

Java User Group Philippines Meetup #2

Thanking the sponsors...

"The food is provided by Azul, who also provide fast and cost-efficient Java!"

"The venue is provided by O&B Software Labs"

"Free licenses by JetBrains"

The Azul logo, featuring the word "azul" in a dark blue, lowercase, sans-serif font.The PinoyJUG logo, featuring the text "PINOYJUG" in a large, bold, yellow, serif font, with "ASSOCIATION OF FILIPINO JAVA DEVELOPERS" in a smaller, black, sans-serif font below it.The Orange & Bronze Software Labs logo, featuring the text "ORANGE & BRONZE" in a large, bold, orange and brown, serif font, with "Software Labs, Inc." in a smaller, black, sans-serif font below it.

Join the Community



Foojay Slack: bit.ly/join-foojay-slack



facebook.com/groups/jugph



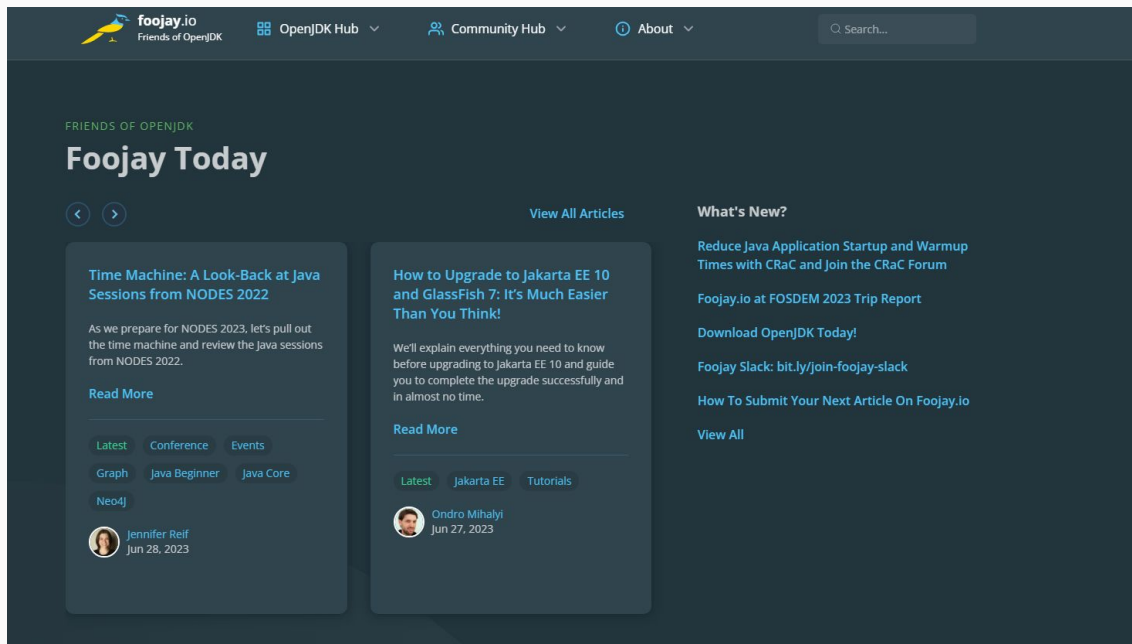
meetup.com/java-user-group-ph/



twitter.com/jugphilippines

Checkout Foojay.io

<https://foojay.io/>



Checkout Dev.java

<https://dev.java/>



The screenshot shows the homepage of the dev.java website. The header is dark blue with the Java logo and navigation links: Learn, Download, Community, Contribute, News, Future. A search bar is on the right. The main banner is dark blue with the Oracle DevLive logo, the text 'Level Up', and 'Java 20 is Here!'. It includes a sub-headline 'Learn more about this milestone release now.' and an orange button 'Learn about Java 20'. Below the banner, the section 'The Destination for Java Developers' features the text 'Hundreds of tutorials, news and videos from the experts, all right here.' and three colored boxes: 'Get Started' (blue) with links to 'Getting Started with Java', 'Java Language Basics', and 'Downloading Java'; 'Go Deeper' (orange) with links to 'Lambda Expressions', 'The Stream API', and 'The Collections Framework'; and 'Resources' (green) with links to 'Java News', 'Official Java Podcast and More', and 'JavaOne Conference 2022'.

