



# ... Emergency procedures OR-1x00

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## Introduction

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*This document is intended to describe the Forced and Soft Reload procedure of the kernel software on an Outdoor Router (OR). The software used is part of the Outdoor Router System Release download from the [www.orinocowireless.com](http://www.orinocowireless.com) web site.*

*A Forced Reload recovers from situations where:*

- *The OR has stopped to respond to the management system.*
- *Parameters and identifiers such as SNMP password have been mislaid.*

## Overview

*The emergency procedures of the OR cover two types:*

- *Forced Reload procedure. At start, only the OR's boot loader is started. In this mode the OR will only support the upload of a kernel.*
- *Soft Reload procedure. In this mode the OR is running as normal, but the IP address can be changed even when the current IP address is in a different network.*

## Tips before start

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- *Connect the OR by the Ethernet cable. In Forced Reload mode, the wireless PC Cards do not work. It is recommended to remove those from the unit.*
- *Give a static IP address to the computer that is used. It is recommended that a static IP address is specified in the range that will be finally used so that there is less to configure after the kernel has been reloaded onto the unit.*
- *Find the kernel file and place a copy of it on the desktop every time when force reloading an OR and use that copy when performing the upload, since upload process writes information back to the originating \*.bin file.*
- *Make sure that \*.bin file attributes are set to not-read-only.*

## Soft Reload procedure

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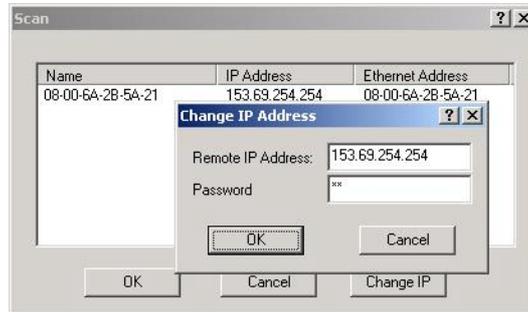
*The Soft Reload procedure is an easy way to only change the IP address of an Outdoor Router. To set the OR in Soft Reload procedure is:*

- *Press during normal operation the reload button until the power LED becomes Amber/Orange.*

*To change the IP address, carry out the following steps:*

1. *Select from the File menu **Open Remote Config...** . The **Enter IP Address** box will open up.*
2. *Click the **Scan** button. The **Scan** box will be displayed. The OR shows up with IP address 153.69.254.254.*

3. Select the OR by clicking on the name.
4. Click the **Change IP** button. The **Change IP Address** box will be displayed.



5. Fill in an IP address that is in the same subnet range as the PC running OR Manager. This IP address is temporary and will only be used during the upload of the kernel.
6. Fill in the password, click **OK** and the **Scan** box is activated again.
7. Select the OR again and click **OK**. The **Enter IP Address** box is activated again.
8. Fill in the password and click **OK**.
9. Select **File**, then **Save Config** to save the new IP address.

## **Forced Reload procedure**

### **Procedure Overview**

In order for a Forced Reload to be completed on an Outdoor Router (OR) unit, two main steps are required:

1. The unit first has to be set in a Forced Reload Mode by pressing the 'RESET' and 'RELOAD' buttons in a specific order.
2. A new kernel has to be uploaded into the unit.

The proper order to set the OR unit into a Forced Reload state is described below, also the equipment what you need to complete the Forced Reload process, is described.

### **Forced Reload Mode**

There are 3 types of Outdoor Routers. Each unit has a slight different procedure to enter Forced Reload Mode. The models are:

- OR-1000/1100 Model # : WavePOINT-II (BNC connector for 2-base T)
- OR-1000/1100 Model # : WP-II E (type 1, see description below)
- OR-1000/1100 Model # : WP-II E (type 2, see description below)
- OR-500 Model # : SP

The model is clearly noted on the label of the unit.

