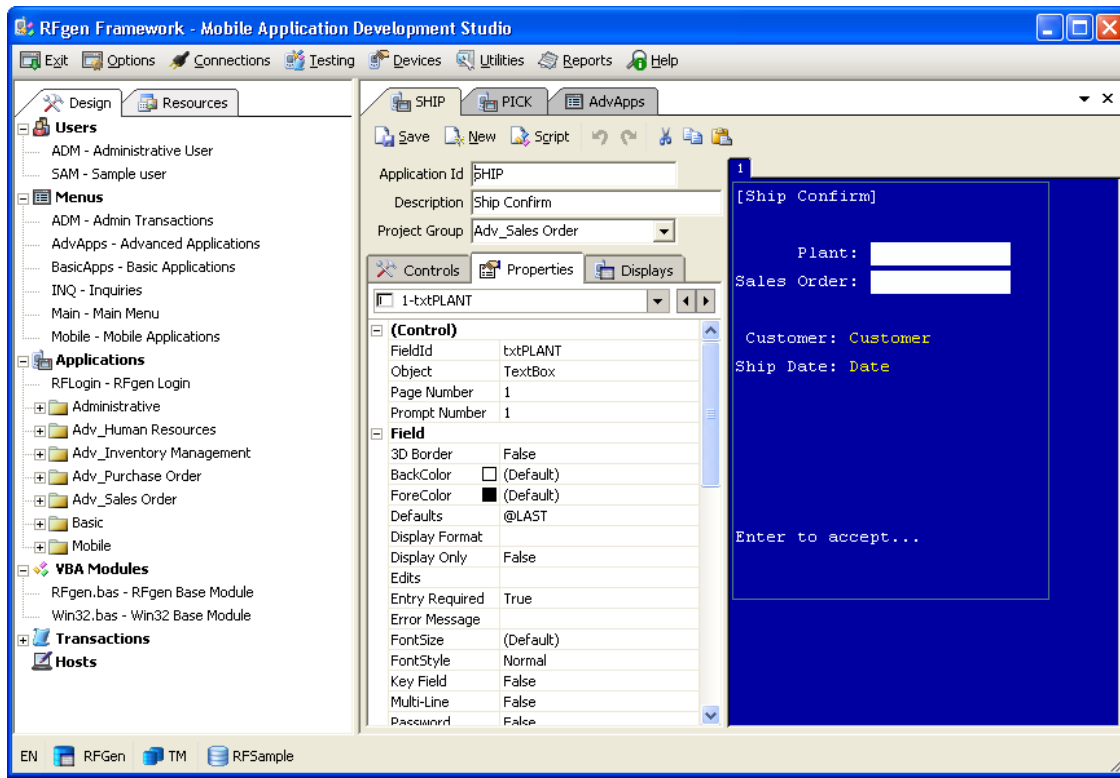


# Extend and Accelerate Deployment with RFgen 4.0 Mobile Development Studio

## — New Feature Analysis —



### Introduction

The purpose of this document is to introduce the new features and capabilities for RFgen mobile and wireless application development that have been introduced in version 4. The user interface for application design, testing and deployment has been significantly updated to reflect modern UI design concepts. Additionally, RFgen's built-in scripting system has been shifted to more fully embrace industry standard object oriented programming concepts. For those migrating from existing v3 or v2 systems, there will be an initial learning curve and adjustment period.

