	Increase speaker volume			2
	Decrease speaker volume			0 (10)
	Disconnect the call			9
	Perform reset to the panel after 5 presses (PSTN only)			8
DTMF blocking period	This feature is used during an emergency call, for a given time-period, to intercept the DTMF codes sent to the CP. The purpose is to prevent the CP from acting according to these DTMF codes. **Note:** The DTMF codes are sent when the monitoring station is transferring the call to the operator assigned to answer the emergency call.	Dropdown List Values: 1-60 seconds and "Default" **Note:** Default – The blocking period is disabled. All DTMF codes are received by the CP.	Required	Default

5.3.3 VPD Configuration Parameters

The purpose of the **VPD Configuration** tab is to configure VPD-related functionality at CP level. For example, the functionality defined by the following parameters applies to all the VPDs installed on your premises.

By default, the VPD trigger phrase must be recognized more than once with a 10-second wait between phrase recognitions. You can override this default using the following parameters.

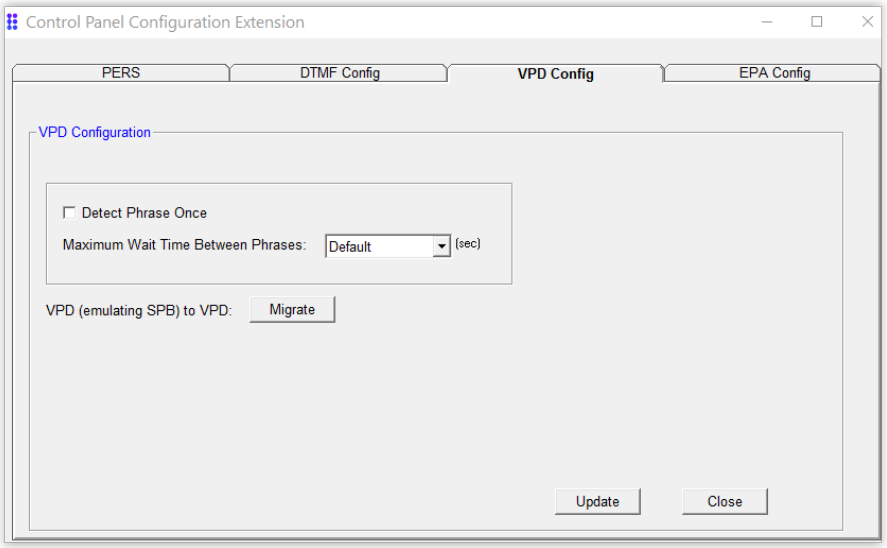


Figure 37: VPD Parameters at Panel Level

The following table describes the PERS VPD-related parameters.

Table 8: VPD Parameters at CP Level

Name	Definition and Instructions	Data Values	Default
Detect Phrase Once	Mark if the trigger phrase can be recognized at least once to trigger an emergency event. **Note:** If marked, **Maximum Wait Time Between Phrases** is disabled and assigned a value of 0 seconds.	Enable = Marked Disable = Cleared	Cleared
Maximum Wait Time Between Phrases	Enter the maximum time (in seconds) required to wait from the first time the trigger phrase is recognized until the next time the trigger phrase is recognized.	Values: (seconds) Default, 10 - 20	Default
VPD (emulating SPB) to VPD	Click **Migrate** to convert the VPDs that are emulating SPBs to full VPD functionality.	Migrate	

5.3.4 EPA Configuration Parameters

The purpose of the **EPA Configuration** tab is to configure EPA-related functionality at CP level. For example, the functionality defined by the following parameters applies to all the EPAs learned on your CP.

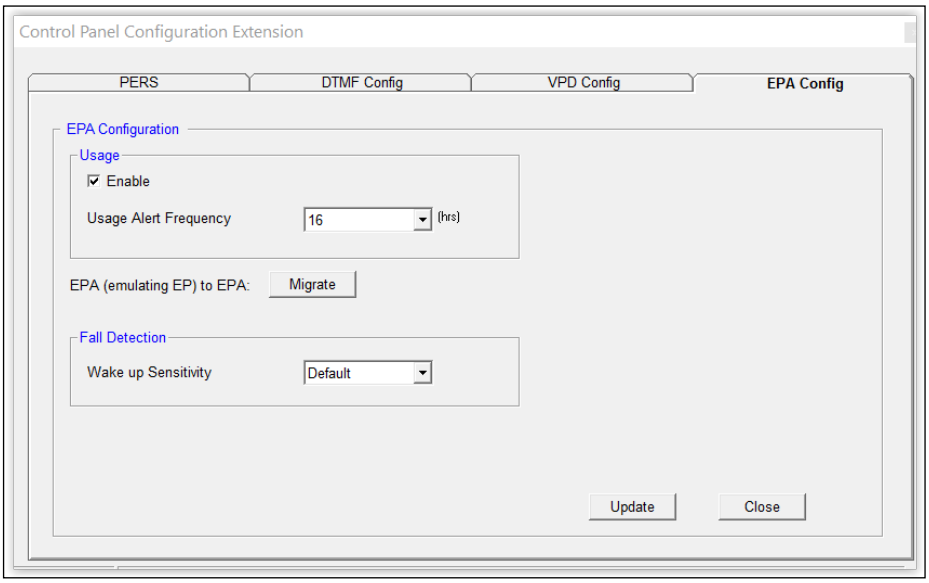


Figure 38: EPA Parameters at Panel Level

The following table describes the PERS EPA-related parameters.

Table 9: EPA Parameters at CP Level

Name	Definition and Instructions	Data Values
Usage **Note:** Usage data includes: ■ The step count: reported for each 8-hour interval within the last 24 hours. ■ Confirmation that the EPA is being worn: reported hourly.	**Enable** Mark to allow the EPA to send usage data to the CP at the frequency specified	Enabled = Marked Disabled = Cleared
	Usage Alert Frequency Select the frequency at which the usage data is sent to the CP. Default: 8 hours **Note:** Required if **Usage - Enabled** is marked.	Values (hours): 8, 16, 24
EPA (emulating EP) to EPA	Click **Migrate** to convert the EPAs that are emulating EPs to full EPA functionality.	
Fall Detection	**Wake Up Sensitivity** Select the sensitivity level for triggering a detection The higher the level – the more sensitive **Note:** It is highly recommended to use the default level of 5	Dropdown list: Default, 1-7

5.4. Speakerphone

Mark to activate the option to answer incoming calls using the  which triggers a medical alarm. This parameter activates the speaker in the CP. The default value is **Enabled**.

> NOTE: For PSTN only:
>
> The CP uses the same landline as the regular telephone on the premises.

5.5. Emergency Response

The following table describes the CP configuration **Emergency Response** parameters for detection of:

- Extreme temperature
- Medical alarm
- Fire or smoke
- Entrance door left open

Table 10: Emergency Response Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Delay	Set the duration before the emergency response alarm is triggered, to allow you to cancel the emergency response alarm, if triggered by mistake. Press RESET to cancel the emergency response alarm.	Number (3) Values: 0-180 Unit of measure: seconds	Required	0 seconds
Voice Window	Set the timeframe for the CP to automatically answer an incoming call. The window allows the operator to call the resident after a call is terminated accidentally, (not by DTMF) when an emergency response alarm is triggered.	Number (2) Values: 0-60 Unit of measure: minutes 0 = disabled	Required	10 minutes

5.6. Periodic Test

The following parameters combined define the reporting frequency for forwarding a periodic system test report to the monitoring station.

If **Night Period** is enabled, the parameters are changed to allow you to schedule the report only for a night time reporting frequency.

Table 11: Periodic Test Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Enable Night Period	Mark to schedule sending the periodic system test report only at night.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared
Days	The part of the reporting frequency that defines the number of days	Number (2) Values: 1-31 Unit of measure: days	Required	7 days
Hours	The part of the reporting frequency that defines the number of hours **Note:** When **Night Period** is enabled, the parameter switches to **Start** time. Default: 00:00	Number (2) or HH:MM Values: 0-23 Unit of measure: hours	Required	0 hours
Minutes	The part of the reporting frequency that defines the number of minutes **Note:** When **Night Period** is enabled, the parameter switches to **End** time. Default: 06:00	Number (2) or HH:MM Values: 0-59 Unit of measure: minutes	Required	0 minutes

5.7. Activity Timer

The purpose of the activity timer parameters is to monitor whether the resident is active.

The resident is expected to press RESET during defined time intervals. The CP reminds the resident to press the RESET, 15 minutes prior to the end of the time interval. The CP issues an alarm if the resident does not press RESET during the defined time interval.

NOTE: If activity is not verified, an inactivity event is sent to the monitoring station.

The following table describes the CP configuration **Activity Timer** parameters.

Table 12: Activity Timer Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Enable	Mark to activate the ability to monitor whether the resident is active within the premises. NOTE: If marked, the LED surrounding the  is lit Blue.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared
Timer 1	Mark to activate the first time-interval when resident activity is monitored.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared
	< Start / End Interval> Define the first time-interval, defined by a start time and an end time, when resident activity is monitored. NOTE: Overlapping time periods are not acceptable.	Time-Picker field Format: HH:MM AM/PM	Required if Enabled	
Timer 2	Mark to activate the **second** time-interval when user activity is monitored.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared
	< Start / End Interval> Define the second time-interval, defined by a start time and an end time, when resident activity is monitored. NOTE: Overlapping time periods are not acceptable.	Time-Picker field Format: HH:MM AM/PM	Required if Enabled	

5.8. Remote Call-In

The following table describes the CP configuration **Remote Call-In** parameters.

Table 13: Remote Call-In Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Enable	Mark to allow the CP to automatically answer incoming calls.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared
Rings	Set the number of rings for the CP to wait before automatically answering a remote call. The user must enter the DTMF code to start a half-duplex conversation.	Number (2) Values: 4-12	Required	4
Mute Rings	Mark to silence the CP ringer for remote calls.	Enable = Marked Disable = Cleared	Optional	Enable = Marked

5.9. Password

Enter the required 4-digit DTMF code used to allow the CP to receive remote calls. Default: 1234

5.10. Inactivity

The **Inactivity** feature uses a global parameter that allows you to redefine the functionality of the devices in the **Activity Sensors** module, such as the motion detector (PIR) and the camera detector (IPD), to detect inactivity.

When the feature is enabled, the devices act as inactivity sensors. If no activity is detected during the defined **Time Window**, the CP sends an inactivity event to the monitoring station.

The following table describes the CP configuration **Inactivity** parameters.

Table 14: Inactivity Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Enable	Mark to activate inactivity monitoring.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared

Name	Definition and Instructions	Data Values	Required /Optional	Default
Time Window	Define the duration to monitor inactivity.	Dropdown list Values 8-48 Unit of measure: Hours	Required	8 hours

5.11. Mains Failure

The following table describes the CP configuration **Mains Failure** parameters.

Table 15: Mains Failure Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Message Enable	Mark to allow the broadcast of power-outage events to the monitoring station.	Enable = Marked Disable = Cleared	Optional	Enable = Marked
Message Delay	A fixed time-delay before broadcasting a power outage event.	N/A	Display Only	4 minutes
Random Range Limit	A 2-minute time-interval during which the power outage event is broadcast randomly. This is used to avoid overloading the monitoring station.	N/A	Display Only	2 minutes

5.12. The CP Communications Channels

The following are the available CP communication channels:

- Public Switched Telephone Network (PSTN) – A standard (landline) telephone.
- Global System for Mobile Communications (GSM) – A cellular telephone.

The ***.cpf*** file received from Essence for each CP is pre-configured with the matching communications channel parameters.

Caution: The CP ceases operation if you change the CP communications channel parameters to the wrong communications channel.

5.12.1 PSTN Communications Channel

If the resident's CP is connected to the landline on the premises, select the **PSTN** option.

The following table describes the CP configuration parameters for the PSTN communications channel.

Table 16: PSTN Configuration Parameters

Name	Definition and Instructions	Data Values	Default
Tone or Pulse	Select the dialing method of the resident's telephone	Radio Group: Tone or Pulse	Tone
ACK Timeout	Set the wait time to receive an acknowledgement message.	Number (3) Values: 1-180 in seconds	30 seconds
DTMF Configuration	Select the external dual-tone multi-frequency (DTMF) configuration file name. NOTE: Essence recommends using the **Profile-1** settings. To define your own settings, use the **Profile-1** settings as a guiding template.	Dropdown list of available DTMF configuration files: ■ Default from Panel ■ Profile-1 ■ <Additional DTMF profiles as defined in the ***PstnDtmf.ini*** file>	Default from Panel

The DTMF profile configuration file (***PstnDtmf.ini***) file is located at the following default path:

c:\Program Files (x86)\Essence\Care@Home CMS\

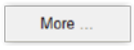
5.12.2 Transmitter (GSM)

If the resident's CP includes a SIM card for cellular communications, select the **GSM** option.

The following table describes the CP configuration parameters for the GSM communications channel.

Table 17: GSM Configuration Parameters

Name	Definition and Instructions	Data Values	Default
Ring Tones	Select the ring tones for when the CP receives a call.	Dropdown list Values, "Default", 1-18	"Default"
Min GSM Level	Set the minimum GSM reception level.	Number (2) Values: 1-31	10
ACK Timeout	Enter the wait time, in seconds, to receive an acknowledgement message.	Number (3) Values: 15-300 Unit of measure: Seconds	30 seconds
Number of Retries	Enter the number of times the dialer redials a phone number.	Number (3) Values: 0-255	2
Retry Timeout	Enter the time interval, in seconds, between redials.	Number (3) Values: 0-255 Unit of measure: seconds	1 second
DNIS (Dialed Number Identification Service)	Enter the DNIS number, which is included in SIA IP messages sent from the CP to the monitoring station. The number is used by the monitoring station to differentiate between multiple service providers.	Number (5)	00000
Combine DNIS with Account No.	Mark to combine the last five digits of the account number with the DNIS. Format: <DNIS>||<Last 5 digits (Account #)>	Combine = Marked DNIS only = Cleared	Clear

To revise additional GSM configuration parameters, click 

. The **GSM More** window appears.

The following table describes the additional GSM configuration parameters.

Table 18: More GSM Configuration Parameters

Name	Definition and Instructions	Data Values	Required/ Optional	Default
SIM	**Enable** Mark to allow this option if there is a PIN code for the CP SIM card.	Enable = Marked Disable= Cleared	Optional	Disable = Cleared
	PIN Code Enter the PIN for the CP SIM card.	Integer (4)	Optional	
	SIM Number Enter the cellular number for the CP SIM card. **Note:** The SIM number is used the SCAIP Callback feature.	Limited to digits, and only one of the following characters: "w", "W", or ">"	Optional	Blank

Name	Definition and Instructions	Data Values	Required/ Optional	Default
Provider Lock	**Enable** Mark to allow the selection of a specific Cellular Provider. This option disables the SIM card roaming option.	Enable = Marked Disable= Cleared	Optional	Disable = Cleared
	Provider Choose the Cellular Provider for the CP SIM card.	Dropdown list per customer region or N/A	Required	N/A
APN	**APN** Enter your name or title for the Access Point Name (APN) for your SIM card Service Provider for data communications (internet) capability.	Characters (32) or N/A	Optional	internet
	User Name Enter the APN user name.	Characters (28) or N/A	Required	internet
	Password Enter the APN password.	Characters (12) or N/A	Required	internet
Communication Module	**Telit 3G**	Enabled	N/A	Display Only

Click **Close** to exit the **GSM More** window.

5.13. Emergency

The following table describes the CP configuration parameters for receiving an emergency call.

Table 19: Emergency Parameters

Name	Definition and Instructions	Data Values
Conversation Mode	Mark to define the conversation mode between the resident and the monitoring station during an emergency call. Default setting: Full duplex	Dropdown list: ■ Full duplex ■ Half duplex – Talk ■ Half duplex - Listen
Speaker Volume	Set the volume level of the CP speaker, for a half-duplex emergency call.	Dropdown list Values: 1-7

5.14. Temperature

The following table describes the CP configuration parameters for extreme temperature.

Table 20: Extreme Temperature Parameters

Name	Definition and Instructions	Data Values	Required /Optional	Default
Extreme Temperature Enable	Mark to enable triggering an alarm when one (or more) of the devices reports a temperature that passes the defined thresholds.	Enable = Marked Disable = Clear	Optional	Disable = Cleared
Freeze Threshold	Set the low threshold for cold temperatures.	Dropdown list Values: 30-75 at 5° increments. Unit of measure: Fahrenheit	Required	40°F
Heat Threshold	Set the high threshold for hot temperatures.	Dropdown list Values: 75-120 at 5° increments Unit of measure: Fahrenheit	Required	100°F

5.15. Emergency Pendant

The following table describes the CP configuration parameters for using the emergency pendant.

Table 21: Emergency Pendant Parameters

Name	Definition and Instructions	Data Values	Default
Min Press Duration	Set the minimum time to press the pendant button to trigger an emergency event.	Dropdown List Values: 0.5-12 with increments of 0.5 Unit of measure: Seconds	0.5 seconds
Pairing Min Press	Set the minimum time to press the pendant button to pair the pendant with the CP.	Dropdown List Values: 4-15 Unit of measure: Seconds	4 seconds

Name	Definition and Instructions	Data Values	Default
Pairing Max Press	Set the maximum time to press the pendant button to pair the pendant with the CP.	Dropdown List Values: 4-23 with increments of 0.5 Unit of measure: Seconds	23 seconds
Supervision Report	The maximum number of hours within which the CP must receive at least one supervisory report from the pendant. **Note:** If no report is received, the CP sends an event message to the monitoring station that the pendant is lost.	Display Only	335 hours

5.16. Sound

The following table describes the CP configuration parameters for the buttons, sirens, and voice announcements.

Table 22: Sound Parameters

Name	Definition and Instructions	Data Values	Default
Beep Level	Set the volume of the beeps and the vocal announcements.	Dropdown List Values: 1-7 Where 1 is Low.	7
Siren Duration	Set the duration for sounding the CP emergency alarm.	Number (3) Values: 0-180 Unit of measure: seconds	5 seconds
Internal Siren Delay	Set how long to wait before sounding the alarm.	Number (3) Unit of measure: seconds Values: 0-60	5 seconds

5.17. The Control Panel Module Buttons

The **Control Panel** module buttons are:

- **Clear** - Restores the parameter values to the values of the last update or the original values from the CP upload.
- **Update** - Updates all the new and revised configuration parameter values to the **Control Panel** module. If **Combine DNIS with Account No** is marked and the CP account number is longer

than five digits, a warning appears reminding you that the DNIS is combined with the last five digits of the CP account number.

NOTE: You must click **Update** to ensure that the modifications are integrated into the CP configuration.

6. The Dialer Module

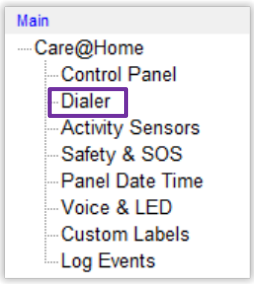


Figure 39: Access to the Dialer Module

Click **Dialer** on the **Main** navigator menu. The **Dialer** module is the tool that enables the definition of communication methods and the management of the flow required to communicate with a monitoring station. The module allows you to manage the **Destinations** list, comprised of domain names and IP addresses, along with the connect sequences for communication between the Care@Home™ PERS CP and the monitoring station.

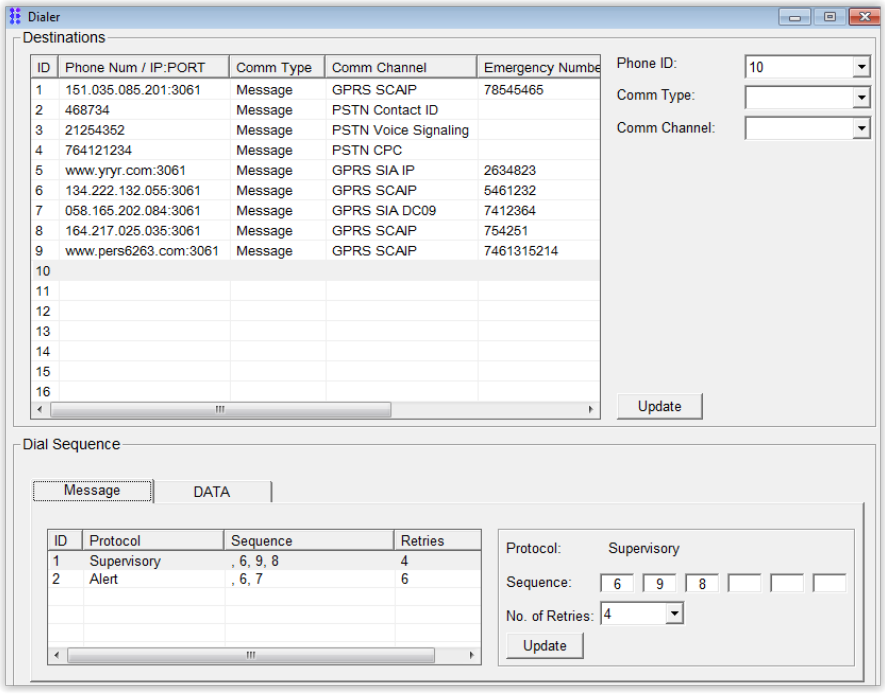


Figure 40: Dialer Module Screen

6.1. Destination Definition

A destination in the **Dialer Destinations** list is limited to one of the following combinations:

- A phone number
- An IP address and a port number
- A domain name (URL) and a port number

The communications type and communications channel attributes are defined for each destination, according to the CP communication channel method chosen in the **Control Panel** module:

Figure 41: CP Communication Channel Methods

Additional attributes are defined for a destination according to the communications type and communications channel attributes selected.

6.1.1 Defining Basic Dialer Attributes

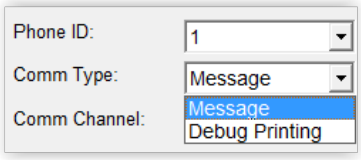


Figure 42: Comm Type

For each dialer, a phone identification number is assigned from 1 – 16.

For either communication channel method, the available **Comm Type**s are:

- **Message** - Sending events to the monitoring station

  The available **Comm Channel**s are determined by the communication channel method.

- **Debug Printing** - For Essence Technical Support only – this option writes dialer debug data to a remote log (***.rlg***) file.

