

# Team Developer 6.2

## IDE Features

### File open dialog

SQLWindows developer opens a new file by choosing File | Open from the menu, or by clicking on the open toolbar button. The Open File dialog comes up and all files with extension .ap? are displayed.

### Select multiple child objects

SQLWindows developers can select multiple GUI objects on form layout and can move the whole set of controls from one tab page to another and can quickly select the pertinent controls and re-assign them. It only allows assigning to a tab page if the control is already on a tab control.

### Ability to re-arrange new outline tabs

SQLWindows developers can drag the outline tabs left and right in the IDE so as to put them in whatever order is desired.

### Quick message navigation

Quick message navigation allows developers to quickly navigate to the appropriate SAM Message by double clicking the control in form layout. For example, developer double clicks on a button in the layout window, the IDE switches to the outline and highlights the SAM\_Click of the button and expands the node so that the user can quickly see and possibly edit the contents of the node.

### Filter messages in Attribute Inspector

There are two new check boxes provided in the Attribute Inspector which allows users to filter SAM message or Users messages.

### Auto-cleanup of compiler temp files

Auto-clean feature is added to the .NET compiler. This cleans any temp folders created under the user's Temp folder when closing SQLWindows IDE.

### “Find All” search feature for IDE

SQLWindows has a "Find All" menu item under Edit popup menu. This allows users to find all occurrences of a particular string in an application and to move easily between these locations. Selecting the Find All menu choice will open a modeless dialog which allows the user to search for a string. All found instances will be loaded into a grid. If you double-click on a row, the outline will display that location. The search can also be restricted by "case".

### Menu items for TD Community and Support Forums

There are two new menu items to the Help menu in SQLWindow's IDE right under the item Upgrade License. TD Community and Support Forums. Both menus open the appropriate web pages in a browser.

## GUI Features

## Progress Bar replacement for cMeter

SQLWindows provides a native progress bar control called Progress Bar which is a replacement for the old cMeter Visual Toolchest control. A Progress Bar control can be added like any control. All new Progress Bar APIs begin with SalMeter. See SalMeter APIs in the in-build help.

## Grid Enhancements

- **Save and load grid state to file.** User SalGridWriteState() and SalGridApplyState() to save and read the Grid state to and from an XML file. The following information can only be saved and retrieved:  
**Group By**  
**Order By**  
**Group by**  
**Summary**  
**Hidden vs. visible columns**  
**Row Height**
- **SalGridDataExport().** The SalGridDataExport() function has been expanded so that if the path parameter is empty, then Team Developer runtime automatically pops up a "Save As" file chooser dialog box to allow the user to interactively select the output path at runtime.
- **Support background color for grid rows and cells.** There is a new API SalTblSetCellBackColor, that can set the color on a specific cell in the grid. The behavior matches VisTblSetCellColor().

## Tree Control Enhancements

- **SalTreeMoveItem().** The SalTreeMoveItem() function moves a tree node, and all its sub-nodes, to a new location in the tree control.
- **SalTreeFindItemByData().** The SalTreeFindItemByData() function allows user to search through the nodes of a tree control to find a node with a specific data value.
- **SalTreeSetItemImageFromBinary().** The SalTreeSetItemImageFromBinary() function allows the user to specify the image for a tree node by passing in image data as a Binary variable.

## Date Time Picker Enhancements

- Show non-month days property for Date Time Picker. There is a new property "**Show Non Months Days**", which allows users set either True or False.
- Show Today attribute for DateTimePicker. There is a new property "**Show Today**", which allows users set either True or False to control Today button.
- Show None attribute for DateTimePicker. There is a new property "**Show None**", which allows users set either True or False to control None button.
- **Ability to set date format for DateTimePicker control.** There is a new Format attribute for Date Time Picker control, similar to the one used for datafields that is set to the datetime data type. Existing SAL APIs, SalFmtGetPicture() and SalFmtSetPicture(), are enhanced to work with DateTimePickers.
- Show Week Numbers for DateTimePicker control. There is a new property "**Show Week Numbers**", which allows users set either True or False to enable or disable week numbers at runtime.

## Named Toolbars Enhancements

There are additional APIs for users to dynamically control and customize toolbar buttons. All new Named Toolbars APIs begin with SalTB\*. See SalTB functions for in-build help or use Named Toolbar.pdf for more information.

## MDI background gradient

There is a new attribute "Themed Background" for MDI Window to control themes. Whatever theme is selected by the user will affect the painting of the MDI's client area.

## Docking

SQLWindows now provides “Allow Child Docking” attribute to dialogs. This provides the ability to dock a dialog box inside another dialog box.

## Watermarks in new Chart control

Developers can set a watermark into a chart control through a new chart API function called `UfcChartSetWatermarkBitmap()`. See in-build help for more information on this API.

## Rich Ribbon Bar

Team Developer provides SQLWindows developer the ability to design rich ribbon menus natively. The overall focus of the new ribbon bar will be an emphasis on easy-to-use, quick-to-create 4GL ribbons. See Ribbon Menu under Books folder for full details on how to use this feature.

