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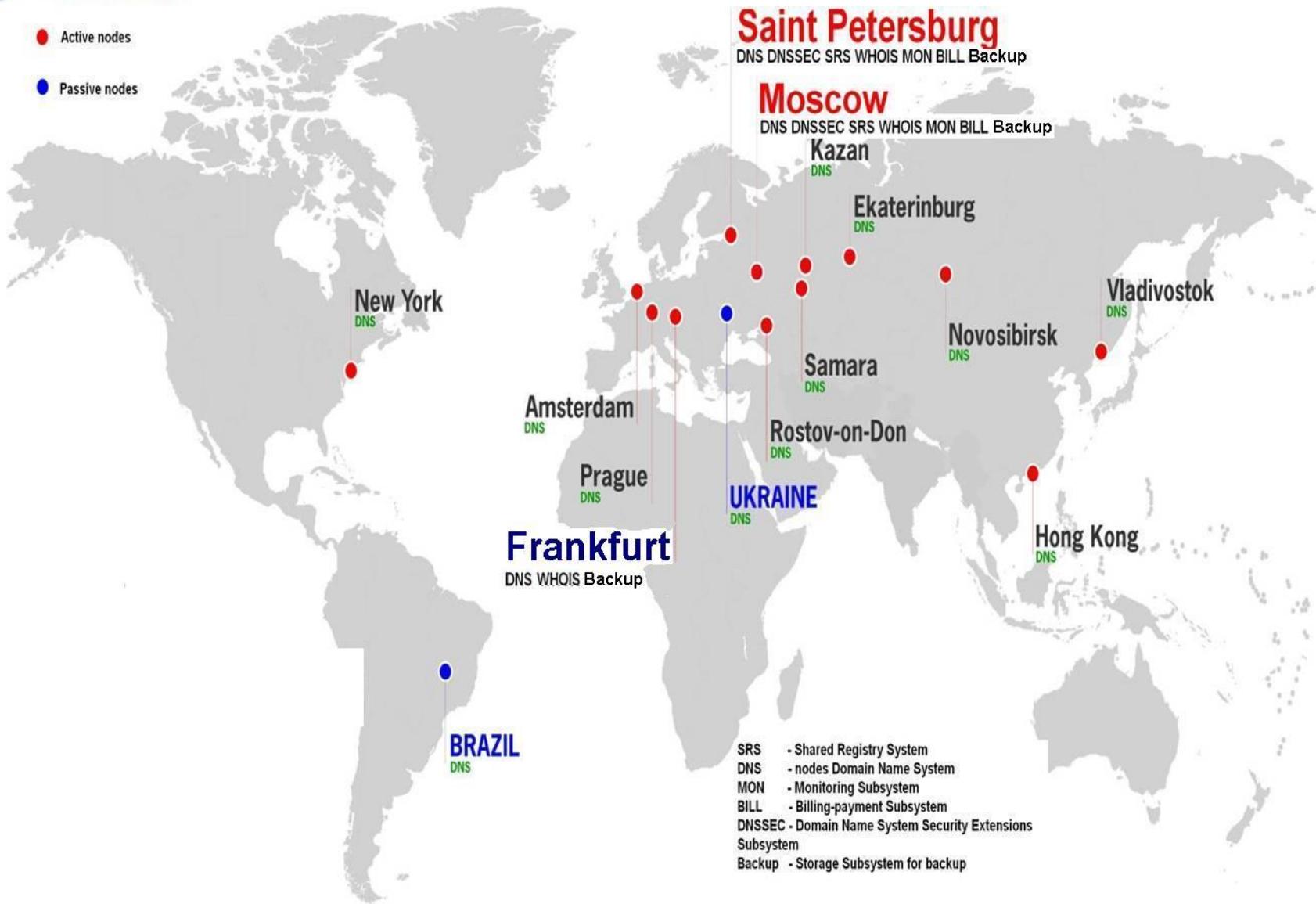


Registry Service Provider Architecture

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Geographic distribution Architecture





Functional Description

- **Shared Registry System (SRS)**

*Peak Average – 354 request per second (max 1000 request per sec)
Load Average - 8 request per second*
- **Nodes Domain Name System (DNS)**

*Peak Average ~ 250 000 request per second
Load Average – 50 000 request per second*
- **Whois service (Whois)**