Java™ Learn Download Community Contribute News Future

ORACLE DevLive

Level Up

Java 20 is Here!

Learn more about this milestone release now.

Learn about Java 20

The Destination for Java Developers

Hundreds of tutorials, news and videos from the experts, all right here.

Get Started

- [Getting Started with Java](#)
- [Java Language Basics](#)
- [Downloading Java](#)

Go Deeper

- [Lambda Expressions](#)
- [The Stream API](#)
- [The Collections Framework](#)

Resources

- [Java News](#)
- [Official Java Podcast and More](#)
- [JavaOne Conference 2022](#)



Quarkus and OpenShift Development





Meet

REYNALDO JOHN TRISTAN MAHINAY

Senior Technical Specialist and Java SME at IBM

- Tristan Mahinay is currently a JUG Leader of Java User Group Philippines.
- He is also a Senior Technical Specialist and Java SME for IBM CIC Philippines.
- Tristan has been developing Java-based applications for 5 years.
- He spends a significant amount of his time blogging, reading, and contributing to the Java community.

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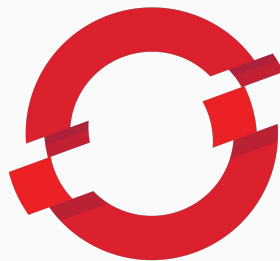
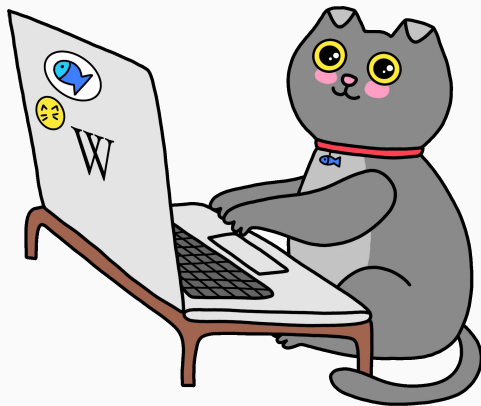
me@rjtmahinay.com



What will the
audience expect
today?

Live coding using IntelliJ
and Gradle

Deployment to RedHat
OpenShift using an
extension



OPENSIFT

What is Quarkus?

Kube-native

Cloud-native

**Support for
Reactive Code**

**Industry/Community
Standards**

Developer-Centric

Kubernetes-native

- Increase productivity using built-in features of Kubernetes
 - Application Configuration
 - Health Metrics
 - Single-step Deployments (S2I) - using Quarkus Extension
 - Remote Development
- Remote Development can be done by using the ff:
 - `quarkus:remote-dev` (Maven)
 - `quarkusRemoteDev` (Gradle)

Cloud-native

- Low memory footprint
- Reduced reflection
- Fast boot time
- Support for GraalVM


Support for Reactive Code

- Support HTTP Microservices
 - RESTEasy Classic
- Reactive Programming
 - RESTEasy Reactive
 - SmallRye Mutiny
- Event-driven Applications
 - AMQP
 - Apache Kafka
 - Apache Camel
- Function/Serverless
 - AWS Lambda
 - Google Cloud Functions
 - Azure Functions
 - Quarkus Funqy

Developer-Centric

- Live Coding
- Remote Development
- DevUI
 - Can be access in development mode and by executing `quarks:dev` goal or `quarkusDev` task
- Continuous Testing in DevUI
- CLI

Dev UI

 Dev UI

Extensions

Configuration

Continuous Testing

Dev Services

Build Metrics

Information

Extensions

ArC

Cache

Datasources

Hibernate ORM

Kubernetes

Micrometer metrics

OpenShift

SmallRye Health

SmallRye OpenAPI

Caffeine

Container Image

Agroal - Database connection pool

Eclipse Vert.x

Hibernate ORM with Panache

JDBC Driver - H2

Build time CDI dependency injection

Enable application data caching in CDI beans

Configure your datasources

Define your persistent model with Hibernate ORM and Jakarta Persistence

Generate Kubernetes resources from annotations

Instrument the runtime and your application with dimensional metrics using Micrometer.

