



Deployment Guide

Infoblox Threat Intelligence Feed



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Introduction

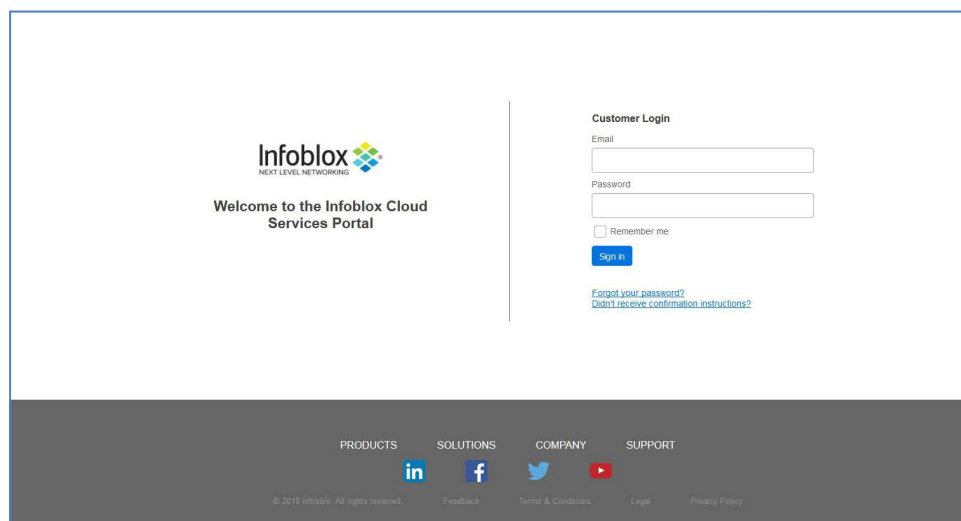
This document provides you with a quick-start guide on how to get to and deploy the Infoblox Threat Intelligence feed.

Portal

Account registration

Upon completion of the sales cycle you will receive notification that your account has been provisioned. To access the portal, log in to the Infoblox Cloud Services Portal.

csp.infoblox.com



Portal Navigation

The portal has a top navigation which will show you the different sections.

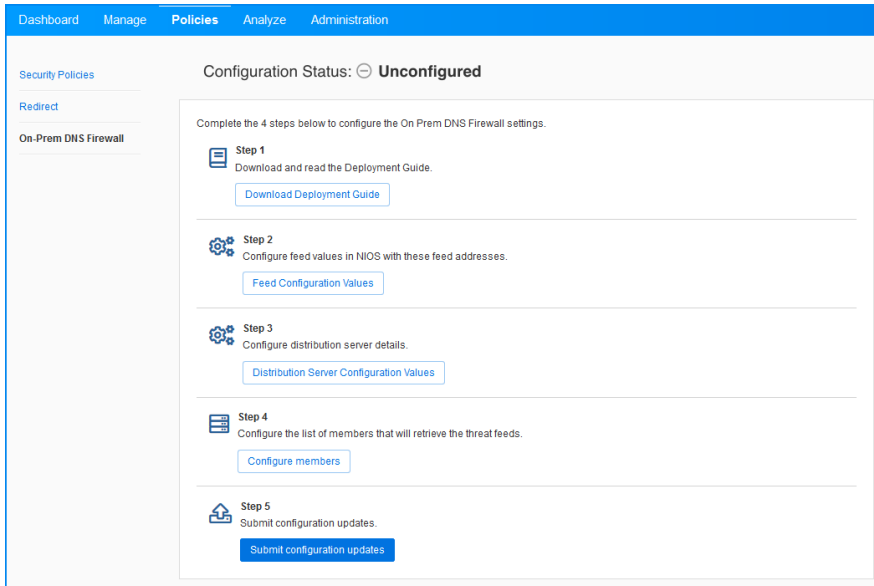
- Analyze** Includes Threat Lookup where you can research suspicious indicators for more information and context.
- Administration** Includes Threat Feeds, where descriptions of the feeds are found that are included in your subscription.
Includes Portal Users, to configure additional users for your organization
- Policies** Includes On-Prem DNS Firewall Configuration where you can perform the configuration of your feed and retrieve NIOS settings

On-Prem DNS Firewall Configuration

Navigate to **Policies > On-Prem DNS Firewall** to configure the On-Prem DNS Firewall service. Complete the four-step process to configure your On-Prem DNS Firewall settings. Please note, downloading of the **Infoblox Threat Intelligence Feed Deployment Guide** is **Step 1** of the process. Once you have reviewed the guide, please proceed to **Step 2** to begin the configuration process.

