



# Alaris<sup>®</sup> System Maintenance

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July 24, 2009

# Alaris<sup>®</sup> System Maintenance

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## Introduction;

- **Title:** Webinar on Alaris<sup>®</sup> System Maintenance Software Fundamentals
- **Length:** Approximately 1 hour, and 45 minutes
- **Target Audience:** The experienced biomedical professional who will be involved in the repair and routine maintenance of Alaris<sup>®</sup> System
- **Take away:** An understanding of the Alaris<sup>®</sup> System Maintenance, its basic interfacing features, preventative maintenance procedures, software configuration procedures, and feel confident in his/her ability to quickly ascertain the status of the system and affect any maintenance
- **Methods:** Slide presentation, software demonstration, and visual demonstration interfacing with instruments connected to software application.
- **Prerequisite:** Technical experience in the repair and maintenance of critical biomedical instruments and systems. A clear understanding of personal computers and Microsoft Windows Operating Systems

# Alaris<sup>®</sup> System Maintenance

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## Agenda

- Introduction to Alaris<sup>®</sup> System Maintenance.
  - Main Window; Overview
  - Features of the Menu Bar / includes File, Options, and Help.  
Options; Include Applications, and Database Settings as well as Export/Import and Migrate MSW database.
    - Establish software application functionality
    - Creating and defining database definitions for retrieval reports
    - Export/Import dialog
  - Window menu tabs; Include Perform Maintenance, View Reports, and Configure Components.
    - Basic overview tutorial with software demonstration.
    - Create configuration packages (Network/Auto ID), and Task groups
    - View report types, and running reports (also viewing log information).
  - Perform Maintenance demonstration.
  - Network configuration setup (Optional for wireless customer).
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# Alaris<sup>®</sup> System Maintenance

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## Objective;

- Alaris<sup>®</sup> System Maintenance which is a PC-based application built for the biomedical engineer to streamline Alaris<sup>®</sup> System configuration and perform preventative maintenance activities.
- Maintain Alaris<sup>®</sup> PC Units model 8000/8015 and attached modules.
- Run check-in procedures.
- Perform preventive maintenance
- Set and check preventive maintenance reminder dates.
- Diagnose, troubleshoot and repair instruments.
- Calibrate modules.
- Transfer Data Set.
- Transfer Network Configuration.
- Download and view instrument logs.

**Note; Alaris<sup>®</sup> System Maintenance software replaces Maintenance Software and Flash Tool for the Alaris<sup>®</sup> System. In addition, the software allows for transfer of Data Set, and download of CQI Logs.**

# Alaris<sup>®</sup> System Maintenance

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## •The role of a the Biomedical Technicians will be?

- Perform preventative maintenance using the Alaris<sup>®</sup> System Maintenance.
  - Troubleshoot faults and perform repairs
  - Verify and update module software versions using the Flash Tool Software
  - Perform check-in verification on instruments returned from Alaris<sup>®</sup> repair depot
  - Download CQI alerts from the Alaris<sup>®</sup> PC Units
  - Configure Alaris<sup>®</sup> PC Units to communicate over the wireless network (Alaris<sup>®</sup> System Maintenance)
  - Transfer released Data Sets to the Alaris<sup>®</sup> PC Units
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# General Contact Information

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## Customer Advocacy

For clinical and technical questions, feedback, and troubleshooting assistance.

Phone, toll-free, within the United States and Canada: (800) 888-876-4287, option 1, 1, option 3

E-Mail: [CustomerFeedback@alarismed.com](mailto:CustomerFeedback@alarismed.com)

For details on the Factory Depot Repair Service Agreement, please contact an  
Cardinal Health Service Contract Specialist; Susan Kinzer @ (Phone) 858-617-4921, ext.  
74921, [Susan.Kinzer@cardinalhealth.com](mailto:Susan.Kinzer@cardinalhealth.com), Sr. Contract Admin; Elizabeth Boyd @ (Phone) 858-617-4744,  
x74744; (fax) 858-617-5184 [elizabeth.boyd@cardinalhealth.com](mailto:elizabeth.boyd@cardinalhealth.com)

## Technical Support - North America

For technical information related to maintenance procedures and service manual support.

United States:

Direct Dial: 888-812-3229 (Technical Support Department)

Toll-free: (888) 876-4CTS (4287), Options 1, 1, 2, 1 (@ prompts)

Canada:

Phone, Toll-free:

Eastern: (800) 908-9918

Western: (800) 908-9919

For more detailed information, refer to the "Service Information" section of this document.

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# Alaris<sup>®</sup> System Maintenance

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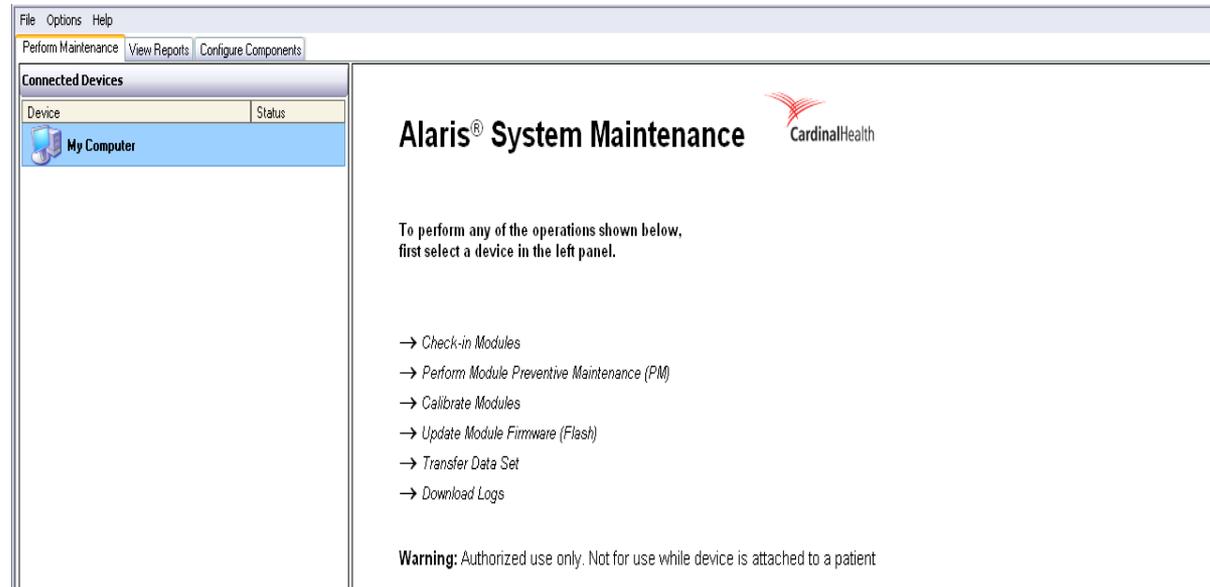
- Briefly, any questions before we start with Alaris<sup>®</sup> System Maintenance software demo.

# Alaris<sup>®</sup> System Maintenance

ASM version 9 Maintenance software allows routine maintenance to be performed on the Alaris<sup>®</sup> System hardware.

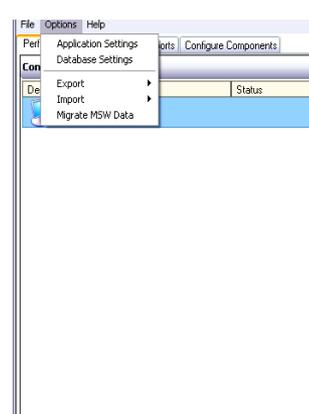
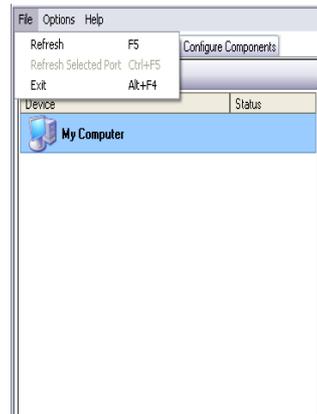
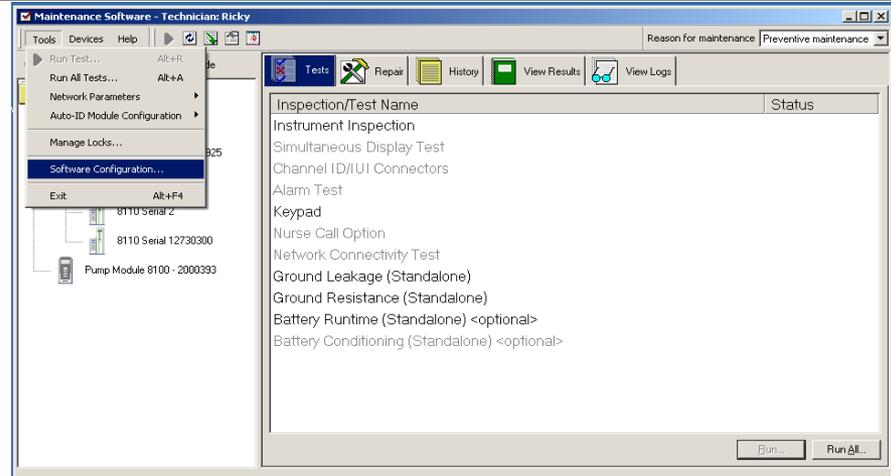
The System Maintenance kit includes.

- System Maintenance CD-Rom
- Serial cable
- ❖ Next we'll look at the differences between the Alaris<sup>®</sup> System Maintenance (ASM), software versus the Maintenance Software (MSW)



# Alaris® System Maintenance vs. MSW

- Maintenance Software version 5,6,7, and 8 have visible differences in the format.
- Select menu bar to choose **Tools, Devices,** and **Help**.
- Alaris® System Maintenance main window appears.
- Select menu bar to choose **File** (refresh ports and/or exit), **Options** (application/database settings, export/import, and migrate MSW files).
- **Help** displays version and copyright information.



## Alaris® System Maintenance

To perform any of the operations shown below, first select a device in the left panel.

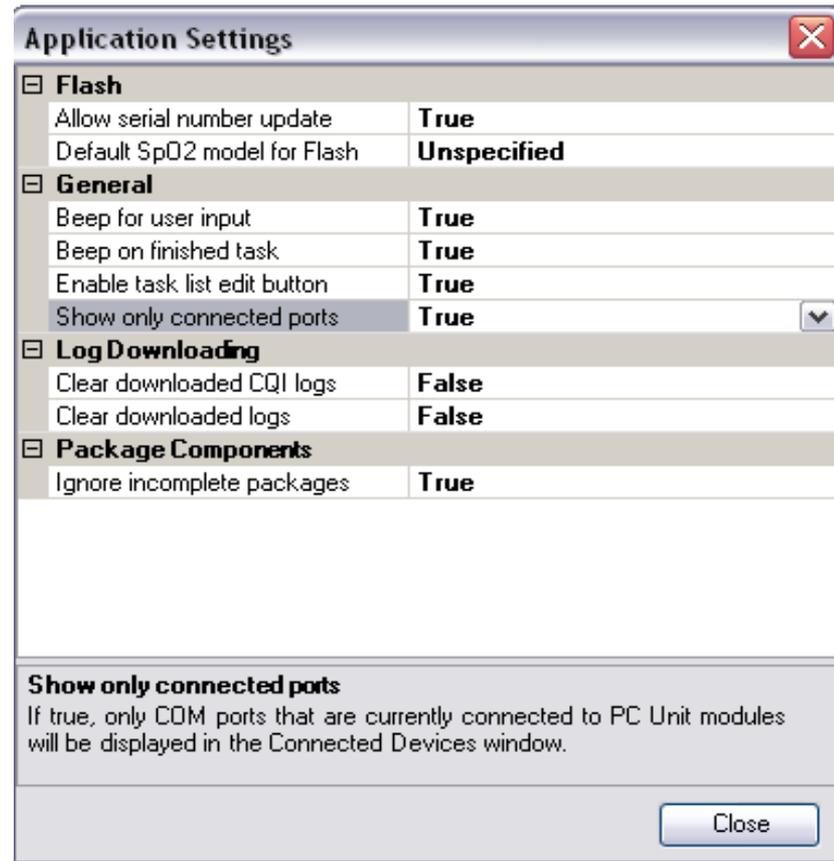
- Check-in Modules
- Perform Module Preventive Maintenance (PM)
- Calibrate Modules
- Update Module Firmware (Flash)
- Transfer Data Set
- Download Logs

**Warning:** Authorized use only. Not for use while device is attached to a patient

# Application Settings

- Select menu bar to choose OPTIONS.
- Select Application Settings from the drop-down.

The Application Settings dialog box is used to configure the available application options for ASM.



# Application Settings

- Select "Allow serial number update", in dialog box.
- Click dropdown arrow to select True or False next to the setting your wish to change.
- In the Description field, describes "If true, the user will be able to set the serial number through the Flash Tasks".

Application Settings	
<b>Flash</b>	
Allow serial number update	True
Default SpO2 model for Flash	True
<b>General</b>	
Beep for user input	True
Beep on finished task	True
Enable task list edit button	True
Show only connected ports	True
<b>Log Downloading</b>	
Clear downloaded CQI logs	False
Clear downloaded logs	False
<b>Package Components</b>	
Ignore incomplete packages	True

**Allow serial number update**  
If true, the user will be able to set serial number through the flash tasks.

Close

# Application Settings

- Select "Clear downloaded CQI logs", in dialog box.
- Click dropdown arrow to select True or False next to the setting you wish to change.
- In the Description field, describes "If true, CQI logs will be cleared from connected devices after download".

