GUI_ExitHRE – **Exit** from HRE

Revision History

2017-06-21	Robin Lamacraft	Initial draft
2018-05-12	Rod Thompson	Replace graphic
2018-06-07	Rod Thompson	Replace graphic
		Revise Actions, Add Event Actions
		Add Windows Interaction Map & Process Flow Chart
		Add Warning Message
2018-06-09	Don Ferguson	Minor edits
2018-06-25	Rod Thompson	Amend SCOPE
2018-06-26		Add text version of Warning Message
		Revise Required SERVICES – Dependencies
		Addition to icon actions – 'X' close
2018-10-27	Rod Thompson	REQUIRED SERVICES – Remove unneeded
		WARNING CONDITIONS – Add Display location
		Add LOGGING
2018-11-12	Rod Thompson	Replace graphic (remove window size control)
		Replace Window Interaction Map
		Replace Process Flow Chart
		Revise SCOPE
2018-11-13	Rod Thompson	Revise WARNING CONDITIONS
		Revise PROCESS FLOW CHART
		Add Warning Message Bypass
		Add BR_Setting to REQUIRED SERVICES
		Add USE CASES & TESTING sections
2019-01-27	Rod Thompson	Replace graphics (v4)
		EVENT ACTIONS corrections to icon actions
		LOOK AND FEEL – Add detail
		ACTIONS – Amend
2019-01-28	Rod Thompson	SCOPE – revise final line, add NOTE
		ACTIONS – additions
		Replace WINDOW INTERACTION MAP (v3)
		Replace Process Flowchart (v4)
2019-01-29	Rod Thompson	Replace graphic (window)
		ACTIONS – Amend
		SCOPE – Amend 'Project Close' line, Main menu, Exit
		LOOK AND FEEL – Replace text
		REQUIRED DATA – amend
		LOGGING – Additions
		EVENT ACTIONS – icon actions – amend
2019-01-30	Rod Thompson	ACTIONS – Add module interaction table
		TESTING – additions
		Replace Process Flowchart (v5)
		LOOK AND FEEL – Add Progress Display
		Add Issues
		Replace WINDOW INTERACTION MAP (v4)
2010 01 01	D 17'	REQUIRED SERVICES – Add Message Pattern (Action Progress)
2019-01-31	Rod Thompson	Add Project Backup option
		Revise Progress Display
		Replace Graphic(v7), Process Flowchart
		Replace WARNING Message graphics(v7)
2019-02-01	Rod Thompson	WARNING CONDITIONS – Add User preference detail
		Add SERVER MESSAGES section
		ACTIONS – revise wording and add 'Backup' option

2019-02-01	Rod Thompson	Replace Process Flowchart Remove Issue1	
		Replace Window Interaction Map	
2019-03-11	Don Ferguson	Address renumbering of GUI modules	

SCOPE

This GUI module may be called in the following ways:

- via the Close and Exit item of the Project menu (GUI_UserInterface)
- from the Project Close module.

It causes closure of open projects, and the optional shut down and exit from HRE.

NOTE – Once the Close All Project button is used, this process can not be cancelled. If the User wishes then to revise a project, the Cancel button will return operation to the Main menu, from whence a project may be re-opened.

Issues:

REQUIRED SERVICES – Dependencies: This list is currently incorrect – needing attention to the Close Projects process interaction.

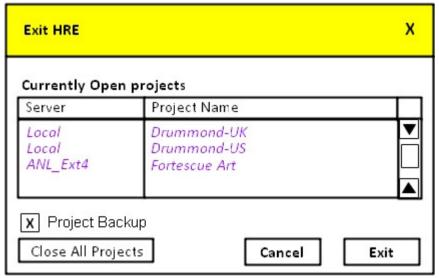
LOOK AND FEEL

The window has the following parts:

- A table listing the currently open projects
 While open projects are displayed, the Exit button is temporarily disabled.
- A 'Close All Projects' button, used to initiate the sequential process of closing all open projects

When used, the 'Cancel' button is temporarily disabled An empty table indicates that there are no further projects to close On completion of the close process, the 'Cancel' and 'Exit' buttons are re-enabled.

- A 'Cancel' button allows the user to return to the Main Window This action closes the Exit HRE window.
- An 'Exit' button, initiates the process to close the HRE Client application, and may trigger closure of the HRE server application
- A Progress Display message pattern is called to display action progress.



ExitHRE Window - Mockup

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 and scale are the only User changeable
settings



Progress Display

A progress display is called for – using the MESSAGE PATTERN – Action Progress module.

