

IEEE Netsoft 2019 :: 2nd Workshop on Advances in Slicing for Softwarized Infrastructures (S4SI) :: June-28, 2019

The current industry trend of convergence between computing and networking ecosystems highlights that computing, storage, and connectivity services, as well as any other present and future application instances, will be deployed in the form of virtualized assets within a software-defined infrastructure running on top of general-purpose processing and communication hardware. All of these will be managed and made available under the cloud “As A Service” paradigm. One of the current trends in this space is the concept of a Slice. This has drawn much attention from many people interested in this important and developing area. Yet the topic of Slicing is very much fragmented across conceptual views, approaches, technologies, standardization, and so on.

In its second edition, the S4SI workshop aims at bringing consolidation around slicing and discussing advances and challenges related to Slicing in Softwarized Infrastructures for faster and improved deployment of services in current and future 5G environments. There are clearly many open questions to be addressed, including:

- Fragmented landscape and gaps, from concepts to standards towards multi-domain, end-to-end slicing;
- How do the existing resource technologies of computing, storage and network can seamlessly be managed, orchestrated and controlled as part of end-to-end slices. Is it better to adapt existing components to support slicing or to design new ones;
- How end-to-end slices can automatically be defined and allocated on-demand – as a service – to host network services with similar requirements in terms of SLA and QoS;
- At what level of abstraction slicing should be introduced, i.e., whether it is better implementing slicing mechanisms into existing frameworks, orchestrators and infrastructure managers via adapting their components, or it is more convenient implementing slicing in a way that it will be transparent to them;
- What abstraction models, APIs and mechanisms would be required in order to implement slicing and what the tradeoff between complexity and performance would be.

S4SI aims at providing an international forum for researchers and practitioners from academia, industry, network operators, and service providers to discuss and address the challenges deriving from the emerging scenarios around *Slicing* where systems, processes, and workflows used in both computing and communications domains are converging. Altogether, S4SI seeks to improve the common understanding of Slicing, the expected benefits, including the new business model opportunities between slice providers and tenants. A concluding panel will contribute with a rich discussion on the lessons learned and the path ahead towards the consolidation of *Slicing*.

The workshop welcomes contributions from both computing and network-oriented research communities, with the aim of facilitating discussion, cross-fertilization and exchange of ideas and practices, and successfully promote innovative solutions toward a real use of *slices*. Contributions that discuss insights and best practices, describe practical *Slicing* deployment and implementation experiences, and demonstrate innovative *Slicing* use-cases are especially encouraged for presentation and publication.

We are interested in papers that cover some of the following topics:

- What is a Slice? What is an end-to-end Slice?
- How are Slices formed and managed?
- How will Slicing affect 5G networks?
- Cross-domain requirements and facilities for Slicing
- Issues in adapting existing systems to support Slicing
- What abstractions and models and APIs are needed for a Slice?
- How can slices be allocated, deallocated, and be elastic by growing or shrinking?
- Network Slices with QoS/KPIs guarantees
- Monitoring and Analytics systems for Slicing

Important Dates

- ☐ **Paper Submission: March 1st, 2019 (FIRM!)**
- ☐ Notification of Acceptance: March 22, 2019
- ☐ Camera ready: April 5, 2019
- ☐ Workshop date: June 28, 2019

Link to submit papers:

<https://edas.info/newPaper.php?c=25712>

More information:

<https://intrag.dca.fee.unicamp.br/s4si2019/>

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(Novel Enablers for Cloud Slicing) project: <http://www.h2020-necos.eu>