

HP Adoption Readiness Tool™ (ART)

Technical Specifications 4.40.5

Languages Supported

The HP Adoption Readiness Tool interface 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.

Author/Administrator Workstation Requirements

Author or administrator workstations support the generation of content using the HP Adoption Readiness Tool editor. The following requirements are based on tested configurations with all software installed locally.

Installation Notes

- The HP Adoption Readiness Tool (ART) install requires administrative permissions on the local machine.
- ART requires the Microsoft .NET framework. The installer will attempt to download the Microsoft .NET framework from the Internet if it is not present at the time of installation. If an Internet connection is not available at the time of installation, install the framework manually before installing. The installer is only available in English (US).

Hardware Requirements for Authoring Content

- 1.5 GHz processor or higher
- 1 GB RAM minimum; 2 GB RAM recommended
- 8 MB Video card with 16 million colors at 1024 x 768 resolution
- 250 MB free disk space. Additional disk space required for application logs and content created.

Supported Operating Systems for Authoring Content

- Microsoft Windows XP Professional SP2/SP3 (32-bit), Vista Business SP1/SP2 (32-bit), or Windows 7 SP1 (32-bit and 64-bit) Professional or Enterprise
- Federal Desktop Core Configuration (FDCC) Major version 1.2 (2009 Q4) of Microsoft Windows XP Professional SP2/SP3 or Vista Business SP1

Requirements for Using Roaming Profiles with the HP ART Authoring Environment

- Authors using roaming profiles should have at least 80 MB allocated to their roaming profile.

Supported Application Recording Environments

- HP Adoption Readiness Tool can record and document virtually any 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.
- The recorder has been tuned specifically to record selected HP software including Service Manager, Asset Manager, Quality Center, PPM, etc.
- Java Access Bridge for Windows 2.01 or higher is required for recording Java based applications. This is included with the HP ART installation if it is not already installed on the author machine. Note that Java runtime environments 1.2.x and below require version 1.02.

Supported Web Browsers for Recording Web Pages and Applications

- Microsoft Internet Explorer 7.0, 8.0, or 9.0

Supported Web Browsers to Enable Content Authoring in HP ART

- Microsoft Internet Explorer 7.0, 8.0, or 9.0 or Mozilla Firefox 3.5, 3.6, 4.0, or 5.0.

Adobe Flash Requirements for Listening to Audio on the Local Authoring Machine

- Adobe Flash Player 9.0, 10.0, 10.1, 10.2, or 10.3 to play audio files in the editor.
- Flash Global Security Settings must be set to "Always allow"

Requirements for Recording Audio in HP ART

- Microphone to record audio.
- By default, audio files are encoded as WAV files. If the LAME encoder installed, audio files are encoded as MP3 files.

Requirements for Importing Microsoft PowerPoint® Content into HP ART eLearning Courses

- Microsoft Office 2003 SP3, 2007 SP2, or 2010 SP1

Requirements for Authoring HP ART Content in a Citrix Environment

- Authors can use the HP Adoption Readiness Tool from a 32-bit or 64-bit Terminal Server to support the generation of content.
- HP Adoption Readiness Tool has been tested against Windows Terminal Services (2003 and 2008) and Citrix XenApp™ (v4.5).
- HP Adoption Readiness Tool 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 authors.

Requirements for Printing Content from the HP ART Authoring Environment

- Connection to a printer with the proper print driver installed

Additional Required Technologies for Authoring Content

Note – the HP ART Installer will install these if they are not already present on the local machine.

- Microsoft .NET Framework v3.5 SP1
- Visual J# Redistributable Package v2.0
- Microsoft Visual C++ Redistributable Package v8.0.50727

End User Workstation Requirements

End user workstations support the viewing of content generated by HP Adoption Readiness Tool. The following requirements are based on tested configurations with all software installed locally.

