



OBJECT
COMPUTING
HOME TO GRAILS & MICRONAUT

2GM Town Hall Meeting

Presented by: Jeff Brown, James Kleeh,
Puneet Behl, and Jen Wiese

Special Guest: David Estes



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Agenda

- Introductions
- State of Micronaut
- State of Grails
- Micronaut Foundation Updates
- Exciting Announcements
- Community Q&A



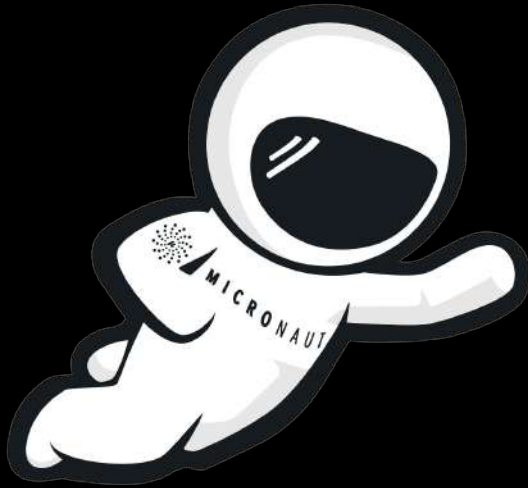
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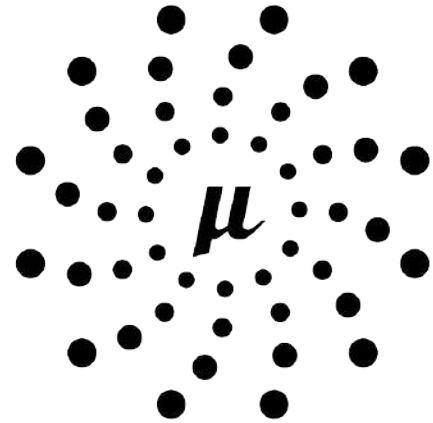


Let's Talk Micronaut

- Timeline of Micronaut
- Community Involvement
- Micronaut 2.0
- The Future of Micronaut



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Micronaut Timeline



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- First commit in March 2017 (Project Particle)
- First milestone in May 2018 (went open source)
- 1.0.0 in October 2018
- 2.0.0 in June 2020
- Going forward we will strive for
- Patch every 2 wks, Minor every 6 wks, Major release yearly

Community Involvement



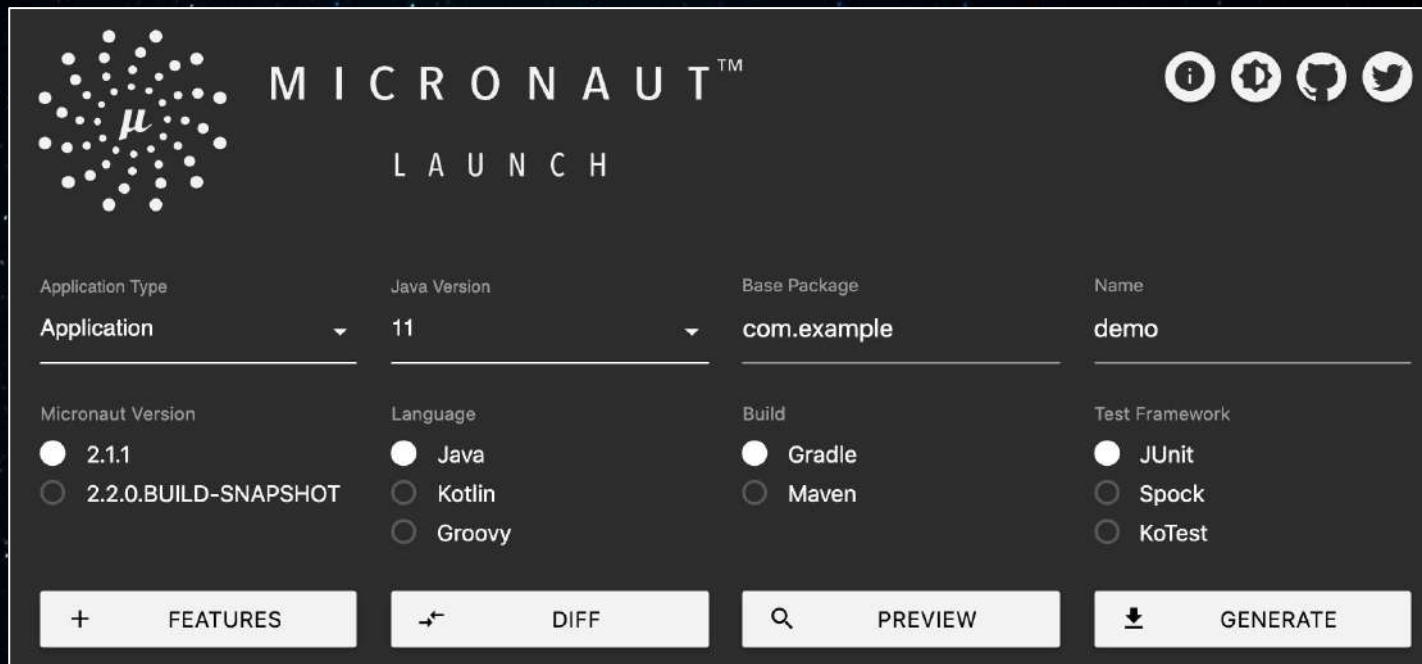
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Micronaut has many contributors across organizations and individuals. Some repositories are community driven

