HRE – WINDOW CONFIGURATION OVERVIEW

Revision history

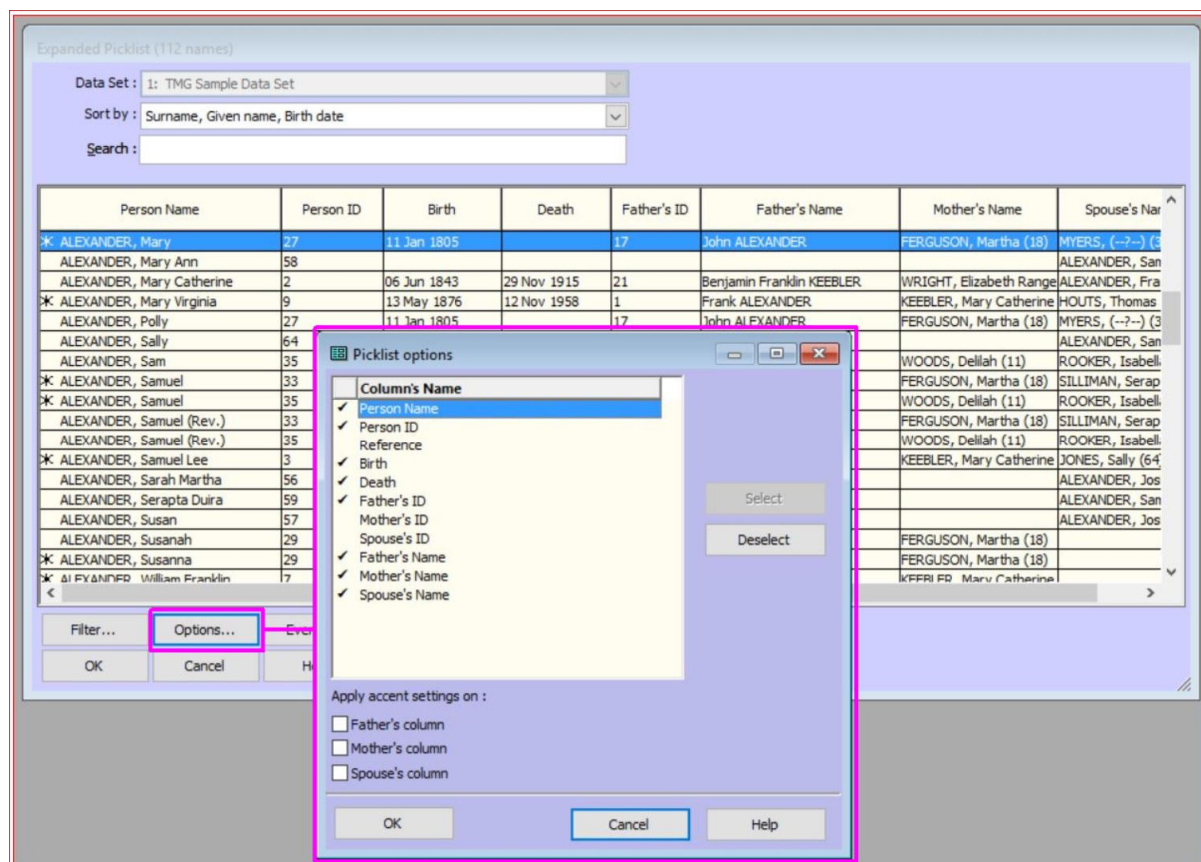| 2018-06-01	Robin Lamacraft	Original draft
2018-06-08	Robin Lamacraft	Added examples and detail
2018-06-09	Don Ferguson	Edited for clarity
2018-06-10	Rod Thompson	Edits

SCOPE

The GUI of HRE has to be flexible in content and not too complex to use. Ideally, it should be consistent in use of GUI elements and follow patterns of navigation that minimize the number of user decisions and actions. Therefore the GUI must be configurable to save and load user's personal preferences for the way that they want to use HRE. When there are multi-users of a project the window configurations need to be defined as Project-related or User-within-Project configurations. All windows therefore must have a default configuration. NOTE: Some windows are not separately configurable as their content does not vary in size except when the display device size changes, the GUI Language changes or the application base font size is changed.

