



**CSOSA**

OFFICE OF INFORMATION TECHNOLOGY

## **CSOSA OIT Infrastructure IPv6 Implementation**

**Date: 10/22/2021**

v. 1.0



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The Infrastructure team will work to implement native IPv6 for CSOSA/PSA infrastructure network devices such as Firewalls, DNS, Routers, Switches, Network Server/Workstation systems and Client applications.

## **Phase I: FY 2021/22**

**Stakeholder Participation Required:** DOJ network and SOC; CSOSA/IT Security; CSOSA/PSA Customer Support

**Meetings:** Monthly – Bi-Weekly

### **Major Milestones:**

- IP Block Acquired
- External Devices, Firewalls, DNS, Routers – dual stack ready
- 1 application tested

The Infrastructure team will collaborate with DOJ to configure all public/external facing servers and services that communicate with public internet services and supporting enterprise networks to operationally use native IPv6. This collaboration will include configuring IPv6 one-to-one NAT translations for CSOSA\PSA internet available resources that will be IPv6 accessible.

The Infrastructure team will Implement a Dual Stack configuration (running IPv4 and IPv6) to alleviate any disruption within the IPv4 production network.

Devices list below will require an IPv6 address as well as keeping their existing IPv4 addresses to support Dual Stack up to a point that each system is able to transition to native IPv6.



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- **Phase I: FY 2021/22 Cont.**

- Firewalls:

- Interface facing DOJ's network
- Public DMZ Interface
- Interface facing Internal network

- DNS:

- Forwarding Interface
- Management Interface

- Routers:

- Interface facing the firewall
- Management Interface
- Interface facing TLS network
- Interface facing Core Switch

- **Phase I: FY 2021/22 Cont.**

- Switches:

- Management Interface
- Interface facing Core Router
- L3 VLAN Interfaces (floors and Server subnets)



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- **Phase II: FY 2023**

**Stakeholder Participation Required:** DOJ network and SOC; CSOSA/IT Security; CSOSA/PSA Customer Support; CSOSA/PSA Development Team

**Meetings:** Bi-Weekly

**Major Milestones:**

- **Inventory of Application status readiness**
- **Action Plan for transitional Role Out**
- **Communication Plan for Customers**
- **20% of applications Transitioned**

The Infrastructure team will collaborate with DOJ to configure all internal client applications that communicate with public internet services and supporting enterprise networks to operationally use native IPv6.

The Infrastructure team will work hand and hand with the internal and external stake holders for each system to test and determine hardware and software capabilities for IPv6 support to evolve all networked Federal information systems to fully enable native IPv6 operation.

Devices list below will require an IPv6 address as well as keeping their existing IPv4 addresses to support Dual Stack up to a point that each system is able to transition to native IPv6.

- Client Application Systems
- Network Application Servers



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- **Phase III: FY 2024**

- **Major Milestone:**

- **Migration continued**
    - **50% of applications Transitioned**

The Infrastructure team will address all Legacy systems to determine IPv6 operational capabilities.

Devices list below will require an IPv6 address as well as keeping their existing IPv4 addresses to support Dual Stack up to a point that each system is able to transition to native IPv6.

- Network Servers, Client Application Systems
- Network Servers
- Network Application Servers