

The United States of a Meta-model Build with MyDraft

An agile model-driven cloud-based platform for data-oriented rich web applications

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	Design time	Runtime
GUI	IDE, code editors	Data-O Rich Web, SaaS
Persistency	Flat files, models	DB: 10Gb instances
Users	Coders & designers,	BA, Q&A, 10K e-U
Collaboration & traceability	SCM bug trackers	Logs, custom history tables, backups

**Concern:
co-evolution**

```

FetchAtomController. x Activity Diagram1
1 package com.karmicsoft.cawa.boot.data;
2
3 import java.util.ArrayList;
21
22
23 @Transactional(readonly=true)
24 public class FetchAtomController implements
25 {
26     private IDaoSupport daoSupport;
27
28     @Override
29     public ModelAndView handleRequest(HttpSe

```

The screenshot shows a web application interface. On the left, there is a 'Tasks' table with columns for 'Description' and 'Worker'. The table contains two rows: '1 Create classes Tom' and '2 Create attributes Jerry'. On the right, there is a 'Task form' with input fields for 'name:', 'order:', and 'description:'.

Agile: propagate changes from model elements to instances, in minutes & seconds, host 10K power users, without coding. Same goes from meta-model elements ...

Design and run time: MyDraft

GUI

Data-O Rich Web, I-DSM-E

Persistency

DB: 10Gb instances **and** models

Users

10K: e-U, BA, Q&A **and** designers, (coders)

**Collaboration
& traceability**

Full traceability and time-machine

Model states: edited, checked, unit tested, checked in, compiled, deployed, running. => United in MyDraft

The screenshot displays the MyDraft application interface. On the left, a 'Packages' tree shows a hierarchy: / Fragment / main, with sub-items: main (tab), Intro (template), composite (composite), header (template), iterationGrid (grid, Iteration), taskGrid (grid, Task), taskForm (form, Task), and workerGrid (grid, Worker). The main workspace is divided into several panels: 'Iterations' (with a table of iterations), 'Tasks' (with a table of tasks), and 'Task form' (with input fields for name, order, and description). The 'Iterations' table has columns 'name' and 'description'. The 'Tasks' table has columns 'Description' and 'Worker'. The 'Task form' has fields for 'name:' (Task-f5), 'order:', and 'description:' (Create). At the bottom, there is a footer with copyright information: 'MyDraft by KarmicSoft © 2012 Tutoriels (c) KarmicSoft 2012 - DSM'12 @ SPLASH2012, Tucson, AZ' and a page number '3'.

MyDraft demonstration

<http://www.karmicsoft.com/index.php/en/resources-menu/demonstration>

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- Running models: www.mydraft.org
- Quick build & change with time-travels

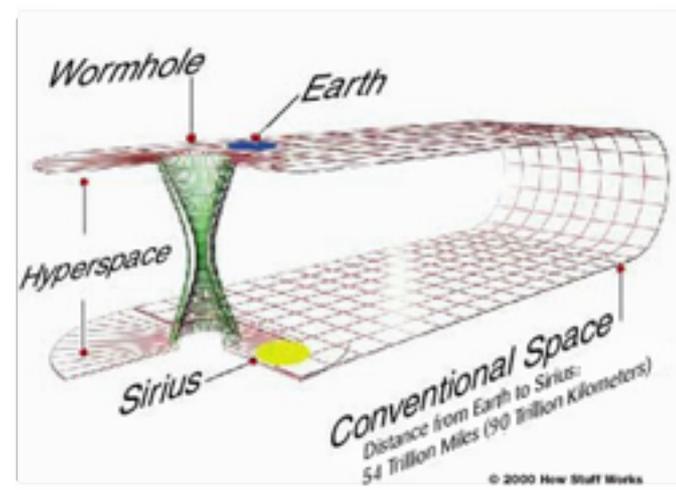
Preview Entry point Clear c

/ Fragment / main

	Name	Type	Class
1	main	tab	
2	citizens	grid	Citizen
3	useCasesCompo	composite	
4	useCases	grid	UseCase
5	useCaseDetail	tab	
6	responsibilitiesCompo	composite	
7	responsibilities	grid	Responsibility
8	behaviour	grid	Behavior
9	features	grid	Feature
10	models	composite	
11	modelGrid	grid	Model
12	modelDetails	tab	
13	features	grid	Feature
14	tests	grid	Test
15	contracts	composite	
16	contractGrid	grid	Contract
17	commitments	grid	Commitment

