

The logo is a dome-shaped graphic composed of several overlapping, semi-transparent layers of color. From top to bottom, the colors are light blue, yellow, orange, and red. The layers are slightly offset from each other, creating a sense of depth and movement.

Cyberoam

CYBEROAM WINDOWS CLIENT GUIDE
VERSION: 7

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Preface

Welcome to the Client Guide of Cyberoam, eLitecore Technologies Ltd.'s integrated Internet Security Solution.

The Cyberoam Client guide tells you everything you need to know to install Cyberoam client component and aims to help the user to understand the installation and configuration procedures of Cyberoam client.

Guide is intended for System and Network Administrators who maintain the corporate network including Cyberoam.

Guide Sets

Guide	Describes
Installation & Registration Guide	Installation & registration process
User Guide	
Part I – Getting Started	How to start using Cyberoam
Part II – Management	Management and Customization of Cyberoam
Detailed statistics – Reports	Detailed reports
Console Guide	Console Management
Windows Client Guide	Installation & configuration of Cyberoam Windows Client
Linux Client Guide	Installation & configuration of Cyberoam Linux Client
HTTP Client Guide	Installation & configuration of Cyberoam HTTP Client
Analytical Tool Guide	Using the Analytical tool for diagnosing and troubleshooting common problems
Cyberoam - LDAP Integration guide	Configuration for integrating LDAP with Cyberoam for external authentication
Cyberoam – ADS Integration Guide	Configuration for integrating ADS with Cyberoam for external authentication
Data transfer Management Guide	Configuration and Management of user based data transfer policy
Mail Management	Configuration and Management of Mail server
Multi Link Manager User Guide	Configuration of Multiple Gateways, load balancing and failover
VPN Management	Implementing and managing VPN
Printer Usage Management Guide	Configuration and Management of user based printing quota policy
Printer Installation and Configuration Guide	Installation and Configuration of Elitecore Print Manager

These documents are available at the site: www.cyberoam.com/cyberoam/product.htm

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:

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Email: support@cyberoam.com

Web site: www.cyberoam.com

Visit www.cyberoam.com for the regional and latest contact information.

Typographic Conventions

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

Item	Convention	Example
Server		Machine where Cyberoam Software - Server component is installed
Client		Machine where Cyberoam Software - Client component is installed
User		The end user
Username		Username uniquely identifies the user of the system
Topic titles	Shaded font typefaces	Introduction
Subtitles	Bold and Black typefaces	Notation conventions
Navigation link	Bold typeface	Group Management → Groups → Create it means, to open the required page click on Group management then on Groups and finally click Create tab
Cross references	Hyperlink in different color	Refer to Customizing User database Clicking on the link will open the particular topic

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Introduction

Cyberoam's integrated Internet security solution is purpose-built to meet the unified threat management needs of corporate, government organizations and educational institutions. It also provides assistance in improving Bandwidth management, increasing Employee productivity and reducing legal liability associated with undesirable Internet content access.

Cyberoam helps to control user access to different IT resources. User is required to log on to Cyberoam Server via Cyberoam Client and authenticated before giving access to any of the resources managed by Cyberoam.

Before you install and start using Cyberoam Client on the user's computer, you must first install Cyberoam Server. Refer to the Installation & Registration Guide for details on Server installation. The Cyberoam Client installation should follow the Server installation and cannot be used alone.

Cyberoam Client has been provided for the following platforms:

1. Windows
2. Linux

Users having any other Operating System than the above can use the Cyberoam HTTP Client to log on to the Cyberoam Server.

Determine the platform on which you want to install and use Client and install the respective Client.

You can install Cyberoam Client on as many machines as you want but number of users who can concurrently login depends on the number of User Licenses you have obtained. If number of Concurrent users' increases, you need to upgrade the User license. Refer to Cyberoam User Guide for details on upgrading the User license.

It is also possible to have a Clientless connection whereby User computer does not require the installation of Cyberoam Client component and User can bypass the Client login to access resources. Refer to Cyberoam User Guide for more details.

Cyberoam Clients

Cyberoam Client supports the following Operating Systems:

Windows Enables Users using Windows Operating System to log-on to Cyberoam Server using the Cyberoam Client for Windows

Linux Enables Users using Linux Operating System to log-on to Cyberoam server using the Cyberoam Client for Linux

HTTP Enables Users using any Operating System other than Windows or Linux to log-on to Cyberoam Server through "Cyberoam Client for HTTP" to access resources

Installation

Once the Cyberoam server is up and configured i.e. Groups, Users and policies created, you can start installing Cyberoam Clients. Refer to Cyberoam Installation Guide and Cyberoam Console Guide for installing and configuring Cyberoam Server.

The installation and configuration process for all the three Clients is different.

To install, download Cyberoam Client from the Cyberoam Web Interface.

Steps of Installation

1. Download
2. Install
3. Configure Client

Downloading & Installing Windows Client

Follow the steps to download and install Client

Step 1: Access Cyberoam Web Interface

Step 2: Select **Help** → **Downloads** to open the download page

Downloads		Logout	Help	Cyberoam
Cyberoam Client Type	Download			
Windows	Download			
HTTP	Download			
Linux	Download			
Single Sign On	Download			

Step 3: Opens File Download window and prompts to run or save the file. Select the appropriate option and click OK button

If "Save" option is selected, then the Setup program - "CyberoamClientInstallation.exe" is saved in the specified folder.

Step 4: Run Setup by double clicking the Setup program. Welcome screen will be displayed and follow the on-screen instructions.

