

PROJECT

ORE Task 1 Integration Activities

DATE

20 October 2022

CLIENT

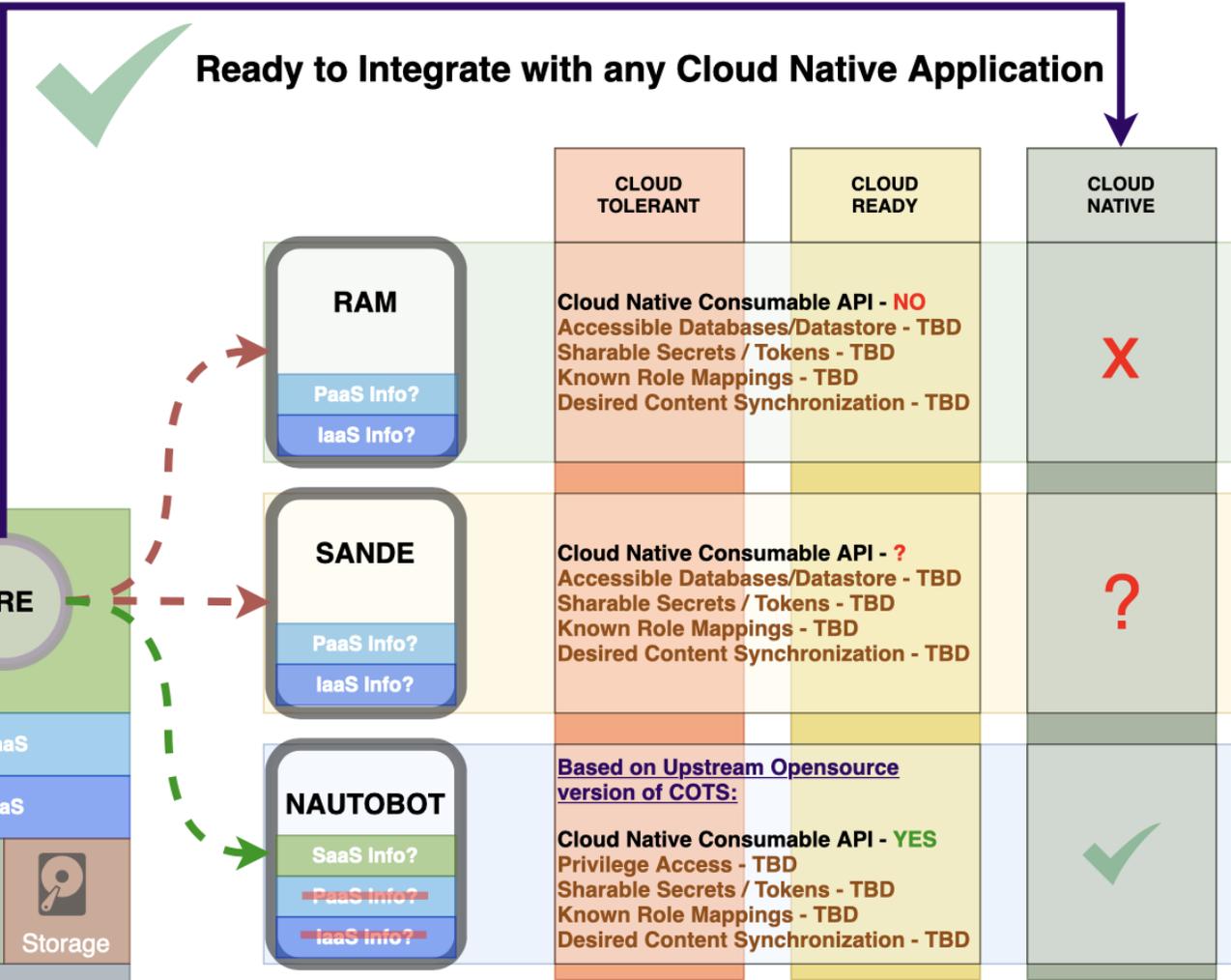
Navy

PHASE

1

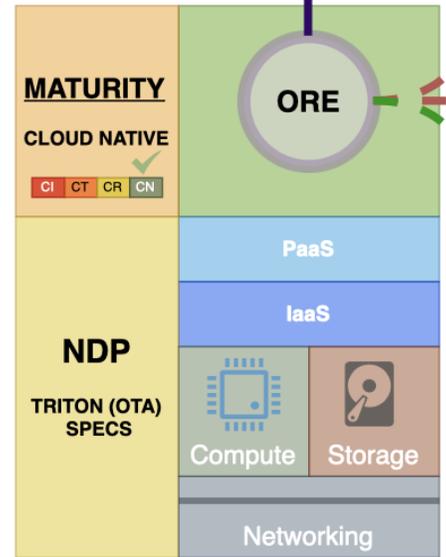


CLOUD MATURITY THRESHOLDS/SPECS				
power	INTOLERANT	TOLERANT	READY	NATIVE
COMPUTE	• NO SCHEDULING POLICIES • NO SCHEDULING POLICIES • NO SCHEDULING POLICIES	• SCHEDULING POLICIES • SCHEDULING POLICIES • SCHEDULING POLICIES	• SCHEDULING POLICIES • SCHEDULING POLICIES • SCHEDULING POLICIES	• SCHEDULING POLICIES • SCHEDULING POLICIES • SCHEDULING POLICIES
NETWORKING	• NO NETWORKING POLICIES • NO NETWORKING POLICIES • NO NETWORKING POLICIES	• NETWORKING POLICIES • NETWORKING POLICIES • NETWORKING POLICIES	• NETWORKING POLICIES • NETWORKING POLICIES • NETWORKING POLICIES	• NETWORKING POLICIES • NETWORKING POLICIES • NETWORKING POLICIES