*Peak Average ~ 18 000 request per second
Load Average – 6 000 request per second*
- **Monitoring Subsystem (MON)**

Load Average - 1 request per second
- **Billing-payment Subsystem (BILL)**

Load Average - 4 request per second
- **Domain Name System Security Extensions Subsystem (DNSSEC)**

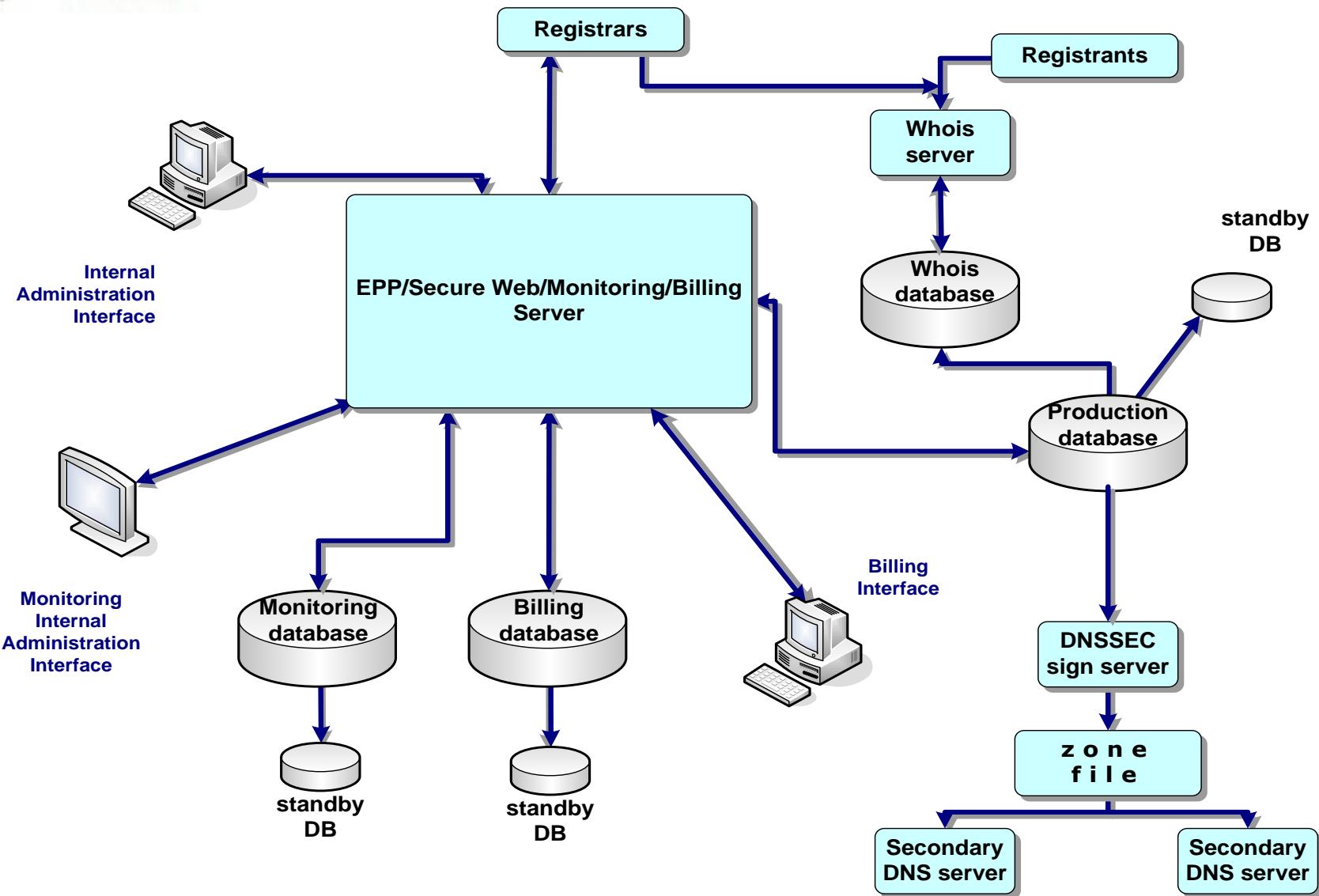
Load Average - 12 request per day
- **Storage Subsystem for backup (Backup)**

