Installation and Configuration Guide

V8.0
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iPrismConfig08.00.01
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CHAPTER 1  iPrism Overview

iPrism Web Security offers a combination of robust features designed to deliver protection from Internet-based threats such as malware, botnets, viruses, spyware, circumvention tools, unauthorized applications and inappropriate content, while helping enforce your acceptable use and security policies. Your new self-contained, integrated appliance is easy to deploy and manage and is preloaded with the iPrism software.

This guide describes the basic functions and installation of the iPrism.

iPrism Hardware

This section describes the iPrism front and rear panel, and the LEDs and lights on the control panel.

Refer to the iPrism Appliance Specifications for a detailed description of each model’s hardware configuration. The iPrism documentation is available at: http://www.edgewave.com/support/web_security/documentation.asp

Front Panel

Figure 1. iPrism Front Panel - Model 35g

Figure 2. iPrism Front Panel - Models 75g, 150g, and 500g
Buttons and Lights

The buttons and lights on the front panel turn the iPrism on and off, and keep you informed of the system status.

Figure 3. iPrism Front Panel - Model 1000g-r2

Figure 4. Buttons and Lights - Model 35g

Figure 5. Buttons and Lights - Models 75g and 150g

Figure 6. Buttons and Lights - Model 500g
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power button</td>
<td>Used to apply or remove power from the power supply to the server system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. <strong>Important:</strong> Do not press the Power button until you have shut down the iPrism using the Exit &gt; Shutdown menu option. This cleanly terminates the current iPrism services and network connections and prepares iPrism to be powered down.</td>
</tr>
<tr>
<td>2</td>
<td>Reset button</td>
<td>Reboots the system. <strong>Important:</strong> Do not press the Reset button until you have shut down the iPrism from the Exit &gt; Shutdown menu option. This cleanly terminates the current iPrism services and network connections and prepares iPrism to be powered down.</td>
</tr>
<tr>
<td>3</td>
<td>Power light</td>
<td>Indicates power is being supplied to the system’s power supply unit(s). This LED should be illuminated when the system is operating.</td>
</tr>
<tr>
<td>4</td>
<td>Device activity light</td>
<td>Flashing indicates device activity.</td>
</tr>
<tr>
<td>5</td>
<td>Network activity light</td>
<td>Flashing indicates network activity on the internal interface port.</td>
</tr>
<tr>
<td>6</td>
<td>Network activity light</td>
<td>Flashing indicates network activity on the external interface port.</td>
</tr>
<tr>
<td>7</td>
<td>Information light</td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicates status as follows:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Solid red - Overheating, may be caused by cables obstructing the airflow in the system or the ambient room temperature being too warm. Check the routing of the cables and make sure all fans are present and operating normally. You should also check to verify that the appliance chassis covers are installed. Finally, verify that the heatsinks are installed properly (if you need assistance, contact Technical Support).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Blinking red (fast) - Fan failure, check for inoperative fan.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Blinking red (slow) - Power failure, check for non-operational power supply.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Solid blue - Local UID has been activated. Use this function to locate the server in a rack mount environment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Blinking blue - Remote UID is on. Use this function to identify the server from a remote location.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This LED remains on or flashing as long as the indicated condition exists.</td>
<td></td>
</tr>
</tbody>
</table>

![Image of Buttons and Lights - Model 1000g-r2](image_url)

**Figure 7. Buttons and Lights - Model 1000g-r2**
1. **Power button**: Used to apply or remove power from the power supply to the server system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. **Important**: Do not press the Reset button until you have shut down the iPrism from the Exit > Shutdown menu option. This cleanly terminates the current iPrism services and network connections and prepares iPrism to be powered down.

2. **Reset button**: Reboots the system. **Important**: Do not press the Reset button until you have shut down the iPrism from the Exit > Shutdown menu option. This cleanly terminates the current iPrism services and network connections and prepares iPrism to be powered down.

3. **Power light**: Indicates power is being supplied to the system’s power supply unit(s). This LED should be illuminated when the system is operating.

4. **Network activity light**: Flashing indicates network activity on the external interface port.

5. **Power failure light**: Flashing indicates a power failure, check for non-operational power supply.

6. **Device activity light**: Flashing indicates device activity.

7. **Network activity light**: Flashing indicates network activity on the internal interface port.

