The Payara Platform Survey

September 2023

Open Source Software with a
Community-Driven Future

Survey Objective

This survey was promoted in September 2023, sent via email to those who subscribe to our blog and Marketing channels. Our objective was to learn more about those of you that use Payara Platform and/or Java and Jakarta EE.

We wanted to learn what software versions you prefer, the tools you build with and what your plans are for the future! Through this information, we can make our products better suited to meet your needs. Our Platform updates and our learning resources will be adjusted to align with your preferences and feedback.

We are also enthusiastic about Jakarta EE and Java, and want to play our part in mapping the ecosystem. Find out how you code in comparison to the community - is your chosen stack the exception or the norm? Are people upgrading to new versions faster or slower than you?

Get stuck in and we hope you find some food for thought!

Survey Highlights

Payara Platform recently hit 150,000 monthly users, a new global milestone. So, it is time to take stock of what tools and technologies you, the users, prefer, what versions you use and how we can boost your experience.

Jakarta EE 10 was the first Jakarta EE (previously Java EE) release under the jakarta namespace to introduce new features. Payara 6 Community and Enterprise followed shortly after, supporting Jakarta EE 10 and allowing Payara Platform users to start enjoying its major specification updates. Our annual survey showed that the Payara community is ready to embrace the future, with almost 50% of you making the leap to Payara 6 and Jakarta EE 10, and still more planning to migrate in the near future. We also found that the majority of our users are on recent LTS Java versions, 11 and 17. It will be interesting to see how the release of Java 21 changes this in our next survey.

We are also proud to note that many developers are starting their Jakarta EE journey with us. Although being a GlassFish user remains the most likely route to a Payara migration, this year we noted that more and more users are not migrating to Payara from an application server they already use. Instead, they are discovering Jakarta EE and Payara Platform together. For many of you, you realised you needed to unlock the benefits of a managed infrastructure and extend Java with specifications for Enterprise, with Jakarta EE - and Payara Server was your application server of choice with which to make the leap!

We also did our usual deep dive into the ecosystem surrounding Payara and which tools you are using. The percentage of respondents NOT using a public cloud platform has massively increased, from 9% to 33% of respondents. Unlike some other application server options, Payara Platform does not assume that you must be using a cloud infrastructure, instead offering aggressive compatibility with a range of stack preferences and tools. This is reflected also in the wide variety of technologies being used with Payara.

And finally, we'll give ourselves a pat on the back. Many respondents asked us to keep up the good work and were happy that development was on the right track. We will keep attracting new users, allowing you to adopt the very latest versions and offering wide-ranging support as we move into 2024!
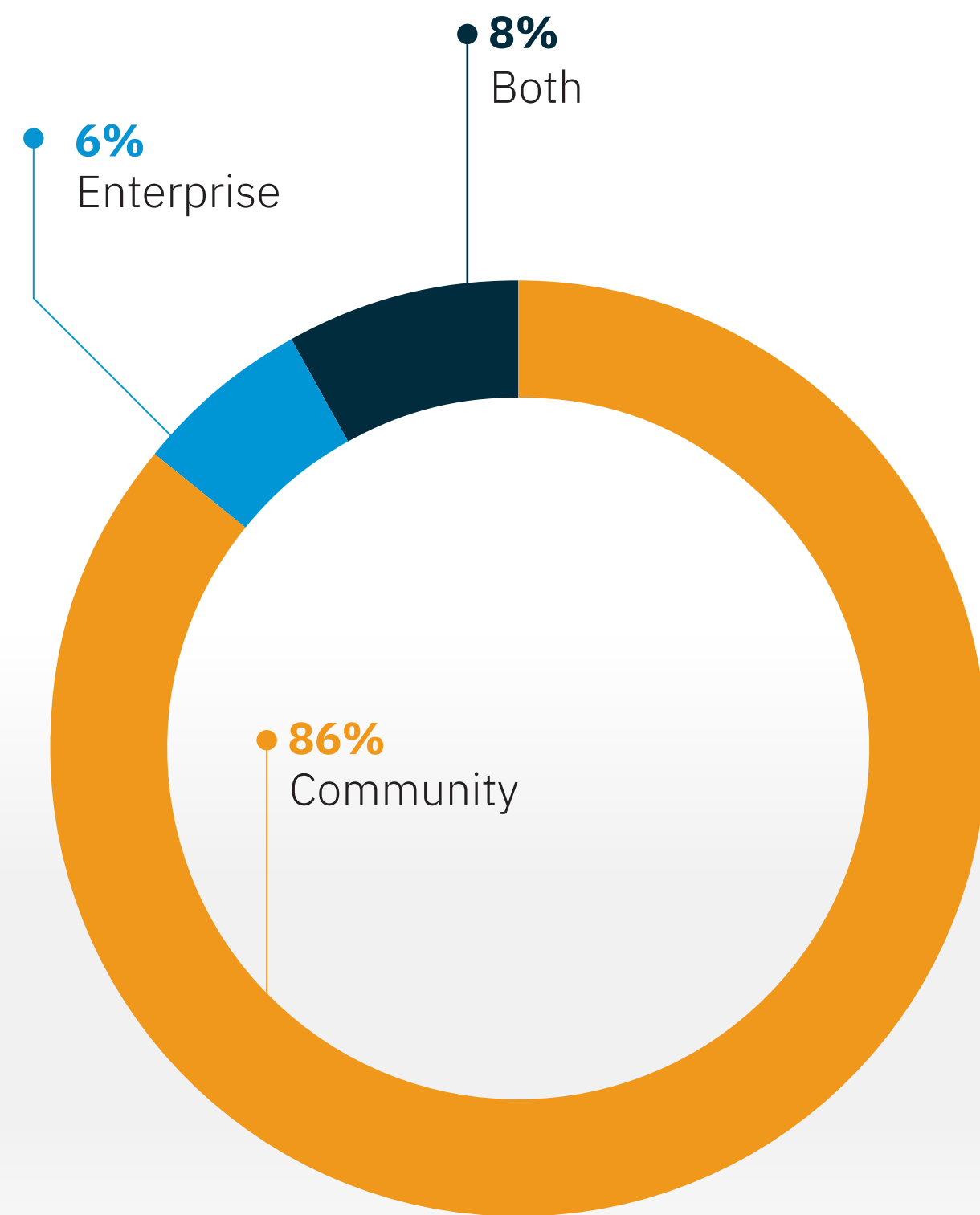
Which Payara Platform do you use?

