

What's New in Mobility XE Version 8.5

Before Upgrading

The Mobility XE version 8.5 client and server setup software was designed to allow for either a brand new installation or to upgrade an existing installation. When upgrading from a previous version of the Mobility XE client or server, the Mobility XE version 8.5 setup software can only be used to upgrade (e.g. overinstall) on Mobility XE version 6.7 or later. If you are running a version of the Mobility XE client or server prior to version 6.7, you must first upgrade to version 6.7 prior to upgrading to version 8.5.

Mobility XE version 8.x also requires Level 4 license keys. If you are already running version 8.0 in production, you should have permanent Level 4 license keys. You can safely overinstall version 8.5 software on servers running version 8.0. After installation, the Mobility XE server will require a reboot, so you should plan for some downtime.

If you are upgrading from a version of Mobility XE prior to 8.x, your Level 2 (Mobility XE version 6.x) or Level 3 (Mobility XE version 7.x) permanent license keys will be converted to temporary (time-limited) Level 4 license keys. Only customers with Premium Maintenance agreements or those who pay for the upgrade will be granted permanent Level 4 license keys. The only way to restore a Mobility XE server pool that has been upgraded to version 8.5 is by restoring system backups for the Mobility warehouse and Mobility servers that were made prior to upgrading.

Clients prior to version 6.7 will automatically be disconnected from a version 8.0 or later Mobility server. And version 8.0 or later clients will be disconnected from a version of the Mobility XE server prior to 6.7.

Customers running version 8.0 with active Standard or Premium maintenance contracts can upgrade to version 8.5 at no additional charge. Customers running versions prior to 8.0 with active Premium maintenance contracts can upgrade to version 8.5 at no additional charge. Accepting permanent license keys for new modules may, in some instances, increase your maintenance renewal fees the next time maintenance is renewed.

Major Features & Changes

New Analytics Module

A new Analytics Module enables Mobility XE server pools to report on information collected from all servers in the pool. The module includes 22 reports that can be configured on-the-fly, as well as over 30 alerts that can be sent automatically by the Mobility system via SNMP, SMTP, and syslog to notify system administrators when critical events occur. In addition, the module uses Microsoft SQL Server and has a published data schema to allow organizations with in-house data analysts to access all of the data collected in order to write custom reports.

Reports. The Analytics Module contains 22 reports, each with customizable filters that allow you to find the information you're looking for. Reports cover many different areas of system usage including

applications, connection attempts, roaming, network usage, notifications, operating systems, and server status, to name a few. Most reports automatically display graphical information to help identify trends. Each report can be printed, saved as a CSV file, or linked to with a URL. And filter criteria for regularly run reports can be saved to speed access to common reports.

Notifications. Notifications are generated automatically and sent via email, SNMP, and syslog when critical system events occur, allowing administrators to manage by exception without having to check the Mobility console to see if everything's still running properly. There are 31 different notifications the system will generate, some with configurable parameters and thresholds. Notifications are automatically generated for configurable thresholds on the Mobility Server (memory, network, and CPU), warehouse status, licensing, battery status, and when Mobility clients repeatedly fail to connect.

Advanced Authentication support for smart cards and X.509v3 user certificates

Mobility XE now supports strong user authentication using Public Key Infrastructure (PKI) systems that support smart cards and X.509v3 user certificates using RADIUS as the front-end to Microsoft's Active Directory Authentication and PKI. EAP-TLS or EAP-TLS inside PEAP are required as the authentication protocol between Mobility XE clients and the RADIUS service when configured to authenticate users with smart cards or with X.509v3 user certificates. Because the Microsoft PKI infrastructure is bundled with their server operating systems, and with several free or low-cost RADIUS server options available, this approach represents a very low-cost but robust option for public safety agencies seeking to comply with the CJIS requirements for Advanced Authentication who may not have allocated additional budget to bring their systems into compliance.

Smart card support complies with the requirements outlined in Homeland Security Presidential Directive 12(HSPD-12) and conforms to Federal Information Processing Standards Publication 201 (FIPS201), Personal Identity Verification (PIV) of Federal Employees and Contractors and NIST Special Publication 800-78-1. Cryptographic Algorithms and Key Sizes for Personal Identity Verification are all supported. Smart cards from vendors that meet Microsoft's smart card minidriver requirements and smart cards from vendors that provide a Microsoft Cryptographic Service Provider (CSP) are all compatible.

X.509v3 user certificates are supported when stored on the mobile device in a protected location only accessible to users who successfully complete desktop authentication and who provide the user certificate password.