Step 1: Download Deployment Guide

Click **Download Deployment Guide**. Read through the guide thoroughly before proceeding to the next step where you will configure your NIOS feeds.

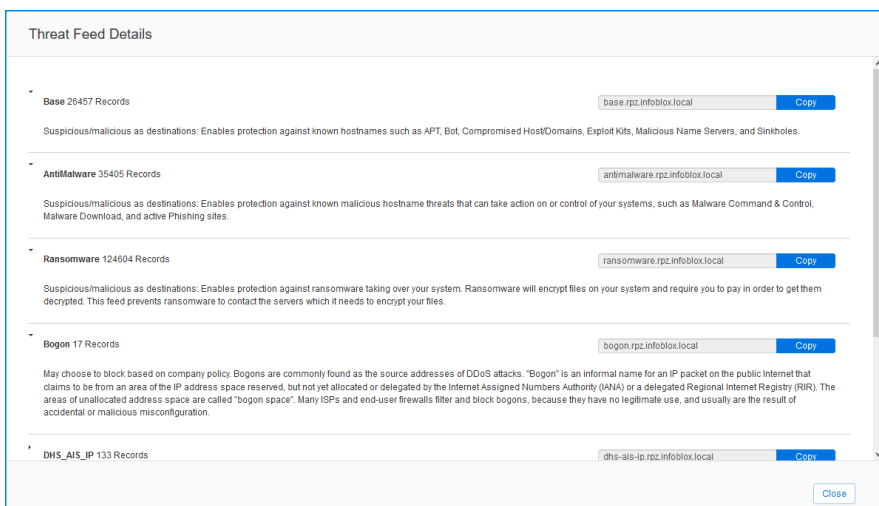


The screenshot shows the 'On-Prem DNS Firewall' configuration page. The top navigation bar includes 'Dashboard', 'Manage', 'Policies', 'Analyze', and 'Administration'. The left sidebar shows 'Security Policies' with sub-items 'Redirect' and 'On-Prem DNS Firewall'. The main content area is titled 'Configuration Status: Unconfigured' and contains a list of five steps:

- Step 1:** Download and read the Deployment Guide. Button: [Download Deployment Guide](#)
- Step 2:** Configure feed values in NIOS with these feed addresses. Button: [Feed Configuration Values](#)
- Step 3:** Configure distribution server details. Button: [Distribution Server Configuration Values](#)
- Step 4:** Configure the list of members that will retrieve the threat feeds. Button: [Configure members](#)
- Step 5:** Submit configuration updates. Button: [Submit configuration updates](#)

Step 2: Feed Configuration

Click **Feed Configuration Values** to configure the NIOS feed values with the provided feed addresses based on your subscription. Copy these values to a text editor as you require them later for NIOS configuration. Please note, the record count associated with a feed is published along with the feed's description. Once completed, click **Close** and proceed to **Step 3**.



The screenshot shows the 'Threat Feed Details' dialog box with a list of feeds:

Feed Name	Record Count	Feed Address	Action
Base	26457	base.rpz.infoblox.local	Copy
AntiMalware	35405	antimalware.rpz.infoblox.local	Copy
Ransomware	124604	ransomware.rpz.infoblox.local	Copy
Bogon	17	bogon.rpz.infoblox.local	Copy
DHS_AIS_IP	133	dhs-ais-ip.rpz.infoblox.local	Copy

Each feed entry includes a description of the feed's purpose and a 'Copy' button. A 'Close' button is located at the bottom right of the dialog.

