

# Equalizer New Software Release

Software Version 7.2.3e

Release Notes March 2007



## Equalizer 7.2.3e is a patch release for all Equalizer models.

The "*New Features*" section describes the enhancements added in 7.2.3a and subsequent patch releases. These include:

1. An Equalizer SNMP Agent
2. Layer 4 port ranges
3. Spoofing is now optional for L4 Clusters
4. Successful core dumps for Flash-based file systems
5. Full time stamps for log entries

The "*Bug Fixes*" section lists the problems that have been fixed in 7.2.3a and subsequent patch releases.

Most notably, this patch adjusts the system's time zone tables for the recent changes to Daylight Savings Time in the United States. See the description of Bug ID #495 at the top of Page 6 for details.

The "*Known Issues*" section lists the problems found in this release.

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## New Features

Category	Job ID	Added In
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Misc	306	7.2.3a
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### Equalizer SNMP Agent (for E450si, E550si, Extreme only)

An SNMP agent monitors Equalizer activity, static and dynamic configurations, and generates traps on server or Equalizer failure. See the document "Equalizer SNMP Agent" for more information.

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Misc	341	7.2.3a
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### Layer 4 Port Ranges

Port ranges have been added to Layer 4 UDP and TCP clusters. See the document "Layer 4 Port Ranges" for more information.

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Misc	372	7.2.3a
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### Spoofing is now optional for L4 clusters

Similar option to the L7 spoofing option. When this flag is set, the server sees the Equalizer IP address rather than the client's IP. When enabled, a default gateway on the server is not required (assuming that the Equalizer and the servers are on the same network segment).

Important note for UDP clusters without spoofing enabled: because UDP doesn't have the notion of a "connection", no spoofing requires that a sticky timer be set on the cluster. A sticky time of 1 second is used automatically if a time is not specified.

Performance Note: Due to the overhead of maintaining additional records containing port and IP information when spoofing is not enabled, enabling the spoofing option for Layer 4 results in better performance. (This does not apply to Layer 7 clusters).

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Misc	392	7.2.3a
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### Successful core dumps for Flash-based file systems

If there is ever a problem with Equalizer which causes a core dump, it will now be correctly saved to the flash file system.

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GUI	319	7.2.3c
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### Time stamps in logs should use full date and time

Previously, Equalizer logs were stamped at the top of the log with the full date and time, and incremental time stamps were supplied next to each entry. This has been changed so that each entry carries a full date and time stamp (much like traditional syslog entries).

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## Bug Fixes

Severity	Category	Reported	Bug ID	Added In
blocker	Misc	11/20/2006	447	7.2.3a

### Poor 'vr' network driver performance on 250si-3 platforms

Due to previously existing driver autonegotiation problems, these systems had very poor network throughput and latency performance. This problem has been fixed.

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critical	Envoy	09/22/2006	415	7.2.3a
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### Envoy infinite loop

When selecting a default site, Envoy could enter an infinite loop if all of the sites have zero performance. This problem has been fixed.

major	Load Balancer	06/21/2006	359	7.2.3a
<b>HTTPS cluster headers not injected correctly</b>				
X-LoadBalancer and X-Forwarded-For SSL headers were only injected once per connection, rather than once for each transaction. This problem has been fixed.				
major	Misc	09/08/2006	407	7.2.3a
<b>Fragmented packets not correctly processed</b>				
For both TCP and UDP, packets were correctly reassembled, but the packet size was not correctly adjusted. This problem has been fixed.				
major	Misc	11/03/2006	432	7.2.3a
<b>eqcfg tool not working</b>				
This tool needs to access the Equalizer licensing information, which was not being initialized properly. This problem has been fixed.				
major	Misc	12/07/2006	462	7.2.3a
<b>Layer 4 probing when same server in multiple clusters</b>				
When a single server was in multiple clusters, even with different ports, a single probe failure caused that server to be marked down in all clusters, even if some of the services were still up. Now, the server is marked down only in the cluster whose probe failed.				
major	Envoy	12/07/2006	463	7.2.3a
<b>Envoy does not permit '-' character in cluster names</b>				
This has been fixed. The '-' character can now be used in <i>both</i> cluster and geocluster names. This is an important enhancement, since Envoy geocluster names are DNS entries, and '-' is a valid character in a URI.				
normal	GUI	08/03/2006	386	7.2.3a
<b>GUI Menu Modifications</b>				
GUI Global Menu has been moved to the "Global Parameters" page.				
normal	Envoy	09/01/2006	401	7.2.3a
<b>Envoy AAAA record support</b>				
Envoy now supports AAAA DNS records.				