12%
Payara Micro

19%
Both

69%
Payara Server
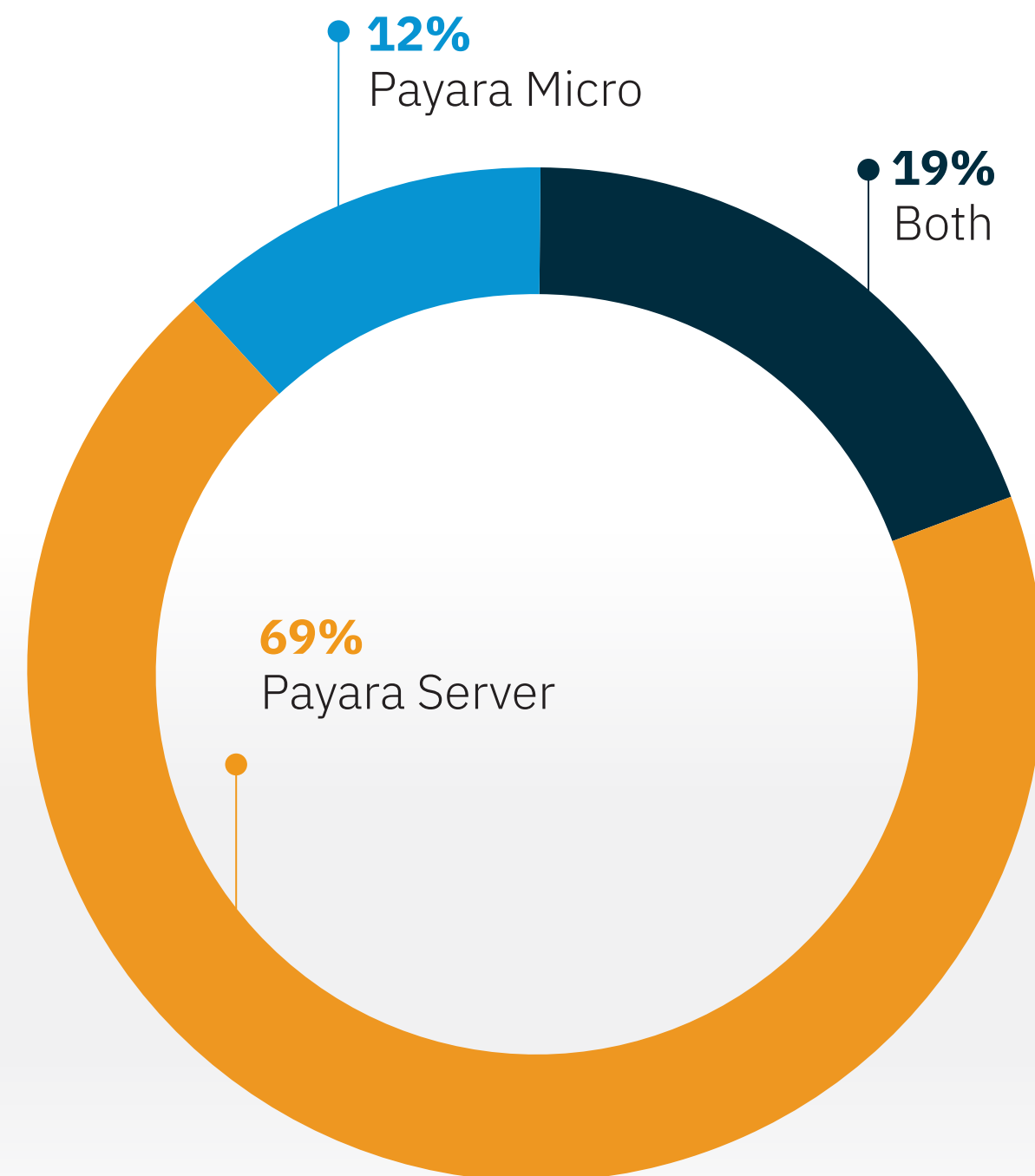
From one of our survey respondents...

"Payara Server is a very stable and robust application server, most of our Jakarta EE apps are running on top of Payara Server. I like that Payara Server always has improvements which are very helpful for the developer. For example, Payara Micro, data grid, JCache, event bus, and the capability to integrate with monitoring tools. Payara's blog was also very helpful in providing helpful information about new features and ways to optimize Payara Server."
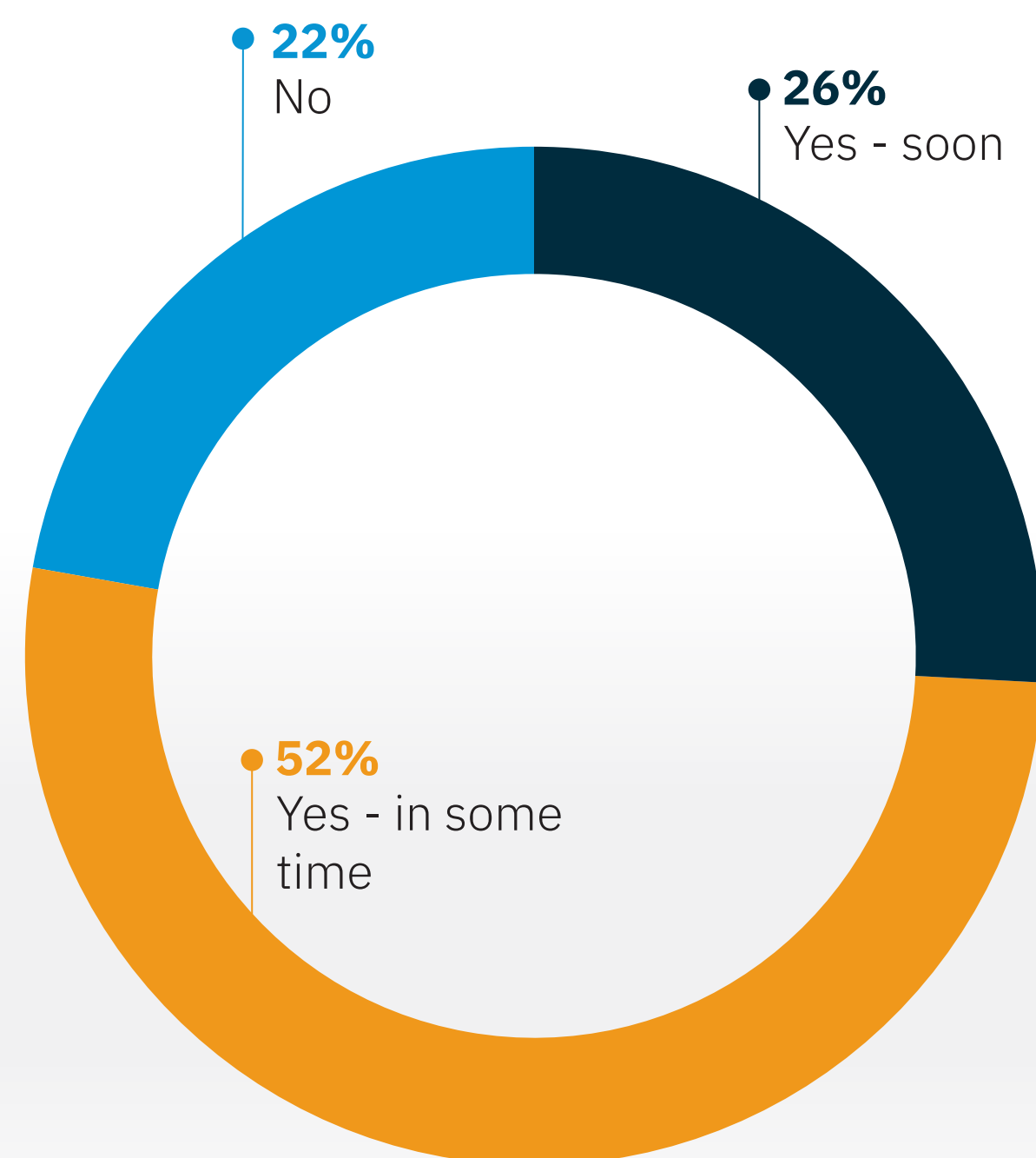
Community or Enterprise Edition?

- **8%** Both
- **6%** Enterprise
- **86%** Community

Which version of Payara Platform do you use?