Application Settings	
<b>Flash</b>	
Allow serial number update	True
Default SpO2 model for Flash	Unspecified
<b>General</b>	
Beep for user input	True
Beep on finished task	True
Enable task list edit button	True
Show only connected ports	True
<b>Log Downloading</b>	
Clear downloaded CQI logs	False
Clear downloaded logs	False
<b>Package Components</b>	
Ignore incomplete packages	True

**Clear downloaded CQI logs**  
If true, after CQI logs are downloaded they are cleared.

Close

# Application Settings Summary

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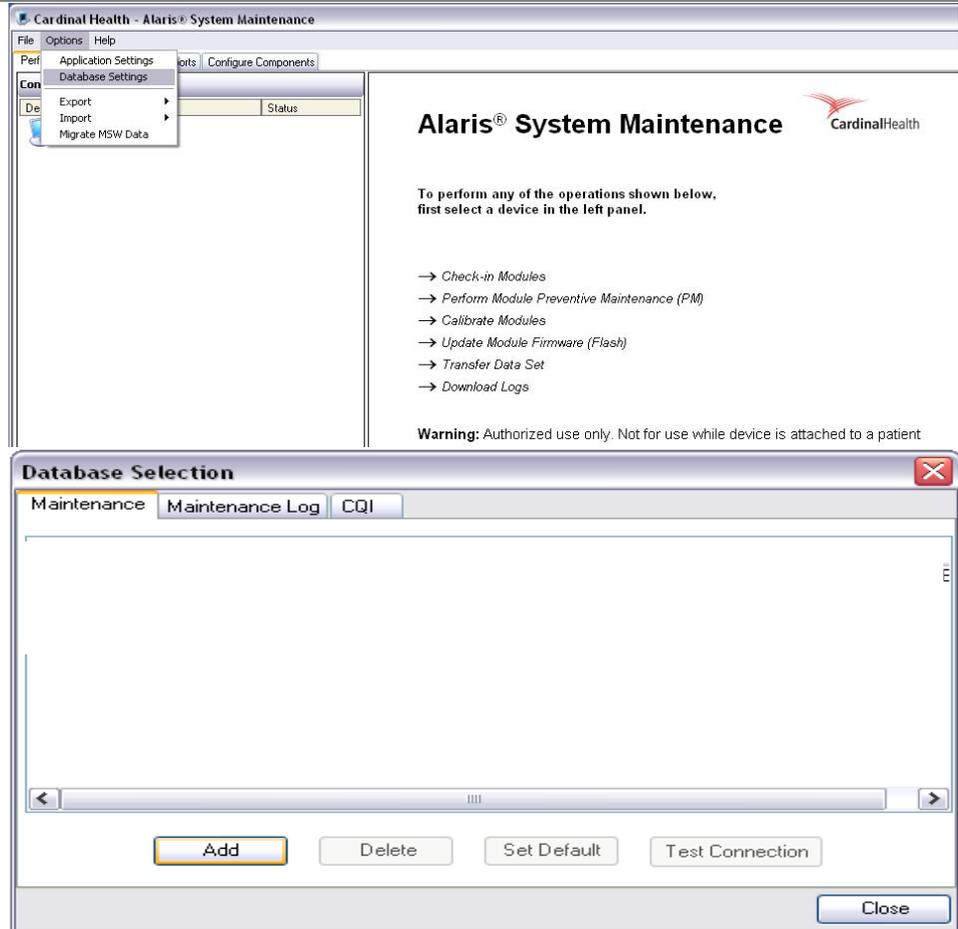
- In the Applications Settings dialog box, which allows for users to configure the available application options for the software response.

# Database Settings

- Select menu bar to choose OPTIONS.
- Select Database Settings from the drop-down.

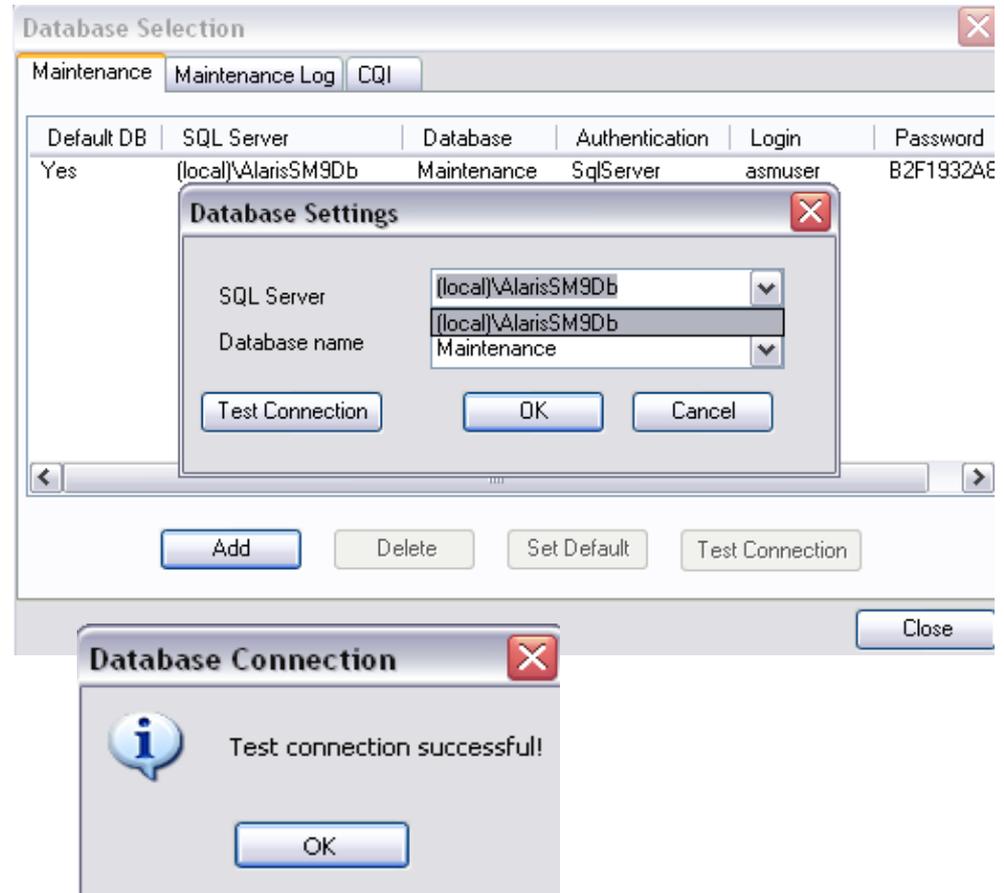
The Database Selection dialog box will open. Defined databases are Maintenance, Maintenance Log, and CQI database (Tabs in window).

- Select Add.



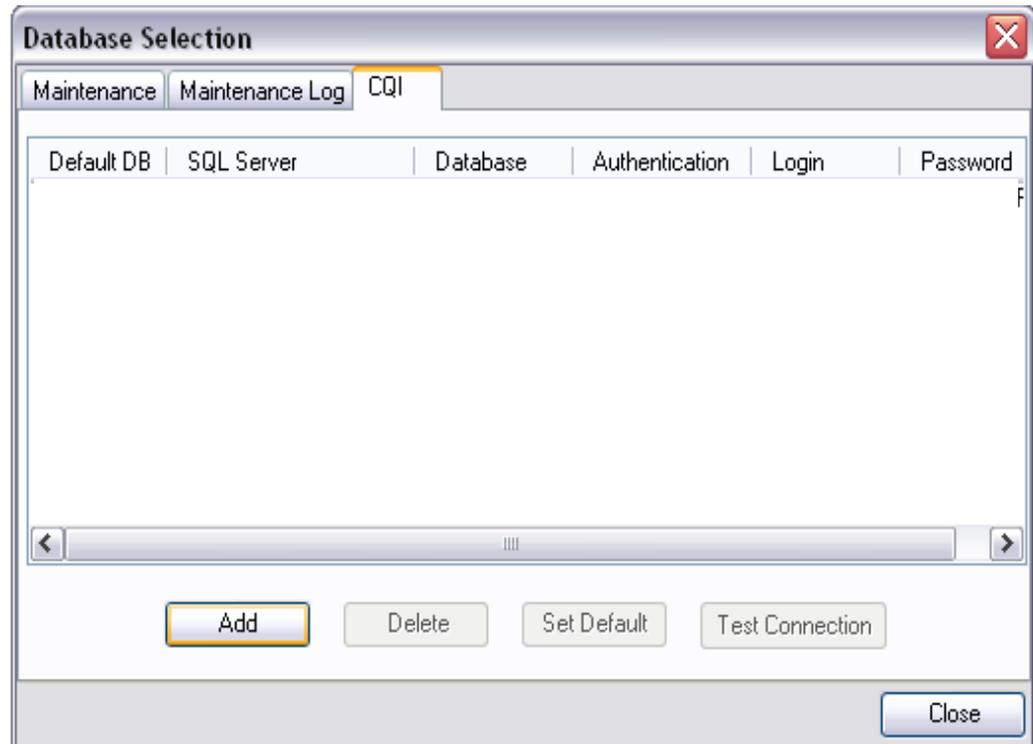
# Database Settings

- Click dropdown arrow to select SQL Server (and/or type name of database in field).
- Select a Database name on SQL Server.
- Test the connection with the server (if successful, select OK).
- Select OK to save the definition.



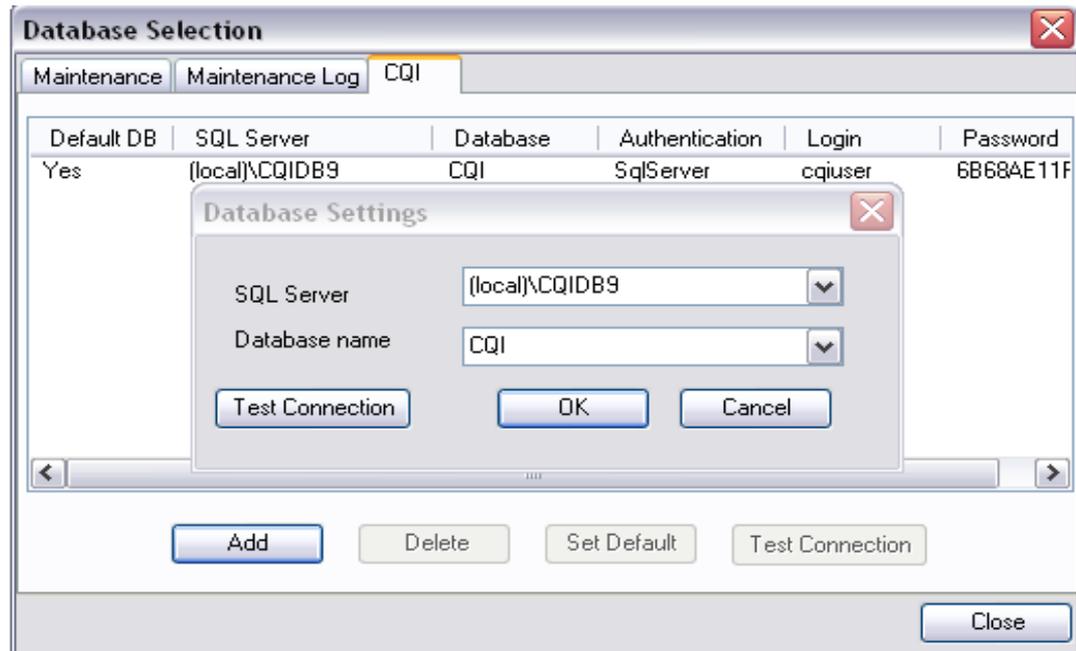
# Database Settings

- Select the CQI tab.
- The Database Selection dialog box will open. Defined database **CQI database** (Tabs in window). Each definition contains server name and authentication for the databases.
- Select Add.



# Database Settings

- The Database Selection dialog box will display.
- Click dropdown arrow to select SQL Server.
- Select a Database name on SQL Server.
- Test the connection with the server.
- Select OK to save the definition.



# Database Settings Summary

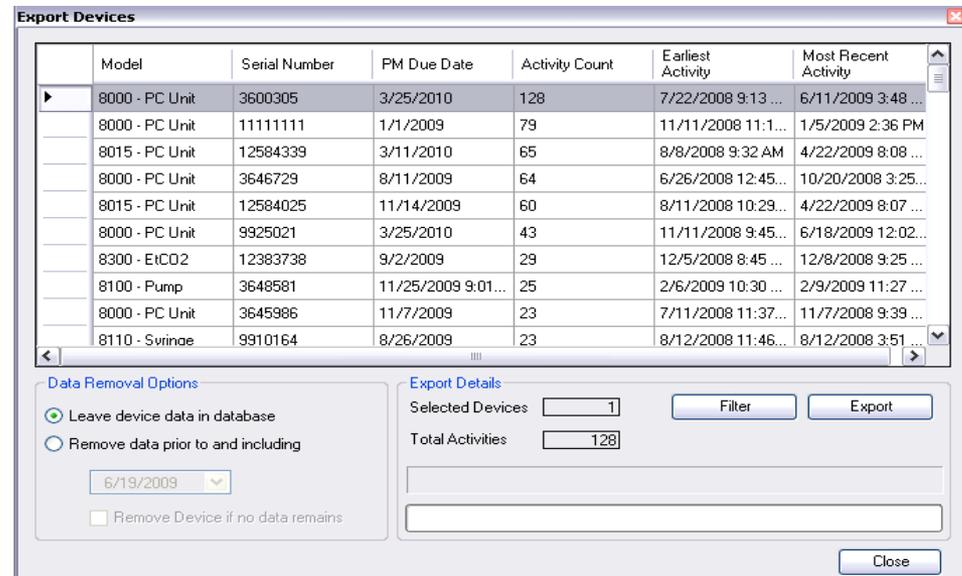
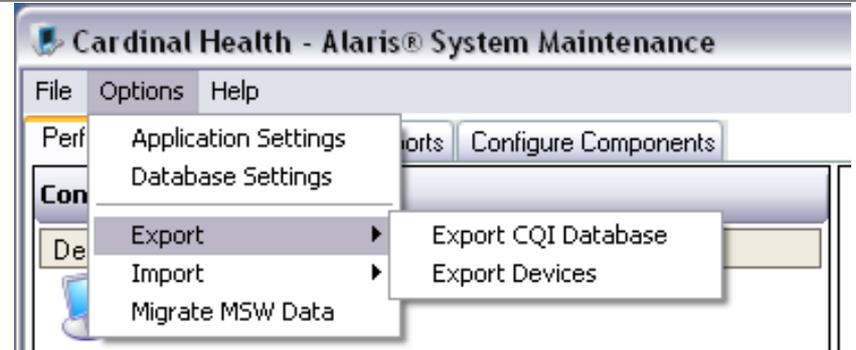
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- We've just reviewed multiple database definitions that defined for the three System Maintenance databases (Maintenance database, Maintenance Log database, CQI database).
- Learned how to test connections of databases, as well as establish database.
- Each definition contains server name and authentication for the databases.

