# Welcome to WOSCx4

Fourth Workshop on Serverless Computing Online Experience/Exchange

https://www.serverlesscomputing.org/woscx4/



## WOSCx4: past and future

Previous workshops: <a href="https://www.serverlesscomputing.org/workshops/">https://www.serverlesscomputing.org/workshops/</a>

This is online workshop: we want you to participate

Discord channel #woscx4 and #introductions

Mailing list: <a href="https://groups.google.com/g/future-compute">https://groups.google.com/g/future-compute</a> (61 members)

Post your questions, share prototypes/demos, discuss anything related to serverless in Slack and post to mailing list

Future events:

Soon WoSC11: <a href="https://www.serverlesscomputing.org/wosc11/">https://www.serverlesscomputing.org/wosc11/</a>

Paper Submission: September 24, 2025

WOSCx5: send us your ideas (2026?)



# Why WOSCx4?

Serverless technologies are now more than **ten years old** (!). Serverless now is more than Function-as-a-Service and it is gaining in popularity:

- Not just serverless computing but also serverless experience in context of DevOps and Platform Engineering
- We want to evolve the workshop to include hybrid cloud environments, as well as edge and IoT devices. What will be next-gen computing?
- How recent advances in generative AI, including Large Language Models (LLMs) and other types of Foundations Models (FMs) will change serverless?
- New challenges to old concerns such as resource optimization, scaling, cost, monitoring, and ease of use.

How do we work together? Academia and industry? We need an open online forum for discussing the future of Serverless technologies?



# Serverless Workshop Future: Al Computing WOS(AI)C?

#### Topics to consider:

- How to make running AI computing as easy as serverless functions?
- Developer experience as we transition from "traditional" serverless and FaaS
- Supporting AI agents and with serverless approaches in agentic platforms
- Supporting MCP and using it in serverless computing applications
- Elastic Al platforms and pay-as-you-go for GPUs with cost \$/Mtokens
- Supporting customization and running user provided AI models any place cloud, edge, ...
- Serverless data management for AI, vector and graph databases
- Other topics that you may suggest during the workshop and/or in #woscx4?



# How to make the "workshop" work for you:

- Presenters should join at least 10 minutes before their session starts to test audio/video and screen sharing
- Presenters have 5 minutes they can leave some time for questions and/or continue discussions in #woscx4 discord channel (some talks will be video playback)
  - We will use beep sound 1 minute before end of time slot (4 minutes into the talk) and 2 beeps (quacks) 10 seconds before your time slot is finished (4m50s)
- Use Zoom "Raise hand" feature to ask question (if there is time for it)
- Use Discord channel(s) for any discussion or topics related to serverless etc.
- Join our online polls
- Join future-compute mailing <a href="https://groups.google.com/g/future-compute">https://groups.google.com/g/future-compute</a>
- There is a reason why we do the workshop live instead of playing back videos participate to get full value of live workshop!

Online poll question: What are the main challenges in Serverless Computing? Answers from WOSCx1 (June 2022), WOSCx2 (June 2023), WoSC9 (Dec 2023), WOSCx3 (June 2024)



vendor lock-in

Online poll question: What are the challenges in Serverless Computing? Answers from WoSC10 (Dec 2024)

#### What are the challenges of Serverless Computing?

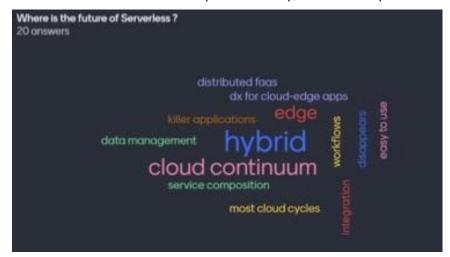
40 responses







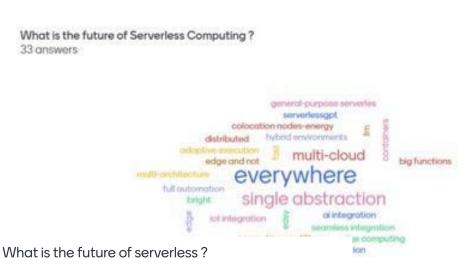
# Online poll question: What is the future of Serverless Computing? Answers from WOSCx1 (June 2022), WOSCx2 (June 2023), WoSC9 (Dec 2023), WOSCx3 (June 2024)



