

IM02606008E

# Foreseer Device Configuration Utility Guide: Foreseer 6.3



# **Device Config Application**

## **User's Guide**

---

# Device Config Application: User's Guide

Publication date Publication date

Publication date 3/2016

Copyright © 2016 by Eaton Corporation. All rights reserved.

Specifications contained herein are subject to change without notice.

Power Xpert and Foreseer are registered trademarks of Eaton Corporation.

EATON CORPORATION - CONFIDENTIAL AND PROPRIETARY NOTICE TO PERSONS RECEIVING THIS DOCUMENT AND/OR TECHNICAL INFORMATION THIS DOCUMENT, INCLUDING THE DRAWING AND INFORMATION CONTAINED THEREON, IS CONFIDENTIAL AND IS THE EXCLUSIVE PROPERTY OF EATON CORPORATION, AND IS MERELY ON LOAN AND SUBJECT TO RECALL BY EATON AT ANY TIME. BY TAKING POSSESSION OF THIS DOCUMENT, THE RECIPIENT ACKNOWLEDGES AND AGREES THAT THIS DOCUMENT CANNOT BE USED IN ANY MANNER ADVERSE TO THE INTERESTS OF EATON, AND THAT NO PORTION OF THIS DOCUMENT MAY BE COPIED OR OTHERWISE REPRODUCED WITHOUT THE PRIOR WRITTEN CONSENT OF EATON. IN THE CASE OF CONFLICTING CONTRACTUAL PROVISIONS, THIS NOTICE SHALL GOVERN THE STATUS OF THIS DOCUMENT.

## DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY

The information, recommendations, descriptions and safety notations in this document are based on Eaton Corporation™ (Eaton) experience and judgment and may not cover all contingencies. If further information is required, an Eaton sales office should be consulted. Sale of the product shown in this literature is subject to the terms and conditions outlined in appropriate Eaton selling policies or other contractual agreement between Eaton and the purchaser. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, OTHER THAN THOSE SPECIFICALLY SET OUT IN ANY EXISTING CONTRACT BETWEEN THE PARTIES. ANY SUCH CONTRACT STATES THE ENTIRE OBLIGATION OF EATON. THE CONTENTS OF THIS DOCUMENT SHALL NOT BECOME PART OF OR MODIFY ANY CONTRACT BETWEEN THE PARTIES.

In no event will Eaton be responsible to the purchaser or user in contract, in tort (including negligence), strict liability or otherwise for any special, indirect, incidental or consequential damage or loss whatsoever, including but not limited to damage or loss of use of equipment, plant or power system, cost of capital, loss of power, additional expenses in the use of existing power facilities, or claims against the purchaser or user by its customers resulting from the use of the information, recommendations and descriptions contained herein.

---

---

Introduction .....	1
Interactive Device Installation .....	2
Configuring a Serial Connection .....	3
Modifying a Device .....	4
Configuring the Message Manager .....	5
Setup .....	5
SNMP Resend Parameters .....	8
Required Connections .....	9
Trusted Message Manager Connections .....	10
Menu Reference .....	11
Administration Menu .....	11
Configuration Menu .....	11
Start/End Server Configuration .....	11

---

# Introduction

You can use the Device Config utility to:

- Add or modify devices from the Foreseer configuration in a running Foreseer Server. You can add “driver allowed” channels as well.
- Modify an existing device or to add a channel to a device, you must first load its driver. In this context, loading a device's driver disables that device in the Foreseer service. When you unload the driver in the Device Config utility that driver is re-enabled in the Foreseer service. You can only load a single driver in the Device Config utility at a time.
- Add channel message settings for Message Management.

---

# Interactive Device Installation

## To install a new Device on the Foreseer Local Server:

1. Select the Start Server Configuration command in the Configuration menu. The \*\*\*\*\*SERVER CONFIGURATION MODE\*\*\*\*\* message appears in the window's title bar.

### Note

If an administrative password is required to configure the server, a dialog box will appear in which you must provide that password.

2. Right-click the local server, then select the Install Device command to access the initial Device Installation dialog box.
3. Locate the previously completed Configuration Checklist for the new equipment, then click Next.
4. Choose the Select the device from a list option and click Next. The Device must be correctly wired and running in a normal operational mode in order to successfully connect to it.

### Note

Do not use SNMP discovery.