# Exporting Devices

- Select menu bar to choose OPTIONS.
- Select Export devices from the drop-down.

The Export Devices dialog box will open. Allowing for Data Removal Options, and Export Details.



# Exporting Devices

- Select individual devices by clicking on line item column.
- Click and drag to select group of devices.
- Click upper left box to highlight all devices in database.
- Click Data Removal Options.
- Select "Remove data prior to and including", to enter a date range for content selection.

The screenshot shows the 'Export Devices' window with a table of device information and export options.

	Model	Serial Number	PM Due Date	Activity Count	Earliest Activity	Most Recent Activity
▶	8000 - PC Unit	3600305	3/25/2010	128	7/22/2008 9:13 ...	6/11/2009 3:48 ...
	8000 - PC Unit	11111111	1/1/2009	79	11/11/2008 11:1...	1/5/2009 2:36 PM
	8015 - PC Unit	12584339	3/11/2010	65	8/8/2008 9:32 AM	4/22/2009 8:08 ...
	8000 - PC Unit	3646729	8/11/2009	64	6/26/2008 12:45...	10/20/2008 3:25...
	8015 - PC Unit	12584025	11/14/2009	60	8/11/2008 10:29...	4/22/2009 8:07 ...
	8000 - PC Unit	9925021	3/25/2010	44	11/11/2008 9:45...	6/24/2009 11:30...
	8300 - EtCO2	12383738	9/2/2009	29	12/5/2008 8:45 ...	12/8/2008 9:25 ...
	8100 - Pump	3648581	11/25/2009 9:01...	25	2/6/2009 10:30 ...	2/9/2009 11:27 ...
	8000 - PC Unit	3645986	11/7/2009	23	7/11/2008 11:37...	11/7/2008 9:39 ...
	8110 - Syringe	9910164	8/26/2009	23	8/12/2008 11:46...	8/12/2008 3:51 ...

**Data Removal Options**

Leave device data in database

Remove data prior to and including

6/25/2009

**June, 2009**

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

Today: 6/25/2009

**Export Details**

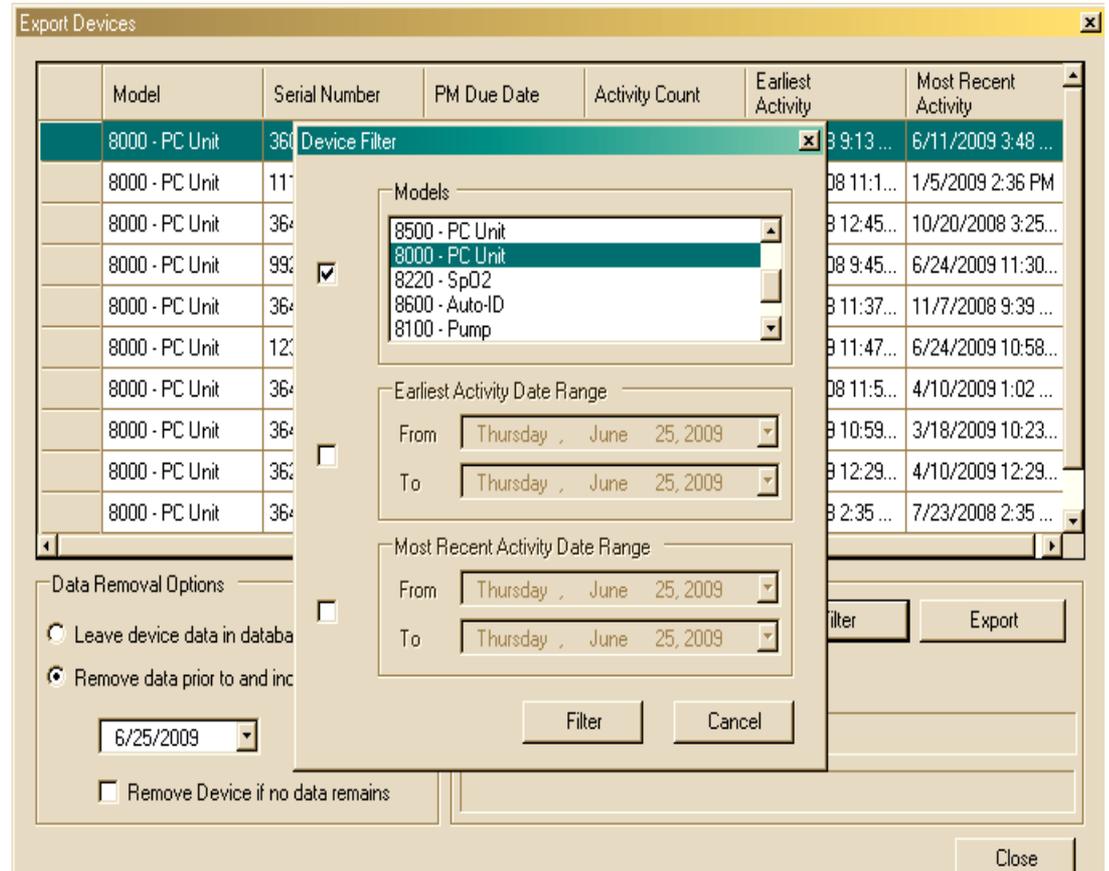
Selected Devices:

Total Activities:

# Exporting Devices

- Click Filter
- Click on Models checkbox (left), to display only 8000-PC Units.

***Device Filter allows to select specific devices to display in dialog box for Export Devices.***



# Exporting Devices

- Export Devices now shows 128 Total Activities for the model 8000-PC Units in database to be selected.

Note:

Device Filter allows user to select specific devices to display in Export Devices dialog box.

- Select Export

The screenshot shows the 'Export Devices' dialog box with a table of device information and control panels for data removal and export details.

	Model	Serial Number	PM Due Date	Activity Count	Earliest Activity	Most Recent Activity
▶	8000 - PC Unit	3600305	3/25/2010	128	7/22/2008 9:13 ...	6/11/2009 3:48 ...
	8000 - PC Unit	11111111	1/1/2009	79	11/11/2008 11:1...	1/5/2009 2:36 PM
	8000 - PC Unit	3646729	8/11/2009	64	6/26/2008 12:45...	10/20/2008 3:25...
	8000 - PC Unit	9925021	3/25/2010	44	11/11/2008 9:45...	6/24/2009 11:30...
	8000 - PC Unit	3645986	11/7/2009	23	7/11/2008 11:37...	11/7/2008 9:39 ...
	8000 - PC Unit	12361860	9/21/2008	21	5/29/2009 11:47...	6/24/2009 10:58...
	8000 - PC Unit	3649500	3/24/2009	12	10/21/2008 11:5...	4/10/2009 1:02 ...
	8000 - PC Unit	3647694	10/20/2009	5	3/10/2009 10:59...	3/18/2009 10:23...
	8000 - PC Unit	3629850	10/15/2009	1	4/10/2009 12:29...	4/10/2009 12:29...
	8000 - PC Unit	3649471	9/21/2008	1	7/23/2008 2:35 ...	7/23/2008 2:35 ...

**Data Removal Options**

Leave device data in database

Remove data prior to and including

6/25/2009

Remove Device if no data remains

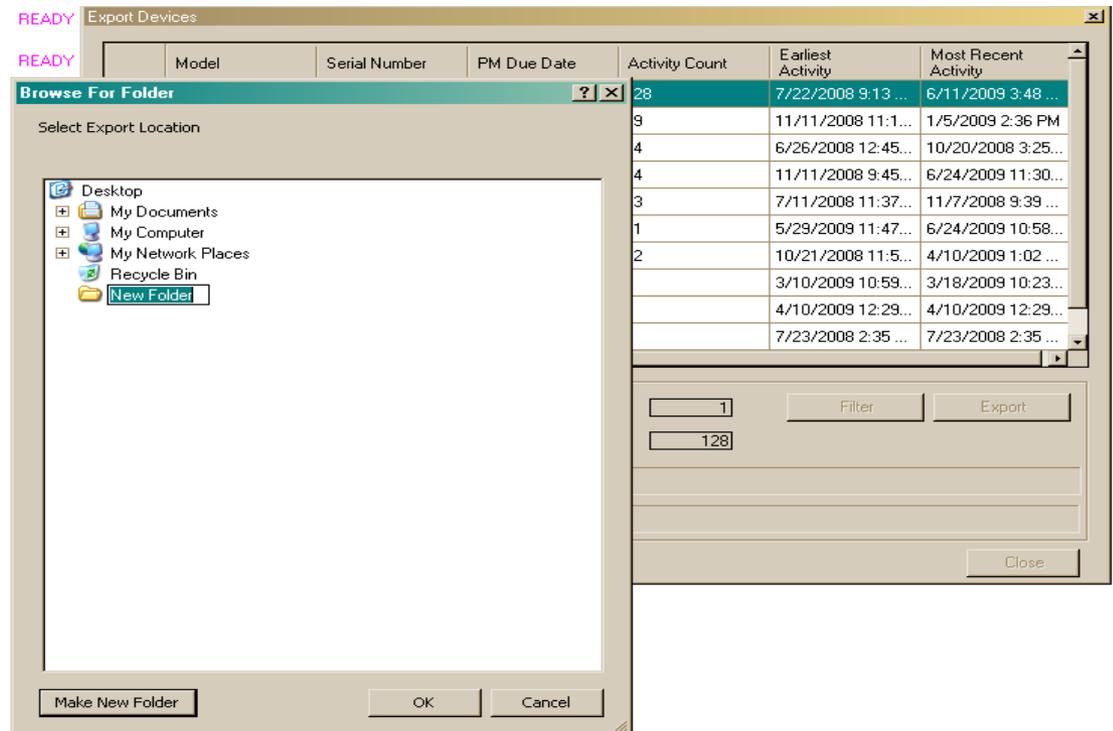
**Export Details**

Selected Devices:

Total Activities:

# Exporting Devices

- Select and/or create a file for the Exporting database information.
- Select OK



# Exporting Devices

- Exporting information will now be stored in this folder/file. "Please remember name of file created".
- Status indicator bar in dialog box will display Export has completed successfully.
- Once transfer is completed, the file is ready to be transferred to another PC system, and/or location.

The screenshot shows the 'Export Devices' dialog box with a table of device information and export options.

Model	Serial Number	PM Due Date	Activity Count	Earliest Activity	Most Recent Activity
8000 - PC Unit	11111111	1/1/2009	79	11/11/2008 11:1...	1/5/2009 2:36 PM
8015 - PC Unit	12584339	3/11/2010	65	8/8/2008 9:32 AM	4/22/2009 8:08 ...
8000 - PC Unit	3646729	8/11/2009	64	6/26/2008 12:45...	10/20/2008 3:25...
8015 - PC Unit	12584025	11/14/2009	60	8/11/2008 10:29...	4/22/2009 8:07 ...
8000 - PC Unit	9925021	3/25/2010	44	11/11/2008 9:45...	6/24/2009 11:30...
8300 - EtCD2	12383738	9/2/2009	29	12/5/2008 8:45 ...	12/8/2008 9:25 ...
8100 - Pump	3648581	11/25/2009 9:01...	25	2/6/2009 10:30 ...	2/9/2009 11:27 ...
8000 - PC Unit	3645986	11/7/2009	23	7/11/2008 11:37...	11/7/2008 9:39 ...
8110 - Syringe	9910164	8/26/2009	23	8/12/2008 11:46...	8/12/2008 3:51 ...
8110 - Syringe	9909691	11/25/2009	22	3/3/2009 3:31 PM	4/7/2009 8:13 AM

**Data Removal Options**

- Leave device data in database
- Remove data prior to and including  
6/25/2009
- Remove Device if no data remains

**Export Details**

Selected Devices: 1 [Filter] [Export]

Total Activities: 79

Export has completed successfully.

[Close]

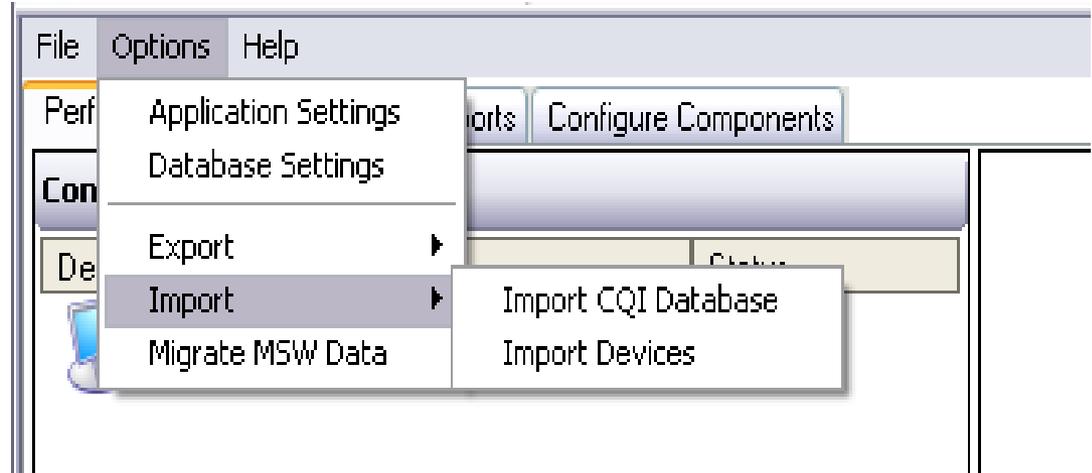
# Exporting Devices Summary

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- Exporting information allows export of the CQI database as well as the Export Devices information for all devices that have been connected to the PC Unit.
- We've stepped through the processes. This also allows for users to transport device information to other workstations.