General requirements

- **High availability (24X7)**
- **Scalability hardware and software**
- **Providing Real-Time Responsiveness**
- **Active monitoring eliminating Bottlenecks**
- **Network security and data security**
- **Protection against natural and man-made disasters and other contingencies**

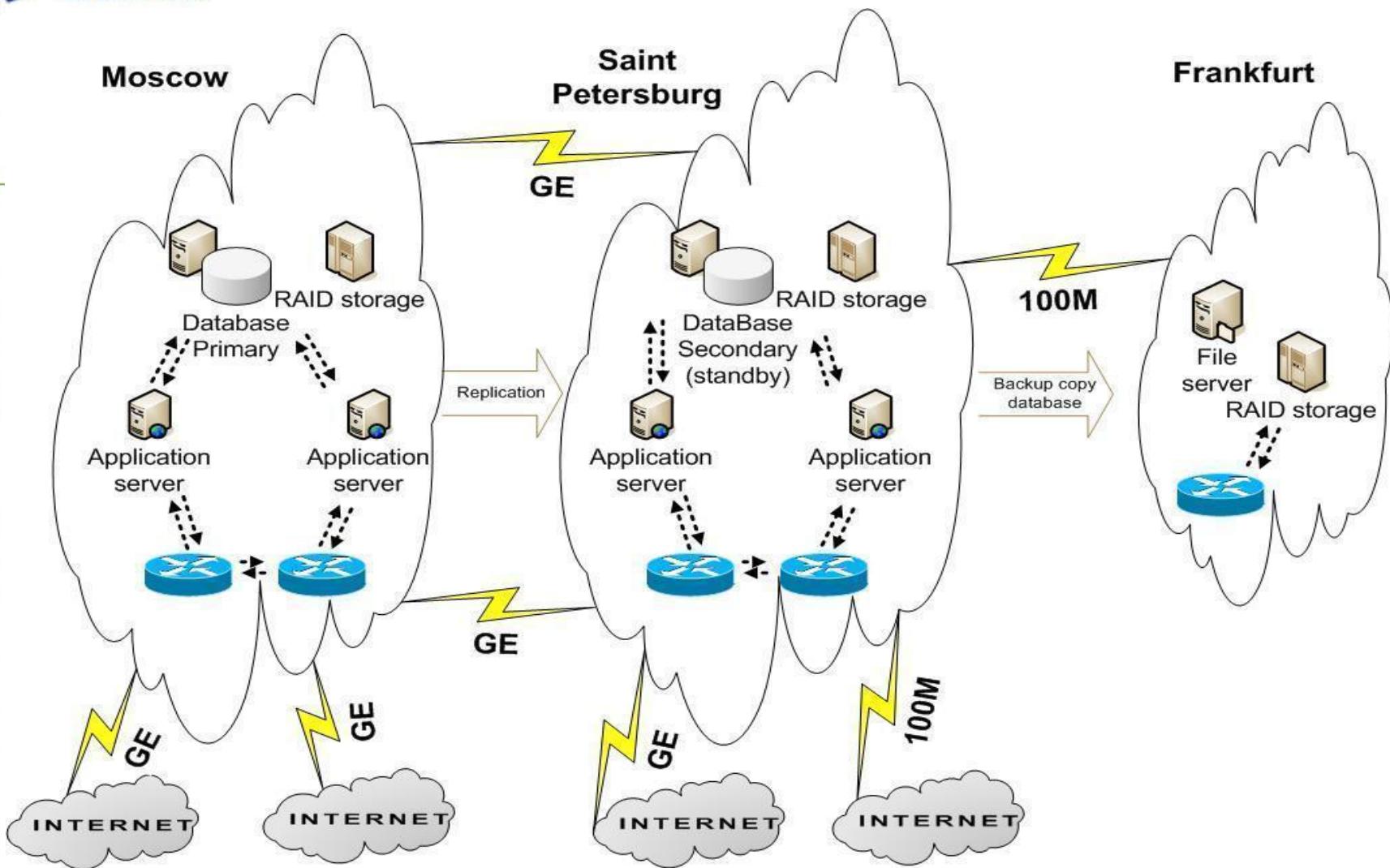


Registry System Data Flow





