

## GUI\_ProjectCopyAs – Copy a Project

### Revision History

2017-06-21	Robin Lamacraft	Initial creation
2018-06-13	Rod Thompson	Edit Replace 'screen' with 'window' Revise LOOK & FEEL – icons Replace BR_PanelConfig with BR_WindowConfig Amend REQUIRED SERVICES – Dependencies Add JL Issue notes and Fileset information Add Process Flow Chart Add Windows Interaction Map Add EVENT ACTIONS Add WARNING MESSAGES
2018-06-30	Rod Thompson	Amend REQUIRED SERVICES – Dependencies Add PROJECT FILESET Add NOTES Revise MESSAGES Replace Process Flowchart
2018-10-31	Rod Thompson	WARNING CONDIITIONS – Amend Remove 'configuration' icon Add USE CASES Add TESTING Replace Windows Interaction Map Add LOGGING
2018-11-17	Rod Thompson	Replace graphic (add filename for new Project & ERROR) Replace WINDOWS INTERACTION MAP Replace PROCESS FLOW CHART (amend User Rights) Add Issue Add 3) to NOTES
2019-02-12	Rod Thompson	LOOK AND FEEL – replace graphics (v5) Add to NOTES – Default Filename & Project name
2019-02-17	Rod Thompson	Replace Process Flowchart (v5) Revise NOTES – Default Filename & Project name Replace WINDOWS INTERACTION MAP (v4) ACTION – Addition to allow Server logoff Add USE CASES TESTING – Revise
2019-02-18	Rod Thompson	Add DEFINITION Amend use of the word 'remote'
2019-04-12	Don Ferguson	Remove Output icon and specifications for it Replace mockup with actual draft screen images Renummer 03.6x module references to 05.8x

### SCOPE

This GUI module is called from the Main Menu (GUI\_UserInterface) to copy an existing populated project as a new HRE project.

### DEFINITIONS

Two modes of operation are provided for in the design of HRE.

- 1) Single computer
- 2) Multi-user **shared** access

In the latter case the project database exists in a computer which is separate from those in which Users are operating. This operation requires Server software on the computer controlling access via the use of Login processes.

**Issue:**

- 1) A process is needed to check linkages between external files and the database, and where broken a means is needed to recreate the links
- 2) This specification assumes that the original project and the new copy are located on the same local or remote server. This limitation is accepted at this time in development – and addressed at a later time.

**PROJECT FILESET**

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

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

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

**NOTES**

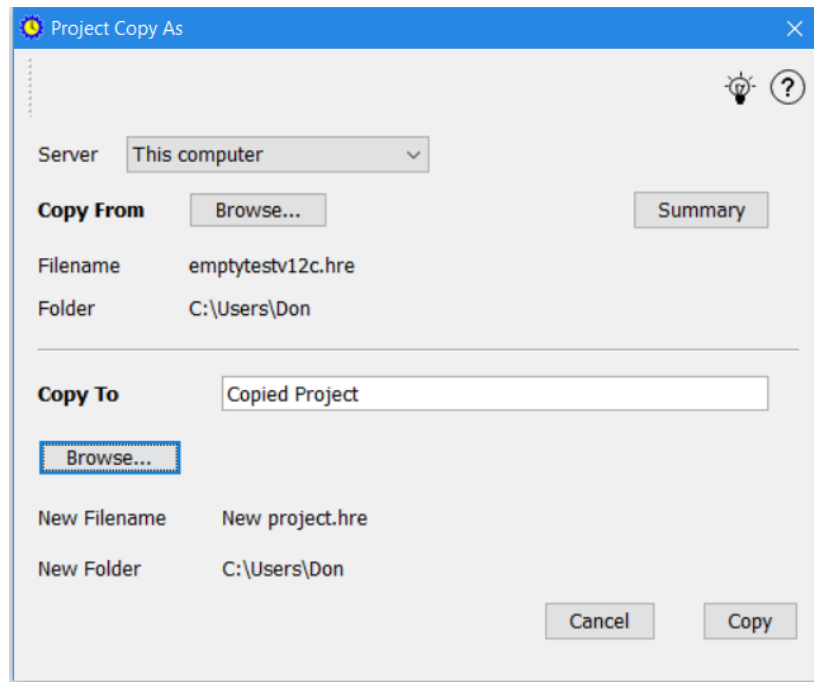
- 1) In the use of this module, no action is taken involving External files linked to the project. Links included in the existing project are copied to the new project.  
If the new project is located in a different location, separate action is required to attend to links to External files
- 2) Access rights of the User may determine if creating a new database (via copy) is a valid function.  
Example: Read only access does not allowing copying a project.  
Write access to Server locations is only provided by an administrator.
- 3) The HRE software should reject a User action to save the project being created, from being copied to a file in the same folder as the original, with an identical filename, generating an Error Message
- 4) The default filename for the new project (auto entry) is identical to the filename of the project being copied
- 5) The default project name used in the newly copied project is similar to that in the project being copied, but appended with a numeral, e.g. 2 (if not already used). This will require that the copied project be 'opened', and the filename changed (without User action).

