



Hyfinity MVC WebMaker v3.1

Release Note – 16th Nov 2009

This document details the key features within the MVC WebMaker v3.1 Release. This document enables organisations to assess the capabilities of the new release. Version 3.1 of WebMaker has consolidated its capabilities to make it the natural choice for building business applications on the Web. Hyfinity's WebMaker enables highly scalable, performance enterprise web applications to be constructed with designer rather than programmer skills.

1. Rich UI Control Features

1.1. Palette of Rich Widgets

WebMaker now enables a range of Form, Layout and Composite UI Controls to be 'dragged' on to the Page with various default options that are customizable and style able. Many of these rich controls enable desktop type UI equivalents to be created for web applications without any coding effort. The controls range from simple form controls to more complex composite controls such as: Rich Text Editor, Accordion, Tree, Multi-Row Edit, Resizable sections, Paging Data Grids with sort able/resizable columns, etc. The palette controls will continue to be extended in future versions.

1.2. Styling Controls – Simple Override Toolbar

The Group and Field Details styling options provide a simple graphical toolbar to be used to override CSS styles with simple specific capabilities such as: Height, Width, Font Size, Font Weight, Font Family, Colours, Justification, etc. The former dimension options are particularly useful for fine controls over group layouts, and the latter for individual field controls.

1.3. Default Styling Adjustments

The default styles have been re-factored to align with the new Palette widgets. It is easier to drop various controls/widgets onto existing controls, and the styling is adjusted appropriately. Many of the styles have been flattened in the CSS to add clarity when viewed. In addition a number of additional pre-prepared styles are supplied e.g. Show/Hide controls, Left/Right Up/Down Arrows, Extended Borders, Rounded Corners, etc.

There will be various FAQ hints and tips available to tackle common layout and styling scenarios.

1.4. Inclusion of latest Dojo Framework

The leading Open Source Ajax toolkit Dojo 1.3.1 release is shipped with MVC 3.1 by default. This enables any of the Ajax features to be used 'out-of-the-box'. Dijit widgets can be attached to existing Hyfinity UI controls as well as adding independent controls. For example, by simply adding a couple of 'custom attributes' to a Field it can be transformed into a "Spinner" control. An important element of this approach is that the UI controls can still degrade gracefully to usable and accessible XHTML as WebMaker detects whether Script has been disabled by the Browser.

2. Data Sources Expanded

2.1. Drag & Drop Multiple Data Sources

The Studio has been greatly enhanced to enable the automatic creation of two-way communication with SQL Databases, Web Services and Rest Data Sources and/or Transactional systems. In most cases all the processing logic is created without the need for any manual changes.



Hyfinity MVC WebMaker v3.1

Release Note – 16th Nov 2009

2.2. Simple Blank Form Processing

WebMaker makes it very straightforward for external Data Sources to be mapped to the Page UI controls in order to handle two-way translation & conversion of the data and its structure between the Form and the Data Source Services. To simplify forms that are not based on existing Data Sources, WebMaker creates default mappings for all the form fields, including proper dynamic handling of repeating data structures. This makes it much simpler to save form data to a local store such as local file system or SQL database if required.

However, the real strength of WebMaker is integrating data directly with other systems such as CRM, BPM, Workflow and back-office systems and databases, without the need for any coding.

2.3. Easy Multiple Data Source Integration

WebMaker enables the user to select multiple Data Sources, and define for each how they wish to interact. Some data sources will require interactions to be information retrievals, others will be transactional interactions. This is enabled through a simple drag-&-drop interface from Data Sources including SQL Databases or Web Services.

2.4. Rapid SQL Integration

WebMaker enables complex Forms or Web pages to be created that manage data directly with SQL Databases. The user can select a SQL Database Tables Columns and define the type of transactional support required for the page interaction. The user is able to select whether the UI interaction is a display of results or single or multiple record maintenance. This process enables all the relevant processing to be automatically created without the need for any coding. The SQL automatically created includes Select, Create, Update & Delete commands as appropriate. It is possible to select multiple SQL tables and manage the transaction state of the various Tables.