Required Hardware for Viewing Content

- 1.0 GHz processor or higher
- 512 MB RAM or higher
- 2 MB Video card with 16 million colors at 1024 x 768 resolution

Supported Operating Systems for Viewing Content

- Microsoft Windows® XP Professional SP3, Vista Business SP2, or Windows 7 SP1 (32-bit and 64-bit) Professional or Enterprise
- Federal Desktop Core Configuration (FDCC) Major version 1.2 (2009 Q4) of Microsoft Windows XP Professional SP2/SP3 or Vista Business SP1

Supported Web Browsers for Viewing HTML Content

- Microsoft Internet Explorer® 7.0, 8.0, or 9.0; or Mozilla Firefox® 3.5, 3.6, 4.0, or 5.0; or Safari 5.0

Supported Microsoft Office® Versions for Viewing Microsoft Office Content

- Microsoft Office® 2003 SP3, 2007 SP2, or 2010 SP1 to view Microsoft Office output

Supported Adobe® Acrobat® Reader Versions for viewing PDF output

- Adobe® Acrobat® Reader 9.0, 9.1, 9.2, 9.3, or 10.0

Supported Adobe® Flash® Player Versions for AICC Communication with an LMS

- Adobe® Flash® Player 9.0, 10.0, or 10.1

Supported Browser, Flash and Quicktime Versions for Listening to Audio in Courses and Simulations

- Adobe® Flash® Player 9.0, 10.0, or 10.1 with Internet Explorer 7.0, 8.0, or 9.0 or Firefox 3.5, 3.6, or 4.0.
- Adobe® Flash® Player 9.0, 10.0, or 10.1 or Quicktime 7.0 with Safari 5.0.

Supported iPad Environments for Viewing HP ART Content

- Apple iPad 1st or 2nd generation running iOS 4.3 or higher. 2nd Generation iPad recommended for lengthy simulations or courses.

Supported Screen Reading Software for HP ART Content

- JAWS 12 For Windows (does not support Internet Explorer 9).

Recommended Network Connectivity for Viewing HP ART Content

For optimum performance, viewing published simulations or courses over a modem connection (56K) is not recommended.

HP ART Content Deployment Information

Understanding the Difference between HP ART Source Files and Published Content

HP ART source files have a UDC (document /recording), ULC (course) or UWS (website) file extension. They are provided by HP or created by a content author. These files can only be opened/viewed in the HP ART application. These source files are utilized only by Authors or Administrators and do not need to be stored in an accessible location to end users.

HP ART published content consists of HTML, Microsoft Word, and PDF files and is intended to be accessed/viewed by end users.

HP ART Source File and Published Content Sizes

HP ART source UDC and ULC files are approximately 100Kbytes per step/page. The size of each of the published files is approximately the same as the corresponding source document for each format.

An HP ART UWS file is small (typically under 5MB) as it only contains links to other files. It can contain up to 1000 links to website pages and other files. A published website is about 50Kb for each link or page. This is in addition to the published content (HTML, Word and PDF files) mentioned above.

An HP ART Glossary source (UPG file) is typically under 5MB and may contain a maximum of 2500 terms, with each term having a single definition. The published output can link to the website and is typically under 5MB.

Example – Website with 1000 HP ART UDC Files

If a site consisted of 1,000 recorded ART documents containing 25 steps each, the Author would require approximately 2.5 GB of disk space for the source files. These files do not need to be made available to end users.

Assuming three output types are selected for each source file, the published output would require approximately another 7.5 GB.

A published website is about 50Kb for each link or page, so 1000 links and/or pages would require approximately 50Mb of additional disk space.

Example – HP ART Asset Manager Content

The HP prebuilt Asset Manager website (UWS) file contains a total of 49 pages/links, out of a total allowance of 1000 pages/links (see screenshot above).

The zip file which contains ART Asset Manager Content is just under 1 GB. Unzipped, this holds the source files (UDC, ULC and UWS), which is 430MB, the published output files, which is 650MB, and the website template which is 25 KB.