- **2%** Payara 4
- **50%** Payara 5
- **48%** Payara 6
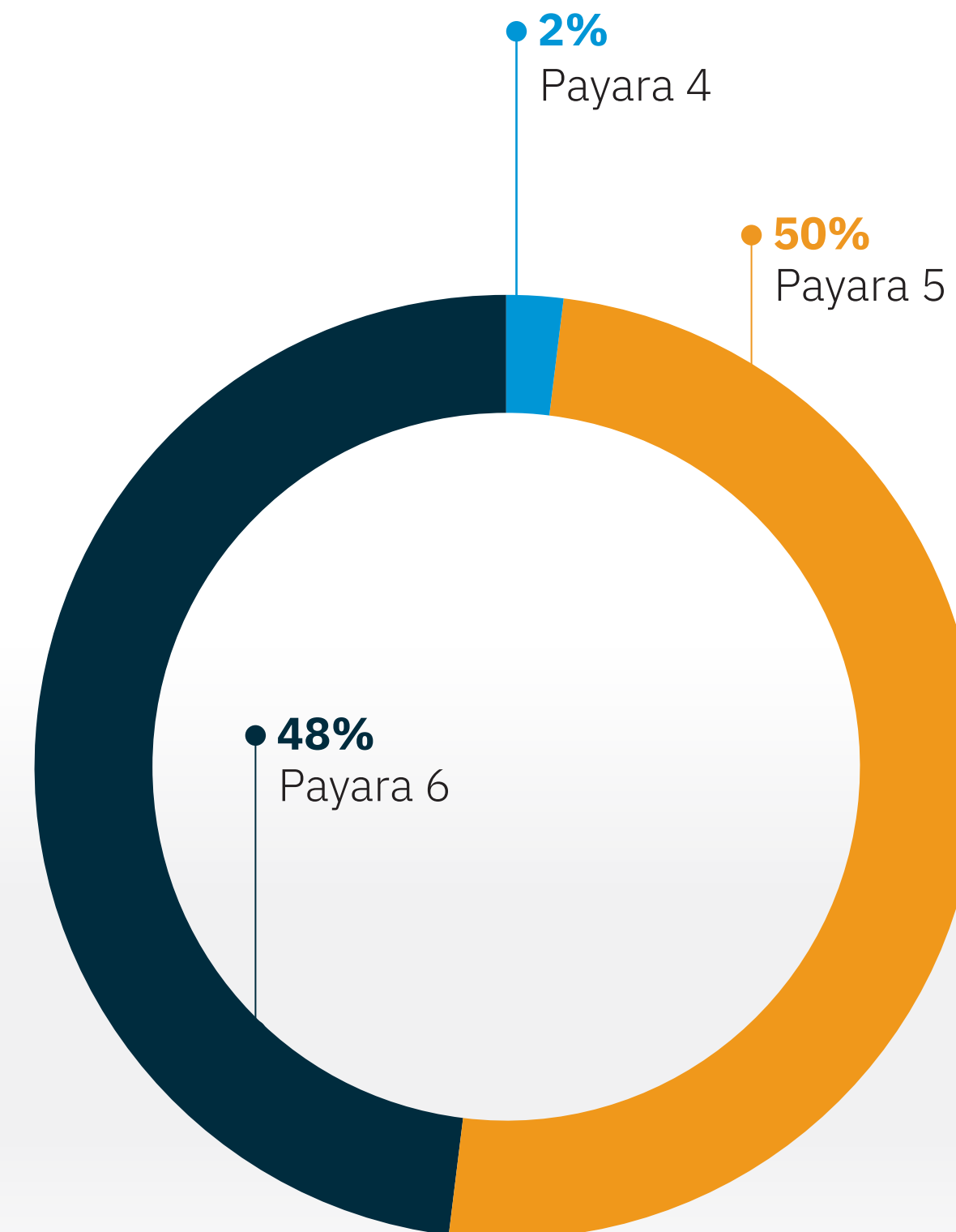
Are you planning to upgrade to Payara 6 in the near future?

22%
No

26%
Yes - soon

52%
Yes - in some time

Payara 6 Community was released in its first stable version in November 2022, with Payara 6 Enterprise following in March 2023. These allow you to use Jakarta EE 10 and MicroProfile 6 with Payara Platform, with Payara Enterprise offering a fully supported, production-ready version of Payara Platform. *We were excited to see that 48% of respondents were already using Payara 6*. Of those who hadn't yet made the move, 78% planned to. We're pleased to see that Payara Platform is helping you embrace the very latest enterprise Java specifications.

If you are still using Payara 5, remember it is no longer updated in Community version but you can get it fully supported and updated with Payara 5 Enterprise. *Find out more.*

What Application Servers did Payara Users Migrate from?

|	
50%	Glassfish
27%	Didn't Migrate
10%	Tomcat
8%	Weblogic
4%	WildFly
2%	TomEE
0%	OpenLiberty
0%	JBoss EAP
0%	WebSphere
0%	Other

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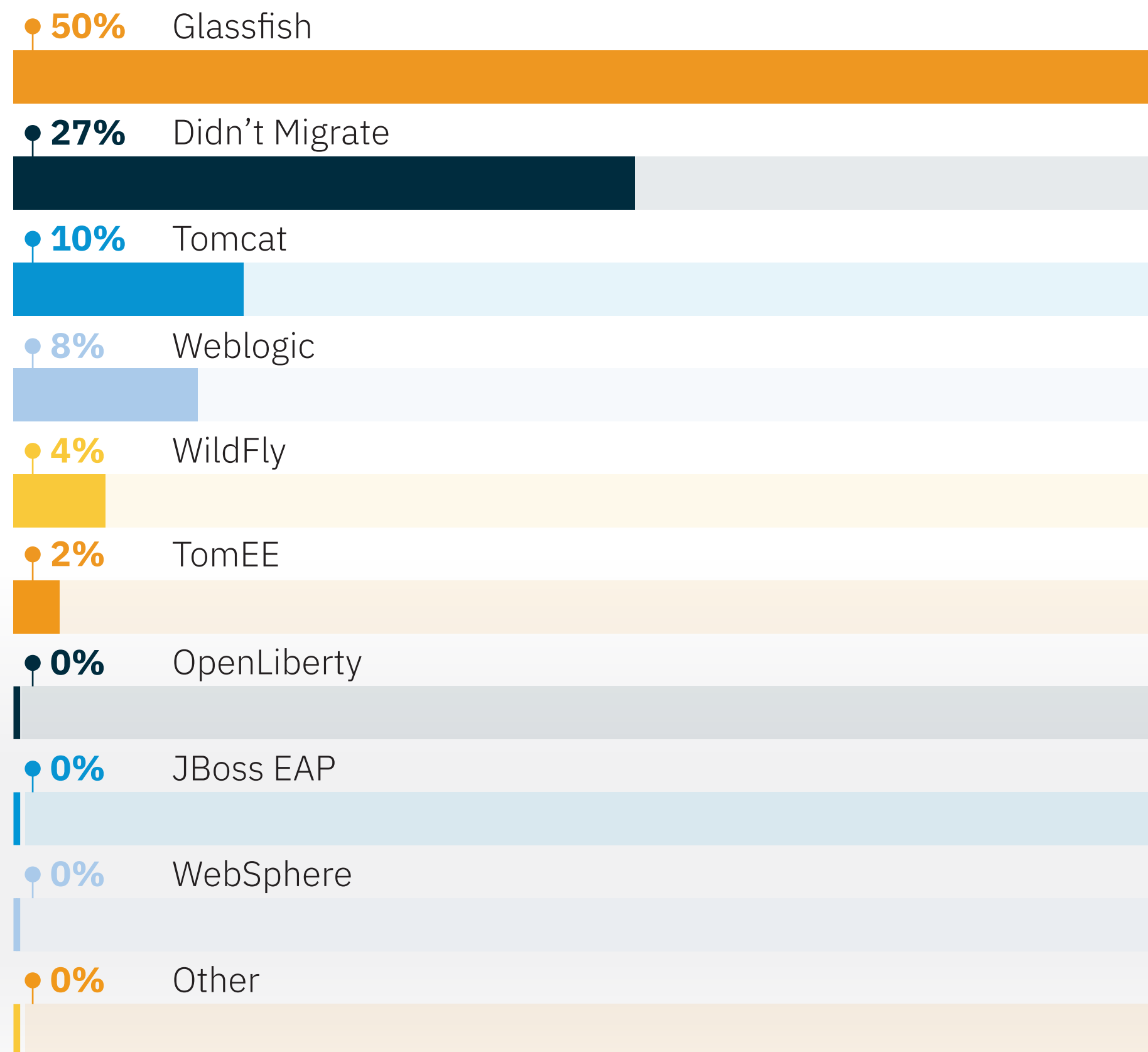
GlassFish remains the most popular application server to migrate from, and many TomCat, TomEE, WebLogic and Wildfly users are also converting to Payara Platform.

