

HRE – GUI OPERATION OVERVIEW

Revision history

2018-07-11	Rod Thompson	Original draft
2018-07-12	Rod Thompson	Additions
2018-07-14	Rod Thompson	Add Window type definitions to SCOPE Update Process Overview graphic
2018-07-15	Rod Thompson	Revise SCOPE Add new section – DEFINITIONS Additions Add new section – REFERENCES Additions
2018-07-16	Rod Thompson	Add 'Process Details' in RUN and USE
2018-07-17	Rod Thompson	General editing and extension
2018-07-24	Rod Thompson	Replace 'DATA' windows with 'INFORMATION' window
2018-10-19	Rod Thompson	DEFINITIONS – Amendments Revise RUN from Installation
2018-11-13	Rod Thompson	Revise Viewpoint Definition Add definition DISPLAY AREA Add PROCESS FLOWCHART – Run HRE Add operation details
2018-11-17	Rod Thompson	Add Active/Enabled menu items at Startup/Close

SCOPE

HRE is designed with flexibility, to allow its use over a wide range of historical research applications. An essential element to the User presentation is the use of Viewpoints, and the customized configuration of all Window displays to flexibly meet an extensive range of possible user preferences. These features are immediately evident when first starting to use HRE.

DEFINITIONS

For the purpose of this description, use will be made of the following definitions.

STARTUP DISPLAY

When HRE is started, the Main Display Window contains only the Toolbars and Menu system. On first use, its on-screen location and size is determined by design, including consideration of the computer's display; but may then be changed by the User as and when desired with subsequent *startups* according to the changed conditions.

DISPLAY AREA

The area of the computer display which is used by HRE.

VIEWPOINT

An area of the HRE Display Area containing one or more windows for presentation of the historical data.

Named Viewpoints may be created (and edited) by the User for each project to suit their preferences. These include WORKING Viewpoints (User named), and DEFAULT Viewpoints.

CONFIGURATION

Properties of each window used in the HRE display, generally defining the Transient Windows used in operation of HRE, and the specifics of Standard Windows to display project data.

Named Configurations for each window may be created (and edited) by the User for each project to suit their preferences.

PROGRAM Windows:

These are the windows opened as a result of User actions. They include:

Windows from menu selection	(e.g., Project Backup, Tools, etc.,)
Sub-windows called from other windows	(e.g., Server Login)
GUI button use	
Software action	(e.g., Warnings & Errors)

They are transient in nature.

The shape, size, layout, color, etc., are determined in design. Content is similarly fixed.

Their location on the HRE main display is specified for initial use; but may be changed by the User.

Other Windows used for example to display Warnings to the User, are NOT provided with any User change functionality.

DATA Windows:

These are the windows which are normally resident on-screen when HRE is running.

The number, location, size and content are determined by the User through use of the Viewpoint and Configuration modules, applying to the User and Project. Some may be automatically updated as the User changes the focus.