5. Select the device from the list, then click Next.
6. Accept the suggested name for the Device or enter another unique description, observing the character limitations, and then click Next to continue.
7. Specify whether the interface between the Server and the Device is a Network or direct Serial connection and then select the appropriate type for that option.

### Note

TCP/IP Protocol must be installed on the Server PC regardless of the type of Device connection. When utilizing a ConnectUPS Network Adapter (Powerware UPS products only), specify a UDP/IP connection. TCP VIM II is only used to install legacy Liebert equipment.

8. In the settings dialog box that appears, enter the requested additional information and then click Next. Continue to enter communications information and click Next until requested. When the display returns to the Device Installation dialog box, click OK followed by Next to continue.
9. In the Identification dialog box, verify that the information displayed about the Device corresponds to the information recorded on the Configuration Checklist. If not, Cancel the installation and recheck the Device. If the displayed Device information is correct, click Next.
10. With the target Device and the interface connection defined, click Finish to complete the installation. The new equipment will appear in the Tree View.

## Important

If the installation is unsuccessful, or the Device information does not appear in the Identification window, click Back and check that all configuration entries are proper and that hardware connections with the equipment are correct. After verifying the configuration and connections, once again attempt to install the Device. Contact Eaton Corporation's Foreseer Technical Support if Device installation problems persist.

11. Install any additional Devices using the same procedure.
12. With all Devices properly installed click No in response to the Install Another Device? prompt to terminate the installation process.
13. Select End Server Configuration in the Configuration menu to restore normal Foreseer Server operation.

## Configuring a Serial Connection

The Device's Port Settings must be specified if a Direct Serial or VIM II connection is used. Either choice requires that you specify the Serial Communications Port and its settings.

### **To configure a Direct Serial Connection at the Foreseer Server:**

1. Accept the displayed Port or select one of the Ports currently available from the list.
2. If you wish to change the port settings, click the Change Settings button to display the named port's Properties dialog box containing additional serial interface parameters.
3. Click OK to enable the displayed Port Settings and return to the Device Installation Wizard.

The process for entering the necessary configuration settings for a VIM II Direct Serial Connection is similar. After specifying the communications Port and Device Settings for the VIM II, you are prompted to specify the VIM II Address and Port. Click OK to enable the displayed parameters and return to the Device Installation Wizard.

---

# Modifying a Device

You can modify any existing device using the Device Config utility. The following general procedure can be used for modifying a device or adding a channel. If you are adding a channel, the process is:

1. First add the channel in the Device Config utility.
2. Next modify the device in the Web Config utility.

## Note

You cannot add a device channel from the Web Config utility. Channels must be added through Device Config (or the Foreseer server). However, if you change channel properties in the Device Config utility these changes will not be saved. To modify device channel properties you must use the Web Config utility (or the Foreseer server).

## To edit a device:

1. Right-click the device in the Tree and then choose Load Driver. The device and its channel icons will turn purple.
2.
  - To modify the device properties, right-click the device and choose Properties.
  - To add a Channel, right-click the device and choose Add Channel.
3. When you've finished, right-click the device and choose Unload Driver. You can now load the driver for another device that you wish to configure.
4. When you're finished configuring devices, select End Server Configuration from the Configuration menu.

---

# Configuring the Message Manager

There are four configuration tasks for the message manager within the Foreseer Server:

Setup	Defines which devices or individual channels send alerts through Message Management as well as the configuration for various alarms and actions. You can also define the SNMP behavior.
Configure Required Connections:	Identifies which Foreseer systems are required to be connected to this Server in instances where the Client normally performs Message Management functions. If any one of the listed systems becomes disconnected from the Server, Foreseer Message Management begins its messaging routine to alert personnel of alarms.
SNMP Properties	Sets global SNMP resend properties.
Trusted Connections	Defines a set of trusted machines that are permitted to connect to the Message Manager.

## Setup

Use this to configure Message Manager settings for the server, devices, or individual channels.

1. Select the Setup command from the Administration > Message Management submenu.
2. Right-click any server, device, or channel in the list, and then click Edit. You can also multiselect.
3. For individual channels, you can set whether or not to use the default Notification List (this checkbox is under the Default tab). For channels, devices, and servers you can set behavior for Critical and Cautionary alarms, as well as when an alarm is acknowledged or normal status is attained. Note that you can select these individually or use multi-select. You can specify:
  - The notification list to use.
  - Whether to send a message if required connections are missing.
  - Parameters for Alpha Messages. You can either choose to use the standard message and configure it with the checkboxes or select Use Custom Message (under Alpha Message). If you are using the standard message, you can select to include the Server Name, Device Name, Channel Name, as well as a user defined message.

