Spine Warranted Environment Specification

2015

Richard Trusson
June 2015

Contents

Introduction

This document specifies the client environments against which the Identity Agent and the user interfaces of HSCIC national systems listed below will be warranted, the Warranted Environment Specification (WES). Included HSCIC national systems are

- Spine including
  - Spine Core
  - Care Identity Service (CIS – formerly Identity Management)
- SUS
- e-RS (formerly Choose & Book)

In this context the client environment is the combination of relevant products installed on a client device that support access to the national systems listed above. The specified components are limited to:

- Operating systems; for example Windows 7
- Browsers; for example Chrome 42
- Java virtual machines (JVMs)
- Smartcard printer drivers

The definition of a warranted environment is;

 an environment in which the supplier supports their product in the live environment with fixes.

For example if the product is the HSCIC Identity Agent v1.0 then support will only be given if that product is being used in a warranted environment as documented in Table 1.

Note that HSCIC only provides support for the use of national systems in the warranted environment. The HSCIC will not provide support for other components; for example a problem with the operating system must be dealt with via normal IT support channels.

Scope

This document covers the following:

- Systems that use the Identity Agent for Authentication and are listed above
- The Identity Agent
- Workstation (desktop) clients, Thin (Citrix) or Virtual Desktops

The document does not cover anti-virus or anti-malware provision specifically as none of the covered national systems detail such provision. However all WES compliant deployments should ensure that relevant precautions are implemented to prevent and detect the introduction of malicious and unauthorised code into an information asset's computer components. Failure to defend against viruses and other malware could lead to significant damage to your organisation's business capabilities and serious impact on service user or patient care.

Further guidance can be found here [1]

---

[1]

https://www.igt.hscic.gov.uk/RequirementQuestionNew.aspx?tk=421687061506856&lnv=2&cb=a143459d-5c32-4100-ad5b-28c11d20389b&sViewOrgType=2&reqid=2724

Intended Audience

The intended audience of the document includes:

- *HSCIC and NHS Technologists*, who must ensure that the warranted environments are appropriate for the client estate.
- *Development Partners*, who must ensure that the developed applications are compatible with these environments during development and testing.
- *System Testers*, who perform end-to-end system testing on the applications against the stated warranted environments.

Approach

The Warranted Environment Specification (**WES**) will be published as required, when there are significant changes to the products that form the warranted environment. Changes that prompt a new release might include the release of new version of a product, for example a new version of the Identity Agent, the removal of support for a component by the vendor, for example Citrix Presentation Server or some other significant change.

The WES Roadmap (see *Appendix 1*) provides a rolling view of product upgrade plans (minor and major versions only, not patches) including vendor support and end-of-life plans. The roadmap will be updated and published as part of this document to support organisation planning activities.

> **NOTE:** the roadmap provides only an indicative view of how the WES is likely to evolve.
> It is subject to change without notice.

The main steps in the process for issuing changes to warranted environments are as follows:

1. HSCIC will actively monitor the client environment product upgrade plans for all relevant products, including end-of-life plans.
2. When a product upgrade is announced, and once the date of availability to HSCIC is known, HSCIC will assess whether this upgrade should trigger a change to the set of warranted environments.
3. HSCIC will publish upcoming changes to the set of warranted environments when product stack changes are identified and will aim to provide an eighteen month view of such changes in the WES Roadmap.
4. The WES (and any associated announcements) will be published on http://www.hscic.gov.uk/

Changes from Previous Versions

This section summarizes the changes to warranted environments that are introduced since the last release of the warranted environments document.

The following components have been **removed** in this version of the WES.

OPERATING SYSTEM	
Windows XP Pro SP2	Removed in this WES
Windows Vista Business SP1 (and above)	Removed in this WES
Windows Vista Enterprise SP1 (and above)	Removed in this WES
Windows XP Pro SP3	Removed in this WES
Windows XP SP3 Virtual PC	Removed in this WES
Windows 8.0[1]	Removed in this WES
BROWSER	
MS Internet Explorer 7	Removed in this WES
Opera 11	Removed in this WES

The following components have been **introduced** in this version of the WES.

Operating System	
Windows 8.1 (32/64 bit) Enterprise/Professional/Ultimate Editions	Introduced in this WES
BROWSER	
MS Internet Explorer 11[2]	Introduced in this WES
Mozilla Firefox 21[3]	Introduced in this WES
Google Chrome26 - 42[3]	Introduced in this WES

1. Windows 8.0 has been superseded by Windows 8.1. Microsoft recommends all organisations upgrade to Windows 8.1 Upgrade 1. Support, from Microsoft, for currently installed instances of Windows 8.0, will cease in 2016.

