



Java
Community
Process



JSR 371- MVC 1.0

January 30 2018

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Christian Kaltepoth

Agenda



Goals/Non-goals

Why?

History

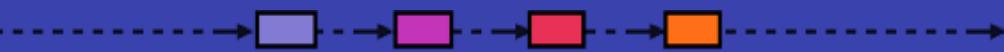
Technical Scope and Features

The Expert Group

Deliverables and Publicity

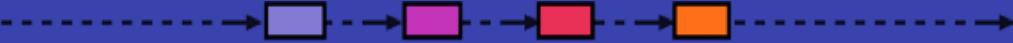
Schedule

Goals



1. Leverage **existing** Java EE technologies
2. Integrate with **CDI** and Bean Validation
3. Define a **solid core** to build MVC applications without necessarily supporting all the features in its first version
4. Explore layering on top of **JAX-RS** for the purpose of re-using matching and binding layers
5. Provide built-in support for **JSPs** and **Facelets** view languages

Non-Goals



1. Define a new view template language and processor
2. Support standalone implementations of MVC running outside of Java EE
3. Support REST services not based on JAX-RS
4. Provide built-in support for view languages that are not part of Java EE

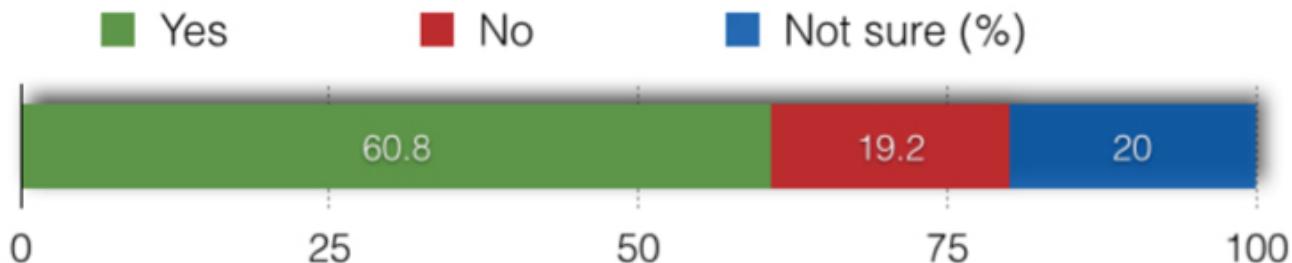


WHY?