**LOOK AND FEEL**

The window has several parts:

- The upper right icon buttons provide the following universal features:
  - the 'Reminder' icon displays the Reminder content for this window
  - the 'Help' icon displays context Help about the use of this window
- The "Server" selection list allows selection from various servers known to this installation of HRE. On selection of a Server, the "Login" button allows the user to access that server (if the user is already logged into that server the "Login" button will be hidden). NOTE: If this is an isolated usage of HRE where project files are only used from the same computer then the server aspects of this GUI will not show any server-related elements. There can be a one user environment. If a second computer is used to access those project files over a local network then the login on either computer must invoke the shared server mode
- The Original Project "Browse" button allows the user to select the project file to be copied

- The “Summary” button opens the GUI\_ProjectSummary module to display the details of the selected project
- The Save in Folder “Browse” button allows the user to select the folder where the copy of the project will be stored. The new name of the project is entered below the folder path, as is the filename
- The “Copy” button initiates the copy of the chosen project to the new location and filename
- The “Cancel” button forces exit without action.



Draft PROJECT COPYAS window

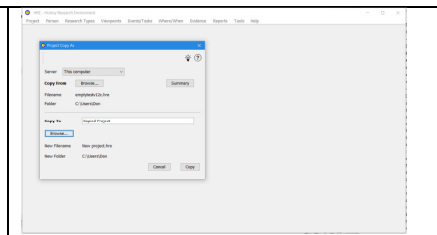
Shape, Size, Color, Layout etc. determined in design.

On screen location

Initially inherited from the HRE main display

Window located immediately below the Project menu button

On screen location is the only User changeable settings



## ACTIONS

The fundamental operations are:

1. Open the window according to its saved window Layout (BR\_WindowConfig)
2. Allow the user to search for a project file (known to the User) to be copied
3. Allow the user to select a name and location (local or named server) for the project copy
4. If the input file is in use, then:
  - prevent any new logins
  - queue action for later time.
5. When the task can be performed, copy the project to the new filename/location
6. Copy the original Project AUX file to the new location, and adjust the Project entries within it to refer to the new database filename/location
7. Notify User(s) of the original project when it is completed
8. If the project is located on a Shared Server, invoke the Server Login module providing the User with the option to logoff.

**USED BY**

All HRE users with valid rights.

**DATA CONTROLLED BY THIS MODULE**

1. An HRE Project database
2. The Project's associated Project AUX file.

**REQUIRED DATA CONTROLLED BY OTHER MODULES**

1. None.

**REQUIRED SERVICES – Dependencies**

Note: this dependency table implies some form of Copy being performed by processing and copying a project's internal tables. A more likely (and simpler) method would be to perform a project backup and restore process.

