



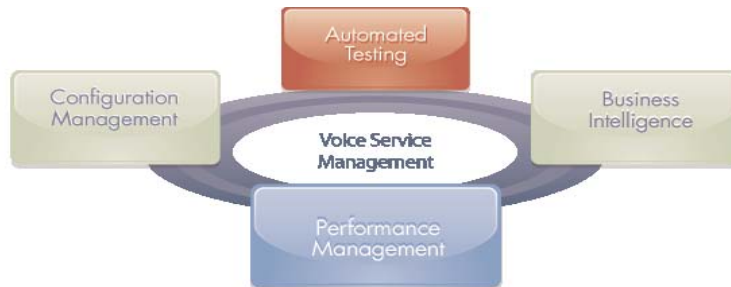
ClarusIPC® Plus+ 2.4

Enterprise networks are going through massive change, and the convergence of voice and data, including including IP Communication deployments, upgrades, transformations and ongoing management, remain a top priority.

According to industry analysts at the Aberdeen Group, 61% are planning for IP Communications in the next two years.

In order to get the most of their investment at the time of deployment and beyond, enterprises must take an end-to-end, integrated voice service management approach, including:

- ◆ Automated Testing,
- ◆ Business Intelligence,
- ◆ Performance Management, and
- ◆ Configuration Management.



Operational Integrity

Cisco Unified Communications Manager is typically one of the most business critical applications, with ongoing operational reliability a necessity. The features within ClarusIPC® allow optimized performance of complex validation and testing scenarios; ensuring the IP Communications application is fully functional, tested, and documented prior to transferring support responsibilities from the deployment organization or System Integrator to the end user IT Operations staff.

Clarus Systems' capabilities have come full circle with the latest version of their flagship application, ClarusIPC Plus+, which delivers strategic solutions for efficient management of IP communications at each stage of the lifecycle. This new version extends the company's integrated pillar approach to empowering Unified Communications by offering system validation through troubleshooting and diagnostics, business intelligence for detailed reporting and analytics, and performance management to define thresholds for optimized voice performance including server health, gateway capacity, media resources and device registration.

What Makes Clarus Systems Different?

The two key differentiators of this release include the business intelligence and performance management capabilities that are integrated with the traditional platform. ClarusIPC Plus+ 2.4 presents seamless monitoring and analytics in a totally redesigned, interactive user interface and dashboard including service and performance alerts tied to relevant views which provide analysis and visualization of traffic patterns across the IP-enabled environment.

IN PRACTICE

One of the top two securities firms on Wall Street is currently deploying a large IP Communications environment.

Leveraging ClarusIPC® Plus+ has allowed the rollout to get back on track ramping from 1-2 branches per week up to a rate of 25 branches per week. With over half of the project already complete, the scope will cover:

- ◆ **650** branch offices
- ◆ **36,000** IP devices, with each branch averaging 10-300 devices
- ◆ **24,500** end users

Communications Lifecycle Management

Day 1 - Deployment Validation

Plan | Design | Implement

- ◆ Configuration Analysis
- ◆ Registration Monitoring
- ◆ Automated Testing
- ◆ Troubleshooting & Diagnostics
- ◆ Regression/Certification Testing
- ◆ As-built Documentation

Day 2 - Operations

Operate | Troubleshoot | Optimize

- ◆ Release/MAC Management
- ◆ Incident/Problem Management
- ◆ Nightly Health Checks
- ◆ Voice Quality
- ◆ Performance & Service Availability
- ◆ Compliance & Security

Transformation Services

- ◆ Deployment Certification Services
- ◆ Upgrade / Migration Services
- ◆ Optimization Services



Integrated Release Features

ClarusIPC Plus+ offers a scalable combination of powerful, integrated features that are easy to set up and intuitive to use - further empowering successful, rapid deployment of Unified Communications as well as ongoing health management enhancements include:

Performance Management Business Intelligence Configuration Management

Core Enhancements

- ◆ Server Groups - Clustering of multiple ClarusIPC servers
 - ◆ Increase scalability and optimal performance
 - ◆ Enable load balancing & failover
- ◆ Testing Enhancements (i.e. test DID's for 800 numbers)
- ◆ Data augmentation: Ability to tag devices with critical business information for Compliance and Billback purposes

Automated Testing, Troubleshooting & Diagnostics

If you haven't tested it, it's probably broken. Exercise all the functionality that the user relies on as well as integrating into business processes through automated testing. Additionally, you can provide troubleshooting and remote phone applications that allow Tier-1 help desk personnel become more productive for voice.

