



**AUTOMATED CONVERSION TECHNOLOGIES OF INFORMATION SYSTEMS**

*Go xpa*

## **100% Automatic Conversion of Magic Applications To magic xpa Version**

The advanced, unique technology developed by *Go Up Technology* experts, enables to perform completely automatic conversion of Magic applications, in any version to magic xpa Version.

Automatic conversion permits the application methodology to be retained, while implementing all the advanced capabilities of the updated magic xpa version.

***Go Up Technology* enables complete automatic conversion in a quicker, shorter, more effective and more economical process when compared to alternative Solutions.**

- Completely automatic conversion, with no additional manual work required.
- Combine optimization with in the conversion process to improve the new system.
- Embed Advanced capabilities in the converted application during the conversion process
- Reduce maintenance costs as a result of standardization of applications.
- Automatic conversion means that the system can be operational very quickly.
- The new converted system is similar to the old one, so assimilation is quick and easy.
- Support at all Magic Versions.

## *Content of the magic xpa Conversion*

### **1. Compatibility to the previous versions**

- Handling the mode of opening tables that aren't supported in the version such as FAST, DUMP, INDEX
- Handling various functions that were in use and are not supported in magic xpa
- Handling link Validate that is no longer supported in the magic xpa Version and assimilating an alternative solution:
  - Deleting double error messages in places where the link field had already been handled with a message
  - Changing the content of the error message and giving an error message with a meaning
- Handling the verify operation which behaves differently in magic xpa when it move into Handlers:
  - Fixing the FLOW to all verify operations that move into the handler
  - Establishing an errors' handling mechanism for the cases in which it's impossible to perform a stop
- Convert the browse operation that aren't supported in magic xpa
- Fix the attributes for fields that was classified as an incorrect model
- Convert MEMO fields and turning them into ALPHA
- Replace KBPOT commands with RAISE EVENT operation
- Handling Duplicate Selection programs resulting from selection program that linked to virtual or real field or linked to control on the screen and also have Call program operation on this field

## **2. Handling Functions**

- Handling LEVEL functions and matching the new test level according to the Handlers
- Replacing functions that no longer exist in the magic xpa
- Converting the functions that have changed in magic xpa
  - MINMagic ,MAXMagic
  - RESMagic
  - Asc ,CHR
  - CtrlName
  - MtblSet1
  - Sys
  - IOExist ,IOSize ,IODel ,IORen ,IOCopy

## **3. Defining fields and storage**

- Separating between the local fields and the parameters fields and defining them accordingly
- Assimilating FILLER in the missing parameters
- Placing default values in the virtual fields
- Standardization in the data storage types in accordance with the database they are working with



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### 4. Convert Record Main to Handlers

- Building HANDLERS from the record main (not be used in RM\_Competibale)
- Handling "dead blocks" of operations that not belong to fields on the screen
- Attributing the Handler to the correct control level (Prefix.Suffix,Verification)
- Dissolving the contents of Block group to Handlers

### 5. Interfaces, data and IO files

- Maintaining the correctness of the data import and export interfaces
- An option to Convert the data and using Unicode data type (from Oem/Ansi storage method)

### 6. Assimilating improves capabilities of magic xpa

magic xpa enable a new capability that are assimilated within and enable the developer to realize them in a simple and easy way. Some of these capabilities necessitate certain definitions in the application. Without those definitions the advanced capabilities will be in DISABLE mode and will not be usable.

- Building HANDLERS for all the old Record Main commands and canceling the
- Cancelling the RM\_Competibale (without this cancellation certain capabilities of the version will be in DISABLE mode)
- Replacing the KBPUT operations with RAISE EVENT commands
- Assimilating the XP STYLE performance with the user's interface (GUI)
- Assimilating PDF capabilities in reports and using the PDF PREVIEW
- Supporting the UNICODE capabilities and enabling the conversion of the database and data types to UNICDOE
- Assimilating the Gradient Style and colors in the online forms

## **7. Handling the data flow as a result of the Convert into using Handlers**

magic xpa operates in a different way than the previous MAGIC versions. The version fully conducts as Event Oriented which means that entire business logic is implemented using events that are realized in the magic xpa version through HANDLERS.

This difference necessitates a fundamental afflictive change in the application because the data flow in the online tasks will be determined from now on not by the order of the lines in the "Record Main" but according to the order of actions that the user had chosen to perform on the screen using a keyboard or a mouse.

