



MagNet Code Chemistry

Philosophy

- Preserve Magic Presentation, Business and Data Layer
- Preserve important RAD related Features of Magic
- Create manageable Native Dot Net Code
- Well documented Code

Magic Program

- **Magic Table Description**
 - Converted to Typed Dataset Data table
 - (Hence) Available during design time
- **Magic Forms**
 - Converted to Native Windows Forms with same look and feel
 - Can edit the form in Design Mode as is usually done in Dot Net environment.

Magic to .Net Chemistry

- **Magic Task Cycle, Record Loop, Control Handlers:**
 - Implemented through native Dot Net Code, Functions, Subroutines and Event Handlers
- **Event Handling:**
 - Converted to Dot Net Event Declaration and Handlers
- **Virtual Variables:**
 - A Special Class is used in the Dot Net Program to implement its change notification property

Magic to .Net Chemistry

- **Real Variables:**
 - Created in the Data tables of the Datasets. Accessed through ADO. Net Binding Source Component
 - Binding source, binds the Presentation Layer with the Data Layer and allows a consistent access of Magic Real Variables both from the Form and the Table
- **Expressions:**
 - Converted to Dot Net Expressions

Magic to .Net Chemistry

- **Functions:**
 - For one-to-one correspondence equivalent Dot Net functions are used.
 - For others, (customizable) Dot Net class library is provided
- **Operations:**
 - Converted to Dot Net Code
 - Example: Update is assignment (=), Link is a function, Verify is message and more

The generated .Net Code: Manageable yet Magic Like



- Some of the valuable RAD related features are automatically available in MagNet converted code
- Non-procedural change notification property of Magic Variables
- Non-procedural Link instruction of Magic

The generated .Net Code: Manageable yet Magic Like



- Elegance of the Radio Button Control
- Mode Change feature and the corresponding housekeeping

(Note: The above features are not ordinarily available in a Dot Net Program)

The generated .Net Code: Manageable yet Magic Like



- The Challenge of Procedural Code in Magic Record Main:
 - This feature, available before “Magic 10,” is very dear to the Magic Programmers. Unfortunately, it violates the basic principle of online program. Magnet provides a special event “skipped control” to effectively tackle this issue
 - On its own, MagNet converts procedural Verify Instructions into Dot Net code (with appropriate advice)

The generated .Net Code: Manageable yet Magic Like



- Well documented Code generation:
 - Magnet generated code comes with good amount of documentation, which includes information, notes and important Code Tips
- Magnet also creates a log file with relevant information

Manage the Magnet Code-

A demonstration



- Managing the MagNet generated code is as easy as managing any Dot Net Code
- The simple example which follows, demonstrates the commonly used steps to show how to:
 - Add a new field in a table and make the corresponding changes in the program
 - Add a new control to the form