2 Twelve Solutions

PROJECT

ORE Task 1
Integration Activities

DATE	CLIENT	PHASE
20 October 2022	Navy	1

Information Needed for Integration Efforts

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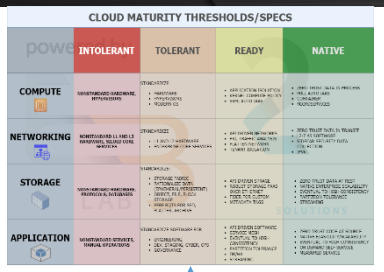


Ready to Integrate with any Cloud Native Application

ORE is ready to integrate with desired solutions (i.e. RAM, SANDE, NAUTOBOT, etc...)

* Where is the solution hosted? Who is the technical admin point of contact?
* What is the URL path?
* What secrets / tokens / cryptographic standards is desired to be used?
* What are the contents in the solution desired synchronization with ORE?

Bottom Line: Need "Info" to integrate ORE with RAM, SANDE and Nautobot.

MATURITY
CLOUD NATIVE
CI CT CR CN

ORE

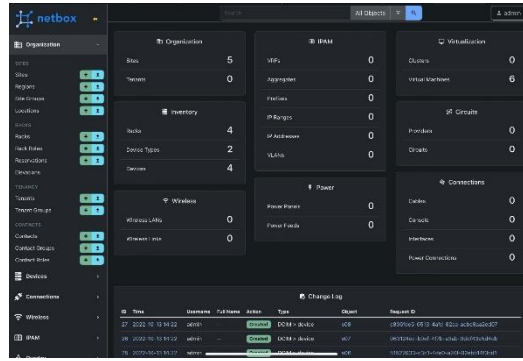
NDP
TRITON (OTA) SPECS

PaaS
IaaS
Compute
Storage
Networking

	CLOUD TOLERANT	CLOUD READY	CLOUD NATIVE
RAM (PaaS Info? IaaS Info?)	Cloud Native Consumable API - NO Accessible Databases/Datastore - TBD Sharable Secrets / Tokens - TBD Known Role Mappings - TBD Desired Content Synchronization - TBD		X
SANDE (PaaS Info? IaaS Info?)	Cloud Native Consumable API - ? Accessible Databases/Datastore - TBD Sharable Secrets / Tokens - TBD Known Role Mappings - TBD Desired Content Synchronization - TBD		?
NAUTOBOT (SaaS Info? ~~PaaS Info?~~ ~~IaaS Info?~~)	Based on Upstream Opensource version of COTS: Cloud Native Consumable API - YES Privilege Access - TBD Sharable Secrets / Tokens - TBD Known Role Mappings - TBD Desired Content Synchronization - TBD		✓

Are there any other applications in SANDE besides Ansible?

Deployed on **NDP Trito Platform**



WHAT data elements are desired to integrate into the ORE?