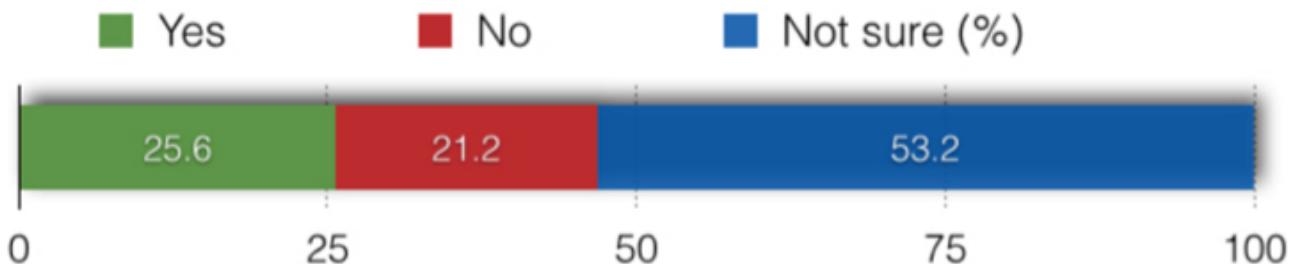


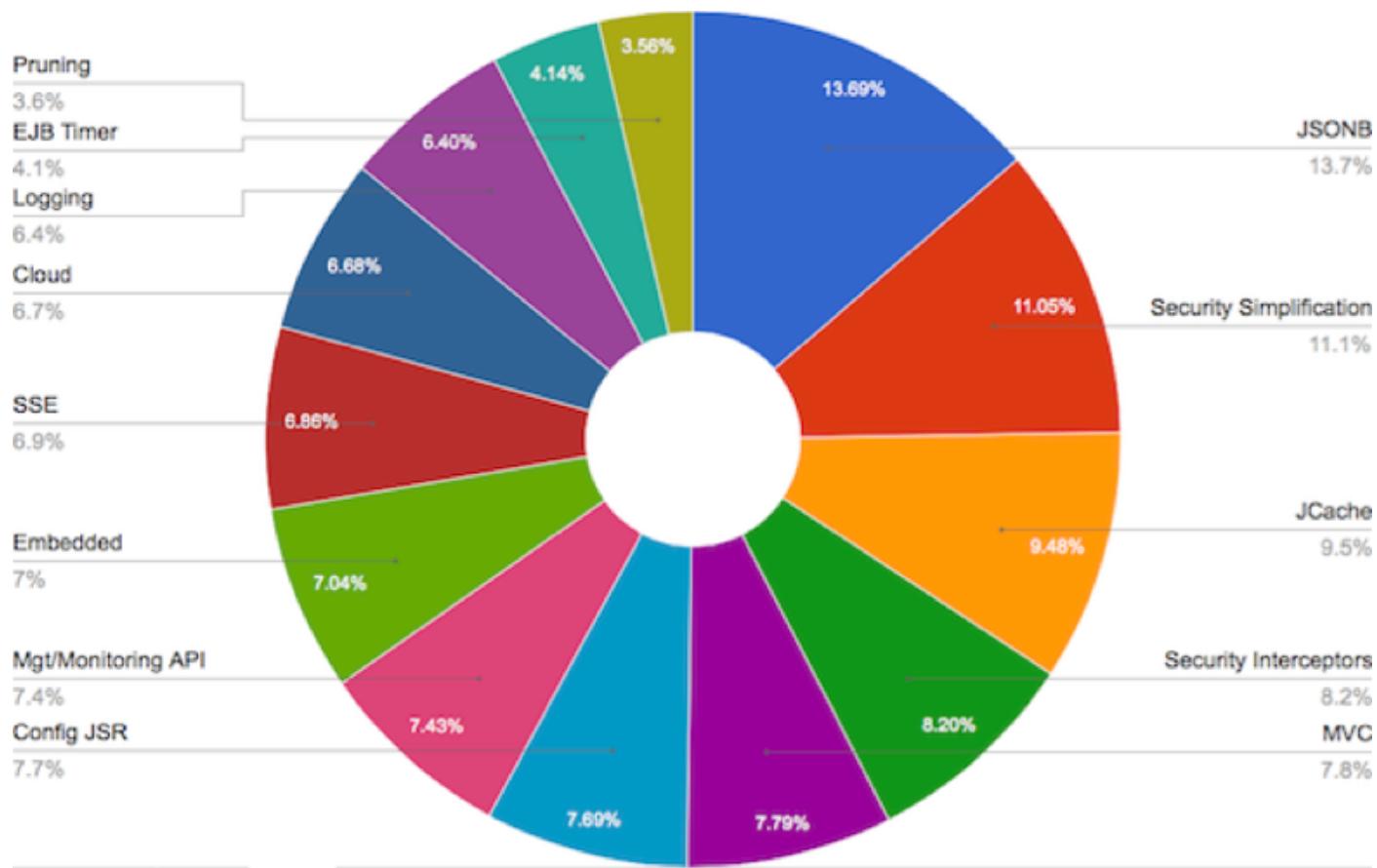
MVC Support

Should Java EE provide support for MVC, alongside JSF?



Is there any one de-facto standard technology in this space to which we should look for inspiration?





