# **opentext**<sup>™</sup>

# **TD Mobile**<sup>™</sup>

# New and Changed Features

Product Version 2.4.2

#### TD Mobile™: New and Changed Features

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The following new features have been added to TD Mobile 2.4.2

# Server

#### SAL API

- SalWebGetHttpMethod Return the method of the current HTTP request,
- SalWebGetHttpHeader Use this function to look up a value by key from the current HTTP request header.

#### MongoDB

MongoDB server executables are excluded from this release due to license limitation but TDM still supports MongoDB API. If you need MongoDB you should download the latest version of MongoDB server from <a href="https://www.mongodb.com/">https://www.mongodb.com/</a>. Sample MongoDB documents can be used from TDM sample, IslandDemoMongo, is installed in C:\ProgramData\Gupta\TD Mobile 2.4\mongodata. You can copy these island data to your mongo data folder or start MongoDB server like as follows.

> mongod.exe -dbpath "C:\ProgramData\Gupta\TD Mobile 2.4\mongodata"

# Controls

#### **List View**

The list view control now has Show Icon property to show/hide right arrow circle icon on the right edge of each row.



The following new features have been added to TD Mobile 2.4

# Reporting

# **Business charts in reports**

- Use bar, pie and line charts.
- Multiple data series can be used for chart input.
- Many color formatting options.
- Optional legend can be included.

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Business chart created using TD Mobile 2.4 reporting.

### Page breaks in reports

Page breaks for web and mobile reports. The lines of a page footer have a new PageBreakBehavior property. The property can be set to none, before and after.

Pro	perties	
*		
۲	PageBreakBehavior	None
*	Line	None
	Auto Height	Before
	Height (in.)	After
*	General	
	+ Border	None,None,None,None
	Border Formula	
	Back Color	<b>*</b> #00000000

# Server

#### Low-code REST wizard

TD Mobile 2.4 includes a new low-code REST wizard. The wizard works with an JSON REST URL input or a JSON string provided. The wizard creates the required UDV for interacting with the REST service. When running the wizard member elements of the desired UDV can be selected.

The wizard is launched from the classes pane selecting the create icon.



#### Provide the REST service URL or a JSON string.

Create Functional Class	for REST			_ 🗆 ×		
Import URL/JSON						
Enter a JSON REST URL be	low, a http GET	request will mad	e to fetch the JSON data	а.		
REST URL:						
https://restcountries.eu/r	https://restcountries.eu/rest/v2/					
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	< Back	Next >	Cancel			

Provide the directory and name for the apl file to be generated.

Create Functional Class for REST							_ 🗆 ×			
Select Fields:										
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The REST wizard automatically generates all required UDVs and includes the generated apl into the currently loaded application.

Developers can then use SalJsonSerializeUDV and SalJsonDeserializeUDV to receive and send data to the REST service.

# SalMail update

- Replace implementation based on Microsoft SmtpClient to use MailKit, which supports modern security and authentication schemes.
- Each provider has different implementations on how it handles OAuth2, to support this a plugin interface has been implemented. The OAuth2Sample installation folder has an example of how to implement such a plugin. The plugin can be registered using the following API:
  - Call Client.SetPlugin("C:\\Program Files\\Gupta\\TD Mobile
     2.4\\OAuth2Sample\\bin\\Release\\OAuth2Sample.dll")
- SetClientSecrets new function for authenticating to Gmail using OAuth
  - Obtain client ID/Secret from Google API console.

# Client

#### JavaScript enhancements

New JavaScript functions to show/hide a column of a table control and a new function to set the focus cell for a table control. These functions have been added to the TD Mobile JavaScript Table class.

- setColumnVisibility( colldx, visible )
  - o colldx, Number, 1 based column index
  - visible, Boolean, true to show column, false to hide
- setFocusToCell( rowIdx, cellIdx )

- o rowldx, Number, 1 based row index
- o cellIdx, Number, 1 based cell index

The following new features have been added to TD Mobile 2.3

### Server

#### SAL API

- SalStrEncrypt/SalStrDecrypt functions for easily encrypting strings using .NET AES encryption.
- SalRegexMatch/SalRegexSearch/SalRegexReplace/SalRegexReplaceAll New regular expression functions for searching/replacing text using .NET regular expression syntax.