STORAGE	• NO STORAGE POLICIES • NO STORAGE POLICIES • NO STORAGE POLICIES	• STORAGE POLICIES • STORAGE POLICIES • STORAGE POLICIES	• STORAGE POLICIES • STORAGE POLICIES • STORAGE POLICIES	• STORAGE POLICIES • STORAGE POLICIES • STORAGE POLICIES
APPLICATION	• NO APPLICATION POLICIES • NO APPLICATION POLICIES • NO APPLICATION POLICIES	• APPLICATION POLICIES • APPLICATION POLICIES • APPLICATION POLICIES	• APPLICATION POLICIES • APPLICATION POLICIES • APPLICATION POLICIES	• APPLICATION POLICIES • APPLICATION POLICIES • APPLICATION POLICIES



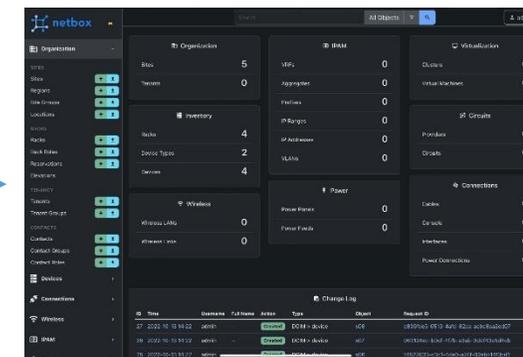
- ORE is ready to integrate with desired solutions (i.e. RAM, SANDE, NAUTOBOT, etc...)**
- * Where is the solution hosted? Who is the technical admin point of contact?
 - * What is the URL path?
 - * What secrets / tokens / cryptographic standards is desired to be used?
 - * What are the contents in the solution desired synchronization with ORE?

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



Are there any other applications in SANDE besides Ansible?