Cloud Maturity Threshold specifications

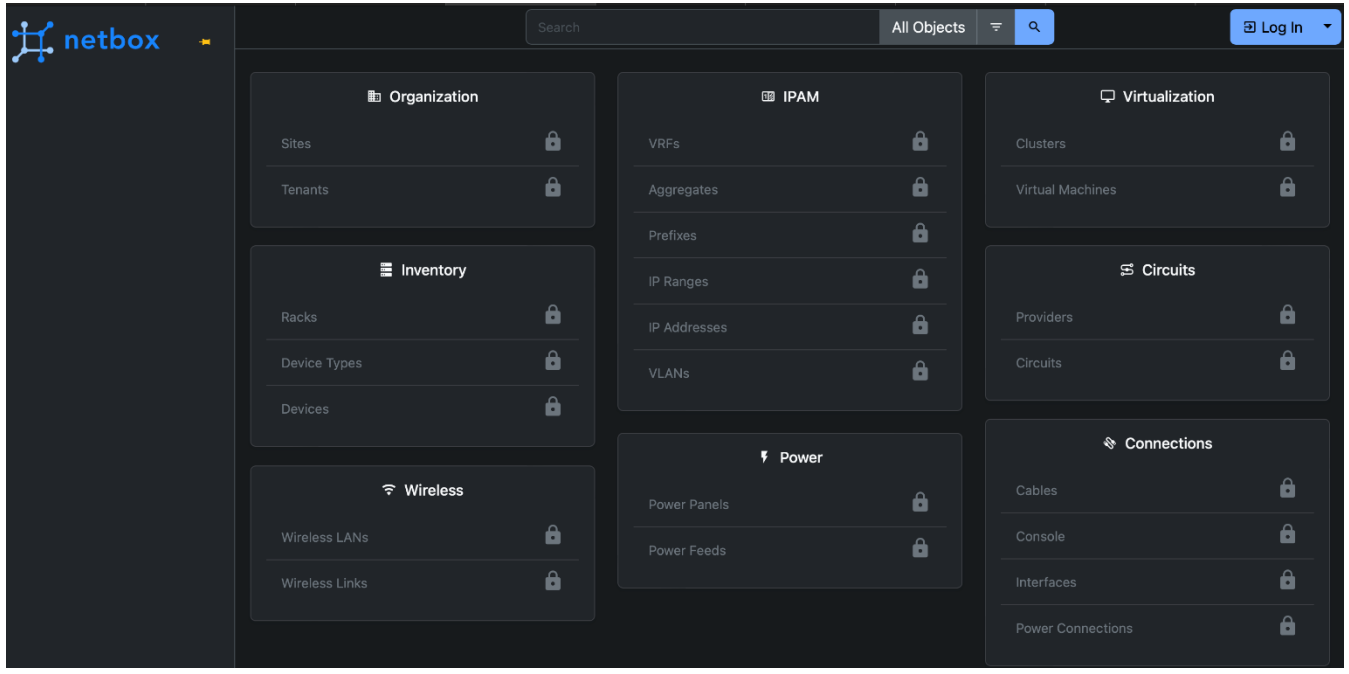
CLOUD MATURITY THRESHOLDS/SPECS

	INTOLERANT	TOLERANT	READY	NATIVE
COMPUTE	**NONSTANDARD HARDWARE, HYPERVISORS**	STANDARDIZE • HARDWARE • HYPERVISORS • MODERN OS	• APPLICATION ISOLATION • KERNEL COMPUTE POLICY • SEMI AUTO IAAS	• ZERO TRUST DATA IN PROCESS • FULL AUTO IAAS • CONTAINER • MICROSERVICES
NETWORKING	**NONSTANDARD L1 AND L2 HARDWARE, SILOED CORE SERVICES**	STANDARDIZE • L1 AND L2 HARDWARE • ENTERPRISE CORE SERVICES	• API DRIVEN NETWORKS • PKI, TRAFFIC ANALYSIS • FLATTEN NETWORK • TENANT ISOLATION	• ZERO TRUST DATA IN TRANSIT • L2-7 AS SOFTWARE • SIDECAR SECURITY DATA COLLECTION • IPV6
STORAGE	**NONSTANDARD HARDWARE, PROTOCOLS, DATABASES**	STANDARDIZE: • STORAGE FABRIC • RATIONALIZE DATA (EPHEMERAL/PERSISTENT) • OBJECT, FILE, BLOCK STORAGE • PERF RQTS FOR SSD, PLATTER, ARCHIVE	• API DRIVEN STRAGE • ROBUST STORAGE PAAS OVER ETHERNET • FIBER FOR CUSTOM • METADATA TAGS	• ZERO TRUST DATA AT REST • NATIVE ENTERPRISE SCALABILITY • EVENTUAL TO HIGH CONSISTENCY • PARTITION TOLERANCE • STREAMING
APPLICATION	**NONSTANDARD SERVICES, MANUAL OPERATIONS**	STANDARDIZE SOFTWARE FOR • ENGINEERING, • DEV, STAGING, CYBER, OPS • GOVERNANCE	• API DRIVEN SOFTWARE • SERVICE MESH • EVENTUAL TO HIGH CONSISTENCY • PARTITION TOLERANCE • DR/HA • STREAMING	• ZERO TRUST CODE AT SOURCE • NATIVE ELASTICITY/SCALABILITY • EVENTUAL TO HIGH CONSISTENCY • ON DEMAND SELF SERVICE • MEASURED SERVICE

Reviewed Netbox (opensource version of Nautobot)

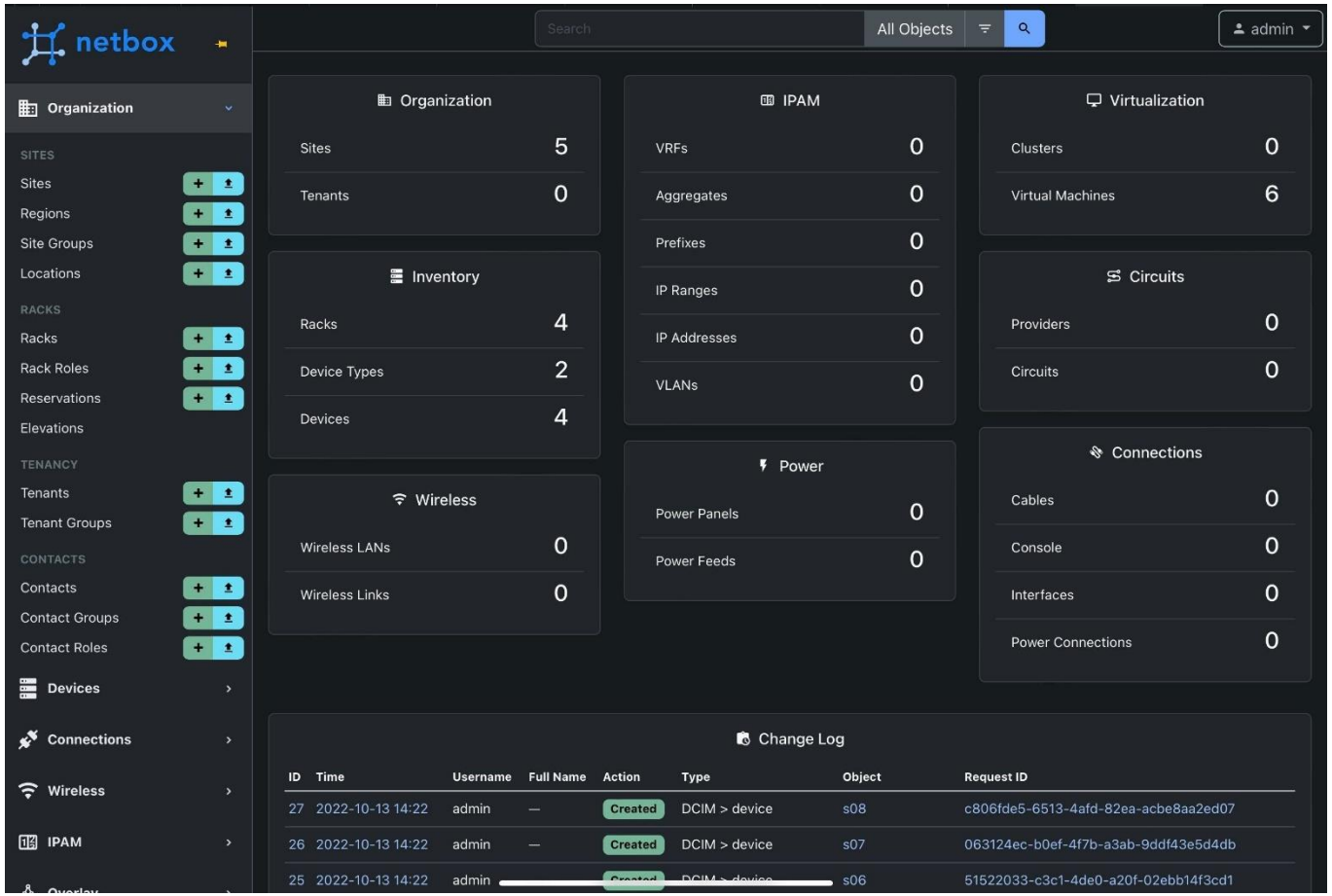
Team implemented the upstream opensource version of Nautobot COTS (Netbox), deployed on Triton Platform (Cloud native infrastructure), leveraging stateless and ephemeral/persistent storage design