However, this year, lots of developers are choosing us when moving to Jakarta EE for the first time, or for brand-new projects.
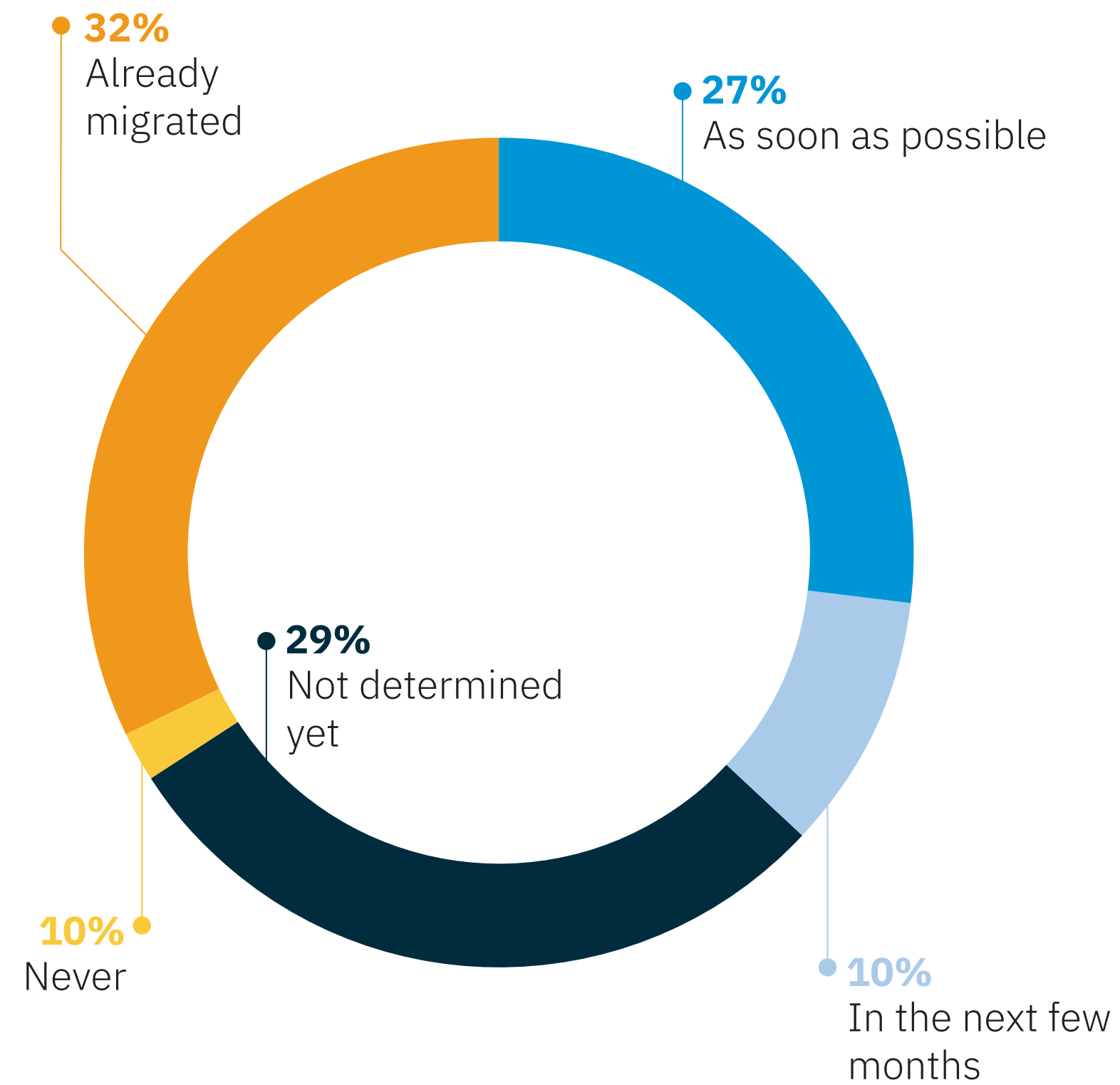
This year, **30%** of respondents didn't migrate from an existing application server to Payara, doubling last year's numbers for first time application server users. *It's great to know Payara Platform is what you choose when moving to a Jakarta EE application server.*

Which Java version do you use?

