



uniPaaS V2.1

Release Notes

We are proud to introduce **uniPaaS V2.1**. uniPaaS V2.1 is an improved and updated version of the uniPaaS V2.0 release. Read the information in this document to find out more about this latest uniPaaS version.

For more information about previous uniPaaS releases, see the [PastReleaseNotes.pdf](#) file provided with this installation.

General Information

Introducing Magic Software's uniPaaS V2.1

We are delighted to provide you with the new major release of Magic Software's uniPaaS application platform.

uniPaaS enables software vendors and enterprises to quickly and cost effectively develop and deploy complex business applications and enjoy all the benefits of .NET applications, Rich Internet Applications (RIA) and Mobile applications whether on-premise, or on-demand.

Genuine .NET Runtime Engine

Since uniPaaS V2.0, the Runtime engine is now a genuine .NET framework based engine (using the Windows Forms .NET library as the GUI front-end), making any application that is run using this engine a genuine .NET application.

In addition to your application being a true .NET application, you can further harness the .NET framework potential by utilizing uniPaaS's seamless .NET integration capabilities.

.NET Integration

You can enhance your application offering by easily embedding and integrating any .NET control or assembly.

You can upgrade the look and feel of your application by directly placing new .NET controls into your application's user interface. You can also enhance the functionality of your application by integrating any .NET assembly.

For more information on how to add and manipulate .NET modules, see the **.NET Tutorial** sample installed with uniPaaS.

Mobile Device Support

Expand your IT offering by supporting mobile devices alongside stationary desktops. With the same high productivity of development and by harnessing your own expertise in developing uniPaaS applications, you can now easily produce highly interactive mobile applications and quickly expand your internal systems to serve the mobile workforce.

uniPaaS Licensing

In addition to the new unitary development and deployment paradigm for RIA and SaaS, uniPaaS also supports any previous Magic Software editions and forms of development and deployment. However, in order to maintain your former development and deployment capabilities, you need to obtain new uniPaaS licenses that reflect your current licenses.

To obtain uniPaaS licenses, please contact your local Magic Software representative.

Migrating from eDeveloper V10.1, uniPaaS V1.x or uniPaaS V2.0x to uniPaaS V2.1

Migrating an eDeveloper V10.1 or a uniPaaS V1.x application to uniPaaS V2.1 requires a migration procedure.

The migration process automatically starts when you open (or import) your project. At the end of the process, you will see a log specifying the changes made to your project.

Before migrating a project, you need to migrate its components. This is important since the project may use models from a component and they must be migrated first.

Note that after the migration to V2.1, you should not open your project in an earlier version.

For more information on the migration process and the major changes between the versions, refer to the [Migration Guide](#) available on Magic's DevNet.

For a full list of changes, refer to the *What's Different in uniPaaS V2.1* help topic.

Migrating from eDeveloper V9.4 to uniPaaS V2.1

Migrating an eDeveloper V9.4 application to uniPaaS V2.1 is a two-phase migration process.

First, you need to migrate your eDeveloper V9.4 application to a uniPaaS V1.0 application. uniPaaS provides a collection of wizards to easily migrate your application, INI settings, and interface builder data. In the **Migration** subfolder of the product, located in the **Start** menu of your desktop, you will find a shortcut to each of the available conversion wizards. Note that these tools are also provided with uniPaaS V2.x, so you do not need to install uniPaaS V1.x for the migration.

Then, migrate the resulting uniPaaS V1.0 application to uniPaaS V2.1 as described in the section above.

We recommend reading the Migration chapter in the *uniPaaS Help* before migrating your eDeveloper V9.4 applications.

From Record Main Based to Event Driven Applications

Turn your applications into fully event driven applications by utilizing the Record Main Converter utility. The utility locates all of the Record Main based logic of a uniPaaS application and automatically and fully converts it to event-based logic while keeping the entire functionality of the application intact.

Making your applications completely event driven enables you to utilize new features, such as subforms and explicit tabbing order of controls that are not available in tasks that have the Record Main Compatible logic unit.

