D.N.A. 5.4 MANAGEMENT APPLICATIONS

The D.N.A. suite of applications is composed of management specific applications and end user applications. The management applications allow administrators to maintain, monitor, and adjust configurations and data to maximize the company's efficiency. The management key components are:

- D.N.A. server
- Directory Manager
- Extension Manager
- Performance Manager

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D.N.A. Server 5.4

At the heart of a D.N.A. network, the D.N.A. Server provides services, a common data storage medium, and communications interface handler for all D.N.A. applications. A set of common utilities including logon/security, site set-up, and installation are provided to complement the basic database services. Multiple D.N.A. Servers can be connected within a network to allow customers to support a distributed system.

Management databases are built up by co-installing a D.N.A. Server with a Microsoft SQL Server. It can serve as a 'stand-alone' server or co-reside with other applications such as D.N.A. Directory Manager and D.N.A. Operator Workstation. Each of these D.N.A. applications can either be used 'standalone' or in combination with other D.N.A. applications.

A large D.N.A. network can be built up using multiple D.N.A. Servers. In this scenario, each server provides services to a defined subset of nodes within the network.

A client application is then able to select one of the servers at logon and manage the associated nodes, depending on authority level. This distributed architecture enables network traffic and response times to be optimized. This is of particular importance for large national and international networks.

D.N.A. Server contains flexible processes and routines that facilitates inter-application communication. It also provides the capability for external applications to integrate with the D.N.A. system.

- Enables unique Directory configurations for each customer
- Flexible configurations possible from single PC installations to a distributed system with multiple servers over LAN/WAN, supporting multiple clients
- Based on Microsoft Windows 2000 server or Windows 2003 server
- Uses Microsoft SQL Server or MSDE database
- Shared management databases
- Uses de facto and industry standards for communication within and outside D.N.A. environments

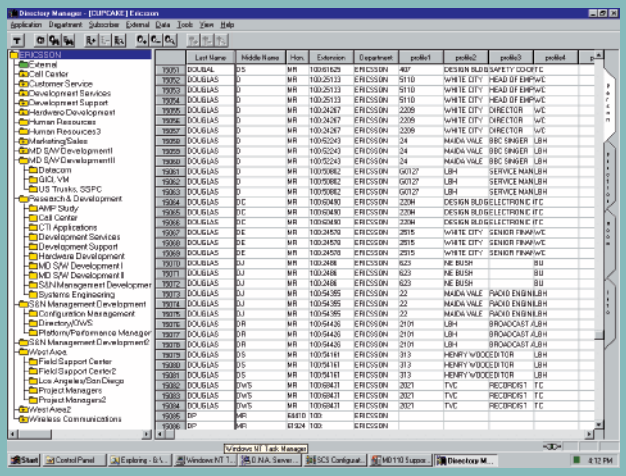
Features

Services provided by D.N.A. Server

- Common database services available to integrated D.N.A. applications
- Common security and user access services to configure individual users of D.N.A. applications
- Connectivity between multiple D.N.A. Servers
- Dial-up client connections via remote access service
- Simplified database access (ODBC) for third-party report generators
- Multiple, simultaneous application connection to MD110 and MX-ONE™
- Re-configuration of managed MD110 and MX-ONE™ nodes by adding new nodes

The following can be configured by the D.N.A. Server:

- Directory
- Trunk
- Time system interface
- Voice system interface
- Message and diversion
- Tenant group
- Name identity conversion
- MD110 and MX-ONE™
- User Name and Privileges



D.N.A. Directory Manager 5.4

D.N.A. Directory Manager 5.4

D.N.A. Directory Manager provides a user-friendly graphical user interface (GUI) for the management of directory data. The simple interface provides a single point of entry to manage directory data.