normal	Kernel	09/18/2006	412	7.2.3a
<b>Extended ASCII and UTF characters in requests</b>				
Extended ASCII and UTF characters in requests normally generate a parameter error. It is now possible to force Equalizer to pass these characters by checking the appropriate flag in the global parameters configuration.				
normal	Upgrade	12/11/2006	464	7.2.3a
<b>Parse_config utility doesn't delete configuration</b>				
Even though the parse_config utility asked whether to delete the configuration file, it did not correctly delete it when a user selected "yes". This has been fixed.				
major	Misc	12/07/2006	459	7.2.3b
<b>Passwords not preserved across upgrade</b>				
Changed passwords (except GUI passwords) were reset back to factory defaults after an upgrade. They are now preserved across the upgrade.				
normal	GUI	10/26/2006	429	7.2.3b
<b>Upgrade script validates eq.conf and warns if invalid</b>				
The upgrade script has been enhanced to notify the user if changes to the eq.conf file made during the upgrade have resulted in an invalid eq.conf file. The upgrade script will prompt the user to either delete the eq.conf file, or leave the file intact and call support.				
normal	GUI	11/03/2006	431	7.2.3b
<b>lbinfo now displays column headings in output</b>				
The <b>lbinfo</b> command line tool did not work correctly for L4 clusters with a port range. This has been fixed. Additionally, it now displays column headings in its output, so the information is easier to read. The columns are: <b>cluster</b> , <b>ip</b> , <b>s.port-e.port</b> , <b>proto</b> , and <b>state</b> .				
major	Kernel	01/22/2007	485	7.2.3c
<b>Active FTP does not work</b>				
Fixed a problem introduced in 7.2.3a with active FTP, where Equalizer was not correctly translating ports for FTP clusters (L4 TCP clusters on port 21) with spoofing enabled. Also added a check so that an FTP cluster cannot be defined without spoofing enabled. For more information on setting up a cluster for FTP, see the document "Configuring an FTP Cluster".				

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normal	GUI	03/31/2005	197	7.2.3c
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### Passwords truncated at 8 characters

If a user entered a password for the Equalizer Administration Interface containing more than 8 characters, the password was silently truncated at 8 characters. This has been fixed. Passwords up to 20 characters are now supported. If a user enters more than 20 characters, an error is displayed and the user must try again.

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normal	GUI	08/23/2005	215	7.2.3c
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### Accidental execution of Equalizer commands via URL

It is possible for a logged in administrator to issue commands to the Equalizer by constructing a URL to send through a browser. In previous releases, the Equalizer commands were sent via the "GET" HTTP method, and so it was possible for an administrator to re-execute a URL accidentally by refreshing the browser or choosing a URL from the browser history. This problem has been addressed by changing the method used from "GET" to "POST". Now, the administrator must respond to the "Repost Data?" prompt before such a URL is re-executed.

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normal	Failover	12/13/2005	256	7.2.3c
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### Primary failover peer does not send email when backup peer fails

This problem has been fixed. Email notification is now sent when the backup peer (also called a 'sibling') in a failover pair fails.

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normal	SSL	07/12/2006	367	7.2.3c
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### Certificates not deleted when failover configuration updated

This problem has been fixed. Certificates are now checked each time a failover cluster configuration is changed, and any certificates that do not match the current cluster configuration are deleted.

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normal	GUI	12/06/2006	453	7.2.3c
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### Can't change email event notification fields

Previously, email event notification fields could not be changed after they were set for the first time. This problem has been fixed. Additionally, empty values for email notification fields are allowed only when the **enable email notification** check box is *not* checked. More useful error messages are now returned; for example, if the **enable email notification** check box is enabled (either at the global or cluster level) and one or more required fields have not been provided, the error message tells the user which fields are missing.

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normal	Misc	12/15/2006	467	7.2.3c
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### User can add two clusters with same IP address and port number

The graphical interface has been updated so that the user is now prevented from adding a new cluster that uses an IP address and port number (or port range) that conflicts with an already defined cluster (that uses the same protocol). (This bug occurs only in versions 7.2.3a and 7.2.3b.)

normal	GUI	01/21/2007	481	7.2.3c
<b>Cluster advanced checkbox broken on E250si</b>				
This problem has been fixed. While non-E250 systems did not exhibit this problem, the same errors in the code caused inconsistencies in form validation for L4 clusters on other models. The changes made fix this problem as well.				
critical	Misc	02/01/2007	495	7.2.3d-550si
<b>System updated for new Daylight Savings Time rules</b>				
The United States government has updated the rules for Daylight Savings Time (DST); Equalizer has been updated to accommodate the changes:				
<ul style="list-style-type: none"> <li>* Previous start: first Sunday of April (1 Apr. 2007)</li> <li>* New start: second Sunday of March (11 Mar. 2007)</li> <li>* Previous end: last Sunday of October (28 Oct. 2007)</li> <li>* New end: first Sunday of November (4 Nov. 2007)</li> </ul>				
normal	Misc	02/09/2007	499	7.2.3d-550si
<b>Display problems in SNMP dialog box</b>				
The SNMP dialog box ( <b>Equalizer &gt; Global Parameters &gt; menu &gt; SNMP</b> ) was broken at the top and right side, although the box worked properly. The display problems have been fixed.				
normal	GUI	02/12/2007	505	7.2.3d-550si
<b>Envoy site configuration interface problems</b>				
In Equalizer 7.2.3c, when viewing the configuration of a site configured within a geocluster, an error page appeared with the text:				
<b>Unable to open html file '/usr/local/www/menu/si_menu_skel.js'.</b>				
Additionally, the configured site's parameters were unavailable for viewing or modification. These problems have been fixed.				
normal	GUI	02/08/2007	498	7.2.3d-550si
<b>The "View &gt; Export to CSV" menu command is missing</b>				
In version 7.2.3c, the <b>View &gt; Export to CSV</b> command is missing from the top level menu of the Equalizer Administration Interface. This has been fixed.				
normal	GUI	02/15/2007	506	7.2.3e
<b>Context help broken</b>				
Context help does not display. This problem has been fixed.				

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## Known Issues

Severity	Category	Reported	Bug ID
normal	Envoy	03/06/2007	518

### **Envoy: Show Defaults button returns error**

When changing the parameters of an existing Envoy GeoCluster, selecting the **Show Defaults** button returns an Internal Server Error. This will be addressed in a future release.