# 6 Reasons Why a Data Lakehouse Service is a Must-Have for Sovereign Clouds

**The modernization of the data analytics architecture that started in the public cloud combines the flexibility, cost-efficiency, and scale of data lakes with the data management and ACID transactions of data warehouses giving us the Data Lakehouse. A Data Lakehouse allows an enterprise to analyze large amounts of structured, semi-structured, or unstructured data, for instance, web server logs, RDBMS data, NoSQL data, social media, sensors, IoT data, and third-party data, all stored in one place, in the same format as its source systems in a modern S3 data lake.**

As data sovereignty has taken on a heightened significance in the world today, the same modern Data Lakehouse services are gaining in popularity in Sovereign Clouds. Here are 6 reasons a Data Lakehouse built using VMware Greenplum and Cloudian HyperStore is quickly becoming a must-have sovereign cloud service:

### 1. Most sought after high-value public cloud service

The Data Lakehouse is an architectural modernization of the data analytics workload in the public cloud. Organizations around the world are evaluating these services, but are keenly aware of the need to manage, store, and secure their data assets as well as comply with the sovereignty laws of the land where this data resides. It is therefore a perfect service for sovereign cloud service providers to offer.

### 2. Revenue-ready Data Lakehouse-as-a-Service and more

VMware Greenplum seamlessly integrates with Cloudian HyperStore S3-compatible object storage, allowing cloud providers to offer Data Lakehouse-as-a-Service with sovereignty. The Greenplum-Cloudian Data Lakehouse separates compute and storage scalability, enabling service providers to offer high margin services that can scale the resources most required. In addition to data analytics, service providers can use HyperStore to offer additional high value sovereign services like Storage-as-a-Service (STaas), Backup-as-a-Service (BuaaS), and more.

### 3. VMware Cloud Provider Program Ready

Together, VMware Greenplum and Cloudian enable xSPs to build and offer robust Sovereign Data Lakehouse solutions, allowing customers to modernize their data analytics architecture, offer high data durability, and more easily comply with local data sovereignty laws by storing data in scalable storage in-region. VMware Greenplum and Cloudian are both part of VMware's Cloud Provider Program, enabling xSPs to build and offer Data Lakehouse-as-a-Service to enterprise customers in a true consumption model.

### 4. Highly Secure

A Data Lakehouse built on VMware Greenplum and Cloudian HyperStore provides extensive security features that make it possible to deploy and operate a cost-effective service that keeps organizational data extremely secure. Cloudian HyperStore has more security certifications than any other on-prem object storage. DOD-level security certifications even make it possible to operate a secure Sovereign Cloud. Capabilities include AES-256 server-side encryption for data stored at rest, SSL for data in transit (HTTPS), transparent key management, Amazon Identity and Access Management (IAM), API and role-based access controls (RBAC), audit trail logging, secure shell with root disable, and last but certainly not least, S3 Object Lock to keep your data immutable against the threat of ransomware.

### 5. High Data Resiliency

Data LakeHouse built on Cloudian Hyperstore provide 14 nines' of resiliency. HyperStore gives the option of storage policies (administrator selectable) for implementing data protection based Replication (RF) or Erasure Coding (EC). Administrators can configure the number of replicas or type of erasure code scheme required to meet SLA and cost objectives. Storage policies also provide fine-grain control of data placement across data centers, taking into consideration factors such as cost-efficiency, security levels, and proximity.

### 6. Multi-Tenant

The solution allows multiple users to analyze data sitting on a single shared Cloudian data lake infrastructure without compromising security. HyperStore gives role-based access to system and group administrators and to end users. Users can select and provision storage services on-demand from a service catalog. Billing, metering, and QOS are built into the HyperStore platform to enable a full multi-tenant deployment.

**Learn more at Cloudian.com/solutions/data-lakehouse/vmware-greenplum-as-a-service-in-sovereign-cloud/**

### Award-Winning

Proven at over 700 enterprises and managed service providers worldwide with nearly two exabytes of capacity under management, Cloudian Scored Highest for All Use Cases in the Gartner 2020 Critical Capabilities for Object Storage Report and was named a Gartner Peer Insights Customers' Choice in 2020, 2021, and 2022.