

Infoblox

An important early step in conducting any census of managed assets is to validate IPAM tracking and allocation data. To that end, Infoblox 2.11 has been integrated with Lumeta. The Lumeta-Infoblox integration brings the reach of Lumeta's network discovery to the IP address management (IPAM) space.

When you activate the Infoblox IPAM integration, Lumeta . . .

1. Queries Infoblox
2. Correlates that data against what Lumeta "knows"
3. Generates reports
4. Pushes metadata about discovered devices to Infoblox

This integration reconciles data between Lumeta and Infoblox without directly reading or modifying Infoblox tables: All pull/update operations are performed by API calls. This integration enables you to produce and export an IP list with which you can update Infoblox's data. With the two solutions working together, gaps in IP management coverage are eliminated and your organization can accurately account for its assets under management.

Update: Lumeta 4.3 is integrated with the Infoblox 2.11—which also provides a better paging mechanism that comes into play in managing the address space in larger deployments. **When using pagination, the largest number of records that can be returned in a single call is 999.**

Lumeta 4.3 collects data from more record types, including host, A, AAAA, and PTR. In addition, the extensible attributes "Site," "Device Type," and "Operating System" are now pushed from Lumeta and populate in Infoblox.



Infoblox logs out after only a minute of idle time. To increase the session timeout value . . .

- Grid Grid Manager Grid Properties Edit Security Session Timeout Max Value: from 60 - 31536000

Compatibility

Lumeta is compatible with Infoblox versions 2.11, 2.10, and 1.2.

Documentation by Infoblox & Infoblox Community

- [Infoblox WAPI documentation](#)
- [REST API documentation](#)
- [Creating Extensible Attribute Using API](#)

Configuration via Lumeta GUI



This procedure applies to Lumeta 3.2.4 and later systems. For deployment via the Linux shell, see [Deployment & Configuration via Lumeta CLI](#).

To configure connectivity between the Lumeta Command Center and the Infoblox server:

1. On the Lumeta main menu, browse to **Settings > Integrations > Other Solutions > Infoblox**.
2. Provide connection credentials, described here:

Field	Example	Description
Polling Interval	24	How often (in hours) that Lumeta should poll Infoblox for information
Server Name	65.246.241.138	The Server name or IP address of the Infoblox server.
Server User Name	infoblox	Your Infoblox username
Server Password	*****	Your Infoblox password

3. Click to toggle the Active control from red to green.
Infoblox is configured.

For more on this integration's reports, see the [IP Address Management](#) page.

To see the results within Infoblox, log into Infoblox and browse to **Data Management > IPAM**.

Using Infoblox GUI

To view managed and unmanaged CIDRs and IP address, brown in Infoblox to Data Management IPAM:

The screenshot shows the Infoblox IPAM interface. The top navigation bar includes 'Dashboards', 'Data Management', 'Smart Folders', 'Grid', and 'Administration'. Under 'Data Management', there are sub-tabs for 'IPAM', 'VLANs', 'Super Host', 'DHCP', 'DNS', and 'File Distribution'. The 'IPAM' sub-tab is active, showing a 'default' network view. A 'Quick Filter' is set to '[S] - Managed'. Below the filter, there are icons for navigation and actions. The main content area displays a table of networks with columns for 'NETWORK', 'COMMENT', 'IPAM UTILIZATION', and 'DISCOVERY ENGINE'. The table lists four networks: 0.0.1.0/24 (0.3% utilization), 1.1.1.0/24 (0.7% utilization), 2.2.2.0/24 (0.3% utilization), and 3.3.3.0/24 (0.3% utilization).

NETWORK	COMMENT	IPAM UTILIZATION	DISCOVERY ENGINE
0.0.1.0/24		0.3%	None
1.1.1.0/24		0.7%	None
2.2.2.0/24		0.3%	None
3.3.3.0/24		0.3%	None

The IPAM Utilization column shows how much of the address space is used by actual hosts.

DNS

With ESI 4.2, pagination and support for IPv6 and DNS Records were added.

