NOKIA

Nokia Intellisync Wireless Email Linux Installation Guide

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Nokia Intellisync Wireless Email Linux Installation Guide

Contents

About This Guide

This guide is organized into the following chapters.

- Chapter 1, "System Requirements"
- Chapter 2, "Server Installation"
- Chapter 3, "Post-Installation Testing"

Additional information is provided in this specific chapter.

- Conventions This Guide Uses
- Related Documentation

Conventions This Guide Uses

The following sections describe the conventions this guide uses, including notices, text conventions, and command-line conventions.

Notices

Warning
Warnings advise the user that bodily injury might occur because of a physical hazard.

Caution
Cautions indicate potential equipment damage, equipment malfunction, loss of performance, loss of data, or interruption of service.

Note
Notes provide information of special interest or recommendations.

Command-line Conventions

You may encounter one or more of the following elements on a command-line path.

Table 1 Command-line Conventions

Convention	Description
command	This required element is usually the product name or other short word that invokes the product or calls the compiler or preprocessor script for a compiled Nokia product. It might appear alone or precede one or more options. You must spell a command exactly as shown and use lowercase letters.
Italics	Indicates a variable in a command that you must supply. For example: **delete interface *if_name*** Supply an interface name in place of the variable. For example: **delete interface nic1**
angle brackets < >	Indicates arguments for which you must supply a value: **retry-limit <1–100>** Supply a value. For example: **retry-limit 60**
Square brackets [ ]	Indicates optional arguments. **delete [slot *slot_num*]** For example: **delete slot 3**
Vertical bars, also called a *pipe* (|)	Separates alternative, mutually exclusive elements. **framing <sonet | sdh>** To complete the command, supply the value. For example: **framing sonet** or **framing sdh**
-flag	A flag is usually an abbreviation for a function, menu, or option name, or for a compiler or preprocessor argument. You must enter a flag exactly as shown, including the preceding hyphen.
.ext	A filename extension, such as .ext, might follow a variable that represents a filename. Type this extension exactly as shown, immediately after the name of the file. The extension might be optional in certain products.
(. , ; + * - /)	Punctuation and mathematical notations are literal symbols that you must enter exactly as shown.
' '	Single quotation marks are literal symbols that you must enter as shown.

Text Conventions

Table 2 describes the text conventions in this guide.

Table 2 Text Conventions

Convention	Description
monospace font	Indicates command syntax, or represents computer or screen output, for example: Log error 12453
bold monospace font	Indicates text you enter or type, for example: **# configure nat**
Key names	Keys that you press simultaneously are linked by a plus sign (+): Press Ctrl + Alt + Del.
Menu commands	Menu commands are separated by a greater than sign (>): Choose File > Open.
The words enter and type	Enter indicates you type something and then press the Return or Enter key. Do not press the Return or Enter key when an instruction says *type*.
Italics	• Emphasizes a point or denotes new terms at the place where they are defined in the text. • Indicates an external book title reference. • Indicates a variable in a command: **delete interface *if_name***

Related Documentation

Nokia offers a common framework for the Nokia Intellisync Mobile Suite products. For this reason, there are electronic manuals and online help systems that cover the entire suite, plus additional resources for specific products.

For instructions to access documentation, see the following topics:

- Accessing Server Documentation
- Accessing Server Online Help
- Accessing Client Documentation

Accessing Server Documentation

The following server guides are available for Wireless Email. These documents are available on the Nokia Support Web Site (http://support.nokia.com) in Adobe Portable Document Format (PDF) or through your system administrator.

Nokia Intellisync Linux Installation Guide (WELinuxInstallGdeEN.pdf) Includes the installation requirements and other information you need to install Nokia Intellisync Wireless Email software.

Nokia Intellisync Wireless Email Release Notes (ReleaseNotesEN.pdf) Includes important information you should know before you install and use Nokia Intellisync Wireless Email. This document includes important late-breaking information that may not be included in other documentation.

Nokia Intellisync Wireless Email Administrator's Guide (WirelessEmailAdminGuideEN.pdf) Covers system administrative functions for managing the Wireless Email server and client operation.

Nokia Intellisync Secure Gateway Administrator's Guide (SecureGatewayGdeEN.pdf) Written as a companion book to the administrator's guide. Covers administrative functions for managing the Secure Gateway.