- Over 250 unique contributors to the core repository alone
- 4.2k stars on GitHub
- Over 1500 people in our Gitter community
- Over 750 questions in stackoverflow

Micronaut Launch

Almost 20,000 applications created since the launch at the start of May 2020!



The screenshot shows the Micronaut Launch web interface. At the top left is the Micronaut logo (a cluster of dots with a Greek letter mu in the center). To its right is the text "MICRONAUT™" and "LAUNCH". In the top right corner are four circular icons: an information icon, a GitHub icon, a Discord icon, and a Twitter icon.

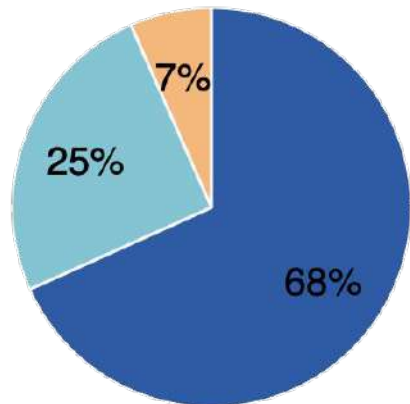
The main content area contains four columns of configuration options:

- Application Type:** A dropdown menu with "Application" selected.
- Java Version:** A dropdown menu with "11" selected.
- Base Package:** A text input field containing "com.example".
- Name:** A text input field containing "demo".
- Micronaut Version:** Radio buttons for "2.1.1" (selected) and "2.2.0.BUILD-SNAPSHOT".
- Language:** Radio buttons for "Java" (selected), "Kotlin", and "Groovy".
- Build:** Radio buttons for "Gradle" (selected) and "Maven".
- Test Framework:** Radio buttons for "JUnit" (selected), "Spock", and "KoTest".

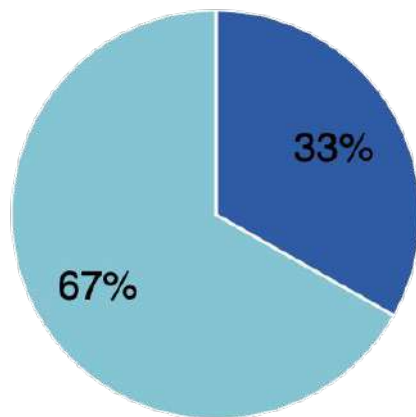
At the bottom, there are four buttons: "+ FEATURES", "↔ DIFF", "🔍 PREVIEW", and "⬇️ GENERATE".