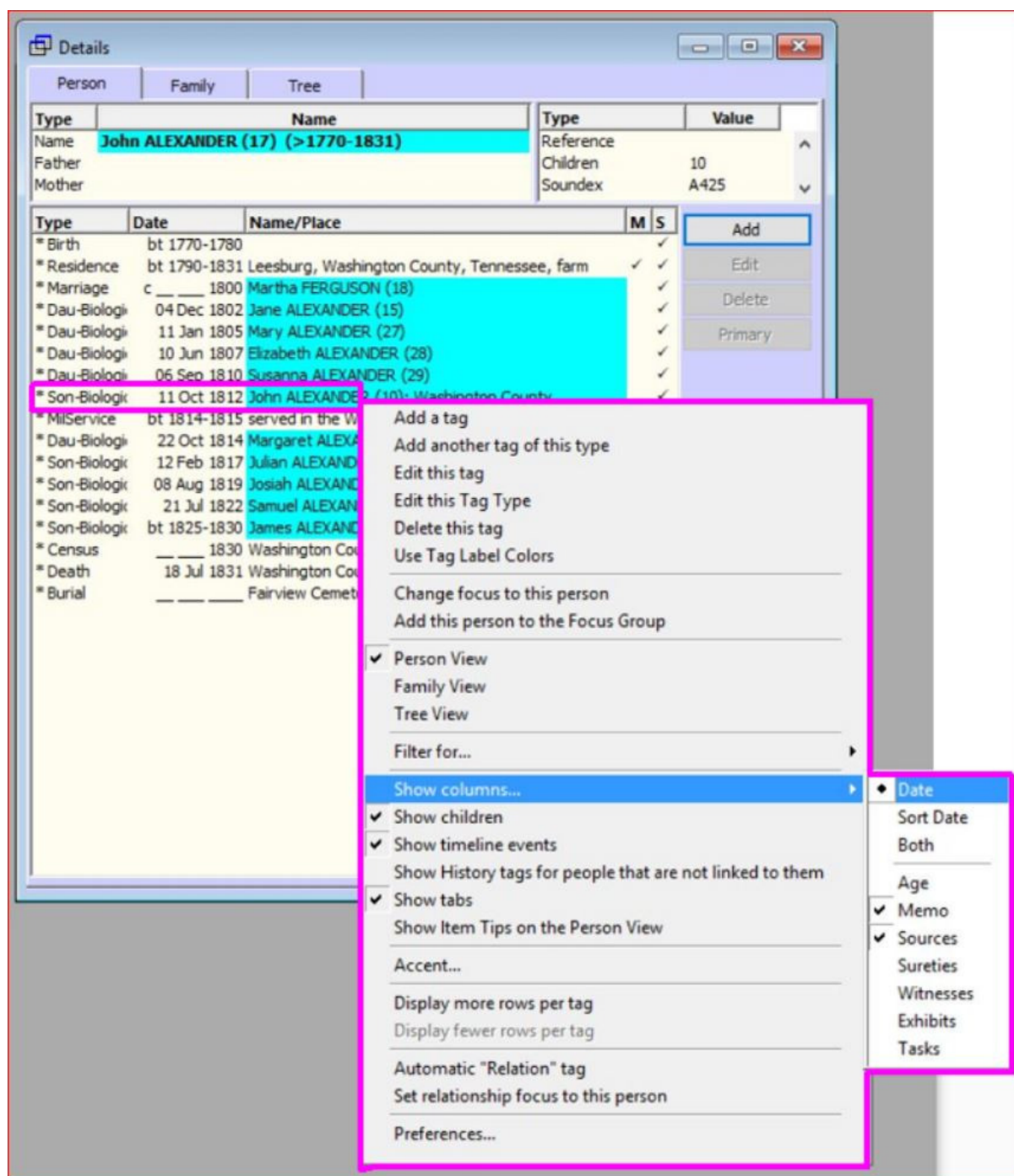## EXAMPLES FROM OTHER APPLICATIONS

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.
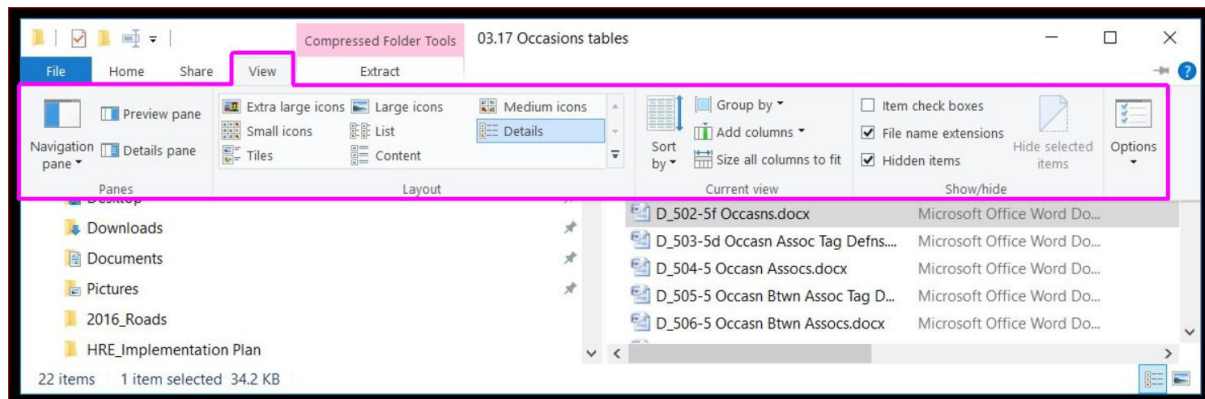
TMG PERSON DETAILS

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

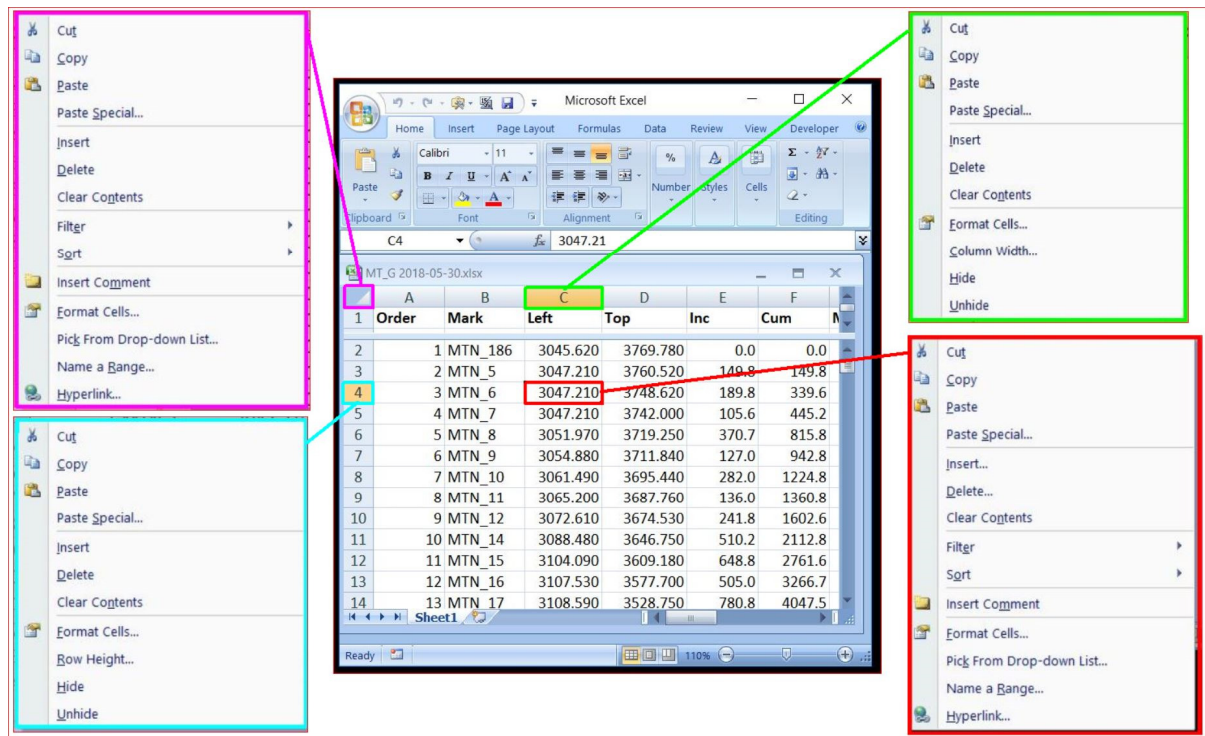The Windows 10 File Explorer has a collection of options to control what is displayed.

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

EXCEL – 4 context menus controlling table content and layout

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.

CONFIGURING HRE WINDOWS

There are 2 ways in HRE to configure a window:

A. **PRE-DEFINING WINDOW CONFIGURATIONS.**
   It uses the Select Configuration command button on the window

B. **DYNAMIC WINDOW LAYOUT ADJUSTMENTS.**
   It uses 4 context menus within the window.

They both use the same auxiliary windows and database storage.