Accessing Server Online Help

Nokia Intellisync Mobile Suite installs an online help system as part of the application to assist you as you work with WebAdmin Console.

Nokia Intellisync Mobile Suite WebAdmin Console Help Includes information for managing the server using a Web browser.

Accessing Client Documentation

The following electronic documents are available on the Nokia Support Web site (http://support.nokia.com) in Adobe Portable Document Format (PDF) or through your system administrator.

Client Installation and Setup Guides

Each guide includes information for installing software on devices using a specific platform, configuring synchronization settings, and synchronizing for the first time.

Table 3 Client Guides

Name	File Name
Intellisync Mobile Suite Client Guide–Palm OS Platform	PalmUsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–Pocket PC Platform	PPCUsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–Smartphone Platform	SmartphoneUsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–S60 3rd Edition Platform	Symbian60_UsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–S80 Platform	Symbian80_UsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–UIQ 2nd Edition Platform	SymbianUIQ_UsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–UIQ 3rd Edition Platform	SymbianUIQ3_UsersGuideEN.pdf
Intellisync Mobile Suite Client Guide–J2ME Platform	J2ME_UsersGuideEN.pdf

Note
The client guides are *not* installed as part of the client installation. You decide whether to provide the documentation to your users.

Nokia Intellisync Wireless Email Linux Installation Guide

1 System Requirements

Nokia Intellisync Wireless Email offers centralized email and personal information manager (PIM) synchronization for your users. Wireless Email allows users to synchronize email, contacts, memos, calendar, and to-do items among all their mobile devices, eliminating duplicate data entry. This same data is accessible from any Internet-ready mobile phone and Web browser on any computer connected to the Internet. For supported devices, you can set up the Push feature so users receive new email as it arrives on the server.

Recommended Server Configuration

Many factors—the number of users, the number of concurrent users, and the volume of information shared, among others—affect how you should set up your system. This section provides some general guidelines for configuring the server.

Components Requiring Dedicated Computers

Depending on the size of your installation and your number of users, some components may be installed on the same computer. Other components perform best when installed on a dedicated computer (or computers).

You should *not* install Nokia Intellisync Wireless Email on the same computer with the Novell GroupWise server.

Product Evaluation and Small Installations

For a product evaluation, you may install the Nokia Intellisync server and the database on the same computer. A single computer that meets the minimum requirements can easily handle both the server and database for a product evaluation or small installation (under 100 users).

After evaluating the product, many customers choose to purchase a license key and upgrade their evaluation environment to a production environment. For larger installations where the Nokia Intellisync server and the database are on the same computer, the system administrator is potentially limiting scalability. If you anticipate converting your existing evaluation system to a production system supporting more than 100 active users, consider using separate computers for the Nokia Intellisync server and the database during evaluation.

Minimum Requirements

Table 4 and Table 5 show the minimum requirements for all Nokia Intellisync Mobile Suite products. As minimum requirements, they may not provide the optimal environment for peak system performance.

Table 4 Client Minimum Requirements

	PC Client	Pocket PC	Smartphone	Palm OS	Symbian	J2ME
HARDWARE						
Processor Type	Pentium	Supported processor type: ARM - XScale				
Hard Disk Space	64MB					
Memory	64MB RAM	32MB RAM	32MB RAM	8MB RAM	32MB RAM	
SOFTWARE						
Operating System	• Windows 2000 • Windows 2003 • Windows XP	Windows Mobile 5.0 or later	Windows Mobile 5.0 or later	Palm OS 4.0 up to 5.4	• Symbian OS 7.0 • Symbian OS 8.0 • Symbian OS 9.1	• S40 3rd Edition, Feature Pack 2 • Some Feature Pack 1 Devices • JP-7; 7, 135, 118 (MIDP-2.0), 139 (CLDC-1.1)
Browser	Microsoft Internet Explorer 6.0 or later					
Other	Microsoft TCP/IP protocol network environment	ActiveSync 4.1 or later (on desktop or laptop)	ActiveSync 4.1 or later (on desktop or laptop)	HotSync 6.0.1 or later (on desktop or laptop)	Symbian 2nd Ed: UIQ, S60, S80 Symbian 3rd Ed: S60, UIQ	

