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Off. C.G. Road,
Ahmedabad – 380015, INDIA
www.cyberoam.com
About this guide

Welcome to the Installation & Registration guide of Cyberoam – The Corporate IT Resource Management software. The Cyberoam Installation & Registration guide tells you everything you need to know to install and register Cyberoam.

Objective

This guide aims to help the user to understand the installation, configuration and deployment options of Cyberoam and deciding on mode for installation and configuring Cyberoam as per the mode of installation selected. Users may go through the document in a sequential manner to gain a thorough understanding of the installation and configuration procedures.

This guide will help the user to
1. Understand the two Deployment modes
2. Install
3. Configure
4. Register Cyberoam

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<th>Guide</th>
<th>Describes</th>
</tr>
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<tr>
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<td>Installation &amp; registration process</td>
</tr>
<tr>
<td>User Guide</td>
<td></td>
</tr>
<tr>
<td>Part I – Basic Configuration</td>
<td>Basic configuration of Cyberoam</td>
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<td>Management and Customization of Cyberoam</td>
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<td>Detailed statistics – Reports</td>
<td>Detailed reports</td>
</tr>
<tr>
<td>Console Guide</td>
<td>Console Management</td>
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Technical Support

You may direct all questions, comments, or requests concerning the software you purchased, your registration status, or similar issues to Customer care/service department at the following address:

**Corporate Office**
eLitecore Technologies Ltd.
904, Silicon Tower
Off C.G. Road
Ahmedabad 380015
Gujarat, India.
Phone: +91-79- 6405600
Fax: +91-79-6462200
Web site: [www.elitecore.com](http://www.elitecore.com)

**Cyberoam contact:**
Technical support (Corporate Office): +91-79- 6400707
Email: support@cyberoam.com
Web site: [www.cyberoam.com](http://www.cyberoam.com)

Visit [www.cyberoam.com](http://www.cyberoam.com) for the regional and latest contact information.
Notation conventions

Material in this manual is presented in text, screen displays, or command-line notation.

<table>
<thead>
<tr>
<th>Item</th>
<th>Convention</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server</td>
<td>Machine where Cyberoam Software - Server component is installed</td>
<td></td>
</tr>
<tr>
<td>Client</td>
<td>Machine where Cyberoam Software - Client component is installed</td>
<td></td>
</tr>
<tr>
<td>User</td>
<td>The end user</td>
<td></td>
</tr>
<tr>
<td>Username</td>
<td>Username uniquely identifies the user of the system</td>
<td></td>
</tr>
<tr>
<td>Topic titles</td>
<td>Shaded font typefaces</td>
<td></td>
</tr>
<tr>
<td>Subtitles</td>
<td>Bold and Black typefaces</td>
<td></td>
</tr>
<tr>
<td>Navigation link</td>
<td>Bold typeface</td>
<td>Group Management → Groups → Create</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It means, to open the required page click on Group management then on Groups and finally click Create tab</td>
</tr>
<tr>
<td>Name of a particular parameter or field or command button text</td>
<td>Lowercase italic type</td>
<td>Enter policy name, replace policy name with the specific name of a policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Name to select where Name denotes command button text which is to be clicked</td>
</tr>
<tr>
<td>Cross references</td>
<td>Hyperlink in different color</td>
<td>Refer to Customizing User database  Clicking on the link will open the particular topic</td>
</tr>
<tr>
<td>Notes &amp; points to remember</td>
<td>Bold typeface between the black borders</td>
<td>Note</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>Bold typefaces between the black borders</td>
<td>Prerequisite  • Prerequisite details  • Prerequisite details</td>
</tr>
</tbody>
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Deployment Overview

There are two deployment options available for the Cyberoam installation enabling users of different network configurations to fully utilize the features of the Cyberoam. Each has a different configuration procedure. This guide describes the installation and the configuration procedure required for each mode.

Sequence for installing and configuring Cyberoam
1. Plan the Cyberoam deployment mode
2. Install
3. Configure - Running Post Installation Wizard for Transparent mode
4. Configure - Running Post Installation Wizard for Route mode
5. Register Cyberoam

Installing Cyberoam is an automated task and performs all the installation related tasks. Post Installation wizard is the step-by-step guide to configure Cyberoam.
Installation

Plan the Cyberoam Deployment mode

The deployment modes available to support the different types of Network configurations are:

1. Network Transparent
2. Route

The following decision matrix will help you in selecting the deployment suited for your network configuration and purpose of use.

