



>> The Problems

- How do we know our infrastructure is providing an appropriate service?
- How do we measure performance against SLA thresholds?
- How do we report on our performance?

The Answer

Response time and availability analysis.

The Hurdles

- How can we measure response times across the network for different types of traffic?
- How can we ensure these response times are within agreed upon SLAs?
- How can we report on network availability in an easily understandable format?
- How can we be aware of long-term trends in network availability and response times?
- How can we integrate this information in a single business view?

>> The CRANNOG Solution

- **RESPONSE**WATCH™
- Web enabled view of network availability and response times.
- Reporting by site and by traffic type.

The Benefits

- Network wide visibility and reporting on device availability.
- Visibility of traffic response times from any to any point in the network.
- Visibility of response times to a particular web page.
- Visibility of jitter on Voice Over IP links.
- Visibility of application response to a TCP port connect.
- SLA reporting and visibility of threshold breaches.

The Positioning

RESPONSEWATCH™ has a dual function. It is primarily a technical product and should be used by 2nd & 3rd level Technical Support Managers who have requirements for response time measurements across the network for either troubleshooting or design. The other area of functionality provides information to customer services focused areas on such items as availability and Service Level Agreements.

At the technical level, by simply configuring Cisco network devices appropriately, information regarding availability and response times can be provided to technical support and design staff through **RESPONSEWATCH™**. For example, a new challenge facing technical support is management visibility within a carrier's MPLS network. With **RESPONSE**WATCH™ staff can track the response times, not only between network devices, but to servers and their applications too. This has the effect of identifying whether a fault is occurring within the carriers' MPLS network, on your own network or at the server or application levels.

RESPONSEWATCH™ can be deployed to measure many types of response times including the downloading of web pages and jitter over VOIP circuits. All the data gathered by RESPONSEWATCH™ can be viewed over long periods to see trends in performance.

The second area of **RESPONSEWATCH™** functionality lies in its ability to report on the breaches in SLA response times and on availability of individual devices or circuits. For example a Customer Services team can create a web page displaying a business unit's availability and even include circuit utilisation data and visuals integrated from Crannog Software's NETWATCH™ application. In effect they can supply a business service view. Internally they can also report on the adherence to or breaches in SLA thresholds for response times.

POSITIONING MATRIX

	Operational	Managerial	Technical	Security
Network traffic response times	*	*	0	*
SLA threshold reporting		Ø	Ø	
Availability reporting	*	Ø	Ø	
Application/Web page response times	*	⊗	0	⊗
Trending	*	*	Ø	







Feature	Function	Benefit
Out-of-the-box Installation	Auto-install from CD or download from www. crannog-software.com	Quick and easy install with no specialist technical knowledge required.
Web Interface	Recognisable interface with intuitive navigation.	No technical training required to begin monitoring.
Administration Interface	Integrated administration web front-end.	Easy access to configure collection and reporting.
Network Device Configuration	Simply configure Service Assurance Agent (SAA) on your router.	SAA is an existing functionality on Cisco devices giving instant response time monitoring and reporting once configured.
Graphs	Instant graphs of traffic response times across the network.	Easy to read and understand graphical reports.
Performance Reports	Display daily, weekly, monthly and quarterly reports showing current, average and peak network response times.	View short to long-term trends on network response.
Availability Reports	Display daily, weekly, monthly and quarterly reports showing network device availability reports.	Easy to read and understand graphical reports on availability.
Configuration	Configure response time measurement on many functions including: IP/ICMP path echo SNA echo TCP connect HTTP get Jitter DNS lookup	Easily monitor and report on network response times, Voice-Over-IP jitter, response times on downloading web pages, application response times, etc.
Service Level Agreement Reporting	Set many thresholds including: Response times Availability Packet loss	Prove compliance with your SLAs through these easy to use reports.
Security	Configure password protection for the whole system or just administration.	Quickly and easily ensure the security of the RESPONSE WATCH™ application through the web interface.
Traffic configuration	Identify standard applications out-of-the-box or configure your own protocols and ports to identify unique applications.	Easily identify all application traffic, even custom applications.
Distribution	Monitor as many or as few devices and traffic types as required. Response Watch is a fully distributed system.	Install RESPONSE WATCH TM on a PC, a small server, a large platform or a mixture of all three to suit your needs.

"With

RESPONSEWATCHTM

staff can track
the response times,
not only between
network devices, but
to servers and their
applications too"

home > devices - Tallaght					
		ts configured on "I			
Device Address: 193.1.207.110					
Technical Contact:					
Physical Location:					
System description: Cisco Internet TS, RELEASE SOFTWARE (fc1) TAC S Compiled Wed 11-Jun-03 20:54 by	Support: http:	ng System Software I //www.cisco.com/tac	DS (tm) 7200 Software Copyright (c) 1986-200	(C7200-35-M), 3 by cisco Systi	Version 12.2(15) ems, Inc.
Test Description	Test Type	Test Target	Response Times	Availability	Packet Loss
DHCP Response	DHCP	0.0.0.0	DE-SEA.	Market .	
Latency to 198.133.219.25 (Max Reliability)	Echo	www.cisco.com	DESIGN	(Mark)	
Time to download cisco.com	HTTP	WWW.cisco.com	9646	DELECT.	
Latency to 198.133.219.25 (Min Delay)	Echo	www.cisco.com	DESIGNATION	DESIGN.	*
Latency Tallaght-Dundalk	Echo	193.1.205.69	SHARE.	DESIGNAL.	
latenct to 207.44.206.86 (routine)	Echo	207.44.206.86	185486	DESERT	
latency to 207.44.206.96 (express)	Echo	207.44.206.86	98680	3666	5
Latency Tallaght-Waterford	Echo	193.1.104.1	SECRET.	(MILES)	
Drops Tallaght-Waterford	Jitter	193.1.184.1	18586	DELEG	SELECT.
Telnet connect Time	TCP Connect	193.1.184.1	26960	3646	

Technologies

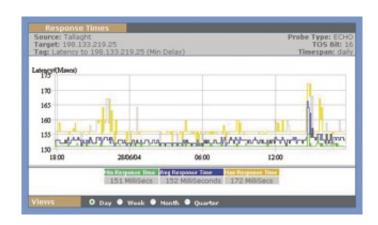
Cisco SAA / IP SLA

Cisco APM (Application Performance Management)

Web-based interface

Architecture

ResponseWatch's architecture presents the user with complete SAA\ IP SLA\ APM graphs and reports via a web interface.



Platform

Minimum Specifications:

256 MB RAM

5 GB free hard disk space for database

100 MB free hard disk for program files

Pentium III 1GHz or better

Windows NT4 or greater

The amount of hard disk required by ResponseWatch will also increase depending on the amount of tests being monitored, and the amount of data being stored for each test.

Linux version optional for some installs.

Environmental Support

Most Cisco devices support SAA and APM as the technology is embedded into the Cisco IOS. In general, as Cisco is constantly developing SAA, later IOS releases support more SAA tests.

Device Address			e sta	(St	ort by Max R	tesponse)	
	Target Address	Test Type	SLA I	Mas	Response	Avg Response	Grapi
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	Worst 10 prob	bes outside th	eir av	Miles	ability SLA		
Device Address	Target Add	ress Test	Type	,	SLA 90	Aveilability %	Grapi
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Device Address	Target Address	Test Type	SLA	M	ax Respons	e Avg Response	
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Device Address that-Hillahlet itnet ie	Target Address	Test Type TOPCONNECT	SLA 300m	M 6	lax Respons	e Avg Response	March 1
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www.crannog-software.com



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