

Building Digital Twins – the BioDT experience

An introduction to building digital twins through the lenses of BioDT use cases, the most important components and lessons learned from our experiences.

Date: 3 -7 March 2025

Location: Lecce, Italy

Programme (some adjustments may still occur)

Monday	09.30 - 11.00	Introduction to BioDT Project and School programme
	11.00 - 11.30	Coffee Break
	11.30 - 13.00	Presenting digital twin - part 1 (process, steps, components, FAIRness, lessons learned, etc.)
	13.00 - 14.00	Lunch Break
	14.00 - 15.30	Presenting digital twin presentation - part 2 (process, steps, components, FAIRness, lessons learned, etc.)
	15.30 - 16.00	Coffee Break
	16.00 - 17.30	Technical tools (Python, LUMI, Slack,) and working groups creation
Tuesday	09.30 - 11.00	Turning research/scientific questions and model into technical tools
	11.00 - 11.30	Coffee Break
	11.30 - 13.00	Turning research/scientific questions and model into technical tools
	13.00 - 14.00	Lunch Break
	14.00 - 15.30	DOI data citation and data papers
	15.30 - 16.00	Coffee Break
	16.00 - 17.30	Using of data APIs + bioRIs
Wednesday	09.30 - 11.00	Introduction to High -Performance Computing - Scaling up Biodiversity Models from Laptops to Supercomputers <i>Examples on pDTs: Crop Wild Relatives, Invasive Alien Species, Cultural Ecosystem Services</i>
	11.00 - 11.30	Coffee Break
	11.30 - 13.00	Hands -on LUMI, Using LUMI web interface and Jupyter notebooks Basics on running jobs on HPC (submit, monitor, check output) <i>Examples on pDTs: Crop Wild Relatives, Invasive Alien Species, Cultural Ecosystem Services</i>
	13.00 - 14.00	Lunch Break
	14.00 - 15.30	Introduction to Open Science
	15.30 - 16.00	Coffee Break
	16.00 - 17.30	Tools and practical steps

Thursday	09.30 - 11.00	Introducing LEXIS and LEXIS API
	11.00 - 11.30	Coffee Break
	11.30 - 13.00	GUI development
	13.00 - 14.00	Lunch Break
	14.00 - 15.30	BioDT pDTs presentation
	15.30 - 16.00	Coffee Break
	16.00 - 17.30	Hackathon tasks presentation and preparation
	20.00 -	Social Dinner
Friday	09.30 - 12.30	Hackathon
	10.30	Working Coffee Break
	12.30 - 13.30	Lunch Break
	13.30 - 16.30	Hackathon
	15.00	Working Coffee Break
	16.30 - 17.00	Closing

School Location

Officine Cantelmo

<https://www.officinecantelmo.it>

Viale Michele de Pietro 8/a, Lecce

Training Resource

The delivery of the School will be supported by the BioDT Training Platform accessible at

<https://training.lifewatch.eu/international-projects/resources/?category=23>

The BioDT School and Hackathon training resource will host all the materials (ppts, documents, files, etc.) that will be used during the event.

The resource link and the access credentials will be shared closer to the event date.

Accommodation

Arryvo Hotel (10 minutes walking distance from the School venue)

<https://arryvo.com>

Via Adua 24, Lecce

Social Dinner

The Social Dinner will take place on Thursday 6 March at 2000.

The location of the dinner will be communicated during the event.

