

EdgeXOS Platform Notes

XRoads Networks

Edge Network Appliance Platform Notes
EdgeXOS Post-Outage Review

Post-Outage Reporting Overview

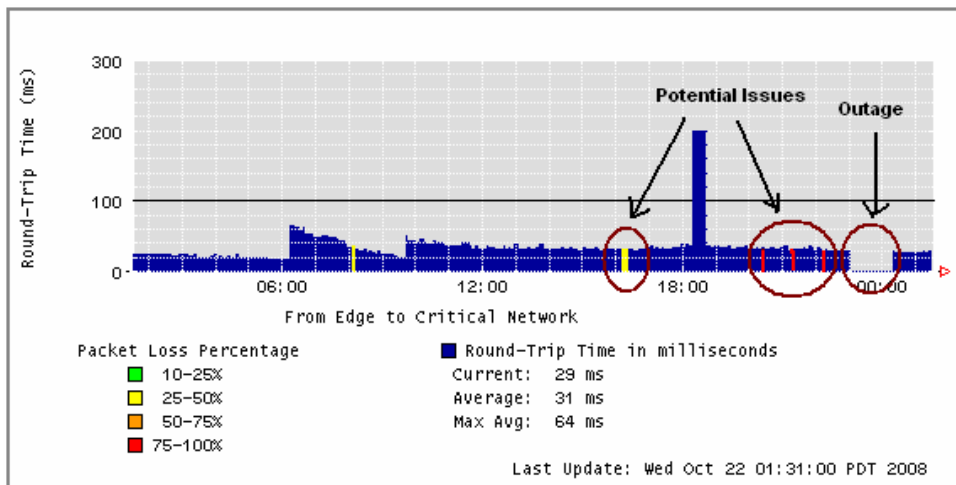
This document provides an overview of what you can do after an outage has occurred to see what happened and how to correct potential issues and help to prevent outages.

Check System Logs/Alerts: First check the XRoads Alerts on the home page to see when the outage occurred and how long it lasted. Every outage alert is recorded here along with a time stamp. When the link comes back up another log entry is added with the up time stamp. Additional more detailed logs can be found on the Reporting tab under the System Logs menu.

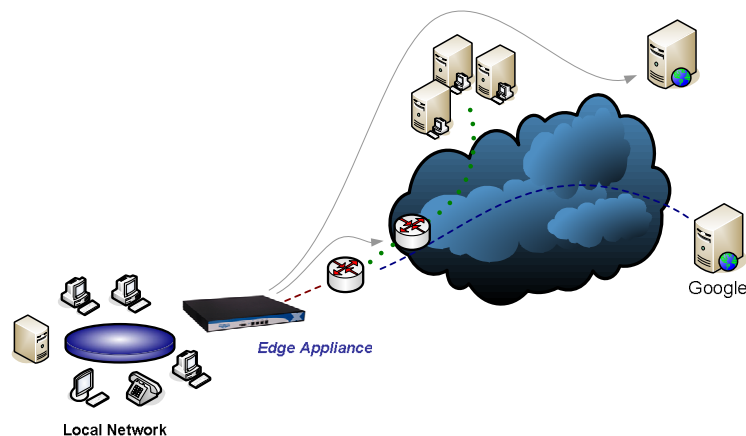
```
Wed Oct 22 23:18:43 2008 Email Alert WAN Testing Alert - Interface wan2-Active
```

```
Wed 11:00:00 2008 1 Email Alert WAN Testing Alert - Interface wan2-Outage-  
Detected
```

Check SLA Reporting: These reports need to be configured before hand, but they can provide a great deal of information regarding the state of each WAN link, including whether the link is deteriorating over time, during certain times of the day, etc. With this reporting you can go back to your service provider and request additional testing and/or demand that they fix the issue.



Check Virtual Technician: Built-in to the EdgeXOS appliance is our Virtual Technician which will automatically perform various link tests when an outage is detected.



These tests are designed to attempt to determine where the issues may be occurring. The Virtual Technician will test the local NIC, the Ethernet connections, access to the gateway device, access across the WAN link, access through the local service provider, and access out to the core Internet.

A report is automatically generated once these tests have been completed.

```
-----  
----- Gateway Testing -----  
-----  
PING 192.168.1.254 (192.168.1.254) from 192.168.1.100 eth2: 56(84) bytes of data.  
From 192.168.1.100 icmp_seq=3 Destination Host Unreachable  
From 192.168.1.100 icmp_seq=4 Destination Host Unreachable  
  
--- 192.168.1.254 ping statistics ---  
4 packets transmitted, 0 received, +2 errors, 100% loss, time 3018ms  
  
VTech Detected Problem With Local Connection  
Recommend checking local connectivity.  
-----  
----- Recommendation -----  
-----  
Could Not Determine Problem  
Recommend additional testing.
```

NOTE: When the unit is defaulted there may be a very old report stored within the appliance. This report is a generic test which is done to confirm that everything is working. The report will be replaced upon the next outage occurrence.

What Steps Can You Take: Once you have reviewed the logs to see what might have happened there are several steps you can take to address the outage issue:

- Check your cabling; make sure that it is still working correctly.
- If there is high latency on the link or high packet loss, contact your service provider to see if they can make improvements.
- If you have WAN1 in proxy mode, make sure that you are not suffering from ARP conflicts, i.e. the LAN side of the EdgeXOS can not be allowed to talk with the WAN1 side of the EdgeXOS. If this does happen by accident, it will most likely cause slowness, timeouts, and possibly a link outage if the appliance has problems testing the link due to the ARP conflicts.

- Increase the link control settings, specifically the down metrics.
- Add additional BPR rules for further link testing; confirm if it is an ISP problem.
- Set the link to 'nailed up' to ensure that the link does not go down (re-commit links).