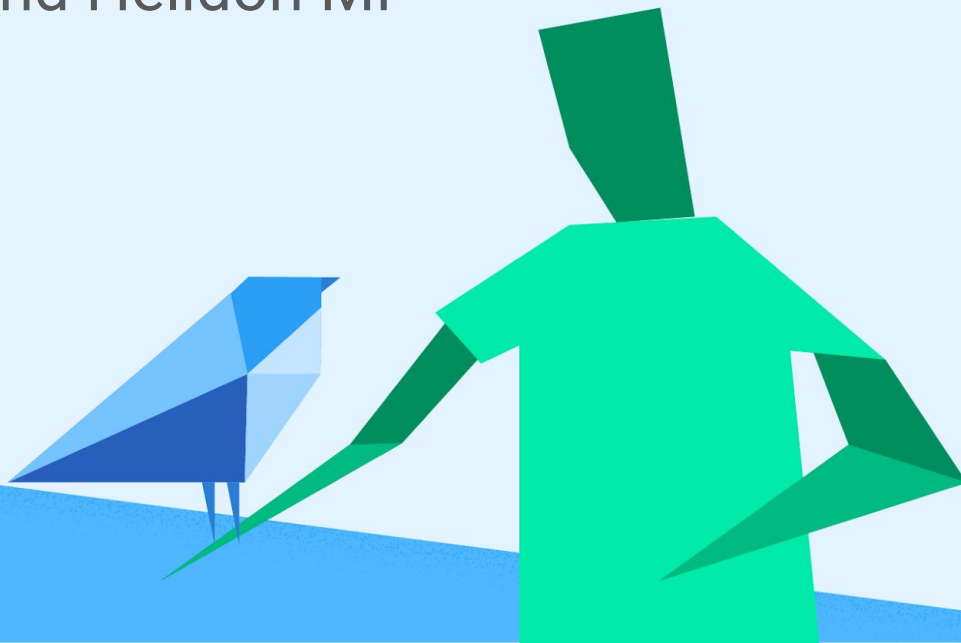




Program Agenda



1. What is Helidon?
2. Helidon SE and Helidon MP
3. Demo
4. Conclusions



Safe Harbour Statement



The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.



A set of Java libraries for developing microservices



Helidon = Swallow (Greek)

Project Helidon

- Open
- Innovative
- Support standards
- Supported active project



Open Source



- Hosted on GitHub
 - <https://github.com/oracle/helidon>
- Apache 2.0 License

The screenshot shows the GitHub repository page for `oracle/helidon`. At the top, the repository name is displayed with icons for watching (60), starring (757), and forking (87). Below this is a navigation bar with tabs for Code, Issues (22), Pull requests (4), Projects (11), Wiki, Insights, and Settings. The main content area shows the repository description: "Java libraries for writing microservices" with a link to <https://helidon.io> and an "Edit" button. Below the description are tags for `java`, `microservice-framework`, `microprofile`, `netty`, and `reactive`, along with a "Manage topics" link. At the bottom, a summary bar displays statistics: 107 commits, 10 branches, 5 releases, and 9 contributors. The license, "Apache-2.0", is shown on the right and is circled in red.

oracle / helidon

Unwatch 60 Unstar 757 Fork 87

Code Issues 22 Pull requests 4 Projects 11 Wiki Insights Settings

Java libraries for writing microservices <https://helidon.io> Edit

java microservice-framework microprofile netty reactive Manage topics

107 commits 10 branches 5 releases 9 contributors Apache-2.0

Supported active project



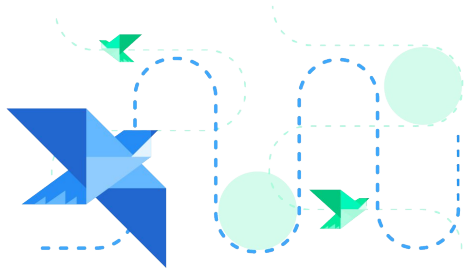
- Web Site with guides and tutorials
 - <https://helidon.io>
- Public Slack channel
 - <https://helidon.slack.com>
- Contributions are welcome!