Micronaut Launch Insights

● Java ● Kotlin ● Groovy



● Maven ● Gradle



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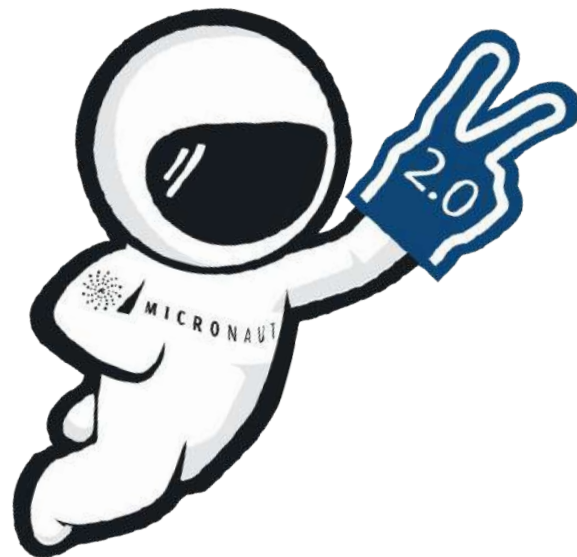
Most selected features include Micronaut Data and Micronaut Security

Micronaut 2.x



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- Gradle and Maven Plugins
- Groovy 3 / JDK 14
- Improved Performance
- GraalVM Native Image Improvements
- Servlet Support
- HTTP/2
- Many more ...



What's Next?



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- Major enhancements and improvements to Micronaut Data including reactive SQL, document and graph datastores, and more
- More integrations with cloud providers
- Kotlin DSL for Gradle
- Improved Kubernetes Support
- Support for more authentication options in the security module
- Integrations with more messaging solutions
- Numerous improvements to existing features and improved performance

Grails Updates

- Grails 4.0 Highlights
- Grails 4.1.0.M2
- Grails Roadmap
- Groovy 4 Sneak Peek



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GRAILS



Grails 4.0 Highlights



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- Apache Groovy 2.5
- Gradle 5
- Spring 5 and Spring Boot 2.x
- GORM 7 / Hibernate 5.3+ (
- All operation would require transaction
- Proxy behaviour has changed
- GORM Datastore REST client removed
- Micronaut Integration



Groovy Changes



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- Upgrade to Groovy 2.5
- No more "all" JAR
- New Extensions
- Date extension require a separate dependency
- JDK 11 warnings not resolved



Plugins



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- Most of them should just work, unless
- ...
- Use Grails Views instead of Grails Converters plugin it will be



Micronaut Integration



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- Reduced memory consumption and faster startup
- No reflection, no runtime proxies, no runtime bytecode generation etc.
- Micronaut Features- HTTP Client, RabbitMQ / Kafka Client
- Create configurations instead of plugins - some things only work with plugins (such as GSP, Views, TagLibs etc.)
- Plugin configuration using @ConfigurationProperties
- @Singleton, @Factory, @Requires, @Replaces



Grails 4.0.4

- Updated to Micronaut 1.3.7
- Improvements in REST API Profile
- Ability to load configurations from the plugin.groovy
- Significant improvements to the performance of compileGroovyPages and compileJsonView Gradle tasks
- Spring Boot 2.1.15
- Spring 5.1.16
- Grails 4.0.5 will be released later this month...



Improvements/Updates

- Update to the latest Elasticsearch in the Grails Elasticsearch plugin
- Injecting GORM Data Services
- GORM for GraphQL 2.0.0 (GraphQL Java 14)



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Grails 4.1.0 Milestones



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- Micronaut 2.0.x
- Spring Framework 5.2.7
- Spring Boot 2.2.8
- Spock 2.0-M2-groovy-3.0
- Updated builds to Gradle 6.5
- GORM 7.1.0.M2
- Grails Views, GSP, Testing Support libraries
- Groovy 3.0.5 - No more warnings with JDK11
- Gradle 6.5
- Grails Profiles - Dependency scopes changes
- GORM for MongoDB to support MongoDB Sync Driver 4.0.3
- GORM for Neo4j to use Neo4j driver 4.0.1