Decision Matrix for selecting the deployment mode

<table>
<thead>
<tr>
<th>Feature</th>
<th>Network Transparent Mode</th>
<th>Route mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Transparency</td>
<td>Sits transparently in the network, but cannot be configured as a router or as a gateway</td>
<td>Can be configured as a router or as a gateway</td>
</tr>
<tr>
<td>Network reconfiguration</td>
<td>Minimal amount of network reconfiguration needed in an existing network setup</td>
<td>Some amount of network reconfiguration is needed in an existing network setup</td>
</tr>
<tr>
<td>Multiple Gateway support</td>
<td>No support for Multiple Gateway available in Network Transparent mode deployment</td>
<td>Multiple Gateway module necessarily requires Route mode deployment</td>
</tr>
</tbody>
</table>

Note
Choose Route mode only if you want Cyberoam to act as a router or want to use the multiple gateway feature of Cyberoam.
Always remember that to control Internet access through Cyberoam all the Internet bound traffic from the internal network should pass through Cyberoam.
Network Transparent mode

In network transparent mode, Cyberoam acts as a bridge, transparent to the network and is placed just before the edge router or the firewall allowing all outbound traffic to pass through Cyberoam.

Network transparent mode:
1. Requires minimum configuration changes in the existing network
2. Transparently redirects/forwards the User requests through Cyberoam

The following figures explain the way Cyberoam can be physically placed in the existing network setup.

Network Transparent placement of Cyberoam

Crossover Cable
A crossover cable is a cable that is used to interconnect two computers by “crossing over” (reversing) their respective PIN contacts without the use of a hub or switch. The ends on a crossover cable are different from each other, whereas a normal ‘straight through’ cable has identical ends.
Route mode

Route mode is recommended for following cases
1. You want to use Cyberoam as a Router
2. You want to use the multiple gateway feature in Cyberoam

Route mode:
1. Requires some network design modifications depending on the existing network
2. Support Networks having multiple gateways
3. Cyberoam can act as a Router also

The following diagram explains the general case of physical placement of Cyberoam in the network.
Hardware requirement

The minimum hardware requirement for Cyberoam depends on the number of User licenses configured on Cyberoam. User license is the maximum number of concurrent users that can log on to Cyberoam.

<table>
<thead>
<tr>
<th>User License</th>
<th>Specification</th>
</tr>
</thead>
</table>
| 10-50 Users  | Pentium P-III Intel Processor  
               Intel Motherboard  
               128 MB RAM  
               10 GB IDE Hard disk (Recommended)  
               2 Intel Ether Express 100 Pro Network Cards |
| 51-200 Users | Pentium P-III Intel Processor  
               Intel Motherboard  
               256 MB RAM  
               18 GB IDE Hard Disk  
               2 Intel Ether Express 100 Pro Network Cards |
| 200 – 400 Users | Pentium P-IV Intel Processor  
                Intel Server 440 GX Motherboard  
                512 GB RAM  
                18.2 GB IDE Hard Disk  
                2 Intel Ether Express 100 Pro Network Cards |
Installing Cyberoam

Once the mode of installation has been decided and the required hardware as per specifications has been arranged, you can proceed with the installation.

Steps of Installation
1. Installing Cyberoam software
2. Configuring Cyberoam for network access - Running the Post Installation Wizard

Before starting installation, remember to change the BIOS settings to ‘Boot from CD ROM’. Insert the Cyberoam Installation CD into the CD drive, and reboot the machine to start installation of Cyberoam. As soon as the computer boots up, the Welcome screen comes up with a boot prompt.

Installation checklist
Ensure that there is no necessary data on the installation Hard Disk as the Cyberoam Installation process formats the Hard disk by which all the data on the Hard Disk will be erased.

Before starting installation, remember to change the BIOS settings to ‘Boot from CD ROM’

Confirm your consent for installation by pressing the <Enter> key on the keyboard.

The Cyberoam installation process will format the hard disk and install the required packages.
A ‘Congratulations screen’ will be displayed on the completion of Installation prompting you to reboot the system.

The CD ROM will be automatically ejected from CD drive; system will reboot and start Cyberoam.

