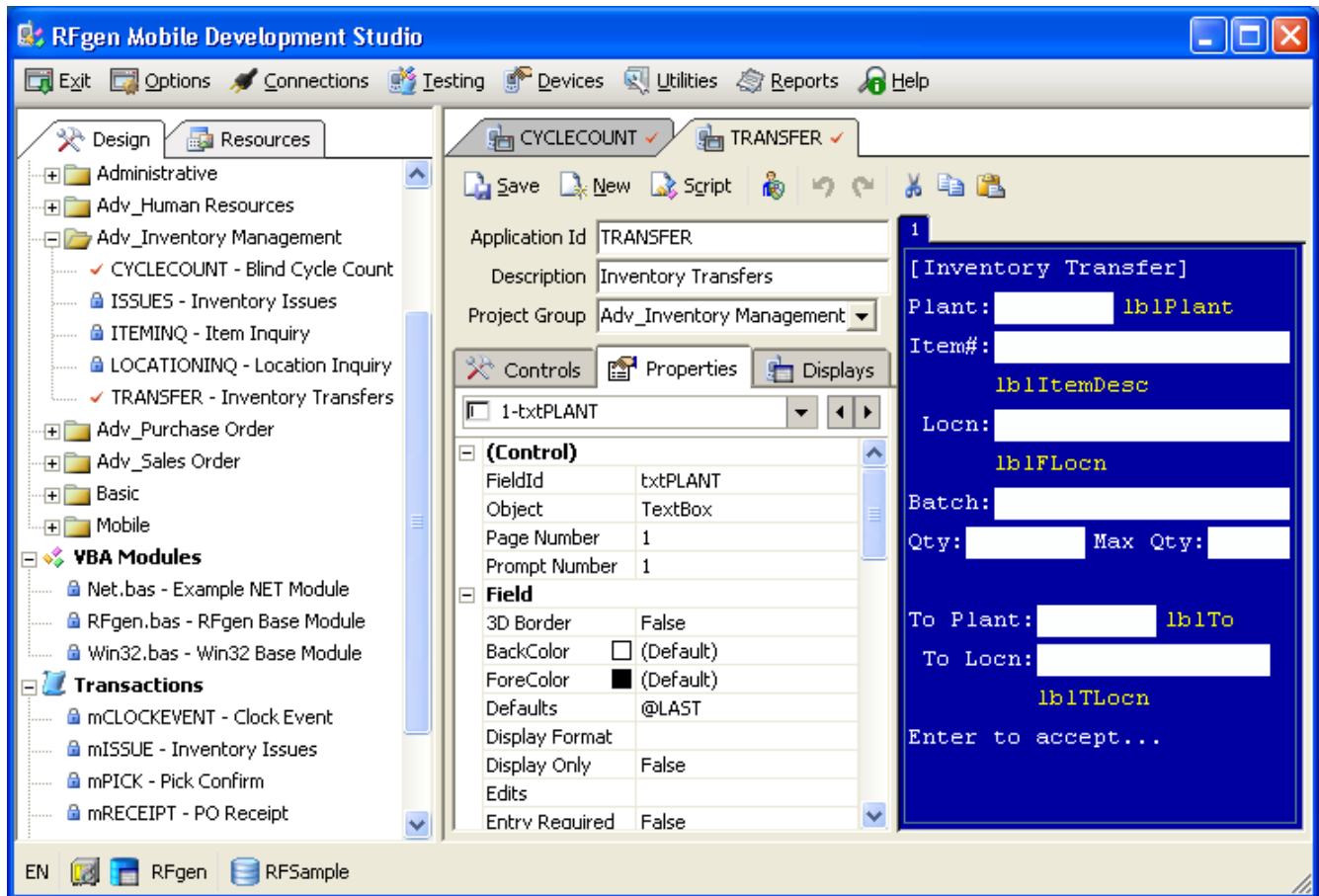


# WHAT'S NEW IN RFGEN



Version 4

## Feature and benefit summary

The best selling wireless and mobile development system just got better! Whether you're using RFgen inside the four walls or roaming worldwide, RFgen's technology empowers your workforce and delivers concrete results.

# WHAT'S NEW IN RFGEN

## FEATURE AND BENEFIT SUMMARY

### RFGEN MOBILE FOUNDATION – INTRODUCTION

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Thank you for your interest in the latest version of RFgen's Mobile Foundation Series. The purpose of this document is to introduce some of the new capabilities to be found in RFgen version 4.