First-Order Dependencies	Second-Order Dependencies (if not already listed)	Higher-Order Dependencies (if not already listed)
05.40 GUI_Reminder	05.88 GUI_SelectConfiguration	NIL
	05.02 GUI_EncodedStringEdit	05.08 GUI_FieldDefinitionEdit 05.42 GUI_SubstitutionEdit 07.26 BR_Substitution 07.24 BR_Setting 07.17 BR_WindowConfig
	07.01 BR_EncodedString	NIL
	07.24 BR_Setting	BR_AppData BR_UserData 07.02 BR_EntityLink
	07.17 BR_WindowConfig	07.06 BR_GuiElement 07.02 BR_EntityLink 07.29 BR_Translation BR_FieldTranslation 07.16 BR_Message Patterns
	07.02 BR_EntityLink	Needed
05.14 GUI_Help	05.88 GUI_Select Configuration	NIL
	07.24 BR_Setting	BR_AppData BR_UserData 07.02 BR_EntityLink
	07.17 BR_WindowConfig	07.06 BR_GuiElement 07.02 BR_EntityLink 07.29 BR_Translation BR_FieldTranslation 07.16 BR_Message Patterns
	07.11 BR_Logging	07.01 BR_EncodedString 07.02 BR_EntityLink BR_FieldTranslation 07.26 BR_Substitution
	07.07 BR_Help	07.29 BR_Translation 07.21 BR_Project 07.01 BR_EncodedString 07.24 BR_Setting 07.11 BR_Logging 07.12 BR_Menu 07.25 BR_Schema 07.28 BR_User 07.16 BR_MessagePatterns
	07.02 BR_EntityLink	Needed
07.17 BR_WindowConfig	07.06 BR_GuiElement	07.01 BR_EncodedString 07.02 BR_EntityLink BR_FieldTranslation 07.16 BR_MessagePattern
	07.02 BR_EntityLink	Needed
	07.29 BR_Translation	07.02 BR_EntityLink BR_Field 07.06 BR_GUIElement 07.16 BR_MessagePatterns
	07.16 BR_Message Patterns	07.02 BR_EntityLink 07.01 BR_EncodedString 07.11 BR_Logging Call Stack 07.24 BR_Setting GUI Translation
07.21 BR_Project	07.06 BR_GuiElement	07.01 BR_EncodedString 07.02 BR_EntityLink BR_FieldTranslation 07.16 BR_MessagePattern
	07.02 BR_EntityLink	Needed

	07.29 BR_Translation	07.02 BR_EntityLink BR_Field 07.06 BR_GUIElement 07.16 BR_MessagePatterns
	07.03 BR_FieldDefinition	Needed
07.16 BR_File	07.16 BR_MessagePatterns	07.02 BR_EntityLink 07.01 BR_EncodedString 07.11 BR_Logging Call Stack 07.24 BR_Setting GUI Translation
	07.21 BR_Project	07.06 BR_GUIElement 07.02 BR_EntityLink 07.29 BR_Translation 07.03 BR_FieldDefinition
	07.24 BR_Setting	BR_AppData BR_UserData 07.02 BR_EntityLink
	07.11 BR_Logging	07.01 BR_EncodedString 07.02 BR_EntityLink BR_FieldTranslation 07.26 BR_Substitution
	07.25 BR_Schema	07.02 BR_EntityLink BR_UserTranslation BR_FieldTranslation
	08.01 BCS_Bridge	10.02 SS_DirectRequest 07.16 BR_MessagePatterns

## APPLICATION PROGRAMMING INTERFACE (API)

1. Single call with no parameters.

## LOGGING

Use of this module **will** create log entries.

Commit Logging occurs for each of the following functions – in the listed tables:

Function	Database Table
Open Session (Starting Project)	128
Close Session (Close Project)	128
Create Project (new name)	126
Move and/or resize window	305/306?

### General Log

This includes:

- Update User AUX file
- Sever Login (if applicable)
- Message to Server (at Client)
- Message from Client (at Server)
- Message to Client (at Server)
- Message from Server (at Client)
- Message Acknowledgement

## EVENT ACTIONS

- 1) Keyboard actions  
New Project Name entry
- 2) Mouse actions

Drag and drop mouse actions to move and resize the window

Setting changes saved to database for User>Project>Window

Left key

- a. click on Server name pulldown expands Server list, and allows selection
- b. click on the Browse button(s) opens the Windows Explorer allowing the user to view the file system to select an existing Folder and Filename, or enter a new Filename
- c. click on the 'Summary' button invokes the GUI\_Project Summary module
- d. click on the 'Cancel' or 'Copy' button, operates the button
- e. click on icons (detailed below)