On-screen location:

Initially inherited from the GUI ExitHRE window

Window located immediately to the right of the window – shifted to the left if the User has relocated the ExitHRE Window such that the Progress Display would exceed the bounds of the Main Window, in which case, shifted to the left side of the ExitHRE window.

Location and size of this window are not User changeable settings.

ACTIONS

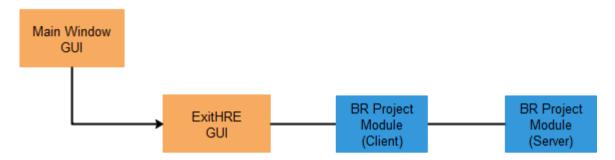
The fundamental operations are:

- 1. Open the window according to its saved Layout (BR_WindowConfig)
- 2. The 'Cancel' and 'Close All Projects' buttons are enabled
- 3. Display currently open Projects
- 4. If projects are open, the 'Exit' button is disabled
- 5. If response is 'Cancel', close the window and return to GUI_UserInterface
- 6. A (NOT YET TO BE IMPLEMENTED) check box provides the User the option to include the project backup function in the close process
- 7. If the 'Close All Projects' is used, execute the ProjectClose process, for each of the open projects
- 8. If the 'Close All Projects' button is used, the Cancel button is temporarily disabled
- 9. On completion of project closure process, the Cancel and Exit buttons are enabled
- 10. If the response is 'Exit', display a confirmation message, message the Server, and close the HRE Client.

The following table illustrates the interaction between modules as the above actions occur.

Client		Server
GUI module	BR Project module	
On open	Get 'Open projects'	Get 'Open projects'
Display 'Open projects'	Supply 'Open projects'	Get 'Open projects'
Close All Projects Button		
General Log entry	Logging	General Log entry
Cycle through open projects	Close project	Update database-Session end
		Close project connection
		General Log entry
Display Message		Message to client
Acknowledge message		
Continue cycle till all closed		
Cancel Button		
General Log entry	Logging	
Display Message		
On confirmation		

Client		Server
GUI module	BR Project module	
Close window		
Focus to Main Window		
Exit Button		
General log entry	Logging	
Display Message		
On confirmation		Logging
Message to Server (Client close)		
Close GUI Window		
Exit HRE Client		



USED BY

All HRE users.

DATA CONTROLLED BY THIS MODULE

1. None.

REQUIRED DATA CONTROLLED BY OTHER MODULES

1. All open projects.

REQUIRED SERVICES – Dependencies

First-Order Dependencies	Second-Order Dependencies	Higher-Order Dependencies
04.07 GUI_ProjectClose	04.05 GUI_ProjectBackup	05.87 GUI - MessagePatterns
		07.17 BR_WindowConfig
		07.21 BR_Project
	04.14 GUI_ProjectSummary	07.17 BR_WindowConfig
		07.21 BR_Project
		07.16 BR_MessagePatterns
	07.16 BR_MessagePatterns	07.16 BR_MessagePatterns
	07.16 BR_MessagePatterns	07.16 BR_MessagePatterns
	07.17 BR_WindowConfig	See below
	07.21 BR_Project	See below
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_MessagePattern
	BR_FieldTranslation	

First-Order Dependencies	Second-Order Dependencies	Higher-Order Dependencies
07.17 BR_WindowConfig	07.06 BR_GuiElement	See above
	07.02 BR_EntityLink	Needed
	07.29 BR_Translation	See above
	BR_FieldTranslation	
	07.16 BR_MessagePatterns	07.02 BR_EntityLink
		07.01 BR_EncodedString
		07.11 BR_Logging
		Call Stack
		07.24 BR_Setting
		GUI Translation
07.24 BR_Setting	BR_AppData	
	BR_UserData	
	BR_EntityLink	
05.87.05 GUI_Message Pattern		
(Action Progress)		

APPLICATION PROGRAMMING INTERFACE (API)

1. Single call, no parameters.

LOGGING

Use of this module will create log entries.