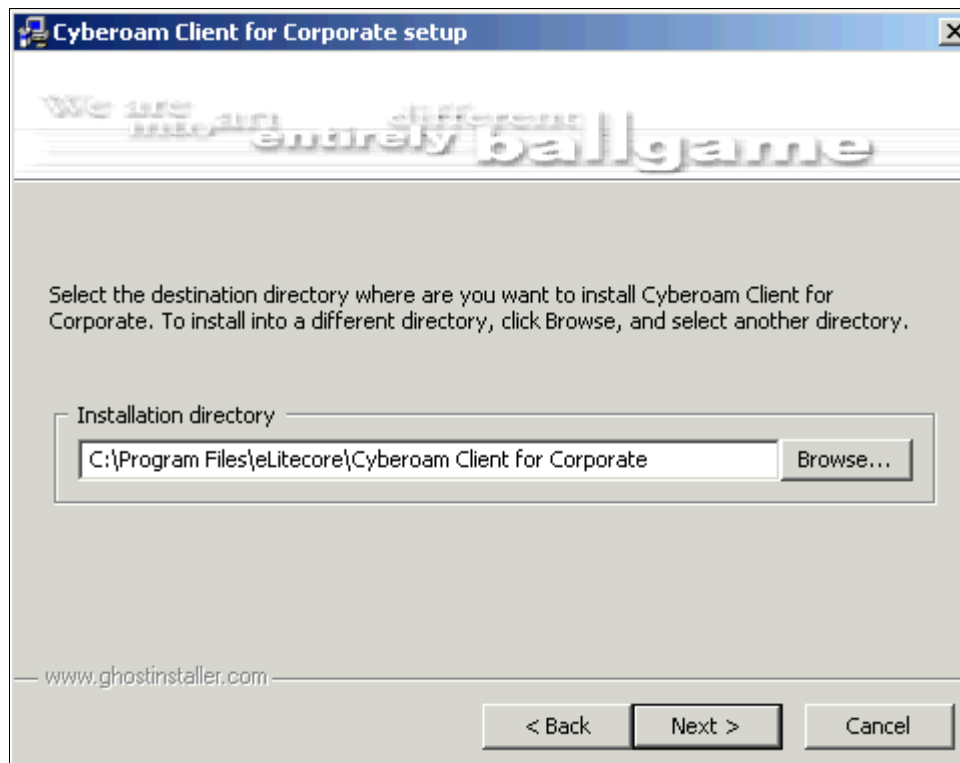


Press "Next" button to continue

Press "Cancel" button to cancel the Installation process

Step 5: Displays the Installation directory.

Click "Browse" button to change the Installation directory, if required.



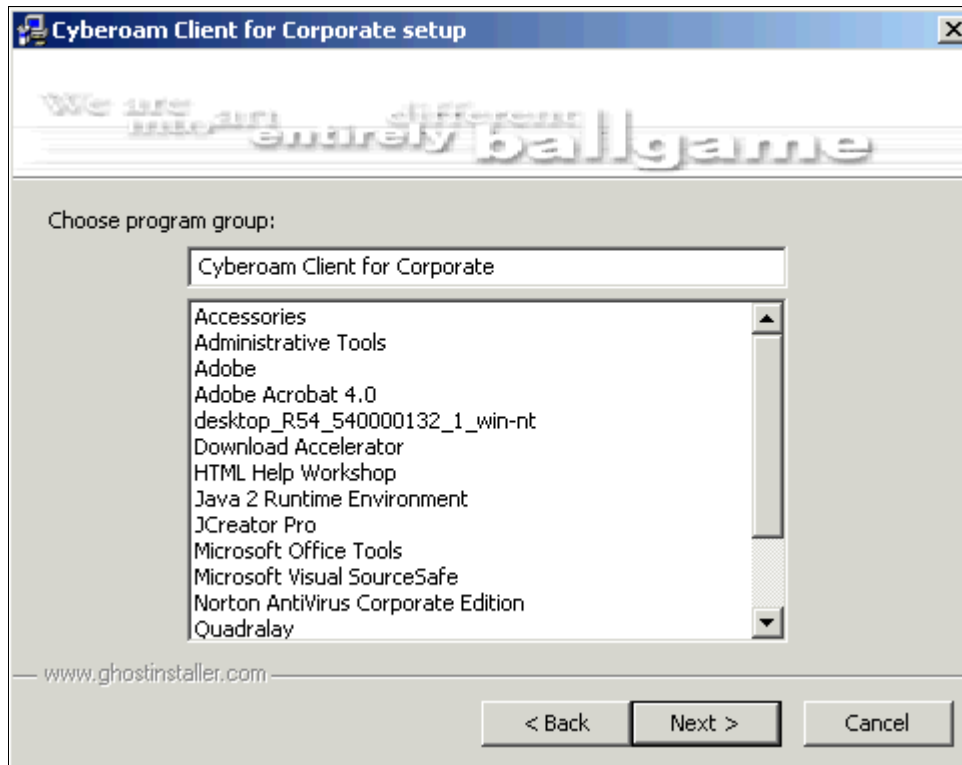
Press "Next" button to continue

Press “Cancel” button to cancel the Installation process

Press “Back” button to change or view the previous Installation information

Step 6: Displays the default Program Group for the Cyberoam Client.

Click on any of the groups displayed to change the group by, if required.