Grails Roadmap



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- Native support for web-sockets
- Transaction support in GORM for MongoDB
- Better support for Kafka, such as improvements in the CLI for creating Kafka listeners through the plugin
- Ability to use GSP in Micronaut and Spring Boot applications by making GSP more modular and independent to Grails
- Converting many Grails plugins or internals to Micronaut
- Support for the latest Groovy and JDK
- More Documentation and Blogs
- More to come ...

Grails Community Updates



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- Grails State of Union Blog (<https://grails.org/blog/2020-09-10-grails-state-of-union.html>)
- Grails Engineering Meeting (<https://github.com/grails/grails-core/wiki/Engineering-Meeting>)
grails-eng-meeting-request@objectcomputing.com
- Grails Community (<https://grails.org/community.html>)
- Upcoming online session on Grails 4 Features & Developments at [Bangalore Groovy User Group \(Bangalore, India\)](#)
<https://www.meetup.com/Bangalore-Groovy-Grails-Meetup/>

Groovy Updates

- Groovy 3 Highlights
- Groovy 4 Roadmap



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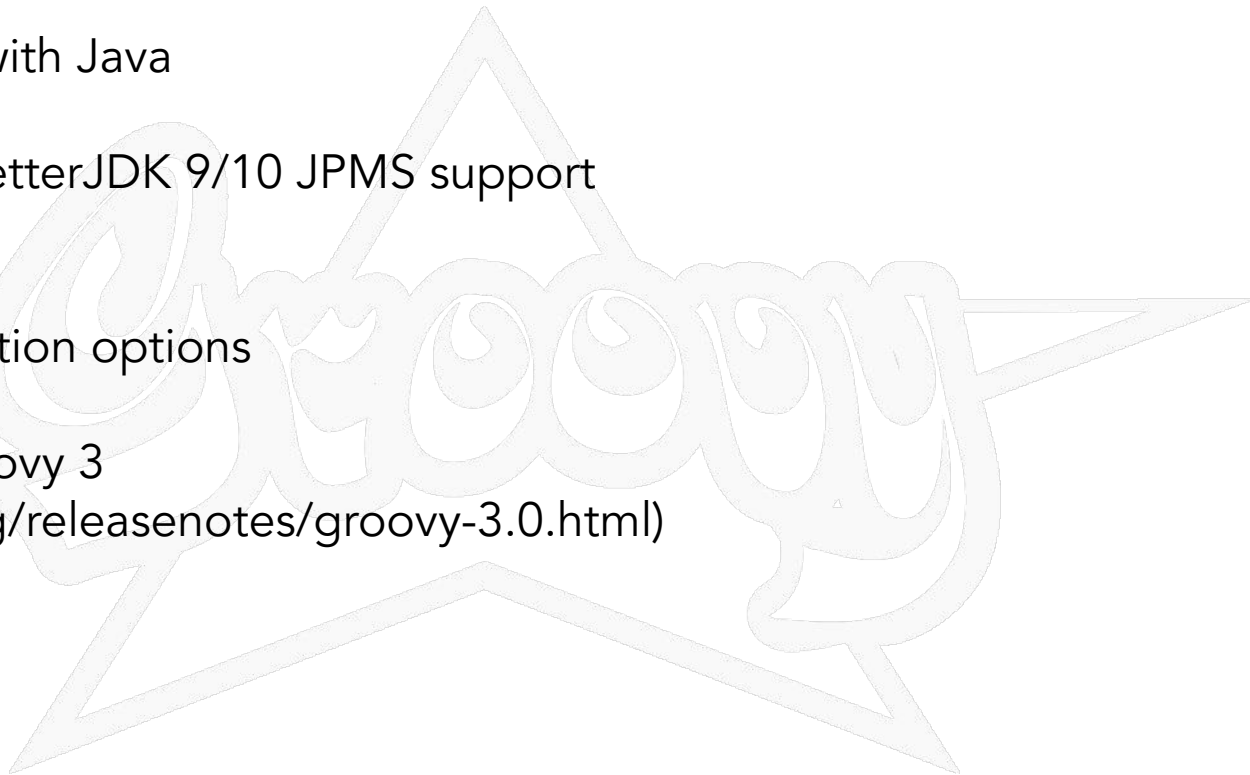