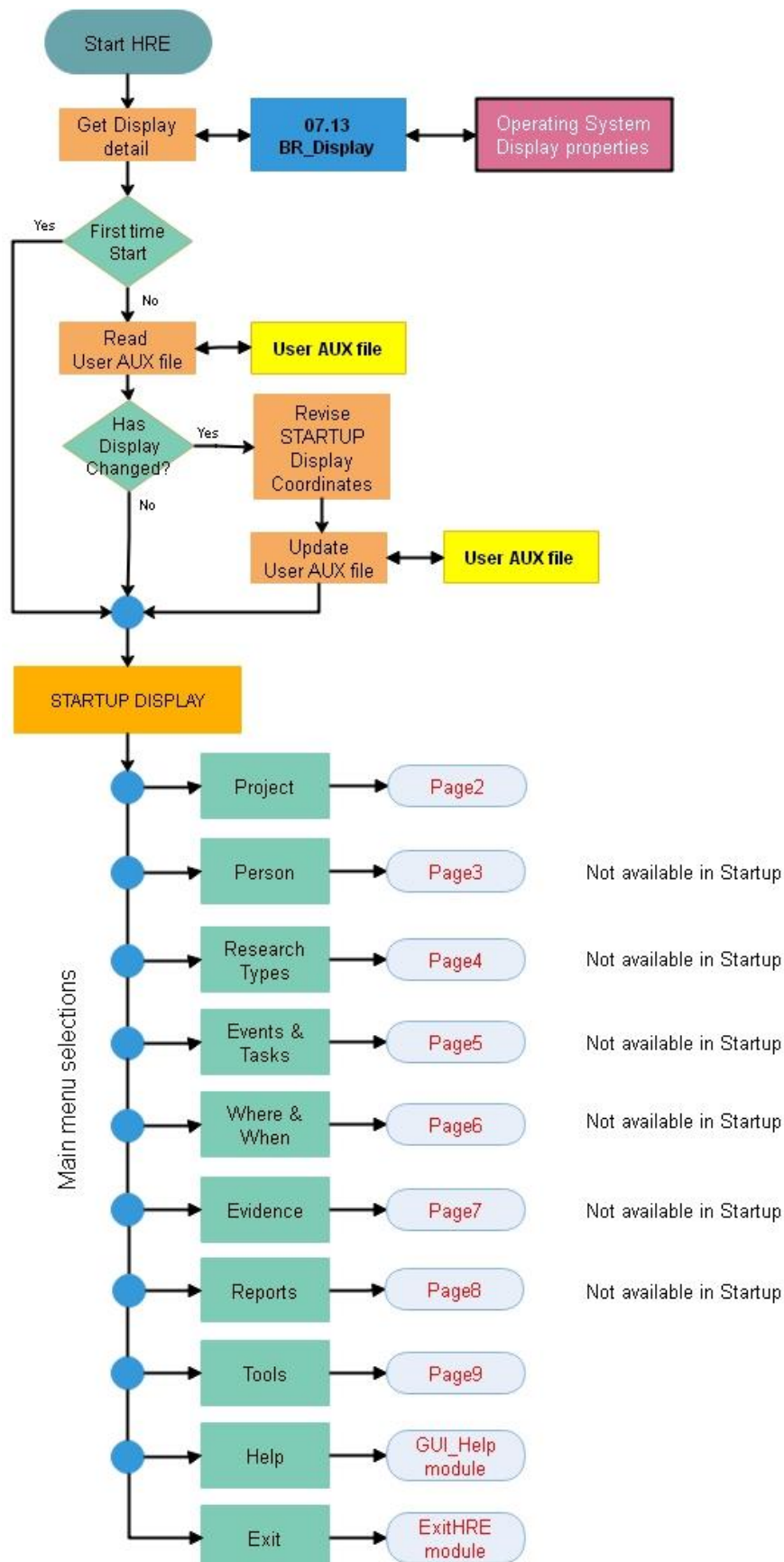
Using HRE

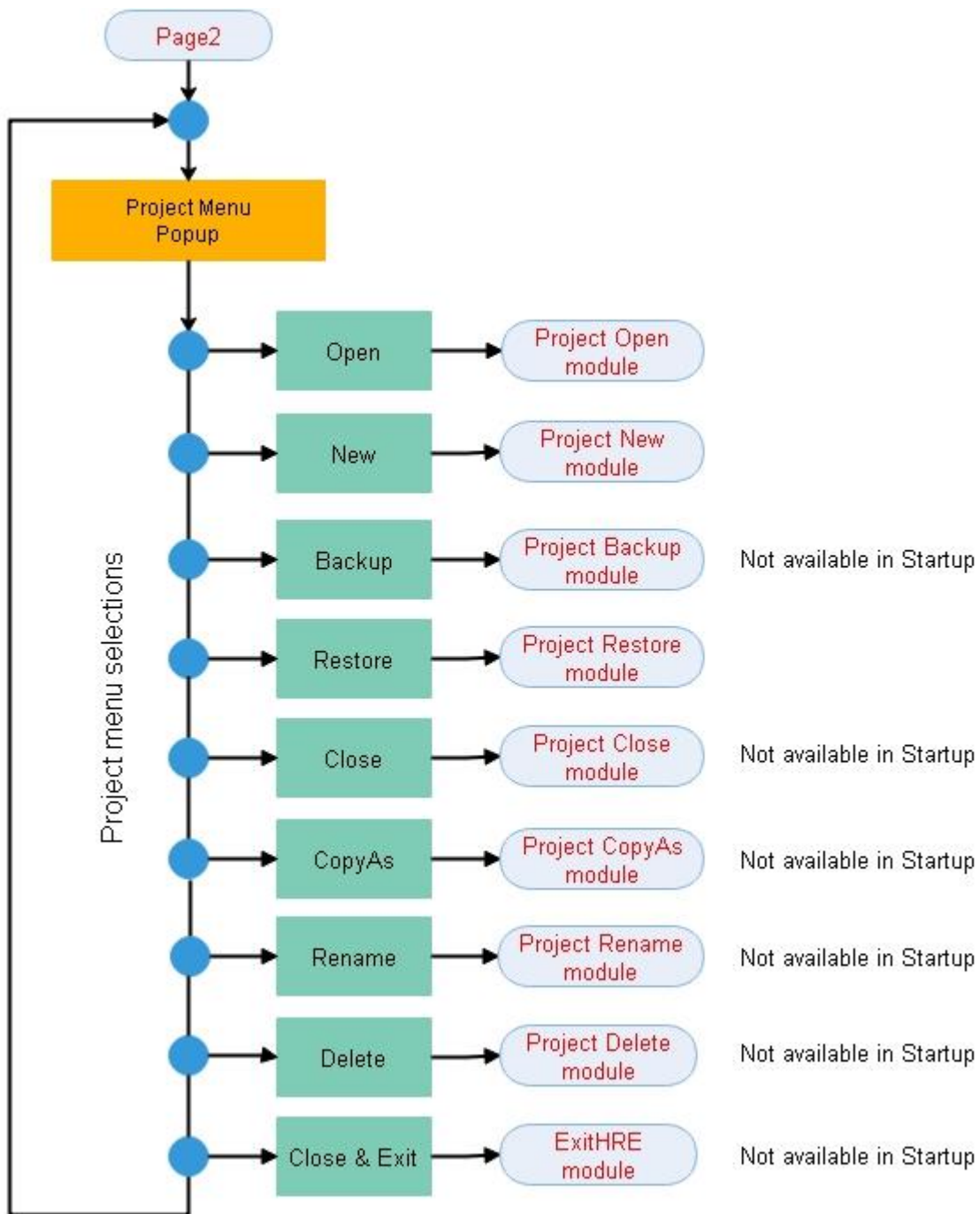
The following assumes that HRE is started in one of the following ways, from:

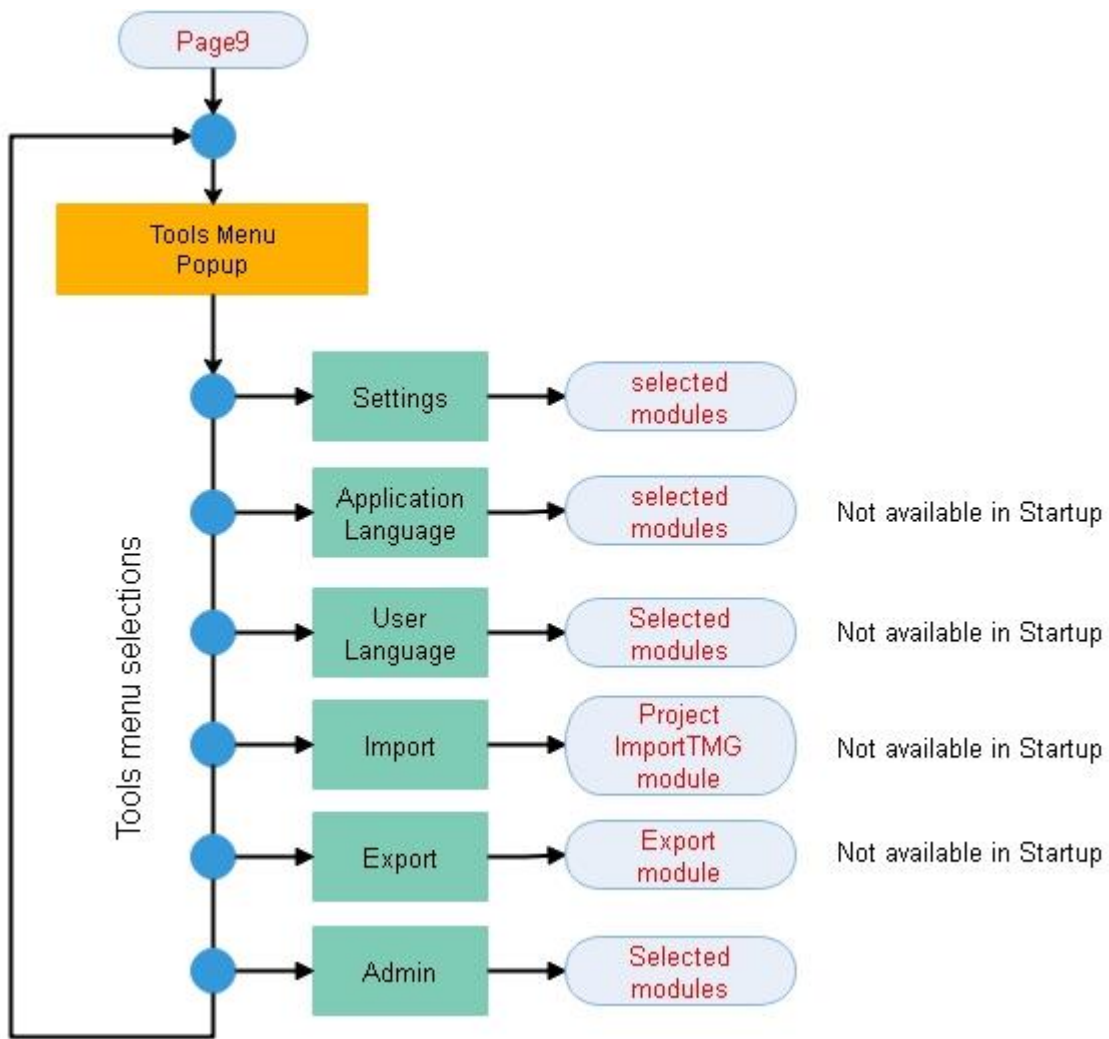
- 1) a desktop icon
- 2) the Start menu, and selection of the HRE application
- 3) a taskbar icon.

