Overview of the LANL Globus Endpoint

GlobusWorld 2016 Lightning Talk
Giovanni Cone
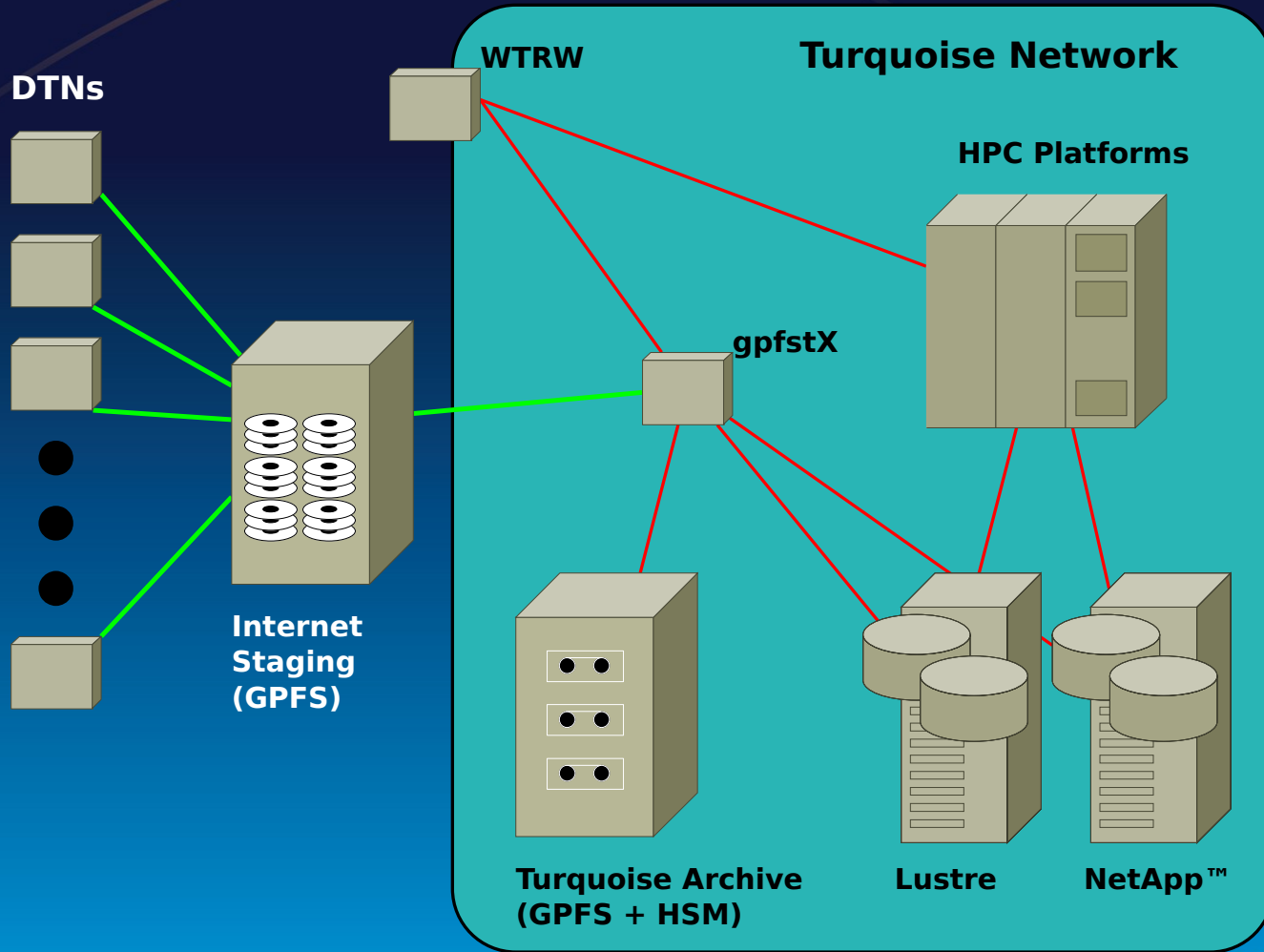
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Motivations for a Globus Endpoint

- Open Science users frustrated with access time-out via gateway (WTRW) system.

- `scp` and `rsync` transfer operations insufficient for transfer of large datasets (10s to 100s of TBs).