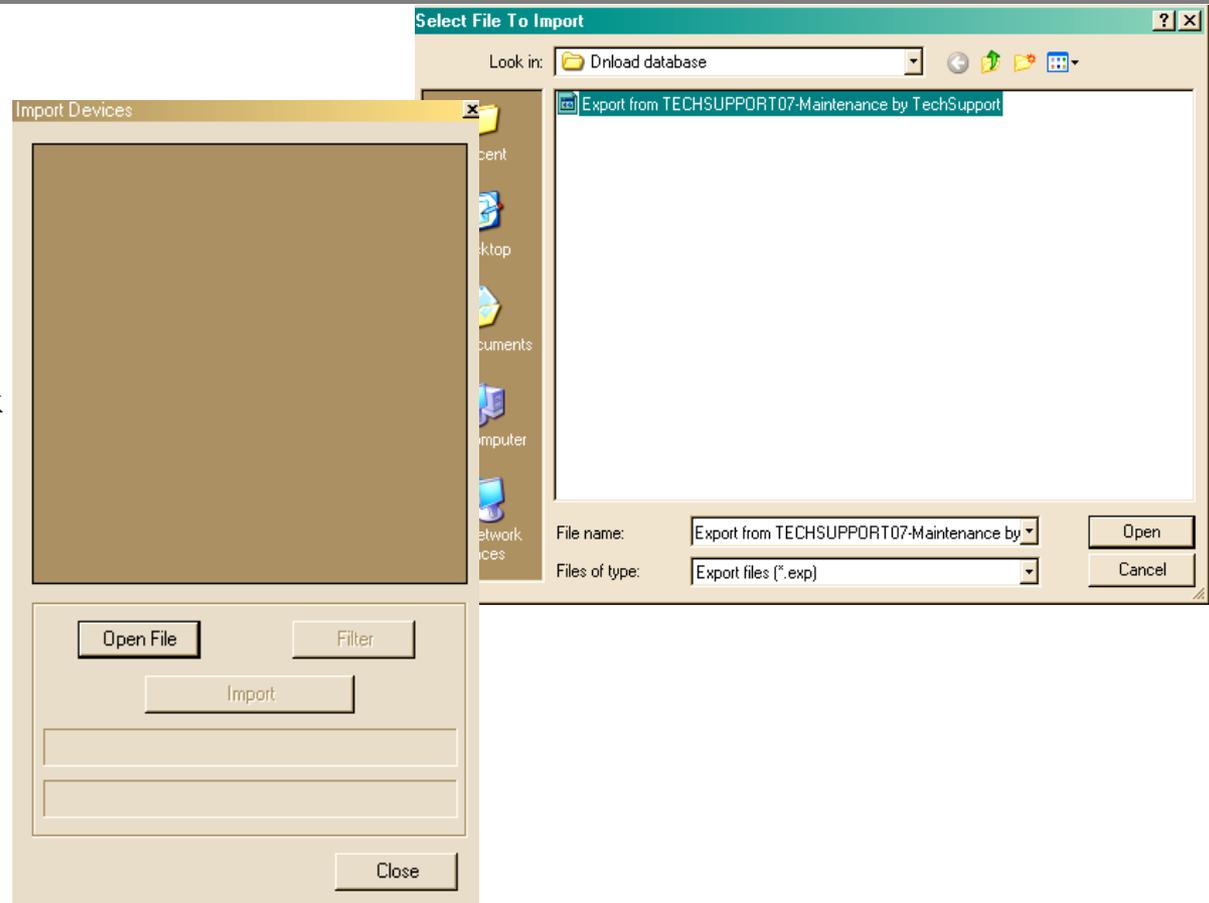
# Importing Devices

- To Import, select Import Devices from the drop down menu under Options.
- Click on Import Devices.
- This will bring up the Import Devices dialog box.



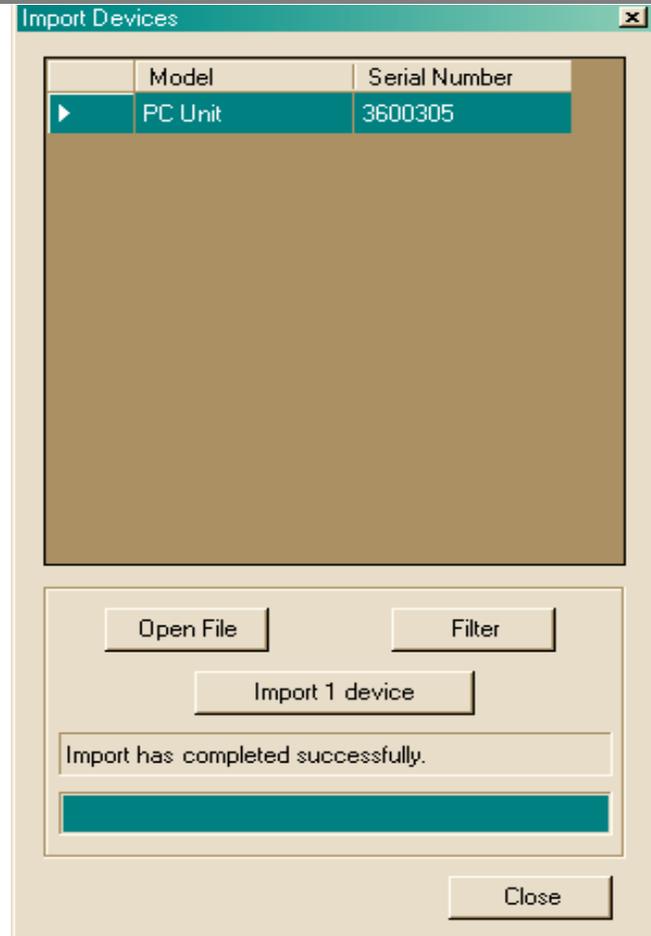
# Importing Devices

- Click on Open File.
- In the pop-up window, please select the Export File created, and/or received.
- Double-click on file, or click file and select Open.



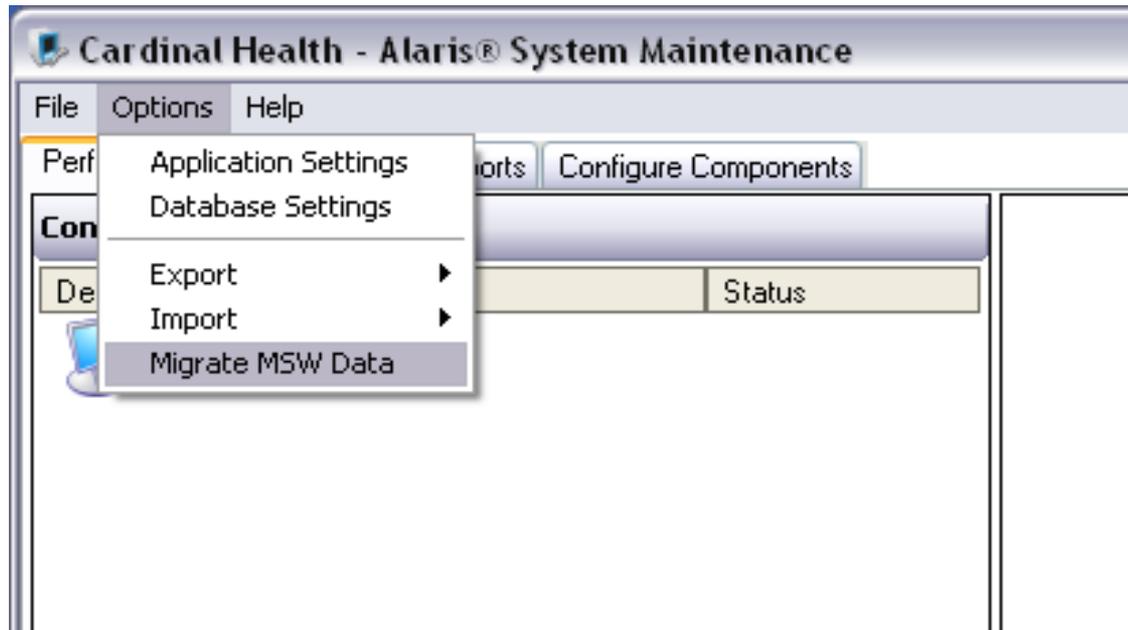
# Importing Devices

- The Import Devices dialog box displays the Model and Serial Number of the devices in file.
- Click on the Import # device button to start import process.
- Data is imported into the selected database.
- Status indicator bar in dialog box will display Import has completed successfully.
- Select Close.



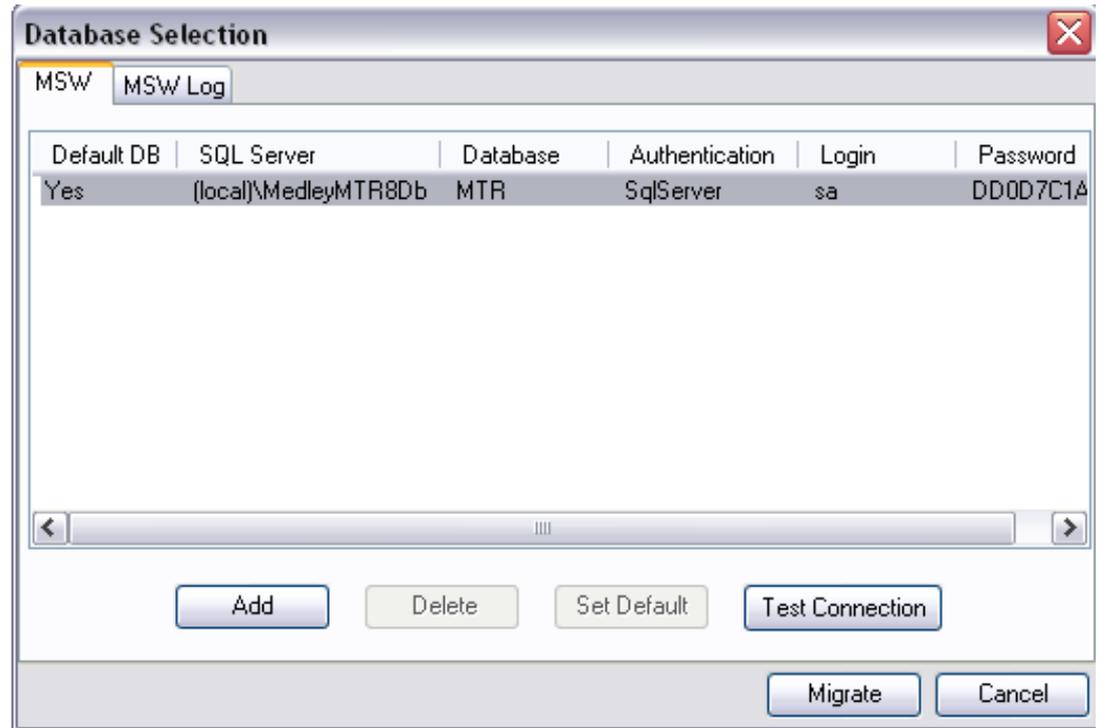
# Migrate Data

- To transfer existing version 8 Database, select Migrate MSW Data from the drop down menu under Options.
- The Database Selection dialog box will open.



# Migrate Data

- The Database Selection dialog box will display.
- Click a Database name on SQL Server.
- Test the connection with the server (optional).
- Select Migrate to transfer data into database.



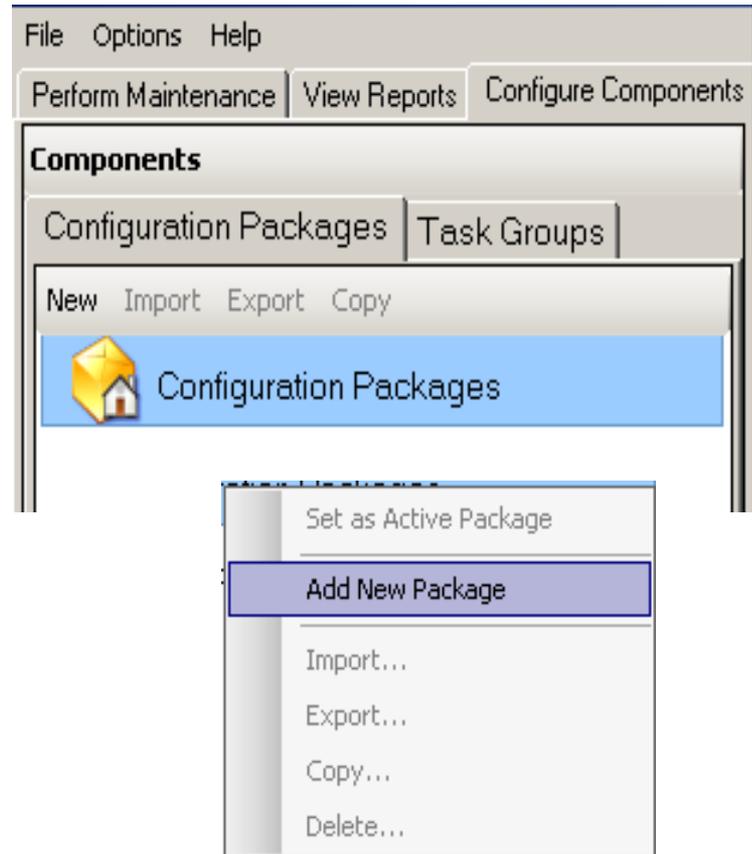
# Importing & Migrate Devices

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- Importing information allows Import of the CQI database as well as the Import Devices information from other workstations.
- We've stepped through the processes. This also allows for users to transport and/or transfer device information to other workstations.
- This process enables users to create reports from device information received.
- In migrating a version 8 database, customer does not lose existing data from previous software.