Groovy 3 Highlights



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- Parrot parser
- Improved copy/pastewith Java
- New syntax/operators
- JDK8 minimum and betterJDK 9/10 JPMS support
- Other improvements
- GDK additions
- Additional documentation options
- Split Packages
- Release Notes for Groovy 3
(<http://groovy-lang.org/releasenotes/groovy-3.0.html>)

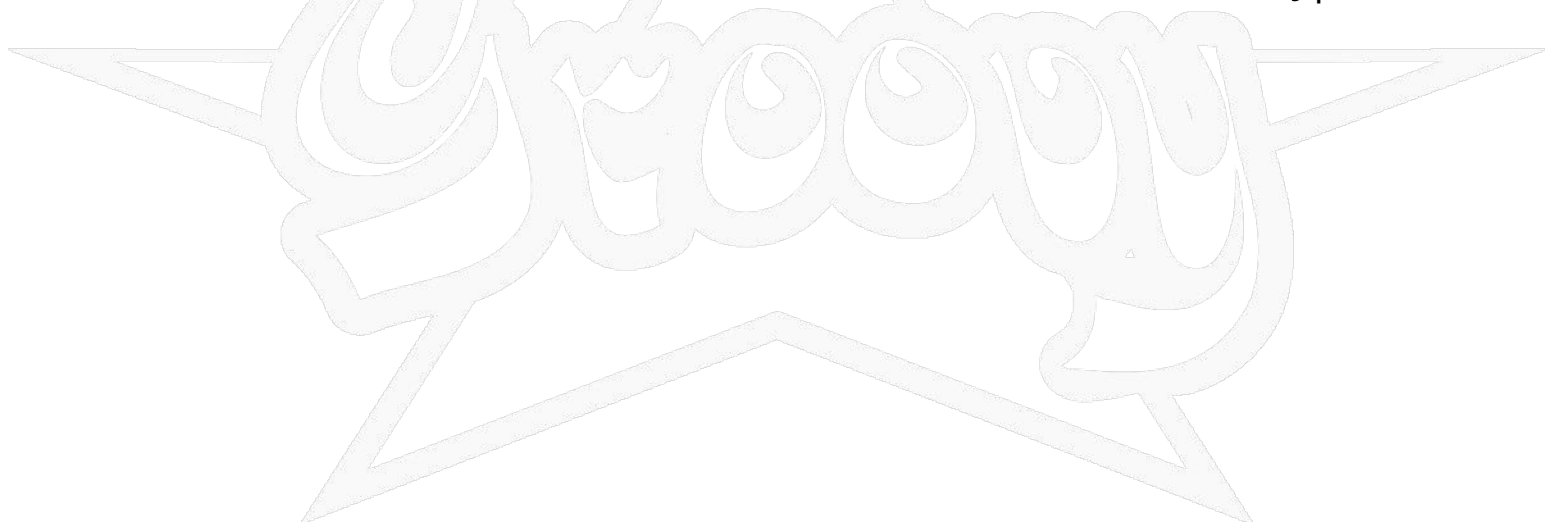


Groovy 4 Roadmap



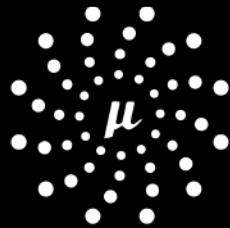
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- Important naming/structuring changes `org.codehaus.groovy` -> `org.apache.groovy`
- Built-in type checkers `@TypeChecked(extensions = 'groovy.typecheckers.RegexChecker')`
- AST Transforms to meta-annotation (`@Immutable`, `@RecordType`)





