HRE – WINDOW CONFIGURATION OVERVIEW

Revision history

2018-06-01	Robin Lamacraft	Original draft
2018-06-08	Robin Lamacraft	Added examples and detail
2018-06-09	Don Ferguson	Edited for clarity
2018-6-10	Rod Thompson	Edit
2018-10-18	Rod Thompson	Rearrange layout; Add broader detail
2020-05-19	Don Ferguson	Align with current HRE design thinking
2021-03-15	Don Ferguson	General revision for accuracy

SCOPE

HRE is a software package for use in a historical research environment – by professionals and serious amateurs. Power comes from a very flexible design, and from an ability to customise the User interface to suit the purpose. Customisation can be achieved in several different ways.

This document is limited to consideration only of Window configurations and aims to detail the different types of customization to be provided.

An Appendix includes examples of data selection configurations from other software applications.

At this time, this document's format is somewhat akin to a discussion paper. The use of color should be obvious here – and it is not intended that some of this material be used in this fashion in the final document.

PURPOSE

This document is intended to outline how windows may be configured in HRE to suit the personal preferences of each user.
In its early form it is to be used as a guide to the amendment of all HRE GUI specifications to ensure consistency.

REFERENCES

Viewpoints

a. Specification **03.41 HRE - Viewpoints Overview** provides a definition of the HRE viewpoint, and references the database tables that stores Viewpoint data
b. Specification **05.30 GUI_Viewpoint** defines how Viewpoints are created and amended and defines the functional layouts.

CONFIGURATION OUTLINE

Present documentation calls for 'configuration' in many areas, often with different meanings.
DATA WINDOWS
A fundamental operation is to display stored data in a meaningful fashion. Having created a Data Window, the User may then define how it displays **multi-column lists**, configuring the detail; defining **size and location**, providing a **focus** to the data to be displayed, to set the **columns** in the window, arranging the **rows** to display of records.
SETTINGS
Some properties of the display are global in nature.
For example, these include font size, font color and background color.
SPECIAL CONDITIONS

A number of Users may have personal conditions making difficult the use of the software. Special adjustments to the User Interface are provided to facilitate their use of the software.
Another special case requires inclusion – where demonstrations of the software using projection systems makes desirable modification of the GUI to aid visibility. This may for example require changes to font sizes, and contrasts between fonts and background colors.

DESIGN

All windows in HRE will have a default configuration.
As changes are made to the 'configuration' by the User, these new settings for each changed window configuration are stored in the database for each User, for each Project, for subsequent use.

DATABASE

Includes the following table:
T_302 GUI Config

Configurations need to be saved in the database by User > Project > Viewpoint for data windows, and by User >Project for program windows.

SPECIAL CONDITIONS

Common conditions applying to some users prevent their use with normal settings of the User Interface.
The most common issues are:

1) their sight: need for larger font, need for change of color contrast e.g. white on black, or their inability to differentiate colors
2) their ability to type keys or accurately move a pointing device or inability to use right-click; inability to move their hand without shaking; hence need a simple step by step GUI
3) if they can't hear then using sounds to alert errors is not very useful, so flashing on the screen is preferred.

CONFIGURABLE PROPERTIES

The properties that may be configured are in a number of classes depending on the usage type of the requesting window. Some classes of properties have more detail than others. A single click of a configuration makes it available for editing or to allow copying under a new name, where a window is configured to the set of features of the requesting window. A selective list of window configuration sections that can now be edited is then shown. In the following list some properties apply to all ROWS, COLUMNS or CELLS, while others apply to a single ROW, COLUMN or CELL.
NOTE each section of these can be toggled to show/edit the Default values for a property. A few other sections will be needed for other window types, but the typical sections are:

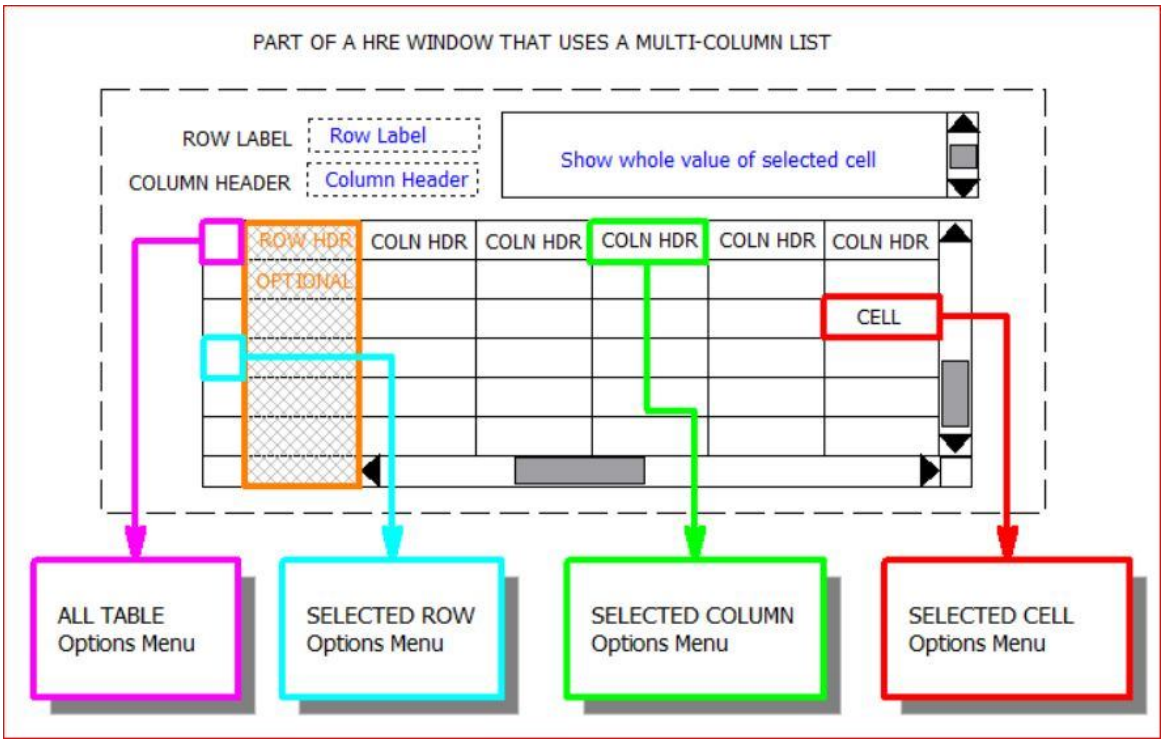
- FOCUS –to set
  - the object type and
  - (if required) the object individual to be displayed in the requesting window.
- COLUMNS – in a multi-column display, to set:
  - the selection of the data value to be displayed in columns
  - the order or reorder of columns
  - the format of columns
  - the heading of columns
  - the use of Accents on columns
  - minimum column width
  - column ordering by drag and drop.
- ROWS – in a multi-row display, to select or restrict the displayed rows:

- which objects are to be displayed
  - by identifying a subset
  - a filter.
- whether the display is
  - a single list
  - (or) a list ordered by Theme first.
- to sort the order the objects are listed.

- SIZE
  - specify rules for use of space as the window is resized
  - specify default.
- OUTPUT
  - TO FILE
    - folder path
    - file name
    - file encoding (TXT, CVS, XML, etc).
  - TO PRINTER
    - printer selection
    - page size
    - page margins.