Right key

To be determined

3) Icon actions

- a. left mouse key click on icons in the Window Control group:  
'X' icon - closes the window  
NOTE: Same action as in use of the 'Cancel' button
- b. left mouse key click on 'Reminder' icon:  
(opens 'Reminder' window for this 'Project CopyAs' module)
- c. left mouse click on 'Help' icon:  
(opens the Help System, searches for the section on 'Project CopyAs')

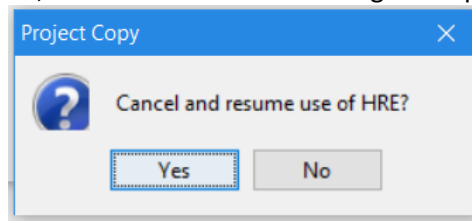
4) Keyboard shortcuts

To be determined

## WARNING CONDITIONS

Display Location: centred on the Cancel button location.

When the 'Cancel' button is used, then a confirmation message is displayed.



Message Display bypass

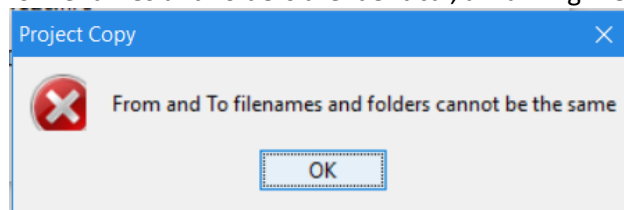
A system is to employed in HRE enabling the bypass of confirmation messages.

Detail of this system is to be determined.

## ERROR CONDITIONS

Display Location: centred on the Cancel button location.

If the chosen From and To filenames and folders are identical, a warning message is displayed:



**SERVER MESSAGES** Created in and sent from Server to Client, using the Server Broadcast Message Pattern

<p>Message M_S_C_1</p> <p>Uses Server Broadcast Message Pattern GUI_Message (SB)</p> <p>Sent to one Client User initiating the 'CopyAs' process</p>	<p>Subject: Project CopyAs From: Server Text Message: Either the Server is currently taking other actions on the project, or you do not have 'RIGHTS' to Copy the project.</p> <p>Requested by: User name Project name: Project name to Project name Project folder: Folder name to Folder name Project filename: Filename to Filename</p>
<p>Message M_S_C_2</p> <p>Uses Server Broadcast Message Pattern GUI_Message (SB)</p> <p>Sent to all Users of the selected project</p>	<p>Subject: Project CopyAs From: Server Text Message: Project copy queued – multiple users. Copy will occur when all users are disconnected from the project.</p> <p>Requested by: User name Project name: Project name to Project name Project folder: Folder name to Folder name Project filename: Filename to Filename</p>
<p>Message M_S_C_3</p> <p>Uses Server Broadcast Message Pattern GUI_Message (SB)</p> <p>Sent to one Client User initiating the 'CopyAs' process</p>	<p>Subject: Project CopyAs From: Server Text Message: Project copy completed.</p> <p>Requested by: User name Project name: Project name to Project name Project folder: Folder name to Folder name Project filename: Filename to Filename</p>

Display location: centred on the GUI\_ProjectCopyAs window

Message designator:

- 1) M\_ signifies a message
- 2) X\_ source
- 3) Y\_ destination
- 4) Z distinguishing number for this window

