10th International Workshop on Serverless Computing

https://www.serverlesscomputing.org/wosc10/

December 2, 2024

Part of ACM/IFIP International Middleware Conference 2024 (Dec 2-6)

WoSC10 Organization

Previous workshops:

On-site workshop chairs

Germán T. Eizaguirre, Universitat Rovira i Virgili

Praveen Venkateswaran, IBM Research

Workshop co-chairs

Paul Castro, IBM Research

Pedro García López, University Rovira i Virgili

Vatche Ishakian, IBM Research

Vinod Muthusamy, IBM Research

Aleksander Slominski, IBM Research

Website support

Enrique Molina, University Rovira i Virgili

Steering Committee

Geoffrey Fox, Indiana University

Dennis Gannon, Indiana University & Formerly Microsoft Research

Arno Jacobsen, MSRG (Middleware Systems Research Group)

Ongoing Serverless Workshops

We are planning to do another virtual serverless workshop in 2025.

Check our website for WoSC and WOSCx (online focused workshops)

https://www.serverlesscomputing.org/workshops/

Video recording of previous workshops:

https://www.youtube.com/@serverlessworkshops

Stay connected! Scheduled workshops are announced at BlueSky/X/Twitter: @wosc17

WoSC10 Program Committee

Alexandru Iosup, Vrije Universiteit Amsterdam

Ali Kanso, Microsoft

Azer Bestavros, Boston University

Cristina Abad, Escuela Superior Politécnica del Litoral (Ecuador)

Dennis Gannon, Indiana University & Formerly Microsoft Research

Eric Rozner, University of Colorado Boulder

Geoffrey Fox, Indiana University

Gul Agha, University of Illinois at Urbana-Champaign

Hans-Arno Jacobsen, MSRG (Middleware Systems Research Group)

Ian Foster, University of Chicago and Argonne National Laboratory

Josef Spillner, Zurich University of Applied Sciences

Kyungyong Lee, Kookmin University

Lucas Nussbaum, LORIA, France

Maciej Malawski, AGH University of Science and Technology, Poland

Maciej Pawlik, Academic Computer Centre CYFRONET of the University of Science and Technology in Cracow

Marc Sánchez Artigas, Universitat Rovira i Virgili

Per Persson, Ericsson Research

Peter Pietzuch, Imperial College

Rich Wolski, University of California, Santa Barbara Rodric Rabbah, Nimbella and Apache OpenWhisk

Rodrigo Fonseca, Microsoft Research Samuel Kounev, University of Wuerzburg

Tyler R. Caraza-Harter, University of Wisconsin-Madison

Višnja Križanović, Josip Juraj Strossmayer University of Osijek

Volker Hilt, Bell Labs (Nokia)

Wes Lloyd, University of Washington Tacoma

WoSC10 Important information

WoSC10 is co located with co-located with [The Tenth International Workshop on Container Technologies and Container Clouds (WoC'24)](#).

Everything is linked from WoSC10 website program page (including these slides):
https://www.serverlesscomputing.org/wosc10/

Staying on schedule is very important. Please respect time limits for talks, we use "duck quack" sound 5 minutes before your time ends and double quack when you reached end of your allocated time.

Zoom stays open during breaks. Use Discord channel #wosc10 for questions as Zoom chat is gone after we finish the workshops.

How to ask questions? Raise virtual hand to ask live questions, you can also use Discord to ask questions in #wosc10 channel on Monday and #woc24 channel on Tuesday.

#wosc10 and #woc24 channels for discussions

Please join our Discord server and #wosc10 channel.

To join use this Discord use this invite link:

https://discord.gg/cAVPZ6Gu

Online polls!

Connect to the link and give us your view on serverless.

Online poll question: What are the main challenges in Serverless Computing?
WOSCx1 (June 2022)

What are the main challenges in serverless computing ?
19 answers

standardization
complexity
state
distribution
low latency
debugging
productivity
dx
usability
billing
observability
synchronization
ultrascale

Online poll question: What are the main challenges in Serverless Computing?
Answers from WOSCx2 (June 2023)

What are the main challenges in serverless computing ?
36 answers

Online poll question: What are the main challenges in Serverless Computing?
Answers from WoSC9 (Dec 2023)

What are the main challenges of Serverless Computing?
36 responses

Online poll question: What are the main challenges in Serverless Computing?
Answers from WOSCx3 (June 2024)

What are the challenges of Serverless Computing?

29 responses

app building blocks

complex applications

workflows   latency   communication

state management   self deployment

servers

full automation

sustainability

shared state   vendor lock-in

acceleration   state debuggin   reproducibility

developer experience

provider differences

slowing innovation

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

Online poll question: What is the future of Serverless Computing?
Answers from WOSCx1 (June 2022)

Where is the future of Serverless ?
20 answers

distributed faas
dx for cloud-edge apps
edge
killer applications
data management   hybrid
cloud continuum
service composition
most cloud cycles
workflows
disappears
easy to use
integration

Online poll question: What is the future of Serverless Computing?
Answers from WOSCx2 (June 2023)

What is the future of Serverless Computing ?

33 answers

general-purpose serverless
serverlessgpt
colocation nodes-energy
distributed   hybrid environments   llm
adaptive execution   multi-cloud   containers
edge and not   big functions
multi-architecture   everywhere
full automation
bright   single abstraction
iot integration   ai integration
seamless integration
computing as utility   edge computing
resource disaggregation
artificial intelligence

Online poll question: What is the future of Serverless Computing?
Answers from WoSC9 (Dec 2023)

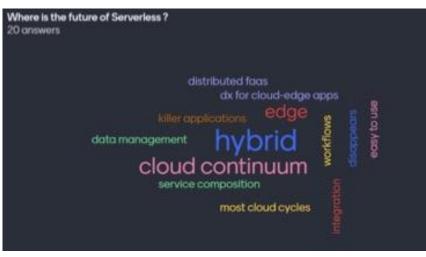# What is the future of serverless ?

37 responses

Online poll question: What is the future of Serverless Computing?
Answers from WOSCx3 (June 2024)

What is the future of Serverless Computing?

31 responses

microservice
edge computing
domain specific platforms
easy-to-use   high performance
low overhead   programming frameworks
programming model   ai   cost
cheap   sustainability
fully automated   performance portability
faster prototyping   higher utilization
carbon neutrality   high abstraction
composable function layer
trivial integration
big lambdas everywhere speed granularity server

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

Online poll questions

TODO link and how to connect ID

https://www.menti.com/

Your Feedback

Please tell us what works and what does not work.

Google feedback form:

https://forms.gle/31aJw3ooYthDAWUJ7

Only two questions: feedback or comments (no email address required)

Or contact us using BlueSky/X/Twitter: @wosc17

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

Agenda Overview

Latest agenda, abstracts, speakers, and links to slides posted here:

https://www.serverlesscomputing.org/wosc10/program

Future workshops

Join our group to be informed about future workshops:

https://groups.google.com/g/future-compute