



**HealthLink SIX Messaging System
(HMS) 6.5.5
Release Notes**

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1 Overview

1.1 Document Purpose

This document provides information for the 6.5.5 release of the HealthLinkSIX Messaging System (HMS).

1.2 Background

HMS is a messaging system which exchanges electronic messages between health providers' computer systems. Using a common electronic message exchange system means that health providers can quickly, easily and securely share information about their patients.

HMS can be used by any health provider organisation with a capable computer system. Many General Practices, Hospitals, Accident and Emergency Clinics and specialist surgeries are reducing their paper workload right now thanks to HMS.

The electronic message is typically created within the provider's clinical system and sent to the recipient using their HealthLink EDI address. The recipient's HealthLink EDI account (mailbox) will store any messages addressed to their organisation. Using HealthLink at their practice, the recipient will collect the messages and import them into their clinical systems. The receiving system will display all newly received messages and sort them by individual recipient. The recipient can process the message, and the information is securely stored on their clinical system.

1.3 Online Resources and Help Desk

Comprehensive information about the HealthLink SIX Messaging System can be found on the HealthLink website: www.healthlink.net/resources/

This includes the following online resources:

- Download of the installer for HMS 6.5.5
- HMS 6.5.5 Installation and User Guide
- Integration Guides for Clinical Software Applications
- Directory of EDI Accounts
- Remote Support Service

HMS 6.5.5 Licensing information is provided as part of the HealthLink Service Agreement (www.healthlink.net/support.htm).

Additional support is available through the HealthLink Help Desk via free phone (0800 288 887 in New Zealand; 1800 125 036 in Australia) or email helpdesk@healthlink.net.

2 Installation

You can download the software installer from the HealthLink website (www.healthlink.net/hmswebinstall/) or request an installation CD from the HealthLink Help Desk. The installer can be used for new installations of the HMS Client as well as for upgrading existing HMS Client installations to the 6.5.5 release.

For detailed installation instructions, please refer to the HMS 6.5.5 Installation and User Guide (see the Online Resources and Help Desk section of these Release Notes).

The following sections provide an overview of the prerequisites and limitations of the HMS 6.5.5 Client.

2.1 Software Requirements

HMS 6.5.5 consists of two main applications, HMS 6.5.5 Client and HealthLink User Online (HUO).

Table 1 and Table 2 provide overviews of the software versions required by these applications.

| | |
|--------------------------|--|
| Windows | 2000 (Pro or Server), XP, Vista (incl. 64 bit), 2003 Server, 2008 Server (incl. 64 bit) |
| MacOS¹ | 10.4, 10.5 |
| Java² | 1.5.0 |

Table 1: Software Requirements of HMS 6.5.5 Client

| | |
|---------------------------|--|
| Windows | 2000 (Pro or Server), XP, Vista (incl. 64 bit), 2003 Server, 2008 Server (incl. 64 bit) |
| MacOS | not supported |
| Internet Explorer | 6.x, 7.x |
| Other Web Browsers | not supported |

Table 2: Software Requirements of HUO

¹ The HMS 6.5.5 Client features Quantum Synchronous Messaging and HealthLink Online (online forms) are not supported for MacOS.

² On non-MacOS machines, the HMS 6.5.5 Client installs its own copy of the Java Runtime Environment. It can only be used by the HMS 6.5.5 Client itself and does not interfere with any existing Java installations (i.e. it neither uses nor modifies them). On MacOS machines, it relies on the operating system's automatic distribution mechanism to use the latest patch level of JRE 1.5.0.