2.5. Multiple Data Mapping/Bindings

It is now possible to bind a single UI field to multiple data sources. This can allow data to be easily mapped for a Web Service and SQL Database Data Sources without any code. This will commonly be used if you are looking to update data into a CRM, BPM or Workflow solution and a back office system or database. This feature allows complex integration without any programming effort.

3. Studio Usability & Productivity

3.1. Product Installer

A new product installation process has been implemented for v3.1. The installer allows a number of options to be configured during installation including: Location, editors (if required), Proxy Server settings, etc. The installer also identifies if existing installations were present on the machine and uninstalls and upgrades the projects if they are from an earlier version. The process will also ask if you wish to export & import projects from an existing installation. The user can control all these options during the installation steps.

3.2. Product Launcher

WebMaker is now launched from the Windows Start Menu or Shortcuts. The product is launched and the Design and Runtime Test Tomcat Servers are started and stopped automatically as appropriate.

3.3. Studio – Improved Options

Various changes have been made to introduce simpler and faster navigational aspects around the studio elements:

- WebMaker – A Windows manager has been introduced to ensure some Browser Windows or Tabs are not closed accidentally losing changes, and also to manage starting/stopping of the Studio Tomcat Web Servers
- WebMaker – The ‘User’ concept has been replaced with a ‘Workspace’ approach. Projects are defined within a Workspace
- WebMaker – Support for Internet Explorer (IE) IE6, IE7 and IE8. It is recommended that WebMaker is used with Tabbed Browsing capability when available.
Note: The next version of the WebMaker Studio will support Firefox, Safari, Chrome and other standards based Browsers
- WebMaker – Improved in-built editors for XML, Javascript and CSS fragments or files
- WebMaker – Documentation is now launched from the ‘Help’ Tab
- WebMaker – The deployment definitions have been altered to make it easier to change location and transport protocol settings and re-deploy
- WebMaker – Performance improvements to rule processing and serialisation

- FormMaker – The WSDL Import and SQL Tables selection is now embedded into the main Page Structure screen, rather than a separate studio capability
- FormMaker – Web application assets such as Javascript, CSS and Image files are now managed within the Studio design repository in a consistent manner to all other resources. This will simplify source management, deployment and publication capabilities
- FormMaker – Application Map now uses a drag-&-drop palette
- FormMaker – Links have been renamed to page Actions
- FormMaker – Double clicks on the Application Map and Page Structure screens enable in-place editing of labels/names. Right Click option provides all other context sensitive menu options
- FormMaker – Pages can now use multiple Event triggers for when the page initially loads or unloads to the Browser
- FormMaker – A ‘Reset’ event has been added to allow all form fields values within a Page or Group to be reverted to the values when the page was first loaded to the Browser
- FormMaker – Palette entries ‘dragged’ onto the central Page canvas will now appear below existing items by default
- FormMaker – Added support for labels to be placed to the left, right, above and below the input fields
- FormMaker – Added further explicit styling capabilities for ‘Repeat’ and ‘Groups’
- FormMaker – Reduced the size of the Dojo framework used in order to make the deployment process faster
- FormMaker – Optimization changes to HTML tags to reduce the number of elements and improve styling options available – Custom Controls within Tables, wrapper styles & spans removed from input fields, Groups within Table groups will not generate DIVs, Options now available to style based on Row and Cells of Tables
- FormMaker – Added graphical animation for Ajax partial pages
- FormMaker – The preview pages have been altered to add a bar indicating that it is a preview page, in order that it is not confused with a deployed application page

- FormMaker – If Schemas are used to construct field controls, the data constraints information is copied from the schema for automatic client side validation creation
- FormMaker – URL based file selection and upload has been improved
- FormMaker – Support has been added for non XML files in the repository, such as Javascript, CSS and Image files

- RuleMaker – Improvements introduced to enable more variations of Rest services to be supported automatically
- RuleMaker – The old ‘Workspace’ concept has been renamed to ‘Variable’ to relate to a XML node set and to be more consistent with BPM Suites
- RuleMaker – The default for forward-chaining has been switched off to improve performance