Revised Java EE 8 Proposal

No Change to Plan
Propose to Drop
Propose to Add

CDI 2.0 (JSR 365) <ul style="list-style-type: none">▪ Bootstrap API for Java SE▪ Async events▪ Observer ordering	JSON-B 1.0 (JSR 367) <ul style="list-style-type: none">▪ JSON <-> object mapping	JMS 2.1 (JSR 368) <ul style="list-style-type: none">▪ Flexible JMS MDBs▪ Improved XA support
Servlet 4.0 (JSR 369) <ul style="list-style-type: none">▪ HTTP/2 support	JAX-RS 2.1 (JSR 370) <ul style="list-style-type: none">▪ Reactive enhancements▪ Server-sent events▪ Non-blocking I/O▪ Client-side circuit breakers	MVC 1.0 (JSR 371) <ul style="list-style-type: none">▪ Action-based MVC framework
JSF 2.3 (JSR 372) <ul style="list-style-type: none">▪ Small-scale new features▪ Community-driven improvements	Management 2.0 (JSR 373) <ul style="list-style-type: none">▪ REST-based APIs	JSON-P 1.1 (JSR 374) <ul style="list-style-type: none">▪ JSON Pointer and Patch▪ Java Lambda support
Security 1.0 (JSR 375) <ul style="list-style-type: none">▪ Authentication/authorization APIs▪ OAuth, OpenID support▪ Secret management	Bean Validation 2.0 (JSR 380) <ul style="list-style-type: none">▪ Collection constraints▪ Date/Time support▪ Community-requested features	Configuration <ul style="list-style-type: none">▪ Standard for externalizing application configuration
	Health Checking <ul style="list-style-type: none">▪ Standard for client-side health reporting	



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27

Rationale for Proposed Changes



New Functionality

- Cloud apps make many remote REST calls. Need a **client-side circuit breaker** added to JAX-RS
- Need a **secret vault** because there's no way to do this today using **standard**
- **Need OAuth and OpenID support** because those technologies have rapidly emerged as standards
- Need **externalized configuration store** to make applications retargetable across environments
- Need basic **multi-tenancy** support to accommodate needs of more complex apps and offer higher density
- **Need standard way of health checking** Java-based apps

Dropped Functionality

- **JMS** is no longer very relevant in cloud. Proposed to stay at JMS 2.0 standard (~~vs. upgrading to JMS 2.1~~).
 - Cloud apps often ship headless, making **MVC** largely irrelevant
- ~~Current Management~~ ISP not widely used

