RELEASE NOTES
Windows HipLink 5.4
(Build # 5.4.0.169)

Supported Platforms

- Windows Server 2016
- Windows Server 2012 and Windows Server 2012 R2
- Windows Server 2008 R2
- Windows 7 – 64 bit
- 32-bit editions of Windows are NOT supported

System Requirements

Low-End/Training System:
- Physical: Intel® Core™ i5 or Core™ i7processor
- Virtual: 2-4 core processor (or vCPUs)
- 2GB to 4GB RAM
- High-speed HDD
- Gigabit Ethernet and high-speed Internet
- Windows Server 2012 R2 operating system

Recommended Production System:
- Physical: Intel® Xeon® Processor E5 Family
- Virtual: 8-12 core processor (or vCPUs)
- 8GB to 16GB RAM
- Enterprise-grade HDD or SSD
- 10 Gigabit Ethernet and high-speed Internet
- Windows Server 2012 R2 operating system

Minimum Production System:
- Physical: Intel® Xeon® Processor E3 Family
- Virtual: 4 core processor (or vCPUs)
- 4GB-8GB RAM
- Enterprise-grade HDD
- Gigabit Ethernet and high-speed Internet
- Windows Server 2012 R2 operating system

High-Performance Production System:
- Physical: Intel® Xeon® Processor E7 Family
- Virtual: 24 core processor (or vCPUs)
- 24GB to 32GB RAM
- Two Enterprise-grade HDDs or SSDs - implement RAID-1 mirroring
- 10 Gigabit Ethernet and high-speed Internet
- Windows Server 2012 R2 operating system

Deployment

Installation Steps

- **ODBC driver 13.1 for SQL server has been installed (for Enterprise version only)**

  - ❖ If it's not installed, download and install the ODBC driver 13.1 for SQL server from here: https://www.microsoft.com/en-us/download/details.aspx?id=53339. Choose the x64 version only for 64-bit systems.

For upgrading from previous version:
  (Note: This build is upgradable only from build 4.7.1060 and above)
- Login into HipLink with admin credentials.
- Stop all running services from the HipLink Services Panel.
- Logout of HipLink.
- Stop the IIS Web Server service [World Wide Web Publishing Service (W3SVC)]
- Make a copy of the entire HipLink directory and save it in a safe location as a backup. (This is typically found at C:\Program Files\HipLink Software\HipLink or C:\Program Files(x86)\HipLink Software\HipLink.)

- **For HipLInk Enterprise (SQL Server) edition:** Take backup of the entire corresponding SQL Server database of HipLink.

• Extract the HipLink build (WIN_HL_5_4_Installer_5.4.0.169.zip).

• Run the HL-5.4-Setup.exe file with the "Run as administrator" option.

• Follow the on-screen instructions and select the "Upgrade" option when prompted.

After Upgrade:
1. Update HTTPS binding in IIS Manager (if HipLink is deployed on HTTPS)
2. Update ca-bundle.crt (if any private CA root and/or intermediate certificates are required)
3. Restart IIS (e.g., by "IISReset" command)
4. Verify from Windows Services Panel that the service "HPD-MaintenanceManager" is **NOT** running
5. Completely clear Web Browser cache
6. Login and navigate to HipLink Services Panel and verify that all relevant services are running

For a fresh install:
1. Make sure that IIS has been installed with all of its required components. Please follow the respective IIS Guide for configuration of IIS 7.5, IIS 8.0 & IIS 8.5, or IIS 10.
2. Extract the HipLink build (WIN_HL_5_4_Installer_5.4.0.169.zip) into any directory
3. Run the HL-5.4-Setup.exe file with the "Run as administrator" option.
4. Follow the on-screen instructions to install HipLink.

Important Notes:
- For installing this build fresh or upgrading from a previous version, currently the user is required to turn **OFF** the machine "User Access Control (UAC)", OR running the installer by right click -> Run as Administrator.

- This build is only supported on IIS Webserver. In case the pre-upgrade build is deployed on Apache Webserver, then user would first need to follow "Apache to IIS Webserver Migration Steps" as given in its associated document.

Removal Steps
If needed, the installed build can be uninstalled as follows:
- Stop all running services.
- Terminate all user sessions.
- Logout of HipLink.
- Make a copy of the Hiplink directory and save it in a safe location as a backup. This is typically found at C:\Program Files\HipLink Software\HipLink or C:\Program Files(x86)\HipLink Software\HipLink
- **For HipLInk Enterprise (SQL Server) edition:** Take backup of the entire corresponding SQL Server database of HipLink.
- Go to Windows -> Control Panel -> Add/ Remove Programs.
- Select HipLink 5.4 from the list of installed programs, and uninstall.

Compatible Desktop Browsers
- Microsoft Internet Explorer version 11 *(versions 8, 9,or 10 are NOT supported)*
- Google Chrome (latest version)
- Mozilla Firefox (latest version)

- Microsoft Edge (latest version)
- Apple Safari (Only on Mac)

New Features & Enhancements

HIPLINK MOBILE ENHANCEMENTS

- **HipLink Mobile Roaming Profile**
  HipLink Mobile client data including Sent and Received Alerts, Sent and Received Messages, Drafts, Status' and Responses can be synced across multiple devices after each successful login. The User is automatically logged out of the previous device when logging into a new one to preserve security standards. The data for each respective client is stored on HipLink server for a defined period of time. The application retains and syncs data of the User's Favorite contacts, saved custom actions, and application configuration across multiple devices in addition to the data entities mentioned above.