DYNAMIC ADJUSTMENT OF A WINDOW'S CONFIGURATION

HRE CONTEXT MENUS for MULTI-COLUMN WINDOW DISPLAYS



1. **ALL TABLE MENU** (when top left cell is selected)
   a. **Configurations** – may open a window showing lists of recently used, favourite and other configurations for the current window.
   b. **Focus Object Type** –> *select object type* for initial data retrieval
      i. **Subset –>** *select Single Subset* of Focus Object Type from list
      ii. **Filter –>** *select Filter* of Focus Object Type from list

iii. **Sorting** (depends on table use) –>*select Filter* of Focus Object Type
iv. **Focus ID** (depends on table use) –> *enter object ID*
v. **Columns** (depends on table use) –> *select Columns from list*
vi. **Row Label** (depends on table use) **–>** *select Column Value for Row Label*
vii. **Column Order** (depends on table use) –> *set Column Order.*

c. **Window Config –>** *select Window Configuration*
d. **Font Size ->** *select default font name, size, color, background*
(This can be overridden by other settings on rows, columns and cells)
e. **Use Theme** (depends on table use)
f. **Print Settings**:
i. **Format** -> *select from list*
ii. **Printer** -> *select from list*
iii. **Page settings**-> *select from list.*
g. **Save to File Settings**:
i. **File Folder**-> *browse*
ii. **File Base Name**-> *enter or edit*
iii. **File Auto Suffix**-> *enter or edit.*

2. **COLUMN HEADER MENU** (when a column header cell is selected)
a. **Heading Text** -> *enter or edit*
b. **Heading Font** -> *select from list*
c. **Column Format** -> *select from list*
d. **Column Width**-> *select from list*
e. **Accent Column**-> *select from list*
f. **Delete Column**
g. **Insert Column** -> *select from list*
h. **Move Column Left**
i. **Move Column Right.**

3. **ROW LABEL MENU** (when a row label is selected)
This has a Usual form and a Theme form (for THEME HEADER rows)
Usual form:
a. **Label Text** -> *enter or edit* (depends on table use)
Theme form: (when selected row is a Theme Row header)
b. **Show/Hide** the rows belong to this Theme level.

4. **CELL MENU** (when a single cell selected)
The cell contents are shown in an area above the table and if appropriate the following menu is opened:
a. The menu has entries for actions that can be performed on that cell, such as open a window related to the type of data in that column with the selected cell object as the focus for the new window.

ON CLOSING

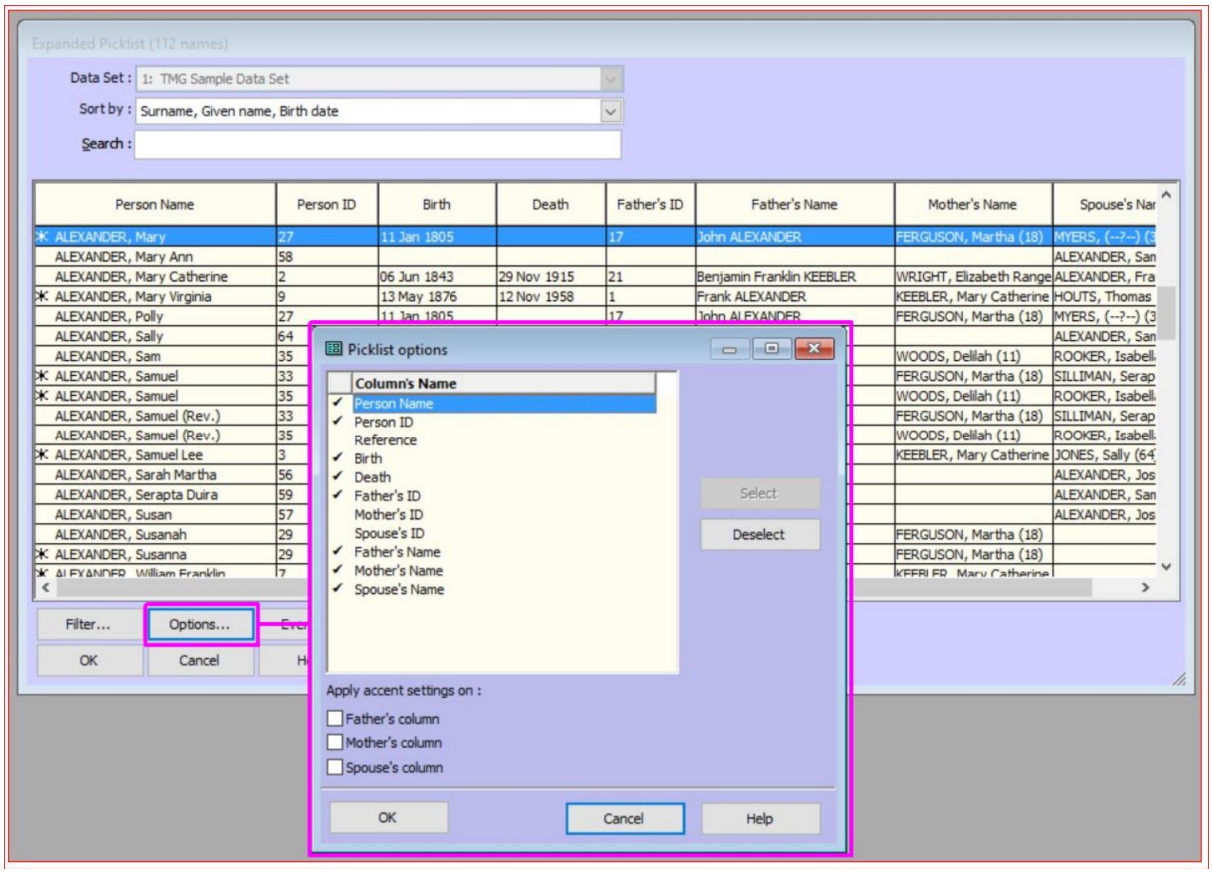
At the close of a modified requesting window an alert may allow the choice of saving or cancelling the changes.