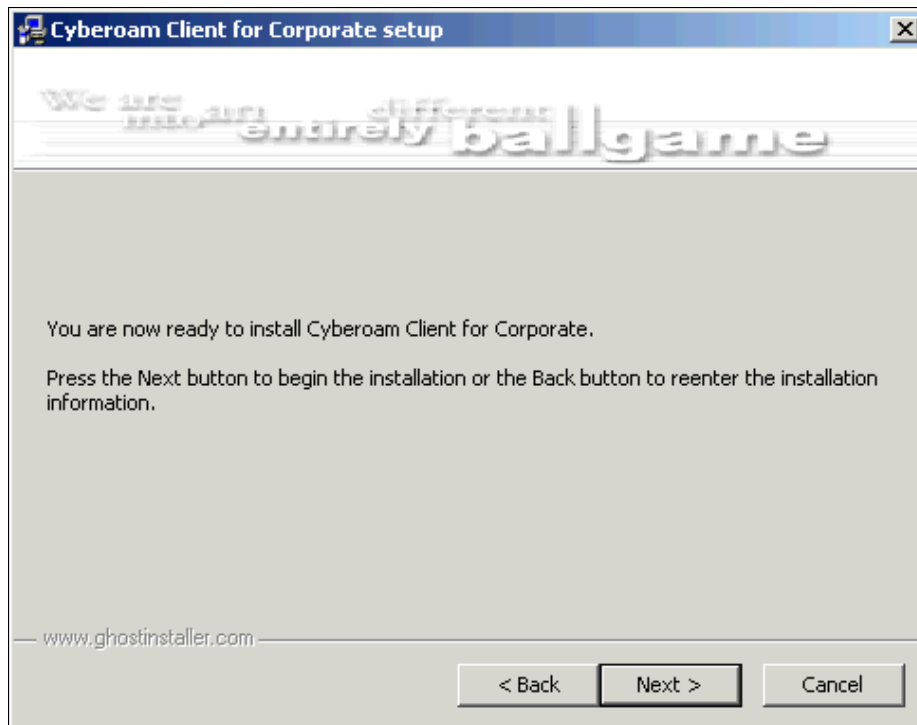
This finishes the pre-installation setting procedure

Press “Next” button to proceed to installation.

Press “Cancel” button to cancel the Installation process

Press “Back” button to change or view the previous Installation information

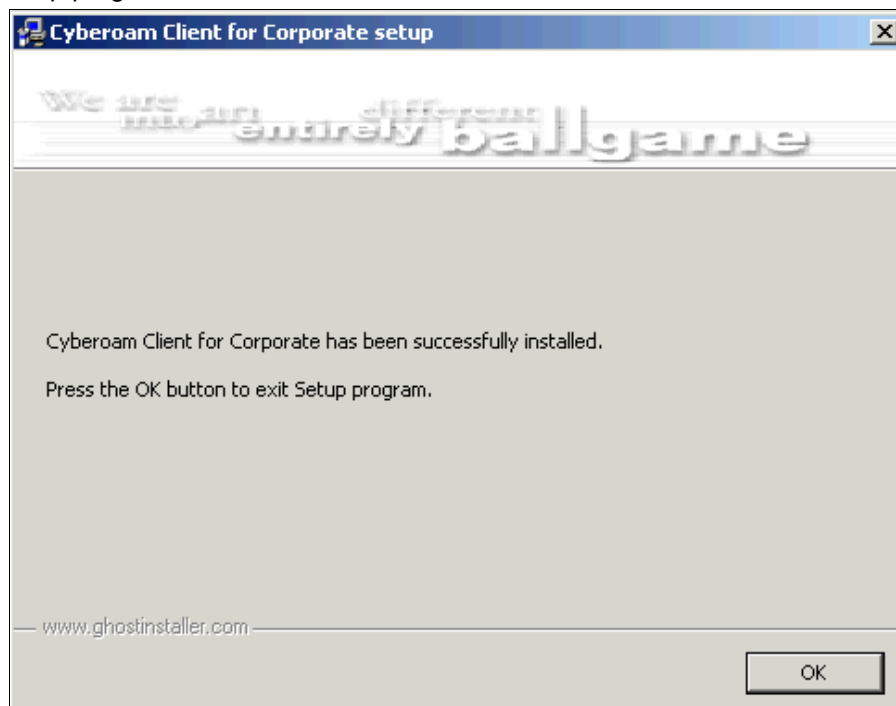
Step 7: If the pre-installation settings are through successfully, press “Next” button to continue with the Installation process



Press "Cancel" button to cancel the Installation process

Press "Back" button to change or view the settings of the previous installation information

Step 8: Successful installation screen will be displayed on completion of Installation and prompts to exit the setup program.



Press "OK" button to exit the setup program

You are now through installing Client and can proceed to configure Client. If you are configuring Client for the first time, you will have to configure for Cyberoam Server and check connectivity with the server.

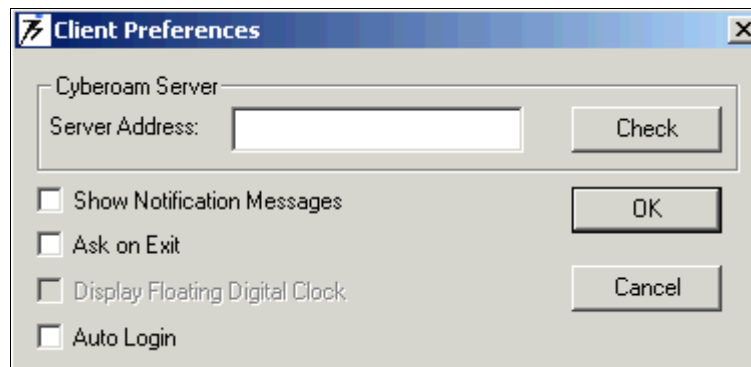
Configuration

After the successful installation, configure client to work with the respective Cyberoam server.