Deployed on NDP Triton Platform

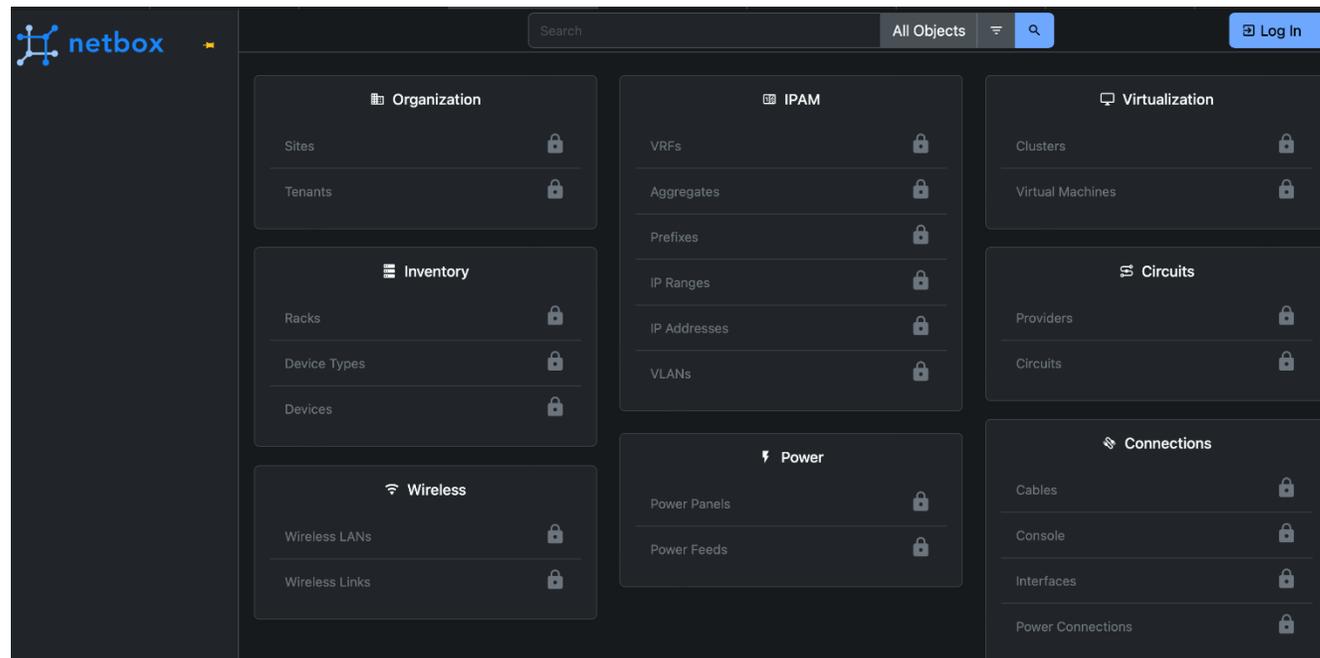


WHAT data elements are desired to integrate into the ORE?

CLOUD MATURITY THRESHOLDS/SPECS				
	INTOLERANT	TOLERANT	READY	NATIVE
COMPUTE 	NONSTANDARD HARDWARE, HYPERVISORS	STANDARDIZE <ul style="list-style-type: none"> HARDWARE HYPERVISORS MODERN OS 	<ul style="list-style-type: none"> APPLICATION ISOLATION KERNEL COMPUTE POLICY SEMI AUTO IAAS 	<ul style="list-style-type: none"> ZERO TRUST DATA IN PROCESS FULL AUTO IAAS CONTAINER MICROSERVICES
NETWORKING 	NONSTANDARD L1 AND L2 HARDWARE, SILOED CORE SERVICES	STANDARDIZE <ul style="list-style-type: none"> L1 AND L2 HARDWARE ENTERPRISE CORE SERVICES 	<ul style="list-style-type: none"> API DRIVEN NETWORKS PKI, TRAFFIC ANALYSIS FLATTEN NETWORK TENANT ISOLATION 	<ul style="list-style-type: none"> ZERO TRUST DATA IN TRANSIT L2-7 AS SOFTWARE SIDECAR SECURITY DATA COLLECTION IPV6
STORAGE 	NONSTANDARD HARDWARE, PROTOCOLS, DATABASES	STANDARDIZE: <ul style="list-style-type: none"> STORAGE FABRIC RATIONALIZE DATA (EPHEMERAL/PERSISTENT) OBJECT, FILE, BLOCK STORAGE PERF RQTS FOR SSD, PLATTER, ARCHIVE 	<ul style="list-style-type: none"> API DRIVEN STRAGE ROBUST STORAGE PAAS OVER ETHERNET FIBER FOR CUSTOM METADATA TAGS 	<ul style="list-style-type: none"> ZERO TRUST DATA AT REST NATIVE ENTERPRISE SCALABILITY EVENTUAL TO HIGH CONSISTENCY PARTITION TOLERANCE STREAMING
APPLICATION 	NONSTANDARD SERVICES, MANUAL OPERATIONS	STANDARDIZE SOFTWARE FOR <ul style="list-style-type: none"> ENGINEERING, DEV, STAGING, CYBER, OPS GOVERNANCE 	<ul style="list-style-type: none"> API DRIVEN SOFTWARE SERVICE MESH EVENTUAL TO HIGH CONSISTENCY PARTITION TOLERANCE DR/HA STREAMING 	<ul style="list-style-type: none"> ZERO TRUST CODE AT SOURCE NATIVE ELASTICITY/SCALABILITY EVENTUAL TO HIGH CONSISTENCY ON DEMAND SELF SERVICE MEASURED SERVICE