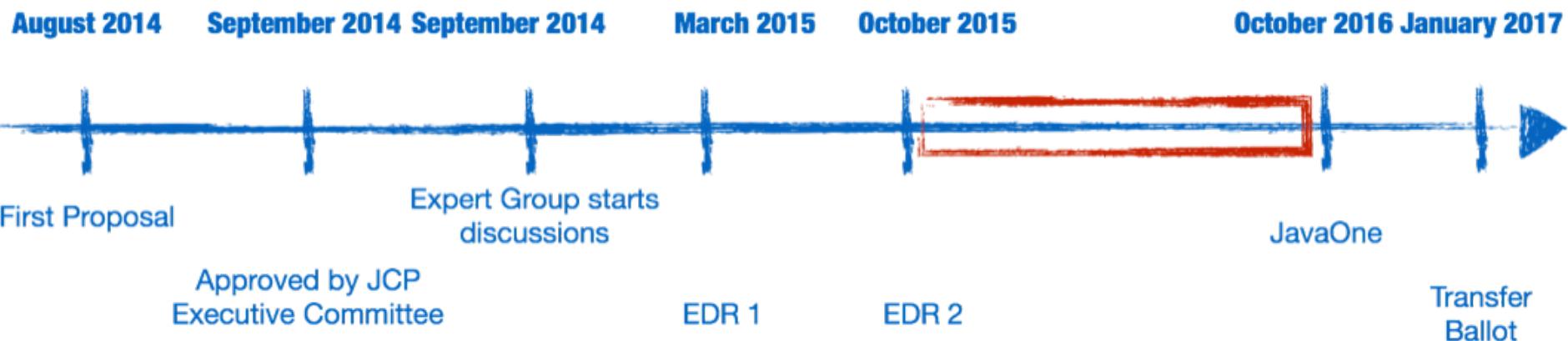


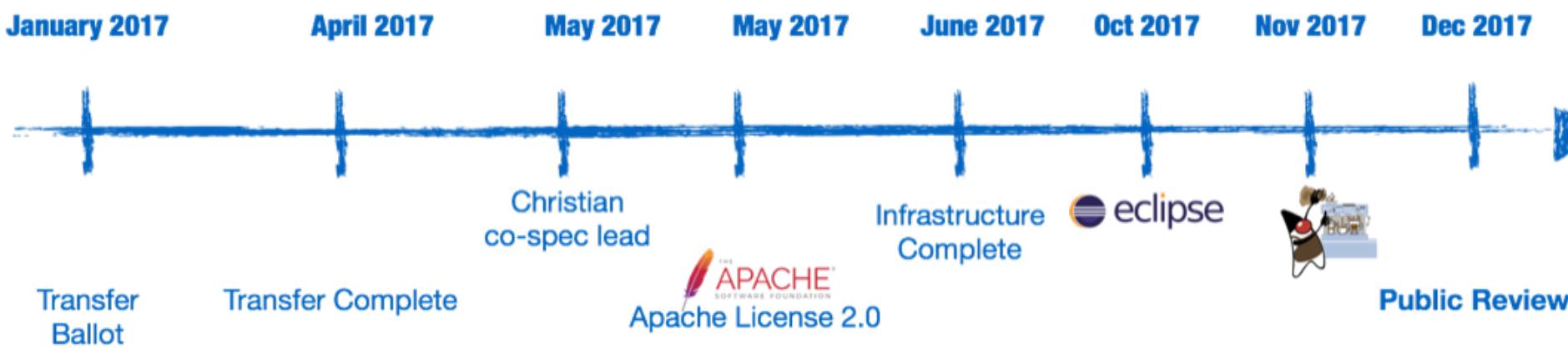
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28



