

# Payara Platform Roadmap for 2019

The Payara® Platform - Production-Ready, Cloud Native and Aggressively Compatible.



# **Contents**

Payara Platform Roadmap for 2019	1
Highlights for the Payara Platform in 2018	1
Overview Roadmap for the Payara Platform in 2019	1
2019 Payara Platform Release Schedule	2
A Closer Look at Payara Platform Plans for 2019	3
Kubernetes and Docker	4
Public Cloud	4
Eclipse MicroProfile and Jakarta EE	4
Developer and Administrator Tooling	4
JDK 11 Support	5
Performance and Scalability	5
Get Involved	5



# Payara Platform Roadmap for 2019

Before we can look at where we're going, we should look at where we've been! The past year was a great one for the Payara Platform and future plans for 2019 and beyond look just as promising.

# Highlights for the Payara Platform in 2018

The Payara Platform achieved many of the things we planned for 2018, and several other features and enhancements were made that we hadn't foreseen. The highlight of 2018 was the release of Payara Server and Payara Micro 5 in February with our 5.181 release. Payara Platform 5 synchronised our state with upstream Eclipse GlassFish 5 and brought support for Java EE 8 applications. We introduced the new Domain Data Grid to simplify and enable greater flexibility in clustering and delivered initial support for the emerging Eclipse MicroProfile APIs.

Throughout 2018, we tracked the MicroProfile APIs and delivered MicroProfile 2.0 support on both Payara Server and Payara Micro. Following customer needs in 2018, we focused heavily on delivering cloud and containerisation support to ensure Java EE developers can take advantage of new deployment architectures. The Domain Data Grid clusters seamlessly on many public cloud Infrastructure as a Service platforms and we have Kubernetes support for secrets and service discovery.

For the second half of the year, the Payara team has also been involved in the migration of Java EE APIs to the Eclipse Foundation and the release of the first version Eclipse GlassFish as Java EE 8 certified. This sets us up nicely to lead the evolution of Jakarta EE 9 and the future of Enterprise Java.

# Overview Roadmap for the Payara Platform in 2019

When talking about the future plans of the Payara Platform, it's important to note that like any software, what is planned may not be delivered exactly according to schedule! Sometimes features get moved from one quarter to another before they can be released - but this is our goal for 2019 and how we're planning our development work for the year:

#### Overall Themes for 2019

- Performance improvements (smaller, faster, simpler)
- Deeper cloud integration (monitoring, security infrastructure, optimized for specific cloud platforms)
- Enhanced Docker support
- Standards Support (MicroProfile, Jakarta EE)
- Developer Tooling (easy to use, enhancement requests from customers)



## 2019 Payara Platform Release Schedule

As usual there will be four releases of the Payara Platform 5 in the community stream for 2019:

- 5.191 in Q1
- 5.192 in Q2
- 5.193 in Q3
- 5.194 in Q4

#### **Release 5.191 – February 2019**

- · New Alternative EJB Remoting
- Stability Stream Root
- MicroProfile 2.1 Support

#### **Release 5.193 – August 2019**

- Initial Monitoring Console
- MicroProfile 3.0 Support
- Jakarta EE 8 Compatible

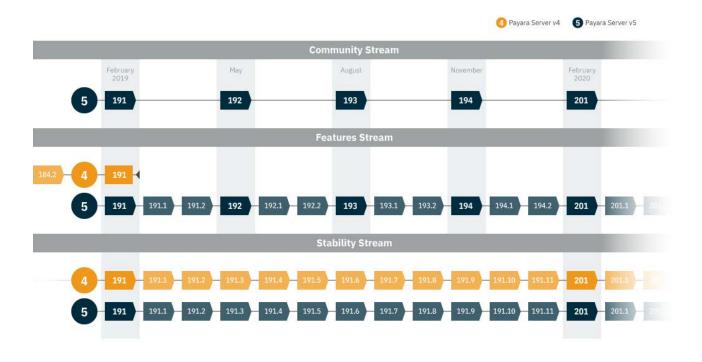
#### **Release 5.192 - May 2019**

- Docker Nodes
- Kubernetes Control
- Supported running on JDK 11
- MicroProfile 2.2 Support
- Dynamic Instances
- Additional 4.x upgrade support

#### Release 5.194 - November 2019

- Full Monitoring Console
- Legacy Free Profile
- Developer Console
- Deployment Analyzer

For commercial support customers with a Migration & Project Support contract or Payara Enterprise contract, there will be monthly releases in the Feature and Stability Streams. Payara Platform 5.191 will be the root of the new customer-only Stability Stream for the duration of 2019.