Generate OpenShift resources from annotations

Monitor service health

Document your REST APIs with OpenAPI - comes with Swagger UI

Caffeine is a high performance, near optimal caching library.

Build container images of your application

Pool JDBC database connections

Write reactive applications with the Vert.x

Simplify your persistence code for Hibernate ORM with Panache

Connect to the H2 database via JDBC

Beans 96

Observers 4

Removed components 104

Reset

Persistence Units

Entity Types

Named Queries

Kubernetes Manifests

Prometheus

Deploy to OpenShift

Health

Health UI

Schema yaml

Schema json

Swagger UI

Version 3.1.5

Quarkus 3.1.2.Final

Server Testing

2023-06-29 00:08:06,591 WARN [] (Quarkus Main Thread) Unrecognized configuration key "quarkus.employee.job.title" was provided; it will be ignored; verify that the dependency extension for this configuration is set or that you did not make a typo

2023-06-29 00:08:06,591 WARN [] (Quarkus Main Thread) Unrecognized configuration key "quarkus.employee.name" was provided; it will be ignored; verify that the dependency extension for this configuration is set or that you did not make a typo

2023-06-29 00:08:07,864 INFO [io.qua.boo.run.Timing] (Quarkus Main Thread) quarkus-java 1.0-SNAPSHOT on JVM (powered by Quarkus 3.1.2.Final) started in 9.126s. Listening on: http://localhost:8080

2023-06-29 00:08:07,867 INFO [io.qua.boo.run.Timing] (Quarkus Main Thread) Profile dev activated. Live Coding activated.

2023-06-29 00:08:07,869 INFO [io.qua.boo.run.Timing] (Quarkus Main Thread) Installed features: [agroal, cache, cdi, config-yaml, hibernate-orm, hibernate-orm-panache, jdbc-h2, jdbc-mysql, kubernetes, micrometer, narayana-jta, rest-client, rest-client-jackson, resteasy-jackson, security, security-jpa, smallrye-context-propagation, smallrye-health, smallrye-openapi, swagger-ui, vertx]

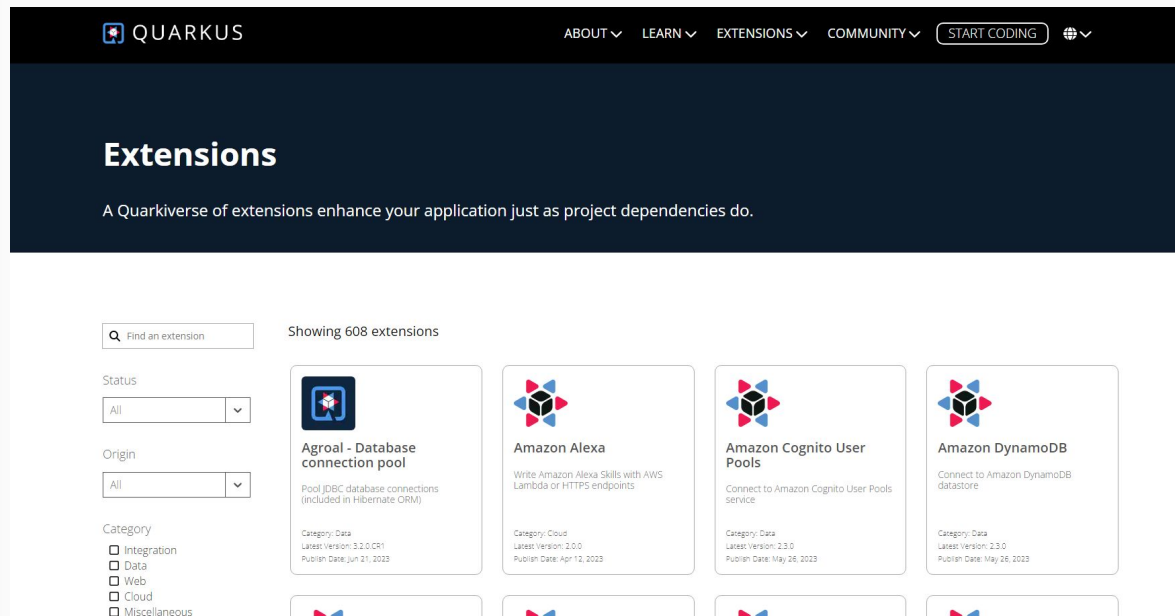
Industry/Community Standards

- Support the usage of JAX-RS/JAX-WS, JPA, Microprofile, Vert.x, Micrometer, Spring Framework and so on..