- Administration tool for structuring, populating, and maintaining your corporate telephone directory
- Single point of entry for all directory data
- Operator Workstation changes in directory data are automatically reflected in the Ericsson Communication Assistant, D.N.A. Mobile Executive or Ericsson Communication Client
- Setup, configure, and modify MX-ONE Messaging™ user accounts

Directory services available with D.N.A. Directory Manager are:

- Interworking (Read/Write access) with external directories using LDAP V3 and D.N.A. interfaces
- Connection to other Ericsson products such as MX-ONE Messaging™, Voice Activated Assistant™ and Solidus eCare™

Designed as a dedicated networking application, Directory Manager (DMG) allows multiple users to simultaneously access the directory database, and provides the means for simplified viewing, editing, adding and deleting of directory data. Directory Manager provides the capability to define unique directory structure for any organization. It also allows directory access to a wide range of other applications. The data stored in the directory databases can be accurately and securely passed to Operator Workstation, Ericsson Communication Assistant, D.N.A. Mobile Executive and Ericsson Communication Client.

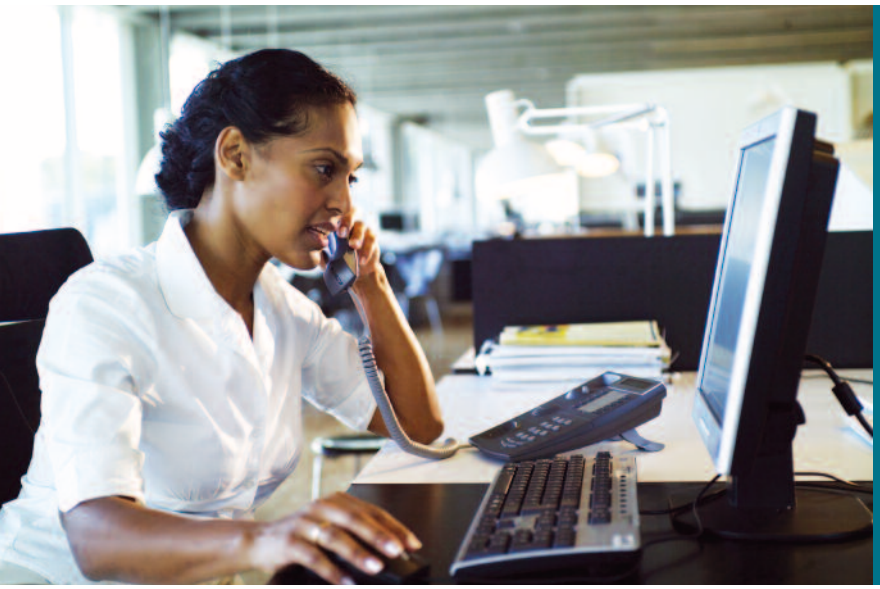
User benefits

- Single point of entry for user-data in the enterprise from any location
  - – DMG can act as master and export data to other database applications
  - – DMG can act as slave and import data from other database applications
- One source of information for:
  - – Accounts department, human resources, IT-related directory information
  - – Central operator directory services
  - – Call accounting and internal billing
- Directory information centrally distributed to many other Ericsson applications
- Central updating retains accuracy of data which helps keep directory data up to date

Features

Subscriber data

- Full Microsoft Windows graphical user interface with common D.N.A. “look and feel”
- Tested for up to 200,000 directory entries
- Storage for people, functions, rooms and information files
- External numbers contact list
- Multiple first and last names, extensions and departments
- Alternative name spellings
- 40 user-definable fields
- Unlimited keywords
- Stored bitmap picture of subscribers can be viewed in Operator Workstation or Ericsson Communication Assistant
- Variable security level for viewing of data fields
- Activate/Deactivate Message Diversions/absence information for subscriber
- Message and diversion data stored for each subscriber
- Subscriber data available for printing by 3rd party office applications
- Visitor Registration enables operators access and printing of visitor information



Usability

- Spreadsheet-like user interface for directory data
- Sort by column
- Multiple select/change
- Find/replace for data update
- Drag-and-drop support for data change
- Directory Populate Utility enables bulk import into the D.N.A. system
- Directory Populate Utility enables bulk export into other systems
- 64 level department hierarchy tree