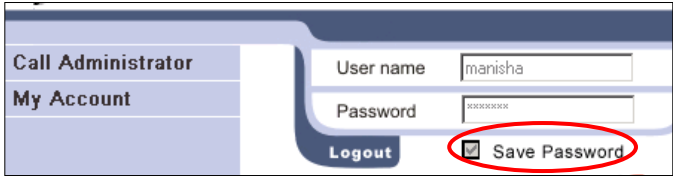
Client has several features that can be customized as per the User requirement but first you have to configure Client for the Cyberoam Server setting.

Client preferences

To configure for Cyberoam Server for the first time, double click the Cyberoam Client icon. It will open the following screen:



Screen Elements	Description
Cyberoam Server	
Server Address	Specify Cyberoam server IP address. If configuring for the first time, specify the IP address If already configured, will display the configured IP address of the Server and can change, if required
Check button	Checks for the connectivity with the specified server Whenever the User tries to login, Client searches for the specified Server Click to check If the specified server is not available, message "Server not found" is displayed
Show Notification Messages	Displays the successful login & logout messages Click to display messages
Ask on Exit	Confirms before Exiting Client Click to ask the confirmation question
Display Floating Digital Clock	Displays the total surfed /used hours Will be able to configure after login
Auto login	Automatically logs on, if password is saved To save password, select "Save password" option in the

	<p>login popup</p> 
OK button	<p>Click to login automatically</p> <p>Saves the configured options</p> <p>If configuring for the first time, clicking "OK" will popup the login screen.</p> <p>By default, Password is same as the Username</p>
Cancel button	<p>Cancels the operation</p>

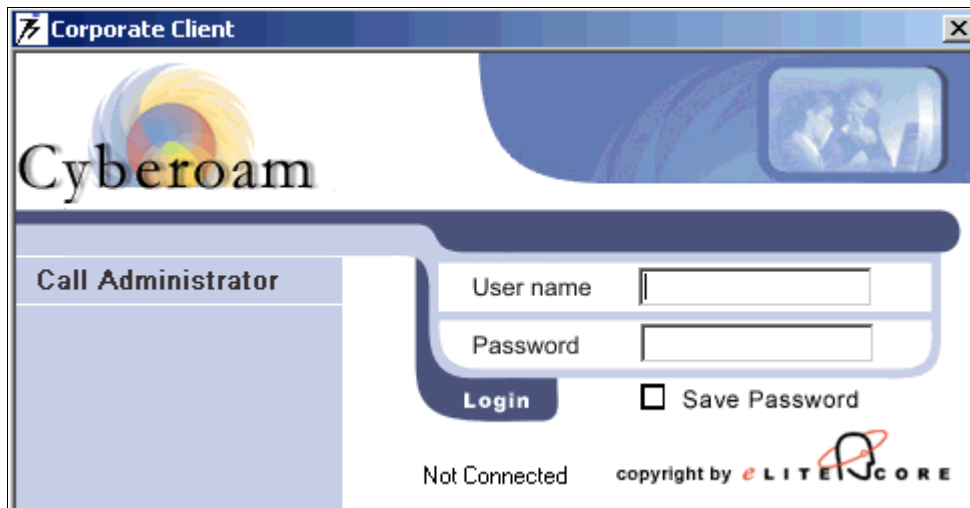
This finishes the initial configuration of Cyberoam.

Log on & log off from the Cyberoam Client

The Log on procedure verifies validity of user and creates a session until the user logs off.

Log on procedure

To get the log in window, double click the Cyberoam Client icon on the task bar. It will popup the login screen as:



Log out procedure

To avoid un-authorized access, log off after you have finished working. This will end the session and exit from Cyberoam.

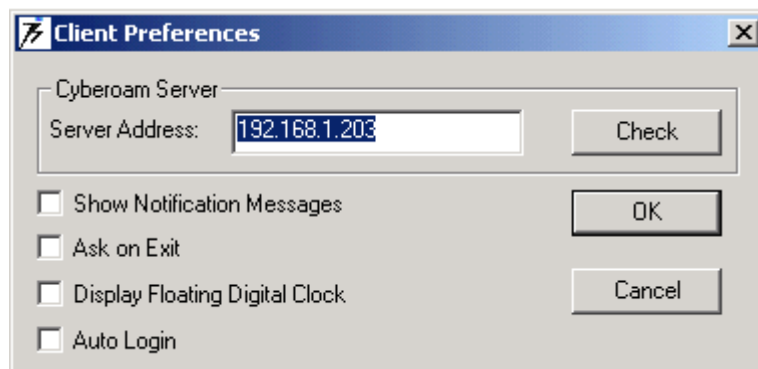
To logout, double click the Cyberoam Client icon on the task bar to popup the login screen and click "Logout"



Update Client preferences

You can modify the configuration for Cyberoam Server or any of the Client preferences after you login.

To modify, right click the Cyberoam client icon  on the task bar and click Preferences. It will open the following screen:

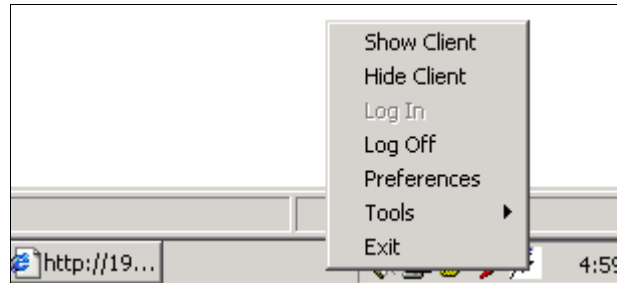


Refer to Clients preferences for details

Miscellaneous features

You can customize Client, for the other features, once you login.

