

Osmos Unveils Al Data Engineer: Revolutionizing Enterprise Data Engineering with Agentic Code Gen in Microsoft Fabric

Osmos, a leader in Al-powered data solutions, today announced the launch of the Osmos Al Data Engineer, an agentic Al designed to transform enterprise data

SEATTLE, WA, UNITED STATES,
September 4, 2025 /EINPresswire.com/
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agentic Al designed to transform how
enterprises build and manage their
data pipelines within Microsoft Fabric.
This innovative solution addresses the

Osmos Al Data Engineer

Home Edit Al tools Run View

Generate notebook
Osmos Al-generated notebook
Osmos Al-generated notebook
Osmos Al-generated notebook

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Generate Production-Ready Spark Notebooks with

Generate Production-Ready Spark Notebooks with Osmos Al Data Engineer

critical need for scalable, high-quality data engineering by autonomously generating, validating, and deploying production-grade code.

Data engineers are the backbone of modern enterprises, meticulously building pipelines and



The Osmos AI Data Engineer is built to assist highly skilled professionals by providing an intelligent partner that understands their unique challenges and delivers production-ready solutions."

Kirat Pandya, CEO of Osmos

ensuring data quality. However, the repetitive nature of transforming data and the sheer scale of modern data estates often lead to significant challenges. Traditional ETL tools and existing code generation solutions fall short, lacking the deep data context and enterprise integration required by data teams.

"Every IT organization has a roadmap that is longer than they will be able to deliver with the engineering resources they have." said Kirat Pandya, CEO of Osmos. "Data engineers are expected to update data systems to meet ever-evolving business needs without compromising

quality which requires designing systems, building code, validating, and deploying at a rapid pace across an ever-expanding surface area. The Osmos Al Data Engineer is built to assist these highly

skilled professionals by providing an intelligent partner that understands their unique challenges and delivers production-ready solutions."

The Osmos AI Data Engineer acts as a collaborative, context-aware software developer that understands user goals, designs intelligent solutions, and generates the code to power data pipelines. Key capabilities and benefits include:

Fabric-Native PySpark Notebooks: The AI Data Engineer generates Fabric-native PySpark notebooks that are fully integrated with OneLake and support various formats like CSV, Excel, JSON, Parquet, and .txt. These notebooks are built with structured sections for inputs, exploration, transformations, validations, and outputs, and include flags for test vs. production mode, row-count tracking, metric logging, and version control.

Autonomous Code Generation and Validation: It writes, tests, fixes, and finalizes its own code, which can then be scheduled, monitored, and managed like any other Fabric workload.

Trust and Transparency: Operating with full transparency, the Osmos AI Data Engineer provides audit trails for every notebook generation and update, version-controlled instructions and transformation logic, row-level metrics, and historical run tracking. All execution occurs within the user's Fabric workspace, ensuring data never leaves their tenant.

User Control and Evolvability: Users remain in charge, able to drive edits through code or updated instructions, and direct the Al Data Engineer to update code as business logic evolves.

Flexible Deployment for Diverse Use Cases: Organizations can create separate Osmos AI Data Engineers for distinct use cases, such as ERP transformations for finance, IoT ingest for manufacturing, or Sales and CRM enrichment pipelines. This structure ensures clear separation of concerns, context reuse, and effortless scaling.

Deep Integration with Microsoft Fabric: The AI Data Engineer is purpose-built to work within the Microsoft Fabric ecosystem, executing notebooks on Spark pools inside the Fabric tenant, ensuring all transformations happen within the customer's data boundary. It integrates natively with OneLake, Power BI, and Microsoft scheduling capabilities, and is certified to Microsoft's standards, meaning no data copies or external systems are required.

Osmos has already seen tangible results with enterprise customers, enabling them to onboard massive ERPs in days instead of quarters, empowering engineers with familiar tools, and replacing brittle ETL logic with durable, Al-generated pipelines.

The launch of the Osmos Al Data Engineer underscores Osmos' commitment to delivering innovative, Al-powered solutions that simplify complex data operations and empower data teams to achieve more.

Osmos empowers organizations to accelerate data readiness while improving data quality. Our Al-powered solutions automate complex data tasks, enabling businesses to make smarter, faster decisions, accelerate activations, and increase operational efficiency.

Contact: <u>Get in touch</u>

Resources:

Microsoft and Osmos joint announcement Meet the Osmos Al Data Engineer

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This press release can be viewed online at: https://www.einpresswire.com/article/823120732

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