Note: The feed(s) you transfer to your grid have an impact on performance of your DNS server. On the right-hand side of the page you can see some performance guidance of what size of feed will work on your appliances. If you are unsure work with your account team or support to ensure you apply what is best for your environment.

Step 3: Distribution Server Configuration Values

Click **Distribution Server Configuration Values** to configure your distribution servers. Both IPv4 and IPv6 IP addresses may be used to serve your feeds, depending on your specific requirements. TSIG Key encryption algorithms supported include HMAC MD5 512-bit and HMAC 256 256-bit. Please be aware, it may take up to one hour before your newly created TSIG keys become active.

To set up where your feeds distribution, complete the following steps:

1. On the **Distribution Server Details** screen, select either the IPv4 or IPv6 IP options for both the US West Distribution and the East Distribution Servers.
2. Copy and save your selected IP addresses. You will need them later when configuring NIOS.
3. Select a TSIG Key algorithm from among the drop-down menu choices. Algorithm choices include HMAC MD5 512-bit and HMAC 256 256-bit. Once you have made your selection, click **Generate** to generate a new TSIG key.
4. Copy and save the Key Name and TSIG Key.
5. Once completed, click **Close** and proceed to **Step 4**.

Distribution Server Details

DISTRIBUTION SERVER - US WEST

IPv4 [Copy](#)

IPv6 [Copy](#)

DISTRIBUTION SERVER - US EAST

IPv4 [Copy](#)

IPv6 [Copy](#)

TSIG New keys will be active in 1 hour. Once new key is active, add the new key name and TSIG key to onprem devices.

Key Algorithm [Generate](#)

Key Name [Copy](#)

TSIG Key [Copy](#)

[Close](#)

Step 4: Configuring Threat Feed Retrieval Members

Click **Configure Members** to configure your list of threat retrieval members. You can add and remove members as suits your needs.

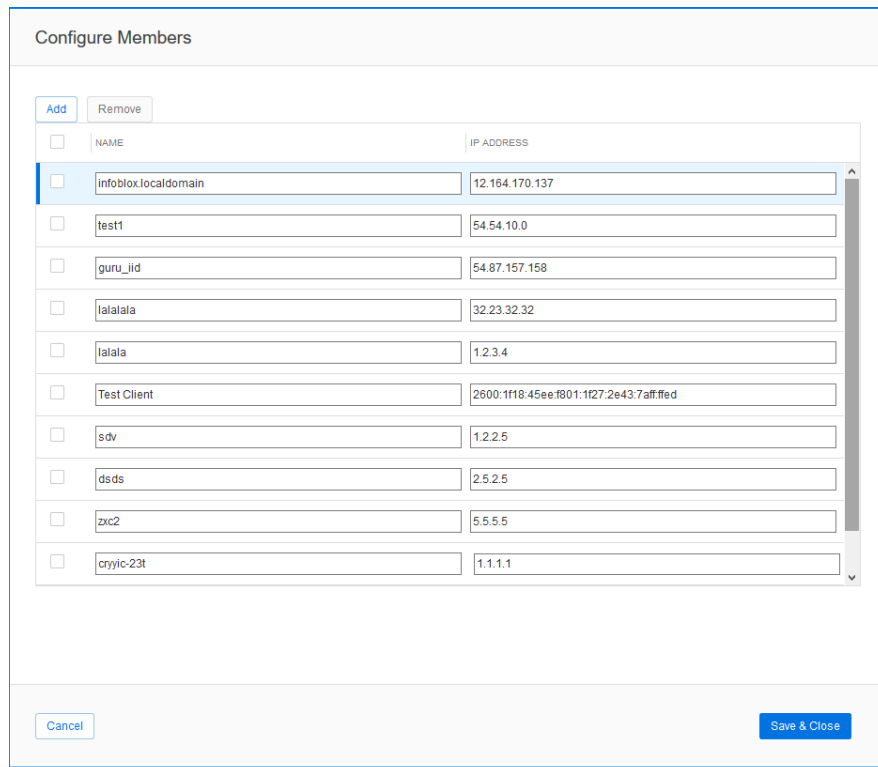
To add a threat retrieval member, complete the following steps:

1. Click **Add**. A new row will populate at the bottom of the list.
2. Select the new row by selecting the box next to it.
3. In the **NAME** field, add a name for the member you are adding.
4. In the **IP ADDRESS** field, add the IP address you want to use for the new member.
5. Once you have finished adding members, you can remove any members you will not be using.

