

LEARNING MADE EASY

Hitachi Vantara Special Edition

Building Your Data Fabric with DataOps

for
dummies[®]
A Wiley Brand



Create
360 views

—
Govern
enterprise data

—
Automate data
operations

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Inspire the Next

What is a data fabric and why should you be interested in it? If you have IT folks who are responsible for making all of your IT operate smoothly while meeting your business needs, you need a data fabric. Your Chief Data Officer (CDO) and the people who support that office — data architects, data engineers, data stewards, and data custodians — are also going to want to know more about this concept that enables DataOps. So how do you go about doing that? Glad you asked.

First of all, a data fabric describes enterprise-wide data management and delivery. It can span infrastructures across multiple clouds, datacenters, and even IoT gateways and edge devices. A data fabric provides customers with a consistent and coherent view of all the integrated and packaged data they may need, no matter the location of the user or the data.



REMEMBER

A data fabric is a living collection of capabilities. It continually grows and changes along with your organization. It's always evolving!

This guide showcases the use cases where a data fabric can be deployed in your organization and also highlights how a data fabric architecture enables DataOps practices (and the perks you gain from it).

Presenting Compelling Data Fabric Use Cases

You may be wondering how you can use a data fabric in your organization. In this section, you discover the value of a data

fabric and how it shines through in the ways in which it drives your business outcomes. In these use cases, you see how a data fabric brings your organization's needs into focus.



REMEMBER

Your organization must work through and document its own important use cases to design and build a data fabric architecture that works for you.

Creating 360 views for self-service

You don't want to keep your departments and functions separated. You're striving for collaboration, and you want people to work together to achieve your business goals, and time is of the essence.

By implementing a data fabric, your analysts can take advantage of self-service tools to explore, investigate, and analyze data items of interest to create 360 views — customer 360, process 360, asset 360, and so on. The built-in, efficient metadata-based search capabilities quickly assemble your desired data. Self-service ensures that users get things done as quickly as they can, with no need for IT involvement.

Automating business processes

Industrial customers need to correlate information from operational technology (OT) with information technology (IT) to solve real-world industrial use cases, such as

- **Improved workforce productivity**
- **End-to-end process automation**
- **Remote monitoring and control**
- **Equipment and supply-chain optimization**
- **Increased workplace safety**

Your customers may be looking to optimize their end-to-end process automation. OT data comes in from sensors in the factory floor into the fabric. This OT data then gets combined with IT data to solve any of the above use cases. OT data when combined with IT data from an inventory management system can help figure out inventory stock information to discern when and how much more stock needs to be produced. This process helps streamline industrial operations, increase productivity, and reduce cost by running just-in-time inventory.

Complying with regulations

You're likely aware of the General Data Protection Regulation (GDPR). Complying with this regulation means that you must provide all data you keep on customers or users, and those users or customers can request at any time that their accounts be closed and all data stored about them deleted. This law also requires that you provide information — or forget information — no more than 30 days after receiving a request. If you have many different and separate data stores, databases, document archives, and so on, you can't be sure that you've found every single piece of data when a request comes in.



TECHNICAL
STUFF

Forgetting information, also called the right to be forgotten (RTBF), is typically when customers ask you to delete all their data from all your company systems. Having a customer 360 view of all customers comes in handy when you have to

comply with GDPR requests. You may face severe regulatory penalties for not passing regulatory compliance — and you risk damaging your corporate brand.



TIP

If you have a data fabric, it can discover all your data and put everything in a global catalog. At that point, you can produce information on-demand (or forget it if asked to do so).

Archiving data intelligently

Create a data fabric that has some intelligence about the data and the regulatory requirements. The data catalog within the data fabric can tag all data that needs to be archived for long term retention purposes. And automatic policies will transparently move that data to cheaper object storage behind the scenes without having to rewrite any front-end applications that use that data. This way, the archive is intelligently managed as and when regulatory data arrives.

Attaining multicloud flexibility

The biggest benefit that you'll see from implementing a data fabric is its platform- and location-agnostic flexibility. The data fabric isn't tied to a specific cloud platform or data store, so you can run your workloads anywhere they're needed — on public or private clouds and without additional programming. Data in the data fabric can accommodate any kind of analysis or analytics that your organization wants to run against your data.

Improving Your DataOps Practices with Data Fabric

Deploying a data fabric architecture enhances your DataOps practices and provides your company with many benefits:

- **You get a complete, single view of your trusted business data.**
- **Your data is secure across your entire company.**
- **You provide a self-service and collaborative platform for your employees.**
- **You can offer real-time sharing of your data with business users, customers, and partners.**

While reaping these benefits, your data operations are also improving. You'll see accelerated delivery of new data for analytics efforts, improved data quality, and reduced cost of data management.

As your users and teams are sharing data, they're adding new meaning to that data, which ultimately makes that data even more valuable to your company. Through this collective enrichment, data is incorporated into your data fabric, giving your employees greater access and performance. Everyone benefits from faster, more efficient handling.

Where to Go from Here

For more resources beyond this guide, check out the following:

- www.hitachivantara.com/en-us/pdf/ebook/data-fabric-for-dummies-ebook.pdf
- www.hitachivantara.com/en-us/products/data-management-analytics/lumada-dataops-suite.html
- www.hitachivantara.com/en-us/services/consulting-services/data-modernization.html
- www.hitachivantara.com/en-us/pdf/ebook/your-data-fabric-the-key-to-accelerating-digital-progress-ebook.pdf