**Note**

Please remove the CD ROM from the CD drive before rebooting the system.

You are now through installing Cyberoam. When you first log on to the console “Cyberoam Post Installation wizard” will be launched. Follow the steps as described in next section of the documentation.
Configuring Cyberoam - Running the Post Installation Wizard

Once the system is rebooted after the Installation, you will begin with the Configuration of Network using the Post Installation Wizard.

The Post Installation Wizard will guide you step-by-step through the configuration of the network parameters like the IP address, subnet mask, and default gateway for Cyberoam.

After the successful Installation of Cyberoam, the console screen will prompt for the password.

Step 1: Enter 'admin' which is the default password after installation and press <Enter>

Installation of Cyberoam in Network Transparent Mode

Step 2: Post installation wizard will start with the following screen.

For placing Cyberoam in Transparent mode, press ‘y’ or ‘Y’ followed by <Enter>

Step 3: Enter the IP address by which you wish to manage Cyberoam through the telnet console as well as the Web console

Assign IP Address for Transparent Mode : 192.168.1.245
Netmask : 255.255.255.0 (Enter)
Step 4: Enter the Default Gateway name & IP address, all the traffic will be routed to the IP address defined in this screen

Please Enter Default Gateway Name: DefaultGateway (Enter) > BSML Gateway
Assign IP Address of Default Gateway : > 192.168.1.203
Current Date : Wed Nov 25 06:26:12 IST 2003
Set TimeZone (y/n) : No (Enter) >

Step 5: Update the time zone and current date, if not properly set

Step 6: Enter Administrator Email Id. Please enter the correct Email Id as it will be used to by Cyberoam to send system Alerts

Cyberoam Server will send System Alerts on Following email address

Enter Administrator Email ID: > nitesh@elitecore.com
Updating Cyberoam System Configuration........
**Step 7:** After the system has been configured successfully, the configured details will be displayed.

```
CYBEROAM SERVER CURRENT CONFIGURATION
Cyberoam Server is currently running in Transparent Mode.
Transparent Mode IP Address : 192.168.1.245
System Date : Wed Nov 26 06:29:07 IST 2003
Default Gateway name : BSNL Gateway
Current Default Gateway : 192.168.1.203
```

Open Internet Explorer and type following URL to open the Web Based Management console:
URL: http://<cyberoam internal IP>
The Cyberoam login screen will appear. Default Administrator username is cyberoam and password is cyber.
After entering username and password the Online Registration screen will appear. You need to register your copy of Cyberoam.

--More--

Confirm the above details and proceed to register your copy of Cyberoam.
Installation of Cyberoam in Route Mode

**Step 2:** For placing Cyberoam in the Route mode, press ‘n’ or ‘N’ followed by <Enter>

**Step 3:** Automatically detects and displays the current Ethernet configuration of Internal Interface. Change the IP address and Net mask, if required.

Internal Interface connects the server with the clients (Internal LAN). By default, eth0 is termed as the Internal Interface.

To setAliases for Internal Interface i.e. eth0 enter ‘y’ otherwise ‘n’

**Step 4:** Automatically detects and displays the current Ethernet configuration of External Interface. Change IP address and subnet mask for the External Interface.

By default, eth1 is termed as the External Interface.

To setAliases for External Interface i.e. eth1 enter ‘y’ otherwise ‘n’

**Step 5:** Update the time zone and current date, if not properly set
Step 6: If the system is configured successfully, configuration details will be displayed.

IP Address : 203.163.156.214
NetMask Address : 255.255.255.252

System Date : Wed Nov 26 03:54:31 IST 2003
Default Gateway name: BSNL Gateway
Current Default Gateway : 203.163.156.213

Open Internet Explorer and type following URL to open the Web Based Management console
URL: http://<cyberoam internal IP>
The Cyberoam login screen will appear
Default Administrator username is cyberoam and password is cyber
After entering username and password the Online Registration screen will appear
You need to register your copy of Cyberoam.
Confirm the details and proceed to register your copy of Cyberoam. This finishes the installation and initial configuration of Cyberoam.

Once you have configured Cyberoam, connect to Cyberoam using a web browser by typing in the following URL: http://<Internal IP Address> (Example: http://192.168.1.203 where 192.168.1.203 is the IP Address where Cyberoam is Installed) for registering your copy of Cyberoam.