To remove a threat retrieval member, complete the following steps:

1. Select the configured member you want to remove by selecting the box next to it.
2. Click **Remove**.

Once you have configured your threat retrieval members, click **Save & Close** and proceed to **Step 5**.



The screenshot shows a dialog box titled "Configure Members". At the top left, there are two buttons: "Add" and "Remove". Below these is a table with two columns: "NAME" and "IP ADDRESS". Each row in the table has a checkbox on the left. The first row is highlighted in blue. At the bottom of the dialog, there are two buttons: "Cancel" and "Save & Close".

	NAME	IP ADDRESS
<input checked="" type="checkbox"/>	infoblox.localdomain	12.164.170.137
<input type="checkbox"/>	test1	54.54.10.0
<input type="checkbox"/>	guru_lid	54.87.157.158
<input type="checkbox"/>	lalalala	32.23.32.32
<input type="checkbox"/>	lalala	1.2.3.4
<input type="checkbox"/>	Test Client	2600:1f18:45ee:f801:1f27:2e43:7aff:fed
<input type="checkbox"/>	sdv	1.2.2.5
<input type="checkbox"/>	dsds	2.5.2.5
<input type="checkbox"/>	zxc2	5.5.5.5
<input type="checkbox"/>	crytic-23t	1.1.1.1

Step 5: Submitting Configuration Updates

To complete the On-Prem DNS Firewall configuration process, click **Submit Configuration Updates**. The configuration status will change to **Running** once the configuration has been updated successfully.

NIOS Configuration

License and Configuration Requirements

In order to deploy remote RPZ feeds, you will need a Grid member with at least a DNS and RPZ license.

In order to obtain the feeds your member will need access to our Threat Intelligence Feed servers on port 53 (UDP and TCP) as the feed data is transferred through a DNS zone transfer. Your server will also need to be able to perform recursion in order to obtain response from the internet.

In order to review log hits, you need to enable on the member or grid level the RPZ logging category (grid settings, toggle advanced, logging, check RPZ)

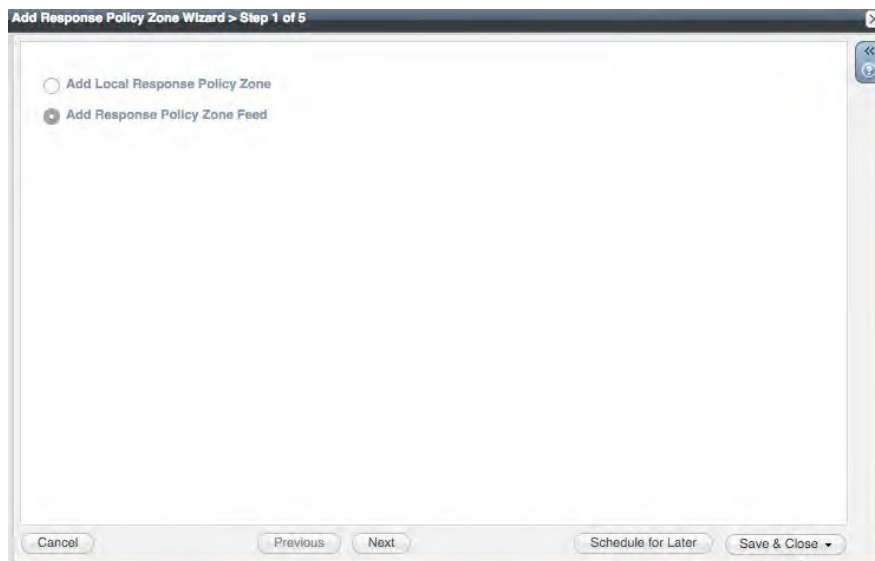
Configuration steps

In NIOS go to:

“Data Management” -> DNS -> “Response Policy Zones”

Press the + button or use “Add” in the sidebar

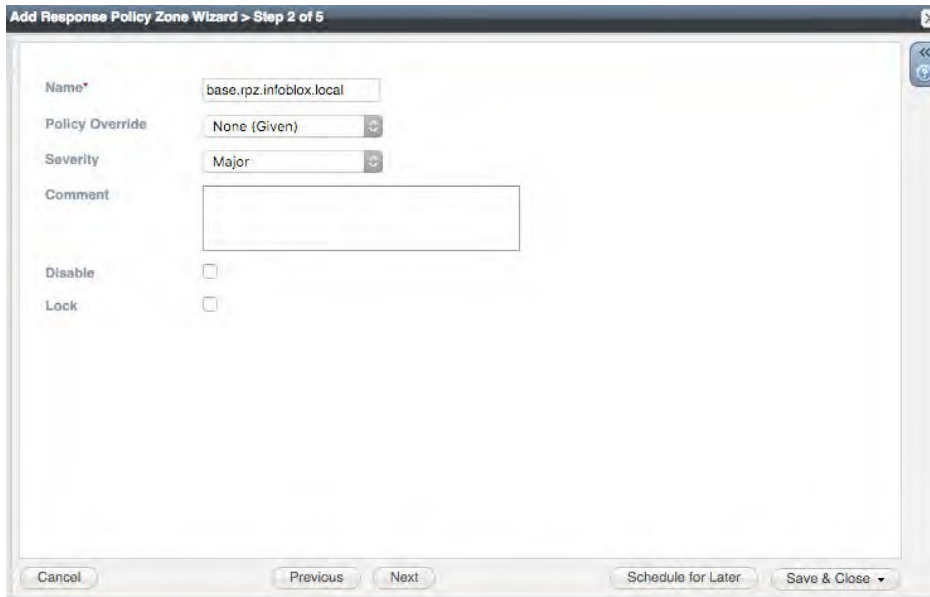
1. Select “Add a Response Policy Zone Feed”:



press next

2. Add the feed you want to use.

Note that each feed is a subset of the data and deploying multiple feeds is required to cover all bases. You will have to repeat these steps for each RPZ.



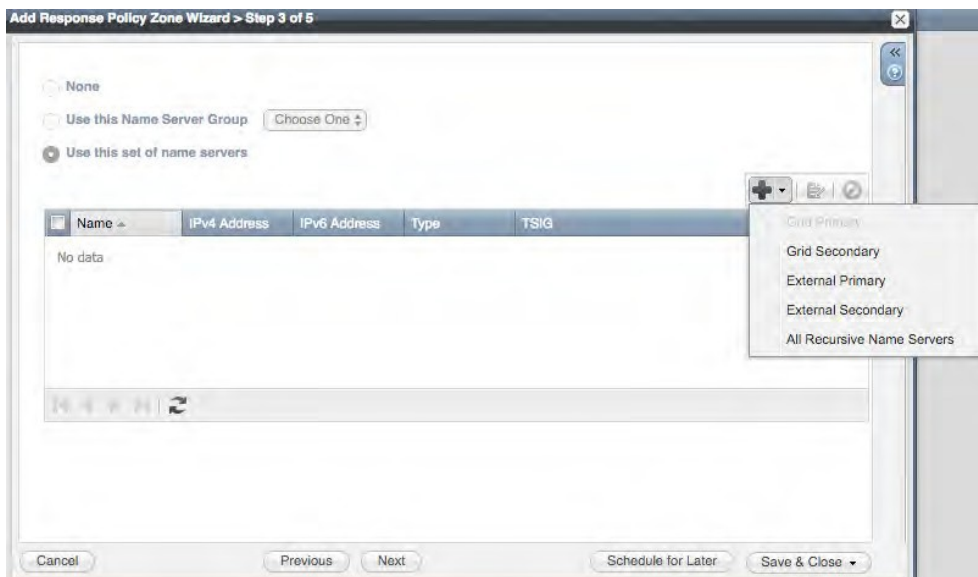
Leave Policy override on “None (Given)” for now. For the other policy override settings please refer to the Admin Guide.

