# Changes made from version 7.1.1.14 to 7.1.2.0

## Form Designer:

Added page position and name, and removed page number, from the Data Dictionary window.

Made several minor modifications and improvements to the Codes field definition dialog.

Fixed an issue in the match fields dialog for Codes fields. Now “unlink” repopulates the column name dropdown field so it can be relinked.

Removed the position information from the Special Information column fields for option fields in the Data Dictionary window.

Fixed an issue where field definitions dialogs were accepting blank field names, resulting in Null value exceptions.

Fixed an issue with comment legal fields throwing an error if no table was assigned.

Fixed an issue creating fields from a template when the template contained a codes field that had a deleted associated field.

Fixed an issue with the LegalValuesDialog that gave users the impression that columns can be re-arranged.

Fixed an issue with the grid columns definition dialog where the user could go to the data source form before a column name was entered.

Fixed an issue where form level templates that where dropped on the project explorer where adding the pages in reverse order.

Fixed an issue with the connection string text in the template project creation dialog was not indicating the project directory.

Added font and layout attributes to the project element in a project-level template.

The default control and/or prompt fonts can now be applied to multiple fields. This process can be carried out by selecting multiple fields, right-clicking on a blank portion of the canvas, and selecting the “Apply Default Fonts” menu item.

Added the ability to select nodes in the project explorer (page, form, project) and change all the fields at once to the default fonts using the right-click context menu for those nodes. (Basically, right-clicking on something in the Project Explorer will let you change the font for all the fields contained inside that item.)

Fixed defect with the assign check code dialog not showing if a translation was used.

Changes to enable the “variable not defined” message pop-up to be translated

Fixed publish time component to set end time at 11:59:59 of the appropriate day.

Fixed an issue with creating a new field with the same name as a deleted field.

Comment Legal list now accepts “$” (or other symbols?) after the hyphen.

Fixed an issue where pages, as shown in the Form Designer window, where not exactly filling a page after being printed. This was caused by the default page size setting; it has been changed from 768 X 1028 to 780 X 1016. Now the letter size is the default and is shown in the page setup dialog as the default.

In the WebPublishDialog, included content of Introduction Page and Exit Page tabs in Copy to Clipboard.

Fixed an issue with renaming grid fields after a copy paste.

Option fields now support a ‘click’ event in check code. Previously, check code for Option fields could only be placed in an ‘after’ event which would not trigger when clicking on one of the radio buttons. Placing code in the ‘click’ event addresses this problem.

Added a Unique Fields property to table-based fields (drop-down lists) in grid controls.

Fixed an issue with not being able to rename the field name of columns in Grid fields.

Form Designer now validates that patterns don't limit range values and that max range is greater than the min range.

Fixed an issue in the Relate Field Definition Dialog box where users were able to select a parent form of the current form as the child form.

Added the name of the code table of a Codes field to the status bar to help the user check if cascading code fields are using the same source table.

Fixed an issue with text field definition dialogs giving inaccurate error message when size is out of range.

Fixed an issue with date columns in grid fields that still prompted user for a pattern when using an older project.

Fixed an issue with templates not picking up field check code for a given page that was placed after the page before or after check code of the same page when creating a page level template.

Fixed issue with the columns in a Grid field created by dropping a page level template. They were not showing up until the page was refreshed.

Added a right-click menu to the codes table editor for 'Insert Row'.

Anchored the data grid in the legal values dialog.

Users can now create a codes field without specifying a table and\or a link.

Fixed an issue where check Code disappeared after deleting an unrelated form.

The EPIWEEK function in check code has been changed to accept a 'first day of week' optional parameter.

Fixed an issue with text fields being created with so much width that they exceeded the page boundaries and couldn't be resized. Now they are shortened to 95% of the page width so the user can drag the field to the left and resized if required.

Fixed an issue related to clearing and removing image fields from a record.

Fixed a defect with templates failing when created on a system in another region.

Removed an un-needed "OK" button on the WebPublish dialog.

Copying a form to an Android device now incorporates a form name validation check.

**The names of new fields can be changed even when the project contains collected data.**

Copying a form to an Android device now checks for supported field types.

Fixed an issue where an Epi Info 3.5.x upgrade would generate false positive 'notification' messages about relate conditions being present in relate buttons, even if no such condition actually existed. (This issue didn't prevent the upgrade from proceeding but could present misleading information to the user.)