If you choose Use Custom Message, you have access to all of the Message Manager variables. Click Edit the Custom Message to access the message editor dialog box.

When creating a custom message, you can use the following variables to provide additional alarm information:

`$_SERVER_NAME$` - returns the server issuing the alarm.

`$_DEVICE_NAME$` - returns the name of the device issuing the alarm.

`$_CHANNEL_NAME$` - returns by the name of the channel

\$ALARM\_MSG\$ - returns the alarm message.

\$DATE\$ - returns the current date.

\$SERIAL#\$ - returns the serial number of the device that issued the alarm.

\$ACKED\_BY\$ - returns the user name that acknowledged the alarm.

\$CHANNEL\_VALUE\$ - returns the current value of the channel.

\$CHANNEL\_UNITS\$ - returns the units used by the channel.

\$ALARM\_VALUE\$ - returns the channel value at the time of the alarm.

\$ALARM\_STATE\$ - returns the current state of the alarm.

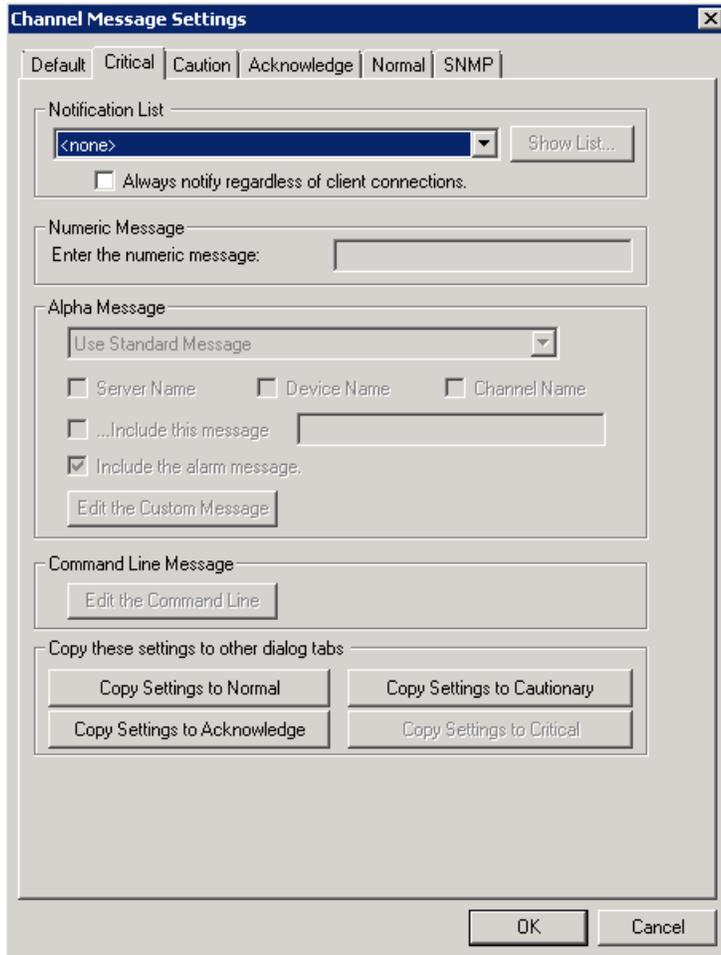
\$ALARM\_PRIORITY\$ - returns the alarm priority.

\$ACK\_NOTE\$ - returns the text, if any, that was entered as a note when the alarm was acknowledged.

- The command line to use for the Command Line service. This allows you to change the command line issued for each alarm state or status.

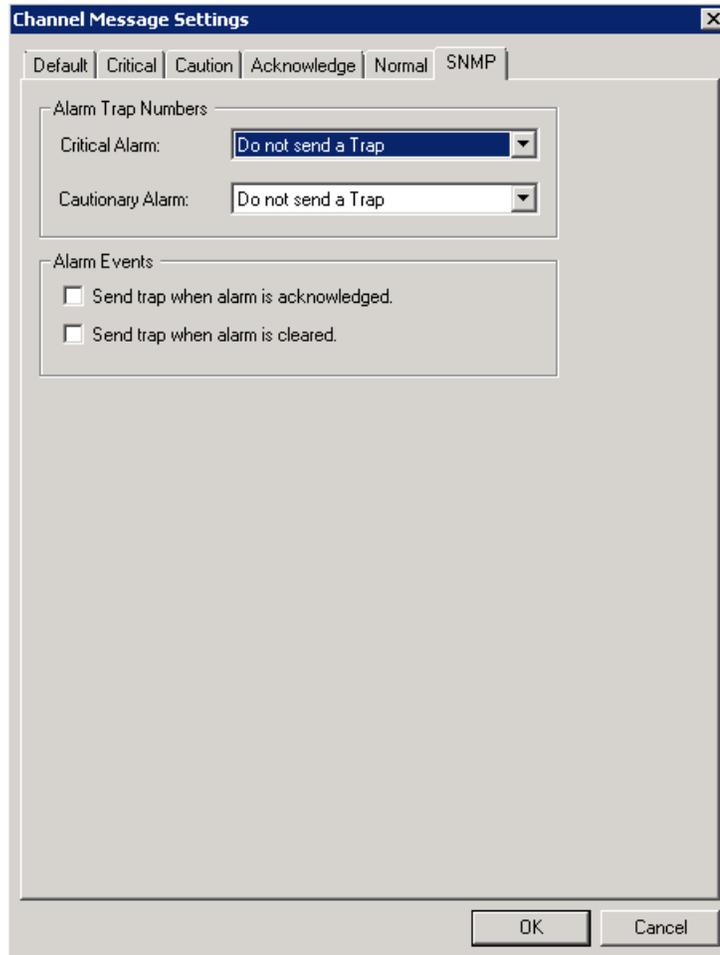
Once these are configured, you can copy the settings to the other alarm or status tabs using the buttons at the bottom of the dialog box.

**Figure 1. Channel Message Settings Dialog Box**



4. If you are also configuring SNMP traps, click the SNMP tab:
  - a. For both Critical Alarm and Cautionary Alarm, select one of the 25 predefined traps or leave the setting at Do not send a Trap.
  - b. Set the Alarm Events parameters. You can choose to also send a trap on alarm acknowledgement or return to normal.
5. Click OK.

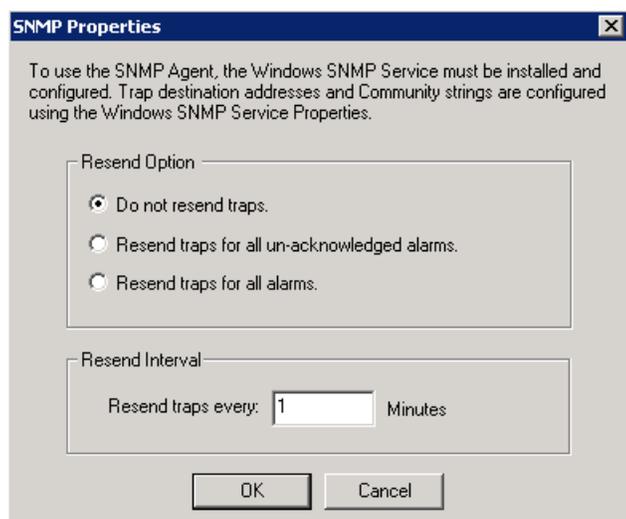
**Figure 2. SNMP Settings**



## SNMP Resend Parameters

Through this dialog box you can globally set the trap resend behavior. These settings apply to all channels, devices, and server for which SNMP traps are configured. To access it, select the SNMP Properties command from the Administration > Message Management submenu.