Modify logging Severity if needed

Press next

3. Add the External Primary³

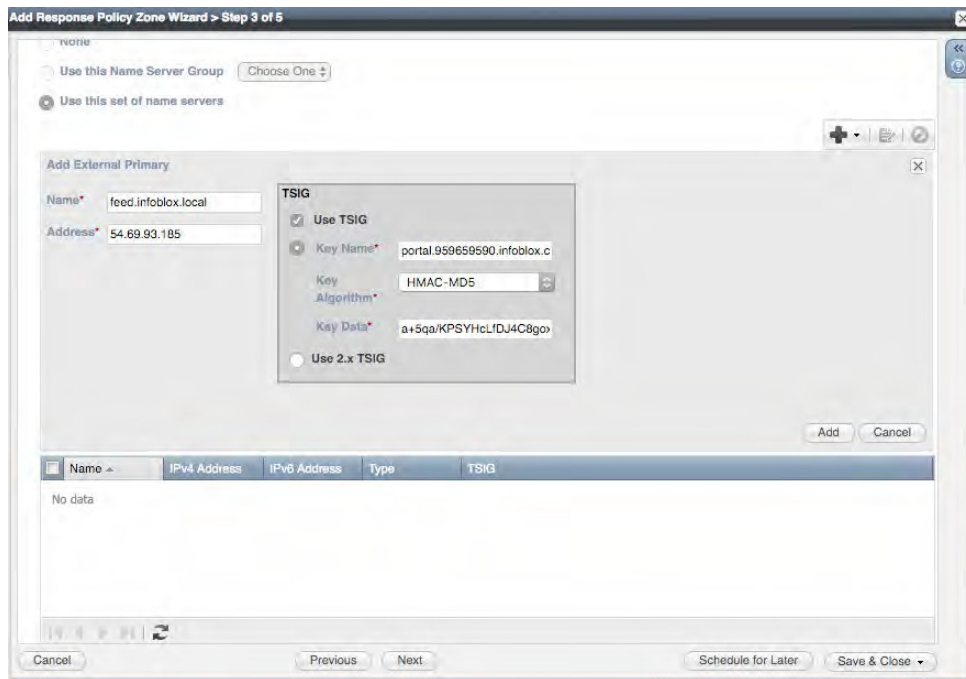
Use the dropdown next to the “+” sign to select External Primary



¹ If you want to save time, create a nameserver group with the external primaries and any grid secondaries that you want to use with this RPZ. You can then later use nameserver groups for each RPZ instead of adding the nodes one by one.

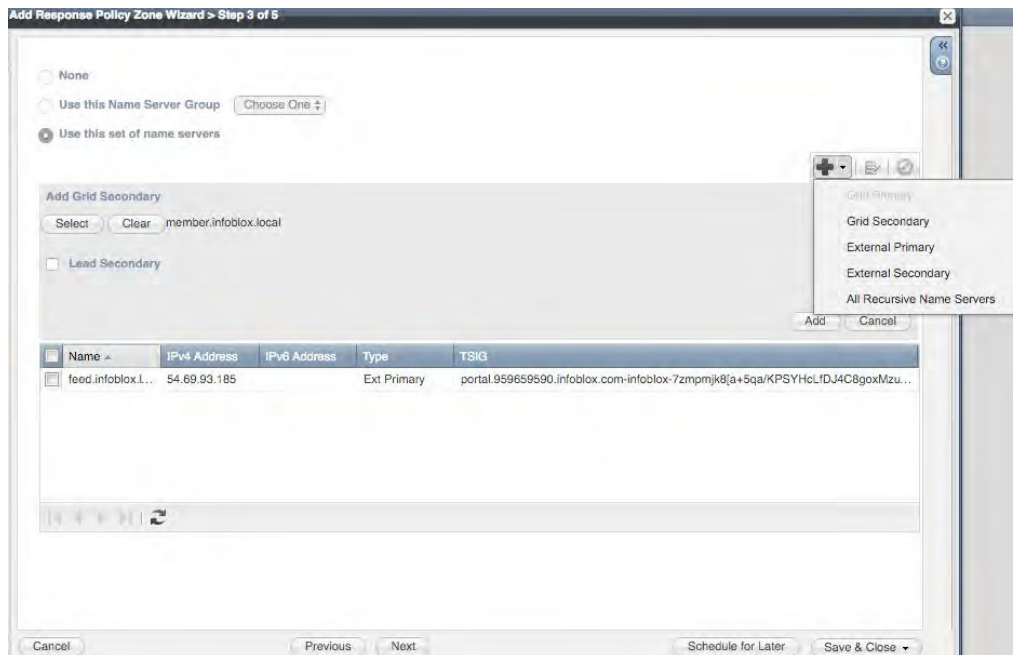
4. Define the External Primary's settings

