



MA4000 Management System

The Powerful, Easy-to-use Management Solution

The benefits of IP telephony technology—total-cost-of-ownership reductions along with productivity enhancements—are clearly established. The corporate world is gradually migrating to feature-rich Voice Over Internet Protocol systems. However, the most powerful telephone system is not beneficial to your organization if its interface is complicated and difficult to master.

The Essence Of Simplicity

Minimizes Training

IT department technicians without in-depth IP telephony skill-sets appreciate the MA4000's easy-to-use GUI. The MA4000 eliminates weeks of expensive training and costly certification.

Every element of the MA4000 web-based interface is designed to empower the IT technicians and managers who will be using it. Drop-down lists make it easy to provision and manage terminals. Basic moves, adds and changes are handled with a highly-intuitive Wizard-style interface.

Powerful Yet Intuitive Tools

Easy Startup

The MA4000 Installation Manager lowers overall install-project costs by reducing the time it takes to perform initial IP telephony programming:

- Quick, simple and consistent first-time voice system and VMS installation tool included
- Flexible data-import methods
- Initial programming cost reductions
- Templates speed installation
- Installation plan validation reports generated

Fast Range Programming

The MA4000 Range Programming tool makes it easy to edit large groups of devices and move, add and change users with the MA4000's wizard-based Range Programming Tool. Range programming lets you:

- Add new users, phones or voice mailboxes using programming templates
- Change telephone or voice mailbox configurations
- Copy current configurations from one device to another
- Delete groups of users, telephones or voice mailboxes
- Move time-division multiplexed (TDM) devices from one location to another without rewiring
- Renumber phones or voice mailboxes
- Swap two or more TDM device locations without rewriting
- Schedule one-time or recurring task execution
- Import to and export from Microsoft® Excel™ or .CVS files

Fast Template Programming

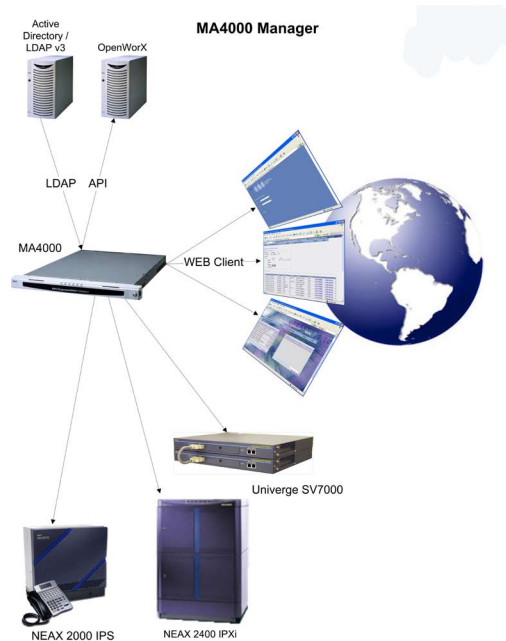
The MA4000 makes it easy to pre-define default configurations for your stations, users and mailboxes, and then apply templates to provision new devices or users with your choice of the Range Programming Tool, the import utility or the LDAP auto-provisioning tool.

Real-time Monitoring and Traffic Management

The MA4000's real-time monitoring tool collects IP Quality of Service (QoS) statistics directly from UNIVERGE® SV7000 and UNIVERGE NEAX® 2400 IPX equipment. It allows you to view the status of any phone, trunk or connection trunk or connection truck on any PBX. It also collects and analyzes voice system traffic data. Capacity planning is automatically calculated with MA4000 using proven Erlang techniques. You will receive proactive, threshold-based alerts about problems as soon as they appear.

Easy Fault Management

The MA 4000's proactive fault management stops network problems before they start. The MA4000 collects faults in real-time from all the voice servers and applications across the network via SNMP traps. It flexibly allows organizations to categorize those faults by type, severity, source or description and generate notification for each kind of fault.



Integration

Centralized administration

The MA4000 provides a single point of administration for your entire NEC communications solution. In fact, it forms the front end of your solution.

Business Process Integration

The MA4000 integrates into your existing infrastructure thanks to:

- **LDAP auto-provisioning.** The MA4000 uses Lightweight Directory Access Protocol (LDAP), the preferred protocol for deploying directory-based applications and solutions.
- **Single point of entry architecture.** The MA4000 acts as a single point of entry for PBX, voice mail, corporate directory, call accounting, the E911 system and more.
- **Telecom Management Network (TMN) compliant.** The MA4000 is built on principles defined by the telecommunications management network (TMN) model; it supports integration with Network Management Systems (NMS).

Security

The MA4000 provides companies with the most dependable voice network communications available. Aspects of security include:

- **Proactive fault management.** The MA4000 collects faults in real-time from all the voice servers and NEC applications across the network via SNMP traps.
- **Powerful end-to-end encryption.** The MA4000 encrypts all transactions from the client and server to the voice system—up to 256 bits in SSH or SSL.
- **Rapid recovery from disasters.** The web-based centralized voice-server management system archives the voice system database every night.
- **Intrusion detection and toll-fraud prevention.** The MA4000 intrusion detection algorithm locks out accounts based on invalid login attempts within a definite period of time. It prevents long-distance toll fraud and other kinds of fraud by accessing a centralized authorization code database.
- **Audit history.** The MA4000 tracks every command issued and every system configuration change.
- **Single login.** The MA4000 integrates with either an Active Directory or LDAP V3 database to provide a single point of authentication enterprise-wide.

Empowered by Innovation

NEC

For more information, visit necunified.com

About NEC Unified Solutions, Inc. NEC Unified Solutions Inc., a global leader in VoIP and data communications for the enterprise and small-medium business, delivers the industry's most innovative suite of products, applications and services that help customers achieve business value through technology. NEC Unified Solutions, a wholly owned subsidiary of NEC Corporation of America, offers a complete portfolio of solutions for wireless, unified communications, voice, data and management services, and an open migration path to protect investments. NEC Unified Solutions, Inc. serves Fortune 1000 customers across the globe in vertical markets such as hospitality, education, government and healthcare.

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