42% Java 17

31% Java 11

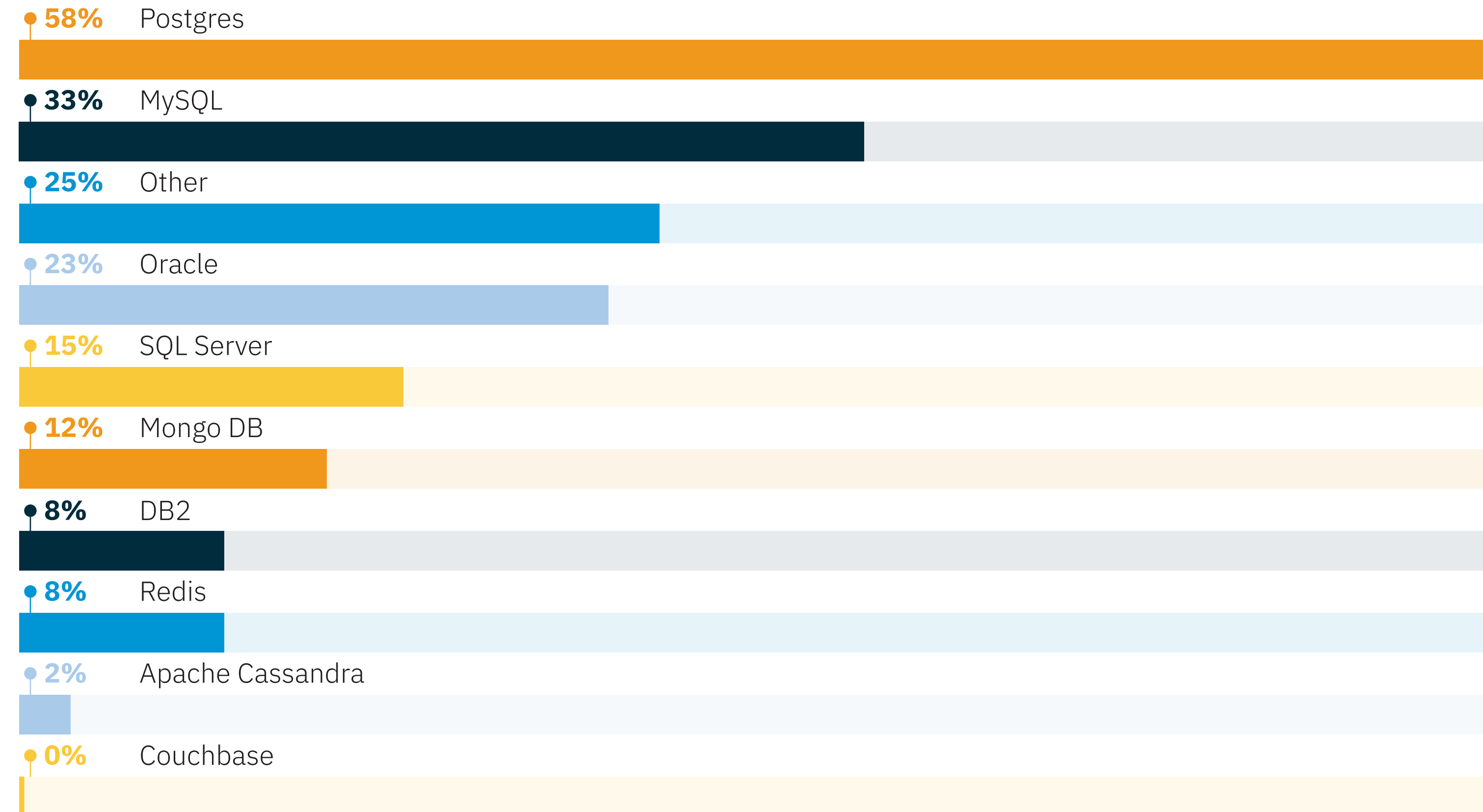**19%** Java 8

4% Java 19

4% Other

0% Java 7
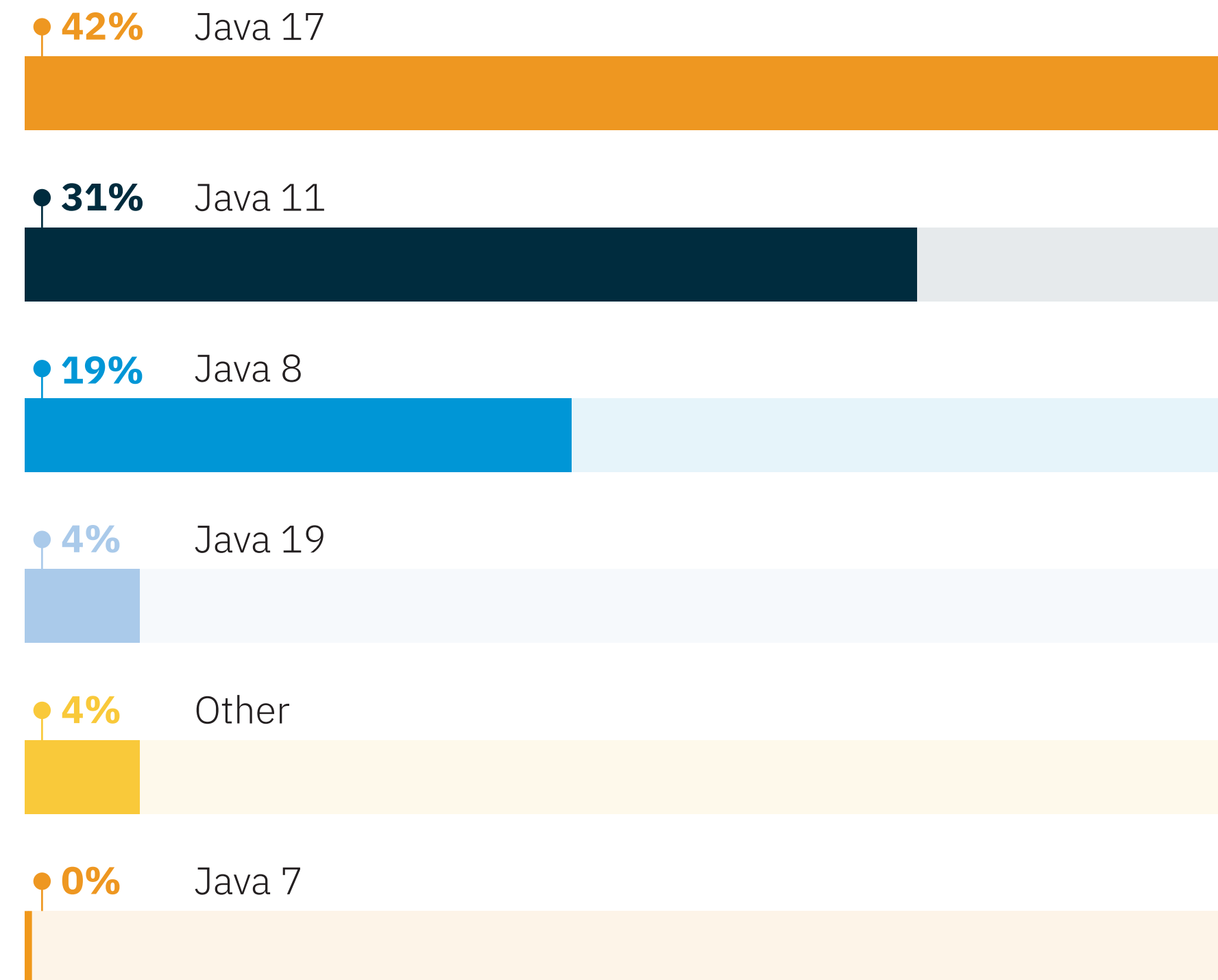
When we surveyed our user base back in March 2023, Java 11 was leading the charge - now the majority of you are using Java 17! *A huge 42% of you are using what was the very latest LTS release*, showing that Payara Platform users are hungry to have the newest Java innovation at their disposal. However, the survey was conducted in the month that the next LTS release, Java 21, came out. If past trends are anything to go by, that means that in the next survey, many of you will have already moved on, to Java 21...

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When do you plan to migrate to the Jakarta namespace?