# Configure Components Tab

- Select the Configure Components tab from main window, to add a New configuration package to the list.
- One Configuration Package is designated as the active package.
- Select the **Configuration Packages** item and click **New**, or right-click the **Configuration Packages** item and select **Add New Package** from the pop-up menu.



# Configure Packages

- Complete the **Component Details** dialog box:

**Name:** Give the configuration package a unique name.

**Date:** Select a creation date (defaults to today's date).

**Author:** Name of person creating configuration package.

**Description:** A description for configuration package.

Accept any changes in the selected configuration package by clicking the **Accept Changes** button.

**Note;**

***\*\*This process can be used for a non-wireless account.***

The screenshot shows a software interface with a menu bar (File, Options, Help) and a toolbar (Perform Maintenance, View Reports, Configure Components). The main window is titled 'Components' and has two tabs: 'Configuration Packages' and 'Task Groups'. Under 'Configuration Packages', there are options for 'New', 'Import', 'Export', and 'Copy'. A tree view shows 'Configuration Packages' as a folder containing 'Package 1', 'Network Settings', 'Auto-ID Settings', 'Firmware Files', and 'Data Set File'. 'Package 1' is selected. To the right, the 'Component Details' pane shows 'Configuration Packages > Package 1'. It contains a 'Name' field with 'Package 1', a 'Date' dropdown menu set to 'Tuesday, June 23, 2009', an 'Author' text box, and a large 'Description' text area. At the bottom right of the details pane are 'Accept Changes' and 'Reset Form' buttons.

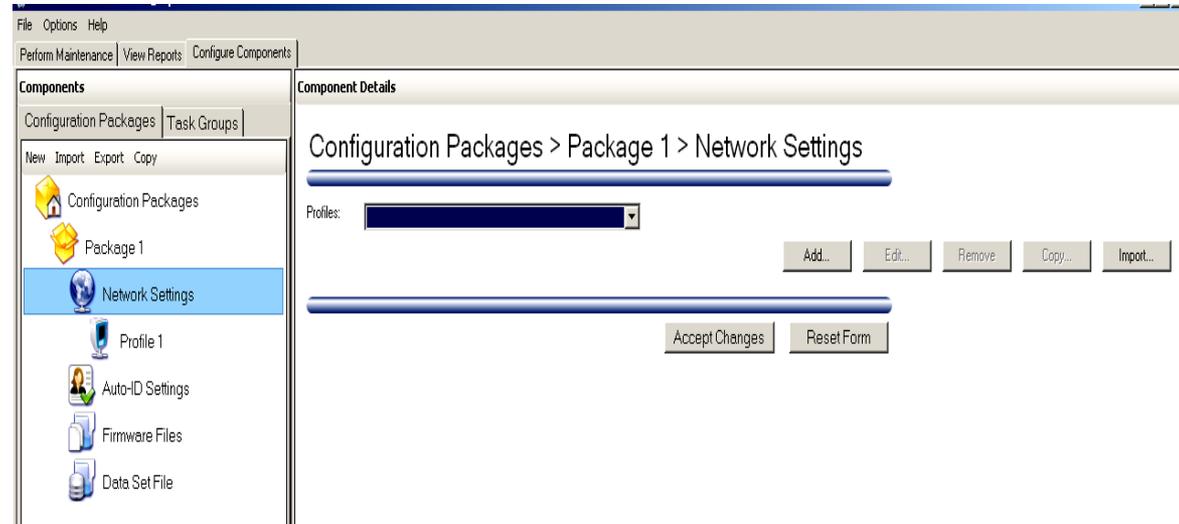
# Configure Components

- Accept any changes in the selected configuration package by clicking the **Accept Changes** button.

**Note:**

The imported data will overwrite any data already in the selected configuration package.

When importing, you can only import configuration data to overwrite of the same type in the selected configuration package.



# Auto ID Configurations

- Access **Auto ID settings** under desired Configuration Package, and use Component Details pane on the right to define Auto-ID configuration.
- Select ID Type for Patient and Clinician fields radio buttons, to edit or define its related ID Locators and ID Format (input fields below).
- ID Format selects rule for parsing corresponding data.
- ID Locators sets the validation for the extracted data from a barcode label.

**Note; ID Locators rule cannot be the same for Patient, or Clinician ID.**

File Options Help  
Perform Maintenance View Reports Configure Components

**Components**  
Configuration Packages Task Groups

New Import Export Copy

- Configuration Packages
  - Package 1
    - Network Settings
    - Profile 1
    - Profile 2
    - Auto-ID Settings**
    - Firmware Files
    - Data Set File

**Component Details**

Configuration Packages > Package 1 > Auto-ID Settings

ID Type

Selected Type	Current Rule
<input checked="" type="radio"/> Patient	None
<input type="radio"/> Clinician	None

ID Format

Rule:  None  Entire String  Field Delimited  Character Length  
 Tag Length  Tagged  HL7

Data:

**Description:** The Entire string is the ID, no delimiters, no field tags  
**Example:** 456123

ID Locators

Label Min Length:	<input type="text" value="8"/>	ID Min Length:	<input type="text" value="8"/>
Label Max Length:	<input type="text" value="8"/>	ID Max Length:	<input type="text" value="8"/>
Label Prefix:	<input type="text"/>		
Label Suffix:	<input type="text"/>		

Accept Changes Reset Form

# Auto ID

- The **Description** and **Example** fields display information to explain the selected rule.
- Click on the **Accept Changes** button to save edits to the configuration package.

File Options Help

Perform Maintenance View Reports Configure Components

**Components**

Configuration Packages Task Groups

New Import Export Copy

- Configuration Packages
  - Package 1
    - Network Settings
    - Profile 1
    - Profile 2
    - Auto-ID Settings**
    - Firmware Files
    - Data Set File

**Component Details**

Configuration Packages > Package 1 > Auto-ID Settings

ID Type

Selected Type	Current Rule
<input type="radio"/> Patient	None
<input checked="" type="radio"/> Clinician	None

ID Format

Rule:  None  Entire String  Field Delimited  Character Length

Tag Length  Tagged  HL7

Data:

**Description:** The Entire string is the ID, no delimiters, no field tags

**Example:** 456123

ID Locators

Label Min Length:	<input type="text" value="6"/>	ID Min Length:	<input type="text" value="6"/>
Label Max Length:	<input type="text" value="6"/>	ID Max Length:	<input type="text" value="6"/>
Label Prefix:	<input type="text"/>		
Label Suffix:	<input type="text"/>		

Accept Changes Reset Form

# Firmware Files

- Access **Firmware Files** under desired Configuration Package, and use Component Details pane on the right dialog box to identify the Released Manifest File for upload to the Alaris® PC Unit and modules.
- Use the Browse button to locate and find the correct xml file to be used to update the Alaris® System.

The screenshot displays the Alaris software interface. The left pane shows a tree view under 'Components' with 'Configuration Packages' selected, and 'Firmware Files' highlighted. The right pane, titled 'Component Details', shows the path 'Configuration Packages > Package 1 > Firmware Files'. It contains instructions for selecting a system disk and a firmware manifest file, and a list of components with 'Newer Version' dropdown menus. At the bottom are 'Accept Changes' and 'Reset Form' buttons.

File Options Help

Perform Maintenance View Reports Configure Components

Components

Configuration Packages Task Groups

New Import Export Copy

- Configuration Packages
  - Package 1
    - Network Settings
    - Profile 1
    - Profile 2
    - Auto-ID Settings
    - Firmware Files**
    - Data Set File

Component Details

### Configuration Packages > Package 1 > Firmware Files

Please select the system disk with the flash content and provide the path to the firmware manifest file. You may also choose the options for updating a device when using a PC unit to flash devices. The default selection overwrites firmware only when a newer version is found. You may choose to 'Always' overwrite or 'Never' overwrite.

*Note: The 'Newer' option is applicable in the PC Unit models 8015 and 8500 flash process, for transfer of files only.*

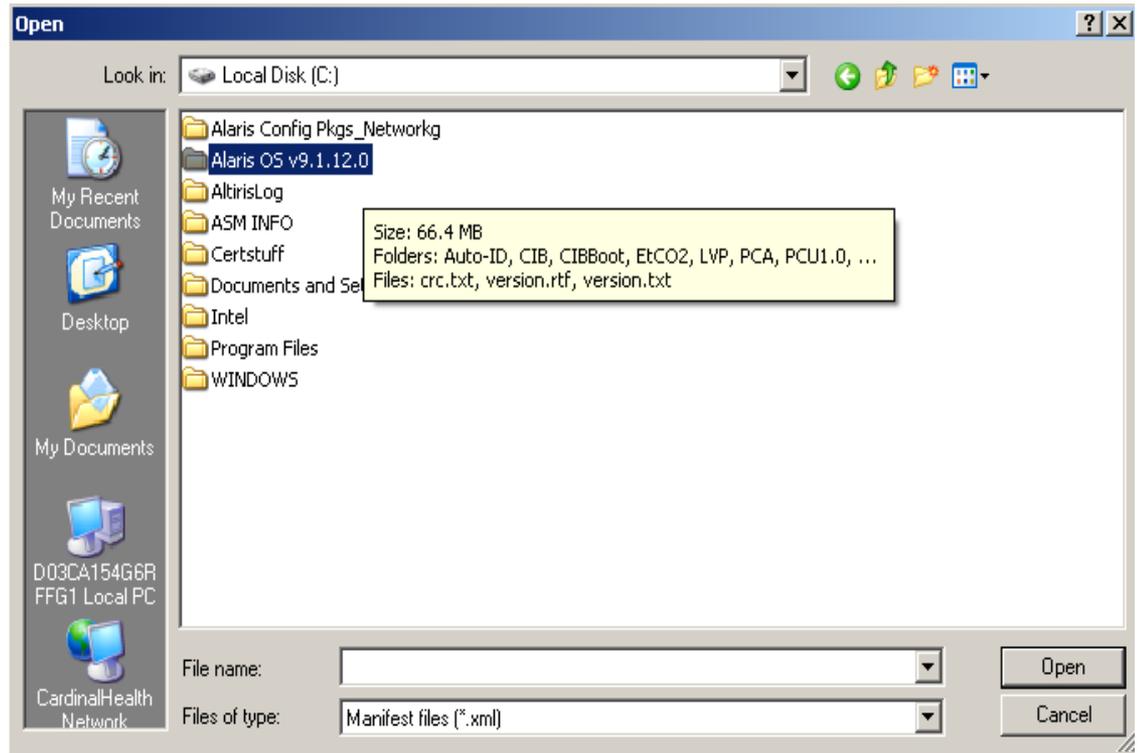
Select Firmware Flash File  [Browse...](#)

PC Unit 8500	<b>Newer Version</b> ▼
PC Unit 8015	<b>Newer Version</b> ▼
PC Unit 8000	<b>Newer Version</b> ▼
Pump	<b>Newer Version</b> ▼
Syringe	<b>Newer Version</b> ▼
PCA	<b>Newer Version</b> ▼
EtCO2	<b>Newer Version</b> ▼
SpO2	<b>Newer Version</b> ▼
Auto-ID	<b>Newer Version</b> ▼

[Accept Changes](#) [Reset Form](#)

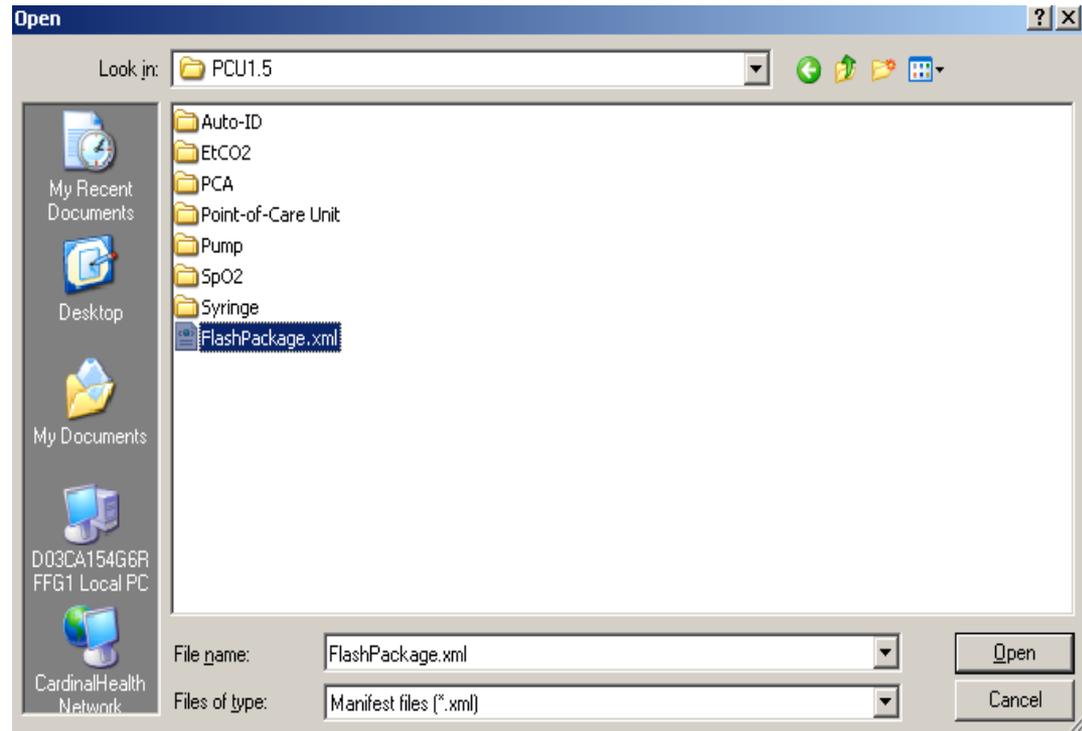
# Firmware Files

- Firmware Files; Used by individual flash tasks that updates the firmware on the PC unit and modules.
- Manifest files identify firmware file to use for updating the Alaris® PC unit and modules, and contains settings on how to apply update to specific modules.



