

GUI_ProjectClose – Close a Project

Revision History

| | | |
|--------------------|-----------------|--|
| 2017-06-20 | Robin Lamacraft | Initial creation |
| 2018-05-29 – 06-03 | Rod Thompson | Major revision; Add Window graphics; Add Process Flow Chart |
| 2018-06-06 | Rod Thompson | Add clarification for meaning of Project Close |
| 2018-06-08 | Rod Thompson | Add Messages (Server); Revise Process Flowchart |
| 2018-06-09 | Don Ferguson | Minor edits |
| 2018-06-15 | Rod Thompson | Add Project fileset detail; Update REQUIRED SERVICES-Dependencies Replace PROCESS FLOW CHART |
| 2018-06-28 | Rod Thompson | Replace PROCESS FLOW CHART; Add Project Fileset under SCOPE |
| 2018-06-29 | Rod Thompson | Replace window graphic |
| 2018-10-23 | Rod Thompson | Replace window graphic; Add Window location detail; LOOK AND FEEL – Remove configuration icon; EVENT ACTION – Add to mouse actions; Add 'Project Close Time record' to ACTIONS; Add LOGGING Update REQUIRED SERVICES-Dependencies |
| 2018-12-13 | Rod Thompson | Replace Process Flowchart (add Action-Progress) Add TESTING SECTION |
| 2019-02-25 | Rod Thompson | LOOK AND FEEL – Add Data Validation & message popup re Server logoff; ACTIONS – Add re Data Validation; WARNING CONDITIONS – Revise; MESSAGES – Update; REQUIRED SERVICES - Update |
| 2020-02-28 | Don Ferguson | Align with actual code (Build 19) |

SCOPE

This GUI module is called from the Main Menu or from GUI_ExitHRE, to close currently open project(s).

In general, the term 'Project Close' is used to mean closure of the connection between the Client and Server for the selected currently open Project. Only when there is ONE User of an open Project, can that Project be 'closed'.

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].

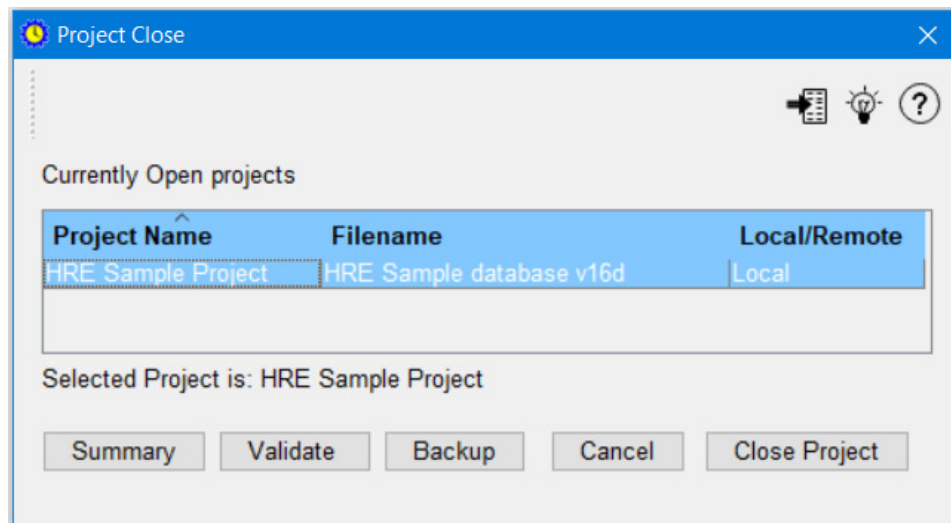
Refer to *03.32 Overview – Auxiliary (Non Database) Files* for details.

LOOK AND FEEL

The window has several parts:

- A top panel with the window name, and window size control icons
- The upper right icon buttons provide the following universal features:
 - The 'Output' icon enables Output of the new project properties list by sending the contents of the Currently Open projects tabular display to a file or to a printer
 - The 'Reminder' icon displays the Reminder content for this window
 - The 'Help' icon displays context Help about the use of this window
- A scrollable display area which shows all of the user's currently open projects, which allows the selection of a Project from the displayed list (this may be empty if no projects are open)
- A "Summary" button which opens the GUI_ProjectSummary module to display details of the selected project

- A “Data Validation” button to initiate that process
- The control buttons
 - “Backup” causes backup of the selected project, in a single user situation
 - “Close Project” performs the project close functions on the selected project
 - “Cancel” exits without action.
- Following use of the “Close Project” option, and on completion of the process, a pop-up message will be displayed about logging from the server (only displayed if the project is server resident)
- Warning messages are displayed where appropriate.