Other methods of using HRE will be considered later.

PROCESS FLOW CHART - Run HRE







HRE Start

On start:

- 1) Computer display data is read from the Operating system
- 2) a Java Container component is placed on screen (full screen size and transparent)

A Splash screen is displayed during the loading process.



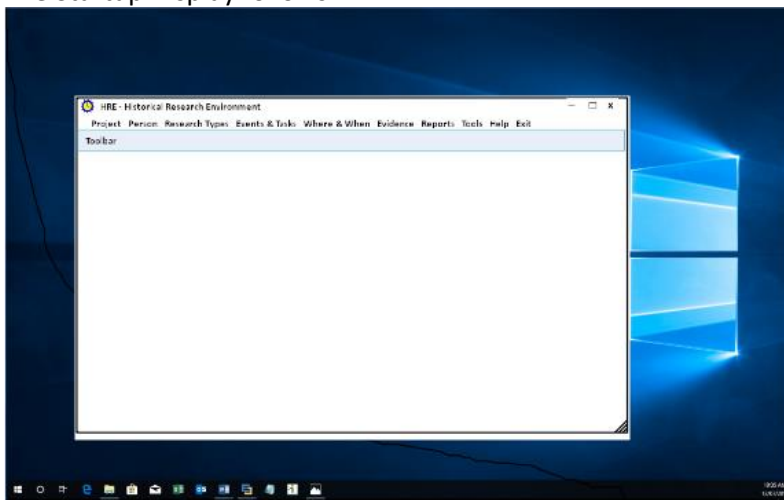
Added to Container 1

Centered on the Main screen of the computer

The Splash screen is hard coded in the HRE Client software.

Removed from display after a time period (to be determined)

The Startup Display follows:



Added to Container 1

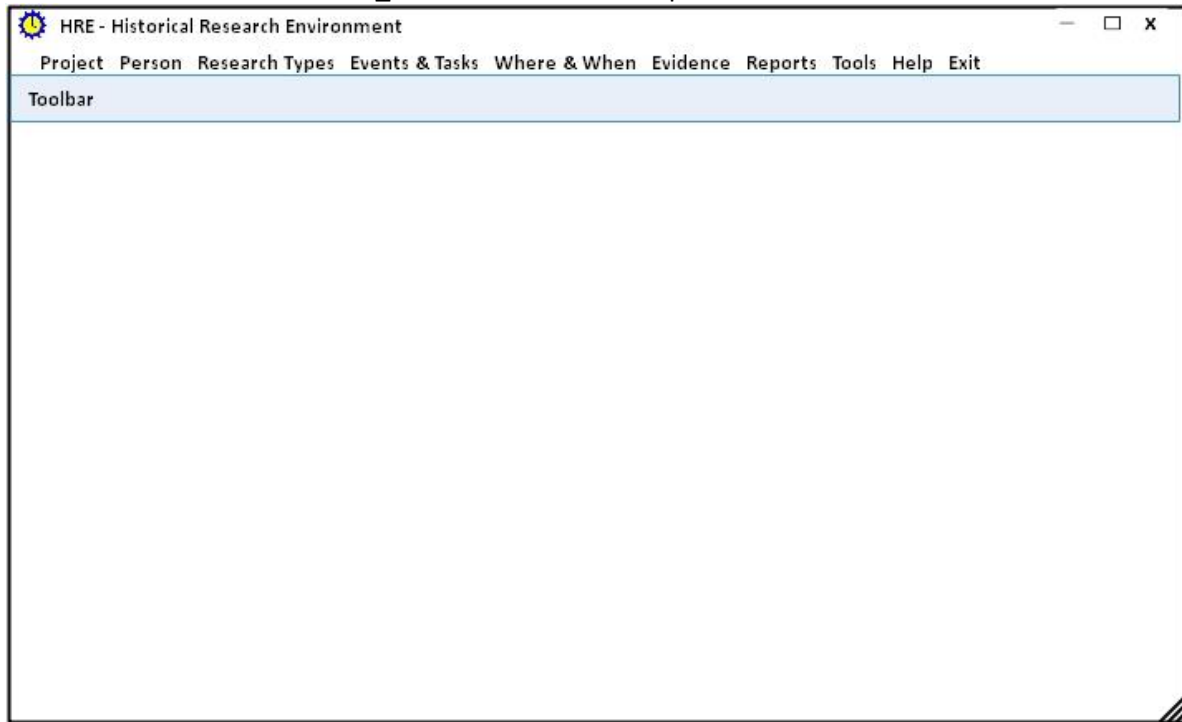
The onscreen position is defined as follows:

- 1) On the computer's main screen (allowing for multi-screen display)
- 2) Located with borders as follows:
 - Left side – 136 pixels
 - Top edge – 154 pixels
- 3) Size
 - Width – 820 pixels
 - Height – 614 pixels

This provides a window size suitable for initial use on a range of computers, and for creation of Viewpoints.
The Startup Display window is hard coded in the HRE Client software.

STARTUP DISPLAY Window

This is defined in the 04.01 GUI_UserInterface module specification.



This window is for genealogy purposes.

A generic menu Startup Display may be required when other HRE applications arise.
This would then be supplemented with application specific menus as further program loading occurs.