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?**



Organization

The screenshot shows the Netbox web interface. The sidebar on the left contains navigation menus for various sections: Organization, RACKS, TENANCY, CONTACTS, Devices, Connections, Wireless, and IPAM. The main content area is divided into several summary cards:

- Organization:** Sites (5), Tenants (0)
- Inventory:** Racks (4), Device Types (2), Devices (4)
- Wireless:** Wireless LANs (0), Wireless Links (0)
- IPAM:** VRFs (0), Aggregates (0), Prefixes (0), IP Ranges (0), IP Addresses (0), VLANs (0)
- Power:** Power Panels (0), Power Feeds (0)
- Virtualization:** Clusters (0), Virtual Machines (6)
- Circuits:** Providers (0), Circuits (0)
- Connections:** Cables (0), Console (0), Interfaces (0), Power Connections (0)

At the bottom, there is a Change Log table with the following data:

ID	Time	Username	Full Name	Action	Type	Object	Request ID
27	2022-10-13 14:22	admin	—	Created	DCIM > device	s08	c806fde5-6513-4afd-82ea-acbe8aa2ed07
26	2022-10-13 14:22	admin	—	Created	DCIM > device	s07	063124ec-b0ef-4f7b-a3ab-9ddf43e5d4db
25	2022-10-13 14:22	admin	—	Created	DCIM > device	s06	51522033-c3c1-4de0-a20f-02ebb14f3cd1

Devices

The screenshot displays the Netbox web interface. On the left is a navigation sidebar with categories like Organization, Devices, Device Types, Device Components, Connections, and Wireless. The main content area shows a dashboard with several summary cards for Organization, IPAM, Virtualization, Inventory, Wireless, Power, and Connections. At the bottom, there is a 'Change Log' table.

ID	Time	Username	Full Name	Action	Type	Object	Request ID
27	2022-10-13 14:22	admin	—	Created	DCIM > device	s08	c806fde5-6513-4afd-82ea-acbe8aa2ed07
26	2022-10-13 14:22	admin	—	Created	DCIM > device	s07	063124ec-b0ef-47b-a3ab-9ddf43e5d4db
25	2022-10-13 14:22	admin	—	Created	DCIM > device	s06	51522033-c3c1-4de0-a20f-02ebb14f3cd1

Overlay

The screenshot shows the Netbox web interface with the 'Overlay' section selected in the sidebar. The main content area displays various metrics for different categories:

- Organization:** Sites (5), Tenants (0)
- IPAM:** VRFs (0), Aggregates (0), Prefixes (0), IP Ranges (0), IP Addresses (0), VLANs (0)
- Virtualization:** Clusters (0), Virtual Machines (6)
- Inventory:** Racks (4), Device Types (2), Devices (4)
- Wireless:** Wireless LANs (0), Wireless Links (0)
- Power:** Power Panels (0), Power Feeds (0)
- Circuits:** Providers (0), Circuits (0)
- Connections:** Cables (0), Console (0), Interfaces (0), Power Connections (0)

