



HIPS

Product Data Sheet

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Key features

- Middleware for seamless integration with the national digital health infrastructure components:
 - Healthcare Identifiers (HI) Service
 - My Health Record system
- Packaging, upload, download and display of CDA™¹ documents
- Generation of pathology and diagnostic imaging report CDA documents from HL7™v2 messages
- Source code, binary code, and comprehensive documentation

Usage (internal, external)

- Large-scale digital health implementations
- Vendors of digital health systems

Format

- Sample code, SQL scripts, WSDL and XML schema
- Binary code
- Comprehensive documentation

Overview

The HIPS product enables the seamless integration of digital health systems with national digital health infrastructure services, such as the Healthcare Identifiers Service and the My Health Record system.

HIPS is a middleware product offering standards-based interfaces for seamless integration with systems like patient administration systems, clinical information systems, and laboratory and radiology information systems. It is aimed primarily at supporting large-scale digital health environments typically found in organisations such as hospitals and diagnostic service providers; however, it is also suitable for direct integration with digital health products.

¹ HL7 and CDA are trademarks of Health Level Seven International and are registered with the United States Patent and Trademark Office.

Key features of HIPS include:

Infrastructure service	HIPS features
Healthcare Identifiers Service	<ul style="list-style-type: none"> • Search healthcare identifiers • Retrieve healthcare identifiers • Cache healthcare identifiers
My Health Record system	<ul style="list-style-type: none"> • Assisted registration of patients • Determine whether a patient has a My Health Record • Upload of clinical documents • Packaging and digital signing of clinical documents • Conversion of HL7v2 pathology and diagnostic imaging reports: <ul style="list-style-type: none"> ○ HL7v2 ORU messages to CDA documents ○ ORU messages with attached PDF reports only ○ Seamless MLLP protocol for ORU message exchange • Displaying a patient’s My Health Record • Download and display of clinical documents

Background

The Australian Digital Health Agency has a strategic objective to support and facilitate the adoption of national digital health services across the health sector. A key element of delivering on this objective is supporting the implementation of solutions that integrate with the national Healthcare Identifiers Service and the My Health Record system.

The HIPS middleware solution is a key building block in support of this objective. Large numbers of both jurisdictional and private implementations of HIPS are in use across Australia to provide the foundations for the Australian digital health ecosystem.

Product components

The HIPS end product consists of the following product components:

Component	Description
Binary Software Package	Binary code for the Core component of HIPS: <ul style="list-style-type: none"> • Core component: <ul style="list-style-type: none"> ○ Binary code ○ WSDL and schema files ○ Database installer and scripts ○ PowerShell scripts ○ HIPS Binary Software - Software Licence Terms and Conditions ○ Third-Party Software Licences

Component	Description
	<ul style="list-style-type: none"> • UI component: <ul style="list-style-type: none"> ○ Binary code ○ Database installer and scripts ○ PowerShell scripts ○ HIPS Binary Software - Software Licence Terms and Conditions ○ Third-Party Software Licences
Source Code Software Package	<p>Sample code for all components of HIPS:</p> <ul style="list-style-type: none"> • Core component: <ul style="list-style-type: none"> ○ Source code (predominantly C# & T-SQL) ○ Source Code Licence and Production Disclaimer ○ Third-Party Software Licences • UI component: <ul style="list-style-type: none"> ○ Source code (predominantly C# & T-SQL) ○ Source Code Licence and Production Disclaimer ○ Third-Party Software Licences
Documentation Package	<ul style="list-style-type: none"> • Build Guide • Installation Guides (Core and UI) • Patient Administration HL7 Message Profile • Pathology Report HL7 Message Profile • Diagnostic Imaging Report HL7 Message Profile • Patient Record Merging Profile • Service Catalogue (Core) • Module Guides (Core and UI) • Evaluation Guide • Topology and Configuration Guide • Upgrade Instructions
Product Data Sheet	This document
Release Note	Notes specific to the current HIPS release
Interface Change Log	Lists all syntactical and semantic interface changes for the current release and preceding releases
Functional Change Log	Lists all functional changes for the current release and preceding releases

Documentation structure

The HIPS end product contains a substantial number of guidance documents. To ensure optimum benefit from this documentation, the Agency recommends reading the documents in a particular sequence, depending on the particular use case.