  The debug data is collected according to the **Debug Mode** selected on the **PERS** tab in the **Control Panel Configuration Extension** window. The ***.rlg*** files are located on the debug server. Refer to 5.3.1 PERS Parameters on page 36.

- The available **Comm Channel**s are the same for either communication channel method:
  - PSTN – Enter a phone number.
  - GPRS – Enter either an IP address or a domain address (URL) with a port number (default: 3061)

6.1.2 Selecting Communications Channels

To select your **Comm Channel**, choose the broadcast method that matches your CP communications method.

For PSTN CP communications method, the available broadcast methods are:

- PSTN SIA
- PSTN Contact ID
- PSTN Voice Signaling
- PSTN CPC

When choosing any of these methods, the **Dialer** module prompts you to enter the landline phone number of the monitoring station receiver.

NOTE: The PSTN communications channel uses the SIA protocol.

When choosing **Voice Signaling**, the **Dialer** module prompts you to enter the **direct** phone number of the monitoring station. The **Voice Signaling** mode is used to ensure that the medical alarm (MA) event messages reach the monitoring station. **Voice Signaling** dialer works only in half-duplex mode.

For GSM CP communications method, the following are the available cellular communication protocol methods, between the CP and the monitoring station:

- GPRS SIA IP
- GPRS SCAIP
- GPRS SIA DC 09

When the choosing the **GPRS** communications channel, the **Dialer** module prompts you to enter the information shown in Figure 43, defined in Table 23.

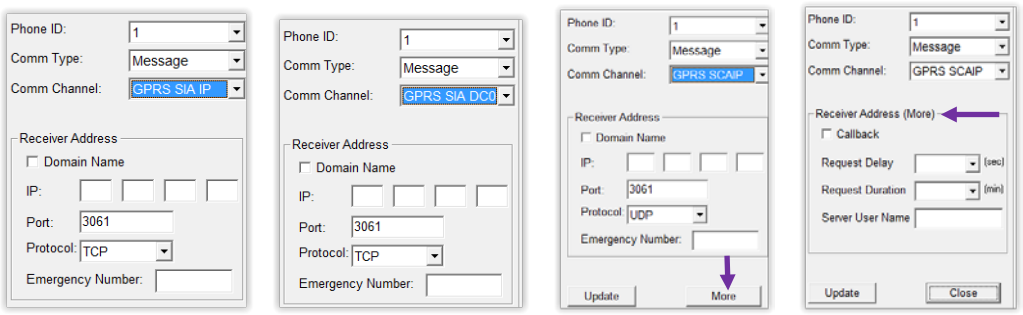


Figure 43: GPRS Communication Channels

Table 23: Receiver Address Information

Name	Definition and Instructions	Data Values	Required / Optional	Default Value
Domain Name	Mark to enter a URL address. Clear to enter an IP Address.	URL = Marked IP = Cleared	Optional	IP = Cleared
IP	Enter an internet protocol (IP) address of the receiver.	A set of 4 3-digit strings Values from 0- 255	Required if **Domain Name** cleared	None
URL	For **Message** communication type only: Enter the DNS that refers to the IP address of the monitoring station receiver.	Character (100+) "<domain name>" For example: "www.essence-grp.com"	Required if **Domain Name** is marked	None
Port	Enter the port number used by the monitoring station receiver.	Integer (5) Values: 1-65536	Required	3061
Protocol	Select the IP communications protocol.	Dropdown list: ■ TCP – for protocols SIA IP and SIA DC 09 ■ UDP - for protocol "SCAIP"	Required	
Emergency Number	Enter the phone number of the monitoring station operator.	Phone number format: 7-18 digits without the leading zeroes.	Optional for **Comm Channel: GPRS**	None

If the chosen protocol is SCAIP, click **More** to enter additional receiver information.

Table 24: Additional Receiver Information

Name	Definition and Instructions	Data Values	Default Value
Callback	Mark to allow monitoring station to return the resident's call through the CP. **Note:** The CP SIM card number must be entered before you can mark the **Callback** option. For information about the SIM number, refer to 5.12.2 Transmitter (GSM) on page 47.	Enable = Marked Disable = Cleared	Cleared
Request Delay	Select time frame in seconds for request delay.	Dropdown list: values 5 - 19 seconds	
Request Duration	Select the time frame in minutes.	Dropdown list: values 3-9 minutes	
Server User Name	Enter your user name on your server.	A/N	

Click **Close** to exit **More** receiver address information display.

Click **Update** to add the IDs to the **Destinations** list of the **Dialer** module along with the attributes entered for each ID.

NOTE: A CP supports only one type of communication channel simultaneously.

6.2. Managing the Destinations List

The **Dialer** module allows you to manage the **Destinations** list by providing you with the following functions:

- **Add** - You can add a new destination in a blank row in the list of destinations.
- **Update** – You can update a row with an existing destination.

- **Delete** - You can delete a row with an existing destination from the **Destinations** list.

6.2.1 Adding a Dialer Destination

To add a new destination to the **Destinations** list:

1. Select an empty row in the **Destinations** list table.
2. Enter the destination information:
   - Communications type
   - Communications channel
   - Receiver address or phone number
3. Right-click on the row selected in step 1. A window appears displaying the functions available to manage the **Destinations** list.

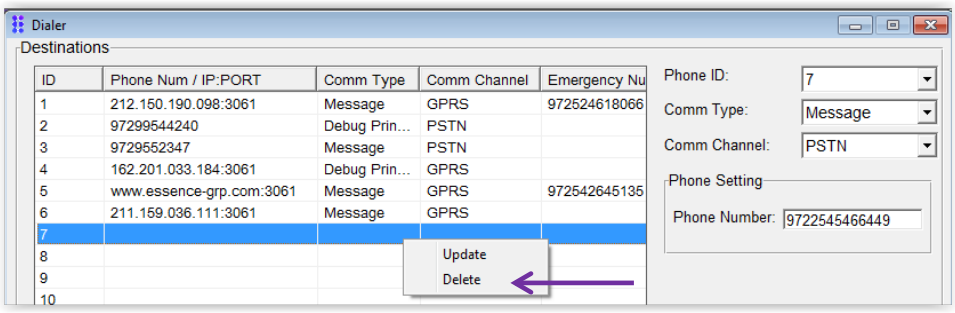


Figure 44: Manually Add Destination

4. Click **Update**.

6.2.2 Updating a Dialer Destination

To modify an existing destination in the **Destinations** list:

1. Select a row in the **Destinations** list window with an existing destination.
2. Revise the destination information:
   - Communications type
   - Communications channel
   - Receiver address or phone number
3. Right-click on the row selected in step 1. A window appears displaying the functions available to manage the **Destinations** list.
4. Click **Update**.

6.2.3 Deleting a Dialer Destination

To remove an existing destination from the **Destinations** list:

1. Right-click on the row in the **Destinations** list you want to delete. A window appears displaying the functions that manage the list.
2. Click **Delete**. A window appears prompting you to confirm the delete request.
3. Click **Yes**.

6.3. The Dialing Sequence

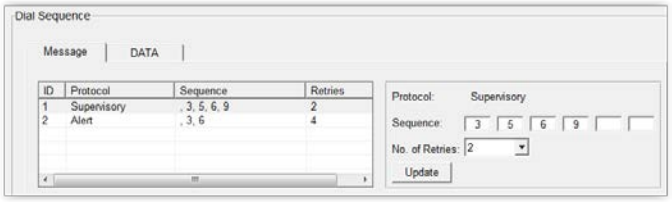


Figure 45: Dialing Sequence for the Message Protocols

You can enter dialing sequences only for the **Message** communications type.

For the **Message** dialing sequence, there are two protocols:

- **Supervisory** – The Periodic System Test Report event sent to the monitoring station receiver according to the **Periodic Test** parameters

  For information about the **Periodic Test** parameters, refer to 5.6 Periodic Test on page 42.
- **Alert** – All the non-supervisory events sent to the monitoring station receiver

In case of a medical alarm event, the voice signaling process works automatically as follows:

1. The CP's dialers are triggered according to the CMS pre-defined dialing sequence.
2. When the dialing sequence reaches the **Voice Signaling** dialer, the CP calls the **Voice Signaling** dialer's pre-defined number.

The **Debug Printing** communications type is associated with the **Data** dialing sequence. The protocol for the **Data** dialing sequence is **Debug Printing**, as shown in Figure 46. This dialing sequence is used only by Essence Professional Services.

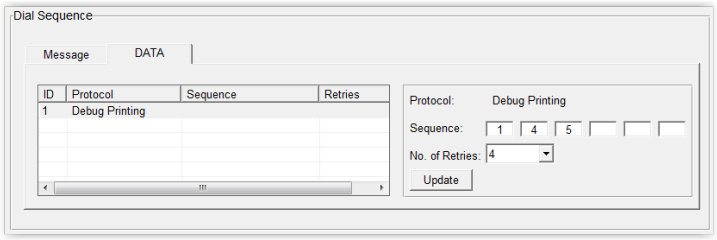


Figure 46: Dialing Sequence for the Data Protocols

Select a protocol and choose the IDs listed in the **Destinations** list window for the relevant dialing sequence, as defined in the Table 25.

Table 25: Dialing Sequence Information

Name	Definition and Instructions	Data Values	Required/ Optional	Default
Sequence	Enter the IDs for the relevant destinations, in the order they must be dialed. See the list of ID numbers in the **Destinations** list window. Refer to Figure 40 on page 53. **Note:** Choose only an ID number for which a phone number is listed.	Number (2) Values: 1-16	Required	None
No. of Retries	Enter the number of attempts to communicate with each ID, if no acknowledgement (ACK) is received.	Dropdown List: Values: 1-8	Required	1

Press **Update** to add the dialing sequence to the selected protocol.

For example, in Figure 45 on page 59, the CP sends supervisory events to the monitoring station receiver, as follows:

1. CP sends supervisory events to the monitoring station receiver according to the destination details of ID #3.
2. The CP attempts to communicate with the receiver twice, as defined for the number of retries in the example.
3. If no acknowledgement is received in both communication attempts, the CP moves on to the next ID in the sequence, such as ID # 5 as in the example.
4. The process of sending this event to the monitoring station receiver continues until one of the following situations occur:
   - An acknowledgement is received for the event. The process ends successfully.
   - No acknowledgement was received for any of the IDs defined in the sequence. The process ends unsuccessfully. The CP issues the following vocal announcement:

     "Attention, communication with the monitoring station is lost."

7. The Activity Sensors Module

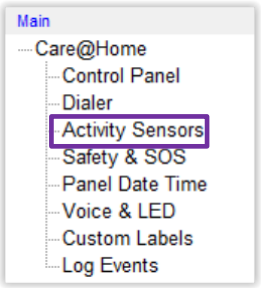


Figure 47: Access to the Activity Sensors Module

Click **Activity Sensors** on the **Main** navigator menu. The **Activity Sensors** module is the tool that allows management of the sensor devices for the Care@Home™ PERS CP installed on the customer premises.

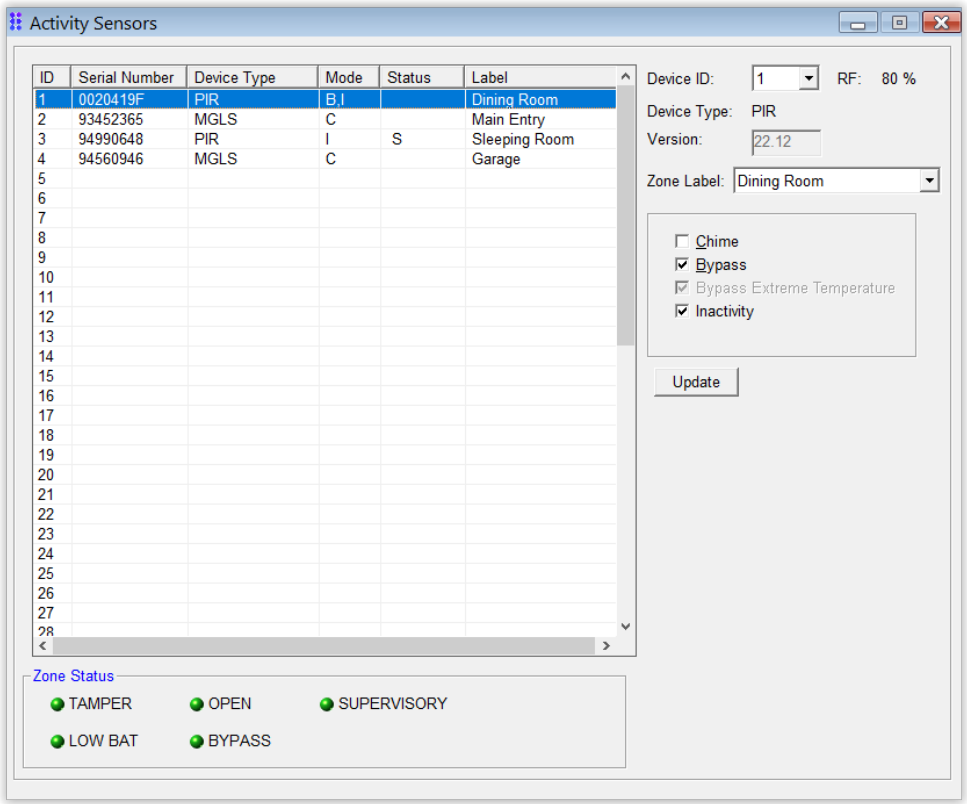


Figure 48: Activity Sensors Module

All the sensor devices connected to the CP are listed by identification number in this module. For each sensor device, the following information is displayed in the **Activity Sensors** table:

- ID – Internal device identification number synchronized with the device ID in the Web app
- Serial Number
- Device Type
- Mode – Represents the LEDs enabled for the selected device
- Status – Represents the Zone status of the selected device
- Label – The installation location on the premises

7.1. Defining Sensor Device Attributes

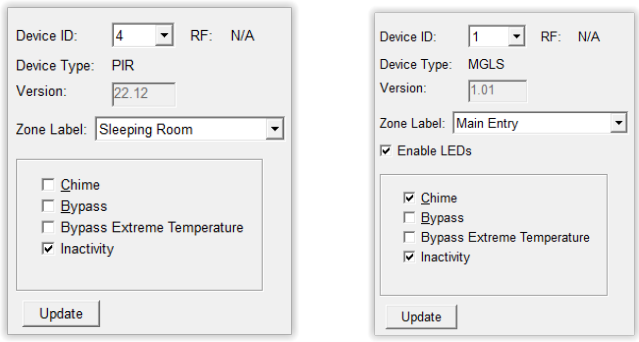


Figure 49: Sensor Device Attributes

Figure 49 shows the attributes required to define the activity sensor devices, described in the following table.

Table 26: Attributes for Sensor Devices

Name	Definition and Instructions	Data Values	Required /Optional	Default
Device ID	The identification number assigned by the CP for each sensor device.	Dropdown list: 1-55 Only for the sensors recognized by the CP.	Required	
RF (radio frequency)	The RF level of the selected sensor device relative to the received signal strength indicator (RSSI) scale. **Note:** An RF level of 80% and above is recommended. If the RF-level is lower than 50%, install the device in a better reception area.	Percent or N/A	Required	Display Only
Device Type	The type of the selected sensor device: ■ **MGLS** – Indoor Magnetic Sensor ■ **PIR** – Passive Infra-Red sensors	Character		Display Only

Name	Definition and Instructions	Data Values	Required /Optional	Default
Version	The version of the firmware of the device	Number (5,2)		Display Only
Zone Label	Choose the label that describes the location where the sensor is installed. **Note:** The dropdown list includes both system-defined location labels and user-defined custom labels. For information on custom labels, see chapter 11 on page 97.	Dropdown list	Optional	None
Enable LEDs	**Note:** MGLS only Mark the checkbox to activate the LED display for the sensors. When the sensor device detects activity, the LED lights up. If disabled, the sensor continues to function. However, the LED does not light up.	Enable = Marked Disable = Cleared	Optional	Disable = Cleared
(Enable modes)	Mark the checkboxes to activate or deactivate modes that alter the functionality of the activity sensor devices. **Chime**- If marked, the device emits a chime sound when the sensor device detects activity. **Bypass** – If marked, the sensor device is deactivated. The sensor device remains connected to the CP. **Bypass Extreme Temperature** – If marked and extreme temperatures are detected, the device issues extreme temperature reports that are sent to the CP. However, no actions are triggered. **Inactivity** – If marked and no activity occurs during a given time-frame from all the inactivity-enabled sensors, the CP sends an inactivity event to the monitoring station. **Note:** This functionality is enabled only if the **Inactivity** and **Extreme Temperature** reporting parameters are marked on the **Control Panel** module. For more information about these parameters, see chapter 5 on page 34.	Enable = Marked Disable = Cleared For the following set of checkboxes: ■ Chime ■ Bypass ■ Bypass Extreme Temperature ■ Inactivity		Disable = Cleared

Click **Update** to add and revise the activity sensor device attributes in the CP.

7.2. Zone Status Definitions

The **Status** column in the **Activity Sensors** table refers to the **Zone Status** of the selected device.

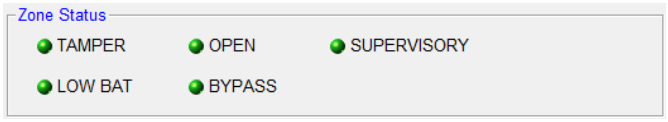


Figure 50: Zone Status for the Selected Device

The **Zone Status** box displays the status (normal =Green; alert = Red) of the selected sensor device.

The following is the list of the available statuses:

- **Tamper (T)** – The selected sensor device was touched, moved, or installed incorrectly.
- **Low Battery (L)** – The battery of the selected sensor device requires replacement.
- **Bypass (B)** – The selected sensor device reports to the CP. However, no actions are triggered.
- **Open (O)** – The connection for the selected magnet sensor device is "open" or "disrupted".
- **Supervisory (S)** – The CP did not receive a supervisory report from the selected sensor device within the period defined by the **Supervision Report** parameter.

  For information about the CP **Supervision Report** parameter, see chapter 5 on page 34.

7.3. Managing the Activity Sensor List

The **Activity Sensors** module allows you to manage the **Activity Sensor** table manually. You can add an activity sensor to the **Activity Sensor** table or update the attributes of an activity sensor in the **Activity Sensor** table.

7.3.1 Add an Activity Sensor

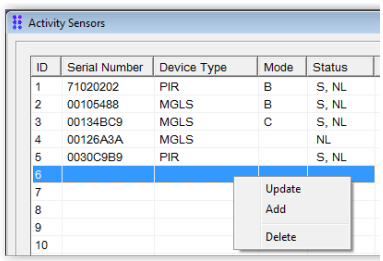


Figure 51: Functions to Manage the Activity Sensors

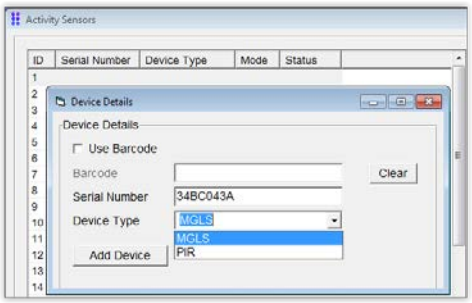


Figure 52: Add Activity Sensor

Figure 51 and Figure 52 above show how to add a new activity sensor to the activity sensor list:

1. In the **Activity Sensors** list, right-click on an empty row. A window appears displaying the functions available to manage the list, as illustrated in Figure 51 above.
2. Click **Add**. The **Device Details** window appears, as illustrated in Figure 52 above.
3. If you have a barcode reader:
   a. Mark **Use Barcode.**
   b. Using the barcode reader, scan the serial number barcode on the device packaging. The scanned data appears in the **Barcode** field.
   c. Tap **Enter**. The serial number and device type from the scanned data are loaded to their respective fields.

   Refer to 2.4 Configuring a Barcode Reader on page 10.
4. If you do not have a barcode reader:
   a. Clear **Use Barcode**
   b. Enter the last eight characters of the device serial number.
   c. Select the device type from the dropdown list.
5. Click **Add Device**.

7.3.2 Update an Activity Sensor

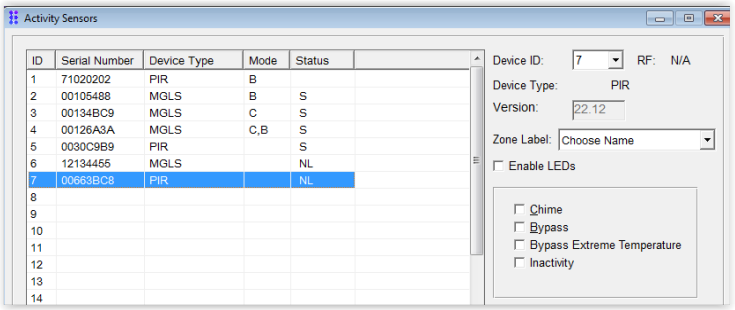


Figure 53: Select Activity Sensor for Update

To update a row in the **Activity Sensor** table with an existing activity sensor:

1. Select the row in the **Activity Sensor** table with the activity sensor requiring update.
2. Modify the values of the activity sensor attributes requiring update. See the attributes to the right of the **Activity Sensor** table as in Figure 53 above.
3. Right click the selected row. The function window appears as in Figure 54 below.
4. Click **Update** either in the function window or at the bottom of the screen.

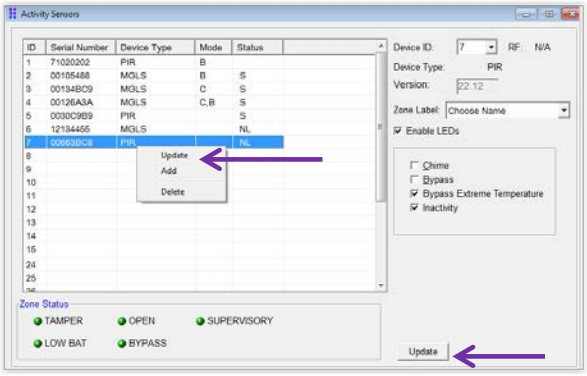


Figure 54: Update Activity Sensor

7.3.3 Delete an Activity Sensor

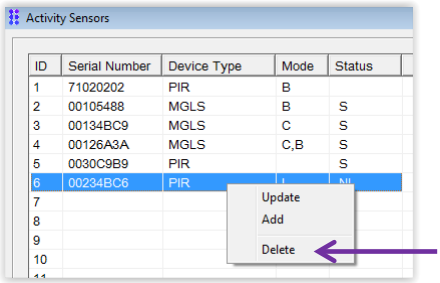


Figure 55: Delete Activity Sensor

To delete an existing activity sensor from the **Activity Sensor** table:

1. Right-click on the row in the Activity Sensor list with the activity sensor requiring deletion. A window appears asking to confirm.
2. Click **Delete**. A message window appears prompting you to confirm.
3. Click **Yes**.