2.2 System Requirements

2.2.1 System Requirements for Windows

| MINIMUM | RECOMMENDED |
|--|---|
| Pentium III 600Mhz | Pentium III 1Ghz |
| 1GB RAM | 2GB RAM |
| Windows 2000 (Pro or Server) | Windows XP, Windows Server 2003, Windows Vista, Windows Server 2008 |
| 56K Modem and Dialup Networking/RAS installed for Internet dialup or VPN connection. | Permanent, broadband Internet connection. |
| 256 Colours and 640x480 resolution | 16 bit Colour 1024x768 Resolution |
| 150MB available hard-disk space for software (excl. space for message storage) | 250MB available hard-disk space (incl. 100MB space for message storage) |

2.2.2 System Requirements for Apple Macintosh

| MINIMUM | RECOMMENDED |
|--|---|
| G3 processor or Intel Core 2 Duo | G4 processor or Intel Core 2 Duo |
| 1GB RAM | 2 GB RAM |
| Mac OS 10.4 | MacOS 10.4, MacOS 10.5 |
| 56k Modem for Internet dialup | Permanent, broadband Internet connection. |
| 256 Colours 800x600 resolution | 16bit Colour 1024x768 Resolution |
| 60MB available hard-disk space (excl. space for message storage) | 160MB available hard-disk space (incl. 100MB space for message storage) |

2.2.3 System Requirements for Internet Usage

HealthLink recommends the use of high-speed broadband Internet as the basis for reliable access to the HealthLink messaging network.

If no broadband internet connection is available, please take the following notes into account:

- The use of an internal dial-up modem is not advised, as this hardware cannot easily be reset when diagnosing Internet connectivity issues.
- Please ensure that the telephone line you intend to use is not using services such as Call Waiting. These services send signals down the line, interrupting your modem transmissions.
- Please ensure that your telephone system is correctly configured for the transfer of data. Internet use through a PABX phone system should be avoided unless the PABX system has been properly configured by a telecommunications professional.

2.3 Upgrade Paths to HMS 6.5.5

HMS 6.5.5 is the first release of HMS for systems under Windows Vista and Windows 2008 Server. For this reason, no upgrade paths from earlier releases of HMS to HMS 6.5.5 are supported for these operating systems.

No upgrade paths from earlier releases of HMS to HMS 6.5.5 are supported for systems under MacOS 10.4 and 10.5.

The supported upgrade paths are listed in Table 3.

Before uninstalling your existing installation of the HMS Client, please ensure that your system meets the software requirements of the HMS 6.5.5 Client (see section 2.1 for details).

| Previous HMS Version | Path to HMS 6.5.5 |
|----------------------|--|
| prior to 6.4.x | Please uninstall your existing HMS version and subsequently install HMS 6.5.5 as a new installation. Remote upgrades are not supported. Please contact the HealthLink Help Desk for assistance. |
| 6.4.x | Please contact the HealthLink Help Desk before performing this upgrade. The Help Desk will set up your EDI account for this upgrade. After that, the upgrade can be performed manually using the HMS 6.5.5 installer. Remote upgrades can be performed on request or automatically. |
| 6.5.1 | Please uninstall your existing HMS version and subsequently install HMS 6.5.5 as a new installation. Remote upgrades are not supported. Please contact the HealthLink Help Desk for assistance. |
| 6.5.2 to 6.5.4 | Manual upgrades using the HMS 6.5.5 installer are supported. Remote upgrades can be performed on request or automatically. |

Table 3: Supported Upgrade Paths

2.4 HMS 6.5.5 Limitations

- Maximum EDI accounts per client: 10
- Maximum file size per message: 2MB (before compression)
- Maximum total file size per connection: 5MB (before compression)
- Maximum files that can be sent per connection: 500

