



DEPLOYMENT GUIDE

Using Reporting Appliance for Managed Service Providers

NIOS version 8.3 | July- 2018



Contents

- Overview 3
- Introduction 3
- Using Reporting Appliance 3
 - Accessing the MSP Dashboards 3
 - Accessing Managed DDI Enabled Features 4
 - Accessing DDI Peak IP Usage Trend 6
 - Accessing Managed DNS Peak Usage Trend 8
 - Alerts 9
 - Configuring Email Settings..... 10
 - Configuring Alerts..... 11
 - Some useful Information 14

Overview

Introduction

With NIOS 8.3 Infoblox has launched a new type of business model for Managed Service Providers(MSPs).MSPs can leverage this business model by activating “*Flex Grid License for Managed Service Providers*”.

Instead of selling perpetual license and 1Yr subscription products to the MSP, Infoblox (IB) will allow the MSPs to deploy most of the IB DDI features to its end customers through several defined feature bundles. IB will then collect, on a monthly or quarterly basis the used licenses for the past calendar period and bill the MSP accordingly for the use of features across all its end customers.

“*Flex Grid Activation License for Managed Services*” is grid wide license and can only be installed on grid master or standalone appliance. This license will only be applicable to IB-FLEX members in the grid. If “*Flex Grid Activation License for Managed Services*” license is installed, the “*Flex Grid Activation*” license cannot be installed and vice-versa.

“*Flex Grid Activation License for Managed Services*” will be the equivalent of having the following licenses.

- Grid
- DNS
- DHCP
- DNS Traffic Control
- Response Policy Zone
- NXDOMAIN Redirection
- Dual Engine DNS (Only for recursive DNS)
- DNS Cache Acceleration
- Threat Protection (Software Add-on)
- Threat Protection Update
- FireEye
- Threat Analytics
- Security Ecosystem
- Microsoft Management
- Cloud Network Automation (Only applies to IB-FLEX grid master)

Using Reporting Appliance

In order to support billing for different MSPs, Infoblox has introduced new reporting dashboards and alerts which comes out of the box. MSPs can set alerts for:

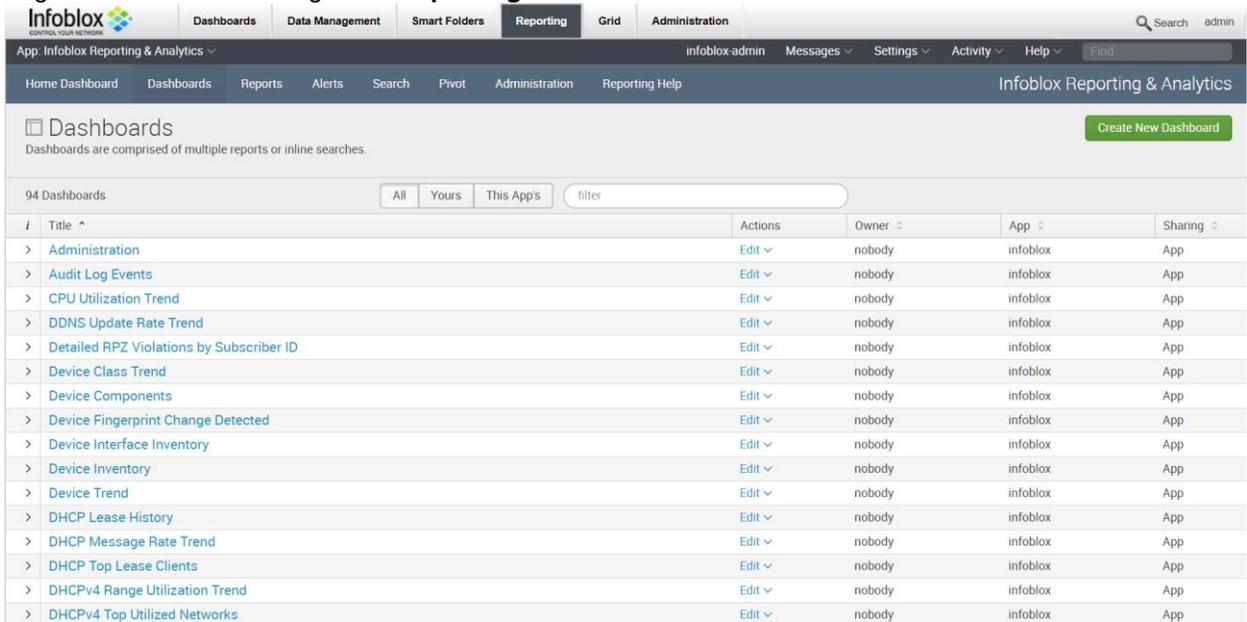
- IP address usage count.
- DNS Queries per second usage.
- Features enabled on the grid.