What is an extension?

<https://quarkus.io/extensions/>

Enhance your Quarkus applications just like a project dependency.



The screenshot shows the Quarkus website's 'Extensions' page. The header is dark blue with the Quarkus logo and navigation links: ABOUT, LEARN, EXTENSIONS, COMMUNITY, and a START CODING button. The main heading is 'Extensions' with a subtext: 'A Quarkiverse of extensions enhance your application just as project dependencies do.' Below this, there's a search bar and filters for Status, Origin, and Category. The Category filter is expanded, showing checkboxes for Integration, Data, Web, Cloud, and Miscellaneous. The main content area displays 'Showing 608 extensions' and lists four featured extensions: Agroal - Database connection pool, Amazon Alexa, Amazon Cognito User Pools, and Amazon DynamoDB. Each extension card includes the Quarkus logo, the extension name, a brief description, the category, latest version, and publish date.

QUARKUS ABOUT ▾ LEARN ▾ EXTENSIONS ▾ COMMUNITY ▾ START CODING

Extensions

A Quarkiverse of extensions enhance your application just as project dependencies do.

Find an extension


Status: All ▾

Origin: All ▾

Category:

- ☐ Integration
- ☐ Data
- ☐ Web
- ☐ Cloud
- ☐ Miscellaneous


Showing 608 extensions



Agroal - Database connection pool

Pool JDBC database connections (included in Hibernate ORM)


Category: Data
Latest Version: 3.2.0.CR1
Publish Date: Jun 21, 2023



Amazon Alexa

Write Amazon Alexa Skills with AWS Lambda or HTTPS endpoints


Category: Cloud
Latest Version: 2.0.0
Publish Date: Apr 12, 2023



Amazon Cognito User Pools

Connect to Amazon Cognito User Pools service

Category: Data
Latest Version: 2.3.0
Publish Date: May 26, 2023



Amazon DynamoDB

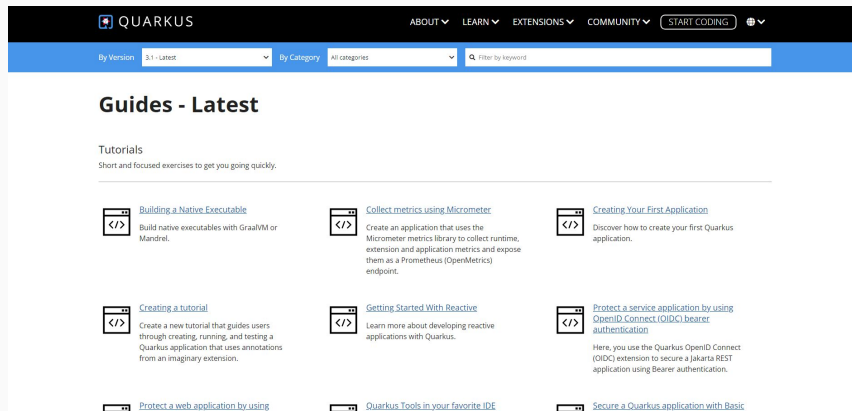
Connect to Amazon DynamoDB database

Category: Data
Latest Version: 2.3.0
Publish Date: May 26, 2023

Where to start?