Table 5 Server Minimum Requirements

	Wireless Email
HARDWARE	
Processor	Pentium III 900MHz
Hard Disk Space	5 GB free disk space
Memory	2 GB RAM
SOFTWARE	
Operating System	SLES 10 (SUSE Linux Enterprise Server 10)
Browser	Firefox 2.0 or Internet Explorer 7 or later
Other	TCP/IP network environment
Supported Databases	Sybase ASA 9.0.1
OTHER REQUIREMENTS	
Permissions	Root
Open port 443	Open port 443 for license server, secure Web access (HTTPS), synchronization requests, and for Windows Mobile Provisioning
Open port 80	Open port 80 for Web access and synchronization requests
Open port 3102	Open port 3102 for synchronization requests
Open port 25	Open port 25 for SMS push (The SMTP (sendmail) service must be configured correctly.)
Latency between IMS server and other backend server, database, or file system	36 milliseconds or less

Note
Make sure the server's temp directory has a minimum of 1 GB free space to successfully extract installation files.

2   Server Installation

This chapter contains information for installing Nokia Intellisync Wireless Email on the Linux server. In addition to basic installation instructions, there are steps you can take before and after installation to make sure Nokia Intellisync Wireless Email functions correctly.

Before You Install

Complete the following tasks *before* installing the software.

- If you have a previous release of Nokia Intellisync Mobile Suite running on a Linux server, you must first uninstall that version before installing a new release. For instructions to uninstall an existing Linux version of Nokia Intellisync Mobile Suite, refer to "Uninstalling an Existing Linux Version of Intellisync Mobile Suite" on page 18.

- Read the Release Notes document on the Nokia Support Web site (http://support.nokia.com) for important information about this release.

- Use the requirements in Chapter 1, "System Requirements" to verify that all prerequisite software is installed and functioning properly.

- To run the installer in graphical mode, you must have an X server running during installation. If you do not have X installed on your server, you can use X forwarding and connect from a machine that is running X. To enable X forwarding when connecting from another machine, use the parameter "-X" with ssh. Refer to the following example.

  desktop1:/root# ssh -X root@server1

  The installation instructions in this document are based on the assumption that you are currently in the directory containing the installation files and that the downloaded installation files are located in `/root/download/gms.`

Uninstalling an Existing Linux Version of Intellisync Mobile Suite

If you have a previous release of Nokia Intellisync Mobile Suite running on a Linux server, you must first uninstall that version before installing a new release.

To uninstall a previous release

1. Run the uninstall shortcut:

    sh Uninstall_Nokia_Intellisync_Mobile_Suite

    Note
    The default location for this file is the root folder.

Complete the following steps after uninstalling an existing version running on a Linux server.

2. To preserve your data, copy all remaining directories to another location.

3. Run the following command:

    rm -rf /opt/ims

4. Go to the following file and remove any reference to GMS services (mobilesuite, securegateway, and asadb):

    /etc/init.d

5. Go to the following file and remove any reference to GMS services (mobilesuite, securegateway, and asadb):

    /etc/crontab

Installing on a Linux Server

The server installation program uses InstallAnywhere to ensure your computer meets specific requirements before installing the software. If the InstallAnywhere application detects a problem, the installation stops. You can restart the installation once you correct the problem.

Nokia Intellisync Wireless Email contains the following installation files.

- ims.bin
- ClientPack_*x.x.x*.jar (where *x* represents the version number)
- branding/branding.iam.zip
- branding/eula.txt
- silent/installer.properties (for running a silent installation)
- documentation
- db directory

Note
The installation must be run as **root**.

Starting the Installation

You can install Nokia Intellisync Wireless Email using one of the following options:

- Graphical installation—provides a sequence of dialog boxes that require you to enter information such as your license key, the default administrator password, and company information. The graphical installation requires you to install from the server that is installing the program or you can use a remote server with X-Window tunneling. To run the graphical installation, see "Running a Graphical Installation" on page 19.

- Silent installation—provides a properties file that you can edit to configure information unique to your installation, such as your license key, company name, and default administrator password. The silent installation does not require an X server running, although it can run in graphical mode as well. The silent installation requires you to install from the server that is installing the program or you can use a remote machine without X-Window tunneling. To run a silent installation, see "Starting and Stopping Services" on page 23.

Running a Graphical Installation

Complete the following steps to run the graphical installation for Nokia Intellisync Wireless Email. Close all applications before starting the installation. The installation screens that appear in this guide may differ slightly from the screens that appear during your installation.

