Course Syllabus:
Migration from uniPaaS V1.x to Magic xpa 3.x

Contents

1   Course Objectives and Goals

The main objective of this course is to enable experienced uniPaaS 1.x developers to get to know the new capabilities of Magic xpa 2.x, become familiar with how to migrate their existing projects, and incorporate these insights into their newly migrated Magic xpa 2.x projects.

Magic Software's Application Platform, formerly called uniPaaS, was rebranded as Magic xpa as of the 2.x release.

Magic Software University's **Migration from uniPaaS V1.x to Magic xpa 3.x** course is based on Magic xpa 3.0.

This course assumes that you have a working knowledge of uniPaaS programming. It is designed to help you improve your uniPaaS programming skills.

In this course you will learn about:
1. Major new capabilities in Magic xpa 3.x.
2. Migrating an application developed in uniPaaS V1.x.
3. The changes made to the Magic xpa MDI, which provide you with more control.
4. The changes in the user interface incurred as a result of the upgrade to .NET.
5. The new GUI Frames interface type.
6. The new and improved Form Designer and Expression Editor.
7. Using the new End User Functionality component.

By the end of the course you will:

- Acquire the skills and knowledge required to migrate a uniPaaS V1.x application to Magic xpa 3.x.

- Become familiar with the new functionality of Magic xpa.

- Comprehend the behavior changes between the versions and practice how to deal with them as a result of the migration process.

- Know what is no longer supported in Magic xpa.

> Install the Magic xpa Studio and ensure that your computer meets the hardware requirements explained on page 4.

2   General Course Details

Course ID:	UCMG19MA3
Level:	Professional
Available Formats:	- Classroom instructor-led training - Private on-site training - Self-paced learning
Target Audience:	Experienced uniPaaS 1.x developers
Duration:	A total of 24 learning hours over a period of 4 days *

Magic Software University may change the course's content/duration with no prior notification. The stated course duration refers to classroom instructor-led training, and does not include IT-related setup time (PC, installations, network, etc.) If required, additional time will be allocated for this.

3   Technical Material

Technical courseware will be provided with all the information required for completing the course including exercises, sample solutions and programs that will further develop the students' knowledge. All of this on the course CD, which also includes Magic xpa.

4 Lesson Outline

The course consists of the following lessons:

4.1 Major New Capabilities

Learn more about the New Capabilities, including:

- Runtime Engine Using WinForms Controls
- .NET Code and Controls
- Form Designer based on Visual Studio
- Mobile Applications
- Offline Applications
- In Memory Data Grid Database
- In Memory Data Grid Middleware

4.2 Migrating Your Project

When you receive a new major release of Magic xpa one of your first tasks is to migrate your current projects. Each new version adds exciting new features that you want to implement in your current projects to improve your product. However, some features that you currently use may no longer be available since the infrastructure was changed.

The migration of a project is a one-way process. You will learn about migrating your project in this lesson.

This lesson covers several topics including:

- Changes to fonts
- Changes to colors
- Converting an application
- Importing an application
- Converting an application with components
- Suggested methodology

4.3   Magic xpa MDI

In V1, in deployment, you displayed the entire frame containing the system bar, the status bar as well as the menus. If you did not want to display the menu, then you reset the pulldown menus. You had little control over the MDI. If you did not want to display the MDI, you defined an SDI application. You also needed to learn how to define an SDI application.

The current version gives you full control of what to display in the MDI: the size of the frame, the position, the status bar messages and other properties, all encapsulated in a single place – the Main Program.

This lesson covers several topics including:

- MDI frame
- Application properties
- Environment properties
- MDI color
- Status bar

4.4   User Interface (UI) Changes

V3 introduces a new Visual Studio-based Form Designer for Display forms as well as a new Expression Editor.

The GUI controls provided by Magic xpa and displayed on the client computer are .NET controls from the Windows Forms .NET library. As a result of this upgrade, some control properties that were available in previous versions, are no longer available and other properties have merged.

You will learn more about the changes in this lesson.
This lesson covers several topics including:

- The new Form Designer
- The new Expression Editor
- Changes to control properties
- Changes to controls
- Unsupported properties
- Unsupported controls

4.5 GUI Frames

Often you need to create more sophisticated forms. Frames enable you to divide a task into multiple sections, each of which displays a different program.

Frames work similarly to Subforms. However, with a frame, the user can easily resize each section by dragging the divider bar.

Frames can be nested, and also used in conjunction with Subforms and tabs, to create elaborate user interfaces.

This lesson covers several topics including:

- Using frames
- Frame name
- Dynamic display

4.6 End User Functionality

Enabling the end user to perform their own ranges, locates and sorts is an integral part of the usability of any application. Enabling the end user to define their own reports on-the-fly brings their application to new levels. This was always a part of the Magic xpa offering.

In V1, the functionality provided by Magic xpa was hard-coded into the engine.

The End User functionality is now provided as a component, providing an interface for the user to perform the Range, Locate, Sort, and Print Data capabilities.

The source code for this component is also available so that you can customize the screens of the component as you wish.

This lesson covers several topics including:

- End user component
- Range, Locate and Sort
- Print Data

4.7 Additional Changes

There are more changes to this exciting new product.

This lesson covers several topics including:

- Task behavior changes
- Environment changes
- Runtime changes

5   Prerequisites

Before you start with the seminar there is basic knowledge that you need to have:

Development knowledge	Working knowledge of uniPaaS V1.x, preferably V1.9x.

6   Setting Up Your PC for this Course

The Studio and Runtime modules of Magic xpa are based on the .NET framework.
Your computer must also meet some basic requirements:

Hardware	• Pentium processor 1.8GHz and upwards (recommended: Dual-core, 2.66-GHz or faster) • 2 GB of RAM or greater • At least 300Mb of free space • Screen resolution of at least 1024x768 pixels • Small fonts
Software	• Windows XP Pro and later. • IIS 7 or later • .NET Framework 4 or later
.NET	• To develop an application using the Magic xpa Studio, you must have .NET framework V4.0 (or above) installed on your machine. • If you plan to run GigaSpaces on your server, you must have .NET framework V4 (or above) installed on the server. • To run Online, Rich Client and Browser Client programs, you must have .NET framework V2.0 SP2 (or above) installed on your client machine. When using .NET framework V2.0 SP2, you also need to install the Microsoft Visual C++ 2008 Redistributable. You can install them by running the NetFx20SP2_x86.exe and VCRedist_x86.exe files from the Scripts\RIA folder.
License	The MGDEMO license for a standalone environment is included as part of the course CD. To use the course in a network environment setting, please obtain a Magic xpa MGCSTK evaluation license from your local Magic Software representative or trainer

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