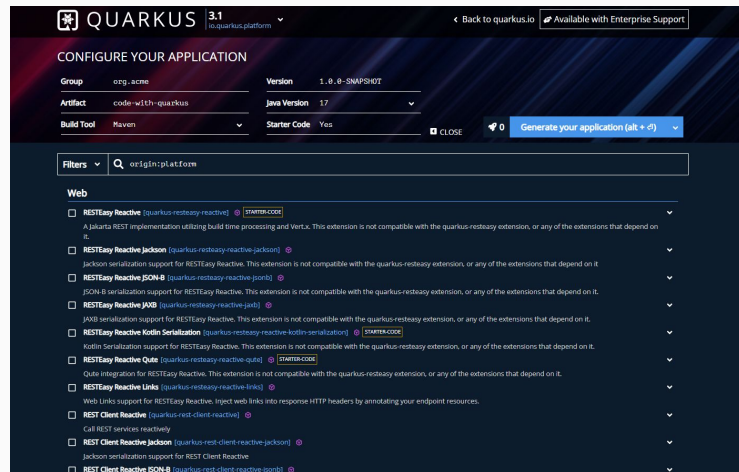
Quarkus Documentation

<https://quarkus.io/guides/>



Quarkus_INITIALIZER

<https://code.quarkus.io/>

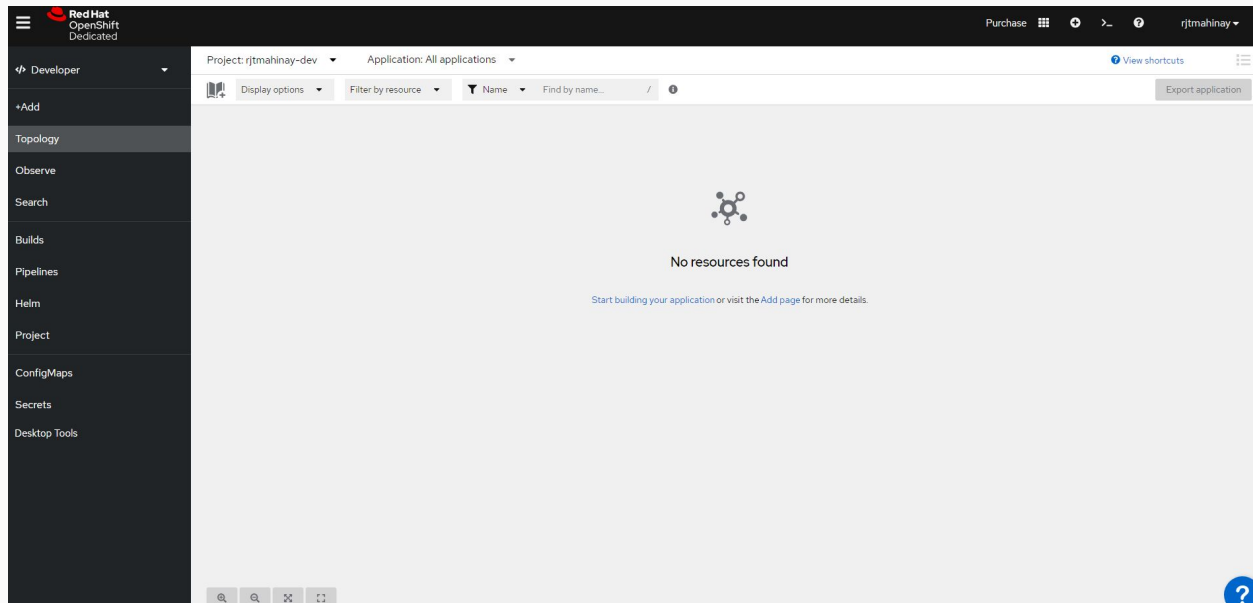


Demo

What is OpenShift?

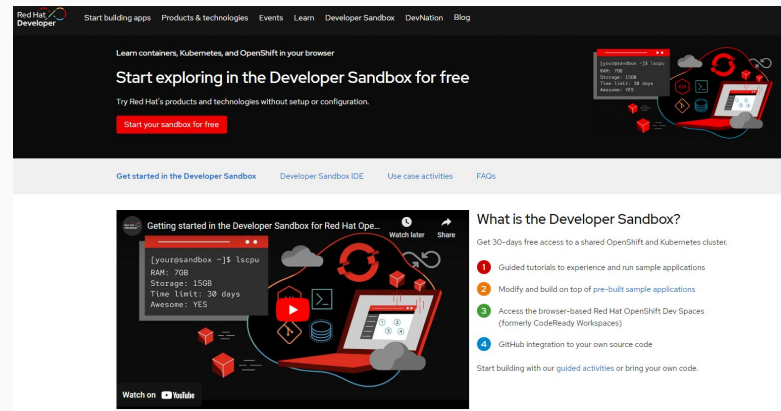
**Kubernetes-based
Platform**

Hybrid Cloud



OpenShift Sandbox


- Visit: <https://developers.redhat.com/developer-sandbox>
- 30 days access
- Data are deleted after the given period but you can provision a sandbox again.



