



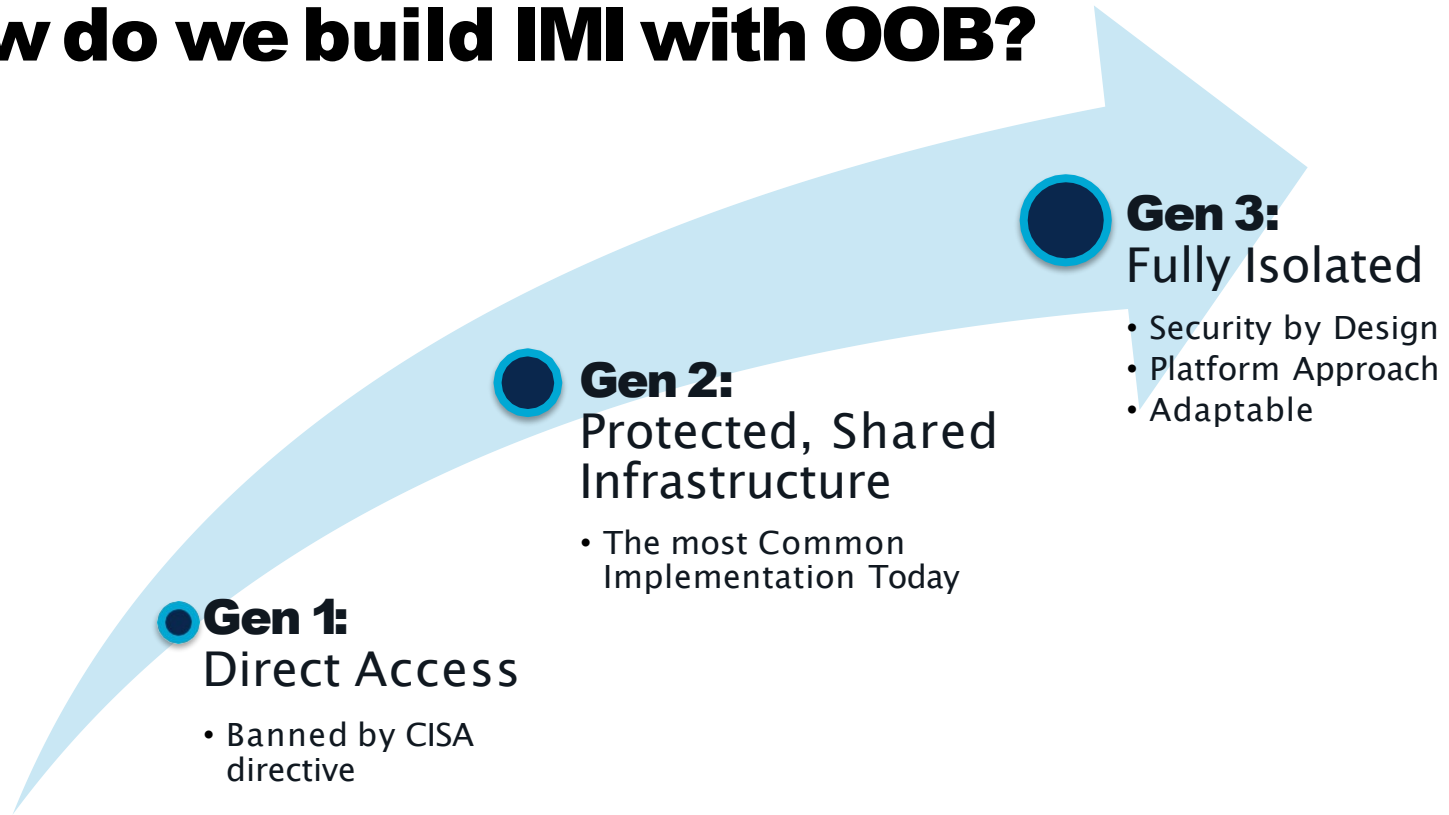
Path to network resiliency: Isolated Infrastructure Management

How Gen 3 Out- of- Band and Isolation Bring Resilience to IT ?