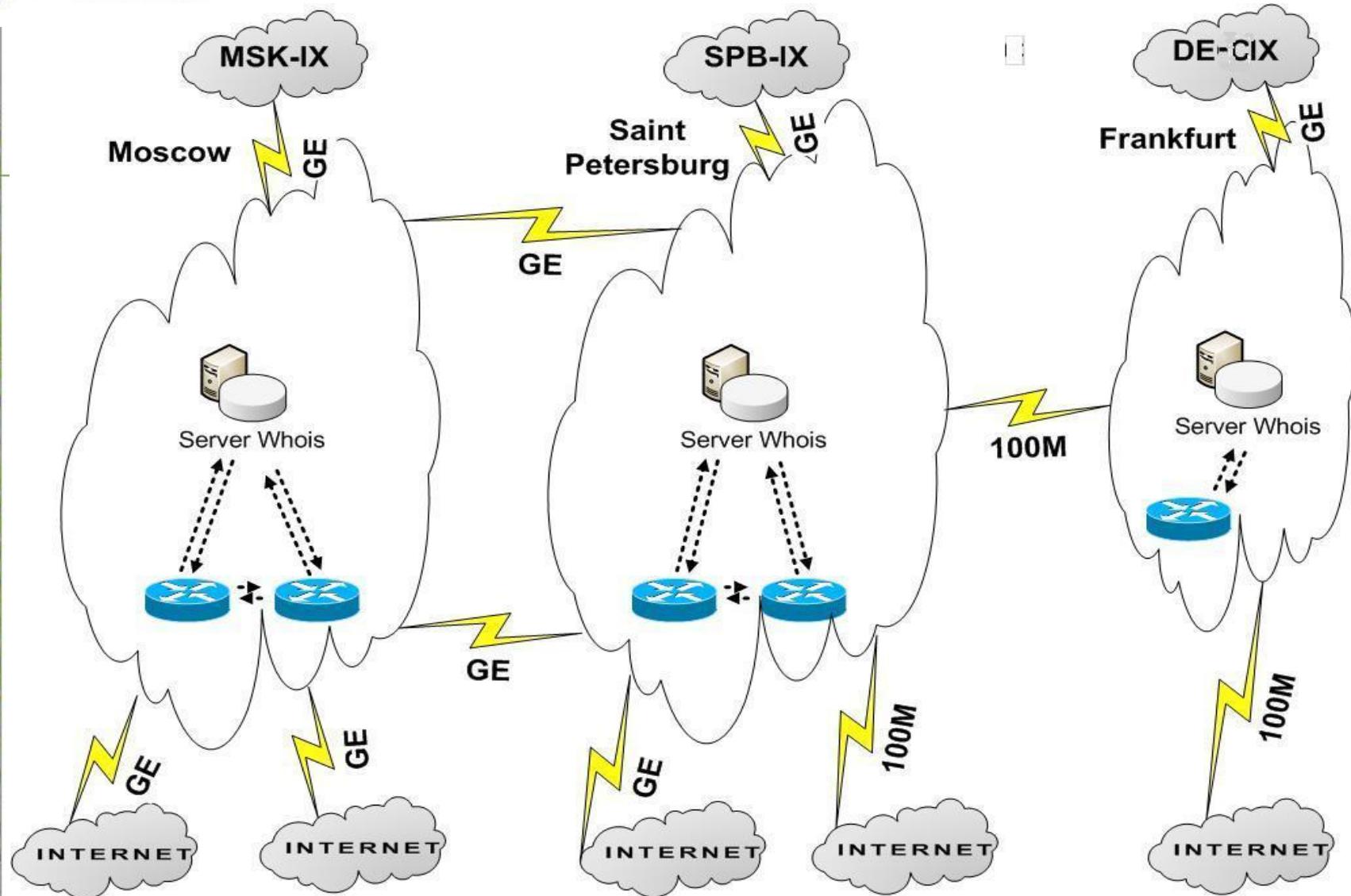
Shared Registry System





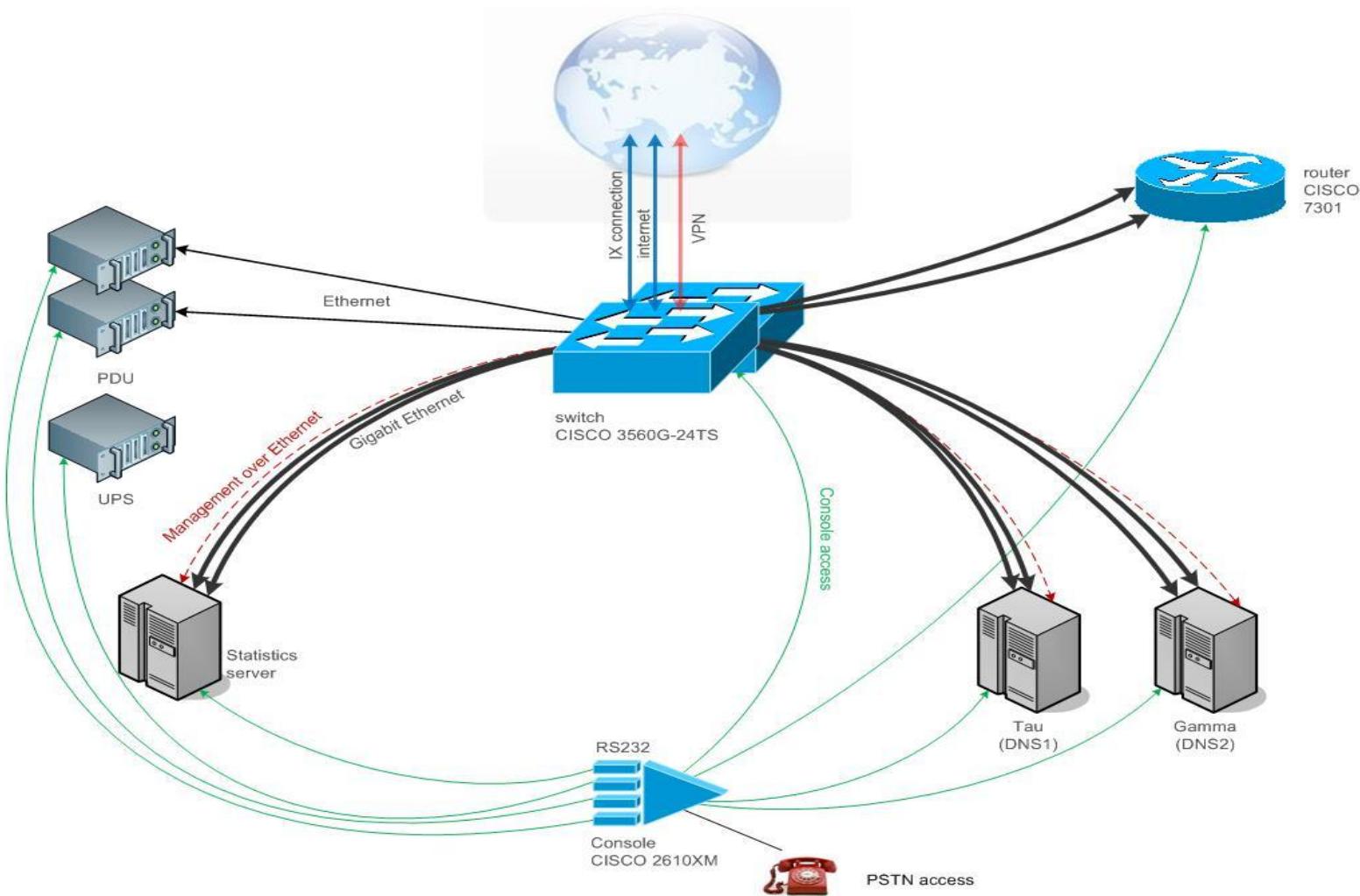
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Public service Whois