The login prompt appears again, login as User ‘cyberoam’ using the password ‘cyber’

If your system is connected to Internet, use Online registration method otherwise use Manual registration method for registering. For details, refer to Registration.
Registration

You have to register your copy of Cyberoam before use. Unless you register, you will not be able to use the features of Cyberoam.

You are prompted to register the copy of Cyberoam software, if logged on for the first time.

Online registration

Online Registration is the default mode of registration. The Cyberoam server contacts the central registration site of Cyberoam with the registration details and registers the Cyberoam server for further use.

Prerequisite

The Cyberoam should be able to reach cyberoamregistration.elitecore.com for registration. If you are not able to contact cyberoamregistration.elitecore.com check out the Internet connectivity using ping and trace route tools.

Select Help → Register Cyberoam → Online registration
### Screen Elements | Description
--- | ---
**Cyberoam Registration form** |  
Public key | Displays Public key of the software and read only field
Product ID | This information is specified on a sticker on CD
Unique ID | This information is specified on a sticker on CD
Company name | Name of the company under whose name the Cyberoam software is to be registered
Contact person | Contact person in the company
Address, City, State, Country, Zip, phone, Email Id, Fax | Complete address, phone number, Email Id & Fax number of the Company
Register button | Registers the Cyberoam software copy
Cancel | Cancels the current operation

After successful registration Cyberoam will display the ‘About’ page along with the registration information.
Manual registration

Use Manual Registration if the Cyberoam machine is not directly connected to the Internet.

Apart from Public key, Product ID and Unique ID, Manual registration requires License key and User license details for registration. To obtain the License key, go to the Central registration site at URL www.cyberoam.com/cyberoam/jsp/registration/registration.jsp

Licence Key details

<table>
<thead>
<tr>
<th>Screen Elements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public key</td>
<td>Displayed on the Manual Registration form of the Cyberoam software. Copy the public key from the Manual registration form and paste it in the text box.</td>
</tr>
<tr>
<td>Company Name</td>
<td>Company name</td>
</tr>
<tr>
<td>Contact person</td>
<td>Contact person name</td>
</tr>
<tr>
<td>Address</td>
<td>Complete address</td>
</tr>
<tr>
<td>Model</td>
<td>Select the product type</td>
</tr>
<tr>
<td>Product ID</td>
<td>This information is specified on a sticker on CD</td>
</tr>
<tr>
<td>Unique ID</td>
<td>This information is specified on a sticker on CD</td>
</tr>
<tr>
<td>Submit button</td>
<td>Submits the request for Licence key</td>
</tr>
</tbody>
</table>
Select **Help → Register Cyberoam → Manual registration**

**Screen Elements**

<table>
<thead>
<tr>
<th>Cyberoam Registration form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public key</td>
<td>Displays the public key of the software</td>
</tr>
<tr>
<td>Product ID</td>
<td>This information is specified on a sticker on CD</td>
</tr>
<tr>
<td>Unique ID</td>
<td>This information is specified on a sticker on CD</td>
</tr>
<tr>
<td>License Key</td>
<td>Click the Cyberoam registration site link to obtain the license key and follow the steps as described in the above section</td>
</tr>
<tr>
<td>User license</td>
<td>Specifies the total number of Users who can concurrently log on</td>
</tr>
<tr>
<td>Company name</td>
<td>Name of the company under whose name the Cyberoam software is to be registered</td>
</tr>
</tbody>
</table>
Cyberoam Installation Guide

Registration

Manual registration

<table>
<thead>
<tr>
<th>Contact person</th>
<th>Contact person in the company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory field</td>
<td></td>
</tr>
</tbody>
</table>

| Address, City, State, Country, Zip, phone, Email Id, Fax | Complete address, phone number, Email Id & Fax number of the Company |
| All are compulsory fields except Fax |

| Register button | Registers the Cyberoam software copy |
| Cancel | Cancels the current operation |

The Central registration site at URL www.cyberoam.com/cyberoam/jsp/registration/registration.jsp is contacted with the information entered where the copy of Cyberoam is registered. On successful registration, following screen is displayed:

After successful registration, Cyberoam is ready to use with all the features. Refer to the User guide for further details on how to use Cyberoam.