

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 Window Interaction Map Add Process Flow Chart
2018-06-06	Rod Thompson	Add clarification for meaning of Project Close Replace BR_PanelConfig with BR_WindowConfig
2018-06-08	Rod Thompson	Add Messages (Server) Revise Process Flowchart
2018-06-09	Don Ferguson	Minor edits

SCOPE

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

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'.

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 'Configuration' icon enables the user to create and retrieve Configurations of this window's layout
 - 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, by server and project name which allows the selection of a Project from the displayed list (this may be empty if no projects are open)
- A display area for the selected Project name
- A "Summary" button which opens the GUI_ProjectSummary module to display details of the selected project
- A display of additional information to the user, relevant to the closing of the Project
- 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
 - "Close HRE" will close HRE if there are no projects open
 - "Cancel" exits without action
- Warning messages are displayed where appropriate.

Project Close

Currently Open projects

Server	Project Name
Local	Drummond-UK
Local	Drummond-US

Summary

Change

Use

Backup Cancel Close Project Close HRE

ProjectClose Window – Mockup

ACTIONS

The fundamental operations are:

1. Open the window according to its saved Layout (BR_WindowConfig)
2. Allow selection of a project to be closed
3. When a project has been selected, the project name is displayed in the text box and the 'Summary' button activated. This allows the User to view a 'Summary' of the selected Project (refer to GUI_ProjectSummary)
4. Wait until all outstanding transactions from this client are completed
5. Ask whether to backup the project; if so, call GUI_ProjectBackup
6. On completion of all tasks above, close the project file from this HRE client
7. Close the window and return to GUI_UserInterface
8. If selected, close the HRE application.

INFORMATION DISPLAY

This provides the user with information about the Project intended to be closed, to assist determining further action.

Two parts make up the information set:

- 1) Project changes

This gathers two pieces of data, and formats these with words according to a template.

 - a. Date Item 1 – the number of changes to the Project since the previous backup
Example 317
 - b. Data Item 2 – the date/time of the previous backup.
Example 10-Jan-2018, 10:04AM

Template: NUMBER changes since the last backup on DATE/TIME

Example: 317 changes since the last update on 10-Jan-2018, 10:04AM

2) Use

This gives information about current use of the selected project, relevant to backup of the Project.

The following template 2-line text messages are involved

a. Single User

Backup allowed

b. Multiple Users

Backup request will be sent to the Server for later action

Where there is only one User of the Project, backup can occur immediately.

Where there are multiple active users, backup can occur only when one user remains, and activates either the Backup or Close processes.

Each of these parts is provided by separate text boxes.

USED BY

All HRE users.

DATA CONTROLLED BY THIS MODULE

1. Any open HRE Project.

REQUIRED DATA CONTROLLED BY OTHER MODULES

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

REQUIRED SERVICES

1. GUI_ProjectBackup
2. GUI_ProjectSummary
3. GUI_ExitHRE
4. BR_WindowConfig
5. BR_Project.

APPLICATION PROGRAMMING INTERFACE (API)

1. Single call, no parameters

EVENT ACTIONS

- 1) Keyboard actions
NIL

- 2) Mouse actions

Left key

- a. Mouse key click on Server/Project name pulldown expands Server/Project list, and allows selection
- b. Mouse key click on a Project Name, causes the project name to be shown in the text box, and enables the Summary button
- c. Mouse key click on each button, operates the button
- d. 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)
 - 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 key click on the 'Configuration' icon
(opens the Configuration Window for this 'ProjectClose' window)
- e. left mouse click on 'Help' icon:
(opens the Help System, searches for the section on 'ProjectClose')

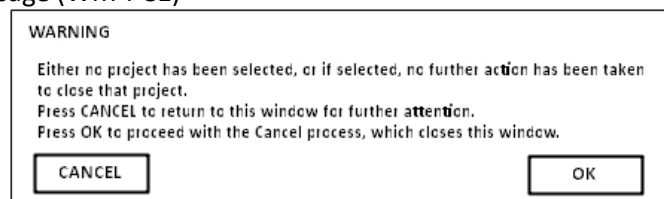
4) Keyboard shortcuts

To be determined

WARNING CONDITIONS

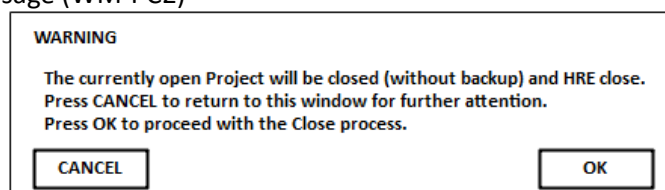
1. When the 'Cancel' button is used, then a warning message is displayed.

