

# Model-Glue In-Depth

The Nitty-Gritty of Model-Glue



## alagad

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## What You Will Learn

- How to configuring Model-Glue settings
- Default Messages and Events
- View Values
- Exit Actions (XFAs)
- Message Arguments
- Performance Tips

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## Configuring the Framework

- Model-Glue is configured by ColdSpring
- Edit ColdSpring.xml
  - Located under /Config by default
- Can (and should) be used to configure more than just Model-Glue (more on this later)

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## Model-Glue Configuration

### reload – boolean

- Indicates if the framework should be reloaded on each request.
- True = slow, but good for development
- False = fast, and good for production

### rescaffold – boolean

- Indicates if scaffolds should be regenerated on each request (more on scaffolds later).
- True = slow, but good for development
- False = fast, and good for production

### debug – boolean

- Indicates if the Model-Glue debug output should be shown.

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# Model-Glue Configuration

**defaultEvent - string**

- Specifies the name of the default Event Handler

**reloadKey - string**

- Specifies the name of the argument used to reload the application manually.
- "init" by default

**reloadPassword - string**

- Specifies the value of the reloadKey that will cause the framework to reload
- "true" by default

**viewMappings - string**

- A comma separated list of locations where Model-Glue will look for views

# Model-Glue Configuration

**generatedViewMapping - string**

- Specifies the directory where Model-Glue will generate views for scaffolds

**configurationPath - string**

- The path to the ModelGlue.xml configuration file.

**scaffoldPath - string**

- The path to the Scaffolds.xml configuration file.

**statePrecedence - string**

- Specifies which has precedence when a value exists in both the form and url scopes.
- Options are: form (default) or url.

# Model-Glue Configuration

**eventValue - string**

- Specifies which value in the event specifies the event handler to execute.

**defaultTemplate - string**

- This is used to indicate the name of your root file (default.cfm, index.cfm, etc.)

**defaultExceptionHandler - string**

- This indicates the name of an event handler that will be fired when there is an unhandled exception.

**defaultCacheTimeout - string**

- Indicates how many minutes cached items can exist.

**defaultScaffolds - string**

- Indicates which events to scaffold.

## About viewMappings

- The viewMappings configuration value specifies a comma separated list of paths to look in for CFM files specified in the <include> tag.
- The paths are searched in the order specified.

## Reloading the Framework

- By default the framework reloads on each request.
- Bad for production, good for development
- When configured not to automatically reload use the configured reloadKey and reloadPassword.
- <http://localhost/index.cfm?reload=true>

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## Default Events and Messages

- Model-Glue provides several built in "hooks" so you can do things at certain points during execution.

### Default Events:

- ModelGlue.OnRequestStart
- ModelGlue.OnQueueComplete
- ModelGlue.OnRequestEnd

### Default Messages:

- OnRequestStart
- OnQueueComplete
- OnRequestEnd

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## Default Events

- ModelGlue.OnRequestStart
- Executes before all other event handlers

```
<event-handler name="ModelGlue.OnRequestEnd">
  <!-- broadcasts, results and views go here -->
</event-handler>
```

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## Default Events

- ModelGlue.OnQueueComplete
- Executes after all messages are broadcast but before views are included

```
<event-handler name="ModelGlue.OnQueueComplete">
  <!-- broadcasts, results and views go here -->
</event-handler>
```

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## Default Events

- ModelGlue.OnRequestEnd
  - Executes after all views are included
  - Good for a single generic template

```
<event-handler name="ModelGlue.OnRequestEnd">
  <!-- broadcasts, results and views go here -->
</event-handler>
```

## Default Messages

- OnRequestStart
  - Executes before all Event Handlers
  - ModelGlue.OnRequestStart Event Handler is ignored if OnRequestStart message is used.

```
<message-listener message="OnRequestStart"
  function="DoSomething" />
```