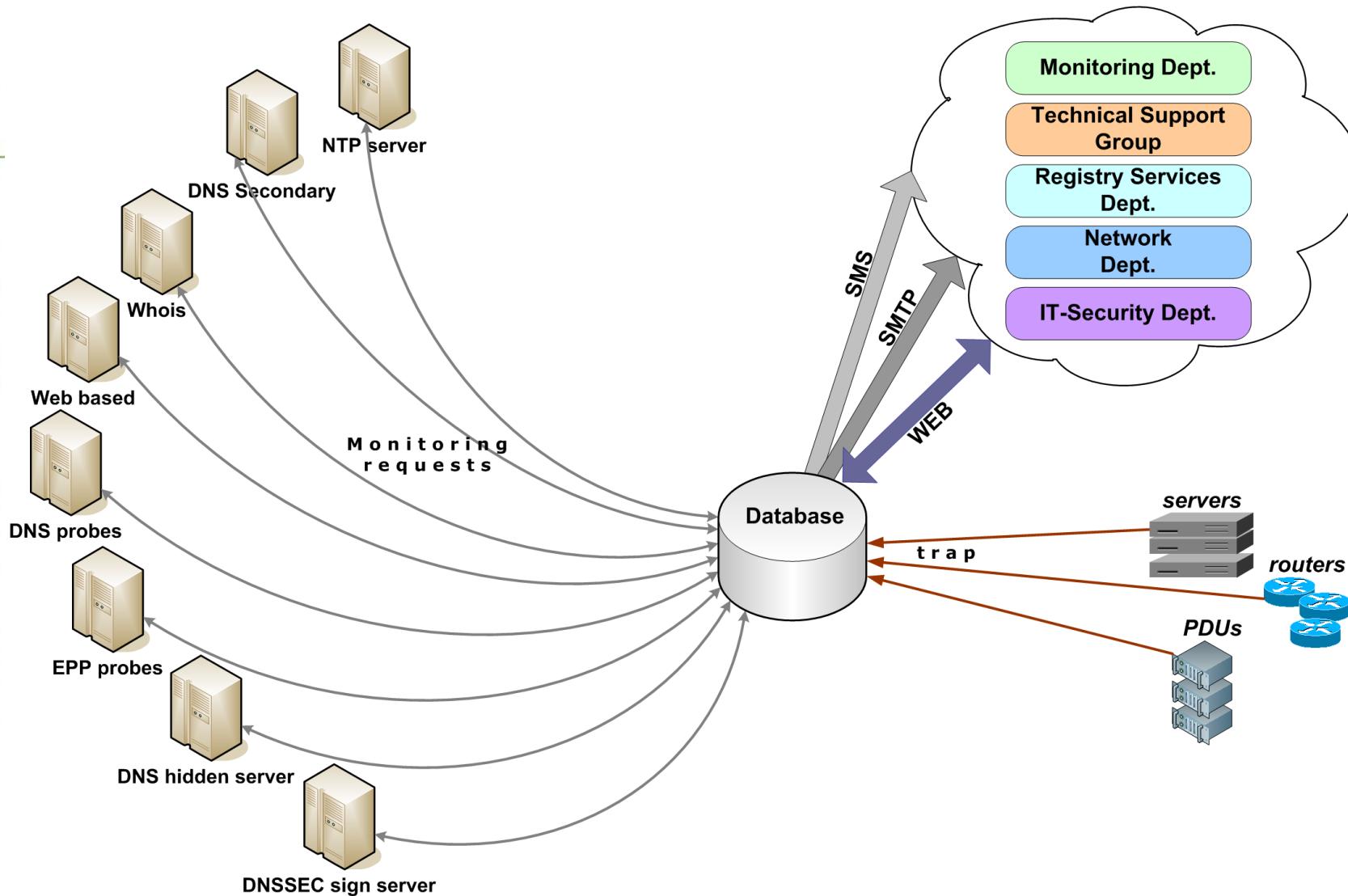


DNS node





Monitoring Registry System



Development tools and hardware

Software:

Databases: Oracle 11.2.0.4 (SRS database, Billing database, Monitoring database), PostgreSQL 9.1 (Whois database)

Application server: Oracle WebLogic 10.3, Oracle OAS

DNS server: BIND 9.7-9.9, NSD3

Programming language: C++, Java, PL/SQL

Hardware:

Database server: SUN SPARC Enterprise M5000,
SUN SPARC Enterprise M4000

Application server: Intel Xeon CPU E5520

DNSSEC signserver: Intel 2xXeon X5690

DNS server: HP Proliant DL 180

RAID Storage: EMC VNX 5100, EMC Clarion CX4-120

Router: Cisco 7604, Cisco 7301, Cisco 3560G-24TS



The RS capacity currently allows support of over 30m domain names, execution of over 3m requests a day and over 20,000 concurrent client connections.

Welcome join!!!

QUESTIONS ?

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