# Firmware Files

- Open drop-down list
- Select options from the drop-down list next to each applicable device, to select what should happen when a PC unit or module is flashed with contents of the Release Manifest File.
- Double-click on file, or click file and select Open.



# Firmware Files

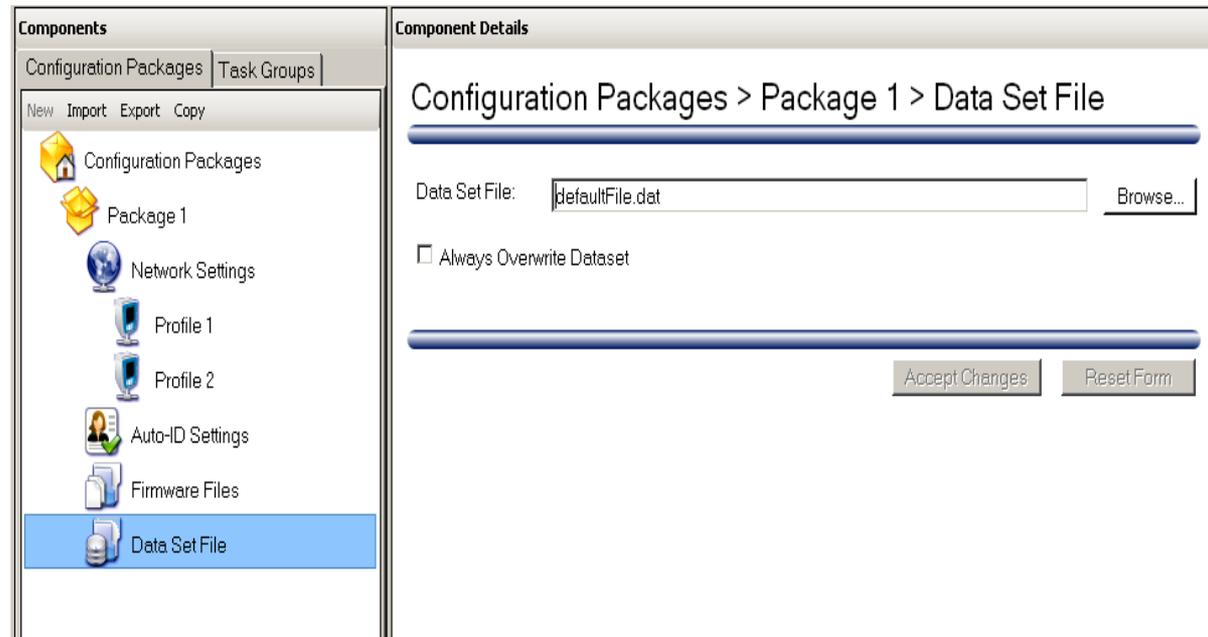
- **Always:** Always overwrite contents of device with content from the Release Manifest File.
- **Newer Version:** Only overwrites contents of device when the Release Manifest File contains a newer version than that already existing on the device.
- **Never:** Do not update device with the Release Manifest File.
- Select Accept Changes to save edits.

The screenshot shows the 'Configure Components' window in the CareFusion software. The left pane shows a tree view with 'Firmware Files' selected. The right pane, titled 'Component Details', shows the configuration for 'Configuration Packages > Package 1 > Firmware Files'. It includes a text box for 'Select Firmware Flash File' with a 'Browse...' button, and a list of components with dropdown menus for their update behavior. The 'Always' option is currently selected in the dropdown for the 'Auto-ID' component. At the bottom right, there are 'Accept Changes' and 'Reset Form' buttons.

Component	Update Behavior
PC Unit 8500	Newer Version
PC Unit 8015	Newer Version
PC Unit 8000	Newer Version
Pump	Newer Version
Syringe	Newer Version
PCA	Newer Version
EtCO2	Newer Version
SpO2	Newer Version
Auto-ID	Always

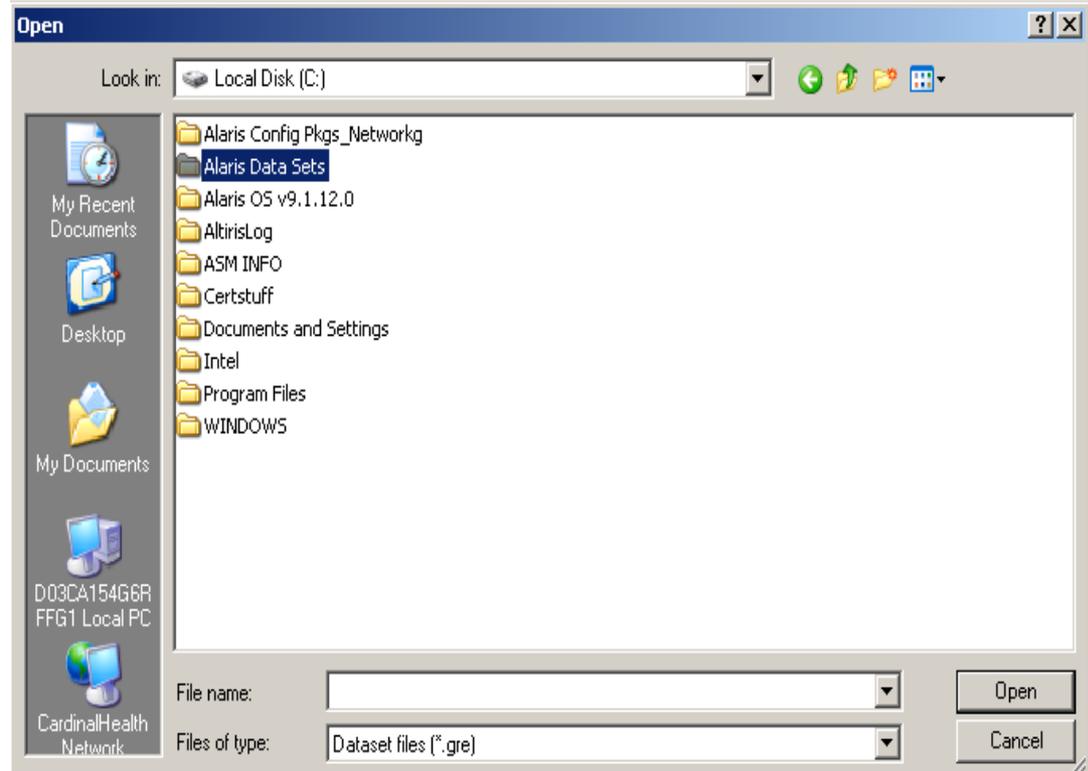
# Data Set Files

- Access **Data Set File** under desired Configuration Package, and use Component Details pane on the right dialog box to identify Data Set.
- Use **Browse** to select the file on the PC workstation.



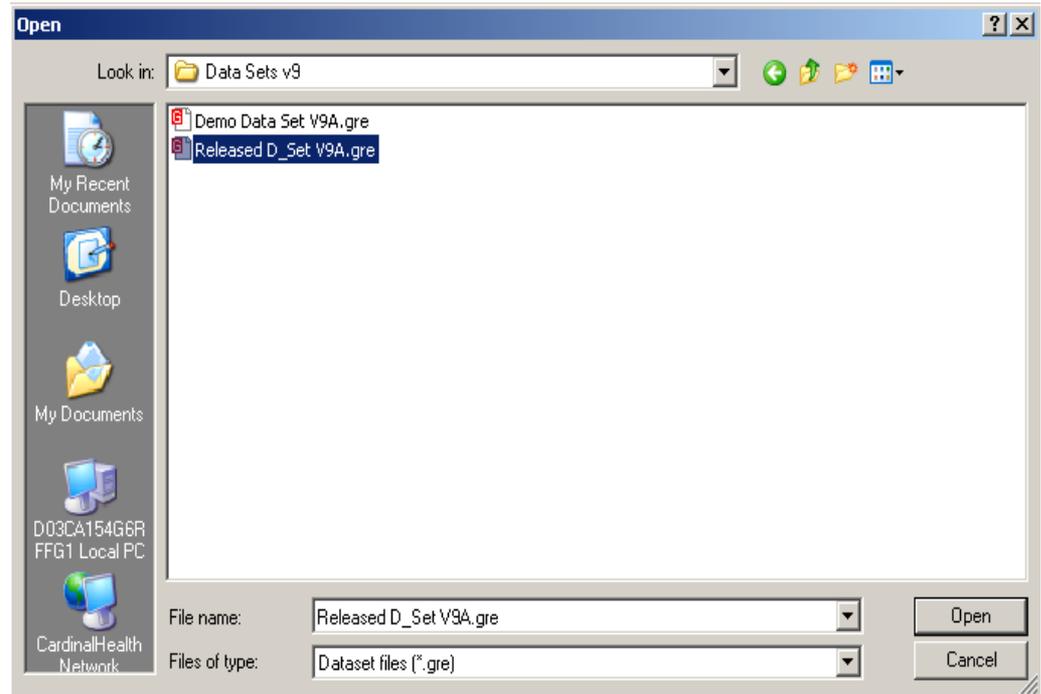
# Data Set Files

- Use the Open dialog box drop-down to select the **Guardrails® data set .GRE** file type for transfer to the PC unit.



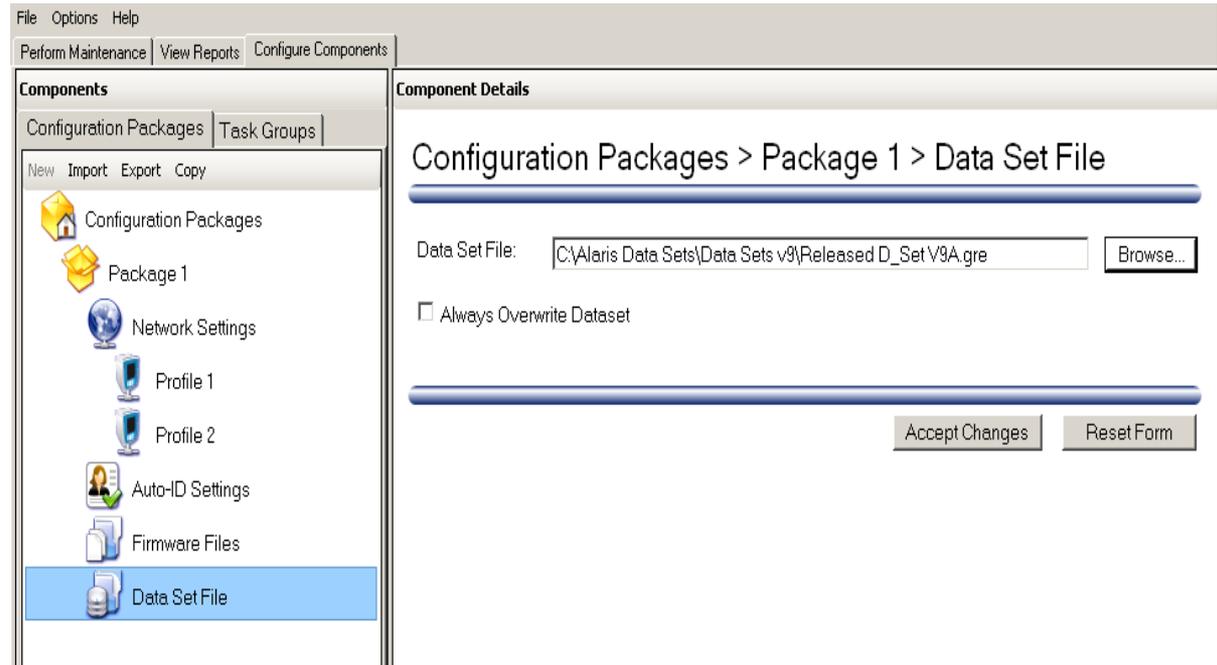
# Data Set Files

- In the Open pop-up window, please select the Data Set File created, and/or received.
- Double-click on file, or click file and select Open.
- Data Set is now in the Alaris® System Maintenance software application.



# Data Set Files

- If you select **Always Overwrite Dataset**, whenever you upload a data set to a Alaris® PC unit, the old data set is overwritten, even if data sets are exactly the same. If you do not select **Always Overwrite Dataset**, the old data set is only overwritten if CRC codes for the two data sets are different.
- Click on the **Accept Changes** button to save edits to the configuration package.



