ADROIT6G Interview

AI-driven Management & Orchestration Framework (ATHENA / NXW)

Q1: What is your role in ADROIT6G?

I contribute to the AI-driven Management and Orchestration framework responsible for zero-touch automation across distributed 6G environments.

Q2: What is the main goal of the framework?

The goal is to enable automated provisioning, orchestration, and optimisation of heterogeneous resources across far-edge, edge, and cloud domains.

Q3: How does the framework support the PoCs?

It coordinates distributed AI agents, orchestration workflows, and closed-loop automation mechanisms used across the PoCs.

Q4: Why is distributed orchestration important for 6G?

Future 6G environments will require scalable, multi-domain orchestration capable of reacting dynamically to changing network conditions.

Q5: What are the key innovations of the framework?

The framework supports distributed AI-driven decisions, automatic resource discovery, and closed-loop optimisation across multiple stakeholders.

Q6: How are closed-loop reactions validated?

We validate runtime adaptation mechanisms that automatically react to service degradation and resource allocation changes.

Q7: What dissemination value does the framework provide?

It demonstrates how AI-native orchestration can simplify future 6G operations while improving scalability and resilience.

Q8: How does the framework enable multi-stakeholder collaboration?

It allows domains to dynamically publish, discover, and combine resources, AI models, and services.

Q9: How are external systems integrated?

Through programmable APIs and interoperable orchestration interfaces supporting cloud-native deployments.

Q10: How do KPIs support validation activities?

KPIs measure provisioning time, automation responsiveness, orchestration efficiency, and service continuity.

Q11: How are AI agents deployed within the architecture?

AI agents are dynamically instantiated across distributed environments depending on service and resource requirements.

Q12: How does the framework support dynamic resource discovery?

Resources are automatically detected and incorporated into orchestration workflows in near real-time.

Q13: What role does programmability play in the architecture?

Programmability enables flexible adaptation of workflows and supports rapid deployment of new services.

Q14: How do validation workflows contribute to dissemination?

Each validated workflow demonstrates practical orchestration capabilities that can be communicated to industry and research communities.

Q15: What knowledge transfer opportunities emerge from the framework?

The framework provides reusable methodologies for distributed AI orchestration and zero-touch operations.

Q16: How do datasets support future developments?

Operational datasets support AI training, orchestration optimisation, and reproducibility of validation results.

Q17: What is the strategic impact of the framework?

The framework supports the transition toward fully automated, AI-native, and sustainable 6G infrastructures.

Q18: How does the framework support exploitation readiness?

It provides measurable technical validation that can support future commercial orchestration platforms and open ecosystems.

Q19: How does the framework align with SNS JU priorities?

It directly supports intelligent automation, cloud-native programmability, and distributed AI integration for future 6G systems.

Q20: What is the future role of AI-driven orchestration in 6G?

AI-driven orchestration will become fundamental for managing highly distributed, autonomous, and multi-domain 6G ecosystems.

Co-funded by the European Union

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ADROIT6G project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grand Agreement No 101095363.