8. **Overheat/fan fail light**: Indicates status as follows:
   - Solid - Overheating, may be caused by cables obstructing the airflow in the system or the ambient room temperature being too warm. Check the routing of the cables and make sure all fans are present and operating normally. You should also check to verify that the appliance chassis covers are installed. Finally, verify that the heatsinks are installed properly (if you need assistance, contact Technical Support).
   - Flashing - Fan failure, check for inoperative fan. This LED remains on or flashing as long as the indicated condition exists.
Rear Panel

Figure 8. iPrism Rear Panel - Model 35g

Figure 9. iPrism Rear Panel - Models 75g, 150g, and 500g

Figure 10. iPrism Rear Panel - Model 1000g-r2

<table>
<thead>
<tr>
<th></th>
<th>Power connectors</th>
<th>Connect power to iPrism (100 – 240 VAC auto-sensing).</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Console port</td>
<td>Access to this port is only under the direction of EdgeWave Technical Support for a specific reason.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>IPMI</strong></td>
<td>A standardized, OS-independent hardware level interface that allows administrators to manage systems remotely. IPMI is configured through the system BIOS, under <strong>Advanced Settings</strong>.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><strong>USB ports</strong></td>
<td>Used to connect a keyboard and/or memory stick (for imaging or upgrading the iPrism).</td>
</tr>
</tbody>
</table>
| **5** | **Management interface** | Provides a third Ethernet port that can be used for out-of-band management of the iPrism.  
- 35g, 75g, 150g, 500g – auto-sensing 10/100/1G  
- 1000g-r2 – auto-sensing 1G/10G  
**Note:** This provides an optional, off-filtering-traffic network interface for management of iPrism. See the *iPrism Administration Guide* for more information. |
| **6** | **Video port** | For connecting a VGA monitor to the iPrism. |
| **7** | **External interface** | Provides auto-sensing Ethernet connectivity to your external network (Internet). Use this port if you are running a 10GB network. |
| **8** | **Internal interface** | Provides auto-sensing Ethernet connectivity to your internal network (the network that iPrism will be filtering). Use this port if you are running a 10GB network. |
Installing your iPrism consists of the following steps, detailed in this guide.

1. Set up the iPrism for testing, evaluation, and initial configuration.

2. Configure the iPrism for test usage on your network. Define the web and application profiles and filters you want to use, and ensure the iPrism works with your authentication system. During this time, your user community can test the iPrism’s ability to filter web traffic by configuring their browser to use the iPrism as a proxy (see Configuring Your Browser for Proxy Mode).

3. After the iPrism has undergone initial testing by your IT team, it can be permanently deployed in either of the following modes:

   **Bridge (Transparent) Mode** (the preferred operating mode): Connect the iPrism between your internal network and the Internet, inside the firewall if you have one.

   **Proxy Mode**: Inform your user community that they must use the iPrism as a proxy or create a domain policy that makes the iPrism the proxy for everyone. Change the firewall rules to block any HTTP traffic that does not come from the iPrism.

This section provides detailed step-by-step instructions for installing and configuring your iPrism. To quickly set up your iPrism in proxy mode, refer to the *Quick Start Guide* at [http://www.edgewave.com/support/iprism/documentation/](http://www.edgewave.com/support/iprism/documentation/).

**System Requirements**

The iPrism configuration utility is accessed via a web browser. The following browsers (current versions) are supported.

**Windows**

- Internet Explorer
- Firefox
Macintosh
- Safari
- Firefox

Before You Begin

The first step in the installation process is ensuring you have all of the necessary information to install and configure your iPrism.

Begin by printing and completing the Information Sheet. Follow the instructions below to locate the information you need.

**Note:** If you already know this information and can complete the information sheet, you can skip to Mounting the iPrism

**(A) IP Address** and **(B) Netmask:** The iPrism appliance requires a unique IP address on the subnet to which it is installed. Locate the available IP address and its netmask on your network and enter them on the information sheet. The computer you are using for configuration and the iPrism **must** be able to communicate over the LAN. In addition, when configuring the iPrism, you **must** choose network settings matching the network on which your computer is located.

To locate your current IP address, do the following from your computer:

1. Open a command prompt.
2. At the `c:>` prompt, type:
   ```
   ipconfig /all
   ```
3. Look for the Ethernet adapter Local Area Connection, e.g.:
   ```
   Ethernet adapter Local Area Connection:
   Connection-specific DNS Suffix .. : .example.com
   IP Address...................... : 192.168.1.10
   Subnet Mask.................... : 255.255.255.0
   Default Gateway.................. : 192.168.1.1
   ```

   Select an IP address for the iPrism on the same IP network. Using the example above, you can choose any available IP address in the 192.168.1.1 – 192.168.1.254 range.