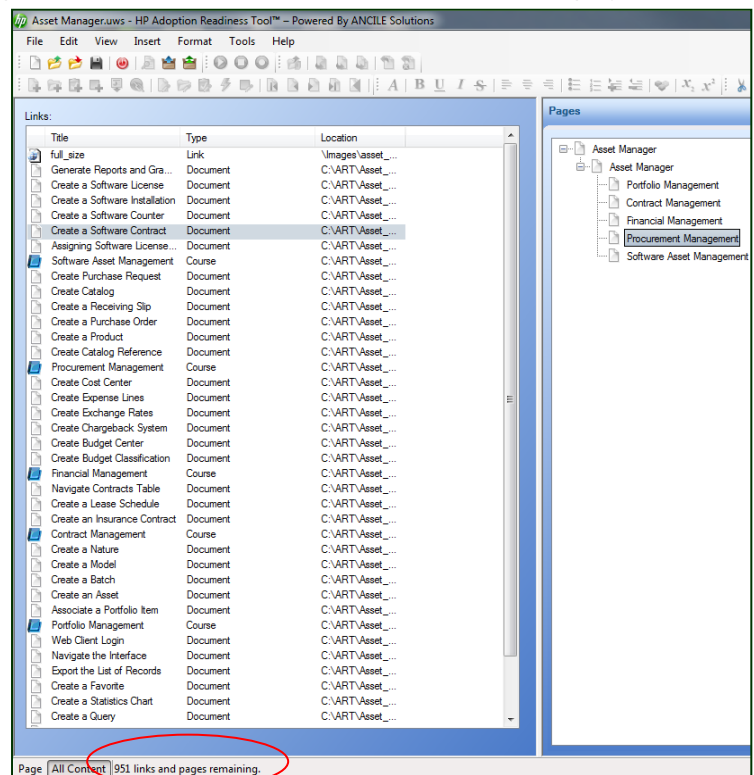
The source content (430MB) is comprised of multiple pieces, including ULCs which are course module files and UDCs which are recorded simulation files. Size is based on length of course or the length of the simulation. An example of a course module in Asset Manager is the Financial Management course file (87MB). Within that course are multiple recorded simulation files such as Create Exchange Rates (1.3 MB)

The published output files (650 MB) will be deployed to end users. These files include HTML and PDF files.

HP ART Web Server Requirements

HP ART published content is typically hosted on a web server to deploy to end users. The HP ART website structure and content may be placed on any server that supports static content delivery inside or outside (managed hosting) of a company network.

The server needed is platform (Windows/Linux/etc.) and web server (Apache/IIS/etc.) independent. At a minimum, it is recommended to have the equivalent of two Dual Core 1.86 GHz or higher processors with 2 GB



of RAM. Additionally, it is recommended that there is enough hard disk space available to support the above published content requirements, OS requirements, application requirements, and growth.

Simulations and courses utilize HTML5, eliminating the need to have any streaming software support and minimizes constant network load. Network and bandwidth requirements are reflective on the number of concurrent users and the size of the published content. There is no specified bandwidth requirement; however increased bandwidth can result in decreased load times.

Examples:

- 5 concurrent users accessing 10MB of published content over a 1.5Mbps connection would take roughly 4 minutes and 26 seconds.
- 5 concurrent users accessing 10MB of published content over a 10Mbps connection would take roughly 40 seconds.

Note: When calculating user concurrency it is important to note that users only access the web server during the loading of content.

Using HP ART Content with an LMS

HP ART courses and simulations contain a packaged zip file that may be imported directly into any Learning Management System (LMS) that conforms to AICC 2.2, SCORM 1.2, or SCORM 2004 to facilitate training.

AICC 2.2 conformant HP ART courses and simulations may be hosted on a web server as noted above and linked to from a Learning Management System (LMS) directly.

HP Adoption Readiness Tool simulations and courses support the following SCORM and AICC elements:

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

Collecting Simulation and Course Assessment Data without an LMS

To implement simulation and course assessment tracking in a non-SCORM or AICC environment, it is possible to use server-side scripting (Active Server Pages, Hypertext Preprocessor [PHP], or CGI) to handle data provided by the simulations and courses. HP Adoption Readiness Tool 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.