

Agent Fabric – Phase II

Enabling a multi-vendor, multi-agent ecosystem for Autonomous Networks



The solution:

Traditional incident management systems struggle to manage today's increasingly complex network environments. This Catalyst is developing a multi-agent system based on generative AI to automate incident diagnosis, resolution, optimization, and continuous learning processes. This will reduce mean-time-to-repair, enhance customer satisfaction, and reduce operational costs.



Addressing the challenge:

- **Multi-Agent AI Runtime:** Introduces a telecom-grade, plug-and-play environment for autonomous agents to collaborate across domains (RAN, transport, core).
- **Cross-Domain Intelligence:** Replaces fragmented scripts with shared agent logic using standard TM Forum APIs.
- **Coordinated Autonomy:** Transforms disconnected automation into an interoperable, scalable, Level 4-ready architecture.
- **Built for Flexibility:** Aligns with TM Forum's AN L4, supporting legacy reuse, GenAI integration, and sustainable operations.



At Telefónica, we believe that participating in this Catalyst will generate a series of very interesting results for us to fine-tune the most relevant aspects to achieve Level 4 in the near future.

We believe that our research and improvements must be able to improve and, in some cases, transform the industry. This Catalyst allows us to look ahead from an innovative perspective, not just at Level 4, and its results will generate very interesting learnings that the industry in general, not just telecommunications, can use and apply to other areas as well. These learnings drive innovation in the industry and ultimately contribute to the evolution and improvement of society as a whole.

Pedro Garcia Parra

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Business impact:

- 30% Reduction** in manual incident handling via collaborative agent workflows.
- 25% Faster** root-cause detection through automated, cross-domain diagnostics.
- Lower OPEX** by reducing truck rolls and increasing operational efficiency.
- Faster ROI:** Scalable model avoids costly full-stack replacements.
- Vendor-Neutral Ecosystem:** Enables real-time, explainable NOC operations and greater trust in AI-driven decisions.

Champions:



Participants:

