# Foreseer 7 Device Configuration Utility Guide





# Foreseer 7.0 Device Configuration Utility Guide

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# Contents

Introduction	4
Interactive Device Installation	4
To install a new Device on the Foreseer Local Server:	4
Configuring a Serial Connection	5
To configure a Direct Serial Connection at the Foreseer Server:	5
To edit a device:	5
Configuring the Message Manager	6
Setup	6
SNMP Resend Parameters	9
Required Connections	10
Trusted Message Manager Connections	10
Menu Reference	11
Administration Menu	11
Configuration Menu	11
5	

# 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 reenabled in the Foreseer service. You can only load a single driver in the Device Con- fig 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**.
- 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.
- 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.

- 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 De-

vice 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 Set- tings 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.

You can modify any existing device using the Device Config utility. The following general procedure can be used for modifying device or channel properties or adding a channel.

#### 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 modify a channel's properties, right-click the channel 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:

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.

Setup

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 permit- ted 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 multi-select.
- 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. \$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.

hannel Message Settings	×	
Default Critical Caution Acknowledge	ge Normal SNMP	
Notification List		
Knone> Show List		
Always notify regardless of cl	ient connections.	
- Numeric Message Enter the numeric message:		
Alpha Message		
Use Standard Message	<b>V</b>	
🗖 Server Name 🗖 Device	Name 🗖 Channel Name	
Include this message		
Include the alarm message.		
Edit the Custom Message		
Command Line Message		
Edit the Command Line		
Copy these settings to other dialog tabs	s	
Copy Settings to Normal	Copy Settings to Cautionary	
Copy Settings to Acknowledge	Copy Settings to Critical	
	UK Cancel	

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**.

Channel Message Settings
Default Critical Caution Acknowledge Normal SNMP
Alarm Trap Numbers Critical Alarm: Do not send a Trap
Cautionary Alarm: Do not send a Trap
Alarm Events
Send trap when alarm is acknowledged.
Send trap when alarm is cleared.
OK Cancel

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.

SNMP	Properties X
To u: confi usin <u>c</u>	se the SNMP Agent, the Windows SNMP Service must be installed and gured. Trap destination addresses and Community strings are configured the Windows SNMP Service Properties.
	Resend Option
	Do not resend traps.
	C Resend traps for all un-acknowledged alarms.
	Resend traps for all alarms.
	Resend Interval Resend traps every: 1 Minutes
	OK Cancel

**Figure 3. SNMP Properties** 

## **Required Connections**

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

Required Connection Settings	×
Required Connections Enter the addresses of required connections. When all of the required systems are connected, alarm notification messages will not be sent by the Message Manager service.	
Address	
☑ 204.144.132.2	
Add Remove Edit	
Startup Delay Enter the the time in minutes that the server will delay before processing required connections. This delay will occur when the server starts up and when leaving configuration mode. This delay allows systems time to connect or reconnect.	
OK Cancel	

**Figure 4. Required Connection Strings** 

- 2. Click on the Add button to access the Enter Client IP Address dialogbox.
- 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 be- come 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.

Trusted Message Manager Connections By default, Foreseer will only accept Message Manager connections from the la permit Message Manager connections from remote systems, add the addresse hosts to the trusted hosts list.	cal system. To s of the remote
111.99.83.23 bobs_computer	Add Edit Remove
OK Cancel	

Figure 5. Trusted Message Manager Connections

# **Menu Reference**

# **Administration Menu**

Login/Logoff	If a password is set for administering the Foreseer serv er, you'll need to enter it configure that server. Login pro- vides a way to authenticate to the server with the pass- word while logoff removed those credentials from your De- vice Config utility session.
Message Management	You can use this submenu to configure <b>Message Man</b> agement. Message Management 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 every- one 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 utili ty 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).