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MICRONAUT FOUNDATION

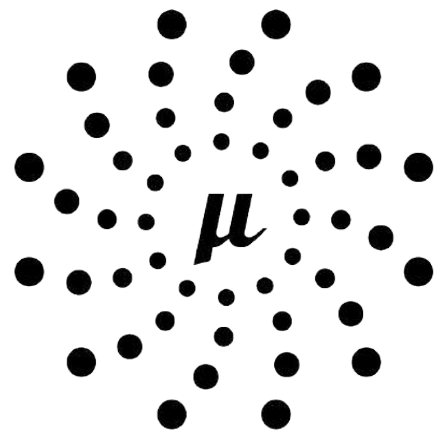
- Micronaut Foundation is a not-for-profit organization that exists to support and collectively lead the open source Micronaut® project
- Micronaut Foundation is supported by a Technology Advisory Board that ensures the Framework continues to reflect and serve its diverse and growing user community
- Micronaut Foundation serves to:
 - Ensure technical innovation and advancement of Micronaut as a free and open public use software development framework for a growing global community
 - Evangelize and promote the Micronaut framework as a leading technology in the JVM space
 - Build and support an ecosystem of complementary documentation, functionality, and services.
- For more information on becoming a contributing member and for organizations interested in nominating a representative to the Micronaut Foundation Technical Advisory Board, please contact us at foundation@micronaut.io

Well This is Exciting!

- As a not-for-profit organization, the Micronaut Foundation relies on the financial support from our amazing community of generous sponsors.
- So the foundation is please to offer several ways to support the Micronaut Foundation....from Corporate sponsorships, to Community sponsorships, to sponsoring the Micronaut Project on Github!
- Plus bags of swag for our "Community All Star" supporters with limited edition swag!



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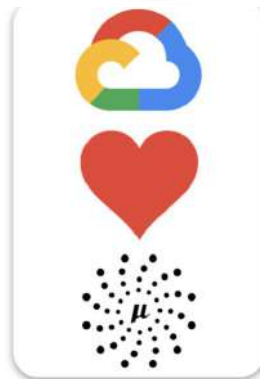
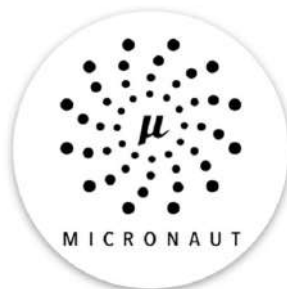


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SHOW ME THAT SWAG!



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We Are Excited To Announce.....



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 - Build and support an ecosystem of complementary documentation, functionality, and services
- For more information on becoming a contributing member and for organizations interested in nominating a representative to the Grails Foundation Technical Advisory Board, please contact us at grails.org/foundation.

Some Kind Words About David...



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"David is a tremendous asset to the community, an exemplar of an extraordinary technologist, a pleasure to collaborate with, and just a damn fine person."

- Jeff Scott Brown

"David has consistently contributed amazing functionality to the Grails framework through plugins over the years which have massively benefited the Grails community. David's plugins, in particular Asset Pipeline, are broadly used by the Grails community and are appreciated by everyone."

- Graeme Rocher

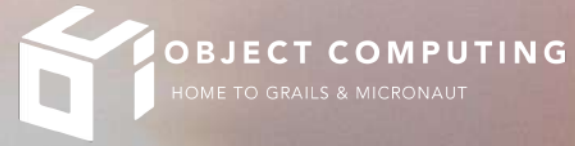
"I can't think of anyone else more deserving!"

- James Kleeh

"He is definitely a Rock Star and should be recognized this year."

