

Enabling Hardware Alerts

For the x346 Server

IBM ® Enabling hardware Alerts from the x346

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1. Overview

This document describes the prerequisites needed to enable the hardware alerting capabilities for the x346. Please review this document carefully and follow the steps according to your configuration requirements.

2. Acronyms

- | | | |
|---|-----------------|--|
| • | BMC | Baseboard Management Controller |
| • | RSA-II Slimline | Remote Supervisor Adapter –II Slimline |
| • | IPMI | Intelligent Platform Management Interface. |
| • | OOB | Out of band |

3. Prerequisites necessary to enable hardware alerting

There are prerequisites of certain levels of firmware and software components in order for hardware alerting to be enabled. This document will itemize the needed components and explain the order in which to perform the updates.

The following diagram illustrates the interdependencies among hardware, firmware and software components.

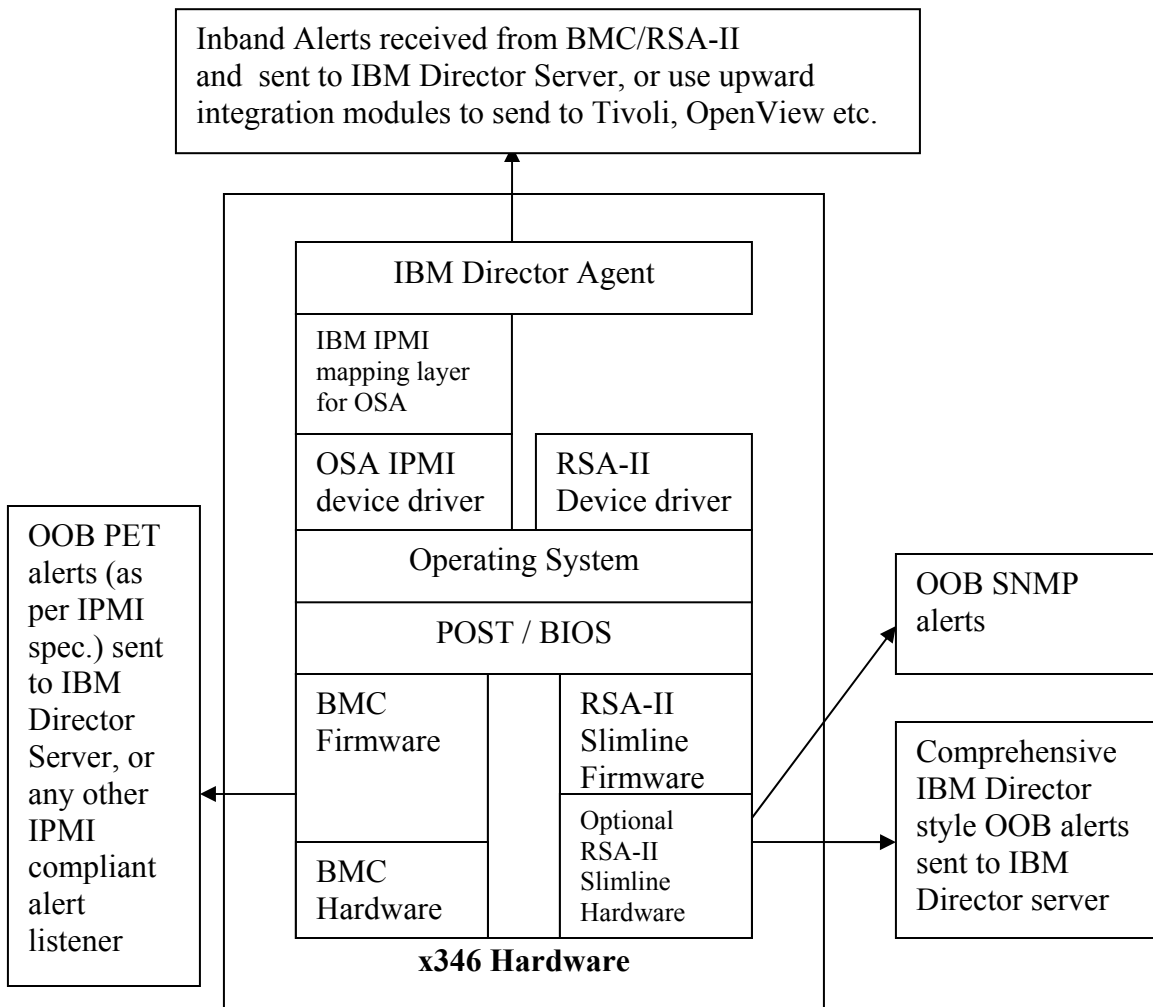


Diagram 1. Illustration of interdependencies for alerting on the x346 hardware

4. List of important websites

- [IBM Support Web Site](#)
- [IBM eServer xSeries 346](#)
- [IBM Director download page](#)

5. Information that you need to know before proceeding:

- Which OS have you installed on x346 ?
Windows ____ / Linux ____ / NetWare ____
- Do you have a RSA-II Slimline adapter ?
Yes/No _____
- Are you using IBM Director to manage the x346 ?
Yes/No _____

Note: IBM Director 4.20.2 is required to manage the x346.