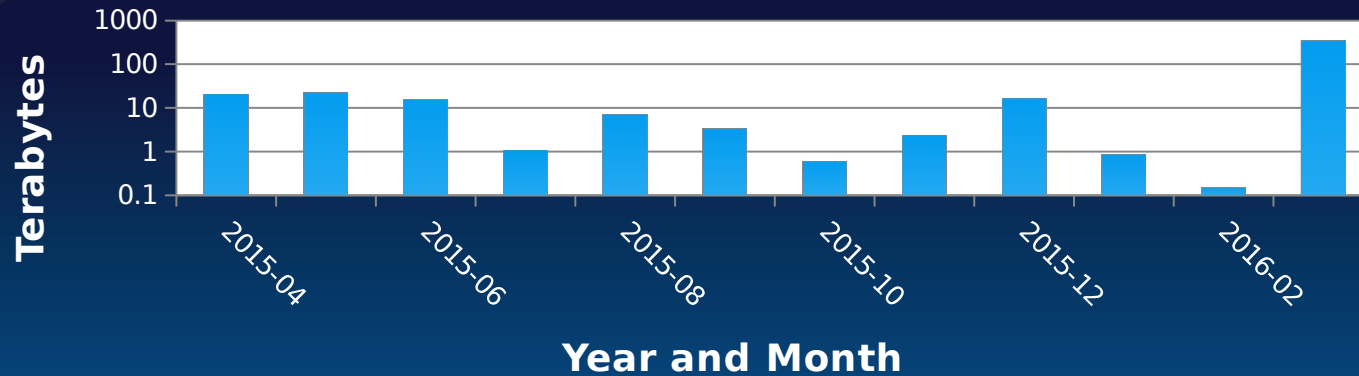- Makeshift large data transfer solutions proved cumbersome to use and support.
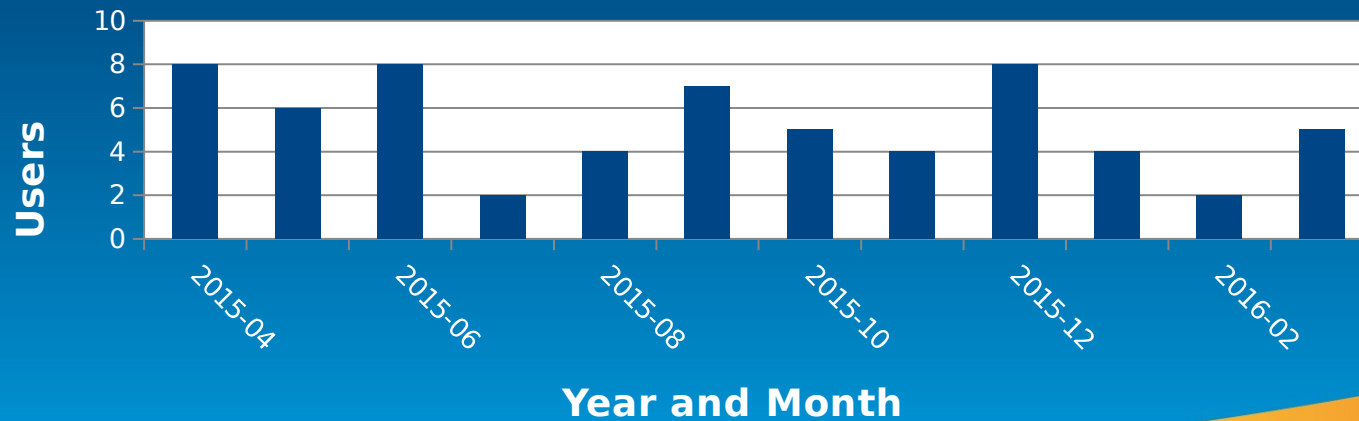
Basic Network Schematic

DTNs

WTRW

Turquoise Network

HPC Platforms

gpfstX

Internet Staging (GPFS)

Turquoise Archive (GPFS + HSM)

Lustre

NetApp™

Usage History

Terabytes per Month

Users per Month

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Closing Comments

- Basic documentation for using Globus published on `hpc.lanl.gov` *Intranet* site.

- Data migration "shepherding" still a manual process from staging space to HPC file-systems.

- Usage levels over the past year less than management expected.

- Further performance improvements to be implemented pending funding and resources.