After successful login, right click the Cyberoam Client icon on the task bar. It will open the following menu



Screen Elements	Description
Show Client	Shows the Client login popup if hidden Click to show
Hide Client	Hides the Client login popup if displayed Click to hide
Log In	Shows whether the user has logged on or not Toggles with user logon and logoff
Log Off	Shows whether the user has logged off or not Toggles with user logon and logoff
Preferences	Use to configure Client preferences For details, refer to Client Preferences
Tools	Use to run the Network Diagnostic tool It helps administrators to promptly diagnose and solve client side issues For details, refer to Network diagnostic Utility
Exit	Exits from Cyberoam Client

Tools - Network Diagnostic Utility

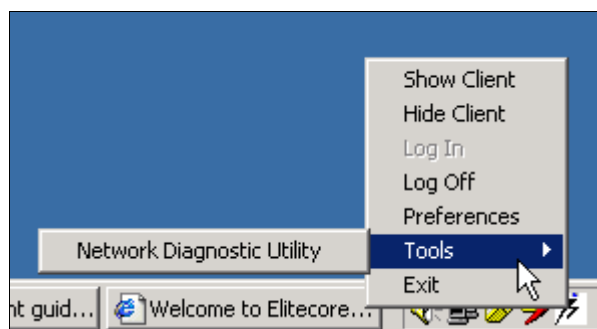
Network Diagnostic Utility has several tools built in which will help in troubleshooting the Network issues.

Having all the standard traceroute and ping features, Network Diagnostic Utility has a nice User Interface, so that you do not need to launch the command prompt window to traceroute or ping a host. It provides a user-friendly view of the output of the traceroute and the ping command.

It gives a snapshot of the Network and system parameters and high-speed traceroute and ping utility arguably twenty times faster than the normal command line utilities.

Whenever a User calls up, the Cyberoam Administrator can ask him to open the Diagnostic Utility and answer his call in a better and a more effective manner.

To configure for Client preferences, right click the Cyberoam client icon on the task bar and click Tools followed by Network Diagnostic Utility. It will open the following screen:

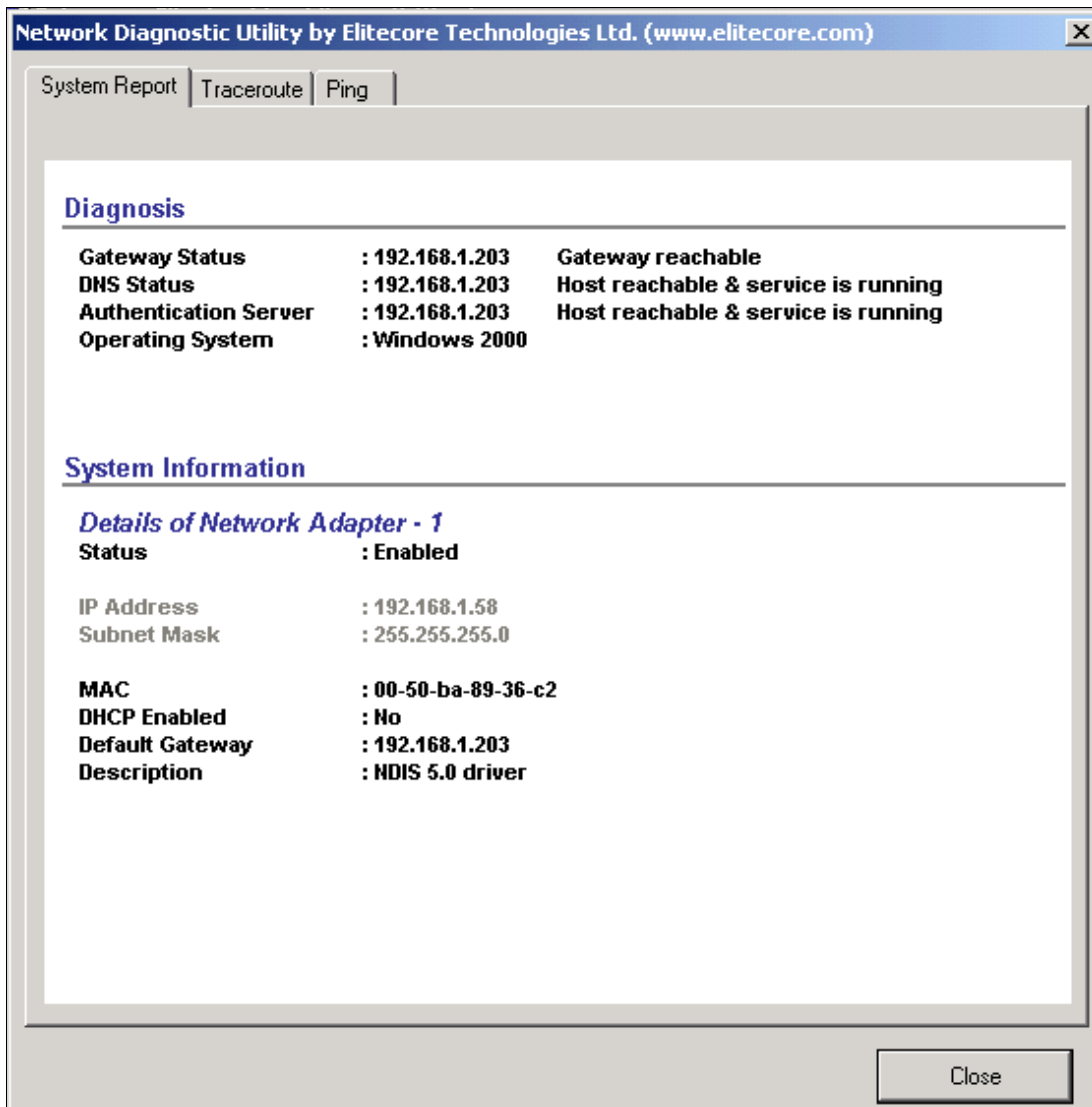


System Report

Use to view the general system information and diagnosis performed with the results.