Note that the Record Main Converter utility might not handle specific complex logic segments. In such cases, the complex logic segment will be kept as-is to maintain the application functionality and to allow for manual intervention to complete the conversion.

The Magic Optimizer

Magic Software is happy to introduce Ocean Solutions's complementary utility – the Magic Optimizer. The Magic Optimizer provides extended query and analysis capabilities for any uniPaaS application.

This version of the Magic Optimizer provides a fully operational documentation feature, and a limited evaluation version of the remaining features.

To obtain a fully operational license of the Magic Optimizer, please contact Ocean Solutions at info@magic-optimizer.com.

Prerequisites

uniPaaS is a native .NET application, so in order to run uniPaaS on your machine, you must have .NET framework V2.0 SP1 or above installed on your machine.

Note: when using .NET framework V2.0 SP1, you also need to install the Microsoft Visual C++ 2008 Redistributable.

You can install them by running the **NetFx20SP1_x86.exe** and **VCRedist_x86.exe** files from the **Scripts\RIA** folder.

Network Installation

The .NET runtime security policy (by default) disables code from running if it exists on a network drive. To run uniPaaS from a network drive you need to adjust your security policy.

This can be done via the Microsoft .NET Configuration tool or by running the following command:

```
c:\Windows\Microsoft.NET\Framework\v2.0.50727\caspol.exe -machine  
-addgroup All_Code -strong -file <path>uniRTE.exe -noname -  
noversion FullTrust -name uniPaaS_Assemblies_Access -description  
"Code group granting trust to uniPaaS assemblies"
```

This command needs to be executed only once in each of the computers.

You can also add a **-silent** key for a silent installation.

Web and RIA Development on Windows® 7

By default, IIS 7.5 is not installed on Windows® 7.

To run Web programs or Rich Client programs using a local IIS Web server, you may need to install it manually. You can install IIS by going to **Control Panel > Programs > Advanced Options > Windows Features**.

For more information, refer to the following URLs:

<http://technet.microsoft.com/en-us/library/cc731911.aspx>

<http://technet.microsoft.com/en-us/library/cc725762.aspx>

Online Changes

Starting with uniPaaS V2.0, the Online GUI is based on the Windows Forms .NET library in the .NET framework instead of Win32.

The .NET framework does not support all the appearances and control behaviors that were supported in previous versions, so there is a change in the uniPaaS Runtime appearance as well.

For a full list of changes, refer to the *What's Different in uniPaaS V2.x* help topic.

Some of the major enhancements are described below.

Sample Projects

The following sample projects are installed in the **SampleProjects** folder:

- Rich Internet Demo – The project of the live RIA Demo that is available at <http://riademo.magicsoftware.com> and <http://riademo.magicsoftware.com/mobile>.
- Online Samples – A set of Online (Client/Server) examples for many Client/Server “how to” scenarios that are described in the Mastering uniPaaS book and some additional samples of uniPaaS functionality.
- Rich Internet Samples – A set of Rich Internet examples for many Rich Client “how to” scenarios that are described in the Mastering uniPaaS book and some additional samples of uniPaaS functionality.
- Mobile Web Samples – Web templates based on HTML Merge technology for mobile devices.
- .NET Tutorial – A short tutorial with examples explaining how to use .NET in uniPaaS.
- .NET 3rd Party Samples – A set of Online and Rich Internet examples for connecting to 3rd party .NET controls.

All of the projects are available with their source code, so you can use them in your applications.

Note that the .NET 3rd Party Samples uses 3rd party assemblies which are not included with this package and should be downloaded from the 3rd party vendor site as described in the sample programs. If your 3rd party package version is different than the one used in the samples, you will have to replace the assemblies defined in the CRR with the ones from your version.

uniPaaS Web Page

Make sure to visit our [uniPaaS Web page](#), where you can view and download various documents.

New Features, Feature Enhancements and Behavior Changes

Android and iOS Support

The uniPaaS RIA client is now capable of running on Android™ and iOS™ devices.

As for the Windows Mobile and BlackBerry, the Magic RIA client for Android and iOS is a native operating system (OS) application implementing the Magic RIA client protocol. Using the Magic RIA client for the different mobile devices, developers can deploy enterprise connected, highly interactive RIA applications on the different mobile devices.