Fixed a defect that was causing forms-used-as-code-tables for legal values and comment legal fields in Epi Info 3.5.x projects to be upgraded, even though this isn't supported. The project analyzer now displays an error and prohibits the process from starting if it detects that a drop-down list field uses another form as its data source.

Fixed a rare cast exception when attempting to create project from a template.

## Enter:

Added page position and name, and removed page number, from the Data Dictionary window.

Removed panel-related code that was causing an error with grid controls on navigation.

Completely re-wrote the underlying Data Packager code to improve performance and resolve rare file I/O exceptions.

Removed the position information from the Special Information column fields for option fields in the Data Dictionary window.

Fixed an issue with Yes/No values being set incorrectly when using related forms.

Leading zeros are no longer being stripped when navigating to related forms.

Changed Invoke back to BeginInvoke in the method that sets the focus to the first control.

Fixed an issue where moving back from a related form was overwriting the object in an image field with a string, causing an exception.

Fixed an issue with comparing comment legal field values that are not in the current page.

Fixed an issue with “lost” field values when navigating child records after returning back from a grandchild view. This was done by using the Expression property to get the parent view and is only hit when the expression syntax of "]." is passed into the TryGetFieldInfo method as the name.

The browse button in the package and unpackage dialogs has been changed to show the word “Browse” instead of the ellipsis.

Fixed issues with a user not being able to save field values if the field was created after data was collected and the page that the user added the field was saved initially as a blank page.

Fixed an issue with saving a record in absence of a page table which can happen when data is entered for the first time and when there is a blank page in the form.

Improved the output that is shown to the user during batch package imports.

Fixed issue with the Yes/No field not saving an updated control font.

Fixed issue with the page panel showing scroll bars when fields extend past page.

Fixed a defect with the EXECUTE command not handling spaces in the paths.

Fixed an issue with WAITFOREXIT and NOWAITFOREXIT not working in EXECUTE command.

Cascading deletions are now supported. That is, if the user deletes a record on a parent form, corresponding child records are also deleted.

Removed deprecated date/time masks from date time fields in grids.

Fixed an issue with failing to start if the target executable directory had a space in it.

Fixed an issue with not being able to print forms in landscape mode.

Fixed an issue with cascaded Codes fields not applying parent selects when child selects have the same name.

Fixed an issue with Codes fields not allowing values with apostrophes.

Fixed a bad index error in the CurrentRecordValueString in Comment Legal fields.

Fixed an issue where a label that was the target of a Codes field was not showing expected text from code table when going record to record.

Various optimizations have been made in an effort to improve performance.

The 'No Records' option (Blank Form) includes data for drop-downs.

Made several changes to the main form object to better support integration with third-party menu applications.

Fixed an issue with Enter not working with command line arguments with spaces in them.

Labels can now be assigned through check code.

The EPIWEEK function in check code has been changed to accept a 'first day of week' optional parameter.

Fixed an issue with Grid fields not being disabled when the record is marked for deletion.

Fixed an issue with using date fields in the Find Records dialog.

Fixed an issue with table-based fields that use collected data tables from forms as their source instead of codetables. The error occurred when no records where entered for the source form.

Fixed an exception that was happening when there were table-based fields in grid controls and the user navigated to another record.

Fixed an unhandled exception in the ‘Find Records’ window that would occur when attempting to add an exposure relationship with a table that had no records.

Fixed an unhandled exception when deleting a row from a grid when two or more columns are selected.

The data packager now allows operation even if a table-based field on one of the forms is referencing another form’s data table as its data source.

Fixed an issue related to image field imports from Android devices that register as media devices.

Enter now allows the use of MS Access linked tables for data entry.

Enter now overrides the mouse wheel behavior when the focus is inside of a drop-down list field. Previously, scrolling the mouse with the cursor present in such a field would scroll through the values in the field, rather than scroll down the page. This has been changed so that scrolling inside such a field scrolls down the page and does not change the values in the field.

Set the list radio button to be not visible in the Dialog dialog.

Fixed an issue where the passing of values of comment legal fields from parent to child was inconsistent.

Fixed an issue where the LIKE operator was not working properly.

