NetApp solutions for the National Electric Vehicle Infrastructure

Navigating the data highway

To support a sustainable energy and climate future, the federal government has established a vision for electrifying the U.S. transportation system. The National Electric Vehicle Infrastructure (NEVI) Formula Program provides $5 billion for building out a network of charging stations to facilitate reliable access for all electric vehicle drivers in the country.

As the availability of charging stations grows along corridors across the country, so will the number of electric vehicles on the road, resulting in a literal data highway. Adding to this already massive amount of data to navigate and to manage, NEVI mandates that state and local authorities report back to the federal government on analytics and outcomes of policy implementation and electric vehicle network usage. That reporting means collecting and moving data from charging stations to data centers—and for that effort, you need a strong partner with deep cloud and data management expertise.

Putting NetApp in the driver's seat

NetApp is the partner that you're looking for. NetApp® data management solutions empower you to manage your data on premises and across private and public clouds with industry-leading simplicity, efficiency, and flexibility. A unified management platform and integration with all the major public cloud providers enable you to easily move data back and forth between clouds and your on-premises environment. So, you reliably have the data that you need from charge point providers to create the required reports. And to keep charging sites safe, NetApp also offers video surveillance solutions that provide real-time data, with the same ease of data movement across clouds.

NetApp at a glance

- The first storage provider to have Commercial Solutions for Classified (CSfC)–validated systems to support classified data.

- Federal Risk and Authorization Management Program (FedRAMP), ISO/IEC 27001, National Institute of Standards and Technology (NIST) 800-171, and SOC 2 compliance certifications for more than a dozen products and services.

- The only storage vendor to integrate with the three biggest clouds:

  aws   Microsoft Azure   Google Cloud

Integrated Zero Trust capabilities such as encryption in flight and at rest, NetApp SnapMirror® replication, NetApp Snapshot™ copies, and near-instant recoverability automate processes to keep your data safe and secure. To maintain PII compliance, NetApp solutions offer governance technologies such as Cloud Data Sense. Built-in storage efficiency technologies such as data deduplication, compression, thin provisioning, and NetApp FlexClone® thin cloning help keep your storage costs from spinning out of control—on premises and in the cloud. With NetApp StorageGRID® object storage, you can build a modern, cost-effective data lake with a free-flowing data pipeline that enables you to run deeper analytics, AI, and machine learning on your data.
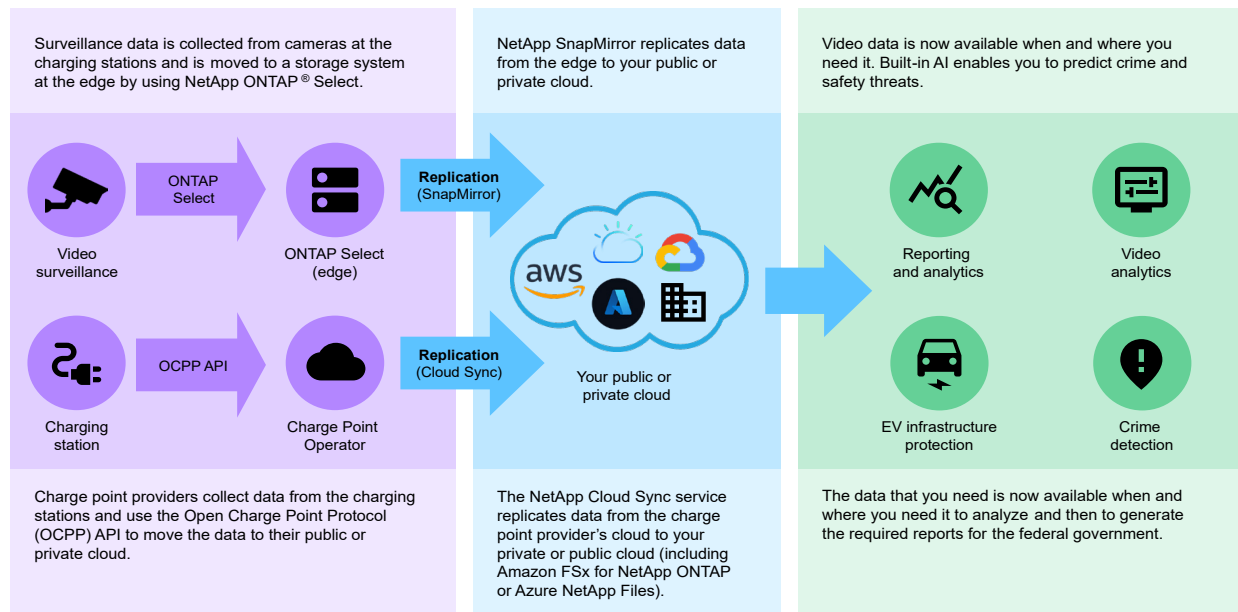
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Figure 1) NetApp technology makes it easy to connect to the data that you need to meet NEVI reporting mandates and to keep charging station properties safe and secure.

When you're ready to get started, NetApp experts can help you design and architect a solution that's just right for you. After your system is up and running, one of our managed services partners, such as Amazon FSx for NetApp ONTAP or Azure NetApp Files, can take the burden of day-to-day administration off your busy IT staff.

Connecting the data with NetApp
To meet NEVI reporting mandates, you need a solution that can capture data directly from charge point providers. Therefore, you must connect data between public and private clouds—and that's where NetApp excels.

But the NEVI data ecosystem is more than just required reporting. Video surveillance should also be part of every charging station site to monitor locations securely and continuously for safety and security threats and for other malicious actions. Figure 1 shows how NetApp solutions can help you safely connect to charge point and video surveillance data.

NetApp in action
NetApp is the partner that you want by your side as you navigate the ins and outs of building a compliant solution to manage and to report on NEVI data—and to keep your charge point sites safe. Here are some customers who know the value of partnering with NetApp for their electric vehicle and transportation needs.

TAG Heuer Porsche Formula E Team
Industry: Electric vehicles and transportation

With NetApp as a partner, the TAG Heuer Porsche Formula E Team is on track for success as it fights for victories in the world's premier all-electric racing series.

Read the full story.

Central Ohio Transit Authority (COTA)
Industry: Transportation

In using its Smart City Challenge grant from the U.S. Department of Transportation, COTA is relying on NetApp technology to help keep riders and equipment safe with a state-of-the-art video surveillance solution.

Read the full story.