Project Close Window

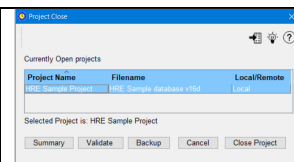
Shape, Size, Color, Layout etc. determined in design.

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 setting



ACTIONS

The fundamental operations are:

1. Open the window
2. Allow selection of the project to be closed
3. When a project has been selected, the ‘Summary’ button is activated. This allows the User to view a ‘Summary’ of the selected Project (refer to GUI_ProjectSummary)
4. Allow a Data Validation process to be run
5. Ask whether to backup the project; if so, call GUI_ProjectBackup
6. On completion of all tasks above:
 - Write a ‘Project Close’ time to the Known Projects table
 - Close the project file.
7. Show a Close confirmation message
8. Close the window
9. If called from Exit HRE, end the HRE application.

USED BY

All HRE users.

DATA CONTROLLED BY THIS MODULE

1. Any open HRE Project.

REQUIRED DATA CONTROLLED BY OTHER MODULES

1. Project names
2. Data from Project Summary for each open Project.

REQUIRED SERVICES – Dependencies

| First-Order Dependencies | Second-Order Dependencies |
|--------------------------|---------------------------|
| 04.05 GUI_ProjectBackup | |
| 04.14 GUI_ProjectSummary | |
| 07.11 BR_Logging | |
| 07.48 BR_DataValidation | |

APPLICATION PROGRAMMING INTERFACE (API)

1. Single call, 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 |
|---------------------------|----------------|
| Close Session | 128 |
| Move and/or resize window | 305/306? |

General Log

This includes:

- Data Validation
- Project Backup
- 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
NIL

- 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. Mouse key click on a Project Name, causes the project name to be highlighted and enables the Summary button
- b. Mouse key click on each button, operates the button
- c. Mouse key 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:
 - a. 'X' icon (closes the window)
NOTE: Same action as in use of the 'Cancel' button
 - b. 'Box' icon
Toggles the window size between full screen, and the saved Layout
 - c. 'Dash' icon
Minimizes the window, to an icon on the screen toolbar.
A click on the toolbar icon restores the display to its previous setting
- b. Left mouse key click on the 'Output' icon:
(opens the 'Output' window for output to File or Printer)
- c. left mouse key click on 'Reminder' icon:
(opens 'Reminder' window for this 'ProjectClose' display)
- d. left mouse click on 'Help' icon:
(opens the Help System, searches for the section on 'ProjectClose')

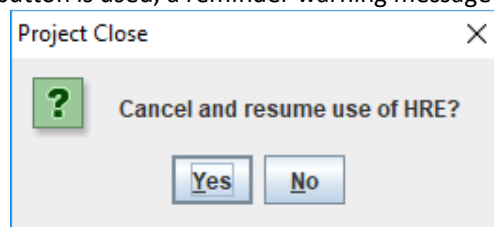
4) Keyboard shortcuts

To be determined

WARNING CONDITIONS

Display Location: centered on the GUI_ProjectClose window

1. When the 'Cancel' button is used, a reminder warning message is displayed.



Implement using a JOptionPane.

Message Display bypass

A user setting enables the bypass of cancel Confirmation messages.

ERROR CONDITIONS

1. Need to record the condition that raised the error, example message and possible next steps.

POSSIBLE SERVER INTERACTIONS

1. In the Client-Server mode of operation, the project database resides on the Server
2. If the Server receives a backup command from a user of a Project with multiple concurrent users, that request is stored in a Queue until there is only one active User, and that User initiates either a Project Backup or Project Close. That backup process is completed before the last active User closes. If the last user does not initiate a Project Backup, the Server must send that user a message indicating activation of the backup process and delay the user's Project close until completion.

MESSAGES

Created in and sent from Client to Server

| | |
|--------------------|------------------------|
| Message M_C_S_1 | Contains: User Name |
|--------------------|------------------------|

| | |
|-----------------------------|---|
| Software based – no display | Project name Folder and filename for saving of the Project Option-External Files Option-App Settings |
|-----------------------------|---|

Created in and sent from Server to Client(s)

| | |
|--|---|
| Message M_S_C_1 Uses Server Broadcast Message Pattern GUI_Message (SB) Sent to all Users of the selected project | Subject: Project Close From: Server Text Message: Project connection closed. Requested by: User name Project name: Project name Backup folder: Folder name Backup filename: Filename |
|--|---|

| | |
|--|--|
| Message M_S_C_2 Uses Server Broadcast Message Pattern GUI_Message (SB) Sent to all Users of the selected project | Subject: Project Close From: Server Text Message: Project closed. Requested by: User name Project name: Project name Backup folder: Folder name Backup filename: Filename |
|--|--|

