Upgrading ART

Table of Contents

1. Upgrading ART

Take the following steps to upgrade an existing ART installation to a more current version.

- Download the latest ART version
- Extract the zip package to a temporary location
- Review the **changelog.txt** file to see what has changed
- Unzip the **art.war** file to a directory e.g. one named `art`. You can use any zip/unzip utility as a .war file is a normal zip file.
- Stop the application server
- Backup the ART database
- Connect to the ART database and run any database upgrade scripts included in the download package to bring the ART database up to date
- Backup the art directory on the application server
- Delete the art directory and any art.war file in the webapps directory of the application server
- If using Tomcat, delete ART's Tomcat cache by deleting the art directory in the **TOMCAT_HOME\work\Catalina\localhost** directory
- Copy the new version art directory (from the unzipped art.war) to the webapps directory of the application server
- Copy the contents of the backup **art\WEB-INF\work** directory to the new version's directory
- Copy the contents of the backup **art\WEB-INF\thymeleaf\jobs** directory to the new version's directory
- Copy the contents of the backup **art\js-templates** directory to the new version's directory
- If you had modified the **art\WEB-INF\art-custom-settings.json** file, review the structure of the new version's file and copy appropriate details to the appropriate sections. New sections may have been added in a new version.
- If you had modified the **art\WEB-INF\groovy-whitelist.txt** file, copy the file to the new version's directory
- If you were using the demo HSQLDB database, after running the upgrade scripts on the ArtRepositoryDB database in the backup location, copy the updated files to the **art\WEB-INF\hsqldb** directory of the new version, overwriting the existing files. You can look at the Tips documentation to see how you can upgrade an HSQLDB database.
- If you had put any **JDBC drivers** in the **art\WEB-INF\lib** directory, copy these drivers from the backup lib directory to the new version's lib directory.
- Start the application server
- Clear your browser's cache e.g. for Firefox, use the History | Clear Recent History menu

The upgrade is complete. All users, reports, scheduled jobs etc should continue to work as before.

2. Notes

Some upgrades may require special attention or additional effort due to feature changes and incompatibilities with previous versions.

2.1. 3.0

ART 3.0 is a major upgrade and may require extensive testing to verify that it continues to fulfill the needs of an existing installation.

Item	Comments
URL changes	URLs that were being used in bookmarks or other links will need updating. Review the new application to see the appropriate URL to use or look at the admin manual to see new URLs.
ART Database configuration	The details of the ART Database will need to be entered afresh
Settings	Application settings will need to be entered afresh
Internet Explorer	If using Internet Explorer, you will need to use version 8 at a minimum. Some features may not work with Internet Explorer 8 so it is recommended, if using Internet Explorer, to use version 11.
Java	Java 7 and above is required
Application server	An application server that supports servlet 3.0 will be required e.g. Tomcat 7 and above
Renamed concepts	Some concepts have been renamed e.g. "Queries" are now "Reports", "Graphs" are now "Charts", "View Modes" are now "Report Formats", "Report on Column" report types are now "Group" reports, "Pivot Table" report types are now "JPivot" reports.
Jxls templates	Jxls templates need to be recreated. Review the sample templates located in the **ART_HOME\WEB-INF\work\templates** directory, or the Jxls website to see the new template structure.
Chained parameters	Reports that use chained parameters will need to be modified. Review the chained parameter example in the demo database or the admin manual to see the new method of specifying chained parameters.
Directory location changes	The templates directory has been moved to **ART_HOME\WEB-INF\work\templates**. The export directory has been moved to **ART_HOME\WEB-INF\work\export**.
XMLA Reports	For Mondrian XMLA and Microsoft XMLA reports, the url, username and password fields have been removed from the report definition page and instead a datasource needs to be created from the Datasource Configuration page and then used by selecting the Datasource field in the report definition.
Query tags	The special hardcoded tags or placeholders than can be used within query sql, **:USERNAME**, **:DATE** and **:TIME** have been changed to include a colon at the end i.e. **:USERNAME:**, **:DATE:** and **:TIME:**
Dashboard XML	If you have xml special characters within tag content, ensure to replace them with the relevant xml character entities e.g. if the `<URL>` tag contains a url like `http://localhost:8080/art/app/runReport.do?reportId=1&p-param1=test`, you'll need to replace the `&` character with `&`, to have the url as `http://localhost:8080/art/app/runReport.do?reportId=1&p-param1=test`. For a list of the 5 special xml characters and their respective replacement strings or character entities, see http://support.esri.com/technical-article/000005870
LOOKUP rule values	If you had any rule values of type **LOOKUP**, these will no longer be in effect as there is no longer an option for lookup rule values. Instead, define a user group, assign rule values to this user group and put the required users into this user group.
Non-labelled multi parameters	For reports that use multi parameters where the parameter name is not included in the sql source, the reports will need to be updated to include the parameter placeholder in the sql source.
Non-labelled rules	For reports that use rules, if the `#rules#` label doesn't exist in the sql source, such reports will need to be updated to include this label, so that rules can be applied.
Long parameters in JasperReports	Parameters that were defined with a data type of `java.lang.Long` in JasperReports need to be modified to `java.lang.Integer`
defaultAutoCommit	If using JNDI for the ART Database, make sure the **defaultAutoCommit** setting is set to **true**. This setting is for Tomcat but a similar change would be needed for other application servers.