# What is the future of Serverless Computing?

31 responses





37 responses



Online poll question: What is the future of Serverless Computing? Answers from WoSC10 (Dec 2024)

#### What is the future of Serverless Computing?

22 responses

```
memory disaggregation
                future standard
         bigger deployments
           prompt-based deployment
ai agents
                                  overcoming the ai hype
                  more use
webassembly
 convergence with k8s
                  ease-of-use
heterogeneity
          convergence with vms
     standards
           energy efficiency
         mobile compute
                internet computer
```





#### Online poll questions

#### "Old" questions:

- What are the challenges of Serverless Computing?
- What is the future of Serverless Computing?

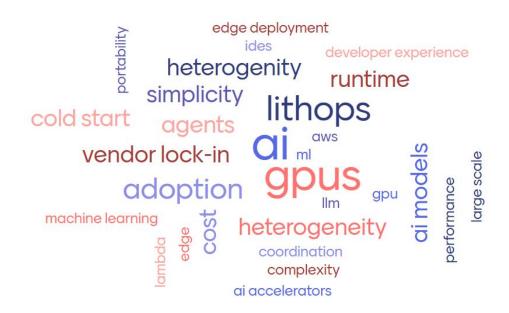
#### New question:

- What are current challenges for serverless AI?
- What AI topics we should have for future workshops? And other topics?

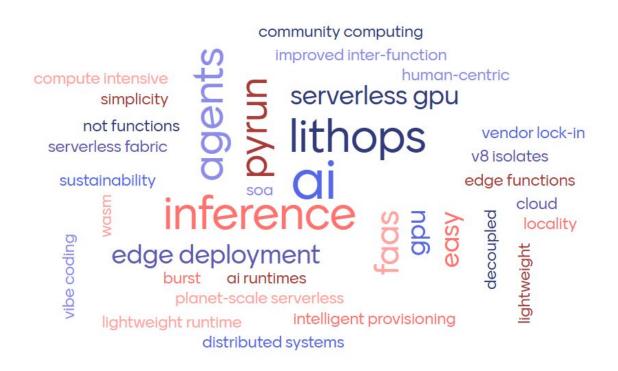
## https://www.menti.com/

code to join: 2566 9408

### What are the main challenges of Serverless Computing?



# What is the future of Serverless Computing?



# What are current challenges for serverless AI?



O edge intelligence, geo-distributed AI services  (b 9) on "What AI topics we should have for future workshops? And other topics?"
O How to make serverless AI that runs without changes from laptop to cloud to edge and anywhere else and is easy to maintain  © 9 on "What AI topics we should have for future workshops? And other topics?"
O Would vibe coding individual serverless functions be a thing? How can we ensure that vibe-coded serverless applications remain compliant? 6 4 on "What AI topics we should have for future workshops? And other topics?"

 How to compose multi-agent autonomic-computing for managing distributed serverlss workflows on IoT-Edge-Cloud Continuum?

ம் 2 on "What AI topics we should have for future workshops? And other topics?"

#### WoSC11 CFP

Paper Submission: September 24, 2025 (AOE)

https://www.serverlesscomputing.org/wosc11/cfp/

Middleware 2025 Dec 15-19, 2025 in Vanderbilt University, Nashville, TN, USA

https://middleware-conf.github.io/2025/

#### Your Feedback

Please tell us what works and what does not work.

Google feedback form:

https://forms.gle/pQ59t4VA7cGZsySq8

Leave us a comment (no email address required)

Or contact us using Discord/BlueSky/X/Twitter: #woscx4 @wosc17.bsky.social @wosc17

Your feedback really matters to us - and to you (to get better workshop in future!)



#### Let start

- Talk are 5 minutes one sound reminder after 4 minutes (suck quack), and multiple quacks when your time limit is reached
- Reserved time for questions after each session
- Use Discord for longer questions and/or continue discussion in #owscx4

Let start with our Keynote "Scalability Meets Simplicity: Serverless Computing with IBM Cloud Code Engine" by Jeremias Werner, STSM, IBM Cloud