Display Location: centred on the GUI_ProjectClose window

Message designator:

- 1) M_ signifies a message
- 2) X_ source
- 3) Y_ destination
- 4) Z distinguishing number for this window

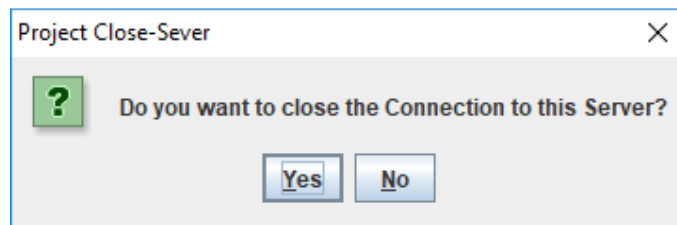
Messages from the Server to the Client utilize the Server Broadcast Message Pattern.
Such messages result in a window opening on the client, to display information (detailed above)

MESSAGES

Created in the Client, triggered by Server action

Display Location: centered on the GUI_ProjectClose window

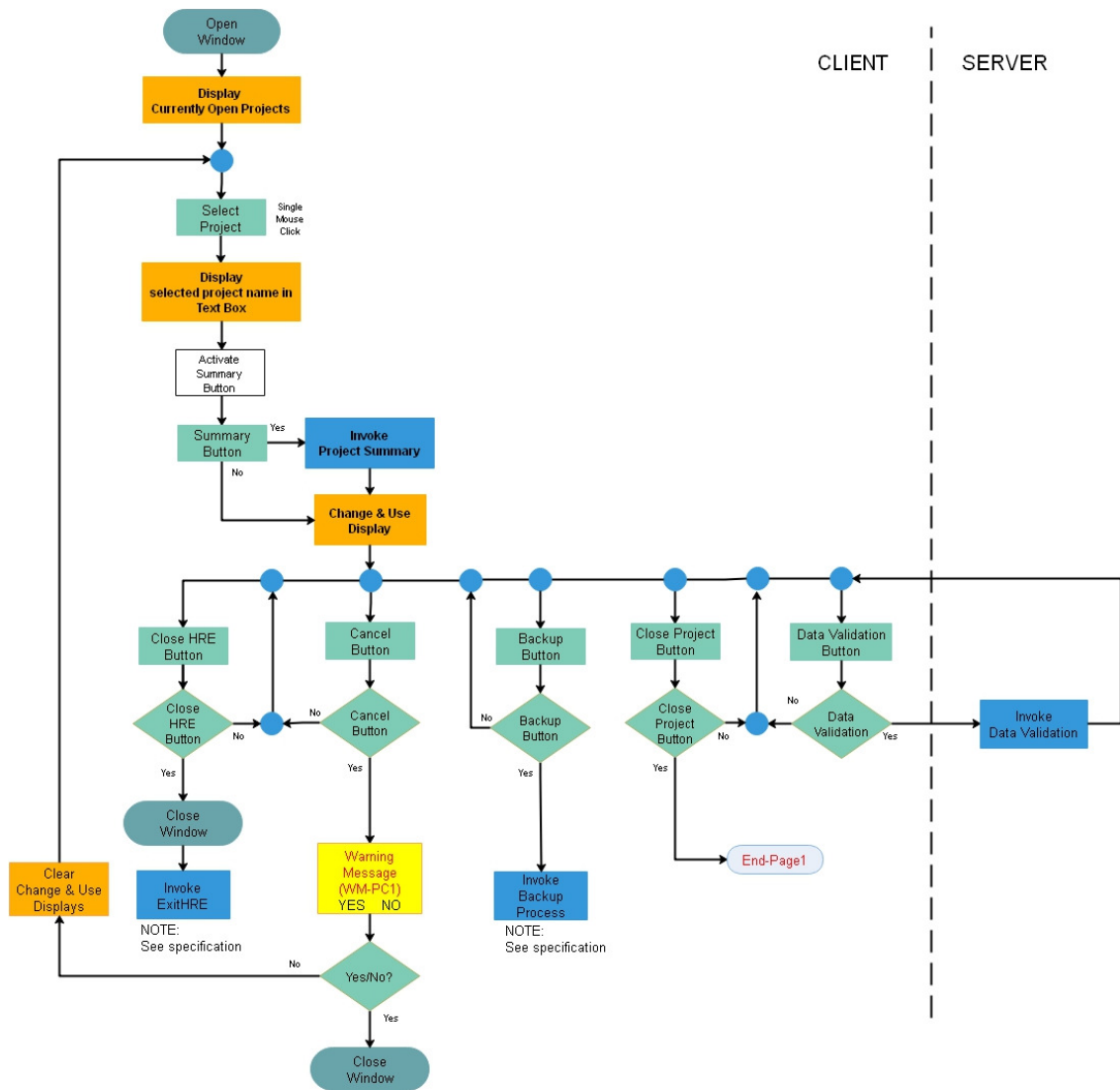
1. When the 'Project Close' button is used, and after the Project is closed, a popup prompt message is displayed.

