



Summer School on “Federated Digital Infrastructures in Education, Scientific Research and Innovation”

5-9 September 2022

Bucharest, Romania



1. Summary

This Summer School is the first of a series which is organized under the frame of the Memorandum of Understanding between the Black Sea Universities Network (BSUN) and European GRID Infrastructure Foundation (EGI). The aim of the summer school is to provide introductory courses on the Federation of Digital Infrastructure and is dedicated for MSc students and PhD students from the BSUN member universities and service providers from universities

and research institutes interested in Federating services and resources with EGI and European Open Science Cloud (EOSC).

The main outcome of this Summer School will be proof-of-concept and pilot federated use cases that can be implemented by EGI in collaboration with the participating service providers and potentially interested students from BSUN member universities.

Black Sea Universities Network (BSUN) was established in 1998 with the purpose of developing educational, scientific, and cultural cooperation and exchanges among the Universities of the Black Sea Economic Cooperation (BSEC) Member States and other institutions with similar concern. The network includes more than 115 member universities from the 12 member states of BSEC as Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey, Ukraine and Serbia.

In 2021, it was signed a Memorandum of Understanding between BSUN and EGI for the development of infrastructure services and resources across BSUN member universities, enabling federation of cloud resource providers, engagement with EOSC and GOSC, training events, community engagement, and the development of a Digital Innovation Hub within the Black Sea region.

The **EGI Foundation** is a not-for-profit foundation established under the Dutch law to coordinate the EGI federation (abbreviated as “EGI”), an international collaboration that federates the digital capabilities, resources and expertise of national and international research communities in Europe and worldwide. The main goal is to empower researchers from all disciplines to collaborate and to carry out data- and compute-intensive science and innovation.

The EGI Foundation has participants and associated participants drawn from representatives of national e-infrastructure consortia (NGIs), EIROs, ERICs, and other legal entities. These entities provide the physical resources and shared services that enable EGI to deliver, improve and innovate services for communities.

2. Agenda

The Official Language of the event will be **English**.

The local time used for the timetable is **EEST (GMT+3)**.

Day 1 - Monday, 5 September

Introduction and e-Infrastructure Security day

Timetable

10:00-10:30	Welcome, introduction to the summer school and round table
10:30-11:00	Introduction to e-Infrastructures. Setting the scene.
11:00-11:15	Coffee break
11:15-12:00	Security operations and essentials
12:00-13:00	Security architecture
13:00-14:00	Lunch break
14:00-16:00	Container security
16:00-16:15	Coffee break
16:15-18:00	Logging, SOC and traceability

Speakers:

- Barbara Krašovec <barbara.krasovec@ijs.si>,
- Daniel Kouril <kouril@ics.muni.cz>,
- David Crooks - UKRI STFC <david.crooks@stfc.ac.uk>,
- Sven Gabriel <sveng@nikhef.nl>

Day 2 - Tuesday, 6 September

Federated Infrastructure day - introduction and using federated infrastructure

Timetable

10:00-10:15	Welcome
10:15-10:45	Keynote speech from prof. Ioan Sacala, vice-Dean of the Faculty of Automatic Control & Computer Science, „Politehnica” University of Bucharest
10:45-11:15	Local computing infrastructures in Romania: report from NGI_RO
11:15-11:30	Coffee break
11:30-12:00	Contribution from NGI_RO
12:00-12:30	Contribution from NGI_RO

12:30-13:00	Federating services and resources in EOSC
13:00-14:00	Lunch break
14:00-14:30	Federating services and resources in EOSC

Day 3 - Wednesday, 7 September

Build your Own Infrastructure day (EGI plus support from NGI_RO). Max 5 use cases (TBC)

Timetable

10:00-10:15	Welcome, round table and introduction of the day (15')
10:15-10:45	<p>Overview of the EGI services for supporting advanced research</p> <p>➤ <i>During this session the EGI service catalogue will be presented and discussed. This will help us establish a common understanding about existing possibilities with EGI, so later during the day we will be able to map scientific use cases to specific services and service capabilities.</i></p>
10:45-11:00	Coffee break
11:00-13:00	<p>Overview of the e-Infrastructure use cases</p> <p>➤ <i>Introduction of the scientific use cases and their expected use of EGI</i></p> <ul style="list-style-type: none"> ○ Use case no.1 - Decision Support System for Sustainable Mobility in Urban Agglomerations (prof. Eden Mamut) ○ Use case no.2 - Multiscale & multiphysics modeling and simulation of complex fluid flows (Laurentiu Oancea) ○ Use case no.3 - IoT from Cloud to FOG (Radu Pietraru, Politehnica University of Bucharest) ○ Use case no.4 - Digital platform for processing medical data (Razvan Nita, Politehnica University of Bucharest)