## Default Messages

- OnQueueComplete
  - Executes after all messages have been broadcast and before views are included.
  - ModelGlue.OnQueueComplete Event Handler is ignored if OnQueueComplete message is used.

```
<message-listener message="OnRequestStart"
  function="DoSomething" />
```

## Default Messages

- OnRequestEnd
  - Executes after all event handlers have been processed
  - ModelGlue.OnRequestEnd Event Handler is ignored if OnRequestEnd message is used.

```
<message-listener message="OnRequestComplete"
  function="DoSomething" />
```

## I am #viewstate.getValue("myself")#

- The Myself viewstate value holds the default file name and the event value
- Example: index.cfm?event=
- Can be used in links or form actions...

```
<a href="#viewstate.getValue("myself")#Foo">Example</a>
```

- Would result in...

```
<a href="index.cfm?event=Foo">Example</a>
```

## View Values

- Uses <value> tags in a <include> tag.
- Sets value into the ViewState

```
<include name="body" template="dspIndex.cfm">
<value name="foo" value="bar" />
</include>
```

## Exit Events

- Uses <value> tags in <include> tags.
- A common technique in Fusebox (XFAs)
- Provide values to views for event names
- A good technique to deal with event names changing overtime
- Useful in changing the flow of an application
- Allows configuration to show a map of the application.
- "Event X has links to A, B and C."

## Exit Event Example

### ModelGlue.xml

```
<include name="template" template="dspTemplate.cfm">
<value name="xe.Home" value="page.index" />
<value name="xe.Recent" value="Fortune.ShowRecentFortunes" />
</include>
```



# Exit Event Example

## dspMyView.cfm

```
<cfset myself = viewstate.getValue("myself") />
<cfset xe.Home = viewstate.getValue("xe.Home") />
<cfset xe.Recent = viewstate.getValue("xe.Recent") />

<cfoutput>
  <a href="#myself##xe.home#">Home</a>
  <a href="#myself##xe.recent#">Recent Fortunes</a>
</cfoutput>
```

# Exit Event Example

## Results in...

```
<a href="index.cfm?event=page.index">Home</a>
<a href="index.cfm?event=Fortune.ShowRecentFortunes">Recent
Fortunes</a>
```

# Message Arguments

- Uses <argument> tags in <message> tag.
- Additional data that is passed along with messages
- Useful for defaulting values
- Useful for passing data into generic events

# Message Arguments

## ModelGlue.xml

```
<message name="NeedFortune" />
  <argument name="defaultCategoryId" value="1" />
</message>
```

# Message Arguments

## ModelGlue.xml

```
<cffunction name="DoGetFortune"
  access="public"
  returnType="void"
  output="false">
  <cfargument name="event" type="any">
  <cfset var defaultCategoryId =
    arguments.event.getArgument("defaultCategoryId") />

  <cfset var categoryId =
    arguments.event.getValue("categoryId", defaultCategoryId) />
  <cfset arguments.event.setValue("fortune",
    variables.Fortune.getFortune(categoryId)) />
</cffunction>
```

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# Performance Tips

- Set reload to false
  - Even when developing, if you want
- Set rescaffold to false
- Disable ColdFusion debugging
  - Don't enable Report Execution Times!!
- Enable trusted cache
  - In production only

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# What You Learned

- The nitty gritty of Model-Glue configuration
- Model-Glue Default Events and Messages
- How to create Exit Events using include values
- How to pass arguments to controllers
- Tips for improving performance

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# Questions and Answers

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## Exercise

- Use a new message to log fortunes into the session scope.
- Create a new page to display the recent fortunes.
  - Use an event argument to control the number to show.
- Update all views to use “myself” and Exit Events
- Put the application into a production-ready configuration

## Discussion

- What was hardest about this last exercise?
- Are you beginning to see some exciting possibilities with Model-Glue?
- Does Model-Glue seem very complex?
- What problems are you running into?
- What are you finding to be easy?