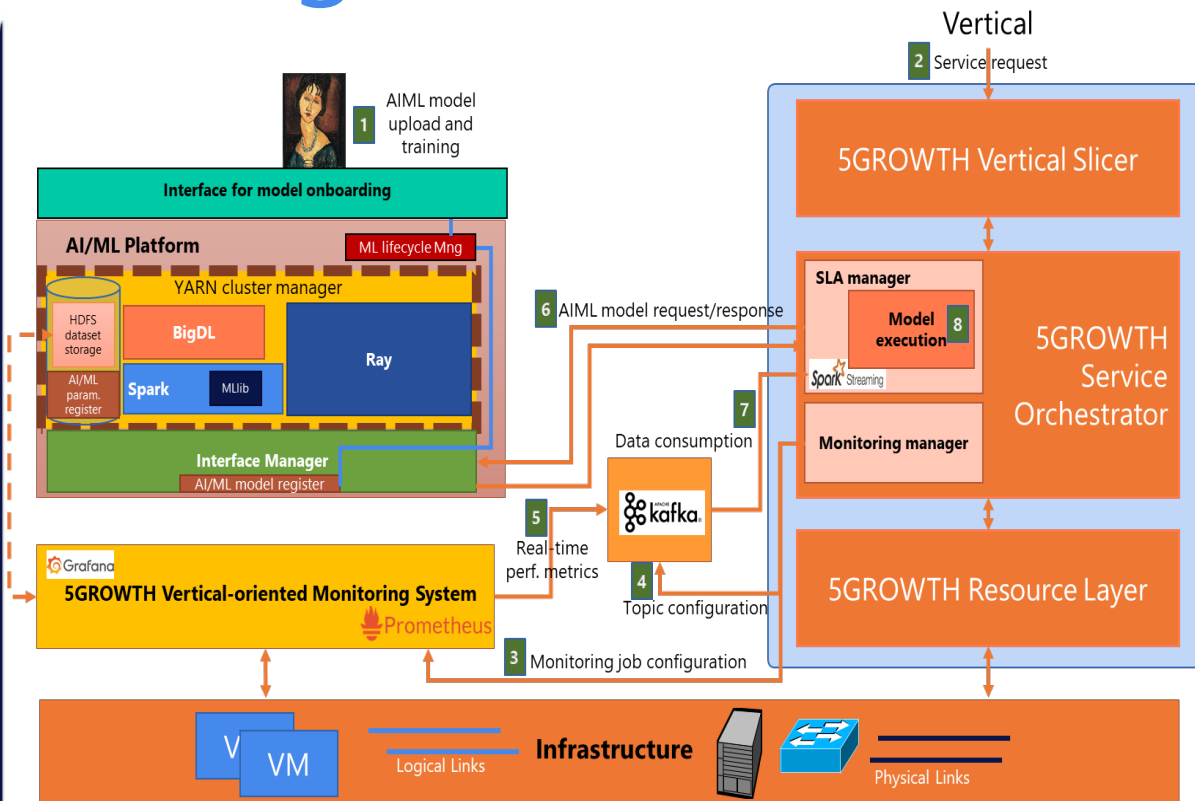


Integration of AI/ML in the E2E MANO stack



Core research findings

- Full MANO stack AIML-based network automation is feasible in practice
- Open AIML integration through AIMLaaS
- AIML improves SLA management at all MANO stack layers

Top-3 priorities & gaps to address in 6G

- Generalization of AI/ML model generation and inter-use case reuse
- Clear definition of AI/ML-related functions and modes of operation
- AIML-based decision-making based on cross-layer and cross-domain metrics

Paper: J. Baranda, J. Mangues, E. Zeydan, L. Vettori, R. Martínez, X. Li, A. Garcia-Saavedra, C. Fabiana Chiasserini, C. Casetti, K. Tomakh, O. Kolodiaznyi, C. Jesus Bernardos, "On the Integration of AI/ML-based scaling operations in the 5Growth platform," in Proceedings of the 6th IEEE Conference on Network Functions Virtualization and Software Defined Networking (IEEE NFV-SDN 2020), 9-12 November 2020.

J. Baranda, J. Mangues, E. Zeydan, C. Casetti, C. Fabiana Chiasserini, M. Malinverno, C. Puligheddu, M. Groshev, C. Guimarães, K. Tomakh, D. Kucherenko, O. Kolodiaznyi, AIML-as-a-Service for SLA management of a Digital Twin Virtual Network Service, in Proceedings of the International Conference on Computer Communications (IEEE INFOCOM), 10-13 May 2021