APPENDIX

EXAMPLES FROM OTHER APPLICATIONS

TMG PICK LIST

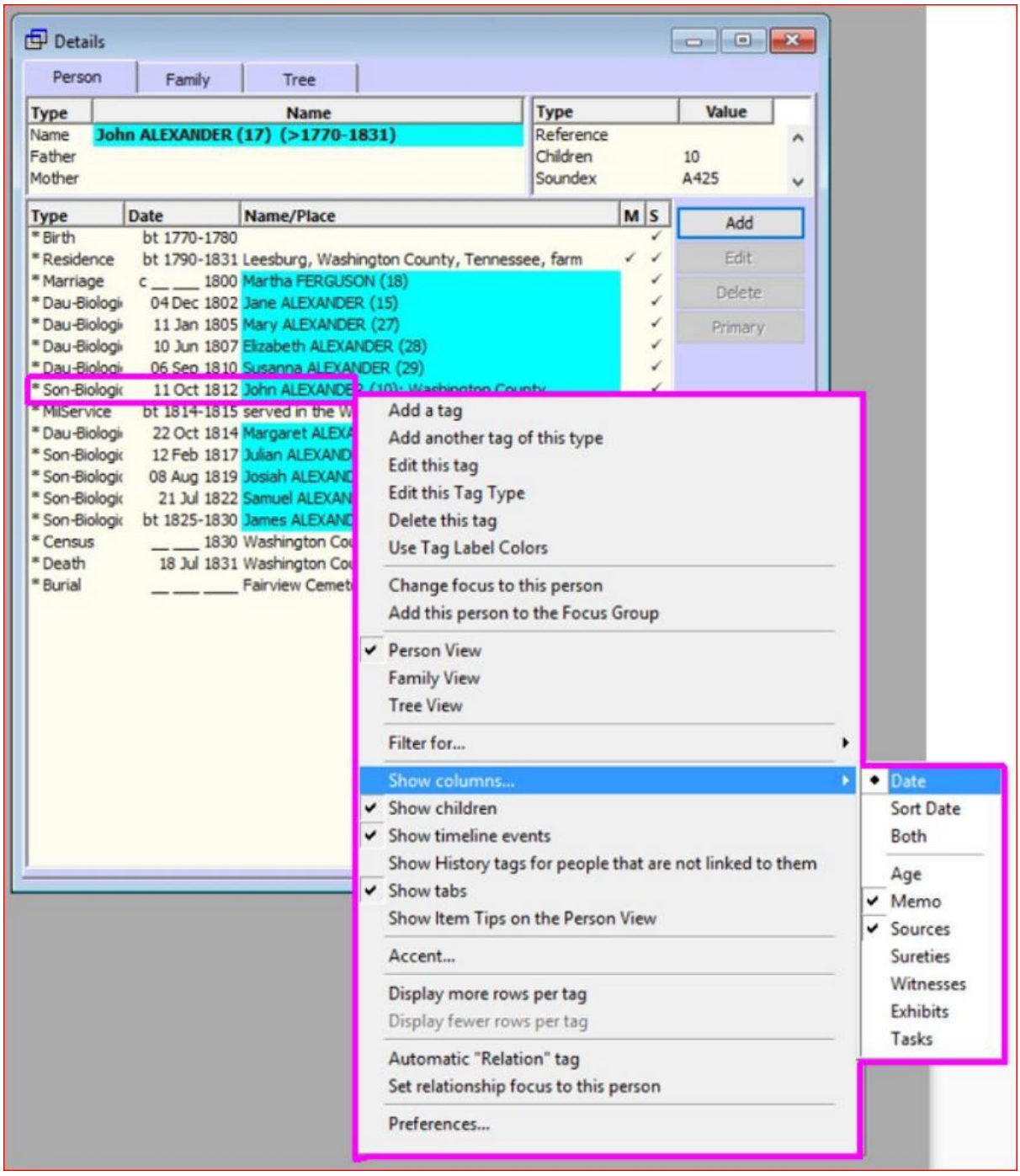
The TMG Pick List has an options command button that allows inclusion or not of a list of properties as additional columns.



This is one capability HRE should have, where the list of possible columns can be edited by the user once the data retrieval method has been defined in HRE. In TMG there is no control on the order of the columns whereas that needs to adjustable by the user.

TMG PERSON DETAILS

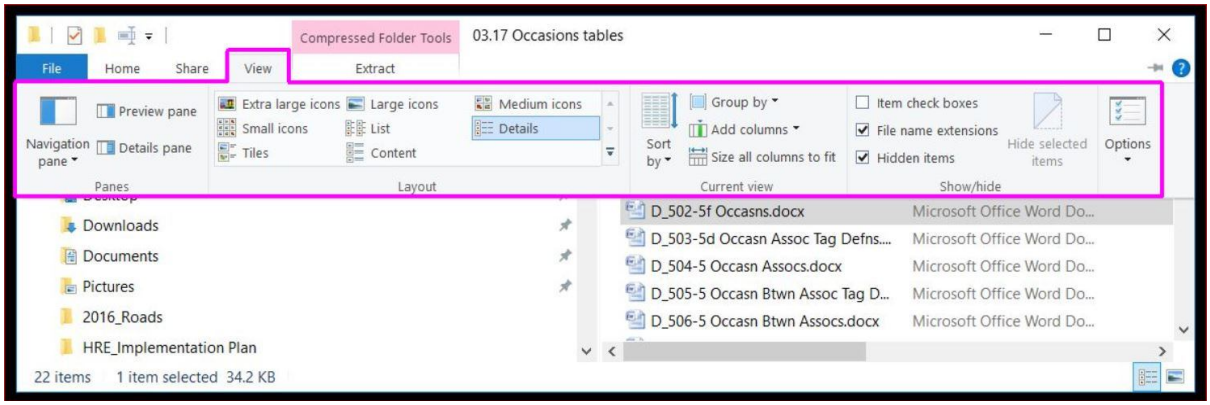
A right-click on the table of the context menu provides a method to select which extra variables can be displayed, although it does not provide a means of editing or reordering the columns.



