

# The interTwin Digital Twin Engine: a platform for building and managing scientific Digital Twins

*Tuesday, 1 October 2024 15:15 (15 minutes)*

The Horizon Europe interTwin project is developing a highly generic yet powerful Digital Twin Engine (DTE) to support interdisciplinary Digital Twins (DT). Comprising thirty-one high-profile scientific partner institutions, the project brings together infrastructure providers, technology providers, and DT use cases from Climate Research and Environmental Monitoring, High Energy and AstroParticle Physics, and Radio Astronomy. This group of experts enables the co-design of the DTE Blueprint Architecture and the prototype platform benefiting end users like scientists and policymakers but also DT developers. It achieves this by significantly simplifying the process of creating and managing complex Digital Twins workflows.

As part of our contribution, we'll share the latest updates on our project, including the DTE Blueprint Architecture, whose latest version will be under finalisation in Q4/2024. The interTwin components, thanks to the collaboration with ECMWF partner in the project, are designed to be aligned with what Destination Earth is designing and building. Therefore, we will show the activities carried out by the project to analyse DestinE architecture and the points of interoperability planned.

The contribution will also cover the status of the DT use cases we currently support and describe the software releases of the DTE.

## Topic

Needs and solutions in scientific computing: Digital Twins

**Primary author:** MANZI, Andrea (EGI.eu)

**Presenter:** MANZI, Andrea (EGI.eu)

**Session Classification:** Replicating and predicting complex systems with scientific Digital Twins