- **What data elements from Nautobot are desired for extraction into the ORE?**
- **When can the Core Node provide the API endpoints and data functions for integration to the ORE?**
- **What services and elements (data) from SANDE are desired to be put into the ORE?**
- **When can SANDE team provide API Endpoints and data elements required for integration for SANDE integration?**



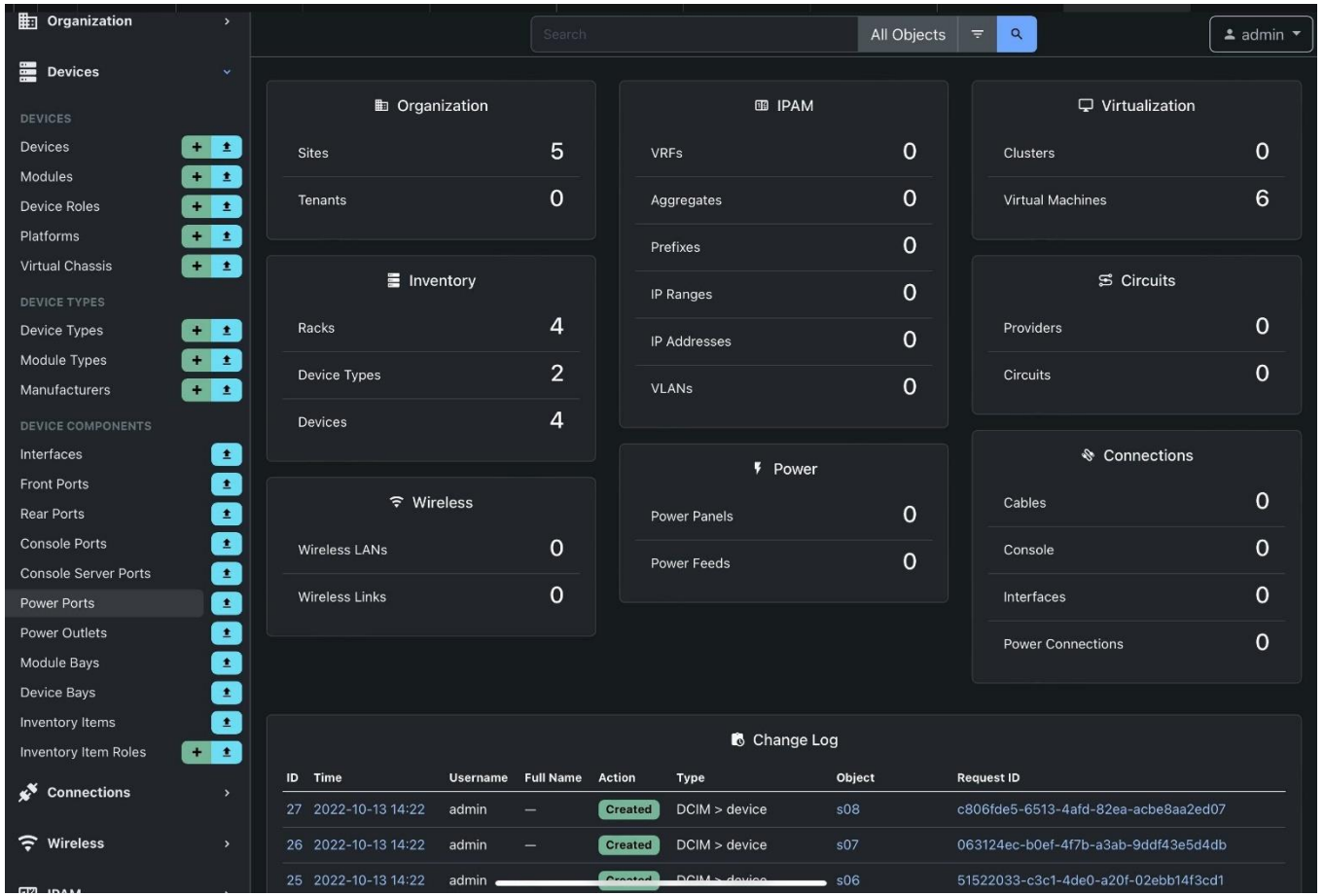
