JSR 380 Public Review
Spec Lead Report
May 9 2017
Gunnar Morling, Red Hat
Agenda

• Overview on Bean Validation 2.0
• Working with the expert group and the community
• Questions & discussion
• Bean Validation 1.0/1.1
  – Annotation-based API and metamodel for applying constraints to Java objects
  – Java SE and EE
  – Integrated with JPA, CDI, JAX-RS, JSF etc.

• Bean Validation 2.0: Embrace Java SE 8
  – Support API additions
  – Take advantage of language additions

“Constrain once, validate everywhere!”
History

- JSR 303/Bean Validation 1.0: 2009 (Java EE 6)
- JSR 349/Bean Validation 1.1: 2012 (Java EE 7)
- JSR 380/Bean Validation 2.0
  - Submitted mid 2016
  - Early Draft: February 2017
  - Public Review: April 2017
  - Planned Final Submission: July 2017
JSR 380 - Technical scope and features

• Support Java 8 API additions
  – New date + time API
  – java.util.Optional

• Benefit from language additions
  – Type annotations
  – Repeatable annotations
  – Default methods
JSR 380 - Technical scope and features

• Validation of container elements
  – java.util.Iterable, Map
  – java.util.Optional
  – Your custom container types

• JSR 310 types supported for @Past/@Future

• New built-in constraints
  – @Email, @NotBlank, @NotEmpty
  – @Positive, @Negative

• Constraints marked with @Repeatable
Example 44. Container element constraints

```java
private List<@Email String> emails;

public Optional<@Email String> getEmail() {
    [...] 
}

public Map<@NotNull String, @ValidAddress Address> getAddressesByType() {
    [...] 
}

public List<@NotBlank String> getMatchingRecords(List<@NotNull @Size(max=20) String> searchTerms) {
    [...] 
}
```
The Expert Group

<table>
<thead>
<tr>
<th>Team</th>
<th>Specification Leads</th>
<th>Expert Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gunnar Morling</td>
<td>Canoo AG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>: Hendrik Ebbers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>: Christian Kaltepoth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ingenit GmbH &amp; Co. KG</td>
</tr>
<tr>
<td></td>
<td>Red Hat</td>
<td>Red Hat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>: Emmanuel Bernard</td>
</tr>
<tr>
<td>Contributors</td>
<td></td>
<td>Genidea Sagl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>: Marco Molteni</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oracle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>: Linda Demichiel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Otavio Santana</td>
</tr>
</tbody>
</table>

- Experts from JSR 310, JAX-RS, JavaFX, Java EE
- Open for contributions by everyone
The Expert Group - Working together

• Operating the open source way
• Discussing on the mailing list
• GitHub pull requests
• Proposals on the website
• F2F discussions at conferences
• EVERYTHING is open source and public
Publicity

- Sessions at conferences such as Devoxx US, JavaLand, RivieraDev, jdk.io
- “Adopt-a-JSR for Java EE”
Publicity

- Community surveys on [http://beanvalidation.org](http://beanvalidation.org), asking for feedback on Twitter
- [http://javademo.io/bv-list-email](http://javademo.io/bv-list-email)
Collaboration with other community groups

• JSRs
  – One of JSR 310 (Java Time) leads is part of EG
  – Collaborating with JSR 370 lead (JAX-RS 2.1)
• Reached out to Ceylon team
• Fixed an integration issue with the Java EE platform spec
• JavaFX
Implementations

- Hibernate Validator 6: RI for Bean Validation 2.0
Schedule

• Public Review until May 27th

• Public Review Ballot May 30th - June 12th

• Proposed Final Draft: Second half of June

• Submission for Final Approval Ballot July
  – Ship with Java EE 8
IP flow

• Bean Validation uses Dual Licensing since 1.0
  – Specification, API, TCK, RI provided under the Apache Software License 2.0
  – Specification, API, JavaDoc additionally available under the JCP click through license

• Open for contributions by everyone
  – Applying CLA
RI and TCK development

• Development fully based on open source principles
• Source code on GitHub
  – [https://github.com/hibernate/hibernate-validator](https://github.com/hibernate/hibernate-validator)
• Binaries on Maven Central
Other deliverables

- Provided by the RI (hibernate.org/validator):
  - Extensive reference guide
  - Example projects
  - FAQ
Adopt-a-JSR

• Discussed some questions with Medellin JUG
• Java EE demo built by Marco Molteni
Mailing lists or forums

• Mailing list
  – Primary communication channel
  – Open to everyone
  – ~65 threads for BV 2.0
  – ~35 messages per month

• Forum
  – Not used as much

• Also discussions on GitHub pull requests
Issue tracker

• [https://hibernate.atlassian.net/projects/BVAL](https://hibernate.atlassian.net/projects/BVAL)

• 84 issues for 2.0.x
  – Open: 11
  – In Progress: 0
  – Reopened: 0
  – Resolved: 5
  – Closed: 73

• Website issues handled separately
Document archive

• All spec revisions at http://beanvalidation.org/specification/
  – Drafts
  – Diff to previous versions
  – API diffs

• Original proposals at http://beanvalidation.org/proposals/
Questions & Discussion
Thank you!