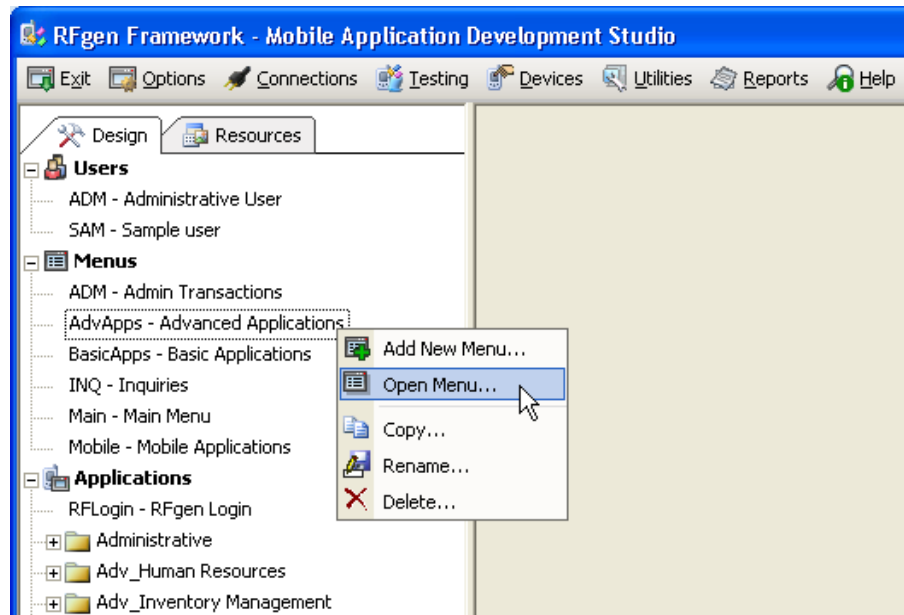
## **RFgen Framework – Core Enhancements**

The following is a summary listing of the major feature enhancements added to the RFgen Framework. Each item will be addressed in more detail later in this document.

- **Development System Redesign**
- **Object Oriented Scripting Extensions**
- **VBA.NET Syntax and Assembly Support**
- **Multiple Options for Speech Enabled Applications**
  - **Nuance - VoCon3200® ASR / RealSpeakSolo® TTS**
  - **Vocollect - VoiceDirect®**
- **Source Control Using Microsoft Visual SourceSafe™**
- **Web Services Data Connector**
- **Device Management Services**
- **Enhanced Logging Options**
  - **Performance Statistics**
  - **Transaction Auditing**
- **Runtime Performance Improvements**

## Development System Redesign

To improve organizational flow and hence developer productivity, RFgen has moved from its older style, static tabbed interface to a tree control structure coupled with dynamic object tabs. Under this model, developers can easily open and interact with multiple design objects, dock / undock objects, copy and paste between objects, etc. To access any object, simply double-click its entry in the tree or right-click on it and select the option you want from the popup menu.

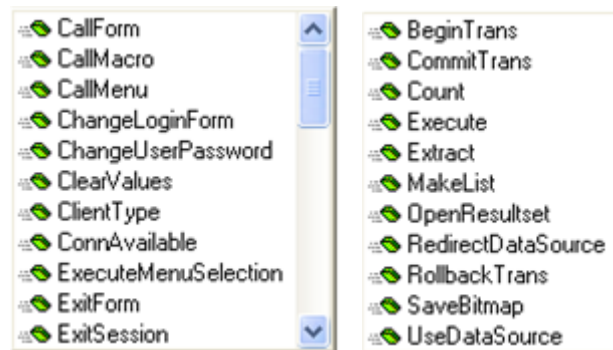


Once you start accessing the new development objects you will find a number of general functionality enhancements including:

- **Undock / Dock Capability** (RIGHT-CLICK on tab to access undock menu)
- **Quick Access Toolbars** (Including Edit Undo / Redo Capability)
- **Support for Multi-Control Drag Operations** (CTRL+CLICK to select multiple)
- **Easy Insertion / Deletion of Grid Lines** (using INS / DEL keys)

## Object Oriented Scripting Extensions

To make the new environment easier to use we've converted the RFgen Scripting Language Extensions into Language Objects. Using object oriented programming models greatly simplifies programming efforts and helps to introduce / expose the rich features provided by the RFgen Framework to new developers. Below you see two popup object list examples for the embedded Application Object (App.) and Data Connection Object (DB.)



