

USNDP Database Computer System Upgrade

Ramon Arcilla Jr.

**National Nuclear Data Center
Brookhaven National Laboratory**

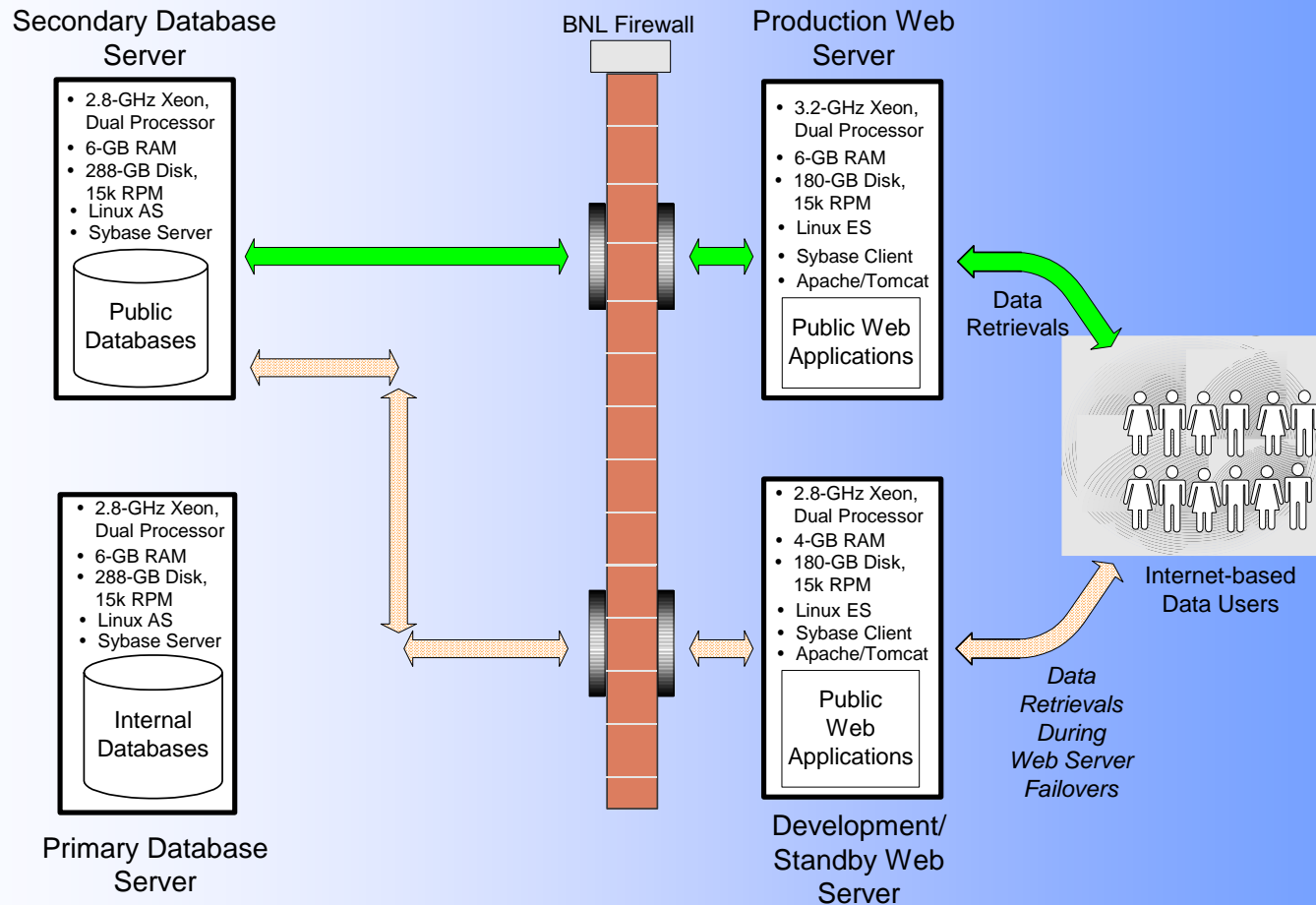
System Upgrades

Objectives

- To enhance availability (24X7) of NNDC Web services
- To enhance NNDC's nuclear data processing capabilities.
- To meet NNDC's computing requirements for CPU- and memory-intensive Java application development