A webinar discussing the 2019 road map has been recorded if you'd like to learn more about any of the upcoming enhancements, new features, and improvements. You can also get a first look at future plans for Payara Server 6.



# A Closer Look at Payara Platform Plans for 2019

Many of the new features and enhancements to the Payara Platform come directly from the expressed needs of our customers. When a <u>Payara Enterprise</u> or <u>Migration & Project Support</u> customer requests a new feature or improvement to the platform, we often put it into action for a future release. We also take our customer survey responses into consideration, along with information we learn about customer needs from our Customer Advisory Calls. Let's take a closer look at some of the new features, enhancements, and improvements we're planning.



#### **Kubernetes and Docker**

Driven by customer demand: We are going to deliver leading support for running Payara Server and Payara Micro in Kubernetes. We are expanding Docker support with the concept of a Docker Node. This will enable Payara instances to be packaged into a Docker container and managed as standard instances from the Domain Administration Server. The population of instances will be dynamic, enabling the number of instances in the domain to fluctuate as container instances come and go. Finally, we will enhance our Kubernetes support enabling the DAS to monitor Payara Pods and instruct Kubernetes to kill pods that are failing, as well as further integration of Kubernetes configuration and security.

#### **Public Cloud**

We aim to make the Payara Platform the best open source platform for production applications on the cloud.

During 2019, we will be building deep integration with public cloud providers APIs enabling Jakarta EE developers to build applications that work well in Microsoft Azure, Google Cloud Platform, AWS and others. We aim to deliver support for key enterprise services like Security, Messaging, Integration, Monitoring and Persistence across the main cloud platforms integrated to the Payara Platform.

# **Eclipse MicroProfile and Jakarta EE**

Throughout 2019 we will continue the good work of 2018 and track and release MicroProfile support on both Payara Server and Payara Micro. We will also integrate these APIs deeply with our runtime to give deep support, manageability and monitoring for applications using these APIs. We envisage Jakarta EE 8 being released in 2019 and work will start on Jakarta EE 9. We will certify the Payara Platform as a Jakarta EE 8 compliant implementation when the programme is released, and we will lead a number of Jakarta EE API projects to evolve the Jakarta EE platform in the directions the Payara Platform community and our customers need.

# **Developer and Administrator Tooling**

The team want you to love using the Payara Platform and that means we need to focus on tooling and diagnostics for developers and administrators building solutions on the Payara Platform. The whole reason for existence of application platforms like Payara is to make life easier - so with this in mind, we have a number of things planned for 2019. We will continue to release plugins for IDEs and ensure their quality and ease is top priority. We aim to deliver a full monitoring console for the Payara Platform. We have built many diagnostic capabilities into the platform over the past couple of years and now is the time to ensure that is visible to developers and operators. We also plan to deliver deeper diagnostics and intelligence about your applications and how they are performing.



## **JDK 11 Support**

We aim to deliver JDK 11 support in the first half of 2019 for Payara Platform 5. The goal is to run Payara 5 on JDK 11 early in the year with full support for customers in the 192 release timeframe. Payara Platform 5 is currently supported on JDK 8 and customers get full support for Zulu Enterprise JDK 8 through to 2024 due to our partnership with Azul.

# **Performance and Scalability**

Finally, as always, we are focused on performance and scalability. We strive to drive down resource usage and increase performance and scalability. The Payara Platform is open source but it is also designed for high performance; high scale production workloads and this is always a focus.

# **Get Involved**

Payara is an open source company and we deliver the Payara Platform to both customers and community, 100% funded by customer support subscriptions. To experience the benefits of our commercial support programs, take a look at our <u>support options online</u> or <u>download the Support Brochure</u>.

If you are a Payara Server or Payara Micro user and your organization can't help by becoming a support customer, please help by providing bug reports on GitHub, coding and raising pull requests, offering ideas for enhancement requests, by helping out the community on the forums or by updating documentation.





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