Netbox Implementation and Analysis

Organization



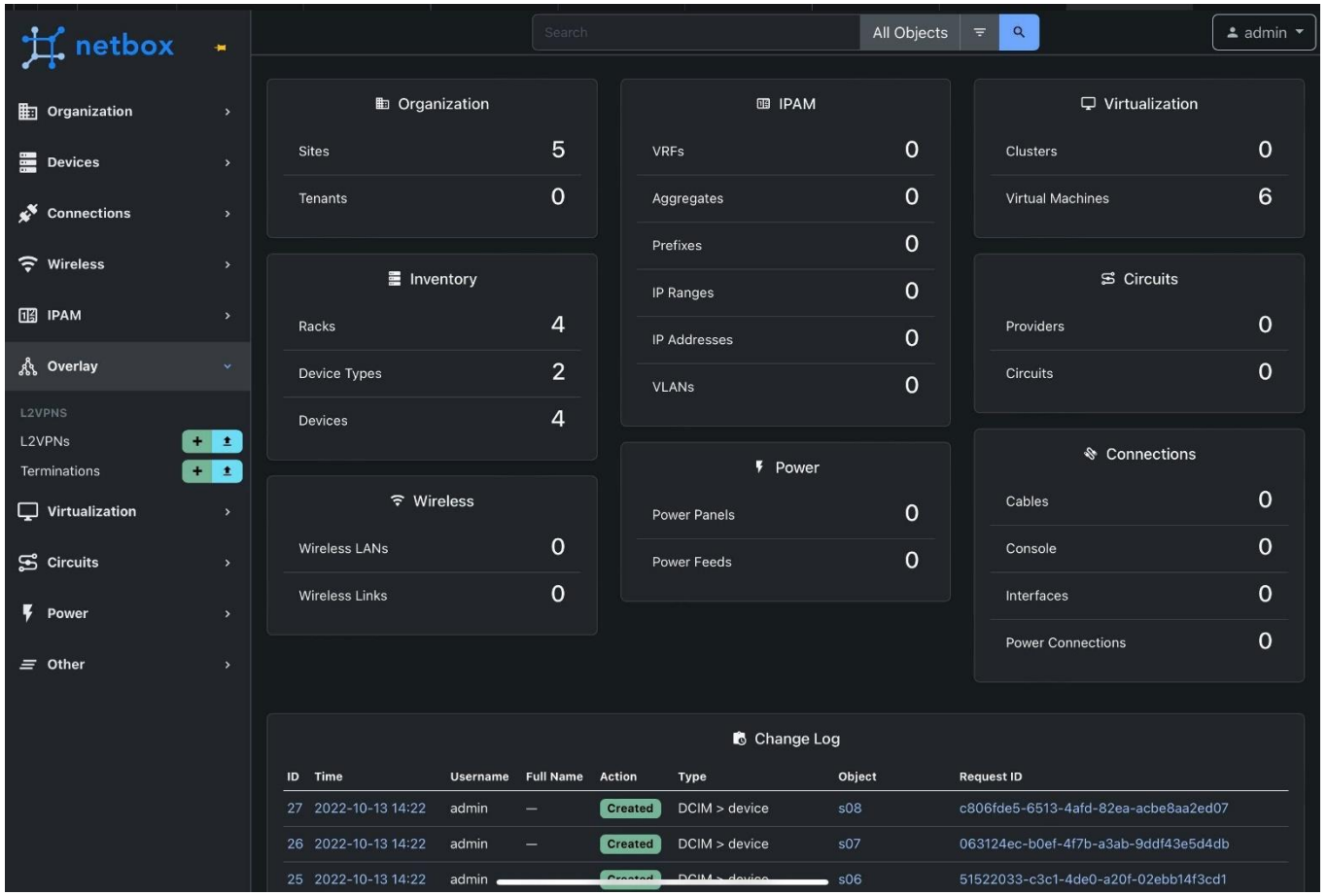
Netbox Implementation and Analysis

Devices



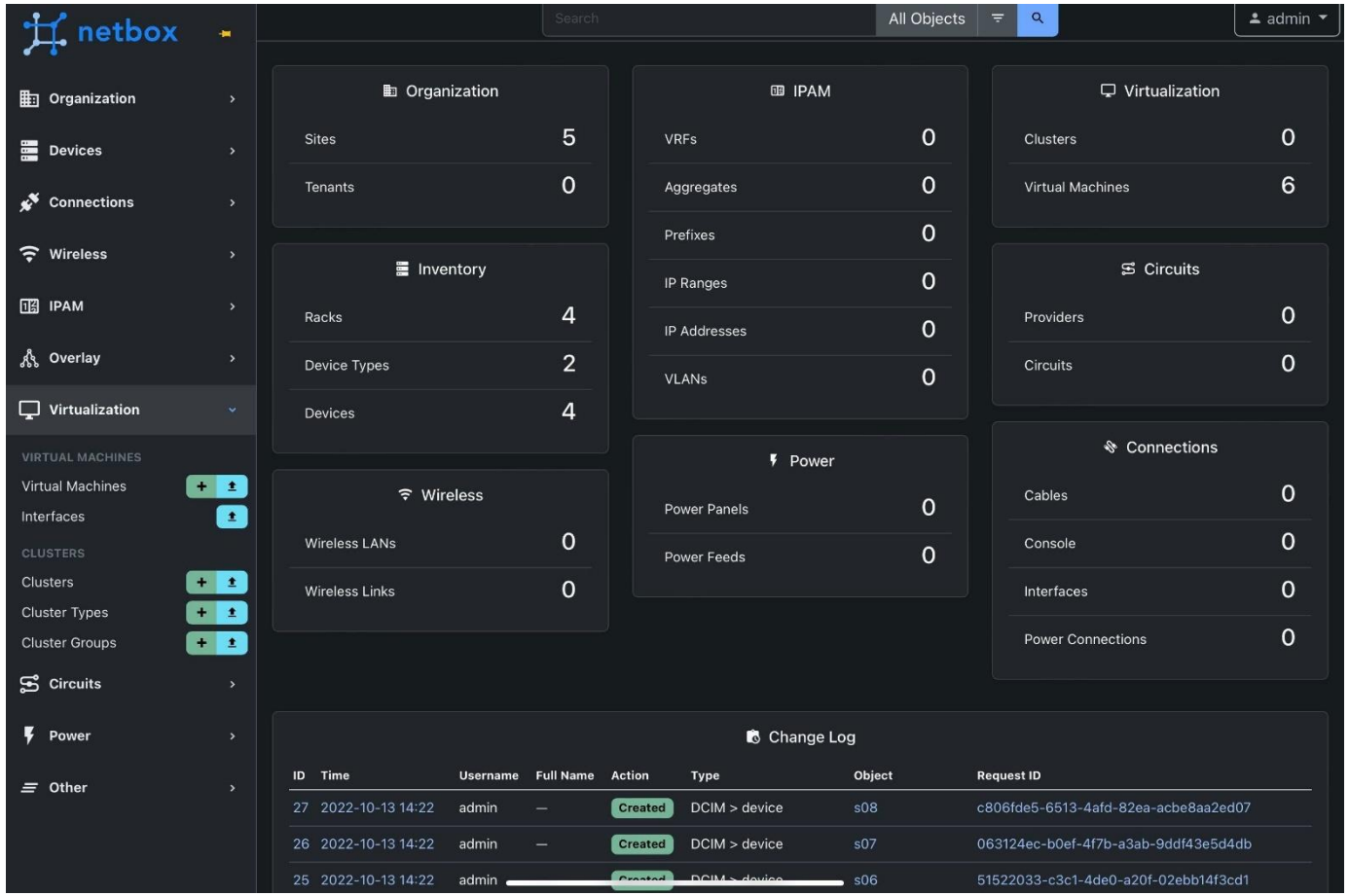
Netbox Implementation and Analysis

Overlay