   **Important:** Verify that the IP address you choose is not in use by another system.
(C) **Default Route (Gateway) Address:** The default route refers to the IP address of the device, usually a firewall’s internal interface, that lies between the local network (subnet) and the Internet. This address should be on the same physical network as the iPrism.

(D) **Name Server (DNS):** Since the iPrism and its clients tend to look up many of the same host names, you can improve efficiency and your cache hit rate by using the same DNS server for the iPrism and the computers that use it. Enter the IP address of this DNS server here.

(E) **iPrism Host Name:** During the setup procedures, you will be asked to assign a host name to the iPrism appliance. The name you choose should reflect your DNS domain, such as iprism.example.com. You can then create an entry for iPrism in your domain DNS configuration (some email filters will not deliver email from a system with no DNS entry).

(F) **iPrism Serial Number:** Your iPrism serial number can be found on your iPrism appliance.

(G) **License Key Expiration Date:** Your license key file was sent by email as an attachment. This key will expire with the termination of your license agreement or subscription.

**Mounting the iPrism**

Mount the iPrism and plug it in:

1. Unpack the iPrism appliance and mount it in its final location (e.g., a 19-inch rack).
   
   If you need help installing the iPrism in a rack or installing rails, see the Knowledgebase article “Installing iPrism on a Rack” at:


2. Connect the power cord to the back of the iPrism and plug it in.

**Hardware Setup**

This section describes how to connect the iPrism appliance to your network in **proxy mode**. This is done in the least obtrusive way possible, allowing your network to operate normally during setup.

**Identifying the Cables**

The cables shipped with your iPrism can be distinguished by holding one of the cables at each end so the connectors are oriented the same way. The color-coding of the wires in each connector indicates the type of cable:
• If the colors are in the same order, it is a standard Ethernet patch cable.
• If the colors are in a different order, it is a crossover cable. The crossover cable's package is marked as such.

Setting Up the G Series

Assign IP address and network settings:

1. Attach a keyboard and monitor to the back of the iPrism.
2. At the first screen, press **Enter**.
3. Select menu option **1**.
4. Enter the information from the **Information Sheet** when prompted.
5. Connect the internal port to the network.

  **Important:** Do not connect the management or external port at this time.

6. Run the Installation Wizard as described below.

Running the Installation Wizard

You can complete the installation from any workstation on the same network as your iPrism.

**Important:** Make sure your browser is not configured to use a proxy while you are running the iPrism Installation Wizard.

1. Open a web browser. See **System Requirements** for a list of browsers that are supported for installation.
2. Enter your iPrism's IP address into the browser window.
3. If you receive a certificate error message, click **Continue** to bypass the message.
4. At the Installation Wizard Login screen, type the default username `iprism` and password `setup`. Click **Login**.
5. Review the license agreement and click **Agree**.

6. On the Installation Wizard screen, select a configuration option and click **Next**.
   - Select **Start a new configuration** if this is a new configuration.
   - Select **Restore from archive** if you have a backup of a previous configuration you wish to use. Click **Browse** and locate the backup file. The archived configuration is used as the base for configuring the new iPrism. When the configuration is complete, the iPrism shuts off. Move it if needed, and then restart it. Continue with step 19 below (log in).
7. Your license key was emailed to you, included as an attachment. Click **Browse** to locate and upload the license key file, then click **Next**. Your subscription information is retrieved.

8. Enter the registration information (all fields are required).
9. Click **Set Password**. Enter a new password for the iPrism administrator account, then enter it again for confirmation. Click **OK**.

10. Click **Next**.
11. Enter the network settings and click **Next**. Use the information sheet as a reference, required fields are indicated by an *.
   - Enter the iPrism Host Name.
   - Enter the IP address and netmask for the iPrism.
   - Enter the default gateway address. If you need to set up static routes, click **Static Routes**, enter the information, and click **OK**.
   - Click **DNS Settings** to enter a Name Server. If you are using Active Directory, specify a domain controller that provides the service.

   **Note:** The iPrism is initially set up in proxy mode for testing. Only the internal interface is connected to the Internet and the iPrism acts as a filtering web proxy. The iPrism may later be set to a dual-interface configuration using bridge (transparent) mode when it is ready for production. For descriptions of each mode, see Deploying iPrism in Production.

![Figure 16. Network Settings](image)

12. Select the filtering rules (Profiles) to apply to web and application traffic.
13. Select the Time Zone for your iPrism and click **Next**. This is usually the city that is closest to you geographically.

   - If you need to make changes, click **Back** to step back through the installation wizard screens.
   - If you want to print this information, click **Print**.
   - When the settings are correct, click **Apply** to continue.

15. Click **Yes** to save the new settings.
The iPrism configuration begins. This will take 4-5 minutes.

16. Log in to your iPrism.

17. The iPrism home page appears after login. You can now begin working with your iPrism. Refer to the iPrism Administration Guide for detailed information.

If the iPrism home page does not appear, try the following to resolve the issue:

- Use the ping command to try to access the iPrism over the network.
• Verify that the IP address you typed into the browser’s address bar is correct.
• Check all of the cable connections to and from the iPrism.
• Wait two minutes, then try again.
Run this test to verify that your iPrism has been installed successfully. If the test fails, do not proceed until the problem is resolved and the test passes.

Test: Using the iPrism as a Proxy Server

This test verifies that the iPrism can be used as a proxy server.

1. Configure your web browser to use the iPrism as the proxy server. For detailed instructions on how to do this, see Configuring Your Browser for Proxy Mode.

2. Use your browser to connect to a site that should be blocked – www.edgewave.com/test2 is rated specifically for this purpose. You should see an Access Denied page.

![EdgeWave iPrism](image)

*Figure 20. Blocked Site*
3. Use your browser to connect to a site that should not be blocked, such as www.yahoo.com. You should be able to access this site.

If this test is successful, you can deploy your iPrism to your user community for testing. Each user must configure their browser to use iPrism as the proxy server.

If this test (blocked site) fails (i.e., you are able to access a site that should be blocked), try the following to resolve the issue:

- Type a different URL, refresh the page, or clear your cache. If the test page you are trying to access is stored in your cache, the iPrism cannot block it.
- Verify the proxy settings. Ensure that you entered the iPrism’s IP address properly and specified a port value of **3128**.

If you are unable to load a web page that is not blocked:

- Verify the existence and/or validity of your Default Gateway (also known as the Default Route) within the iPrism Configuration Manager (located in the **System** section’s **Network** section).

If you experience a filtering error:

- The iPrism iGuard™ database may need to be updated; iPrism will do so automatically within 20 minutes, after which you can try the test again. Alternately, you can update the iGuard database immediately by doing the following (you must have a working Internet connection):

  1. From the iPrism home page, select **System Settings**, then **System Preferences**.
  2. In **Filter List Updates**, click **Update Now** to download an updated filter list.

  **Note:** This can take up to 20 minutes.

If you continue to experience a filtering error after updating the iGuard database, contact Technical Support.

**Advanced Configuration Options**

Your iPrism is now installed and set up so that you may configure it, test the results, run reports, and generally experiment with your system before deploying it in a production environment. iPrism has an extensive list of features; details can be found in the **iPrism Administration Guide**.
Advanced configuration options include:

- Various filters for different types of users
- Using your existing Windows or LDAP authentication service for user management
- Defining time-dependent filters
- Creating reports and using drill-down reporting
- Using the Management Port to manage the iPrism on a secure subnet
- Configuring static routes (this may be necessary if you have a complex internal network with many subnets)
When installation is complete, the iPrism is set to bridge (transparent) mode. Alternatively, you can setup iPrism to operate in proxy mode.

**Bridge (Transparent) Mode**

Bridge (transparent) mode is an “in-line installation” which has two network (NIC) connections. All network traffic destined for the Internet (e.g., email and web) flows through the iPrism, and a single IP address is used by both interfaces. iPrism filters web and application traffic only. It is best to position iPrism between the outbound Internet connection and an internal switch to limit traffic handling to outbound Internet traffic. This is the preferred mode in which to deploy and operate an iPrism.

The iPrism can act as a filtering web proxy or be used with a terminal server when in bridge (transparent) mode. Users can configure their browsers to point at the iPrism, just as they do in proxy mode. Web and application traffic is filtered for these users.
By default, iPrism is set up in bridge (transparent) mode when installation is complete.