First class citizens Use cases Models Contracts

	name	oc	equals	auditName	getOwner	domain
1	Dennis	11				FDD
2	Bill	21				RDD
3	Steve	30				BDD
4	Gail	40			Designer	TDD
5	Badge	50			A strategic ...	Embedded software
6	MetaXDD	60			Just a [meta...	DIWA



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Time Travels

The screenshot displays an IDE interface with two test execution windows. The top window shows a failed test named 'testName' with a green result bar. The bottom window shows a successful test named 'setupModel' with a green result bar. Both windows have an 'Object history' panel open, showing details of the test execution.

Top Window (Failed Test):

Name	Result	Setup	Teardown
1 testName	Failed	setupModel	

Object history (Failed Test):

Name	Value
body	// check this folks this.assertEquals("", this.model.auditName());
lastMessage	Assertion failed: expected , got Name must start with a letter and contain only letters and digits.
lastRun	FAILED
marker	mz
name	testName
op	UPDATE
test	testModel
timestamp	2012-10-21 03:41:07.190

Bottom Window (Successful Test):

Name	Result
1 setupModel	Passed

Object history (Successful Test):

Name	Value
body	var Model = require("evaluations.mike003.myProject.Model"); this.model
marker	mz
name	setupModel
op	UPDATE
timestamp	2012-10-21 03:41:00.173

Context Menu:

- Set current version
- Compare with latest version
- Compare with each other
- Restore object
- Copy cell value

Date	OP	Relative path	Attributes
	DELETE	taskGrid.estimate_ext_gen81...	label,name,order,paginated,readOnly,s...
	UPDATE	taskGrid	attributes
	DELETE	taskGrid.estimate_ext_gen83...	label,name,order,paginated,readOnly,s...
2012-10-22 05:33:12.313	CREATE	more.classBrowser.title_142...	booleanValue,name,stringValue,type
	UPDATE	more.classBrowser	properties
2012-10-22 05:32:52.173	UPDATE	more	name
2012-10-22 05:32:45.530	UPDATE	moreStuff.classBrowser	name
2012-10-22 05:32:31.393	UPDATE	moreStuff	name
2012-10-22 01:57:18.403	DELETE	classDetails.class2.set2e	name,source,type
	DELETE	classDetails.class2	entity,name,package,relations,type

Selected object history

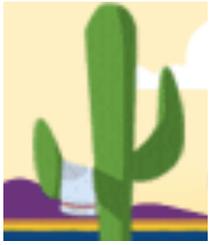
vid	timestamp	marker	op	source	order	width
7352556	2012-10-22 05:34:06.167	mike004	DELE...	worker	40	100
7350827	2012-10-20 08:47:11.610	mike004	CRE...	worker		

- Set current version
- Compare with latest version
- Compare with each other
- Restore object
- Copy cell value

Model's karma

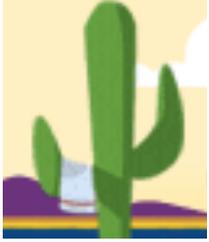
Conclusion

- Specific domains: D-ORWA + Specific IDE
- Business analysts: Domain classes + GUI fragments + run tests
- Coders: operations + unit tests / scripted JSR#223
- United states of a meta-model : «M0 .. M3»
- Model changes are available instantly. Bootstrap: 10ms
- Full traceability: model's karma + time machine
- Co-evolution: Data-Model-Meta-model. Eager vs lazy.
- MyDraft: build in MyDraft => in constant evolution, DNA++
- Video tutorials, 30 days free trial: www.karmicsoft.com



What about the future?

- As we did some time travel to the past, you might say: What about the future?
- I can **not** tell you I came from the future.
- The future is prepared here, in the desert. In a few years, the whole planet will be a desert: 8\$ bottle of water from Mars
- The best way to predict the future is to build it
- Now, there's an app for that.



Thank you!

www.karmicsoft.com

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