Use case	Recommended reading sequence
Product overview	<ol style="list-style-type: none"> 1 Product Data Sheet 2 Release Note 3 Module Guide (Core) 4 Module Guide (UI)
Upgrade planning	<ol style="list-style-type: none"> 1 Product Data Sheet 2 Release Note 3 Functional Change Log 4 Interface Change Log
Product evaluation	<ol style="list-style-type: none"> 1 Build Guide 2 Initial and Clean Installation Guide (Core) 3 Initial and Clean Installation Guide (UI) 4 Evaluation Guide
Integration with existing systems	<ol style="list-style-type: none"> 1 Pathology Results HL7v2 Profile 2 Diagnostic Imaging Results HL7v2 Profile 3 Patient Administration HL7v2 Profile 4 Patient Record Merging Profile 5 Service Catalogue (Core)
Legal terms and licences	<ol style="list-style-type: none"> 1 Source Code License and Production Disclaimer 2 HIPS Binary Software – Software License Terms and Conditions 3 Third-Party Software Licenses

System requirements

HIPS is based on a number of underlying platform software products and frameworks. This release of HIPS has successfully been tested against the products and product versions listed in the sections below.

Usage of HIPS with product versions other than those listed may require retesting of the product. This may include the need to repeat all required conformance and notice-of-connection tests.

HIPS incorporates a number of third-party libraries that are listed in the *Third-Party Software Licenses* document included in this release. These libraries are distributed as part of the HIPS product.

For the build of the HIPS components from its source code version, a number of software development tools are required. These tools are listed in the *Build Guide* included in this release.

HIPS Core and UI components

The HIPS Core and UI components require the following software platforms.

Tested versions: Each HIPS major release is tested against the latest released version of the infrastructure software components. The same infrastructure versions are subsequently used for testing minor and patch releases associated with the same HIPS major release.

Latest versions: HIPS implementers should ensure that the latest supported versions of infrastructure software are in place when installing or upgrading to a particular HIPS release.

Non-current versions: While HIPS is supported on previous released (non-current) versions of infrastructure, should a raised support ticket be found to be caused by an earlier version of the infrastructure to what HIPS was tested against, it is the implementer's responsibility to upgrade the infrastructure to resolve the ticket. As such, the support ticket will be closed with the recommendation to upgrade the infrastructure.

Operating system	<p>HIPS 7.x has been tested on Windows Server 2016.</p> <p>HIPS 7.x is supported on:</p> <ul style="list-style-type: none"> • Windows Server 2012 (non-current) • Windows Server 2012 R2 (non-current) • Windows Server 2016 (tested – latest at major) • Windows Server 2019 (latest)
Framework	<p>HIPS 7.x has been tested on .NET Framework 4.7.</p> <p>HIPS 7.x is supported on:</p> <ul style="list-style-type: none"> • .NET Framework 4.5.2 (non-current) • .NET Framework 4.6 (non-current) • .NET Framework 4.6.1 (non-current) • .NET Framework 4.6.2 (non-current) • .NET Framework 4.7 (tested – latest at major) • .NET Framework 4.7.1 • .NET Framework 4.7.2 • .NET Framework 4.8 (latest)
Database Management System	<p>HIPS 7.x has been tested on SQL Server 2016.</p> <p>HIPS 7.x is supported on:</p> <ul style="list-style-type: none"> • SQL Server 2012 (non-current) • SQL Server 2014 (non-current) • SQL Server 2016 (tested – latest at major) • SQL Server 2017 • SQL Server 2019 (latest)

HIPS UI component

The HIPS UI component is designed to interact with web browsers for the rendering of the user interface. The user interface has been tested on the following software platforms:

Operating system	Windows 10
Web browser	Microsoft Internet Explorer 11 with Adobe Reader Google Chrome 75 Mozilla Firefox 68 Microsoft Edge 44

Licence

The HIPS Binary Software is licensed under the *HIPS Binary Software – Software License Terms and Conditions* (included in the HIPS Binary Software Package).

The HIPS Source Code is licensed under the *Source Code License and Production Disclaimer* (included in the HIPS Source Code Software Package).

Downloads

HIPS is available from the Agency’s Developer Centre:

<https://developer.digitalhealth.gov.au/specifications/implementation-and-adoption/>

Support

HIPS is provided in both binary and source code form.

The Agency provides support to sites that use the Agency-provided binary version of HIPS².

Sites using HIPS binary code that has not been provided by the Agency are generally not supported by the Agency. Third-party technical support is available from commercial partner organisations. Implementers are encouraged to take out support contracts with suitable support providers to ensure the successful implementation and operation of HIPS.

Please contact the Agency for details of available support services.

For further information about the product or to provide feedback, please email the Agency Help Centre at help@digitalhealth.gov.au or phone 1300 901 001. Your views on the scope and usability of HIPS will inform future releases.

² Sites requiring support by the Agency need to complete the registration process for HIPS Nominated Sites. This may include meeting additional requirements including a commitment to regularly upgrade their HIPS installations to the latest HIPS release.

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