Note that the RIA client for Android is a Beta version.

Refer to the **RIA for Mobile Devices PDF** or to the **RIA for Mobile Devices** concept paper available in the uniPaaS Help.

Call to a Destination Subform or Frame in Online Tasks

The Call operation in Online programs was enhanced with a new property called 'Destination'. This property provides the ability to dynamically call a program or a task and run it in a subform or a frame (similar to Rich Client).

Retain Focus in Online Tasks

The Call operation in Online programs was enhanced with a new property called 'Retain Focus'. This property defines whether the focus will remain on the current control or be moved to the first control of the called program or task after executing the Call operation.

This property is enabled when performing the call from a logic unit other than the Task, Record, or Control logic units to a destination subform or frame using the Destination property.

Parallel Execution in Online Tasks

Parallel execution is now supported for Online tasks.

The Application Modal window type was removed and the Modal window type will behave as the old Application Modal.

The Window menu and window-related events are still not supported.

View Refresh in Rich Client Tasks

The View Refresh behavior in Rich Client tasks was enhanced. After performing a view refresh with 'Relocate Mode=0', the position of the current record now remains as-is (and is not changed to be the first record).

Row Placement Property in a Table Control

A new property was added to support the fixed number of table records.

Setting this property value to Yes means that the row's height will be resized according to the table's height, thus keeping the same number of records as designed in the Studio.

Default Location of Forms

A new option named Windows Default Location was added to the form's Startup Position property. When using this option, the form is positioned at the Windows default location and has the dimensions specified in the form's size.

The Default option in which the form is positioned at the Windows default location and has the bounds determined by the Windows default was renamed to Windows Default Bounds.

.NET Data Binding

It is now easier than ever to use uniPaaS data variables with .NET controls.

Two new properties were added to the .NET control model so that you can define the .NET control property to which you want to bind the data and the event that will be the trigger for the data update.

After these properties are defined, you can use the .NET control in the same way as you use any uniPaaS built-in control. You simply need to attach your data variable to the .NET control's Data property.

The previous functionality of assigning a .NET variable to the .NET control is still supported and can be done by using the **.NET Object** property in the .NET control.

For more information on how to use .NET data binding, see the **.NET Tutorial** sample installed with uniPaaS.

.NET – DataViewToDNDataTable() function

A new function was added to create a .NET DataTable object out of the task's data view.

The .NET DataTable objects can then be used as the data source of other .NET objects.

.NET Controls– Change of Behavior

When clicking on a .NET control defined with Allow Parking = No, the focus will not leave the current control or record.

Requester and Broker Logs – Default File Names

The default value for the requester and broker logs were changed as follows:

mrb_event.log => BrokerActivity.log, mrb.log => Broker.log, req.log => Requester.log

Mobile Devices – Additional Information

A new property was added to allow maximum flexibility with mobile device properties.

This property will be used to send specific pre-defined information to the mobile devices.

Mobile Devices – Press Event

A new event was added to handle the long press on a control in mobile devices. At this stage, this event is supported for BlackBerry only.

.NET 3rd Party Samples

A new sample project was added to demonstrate how you can use 3rd party .NET objects and controls in your application to improve the functionality and user interface.

The 3rd party assemblies are not included with this package and should be downloaded from the 3rd party vendor site as described in the sample programs.

Note: If your 3rd party package version is different than the one used in the samples, you will have to replace the assemblies defined in the CRR with the ones from your version.

Magic Software Enterprises Ltd provides the information in this document as is and without any warranties, including merchantability and fitness for a particular purpose. In no event will Magic Software Enterprises Ltd be liable for any loss of profit, business, use, or data or for indirect, special, incidental or consequential damages of any kind whether based in contract, negligence, or other tort. Magic Software Enterprises Ltd may make changes to this document and the product information at any time without notice and without obligation to update the materials contained in this document.

Magic is a trademark of Magic Software Enterprises Ltd.

Copyright © Magic Software Enterprises, April, 2012