Refer to the portal for the values from your account. Select the nearest name server and use the values you copied from CSP during feed configuration. Note that the name field is only for reference purposes and you can use any name you choose to.



Press Add

5. Add a Grid Secondary



Use "Select" to select which member(s) you want to add or use "All recursive servers" if you want to add all recursive nodes with an RPZ license.

Note that you can configure a single secondary to be “Lead secondary”. If you set this up that member will be the only one to reach out to the external primary. You will then redistribute the feed internally between your members through zone transfers.

Press Add

Press Save and Close, restart services as required (use the banner at the top)

Give services 5 minutes to fetch the zone, if you refresh the GUI you will see the last updated value for when the last transfer was successful.

Troubleshooting

In case you are not getting a feed from our servers verify if:

- You used the right feed name
- Your time is set correctly (ntp should be used)
- You use the right key name, TSIG key, and algorithm

For further troubleshooting check the syslog of your (lead) secondary for message that include “transfer”

Generating & Reviewing Hits

In order to generate a hit against the feed, query a member that has the zone running for “adobekr.com”

If you want more inspiration for testing, once the base.rpz.infoblox.local zone you configured is showing as “Last updated” you can click the name and download it as a csv file.

Check the syslog for security hits you should see a CEF entry with the domain(s) you are testing, you can also refer to the security dashboard for graphed out results based on the last 30 minutes of traffic.



Portal Investigation

To research suspicious indicators for more information and context, take the domain from the log entry and use the “Threat Lookup” feature under “Analyze” in top navigation to get more information and context.

The screenshot shows the Threat Lookup interface. At the top, there is a search bar with the query *.adobekr.com. Below the search bar, there are filters for "Active only" (unchecked) and "All data" (selected), with a note that "1 results found". The main content area is divided into two sections: "Threat Results" and "Details - *.adobekr.c...".

Threat Results

▼ *.adobekr.com (4)

Discovered on:	Expires on:	Threat Class:	Feed:	Provider:	Threat Level:
10/5/16	10/5/36	APT	Base	Infoblox	HIGH
10/5/16	10/5/36	APT	Base	Infoblox	HIGH
2/29/16	2/29/36	APT	Base	Infoblox	HIGH
8/6/16	N/A	Policy	SURBL_Fresh	SURBL	LOW

Details - *.adobekr.c...

Threat Class: **APT**
Threat Property: **APT_MalwareC2**
Feed: **Base**
Status: **Active**
Discovered on: **Oct 5, 2016 12:00:00 AM**
Expires on: **Oct 5, 2036 12:00:00 AM**
Data Provider: **Infoblox**
Threat Level: **HIGH**
Confidence:

Narrative: Machines infected with malware may reach out to remote servers to deliver data or receive additional instruction, C&C servers associated with advanced persistent threats (APTs) indicate those servers are

You can also use IP's from your logs, be aware that you need to inverse them and take the first octet as the hostmask.

For example: 32.1.0.0.10 becomes 10.0.0.1/32

More investigation can be done in Dossier which is accessible under Analyze and is included in ActiveTrust Plus and Advanced subscriptions.