Select **Tools** → **Network Diagnostic Utility** → **System Report** to view the system report

Any option/status shown in **RED** means some error or a problem area.



Screen Elements	Description
Diagnosis This is helpful in determining if Cyberoam Client is properly configured	
Gateway status	<p>Displays status of the Gateway i.e. whether the Gateway is reachable from the Client computer or not</p> <p>The Gateway IP address is normally the IP address of the Cyberoam server. It can also be the router <i>between</i> the User LAN and the Cyberoam server.</p> <p>Refer to Error Table for understanding the various types of errors.</p>
DNS status	<p>Displays the status of the DNS i.e. whether the DNS is running or not and is reachable from the Client computer or not.</p> <p>The DNS IP address should normally be the IP address of the Cyberoam server.</p> <p>Refer to Error Table for understanding the various types</p>

	of errors.
Authentication server	<p>Displays the status of the Cyberoam Authentication server i.e. whether the Authentication is running or not and is reachable from the Client computer or not.</p> <p>The Authentication server IP address should be the IP address of the Cyberoam server.</p> <p>Refer to Error Table for understanding the various types of errors.</p>
Operating system	Displays the name of the Operating system running on the User machine
System Information	
Displays information of all the Network Adapter/Network Interface cards installed	
Details of Network Adapter	
Status	<p>Displays the status of the Network Adapter</p> <p>Status can be Enabled Disabled</p>
IP address	Displays the IP address of the Network Adapter
Subnet Mask	Displays the Subnet Mask of the Network Adapter
MAC	Displays the MAC address of the Network Adapter
DHCP Enabled	Displays whether DHCP option is enabled or not
Default Gateway	Displays the default Gateway IP address
Description	<p>Displays the description and the Make information of the Network Adaptor</p> <p>This can be used to find any unusual network adaptor make</p>

Traceroute

Internet is a large and complex aggregation of network hardware, connected together by gateways. Tracking the route one's packets follow or finding the gateway that is discarding your packets can be difficult.

Traceroute is a useful tool to determine if a packet or communications stream is being stopped at the Cyberoam, or is lost on the Internet by tracing the path taken by a packet from the source system to the destination system, over the Internet.

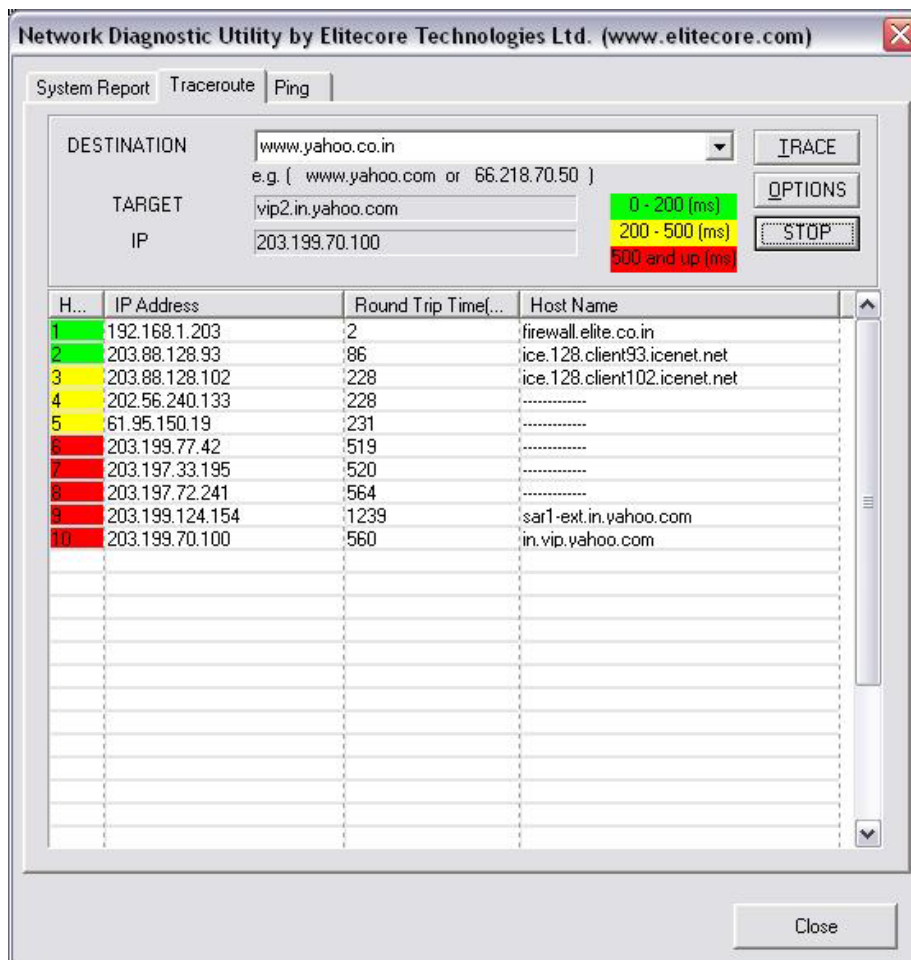
Use this utility to find any discrepancies in the Cyberoam network or the ISP network.