## .NET New Features

### XAML Spell Checking for Datafield, multiline-filed and rich text control

Developers can turn on the new Spell Check attribute for the field that needs spell check. This is .NET only feature. This feature is supported for English, German, French and Spanish regions only.

### 64-bit applications on .NET

When compiling in .NET build setting, SQLWindows now has the option of specifying the "bitness" of the outputted file (EXE or DLL). The choices are 32 bit, 64 bit, or "auto". See `DotNet.pdf` under books folder for more information.

### SAM\_NetException

Developer are now able to put a global `SAM_NetException` message in their app to catch exceptions which occur when calling methods in external .NET libraries while in win32 mode. By default, when an exception occurs during the invocation of an external .NET method, the `SAM_NetException` message will be sent to the Application Actions section. If there is code and the code either returns `TRUE` or has no Return statement, then that ends the error processing. If there is no `SAM_NetException`, or there is one and it returns `FALSE`, then the old processing continues.

### Debug Web Services and Class Libraries

SQLWindows now provides the mechanism to debug into external web services and class libraries. See `DotNet.pdf` under Books folder for more information on this.

### Load XAML resource dictionary dynamically

There is a new API `SalDictionaryLoad()` that allows users to dynamically decide on the appearance of their application and selectively load resource dictionaries based on user input or saved settings.

### Assembly sign to register in GAC

SQLWindow provides the ability to enter the path to a Strong Name Key file (\*.snk) on the new Advanced Settings dialog box under Build Settings dialog. If this value is provided, the .NET compiler will attempt to sign the assembly using the file. Strong signing is needed to register an assembly in the GAC

### Custom exceptions

SQLWindows offers developers the ability to define their own custom exceptions and to throw them ad-hoc. Using the new language keyword “Throw”, developers are now able to implement their own structured exception handling logic. This feature can also be used if the developer has a DLL that wishes to share with other applications and want to

define a specific set of exported exceptions to govern error conditions.

Under Global Declarations, there is a new node called "Named Exceptions". The legal child-node of Named Exceptions is an "Exception" node. The Exception node itself just defines a simple string name, for example Exception: MyException.

Indented under the exception node, there is a standard "Description" node and an "Exception Variables" node. These nodes describe the data which can be specified at throw time to further describe the exception which occurred.

There is a new language keyword "LastException" to return the name of the last exception which occurred and also a new function SalGetLastExceptionField() to retrieve data from within the exception. The system variable "LastException" is not reset until another exception occurs. It is not a valid coding practice to check if an exception has occurred by constantly comparing this variable to an empty string.

## Language API Features

### Allow dynamic setting of web service address

There is a new SAL function SalWSSetEndpointAddress() to override the web service address which is embedded in the WS interop assembly which gets generated by the Team Developer Web Service Wizard.

### Convert strings into binaries

There is a new Sal API function SalStringToBinary() that takes a string value and converts it into a binary value in the new Binary datatype. This is a front end function to SalStrToMultiByte(). See in-build help for more information.

### Convert binaries into strings

There is a new Sal API function SalBinaryToString() converts a binary value into a string value. This is basically a front-end function to SalStrToWideChar(). See in-build help for more information.

### SalGetEnvironment

There is a new SalGetEnvironment() function that returns system information about the current machine, like OS version and hardware specifications, etc. Due to differences in .NET and Win32, not all the same keys are guaranteed to come back from SalGetEnvironment() when calling in Win32 and .NET. See in-build help for more information.

### Convert local times to and from Universal Coordinated Time (UTC)

There are two new Sal functions: SalDateToUTCTime() and SalDateToLocalTime(). These will take a date/time variable and convert it to UTC and vice-versa. The return value is a Date/Time variable. See in-build help for more information.

### Compiler warnings for GUI-related SAL functions within a DLL or Web Service

SQLWindows compiler gives warnings when GUI-related SAL functions are called within a DLL or Web Service build settings.

### SalDlgOpenFileMulti()

This new API works basically the same way as SalDlgOpenFile() except that users will be able to select more than one file. The two parameters describing the file which was picked will become arrays and a new argument is added at the end, giving the number of files which were chosen. See in-build help for more information on this.

## Report Builder

### New Graph Control

The existing support for embedding QuickGraph controls in a Report Builder report is

replaced with the new Chart control. All existing QuickGraph properties are migrated forward and new Chart properties will be persisted within the QRP/CQT. Any existing QRP/CQT files will open and run in Report Builder 6.2 without modification, with the new Chart showing up instead of legacy QuickGraph. The new Chart properties dialog allows the user to set the desired report properties.

## Repeat Column Header after Break

When group contents are longer than the height of a column, a column break will appear. The user has an option to display the Column Header for that groups contents and any subsequent group contents after all column breaks in a report. In the Report Design, Select the column 'Header'. In the Tools toolbar, select the Report tab. Select Block (under Format items). Select (check) on 'Repeat on Column break'.

Or

Right-click on column 'Header' (context menu), select Properties....



Team Developer Guide to New Features