# Configure Components Summary

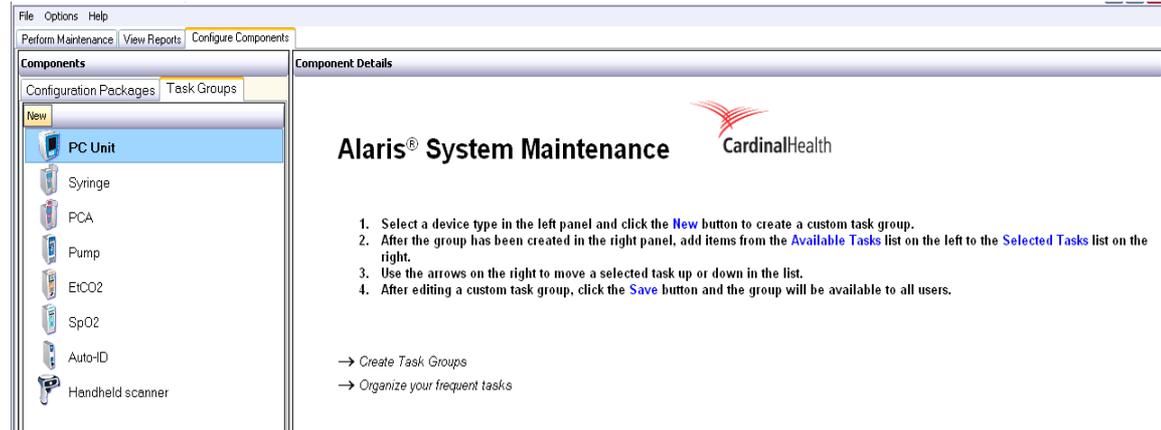
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- We create Configuration Packages which contain the configuration settings that can be uploaded to the Alaris<sup>®</sup> PC Unit and modules, as well as configuration information used solely on the Alaris<sup>®</sup> System Maintenance application running on service computer.
- You've learned some of the component details pane, and how user input to dialog boxes or window pop-ups.

# Task Groups

## Creating Task Groups:

1. Select the **Configure Components** tab on the System Maintenance main window.
- Select the **Task Groups** tab in the **Components** window.
- Select a device type and click **New** at the top of the device type list, or right-click on the device and select **New**.



# Task Groups

- Enter a name for the task group and select **Enter**.
- The **Component Details** pane appears.
- The Task group name will be added to the list of task groups in the **Components** Task Group

Perform Maintenance | View Reports | **Configure Components**

**Components**

Configuration Packages | **Task Groups**

New

- PC Unit
- Syringe
- PCA
- Pump
- EtCO2
- SpO2
- Auto-ID
- Handheld scanner

**Component Details**

Alaris® System Maintenance 

1. Select a device type in the left panel and click the **New** button to create a custom task group.
2. After the group has been created in the right panel, add items from the **Available Tasks** list on the left to the **Selected Tasks** list on the right.
3. Use the arrows on the right to move a selected task up or down in the list.
4. After editing a custom task group, click the **Save** button and the group will be available to all users.

→ Create Task Group  
→ Organize your frequency

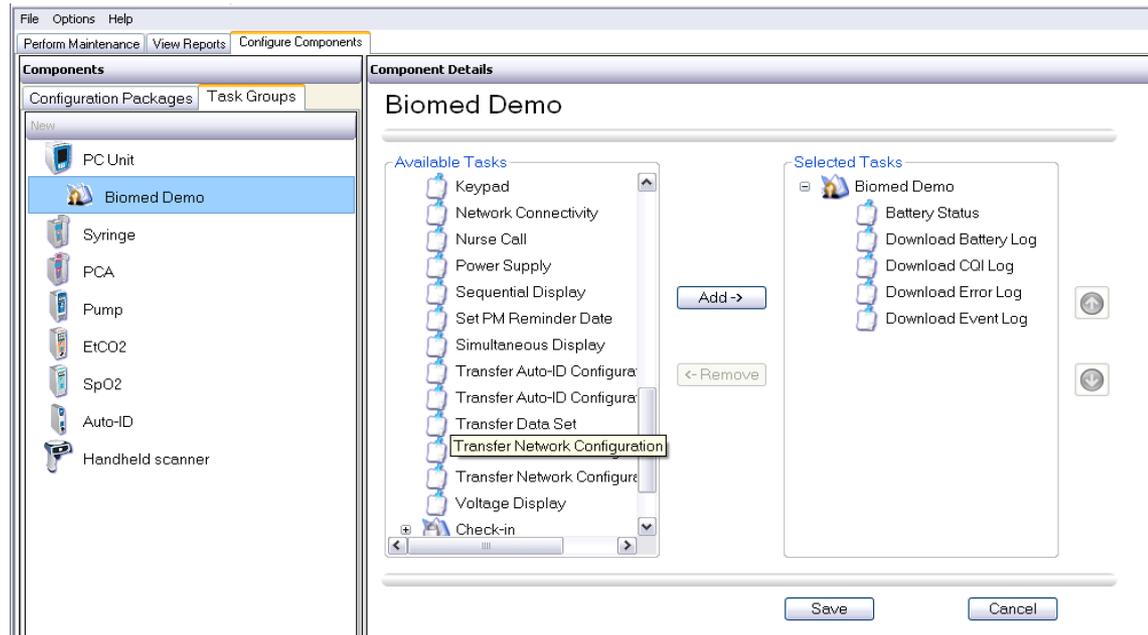
**PC Unit Group Name**

Biomed Demo

Enter

# Task Groups

1. If you wish to add a task, select the task from the **Available Tasks** list and click **Add** to add it to the **Selected Tasks** list for the device.
2. If you wish to remove a task, select the task in the **Selected Tasks** list and click **Remove** to remove it from the list.
3. Continue selecting tasks until you have collected all the needed tasks.
4. Use the up and down arrows to change the list order, if required.
5. Select **Save** to save changes.



# Task Groups Summary

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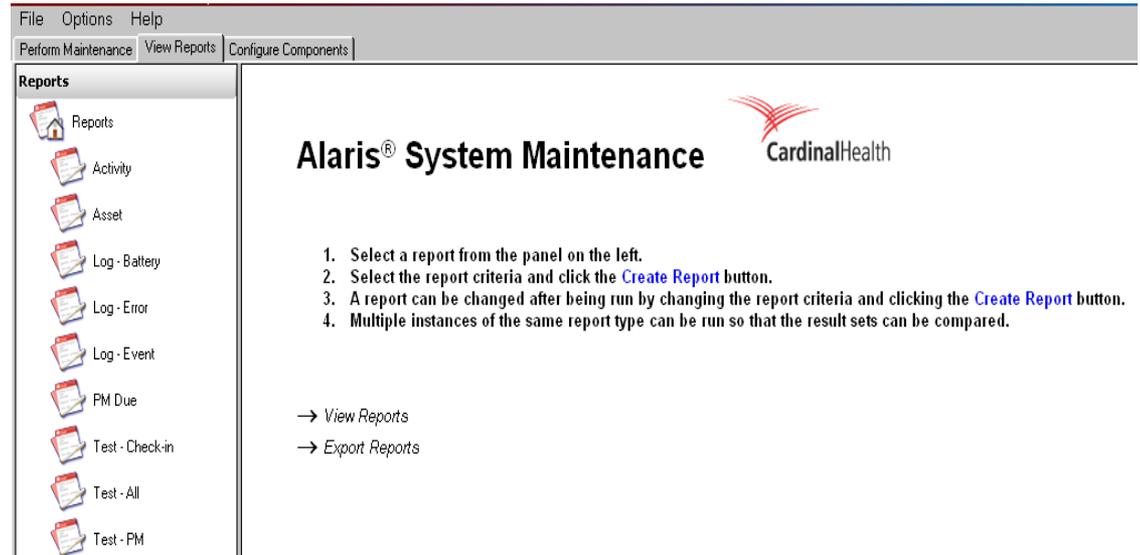
- **Note:** Custom **Task Groups** can be defined and then added to the Task list. You cannot edit the standard task groups, which will always display in the Task list.
- In creating the **Task Group**, you are able to customize the tasks specific to diagnose and/or perform maintenance.
- You've also seen shortcut for adding or removing a single task.
- **Hint;** You'll find that Double-clicking a task in the Master Task List will immediately add it to the list. Double-clicking in a task in the Current Task list will immediately remove that task from the list.

# View Reports

Maintenance reports are available from data stored in the System Maintenance and/or the Maintenance Log databases.

To run reports from the System Maintenance database:

1. Select the **View Reports** tab on the System Maintenance screen.
2. Select report type in the **Reports** pane.



# View Reports

3. Select devices by clicking on the **Select Devices** button. In the **Device Selection** dialog box, you can use the following techniques:

- Ctrl-click to select multiple devices.
- Shift-click to select a range of devices in the displayed list.
- Select the **Filter** button to select specific model numbers or PM Due dates for display.
- Select the **Serial Search** to display devices with serial numbers starting with number sequence entered.

The screenshot shows the 'View Reports' tab in a software application. The main window has a sidebar with a 'Reports' list containing items like 'Reports', 'Activity', 'Asset', 'Log - Battery', 'Log - Error', 'Log - Event', 'PM Due', 'Test - Check-in', 'Test - All', and 'Test - PM'. The 'Log - Battery' item is selected. The main area shows a 'Select Device' button, a 'Use Download Date' checkbox, and date pickers for 'Start Date' and 'End Date' (both set to Thursday, July 02, 2009). There are 'Filter' and 'Create Report' buttons. A 'Device Selection' dialog box is open, showing a table with one device selected.

Serial Number	Model Number	Event	Error	Battery
11111111	8000	6/23/2009	6/23/2009	6/23/2009

4. Click **Select**.

# View Reports

- If required, enter a start and end date for the report.
  - The start date defaults to the earliest entry in the database and the end date defaults to today's date.
- Click **Create Report**.
  - The report generates and displays on screen.

The screenshot shows a software interface with a menu bar (File, Options, Help) and a toolbar (Perform Maintenance, View Reports, Configure Components). A left sidebar contains a 'Reports' tree with items like Activity, Asset, Log - Battery, Report, Log - Error, Log - Event, PM Due, Test - Check-in, Test - All, and Test - PM. The main area displays a 'Battery Log Report' for device '8000 - Alaris® PC Unit, Serial Number: 1000000' on '5/5/2006 - 5/5/2006'. The report includes a table with columns for Seq, Log Date, Description, and Details. The table contains six rows of data. The CardinalHealth logo is visible in the top right of the report area.

Seq	Log Date	Description	Details
0	5/5/2006 2:34:33 PM	TRICKLE_CHARGING	ChargeAccumulated=3400
1	5/5/2006 1:40:35 PM	TOP_OFF_CHARGING	ChargeAccumulated=3060
2	5/5/2006 12:45:29 PM	BATT_START_TEMP_HIGH	ChargeAccumulated=3060
3	5/5/2006 12:45:28 PM	FULL_CHARGE_DETECTED	ChargeDetector=TEMP_AT_MAX_SLOPE; ChargeAccumulated=2613
4	5/5/2006 10:46:26 AM	QUICK_CHARGING	ChargeAccumulated=0
5	5/5/2006 10:46:11 AM	AC_POWER_ON	ChargeAccumulated=0

Page 1 of 1

# View Reports Summary

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- Now we've learned that a number of maintenance reports are available from data stored in the System Maintenance and/or the Maintenance Log databases.
- These would include Activity, Asset, Logs (Battery, Error, Event), PM Due, and Test (Check-in, All, and PM).

# Perform Maintenance Demo

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- At this opportunity, we will need to briefly step out of the presentation as to demonstrate the ASM software application.
- ASM demonstration will be followed by a Networking demo for our networking customers.
- If you are not a wireless customer, the Networking Demo is an optional item and not mandatory to participate.

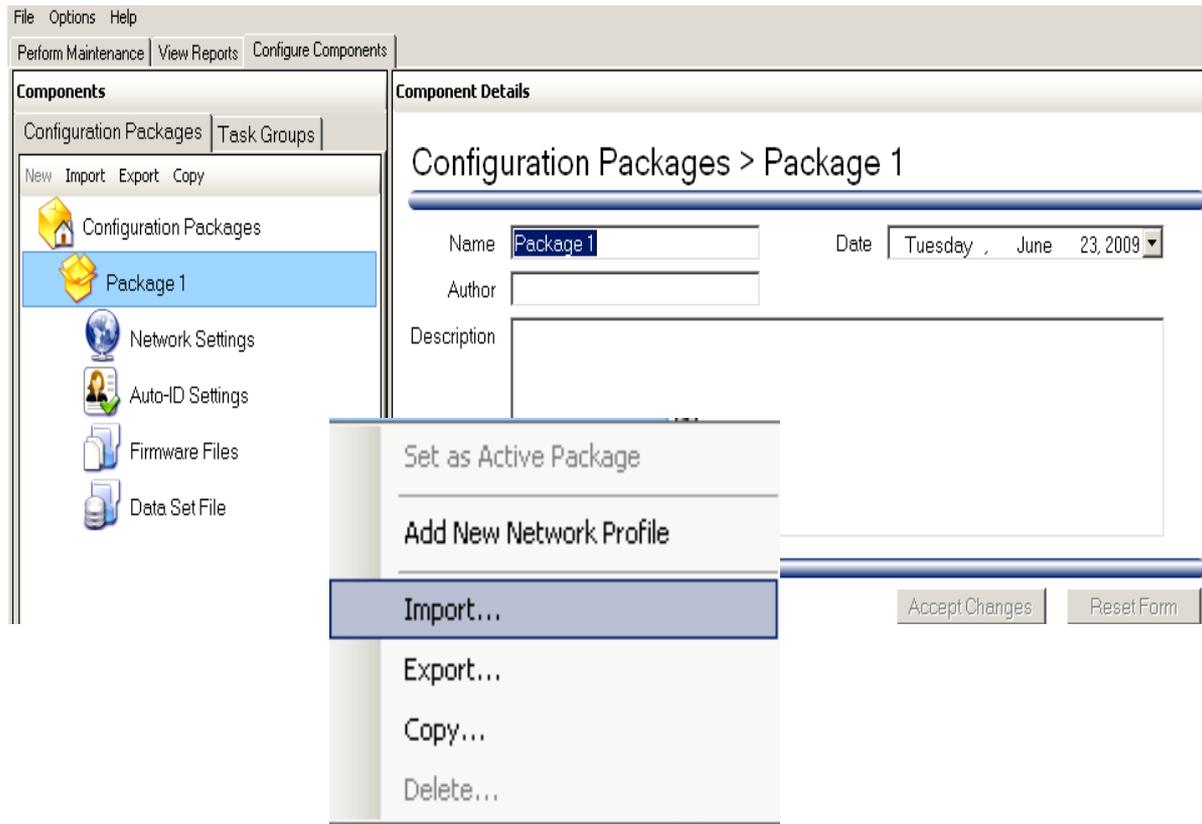
# Configuration Packages

## To import a configuration package:

1. Select a configuration package name in the Configuration Packages list to highlight it.
  2. Click **Import** or right-click on the configuration package name and select **Import** from the pop-up menu.
- The Open dialog box displays.