- Dashboard – Enable log entries to be launched in the Test Client screen for speedy debugging of URLs and poorly formed messages

3.4. Studio – Important Fixes

Various fixes have been made for the most common limitations:

- WebMaker – Improvements to managing the current state of the various screens as you navigate around the Studio
- WebMaker – Ability to copy existing projects correctly
- WebMaker – Removed need to specify prefix for WSDL Service Import

- FormMaker – Custom Attributes on Output fields will not be lost when generated
- FormMaker – Invalid schemas links in WSDLs will not cause incorrect rules to be created
- FormMaker – Stopped the optimisation of Label tags when there is no descriptive text
- FormMaker – WSDL import has improved handling of WSDL variations for RPC services and non-schema based messages, including better support for array handling
- FormMaker – Fix to default setting for Radio Buttons if no data binding available
- FormMaker – Updates to the xpath validation process to show all valid xpath matches on documents
- FormMaker – Calendar pop-up fires an ‘on change’ event when date selected
- FormMaker – Improvements to the Controller creation process

4. Web 2.0, SOA & SaaS Platform Support

4.1. Publication Capability

WebMaker now enables multiple publication environments to be configured for the web applications/forms developed. This can enable one or more projects to be deployed together for various different environments with variations in the implementation details e.g. Database locations, Web Service URLs, etc. The most common usage is likely to be multiple environments such as System Test, User Acceptance Test, Production, etc.

The deployments can easily be configured for publication to common Web Application Servers as WAR files such as Tomcat, JBoss, WebSphere, Oracle, etc. The same approach can also be used to remotely configure the Web Applications to be installed into 3rd party web based solutions. In the

future configurations will be made available for environments such as BPM products, SaaS based deployments and so on.

4.2. Full Bi-Directional Language Support

WebMaker now enables web applications to be created that support Left-to-Right or Right-to-Left languages. The Studio now enables support for languages such as Hebrew, Arabic and Thai and so on. Forms and Web applications can be developed and then simple CSS styling changes can be applied to implement Right-to-Left capability along with setup of Language Dictionary translations for each language.

4.3. Advanced Customisation Options

WebMaker has introduced two capability areas that are intended to be extensible for the future:

- **Palette Controls** – Users can package and reuse their own simple and complex controls by extending the standard Hyfinity palette configuration files.
- **Extensible Events** - It is now possible to write your own events and handlers in javascript. This provides the ability to map events raised by external pages to WebMaker application page scripts.

It is possible to edit and customise the configuration files for these areas within the product installation. However, it is recommended it is performed with Hyfinity's assistance to ensure that it is implemented without impacting the product installation and ensuring appropriate source management is in place.

5. Third Party OEM Embedding

5.1. Third Party Product Integration

A launch mechanism has been added to make it simpler for the WebMaker Studio to be launched from other 3rd party Projects. This capability can be extended to enable 'pre-built' web application elements to be pre-populated when creating a new project for a 3rd party provider. There is also a capability to map events raised by external pages (web or 3rd party software) to WebMaker application event page scripts.

The various enhancements above make it easy for 3rd party products to easily embed WebMaker into existing software suites to provide the rich forms and web applications.

6. Frequently Asked Questions (FAQ)

6.1. FAQ Details

For future maintainability 'How To' type guidance will be moved to the online system hosted at <http://www.hyfinity.net/faq/>. Examples and scenarios will be added on a continuous basis. The standard tutorial application that used to exist in the documentation has been replaced with video tutorials on the FAQ site.

Note: The FAQ includes details of some considerations that may need review if migrating to V3.1 from previous versions. This should only apply to some specific features that may have been used from previous versions. This does not apply to Hyfinity metadata, but only if some logic has been used within Web Application specific elements. Please search the FAQ with '[Upgrading from a Previous Version](#)'.



Hyfinity MVC WebMaker v3.1

Release Note – 16th Nov 2009