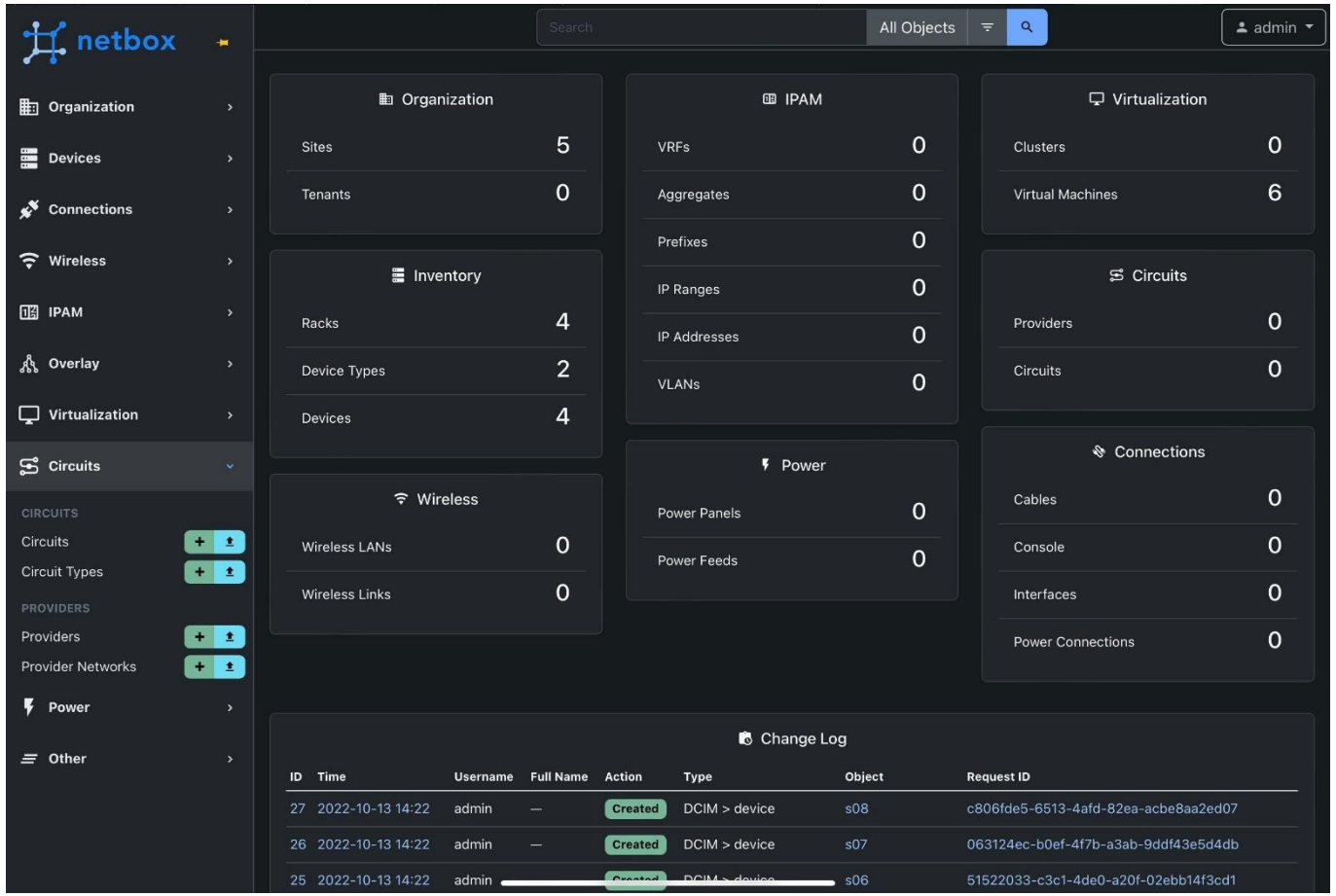
Netbox Implementation and Analysis

Virtualization



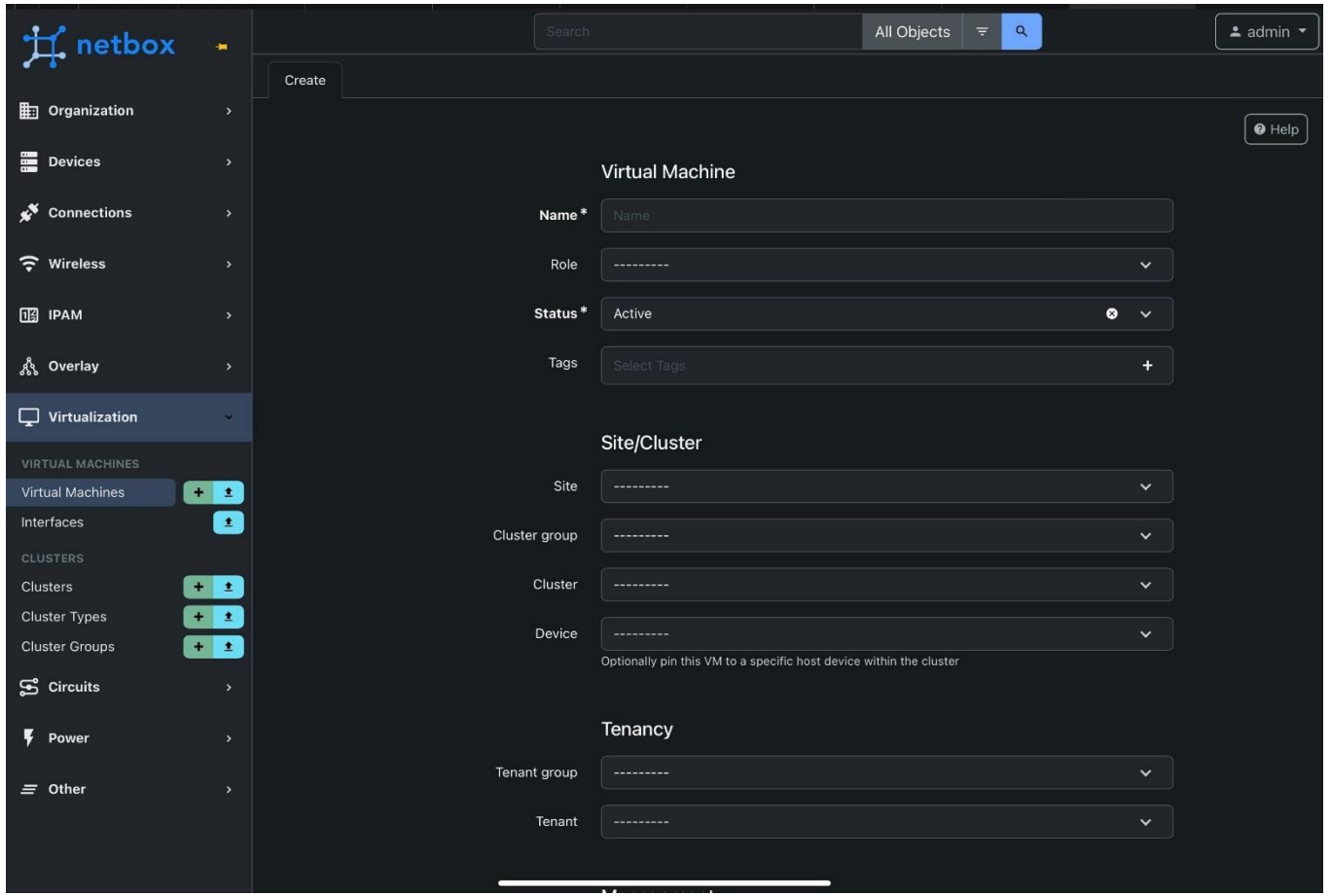
Netbox Implementation and Analysis

Circuits



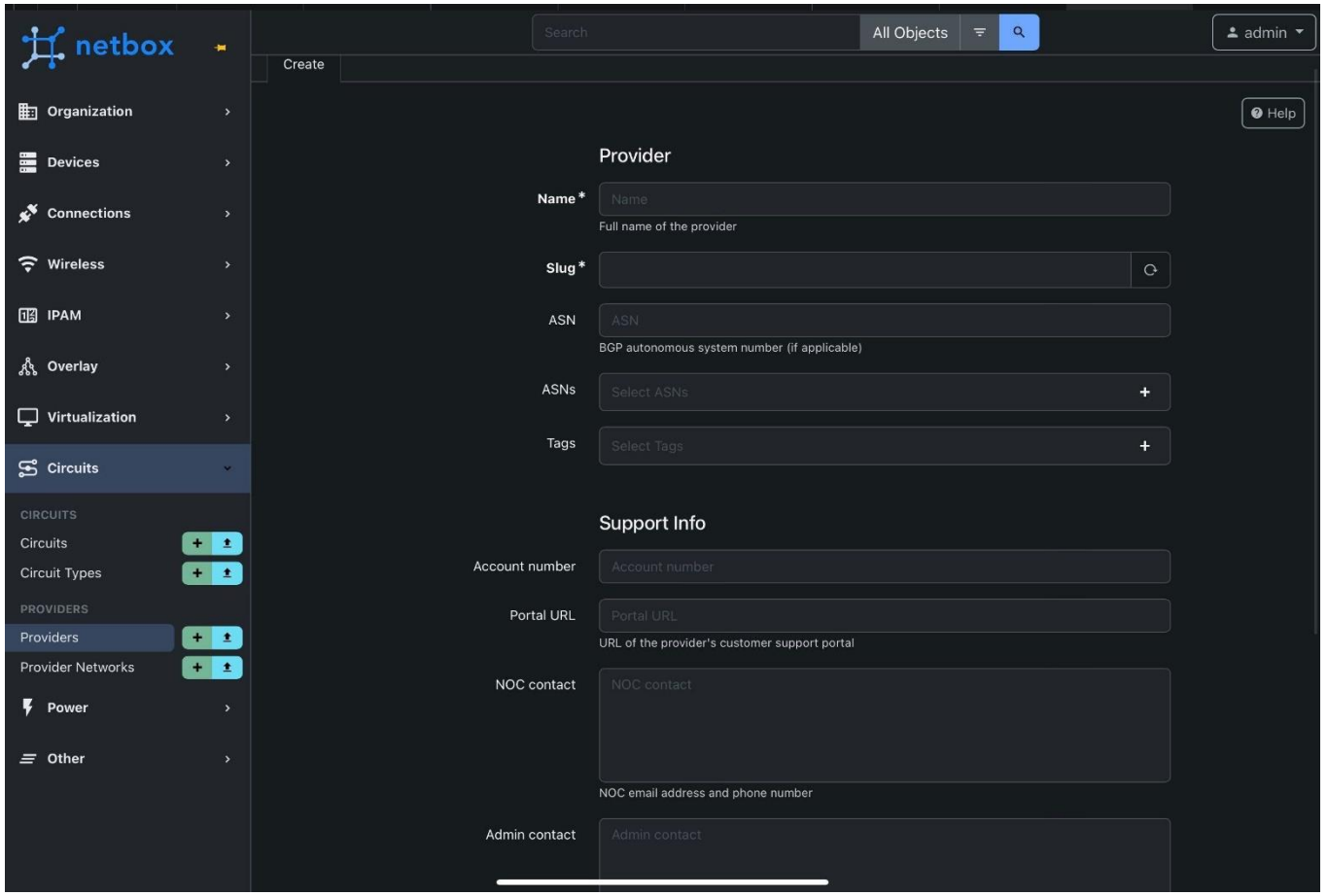
