

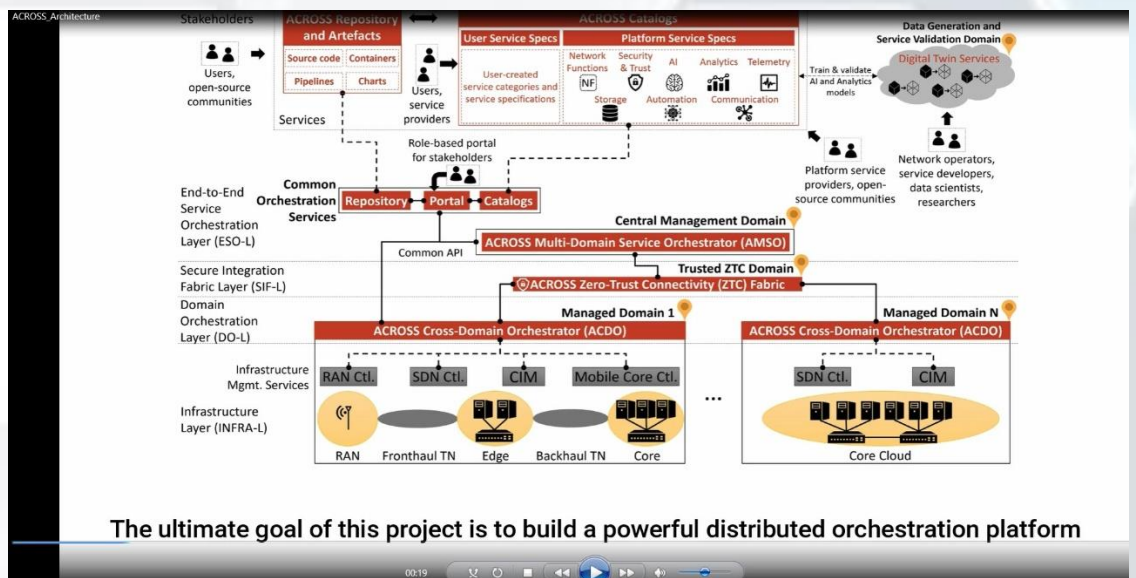


ACROSS

Automated zero-touch cross layer provisioning framework for 5G and beyond vertical services

Press Release

ACROSS Architecture Video



17 June 2024

ACROSS Architecture Video is OUT!

The second VIDEO of ACROSS is OUT!

ACROSS's consortium releases the second video of the project entitled "ACROSS Architecture", one that aims to inform the public about the Architecture, the Services and the Test Cases of ACROSS.

ACROSS Architecture

The initial version of the ACROSS architecture spans across multiple horizontal infrastructure domains and multiple vertical platform layers:

- *The first layer is the Infrastructure Layer, which comprise of geo-distributed heterogeneous physical and virtual appliances that span across multiple domains.*
- *The second layer is the Domain Layer. In every domain, ACROSS employs a dedicated domain orchestrator, which oversees and manages all domain resources.*
- *The third layer is the End-to-End Service Orchestration Layer, which is a central cloud-managed end-to-end service orchestration layer that operates the services of the secure integration layer.*
- *The fourth layer is the Secure Integration Layer, which acts as a trusted central authority for accessing ACROSS services.*

ACROSS Services

To provide additional capabilities without disrupting today's orchestration loops, the ACROSS promotes the concept of platform services as a general means to extend an orchestration platform. Therefore, ACROSS adopts the following platform Services:

1. *The ACROSS Training and Validation Environment and Services (enables the execution of experiments)*
2. *The ACROSS End-User Services*
3. *ACROSS Platform Services (Storage, Communication, Telemetry, Network Functions, Security & Trust, Analytics, AI, Automation)*

ACROSS Test Cases

The ACROSS platform will be evaluated and validated through a set of four Test Cases:

- *TC1: Test Case 1 concerns stakeholder-driven orchestration test cases that exercise the ability of the ACROSS platform to realize events coming from the overlay stakeholders through the ACROSS NBIs.*
- *TC2: Test Case 2 regards device-driven orchestration test cases that exercise the ability of the ACROSS platform to react upon events coming from the underlying infrastructure.*
- *TC3: Test Case 3 is about Intelligence-driven orchestration test cases that demonstrate how the ACROSS platform can deploy intelligent AI-based and Analytics-based platform services.*
- *TC4: Test Case 4 refers to a holistic orchestration test case that demonstrates how multiple test cases can be chained together to expand the ACROSS platform to new domains.*

The “ACROSS Architecture” video is publicly available through ACROSS’s YouTube channel and can be found here: [ACROSS Architecture](#)

About ACROSS

ACROSS is a HORIZON-JU-SNS-2022 funded research project that designs and implements an end-to-end service deployment and management platform for next generation networks and services, aiming at unprecedented levels of automation, performance, scalability, and energy efficiency. The platform is further enhanced with a) **deep end-to-end telemetry** to unlock visibility of the intertwined network and compute system states, b) **AI-driven intelligence** that leverages both the vast number of events originating from the dense IoT ecosystem and detailed monitoring data originating from the ACROSS telemetry sub-system, to generate new insights, c) **full-stack cross-domain zero-touch provisioning** via programmable “hooks” that exploit events originating from raw telemetry and AI processed events, and d) **secure and trusted orchestration mechanisms** for trusted computing technologies over large and heterogeneous cloud-edge deployments, as well as orchestration and monitoring of the security VNF.

Learn more and be part of the ACROSS community!

 <https://across-he.eu/>

 <https://www.linkedin.com/company/across-horizon-europe/>

 https://twitter.com/horizon_across

 <https://www.facebook.com/people/Across-Horizon-Europe/100089706850799/>

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