2. Only 32bit editions of Internet Explorer are supported by the Identity Agent

3. As the versions of these products are updated numerous times within a given year it is not feasible to try to predict how new features and functionality may affect their use with national systems. Therefore, although other Firefox and Chrome versions may well work with national systems, the versions above form part of the reference stack - which means that any national systems-related issues must be replicated on the reference stack in order to be supported.

Identity Agent Warranted Environments

This section specifies the client environments that the HSCIC and legacy BT Identity Agent are supported in. Included are the standard workstation operating systems as well as remote desktop service configurations.

IA Version	Windows 8.1 x32 / x64	Windows 7 SP1 x32 / x64	Windows Terminal Services 2012 R2	Windows Terminal Services 2008 R2	Citrix Presentation Server 4.0 / 4.5 Enterprise	Citrix XenApp 5.0/6.0/6.5	IE 11,10,9,8	Chrome	Mozilla Firefox	JRE	Card Reader Type Contact	Card Reader Type Contactless	Supported Smart Card Series Contact	Supported Smart Card Series Contactless
HSCIC IA v2.0	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	7,8	Yes	Yes	4^6,5,6	5,6
HSCIC IA v1.0	No	Yes	No	Yes	No	No	Yes	Yes	Yes	6,7	Yes	Yes	4,5,6	5,6
BT IA v13	No	x32	No	No	Yes	Yes	No	No	No	6,7	Yes	Yes	3,4,5,6	5,6

Table 1 IA WES List

NOTE:

1. Windows 8.0 is not supported. Microsoft recommends that all organisations upgrade to Windows 8.1 Upgrade 1. Support, from Microsoft, for Windows 8.0 will cease in 2016.
2. Windows Server 2008 R2 is now in extended support. Organisations should start to migrate off this product.
3. IE support assumes the desktop version of the product. Windows Store IE is not supported.
4. Only x32 versions of IE are supported.
5. JRE 6 has serious security flaws and organisations should upgrade to JRE 7 or 8 as soon as possible.
6. Series 4 cards are not supported on Windows 8.1.
7. HSCIC IA 2.0 due Q3 2015.
8. Chrome is only supported up to version 44; versions 42-44 require an NPAPI flag to continue to work. It is HSCIC's intention to resolve this issue prior to Chrome version 45 being released in September 2015.

Smartcard printers

The Care Identity Service (CIS) user interface within National systems includes functions to print smartcards on a smartcard printer device attached to the client PC. The smartcard printers and drivers are procured and supported by the NHS and as such form part of the client environment.

It is recommended that the latest supported version of the smartcard printer driver for the in use operating system is used.

The following table specifies the baseline set of workstation client environments, against which CIS is warranted:

OPERATING SYSTEM	WEB BROWSER	PRINTER DRIVER(S)	SMARTCARD PRINTERS
Windows 7 (32/64 bit) Enterprise/Professional /Ultimate	MS Internet Explorer 8/9/10/11/ Chrome Firefox	Datacard Smart Driver 11 and above (SP and SP Plus series)	Datacard SP35 and SP35+
Windows 8.1 (32/64 bit) Professional/Enterprise	MS Internet Explorer 9/10/11/ Chrome Firefox	Datacard Smart Driver 11 and above (SP and SP Plus series)	Datacard SP35 and SP35+
Windows 7 (32/64 bit) Enterprise/Professional /Ultimate	MS Internet Explorer 8/9/10/11/ Chrome Firefox	Magicard HSCIC Printer driver, v2.0.14 and above	Magicard HSCIC Printer (Enduro+) Magicard Enduro+ Printer
Windows 8.1 (32/64 bit) Professional/Enterprise	MS Internet Explorer 8/9/10/11/ Chrome Firefox	Magicard HSCIC Printer driver, v2.0.14 and above	Magicard HSCIC Printer (Enduro+) Magicard Enduro+ Printer

hscic Health & Social Care
Information Centre

Product Details

NOTE: The supported environment for some products may differ from that for the Identity Agent or from that offered by product vendors.

NHS e-RS Operating Requirements Matrix

The e-Referral Service has its own support requirements that, where applicable, must be layered on top of the Identity Agent requirements for authentication.

There are two editions of the e-RS client;

1. Professional Application – this requires the IA client
2. Patient Application – this does not need the IA client so does not need Java or ActiveX components

Professional Application

- Operating System – any version on which all the required components are supported.
- BT Identity Agent 11 or HSCIC Identity Agent v1.0 or later supported version
- Internet Explorer 8 to Internet Explorer 10 inclusive - NHS e-RS has been tested against Internet Explorer version 7 and above but performance is optimised against version 8 and above. Performance is significantly improved in version 9 and version 10[2].
- Chrome (up to Version 44)
- Firefox (latest)
- ActiveX Control on Internet Explorer browsers – either the NHS e-RS ActiveX control or Choose and Book ActiveX control
- JRE6 / JRE7

Patient Application

- Operating System – any version on which all the required components are supported.
- Browser – any HTML 4.0 standards compliant browser

NHS SUS

SUS currently supports

- IE7
- IE8

Support Information

Microsoft Support information http://support.microsoft.com/lifecycle/default.aspx?LN=en-gb&x=21&y=17

Java Support Information http://www.oracle.com/technetwork/java/eol-135779.html

Citrix Support Information http://www.citrix.com/support/product-lifecycle/product-matrix.html

IDENTITY MANAGEMENT (IA SUPPORT) iam@hscic.gov.uk

---

[2] NHS e-RS will support version 11 in a future release.