To view the zones that hold DNS records:

1. Browse to DNS Zones.
2. Click a record such as "lum-forward"

The screenshot shows the Infoblox DNS Zones interface. The top navigation bar includes 'Dashboards', 'Data Management', 'Smart Folders', 'Grid', and 'Administration'. Under 'Data Management', there are sub-tabs for 'IPAM', 'VLANs', 'Super Host', 'DHCP', 'DNS', and 'File Distribution'. The 'DNS' sub-tab is active, showing a 'default' zone view. A 'Quick Filter' is set to 'None'. Below the filter, there are icons for navigation and actions. The main content area displays a table of zones with columns for 'NAME', 'GRID PRIMARY SE...', 'TYPE', 'COMMENT', 'MULTI-MASTER Z...', 'MONITORED SINCE', 'LAST QUERIED', 'RECORDS MONITOR...', and 'SITE'. The table lists four zones: lum-forward (Authoritative), 0.0.127.in-addr... (Auto-created), 1.200.172.in-ad... (Authoritative), and 1.0.0.0.0.0.0.0... (Auto-created).

NAME	GRID PRIMARY SE...	TYPE	COMMENT	MULTI-MASTER Z...	MONITORED SINCE	LAST QUERIED	RECORDS MONITOR...	SITE
lum-forward		Authoritative		No	Not Monitored	Not Monitored	No	
0.0.127.in-addr...		Auto-created		No	Not Monitored	Not Monitored	N/A	
1.200.172.in-ad...		Authoritative		No	Not Monitored	Not Monitored	No	
1.0.0.0.0.0.0.0...		Auto-created		No	Not Monitored	Not Monitored	N/A	

3. You can see the record types in the Type column and add a new record here of the types A, AAAA, PTR, Host.

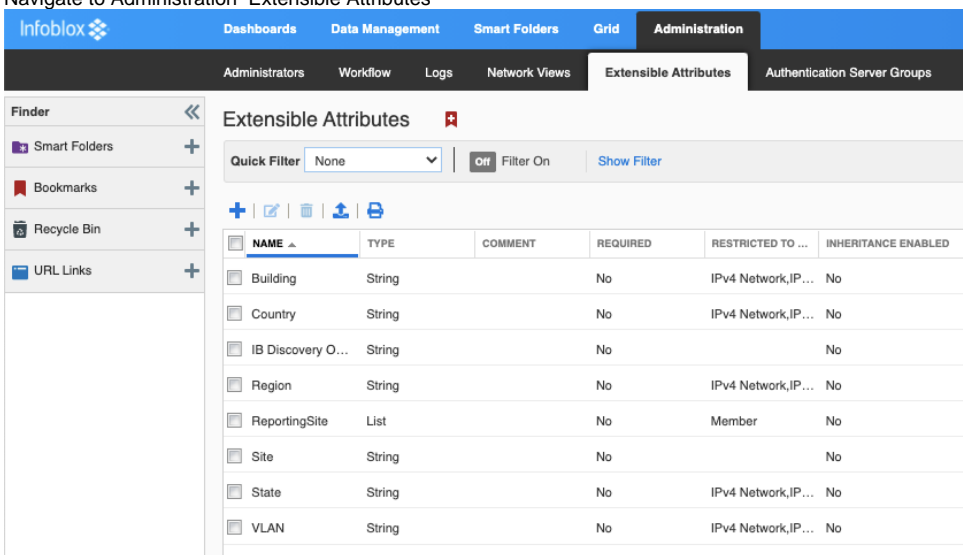
The screenshot shows the Infoblox DNS Records interface for the 'lum-forward' zone. The top navigation bar includes 'Dashboards', 'Data Management', 'Smart Folders', 'Grid', and 'Administration'. Under 'Data Management', there are sub-tabs for 'IPAM', 'VLANs', 'Super Host', 'DHCP', 'DNS', and 'File Distribution'. The 'DNS' sub-tab is active, showing a 'Records' view for the 'lum-forward' zone. A 'Quick Filter' is set to 'None'. Below the filter, there are icons for navigation and actions. The main content area displays a table of records with columns for 'NAME', 'TYPE', 'DATA', 'RECORD SOURCE', 'PRINCIPAL', 'PROTECTED', 'COMMENT', 'MONITORED SINCE', 'LAST QUERIED', 'RECLAIMABLE', and 'CREATION TIME'. The table lists five records: A Record (172.200.1.1), Host (3.10.32.214), Host (172.210.1.141), Host (172.210.1.176), and Host (172.16.52.11).