- Joe McCall

Grails Rock Star Award Winner



David Estes

GRAILS COMMUNITY ROCK STAR AWARD





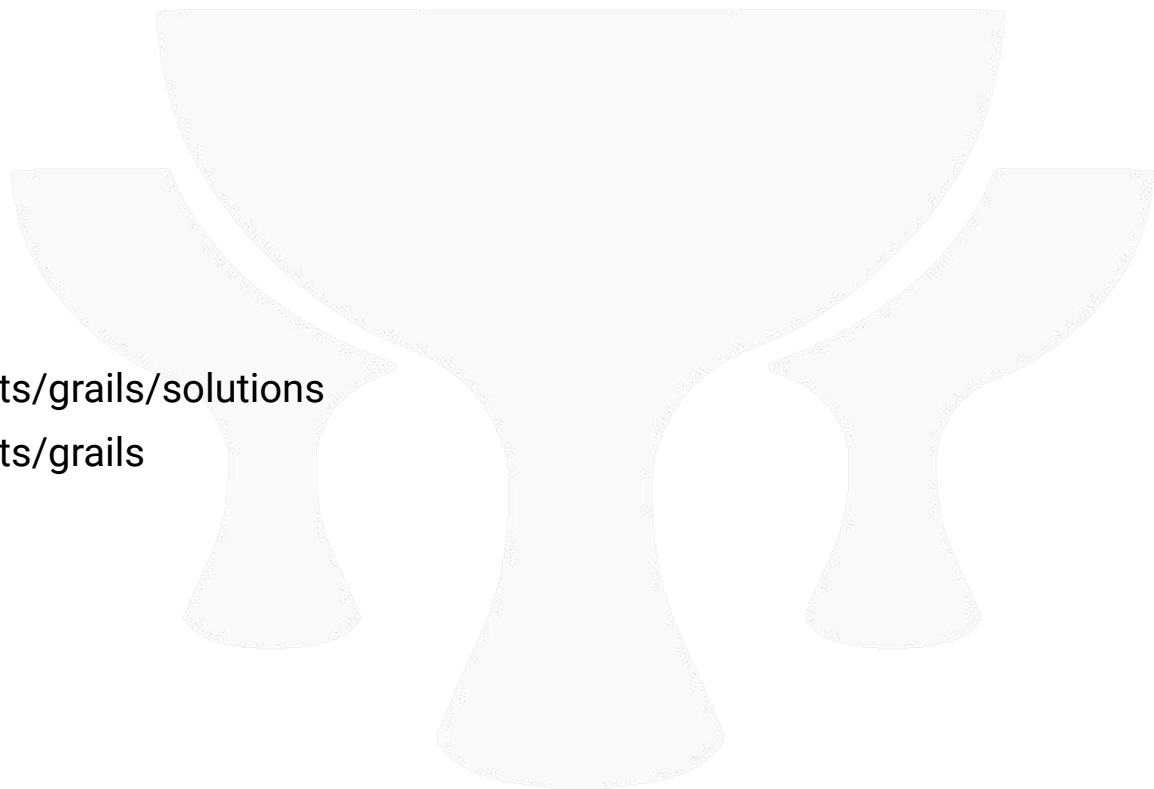
MICRONAUT COMMUNITY RESOURCES

- [@micronautfw](#)
- [gitter.im/micronautfw](#)
- [micronaut.io/launch](#)
- [docs.micronaut.io](#)
- [micronaut.io/learn](#)
- [guides.micronaut.io](#)
- [micronaut.io/blog](#)
- [micronaut.io/faq](#)
- [micronaut.io/foundation](#)
- [github.com/micronaut-projects/micronaut-core](#)
- [objectcomputing.com/products/micronaut/solutions](#)
- [objectcomputing.com/products/micronaut](#)
- [objectcomputing.com/resources/events](#)



GRAILS & GROOVY COMMUNITY RESOURCES

- [@grailsframework](#)
- [Grails.org](#)
- [github.com/grails](#)
- [Grails-slack.cfapps.io](#)
- [grails.org/blog/index.html](#)
- [grails.org/foundation](#)
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Q&A



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THANK YOU! LET'S STAY CONNECTED

✉ 2GM@objectcomputing.com

🐦 @micronautfw

🐦 @grailsframework

🐦 @ApacheGroovy

