

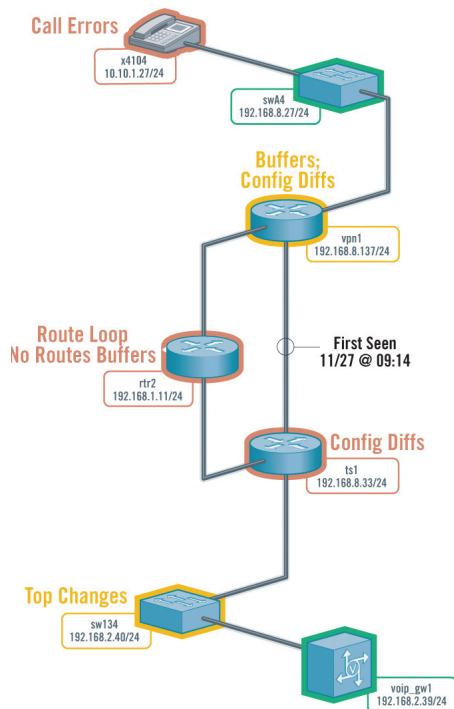
NetMRI™ IP Telephony Technology Modules

IP Telephony Management Made Easy

A Better Way to Monitor VoIP Systems

Voice traffic traverses your entire infrastructure, including routers, switches, IP telephony servers, IP phones, and circuits. Service quality can be disrupted if any of these key components are malfunctioning or misconfigured. That's why it's critical that you have proactive visibility into service quality with understandable, useful, and actionable information.

NetMRI takes the work and risk out of voice management by automating data collection and correlation of voice data from Cisco and Avaya



IP Telephony Analysis – Path Diagnostic Chart
NetMRI shows every element in the voice connection.

IP PBXs, and network data. Using expert and best-practice “rules,” NetMRI analyzes your network daily—or on an ad hoc basis, whenever you want—to search for vulnerabilities and identify problems prior to any real interruption to your voice services.

The NetMRI IP Telephony Module is the most comprehensive, automated network diagnostic tool in the industry, identifying and analyzing problems with VoIP applications from leading IP PBX vendors.

Automate Voice Data Collection and Correlation

Customers rely on NetMRI's expert analysis and in-depth data collection to alert them of problems in their voice service before they can impact any end user. NetMRI employs a high-level scorecard to deliver daily data collection and expert analysis in a clear, graphic report that makes immediate sense. You see trouble spots before the network does, and that gives you the power to prevent any voice services issues.

NetMRI also offers a “Path Diagnostic” diagram that visually shows every network element in the voice connection—end to end—to highlight any disruptions in the transmission.

Integrated Analysis of Call Data Records (CDRs) and IP Infrastructure

The NetMRI IP Telephony Module gathers Voice Call Detail Records (CDRs) from leading IP PBX

Features and Benefits

- Measures call quality right down to the IP handset
- Reduces troubleshooting time with a visual Voice Path identifying all relevant devices and key issues
- Integrates data and voice reporting, as well as problem resolution, improving responsiveness and lowering operational costs
- Reduces MTTR (Mean Time To Repair) with rapid identification of specific devices having Quality of Service issues
- Identifies configuration changes that are inconsistent with policy
- Provides quantifiable comparison to past history, indicating optimally-performing resources and those needing attention
- Provides a helpful assessment of VoIP readiness before deployment

manufacturers, such as Cisco and Avaya. NetMRI analyzes those records on a daily or more frequent basis and creates a Path Diagnostic Chart. Call information and call performance—together with IP network analysis—provide an excellent overview of VoIP processing throughout your network and can be used to help troubleshoot specific VoIP problems.

Detect Quality of Service (QoS) Configuration Issues

NetMRI uses SNMP to capture the MIB data from all of the devices in the call path, evaluating the QoS configurations. If a given Voice Path does not have QoS configured or if the configurations change, an issue is generated to alert the engineer or technician. NetMRI collects configuration information, as well as MIB data, from key infrastructure

components, including routers, switches, and some VoIP-enabled devices. Integrated with the CDR information, NetMRI then identifies hard-to-find issues, wherever they may occur, which can negatively affect QoS.

Daily Voice Assessment via High-Level Scorecard

On a daily basis NetMRI prepares a summary Network Scorecard of the network's health, with a single overall index between 0-10. VoIP is one of the key functional areas that is evaluated, measuring Correctness and Stability based upon leading manufacturers' best practices.

Detailed Analysis of Voice Data Across the Network

In addition to identifying VoIP

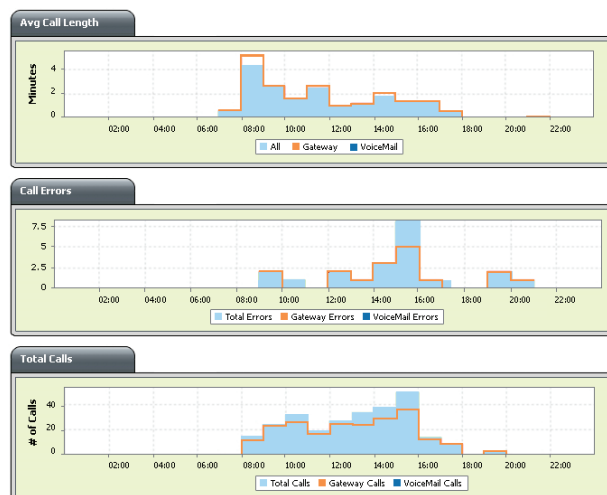
issues and helping technicians troubleshoot specific problems, NetMRI provides summary tables and charts for a management overview of how VoIP is being used across the network.

NetMRI shows you the cause of poor voice quality, not just the symptoms. Your voice services will have the highest performance because NetMRI audits every device, every phone, and every call record to detect problems proactively.

For VoIP platforms running on a Cisco-based infrastructure, NetMRI supports Cisco's IP Service Level Agreements (SLAs), a standard feature supported by most Cisco routers and switches.

Caller Usage									
	IP Address	Device Name	Device Type	Calls Orig	Calls Recvd	Total Calls	Orig Mins	Recvd Mins	Total Mins
1	10.1.114.4	Gateway-3725-1	VoIP Gateway	92	115	207	131	269	400
2	10.1.114.7	Unity1	Voice Mail	0	62	62	0	25	25
3	10.1.114.7	Unity1	Voice Mail	0	62	62	0	25	25
4	10.1.114.7	Unity1	Voice Mail	0	62	62	0	25	25
5	10.19.4.177	SEP000DBC081369	IP Phone	15	3	18	71	3	75
6	10.56.4.91	SEP001120254B1E	IP Phone	14	3	17	10	2	12
7	10.2.114.87	SEP000DE6C3BA8	IP Phone	6	10	16	2	23	25
8	10.19.4.179	SEP001120255117	IP Phone	7	6	13	10	22	32
9	10.2.114.219	SEP001120037133	IP Phone	3	9	12	1	19	21
10	10.56.4.111	SEP000DBC080D97	IP Phone	11	0	11	34	0	34

NetMRI Summary tables and charts provide the critical data to proactively detect issues with VoIP.



In addition to spotting VoIP problems, NetMRI provides information on how VoIP is being used across the network.

For more information on Netcordia and our full range of automated network management solutions, please call **410-266-6161** or visit **netcordia.com**