Landscape



helidon SE

- Microframework
- Functional style
- Reactive
- Transparent

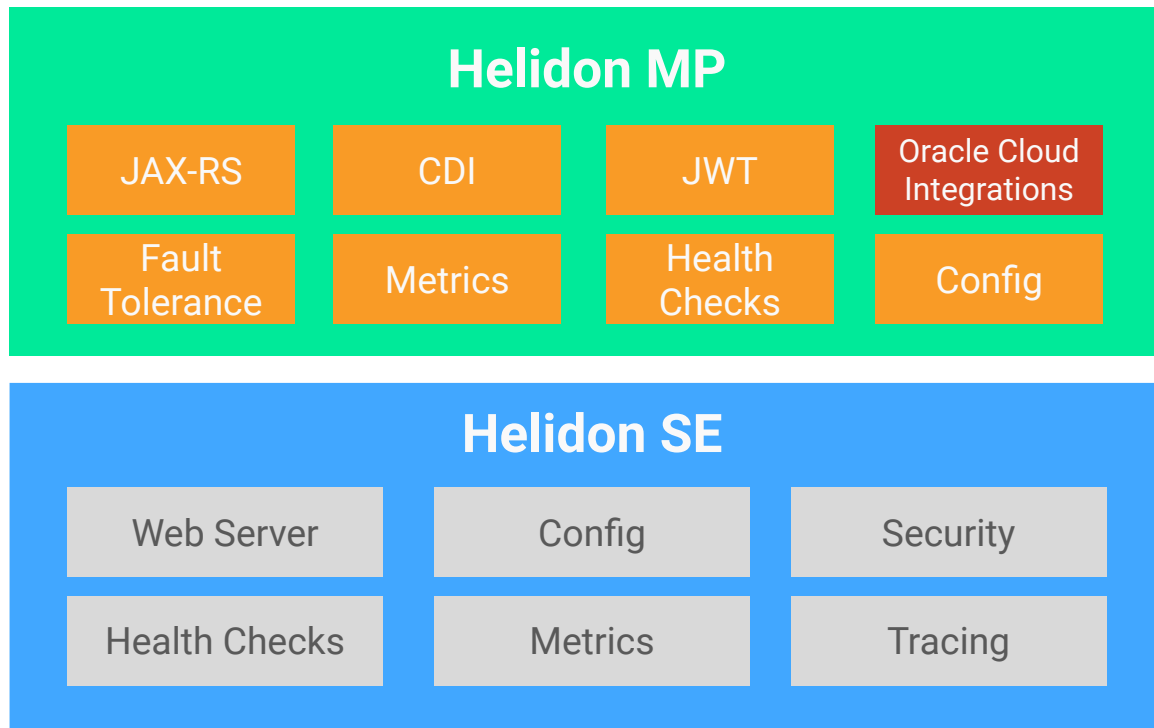


helidon MP

- MicroProfile
- Declarative style
- CDI, JAX-RS, JSON-P



Helidon Architecture



Helidon SE



Reactive Web Server

- Simple functional routing model with reactive Flow API
- Built on Netty
- OpenTracing, Metrics and Health Checks
- Static content support