3 New Features

| | Feature Description | JIRA Issue ID |
|---|---|--|
| 1 | <p>New Installer for HMS Client</p> <p>Version 6.5.5 of the HMS Client introduces a completely revised installer based on a different technical platform. This new installer adds native support for Windows Vista, Windows 2008 Server and MacOS X. It resolves compatibility issues with the automatic distribution mechanism for the Java Runtime Environment on MacOS X machines including its security settings.</p> <p>The new installer supports silent mode installation which is used for remote upgrades of the HMS Client.</p> <p>The new installer also supports upgrades of HMS Clients from any of the following versions: 6.4.7, 6.5.2, 6.5.3, 6.5.4.</p> | HMS-3 HMS-18 HMS-21 HMS-23 HMS-116 |
| 2 | <p>HealthLink Online Support (Forms Director)</p> <p>Version 6.5.5 of the HMS Client supports the usage of the HealthLink Online service for secure online forms.</p> | HMS-12 |
| 3 | <p>New Installer for HealthLink User Online (HUO)</p> <p>Version 6.5.5 of the HMS Client offers a separate installer for the HealthLink User Online (HUO) web application. This reflects typical installation scenarios where the HMS Client is installed on a different machine than HUO.</p> <p>As in previous releases, HUO is only available on Windows platforms.</p> | HMS-16 |
| 4 | <p>Test Message Generator with Dynamic Template Download</p> <p>A test message generator for loopback message transmission tests is now available as part of Advanced Options. All EDI accounts installed on the HMS Client can be used for sending and receiving test messages.</p> <p>Test messages are generated on the basis of a set of test message templates which are installed on the HMS Client by default. New versions of the test message templates are dynamically downloaded from a HealthLink server once they have become available.</p> | HMS-6 HMS-27 |
| 5 | <p>Message Transmission Without GPS Availability</p> <p>Version 6.5.4 of the HMS Client requires information from a server-side component (GPS) before being able to perform its message processing and transmission tasks. This dependency has been removed for version 6.5.5 of the HMS Client.</p> | HMS-22 |
| 6 | <p>HL7 2.4 LAB Support</p> <p>The message definition for the HL7 2.4 LAB message type (<code>LAB24NZ_HL7</code>) has been added to the HMS Client and is available to all customers by default.</p> <p>The HL7 2.4 LAB message type is currently used in New Zealand only.</p> | HMS-8 HMS-17 HMS-82 |

| | Feature Description | JIRA Issue ID |
|---|--|----------------------|
| 7 | QLDH01RSD Support The message type QLDH01RSD has been supported by the HMS Client since January 2007 as an option that could be manually activated. From version 6.5.5, this message type is available to all customers by default. The QLDH01RSD message type is currently used in Queensland, Australia, only. | HMS-7 |
| 8 | HL7 RSDAU Message Definition Update The HL7 data type "ED – Encapsulated Data" has been added to the message definition. This data type can be used in OBX segments for including encoded binary data. Without this data type, including binary data in RSDAU messages would lead to error messages ("Extra data found after field" or uncontrolled modification of subsequent information in the message). The HL7 2.4 LAB message type is used in Australia only. | HMS-72 |
| 9 | HL7 2.4 RSD Message Definition Update The length limitation for the "FN" data type has been removed from the message definition of the HL7 2.4 RSD message type (RSD02NZ). The HL7 2.4 RSD message type is currently used in New Zealand only. | HMS-74 |

4 Resolved Issues

| | Issue Description | JIRA Issue ID |
|----|---|---------------|
| 10 | <p>Directory Permissions Check</p> <p>In situations where the HMS Client does not have the permission to delete messages from the messaging folders, it was possible that messages were sent repeatedly. This issue has been resolved in version 6.5.5. Instead of sending the message repeatedly, an error message is generated and forwarded to the HealthLink Help Desk which will work with the customer to resolve the issue.</p> | HMS-9 |
| 11 | <p>Missing "Cancel" Button in Advanced Options</p> <p>The Advanced Options screen for modifying message directories now offers separate "Save" and "Cancel" buttons. This reduces the potential for misinterpretations of the former single "Close" button.</p> | HMS-11 |
| 12 | <p>Scrolling in Advanced Options</p> <p>The smoothness of scrolling screens in Advanced Options has been improved for situations where the scrolling is initiated by the mouse wheel or the arrow keys.</p> | HMS-10 |
| 13 | <p>Unable to Restart After Auto Update</p> <p>The HMS Client is unable to restart after an Auto Update caused by a problem during the loading of a Xerces class.</p> | HMS-32 |
| 14 | <p>HTTP Post Error When Retrieving CA Information</p> <p>Some HMS Clients (version 6.5.3 only) were reporting connection problems as part of their automatic certificate expiration checking mechanism. While this problem did affect neither the security nor the performance of message transmissions, it has been resolved in version 6.5.5 of the HMS Client.</p> | HMS-91 |
| 15 | <p>Intermittent Processing Problem for LAB and RSD Messages</p> <p>Some HMS Clients (version 6.5.3 only) were experiencing intermittent problems related to the processing of LAB and RSD messages. This problem has been resolved in version 6.5.5 of the HMS Client.</p> | HMS-78 |