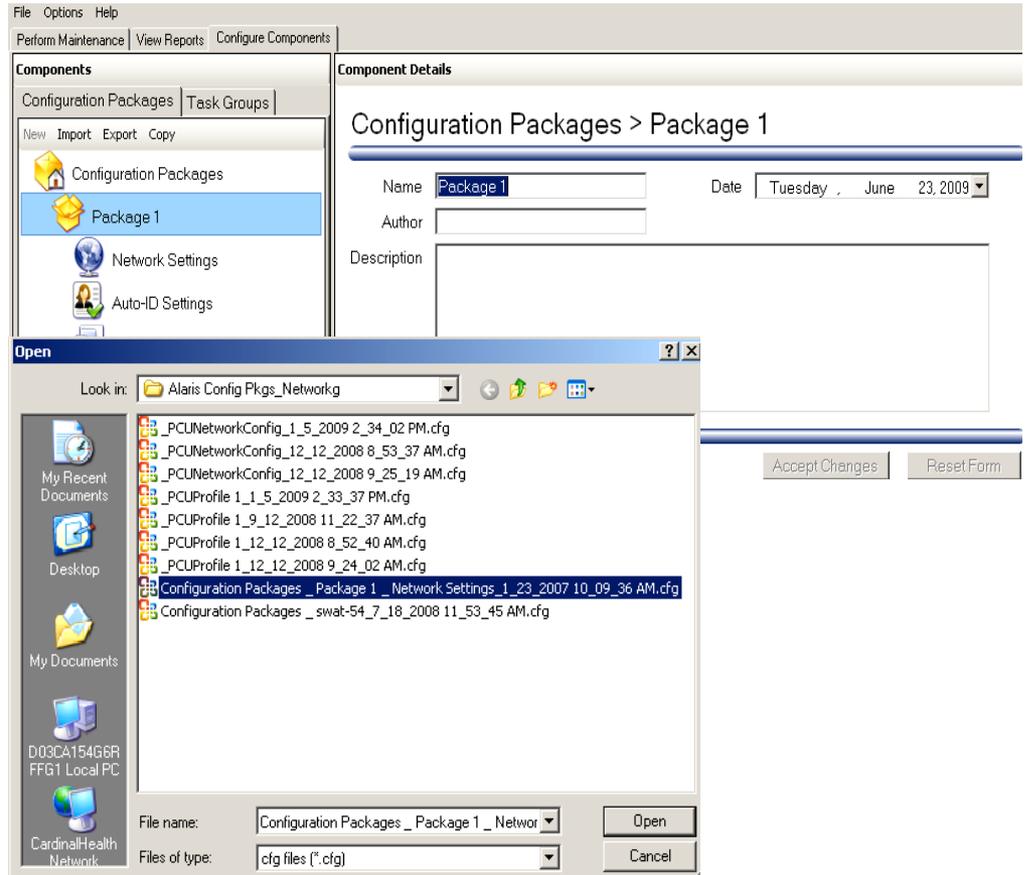
### Note;

Defining network profiles should only be performed by Network Administrator or other qualified personnel.



# Configuration Packages

3. Browse to select a .cfg file to import and select **Open**.
  - Data is imported into the selected configuration package.
4. Accept any changes in the selected configuration package by clicking **Accept Changes**.

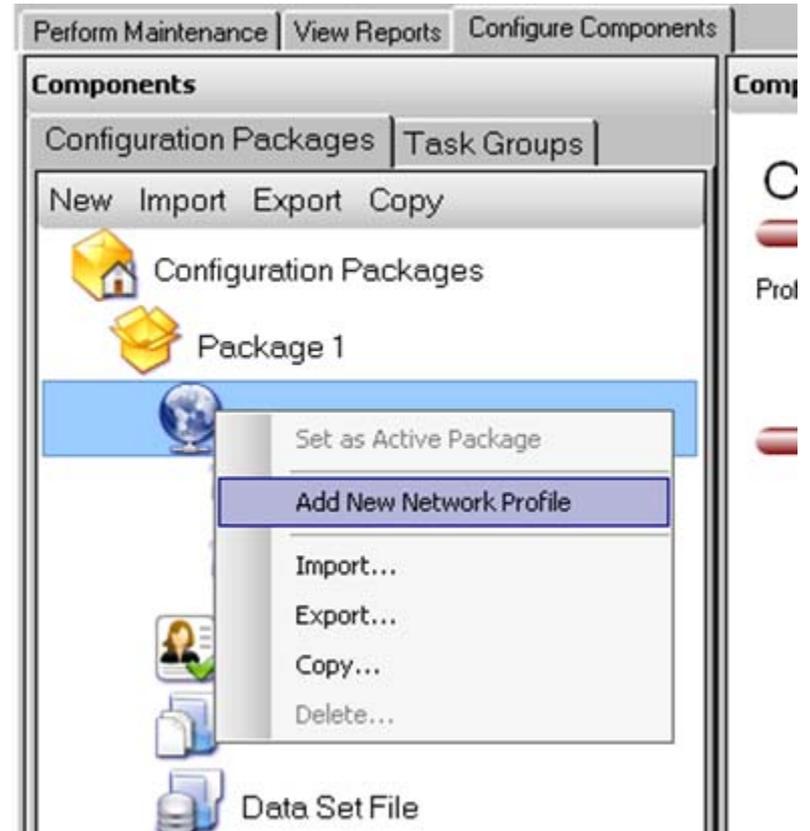


# Network Profiles

## Create Network Profile

1. Right-click on the Network Settings for the desired package, and select **Add New Network Profile**.

Note; The Alaris® System Maintenance software can define and save up to eight network profiles on a PC unit.



# Network Profiles

- The profile appears in the **Component Details** pane.
- The **Datalink** tab allows you to specify the wireless security settings for this profile.

## Configuration Packages > Package 1 > Network Settings

Datalink | Network | Server

Datalink Type: 802.11b

WLAN Config

SSID:

Security

Security Type: WEP

WEP Configuration:

Authentication: Open

Key Length: 40      Transmission Key Index: 0

Key Index 0:

Key Index 1:

Key Index 2:

Key Index 3:

Accept Changes

Reset Form

# Network Profiles

The Network tab allows you to specify the Internet Protocol (IP) information for connecting to the Information Server.

1. Choose either **Obtain an IP Address Automatically**, or **Use Static IP Address** from the drop-down list.
2. Choose either **Obtain DNS Server Address Automatically**, or **Use Static DNS IP Address** from the drop-down list.

Component Details

## Configuration Packages > Package 1 > Network Settings

Datalink | **Network** | Server

You can get IP settings assigned automatically if your network supports DHCP. Alternatively, you can ask your Network Administrator for appropriate static IP Settings.

Obtain an IP address automatically ▾

Static IP address ▾

IP Address:

Subnet Mask:

Default Gateway:

IP Address Range:

Start IP Address:

End IP Address:

Obtain DNS server address automatically ▾

Preferred DNS Server:

Alternate DNS Server:

Accept Changes | Reset Form

# Network Profiles

The Server tab allows you to specify the application-level communication protocol settings that will be used between the PC unit and the information server.

1. Choose **DCMP** application-level communication protocol from drop-down list.
2. Specify related information from the following table.
3. Accept any changes in the selected configuration package by clicking **Accept Changes**.

**Component Details**

Configuration Packages > Package 1 > Network Settings

Datalink | Network | **Server**

Server Type:

Alaris® Server Information:

AES Encryption:

Encryption Key:

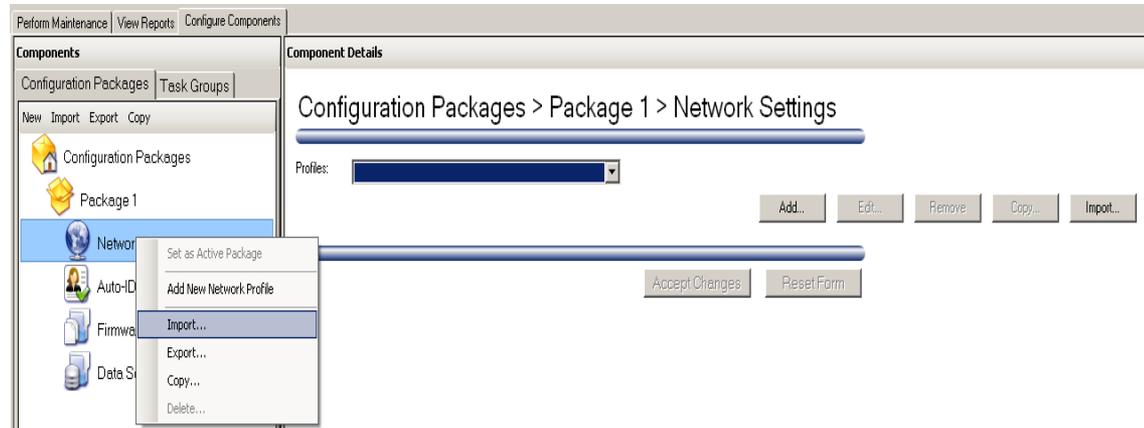
Host Name:

Server Port:

# Importing Configuration Packages

To import a configuration package:

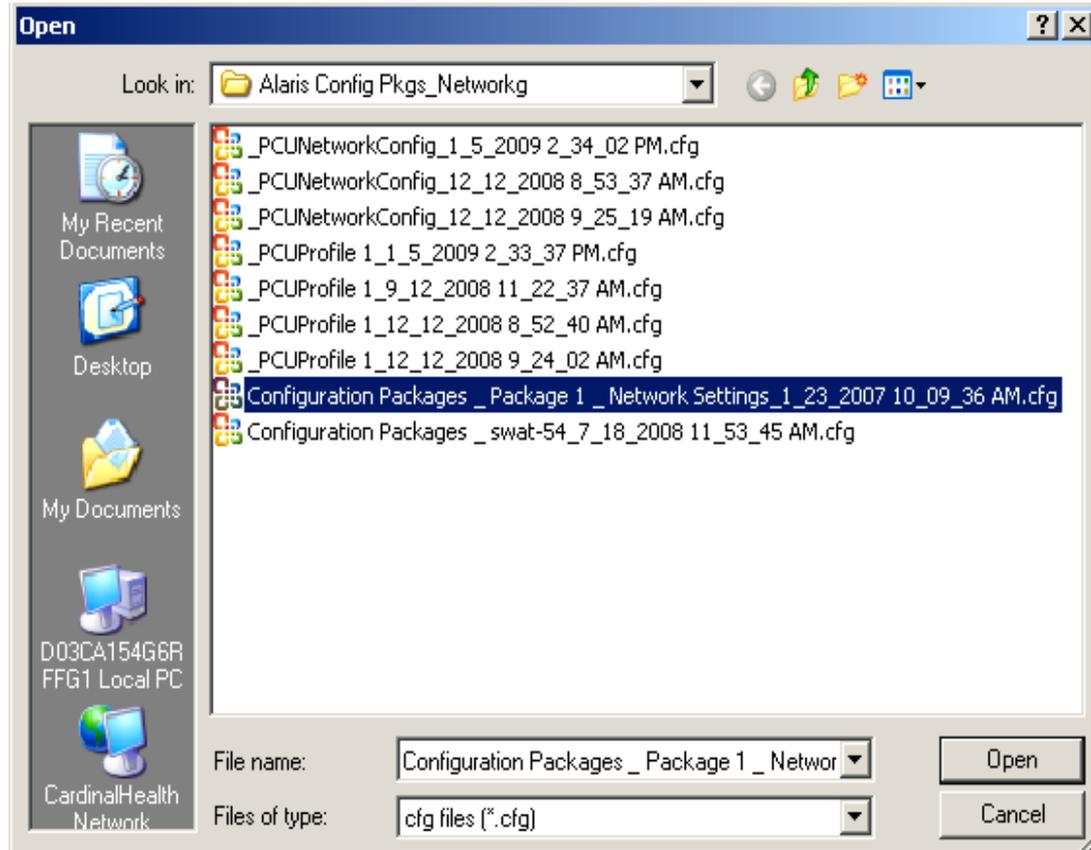
1. Select a configuration package name in the Configuration Packages list to highlight it.
2. Click **Import** or right-click on the configuration package name and select **Import** from the pop-up menu.



# Importing Configuration Packages

The Open dialog box displays.

1. Browse to select a .cfg file to import and select Open.
2. Data is imported into selected configuration package.
3. Accept any changes in the selected configuration package by clicking **Accept Changes**.



# Configuration Packages Summary

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- You've just seen examples of how Configuration Packages are setup.
- Users can now create tasks for the Transfer of Network Configuration.
- Add to note; Defining network parameter sets should only be performed by the Network Administrator or other qualified personnel.

Alaris<sup>®</sup> System Maintenance can define and save up to eight (8), Network Profiles on a PC Unit. These profiles are used when the PC Unit connects to the network, allowing an institution to create a large network with multiple access points. If PC Units are moved, it cycles through the available profiles to find the optimum profile for that location.



# Thank You

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