- **New Personalized Profile Screen**
  Introduction of a new personalized profile screen from where HipLink Mobile users can perform the following tasks and have them synced to the main server:
  1. View Profile
  2. Change Password
  3. Change On-Call Status
  4. Change their Call Back Number

- **Firebase Cloud Messaging for Android**
  Replaced Google Cloud Messaging (GCM) with Firebase Cloud Messaging (FCM) for better performance and reliability of push notifications and messages to HipLink Mobile clients on Android devices.
- **Password Rules / Policy for HipLink Mobile devices**
  HipLink administrators can now enforce the same password policy for HipLink Mobile devices as they do for login Users. Passwords for access to HipLink Mobile can have an expiration date after a defined time period that forcing the end users to change their password. Also, password rules can be enforced for minimum length and strong password that have at least one alphabet, one numeric and one special character.

MESSAGE TRANSFORMATION FILTER

This is an enhancement to HipLink's current message filtering engine with the ability to transform the message text, message body, and message recipient (API filter only) of a message if a set of user-defined conditions are met.

The message text is allowed to undergo:
  1. A comprehensive set of string parsing and manipulation functions.
  2. Dynamic addition or removal of any text before, after or, in between the message with the help of functions above.
  3. Insertion of a defined set of system variables that represent the key set of information available in a message. e.g., the receiver name, the recipient group name, the sender name, etc.

A HipLink customer can now dynamically construct and transform a message and apply rules.

ENHANCED MESSAGE TEMPLATE GUI EDITOR
HipLink has the ability for the any level of User to design, construct and modify Message templates. This enhancement includes the structure and User interface of a message template using UI controls in addition to XML based coding.

ENHANCEMENTS IN WEBSERVICE API
The HipLink Webservice API has been enhanced around a new architecture using Fast CGI that allows for better performance and compatibility across all Operating Systems on which HipLink operates. For enhanced security the Webservice API is now authenticated against an API HipLink User instead of a GUI User.

ADDITIONAL IP ADDRESSES FOR HIPLINK API (NON-GUI) USERS
The Webservice API and WCTP Gateway Non-GUI Users can now have an additional source IP address for fail-over purposes. By default, one additional IP address is included with the API license. Additional IP addresses can be added for additional application access and are controlled through the license key in the system.

HIPLINK FILE SYSTEM INTERFACE MODULE ENHANCEMENTS
The File System Interface module in HipLink has been enhanced to allow end users the ability to define the pattern of files to be read and processed as well as the specific keys and tags defined in the file pertaining to specific entities present in HipLink.

PERFORMANCE & SECURITY ENHANCEMENTS
Updated C++ compiler and standard library with enhanced support for C++11 and C++14 features, as well as preliminary support for certain features expected to be in the C++17 standard. This has resulted in several improvements in optimization, code generation, toolset versioning, and diagnostics.

Assumptions for this build for HipLink Enterprise only
Following are the assumptions for this build that need to be strictly adhered to:
1. Both HipLink deployments are installed on exact same physical directory on the two application servers.
2. Both HipLink server machines are configured in the same time zone in Windows.
3. Both HipLink servers have the exact same build version of HipLink.
4. The deployment includes a load balancer (or similar software) that controls the traffic routing to the HipLink servers, such that it controls routing the traffic to the backup HipLink server in the event when the primary HipLink server goes down, and vice versa.

Issues fixed in this Release
- Fixed an issue of WCTP Gateway when API filter is not applied on message files created through WCTP gateway.
- Fixed an issue of sending quick message through APIs when API throttle filters are applied.
- Fixed issue of updating password from device if receiver schedule has already passed.
- Reconfigured value of Password Reset Interval from 2 days to 365 days in Global Settings configuration file.
- Fixed multiple issue of REST API when sending quick message.
- Fixed an issue of throttle filter application for HNP message.

- Fixed an issue of throttle filter application for confidential messaging of all protocols.
- Added file attachment support in message sending through REST API.
- Fixed "Response CC" messages not being generated for Receiver Groups in addition to Receivers (Applicable for Broadcast Groups & Subscription Groups Only)
- Modified Facebook integration files to reflect new permissions allowed by Facebook and removed the permissions deprecated by Facebook.

Outstanding Defects in this Release

- If Non-Department License Key is updated to Department License Key, the existing user groups do not get permissions assigned on the Default department.
- No permissions of IPAWS module are present in WebService API SandBox while adding new user group.

Contacting Customer Support

You can contact HipLink customer support at the following times and with the following methods:

Time	Monday through Friday 7:00 a.m. to 5:00 p.m. Pacific Standard Time (PST) Excluding U.S. holidays.
Email	support@hiplink.com
Phone	408-399-0001
Fax	408-395-5404
Customer Support Portal System	http://portal.hiplink.com

We recommend that you review the following documentation to become familiar with the product.
- Installation and Administration Guide
- User Guide
- Programmer's Guide

To open all guides, log on to the HipLink application through GUI. Click on "Help" button on the top right corner. It opens up a pop up window rendering the HipLink Help Index. Click on required link to open help guide.

Send Us Your Feedback

We always appreciate suggestions from our customers. If you have comments or suggestions about our product or documentation, send an email message to support@hiplink.com

Also visit our website www.hiplink.com for general information.