| | Issue Description | JIRA Issue ID |
|----|--|---------------------|
| 16 | <p>Non-Default Message Folders Get Reverted Back to Default Settings</p> <p>In a number of instances, the HMS Client in NT Service mode stops using the configured message directories for incoming messages. Instead, all message directories are reverted back to their default settings (under the default base message directory C:\HLINK).</p> <p>While, by the looks of it (and due to the absence of any error message), the Client seems to be working fine, the clinical system can no longer find the received messages as they are not stored in the expected directories.</p> <p>The circumstances of this error occurring could not be finally determined. Development has not been able to reproduce the error. Key indicators seem to be:</p> <ul style="list-style-type: none"> • Issue only occurs in NT Service mode; it does not affect any of the Client's other operation modes. • Issue started to occur from HMS 6.5.3 (issue has not shown for HMS 6.5.5, which may be down to only low number of sites on 6.5.5). • Issue occurs without any user intervention after a period of correct performance. • Issue can be resolved by (potentially repeatedly) uninstalling and reinstalling NT Service. <p>Due to the inability of Development to replicate the issue, it could not be established whether the applied fix reliably resolved the issue.</p> <p>Earlier builds of HMS 6.5.5 as well as all builds of HMS 6.5.3 included an outdated version of the Microsoft C Runtime System (version 6.0). Java 1.5 (first introduced in version 6.5.3 of the HMS Client) requires the usage of version 7.1 of the runtime system. This usage of the wrong version of a runtime system can cause unpredictable errors and instabilities that may only occur after a long runtime period.</p> <p>The wrong runtime system version was only deployed for the HMS Client in NT Service mode. In all other modes, the HMS Client used the default version of the runtime system, deployed as part of the operating system, which is usually version 7.1</p> | HMS-215, HMS-247 |
| 17 | <p>Dialup Connections Fail</p> <p>Due to incompatibilities with the new version of the Microsoft C Runtime System (version 7.1; introduced as part of the solution of issues HMS-215, HMS-247; see Resolved Issue 16), this build of the HMS Client fails to establish dialup connections. This issue has been resolved in build 1806 (HMS 6.5.5.1806 Client).</p> | HMS-258 |

5 Known Issues

| | Issue Description | JIRA Issue ID |
|---|---|---------------|
| 1 | <p>Installer Always Contains the Full Java Runtime Environment</p> <p>The new installer of the HMS Client is not available as a package without the Java Runtime Environment (JRE) on Windows systems.</p> <p>This is related to the change in the underlying software platform of the new installer and the fact that, on Windows systems, the JRE needs to be installed as part of the HMS Client (in order to make the JRE effectively invisible to other applications and to avoid interference with any other JRE installations on the system).</p> <p>This issue does not interfere with the functionality of the HMS Client.</p> | HMS-19 |
| 2 | <p>Error Log Gets Created During Install from Hard Disk</p> <p>The installer creates an error log file in C:\Documents and Settings\Administrator\Desktop\cdrom\Installers\Windows\error.log, even if no errors occurred during the installation.</p> <p>This does not occur when the installer is started from CD-ROM.</p> <p>This issue does not interfere with the functionality of the HMS Client.</p> | HMS-46 |
| 3 | <p>NT Service Mistakenly Automatically Started After System Restart</p> <p>If an HMS Client has NT Service installed (but not started) and its operation mode is set to "Unattended (Handsfree)", the NT Service is automatically started and the operation mode changed to "NT Service" after a restart of the system.</p> <p>The HMS Client can still manually be started in "Unattended (Handsfree)" by clicking on either the desktop or the quick-start icon.</p> <p>This issue can lead to unexpected behaviour of the HMS Client as "NT Service" may not be the desired operation mode.</p> <p><u>Workaround:</u> The issue can be manually resolved by using Advanced Options to uninstall NT Service and set the operation mode to "Unattended (Handsfree)".</p> | HMS-85 |
| 4 | <p>Inconsistent Combinations of Operation Mode and NT Service Installation Status</p> <p>In situations where, both, the HMS Client is running in "Unattended (Handsfree)" operation mode and the NT Service is installed, a "race condition" exists between the two after a system restart: As it is not permitted to run both processes in parallel, the first process starting up "wins" while the other process will automatically quit.</p> <p>The described combination of operation mode and NT Service installation status is not a supported combination. Future releases of the HMS Client will not allow this combination to be selected in Advanced Options. During upgrades to this release of the HMS Client, the installer will automatically uninstall the NT Service if this unsupported combination is detected.</p> <p><u>Workaround:</u> Use the Advanced Options to manually uninstall NT Service.</p> | HMS-89 |