- ◆ True end-to-end UC functionality testing
 - ◆ Automates testing and acceptance
 - ◆ Utilizes deployed IP telephony infrastructure
 - ◆ Centralizes and standardizes test processes
- ◆ Troubleshooting Individual Phone Issue
 - ◆ Real time phone/line configurations
 - ◆ Voice quality of recent calls
 - ◆ Comparisons to known good phones or recent configuration changes
- ◆ Remote Phone Control (Remote Hands)
 - ◆ One click launch from various points within core product
 - ◆ Remote control of all features/functions of IP phone
 - ◆ Replicate issues/confirm fixes without end user involvement

Business Intelligence

Data synchronization, reporting & analytics of inventory, tests and KPI's that Business and IT can leverage to reduce costs and create competitive advantages.

Interactive user interface and dashboard including call history based service views, providing analysis and visualization of traffic patterns.

Data Discovery/Synchronization

- ◆ Constantly organizing critical source data collection
 - ◆ CUCM/phone configuration data
 - ◆ Device status - registration & device details
 - ◆ Phone details - apload/bootload, serial #, TFTP server, DHCP
- ◆ Frequent collection of
 - ◆ Call records (CDR/CMR)
 - ◆ KPI's

Reporting

- ◆ Automated testing results
- ◆ Inventory management
- ◆ Service analysis

Analytics

- ◆ Performance dashboard with interactive UI
- ◆ Visualize KPI's with 72-hour playback capability
- ◆ View device registration across clusters & pools
- ◆ Service analysis views data mining CDR's

Performance Management

Built upon monitoring and alerting capabilities of Voice Monitor, including:

- ◆ Voice Quality
- ◆ Service Availability (calling and voicemail access)
- ◆ Incorrect Call Routing
- ◆ Security & Compliance

Performance Management capabilities provide actionable, near real time insight into what's happening within the UC environment. ClarusIPC Plus+ 2.4 extends capabilities to monitor server health, gateway capacity, media resources and device registration, including:

- ◆ End User perspective on Voice Quality
- ◆ Business logic to make rules more actionable
- ◆ Voice Service Availability - monitoring & alerting

Benefits to Service Provider & End Customer

- ◆ Decrease reaction time/mean time to repair
- ◆ Proactive monitoring of high priority issues
- ◆ Enhance security monitoring to detect toll fraud and malicious calls

New KPI & Device Registration Monitoring & Alerting Features

- ◆ Server Health
 - ◆ CUCM Server Performance
 - ◆ CUCM Services
- ◆ Gateway Call Activity
 - ◆ Number of active calls by specific gateways
 - ◆ Status of any PRI channel on MGCP controlled gateways

- ◆ Device Registration Changes
 - ◆ % unregistered by location, pool, etc.
- ◆ Media Resource Availability
 - ◆ Resources available to provide Music On Hold (MOH), Transcoding (Codec), Media Termination Points (MTP).

Proactively manage system health to prevent large-scale outages or unplanned downtime:

- ◆ Agent-less, 24x7 monitoring of the health of multiple CUCM Clusters
- ◆ User defined policies and rules for system performance thresholds
- ◆ Flexible alerting capabilities tied to each policy

Configuration Management

ClarusIPC Plus+ will soon offer a configuration management add-on module in the second half of 2008 that will include extensive Unified Communication change tracking, monitoring, alerting and reporting. Configuration management will provide expanded data discovery and change reporting including new add/remove/change reports, unity data collection, change tracking and reports, and new configuration views. It will also add configuration change monitoring and alerting.

ABOUT CLARUS:

Clarus Systems, Inc. provides integrated management, testing and monitoring solutions for IP Communication and Contact Center deployments, upgrades and transformations. Privately held and based in Redwood City, Calif., Clarus Systems is widely recognized for its award-winning application, ClarusIPC®, which maximizes system availability and performance through automated, end-to-end testing, monitoring, reporting, troubleshooting, and operations management. With over 500,000 devices tested, Clarus Systems' solutions ensure ongoing, validated telephony environments that can serve as the foundation for unified communications. The company attributes its success to its roster of elite Global 2000 enterprises, system integrators, and managed service providers within the financial services, aerospace & energy, and public sector & education market segments.