“Our approach must shift from a futile quest for absolute invulnerability to a more realistic strategy of resiliency in which we control the impacts of failures.”


Strategy for Cyber Resilience(White House – Feb 2024)

How do we build IMI with OOB?





IMI is Recommended by ...






Outcome	Challenges	Gaps
 <p>Day Zero & One Installation Day Bring Sites up quickly</p>	<p><i>“How much time will this take?”</i></p> <p><i>“How do I bring up a new site with less staff and cost”</i></p>	<p>Lack of Staff 87% understaffed (from ISC 2, WW cybersecurity members association)</p>

Life as an IT Admin






Outcome	Challenges	Gaps
 <p>Day Zero & One Installation Day Bring Sites up quickly</p>	<p><i>“How much time will this take?”</i></p> <p><i>“How do I bring up a new site with less staff and cost”</i></p>	<p>Lack of Staff 87% understaffed (ISC 2)</p>
 <p>Day Two Ongoing Operations Keep Everything Running</p>	<p><i>“Will this change break the system?”</i></p> <p><i>“How do I Eliminate configuration drift?”</i></p>	<p>Lack of Confidence, Zero Day to Zero Hour attacks 300+ days to patch</p>

Outcome	Challenges	Gaps
 <p>Day Zero & One Installation Day Bring Sites up quickly</p>	<p><i>"How much time will this take?"</i></p> <p><i>"How do I bring up a new site with less staff and cost"</i></p>	<p>Lack of Staff 87% understaffed (ISC 2,)</p>
 <p>Day Two Ongoing Operations Keep Everything Running</p>	<p><i>"Will this change break the system?"</i></p> <p><i>"How do I Eliminate configuration drift?"</i></p>	<p>Lack of Confidence 150+ days to patch</p>
 <p>Doomsday Unplanned Outages Minimize damage and downtime</p>	<p><i>"How fast can I recover?"</i></p> <p><i>"How can I quickly rebuild my Infrastructure?"</i></p>	<p>Lack of Recovery Capability \$5M+ in damage per instance (\$12B in CY23, x2 since 4Y, Bureau analysis)</p>

Solution: Automation + OOB



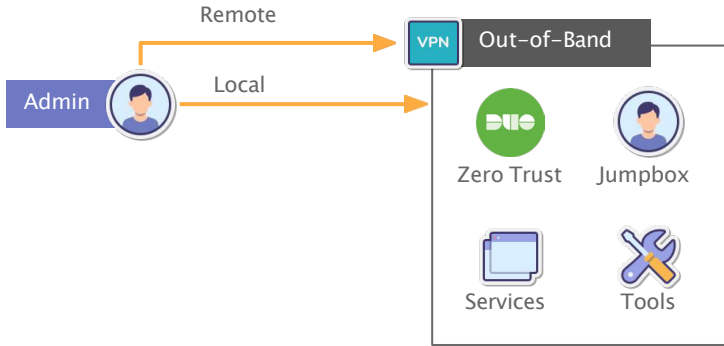
Outcome	Challenges	Solutions
 <p>Day Zero Installation Day Bring Sites up quickly</p>	<p><i>"How much time will this take?"</i></p> <p><i>"How do I bring up a new site with less staff and cost"</i></p>	<p>Seed of Life Deploy locations faster</p>
 <p>Day Two Ongoing Operations Keep Everything Running</p>	<p><i>"Will this change break the system?"</i></p> <p><i>"How do I Eliminate configuration drift?"</i></p>	<p>Isolated Management Infrastructure Daily Change Management</p>
 <p>Doomsday Unplanned Outages Minimize damage and downtime</p>	<p><i>"How fast can I recover?"</i></p> <p><i>"How can I quickly rebuild my Infrastructure?"</i></p>	<p>Isolated Recovery Environment Recover from outages faster</p>

Gen 3:

Isolated Management Infrastructure

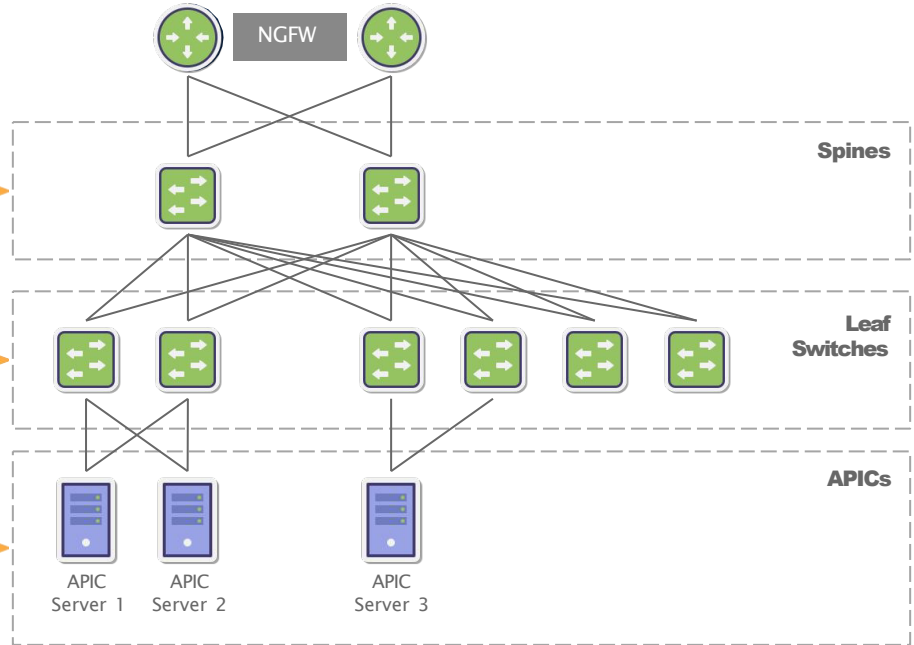
Strongly Encouraged by BOD 23-02 (CISA)

Control Plane Infrastructure



Security & Isolation

Production Infrastructure



Day Zero, Day Two, Doomsday



Day Zero

Initial Deployment



LIVING SPACES

40+ new stores to open

Only 3 IT staff

Opening a new store every other week

Avoiding truck roll,
Reducing costs,
\$75,000+ per year

Features Used:

Modular hardware with LTE, Serial,
Storage, Fiber Connectivity, Compute

Automation

ZPE Cloud


Day Zero, Day Two, Doo msday



Day Zero



Day Two

Initial Deployment	Ongoing Operations
 LIVING SPACES 40+ new stores to open Only 3 IT staff Opening a new store every other week	250 data centers 7,000+ devices
Avoiding truck roll, Reducing costs, \$75,000+ per year	Consistent, faster, automated deployments & patching No additional manpower
Features Used: Modular hardware with LTE, Serial, Storage, Fiber Connectivity, Compute Automation ZPE Cloud	Features Used: Ansible Automation Auto discovery Clustering Docker/VM Virtualization

Day Zero, Day Two, Doom sday




Day Zero



Day Two



Doom sday

Initial Deployment	Ongoing Operations	Recovery and Resurrection
 LIVING SPACES		
40+ new stores to open Only 3 IT staff Opening a new store every other week	250 data centers 7,000+ devices	Lack of resilient recovery infrastructure Quick recovery is challenging in 100 remote locations
Avoiding truck roll, Reducing costs, \$75,000+ per year	Consistent, faster, automated deployments & patching No additional manpower	Quick data center rebuild Ransomware recovery Minimize business disruption
Features Used: Modular hardware with LTE, Serial, Storage, Fiber Connectivity, Compute Autom ation ZPE Cloud	Features Used: Ansible Autom ation Auto discovery Clustering Docker/VM Virtua liza tion	Features Used: ZPE Cloud 4G/5G Docker/VM Virtua liza tion Built Isolated Recovery Environment (IRE)



THANK YOU