| | Issue Description | JIRA Issue ID |
|---|---|---------------|
| 5 | <p>Issues with Multiple Instances of Advanced Options Running</p> <p>Multiple instances of Advanced Options running in parallel can potentially lead to an inconsistent state of the HMS Client's profile files.</p> <p>A mechanism preventing a second instance of Advanced Options from starting is planned for one of the upcoming releases.</p> <p><u>Workaround:</u> Before starting Advanced Options, make sure that no other instance of it is already running. It is recommended to perform this check on the basis of the "Processes" list of the Windows Task Manager. The Advanced Options application is identified by the label "HMS Advanced Options.exe".</p> | HMS-88 |
| 6 | <p>Misleading Warning Message During Upgrade for VPN and Dial-Up Connections</p> <p>During an upgrade from an installation of the HMS Client that was successfully using VPN or Dial-Up connections, a potentially misleading notification box is displayed:</p> <div data-bbox="423 842 1122 1087" data-label="Image"> </div> <p>This message does not actually indicate any existing problem with the Dial-Up Networking. Instead, after clicking "OK", the installation of the HMS Client continues and is successfully completed.</p> <p><u>Workaround:</u> Ignore the error message and continue the installation by clicking "OK".</p> | HMS-103 |
| 7 | <p>VPN Connection Has Intermittent Connection Problems</p> <p>HMS Clients relying on VPN for their messaging are occasionally experiencing connectivity issues. This is inherent to modem-based VPN connection and not a defect of the HMS Client.</p> <p>HealthLink does not recommend the usage of VPN for messaging. Instead, HealthLink endorses broadband internet connections as a reliable means of message exchange. Only with broadband connections enable the usage of HealthLink's online services, including HealthLink Online.</p> | HMS-104 |
| 8 | <p>HLINK Folder Created in C:\WINNT</p> <p>Under Windows 2000, the HMS Client's default for the message base directory is set to C:\WINNT\HLINK instead of C:\HLINK.</p> <p>Other operating systems are not affected.</p> <p>While this issue does not affect the functionality of the HMS Client, it does have the potential to create problems when configuring peer systems like a clinical system as it may not be prepared to use this unusual directory.</p> | HMS-211 |

| | Issue Description | JIRA Issue ID |
|---|--|---------------|
| 9 | <p data-bbox="345 306 889 338">HUO Needs Re-Installation After Client Upgrade</p> <p data-bbox="345 380 1198 485">The upgrade from previous versions of the HMS Client to version 6.5.5 or higher requires the replacement of both, the HMS Client and HUO. The uninstaller integrated with the HMS Client installer automatically uninstalls HUO as part of the HMS Client upgrade.</p> <p data-bbox="345 495 1187 579">This effect is a result of the necessary re-designs of both, the HMS Client installer as well as the HUO installer, on the basis of state-of-the-art installer software (itself warranted mainly by the need to support the Windows Vista platform).</p> <p data-bbox="345 590 480 611"><u>Workaround:</u></p> <p data-bbox="345 621 1166 674">HUO needs to be re-installed using the new HUO installer once the upgrade of the HMS Client has been completed.</p> | HMS-218 |