8. The Safety & SOS Module

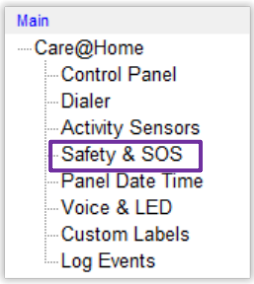


Figure 56: Access to the Safety & SOS Module

Click **Safety & SOS** on the **Main** navigator menu. The **Safety & SOS** module is the tool that allows management of the safety and emergency devices for the Care@Home™ PERS CP installed on the customer premises.

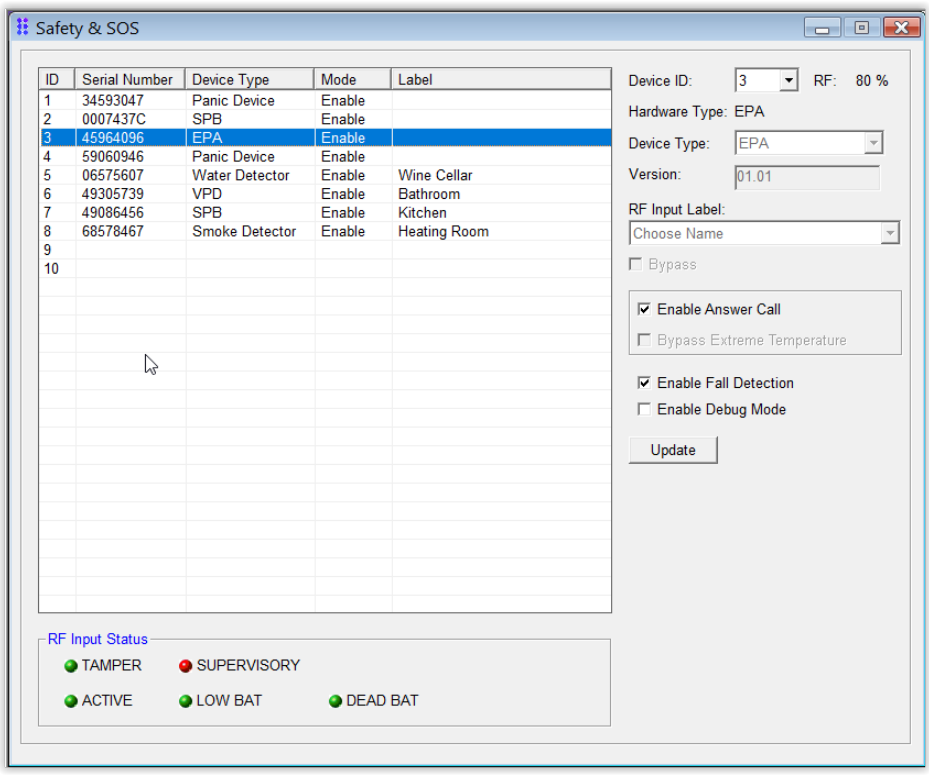


Figure 57: The Safety & SOS Module

All the safety and emergency devices connected to the CP are listed by identification number in this module. For each safety or emergency device, the following information is displayed:

- ID - Internal device identification number synchronized with the device ID in the Web app

- Serial Number
- Device Type
- Mode – Represents the **Bypass** mode of the device
- Label - The installation location on the premises

8.1. Defining Attributes for Safety & SOS Devices

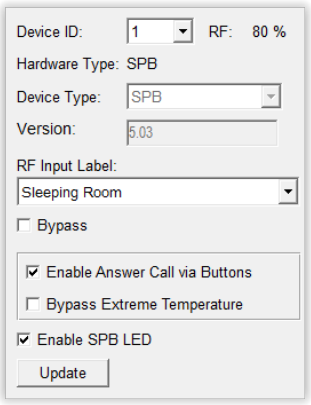


Figure 58: SPB Emergency Device Attributes

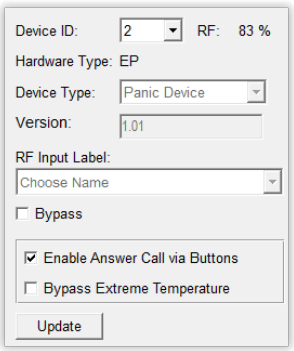


Figure 59: Emergency Pendant Attributes

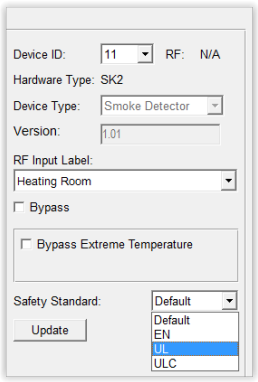


Figure 60: SK2 Safety Device Attributes

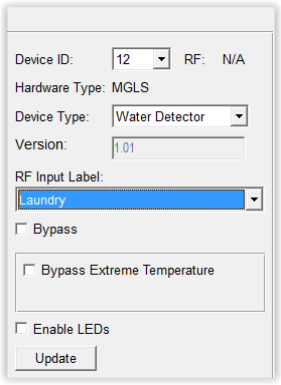


Figure 61: MGLS Safety Device Attributes

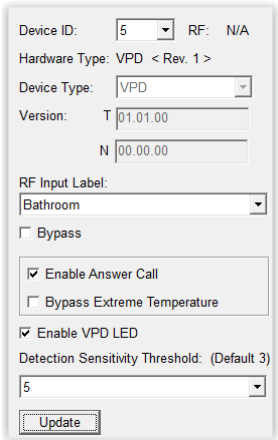


Figure 62: VPD SOS Device Attributes

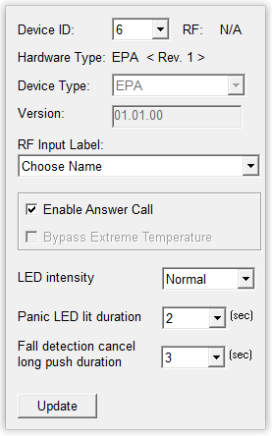


Figure 63: EPA SOS Device Attributes

Table 27 describes the attributes of the safety and emergency devices connected to the CP. These attributes are display only, except for the device type of the MGLS device.

Table 27: General Attributes for Safety & SOS Devices

Name	Definition and Instructions	Data Values
Device ID	The identification number assigned by the CP for each safety and emergency device.	Integer from 1-16
RF	The RF level of the selected safety and emergency device relative to the RSSI scale. **Note:** An **RF level of 80% and above** is recommended. If the **RF-level is lower than 50%,** install the device in a better reception area.	Percent
Hardware Type	The code for the hardware type of the selected safety and emergency device. ■ SPB – Stationary panic button ■ EP, EP+ – Panic button devices ■ MGLS – Transmitter input device ■ SK2 – Smoke detector ■ VPD – Voice panic detector ■ EPA – Active panic button	Character **Note:** For VPD and EPA devices, the hardware revision number is displayed

Name	Definition and Instructions	Data Values
Device Type	The name of the hardware type of the selected safety and emergency device. **Note:** For MGLS only - the application of the MGLS Input device, for example, connecting a third-party water leakage detector to the Care@Home™ PERS system	Dropdown list Choose connected device type for the MGLS only
Version	The version of the firmware of the device **Note:** For the VPD, two firmware versions are displayed: ■ T – TI ■ N - NXP	

8.2. Specific Safety and Emergency Attributes

The hardware types of the safety and emergency devices are as follows:

- SK2 – Smoke detector devices
- EP and EP+ – Emergency pendant devices
- SPB – Stationary panic button devices
- MGLS – Third-party devices connected to the Care@Home™ PERS using the universal transmitter
- VPD – Voice panic detectors
- EPA – Active panic buttons with fall detection

Table 28 describes the attributes specific to the hardware types of the safety and emergency devices associated with the CP.

Table 28: Specific Attributes for Safety & SOS Devices

Name	Definition and Instructions	Data Values	Required/ Optional	Default
RF Input Label	**Note:** Not for any of the emergency pendants Choose the label that describes the location where the safety or emergency device is installed. **Note:** The dropdown list is the same as the dropdown list for the **Zone Label** attribute, in the **Activity Sensors** module. The list includes both system-defined location labels and user-defined custom labels. For information on custom labels, see chapter 11 on page 97.	Dropdown List	Optional	None
<Bypass options>	Mark to activate or deactivate modes that alter the functionality of the safety and emergency devices.			
	Bypass **NOTE:** Not for any of the emergency pendants Mark to deactivate the sensor device. The sensor device remains connected to the CP.	Enable = Marked Disable= Cleared	Optional	Disable = Cleared
	Enable Answer call via Buttons **NOTE:** Not for SK2 and MGLS: Mark to activate the option to answer incoming calls using the panic button.	Enable = Marked Disable= Cleared	Optional	Enable = Marked
	Bypass Extreme Temperature Mark so that if extreme temperatures are detected, the device can issue extreme temperature reports that are sent to the CP. However, no actions are triggered.	Enable = Marked Disable= Cleared	Optional	Disable = Cleared
Enable LEDs	**NOTE:** For SPB and MGLS Only: Mark to activate the LED display for the device. When the device is triggered, the LED lights up. If disabled, the device continues to function. However, the LED does not light up.	Enable = Marked Disable= Cleared	Optional	Enable = Marked

Name	Definition and Instructions	Data Values	Required/ Optional	Default
Safety Standard	**NOTE:** For SK2 Only: Select the safety standard to apply to the smoke detector device. The standards relate to the event reporting frequency. The safety standards are: **Default** –out-of-the box factory settings designed to preserve battery life. **EN** – European standards **UL** – USA standards **ULC** – Canadian standards	Dropdown list: ■ Default ■ EN ■ UL ■ ULC	Required	Default
Enable VPD LED	**NOTE:** For VPD Only: Clear to disable the LED i.e. for night time	Enable = Marked Disable= Cleared	Required	Disable = Cleared
Detection Sensitivity Threshold	**NOTE:** For VPD Only: Select the sensitivity of voice detection	Dropdown list Values: 1-9 1 – High 9 – Low	Required	Default: 8 seconds
LED Intensity	**NOTE:** For EPA Only: Select whether to ■ Disable the LED ■ Light the LED at normal intensity. For example, to dim LED at night. ■ Light the LED at maximum intensity For example, to light up LED during the day time.	Dropdown list: ■ Off ■ Normal ■ Bright	Required	Default: Disable
Panic LED lit duration	**NOTE:** For EPA Only: Select the number of seconds the LED is lit on the EPA when a panic alert is triggered.	Dropdown list Values: 1-10 seconds	Required	Default:2 seconds
Press duration to cancel fall detection	**NOTE:** For EPA Only: Select the number of seconds the resident must press the EPA button to cancel fall detection.	Dropdown list Values: 3, 4, or 5 seconds	Required	Default: 3 seconds

Click **Update** to add and revise the safety and emergency device attributes in the CP.

8.3. RF Input Status Definitions

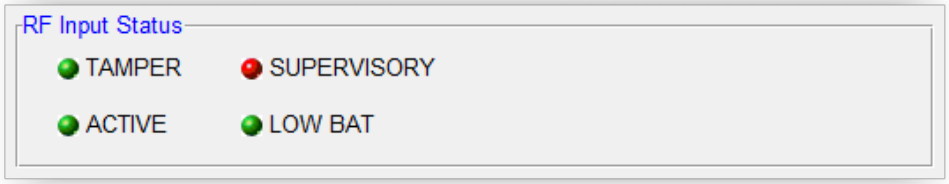


Figure 64: RF Input Status for a Selected Device

The **RF Input Status** reports the status of the selected safety or emergency device (normal = **Green**; alert = **Red**). The following is the list of the available statuses:

- **Tamper** – The selected device was touched, moved, or installed incorrectly.
- **Low battery** – The battery of the selected device requires replacement.

  For the EP, the pendant itself must be replaced.
- **Active** – A safety or emergency device detected a safety or emergency "situation".

  This status refers **only to devices connected to an MGLS device**, such as a water detector or a third-party panic device. It does not refer to emergency pendants, SPBs, or SK2 devices.
- **Supervisory** – The CP did not receive a supervisory report from the selected sensor device within the period defined by the **Supervision Report** parameter.

  For information about the CP **Supervision Report** parameter, see chapter 5 on page 34.

8.4. Managing the Safety & SOS Devices

The **Safety & SOS** module allows you to manage the **Safety & SOS** device table manually. You can add a safety or emergency device to the **Safety & SOS** device table or update the attributes of a safety or emergency device in the **Safety & SOS** device table.

8.4.1 Add a Safety or SOS Device

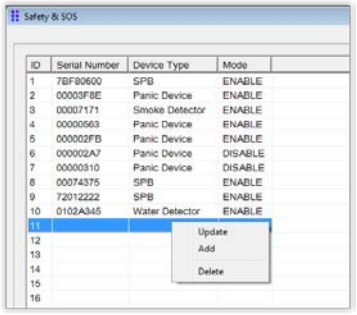


Figure 65: Functions to Manage the Safety or SOS Devices

Figure 65 above and Figure 66 below illustrate how to add a new safety or emergency device to the **Safety & SOS** device table.

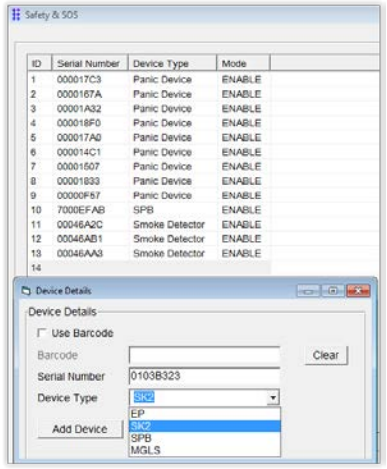


Figure 66: Add Safety or SOS Device

To add a safety and emergency sensor:

1. Right-click on an empty row in the safety & SOS device list. A window appears displaying the functions available to manage the list, as shown in Figure 65 above.
2. Click **Add**. The **Device Details** window appears, as shown in Figure 66 above.
3. If you have a barcode reader:
   a. Mark **Use Barcode.**
   b. Using the barcode reader, scan the serial number barcode on the device packaging. The scanned data appears in the **Barcode** field.
   c. Tap **Enter**. The serial number and device type from the scanned data are loaded to their respective fields.

Refer to 2.4 Configuring a Barcode Reader on page 10.

4. If you do not have a barcode reader:
   a. Clear **Use Barcode.**
   b. Enter the last eight characters of the device serial number.
   c. Select the device type from the dropdown list.
5. Click **Add Device**.

8.4.2 Update a Safety or SOS Device

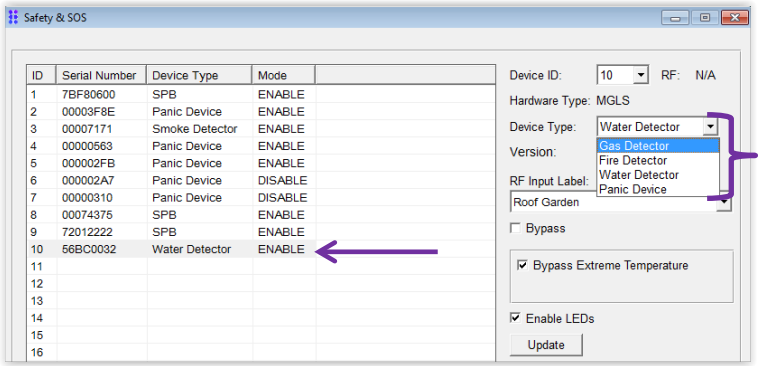


Figure 67: Select Safety or SOS Device for Update

To update a row in the **Safety & SOS** device table with an existing safety or emergency device:

1. Select the row in the **Safety & SOS** device table with the safety or emergency device requiring update.
2. Modify the values of the safety or emergency device attributes requiring revision. See the attributes on the right of the **Safety & SOS** device table in Figure 67 above.

   Figure 67 above illustrates that the MGLS device enables expansion of the Care@Home™ PERS capabilities by connecting addition functionality to the system.

NOTE: Essence supports connecting the MGLS device to either a third-party Water Detector or a third-party Panic Device.

3. Right click the selected row. The function window appears as in Figure 68 below.

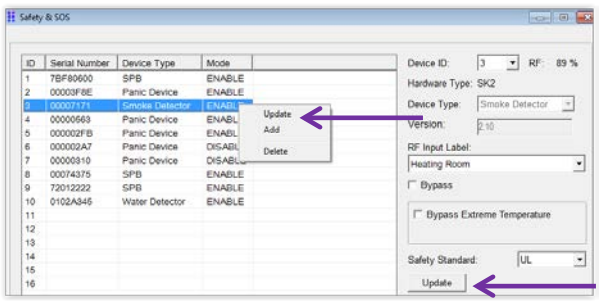


Figure 68: Update Safety or SOS Device

4. Click **Update** either in the function window or at the bottom of the screen.

8.4.3 Delete a Safety or SOS Device

To delete a safety or emergency device from the **Safety & SOS** device table:

1. Right-click on the row in the **Safety & SOS** device list with the safety or emergency device you want to delete. A window appears prompting you to confirm the delete request as in Figure 69 below.

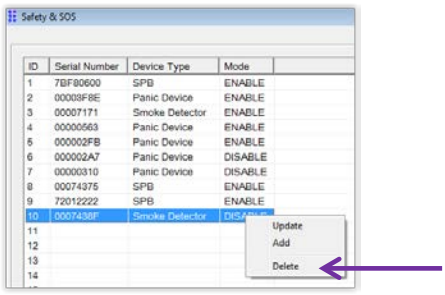


Figure 69: Delete Safety or SOS Device

2. Click **Delete**. A window appears prompting you to confirm.
3. Click **Yes**.

9. CP Internal Clock

The CP has an internal clock used by the Care@Home™ PERS system to:

- "Timestamp" notifications
- Trigger time-sensitive activities
- Track events

Configuring the internal clock to the local time zone of the CP's location is vital to the operation of the Care@Home™ PERS system.

9.1. Importance of the Internal Clock

The CP internal clock is used to trigger Care@Home™ PERS time-sensitive functionality such as:

- Activity Timer feature – Refer to 5.7 Activity Timer on page 43.
- Vocal Reminders functionality – Refer to 10 Voice & LED Module on page 85.

It is important to synchronize the CP internal clock to the local date and time wherever the CP is located.

For example, consider the situation where the CP for an end user is in Los Angeles, California and the service provider is in New Jersey. The CP is in a different time zone than the service provider. The service provider administrators must synchronize the CP internal clock to the local date and time of Los Angeles, California. This ensures that all vocal reminders for this CP are announced according to the Los Angeles, California time zone.

9.2. Automatic Internal Clock Update

The CP internal clock is automatically updated by the communications processed through the CP. The automatic update process differs depending on the communications channel used by the CP.

There are two communications channels:

- **Landline (PSTN)**: The CP is connected through the home or residence telephone line, which is configured with "Caller-ID" support.
- **GSM (4G/3G/2G)**: The CP is connected through its own SIM-card, using cellular communications.

9.2.1 Landline Automatic Update

If a landline (PSTN) CP is connected to the home or residence telephone line and the telephone service is configured with "Caller-ID" support, the date and time of the internal clock of the Landline CP is updated when receiving any "incoming call" to the home or residence.

In this situation, for each "incoming call", the CP updates its internal clock to the PSTN local operator date and time. The CP updates only the following date/time components:

- Month
- Day
- Hour
- Minute

NOTE: An automatic landline CP date/time update **does not** include updating the year component.

9.2.2 GSM Automatic Update

The date and time of the internal clock of a GSM (4G/3G/2G) CP is updated by the cellular service operator. The CP updates its internal clock:

- Upon CP reset
- During CP power-up
- Every time the CP sends a periodic test message, according to the periodic test parameters

The CP updates the following date/time components:

- Month
- Day
- Year
- Hour
- Minute

9.3. Override Landline Manual Update

The **Panel Date Time** module provides the service provider with the tools to manually configure the internal clock of the CP.

When using a Landline CP with telephone service configured with Caller-ID support, all manual changes to the CP internal clock are overridden during the next automatic update of the CP.

IMPORTANT: **For Landline CPs only**:

Any remote Care@Home™ PERS CMS command to a landline (PSTN) CP is considered an "incoming call" and subsequently, overrides the manual changes made to the CP's internal clock.

For example,

1. The internal clock of a landline CP is automatically set to the current local date and time: February 1, 2015, 15:45.
2. The service provider applies a manual date/time update, using the **Panel Date Time** module, to January 31, 2015, 10:00.
3. To verify that the internal clock of the CP has been successfully updated, the service provider reconnects to the CP, using a remote Care@Home™ PERS CMS command.

This action is considered an "incoming call". As a result, the internal clock of the CP is automatically updated to the current local date and time, February 1, 2015, 15:47, overriding the manual update.

NOTE: When a landline (PSTN) CP is connected to the home or residence telephone line and the telephone service is **not** configured with **Caller-ID** support, there is no automatic update of the date and time of the landline CP internal clock.

9.4. Manual Update Using the Panel Date Time Module

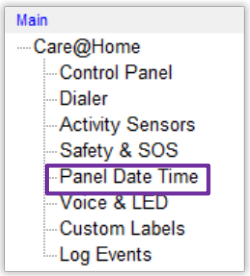


Figure 70: Access to the Panel Date Time Module

For the management of the Care@Home™ PERS CP internal clock, the **Panel Date Time** module functionality is two-fold, as follows:

- Manual update of the local date and time of the Care@Home™ PERS CP
- Maintenance of a Daylight-Savings Time Table for the Care@Home™ PERS CP

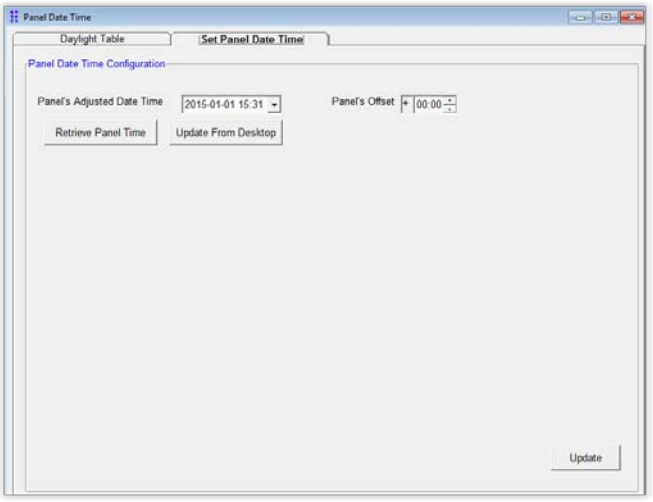


Figure 71: Manage CP Local Date Time

9.4.1 Manual Setting of Landline CP Clock

The automatic update of the internal clock of the landline (PSTN) CP does not update the year.