	<ul style="list-style-type: none"> ○ Use case no.5 - Metacampus application on Federated Infrastructures (Cumali Yasar, Canakkale University, Turkey)
	<ul style="list-style-type: none"> ○ Use case no.6 - AI applications dedicated for education purpose on Federate Infrastructures (Zafer Karadayili, Canakkale University, Turkey)
13:00-14:00	Lunch break
14:00-14:15	Introduction of the afternoon session
14:15-16:00	Working on the integration plans. ➤ <i>Prepare integration plans and roadmaps for each use case (PART I)</i>
16:00-16:30	Coffee break
16:30-17:30	Working on the integration plans. ➤ <i>Prepare integration plans and roadmaps for each use case (PART II)</i>
17:30-18:00	Closing of the day and next steps

Documentation:

- User Guides: <https://docs.egi.eu/users/>
- Service Provider Guides: <https://docs.egi.eu/providers/>

Speakers/Technical Experts:

- Gianni Dalla Torre, gianni.dallatorre@egi.eu
- Yin Chen, yin.chen@egi.eu (TBC)
- NGI_RO (TBC)

Day 4 - Thursday, 8 September

FitSM Foundation training

Timetable

10:00-10:15	Log in, set up, round table
10:15-10:45	Service and service management: Introduction, terms and concepts

10:45-11:00	Coffee break
11:00-12:30	The FitSM standard series & Service management – General aspects, Exam questions
12:30-13:30	Lunch break
13:30-14:45	Service management – Processes: SPM, SLM, SRM
14:45-15:00	Coffee break
15:00-16:15	Service management – Processes: SACM, CAPM, ISM, Exam questions
16:15-16:30	Coffee break
16:30-17:30	Service management – Processes: CRM, SUPPM. Wrap up for the day
17:30-18:00	Additional discussion / backup time

Training material:

- <https://indico.egi.eu/event/5882/sessions/4866/>

Speaker:

- Thomas Schaaf <thomas.schaaf@egi.eu>

Day 5 - Friday, 9 September

FitSM Foundation exam

Timetable

10:00-10:15	Log in, set up, round table
10:15-11:30	Service management – Processes: ISRM, PM, CONFM
11:30-11:45	Coffee break
11:45-13:00	Service management – Processes: CHM, RDM, CSI, Exam questions
13:00-14:00	Lunch break
14:00-15:00	Benefits, Risks & Challenges of Implementing ITSM, Related standards and frameworks, Exam prep
15:00-16:00	Break, pre exam
16:00-17:00	Exam

Training material:

- <https://indico.egi.eu/event/5882/sessions/4866/>

Speaker:

- Thomas Schaaf <thomas.schaaf@egi.eu>

3. Accommodation:

The Summer School will be held at the “Politehnica” University of Bucharest.

Participating students will be accommodated in dormitories (accommodation in double room – 2 persons or accommodation in single room).

The infrastructure and organizational support will be assured by the “Politehnica” University of Bucharest.

More information for the preparations and the materials needed for the accommodation will be provided by the local organizers.

4. Summer School Organization

- Summer School Organizing Committee
- Summer School Scientific Committee

5. Fees for participation

Payment methods will be announced in due time.

Fees:

- Meal costs: €7 / meal

- Accommodation costs: €15 / pers / night (accommodation in double room) or €30 / pers / night (accommodation in single room)
- For participation in the FitSM Foundation training and FitSM Foundation Exam (Day 4 & 5) – €300 / participant (the fee will include also a formal certificate)

Important! The participation to the Summer School – Day 1, 2, 3 is free of charge.

All participants are responsible for covering travel costs from their home cities to Bucharest and other everyday expenses.

6. Submission of the Application form for participation

The interested parties have to fill online the relevant Application form at the following link:

https://docs.google.com/forms/d/e/1FAIpQLSdi3l6qlryu8IyNOMv5SAUKs20xxU18UgoHmry9RY20zwtG3w/viewform?usp=sf_link

Applicants will be notified for the acceptance of their application.

7. Official website of the event

<https://bsun.org/pages/bsun-egi-summer-school.php>

8. Contact information

Prof. Eden MAMUT, PhD, Eng., Secretary General

Black Sea Universities Network

124 Mamaia Avenue

900527 Constantza, Romania

<https://bsun.org/>

Phone/Fax: +40 241 606 462

GSM: +40 748 142 615

Email: emamut@bsun.org

