



**Hewlett Packard  
Enterprise**

**HPE Adoption  
Readiness Tool (ART):  
Technical  
Specifications**

For version: 5.3  
Revision A

## Installation

HPE ART installation requires administrative permissions on the local workstation. The installers are only available in English (US). Installation requires the Microsoft .NET framework.

## Languages Supported

The HPE ART user interface and published content supports the following languages: Bulgarian, Catalan, Chinese (PRC), Chinese (Taiwan), Croatian, Czech, Danish, Dutch (Belgium), Dutch (Netherlands), English (US), English (UK), Finnish, French (Canada), French (France), German, Greek, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Portuguese (Portugal), Romanian, Russian, Spanish, Swedish, Thai, and Turkish.

ART published content and the ART Website support the Arabic language.

## Author Citrix Usage

Authors can use ART from a 32-bit or 64-bit Terminal Server to support the generation of content. The ART DevKit has been tested against Windows® Terminal Services (2008) and Citrix XenApp™ (v4.5). HPE will support customers using newer versions of Citrix although they have not been tested. ART does not support application publishing, remote applications, or web gateways from a Terminal Server. The Citrix server technical specifications will vary depending on other applications in use on the Citrix server, as well as the number of planned concurrent ART authors.

## Workstation Environments

### End User Workstations

End user workstations support viewing of content generated by ART. The requirements are based on tested configurations with all software installed locally.

To view video included in courses, the video viewer (browser, plug-in, or device) used to view the course must meet the requirements for any video files included in courses. Prior to enabling a given video format in your template, ensure your chosen viewer supports that video format. For best results for video in Preview mode within a course, installation of QuickTime® 7.0 is recommended.

Adobe Flash is required to listen to WAV audio files in published courses or simulations in all supported browsers. Flash is required to listen to MP3 audio files in Internet Explorer or Firefox. Media Player browser plugin is required for Firefox. The new Windows 64-bit version of

Firefox does not recognize or support the Media Player browser plugin. Flash or QuickTime 7.x is required to listen to audio in Safari 5.x.

For optimum performance, viewing published simulations or courses over a low bandwidth connection is not recommended.

## Author/Administrator Workstations

Author or administrator workstations support the generation of content using ART. The requirements are based on tested configurations with all software installed local.

By default, audio files are encoded as WAV files. If the LAME encoder is installed, audio files are encoded as MP3 files. Refer to the *Creating Content* manual for information on the LAME encoder.

Adobe Flash Player to play audio files. See the End User Workstation section for Flash requirements to listen to audio in published course or simulation output. To view output locally (versus via standard web server deployment), Flash Global Security Settings must be set to "Always allow."

<b>Workstation Requirements</b>	<b>End User</b>	<b>Author/Admin</b>
1.5 GHz processor or higher	X	X
1 GB RAM minimum; 2 GB RAM recommended	X	X
2 MB Video card with 16 million colors at 1024 x 768 resolution	X	
8 MB Video card with 16 million colors at 1024 x 768 resolution		X
Microsoft Windows® 7 SP1 (32- and 64-bit) Professional or Enterprise	X	X
Windows 8.1 (Desktop mode)	X	X
Windows 10 (Desktop mode)	X	X
(USGCB) v1.2	X	X
Microsoft Internet Explorer® 11 to view content	X	X
Mozilla Firefox® 42 to view content	X	X

Google Chrome™ 47 to view content	X	X
Safari for Windows® 5.x to view content	X	X
Microsoft Office® 2013 to view content	X	X
Microsoft Office 2013 to import Microsoft Office PowerPoint content into eLearning courses		X
Adobe Flash® Player 20.x to communicate with an LMS using the AICC to listen to WAV audio files	X	
Adobe Acrobat Reader® XI, DC 2015 to view PDF output	X	
Adobe Acrobat Reader XI, DC 2015 if recording Adobe Forms		X
Apple iPad® running iOS 8.1 or higher to view content	X	
Android device running v4.1 or 4.2 to view content	X	
JAWS® for Windows v12-16	X	
Microsoft .NET Framework v4.5.2		X
Microsoft Visual C++ Redistributable Package v10.0.40219.1		X
Microsoft Windows Automation API 3.0		X
Java Access Bridge for Windows 2.0.2 or higher for Java Runtime Environments 1.5 and later if recording Java-based applications		X
250 MB allocated to roaming profile		X
Microphone to record audio while recording		X
Connection the server to submit task, check-in/out documents		X

Visual J# Redistributable Package v2.0		X
Microsoft server speech voices v10 or v11, or other 32-bit SAPI5 compliant voice(s) installed if publishing files that use text-to-speech functionality.		X
JRE 1.7 Update 13 or higher		X

## Server Environments for the ART Website

### Web Server Requirements Assessments

To implement simulation and course assessment tracking in a non-SCORM environment, use server-side software (Active Server Pages, Hypertext Preprocessor [PHP], or CGI) to handle data provided by the simulations and courses. Simulations and courses provide data via a POST command, and provide user name, simulation title, total number of questions, total number correct, questions incorrectly answered, and pass/fail to the server script.

