

GUI_ProjectRestore – Restore a Project

Recent Revision history

2017-06-21	Robin Lamacraft	Original draft
2019-03-31	Rod Thompson	Major revision
2019-04-09	Don Ferguson	Replace mockups with actual screen shots; Minor text revisions for clarity throughout; Update 03.6x references to 05.8x (with notes of changes required in graphics)
2023-07-15	Don Ferguson	Align with Build 30

SCOPE

This GUI module is called from the Main Menu to restore an HRE project from backup files.

The location and naming of the Backup file to be used for restoration is determined by the User. The backup process may also have included external files, for which restoration is optional, to selected locations.

Selection of a project for 'restore' action is made from a selection of the relevant project.

Where a database software update has occurred since the project backup was created, an 'update' process may be required. If no errors are detected, the project is made User accessible.

Rules for Project Restore

- 1) Cannot restore over an existing project from a backup (i.e. same filename, location)
- 2) Can restore from a selected backup to a new location (with same or new filename)
- 3) Can restore from a selected backup to the same location (as the original) but must then have a new file name and project name.

This arrangement ensures that there is no loss of User entries when a project is restored from an earlier backup of a multi-user shared project. It may require User and/or Administrator attention to deal with data differences, and enable return to use of a single Project. It will also create multiple entries for the same Project in the Recorded Projects list.

The Project Restore function is subject to User Rights (implementation to be determined).

PROJECT FILESET

A set of files required for normal use of HRE projects consists of:

- an H2 database
- A 'User' Auxiliary file
- folders of external files (images, etc) [optional].

Refer to *03.32 Overview – Auxiliary (Non Database) Files* for details.

Issues

1. The number of Backup files – assumed there is a zipped backup of the project database and an optional second zipped file for external files.

LOOK AND FEEL

The window has several parts:

- The upper right icon buttons provide the following universal features:
 - the 'Help' icon displays context Help about the use of this window.
- The Select a Backup to Restore area displays the Filename and folder detail of the selected project, once found

- The Restore to a New Project area enables the user to select where the Project is to be restored and how it is to be named
- The buttons:
 - “Restore” performs the restore project functions on the selected project
 - “Cancel” exits without action
- Independently the lower part of the screen allows the user to select a ZIP file containing external files to be restored. These file can be selected and a restore location set. This section contains its own “Restore” and “Cancel” buttons.

PROJECT RESTORE Window

ACTIONS

The fundamental operations are:

1. Open the window
2. Allow the user to select a project for restoring from a backup
3. Where the project resides on a server for shared access, server login action is invoked
4. Allow the user to select where the backup file will be restored to
5. Allow the user to select what External file backup is to be restored, and the location where that is to be restored to
6. Perform the restore operation
 - Check the validity of the H2 database, performing a ‘Data Validation’ check
This process is as yet to be defined, but will create a log file.
If the restore process creates an Error:
 - i. An Error Message is displayed
 - ii. The ‘Restore’ process is ‘failed’ and the newly restored project files deleted.

- A database version check is performed, to confirm that the version is current. When the restored database is an older version, it is updated, and the Data Validation check performed again
- 7. When the restoration action is successful, entries are added in the initiating User Auxiliary file
- 8. Other Users of the Project are notified of the actions.

LOGGING

Use of this module will create log entries.

USE CASES

- 1) HRE Software and Project version differences (Single computer or Client to Single Server)
- 2) HRE Software and Project version differences (Server based multi-user)
- 3) Restoration by a User different from the User that created the backup
- 4) Restore recently backed up project (same User), no external files
- 5) Restoration in a different location from original
- 6) Restoration (with external files).

NOTE: Where the Use Case identifies 'version difference' this can be either a difference in HRE software/database version numbers OR a difference in installed HRE plugins. Where the difference is in installed plugins, a restore should never be allowed, as database corruption may result from either (a) lack of a plugin that was used to create data in the backup file, or (b) installation of a plugin in the software that may cause database corruption or fail of the integrity checks.

Use Case 1

Single Computer, or Client to Single Server - HRE Software and Project version difference

Where the database version is lower than the software, then the database is in need of upgrading.
Where the database version is higher than the software, no restore action is permitted.

Where the upgrade is possible (software determination), then carry out the Restore process, then upgrade the project to the current version.
Save the database, and update AUX file records.

When access is not possible, additional information needs to be provided to the User (i.e., software and database versions).

Use Case 2

Server based project (multi-user) - HRE Software and Project version difference

An administrator probably determines the software versions of client installations.
Project versions and client HRE's will generally match.

An exception may be a guest client user, in which case rights are likely to be limited.
If rights are open, and the guest user has a newer version of software, then any data saved by the guest user may cause problems for the broader user base, thus no restore can be permitted.

Another exception may exist where multiple organisations share a common project on a server.
Rights will have to determine action taken where a project/software version difference is detected.

Project versions need to be stored in User AUX Files and Database AUX files.

A new specification is required (BR series) to define requirements resulting from HRE software version changes. The presumption is that with each software version upgrade, a set of rules will be established for project database upgrades, which will be embedded in the software.

Use Case 3

Restoration by a User different from the User that created the backup

Project database backup (old) supplied by Pamela Joes [backup created by deceased husband-Paul] to Eliza Smith. Files supplied as a zip set, on a memory stick. No external files.

Process

- 1) H2 database restored to new location with filename EJ_HRERestore_Date/Time
- 2) AUX file updated with new information
- 3) No external files
- 4) Database integrity check (yet to be defined)
Information from that process added to the log
INTEGRITY TEST – PASS or FAIL
- 5) If FAIL, file deleted and user warned the restore failed
- 6) If PASS, files left as restored.

Use Case 4

Recently backed up project (same User)

Process

- 1) H2 database restored to new location with new filename
- 2) AUX file updated with new information.

Use Case 5

Restoration in a different location from original

Use Case 6

Project Backup restoration (with external files)