Other Features, Changes & Bug Fixes

Added full support for Windows Vista SP1 and Windows XP SP3

Added full support for Windows CE 5.0 devices with SH4 processors

New function calls in Mobility Client API

New function calls in Mobility client API (NMCLAPI.dll) to allow toggling "Load on startup" and to determine whether the Mobility client is running.

Updated NAC Support

The Mobile NAC module now supports Cisco Security Agent and Microsoft ForeFront. See technical note [2234 "NAC Module Compatibility Chart"](#) on www.netmotionwireless.com.

Better management of stale sessions in a server pool when using RSA SecurID (11606)

Added functionality to prune the stale sessions created on the server over a period of time either when the authentication method being used did not support load balancing (RSA) or load balancing for the pool had been turned off. The new stale session manager can be configured with assistance from technical support to run periodically to prune the stale sessions left on the server.

Added default "Server" column on "Connection List - All Connections" page (11864)

The connections list page now shows the server name column by default that a particular user or device is connected to. The column was available in the previous release as one of the column options.

Static IP Address Assignments are now available in the Users window in the Mobility Console (11406)

A new column is available to display static IP Address assignment in the Mobility console for both users and devices. In previous versions the column was only available for devices, not users.

New POP and Virtual IP address filters added to client connection page (3014)

Mobility server has had the capability to search the connection lists for a particular device or user name. The functionality has been extended to search connection lists using the 'Point of Presence' and the 'Virtual IP' address.

Shorter log-in times when 'waiting for Mobility adapter' (11684)

Fixed an issue on the client where the initial login after a reboot would sometimes take up to 60 seconds even when the client had a point of presence address available to reach the Mobility server.

Modified client and server setup to warn on unsupported operating systems (8082)

When Mobility XE setup for client or server is run on an unsupported operating system, it pops up a warning message. Users can still choose to continue the installation, but the system will not be supported and there is no assurance the system will function properly.

Fixed IPSec compatibility on Win 2003 Server (12304)

IPSec tunneling between a Mobility client and server now works on Windows 2003 server, regardless of the Service Pack. Mobility server on Windows 2003 Server did not work with IPSec in the last couple of releases.

Fixed proxy ping on Windows Vista SP1 (11704)

The ping functionality through the Mobility client software running on Vista Service Pack 1 is now fixed.

Fixed warehouse session consumption under heavy pool load (11797)

Fixed a problem on the Mobility XE 8.0 server where there was a leaking handle that caused the Mobility server to have open LDAP connections. This could cause the warehouse to run out of connections when the Mobility pool was under a heavy load.

Importing rules/rule sets with illegal names now prevented (11858)

Fixed a bug where importing rules and rule sets with invalid names was not being validated. We now both validate and display an error if the particular rule or rule set cannot be imported into the Mobility console.

Fixed Mobility XE client install via ActiveSync on Window CE 5.0 devices (12555)

Fixed rare blue screen with shared NetBIOS sessions on Windows Vista clients (11678)

Fixed a blue screen on the Windows Vista client when Mobility client went into bypass with active NetBIOS sessions.

Fixed truncation of large lists of network addresses in Policy rules (12445)

Fixed a bug that truncated part of a list of network addresses in a Policy module rule (e.g. Block, Allow, etc.) if the list exceeded about 500 characters.

System Requirements

Mobility XE Hardware and Software Requirements for Version 8.5

Mobility XE small deployment server system

- **Processor:** x86-compatible Pentium 4 processor, 2.0 GHz (minimum).
- **Operating system:** Microsoft Windows Server 2003 R2 (Service Pack 2), Microsoft Windows Server 2003 (Service Pack 2),.
- **RAM:** 2 GB, minimum.
- **Disk space:** 4 GB free, minimum.
- **Browser (with JavaScript enabled):** Internet Explorer v7, Internet Explorer v6, Firefox 2.0.

The Mobility XE small deployment server system installs the Mobility server, Mobility warehouse, Mobility reporting server, and Microsoft SQL Server 2005 (SP2) Express Edition on one machine. It is intended for pilot programs and small deployments with up to 100 clients

Stand-alone Mobility server

- **Processor:** x86-compatible Pentium 4, 2.0 GHz (minimum).
- **Operating system:** Microsoft Windows Server 2003 R2 (Service Pack 2), Microsoft Windows Server 2003 (Service Pack 2),.
- **RAM:** 2 GB, minimum.
- **Disk space:** 1GB free, minimum.
- **Browser (with JavaScript enabled):** Internet Explorer v7, Internet Explorer v6, Firefox 2.0.
- **For RSA SecurID user authentication:** RSA Authentication Agent version 6.0 or higher.