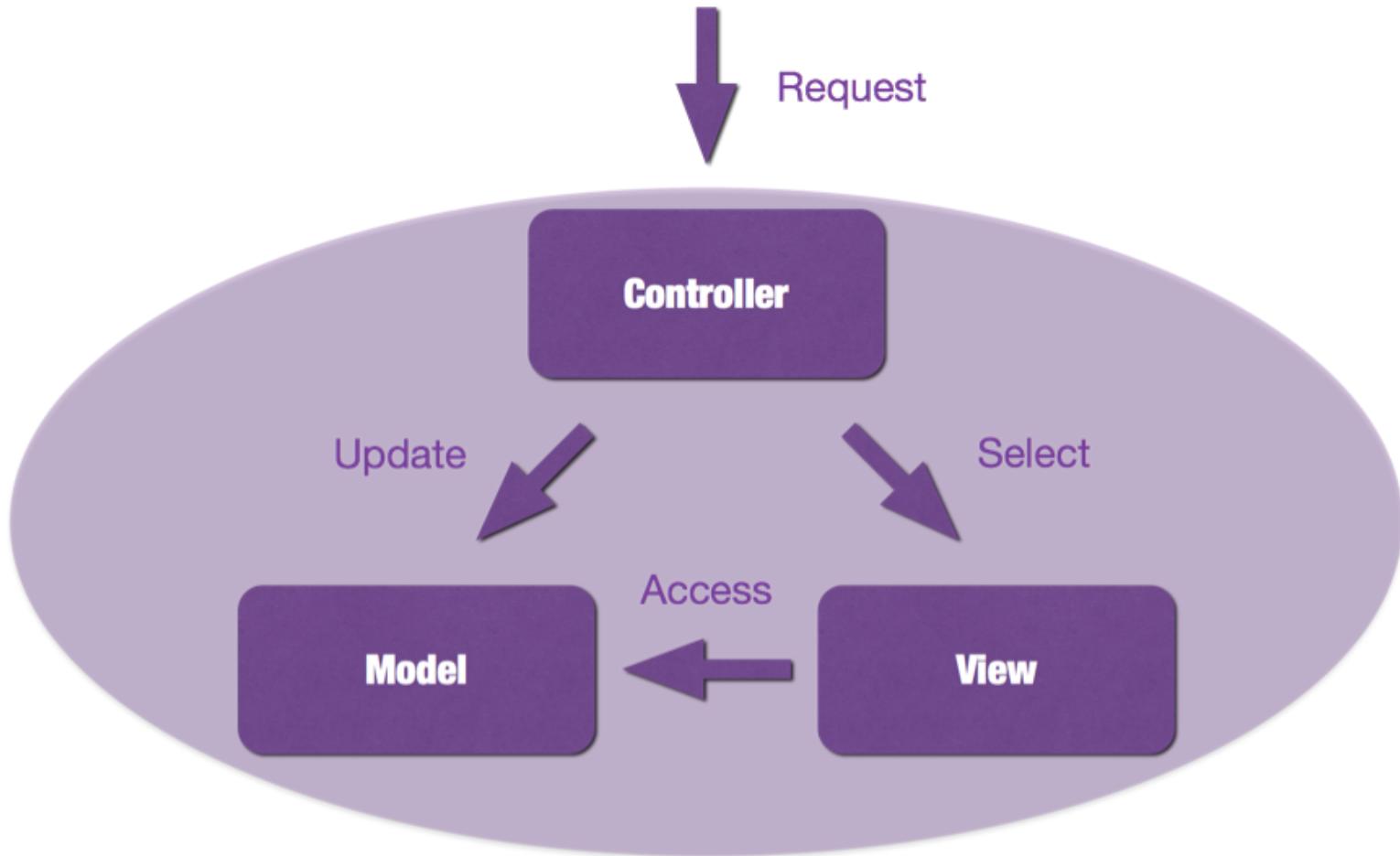
HISTORY







TECHNICAL SCOPE AND FEATURES





```
-->[purple square]-->[pink square]-->[red square]-->[orange square]-->  
@View("hello.jsp")  
@Controller  
@Path("hello")  
public class HelloController {  
  
@Inject  
private Greeting greeting;  
  
@GET  
public void hello() {  
    greeting.setMessage("Hello Hursley!");  
}  
}
```



- The Basics
 - Model, View, Controller
- The Extras
 - Validation and Error Handling
 - Scopes
 - Security
 - Internationalization
 - Events



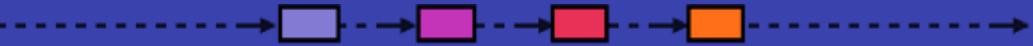
THE EXPERT GROUP

The Expert Group



Mathieu Ancelin (Individual Member)	Ivar Grimstad (Individual Member)
Neil Griffin (Liferay, Inc)	Joshua Wilson (RedHat)
Rodrigo Turini (Caelum)	Stefan Tilkov (innoQ Deutschland GmbH)
Guilherme de Azevedo Silveira (Individual Member)	Frank Caputo (Individual Member)
Christian Kaltepoth (ingenit GmbH & Co. KG)	Woong-ki Lee (TmaxSoft, Inc.)
Paul Nicolucci (IBM)	Kito D. Mann (Individual Member)
Rahman Usta (Individual Member)	Florian Hirsch (adorsys GmbH & Co KG)
Santiago Pericas-Geertsen (Oracle)	Manfred Riem (Oracle)

The Expert Group



- Mailing List
jsr371-users@googlegroups.com
- Project Page
<https://www.mvc-spec.org>
- GitHub Organization
<https://github.com/mvc-spec>

Issue tracker



<https://github.com/mvc-spec/mvc-spec/issues>

- Total number of issues?

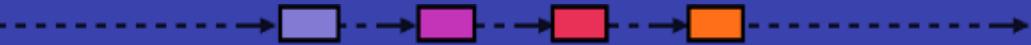
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- How many in each state?

Open **25**

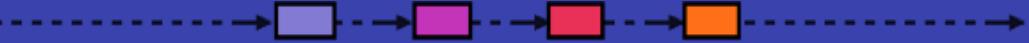
Closed **52**

RI and TCK development



- Specification and API
<https://github.com/mvc-spec/mvc-spec>
- Reference Implementation
<https://github.com/mvc-spec/ozark>
- TCK
<https://github.com/mvc-spec/mvc-tck>

Other deliverables



- MVC 1.0 Cookbook
<https://www.mvc-spec.org/learn/cookbook/>
- MVC 1.0 Hands-on-Lab
<https://github.com/ivargrimstad/mvc-hol>
- Samples
<https://github.com/ivargrimstad/mvc-samples>

IP flow



- **Spec**

JCP License + Apache Software License 2.0

- **RI**

Apache Software License 2.0

When established as Eclipse Ozark:

Eclipse Public License 2.0

- (Secondary) GNU General Public License, version 2 with the GNU Classpath Exception

- **TCK**

Apache Software License 2.0

Publicity



MVC specification
@mvc_spec FOLLOWING @IVAR_GRIMSTAD
MVC 1.0 Specification
Malmo, Sweden · mvc-spec.org

TWEETS 34	FOLLOWING 6	FOLLOWERS 87	LISTED 4	Following	...
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Followed by David R. Heffelfinger, Gaurav Gupta, Rahman USTA and more.