MSPs will have to enable alerts based on billing frequency (monthly or quarterly).Each alert generates an email with an attached CSV report.

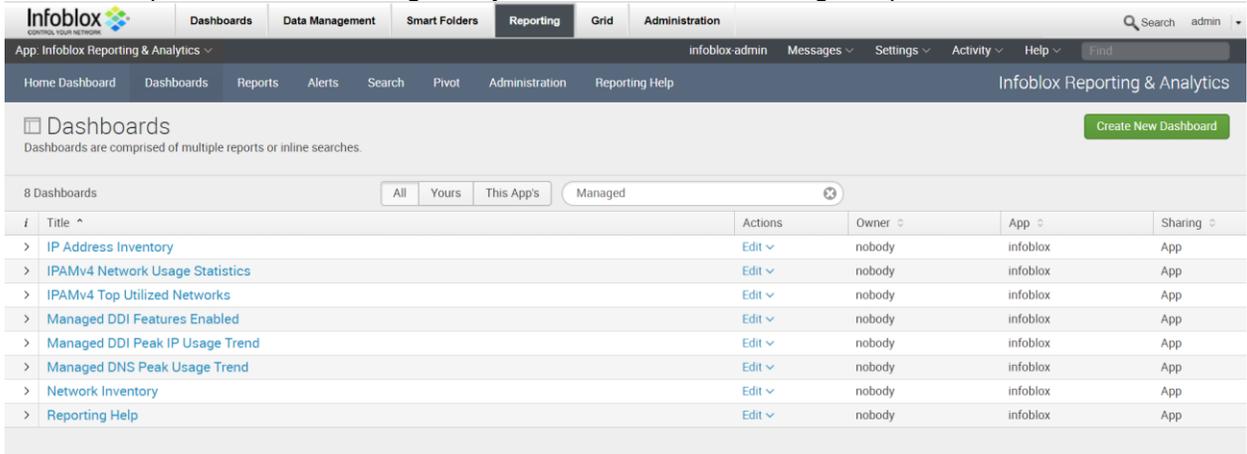
This deployment guide contains step by step procedure of configuring various MSP related reports and alerts.

Accessing the MSP Dashboards

1. Login to the Grid and navigate to **Reporting → Dashboards**.



2. In the filter option search for **Managed** Keyword. You will see 3 Managed reports.



Infoblox ships 3 reports out of the box for Managed service providers.

- Managed DDI Enabled Features.
- Managed DDI Peak IP Usage Trend
- Managed DNS peak

Accessing Managed DDI Enabled Features

This report displays list features which gets enabled because of Flex Grid Activation License for Managed Service Providers.

1. Login to the Grid and navigate to **Reporting → Dashboard**. In the filter option search for **Managed** Keyword.

Infoblox Reporting & Analytics

App: Infoblox Reporting & Analytics

Home Dashboard Dashboards Reports Alerts Search Pivot Administration Reporting Help

Dashboards

Dashboards are comprised of multiple reports or inline searches.