Note: The RFgen Framework includes a built-in upgrade capability that will analyze prior version scripts and convert them automatically for you to the newer syntax. We've also included a script validation utility so you can quickly see the results of this process.

## VBA.NET Syntax and Assembly Support

The RFgen Framework now fully supports the VBA.NET scripting syntax for its modules and can also link to and access your custom .NET assemblies at runtime. For any scripting module, simply select its compiler mode and write your code accordingly. You can even create an RFgen application that accesses legacy VBA script and VBA.NET script at the same time.

## Multiple Options for Speech Enabled Applications

RFgen v4 now features multiple embedded support options for Text-To-Speech (TTS) and Automated Speech Recognition (ASR) applications.

For those who are interested in quickly and easily integrating **Vocollect - VoiceDirect®** enabled devices into their supply chain, RFgen includes native support for interacting with these devices. We use a combination of dynamic function definitions, script based event processing and the RFgen Framework's transaction processing and back-end connectivity options. With RFgen, Vocollect® voice enabled applications can be realized in a fraction of the time and complexity that would otherwise be required. Another important benefit of RFgen's seamless integration with Vocollect is that all operations are performed and visible in real time.

Alternatively, RFgen has also licensed and embedded state of the art voice related technology from **Nuance (VoCon3200® / RealSpeakSolo®)** into its core framework. Supporting multiple languages, this embedded speech technology enables almost any existing RFgen application to be quickly and easily voice enabled (ASR / TTS) allowing you to create hybrid text, scanning, and voice capable solutions. Note: this is a licensed technology that is installed as a separate voice package; there is an additional licensing fee required for each development PC and mobile device that the voice package is installed on.

## Source Control Using Microsoft Visual SourceSafe™

Many of our customers and partners have multiple individuals working on their RFgen mobile and wireless applications. RFgen now comes with native support for source control using Microsoft Visual SourceSafe Database. Any RFgen object other than a user profile can be managed by SourceSafe™ with check-out, check-in, undo, get-latest, rollback and difference comparisons. Using source control can help multi-developer efforts by preventing accidental overwrites and can also simplify multi-site code synchronization efforts.

## Web Service Data Connector

RFgen continues its longstanding drive to provide users with easy to use, managed connectors to back data sources (SAP, JD Edwards, Dynamics, Screen Mapping, ODBC, etc.) by introducing its new web services connector. Designed to facilitate integration with service oriented architectures, RFgen v4 provides basic service discovery, support for HTTP/HTTPS communication requirements, SOAP package exchange, and standard XML document (DOM) operations.

## Device Management Services

Many companies offer device management services that are used to simplify common support tasks for mobile devices such as program updates and remote support. Unfortunately, most charge annual fees or have built-in costs that occur whenever you modify the targeted components. RFgen v4 introduces its Command and Control module which provides many of the same capabilities that these 3<sup>rd</sup> party products provide – but without a recurring fee. Whether you want to auto-deploy RFgen core program updates, custom mobile application updates, 3<sup>rd</sup> party products, interrogate / exchange data with remote databases, etc. you really should check out this new and evolving RFgen technology.

## Enhanced Logging Options

To help end-users and developers fine-tune their mobile and wireless applications to achieve maximum performance and regulatory compliance, RFgen v4 now includes numerous options for logging update operations and collecting statistics. Options include the ability to track the performance of the managed data connections to your back-end host systems, giving you all the information necessary to find and eliminate performance bottlenecks. For those who need to track all system update transactions, and who performed them, in order to achieve regulatory compliance, RFgen now includes transaction auditing services that can provide both summary and data-mining capable logs of transaction data.

## Runtime Performance Improvements

With RFgen v4, the fast just got a whole lot faster. Internal performance tests on everything from ODBC requests to ERP system updates have shown improvements anywhere from 10% to as much as 500%. Installing the latest version of RFgen is certain to give your existing operations a performance boost for both wireless and mobile environments.