For example, when distributing inventory, it is important to setup the internal clock of the CPs to the exact date and time. The manufacturer preconfigures each CP, including setting the full date and time of the internal clock.

If a CP, using landline communications, is preconfigured in year **X**, and then, is given to a customer to use in year **X+n**, the internal clock of the CP must be manually updated for the correct year.

You can use the **Panel Date Time** module to manually set the internal clock of a landline CP for the full date and time of any year.

9.4.2 Manual Year Update Procedure

To manually set the landline (PSTN) CP internal clock to another year:

1. Log in to the Care@Home™ PERS CMS application.
2. Connect to a landline CP.
3. Verify the current date and time of the landline CP, using the **Panel Info** window. The **Panel Info** window displays the CP **Actual** date and time.

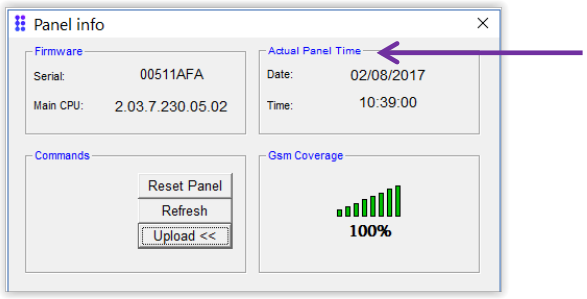


Figure 72: Verify Current Date and Time

4. Click **Panel Date Time** in the **Main** menu.
5. Enter the full date and time in the **Set Panel Date Time** tab, using the calendar mechanism.

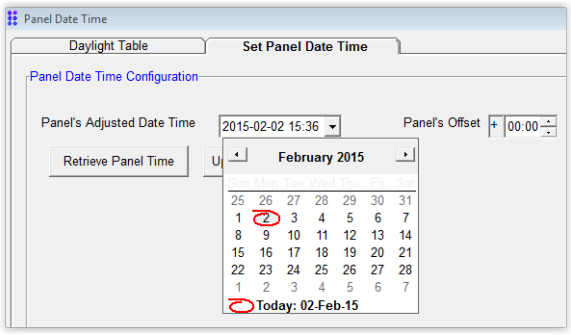


Figure 73: Manually Enter Date and Time

6. Click **Update**.

7. Click  to update the CP internal clock.
8. Click  to disconnect from the landline CP.
9. Click  to reconnect to the landline CP.
10. Verify that the year on the **Panel Time** is updated on the **Panel Info** window.

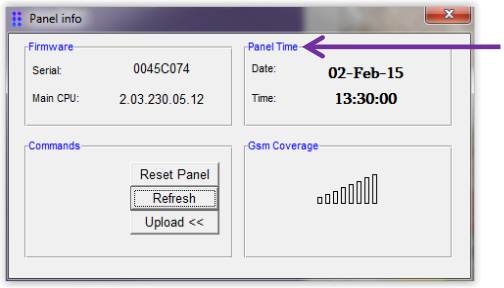


Figure 74: Verify Updated Year

NOTE: Consult with Essence Professional Services personnel for more information about the **Panel Date Time** module and its functionality.

10. Voice & LED Module

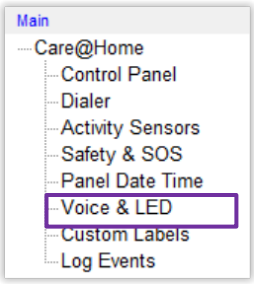


Figure 75: Access to the Voice & LED Module

Click **Voice & LED** on the **Main** navigator menu. The **Voice & LED** module allows you to configure:

- The receipt of vocal reminders for technical, medical, and safety issues
- The Pendant Test operational parameters
- The CP to "vocally" remind the resident about scheduled activities.

The vocal reminder is characterized by the following attributes:

- The purpose of the reminder announcement
- Additional information related to the purpose of the reminder
- The scheduled frequency of the reminder announcement (schedule type)
- The period of the reminder announcement
- The time of the reminder announcement

The mechanism for issuing vocal reminders includes four schedule types:

- **One Time**: Refer to 10.2.1 One-Time Schedule Type on page 90.
- **Weekly**: Refer to 10.2.2 Weekly Schedule Type on page 90.
- **Monthly (Day of the month)**: Refer to 10.2.3 Day of the Month Schedule Type on page 90.
- **Monthly (Day of the week)**: Refer to 10.2.4 Day of Week Schedule Type on page 90.

For each schedule type, you can choose the "date" and time for the reminder to be announced. The time assigned to a reminder announcement is restricted to an hour with 15-minute increments.

The structure for defining a reminder includes the parameters that define the attributes of a vocal reminder. For example, Figure 76 illustrates the structure to define a weekly vocal reminder.

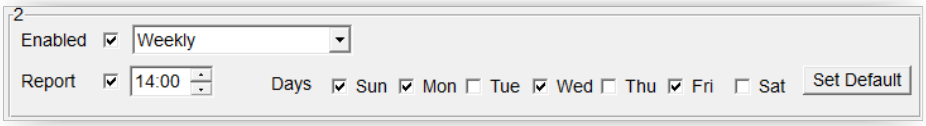


Figure 76: Vocal Reminder Structure

Table 29 describes the parameters that define the attributes of a vocal reminder.

Table 29: Vocal Reminder Parameters

Parameter	Definition/Instructions	Attributes
(Reminder) Enabled	Mark to activate the vocal reminder.	Enable = Marked Disable = Clear
(Schedule Type)	Select the type of schedule you require for the vocal reminder. Refer to 10.2 Reminder Schedule Types on page 89.	Dropdown list: ■ One-Time ■ Weekly ■ Monthly (Day of Month) ■ Monthly (Day of Week)
Report	Mark to send a Missed Reminder report to the monitoring station when a reminder is not acknowledged, or a pendant test is incomplete.	Enable = Marked Disable = Clear
Period: **Day and Time**	**Day**: Enter either the day of the week, the day of the month, or the date when you require the reminder announcement.	The format of the date is dependent on the schedule type. Refer to 10.2 Reminder Schedule Types on page 89.
	Time: Enter the time when you require the reminder announcement	Time in *hh24:mi* format
Days/Weeks	Mark one or more days/weeks when you require the reminder announcement.	Per day/week: Enable = Marked Disable = Clear
Set Default	Click to reset to default settings. The **Reminder** structure is reset to factory settings, disabled, and displayed in grey, as illustrated in Figure 77.	Push button
Time to Announce	Enter the time to inform the resident when an event is scheduled.	Time in *hh24:mi* format

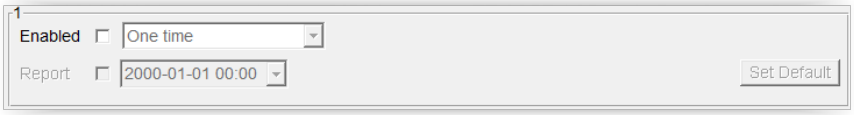


Figure 77: Vocal Reminder Default Settings

There are five kinds of vocal reminders:

- **Medication**: Refer to 10.3 Medication Reminders on page 91.
- **Appointment**: Refer to 10.4 Appointment Reminders on page 92.
- **Rides**: Refer to 10.5 Ride Reminders on page 93.
- **Alarms:** Refer to 10.6 Alarm Reminders on page 94.
- **Pendant Test**: Refer to 10.7 Pendant Test on page 95.

10.1. General Configuration Parameters

The **Voice & LED** module includes the global parameters that configure the scope of the vocal announcements and reminder definitions and allows you to manage the CP **Trouble** LED.

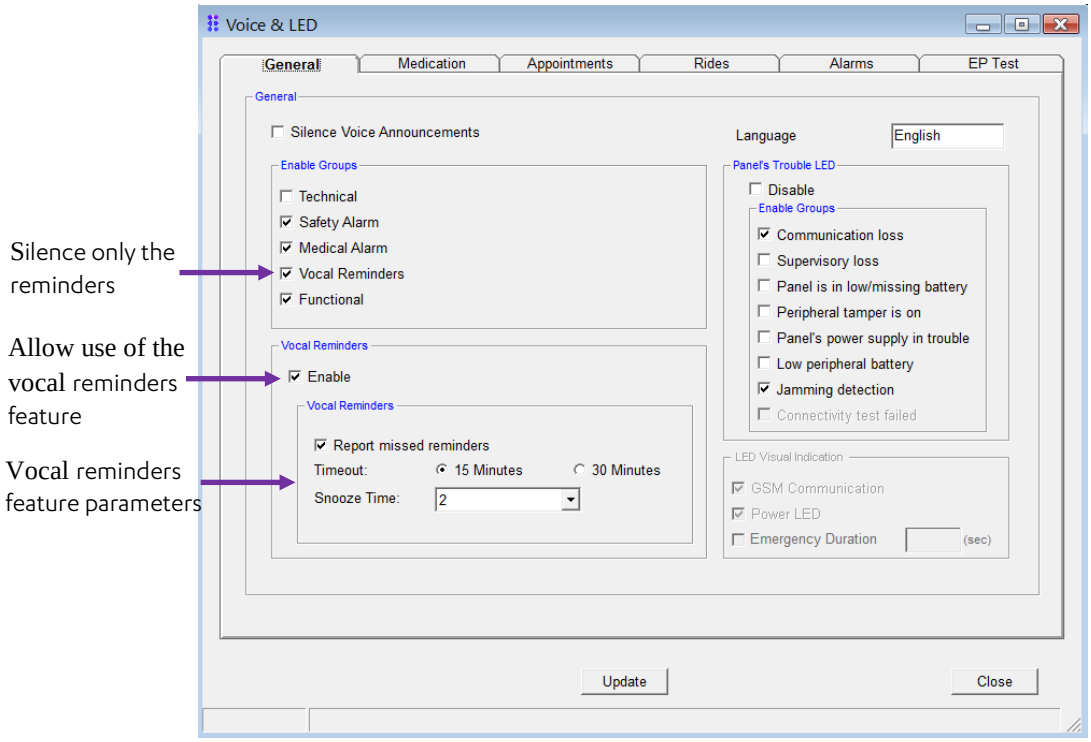


Figure 78: Voice & LED General Configuration

The following table defines the **Voice** configuration parameters.

Table 30: Vocal Reminder Configuration Parameters

Field	Definition/Instructions	Attributes	Required/ Optional
Silence Voice Announcements	Mark to silence the vocal announcements. **Note:** If enabled, all vocal announcement groups are silenced.	Enable = Marked Disable = Clear	Optional
Language	The language of the vocal announcements is determined by the voice file downloaded to the panel. Contact Essence for the voice file.	N/A	Display Only
Enable Groups	Clear the checkboxes of the group of announcements you want to silence.		
	Technical – Clear to silence vocal messages about technical problems such as tamper and low battery power.	Enable = Marked Disable = Clear	Optional
	Safety Alarm – Clear to silence vocal messages for safety alarms such as fire alarm and flood alarm.		
	Medical Alarm – Clear to silence vocal messages about panic and emergency alarms.		
	Vocal Reminders – Clear to silence vocal reminder messages.		
	Functional – Mark to enable vocal messages for operations performed using the CP and the peripherals.		
Vocal Reminders: Enable	Mark to allow the use of the **Vocal Reminders** feature.	Enable = Marked Disable = Clear	Optional
Send Missed Reminder report	Mark to allow the broadcast of **Missed Reminder** reports. Each reminder type has a **Report** parameter that, if marked, allows sending a **Missed Reminder** report to the monitoring station if a reminder is not acknowledged or the Pendant Test is incomplete. **Note:** If this parameter is not marked, none of the reminders can send **Missed Reminder** reports.	Allow = Marked Not allow = Clear	Optional
Timeout	Select the timeframe for the continued repetition of the reminder announcements. At the end of the timeframe, if the resident has not pressed RESET, a **Missed Reminder** report is sent to the monitoring station, if **Report** is marked. **Note:** For the **Pendant Test**, this is the test interval within which the resident must press their emergency pendant button.	15 minutes or 30 minutes	Required
Snooze Time	Select the wait interval for rebroadcasting reminder announcements. **Note:** If you choose "No Repetition", the reminder announcement is not broadcast again.	Dropdown list values: No Repetition, 1 - 30 minutes	Required

The following table defines the parameters for configuring the CP's **Trouble LED**, as shown in Figure 78 on page 87.

Table 31: Parameters to Configure Trouble LED for Alerts

Field	Definition/Instructions	
Disable	Mark to deactivate the CP **Trouble LED**. When an alert is issued for the alert categories, the LED remains unlit. Values: Enable = Marked; Disable = Cleared	
Enable Groups	Mark the group of trouble states for which you want to light the **CP trouble LED**. Values: Enable = Marked; Disable = Cleared	
	Group	**Description**
	Communication loss	When the CP loses communications with the monitoring station
	Supervisory loss	When the CP loses communications with a peripheral
	Panel is in low/missing battery	When the CP battery is low or missing
	Peripheral tamper is on	When a peripheral is tampered
	Panel's power supply in trouble	When there is trouble with your power supply
	Low peripheral battery	When a peripheral reports low battery
	Jamming detection	When RF communications detects jamming
	Connectivity test failed	Note: **Pro and Family Only - disabled**
LED Visual Indication Note: **Pro and Family Only**	**DISABLED**	**GSM Communication**
		Power LED
		Emergency Duration

10.2. Reminder Schedule Types

The following sections describe the different schedule types of the voice reminders and how to apply the schedule types in setting up the voice reminders.

- **One Time**: Refer to 10.2.1 One-Time Schedule Type on page 90.
- **Weekly**: Refer to 10.2.2 Weekly Schedule Type on page 90.
- **Monthly (Day of Month)**: Refer to 10.2.3 Day of the Month Schedule Type on page 90.
- **Monthly (Day of Week)**: Refer to 10.2.4 Day of Week Schedule Type on page 90.

10.2.1 One-Time Schedule Type

For the **One-Time Schedule Type**:

1. Choose a specific date for the reminder to be announced.
2. Choose a specific time for the reminder to be announced.

On the chosen date, at the time specified, the reminder is announced.

10.2.2 Weekly Schedule Type

For the **Weekly Schedule Type**:

1. Choose a specific time for the reminder to be announced.
2. Choose one or more days of the week when the reminder is to be announced.

Every week, on the chosen day or days of the week, at the time specified, the reminder is announced.

10.2.3 Day of the Month Schedule Type

For the **Monthly (Day of Month) Schedule Type**:

1. Choose a specific day of a month for the reminder to be announced.
2. Choose a specific time for the reminder to be announced.

Every month, on the chosen day, at the time specified, the reminder is announced.

10.2.4 Day of Week Schedule Type

For the **Monthly (Day of Week) Schedule Type**:

1. Choose a day of the week for the reminder to be announced.
2. Choose a specific time for the reminder to be announced.
3. Choose the week or weeks of the month for the reminder to be announced.

Every month, during the chosen week or weeks, on the chosen day of the week, at the time specified, the reminder is announced.

10.3. Medication Reminders

The **Voice & LED** module allows you to define up to four scheduled **medication** reminders.

The reminders are identified by the labels: MI1 – MI4

The purpose of the **medication** reminders is to broadcast vocal announcements through the CP to remind the residents to take their medication.

The text of the message is: "**Attention!** It is time to take your medication. Please take them and press the **RESET** button"

To acknowledge the reminder, the resident must press the blinking CP **RESET** button, within the configured **Timeout** timeframe. If the resident does not press **RESET** before the **Timeout** timeframe ends, a **Missed Reminder** report is sent to the monitoring station, if **Report** is enabled.

For information about configuring the **Timeout** parameter, refer to 10.1 General Configuration Parameters on page 87.

Figure 79 shows the **Medication** tab. Refer to 10.2 Reminder Schedule Types on page 89.

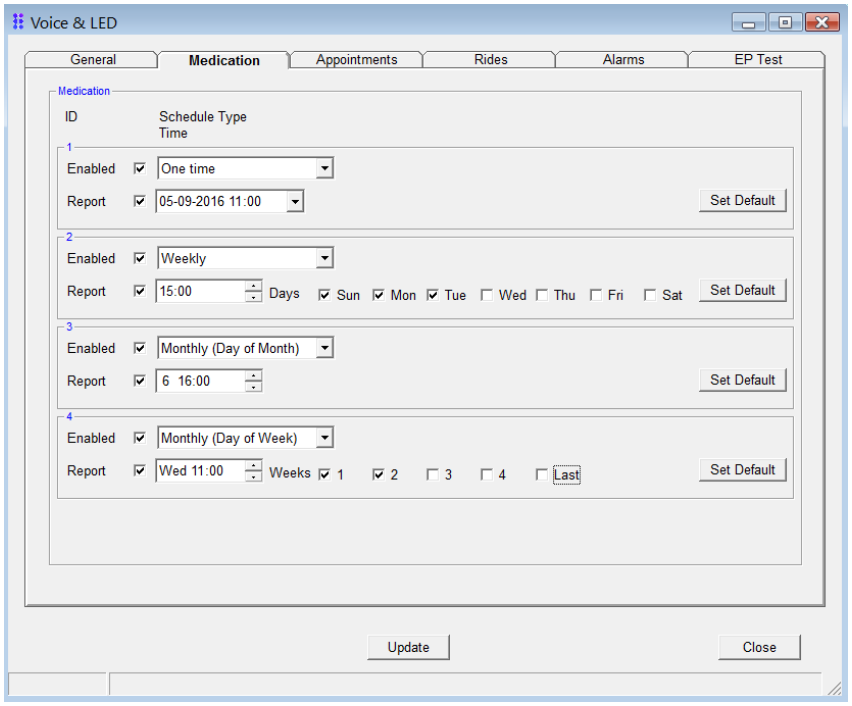


Figure 79: Medication Tab

10.4. Appointment Reminders

The **Voice & LED** module allows you to define up to four scheduled **appointment** reminders.

The reminders are identified by the labels: MI5 – MI8

The purpose of the **appointment** reminders is to broadcast vocal announcements through the CP to remind the residents to prepare for their appointments.

Each reminder is defined with an additional parameter: **Time to Announce**.

Enter the scheduled time of the appointment as the **Time to Announce**, which is added to the text of the vocal announcement.

The text of the reminder is: "**Attention!** Your appointment is at <***time to announce***>. Please press the **RESET** button."

To acknowledge the reminder, the resident must press the blinking CP **RESET** button, within the configured **Timeout** timeframe. If the resident does not press **RESET** before the **Timeout** timeframe ends, a **Missed Reminder** report is sent to the monitoring station, if **Report** is marked.

For information about configuring the **Timeout** parameter, refer to 10.1 General Configuration Parameters on page 87.

Figure 80 shows the **Appointments** tab. Refer to 10.2 Reminder Schedule Types on page 89.

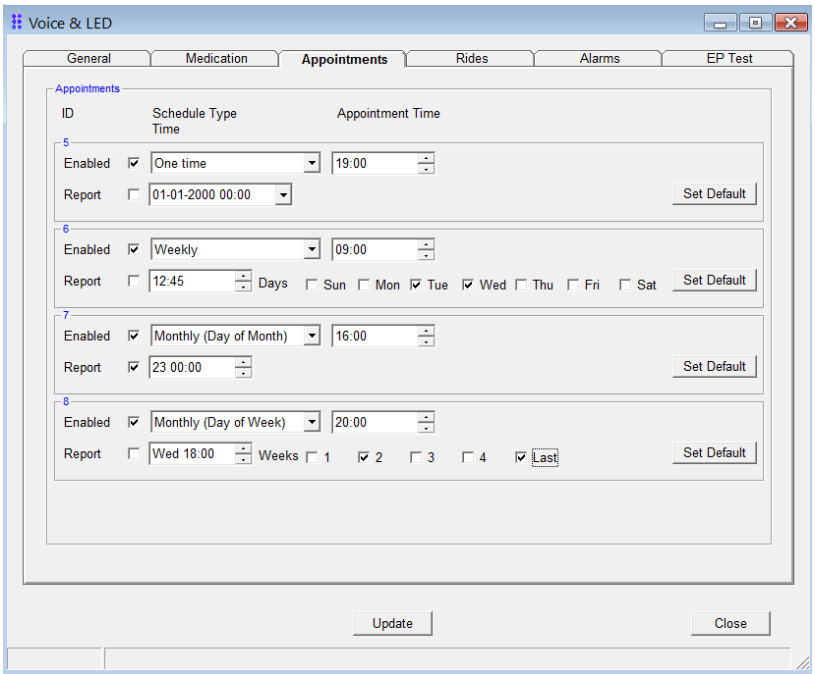


Figure 80: Appointments Tab

10.5. Ride Reminders

The **Voice & LED** module allows you to define up to four scheduled **ride** reminders.

The reminders are identified by the labels: MI9 – MI2

The purpose of the **ride** reminders is to broadcast vocal announcements through the CP to remind the residents to prepare for their rides.

Each reminder is defined with an additional parameter: **Time to Announce**.

Enter the scheduled time of the ride as the **Time to Announce**, which is added to the text of the vocal announcement.

The text of the reminder is: "**Attention!** Your ride will arrive at <***time to announce***>. Please press the **RESET** button."

To acknowledge the reminder, the resident must press the blinking CP **RESET** button, within the configured **Timeout** timeframe. If the resident does not press **RESET** before the **Timeout** timeframe ends, a **Missed Reminder** report is sent to the monitoring station, if **Report** is marked.

For information about configuring the **Timeout** parameter, refer to 10.1 General Configuration Parameters on page 87.