Fixed a defect in the 'Find' feature; it was using the form name to check if a data table exists for the form. This check failed if the data table name was different than the form name and prevented the user from using the find feature. This has been corrected to use the form's table name property instead.

Added a point map menu item.

Modified the record selection dialog for the data packager to make it clearer that all of the specified conditions must be met. (The conditions are combined using AND operators behind-the-scenes.)

Tweaked the data package import process to better handle scenarios where a user has managed to create a form with invalid field names.

## Classic Analysis:

Standardized button placement and added Clear and Help buttons in the Merge Dialog and BuildKeyDialog.

Formatted buttons to be in two rows in the Merge Dialog.

Changed order of tabs so the Show Forms tab is first in the Merge dialog.

Fixed an error that would occur when exporting to existing 255+ column tables using the MS Access database format.

Using the MEANS command with a cross-tab variable: Changed two functions to return NaN (not a number) when user tries to compute means on wrong type of variable.

Fixed a defect where the LIST command would display a “FillWeight values” error message when run on extensive Epi Info 7 projects.

Fixed an error that was displayed when generating graphs with WEIGHTVAR and SERIES parameters.

Fixed a minor issue with the HEADER command.

Fixed a defect where the concatenation operator was not concatenating strings correctly.

Delete Records dialog now correctly validates field names.

Delete Dialog is properly generating command syntax for "All Records" option.

Permanent deletions now allow deletion using RecStatus criteria.

**Added t-test for non-zero mean to MEANS routines.**

The RELATE command now properly shows the file per the data source type.

Fixed an issue with the order of variables when using LIST command with a grid table.

Fixed an error that occurred when executing SELECT SEX="Female" AND VANILLA= (+) in the Oswego sample data set.

Fixed cross-tabulation in Means being out-of-order for System.Bytes using values 1 and 0 and System.Booleans.

Fixed several sorting issues with row and column values in the TABLES command when either the exposure or the outcome, or both, are System.Bytes with values 0 and 1 or System.Booleans and the resulting table is 2x2.

Removed ability to select more than one main variable for Pie charts.

Using the WRITE (Export) command to write data to a SQL server database no longer creates additional tables every 250 fields.

## Dashboard:

Fixed a problem that was causing hanging during t-test calculations in the Means gadget.

Computing unweighted Pearson's correlation coefficient, t-statistic, and p-value.

The gadget header icons and header font size were all made slightly larger.

The line list gadget now allows selection of user-defined groups.

The browse button in the Export window now shows the word “Browse” instead of an ellipsis.

The description button for each gadget has been changed. It now shows a dialog box to the user that prompts them for a custom title and custom description. Additionally, clicking on the gadget’s title in the title bar no longer allows changing the title, as this is now done using the aforementioned dialog box.

Some unnecessary whitespace was removed from the area between the gadget’s title and the gadget’s output.

Hiding a gadget’s borders using the ‘Show/Hide borders’ button on the status bar no longer hides the gadget’s title.

Fixed an issue where a gadget’s description was not made visible again when expanding output that had been previously collapsed by the user.

Added a routine for computing Spearman's Correlation coefficient for the Linear Regression gadget.

Updated the right-click context menu to detect if third-party gadgets are present. If so, they will show up under a ‘Custom Gadgets’ menu underneath ‘Add Analysis Gadget’.

Fixed a defect with the 'convert number to text' simple assignment type that wasn't showing number columns as valid fields to convert.

Fixed a defect related to the displaying of canvas filters when switching between guided and advanced modes, and when no advanced mode filter has been set (that is, when it's been cleared).

Reworked the Frequency and Means gadget’s ToHTML() methods so they respect user-specified column display options. For example, if the user decides not to show the cumulative percent column for the frequency output in the Dashboard, then that column will also not show up in the HTML output. In previous versions of Epi Info 7, all of the columns were displayed in the HTML output even if they had been turned off in the Dashboard.

Gadgets that have been collapsed can save their ‘collapsed’ state to a canvas file.

The ‘Set Data Source’ dialog has been updated to allow for choosing forms, tables, or both forms and tables from an Epi Info 7 project. Previous versions of the Dashboard only showed forms in the Data Source explorer.

The Line List gadget has been updated to allow specifying a *maximum* allowed width and height. If the amount of output exceeds these values, then scrollbars will appear.