[TWEETS](#) [MENTIONS](#) [LIST](#) [COLLECTION](#) [LIKES](#)

Publicity



<https://www.mvc-spec.org/learn/>

MVC 1.0 – Learn

Secure | https://www.mvc-spec.org/learn/

Learn more about MVC 1.0

This page lists various resources for learning more about MVC 1.0.

MVC 1.0 Cookbook

The MVC 1.0 Cookbook is a collection of small articles which describe how to implement common requirements with MVC 1.0.

Articles

- MVC 1.0 is here to stay
- MVC 1.0 JSR will soon belong to the community
- Possible Ways Forward for MVC 1.0
- Why Another MVC?
- Java EE 8 MVC + Leaflet Map Demo
- MVC 1.0 in Java EE 8: How to Work With Models
- MVC 1.0 in Java EE 8: How to work with Controllers
- MVC 1.0 in Java EE 8: Redirects and Forwards
- MVC 1.0 in Java EE 8: Handling Form Submits
- MVC 1.0 in Java EE 8: Getting Started with NetBeans 8.1 and Payara
- First Look at JSR 371, MVC 1.0 Specification and Ozark RI
- Introduction to the New MVC 1.0 (Ozark RI)
- Getting Started with Action-oriented MVC on Java EE 8
- Bringing MVC with MongoDB
- Add more by editing the file via GitHub

Blog posts

- Why MVC 1.0 is important for Java EE 8
- View technologies for MVC 1.0
- MVC 1.0 is Back!
- MVC on Wildfly
- Java EE 8 MVC with Ozark and Apache Tomcat
- Java EE 8 MVC (JSR-371) Example
- Java EE 8 MVC: Global exception handling
- Java EE 8 MVC: Working with bean parameters

MVC 1.0 – Learn

Secure | https://www.mvc-spec.org/learn/

- Java EE 8 MVC: Working with bean parameters
- Java EE 8 MVC: Working with form parameters
- Java EE 8 MVC: Working with path parameters
- Java EE 8 MVC: Working with query parameters
- Java EE 8 MVC: A detailed look at Controllers
- Java EE 8 MVC: Getting started with Ozark
- Criando uma aplicação com JSR-371 MVC 1-0 (In Portuguese/Brazil)
- JSR-371 (MVC 1.0)-Com TomCat & TomEE (In Portuguese/Brazil)
- JSR-371 (MVC 1.0)-Validação (In Portuguese/Brazil)
- Conheça o MVC 1.0, a nova JSR para um framework MVC action-based na JEE 8 (In Portuguese/Brazil)
- MVC 1.0: JSR para um framework MVC action-based na Java EE 8 (In Portuguese/Brazil)
- Primeiros passos com a especificação do MVC 1.0 (In Portuguese/Brazil)
- Add more by editing the file via GitHub

Talks / Videos

- MVC 1.0 - by Example by Ivar Grimstad/Rene Gielen
- Introduction to MVC 1.0, David Delabassee
- MVC 1.0 (JSR 371)
- Playing With MVC and Java EE 8
- Modern Web Apps with HTML5 Web Components, Polymer, and Java EE MVC 1.0
 - Sample app and slides
- Add more by editing the file via GitHub