ENABLED MENUS at STARTUP and CLOSE

Project	Open, New, Restore
Tools	Settings & Admin (some selections)
Help	Search Help, HRE website, AboutHRE
Exit	

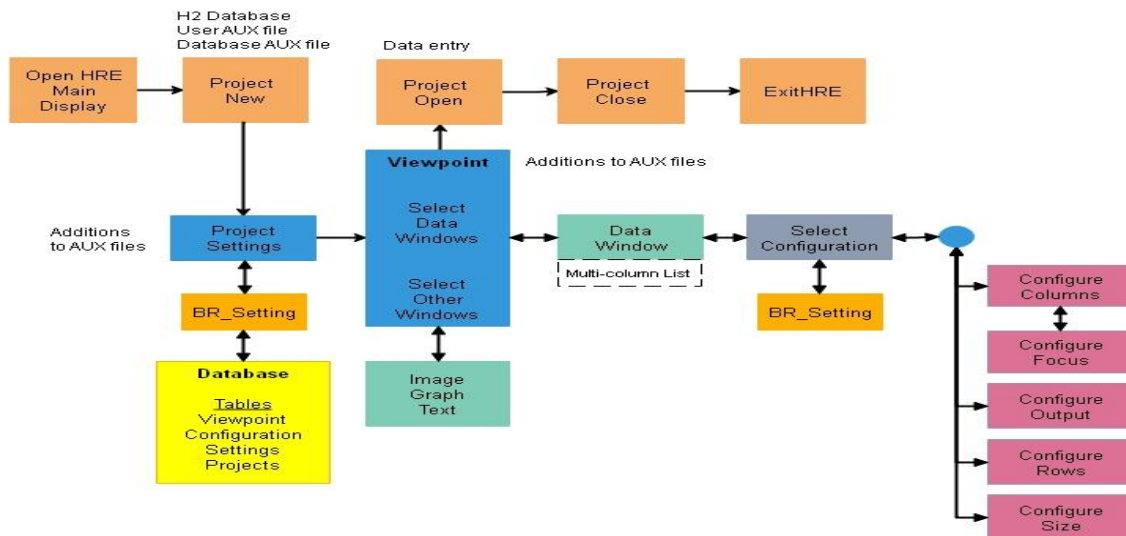
All other selections are disabled. Menu buttons are visible but greyed.

USE of HRE

Little further action may be obvious for a new User, except perhaps to review the Help system documentation. Intuition should perhaps draw the user to the menu selections, and the predominant **Project** menu, with the intention to create a New Project, or to Open or Restore another User's project.

The design of HRE is based on a philosophy of creating projects to record historical data. Detail of the use of the GUI Project modules is found in their individual specifications.

The following provides an overview of operation.



Process

STARTUP DISPLAY

Defines location of the HRE Main Display – GUI-User Interface

Menu display (partial availability)

PROGRAM windows available for some sub-menu selections

Each PROGRAM window is displayed by its DEFAULT Configuration (and may be User changed)

Main menu selections:

1) Project New, involves:

- a. Project naming
- b. Project database creation (from seed)
- c. Project saving (filename and path)
- d. Project Settings
- e. Display Area setup
- f. WORKING Viewpoint creation (named)
- g. DATA Window configurations (Default or named)
- h. Project data addition to the User AUX file
- i. Viewpoint data addition to the project's Database AUX file.

2) Project Open – First use (local or LAN)

Possible Projects would be 'Sample(s)', and files supplied by another User.

Stored with a named Viewpoint & Configurations

No User/Viewpoint data – display using the Project's DEFAULT Viewpoint

This invokes Settings/Viewpoint/Configuration for User setup

3) Project Open (remote Server)

If Server/Project information available
User could use TOOLS>SERVER to define a Server
Then Project Open - logon to Server
No User/Viewpoint data - display using the DEFAULT Viewpoint
This invokes Settings/Viewpoint/Configuration for User setup

- 4) Project Restore
No Project yet created by this User.
If created by another User –display using the DEFAULT Viewpoint
Requires saving the Project for this new User
This invokes Settings/Viewpoint/Configuration for User setup

DISPLAY AREA

This is defined as the region of the computer display that is used by HRE.

On starting HRE, the 'Display Area' is that of the Startup Display.

A Java Container component (Container 2) is added to the display for the purpose of defining the HRE Display Area. The initial size is that of the Main Display window. It can not be smaller than the Main Display window.

A Border component is added to Container 2.

The Border component is not normally visible.

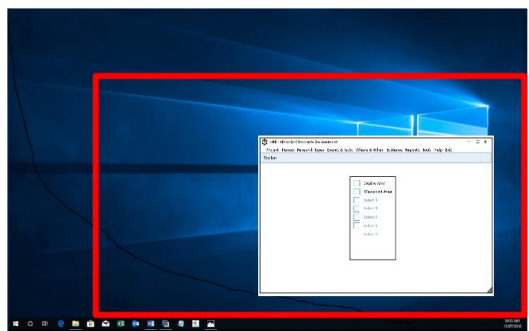
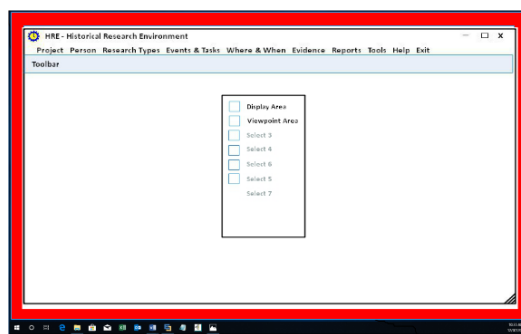
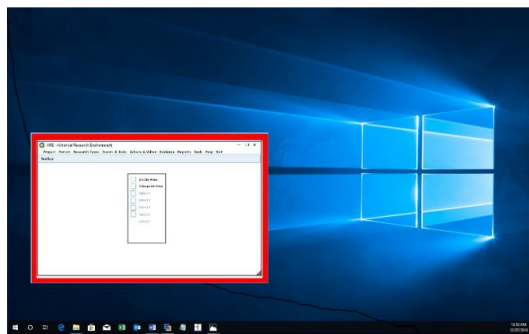
Display of the border is invoked via the right mouse key.