Commit Logging – Session end for each project as it is closed (by the Project Close process General Log

Client

Module ID, Date, Time and Event record for each of the following (if applicable)

- Close All Projects button
- Cancel button
- Exit button

<u>Serv</u>er

Client ID, Date, Time and Event record for each of the following (if applicable)

- Close & Exit process initiated
- Project X disconnect
- Project Y disconnect, etc.
- Client close

EVENT ACTIONS

1) Keyboard actions

NIL

2) Mouse actions

Left key

- a. Mouse key click on each button, operates the button
- b. Mouse key click on icons (detailed below)

Right key

To be determined

3) Icon actions

left mouse key click on icons in the Window Control group:

'X' icon

(closes the window – returning to the Main Window)

NOTE: Same action as in use of the 'Cancel' button

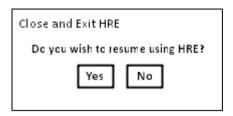
4) Keyboard shortcuts

To be determined

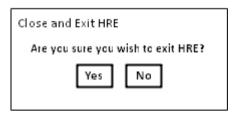
WARNING CONDITIONS

Display Location: centred on the GUI ExitHRE window

1. When the 'Cancel' button is used, then a warning message is displayed. Warning Message (WM-HE1)



2. When the 'Exit' button is used, then a warning message is displayed. Warning Message (WM-HE2)



Implement using a JOptionPane.

User Preference

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 YES button.

SERVER MESSAGES

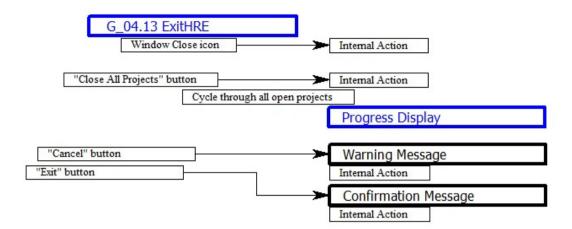
Created in and sent from Server to Client

Message	Subject:	Project Close
M_S_C_1	From:	Server
	Text Message:	
Uses Server Broadcast Message Pattern	Project connecti	on closed
GUI_Message (SB)		
	Requested by:	User name
Sent to one Client User initiating the 'ExitHRE'	Project name:	Project name
process	Project folder:	Folder name
	Project filename	: Filename

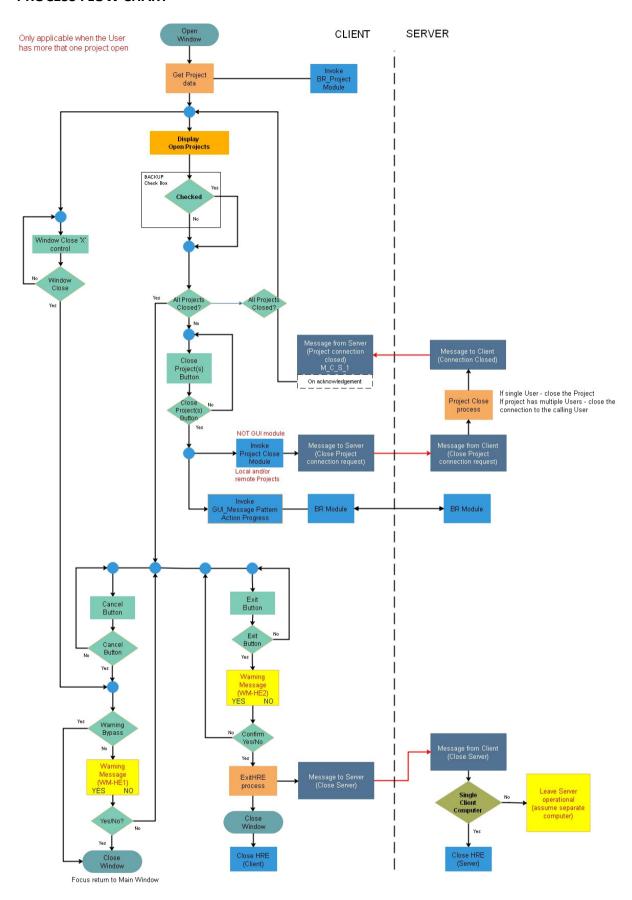
ERROR CONDITIONS

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

WINDOW INTERACTION MAP



PROCESS FLOW CHART



USE CASES

- 1) Client Exit
- 2) Client & Server Exit

Use Case 1	
Single Computer	
Use Case 1	
Single Client to Single Server	

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.

General requirements	Code element requirements
HRE installation	Client
1) Single computer	Main GUI
2) Client-Server	GUI_ExitHRE
3) Test Project database fileset (3 off)	Dependencies listed
	<u>Server</u>
	?????

Process

- 1) Run HRE
 - a. Open the one Test Project
 - b. Exit HRE
- 2) Check result

Is Client shutdown?

Use Client and Server Logs to confirm results

See Test Plan document.