

MA4000 Management System

Improve operations efficiency

MA4000 Management System

A Powerful, Easy-to-Use Management Solution

Secure, easy-to-use and robust, the MA4000 is designed to increase overall productivity while at the same time delivering flexibility and simplicity to IP telephony administration. In combination with the NEC voice servers, MA4000 provides the necessary tools for a truly comprehensive IP telephony solution.

MA4000 has removed the mystery behind voice server administration. Powerful functions in MA4000 allow any task within the system to be done with ease. Features like Range Programming can perform large tasks, such as adding new extensions, changing extension programming or numbering, and moving, swapping or deleting extensions, faster than using traditional methods. MA4000 reduces training and improves productivity, letting you focus on what is important: your customers.

At a Glance

- > Centralized administration that integrates seamlessly
- > Powerful, intuitive tools for simplified management
- > Reliable fault management
- > Advanced security through extensive controls
- > Pro-active traffic management
- > Performance Optimization tool

Centralized administration and seamless integration

Centralized management is an essential part of a complete voice solution in today's enterprise environments. MA4000 has the ability to manage all of a company's voice servers simultaneously and with virtually no interaction by the administrator on a daily basis.

Automatic moves, adds and changes

By interfacing to the standard Lightweight Directory Access Protocol (LDAP), or using .csv files, MA4000 Synchronizes NEC' voice servers to a company's internal telephone directory, allowing users to take advantage of always up-to-date directory systems. The directory information is used to create voice server users, extensions and voicemail boxes automatically.

Voicemail integration

MA4000 provides tight integration with VMPP compliant voicemail systems. When new stations are created with MA4000, a mailbox can be generated and configured automatically with no additional effort. Voicemail configuration templates can be created in MA4000 for use with the Range Programming tool, the LDAP Auto Provisioning engine and the Import utility.

Expense Management integration

Keeping control of telecommunication costs is essential. MA4000 Expense Management is a module specifically designed for this task and supports both the fixed phone cost as well as mobile phone costs. Easily accessible through one central MA4000. Provides automatic barring of devices when user budget is depleted.

DECT Management Integration

Both traditional and IP DECT can be managed through MA4000. The MA4000 offers access to the DAP manager (IP DECT) through smart links, whereas the traditional DECT manager is part of the MA4000 SIP@Net Utility.

SIP Management integration

MA4000 provides a fully integrated and central interface for the management of SIP phones. This can be the NEC range of SIP phones, but also the Polycom range. SIP configuration files are automatically created and maintained independent of the SIP phone version.

Free Numbering

Free Numbering enables you to move a user easily across the various voice systems, while keeping the same extension number. Existing properties are not moved, but replaced by a predefined set of properties, which keeps the system clean. The various templates allow you to create default settings for each type of user.

Network-wide virtualisation

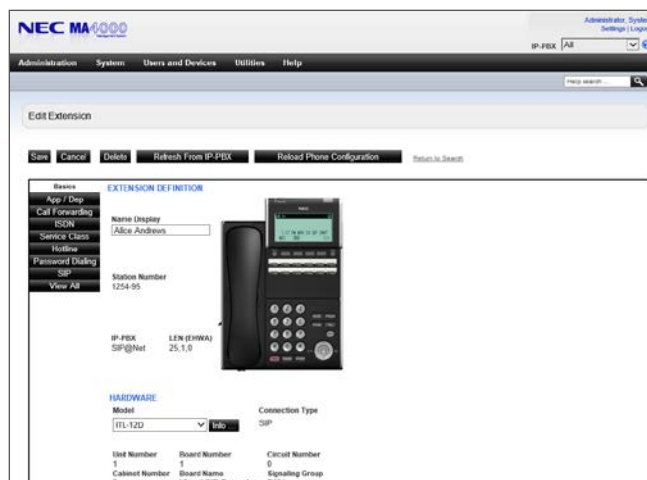
MA4000 provides basic integration with the NEC ProgrammableFlow PF6800 Controller. This controller provides a high-performance, fabric-based Software Defined Network (SDN) with advanced network automation, control and flexibility, enabling full network virtualization and secure, multi-tenant networks. MA4000 retrieves information from the PF6800 and displays a grid with the SDN nodes that match the last known IP address and MAC address of the extension, enabling it to display flow lists and/or safe flow.

Simplified management

MA4000 offers a complete overview of all the characteristics of an extension and/or group and their dependencies. The administrator can search for and display extension and/or group information, locate, add, modify and delete extensions and/or groups, assign them to users, program the buttons and view its current status.

Range Programming

MA4000's Range Programming wizard makes it easy to perform adds, changes, copies, deletes, moves, renumbering of extensions and swaps of phones by using a sophisticated search engine that takes the guesswork out of management.



Templates

The MA4000 can be used to pre-define default configurations for extensions, users and mailboxes. These templates can then be used to add new devices or users with your choice of the Range Programming Wizard, the import utility or the LDAP autoprovisioning feature.

Task scheduling

Administrators can execute tasks for a variety of MA4000 applications, such as range programming. A task can be scheduled to execute on a specific date and time, or immediately. Toll fraud (by staff after office hours) can easily be prevented by changing the phone's service class at a predefined schedule.

All Range Programming tasks create an audit log. A programming error results in an alert.