Netbox Implementation and Analysis

Virtual Machines



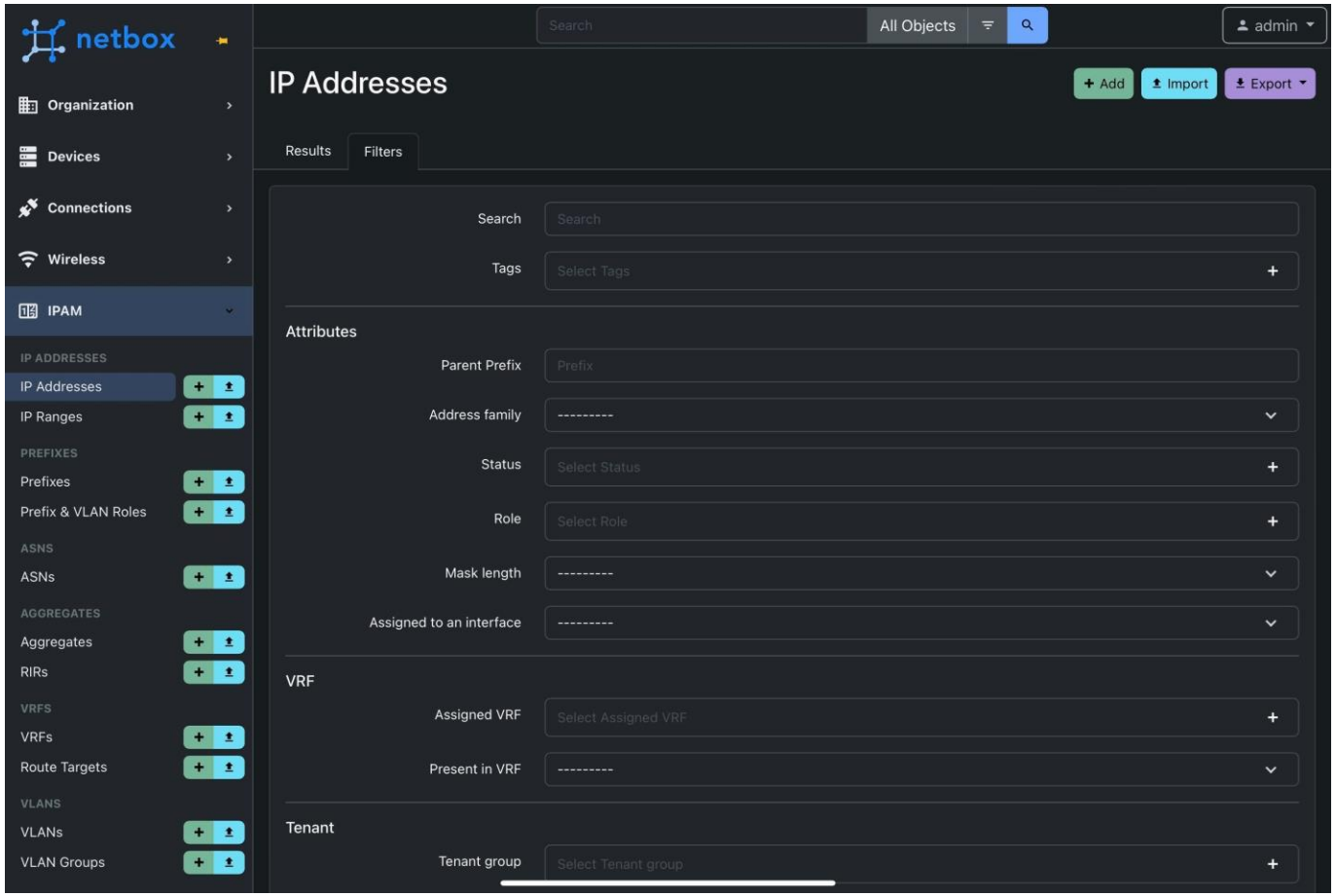
Netbox Implementation and Analysis

Service Providers



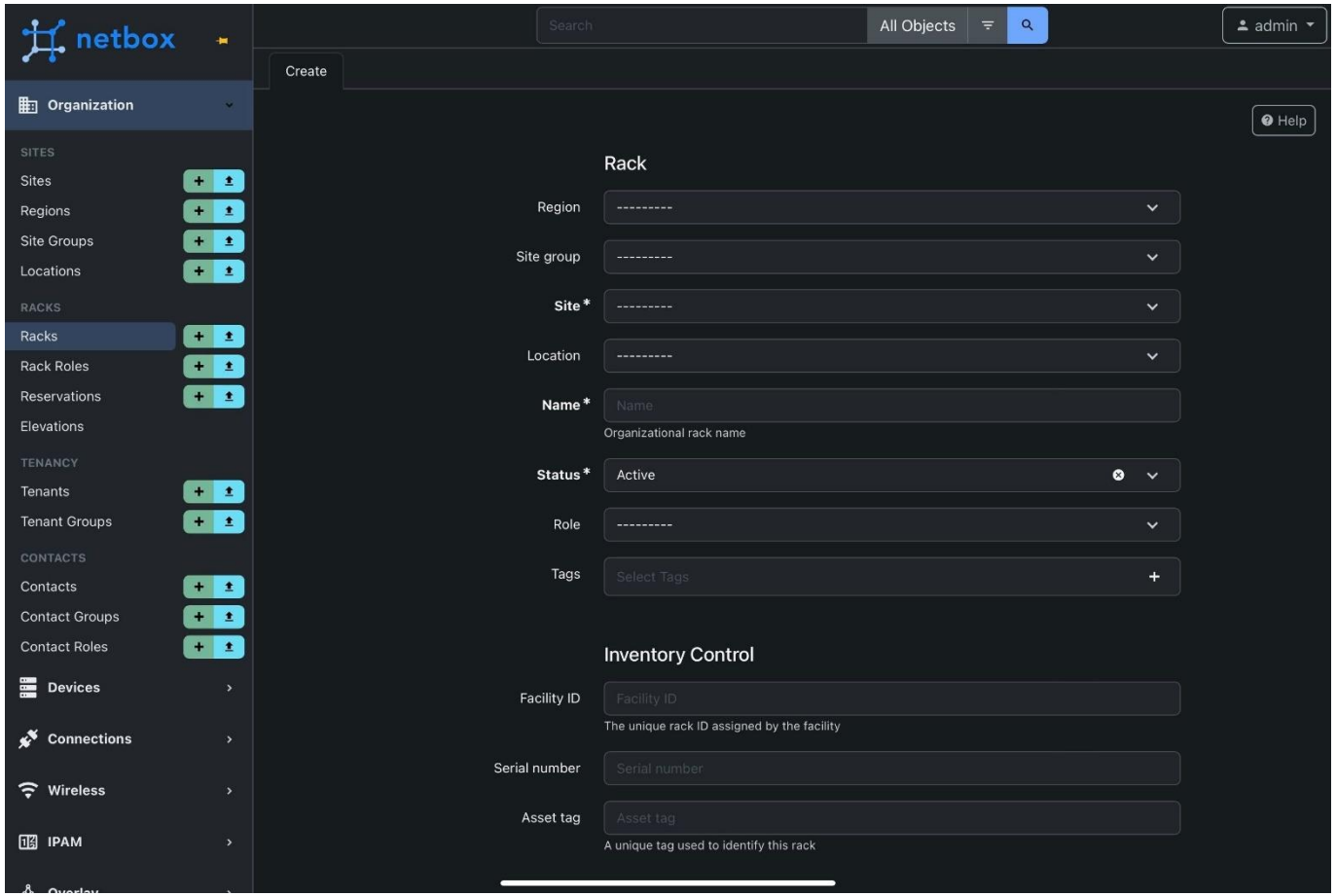
Netbox Implementation and Analysis