Figure 81 shows the **Rides** tab. Refer to 10.2 Reminder Schedule Types on page 89.

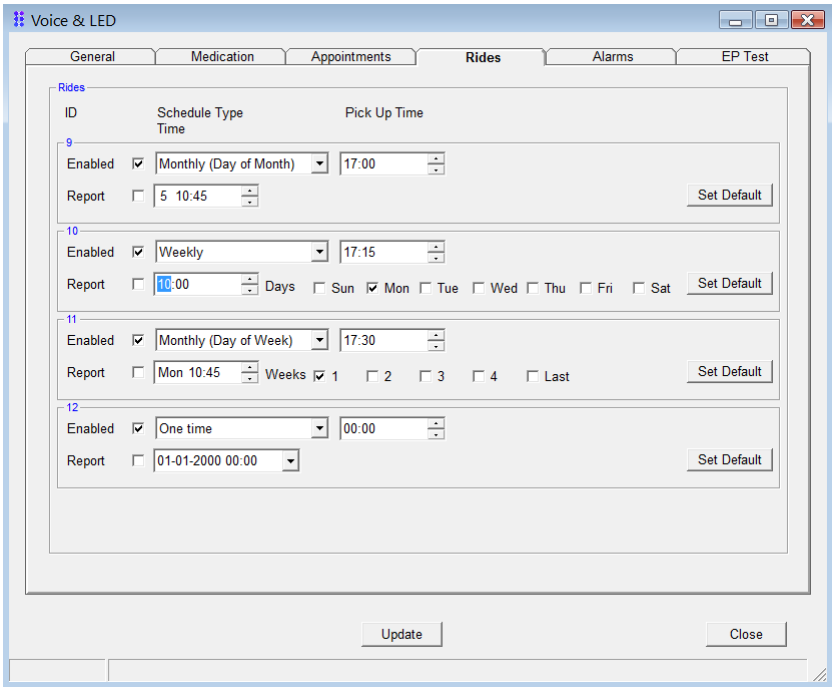


Figure 81: Rides Tab

10.6. Alarm Reminders

The **Voice & LED** module allows you to define up to four scheduled **alarm** reminders.

The reminders are identified by the labels: MI13 – MI6

The purpose of the **alarm** reminders is to use the CP as an alarm clock to remind the residents of scheduled times such as when to wake up in the morning or when to wake up from their other rest periods.

The text of the reminder is: "**Attention**! Alarm reminder. Please press the **RESET** button."

To acknowledge the reminder, the resident must press the blinking CP **RESET** button, within the configured **Timeout** timeframe. If the resident does not press **RESET** before the **Timeout** timeframe ends, a **Missed Reminder** report is sent to the monitoring station, if **Report** is marked.

For information about configuring the **Timeout** parameter, refer to 10.1 General Configuration Parameters on page 87.

Figure 82 shows the **Alarms** tab. Refer to 10.2 Reminder Schedule Types on page 89.

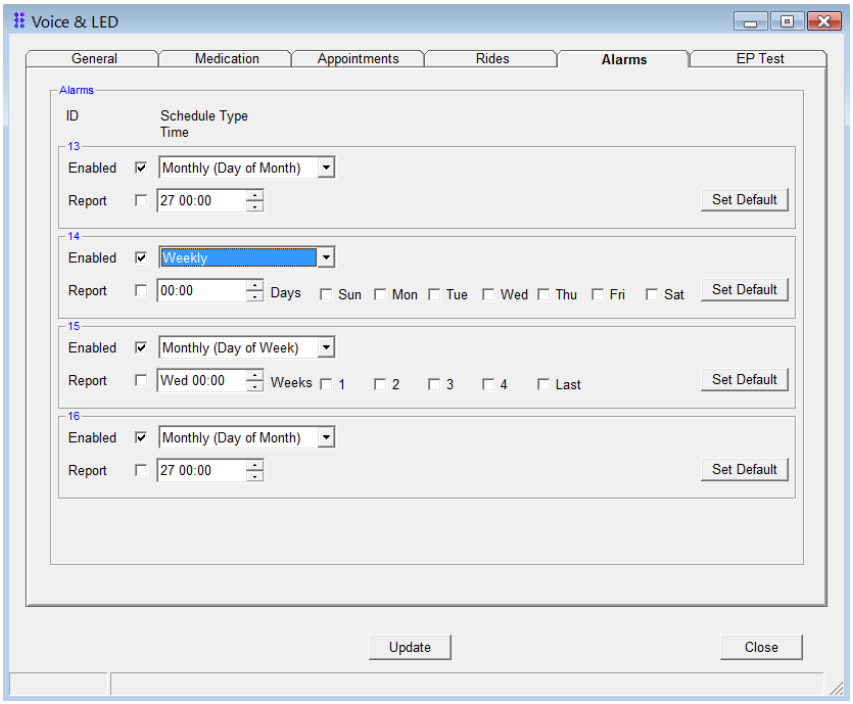


Figure 82: Alarms Reminders Tab

10.7. Pendant Test Reminder

The **Voice & LED** module allows the operator to define one scheduled emergency **Pendant Test** reminder.

The reminder is identified by the label: MI17

The purpose of the **Pendant Test** reminder is to broadcast vocal announcements through the CP to remind the resident to perform a test of their emergency pendant.

The pendant test supports the EP, the EPA, the EPP, and the EPA-BC. If the resident has multiple emergency pendants, only one pendant is needed for the pendant test.

To configure pendant test parameters:

On the **General** tab under **Vocal Reminders:**

1. Ensure that **Report Missed Reminders** is marked.
2. Set the **Timeout** pendant test interval.
3. If you want the pendant test to repeat if the pendant test fails to complete, set **Snooze Time** for the wait interval between pendant tests.
4. If you do not want the pendant test to repeat if the pendant test fails to complete, set **Snooze Time** to "No Repetition".

On the **EP Test** tab:

1. Mark **Report** to allow sending a **Missed Reminder** report when the pendant test fails.
2. Set the **EP Test Duration** to the wait interval, from the schedule date and time to begin the **Pendant Test** interval. The wait interval can be either 1, 2, or 3 hours.

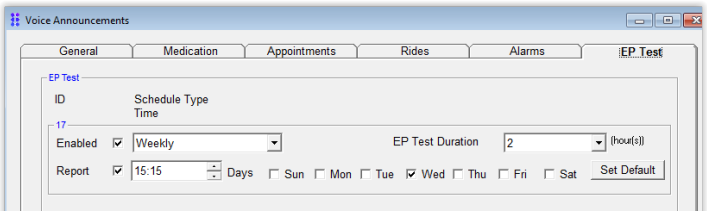


Figure 83: EP Test Tab

When the duration time finishes:

- The CP **RESET** button starts blinking
- The **Timeout** test interval begins.
- The pendant test reminder announcement is broadcast once

The text of the reminder is:

"**Attention!** It is time to test your pendant. Please press your pendant button."

To complete the pendant test, the resident must press their emergency pendant button.

If the resident does not press the pendant button before the test interval ends, a **Missed Reminder** report is sent to the monitoring station, if **Report** is marked.

Refer to 10.2 Reminder Schedule Types on page 89.

11. Custom Labels Module

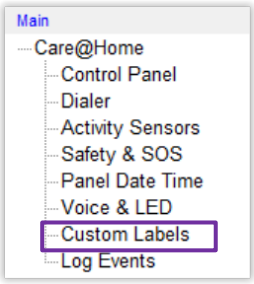


Figure 84: Access to the Custom Labels Module

Click **Custom Labels** on the **Main** navigator menu. The **Custom Labels** module is the tool that allows management of the personalized labels for Care@Home™ PERS CMS installed on the resident's premises.

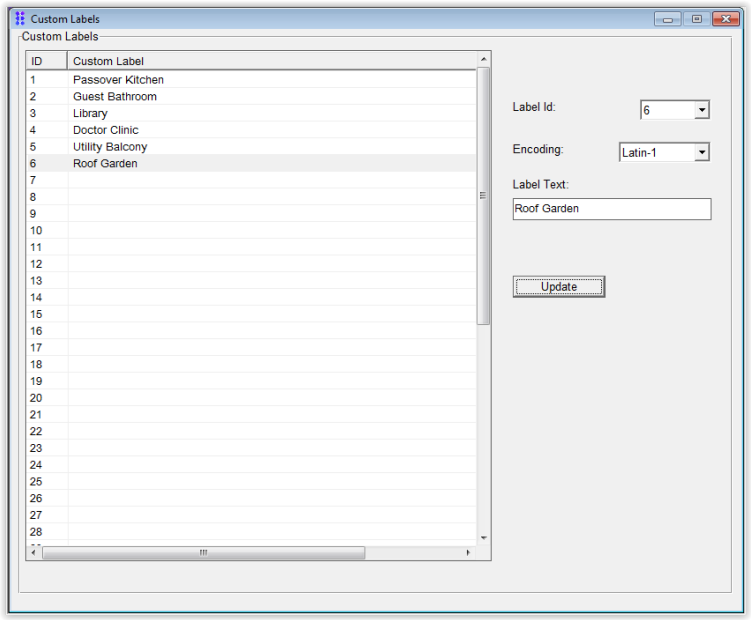


Figure 85: The Custom Labels Module

11.1. Defining Custom Labels

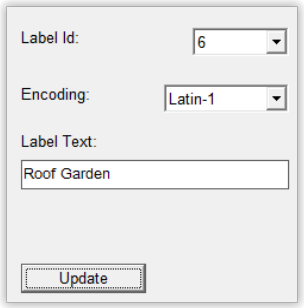


Figure 86: Custom Label Definition

The following table describes the parameters needed to define personalized labels for Care@Home™ PERS devices.

Table 32: Custom Label Definition Parameters

Name	Definition	Data Values	Default
Label Id	The internal identification of a label in the **Custom Labels** list.	Dropdown List Values: 1-50	
Encoding	The encoding character set with which to enter the personalized text for the custom label.	Dropdown list – one option	Latin-1
Label Text	Free form text up to 31 characters	A/N	

11.2. Managing Custom Labels

To add a custom label:

1. Select an empty row in the **Custom Label** list.
2. Enter the name of the label in the **Label Text** field.
3. Click **Update**.

The update process adds the custom labels to the dropdown list for the following parameters in other modules:

- The **Zone Label** parameter in the **Activity Sensors** module
- The **RF Input Label** parameter in the **Safety and SOS** module

To update an existing label:

1. Select the row in the **Custom Label** list with the label you want to edit.
2. Modify the text in the **Label Text** field.
3. Click **Update**.

To delete an existing label:

1. Select the row in the **Custom Label** list with the label you want to delete.
2. Remove the text in the **Label Text** field.
3. Click **Update**.

12. The Log Events Module

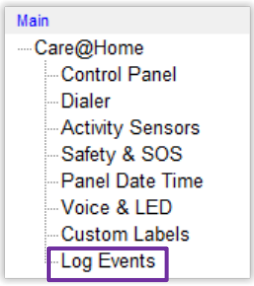


Figure 87: Access to the Log Events Module

Click **Log Events** on the **Main** navigator menu. The **Log Events** module is the tool that allows management of the event log files for the Care@Home™ PERS CP installed on the customer premises.

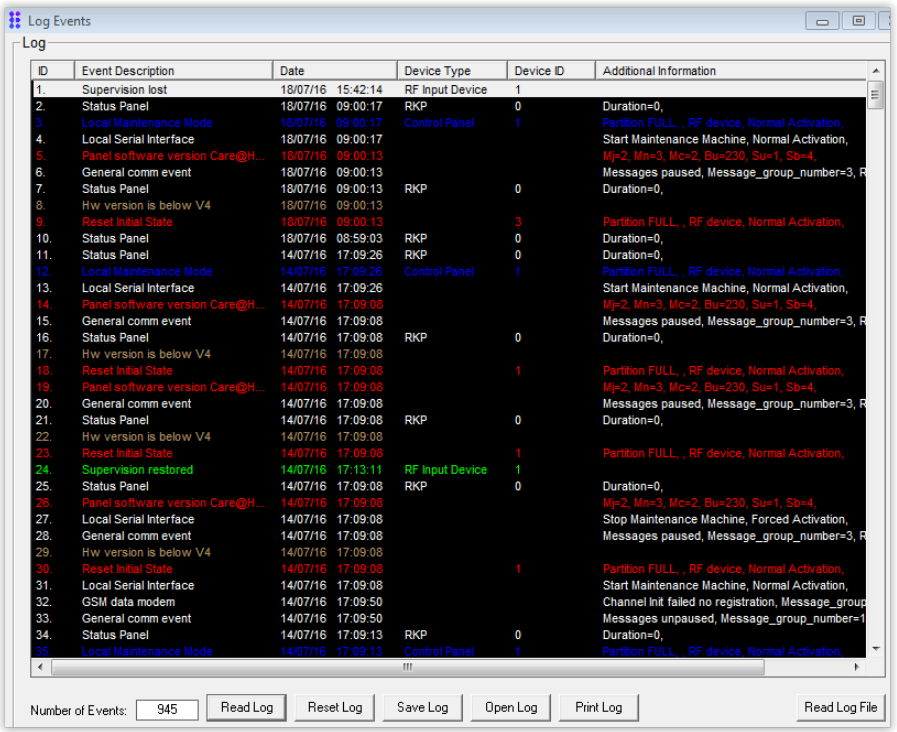


Figure 88: Log Events Page

The Care@Home™ PERS system provides the ability to capture and read a CP event log file (***.lgf*** file). Essence Professional Support personnel use the log file to analyze system behaviors and malfunctions.

12.1. Log Events Module Actions

The log files are stored in the CP. The **Log Events** module action buttons allow the user to view, store, print, or reinitialize the events log file in the CP.

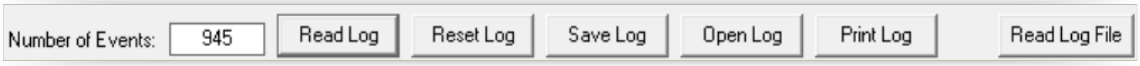


Figure 89: Log Events Module Action Buttons

12.2. Number of Events

The **Number of Events** parameter allows the user to enter the number of records to retrieve from the CP cyclical event log file. The records retrieved are the last events recorded by the log file.

For example, if the user enters "5" and clicks **Read Log**, the last five recorded events are displayed.

The log file can store up to 945 event records. Since the log file is cyclical, these records are of the last 945 events recorded by the CP and its peripheral devices.

12.3. Read Log

Click **Read Log** to retrieve the number of records entered in the **Number of Events** parameter. The records are retrieved from the CP event log file in "Last In First Out" (LIFO) order. The records are displayed in the **Log Events** main page in "descending order" by the date and time the event was reported.

For example, Figure 88, on page 100, shows the records displayed on the **Log Events** main page in "descending order".

12.4. Reset Log

Click **Reset Log** to empty the current CP event log file. You are prompted to confirm the reset log request. Click **Yes**.

The contents in the CP event log file are deleted. The event log file is ready to log new CP events, issued by the CP, the sensors, and other peripheral devices connected to the CP.

12.5. Save Log

Click **Save Log** to create an external copy of the retrieved records from the event log file in the CP. The records displayed on the **Log Events** screen are saved to an external file.

A Windows **Save Log** dialog box, as shown in Figure 90 below, appears to allow the user to specify the log file name with the extension ***.lgf*** and the location to store the log file on the local PC.

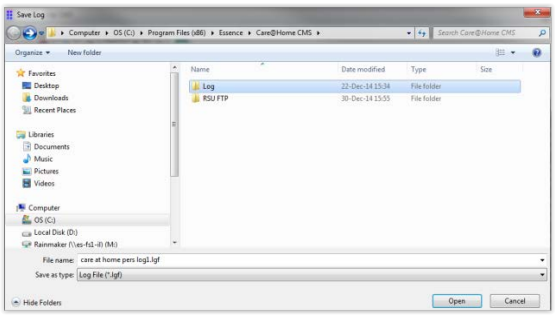


Figure 90: Save Log Window

NOTE: Use the **Save Log** feature to create the external ***.lgf*** file, when requested by the Essence professional service personnel to send them the CP events log file.

12.6. Open Log

Click **Open Log** to open the Windows **Open Log** dialog box, as shown in Figure 91, to locate an event log file (.lgf) on the local PC, "open" it, and display its contents on the **Log Events** page.

For example, Figure 92 shows the records in the event log file, retrieved in Figure 91, displayed on the **Log Events** page.

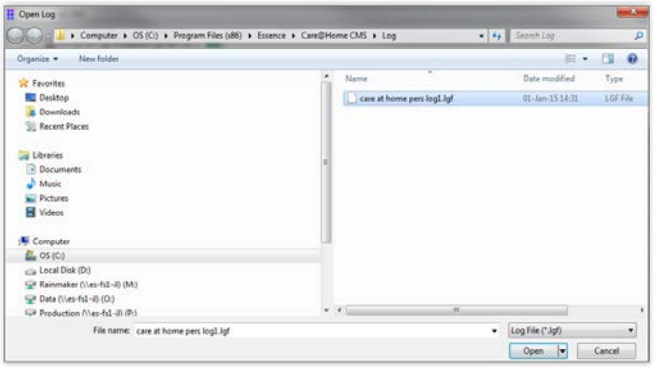


Figure 91: Open Log Window

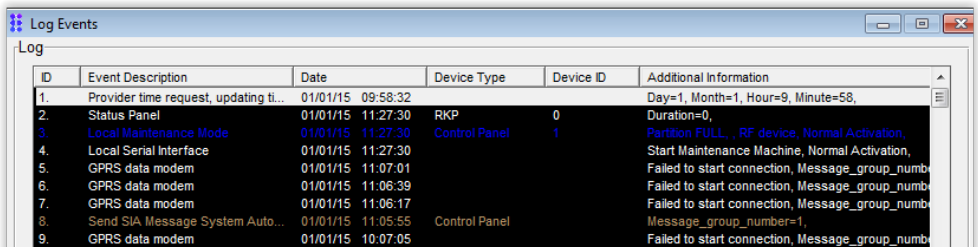


Figure 92: Log File Opened on the Log Events Screen

12.7. Print Log

Click **Print Log** to open the **Print Log** window, as shown in Figure 93, to allow you to choose whether to produce an Excel file, a ***.csv*** file, or a hardcopy of the event log file.

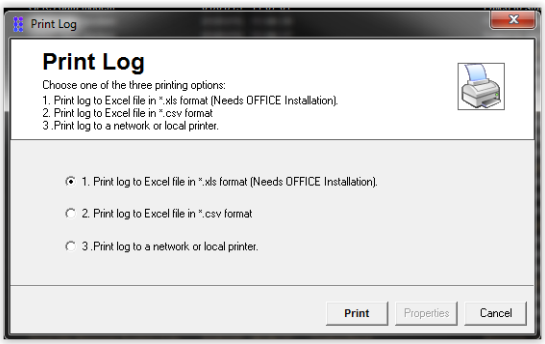
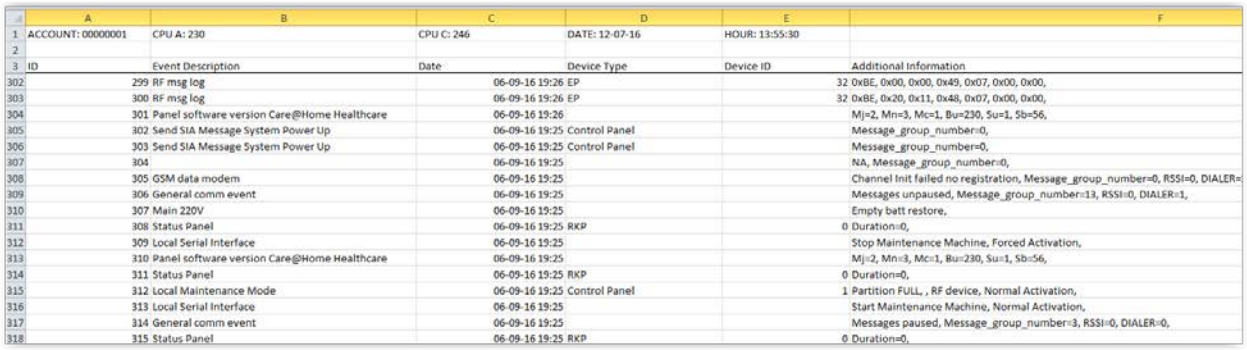


Figure 93: Print Window for Print Log Function

The log file is formatted in Windows EXCEL to properly view and understand the event log records.

For example, Figure 94 shows an event log file formatted and printed as an Excel file.



	A	B	C	D	E	F
1	ACCOUNT: 00000001	CPU A: 230	CPU C: 246	DATE: 12-07-16	HOUR: 13:55:30	
2						
3	ID	Event Description	Date	Device Type	Device ID	Additional Information
302	299	RF msg log	06-09-16 19:26	EP	32	0xBE, 0x00, 0x00, 0x49, 0x07, 0x00, 0x00,
303	300	RF msg log	06-09-16 19:26	EP	32	0xBE, 0x20, 0x11, 0x48, 0x07, 0x00, 0x00,
304	301	Panel software version Care@Home Healthcare	06-09-16 19:26			Mj=2, Mn=3, Mc=1, Bu=230, Su=1, Sb=56,
305	302	Send SIA Message System Power Up	06-09-16 19:25	Control Panel		Message_group_number=0,
306	303	Send SIA Message System Power Up	06-09-16 19:25	Control Panel		Message_group_number=0,
307	304		06-09-16 19:25			NA, Message_group_number=0,
308	305	GSM data modem	06-09-16 19:25			Channel Init failed no registration, Message_group_number=0, RSSI=0, DIALER=
309	306	General comm event	06-09-16 19:25			Messages unpaused, Message_group_number=13, RSSI=0, DIALER=1,
310	307	Main 220V	06-09-16 19:25			Empty batt restore,
311	308	Status Panel	06-09-16 19:25	RKP	0	Duration=0,
312	309	Local Serial Interface	06-09-16 19:25			Stop Maintenance Machine, Forced Activation,
313	310	Panel software version Care@Home Healthcare	06-09-16 19:25			Mj=2, Mn=3, Mc=1, Bu=230, Su=1, Sb=56,
314	311	Status Panel	06-09-16 19:25	RKP	0	Duration=0,
315	312	Local Maintenance Mode	06-09-16 19:25	Control Panel	1	Partition FULL, , RF device, Normal Activation,
316	313	Local Serial Interface	06-09-16 19:25			Start Maintenance Machine, Normal Activation,
317	314	General comm event	06-09-16 19:25			Messages paused, Message_group_number=3, RSSI=0, DIALER=0,
318	315	Status Panel	06-09-16 19:25	RKP	0	Duration=0,

Figure 94: Print Log Function Results

12.8. Read Log File

Click **Read Log File** to open the Windows **Open** dialog box to locate the remote log file (***.rlg***) on the debug server, "open" it, and display its contents on the **Log Events** page.

