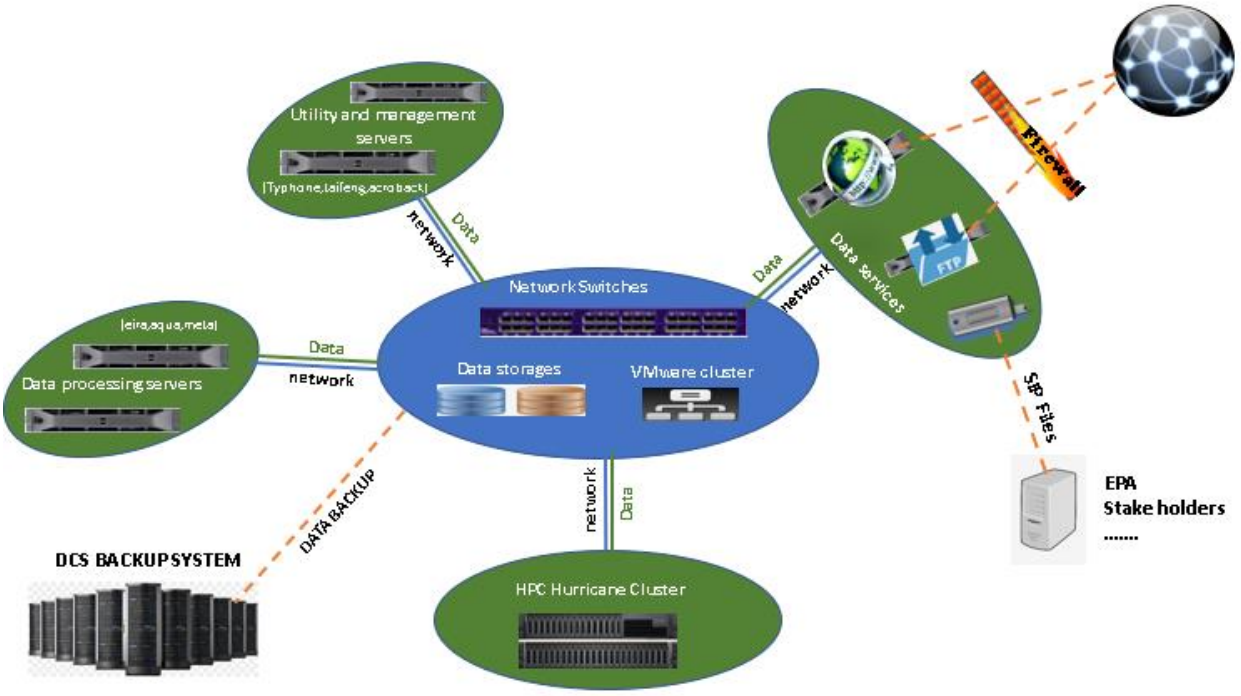
## Current Computer Systems




## Your objectives for modeling in the cloud

- Evaluate suitability of cloud platform as alternative to current system
- Test access to on-demand service and associated cost

## What cloud platform you're using

- FY21 focused on AWS platform testing
- FY22 plans to test Microsoft Azure platform

## The type of modeling

- CAMx
- WRF
- GEOS-Chem
- Emissions modeling using EPS3

## What you've accomplished thus far (have you had any wins?)

- AWS cluster
  - HPC clusters in AWS are built with AWS ParallelCluster
  - Slurm is used as the job scheduler with sbatch used as command
  - Clusters have multiple queues with different instance types
  - AWS cluster working environment is the same as working with our local cluster
  - AWS cluster building and updating are automated with configuration files and scripts
  - AWS HPC clusters work with container (mainly Singularity) and non-container workloads
    - Run CAMx with non-container workloads
    - Run WRF with Singularity container
    - Run Geos-Chem with both Singularity container and non-container workloads


What's challenging you

- Billing Issues
- Predictability

Some indication of what would be helpful to further this work in your agency

- How to share modeling files within agencies?
- How to share modeling files with the public?
- How to share configurations and setup with different agencies?