DataMAX, as a company, has heavily invested in R&D efforts focused on expanding the capabilities of the entire RFgen product family. Now, after a multi-year effort, we are proud to announce the most significant release of RFgen since it was initially created. The new RFgen vision starts with a completely redesigned application development environment (now called the Mobile Development Studio), moves on to include major performance boosts to all of our Mobile Application Services, and finishes up by adding new, high-value feature enhancements to the core RFgen Mobile Foundation Architecture.

One of the first things you'll notice if you're migrating from an earlier RFgen release is that the user interface has been significantly updated to use a modern, component oriented design. The next thing that stands out is how we've adjusted the built-in scripting system to fully embrace object-oriented programming concepts with drop-down lists and IntelliSense technology. Those migrating from RFgen v3 or RFgen v2 interfaces will be glad to know that we have provided numerous technical documents, application examples, and indexed help files to minimize the initial learning curve and adjustment period. Additionally, our upgrade process has been expanded to automatically convert any existing RFgen scripts to operate properly in the new environment. We've also provided a utility that will auto check all of your application modules to verify the results of the upgrade process.

### SUMMARY OF CORE ENHANCEMENTS

- **DEVELOPMENT SYSTEM REDESIGN**
- **OBJECT ORIENTED USER SCRIPTING**
- **VBA.NET SYNTAX AND ASSEMBLY SUPPORT**
- **SPEECH ENABLED APPLICATION DEVELOPMENT**
- **NETWORK DEVICE MANAGEMENT SERVICES**
- **SAP™ CONSOLE APPLICATION INTEGRATION**
- **VOCOLLECT™ VOICE DIRECT DEVICE SUPPORT**
- **APPLICATION SOURCE CONTROL**
- **MANAGED SUPPORT FOR WEB SERVICES**
- **GENERAL RUNTIME PERFORMANCE IMPROVEMENTS**
- **DATA CONNECTION PERFORMANCE MONITORING**
- **APPLICATION TRANSACTION AUDITING**

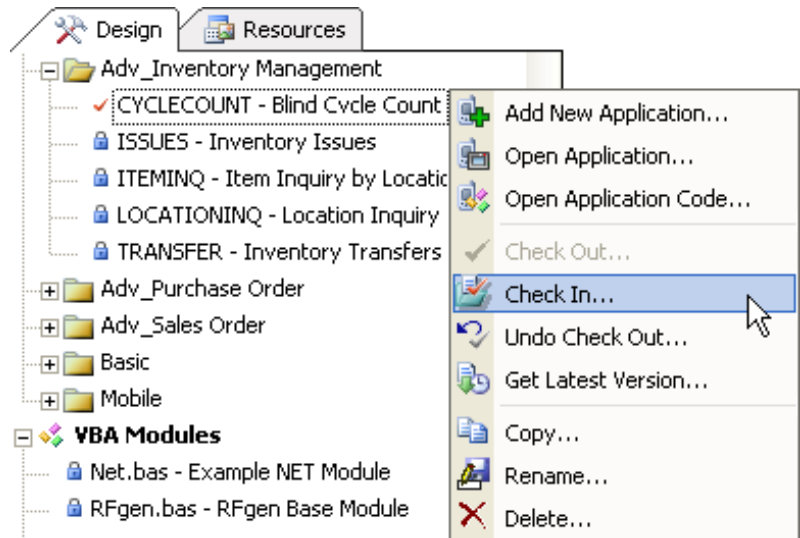
## DEVELOPMENT SYSTEM REDESIGN

The program known as RFgen's Programmers Assistant is now RFgen's Mobile Development Studio. All the functionality that existed in earlier versions is still there, it is just now easier to access.

The overall layout of the development studio has been redesigned to present an enhanced layout with a contemporary look and feel. RFgen has shifted from a static-tabbed interface to a tree-controlled structure that is paired with dynamic tabs. This new model allows developers to open and interact with multiple objects simultaneously and promotes flexibility while enhancing overall developer productivity. Objects like forms, menus, and VBA modules can all be easily accessed by a simple double-click on the entry in the design tree.

To access more file control operations such as making duplicate copies, renaming or deleting objects you simply right-click an object in the tree to view its context menu.

If your organization has enabled our new source control feature, right-clicking on an object or the source control icon will display a context menu that also includes commands to check-in, check-out, undo check-out, and to get the latest version from the source control provider.