To verify the settings and deploy iPrism:

1. Verify the system settings:
   - From the iPrism home page, select **System Settings**, then **Network ID**.
   - Verify that the internal interface settings are configured as desired.
   - If you are using a Management Interface (optional), verify that these settings are configured.
   - Click **Save** to save the settings.
   - If you made changes, click **Activate Changes** to activate these changes immediately. If you do not activate the changes now, you will be prompted to do so before logging out of iPrism.

2. If you are using a complex network with multiple subnets or VLANs, careful planning is required. See the knowledgebase articles:

   http://edgewave.force.com/support/knowledgeProduct?c=Networking

3. Shut down your iPrism.

   **Note:** Do not change any of the routing tables on your network. Previous releases of the iPrism required router changes for deployment in bridge (transparent) mode; this is no longer necessary.
4. Remove the connection between your switch and the Internet. Connect the external interface of the iPrism to the internal interface of the firewall.

5. Turn on the iPrism.

Proxy Mode

In **proxy mode**, iPrism uses a single internal interface to connect to the Internet. Proxy mode uses one network (NIC) connection, as only the internal interface is connected to the local network. The iPrism acts as a filtering web proxy; web and IM network traffic explicitly directed to the iPrism is filtered. This is the preferred mode in which to operate the iPrism during testing.

![Figure 22. Proxy Mode](image)

To use your iPrism system in proxy mode:

- Configure all workstations to use the iPrism as the proxy, or define a domain policy/configuration that requires all users to use the iPrism as the proxy.

**Note:** For an extra layer of effectiveness, configure your firewall to disallow all traffic on port 80 for all systems except the iPrism.
The figure above shows the iPrism configured in single-interface proxy mode. Note that only the internal interface is used; traffic comes into the iPrism via the internal interface, and the iPrism proxies to the Internet using the internal interface. The first two workstations have been configured to use the iPrism as their proxy, so all of their web traffic goes through the iPrism. The iPrism then filters the traffic and sends it to the Internet through the firewall. Your firewall must be configured properly, or the iPrism will not be able to access the Internet.

The third workstation has not been configured to use the iPrism as its proxy. Since the firewall only allows traffic from the iPrism, this workstation is unable to access the Internet.
The information listed on this page is needed to configure your iPrism. See Before You Begin.

A. IP Address: ____________

B. Subnet Mask (Netmask): ____________

C. Default Gateway IP Address: ____________

D. Name Server (DNS) IP Address: ____________

E. iPrism Host Name: ________________

F. iPrism Serial Number: ________________

G. License Key Expiration Date: ____/____/_______
There are some special considerations to be aware of, such as network conditions, for which additional documentation is available. Go to the EdgeWave support website at

http://www.edgewave.com/support/

Topics include:

- If other proxy servers are configured on the network.
- If you have a wide area network serviced by a router that is also the Internet router.
- If you have concerns about your network’s ability to interact with the iPrism.

If you are unable to resolve your issue using the provided documentation, contact EdgeWave’s technical support team. Contact information is available on the website.

When contacting tech support, have the following information ready:

- All relevant information about how iPrism is configured on your network (topology, other hardware, networking software, etc.).
- Your iPrism serial number and registration key.
- To help our support staff resolve your issue, it is helpful to send us a network diagram showing the basic hardware used on your network.
APPENDIX C

Configuring Your Browser for Proxy Mode

To configure your browser for proxy mode, follow the instructions below for your specific Internet browser.

Internet Explorer

1. Select **Tools -> Internet Options**.
2. Select the **Connections** tab.

![Figure 23. Connections Tab in Internet Explorer](image-url)
3. Click **LAN Settings**.

![Image of LAN Settings in Internet Explorer]

**Figure 24. LAN Settings in Internet Explorer**

4. Check **Use a proxy server**. Enter the IP address of your iPrism in the **Address** field and enter 3128 in the **Port** field.

   ![Note icon] **Note:** Port 3128 is the default. You can change this setting.

5. Click **OK**, then click **OK** again.

**Firefox**

1. Select **Tools -> Options -> Advanced**.
2. Select the **Network** tab.
3. Click **Settings**.

**Figure 25. Network Options in Firefox**
4. Select Manual proxy configuration. Enter the IP address of your iPrism in the HTTP Proxy field and enter 3128 in the Port field.

   **Note:** Port 3128 is the default. You can change this setting.

5. Click OK, then click OK again.