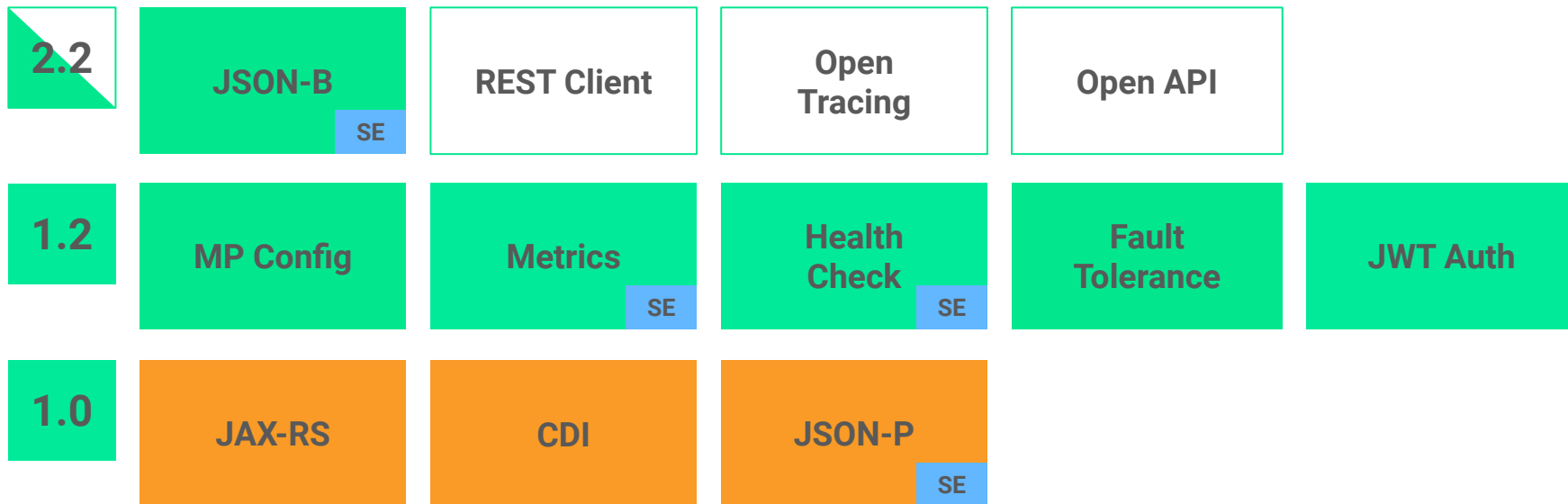
Config

- Flexible, typed config model
- Multiple data sources
- Hierarchical model
- Dynamic updates
- Extensible

Security

- Authentication
- Authorization
- Outbound Security
- Auditing
- Extensible

Helidon MP



Helidon SE



```
Routing routing = Routing.builder()
    .get("/hello", (req, res) -> res.send("Hello World"))
    .build();

WebServer.create(routing)
    .start();
```

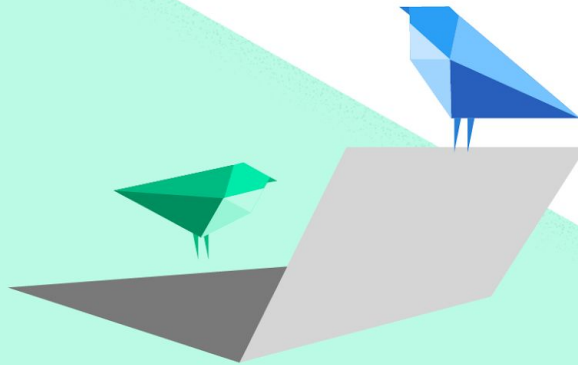
Helidon MP



```
@Path("hello")
@ApplicationScoped
public class HelloWorld {
    @GET
    public String hello() {
        return "Hello World";
    }
}
```

```
java -cp ... io.helidon.microprofile.server.Main
```

Demo



Roadmap



Q1 2019

- Helidon 1.0 (done)
- MicroProfile 1.2 (done)

Q2 2019

- MicroProfile 2.2
- JPA and JTA
- Graal VM integration
- gRPC support

Later 2019

- HTTP/2
- Reactive HTTP Client
- Reactive storage (ADBA, R2DBC, NoSQL)
- Eventing
- More OCI integrations
- Commercial support

Links



- Website: <https://helidon.io>
- Twitter: [@helidon_project](https://twitter.com/helidon_project)
- GitHub: <https://github.com/oracle/helidon>
- Slack: <https://helidon.slack.com>



Competitive landscape



Microservice Framework/tool	Helidon	Spring Boot	Dropwizard	Vert.X	Spark	Open Liberty	Thorntail	Apache TomEE	Payara
Open source	✓	✓	✓	✓	✓	✓	✓	✓	✓
Easy to learn	✓	✓	✓		✓			✓	
Microprofile capability	✓					✓	✓	✓*	✓
Small footprint	✓		✓	✓	✓			✓	
Large commercial contributor	✓	✓		✓		✓	✓		
Support	✓	✓				✓		✓	✓