At the bottom, there is a 'Change Log' table with the following data:

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25	2022-10-13 14:22	admin	—	Created	DCIM > device	s06	51522033-c3c1-4de0-a20f-02ebb14f3cd1

Virtualization

The screenshot shows the Netbox web interface with the 'Virtualization' section selected in the sidebar. The main content area displays several summary cards:

- Organization:** Sites (5), Tenants (0)
- Inventory:** Racks (4), Device Types (2), Devices (4)
- Wireless:** Wireless LANs (0), Wireless Links (0)
- IPAM:** VRFs (0), Aggregates (0), Prefixes (0), IP Ranges (0), IP Addresses (0), VLANs (0)
- Power:** Power Panels (0), Power Feeds (0)
- Virtualization:** Clusters (0), Virtual Machines (6)
- Circuits:** Providers (0), Circuits (0)
- Connections:** Cables (0), Console (0), Interfaces (0), Power Connections (0)

At the bottom, a 'Change Log' table shows recent actions:

ID	Time	Username	Full Name	Action	Type	Object	Request ID
27	2022-10-13 14:22	admin	—	Created	DCIM > device	s08	c806fde5-6513-4afd-82ea-acbe8aa2ed07
26	2022-10-13 14:22	admin	—	Created	DCIM > device	s07	063124ec-b0ef-4f7b-a3ab-9ddf43e5d4db
25	2022-10-13 14:22	admin	—	Created	DCIM > device	s06	51522033-c3c1-4de0-a20f-02ebb14f3cd1

Circuits

The screenshot shows the Netbox web interface. The sidebar on the left contains navigation options: Organization, Devices, Connections, Wireless, IPAM, Overlay, Virtualization, Circuits (selected), and Other. Under the Circuits section, there are sub-headers for CIRCUITS, PROVIDERS, and Power, each with a '+ -' icon. The main dashboard displays several summary cards for Organization, IPAM, Virtualization, Inventory, Wireless, Power, and Connections. At the bottom, there is a 'Change Log' table.

ID	Time	Username	Full Name	Action	Type	Object	Request ID
27	2022-10-13 14:22	admin	—	Created	DCIM > device	s08	c806fde5-6513-4afd-82ea-acbe8aa2ed07
26	2022-10-13 14:22	admin	—	Created	DCIM > device	s07	063124ec-b0ef-4f7b-a3ab-9ddf43e5d4db
25	2022-10-13 14:22	admin	—	Created	DCIM > device	s06	51522033-c3c1-4de0-a20f-02ebb14f3cd1

Virtual Machines

The screenshot displays the Netbox web interface for creating a new Virtual Machine. The interface is dark-themed and includes a sidebar on the left with navigation options: Organization, Devices, Connections, Wireless, IPAM, Overlay, Virtualization, Virtual Machines, Interfaces, Clusters, Cluster Types, Cluster Groups, Circuits, Power, and Other. The 'Virtualization' section is expanded, and 'Virtual Machines' is selected. The main content area shows the 'Create' form for a 'Virtual Machine'. The form includes the following fields:

- Name ***: A text input field with the placeholder 'Name'.
- Role**: A dropdown menu.
- Status ***: A dropdown menu with 'Active' selected.
- Tags**: A 'Select Tags' button with a plus sign.
- Site/Cluster**: A section containing:
 - Site**: A dropdown menu.
 - Cluster group**: A dropdown menu.
 - Cluster**: A dropdown menu.
 - Device**: A dropdown menu.
 - A note: 'Optionally pin this VM to a specific host device within the cluster'.
- Tenancy**: A section containing:
 - Tenant group**: A dropdown menu.
 - Tenant**: A dropdown menu.

At the top of the form, there is a search bar, a filter icon, and a search button. The user 'admin' is logged in, as indicated by the top right corner. A 'Help' button is also visible in the top right corner of the form area.

