





TASKBUILDER STUDIO

IS THE DEVELOPMENT PLATFORM
CREATED TO IMPLEMENT FLEXIBLE
AND ROBUST ERP AND BUSINESS

WHAT CAN I DO WITH TASKBUILDER STUDIO?

create stand-alone or vertical solutions integrated
in Mago4.

develop ERP and Business applications working
in symbiosis with Mago4, with your own Database tables,
Business Objects, data-entry dialogs, menus, reports,
and much more.

use Mago4 Business Objects to carry out actions already
present in the standard application, such as to post
an order, calculate the balance of an account, etc.

dynamically extend or change the behavior of Mago4,
without changing its source code.



DEVELOPING APPLICATIONS

TaskBuilder Studio abolishes any rigidity with Dynamic Application concept: the ERP solution installed consists of several independent applications that work together to perform the required actions.

Applications provided by different developers and aimed at different areas of the company coexists in the same installation and are dynamically loaded at run-time.

The environment and building blocks provided by TaskBuilder Framework are common to all applications, displaying a consistent set of interfaces and behaviors, even if implemented by third parties.

The final applications are not monolithic, but consist of optional modules, just as with Mago4 applications.

BUSINESS OBJECTS

TaskBuilder Studio has been developed using Object Oriented languages and encourages a strict OOD (Object Oriented Design) approach for application development. Each component is obtained by specialization of abstract components, integrating it with others.

The abstract components of the platform incorporate numerous predefined behaviors (export in XML, access via Web Services, DBMS persistence, etc.) that become part of the specialized component.

DATABASE MANAGEMENT

TaskBuilder Studio provides a range of ORM components (Objects Relational Mapping) in order to manage database tables, directly from the application code. In this way, TaskBuilder Studio manages MS SQL Server and Oracle, but also allows Database Engines from other producers to be added, avoiding the developer the difficult task of writing SQL statements compatible among databases.

All other aspects of interaction with the DBMS (such as transactions, isolation level, connections, data structure definition) are managed through specific software components provided by TaskBuilder Studio.

DYNAMIC COLLABORATION BETWEEN OBJECTS

Thanks to the Dynamic Component Collaboration model, TaskBuilder Studio allows you to extend ERP applications, such as Mago4, without changing the source code.

The possibility to build new Business Objects by programming those already available is crucial, in order to implement customized or vertical applications. Often, however, the behavior of standard functions needs to be modified to meet customer or market needs. TaskBuilder Studio users have the source code of Mago4 available as a reference.

The typical approach of modifying the original source code for customization purposes, is not the model to follow, even if it is possible: this scheme in fact limits, or impedes, the possibility to easily update the product, and prevents the installation of new versions - other than at the cost of a significant refactoring.

The Dynamic Component Collaboration model meets both customization as well as updating needs, dynamically changing the behavior of standard Business Objects without changing the source code.

In implementing these dynamic extensions, BO are linked at run-time to their extensions and notify to the latter all the significant events of their operational life cycle. The extensions can add actions (such as calculations, messages, additional controls) and enhance the interface by adding buttons and windows, manage data on their database tables and much more.

Several Mago4 functions are implemented with the same Dynamic Component Collaboration model - Sales Force management, Manufacturing functionalities, etc. -, that therefore goes far beyond mere customization.

TASKBUILDER STUDIO FEATURES THE BEST 4

TASKBUILDER STUDIO ARCHITECTURE 4 KEY POINTS



COMPONENTS

TaskBuilder Studio provides an extensive set of software components oriented to ERP solutions: controls, templates, DBMS management, Business Object abstraction,, menus, reports, setup, and much more.

TaskBuilder Studio is based on standard programming languages (C++, C# and Javascript) and uses standard MS Visual Studio* development environments; it is not a proprietary language or platform.

TaskBuilder Studio is an open platform. Thanks to standard languages and development environments, the developer is free to enhance the personalization by integrating other components.

TaskBuilder Studio platform is specifically oriented to the development of ERP and Business solutions and applications.

TaskBuilder Studio is the platform Mago4 is built on, but it is not designed just only to customize ERPs: thus it empowers developers to have the same potential as the Zucchetti* development team.

* For Developer Edition only



APPLICATIONS

They are built using the platform elements. Mago4 itself consists of various applications, including the ERP, core of the system, but everything is designed to allow the easy addition of third-party applications.



TOOLS

TaskBuilder Studio fully integrates with TaskBuilder Framework, the integration framework of all application components, which contains all the general tools - such as DMS, Security, Auditing. The tools help you to interact with the application to browse and search data, manage access rights to functions and data, track activities, etc.



WEB SERVICES

The orchestration of the components takes place using Web Services, i.e. the communication interface used by all objects, components and applications implemented using TaskBuilder Studio. Web Services support is therefore not restricted to specific objects with a limited interface.