Stand-alone Mobility warehouse

- **Processor:** x86-compatible Pentium 4, 2.0 GHz (minimum).
- **Operating system:** Microsoft Windows Server 2003 R2, Microsoft Windows Server 2003 (Service Pack 2).
- **RAM:** 2 GB, minimum.
- **Disk space:** 3 GB for a pool of four or fewer Mobility servers. 5 GB for a pool of five or more Mobility servers.

Stand-alone Mobility reporting server (for Analytics Module)

- **Processor:** x86-compatible Pentium 4, 2.0 GHz (minimum).
- **Operating system:** Microsoft Windows Server 2003 R2 (Service Pack 2) or Microsoft Windows Server 2003 (Service Pack 2).
- **RAM:** 2 GB, minimum.
- **Disk space:** 1 GB free, minimum.
- **Browser (with JavaScript enabled):** Internet Explorer v7, Internet Explorer v6, Firefox 2.0.

Stand-alone Mobility database server (for Analytics Module)

- **SQL Server platform:** SQL Server 2005 Enterprise Edition (Service Pack 2), SQL Server 2005 Standard Edition (Service Pack 2), SQL Server 2005 Express Edition (Service Pack 2). NOTE: SQL Server 2005 Express Edition is automatically installed to satisfy this requirement when installing a “small deployment server” or “Mobility reporting database.”
- **Processor:** x86-compatible Pentium 4, 2.0 GHz (minimum), or equivalent.
- **Operating system:** Microsoft Windows Server 2003 R2 (Service Pack 2) or Microsoft Windows Server 2003 (Service Pack 2).
- **RAM:** 2 GB, minimum.
- **Disk space:** 2 GB, estimated to maintain about 13 months of data for 100 Mobility clients.

Mobility client for Windows Vista, Windows XP, or Windows XP Tablet

- **Operating system:** Microsoft Windows Vista (Business, Enterprise, or Ultimate Edition), Microsoft Windows XP (Service Pack 2), Microsoft Windows XP Tablet (Service Pack 2).
- **Disk space:** 10 MB free.
- Mobility XE online help requires a web browser that supports HTML 4.0, JavaScript 1.2, and CSS1 or higher.

Mobility client for Windows Mobile and Windows CE

- **Processor:** StrongARM 1100 or compatible processor (e.g., XScale) or SH4 processor.
- **Operating system:** Microsoft Windows Mobile 6.0 (Classic, Standard, or Professional), Microsoft Windows Mobile 5.0 for Smartphone or Pocket PC, or Microsoft Windows CE version 5.0.
 - See [technical note 1515](http://www.netmotionwireless.com) on www.netmotionwireless.com for a current list of tested device types and processors.
- **Storage memory:** 3 MB free on Windows Mobile for Pocket PC devices, or 7 MB free on Windows Mobile for Smartphone.
- ActiveSync installation requires ActiveSync v. 4.1 or greater.
- **Network requirements**
- To integrate Mobility XE into a wireless network environment, you must have at least one of the following:
 - A wireless LAN adapter installed on a mobile device and wireless access points installed on the wired network.
 - A wireless WAN device installed on a mobile system and available wireless WAN service (for example, an account with a service provider).
 - A modem installed on a mobile device and available dial-up service.
- Server components should be installed on workgroup or domain machines. Mobility XE does not support servers installed on domain controllers.
- For subnet roaming, DHCP services must be available on the network.

End-of-Life Notice

Mobility XE version 6.7

NetMotion Wireless has announced the end-of-life (EOL) for NetMotion Mobility XE version 6.7 will occur on December 31, 2009. Customers who want to continue receiving technical support must upgrade to Mobility XE version 7.x or a later version. Until December 31, 2009, customers with maintenance contracts will continue to receive support. Until it is discontinued, any NetMotion Wireless customers can upgrade without charge to Mobility XE version 6.7 from any previous version of Mobility XE. And for customers running Mobility versions prior to 6.7, upgrading to version 6.7 may be a necessary but temporary step in the upgrade path to version 8.5 or later versions.

Specific EOL announcements for future versions will be issued at least 12 months in advance of their end-of-life effective date.

Discontinued Support

MS Windows 2000 Server Operating System

Support for Windows 2000 Server has been deprecated in Mobility XE version 8.5. Customers should upgrade their Mobility XE server infrastructure to Windows Server 2003 SP2.

MS Windows 2000 Professional Operating System

Support for Windows 2000 Professional has been deprecated in Mobility XE version 8.5. Customers should upgrade their Mobility XE client devices to Windows XP or Windows Vista.

MS Windows CE 4.2 and Pocket PC 2003 Operating Systems

Support for Windows CE 4.2 and the Pocket PC 2003 operating systems has been deprecated in Mobility XE version 8.5.

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