- Handling Handlers that are attributed to a field that isn't on the screen or that has a standing condition expression on it
- Attributing the Handler to the correct level
- Dissolving the contents of Block group to Handlers
- Handling extreme cases in Handlers attribution

## **8. Issues of working with SQL databases**

- Maintaining the operational functionality of the interface
- Improved the performance and Creating a more pleasant user experience
- Keeping the transactions' correctness as defined in the application
- An option to improve the performance:
  - Definitions improvement in the INI environment file
  - Using Cursor in the tables
  - Reclamation of the tables and indexes definition in the table repository
  - Improving the transactions conduct in the application

## 9. Tables

magic xpa contains a table control that in order to fulfill all of its capabilities and work in a natural way, there is a need to define the table and its controls in a different way than in previous versions:

- Cancelling the definition of the table as "V9 Compatible" model and defining the table as standard Windows control
- Defining the columns in the table control and link the columns
- Setting a headline to each column according to the headline field's content
- Defining the columns with a sorting option
- Removing headline fields that were on the table
- Enlarging the table's size in relevant places to prevent scrolling
- Replacing controls that was on the table and aren't supported in magic xpa
- Changing the table's appearance and style
- Defining a unique color for the table
- Defining an alternative color for the table
- Defining a unique color and font for the column (affects the column's headline)
- Defining style and color to the Row highlight
- Assimilating a user state identifier which enables each user to design the table and its columns in an independent manner and preserve the design

## **10. Forms & Screens**

magic xpa managed the flow of information in the ONLINE tasks in a different way than in previous versions. Due to the cancellation of "Record Main", the controls on the screen are those that will lead the task's events. The raising of those events will be according to the According to user actions and by the expression on the linked Control

- Determining the Tab order of Controls on the screen (Tab Order)
- Assimilating meaningful names to each control on the screen  
(According to the content or the connected field)
- Handling the fonts and colors and advancing them with a fixed value  
(In expressions as well)
- Handling the number of the first form which is operated while entering the online program
- Link controls to the right layer in screens and building a hierarchy of the control
- Maintaining the location of the forms in forms without title bar or borders and in child window types forms (usually with using SubForm control)
- Converting the old flow standing condition expressions from the Record main operations to the controls on the form
- Assimilating XP STYLE and defining "Windows-like" models for the controls and not "V9 compatible"
- Replacing Rectangle / Frames with Label control
- Handling unsupported controls
- Implement the End-User Functionality Component

## **11. Block group expressions and old flow standing condition**

Following the cancellation of "Record Main" in magic xpa, the Block groups and sub-Block groups in which the select fields operation from a primary or linked table are contained, will no longer be supported since all of the fields selection will transfer into one new screen called DATA VIEW.

The condition for standing on the selected fields will move to the controls on the screen.

- Implement the group's expressions in the relevant Control that were inside of it
- Implement the group's expressions in the relevant Handlers that linked to those controls
- Handling the expressions concatenation:
  - Expressions on selected field that is within the Block group will be concatenated to the expressions above them
  - Expressions of Block group within a Block group will be concatenated to all of the groups' contents in respectively

## **12. 3<sup>rd</sup> Party components (Activx and Dll)**

Magic xpa enables using those 3<sup>rd</sup> Party components if it's based on .Net

During the magic xpa conversion we handle those components and adapt them to work with magic xpa

### **13. Xpa different behavior Studio/Runtime**

Magic xpa have different behavior in Runtime.

During the magic xpa conversion we handle those issues and make sure that the behavior at runtime will be the same as in the Studio environment.

### **14. Issues arising as a result of .Net Deployment**

- Handle Option Button Control overturned values
- Handle scrolls in screens
- Handle Scrolls and displacement of GUI controls
- Add Trim to Expressions in Column Title
- Implements New color to controls which because there is no more style attribute, their color is now active
- Fix Layers of controls on columns Table
- Fix displacement of the Group control
- Fix Unsupported Text on Buttons
- Fix Subform displacement On Tab
- Handle xpa crash in Locate/Range
- Handle GUI object that change their behave from the magic xpa



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## **15. Preparation for RIA**

The RIA technology enables to transform each application into a SAAS application.

During the Magic xpa conversion process a preparation work is underway upon the Application for an easy and simple future transfer into the RIA

Almost 70% of the activities required to Convert Magic xpa application to the RIA Version are include in this process.