NAME	TYPE	DATA	RECORD SOURCE	PRINCIPAL	PROTECTED	COMMENT	MONITORED SINCE	LAST QUERIED	RECLAIMABLE	CREATION TIME
	A Record	172.200.1.1	Static		No		Not Monitored	Not Monitored	No	2020-11-17 15:5...
03_10_32_214	Host	3.10.32.214	Static		No		Not Monitored	Not Monitored	No	
1-141	Host	172.210.1.141	Static		Yes		Not Monitored	Not Monitored	No	
1-176	Host	172.210.1.176	Static		Yes		Not Monitored	Not Monitored	No	
52-11	Host	172.16.52.11	Static		Yes		Not Monitored	Not Monitored	No	

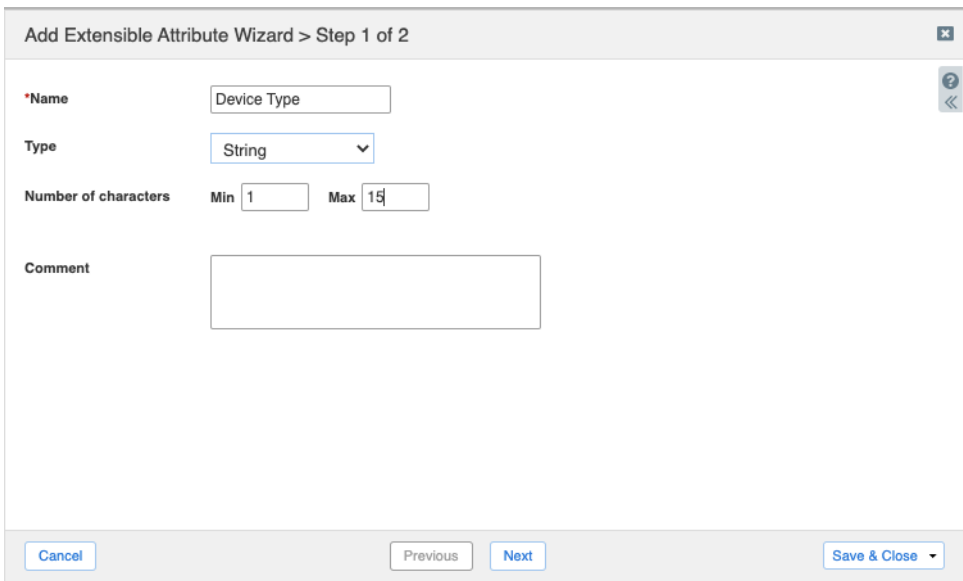
Extensible Attributes

To view extensible attributes from the GUI:

1. Navigate to Administration Extensible Attributes



2. You can add or import extensible attributes from here.



To view extensible attributes from the CLI:

```

• curl -s -k -u admin:infoblox -X GET "https://172.16.42.113/wapi/v2.8/extensibleattributedef?_return_fields=name,type,list_values" | grep "name"
"name": "Building",
"name": "Country",
"name": "Region",
"name": "Site",
"name": "State",
"name": "VLAN",
"name": "IB Discovery Owned",
"name": "Parental-Control-Policy",
"name": "Subscriber-Secure-Policy",
"name": "Proxy-All",
"name": "Black-List",
"name": "White-List",
"name": "PC-Category-Policy",
"name": "User-Name",
"name": "ReportingSite",

```

To view/create/delete extensible attributes from Infoblox GUI: Administration Extensible Attributes:

Example creating "Operating System" extensible attribute

```
curl -k -u admin:infoblox -X POST 'https://172.16.42.113/wapi/v2.11/extensibleattributedef' -H "Content-Type: application/json" -d '{"name": "Operating System", "type": "STRING"}'
```

Add extensible attributes as a column when listing IPs in Infoblox view.

Compatibility Matrix

	IB v8.5.1 or Greater	IB pre v 8.5.1	wAPI 2.11 or greater	wAPI pre 2.11
Lumeta 4.2 or later	Supported	Not Supported	Supported	Not Supported
Lumeta pre 4.2	Not Supported	Supported	Not Supported	Supported