Interfaces

- Directory Link Interface enables directory data to be configured from external applications. With an OCX (OLE Custom control) based interface, it is possible to enable manipulation of subscriber and department data from non-D.N.A. applications.
- LDAP V3 interface enables external directory systems to read/write D.N.A. directory data. LDAP is an industry standard, allowing non-D.N.A. applications read/write access to the directory database.
- Directory "change log" enables directory data to be collected by external applications like call accounting packages and/or desktop applications or other Ericsson CTI applications.
- Interworking with Extension Manager using the transaction register to maintain accurate and synchronized information between the two applications.
- The Directory database can be used by:
  - D.N.A. Operator Workstation, Ericsson Communication Assistant and Ericsson Communication Client to read directory information, set message diversion and personal number
  - Mobile Executive to access Corporate Information, select personal profile, view and delete short D.N.A. messages and set message diversion (via your WAP enabled phone)
  - Call accounting systems (read directory information)
  - Time systems (set message diversions upon entry/exit)
  - MX-ONE Messaging™ (message diversion integration)
  - Outlook (message diversion integration)
  - Lotus Notes (message diversion integration)

Directory Interworking

- D.N.A. Operator Workstation
- Ericsson Communication Assistant
- Ericsson Communication Client
- D.N.A. Mobile Executive
- Solidus eCare™ Desktop Manager

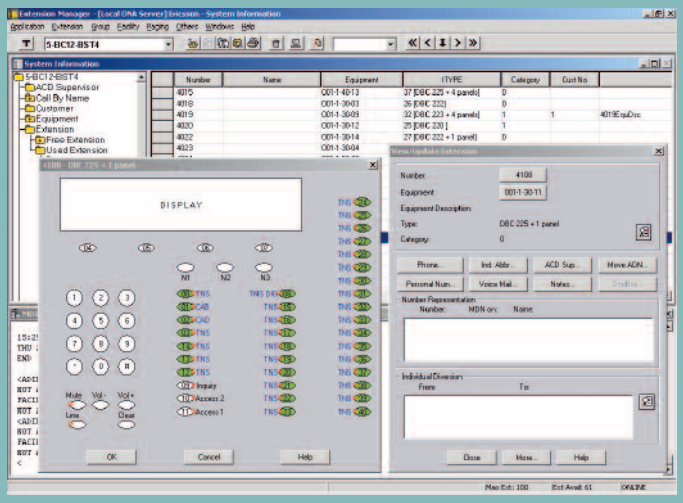
D.N.A. Extension Manager 13.1

D.N.A. Extension Manager is an application which enables the simplification of day-to-day moves, adds, and changes of telephony switch extensions and facility data.

Using a graphical user interface (GUI), Extension Manager reduces complex functionality to provide system administrators with a highly effective administrative tool. Administrators can perform tasks related to extensions more easily, quickly, and efficiently than using a standard command line interface.

- Window-based GUI configuration, with drag and drop, point and click features
- Extension and mobility feature configuration for BC12.1, MX-ONE™ Telephony Switch, and MX-ONE™ Telephony System version 3
- View, add, delete and change:
  - Extensions, groups, abbreviated numbers,
  - Categories, authorization codes, hot lines, ACD/ANCD
- Create custom templates for standardized phone set-up
- Setup, configure and modify MX-ONE™ Messaging users
- Perform changes on-line or via batch job
- Extension configuration possible from other applications via Extension Link interface

D.N.A. Extension Manager supports analog, digital, generic, ISDN, data and cordless extensions as well as IP and Mobile extensions. It automatically keeps track of both free and used extension data as well as feature and



Extension Link interface

group information. Performing moves, adds and changes is simply a matter of dragging and dropping features and parameters onto the relevant data fields. Extension Manager also supports administration of MX-ONE Messaging™ voicemail and unified messaging accounts all through one single interface providing a central point of administration.