Sending gadget output to HTML via right-clicking on a gadget and selecting ‘Send to web browser’ should now display the gadget's proper name in the title bar, rather than always displaying 'Line List'.

The Report Text Gadget now has font and color options. These can be accessed by right-clicking on the text gadget’s border (the small area between the outside of the gadget and the innermost text box).

The contents of the Report Text Gadget are now sent to HTML.

Fixed a defect where re-size adorner layer for simple text report gadget was not being displayed when loaded from a canvas file.

Updated file and directory path code to resolve some rare HTML output issues.

Updated the underlying methods in the data management layer that are used to get distinct stratification values.

Added t-test for non-zero mean to Means gadget.

Added a Value Remapper to the 2x2 and matched-pair case control gadgets. This feature can be used to specify which value(s) represent ‘true’ and which represent ‘false’ for the purpose of generating 2x2 tables out of otherwise non-dichotomous data. Any values that are unassigned are treated as missing or empty. For example, if you read a data set where the exposure and outcome variables intended for use in a 2x2 table have values 1, 2, and 9, representing Yes, No, and Missing (respectively), the resulting output will be a 3x3 table and no statistics will be displayed. The value remapper can specify that the 1 value is the Yes value and the 2 value is the No value. By leaving the 9 value unassigned, it is treated as missing and ignored, thus delivering a valid 2x2 table. Currently, any Boolean fields (and Yes/No fields in Epi Info 7) are ignored by the remapping code such that Yes always translates to Yes (and No always translates to No), regardless of how the values are remapped.

The NutStat chart control was updated to better handle scenarios where there are zero data points for one or more records.

The Dashboard now supports many-to-one relates via the 'Add related data source' feature.

The 'all list values' option found in many gadgets now works with day and month name options that were assigned using the formatted variable type. This is currently supported in charts only.

Conditional cell shading has been added to the MxN table gadget. Does not function inside of a 2x2 table.

Added a confirmation dialog when selecting the ‘Reset Dashboard’ feature.

Added a defective rule check for improperly recoded variables.

Fixed a defect with using the & symbol in string-based data filters.

An extra validation check was added to the recode dialog to ensure text values aren't saved to a variable rule defined as numeric.

Literal date values are now allowed in date-based simple assignment rules. For example, in the simple assignment type 'Find the difference in years between...' you can now specify either a hard-coded date such as 5/5/2011 or another date variable on the form. Previous versions of the Dashboard only allowed selecting another date variable on the form.

Added 'is not equal to' operator to the data filtering controls.

Fixed crash that would occur when opening a window (e.g. font window, export window) for a second time.

For stratified 2x2 tables, changed Exact Adjusted Odds Ratio and CI routine to better handle large numbers.

Fixed a rare crash that sometimes occurred when closing a report text gadget.

When using a custom SQL query as the Dashboard’s data source, the query can now be modified by right-clicking on the canvas and selecting ‘Canvas Properties’. The query shows up in a text box in the Canvas Properties panel. Modifying the query in this manner does not clear the current set of gadgets, filters, and variables.

When using a custom SQL query as the Dashboard’s data source, the query is now persisted in the ‘Advanced’ set data source dialog box. Updating the query in this dialog does re-set the current set of gadgets, filters, and variables. (Use Canvas Properties to change the query without re-setting the canvas.)

Fixed a rare crash that would occur when the risk ratio estimate is undefined in the 2x2 gadget.

Added a feature to force vertical arrangement of gadgets. It is available in the status bar.

Fixed a rare label out-of-order problem with multi-stratified 2x2 tables.

Fixed a rare out-of-bounds exception in stratified 2x2 tables.

The Epi Info 7 version number is now displayed in the canvas properties.

Fixed a defect that was causing the column names in the Recoded Variable dialog to show up as 0, 1, and 2 if the user loaded a canvas file and then edited an existing recoded variable.

The matched-pair case control analysis gadget now shows exposure variable name on top of the output table.

Fixed a defect where the Kruskal-Wallis routine for the Means gadget was running even when a particular cross-tab had no data, in which case an object reference error was generated in the gadget's output panel. (A crash did not occur, but no actual output was being displayed.)

Fixed a defect related to users stratifying by a string variable where multiple values may have differing numbers of trailing spaces or consist only of spaces (e.g. one row has 'Male' and another has 'Male ' for a column called Gender). Some parts of EI7 and .NET treat these as the same value, others as different values. This issue only occurs with Excel spreadsheets. Now, all string column types are trimmed upon an initial read of Excel data to prevent this problem from occurring.

