

Case Study: Department of Justice

Customer

United States Department of Justice (US DOJ), Executive Office for United States Attorneys (EOUSA), Civil Division (CIV), various US Attorneys Offices including the Southern and Western Districts of New York, The Environment and Natural Resource Division (ENRD), and the Executive Office for Immigration Review (EOIR).

Challenge

EOUSA provides general executive assistance to the 90 Offices of the United States Attorneys as well as coordinating between the offices. The Civil division represents the United States in civil and criminal matters, protecting the US Treasury, ensuring that the US speaks with one voice in its view of law, preserving the intent of Congress, and advancing the credibility of the government before the courts.

Amplify Federal is assisting the customer in managing the infrastructure that houses applications used to gather, retain, maintain, and recall evidence used in litigation.

Virtual Infrastructure Engineering

Amplify Federal, a Service-Disabled Veteran Owned Small Business, provides comprehensive engineering support and expertise for maintaining, improving, and iterating upon the virtual infrastructure environment for the Department of Justice.

The current environment consists of nearly 200 virtual machines situated on 14 physical hosts, as well as a small number of physical host servers used for archiving, backup, and disaster recovery. The customer utilizes VMWare VCenter, along with ESXi, as the backbone of the environment. Our work consists of providing solutions and support for the appropriate hardware from Cisco, NetApp, Pure Storage, and Palo Alto.

Our engineers provide full lifecycle support for both the physical and software side of the virtual infrastructure. We engage in both building and decommissioning of virtual machines that will be utilized across various sectors and applications for both Windows and Linix platforms. This support also includes hardware maintenance and support for the underlying physical hosts.

Physical Infrastructure Engineering

The physical infrastructure for this project is hosted in one datacenter in Sterling. Amplify federal provides the customer with assistance managing the physical infrastructure. This includes racking and setting up servers, switches, storage solutions, and firewalls, configuring physical networking, replacing damaged or faulty modules such as disks and components, and replacing tapes.

In order to maintain security, Amplify Federal also assists in properly disposing of parts of the physical infrastructure on which data rests. This can include hard disks, SSDs, flash drives, and embedded disks. Amplify Federal also assists with network security by maintaining firewall rules as deemed appropriate by PAE's security team, which mostly involves blacklisting addresses at their request.

Storage Solutions

Amplify Federal assists in th3 management of storage solutions for our DOJ clients. The primary purpose of the applications we support is to store data used in DOJ-related litigation. As such, data storage is of primary concern. Amplify Federal assists in maintaining both physical storage and virtual storage pools. Daily monitoring, architecture, and engineering is needed to assess, manage, and quantify over 750 terabytes of data.

We deploy and manage hardware across various storage vendors. Our current storage infrastructure is dependent upon NetApp and NetGear storage devices with a plan to add Pure Storage within the current quarter. We plan to transition to using Amazon Web Services S3 for disaster recovery in the coming year, with plans to further offload storage to the cloud at a later date.

Backup Infrastructure Engineering and Management

Amplify Federal is proud to provide the customer with resources that protect the United States Department of Justice's crucial data sets. Utilizing the Veeam family of backup solutions, we currently protect over 750 terabytes of data utilized for DOJ litigation.

Backups occur to physical infrastructure in our datacenter, utilizing Western Digital and HP hard disks for storage as well as a Quantum tape drive. Under the current design we can meat the current customer need. However, in order to plan for future storage needs we seek to transition to cloud storage for backup and disaster recovery utilizing Amazon Web Services S3 storage.