### Website Sizing

A single website file may contain a maximum of 1000 total objects – the sum of web pages, links to documents (\*.udc), links to courses (\*.ulc), and links to non-ART content. Examples of the total object count are:

- 500 web pages + 500 links to udc files
- 500 web pages + 250 links to udc files + 250 links to ulc files
- 400 web pages + 250 links to udc files + 250 links to ulc files + 100 links to non-ART content
- 100 web pages + 700 links to udc files + 100 links to ulc files + 100 links to non-ART content

# Learning Management Systems (LMS)

## Capturing Simulation and Course Assessments

Published simulations and courses can be imported into any Learning Management System (LMS) that conforms to AICC 2.2, SCORM 1.2, or SCORM 2004.

## Learning Management System (LMS) Communication

HPE ART uses Package Exchange Notification System (PENS) 1.0.0 to announce the location of content packages for delivery of courses to a Learning Management System (LMS).

Simulations and courses support the following SCORM and AICC elements:

SCORM 1.2	
Lesson Status (cmi.core.lesson_status)	Interactions (cmi.interactions)
Lesson Location (cmi.core.lesson_location)	<ul style="list-style-type: none"> <li>Interaction ID (cmi.interactions.n.id)</li> </ul>
Suspend Data (cmi.suspend_data)	<ul style="list-style-type: none"> <li>Interaction Time (cmi.interactions.n.time)</li> </ul>
Raw Score (cmi.core.score.raw)	<ul style="list-style-type: none"> <li>Interaction Type (cmi.interactions.n.type)</li> </ul>
Min Score (cmi.core.score.min)	<ul style="list-style-type: none"> <li>Interaction Correct Response</li> </ul>
Max Score (cmi.core.score.max)	(cmi.interactions.n.correct_responses.n.pattern)
Session Time (cmi.core.session_time)	<ul style="list-style-type: none"> <li>Interaction Student Response</li> </ul>
Progress (rwd.progress_measure)	(cmi.interactions.n.student_response)
Completion threshold (rwd.completion_threshold)	<ul style="list-style-type: none"> <li>Interaction Result (cmi.interactions.n.result)</li> </ul>
Simulation Mode (rwd.sim_mode)	<ul style="list-style-type: none"> <li>Interaction Description (rwd.interactions.n.description)</li> </ul>
SCORM 2004	
Completion Status (cmi.completion_status)	Interactions (cmi.interactions)
Success Status (cmi.success_status)	<ul style="list-style-type: none"> <li>Interaction ID (cmi.interactions.n.id)</li> </ul>
Lesson Location (cmi.location)	<ul style="list-style-type: none"> <li>Interaction Type (cmi.interactions.n.type)</li> </ul>
Suspend Data (cmi.suspend_data)	<ul style="list-style-type: none"> <li>Interaction Correct Response</li> </ul>
Raw Score (cmi.score.raw)	(cmi.interactions.n.correct_responses.n.pattern)
Min Score (cmi.score.min)	<ul style="list-style-type: none"> <li>Interaction Student Response</li> </ul>
Max Score (cmi.score.max)	(cmi.interactions.n.student_response)
Scaled Score (cmi.score.scaled)	<ul style="list-style-type: none"> <li>Interaction Result (cmi.interactions.n.result)</li> </ul>
Session Time (cmi.session_time)	<ul style="list-style-type: none"> <li>Interaction Description (cmi.interactions.n.description)</li> </ul>
AICC	
Lesson Location (Core.Lesson_Status)	
Lesson Status (Core.Lesson_Location)	
Suspend Data (Core_Lesson)	
Raw Score (Core.Score)	
Session Time (Core.Time)	

## Recording

HPE ART can record and document most 32-bit and most 64-bit Microsoft Windows or web-based applications, provided that the Windows or web-based application has been developed using Windows accessibility standards.

General recording of browser-based applications can be done in any supported desktop browser. For best results, Internet Explorer is the recommended browser. Automatic capture of information for context-sensitive help purposes from browser applications during recording requires supported Microsoft Internet Explorer version. If recording applications in other browsers, you must manually enter context information within the document.

## Browsers

- Internet Explorer: We will support each Internet Explorer version until the end of mainstream support as determined by Microsoft.
- Chrome and Firefox: We will support each Chrome version until it is no longer supported by Google. We will support each Firefox version until it is no longer supported by Mozilla. Due to the higher frequency of new releases of these browsers, we may not be able to support a specific browser version throughout the lifecycle of a full release of our software.
- Safari: We will support each Safari version until the end of mainstream support as determined by Apple.