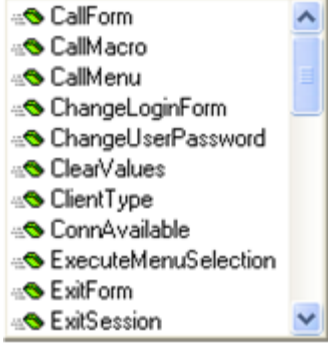
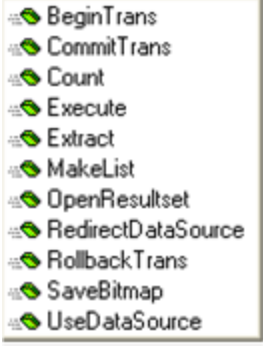


Further, to simplify the entire development process, the RFgen Mobile Development Studio now comes standard with the following general functionality enhancements...

- **FORM DOCK / UNDOCK CAPABILITY**
  - RIGHT-CLICK ON A TAB TO ACCESS OPTIONS
- **QUICK ACCESS TOOLBAR**
  - ONE-CLICK CUT, COPY, PASTE, UNDO, REDO AND SAVE OPERATIONS
- **SUPPORT FOR MULTI-CONTROL DRAG OPERATIONS**
  - CTRL + CLICK TO SELECT MULTIPLE OBJECTS
  - RIGHT-CLICK TO CUT, COPY AND PASTE PROMPTS AT FORM DESIGN
- **ENHANCED GRID CONTROL FOR INSERT AND DELETE OPERATIONS**
  - USE INSERT / DELETE KEYS OR RIGHT-CLICK FOR CONTEXT MENU
- **EXPANDED SCRIPTING DEVELOPMENT OPTIONS**
  - RIGHT-CLICK TO OPEN AND VIEW REFERENCED FUNCTIONS
  - AUTOMATIC DROP-DOWN LISTS AND INTELLISENSE LOOKUPS

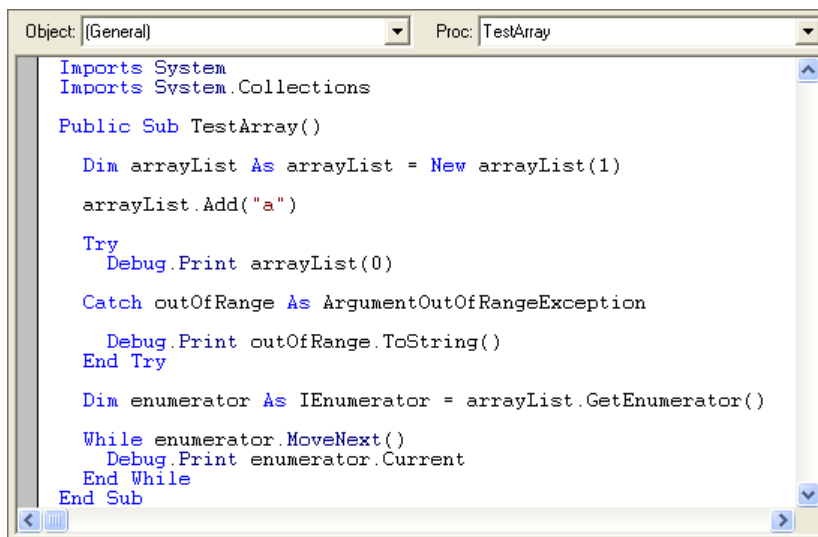
## OBJECT ORIENTED USER SCRIPTING

The RFGen scripting language extensions (over 130 as of last count) have been reorganized and grouped into easily accessible language objects. Over the years, numerous studies have proven the productivity enhancing effects and decreased training costs that object-oriented programming languages provide. We believe that implementing this methodology inside the RFGen Mobile Foundation will greatly simplify end-user programming efforts and help to promote usage of the rich features provided within RFGen. Similar to IntelliSense, RFGen now displays a list of methods/properties associated with a particular object/command during programming.

App.	DB.
	
Related methods for the embedded Application object are displayed.	Related methods for the Data Connection object are displayed.

## VBA.NET SYNTAX AND ASSEMBLY SUPPORT

The RFGen Mobile Foundation now fully supports VBA.NET scripting syntax for windows 32 and 64 bit environments. Users can link to and access both standard and custom .NET assemblies during development and runtime. To enable .NET syntax support within any scripting module, simply select the compiler mode from the drop-down box and begin developing code accordingly.



```

Object: [General] Proc: TestArray
Imports System
Imports System.Collections

Public Sub TestArray()
    Dim arrayList As ArrayList = New ArrayList(1)
    arrayList.Add("a")

    Try
        Debug.Print arrayList(0)
    Catch outOfRange As ArgumentOutOfRangeException
        Debug.Print outOfRange.ToString()
    End Try

    Dim enumerator As IEnumerator = arrayList.GetEnumerator()
    While enumerator.MoveNext()
        Debug.Print enumerator.Current
    End While
End Sub

```

Developers can even create RFGen applications that have the ability to concurrently access legacy VBA script and VBA.NET script.