Service Providers

The screenshot displays the Netbox web interface for creating a new provider. The left sidebar shows the navigation menu with 'Providers' selected under the 'PROVIDERS' section. The main content area is titled 'Create Provider' and contains the following fields:

- Name ***: A text input field with the placeholder 'Name' and a description 'Full name of the provider'.
- Slug ***: A text input field with a refresh icon and a description 'Full name of the provider'.
- ASN**: A text input field with the placeholder 'ASN' and a description 'BGP autonomous system number (if applicable)'.
- ASNs**: A multi-select dropdown menu with the placeholder 'Select ASNs' and a plus sign.
- Tags**: A multi-select dropdown menu with the placeholder 'Select Tags' and a plus sign.
- Support Info**: A section containing:
 - Account number**: A text input field with the placeholder 'Account number'.
 - Portal URL**: A text input field with the placeholder 'Portal URL' and a description 'URL of the provider's customer support portal'.
 - NOC contact**: A large text area with the placeholder 'NOC contact' and a description 'NOC email address and phone number'.
 - Admin contact**: A text input field with the placeholder 'Admin contact'.

IP Address Management

The screenshot displays the Netbox web interface for IP Address Management. On the left is a navigation sidebar with categories: Organization, Devices, Connections, Wireless, IPAM (selected), IP ADDRESSES (IP Addresses, IP Ranges), PREFIXES (Prefixes, Prefix & VLAN Roles), ASNS (ASNs), AGGREGATES (Aggregates, RIRs), VRFS (VRFs, Route Targets), and VLANS (VLANs, VLAN Groups). The main content area is titled 'IP Addresses' and includes a search bar, 'All Objects' filter, and user 'admin'. Action buttons for '+ Add', 'Import', and 'Export' are visible. Below are tabs for 'Results' and 'Filters'. The form contains fields for Search, Tags, Parent Prefix, Address family, Status, Role, Mask length, Assigned to an interface, Assigned VRF, Present in VRF, and Tenant group.

Rack Data

The screenshot displays the Netbox web interface for creating a new rack. The interface is dark-themed and includes a sidebar on the left with navigation options: Organization, SITES (Sites, Regions, Site Groups, Locations), RACKS (Racks, Rack Roles, Reservations, Elevations), TENANCY (Tenants, Tenant Groups), CONTACTS (Contacts, Contact Groups, Contact Roles), Devices, Connections, Wireless, and IPAM. The main content area is titled 'Create Rack' and contains the following fields:

- Region:** A dropdown menu.
- Site group:** A dropdown menu.
- Site*:** A dropdown menu.
- Location:** A dropdown menu.
- Name*:** A text input field with a placeholder 'Name' and a description 'Organizational rack name'.
- Status*:** A dropdown menu with 'Active' selected and a refresh icon.
- Role:** A dropdown menu.
- Tags:** A 'Select Tags' button with a plus sign.
- Inventory Control:**
 - Facility ID:** A text input field with a placeholder 'Facility ID' and a description 'The unique rack ID assigned by the facility'.
 - Serial number:** A text input field with a placeholder 'Serial number'.
 - Asset tag:** A text input field with a placeholder 'Asset tag' and a description 'A unique tag used to identify this rack'.

Rack Diagrams

The screenshot displays the Netbox web interface. On the left is a navigation sidebar with categories: Organization, SITES, RACKS, TENANCY, CONTACTS, Devices, Connections, Wireless, and IPAM. The 'RACKS' section is expanded, showing 'Racks', 'Rack Roles', 'Reservations', and 'Elevations'. The main content area shows a grid of rack diagrams for four racks: 'cisco', 'ndp', 'rack1', and 'rh'. Each rack diagram is a vertical grid of 42 rows, numbered 7 to 42. The interface includes a search bar, 'All Objects' filter, and a user profile dropdown for 'admin'.

Circuit Data Import

Circuit Type Bulk Import

Bulk Import

CSV Data CSV File Upload

name, slug

Enter the list of column headers followed by one line per record to be imported, using commas to separate values. Multi-line data and values containing commas may be wrapped in double quotes.

Submit Cancel

CSV Field Options

Field	Required	Accessor	Description
name	✓	—	Name of circuit type
slug	✓	—	URL-friendly unique shorthand
description	—	—	Description