### **Dynamic Data Connections**

New SAL function SalWebUpdateConnection(sConnectionName, sConnectionString) can be used to dynamically update the connection string used by Data Operations.

# Client

#### **Application Start/Exit Events**

Start and Exit events can be defined under Client Resources->Events (Select application node in explorer tree).

#### Service Worker Offline Cache

When enabling Offline Cache under build settings, a new option to use "Service Worker" has been added. When this is enabled, TDM will generate a td.sw.js that will be installed a service worker in the browser to facilitate caching static content for offline use. Note that not all mobile browsers support this.

# **Native Date/Time Picker**

By default TDM uses html 5 date type on input fields, which mobile browses will use to show their OS specific date control. A new Date/Time picker control has been added that uses an HTML based popup.

# **Global Binds/Constants**

Under Client Resources in the explorer tree, global binds and constants can be defined. Once defined, they can be used on pages and dialogs.

# IDE

#### **Export/Import Languages**

When exporting/importing languages with the IDE, we now use the Windows List Separator regional setting as the delimiter for CSV output.

# Reporting

#### **Dynamic Line Wrapping**

String data with newline characters, or data that is too long will wrap to new lines. Fields have a new property, Line Wrapping Behavior, to control this.

#### Watermarks

Watermark image support. On the report object, a new property Watermark has been added. Watermarks can be defined using a static image, input/report variable, or text.

# **Conditional Formatting**

Controls now have a Back Color Formula and Border Formula. Similar to Report Builder, non-zero values will set the defined colors, otherwise default will be set.

#### **Image Scaling**

Picture control now has a Scale and Scale Percentage property for controlling how the image is resized to fit the picture control.

The following new features have been added to TD Mobile 2.2

# Server

# Limit/Skip Data Operation

Data Operation nodes now support settings for limit and skip numeric values for browse queries. These settings can be used to support paging through data. Limit will constrain the max number of rows returned, and skip will offset X number of rows before iterating the result set.

# Client

### **Global JavaScript Functions**

A new JS Functions node has been added under Client Resources for defining JavaScript functions that are global, and can be referenced from all pages or dialogs.

#### **User Events**

User defined events can now be added under Page Events. These events are prefixed with "User\_" and can be raised with the new event action "RaiseEvent".

# IDE

#### **Source Control Pane**

A new source control pane has been added where users can interact with GIT or Subversion repositories. Using this pane, users can directly checkout, modify and commit changes to TDM applications.

#### Localization

Support localization of combo box clear choice. Also support table/menu caption localization on localization tab.

# Reporting

# Localization

A new settings dialog has been added to support switching between supported IDE languages.

# Formulas

Added support for more system functions available in Report Builder.

The following new features have been added to TD Mobile 2.1

# **Controls**

#### Мар

The map control now has an API Key property, which can be used to specify the Google API key needed to use the Google Map API. This key can be obtained from the Google Developer Console, and when set on a single map control will be shared for all map controls in the application.

# **Table Editing**

You can now drop several editable controls (datafield, combo, flipswitch) into table columns. Updated data will be made directly against the UDV array bind backing the table. You can pass this array to an operation, or optionally turn on automatic change tracking. With auto change tracking, you specify add/update/delete operations that the table control will use to pass modified records.

# Slider/Range

A new slider control, which users can use to select numeric values has been added.

#### Label

A new property, Color Mappings, has been added. This allows conditionally setting the text color of the label based off of binding values.

# Client

# **If/Elself Expressions**

You can now input JavaScript expressions after If and Elself event actions. This allows you to do more complicated and flexible branching instead of branching simply on Boolean binds or bind Boolean expressions.

# **Bind Events**

You can now add events to bind objects. Currently the only support event is On Changed, fired whenever the value of the bind is updated.

# **Page Events**

Two new page events have been added. OrientationChange: fired when the device orientation changes. OnlineStatusChange: fired when the online/offline status of the device changes.