Added the ability to use numbers for the starting and ending values in the epi curve chart gadget. If a number is specified, it will be interpreted as the number of days past the current system date and time. For example, a value of -7 for the start value will always show an epi curve with a minimum x-axis date of 7 days prior to the current date.

Updated the gadget base class to handle collapse/expand behavior and made other modifications to collapse/expand in specific gadgets. This fixes auto-expanding-on-dashboard-refresh issues with the line list, frequency, and combined frequency gadgets.

Chart legends can now be placed to the right, left, top, or bottom of the chart.

Error and warning pop-ups in the Expression Assign dialog and Create Group Variable dialog boxes have been made translatable.

Fixed an issue where the data filtering message that appears at the top of the canvas was only being translated if the user had created a filter in ‘advanced’ mode. This has been corrected to always use the proper translatable resource.

Fixed an issue where the denominator in a combined frequency wasn’t taking into account any gadget-level filtering. This may have resulted in incorrect percentages (the raw counts would still have been correct).

Dashboard charts have been completely overhauled and are now available underneath a ‘Charts’ menu item. Each chart type has its own gadget (unlike previous versions of the Dashboard, where the chart types were all incorporated into a single chart gadget). New charting features not previously available in the Dashboard:

* Area charts
* Donut charts
* Step charts
* Ability to use gadget-specific filters in the charts
* Ability to multi-stratify the charts
* Ability to show one chart for each value of a given variable (in addition to stratifying)
* Ability to place legends on the top, left, right, or bottom of the chart
* Ability to specify a Y2 axis variable or use a ‘rate per 100k population’ calculation for the Y2 axis
* Y1 and Y2 axis format strings
* Chart subtitles
* Ability to change to one of many chart color palettes
* Epi Curve charts can set a custom step and interval. For example, ‘Every 3 days’ or ‘Every 4 months’.
* The x-axis values can be rotated to a user-specified angle.
* Legend font sizes are customizable.
* The value for a given column, point, or pie slice can be displayed using the ‘Show Annotations’ setting.

## Maps:

Added point maps as a layer type.

## Miscellaneous:

Upgraded codebase to .NET 4.0 from .NET 3.5. This change requires all users to have the Microsoft .NET 4.0 framework installed or Epi Info 7.1.2 will not run.

Removed unused Epi.Menu2000 project.

The E. Coli project has been updated to include the First/Last save columns for both the FoodHistory and FoodHistory\_NoCheckCode base tables.

**Epi Info 7 now supports third-party data driver plugins. Users can create their own data drivers (e.g. if they want to read a database format unsupported in Epi Info 7) and import them using the Options menu. For more information about how to create data drivers, please contact the Epi Info development team at** [**epiinfo@cdc.gov**](mailto:epiinfo@cdc.gov)**.**

**Epi Info 7 now supports third-party gadget plugins for the Dashboard. Users can create their own Dashboard gadgets (e.g. if they want to analyze data in a way that is unsupported in the Dashboard) and import them using the Options menu. For more information about how to create and use custom gadgets, please contact the Epi Info development team at** [**epiinfo@cdc.gov**](mailto:epiinfo@cdc.gov)**.**

**Removed the Date\Time tab from the Options dialog.**

Added 'Albany County Boundary\_region' files to \Resources\Training Projects\CommunityHealthAssessment.

The arrangement of gadgets in the E. Coli and Oswego canvas files was updated.

Added code to matched-pair case control gadget to allow for more than one control per case.

A new cryptographic DLL was added that users can optionally specify to use through the configuration file.

Updated the EIHA training database in \Resources\Training Projects\CommunityHealthAssessment to remove the zero values from latitude and longitude. They have been replaced with null values.

Salmonella training data set and EDP7 file included in \Resources\Training Projects\Salmonellosis.

The Endpoint address field in the Options menu was changed from a rich text box to a text box.

Modified the Ole data driver to properly bracket the table name parameter in the 'TableExists' method. This should ensure that any old projects (projects created in newer versions of Epi Info 7 prohibit such names) with now-invalid table names can be used with the Find feature.

The sample HIV project was updated to remove a problematic date range setting on the date of interview field.