6. Preparation:

This section will provide the steps to take to obtain the needed software components to enable hardware alerting. You will not be installing any of these components until step 7 in this document.

NOTE:

Before you start, if you are using the IBM Director server software to manage your x346 system, then an upgrade to the IBM Director server software is needed.

- Ensure you have IBM Director server version 4.20.2 or higher prior to proceeding.
- For IBM Director server version 4.20.2 apply IBM Director [eFix for Windows](#) or [eFix for Linux](#) (eFix IC43417)

For all environments:

- Download the Linux or Windows online update package for system BIOS version 1.03 or higher, from the support website link at: [Linux BIOS update package](#) or [Windows BIOS update package](#), or optionally create diskette image(s) for [BIOS for x346](#).
- Prepare the diskette image(s) for the x346 [BMC Firmware](#) version 1.07 or higher.

If you have an RSA –II installed:

- Download the firmware for the RSA II slimline firmware version 1.02 or higher for the x346.
 - a) For installation under Windows download the online update package:
[RSA II Firmware update for Microsoft Windows](#)
 - b) For installation under Linux download the online update package:
[RSA II Firmware update for Linux](#)
 - c) For NetWare download the [Zip file for use with the Web Interface](#) ¹

- Choose one of the following three steps and download the appropriate code package onto your server, but do not install the software at this time. Section 7 will describe installation order. If your server does not have a LAN connection, you can create a diskette of the RSA II software.
 - a) For Windows, download version 5.33 (or higher) of the IBM Remote Supervisor Adapter II Server [Software support for Microsoft Windows](#)
 - b) For Linux, download version 1.16 (or higher) of the IBM Remote Supervisor Adapter II – USB Interface Daemon by clicking on this link: [Daemon for Linux](#) .
 - c) For NetWare, download version 1.07 (or higher) of the IBM Remote Supervisor Adapter II Support Software for Netware by clicking on this link: [Software support for Netware](#) .

If you do NOT have an RSA –II installed:

- If you ***do not have*** an RSA-II installed, but you plan to use IBM Director Server for in-band alerting or you plan to use the ASR (Automatic Server Restart) functionality, then you will need to download two additional pieces of software.

First download the OSA IPMI device driver according to the operating system you plan to use. Do not install the driver at this time.

¹ You may use the zip file and the web interface to update RSA II firmware for any of the operating systems if you prefer.

i. Choose one of the following steps for operating system specific preparation:

- a) For Windows, download version 2.2.1.0 (or higher) of the Windows OSA IPMI driver.
- b) For Linux, download the 'rpm' file for version 2.2.1-1a (or higher) of the Linux OSA IPMI driver.
- c) For Netware, download version 2.2.0 (or higher) of the NetWare OSA IPMI driver

ii. Then download the IBM Mapping Layer for OSA IPMI software package according to the operating system you plan to use.

- d) For Windows, download version 1.01 (or higher) of OSA IPMI Mapping Layer for Windows
- e) For Linux, download version 1.02 (or higher) of the OSA IPMI Mapping Layer for Linux
- f) For NetWare, download version 1.01 (or higher) of the OSA IPMI Mapping Layer for NetWare

7. Update Process²:

- Update the BIOS to version 1.03 or higher.
- Update BMC firmware to version 1.07 or higher. After this step, you will restart your operating system.
- Continue update process by using either Step (i) or (ii) below, depending on your configuration:

- **i. Your configuration includes an RSA-II Slimline adapter**

- a) Install the RSA-II software downloaded during the previous preparation step.
- b) This is an optional step: If systems management is performed with only the RSA-II Slimline adapter you will not need the IPMI software and can uninstall the IPMI device drivers and IBM IPMI mapping layers if they are already present on your server.
- c) Update the RSA-II Slimline adapter firmware to version 1.02 or higher. (Note: for Netware you will be using the

² Refer to the readme of each component for installation details

zip file for updating through the web interface of the RSA-II Slimline adapter³)

- **ii. Your Configuration does not include the RSA-II Slimline adapter**

Install the OSA IPMI device driver for the BMC and the corresponding IBM Mapping Layer in the following order:

- a. Install the OSA IPMI device driver downloaded during the previous preparation step.
- b. Install the IBM IPMI Mapping Layer downloaded during the previous preparation step.

If in band management via IBM Director is desired, then install the Director 4.20.2 or later agent on the x346. This will depend on the OS installed on the x346. There is no upgrade required for this component.

If you were previously managing the x346 from an existing Director server, delete the Native Managed Object (and associated Platform Managed Object, if any), and rediscover the x346 agent system.

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³ Please extract the zip file and follow the instructions in the ‘readme’ to update the firmware of your server through the web interface.

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