Automotive Infrastructure Data Center

A leading automotive company with over $45 billion in sales per year and with over 200,000 employees around the globe breaks vendor lock in using EDpCloud.

The Challenge: Keep incompatible NetApp appliances in sync

The automotive company has many branch offices and needs to synchronize data, automatically and securely, between locations worldwide. The company needed to replicate data between Network Appliance Filers (NetApp) in multiple locations. The Netapp Network Attached Storage (NAS) appliances had different software and OS versions and were not compatible with each other in terms of replication. Older Netapp appliances could not replicate to newer NetApp appliances and vice-versa.

Previously, the company used a combination of ftp and rsync to move data between locations. These methods were labor intensive, error prone, slow and did not deliver data on time as needed and where needed.

Other characteristics of the operating environment are as follows:

- Servers and clients run a mix of Windows and of Linux
- Clients accessed data via NFS or CIFS
- The data that needs to be exchanged includes proprietary software, tech designs and business information
- The data included significant intellectual property that must be protected from industrial espionage
- The data included information about critical proprietary business process
- More than 10 million files needed to be replicated back and forth between Japan, Germany and Poland and other locations.

The Solution

EDpCloud was installed on Linux virtual machines (RedHat and CentOS) in Frankfurt, Yokohama Japan and Warsaw Poland.

Replication policies were defined to enforce authentication, what folder and file patterns to include or exclude from replication.

Key Benefits

Performance

- Data is replicated between the remote data centers and is immediately available for use by various teams
- Automated file replication reduced costs significantly
- Automated replication reduced errors and risks.

Flexibility

- Replication policies control what files gets replicated and which ones do not get replicated
- Data about different production systems is available when and where needed.

Resilience and Operational Efficiency

- A browser based GUI is used to configure the systems
- A CLI was used to integrate EDpCloud in the workflow
- Data is automatically synchronized between remote data centers
- EDpCloud optimizations for network latency helped move data more efficiently
- EDpCloud resumed from where it left off in the event of network failures
- Data is protected by mirroring it to other locations
- Time required to keep data in sync was significantly reduced.

Security and Compliance

- Automatic end to end data encryption prevents data leaks
- Multi-level access control and authentication keep access to data secure
- Detailed audit logs show what data was transferred, where and when it was transferred.

Outcomes

The manufacturer was able to synchronize data between incompatible NetApp appliances automatically, securely and on time without the need to incur additional costs to upgrade all appliances. Significant costs savings were realized by automating tasks and even using commodity of the shelf hardware.