To install using the graphical installation

1. Change the directory to the installation folder on the server, and run the following command:

   `./ims.bin`

   The Introduction dialog box appears.

2. Click Next.

   The Enter License Key dialog box appears.

3. Enter a valid license key for your software, and then click Next.

   The License Agreement dialog box appears.

4. Review the license agreement, select "I accept the terms of the License Agreement," and then click Next.

   The Choose Install Set dialog box appears

5. Complete one of the following, and then click Next.

   - Click Mobile Suite to install the components of Nokia Intellisync Mobile Suite for which you have a license.
   - Click Secure Gateway only if you have already installed Nokia Intellisync Mobile Suite, and then proceed to step 7.

   The Choose Uninstall Link Folder dialog box appears.

6. Select one of the options, and then click Next. If you select Other, you can choose any valid path on the system except the /opt/ims installation folder. The folder you select will contain the links to uninstall the software.

The WebAdmin Password dialog box appears.

7. In the Password field, type a password for accessing WebAdmin Console administrative server functions. You must use this password to logon to the server as an administrator. Passwords are alphanumeric only. The default user name is "admin," which is created during the installation.

8. In the Confirm Password field, type the password again, and then click Next.

The Company Information dialog box appears.

9. Type your company name using only alphanumeric characters.

10. Type your two letter country code in International Organization Standardization 3166 country code format. To look up your country code, type the following URL: http://www.iso.org/iso/english_country_names_and_code_elements.com

11. Type your external server name to which clients may have access from outside the firewall. Use a fully qualified domain name format: *servername.domain.suffix*.

12. Click Next.

The Pre-Installation Summary dialog box appears.

13. Click Install to begin installing the software.

When the installer finishes processing the files, the Install Next Steps dialog box appears.

14. Review the information and note the server address. This is the server address for launching and accessing Nokia Intellisync Mobile Suite.

15. Click Next.

When the installation completes, the Install Complete dialog box appears.

16. Click Done.

17. Open a Web browser and type http://<*serveraddress*>/admin to access the WebAdmin Console.

Running a Silent Installation

You can configure and run a silent install if you want to automate the installation of Nokia Intellisync Wireless Email or you do not have an X server running.

To configure and run a silent installation

1. From the installation folder on the server, open the following file:

   silent/installer.properties

2. Edit the following file parameters to match your environment.

File Parameter	Instructions
INSTALLER_UI=silent	Installation is silent with minimal console output. **Note**: Do not change this parameter.
CHOSEN_INSTALL_SET=Mobile	Default setting to install Nokia Intellisync Mobile Suite. To install only Secure Gateway, change the parameter to CHOSEN_INSTALL_SET=Secure
LICENSE=	Type your license key. The license key must be valid or the installation will stop.
USER_SHORTCUTS=/root	Selects the directory for creating the uninstall links. You can set this value to any valid path on the system except the /opt/ims installation folder.
ADMIN_PW=	Type a password for accessing the server administrative functions in WebAdmin Console. Passwords are alphanumeric only and must not contain symbols. **Note**: Do not type a password if you are installing only Secure Gateway.
ADMIN_COMPANY_NAME=	Type your company name using only alphanumeric characters.
ADMIN_COUNTRY=	Type your two letter country code.
SERVERURL=	Type your external server name to which clients can access from outside the firewall. Use the format: *server.domain.suffix* **Note**: Do not add http:// or https:// to the server name.

3. Open a terminal window.

4. Change the directory to the installation folder on the server, and run the following command:

   ims.bin -f ./silent/installer.properties

   The installation process starts.

5. Open a Web browser and type http://<*serveraddress*>/admin to access the WebAdmin Console.

Restoring Existing Data

If you uninstalled a previous version and copied data to another location, complete the following steps. For instructions on starting and stopping services, refer to "Starting and Stopping Services" on page 23.

1. Manually stop services.

2. Copy the data and, if prompted, select Overwrite All.

3. Manually start services.

Verifying GroupWise Mobile Server Requirements

For the GroupWise Mobile Server to run properly, GroupWise Post Office Agent must be installed on the GroupWise server, as it is needed by the SOAP interface used by the GroupWise translator. Refer to your Novell GroupWise documentation for more information about installing GroupWise Post Office Agent.