The result?

All functions and applications are accessible via Web Services transparently, allowing other development tools and languages to use the BO developed on the platform.



Reporting Studio

International Studio

Setup Studio

Easy Studio

Wizard Studio

TaskBuilder Library

For a summary of the different functionalities available in TaskBuilder Studio Personal Edition, TaskBuilder Studio and Developer Edition, please refer to the final table.

REPORTING STUDIO

Sophisticated reporting system used by all the application developed with TaskBuilder Studio.

Highlights:

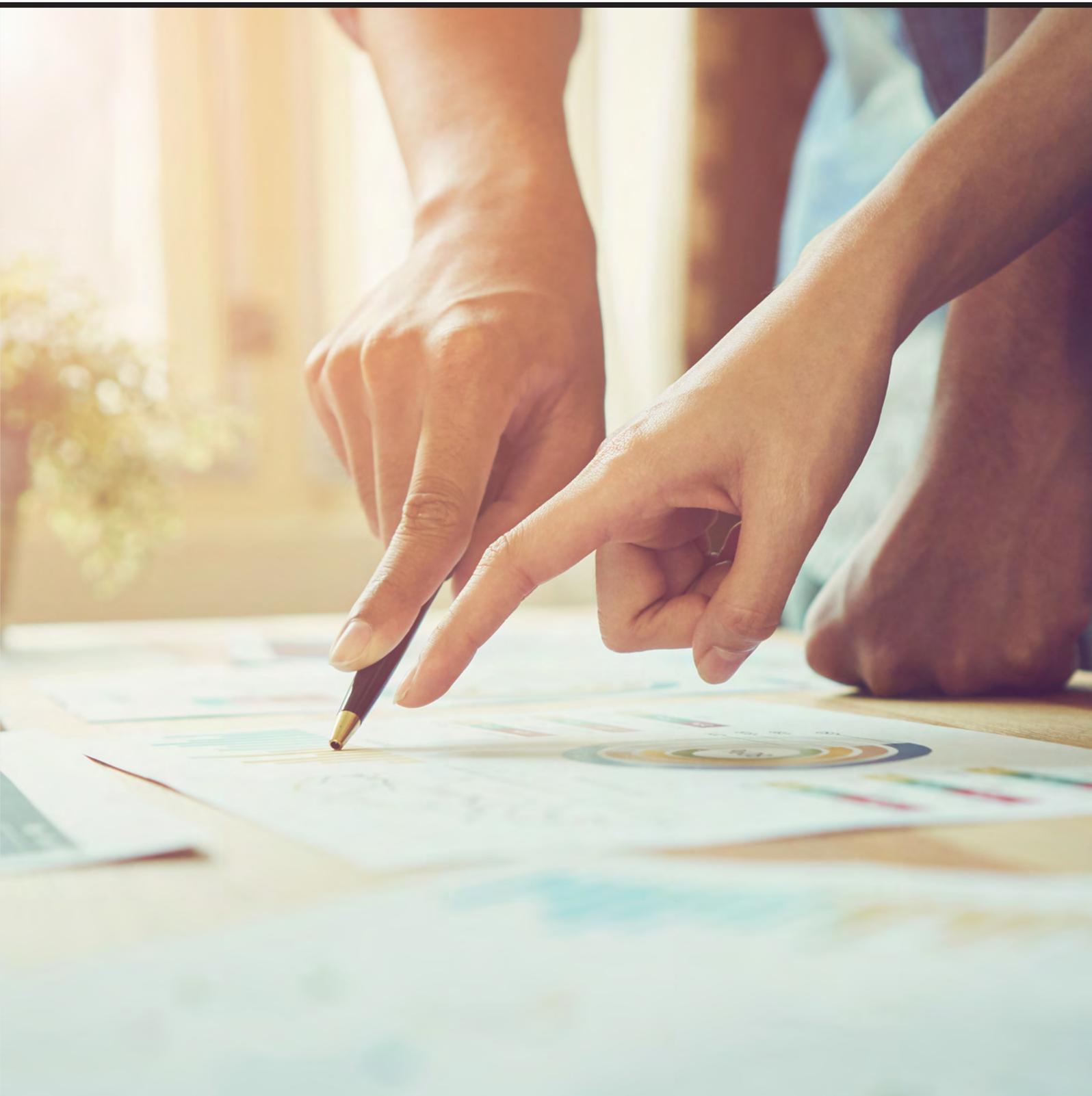
- Intuitive graphical interface
- Sophisticated Script Language for instructions and expressions
- Development via visual interface or by a programming language
- Inquiry Engine and Layout Designer in a single tool
- Event processor for full control of the data flow and layout
- Definition of parameters used for extraction conditions, filtering and sorting
- Layout defined by an extremely precise WYSIWYG designer
- Print engine that ensures consistent output on any printer
- Inquiry Engine with SQL-like syntax, independent of the database used
- Images in any format, even as a background for layout composition
- Possibility of calling native Mago4 and other application functions
- Drill-down support
- Cascade reports
- Links to Mago4 documents and other applications developed by TaskBuilder Studio
- Data export to Excel, Word, HTML, text
- Sending reports via email as an attachment in PDF format
- Support for Google Maps and Skype links.

