



# Data Hub with NVIDIA DGX<sup>™</sup> POD

A PlatformDIGITAL<sup>®</sup> Pervasive Datacenter Architecture (PDx<sup>®</sup>)

A PlatformDIGITAL<sup>®</sup> Solution Overview



## Data Hub with NVIDIA DGX<sup>™</sup> POD Enable Centers of Data Exchange with NVIDIA DGX<sup>™</sup>

Digital business requires a new data infrastructure architecture, a PlatformDIGITAL<sup>®</sup> Pervasive Datacenter Architecture (PDx<sup>®</sup>) strategy. Using a PDx<sup>®</sup> strategy enables companies to localize staging, analytics, data aggregation, streaming and management at global points of business presence.

This improves performance and data compliance control, necessary to support exploding volume, variability and velocity of data creation, processing and storage to accommodate digital business. The strategy brings the users, networks, systems, and controls to the data, which removes barriers of data gravity and creates centers of data exchange to scale digital business.

#### Data Hub with NVIDIA DGX<sup>™</sup> POD

Deploying Data Hub with NVIDIA DGX<sup>™</sup> POD enables customers to implement their HPC initiatives, connect and host critical data infrastructure in proximity to users, networks, clouds, and things to address data gravity and compliance to scale digital business. By deploying Data Hub on PlatformDIGITAL<sup>®</sup> enterprises create centers of data exchange to solve global coverage, capacity and connectivity needs. These centers of data exchange are an ideal place to support analytical workflows. High Performance Computing (HPC), combined with distributed storage and security, leads to real-time processing which results in real-time benefits.

To enable this solution, Digital Realty has integrated the NVIDIA DGX<sup>™</sup> POD as part of the PlatformDIGITAL<sup>®</sup> Data Hub solution. This unified solution provides best-in-class IT infrastructure paired with a seamless global ecosystem with consistent experience, security and resiliency.

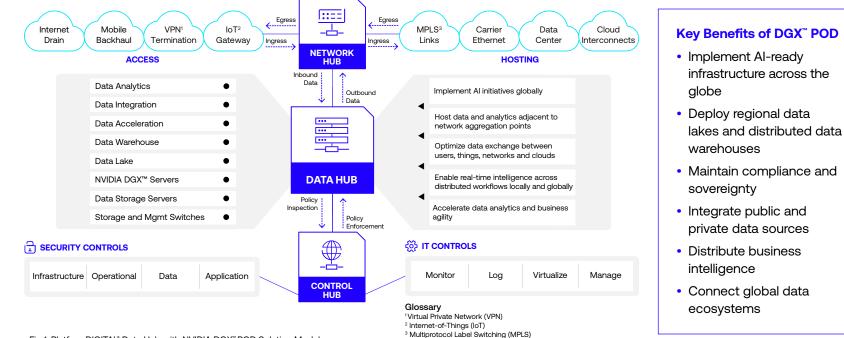
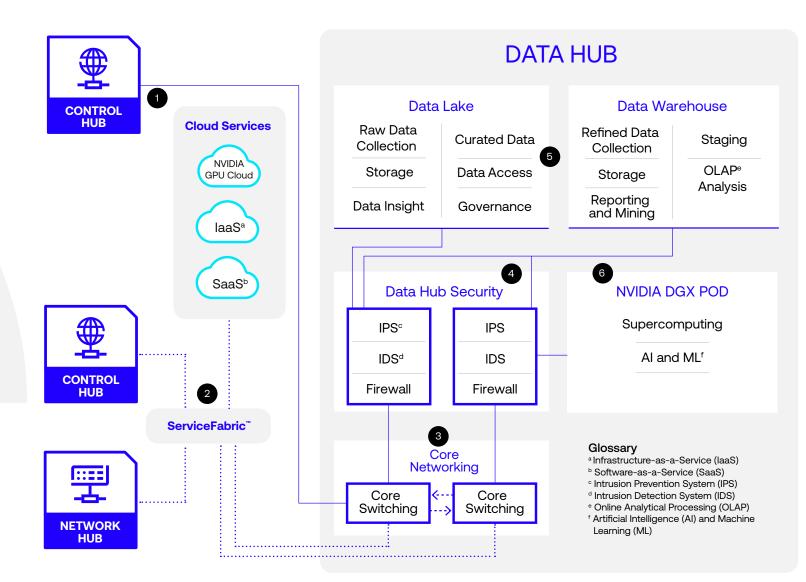


Fig 1. PlatformDIGITAL® Data Hub with NVIDIA DGX® POD Solution Model

#### **Data Hub Reference Architecture**

- 1 The Data Hub, located in close proximity to the Control Hub, connects using a Campus Connect or Metro Connect.
- 2 An out-of-market Control Hub connects back to the Data Hub using ServiceFabric<sup>™</sup>. Trusted data from Network Hubs flow to the Data Hub for further analysis and modeling.
- 3 The Core Switching infrastructure terminated connectivity into the Data Hub and enabled access to the cloud for deep analytics, and archival storage.
- 4 Due to the value and sensitivity of enterprise data, access needs to be strictly controlled and logged.
- 5 Data Lakes analyze and curate raw data for Data Scientists to use. Refined data sits in the Data Warehouse for business professionals to use.
- 6 DGX<sup>®</sup> POD located directly adjacent to data stores for direct access. DGX<sup>®</sup> POD enables AI and ML implementation, complex modeling and simulations, fraud detection and risk analysis.



### **About Digital Realty**

Digital Realty brings companies and data together by delivering the full spectrum of data center, colocation and interconnection solutions. PlatformDIGITAL<sup>®</sup>, the company's global data center platform, provides customers with a secure data meeting place and a proven Pervasive Datacenter Architecture (PDx<sup>®</sup>) solution methodology for powering innovation and efficiently managing Data Gravity challenges. Digital Realty gives its customers access to the connected data communities that matter to them with a global data center footprint of 300+ facilities in 50+ metros across 25+ countries on six continents. To learn more about Digital Realty, please visit **digitalrealty.com** or follow us on **LinkedIn** and **Twitter**.

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