Sys Upgrade: 2nd Web Server

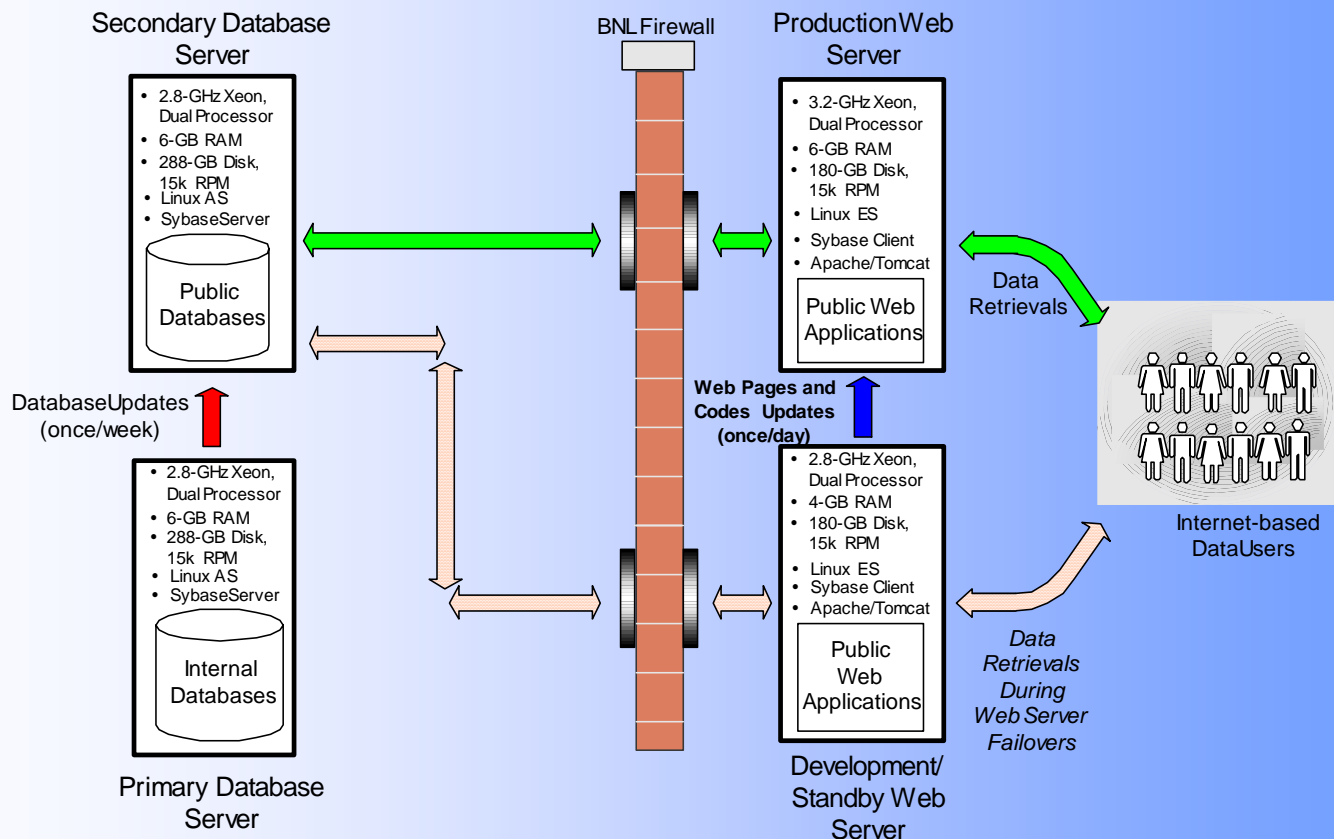
Completed: Second Web Server became operational in May 2005.



Sys Upgrade: Replication

Implemented (Sep '05): Automatic replication of updates from primary to secondary DB server.