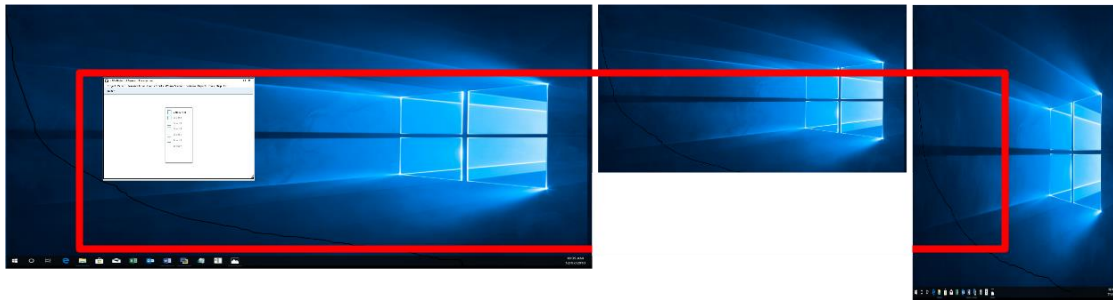
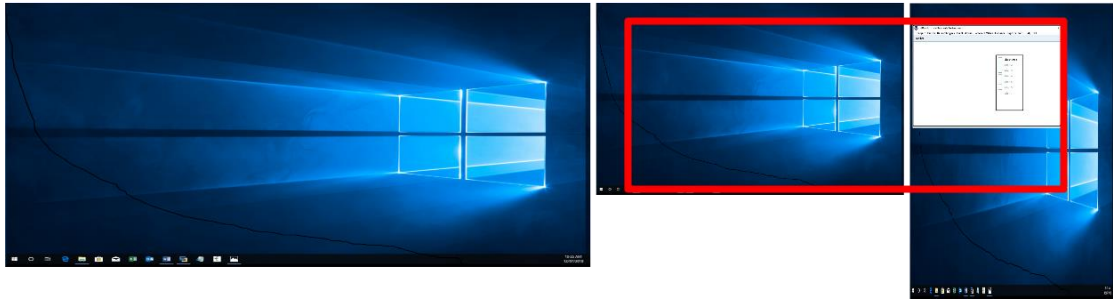
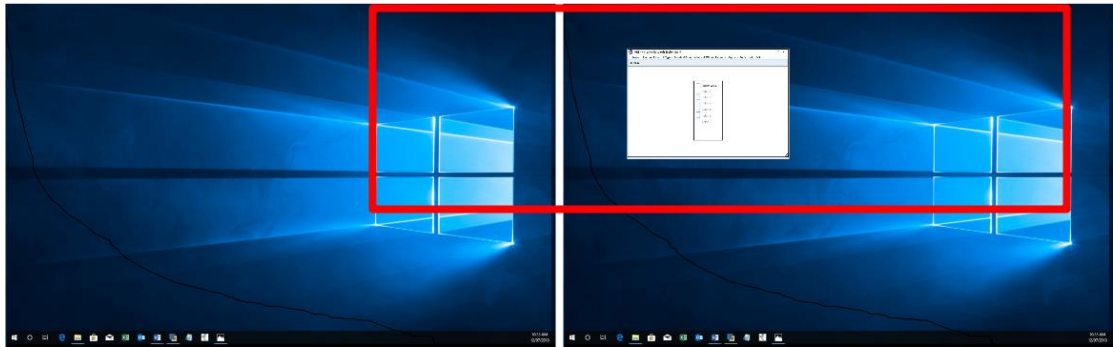
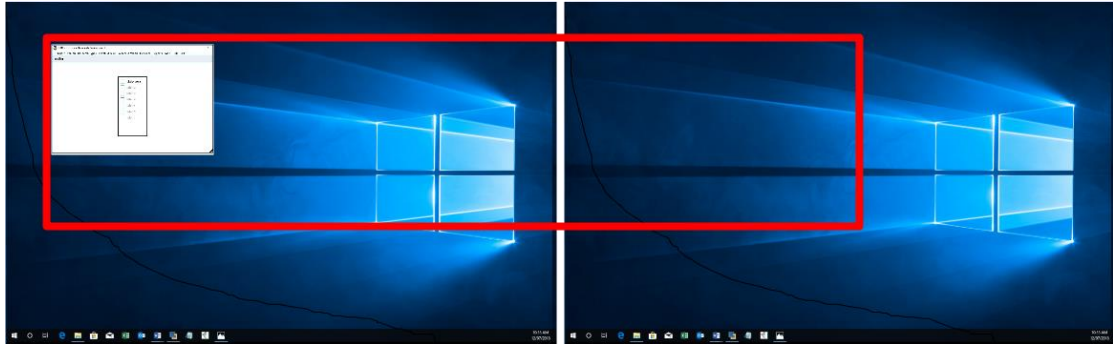
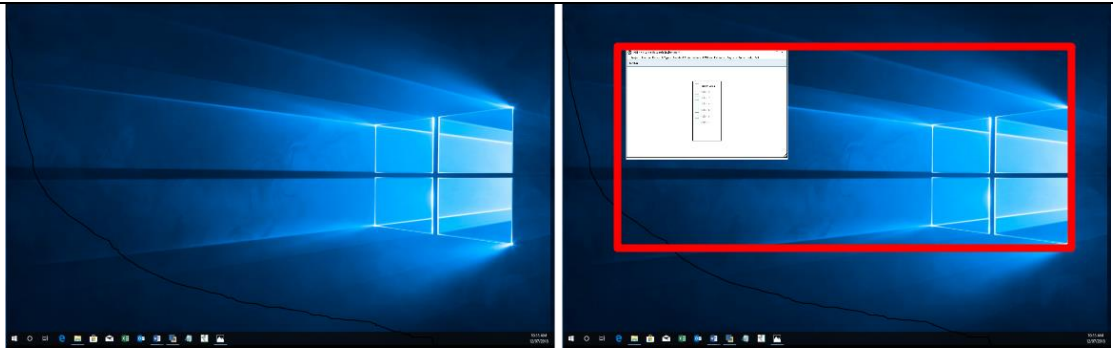
The User can move and resize the Border component (linked to the Display Area) with the familiar mouse drag and drop process to any place on the computer's display.

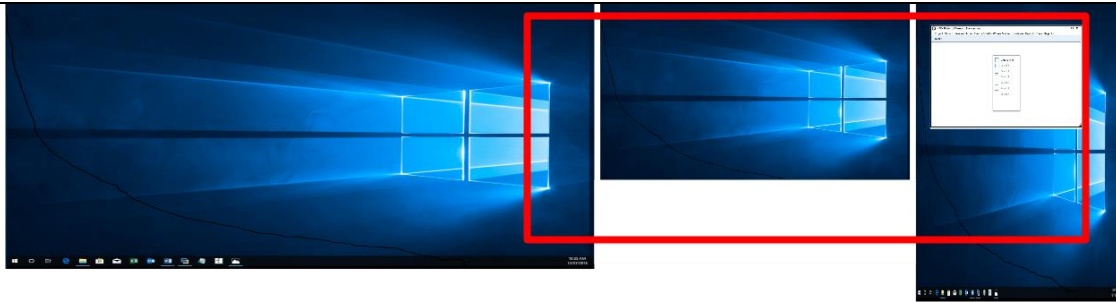
Display of the border component disappears as soon as the User takes some other action.