32%
Already
migrated

27%
As soon as possible

29%
Not determined
yet

10%
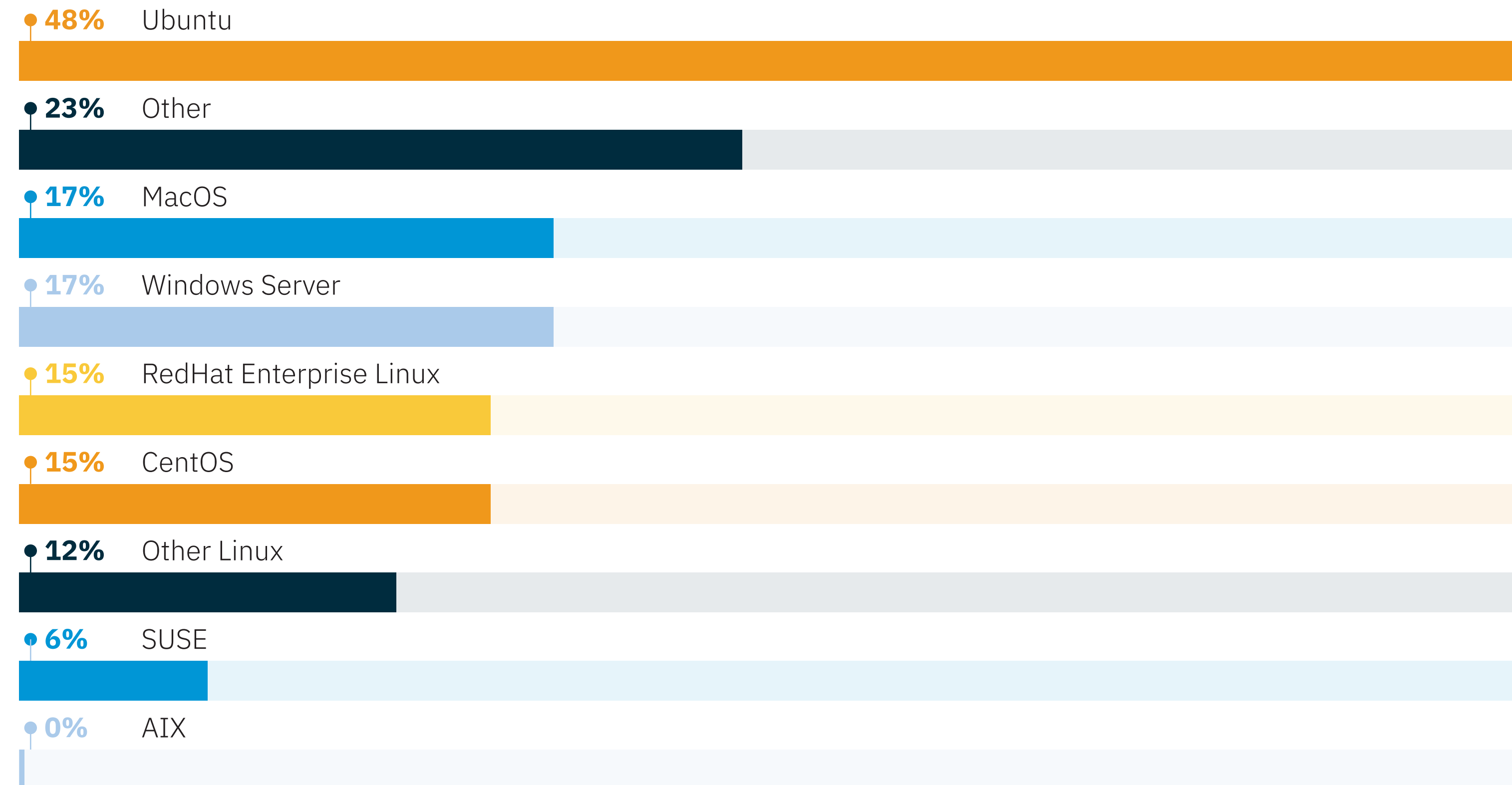Never

10%
In the next few
months

When open source software
foundation the Eclipse
Foundation took up stewardship
of Java EE, they did not have
rights to the *javax* namespace.
The transition has now been
made to the *jakarta* namespace
and Java EE renamed Jakarta EE.
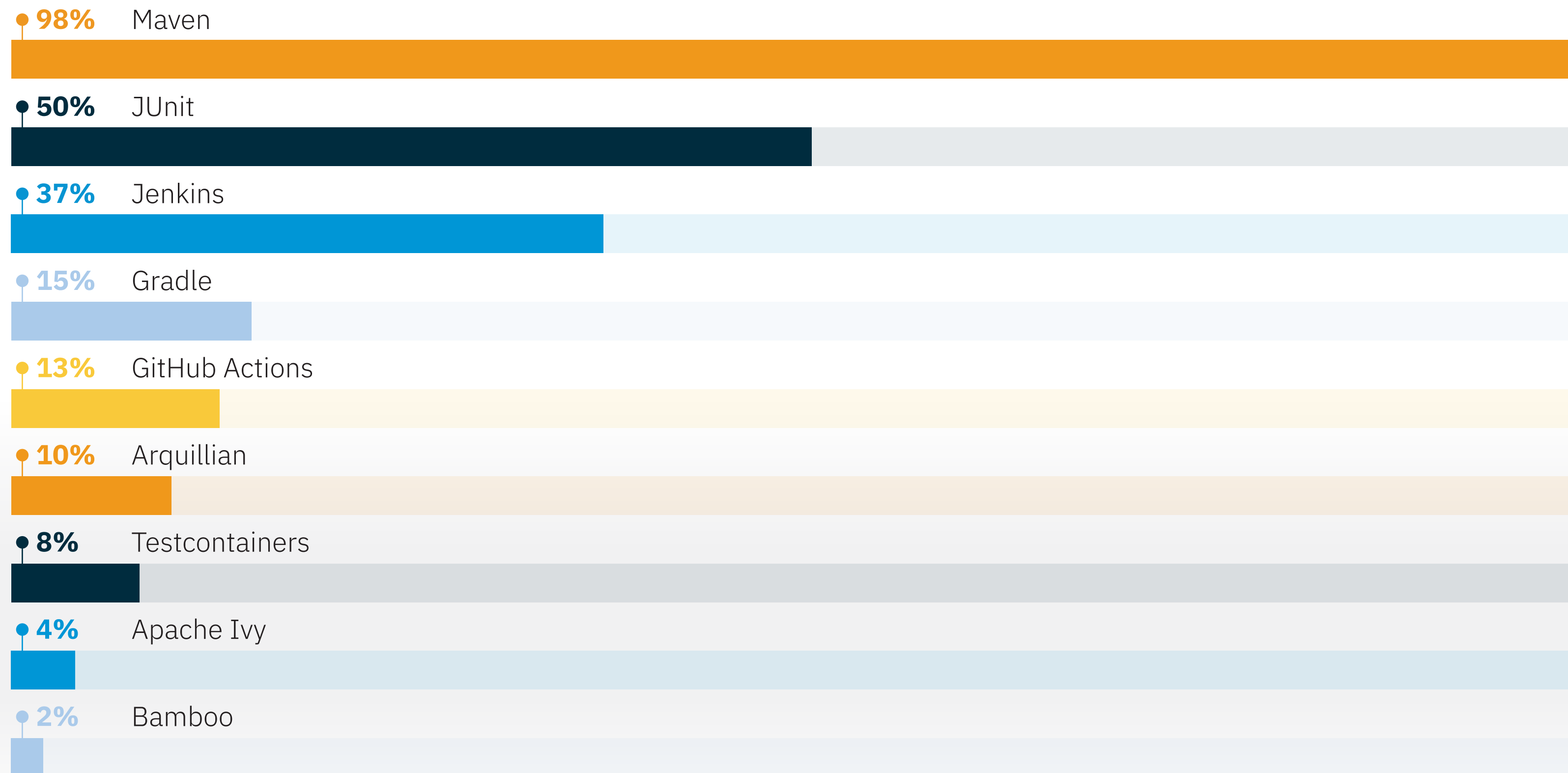
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Which data storage system do you use with Payara Platform?