PRE-DEFINING WINDOW CONFIGURATIONS

- **SELECT CONFIGURATION** button – This command button opens the Select Configuration window to show a list of available configurations for the requesting window in a number of selectable configuration lists like "Recent", "Favourites", "Other" and "All". At this point double clicking on a configuration will close Select Configuration and apply the selected configuration to the requesting window
- **RESIZE** the requesting window.

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 of it under a new name. This 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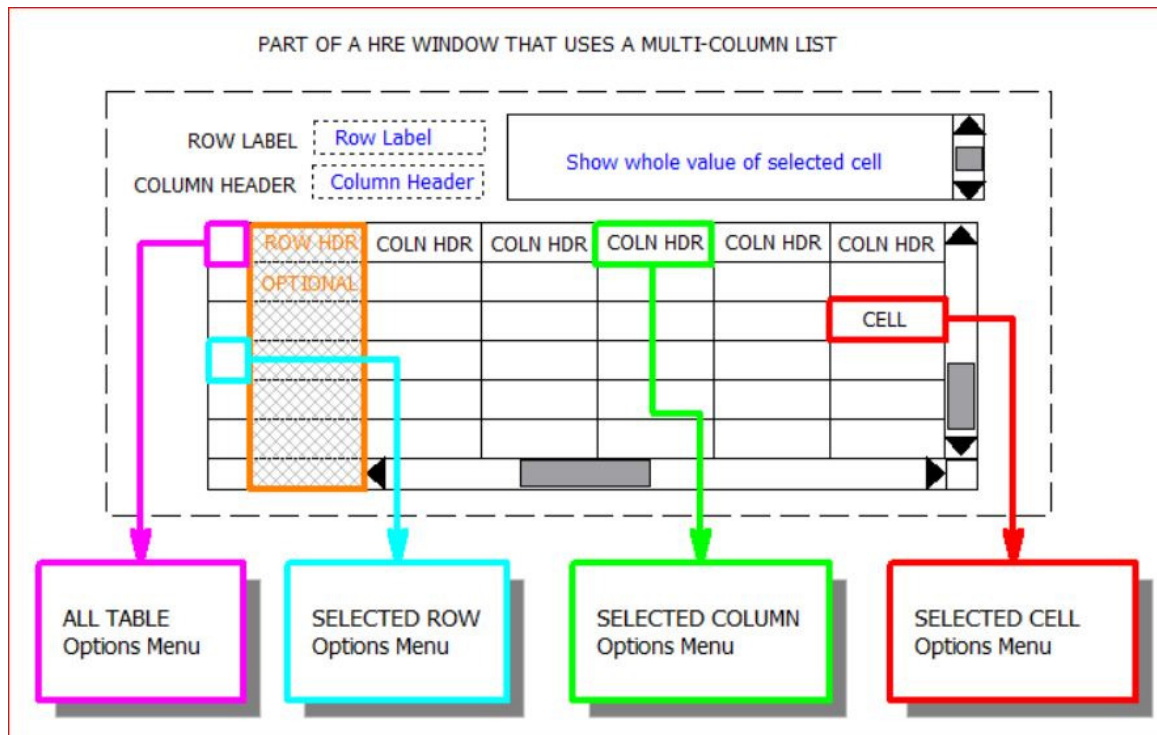 others apply to a single ROW, COLUMN or CELL. NOTE each section of these can be toggled to show/edit the Default values for a property. A few other sections will be needed for other window types, but the typical sections are:

- 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 displaced
    - 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
  - row height
  - row re-ordering by drag and drop.
- SIZE
  - specify rules for use of space as the window is resized
  - specify default.
- OUTPUT

- o TO FILE
  - ▪ folder path
  - ▪ file name
  - ▪ file encoding (TXT, CVS, XML, etc).
- o TO PRINTER
  - ▪ printer selection
  - ▪ page size
  - ▪ page margins.

DYNAMIC ADJUSTMENT OF A WINDOW'S CONFIGURATION

HRE CONTEXT MENUS for MULTI-COLUMN WINDOW DISPLAYS

PART OF A HRE WINDOW THAT USES A MULTI-COLUMN LIST

1. **ALL TABLE MENU** (when top left cell is selected)
   a. **Configurations** – opens 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)
   - b. **Line Spacing** -> *select from list* (depends on table use).

   Theme form: (when selected row is a Theme Row header)
   - c. **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 will allow the choice of saving or cancelling the changes.