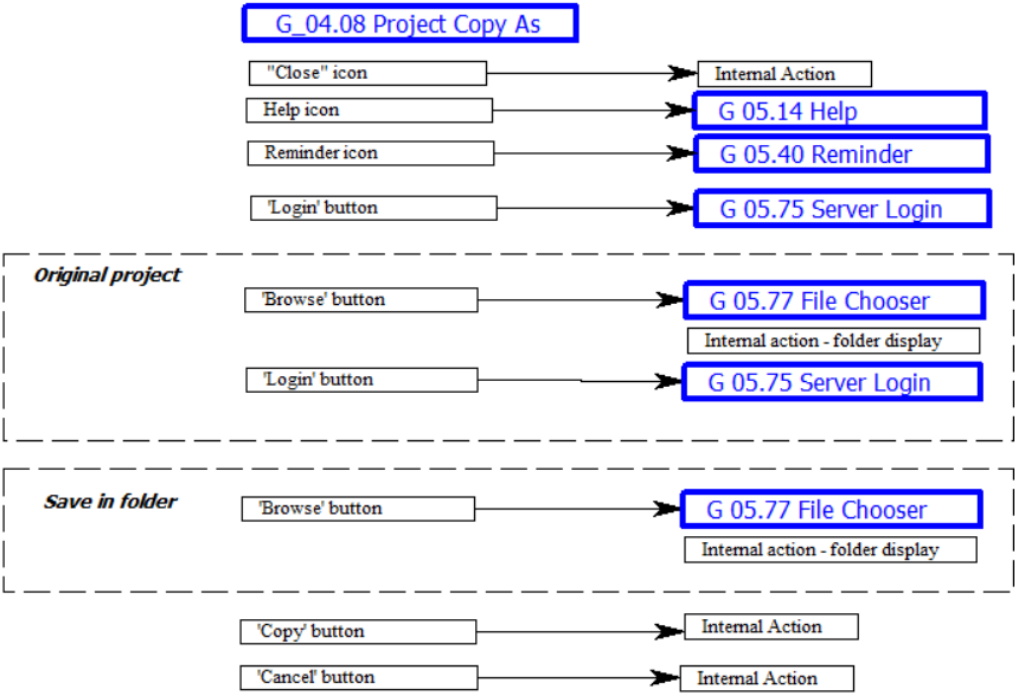
Use (or otherwise) of Warning Messages in HRE is a User controlled preference, set through the Application Settings management module.

Where applicable in the operation of HRE, Warning Messages are generated.

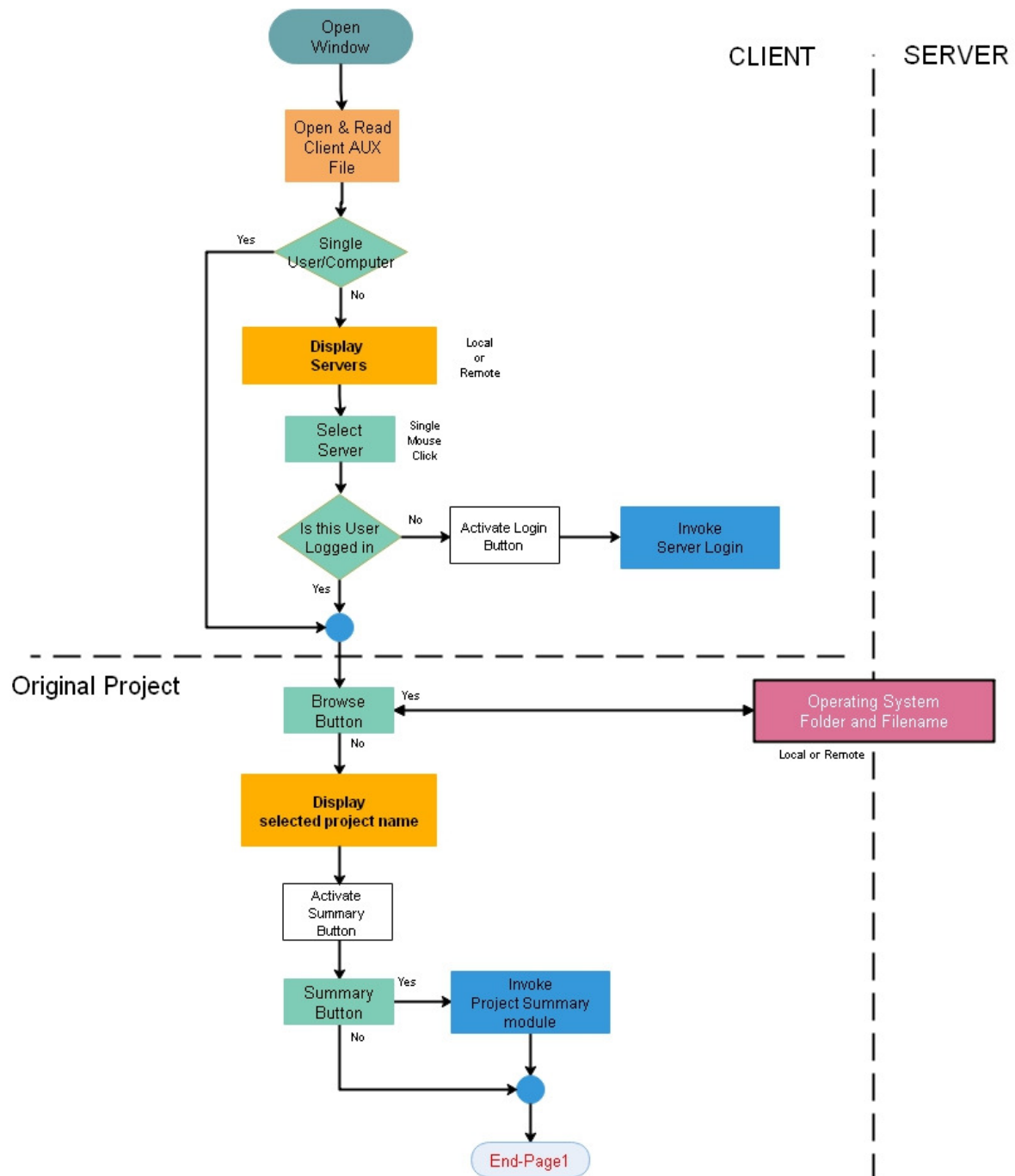
According to the User preference for these, the display of such messages is bypassed, with action taken by the software equivalent to the User operation of the OK button.