Appendix 1: WES Roadmap

The table below shows the vendor or supplier communicated support milestone dates.

While end dates are given for JRE6 and JRE7 as these are open source it might still be possible to receive product updates after Oracle ceases to supply them. However it should be expected that this may have to be paid for or would be sourced from the community and not backed by Oracle.

The Google Chrome browser will no longer support running Java Virtual Machine, required for Identity Agent v1.0, after version 44.

	2015				2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Identity Agent										
HSCIC IA v2.0										
HSCIC IA v1.0								Sunset - EOL Oct 2017		
BT IA v11										
Operating Systems										
Windows XP	EOL									
Windows 7 SP1		Extended Support Only (EOL January 14th 2020)								
Windows 8.1		Enters Extended Support January 2018 (EOL January 2023)								
Windows Server 2008 R2 SP1		Extended Support Only (EOL January 2020)								
Windows Server 2012 RDP		Enters Extended Support January 2018 (EOL October 2023)								
Browsers										
IE7 - no longer supported.										
IE8		See Note 1 below								
IE9		See Note 1 below								
IE10		See Note 1 below								
IE11										
Chrome		Support for Java is removed in versions higher than 44								
Mozilla Firefox										
Java										
JRE6 - no longer supported										
JRE7	End of public updates									
JRE8		End of Public Updates September 2017								
Citrix										
Presentation Server 4.0 Enterprise										
Presentation Server 4.5 Enterprise										
XenApp 5.0		End of Life January 2020								
XenApp 6.0								End of Life January 2020		
XenApp 6.5		End of Life Jun 2018								

Key
- 🟩 Fully Supported by the Vendor / Supplier
- 🟨 Product is in extended support.
- 🟥 Product is approaching end of life and should be migrated off.

NOTE:

1 After January 2016 Microsoft will only support the latest version of Internet Explorer on supported Operating Systems.
For more information see https://support.microsoft.com/en-gb/gp/microsoft-internet-explorer

2 Any products coloured red in the extreme left hand column are already out of vendor support. They are included here for reference.

Appendix 2: NHS Mail

NHSmail does not currently use the smart cards to logon and so is not currently a core part of this document. However it is in wide spread use throughout the NHS and so including its support environment is considered beneficial for the readership. The supported environment detailed below is for the NHSmail 2 environment. NHSmail2 will start to roll out to organisations in the second half of 2015. There are four main environments

1. **User Tools** for browser based password change, directory search/ browse and help pages
2. **LOA Tools** or Administrative tools from which user admin tasks are conducted via browsers or programmatic (RESTful API) interfaces
3. **Email/Calendaring** including Outlook Web Access (OWA) where users access their email via a web browser
4. **Collaboration** for SharePoint and Skype for Business

For each of the main environments access is supported from the following methods

Browser:

1. **User Tools** IE 7 or above (IE 9 and above best), Chrome, Firefox and Safari
2. **LOA Tools** IE 9 or above, Chrome, Firefox and Safari
3. **OWA**
   a. Light: IE 7 - IE9
   b. Full: IE9
   c. Full and Offline: IE10 and IE11
4. **Other Browsers**: Chrome, Firefox and Safari
5. **Collaboration** IE 7 or above (IE 9 or above best), Chrome, Firefox and Safari

Desktop Client:

1. **User Tools** Any supported desktop operating system that can run the above browsers
2. **LOA Tools** Any supported desktop operating system that can run the above browsers
3. **Email/Calendaring** Outlook 2007 or above, Office for Mac 2011 or above, and any supported IMAP4/POP3 client
4. **Collaboration** Any supported desktop operating system that can run the above browsers

Mobile Device:

1. **User Tools** To be confirmed
2. **LOA Tools** To be confirmed
3. **Email/Calendaring** Any device with an Exchange ActiveSync client that supports isolation (note this currently excludes the native Android email client). Supported browsers are yet to be confirmed.
4. **Collaboration** To be confirmed

Applications:

1. **User Tools** RESTful APIs (to be detailed at a later date)
2. **LOA Tools** RESTful APIs (to be detailed at a later date)
3. **Email/Calendaring** any supported IMAP4/POP3 client
4. **Collaboration** RESTful APIs (to be detailed at a later date)

To check on release dates and for more information please email the NHSMail2 team on feedback@nhs.net