INTERNATIONAL STUDIO

Localization features are the basis of the platform design: International Studio is the localization tool par excellence for all applications implemented with TaskBuilder Studio.

You can translate the applications created by TaskBuilder Studio in all languages, thanks to full support of the UNICODE standard that manages every character set, including those of the Far East.

In the application development phase, all text elements (templates, messages, etc.) are in a base language - usually English -; the application can then be transposed into any language, thanks to a specific translation support tool, with the possibility of using glossaries, repeating translations already applied elsewhere, having a preview of templates to check the visual appearance, and so on. Translated items are stored in XML databases ("dictionaries"), dynamically loaded when using the program. The application can therefore be viewed in different languages by different users of the same organization. The interface language can be set at the level of installation, company or individual user.



Reporting Studio
International Studio
Setup Studio
Easy Studio
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TaskBuilder Library





SETUP STUDIO

It generates installation packages for solutions developed by TaskBuilder Studio Personal Edition which can be downloaded via the Internet. Thanks to the Setup Studio component, you obtain a package which can be used for distribution, like any Windows product.

Packets are read at Run-Time and are dynamically installed (JIT) on the application.

EASY STUDIO

Intuitively manage graphical and functional customization of an existing document or create a template from scratch.

Easy Studio can create all the types of objects managed by applications created by TaskBuilder Studio Developer Edition (for example Mago4): from text fields to checkboxes, from combo-boxes to grids.

Easy Studio was created to meet the multiple needs of customization of Mago4 and of the applications written with TaskBuilder Studio: it is a tool to create your customizations in a simple and fast way, making them as upgrade-safe as possible and immediately portable, without writing a single line of code. The areas of use are endless: from simple cosmetic/functional changes to the creation of veritable applications that live inside the main one.

Thanks to the intuitive graphic designer, Easy Studio simplifies the work of newbies, but also provides more demanding and experienced developers with the tools to create specific vertical market applications.

Thanks to Easy Studio you can:

- Add items to existing management documents via drag&drop
- Create new data entry templates
- Build batch procedures
- Operate on objects in existing templates
- Change the layout of standard/custom templates
- Add actions and controls to both new and existing objects
- Browse and use the Object-Model of the host application
- Write event management code in C#
- Benefit of the Intellisense technology
- Use the interactive Debug, having also the reflection support of .NET
- Work with a powerful native JSON editor

WIZARD STUDIO

Helps the programmer to interactively define new applications based on TaskBuilder Studio in a guided manner. Featuring a simple and intuitive interface, Wizard Studio is easy to learn and use.

You can define and control all aspects of an application developed by TaskBuilder Studio, navigating the logical correlation amongst the components and automatically preparing all the necessary environment for its execution.

The tool is of great help especially in the initial design of a new application or extension module: Wizard Studio generates and maintains database definition SQL scripts, XML metadata, source code, etc., and prepares the necessary injection points to enter the specific business logic of the customization.

Wizard Studio brings real time savings and makes developers immediately productive.

TASKBUILDER LIBRARY

This is the Classes and components, described in C++, collection which any document definition is based on. The library allows advanced developers to create powerful business applications using Microsoft Visual Studio. Most of the classes are available through specific wrappers, also for C# and Framework .NET

**TASKBUILDER STUDIO
TECHNOLOGICAL HIGHLIGHTS**

- Web 2.0 interface
- HTML5 + CSS3 + JavaScript clients
- Back-End in C++/C#
- Resources dynamically described in JSON
- Events managed on the Client side
- Ajax + WebSocket communication protocol
- JavaScript client libraries: AngularJS, JQuery, ExtJS

**TASKBUILDER STUDIO
KEY BENEFITS**

- Easy to use and install
- Similar WEB Desktop interfaces
- TBF and Host Application instanced as IIS Module
- Highly scalable
- Low processing load on the server
- Use of high-performance JavaScript libraries

TASKBUILDER STUDIO CAPABILITIES IN THE VARIOUS EDITIONS

Component	TASKBUILDER STUDIO Personal Edition	TASKBUILDER STUDIO Developer Edition
Reporting Studio	●	●
International Studio	●	●
Setup Studio	●	●
Easy Studio	●	●
Wizard Studio		●
TaskBuilder Library		●



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