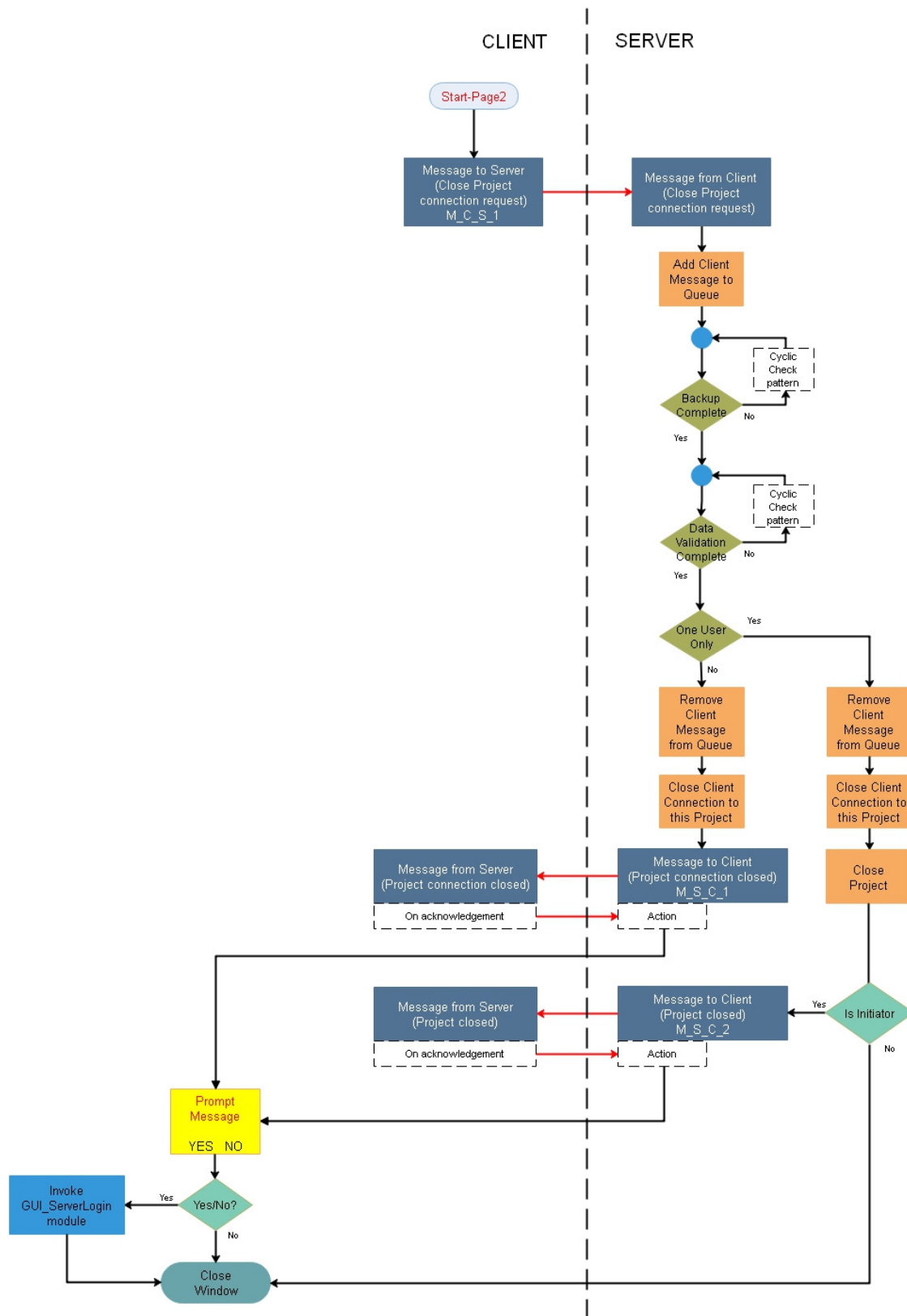


message is not to

Implement using a JOptionPane.

PROCESS FLOW CHART





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 | ExitHRE |

Process

- 1) HRE (Simple restore)
 - a. Open HRE
 - b. Open the Project
 - c. Close the Project
- 2) Check result (how?)
 - a. Appropriate Commit Log entries
 - b. Appropriate General Log entries.