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Modernization of Energy Market Communication

innogy Has a Secure and Scalable Solution for Data Exchange with OTE and EDC

innogy / Powered by MVM

Situation

- The custom SMW solution on SAP NetWeaver handled data exchange and processing between innogy systems and the energy market as part of critical business processes.
- The legacy technology limited flexibility, scalability, and further development. Maintenance required detailed knowledge of the original proprietary implementation.
- The approaching end of life of the SAP NetWeaver platform reinforced the decision to migrate the solution to the strategic cloud platform, SAP BTP.
- The modernization created an opportunity to build a shared architectural and operational foundation on SAP BTP for both the Utilities Market Communication (UMC) application and other custom business applications.

Challenges

- Replace data exchange and processing in a business-critical process while preserving interface compatibility and the continuity of downstream processes.
- Handle unpredictable communication traffic spikes driven by OTE through dynamic system resource scaling, while adhering to required response and processing times.
- Establish environment governance, security, monitoring, and standardized rules for application development and deployment.
- Prepare an environment for future business applications extending standard SAP functionality in accordance with clean core principles.

Solution

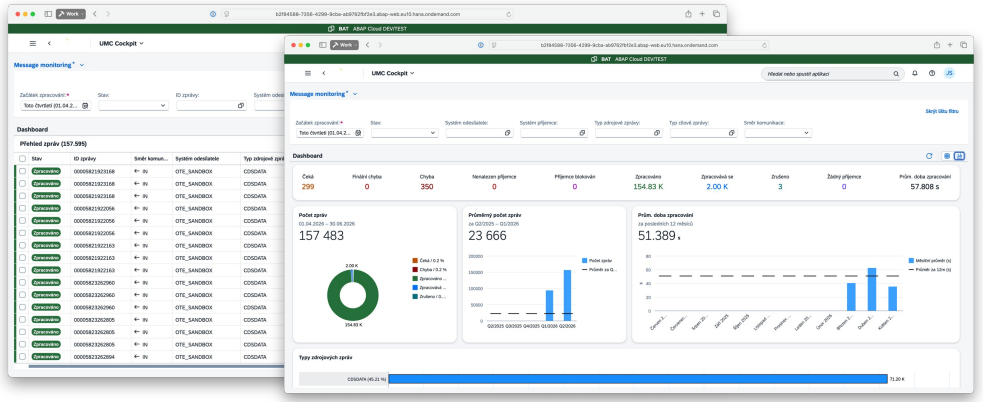
- Architectural design and implementation of UMC on SAP BTP, connecting an application in SAP BTP ABAP Environment with Cloud Integration within SAP Integration Suite.
- An application layer comprising a custom data model, processing logic, Fiori cockpit, communication configuration, status tracking, and reprocessing mechanisms for failed messages.
- Phased, controlled migration of communication without significant operational disruption; system dimensioned for approximately 2.5 million messages per month and peak loads of around 60,000 messages per hour.

Benefits

- Modernized communication processing with the energy market, delivering higher operational transparency and simplified administration.
- Decommissioning not only the legacy custom solution, but the entire SAP NetWeaver environment, yielding direct operational cost savings (TCO).
- Ability to dynamically scale capacity to load spikes while maintaining the required service level and throughput.
- Reusable architecture along with standardized security, development, and operational governance for future applications.
- Expansion of custom functionality on SAP BTP with minimal modifications to the core SAP systems (Clean Core).
- Faster implementation of new integration requirements.

Future plans and development

- Leverage the newly established SAP BTP ABAP Environment to build and run further custom applications extending standard SAP capabilities, including AI-assisted development.
- Build on the established governance, security, monitoring, and controlled deployment pipelines when delivering subsequent applications aligned with clean core principles.
- Extend UMC to accommodate new energy market regulations and requirements—including EDC scenarios—and leverage SAP Integration Suite as needed to connect additional systems and applications.



Industry
Energy & Utilities

Customer
innogy Česká republika a.s.

Headquarters
Prague

Products and services
Electricity and natural gas supply, energy services

Number of employees
1,600

System environment
- SAP S/4HANA Private Cloud
- SAP BTP
- SAP Integration Suite
- SAP ABAP Environment

Project implementation timeline
2/2026–8/2026

Reference
Martin Choděra – Senior Manager IT Backend Apps