D.N.A. Extension Manager is a true multi-user application allowing multiple sessions to be opened towards one or more MD110 and MX-ONE™ nodes. An Extension Manager user is also able to access several D.N.A. Server databases one at a time.

User benefits

- Perform adds, moves and changes immediately or when needed via batch jobs
- No external costs needed for moves, adds and changes
- Uses a simple graphical user interface (GUI) instead of specific MD110 and MX-ONE™ command syntax
- Provides an overview of occupied and free resources for early planning
- Lower total cost of ownership with centralized management for MD110 and MX-ONE™ nodes

Features

Usability

- Full Microsoft Windows (GUI) with common D.N.A. look and feel
- Spreadsheet interface for information viewing
- Drag-and-drop support for data manipulation
- Online documentation for switch parameters
- Online display of command feedback from the switch
- Easy-to-use dialog boxes
- Tree hierarchy display of system information
- Templates may be defined for common configurations
- Simultaneous multiple-user access
- User-privilege definition to enable specific functionality for different users
- Ability to access and update data on multiple D.N.A. Servers
- Daily system activities held in log files
- Multiple switch node configuration from any Extension Manager client
- Complete printout of system information

Switch interworking

- Data Synchronization of single LIMs, single boards and single extensions from the MD110 Support (MDS) and D.N.A. Extension Manager
- Online and offline mode towards MD110 and MX-ONE™
- Batch mode for offline configuration of the switch
- Displays board suffix and revision when information is viewed
- File transfer capability

MD110 and MX-ONE™ feature configuration

Extensions

View/change/add/delete:

- Digital Extensions, including function key assignments
- Analog Extensions
- Data Extensions
- Generic Extension
  - Mobile Extension
  - IP Extension
  - Short Message Service
- DNIS data configuration
- Dial by Name support for display in Digital Telephones
- Leading Zero extensions
- Choice of Language

MX-ONE™ Messaging

View/change/add/delete:

- Mailbox Number
- Set message waiting indicator
- Clear Message Waiting Indicator
- Message Retention – Unlimited or Number of days
- Callouts – In house, Local and Long Distance
- Message Management Access
- Setup Tutorial Required
- Name and Department
- Primary Extension
- Alternate extensions – Secondary Voice Extension, Fax Extension, Operator Extension, Unknown Extension
- E-mail parameters – Type (User e-mail type, none, access, store), Name (User display name), Address (User address), Logon ID, Logon Password, Server ID (e-mail server ID)
- Distribution lists that the subscriber is a member of
- Message Presentation Options

Groups

View/Change/Add/Delete:

- Common Bell
- Group Hunting
- Call Pickup
- Data
- Group Do Not Disturb
- ACD Agent groups
- ANCD groups

Facilities

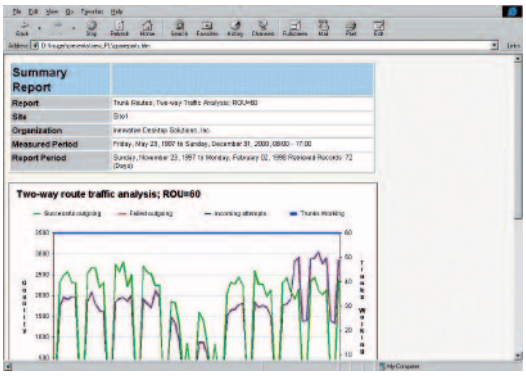
View/Change/Add/Delete:

- Common Abbreviated Number
- Common Categories
- Individual Categories
- Authorization Codes
- Account Codes
- Individual Abbreviated Numbers
- Hot Lines
- ANCD Management
- ACD Supervisor management functions
- Personal Number

Interfaces

- ExtensionLink Interface to enable extension configuration from external applications. With an OCX (OLE Custom control) based interface, it is possible to enable manipulation of extension data from non-D.N.A. application
- Interworking with Directory Manager using transaction register to maintain accurate and synchronized information between the two applications