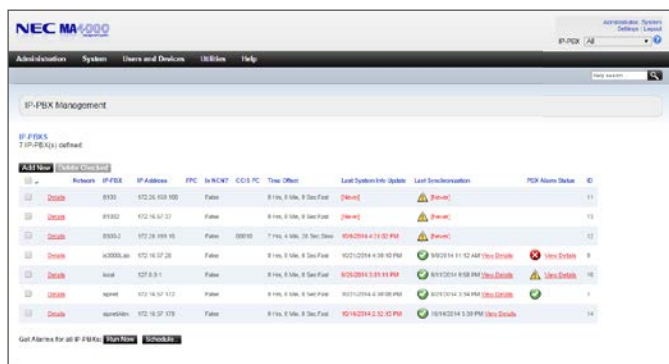


Powerful Help search

MA4000 offers advanced keyword searches across all MA4000 online help and voice server documentation. This feature works just like a basic web search and displays results in the same way. Each returned result is ranked in order of relevance.

Fault Management

MA4000 offers the administrator a complete status overview of the connected Voice Servers, using clear icons. Details can be obtained through a simple mouse click.



System Health monitoring

System Health monitors the MA4000 server and MA4000 database periodically for any events that might create degradation in service and immediately notifies those concerned via MA4000 fault management. For example: an Alarm Notification is generated when available hard drive or database space is becoming low.

Advanced security

High attention is paid to secure access. Communication with the client can be encrypted using SSH (Secure SHell). Central Authentication Service is provided for Single Sign On. The information sources to perform the authentication include Windows Authentication, an LDAP source or even an internal database. The provision of credential information is always done in a secure fashion using SSL (Secure Socket Layer) (HTTPS). User access rights can be granularly and flexibly assigned by the allocation of roles defined by the manager. Users can be configured to only access certain Voice Systems or even limited Voice System resources as part of a particular user role.

Pro-active traffic management

The MA4000 traffic management option allows for pro-active traffic management of trunks, routes and processor occupancy. Immediately when there are potential traffic problems with routes, trunks or if the processor load is too high, the administrator is informed. Detailed reports, complete with useful and descriptive graphs describing the traffic patterns over time, can be generated manually or run automatically and either emailed to users or printed on specified printers.

Performance Optimization tools

Voice over IP statistics

MA4000 shows how network conditions affect VoIP quality. Detailed VoIP statistics from all IP phones throughout your network can be collected and viewed. Statistics include: bandwidth usage, packet loss, warning tone count and much more. Thresholds can also be defined for VoIP statistics and alarms can be generated when those thresholds are exceeded.



Real-time monitoring

The real-time monitoring tool displays connection status, registered/unregistered status, connected-to information, IP address, trunk number and route information, connection route details and much, much more. This tool allows for the simultaneous monitoring of stations, trunks and connection routes on multiple voice servers simultaneously and all from the same screen.

Requirements

Minimum requirements	
Processor	2.0 GHz (64-bit) Dual Core
Memory	4 GB
Storage space	40 GB
Database	- SQL Server 2016 Express, Standard - SQL Server 2014 Express, Standard - SQL Server 2012 Express, Standard - SQL Server 2008 R2 Express, Standard - SQL Server 2008 Standard
OS	- Windows Server 10 64-bit Pro and Enterprise - Windows Server 2016 Standard, Datacenter - Windows Server 2012 R2 Foundation, Standard, Datacenter - Windows Server 2012 Foundation, Standard, Datacenter - Windows Server 2008 R2 SP1 Foundation, Standard, Enterprise, Datacenter
Other requirements	
WEB browsers	MA4000 supports the client web browser Microsoft Internet Explorer and Google Chrome.
Voicemail systems	MA4000 supports the UNIVERGE UM4730, UM800 and UM8700. Up to 50 voicemail systems can be supported per MA4000 server.
Voice platforms	MA4000 supports UNIVERGE SV9500, SV8500, SV9300, SV8300, SV8100, iS3000, SIP@Net. Up to 200 Voice servers per MA4000 server can be managed.
SDN controller	MA4000 supports the PF6800 ProgrammableFlow Controller One software defined network (SDN) controller can be integrated per MA4000 server.

Technical data

Functionality	SV8500 SV9500	SV8300 SV9300	iS3000 SIP@Net server
Alarm collection via SNMP	✓	✓	-
Automatic escalation	✓	✓	✓
System health monitoring	✓	✓	✓
Alarm and Audit logs and notification	✓	✓	✓
Extension and group management	✓	✓	✓
Range and template based programming	✓	✓	✓
Number pick list	✓	-	-
3rd-party SIP terminal programming	-	-	✓
Button programming	✓	✓	✓
Reporting	✓	✓	✓
Feature command programming	✓	✓	✓
Extensive on-line help	✓	✓	✓
Terminal status indication	✓	-	-
Abbreviated dialling	✓	-	✓
Free numbering	✓	✓	✓
Location diversity	✓	n.a.	n.a.
Task scheduling	✓	✓	✓
Real time monitoring and traffic status	✓	-	-
Traffic planning and VOIP trouble shooting	✓	-	-
Single point of authentication	✓	✓	✓
Encryption	✓	✓	✓
Role based permission	✓	✓	✓
Intrusion Detection	✓	✓	✓
Toll Fraud Protection	✓	✓	✓
Disaster recovery-backup	✓	✓	✓
VoiceMail integration	✓	✓	✓
LDAP (s)	✓	✓	✓
Import/export names and station numbers	✓	✓	-
MA4000 Expense Management integration	✓	✓	✓
DECT Management integration	-	-	✓
Clipboard functionality	✓	n.a.	n.a.
Hospitality	✓	n.a.	n.a.

For further information please contact NEC EMEA or:

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