NOTE – there is a constraint linkage between the size of the Display Area and that of the Main Display

Display Area stored in the User/Project database and records updated as change occurs. Needs a database amendment.







Border sizes shown above are exaggerated for visibility in this document form.

MAIN DISPLAY

Once a Project is created or opened, the window which initially was referred to as the Startup Display is now referred to as the Main Display.

The size and location of the Main Display may be changed by the User, using the familiar mouse drag and drop process.

The Full Screen size icon on the Main Display window may be used to expand the window to full screen size (on the computer's screen where the Main Display is located)

NOTE – there is a constraint linkage between the size of the Display Area and that of the Main Display

Changes to the Main Display window size and location are saved to the database (T_305)

See pictures above

VIEWPOINTS

Used to display the historical data

One or more WORKING Viewpoint may be created and used simultaneously.

WORKING VIEWPOINT

(See 05.30 GUI_Viewpoint)

Created by the User in the Project New process, associated with the Project and User
Named and saved

A Viewpoint border (Java border component) is drawn (visible) on the display (within the HRE Display Area) in the creation process.

Allows User to add a number of DATA Windows for the data display.

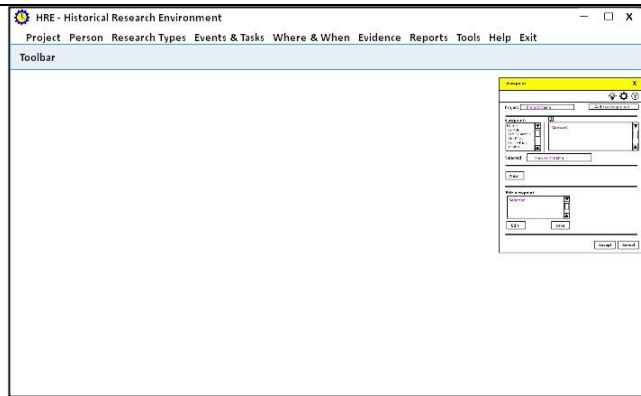
The Viewpoint may be resized and relocated by the user (within the HRE Display area), using the familiar mouse drag and drop process.

The Viewpoint border disappears from the display as soon as the User takes some other action. Its display may be involved using the right mouse key (while the cursor is located within the Viewpoint area).

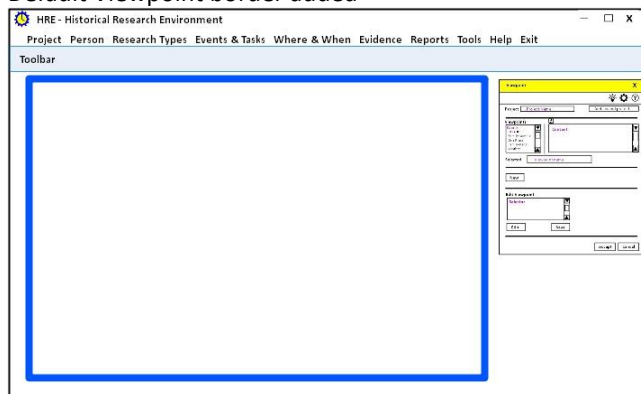
Detail of the WORKING Viewpoint is saved in the database (T_303)

WORKING Viewpoints would be application dependent, so different for Genealogy as distinct from other fields like Biology, One-place-study, personal art collection, cattle breeding, museum collection.

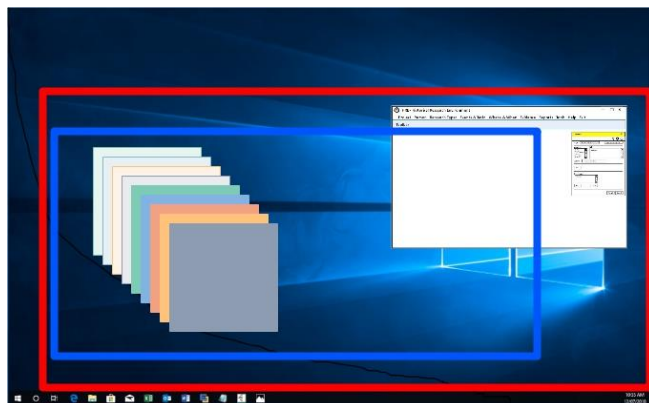
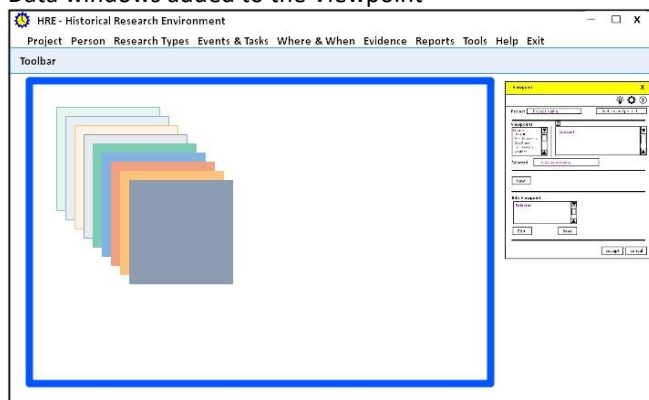
Main Display with Viewpoint window

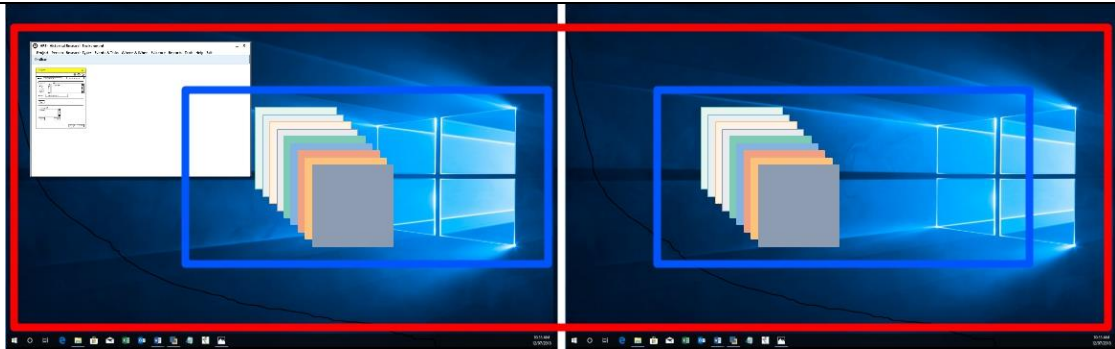


Default Viewpoint border added



Data windows added to the Viewpoint





PROGRAM WINDOWS

PROGRAM windows (all inherit location from the Main Display) are initially displayed in size and location according to programmed defaults.