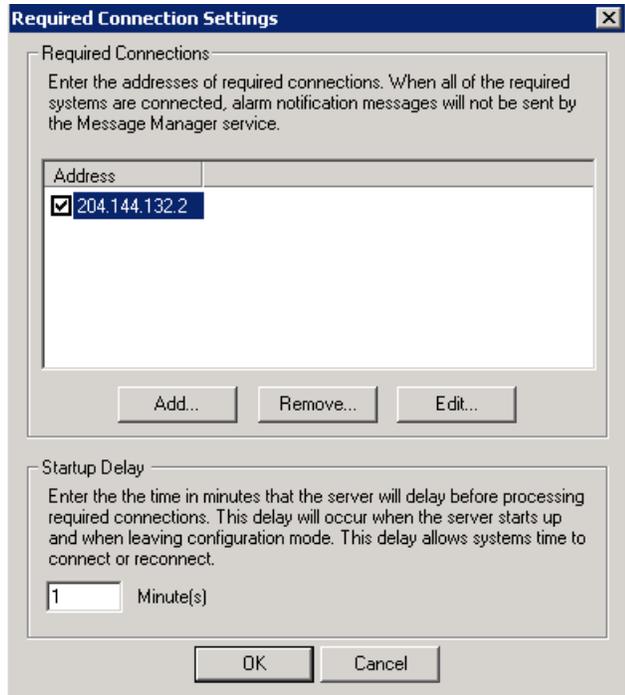
**Figure 3. SNMP Properties**



## Required Connections

1. Select the Configure Required Connection command from the Administration > Message Management submenu to display the Required Connection Settings dialog box.

**Figure 4. Required Connection Strings**



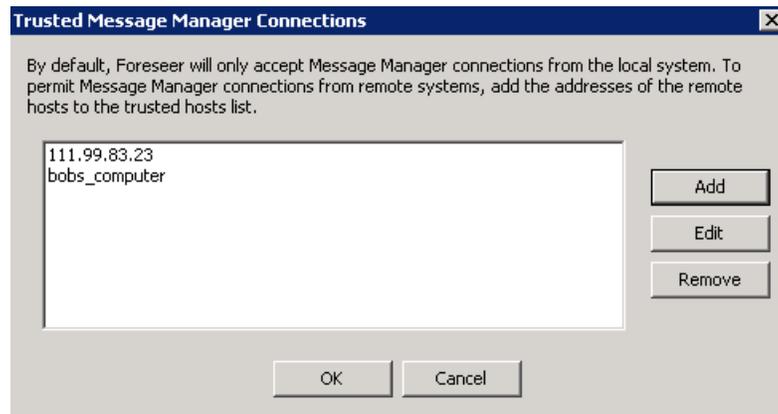
2. Click on the Add button to access the Enter Client IP Address dialog box.
3. Furnish either the Foreseer Message Management host network address or computer name and click OK.

4. Check the box preceding the address to enable server access by that client.
5. Specify the Startup Delay during which the server will ignore any clients that become disconnected. This delay is in effect whenever the server is initialized, or when modifications have been made to the system.
6. Repeat the process to add other Foreseer clients to the list.
7. Click OK to accept the displayed settings.

## Trusted Message Manager Connections

When setting up the Message Manager on client machines, you must define them as having trusted IP addresses or machine names. To access the dialog box, select the Trusted Connections command from the Administration > Message Management submenu. Click the Add button to add machines to the list. Select an entry and click Remove to delete it. Use the Edit button to change an entry.

**Figure 5. Trusted Message Manager Connections**



---

# Menu Reference

## Administration Menu

Login/Logoff	If a password is set for administering the Foreseer server, you'll need to enter it configure that server. Login provides a way to authenticate to the server with the password while logoff removed those credentials from your Device Config utility session.
Message Management	You can use this submenu to configure <b>Message Management</b> . <b>Message Management</b> establishes an automatic escalation procedure in response to user-specified alarms. When an alarm is detected, Foreseer calls each person in the appropriate Notification List in the order shown until the alert is acknowledged. The <b>Status</b> portion of the <b>Message Management</b> window reports the notification is being performed and its ongoing progress. If everyone on the <b>List</b> is called without receiving an acknowledgement, Foreseer can repeat the entire procedure until the alarm is acknowledged, thereby ensuring a response.
Unload/Load Driver	By default, all devices are shown in the Device Config utility tree with white icons. Loading the driver for an individual device disables that device in a running Foreseer service so that it can be modified. When you are finished configuring the device, unloading the driver re-enables it (with the changes to its configuration) in the Foreseer service. You must unload the driver to configure a device and you can only unload one driver at a time. That is, you cannot simultaneously configure more than one device.

## Configuration Menu

### Start/End Server Configuration

Certain configuration functions are only available when in Server Configuration mode. Configuring backups is only available when not in Server Configuration mode. Functions that are only available in Server Configuration mode are:

- Install Device (Device right-click menu and Configuration menu)
- Add Channel (Device right-click menu and Configuration menu).