Production Environment Documentation:

- **Hardware:**
  - Servers:
    - Server 1: Dell PowerEdge R740, 2x Intel Xeon Gold 6130, 128GB RAM, 2TB SSD
    - Server 2: HP ProLiant DL360 Gen10, 2x Intel Xeon Silver 4110, 64GB RAM, 4x 1TB HDD (RAID 5)
  - Network Devices:
    - Cisco Catalyst 3850 Series Switch
    - Cisco ASA 5506-X Firewall
  - Storage:
    - NetApp FAS2650, 24TB usable capacity, RAID-DP
    - EMC VNX5300, 20TB usable capacity, RAID 5
- **Software:**
  - Operating System:
    - Server 1: Windows Server 2019 Datacenter Edition
    - Server 2: CentOS Linux 7.5
  - Web Server:
    - Apache 2.4.41
  - Database:
    - MySQL 8.0.21
  - Application:
    - Custom Java-based CRM System, Version 3.2.0
- **Configurations:**
  - Web Server Configuration:
    - Virtual Hosts:
      - Domain: www.example.com, DocumentRoot: /var/www/html
  - Database Configuration:
    - InnoDB Buffer Pool Size: 16GB, Max Connections: 200
- **Network Settings:**
  - IP Addresses:
    - Server 1:
      - LAN: 192.168.1.10
      - WAN: 203.0.113.5
    - Server 2:
      - LAN: 192.168.1.11
  - Subnet Mask: 255.255.255.0
  - Gateway: 192.168.1.1
  - DNS Servers:

- Primary: 8.8.8.8
- Secondary: 8.8.4.4

This documentation provides a detailed overview of the hardware, software, configurations, and network settings in the production environment. It serves as a reference for replicating this environment in a staging environment for testing and validation.

Staging Environment Configuration:

Hardware:

Servers:

- Staging Server 1:
    - Model: Dell PowerEdge R740
    - CPU: 2x Intel Xeon Gold 6130
    - RAM: 128GB
    - Storage: 2TB SSD
- Staging Server 2:
    - Model: HP ProLiant DL360 Gen10
    - CPU: 2x Intel Xeon Silver 4110
    - RAM: 64GB
    - Storage: 4x 1TB HDD (RAID 5)

Network Devices:

- Cisco Catalyst 3850 Series Switch (Replicated)
- Cisco ASA 5506-X Firewall (Replicated)

Storage:

- NetApp FAS2650 (Replicated)
    - Capacity: 24TB usable
    - RAID Configuration: RAID-DP
- EMC VNX5300 (Replicated)
    - Capacity: 20TB usable
    - RAID Configuration: RAID 5

Software:

Operating System:

- Staging Server 1: Windows Server 2019 Datacenter Edition (Matched)
- Staging Server 2: CentOS Linux 7.5 (Matched)

Web Server:

- Apache 2.4.41 (Matched)

Database:

- MySQL 8.0.21 (Matched)

Application:

- Custom Java-based CRM System, Version 3.2.0 (Matched)

Configurations:

Web Server Configuration:

- Virtual Host:
    - Domain: www.example.com
    - DocumentRoot: /var/www/html

Database Configuration:

- InnoDB Buffer Pool Size: 16GB
- Max Connections: 200

Network Settings:

- Staging Server 1:
    - LAN: 192.168.1.20
    - WAN: 203.0.113.15
- Staging Server 2:
    - LAN: 192.168.1.21
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.1.1
- DNS Servers:
    - Primary: 8.8.8.8
    - Secondary: 8.8.4.4

Additional Considerations:

- **Security Measures**:
    - Replicate security measures, including firewall rules, encryption, and access controls, as in the production environment.
- **Load Balancers**:
    - If load balancing is used in production, replicate the same setup in staging.
- **Monitoring Tools**:
    - Install the same monitoring tools used in production for performance tracking.

By mirroring the production environment in this way, you'll create a staging environment suitable for rigorous testing and validation.