### **Alert Dialog**

The Alert dialog opened by the Alert event action is now modal. This forces the user to click on the OK button to dismiss the dialog rather than clicking/tapping outside the dialog to dismiss.

# IDE

### **Hybrid Applications**

We have enhanced our Cordova build process to reduce the amount of command line options needed for repetitive tasks. The IDE will now automatically create the Cordova project in the directory specified in the build settings dialog. It will also auto add the selected platform, and execute the build. The Compile ribbon button now supports a dropdown where you can build the Cordova project directly from the IDE.

# Web Configuration

A new Web.config node has been added to the Server Resources section of the explorer tree. You can add either connection strings or app settings which will be written to the applications Web.config file. Entries can have a local (debug) or publish value. At publish time, the publish value will be written to the Web.config file.

# Publish

The entered credentials for publishing your application are now saved so they don't need to be re-entered after restarting the IDE.

# Libraries

Items in the explorer tree that come from library includes now have an icon overlay so you can quickly identify them.

# JavaScript Editor

The JavaScript editor dialog is now modeless, allowing interaction with the main IDE window while editing JavaScript.

The following new features have been added to TD Mobile 2.0.2

# API

# SalWebGetClientIP

This new function will return the clients IP address as a string.

# setCaption

JavaScript controls in the Td.Controls namespace now have a setCaption function. This function can be used to update the controls associated caption text.

The following new features have been added to TD Mobile 2.0.1

# API

# SalWebGetAppURL

A new function, SalWebGetAppURL, has been added that can be used to get the base application URL for the deployed application. This is useful when you need to construct absolute URL paths, which is often the case with hybrid applications as they can't fetch relative URL's like a browser based application can.

### SalWebGetConnectionString

A new function, SalWebGetConnectionString, has been added that can be used to lookup connection string values defined in the application's Web.config file. Rather than hard code a .NET connection string in SAL, a Web.config entry can be used and easily updated when deployed in customer environments without having to modify SAL code.

# SalWebGetAppSetting

A new function, SalWebGetAppSetting, has been added that can be used to get general configuration options that are set in the app settings section of an application's Web.config file.

# **Controls**

#### Label

The label control has been enhanced to allow HTML content in bind values. In previous versions of TD Mobile, any html markup would be escaped and not rendered.

# **Data Connectivity**

#### **Data Connection**

Data connections have been enhanced to allow overriding of their connection string in the application's Web.config. If a connection string is configured in Web.config with an identical name as the Data Connection,

it will be used at runtime instead of the value specified in the IDE. This is useful for configuring the application at deployment without having to rebuild the application.

The following new features have been added to TD Mobile version 2.0.

# **Hybrid Support**

# **Hybrid Application Support**

This new build option allows TDM projects to be linked to an Apache Cordova hybrid application. With this new build option, the TDM IDE configures the application so that it can be run as a hybrid application. The developer can then use Cordova's command line interface tool for building a native that targets Android, iOS, or Windows.

# **Barcode Scanner Plugin**

Cordova offers a powerful barcode scanning plugin. If the hybrid build option is configured, a new event action ScanBarcode is available, which makes it easy to work with this native plugin.

# **Controls**

# **Dialogs**

You can now create custom dialog pages that can be opened using the ShowDialog event action.

#### **Tables**

A new Table control has been added. This control shows data in columns with a heading. It supports the ability to sort on columns and also to toggle columns on and off.

#### Menu

The menu has been enhanced to support fixed display on larger screens, allowing users to create a panel-like layout.

The menu also has a new item type called Menu List, which supports binding to an array to dynamically generate menu items.

# **Data Connectivity**

# **Calculated Fields**

You can now create fields on Data Classes that are computed from SAL expressions. This is useful if you want to combine one or more fields together for use on your page.

# **Identify Fields**

You can now define more than one identify field per Data Class. This is useful for schemas that use composite primary keys.

# API

# SalWebCacheFile

A new function, SalWebCacheFile, has been added that can be used to cache binary data in memory for downloading by the browser later. This is useful for sending data that is either dynamically generated, or that comes from a database, without having to save it to disk first.