The typical path taken by data packets sent by the source to the destination has been depicted by the below figure:

Source System → Router of the Source Network → Router of the Source Network's ISP → Router of the Destination's ISP → Router of the Destination Network → Destination System

Traceroute displays all the routers through which data packets pass on way to the destination system from the source system. Thus, in effect, you come to know the exact path taken by the data packets in the data transit.

Select **Tools** → **Network Diagnostic Utility** → **Traceroute** to traceroute

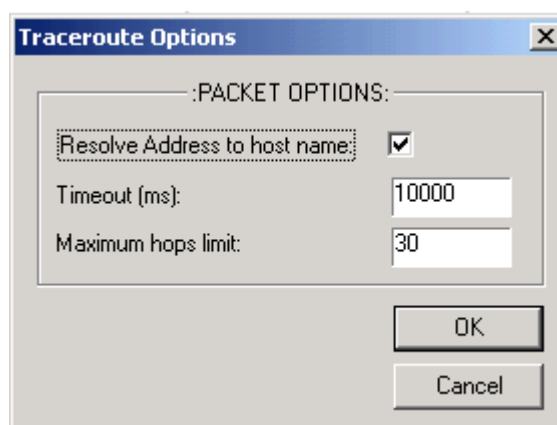


Screen Elements	Description
Destination	Destination IP address Hostname or IP Address that should be finally reached
Target	Displays the target name
IP	IP address of the host name
Trace button	Initiates a trace route until the destination host specified reached or stopped. Each time a new Host is found on the way, the Hop event is fired.
Option button	Configure the traceroute properties
Stop button	Stops the traceroute

Result table

Columns	Description
HOP	Traceroute shows you the route needed for the network packets to reach a destination host. Hop is the trip a data packet takes from one router or intermediate point to another in the Network.
IP Address	IP address of the router at that hop
Round Trip time (ms)	Total time taken by the packet to return measured in milliseconds
Host name	Host name of the router at that hop

Options table



Packet Options	Description
Resolve Address to host name	Specify whether an IP address of each hop should be resolved to a Hostname or not

Timeout (ms)	Specify time limit until which the resolving should continue The amount of time the control will wait (in milliseconds) before declaring error
Maximum hops limit	Traces the path up to the maximum hops defined i.e. maximum number of allowed hops
OK button	Saves the configuration
Cancel button	Cancels the operation

Ping

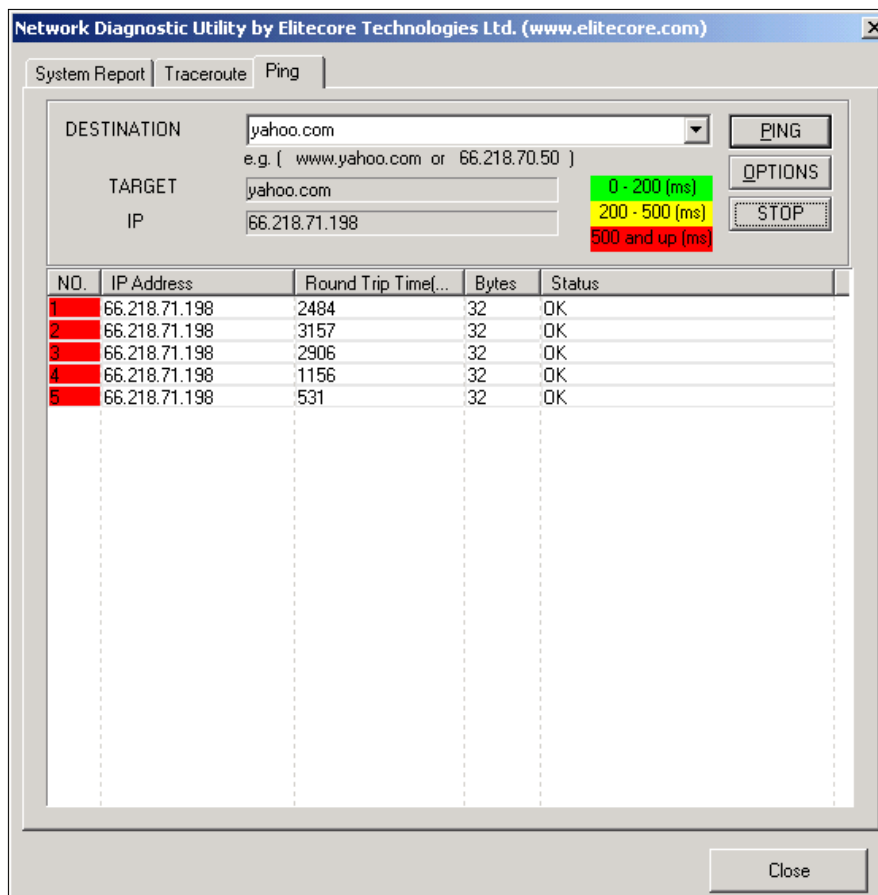
Network Diagnostic Utility provides easy to use 'ping' functionality. Ping is a basic Internet program that lets you verify that a particular IP address exists and can accept requests.

Using Ping you can test for the existence of machines on the net and also determine the latency time for the transfer between the machine doing the ping and that being pinged.

