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Blog

DEMYSTIFYING DATA ORCHESTRATION (3 SIMPLE PRINCIPLES OF PRODUCTIVITY)

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Demystifying Data Orchestration

(3 Simple Principles of Productivity)

Introduction

✓ A Day in the Life of a Data Architect

Designing the ultimate data system for speed, accuracy, and efficiency takes careful planning, extensive knowledge, and a keen sense of interoperability. Most data architects spend their days balancing their time between a view from 10,000 feet and down in the details of how different data platforms work together. If the data architects' job was as easy as stitching together different tools, there would be nothing to their job. The real challenge comes when products have been selected and someone needs to make different products work together.

✓ Data Orchestration Demystified for the Data Architect

Data orchestration is one of the few modernization technologies that connects multiple technologies together and eliminates the need for data architects to be down in the weeds figuring out how to make products work together. Think of data orchestration as the unified replacement for data movement, replication, change data capture, data integration, API integration, data transformation, data cleansing, data preparation, and machine learning operations, all in a single platform.

✓ A Productive Day in the Life of a Data Professional

With unified data orchestration, the data architect delivers a data environment with the speed, accuracy, and efficiency already built in for the data professional. Ideally, users should not have to move from one platform to another to build their data pipelines or when they need to pass data or analytics on to another user. In addition, they are able to automate many of the formerly manual tasks and reuse a significant amount of their code for future projects. Productivity gains are multiplied when collaboration is also built into the unified data orchestration platform.

The Principle of Unification

To address the issues created by legacy data management approaches, data orchestration must be unified to support all data types, at all latencies, for all use cases, in all locations. Specifically, a single platform should easily combine diverse data types including both structured and semi-structured data, as well as both streaming and batch data, with the ability to combine all data in a single data pipeline. A unified approach to data orchestration then supports a broad range of users and use cases, including data collection, movement, replication, CDC, integration, quality, and transformation across SaaS, IoT, cloud, multi-cloud, on-premises, and hybrid data storage configurations.

The Principle of Consolidation

When the data architect unifies data orchestration, they initiate the consolidation of multiple data movement and transformation platforms. The cost and complexity of using multiple data management tools to create end to end data pipelines grows exponentially as each new tool is added. It requires more funding, more resources, and more skills not only to operate the diverse toolset, but also to create some kind of interoperability. Additional time is wasted moving data from one system to another. A unified approach to data orchestration provides a single platform where legacy data management platforms can be consolidated.

The Principle of Leverage

When the data architect unifies data orchestration, they give data and business professionals the means to leverage existing data and analytics excellence, and to maximize reuse. Moving data or analytics from one platform to another requires migrations; and migrations mean the loss of data or insight, as well as, unexpected delays. A unified data orchestration platform provides a single repository for all end to end data pipelines. With rich metadata capabilities and agent-based data processing, it supports up to 80% reuse of existing code creation for future migrations. A unified approach to data orchestration also makes it easy to add new data types, new data platforms, and new analytics as the future continues to unfold.

The Simplicity of Unified Data Orchestration

The data architect spends a significant portion of their time trying to figure out how to make different products work together in their data ecosystem. Unified Data Orchestration frees data architecture professionals from the difficulty of interoperability and puts them in the driver's seat of organizational efficiency, productivity, and success. The result of data integration modernization is greater productivity for all data professionals. The success of the data architect is most obvious when their architectural decisions result in saved time, money, and resources, along with increased value creation and innovation.

To learn more about PurpleCube Unified Data Orchestration, download this product brief or this whitepaper on Unified Data Orchestration



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