These may be resized and relocated by the user (within the HRE Main Display area), using the familiar mouse drag and drop process, with the revised configurations automatically saved to the database. On restarting HRE and opening the Project, the Program windows will be re-opened as per the last saved configuration.

Availability of this User control is indicated by inclusion of an indicator symbol (see below) in the bottom-right corner of each window.



Any Project (not created by the User) when first opened by the User will make use of the DEFAULT Viewpoint defined by the Project creator HRE software

DEFAULT VIEWPOINT (Genealogy)

Consists of the following:

- Main display window
- Data window (explorer)
- Data window (person details)
- Data window (ancestors)
- Data window (descendants)

Must define the DEFAULT Configurations for each of these windows

The DEFAULT Viewpoint is software created after a WORKING Viewpoint is created.

The DEFAULT Viewpoint for a project is thereafter separately editable.

(see Project New module)

VIEWPOINT requirements

(See 05.30 GUI_Viewpoint)

- Display Project Name (enter new name for new Viewpoint)
NOTE: Need to allow for two concurrent open projects
- Display Viewpoints (known to the User)
- Allow selection of a Viewpoint (to be applied to the present project)
- Create New Viewpoints
(Start from scratch or clone and amend)
- Edit Viewpoint
 - Number of Windows
 - Content of each Window (through Configuration)

Database Tables

T_303	Viewpoint Configs	name, description and on-screen location
T_304	Viewpoint Elements	records of each window making up the viewpoint

CONFIGURATION requirements

(See 03.68 GUI_Select Configuration)

Applies to each individual DATA type Window

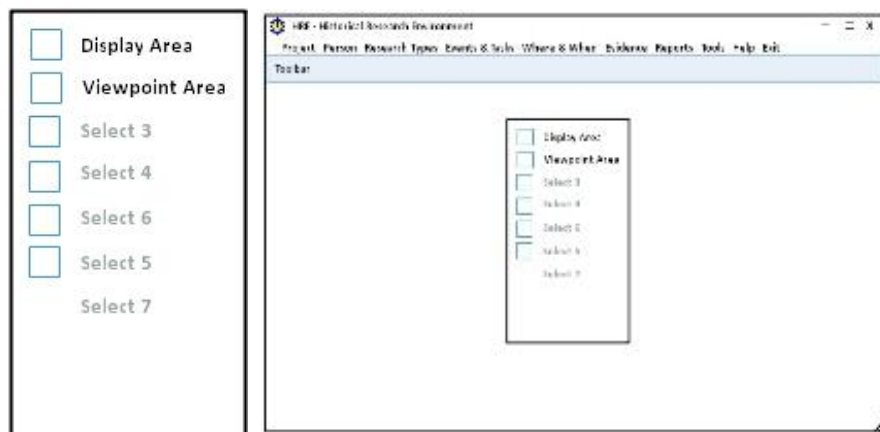
- Display Configuration Name (enter new name for new Configuration)
- Display Configurations (known to the User)
- Allow selection of a Configuration (to be applied to the present project Viewpoint)
- Create New Configurations
(Start from scratch or clone and amend)
- Edit Configuration
 - Data source (Focus)
 - Number of Field and Records Columns and Rows)
 - Size of Windows and data columns (Size)

Database Tables

T_305	Configuration Configs	name, description and parent window/viewpoint/project
T_306	Configuration Elements	records of each property of the configuration

Right Mouse key

This opens a popup menu with selections available, in the context of current use.



Operates when the mouse/cursor is located within the HRE Main Display Area

The popup menu is of fixed design size, and opens (top left corner) where the mouse cursor is located.
The size and location are not user changeable.

This needs some more thought – likely need to display ALL borders

SUBSEQUENT USE of HRE

On subsequent starts of HRE, the User's AUX files is read.

If a change in the computer display occurs, DEFAULT configurations are used until the User creates new WORKING Viewpoints.

The process of opening an existing project includes reading information from the User Auxiliary file, locating the appropriate WORKING Viewpoint for the Project/User in the project database, loading and displaying the Viewpoint with data windows according to the User preferences.

If the User creates another new project, the new WORKING Viewpoint to be used is selectable, and may be the same as previously used, or a new Viewpoint may be created.

When a project is accessed by a new User for the first time, no Viewpoint (for that User) data will exist.

A DEFAULT Viewpoint will be used to display a set of the project data; and prompt the user Creating a new WORKING Viewpoint for the project to suit their client computer system and personal display preferences. The Viewpoint data is then saved for future recall.

This situation will exist in the Client Server environment, or where a project is shared by a User with the supply or project files to another User via some other means.

Viewpoints may be changed by the user in two ways.

- 1) Using the Tools > Settings > Viewpoint selection

This invokes the GUI_Viewpoint module.

New or existing Viewpoints can be selected and used, with editing to vary the display.

Editing may be saved or discarded.

Refer also to the GUI_Select Configuration module for configuration of the Data Windows within each Viewpoint.

- 2) On screen editing during use.

Changes to Viewpoint and Window locations and sizes are made using a drag and drop process with the mouse; or resizing via dragging window borders with the mouse.

Some interchange of fields and records in DATA Window displays is possible.

This form or editing to the DATA Windows is not immediately saved for subsequent use.