Warning Message (WM-PC1)



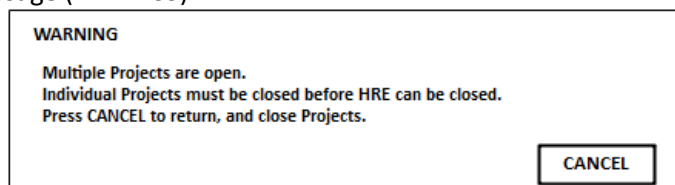
2. When the 'CloseHRE' button is used, and only one project is open; then a warning message is displayed.

Warning Message (WM-PC2)



3. When the 'CloseHRE' button is used, and if there are multiple projects open; then a warning message is displayed.

Warning Message (WM-PC3)



Error Message window width approximately 450 pixels
Location: centred on the GUI_ProjectClose window

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. Backup commands from the Client act in the Server to backup the data
3. This may occur on receipt of the command, where there is only one user of a Project
4. Where multiple users concurrently access a Project, a backup of the Project is allowed only when there is one user
5. 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 Software based – no display	Contains: User Name Project name Folder and filename for saving of the Project Option-External Files Option-App Settings
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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 backup queued – multiple users. Requested by: User name Project name: Project name Backup folder: Folder name Backup filename: Filename
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Message designator:

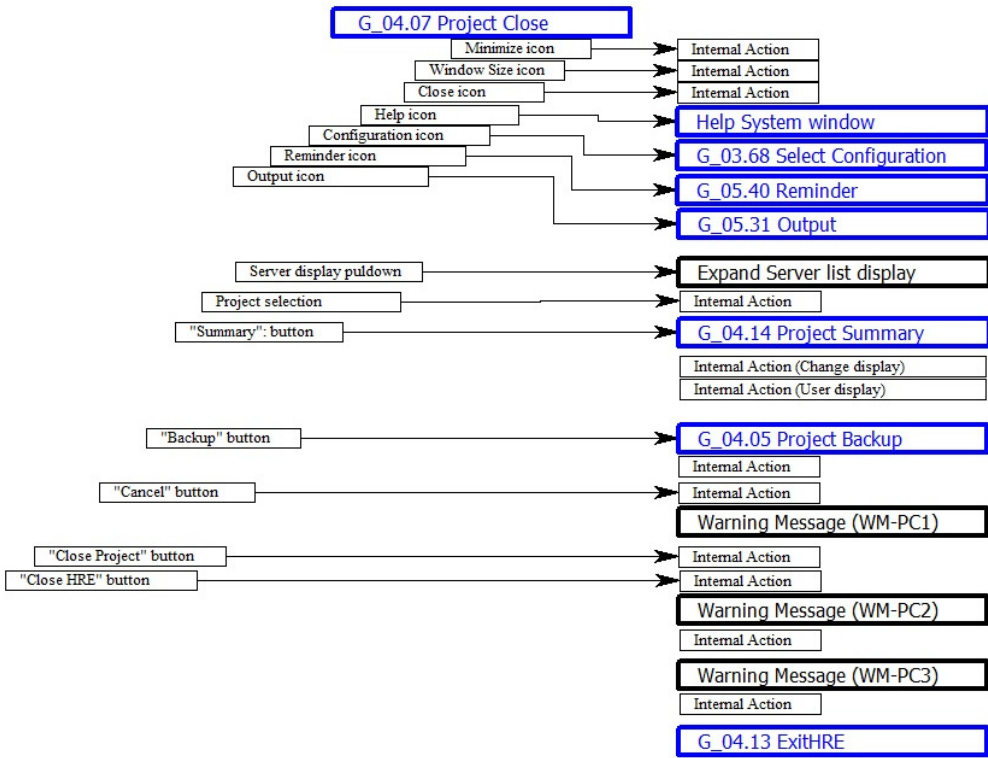
- 1) M_ signifies a message
- 2) X_ source
- 3) Y_ destination
- 4) Z distinguishing number for this window

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)

DATABASE INTEGRITY TESTS

Database integrity is checked prior to backup; and initiated by that process.

WINDOW INTERACTION MAP



PROCESS FLOW CHART