**Note: while we are working on enabling this functionality in our mobile clients, existing limitations in the Microsoft Compact Framework currently restrict this functionality to real-time, on-line processing only in Windows 32 / 64 bit environments.**

## SPEECH ENABLED APPLICATION DEVELOPMENT

RFgen version 4 is proud to announce its full support for embedded Text-To-Speech (TTS) and Automated Speech Recognition (ASR) applications. Creating, deploying and using voice enabled solutions has never been easier. Here are some industry quotes that relate to voice enabling parts of your supply chain...

*The benefits of using voice recognition for picking orders are well proven . . .  
15%+ productivity gains over handheld / truck mounted RF devices*

*Manufacturing & Logistics IT*

*Voice has a 20-year track record of documented success in improving productivity  
and performance while achieving rapid ROI*

*Supply Chain Digest*

With RFgen, just about any Windows based device can be speech enabled allowing users to reap the benefits from hands-free and eyes-free data collection without having to integrate third party products.



### KEY FACTS AND FEATURES

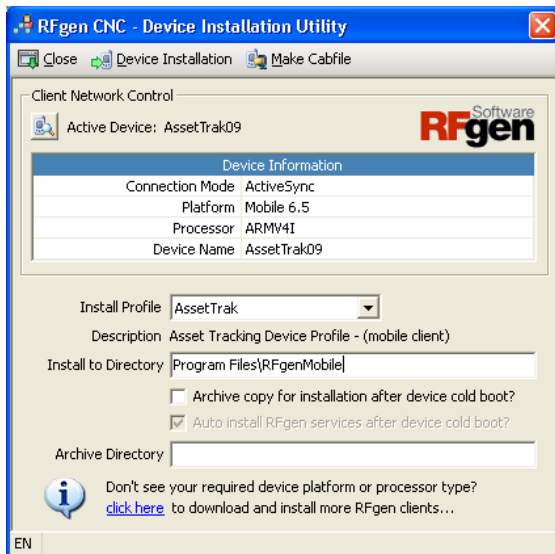
- BASED ON NUANCE TECHNOLOGY
- REQUIRES WINDOWS CE v4+
- FULLY HARDWARE INDEPENDENT
- SUPPORTS MULTIPLE LANGUAGES
- EASY TO IMPLEMENT AND SUPPORT
- RECOGNIZE SPEECH WITHOUT WORD TRAINING
- COMBINE KEYBOARD, SCANNING AND VOICE
- VOICE DIRECT EXISTING APPLICATIONS
- 30 DAY FREE TRIAL AVAILABLE

Supporting multiple languages, RFgen's embedded speech technology enables almost any existing wireless or mobile application to be quickly and easily voice-enabled (ASR / TTS) allowing for the creation of hybrid text, scanning, and voice capable solutions.

## NETWORK DEVICE MANAGEMENT SERVICES

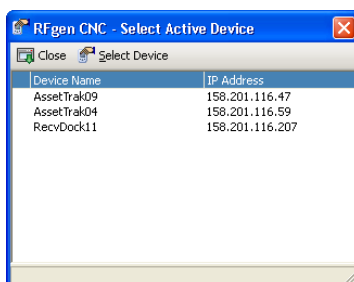
There are a number of products on the market today that offer various device management services that are used to simplify managing a network of mobile devices. Typically, remote support / maintenance operations' on mobile devices include tasks like installing program updates and managing software content on the device. Unfortunately, most of these products charge annual fees or have built-in costs that are incurred whenever

targeted components are modified. The new RFgen Client Network Control module provides many of the same capabilities that these 3rd party products provide, but without a recurring fee. RFgen has decided to change the game in this space with the bundling of its own Client Network Control (CNC) capabilities paired with some remote access tools that can be included with every RFgen client installation.



RFgen CNC core capabilities include the ability to detect that a server upgrade has occurred and to auto-update the RFgen client environment – without the intervention of IT personnel. Further, if you've deployed RFgen in a mobile (off-line capable) environment, RFgen CNC provides support for "Application Synchronization" requests. In this scenario, if you've changed any RFgen applications that are in the mobile devices profile, it can automatically detect the application / profile changes, build a custom deployment package and remotely update the device – all without the intervention of IT personnel.