58% Postgres

33% MySQL

25% Other

23% Oracle

15% SQL Server

12% Mongo DB

8% DB2

8% Redis

2% Apache Cassandra

0% Couchbase

Which Operating Systems do you use with Payara Platform?

- **48%** Ubuntu
- **23%** Other
- **17%** MacOS
- **17%** Windows Server
- **15%** RedHat Enterprise Linux
- **15%** CentOS
- **12%** Other Linux
- **6%** SUSE
- **0%** AIX

Which of these tools do you use?

98% Maven

50% JUnit

37% Jenkins

15% Gradle

13% GitHub Actions

10% Arquillian

8% Testcontainers

4% Apache Ivy

2% Bamboo

Which IDEs do you use with Payara Platform? (tick all that apply)

54% NetBeans

44% Eclipse Java IDE

37% VS Code

37% IntelliJ IDEA

0% Other
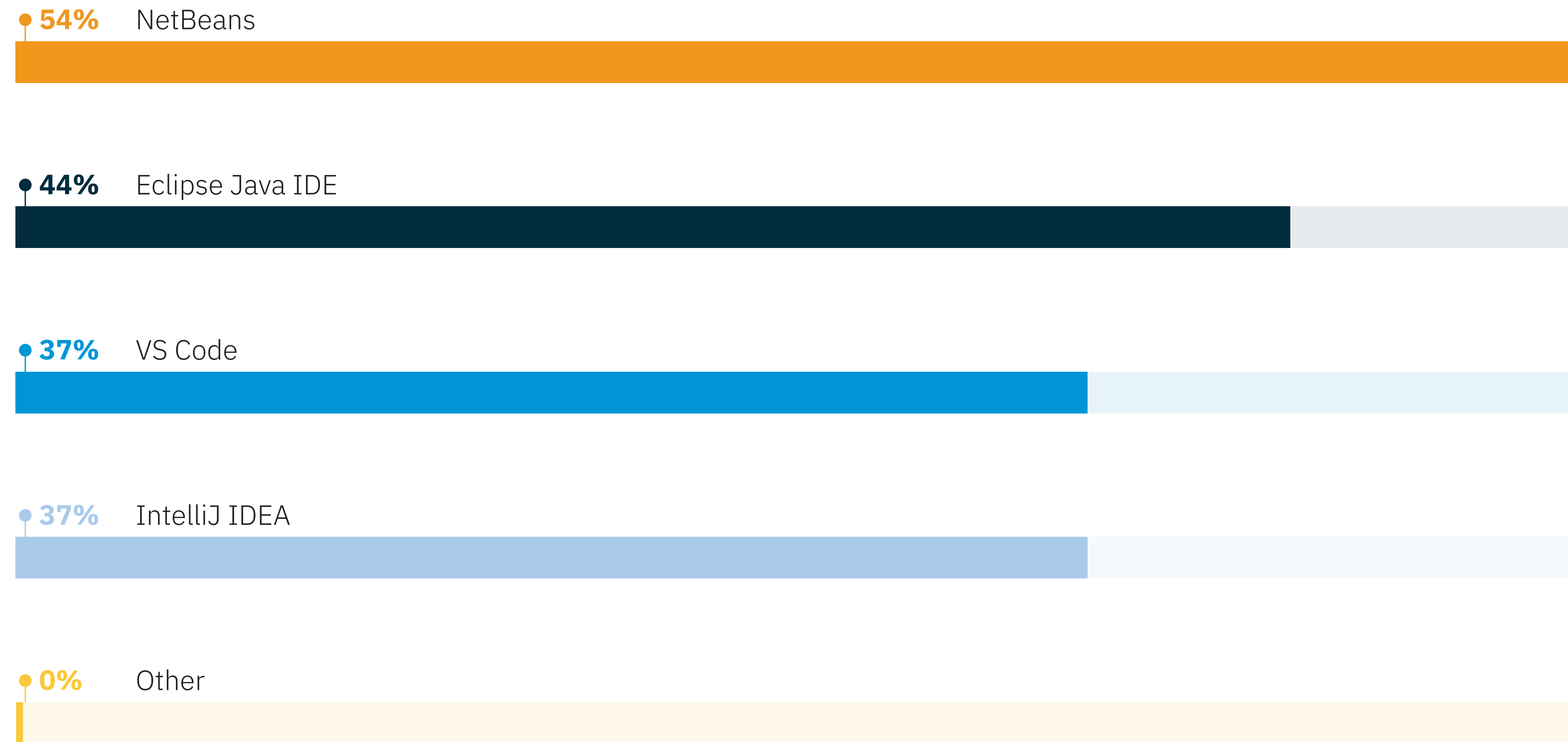
Which public cloud platforms do you use?

42% None

35% Amazon AWS

25% Microsoft Azure

12% Google Cloud Platform

12% Other

0% AliBaba

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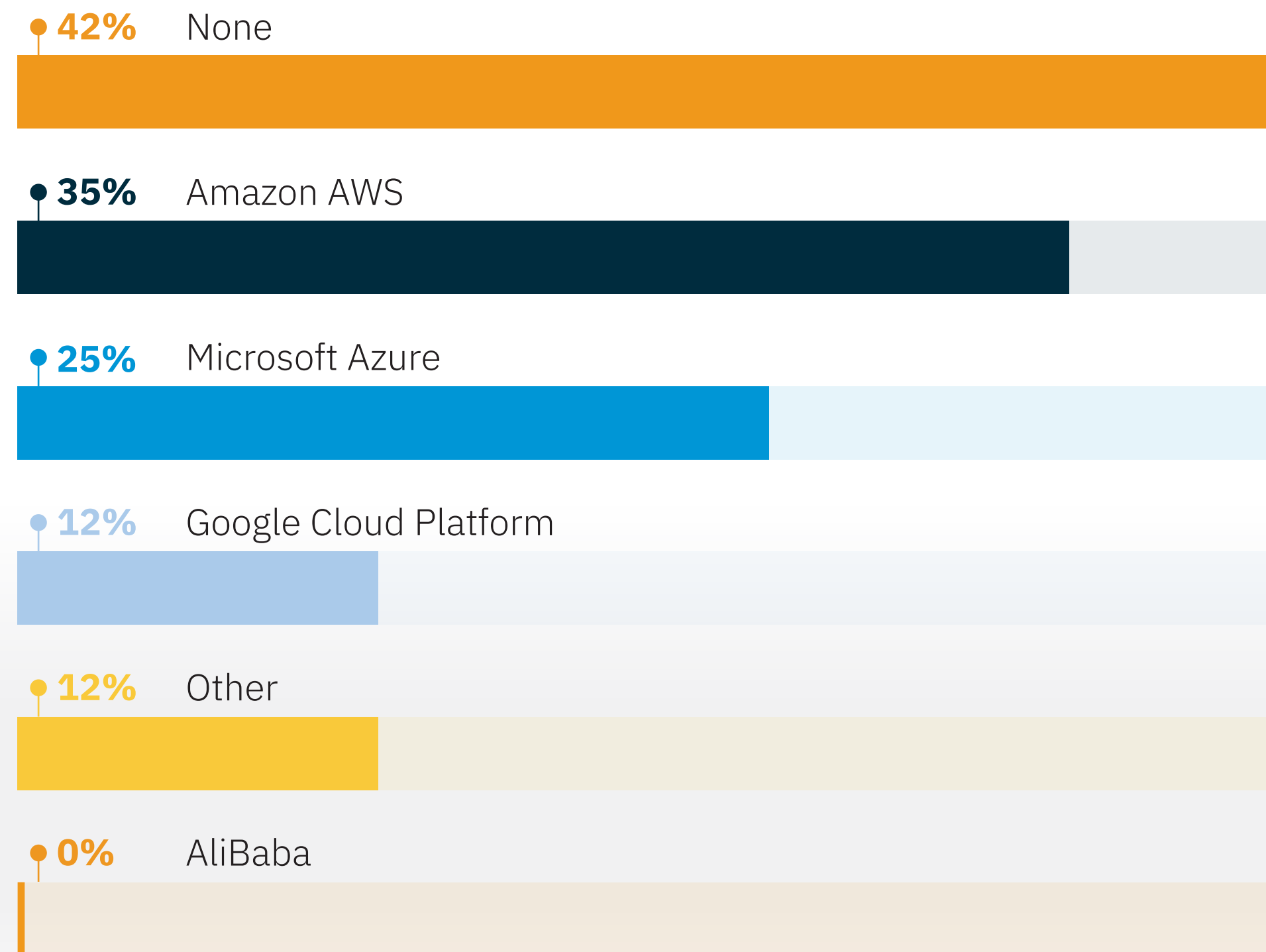
33% of you do not use public cloud platforms at all. Payara Platform prides itself on allowing you to 'write once, run anywhere'. If public cloud, despite industry hype, is not for you, Payara Platform will continue to take care of your interests.