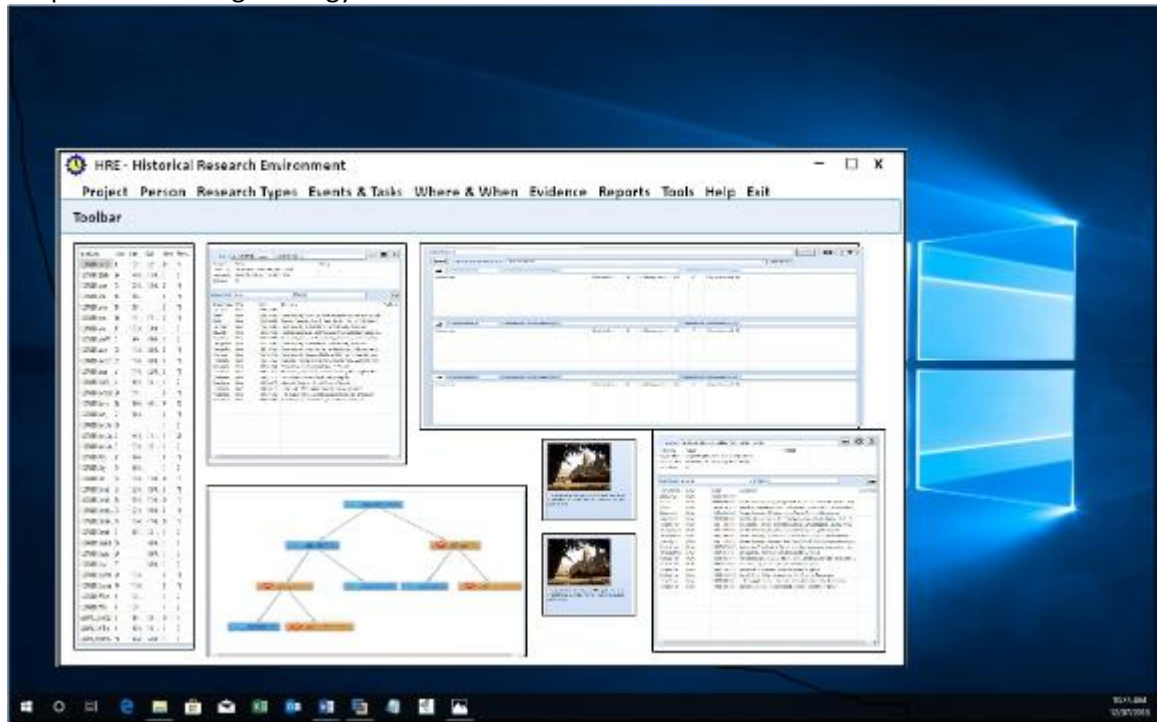
User action may determine that such changes are saved to a recorded Configuration.

At appropriate times, the software will determine if changes have occurred in use of HRE and create a Warning message to the user. Such warnings apply to the project data, and to the display Viewpoint, as well as the configuration of the displays within each DATA window. Use (or otherwise) of Warning Messages in HRE is a User controlled preference, set through the Application Settings management module.

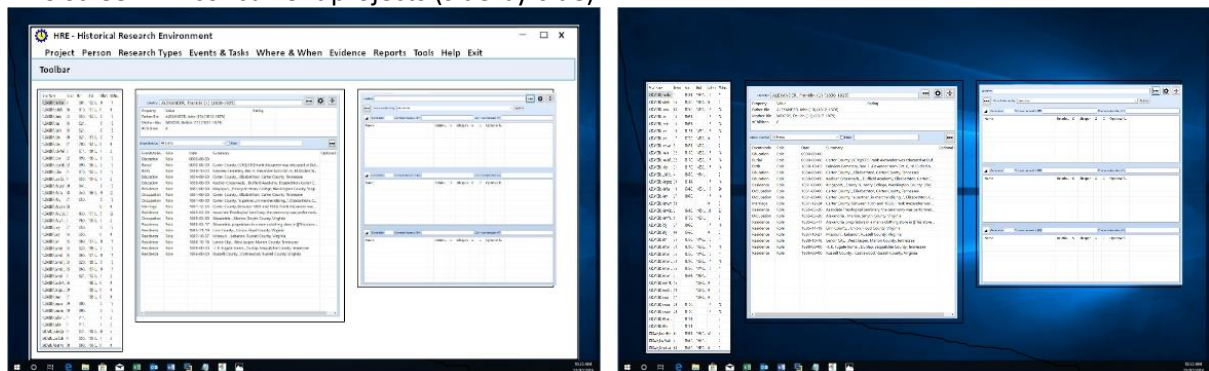
According to the User preference, the display of such messages is bypassed, with action taken by the software equivalent to the User operation of the OK button.

Viewpoint Examples (including DATA Windows)

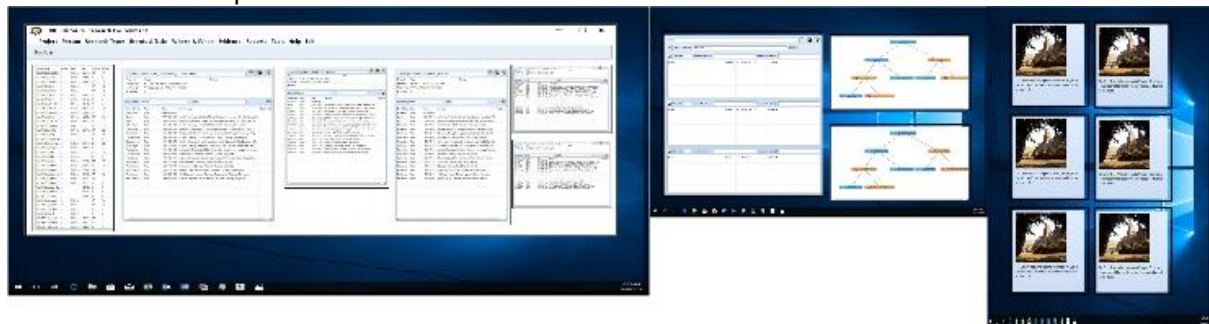
Simple one screen genealogy



Two screen – 2 concurrent projects (side-by-side)



Multiscreen - Complex interlinked Museum databases



PROJECT CLOSE

When an HRE project is closed, the software will determine if changes have occurred to the project data and to configurations.

Warnings will be issued in relation to any changes, and the appropriate action as determined by the User.

PROJECT BACKUP

The menu selection is available to the User after the creation of a Project.

Refer to 04.05 GUI_Project Backup module specification.

PROJECT RESTORE

An existing earlier saved project may be restored.

Refer to 04.06 GUI_Project Restore module specification.

PROJECT COPY AS

The menu selection is available to the User after the creation of a Project.

A copy is created of an existing project, and renamed.

Refer to 04.09 GUI_Project CopyAs module specification.

PROJECT RENAME

The menu selection is available to the User after the creation of a Project.

An existing Project is renamed.

Refer to 04.10 GUI_Project Rename module specification.

PROJECT DELETE

The menu selection is available to the User after the creation of a Project.

An existing project is deleted.

Refer to 04.10 GUI_Project Delete module specification.

EXIT

After closing all projects, the HRE main window is closed and the program ended.

Refer to the 04.13 GitHRE module specification.

REFERENCES

Specifications

03.30 Overview - Window Configuration

03.41 Overview - Viewpoints

03.68 GUI_Select Configuration