Configuring the GroupWise Mobile Server

There are several configuration changes that must be made to synchronize successfully with a GroupWise account.

- External server names must be set correctly. For example, Web Site Server, Sync Server, and Network Push Server. Using the WebAdmin Console, go to System Settings > Server Names and verify the external server names are set correctly to your external IP address/DNS names.

- You can create authentication sources using the WebAdmin Console. Go to System Settings > Authentication > Sources > New GroupWise.

  Note: If you are using a GroupWise authentication source and your GroupWise server requires Secure Sockets Layer (SSL) for SOAP access, select the "Use SSL" option. Afterward, go to User Settings > Wireless Email > Novell GroupWise. From the Novell GroupWise Access tab, click Edit, and then select the "Use SSL" option.

- To manage and add the GroupWise server that your users will use, go to User Settings > Wireless Email > Novell GroupWise. From the Novell GroupWise Access tab, click Edit and enter the server address.

- To allow end users to add or remove GroupWise connections, go to User Settings > Wireless Email > Novell GroupWise. From the Novell GroupWise User Settings tab, click Edit and select the first three options.

- To allow end users to access their information from the Web PIM, go to User Settings > Wireless Email > Wireless Email User. Click "Setting: Default," and then click Edit. From the Settings tab, select the "Enable PIM functionality on the Web" option.

Provisioning Windows Mobile 5 Clients on Non-standard Ports

Nokia Intellisync Mobile Suite is capable of running on non-standard ports, however this feature is not officially supported. If you change the HttpSSLPort value from the default SSL port 443 in the Secure Gateway configuration file, you must update the over-the-air delivery site with the new port information. To do this, open the following file on the Nokia Intellisync Mobile Suite server:

```
/opt/ims/lib/syncserver.xml
```

In the section containing the <systemprop> tags, enter the new port number as follows:

```
<systemprop name="custom.ssl.port" value="newportnumber"/>
```

For example, if you change the HttpSSLPort value to 445 in the Secure Gateway configuration file, edit the syncserver.xml file as follows to set the Nokia Intellisync Mobile Suite port to 445. as follows:

```
<systemprop name="custom.ssl.port" value="445"/>
```

Starting and Stopping Services

Services start automatically after the installation completes.

To manually stop or start Nokia Intellisync Mobile Suite services, run the following commands as root:

```
/etc/init.d/asadb start
/etc/init.d/securegateway start
/etc/init.d/mobilesuite start
```

To stop Nokia Intellisync Mobile Suite services, run the following commands as root:

```
/etc/init.d/mobilesuite stop
/etc/init.d/securegateway stop
/etc/init.d/asadb stop
```

Checking the Status of Services

To check the status of running services, use the **status** argument for any script, as shown in the following example:

```
/etc/init.d/mobilesuite status
/etc/init.d/securegateway status
/etc/init.d/asadb status
```

3 Post-Installation Testing

The following sections provide instructions for verifying that the Web site is available.

End User Web Site

Users can use the Web site to log in, configure their account settings, and install software on the device.

On the server, open a Web browser and type http://*<serveraddress>*/. This step validates that the server is operational and the Web site is available.

If you receive an HTTP error, try the following solutions:

- Check the default Web site port and confirm the port is set to 80.
- Restart the server.

Administrator Web Site

On the server, open a Web browser and type http://*<serveraddress>*/admin/. This step validates that the server is operational and the Web site is available.

If you receive an HTTP error, try the following solutions.

- Check the default Web site port and confirm the port is set to 80.
- Restart the server.

After you complete these initial tests, the system is ready for user access.

Troubleshooting Logon Issues

If the server does not recognize the account or password, then the logon fails. Make sure you typed the correct user name (including the domain name) and password, and then try again.

If the user name and password are correct but you still cannot log on, ensure that all Nokia Intellisync services are started. For instructions to start Nokia Intellisync services, refer to "Starting and Stopping Services" on page 23.

Verifying Successful Authentication

Use the information in this section to verify that authentication is working properly.

Successful Access to Novell GroupWise

For GroupWise users, the system queries the GroupWise server and gathers user information. Depending on the access type, the system may automatically discover the mailbox server and mailbox name. If not, manually specify a valid GroupWise user name. To manage Novell GroupWise Access settings, go to User Settings > Wireless Email > Novell GroupWise, click the Novell GroupWise tab, and then click Edit.

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