Whereas in 2022, Google Cloud Platform took the lead out of the public cloud providers, AWS and Azure now storm ahead.

What do you run Payara Platform on?

38% Virtual Machines on Premise

37% Virtual Machines on Cloud

37% Bare Metal Servers

35% Containers e.g. Docker

17% Kubernetes

4% Container Services (e.g. Fargate, Azure Container Services)

4% Other
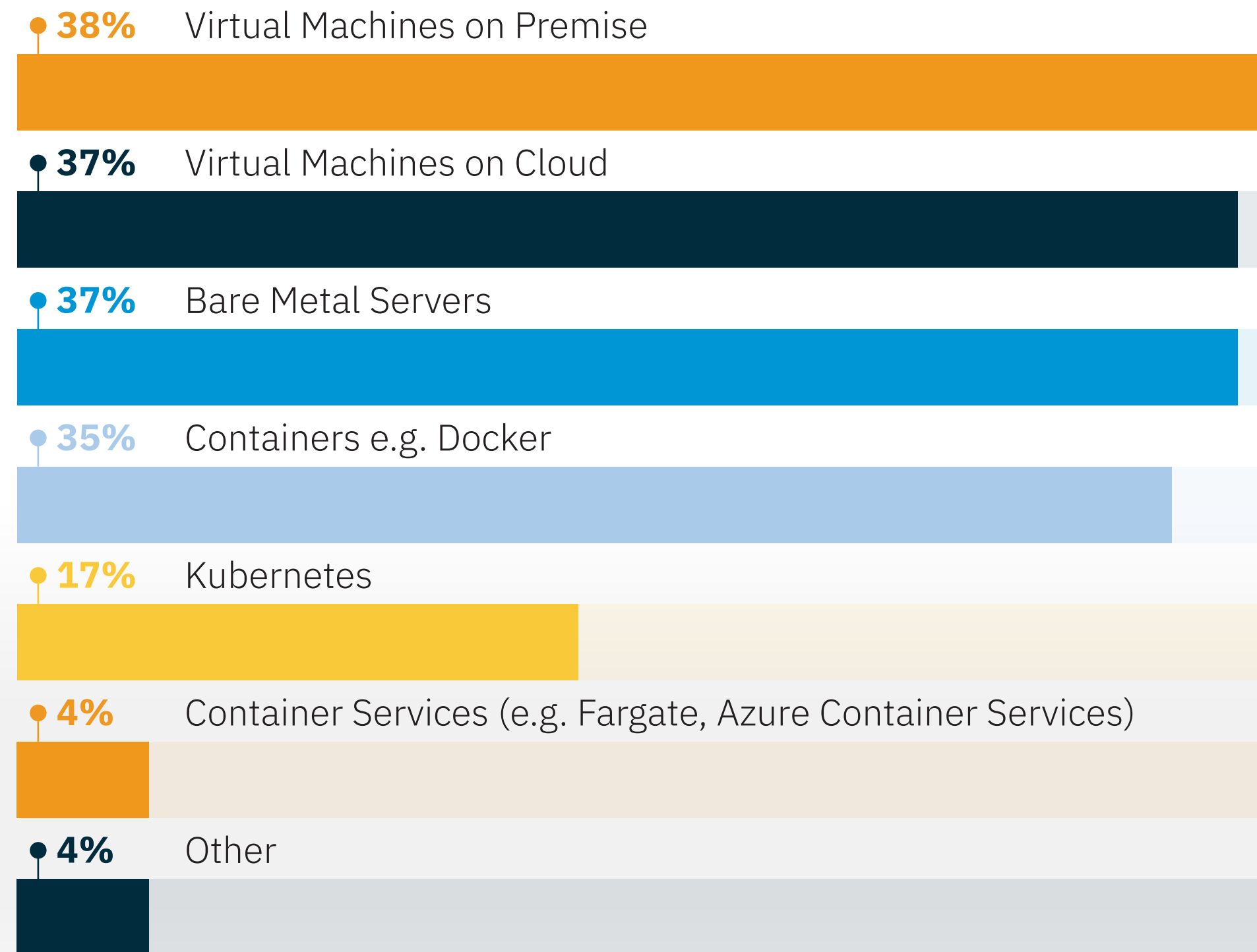
Continuing on the theme of supporting you however you choose to structure your stack, it is a fairly even split between the top four hosting options for running Payara Platform. Bare metal servers, virtual machines on premise, virtual machines on cloud and containers e.g. Docker are all catered for by the features of Payara Platform.

Most wished for improvements in Payara Platform

Better test integration

Improve bus integration Modularisation

Easily configue smart card authentication

In-depth training Better support of tools

Reduce deploy times Better integration
to Docker

Simpler management

Auto-upgrade on the Server

Eclipse plug-in improvement

We hope you have found our Payara Platform Survey - September 2023 interesting reading! We will be taking on board your feedback and using it to structure our next roadmap.

In the meantime, make sure you stay in touch:

- Subscribe to our blog

- Twitter/X

- LinkedIn

- Community Forum

While you may be familiar with Payara Platform, have you tried our new product, Payara Cloud?

Our fully managed cloud native application runtime offers a flexible and powerful way to run your Jakarta EE apps on the cloud. It deals with the infrastructure for you: simply select your WAR, click deploy, and watch your apps run on the cloud – automatically, like magic. See it for yourself with a free trial!

If you are using Payara Community and want to try our fully supported, production optimized version, Payara Enterprise, we also recommend a free trial. Get support directly from our expert Engineers and a 10 year software lifecycle. Continue to enjoy stable software, without having to rush to the latest Java and Jakarta EE versions.

FREE TRIAL