The ***.rlg*** file stores dialer debug data written to the remote log file when the **Debug Printing** option is used in the **Dialer** module. Refer to 6.1.1 Defining Basic Dialer Attributes on page 54.

13. Software Updates

There are several methods available for performing software and firmware updates:

- Remote Boot Feature
- Remote Software Update (RSU) using FTP
- Remote Multiple Device Manager – using a PSTN modem

13.1. The Remote Boot Feature

The **Remote Boot** feature allows the management of the CP, the voice announcements, and the CP software and peripheral firmware updates.

13.1.1 Launching the Remote Boot Feature

To launch the **Remote Boot** feature, perform the following procedure:

1. Double click 

. Care@Home™ PERS CMS opens and the **Connect** window appears.
2. Select the **Remote Boot** Protocol option.
3. Select the COM port according the connection method.
4. Click 

.
5. Following the successful completion of the connection procedure, the **Remote Boot** window appears, as shown in Figure 95 on page 106.

13.1.2 Remote Boot Setup

The Remote Boot setup is required to prepare for the software and firmware updates.

The Remote Boot Setup includes:

- Setting the **Boot Options**
- Selecting the update (***.esi***) file

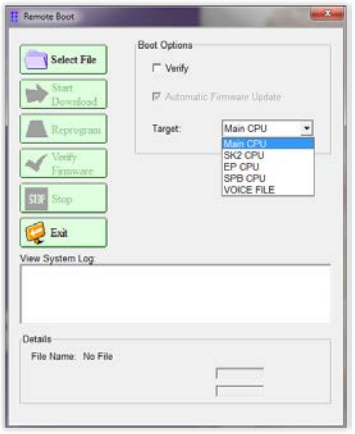


Figure 95: The Remote Boot Window

The following are the **Boot Options**:

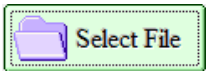
- **Verify** – If the checkbox is marked, the CP automatically verifies that the software/firmware (***.esi***) file transfer completed successfully.
- **Automatic Firmware Update** – If marked, the CP automatically performs the software/firmware update. When not marked, use 

to perform the software/firmware update.
- **Target** – Allows you to specify the target device for which the **Remote Boot** feature is to update the firmware.

Table 33 below lists the target and usage instructions.

Table 33: Remote Boot Targets

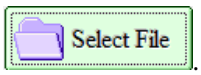
Target Device	Usage
Main CPU	Choose this option to upgrade the CP software.
SK2 CPU	Choose this option to upgrade the smoke detection peripheral device.
EP CPU	Choose this option to upgrade the emergency pendant.
EPA CPU	Choose this option to upgrade the emergency pendant advanced.
EP+ CPU	Choose this option to upgrade the emergency pendant plus.
SPB CPU	Choose this option to upgrade the stationary panic button.
Voice File	Choose this option to update the recording of the voice announcements.
VPD CPU	Choose this option to upgrade the voice panic detector.
Configuration	Choose this option to upgrade the configuration file.

Following the definition of the **Boot Options**, click 

to locate and select the update file.

13.1.3 The Software/Firmware Update Procedure

Perform the following procedure to run the software and firmware updates. Use Figure 95, on page 106, as a reference to the **Remote Boot** window.

1. Define the **Boot Options**, located on the right side of the **Remote Boot** window.
2. Click 

. The **Open ESI File** window appears, as in Figure 96 below.

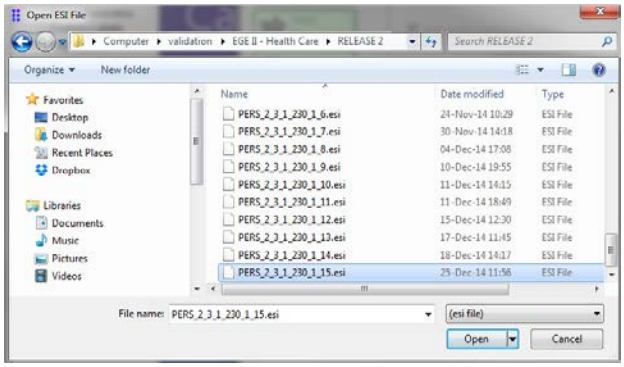
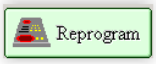


Figure 96: Open ESI File Window

3. Using the browser, select the update (***.esi***) file for the target device chosen in the **Boot Option** setup. The file details appear in the **Details** box at the bottom of the **Remote Boot** window, as in Figure 97 on page 108.

NOTE: If you want to control the software/firmware update manually, using 

, unmark the **Automatic Firmware Update** checkbox now.

4. Verify that the selected ***.esi*** file is the file, received from the PSO team, for the target device.

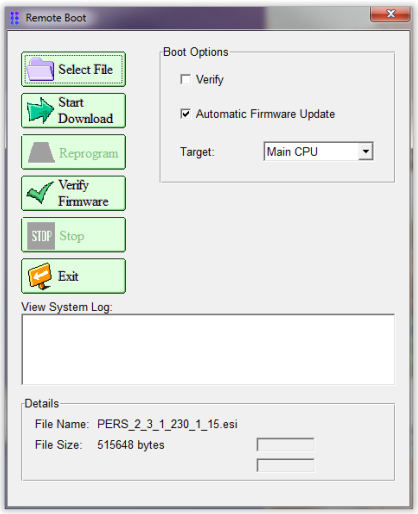


Figure 97: ESI File Details

5. Click 

. The application verifies that the ***.esi*** file is the file for the target device.

   If the file is not for the target device, the download process aborts and an error message appears, as in Figure 98.

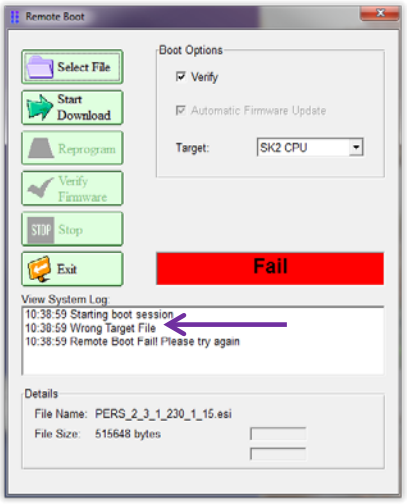


Figure 98: Wrong ESI File

If the file is for the target device, the update download process begins.

Information about the progress of the download process appears in the **View System Log** box and in the **Details** box, as in Figure 99. Note that there is a progress bar at the bottom of the window.

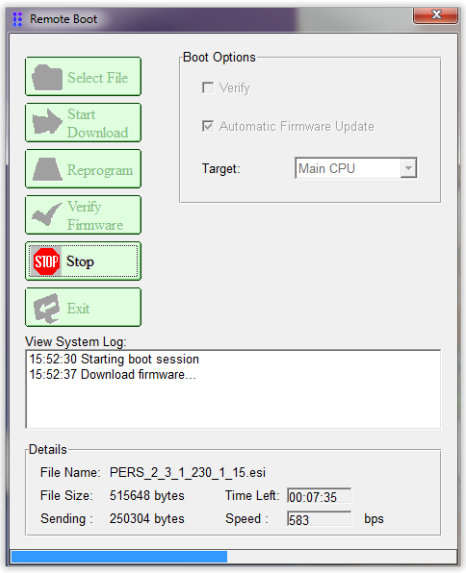


Figure 99: Download Process Details

The information displayed includes:

- **File Name** - The name of update file
- **File Size** – The amount of data to be transferred
- **Sending** – The amount of data transferred
- **Time Left** – The estimated time remaining
- **Speed (bps)** – The data transfer rate

6. If you need to abort the update process, click 

. The update process aborts and an error message appears, as in Figure 100.

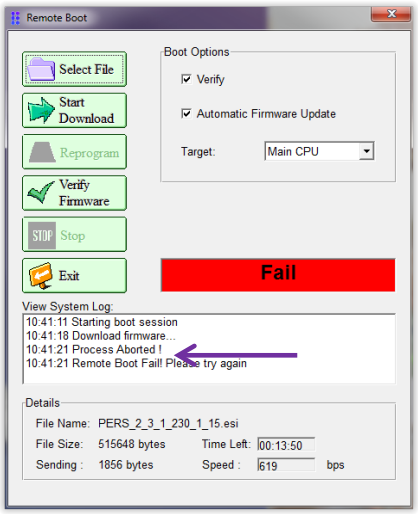
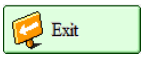


Figure 100: Download Process Aborted

7. To restart the update process:

   a. Click 

   b. Disconnect from the CP.

   c. Reconnect to the CP.

   d. Launch the **Remote Boot** feature

   e. Click 

.

   When the update process ends, **Success** confirmation appears along with the information displayed in both the **View System Log** box and in the **Details** box, as in Figure 101.

Figure 101: Download Process Ends

The CMS automatically disconnects from the CP and issues the message in Figure 102.

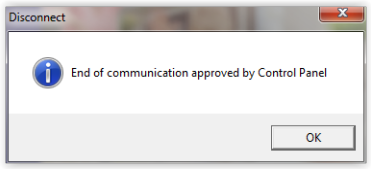


Figure 102: CP Disconnect Message

Table 34 below summarizes the functionality of the **Remote Boot** action buttons and boxes.

Table 34: The Remote Boot Parameters

Name	Definition and Instructions	Required or Optional	Default Value
Select File	Select the file for the target device. A browser dialog window appears to allow location and selection ('open') of the relevant update file (***.esi*** file).	Optional	Enabled
Start Download	Click to perform the update file transfer and update the software/firmware, according to the **Boot Options**.	Optional	Disabled
Reprogram	Click to manually initiate the software/firmware update. This button is enabled when you select a file. If **Automatic Firmware Update** is marked, the CP automatically performs the software/firmware update. In this situation, the button is disabled.	Optional	Disabled
Verify Firmware	Click to verify that the existing software for the Main CPU updated successfully. NOTE: This button is enabled only when the Main CPU is selected.	Optional	Disabled
Stop	Click to stop the remote boot process.	Optional	Disabled
Exit	Click to exit the **Remote Boot** window.	Optional	Enabled
View System Log	Displays the system messages and the error messages issued during the remote boot processing.	N/A	Display Only
Details	When a file is selected, the details of the file selected appear in this field.	N/A	Display Only

13.2. Remote Software Update Using FTP

The purpose of the **Remote Software Update** (RSU) feature **using FTP** is to allow you to update the CP software and the GSM module firmware, for multiple Care@Home™ PERS 4G/3G/2G CPs.

The RSU feature is administered using the **Remote Software Update using FTP** (RSU FTP) protocol, provided in the **Connect** window, as illustrated Figure 106 in on page 116.

NOTE: Before you can initiate the RSU FTP process, you must prepare the prerequisites. Refer to 13.2.2 Prerequisites on page 113.

13.2.1 Operational Flow

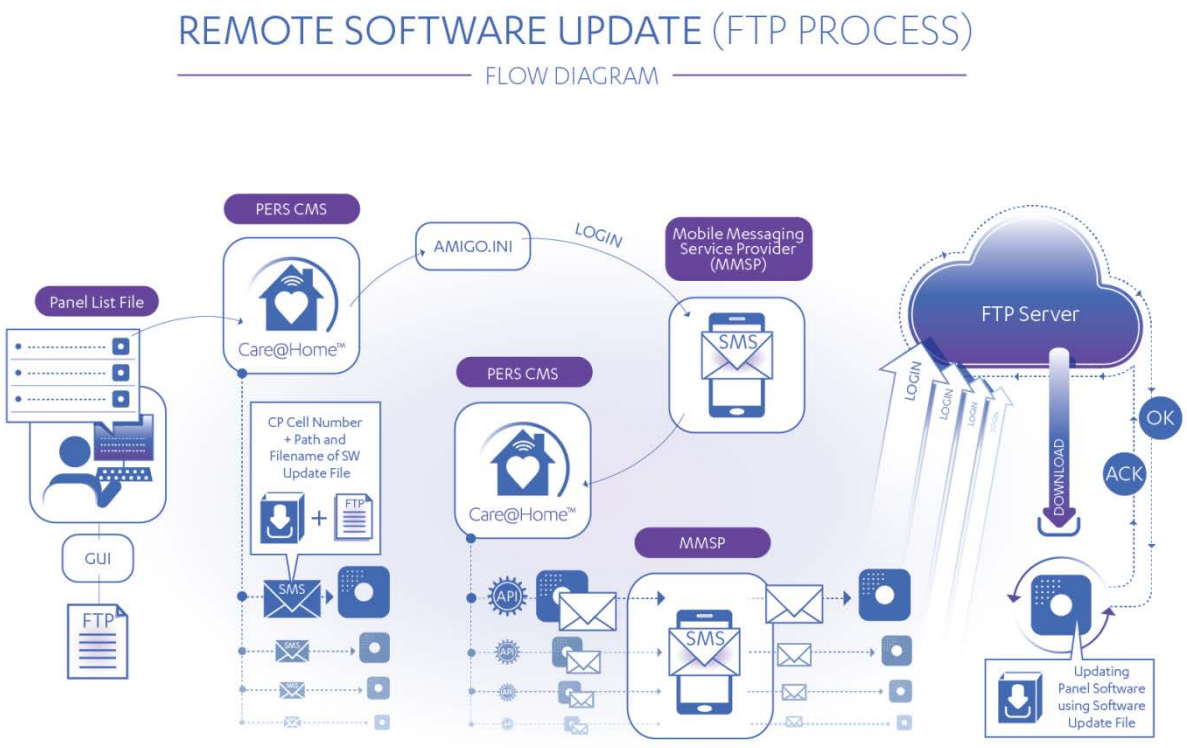


Figure 103: RSU Operational Flow

The **RSU** feature relies on an FTP Server and your Mobile Messaging Service Provider (MMSP) along with Care@Home™ PERS CMS, to perform the "mass" CP update. The operational flow, as shown in Figure 103 above, illustrates the process that performs the update, for each CP in the **Panel List** file.

13.2.2 Prerequisites

There are several prerequisites to arrange and prepare prior to using the RSU feature to update the software and firmware of multiple CPs.

The prerequisites are as follows:

- An FTP server for storing the software and firmware files for the CPs and the GSM modules respectively
- The user credentials for the FTP server which include:
  - IP address of the FTP Server
  - Port of the FTP Server
  - User and Password to access the FTP Server
  - The software files (**.esi**) for the CPs, as needed
  - The firmware files (**.env**) for the GSM modules, as needed
- A MMSP for sending SMS messages to the CPs
- The SMPP protocol account details of the Mobile Messaging Service (MMS).

NOTE: Contact Essence professional services for instructions on how to edit the ***Amigo.ini*** file with the MMS account details.

- For each software update, prepare a **Panel List** file (**.csv**) that lists all the CPs for the CP software update.
- For each firmware update, prepare a **Panel List** file (**.csv**) that lists all the CPs for the GSM module firmware update.

13.2.3 Update Files

There are two types of updates files:

- Update the CP software with an **.esi** file
- Update the GSM module firmware with an **.env** file

NOTE: Contact Essence professional services to receive the software and firmware update files.

13.2.4 The Panel List File Organization

The **Panel List** file is a ***.csv*** file which contains a list of CPs to be updated. Each line of the **Panel List** file represents a CP to be updated and the software and firmware update file to use to update the CP.

A **Panel List** file can contain **only one type** of software/firmware update file.

For example, there are two **Panel List** files. Each one contains a list of CPs to update.

- One **Panel List** File contains a list of CPs to update the CP panel software. The lines in the file include filenames of CP panel software update files.
- The other **Panel List** File contains a list of CPs to update the GSM module firmware. The lines in the file include filenames of GSM module firmware update files.

A CP that requires both a CP software update and a GSM module firmware update can appear in both **Panel List** files.

13.2.5 The Panel List File Structure

Before you can run the RSU FTP, you must prepare the **Panel List** file.

Table 35 below describes the structure and contents of a **Panel List** file.

Table 35: Panel List File Structure

Field	Description/Instruction	Data Characteristics	Required/ Optional
Panel Phone Number	The cellular phone number of the SIM-card installed in the CP	Character (15) in international cell phone format: +||<country code>||<area code>||<cell phone number>	Required
Panel Account Number	The account number assigned to the CP	Integer (8)	Required

Field	Description/Instruction	Data Characteristics	Required/ Optional
DTMF Code	The password assigned to the CP	Integer (4)	Required
Software Update File	Path and filename of the software update file, located on the FTP Server. The file can be either **.esi** for CP software update or **.env** for GSM module firmware update.	Character Path and filename format: /<Path>/<filename>.<extension Where extension can be: ■ .esi ■ .env	Required
Software Update File Type	A code to identify the type of software update file	Character ■ 00 – Panel firmware update (**.esi** file) ■ zz – GSM communications module update (**.env** file)	Required
FTP Server IP Address	Standard IP address of the FTP Server	Format: A set of four 3-digit strings separated by a period. Values from 0 - 255	Optional - First Row Only
FTP Port	Standard port address of the FTP Server	Integer (4)	Optional - First Row Only
FTP User	FTP server user name	Character (6)	Optional - First Row Only
FTP Password	FTP server user password	Character (10)	Optional - First Row Only

NOTE: The FTP credentials are added only at the end of the first line in the **Panel List** file. If not entered, the user must enter the FTP credentials in the **Connect** window manually.

Figure 104 below shows an example of the CP firmware update (***.esi***) file.

	A	B	C	D	E	F	G	H	I	J
1	panelPhone	PanelAccount	DTMF	filePath	DeviceType	ipDomain	port	userName	password	
2	14018311234	11111001	1234	/update_CP/PERS _2_3_1_230_1_14.esi	0	82.123.123.123	21	user	pass	
3	14018312468	11111002	1234	/update_CP/PERS _2_3_1_230_1_14.esi	0					

Figure 104: Panel Software Update File

Figure 105 below shows an example of the GSM communications module update (***.env***) file.

	A	B	C	D	E	F	G	H	I
1	panelPhone	PanelAccount	DTMF	filePath	DeviceType	ipDomain	port	userName	password
2	14018311234	11111001	1234	/update_GSM/Delta_205_B10-204.bin.env	0	82.123.123.123	21	user	pass
3	14018312468	11111002	1234	/update_GSM/Delta_205_B10-204.bin.env	0				

Figure 105: GSM Module Firmware Update File

13.2.6 Launch Software Update Process

Perform the following procedure to launch the RSU FTP process.

1. Double click 

. Care@Home™ PERS CMS opens and the **Connect** window appears.
2. Select the RSU FTP protocol option. The structure of the **Connect** box changes to allow entry of the RSU FTP parameters, as shown in Figure 106 below.

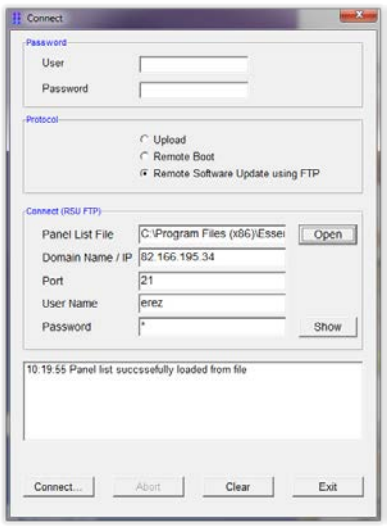


Figure 106: RSU Window

3. Enter the RSU FTP parameter values in the **Connect** box. Table 36 below lists the definitions of each of the RSU FTP parameters.

Table 36: RSU FTP Parameter Definitions

Field	Description/Instruction	Attributes
Panel List File Name	Enter the **Panel List** file filename. **Note:** Click **Open** to select the file using the Browser	A/N
Domain Name/IP	Enter the FTP server IP address.	Standard IP address format
Port	Enter the port number of the FTP Server.	Integer
User Name	Enter the FTP server user name.	Character
Password	Enter the FTP server user password **Note:** Click **Show** to reveal the password text. If the password text is readable, click **Hide** to mask the password text.	Character

4. Click Connect... at the bottom of the **Connect** window.
5. Following the successful completion of the connection procedure, the RSU FTP process begins.

13.2.7 RSU FTP process

The following is the description of the RSU FTP Process:

1. Care@Home™ PERS CMS logs on to the MMSP, via the **Amigo.ini** configuration file, using the SMPP account details you received from your MMS.
2. After Care@Home™ PERS CMS logs on to the MMSP, the MMS sends an SMS to each of the CPs, using each CP's SMS address (CP cellular phone number).
3. Each SMS contains the following information:
   - The CP credentials
   - The path and filename of the software or firmware update file, on the FTP Server
   - The FTP Server credentials
4. When receiving the SMS, each CP logs on to the FTP Server, using the FTP credentials received in the SMS, and downloads the software or firmware update file to the CP.
5. The CP updates (burns) itself with the downloaded software or firmware update file.
6. After the completion of the process, the CP logs on to the FTP Server, using the FTP credentials, and uploads the FTP ACK (acknowledgement) message to the FTP Server.

13.2.8 FTP ACK Messages

The following is an example of an FTP ACK filename:

_00001224358166_271017_110759_5_PERS_2_3_7_230_1_11.ack

Table 37 below describes, in order, the filename format

Table 37: FTP ACK Filename Format

Name	Length	Description
Phone Number	15	Control panel's phone number, left padded with zeroes and an underscore
Date	6	Control panel's date in ddMMyy format
Time	6	Control panel's time in HHmmSS format
RSU Status Code	1	Set according to the result of connecting with the FTP Server: 1 - Open FTP failure 2 - File download failure 3 - File type mismatch (or device-file mismatch) 4 - File CRC failure 5 - File download success 6 - RSU failure
Firmware	As needed	Firmware file name

13.3. Remote Multiple Device Manager

The Care@Home™ PERS CMS Remote Multiple Device Manager (RMDM) utility has dual functionality, for updating software and firmware associated with deployed PSTN CPs:

- To upgrade the firmware for any of the following target devices:
  - CP CPU
  - Smoke Detector (SK2)
  - Emergency Pendant (EP)
  - Stationary Panic Button (SPB)
  - CP Voice File
- To update the CP parameters from a predefined set of values you configured in the Care@Home™ PERS CMS application.