D.N.A. Performance Manager 5.4



- Graphical interface for managing and viewing the MD110 and MX-ONE™ performance
- Easy to read and customize traffic information from the MD110 and MX-ONE™
- Traffic analysis of major MD110 and MX-ONE™ components, including Radio Base Stations and IP extensions
- Multiple MD110 and MX-ONE™ Nodes can be managed from a single Performance Manager application

D.N.A. Performance Manager provides simplified measurement and analysis of performance data from MD110 and MX-ONE™. It also gives the MD110 and MX-ONE™ administrator information about the overall performance of trunks, routes, operators, individual extensions and common system resources. Performance Manager supports extended reporting or radio base station performance statistics. Performance data can be easily accessed from the MD110 and MX-ONE™ through the simple user interface. This data is automatically retrieved and stored in the D.N.A. Server.

Using the Performance Presentation Manager sub-modules the data can be easily viewed, modified and presented in either report or graphic formats for printing or distribution within the organization. Performance Manager ‘Lite’ provides an additional method of viewing reports via a Web browser. Performance Manager Lite makes it possible to access six pre-defined reports.

Using Performance Manager, potential bottlenecks in the MD110 and MX-ONE™ implementation can be avoided and system resources tuned to ensure maximum availability.

User benefits

- Optimized trunk routes or leased lines means optimized payments to your service provider
- Correct number of trunks means more calls staying on the corporate network for increased calls, faster access and reduced toll charges
- Insufficient incoming trunks means callers (customers) hang up and potential business is lost
- Graphical interface saves time by enabling customized reports specific to your organization
- More information available in your organization through effective distribution of traffic information
- Easy-to-use access to traffic information using PMG Lite
- Optimized call groups and operator configurations enable high level of service for incoming callers

Features

Performance Data Manager

- Full Microsoft Windows graphical user interface with common D.N.A. look and feel
- Up to 250 traffic measurements from the MD110 and MX-ONE™
- Manage up to 250 traffic measurements in total for:
  - Trunks
  - Extensions
  - Operators
  - PCM Lines
  - Common system resources
- Multi-user environment for local and remote connections
- Automatic or manual traffic data extraction from MD110 and MX-ONE™
- Back-up and restore of historical traffic measurement data for presentation access
  - Up to six months for primary database
  - Up to a year for auxiliary database
- Online display of the MD110 and MX-ONE™ feedback
- Drag and drop support for data manipulation
- Multiple MD110 and MX-ONE™ configurations
- Daily system log files

Performance Presentation Manager

- Macro Wizard for easy-to-design reports
- Simplified graphical user interface using Microsoft Excel
- Fully customizable report layouts
- Predefined reports for:
  - Operators
  - Trunk routes
  - Extensions
  - Hunt groups
  - PCM Lines
  - Cordless Extensions
  - IP Network Interface
- View reports in graphic, tabular or summary formats
- Manipulate chart data by editing existing traffic measurement data fields to create new reports
- All database fields available for customizable reports
- Task scheduler:
  - Automatic printing of reports
  - Automatic mailing of reports
- Capability to switch between accessing primary or auxiliary databases

PMG Lite

- Web access to 6 pre-defined reports using an internet browser

Technical information

Hardware/Software

Since each D.N.A. configuration has different storage and processing requirements, the following is a general guideline for a small D.N.A. installation:

- Pentium IV2.4 GHz or better for the D.N.A. server
- Pentium III 800 MHz for client applications
- 512 MB RAM
- Minimum 1024x768 SVGA monitor
- Network Card and TCP/IP network protocol
- D.N.A. Server: Microsoft Windows 2000 or Windows 2003
- D.N.A. clients: Microsoft Windows 2000, Windows 2003, or Windows XP
- Microsoft SQL Server 2005, SQL Server 2005 Express, SQL Server 2000, MSDE 2000
- D.N.A. Performance Presentation Manager requires Microsoft Excel 2000, 2002 or 2003 to view reports.
- D.N.A. Performance Manager Lite requires Internet Explorer 5.5 or later

Communication

Connection to the MD110 and MX-ONE™ is achieved via Ethernet using the Network Interface Unit (NIU) or V.24 connections.

D.N.A. Performance Manager clients can connect to D.N.A. Server via Ethernet, TCP/IP or dial up RAS connection.

Compatibility

D.N.A. 5.4 is compatible with MD110 BC12.1, MX-ONE™ Telephony Switch, and with MX-ONE™ Telephony Server version 3

Dynamic Network Administration 5.5

Product News

Executive Summary

This Product News covers the latest enhancements related to the D.N.A. 5.5 Application Suite.

D.N.A. 5.5 has been enhanced with an installation option to enable only MX-ONE Version 3.1 management support consisting of D.N.A. Server and Extension Manager (EMG). D.N.A. has also been enhanced to support Microsoft Vista.

The D.N.A. 5.5 software is released as a new media kit; please place an order with the Enterprise Order desk for item LZY 601 177.

Yours truly,

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1 D.N.A. 5.5

D.N.A. 5.5 has a specific installation option for MX-ONE Version 3.1 and also supports new functionality in Extension Manager for MX-ONE Version 3.1.

Along with the MX-ONE Version 3.1 enhancements, D.N.A. 5.5 is also a sustaining release of D.N.A.

2 D.N.A. Product Information

The release of D.N.A. 5.5 does not impact the already announced D.N.A. phase-out schedule.

No other D.N.A. product documentation will be updated as D.N.A. is phased out so minimal effort will be made on items such as product offer documents, datasheets, ordering information, presentations, etc. For example the data sheet for D.N.A. 5.4 is still valid for D.N.A. 5.5.

License files from D.N.A. 5.4 will work with D.N.A. 5.5 upgrades so you don't have to regenerate ELM license files. For the majority of our customers, D.N.A. 5.5 can be viewed as a service pack release.

3 D.N.A. 5.5 and MX-ONE V.3.1

D.N.A. 5.5 has a new install option for use with MX-ONE Version 3.1. This installation option will install the D.N.A. server and EMG only. New licenses for this new install option are as follows:

Product Number	**Description**
FAL 104 7211	D.N.A. server SW key, 1 server
FAL 104 7212	MX-ONE Extension Manager SW key, 1 extension
FAL 104 7237	MX-ONE Extension Link SW key unlimited, 1 server

4 New MX-ONE V.3.1 Functionality

MX-ONE Version 3.1 support has mainly impacted Extension Manager where support for the following functions has been added:

- SMS for DECT
- MCT for IP
- Hotline for Generic extension
- IP Security
- Auth Code / Acc Code

In PDM support for MX-ONE Version 3.1 has been updated to support command changes in FIFCP but, no new functionality has been implemented.

5 D.N.A. and Vista Support

All D.N.A. client applications can be installed and used on Microsoft Windows Vista.

6 New Media Kit Required

A new media kit for this release is required due to:

- Microsoft Vista support for all client applications
- MX-ONE Version 3.1 installation option

7 System Information

System information:

- ***PBX:*** MX-ONE Telephony Switch, & MX-ONE Version 3.1
- ***Server Side:*** Windows 2000 server, Windows 2003 R2 server
- ***Client Side Support:*** Windows XP, & Vista
- ***Database:*** Microsoft SQL 2000/MSDE & SQL 2005/Express

- ***Webserver:*** IIS 5.0 for Windows 2000, IIS 6.0 for Windows 2003

8 Reasons to Upgrade to D.N.A. 5.5

Reasons to upgrade to D.N.A. 5.5:

- New support: MX-ONE Version 3.1 and Microsoft Vista
- Software is a free upgrade from D.N.A. 5.x versions
- Partners with D.N.A. 5.4 PBA are automatically approved for D.N.A. 5.5

D.N.A. 5.4 is no longer supported from a sustaining perspective. All sustaining activities will be handled in D.N.A. 5.5.

9 Contacts and Support

For more information about this product news document, please contact your Ericsson Enterprise Channel Manager.