HRE needs equivalent methods of modifying the display from that window including extending the list of available columns and reordering the columns. In HRE each column can be highlighted by using a separate Accent definition per column. TMG allows selection of the gap between column headers to allow the user to resize the width of a column, which should carry over into HRE.

WINDOWS 10 FILE EXPLORER VIEW MENU

The Windows 10 File Explorer has a collection of options to control what is displayed.



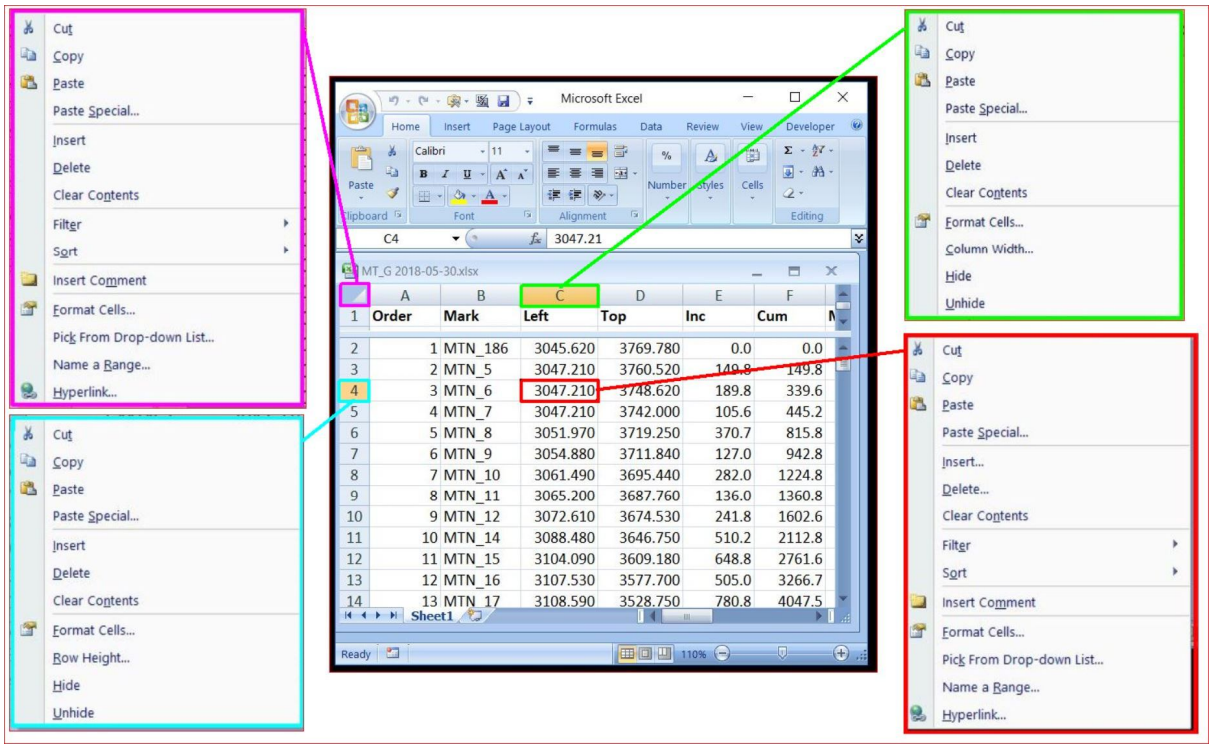
Many of these are options that should be available on some windows in HRE.

EXCEL

In Excel there are 4 separate context sensitive right-click menus. This diagram shows the 4 places that open different menus**:**

1. **The top-left cell** – all table options/actions, all columns options and all row options
2. **A Column Header cell** – options/actions for that selected column
3. **A Row Label cell** – options/actions for that selected row
4. **Any other single cell** – options/actions for that cell

NOTE: Some menu items can open other windows to select or edit data.



It is this concept of having context menus that needs to be implemented within screens that contain lists of records or tables of properties of objects in HRE. The GUI for a research application must help the user to arrange output so that patterns can be recognized.