RFgen CNC also includes a number of remote access tools that can help IT personnel to remotely analyze the device and investigate its contents. This functionality is available whenever the device can be seen on your network (wireless, wired, GPRS/VPN, etc.) Using RFgen CNC technology, you can attach to it and remotely perform many different tasks, such as...



- REMOTE SQL QUERY EXISTING DATABASES
- REMOTE DATABASE ANALYSIS (TABLES / INDEXES)
- REMOTE FILE EXPLORER
- REMOTE FILE INSTALLATION
- REMOTE RFGEN APPLICATION EXPLORER

**Note: Core CNC functionality is available now; CNC remote tools will be available shortly after the official launch date.**

## SAP™ CONSOLE APPLICATION INTEGRATION

RFgen has been successfully integrated with SAP in numerous locations around the world. Typically it was selected as an alternative to SAP Console because of flexibility requirements, mobile or off-line data collection requirements or simply because of the high complexity, costs and timeline typically required to implement and customize SAP Console.

**SAP® Certified**  
Integration with SAP Applications

DataMAX has received numerous requests from companies that have already implemented SAP Console for the ability to use RFgen in conjunction with their existing console applications. Typically, these companies have a large capital investment in place from implementing SAP Console but now require more functionality or capabilities than SAP Console provides. To address these requests, RFgen has implemented native support for Console based applications as part of its Screen Mapping module. Further, we've introduced a new control for graphical and telnet clients that acts as a pass-through window to the hosted console application.

What this means is that customers can continue to use their existing SAP Console applications, preserving their initial investment, while simultaneously deploying new SAP transactions that can operate in real-time, on-line modes as well as in mobile, casually-disconnected states. This is accomplished by simply logging into RFgen, and selecting your console application from a user menu; the user will then be placed into a pass-through mode working in SAP Console. When he needs to perform a different task in the RFgen environment, he simply presses a key to exit the SAP environment and he will return to the RFgen menu, ready to perform other, non-SAP Console tasks. Further, when he decides to return to SAP Console, he will be placed back in session exactly where he left off.

## VOCOLLECT™ VOICE DIRECT DEVICE SUPPORT

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.

RFgen uses a combination of dynamic function definitions, script based event processing, and the RFgen Mobile Foundation's transaction processing and back-end connectivity options to simplify the entire integration process and guarantee sub-second response times – even under heavy user loads.

With RFgen, Vocollect voice-enabled applications can be realized in a fraction of the time and complexity that would otherwise be required. The primary reason for this is because you can easily trace all the data requests and application responses during testing and deployment, set breakpoints in the events, and even separate update logic from the user's process to maximize employee productivity.

Another important benefit of RFgen's seamless integration with Vocollect is that all operations are performed, validated and visible in real time.



## APPLICATION SOURCE CONTROL

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Many of our customers and partners have multiple individuals working on their RFgen mobile and wireless applications. RFgen now comes with built-in support for application source control using Microsoft Visual SourceSafe™ as the source control provider.

Any RFgen object other than a user profile can be managed by SourceSafe™ with check-out, check-in, undo, get-latest, roll-back and difference comparisons. Using source control can help multi-developer efforts by preventing accidental overwrites of application files. Further, for companies deploying RFgen solutions at multiple sites, RFgen based source control can simplify code synchronization efforts and application rollouts.

## MANAGED INTEGRATION FOR WEB SERVICES

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RFgen continues its longstanding drive to provide users with easy to use, managed connectors to back-end 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 web services connector facilitates basic service discovery, support for HTTP/HTTPS communication requirements, SOAP package exchange, and standard XML document (DOM) operations.

## GENERAL RUNTIME PERFORMANCE IMPROVEMENTS

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

## DATA CONNECTION PERFORMANCE MONITORING

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To help end-users and developers fine-tune their mobile and wireless applications to achieve optimal performance, RFgen now includes numerous options for collecting statistics. Options include the ability to view the actual data collection requests along with the processing time required to complete them, or simply to log performance data supplying all of the information necessary to find and eliminate any back-end performance bottlenecks.

## APPLICATION TRANSACTION AUDITING

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For those who need to track all host system updates along with their associated details in order to achieve regulatory compliance, RFgen now includes transaction auditing services that can provide both summary and data-mining capable logs of all transaction data that came from your data collection system.