What is S2I?

Source-to-Image (S2I) is a framework that makes it easy to write images that take application source code as an input and produce a new image that runs the assembled application as output.

Extensions > OpenShift



OPENSIFT

Generate OpenShift resources from annotations

TRY THIS EXTENSION

DOCUMENTATION

Make sure to use the [documentation](#) to get your questions answered.

INSTALLATION

To add this extension to your project, use the relevant command in your Quarkus project directory:

```
Quarkus CLI
```

Latest Version	Publish Date
3.2.0.CR1	Jun 21, 2023
Group ID	Artifact ID
io.quarkus	quarkus-openshift
Built with	Status
3.2.0.CR1	stable
Category	Platform
cloud	io.quarkus.platform:Quarkus

Demo

Want to contribute to Quarkus?

<https://github.com/quarkusio/quarkus>

The screenshot shows the GitHub repository page for `quarkusio / quarkus`. The repository is public and has 266 watches, 2.3k forks, and 11.9k stars. The main branch is `main` with 41 branches and 245 tags. The repository is described as "Quarkus: Supersonic Subatomic Java." and is licensed under Apache-2.0. The repository has 239 releases, with the latest being 1.12.Final, released 2 weeks ago. There are 815 contributors. The repository is categorized by tags: `java`, `kubernetes`, `reactive`, `cloud-native`, and `hacktoberfest`. The repository also has a README, a security policy, and an activity feed. The repository is also featured in the "Releases" section, which shows the latest release, 1.12.Final, released 2 weeks ago. The repository is also featured in the "Contributors" section, which shows 815 contributors. The repository is also featured in the "About" section, which provides more information about the project.

quarkusio / quarkus

<> Code Issues 2.3k Pull requests 154 Discussions Actions Projects 8 Wiki Security Insights

quarkus Public

Go to file Add file <> Code

sbryozkin Merge pull request #34360 from michelle-purcel/SECURITY-ARCHITECT... 3 hours ago 39,170 commits

forbiddenapis	Drop and ban commons-io dependency from quarkus-core-deployment	5 months ago
github	Adjust some native builds timeouts	last week
gitpod	GitPod - review - add changes on Dockerfile and quarkus command	last year
idea	Add Quarkus dark logo from design.jboss.org	7 months ago
jbang	make it easy to record/update api-changes xml file with jbang script	10 months ago
mvn	fix dont publish test-classes bound mvn runs and tag them to be able...	2 weeks ago
adr	all: fix some typos	9 months ago
bom	Merge pull request #34263 from quarkusio/dependabot/maven/org.che...	yesterday
build-parent	Merge pull request #34173 from quarkusio/dependabot/maven/org.asci...	last week
core	Merge pull request #34069 from radcortez/config-processor	5 hours ago
coverage-report	Merge jacoco-maven-plugin's executions to avoid build warning	8 months ago
devtools	Merge pull request #34240 from ia3andy/fix-exceptions	yesterday
docs	Merge pull request #34368 from michelle-purcel/SECURITY-ARCHITECT...	3 hours ago
extensions	Merge pull request #34348 from nahquan/global-interceptor-producer...	11 hours ago
independent-projects	Merge pull request #34339 from geoand/r-r-instance	7 hours ago
integration-tests	Merge pull request #34348 from nahquan/global-interceptor-producer...	11 hours ago
relocations	Fix versions in quarkus-opentelemetry-exporter-jaeger relocations	3 weeks ago

About

Quarkus: Supersonic Subatomic Java.

quarkus.io

java kubernetes reactive cloud-native hacktoberfest

Readme

Apache-2.0 license

Security policy

Activity

11.9k stars

266 watching

2.3k forks

Report repository

Releases 239

1.12.Final (latest) 2 weeks ago

+ 238 releases

Contributors 815

Q & A

Raffle