IP Address Management



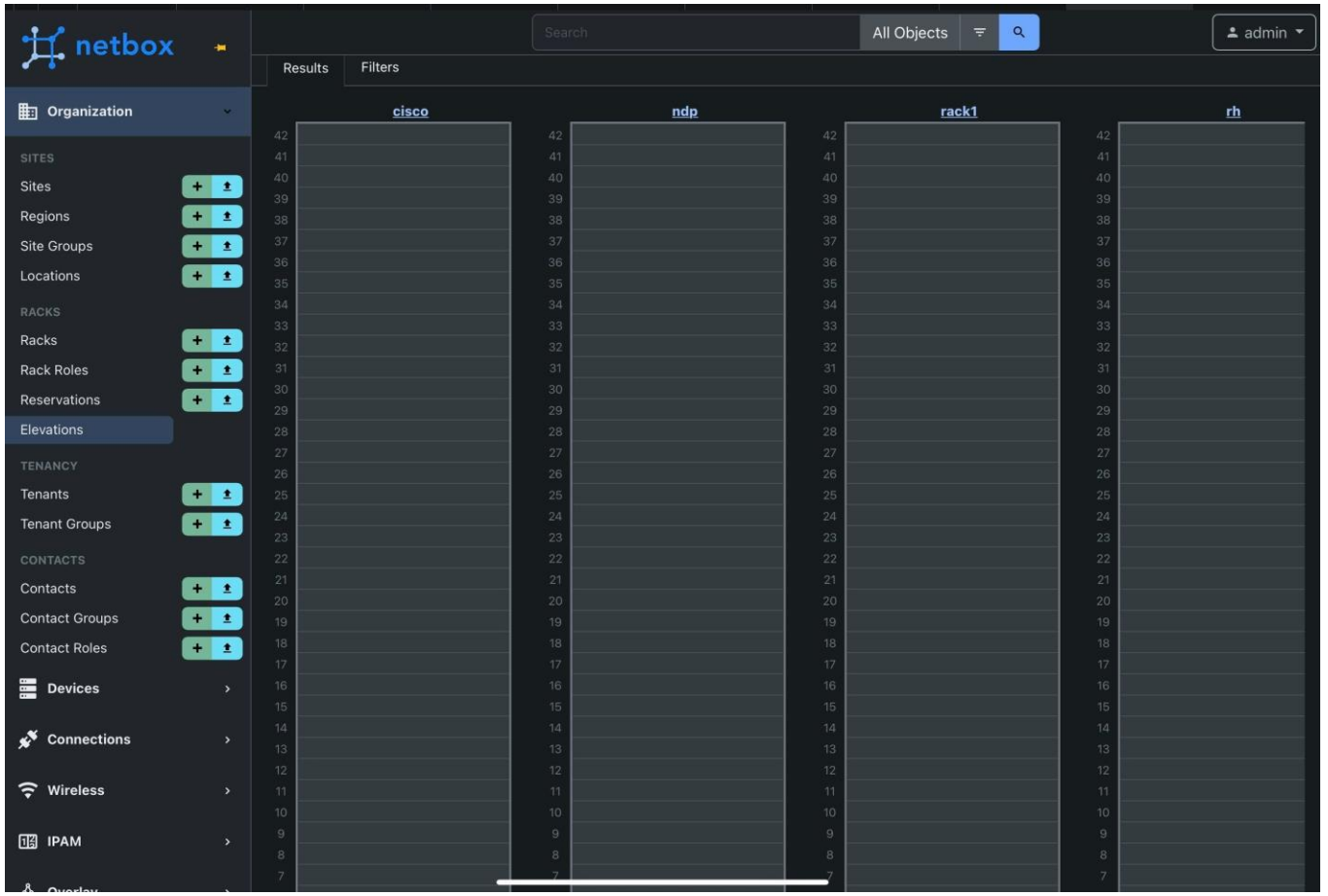
Netbox Implementation and Analysis

Rack Data



Netbox Implementation and Analysis

Rack Diagrams



Netbox Implementation and Analysis

Circuit
Data Import