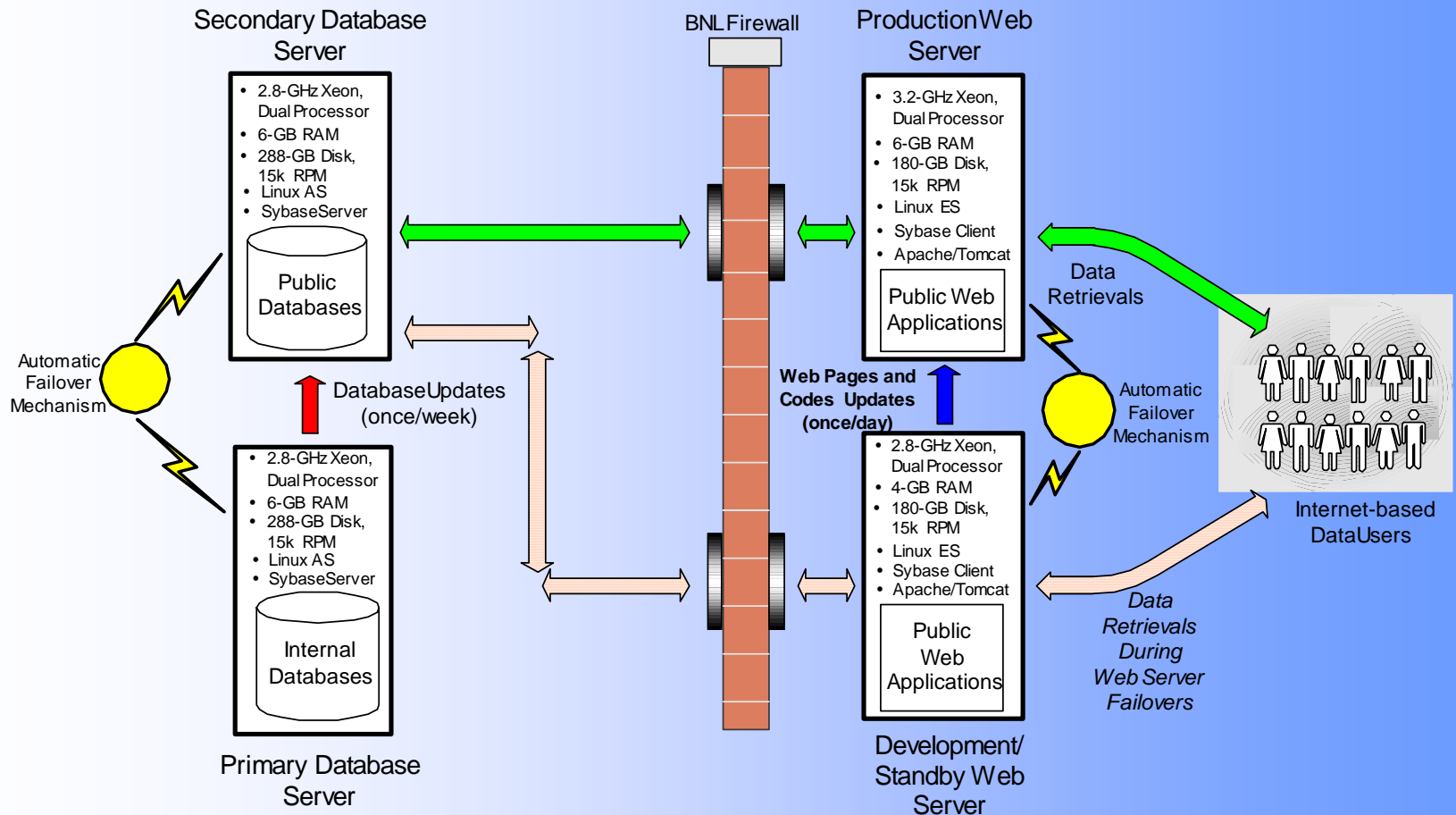
Under testing: Automatic replication of updates from development to production Web server



Sys Upgrade: Automatic Failover

Under testing: Automatic failover from primary to secondary DB server.

Automatic failover from production to development Web server



Other System Upgrades

- Dell workstation for ENDF/B-VII library processing and covariance calculations
 - CPU: Dual Intel Xeon 3.2 GHz
 - RAM: 4 GB
 - Disk : 144 GB, RAID
- Dell workstation for CPU- and memory-intensive Java applications development
 - CPU: Intel Pentium 4, 3.8 GHz
 - RAM: 2 GB
 - Disk : 80 GB
- Laptop for each scientific and professional staff member
 - Wireless capability (Intel Centrino technology)
 - VPN connection from Internet (anywhere) to BNL's internal computing resources

Future Direction

Automatic replication from NNDC primary DB server to NDS (IAEA, Vienna) server.