Slides

- MVC 1.0 / JSR 371 - David Delabassee
- New MVC 1.0 JavaEE 8 API - Trayan Lliev
- MVC 1.0: Zeitgemäße Webanwendungen in JavaEE - open knowledge GmbH
- Getting start Java EE Action-Based MVC with Thymeleaf - Masatoshi Tada
- Java EE 8 Web Frameworks: A Look at JSF vs MVC - Josh Juneau
- MVC 1.0 - by Example @ GIDS 2016 - Ivar Grimstad
- MVC 1.0 - Now Even Better! - Ivar Grimstad
- Java EE / EE4J MVC (JSR-371) - Daniel Dias (In Portuguese/Brazil)
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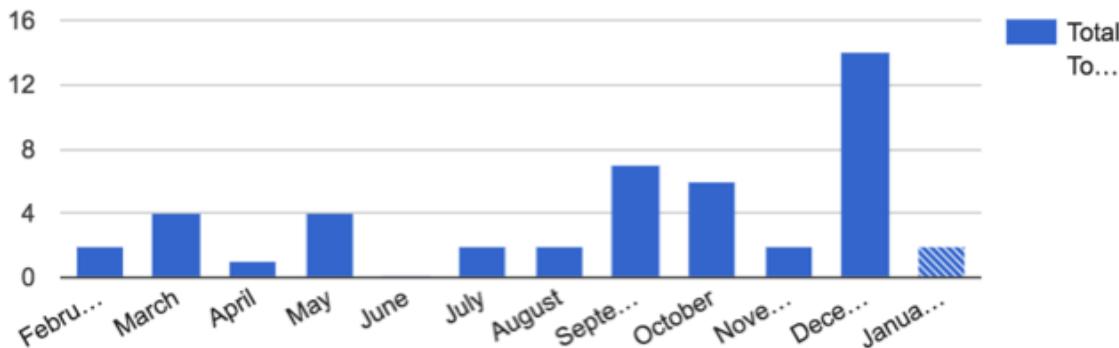
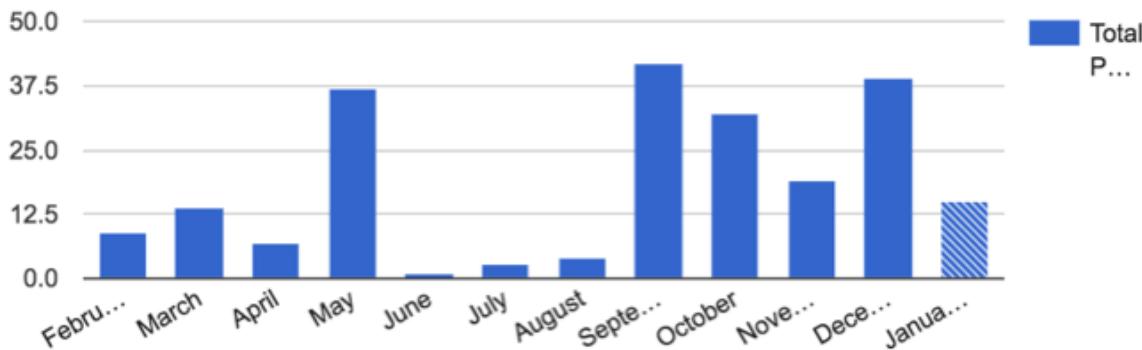


Mailing lists or forums

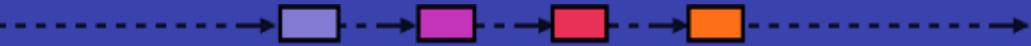


- Mailing List

jsr371-users@googlegroups.com



Adopt-a-JSR



- Are you participating in the Adopt-a-JSR program?
Yes
- **Netherlands JUG**
Review of specification
- **DOAG**
Logotype, Workshop, TCK



Schedule



- **Q4 2017**
 - Public Review
- **Q1 2018**
 - Proposed Final Draft
- **Q2 2018**
 - Final Release





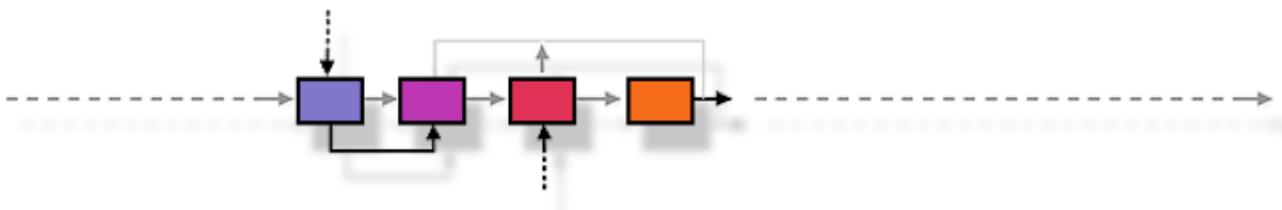
DEMO



Questions, discussion, next steps



Java
Community
Process



Thank you!
<http://jcp.org>