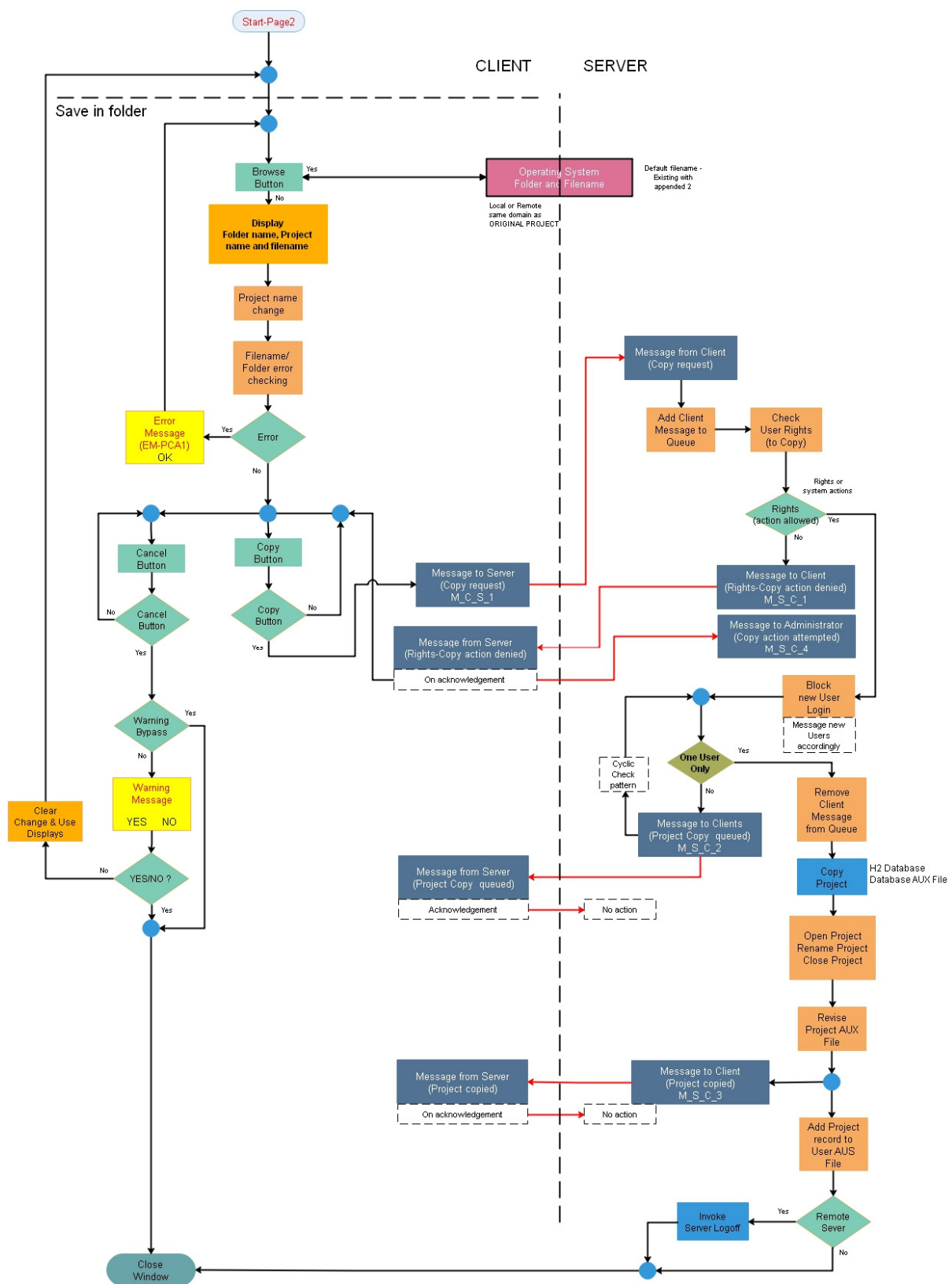


WINDOWS INTERACTION MAP



## PROCESS FLOW CHART





## USE CASES

- 1) CopyAs a local project
- 2) CopyAs a known project on a Server
- 3) CopyAs an unknown project on a Server

### Use Case 1

CopyAs a project on the local computer

In the GUI window, the User will select the 'This computer' entry in the Server selection box

The Browse button (Original Project) will provide access to the computer's operating system file explorer, enabling the User to identify the project database file.

This process will be rights protected, allowing access only to specific folders and projects.

Use of the Summary button will allow the User to view details of the project.

A Browse button (Save in folder) will provide access to the computer's operating system file explorer, enabling the User to select a new folder in which the new project is to be copied, to define a new project name (if desired) and to enter a filename for the new project.

Use of the 'Copy' button will perform the operation.

- 1) Copying the project H2 database and AUX file to the new folder, with the new filename
- 2) Open the project and amend the Project name
- 3) Add the new project to the UserAUX file
- 4) Revise the ProjectAUX file (as required)  
This is expected to involve:
  - a. A rename of the project name record
  - b. Deletion of records of users of the original project (with the exception of the current User)
- 5) Update of the UserAUX file with the new project detail
- 6) A Sever Logoff option is provided.

### Use Case 2

CopyAs a known project on a Server

Same as above with the exchange of all references to the local computer to than on the selected Server. In addition, a login to the Server is required.