#### **OR-1000/1100 Model #: WavePOINT-II**

The WavePOINT-II can easily be recognized by the BNC connector. To set the unit in Forced Reload mode, do the following:

1. Press and release the 'RESET' button. The LEDs on the unit will flash and start to cycle.

2. After ten seconds press and hold the 'RELOAD' button for about thirty seconds until the Power LED remains Amber/Orange.

The unit is now in a Forced Reload state.

#### **OR-1000/1100 Model #: WP-II E**

The WP-II E can easily be recognized by the RS-232 connector.

1. Press and release the 'RESET' button. The LEDs on the unit will flash and start to cycle.
2. As soon as the LED on PC Card Slot B (after approximately 3 seconds) will turn red, press and hold the 'RELOAD' button for about thirty seconds until the Power LED remains Amber/Orange. During the thirty seconds, the LEDs will flash and cycle.

Note: some units have the inconvenience that the Slot B LED will be Red for only 0.5 seconds. This means that the reload button has to be pressed within that 0.5 seconds. If the Reload button is pressed too early or too late, the Power LED will shortly change to Green, then to Amber. When the Reload is pressed at the proper time, the Power LED will change immediately to Amber in the end of the cycle.

#### **OR-500 Model #: SP**

To set the OR-500 in Forced Reload mode, do:

- Press the reset button, release the reset button and press the reload button immediately and hold until the power LED becomes Amber/Orange.

### **Upload of the kernel in Forced Reload Mode**

To only action the OR accepts in Forced Reload mode, is the upload of a new kernel. To do this, start the OR Manager and take the following 3 steps:

#### **Step 1 - Open a \*.bin File**

1. Select from the **File** menu **Open Config File...** . The **Open window** will display and the user can browse through the files.
2. Choose **Kernel Files (\*.bin)** as **Files of type** and select the kernel of your choice. The OR-1x00 will use the AG1x\*.bin and the AG05\*.bin are to be used with the OR-500.
3. Follow the instructions, filling in the keys.

The message **Opened File <filename>** is displayed.

#### **Step 2 - Change the setup within the \*.bin File**

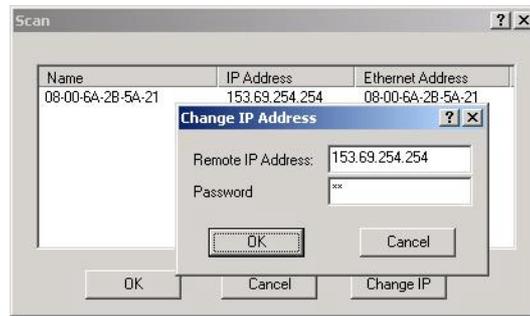
The configuration in the \*.bin file may be changed. This is need required, but it strongly recommended changing at least the IP address.

1. Select the appropriate items from the **Setup** menu and change the settings. For example to change the IP address, select **IP Address Setup...** and fill in the OR's final IP address.

#### **Step 3 - Upload the \*.bin to the OR**

1. Select from the **File** menu **Upload Software...** . The **Enter IP Address** will open up.
2. Click the **Scan** button. The **Scan** box will be displayed. The OR shows up with IP address 153.69.254.254.
3. Select the OR by clicking on the Name.

4. Click the **Change IP** button. The **Change IP Address** box will be displayed.



5. Fill in an IP address that is in the same subnet range as the PC running OR Manager. This IP address is temporary and will only be used during the upload of the kernel.
6. Fill in as **Password** 'public' (without the quotes), click **OK** and the **Scan** box is activated again.
7. Select the OR again and click **OK**. The **Enter IP Address** box is activated again.
8. Fill in as **Password** 'public' (without the quotes), click **OK**.
9. Some messages are displayed. Click all **Yes** and **OK**. The kernel will be uploaded and a message will be displayed indicating that the upload is complete.



After the upload, the unit will reboot and is ready for operation.

## More information

For more information refer to the *OR Manager - User's Guide, Appendix C "Forced Reload Procedure"* and to the [www.orinocowireless.com](http://www.orinocowireless.com) website.