Use Ping diagnostically to

1. Ensure that a host computer you are trying to reach is actually operating or address is reachable or not.
2. Check how long it takes to get a response back.
3. Get the IP address from the domain name

Select **Tools** → **Network Diagnostic Utility** → **Ping** to ping

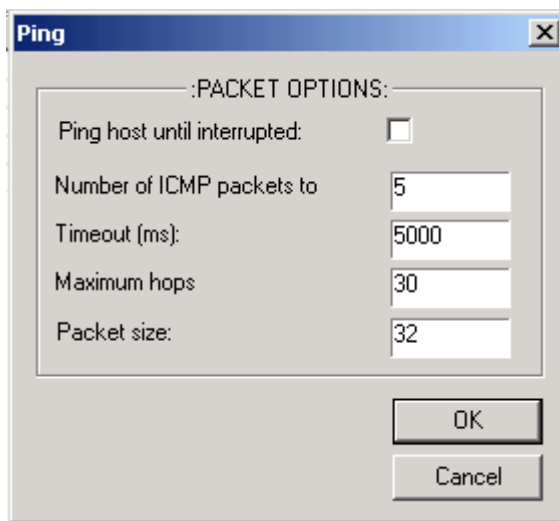


Screen Elements	Description
Destination	IP address or the host name to be pinged
Target	Displays the target name
IP	IP address of the host name
Ping button	Starts pinging a host i.e. sends the ping packet to a host
Option button	Configure the Ping properties
Stop button	Stops pinging the host

Result table

Columns	Description
No.	Displays number of pings
IP Address	The IP address of the Outbound Packet
Round Trip time (ms)	Time taken by the packet to return
Bytes	Display the number of data bytes sent
Status	Displays whether ping was successful or not Options OK - Ping successful, received packet from the host and host is alive Error - Ping not successful and did not receive any packet from the host and host is not alive

Options table



Packet Options	Description
Ping host until interrupted	Specifies whether to continues to ping the host even after the response is received Click to continue to ping the host until interrupted to stop
Number of ICMP packets to	Specify the number of ICMP packets to be send to hosts
Timeout (ms)	Specify a timeout, in milliseconds, before ping exits regardless of how many packets have been sent or received and declaring error
Maximum hops	Maximum number of allowed hops
Packet size	Specifies the number of data bytes to be sent
OK button	Saves the configuration
Cancel button	Cancels the operation


Error List

This list describes some common situations/errors that might occur when using Cyberoam and how to deal with them.

Error Message	Description	Probable Causes
Gateway		
Gateway not defined	Gateway IP address is not set in the client computer	Configuration error
Multiple Gateways found	More than one Gateway IP address is set in the client computer	Configuration error
Gateway not reachable	Gateway IP address is set but client is not able to reach Gateway IP address	<ol style="list-style-type: none"> 1. Wrong Gateway IP address 2. Network component failure between the client and the Gateway 3. Gateway Machine is down
DNS		
DNS not defined	DNS IP address is not set in the client computer	Configuration error
DNS not reachable	DNS IP address is set but the client is not able to reach the DNS IP address	<ol style="list-style-type: none"> 1. Wrong DNS IP address 2. Network component failure between the client and the DNS 3. DNS Machine is down
Host reachable but DNS service not running	DNS IP address is set, the client is able to reach it but the DNS is not running on that IP address	<ol style="list-style-type: none"> 1. Wrong DNS IP address 2. Network component failure between the client and the DNS 3. DNS Machine is down
Authentication Server		
Authentication Server not defined	Authentication Server IP address is not set in the client computer	Configuration error
Host not reachable	Authentication Server IP address is set but the client is not able to reach the Authentication Server IP address	<ol style="list-style-type: none"> 1. Cyberoam server IP address is wrong 2. Network component failure between the client and the Cyberoam server 3. Cyberoam server is down
Host reachable but service not running	Authentication Server IP address is set, the client is able to reach it but the Authentication Server is not running on that IP address	<ol style="list-style-type: none"> 1. Wrong Authentication server IP address 2. Network component failure between the client and the Authentication server 3. Authentication server Machine is down
IP address		

Error Message	Description	Probable Causes
0.0.0.0	No IP address is assigned to the network adapter	<ol style="list-style-type: none"><li data-bbox="900 255 1350 291">1. No IP address has been assigned<li data-bbox="900 315 1350 403">2. The client is DHCP enabled and no IP as yet has been obtained from the DHCP server

Call Administrator


Clients can send message to the Administrator directly. In the task bar, double click the Cyberoam client icon  and click Call Administrator.



Type the message to be send in the "Purpose" field and press "OK"

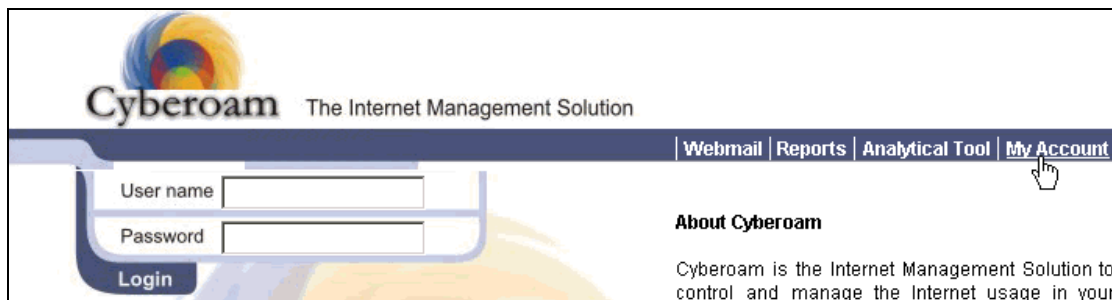
My Account

Users can also view their account details like Personal details, Internet, Printer usage and change password.

In the task bar, double click the Cyberoam client icon  and click My Account.



It opens a new window and prompts for MyAccount login Username and Password.



Opens a new window with following sub modules: Personal, Client, Account status and Logout
Refer to User Guide – User My Account for details