### Use Case 3

CopyAs an unknown project on a Server

Assumption that the server is listed.

If not – the Project must first be located via Project Open.

In the GUI window, the User will select the applicable Server entry in the Server selection box

The Browse button (Original Project) will provide access to the server computer's operating system file explorer, enabling the User to identify the project database file.

This process will be rights protected, allowing access only to specific folders and projects.

Use of the Summary button will allow the User to view details of the project.

A Browse button (Save in folder) will provide access to the computer's operating system file explorer, enabling the User to select a new folder in which the new project is to be copied, to define a new project name (if desired) and to enter a filename for the new project.

This process will be rights protected, allowing access only to specific folders for saving the new project.

Operations as defined in User Case 1 above

## TESTING

Testing to prove the functionality of this module in use with others of the HRE application.

Limited 'Project' functionality (see below).

Prior testing of the module in the code development process is assumed.

<u>General requirements</u>	<u>Code element requirements</u>
HRE installation	Main GUI
1) Single computer	Project Open
2) Client-Server	Project Close
3) Test Project database fileset	Project CopyAs
	ExitHRE

## Process

- 1) Run HRE
  - a. Open HRE
  - b. Invoke the ProjectCopyAs module  
Create the Copy
  - c. Open the newly copied Project - check
  - d. Exit HREFor single computer and shared access computer operations
- 2) Check result (how?).

See Test Plan document.