The Care@Home™ PERS CMS RMDM utility uses a PSTN landline modem to connect remotely to the CPs in the panel list. Essence recommends that you use the USRobotics Dial-up External Modem (product code: USR5637). See Figure 11 on page 17.

NOTE: This reference manual refers to version 1.0.13 of the Care@Home™ PERS CMS RMDM utility.

13.3.1 Prerequisites

Before you begin the update of the CPs, do the following:

1. Establish the remote PSTN connection using the PSTN modem.

   Refer to 3.4.1 Remote PSTN Connection to the CP on page 17.

2. Create a **Panel List** file (***.csv***), using the **Notepad** utility, with the phone numbers for the CPs to be updated.

   The file structure includes a single column of landline phone numbers. Each phone number must be followed by four commas.

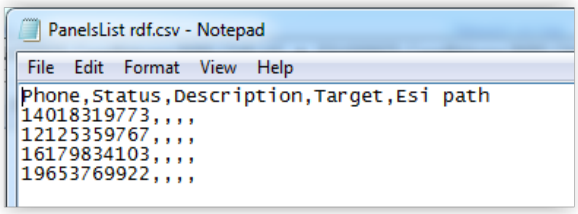


Figure 107: Panel List File Structure

   Enter the phone numbers in the format you would use for dialing the CP.

   For example, Figure 107 shows CP phone numbers in the US format with a leading "1" for calling phones outside your area code.

3. Locate one of the following files as the input file:
   - Firmware file (***.esi***) with which to upgrade the CPs or peripherals
   - Configuration file (***.cpf***) with which to update the CPs configuration parameters
4. Identify the target device type to be upgraded.
5. Determine the time periods for running the upgrade process.

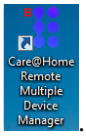
NOTE: Since the process calls the resident landline phone number, it is important to define time periods that will not disturb the resident.

6. Define the optimum number of retries and time to wait between retry attempts.

13.3.2 Upgrading the CPs

The RMDM utility is designed for prolonged run times. If a CP is busy or offline, the RMDM allows you to rerun the update process just for the CPs that were not updated.

To update the CPs, the peripherals, or the CP configuration parameters:

1. Ensure that you have performed the prerequisite tasks. Refer to 13.3.1 Prerequisites on page 119.
2. Double-click 

. The main window of the Care@Home™ PERS RMDM utility appears.

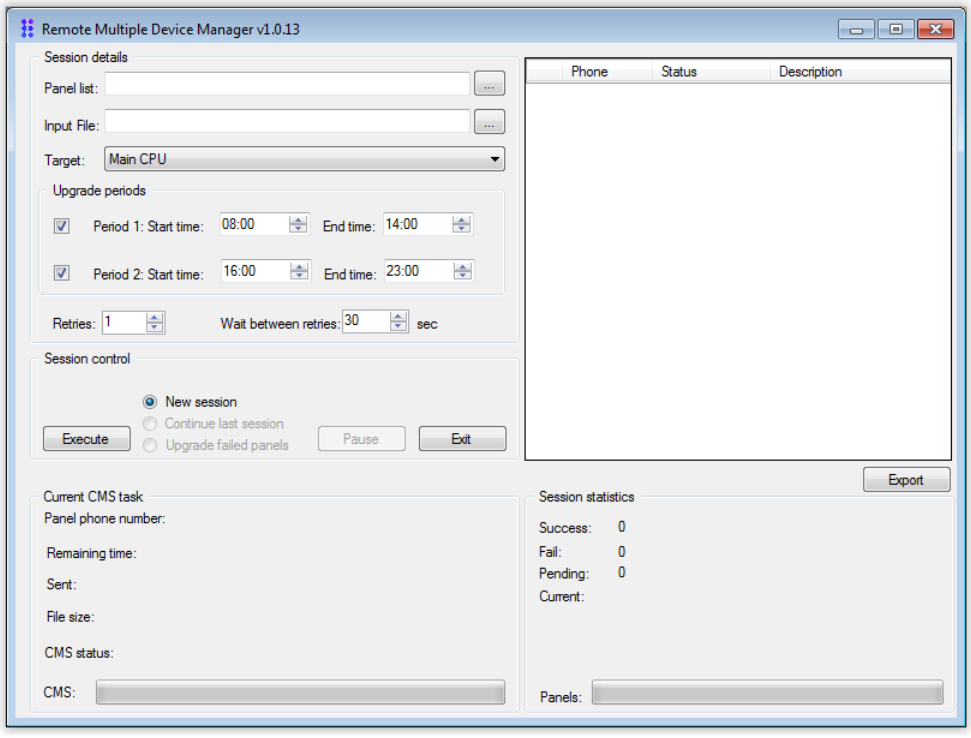


Figure 108: Remote Multiple Device Manager Window

3. For the **Panel List** field, click [...]. The **Open CSV File** window appears, as in Figure 109 below.

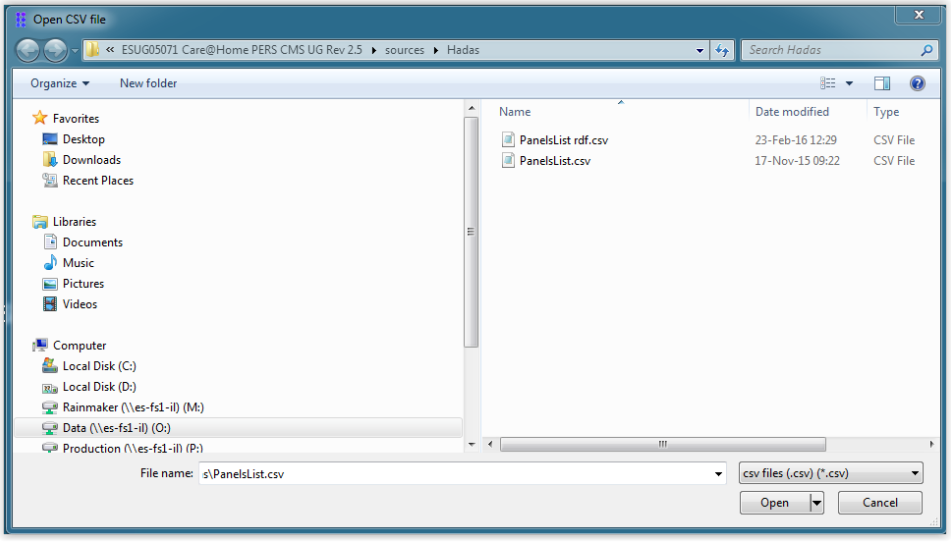


Figure 109: Open CSV File Window

4. Select the **Panel List** file (***.csv***). The path and name of the selected file appear in the **Panel List** field The **Panel List** file details appear in the box to the right of the **Panel List** field, as in Figure 114 on page 123.

5. For the **Input File**, click [...]. The **Open input file** window appears.

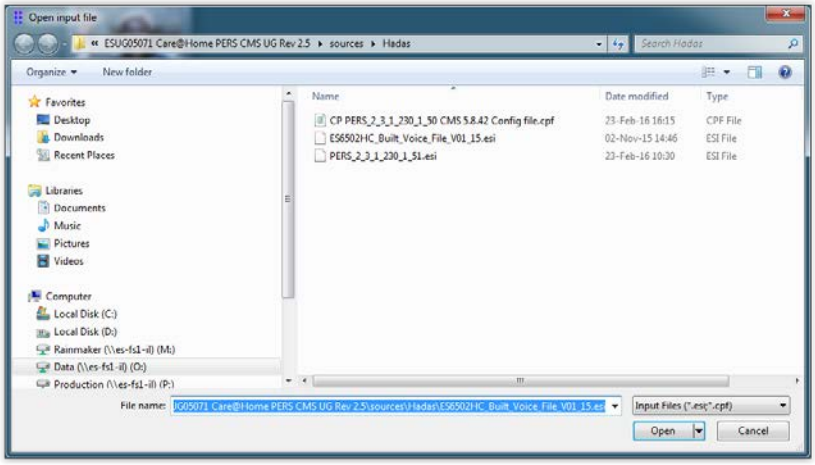


Figure 110: Open Input File Window

6. If you want to upgrade the CP or a peripheral, select a firmware upgrade file (***.esi***) for the target device.

7. If you want to update the CP configuration parameters, select a configuration file (***.cpf***).

8. If you want to upgrade the CP or a peripheral, select the device type to upgrade from the **Target** dropdown list.
9. If you want to update the CP configuration parameters, select **Configuration** from the **Target** dropdown list.

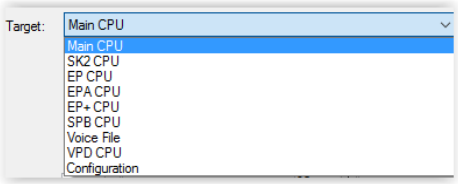


Figure 111: Target Device Types

10. Mark the **Upgrade** period(s) that you defined when preparing the prerequisites**.** Refer to 13.3.1 Prerequisites on page 119.
    - If no **Period** checkboxes are marked, you can run the upgrade process nonstop until all the target devices associated with the CPs in the **Panel List** are upgraded.
    - If the **Period** checkboxes are marked such that one interval overlaps the other, the following error message appears:

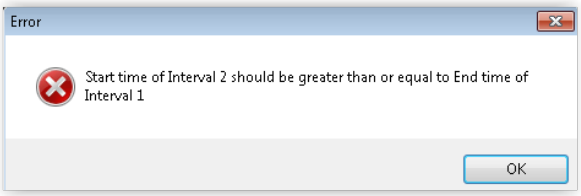


Figure 112: Error Message: Overlapping Intervals

    - If the end time of a period is earlier than the start time of that same period, the following error message appears:

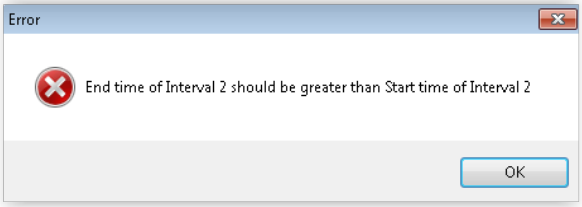


Figure 113: Error Message: End Time Earlier than Start Time

11. Enter the number of **Retries** and **Wait Time between Retries** as you defined when preparing the prerequisites. Refer to 13.3.1 Prerequisites on page 119.

12. Ensure that the values for all the parameters described in Steps 1-10 are entered and completed correctly.
13. Click **Execute**. If you entered all the parameters correctly, the utility begins the upgrade process.

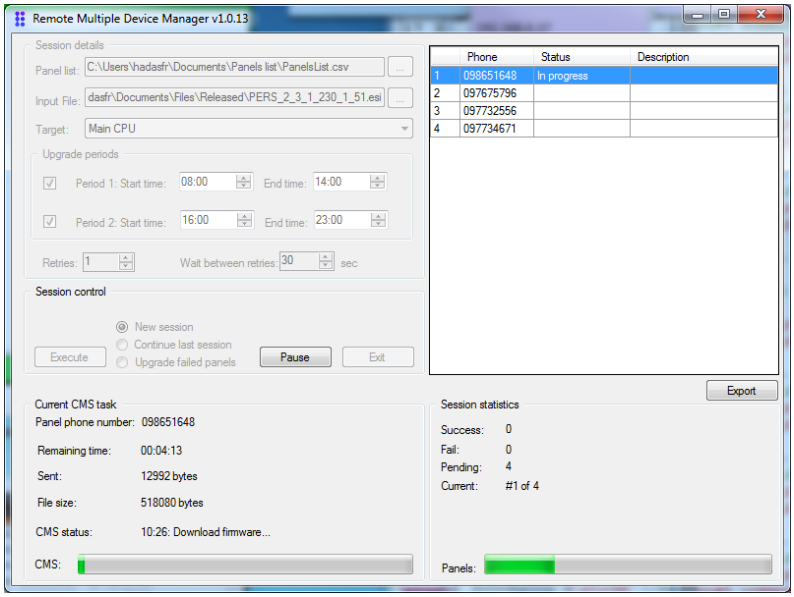


Figure 114: RMDM Upgrade Processing

If you did not enter the file parameters correctly, error messages are displayed:

- If you did not enter the **Panel List** file, the following error message appears:

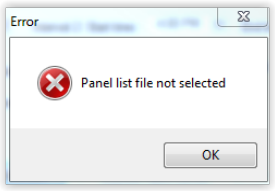


Figure 115: Panel List File Missing

- If the utility cannot locate the **Panel List** file you entered, the following error message appears:

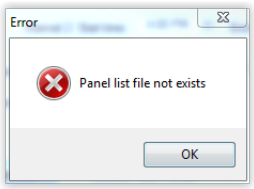


Figure 116: Panel List File Not Found

- If you did not enter the **Input file**, the following error message appears:

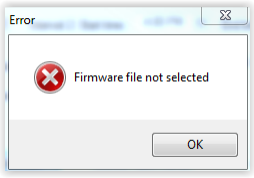


Figure 117: Firmware Upgrade File Missing

- If the utility cannot locate the selected **Input file**, the following error message appears:

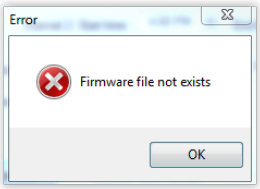


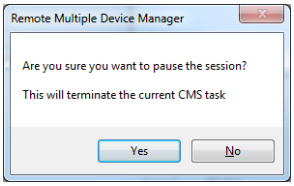
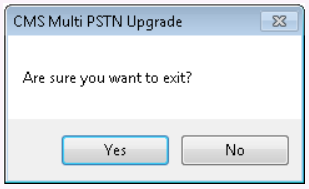
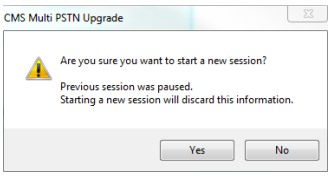
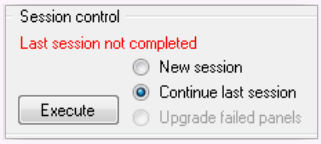
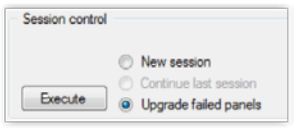
Figure 118: Firmware Upgrade File Not Found

13.3.3 Managing RMDM Processing

The RMDM utility provides you with the tools to manage and control the upgrade process.

Table 38 below provides the operating instructions for using the **Session Control Actions** to manage the upgrade process.

Table 38: Manage Processing

Session Control Actions	Instructions	Confirmation Windows
Execute	Click to initiate RMDM upgrade processing.	
Pause	Click to suspend processing. The confirmation window appears, prompting you to confirm the **Pause** action. Click **Yes** to terminate the current CMS task.	
Exit	Click to stop processing and close the utility main window. The confirmation window appears, prompting you to confirm the Exit action. Click **Yes** to terminate the current session.	
● **New Session**	Following a **Pause** action, if you wish to dismiss the previous upgrade processing and restart the upgrade process of the **Panel List** file from the beginning. The confirmation window appears, prompting you to confirm the **New Session** action. ■ Click **Yes** to start a new session. ■ Click **No** to retain the previous processing.	
● **Continue Last Session**	Following a **Pause** action, the message appears in Red, prompting you to decide which action to choose. Mark option if you wish to resume processing of the last session.	
● **Upgrade Failed Panels**	This option is enabled following the completion of the upgrade process for the **Panel List** file. If the results of the upgrade process include upgrade failure to one or more CPs, the option to restart the upgrade process is enabled. Mark if you wish to run the upgrade process again for the CPs that failed the upgrade process.	

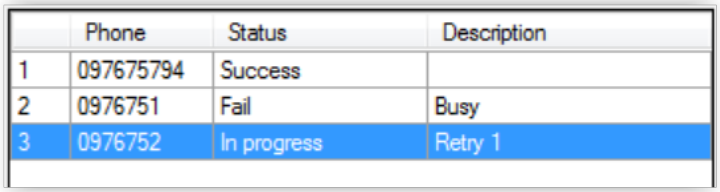
13.3.4 Upgrade Progress Reporting

The RMDM main window reports the progress of the process and the upgrade results for each CP as it is upgraded.

There are four areas of progress reporting:

- Panel List Details box – Refer to 13.3.4.1 Panel List Details Box on page 126.
- Current CMS task – Refer to 13.3.4.2 Current CMS task on page 127.
- Session Statistics – Refer to 13.3.4.3 Session Statistics on page 128.
- Export feature – Refer to 13.3.4.4 Export feature on page 129.

13.3.4.1 Panel List Details Box



	Phone	Status	Description
1	097675794	Success	
2	0976751	Fail	Busy
3	0976752	In progress	Retry 1

Figure 119: Panel List Details Box

The contents of the **Panel List** file are displayed in the box to the right of the **Panel List** field, as illustrated in Figure 114 on page 123. The utility updates the status of the upgrade of each CP in the **Panel List** file.

For example, in Figure 119 above, the **Panel List** details box shows that:

- The first CP was successfully upgraded.
- The second CP upgrade failed, due to an unavailable ("Busy") landline connection.
- The third CP upgrade process is running the first retry.

The following table describes the information reported in the **Panel List** details box.

Table 39: Panel List File Status

Column Names	Description	Notes
Phone	The landline phone number of the CP to be upgraded with the chosen firmware	
Status	The status of the CP **Upgrade** processing **Caution:** If residents answer the ringing of their landlines when the utility connects with the CPs, **the upgrade process for each of the CPs fails.**	■ Successful ■ Fail ■ In Progress ■ Pending
Description	Additional information about the **Upgrade** process such as: ■ The number of the retry currently running ■ The reason for a failed **Upgrade** process	

13.3.4.2 Current CMS task

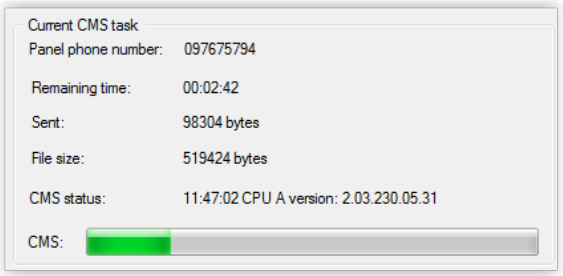


Figure 120: Current CMS Task Information

The **Current CMS Task** information provides you with the real-time status of the **Upgrade** processing of the current CP.

For example, in Figure 120 above, the **Current CMS Task** information shows:

- The phone number currently being processed
- The statistics about the current processing of the firmware file
- The version the CPU of the current CP
- Progress of the current upgrade process

The following table describes the information reported for the **Current CMS Task**.

Table 40: Current CMS Task Information

Task Information	Description
Panel phone number	The phone number of current CP in process
Remaining time	The time remaining to transfer the firmware file
Sent	The current number of bytes transferred
File size	The total number of bytes to transfer
CMS status	Additional information about the CP, such as the version of the CP CPU software
CMS	The progress bar that represents the status of the current **Upgrade** process.

13.3.4.3 Session Statistics

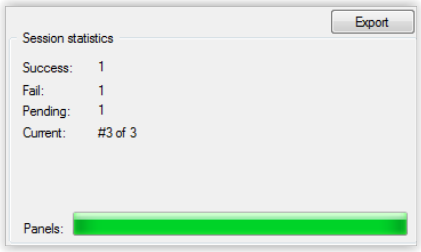


Figure 121: Session Statistics

The **Session Statistics** reports the overall progress of the **Upgrade** process within the session.

For example, in Figure 121 above, the **Session Statistics** show:

- How many CPs have been processed
- How many CPs are left to process
- The overall progress of the upgrade process

The following table describes the information reported for the **Session Statistics**.

Table 41: Session Statistics Information

Statistics	Description
Success	The number of successful CP upgrades
Fail	The number of failed CP upgrades
Pending	The number of CP upgrades remaining
Current	The position in of the current CP in the **Panel List** file
CMS	The progress bar that represents the overall status of the **Panel List Upgrade** process.

13.3.4.4 Export feature

	A	B	C	D	E
1	**Phone**	**Status**	**Description**	**Target**	**Esi path**
2	97675787	Success		Main CPU	[illegible]\PERS_2_3_1_230_1_31.esi
3	976751	Fail	Busy		
4	976752	InProgress			
5					

Figure 122: Export CSV File

The **Export** feature allows you to generate a report of the CPs **Upgrade** process in the **Panel List**.

To generate the list, click **Export**, as shown in Figure 121 on page 128. The utility generates a ***.csv*** file which includes the information concerning the current **Panel List** file upgrade process.

Figure 122 above shows an example of the upgrade process report.

Table 41 above describes the information reported in the upgrade process report.

Table 42: Export CSV File Structure

Column Name	Description
Phone	The landline phone number of the CP processed
Status	The status of the **Upgrade** processing of the CP

Column Name	Description
Description	Additional information about the **Upgrade** process such as: ■ The number of the retry currently running ■ The reason for the failed **Upgrade** process
Target	The CP or peripheral device for which the upgrade process is running
ESI Path	The path and name of the firmware file (***.esi***)

Appendix A USB to RS232 Adapters

If the PC on which Care@Home™ PERS CMS is installed has no available RS232 COM ports, the user is instructed to use a RS232-USB adapter to connect the CP to the PC.

Essence Professional Services recommends the following two alternatives:

- USB Gear Serial Adapter
- VSCom USB-COM Mini

These are the descriptions and special features of the adapters.

The USB Gear Serial Adapter

Figure 123: The USB GEAR USB to Serial Adapter

The following is a list of some of the features of this USB to serial adapter:

- Over 500 kbps of data transfer capability
- Works with Modems, PDA's, Cell phones, Digital Cameras and more serial legacy devices
- LED visuals for transmit and receive between devices
- Compatible with: Windows 8.1 (32/64Bit) through Windows 10
- The USB Gear's 12" USB Serial Converter, with its powerful Hi-Speed DB9 Serial adapter, comes with software drivers and a manual. The customer can download the software drivers and the user manual from the following link: http://www.usbgear.com/Serial-usb-adapter/index.cfm

The VScom USB-COM Mini

Figure 124: The VScom USB-COM Mini Adapter

The VScom USB-COM Mini adapter provides a high speed RS232 serial port with 128 byte FIFO to allow for high speed communications, even for heavy loaded systems. The RS232 serial port on this adapter also enables high speed settings such as 500,000 bps.

The following is a list of the key features of this USB to serial adapter:

- 1 x RS232 DB9 male port
- Speed up to 921.6 kbps
- No external power supply

The customer can access VS Com and more information about this adapter by following this link: http://www.vscom.de/619.htm

Appendix B Care@Home™ PERS CMS Warehouse

The purpose of the Care@Home™ PERS CMS warehouse utility is to update one or more CPs with one or more of the following files:

- CP configuration - ***.cpf*** *parameter file*
- CP firmware - ***.esi*** firmware file
- Prerecorded vocal messages - ***.esi*** voice file

You can create the ***.cpf*** file using the Care@Home™ PERS CMS. The ***.esi*** files are provided by Essence support personnel.

Generating a CP Configuration File

To generate a CP configuration file (***.cpf***):

1. Define a given set of parameter values, using the Care@Home™ PERS CMS.
2. Save the given set of parameters to a ***.cpf*** file on the local PC.

Setting Up the CMS Warehouse Utility

The installation of the Care@Home™ PERS CMS warehouse utility is performed automatically during the installation of Care@Home™ PERS CMS.

The warehouse utility references the **[Warehouse]** section in the setup file, ***setup.ini***. For example, the default COM port in the setup file is: ***DefaultPort=COM1***

To allow you to update firmware and voice messages in addition to the CP configuration, you must edit the setup file, using the **Notepad** utility, to redefine the **Remote Software Update** parameter to 1.

To edit the ***setup.ini*** file:

1. Open the ***setup.ini*** file in the **Notepad** utility.
2. Change ***rsu=0*** to ***rsu=1***.
3. Save the file changes.

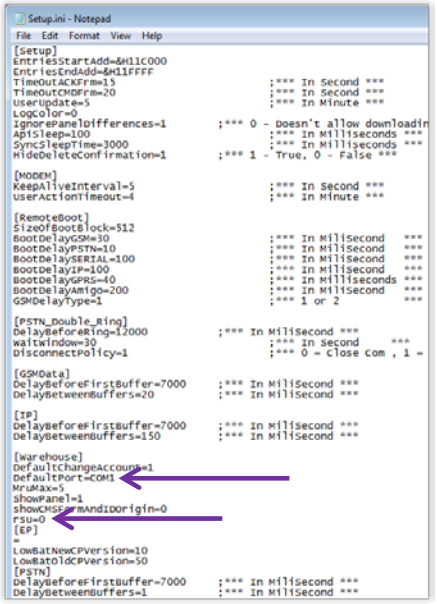


Figure 125: Setup.ini File

The Care@Home™ PERS CMS Warehouse Window

The Care@Home™ PERS CMS warehouse utility includes one main window. The window changes depending on the ***setup.ini*** file. For example, if the ***rsu=0*** in the ***setup.ini*** file, the window displays only the **Configuration File** field.

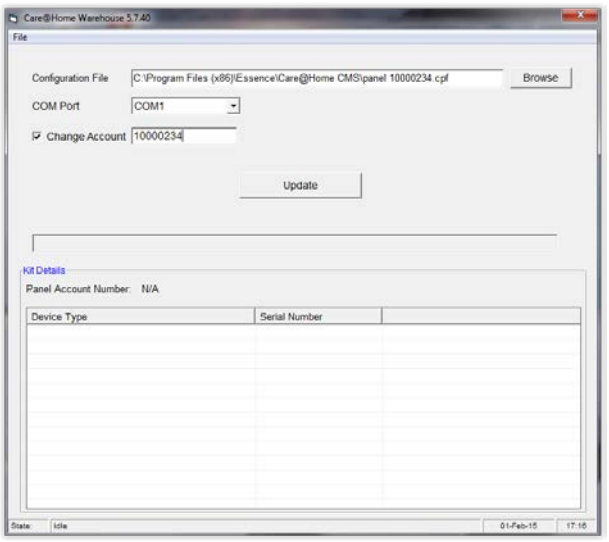


Figure 126: The CMS Warehouse Window

The CMS warehouse window also includes a **File** menu on the menu bar.

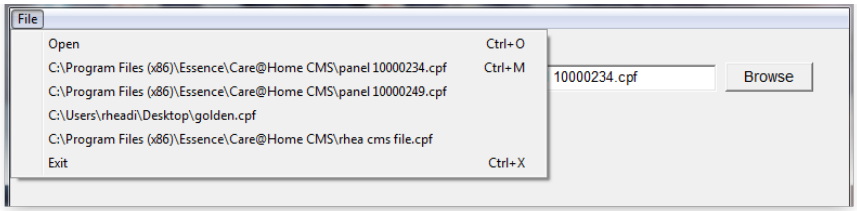


Figure 127: The File Menu

Table 43: File Menu Functions

Name	Definition and Instructions
Open	Locate the local ***.cpf*** file on the personal computer, using the Windows CMS File Dialog box.
<recent files>	List of the last ***.cpf*** files accessed in the warehouse. The number of files listed is configurable in the ***setup.ini*** file.
Exit	Select this function to exit the Care@Home™ PERS CMS Warehouse utility.

Updating CPs with the Care@Home™ PERS CMS Warehouse

The CP configuration file is required to run the CMS Warehouse utility. You must enter a ***.cpf*** file in the **Configuration File** field. However, you can stop the file processing before reaching the configuration file update.

Run the Care@Home™ PERS CMS warehouse utility as follows:

1. Double click 

. The Care@Home™ PERS CMS warehouse window appears.
2. To update the CP firmware, mark the **Esi File** checkbox and enter the firmware ***.esi*** file path and filename. To search for the firmware file, use **Browse**.
3. To update vocal messages, mark the **Voice File** checkbox and enter the voice ***.esi*** file path and filename. To search for the voice file, use **Browse**.
4. Enter the path and the filename of the ***.cpf*** file in the **Configuration File** field.

   To search for the CP configuration file, use **Browse** or the **Open** option on the **File Menu**.

NOTE: The warehouse application validates each ***.esi*** or ***.cpf*** file. If the file entered is not the correct type of file, an error message window appears. The file is not accepted.

5. Select the COM port used to connect the CP to the local computer in the **COM Port** field.

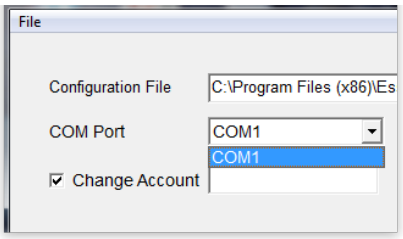


Figure 128: COM Port Dropdown List

6. To enter an account number for the CP, mark the **Change Account** checkbox and enter the 8-digit account number in the field to the right of the checkbox.

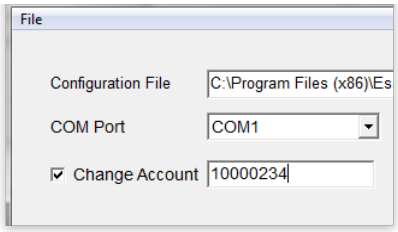


Figure 129: Change Account Field Enabled

7. Click **Update**. One or more files are transferred to the CP in the following order:
   a. If the **Esi file** is marked, the CP firmware is upgraded, using the ***.esi*** firmware file.
   b. If the **Voice file** is marked, the voice messages on the CP are updated, using the ***.esi*** voice file.
   c. If the processing continues, the CP configuration parameters are updated using the ***.cpf*** file.

File Processing

When processing the files, in addition to the progress bar, messages appear displaying the process progress per file. The messages are:

- Initializing
- In progress
- Completed

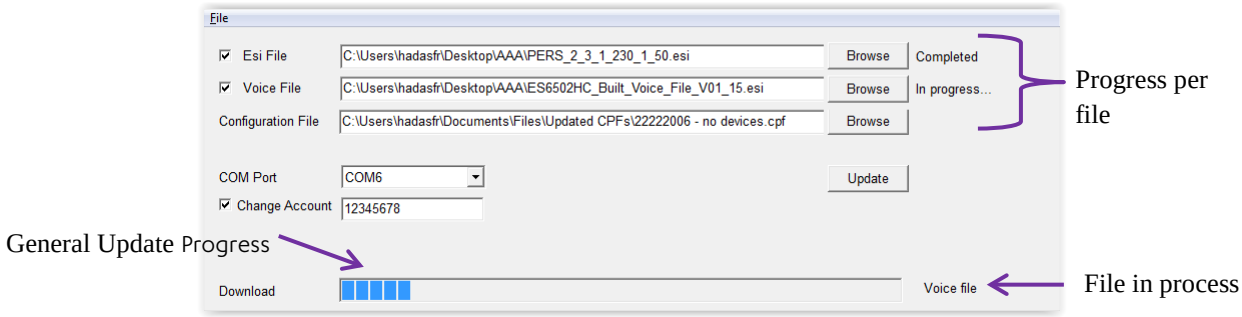


Figure 130: Processing Messages Appear

If an error or problem occurs during the file processing, the relevant error message window appears.

Firmware File Upgrade

When the firmware file transfer is completed, the file transfer process is suspended. A window appears with instructions for the user to set up the CP to acknowledge the firmware file transfer. Follow the instructions in the window.

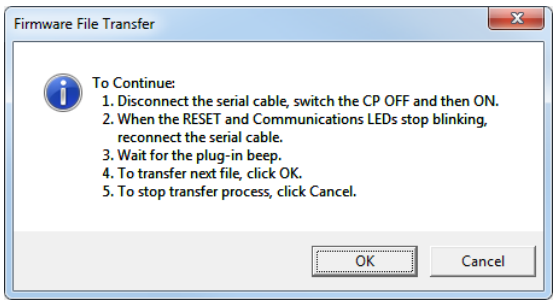


Figure 131: Firmware File Transfer Completion Instructions

If you stop the process, the files that were transferred remain. No additional files are processed.

Vocal Messages Update

When the voice file transfer is completed, the file transfer process is suspended. A window appears with instructions for the user to set up the CP to acknowledge the voice file transfer. Follow the instructions in the window.

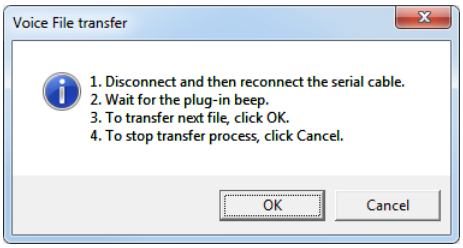


Figure 132: Voice File Transfer Completion Instructions

If you stop the process, the files that were transferred remain. No additional files are processed.

Configuration File Update

The configuration file update completes the entire file transfer process. A window appears to confirm that the transfer process is finished and the CP is ready for shipping. Follow the instructions in the window.

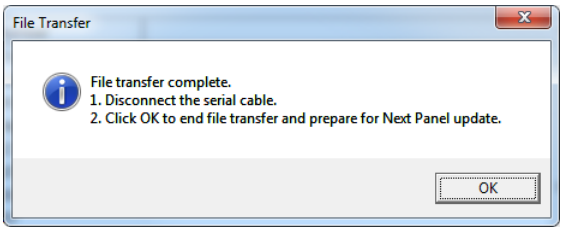


Figure 133: Configuration File Transfer Completion Instructions

CMS Warehouse Processing Completed

When the CMS warehouse processing completes, the CP is updated with the files that were entered. For each updated CP, the following information is displayed in the **Kit Details** box:

- The updated CP account number
- The list of the devices included in the kit

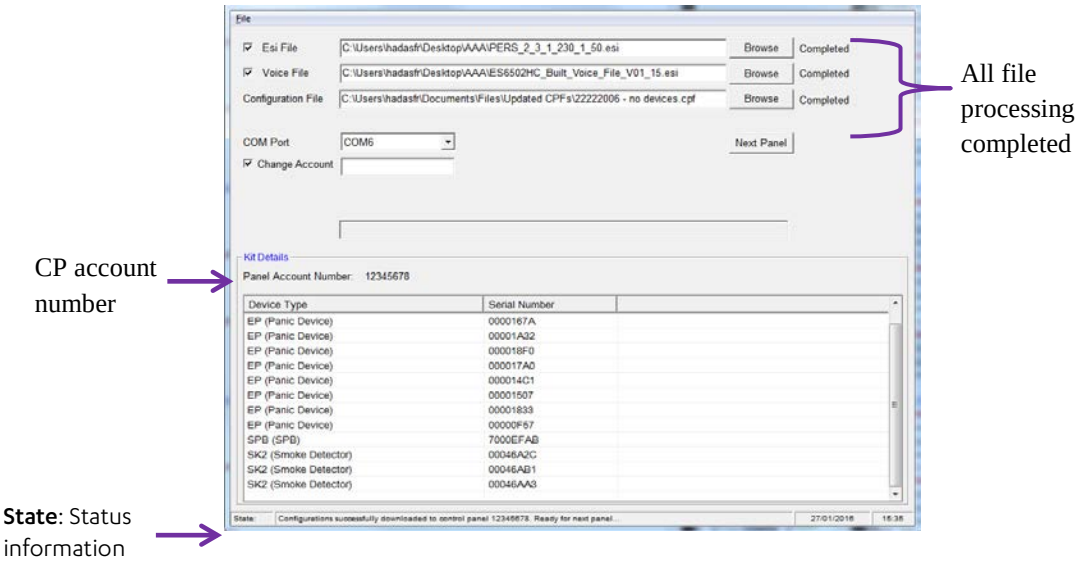


Figure 134: CMS Warehouse Processing Completed

Figure 134 shows an example of a list of devices for a CP updated by the CMS warehouse. The devices are listed with their serial numbers, allowing the user to verify that the **Kit Details** displayed match the actual physical contents of the kit.

The **State** field, on the bottom of the window, before the date, displays messages describing the progress of the warehouse process.

Appendix C Vocal Announcements

The following table includes examples of the texts for the vocal announcements listed by group.

Table 44: Vocal Announcements

Reminders Group	Announcement Text
Configured Vocal Reminders	"Attention, it is time to take your medication. Please take them and press the RESET button"
	"Attention, your appointment is at [hour, minute AM/PM]. Please press the RESET button."
	"Attention, your ride will arrive at [hour, minute AM/PM]. Please press the RESET button."
	"Attention, alarm reminder. Please press the RESET button."
	"Attention, it is time to test your pendant, please press the pendant button."
Medical	"Activity alarm"
	"Emergency alarm"
Safety	"Flood alarm"
	"Fire alarm"
	"Temperature alarm"
	“Gas alarm”
	"Attention, communication with monitoring station is lost"
Functional	"Activity timer on"
	"Activity timer off"
	“Activity timer will expire. Please press RESET button.”
	"Attention, cellular signal strength is [X] percent
	"Console on"
	"Console shutting down"
	"Could not add device. Please try again."
	"Device added successfully"
	"Device already paired with console"
	"Memory full, additional device cannot be added"
	“Signaling mode on”
	“Signaling mode off”
	"Successful operation - All devices were erased from Control Panel."
	"To erase all devices press the pairing button. To exit press the RESET button."
	"Pendant recognized"

Reminders Group	Announcement Text		
Technical	"Please press the RESET button"		
	"Battery missing in console"		
	"Attention, low battery in console"		
	"Attention, a device is tampered"		
	"Attention, phone line is disrupted"		
	"Attention, console switched to backup battery"		
	"Attention, low battery in a device was detected"		
	"Attention, console backup battery needs to be replaced"		
	"Attention, supervision loss of a device was detected"		
	"Memory full, additional device cannot be added"		
	"Attention, RF jamming was detected"		
	"RF jamming restored"		
	"Console Performed Software Reset"		
	"Malfunction Alarm"		
	"Attention, supervision loss of"	"Motion Detector (PIR)"	"was detected"
		"Magnetic Input Detector (MGI)"???	
		"Magnet Sensor (MGLS)"	
		"Fixed Emergency Button (SPB)"	
		"Portable Emergency Button (EP)"	
		"Smoke Detector (SK2)"	
	"Zone"		

Appendix D Contact ID Event Codes

Contact ID events and codes are detailed in the following table. The event codes apply to the use of Contact ID in Care@Home™ PERS release 2.3.

ID	Name	Description	Enabled?	Qualifier	Code
1	Power restored in control panel	Mains/AC power returned after a previous power loss event	Yes	3	301
2	Power failure in control panel	Control panel lost mains/AC power supply	Yes	1	301
3	High temperature alarm	A sensor measured an extremely high temperature	Yes	1	158
4	High temperature alarm cancelled	A high temperature alarm was cancelled by pressing the control panel's reset button	Yes	3	158
5	Listen-in ended	An alarm verification call was ended by the operator	No	N/A	N/A
6	Listen-in started	An alarm verification call was started	Yes	1	606
7	Emergency alarm in control panel	Control panel emergency button was pressed	Yes	1	100
8	Medical alarm restored	A medical alarm situation was ended by the operator (or when the alarm window closed)	Yes	3	100
9	Communication restored with medical alarm device	A medical alarm device (VPD, EPA, EP/EP+, SPB/SPD, or activity sensor) communicated with the control panel after a previous communication loss event	Yes	3	381
10	Medical alarm cancelled	A medical alarm was cancelled by pressing the control panel's reset button	Yes	1	406

ID	Name	Description	Enabled?	Qualifier	Code
11	Communication lost with medical alarm device	No communication received from a medical alarm device (VPD, EPA, EP/EP+, SPB/SPD, or activity sensor) for too long	Yes	1	381
12	No activity	No movement detected inside the premises for longer than expected, or no button was pressed during the expected time frame	Yes	1	641
13	Automatic communication test	The control panel sends a periodic communication test	Yes	1	602
14	Empty battery restored in control panel	Control panel's battery power restored after battery was empty or missing	Yes	1	305 See note below table
15	Tamper alarm	Device was tampered with	Yes	1	383
16	Tamper restored	Device is back to normal after being tampered with	Yes	3	383
17	Battery restored in peripheral device	Batteries in peripheral device were replaced (after a low or empty battery situation)	Yes	3	302
18	Low or empty battery in peripheral device	Low or empty battery in peripheral device	Yes	1	302
19	Empty or missing battery in control panel	Empty or missing battery in control panel	Yes	1	311
20	Low battery restored in control panel	Control panel's battery recharged to a normal level after a previous low battery situation	Yes	3	302
21	Communication failure	Control panel failed to send a message to the receiver	Yes	1	350
22	Low battery in control panel	Low battery in control panel	Yes	1	302
23	Low temperature alarm	A sensor measured an extremely cold temperature.	Yes	1	159

ID	Name	Description	Enabled?	Qualifier	Code
24	Low temperature alarm cancelled	A cold temperature alarm was cancelled by pressing the control panel's reset button	Yes	3	159
25	Fire or smoke alarm	Fire or smoke detected	Yes	1	110
26	Fire or smoke alarm cancelled	A fire or smoke alarm was cancelled by pressing the control panel's reset button	Yes	1	912
27	Communication restored with a fire or smoke sensor	A fire or smoke sensor communicated with the control panel after a previous communication loss event	Yes	3	200
28	Fire or smoke restored	Fire or smoke is no longer being detected by the sensor	Yes	3	110
29	Communication lost with fire or smoke sensor	No communication received from a fire or smoke sensor for too long	Yes	3	381
30	High temperature restored	Temperature is back to normal after a previous high temperature alarm	Yes	3	114
31	Communication lost with temperature sensor	No temperature information received from a sensor for too long	Yes	1	153
32	Low temperature restored	Temperature is back to normal after a previous low temperature alarm	Yes	1	406
33	Local programming started	Control panel is being programmed on site	Yes	1	627
34	Local programming ended	Control panel is no longer being programmed on site	Yes	1	628
35	Activity resumed	An activity was detected in premises after a previous no activity alarm had been sent due to no movement in premises	Yes	3	641

ID	Name	Description	Enabled?	Qualifier	Code
36	Remote programming started	Control panel is being programmed from another location	Yes	1	901
37	Remote reset	Control panel was reset from another location	Yes	1	414
38	Remote programming ended successfully	Control panel was successfully programmed from another location	Yes	1	412
39	Remote programming failed	Control panel could not be programmed from another location	Yes	1	902
40	Power supply fault in control panel	A problem was detected with the control panel's power supply	Yes	1	314
41	Power supply restored in control panel	Control panel's power supply returned to normal after a previous power supply fault	Yes	3	314
42	Time changed	Control panel's time was manually changed	Yes	1	625
47	Missed reminder	The control panel's reset button wasn't pressed after a vocal reminder had been announced	Yes	1	623
48	Water alarm	Water leakage was detected	Yes	1	624
49	Water restored	Water leakage is no longer being detected by the sensor	Yes	3	154
50	Communication lost with water sensor	No communication received from a water sensor for too long	Yes	1	381
51	Communication restored with a water sensor	A water sensor communicated with the control panel after a previous communication loss event	Yes	3	381
52	Gas alarm	Gas leak detected	Yes	1	151
53	Gas restored	Gas leak is no longer being detected by the sensor	Yes	3	151

ID	Name	Description	Enabled?	Qualifier	Code
54	Communication lost with gas detector	No communication received from a gas detector for too long	Yes	1	381
55	Communication restored with a gas detector	A gas detector communicated with the control panel after a previous communication loss event	Yes	3	381
56	Radio interference	Control panel detects radio frequency jamming	Yes	1	344
57	Radio interference restored	Control panel no longer detects radio frequency jamming	Yes	3	344
58	Medical alarm in pendant	Emergency button was pressed on a worn device (e.g.: EP, EP+, EPA)	Yes	1	100
59	Fall detection alarm	Fall detected (by EPA)	Yes	1	100
60	Voice detection alarm	VPD detected emergency voice phrase	Yes	1	100
61	Cord pulled alarm	Emergency cord pulled (in VPD/SPD)	Yes	1	100
62	Medical alarm in Stationary Button	Emergency button was pressed on a stationary device (e.g.: VPD, SPB/SPD)	Yes	1	100
63	Control panel power up	Control panel is powered up	Yes	1	305

NOTE: The correct codes for event **ID 14**, **Empty battery restored in control panel**, are qualifier: 3 and event code: 311. However, for backward compatibility, the qualifier and event code are as shown in the table. This means there is duplication with event **ID 63**, **Control panel power up**.

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