Create New Dashboard

8 Dashboards

All Yours This App's Managed

i	Title ^	Actions	Owner	App	Sharing
>	IP Address Inventory	Edit	nobody	infoblox	App
>	IPAMv4 Network Usage Statistics	Edit	nobody	infoblox	App
>	IPAMv4 Top Utilized Networks	Edit	nobody	infoblox	App
>	Managed DDI Features Enabled	Edit	nobody	infoblox	App
>	Managed DDI Peak IP Usage Trend	Edit	nobody	infoblox	App
>	Managed DNS Peak Usage Trend	Edit	nobody	infoblox	App
>	Network Inventory	Edit	nobody	infoblox	App
>	Reporting Help	Edit	nobody	infoblox	App

2. Click on “Managed DDI Features Enabled” report to get the list of enabled features.

Infoblox Reporting & Analytics

App: Infoblox Reporting & Analytics

Managed DDI Features Enabled

System-created dashboard: Please clone before editing.

Hide Filters Edit More Info

Time: Last 30 days Members: All Submit

Feature	Enabled
Active Trust Plus	No
Active Trust Standard	No
Authoritative DNS	No
Captive Portal	No
Cloud Network Automation	No
DHCP	Yes
DNS Cache Acceleration	Yes
DNS Traffic Control	No
Fireeye	No
Microsoft Management	No

3. Under Time option, you can select the frequency of the data to be pulled.

Infoblox Reporting & Analytics

App: Infoblox Reporting & Analytics

Managed DDI Features Enabled

System-created dashboard: Please clone before editing.

Hide Filters Edit More Info

Time: Last 30 days Members: All Submit

> Presets

> Relative

Earliest: 30 Days Ago

Latest: now Beginning of today

No Snap-to Beginning of day

Apply

> Real-time

> Date Range

> Date & Time Range

> Advanced

Feature	Enabled
Active Trust Plus	No
Active Trust Standard	No
Authoritative DNS	No
Captive Portal	No
Cloud Network Automation	No
DHCP	Yes
DNS Cache Acceleration	No
DNS Traffic Control	No
Fireeye	No
Microsoft Management	No

« prev 1 2 next »

- Cancel out the All option from the member tab

The screenshot shows the Infoblox Reporting & Analytics interface. The main heading is "Managed DDI Features Enabled" with a subtitle "System-created dashboard: Please clone before editing." Below this, there are filters for "Time" (set to "Last 30 days") and "Members" (set to "* All"). A "Submit" button is visible. The main content area is a table with two columns: "Feature" and "Enabled".

Feature	Enabled
Active Trust Plus	No
Active Trust Standard	No
Authoritative DNS	No
Captive Portal	No
Cloud Network Automation	No
DHCP	No
DNS Cache Acceleration	No
DNS Traffic Control	No
Microsoft Management	No
Security Ecosystem	No

- Post canceling, click in white box to get the list of all members which have inherited the MSP license.

The screenshot shows the same Infoblox Reporting & Analytics interface. The "Members" dropdown menu is now open, displaying a list of members: "All", "ha_member.infoblox.com", "ib_flex_16_20_member.infoblox.com", "ib_flex_4_12_member.infoblox.com", and "ib_flex_openstack.infoblox.com". The "Submit" button is still visible. The table below shows a different set of features.

Feature	Enabled
Recursive DNS	Yes
Security Ecosystem	No
Subscriber Services	No
Threat Analytics	Yes
Threat Protection	Yes

Accessing DDI Peak IP Usage Trend

This report enables MSPs to view the five-day average for total peak DNS QPS calculated for all IB-FLEX members in the grid. The Peak DNS QPS is calculated as maximum per day of average QPS calculated for 10-minute intervals.

- Click on "Managed DDI Peak IP Usage Trend" to get this report details.

Infoblox CONTROL YOUR NETWORK

Dashboards Data Management Smart Folders **Reporting** Grid Administration

App: Infoblox Reporting & Analytics infoblox-admin Messages Settings Activity Help Find

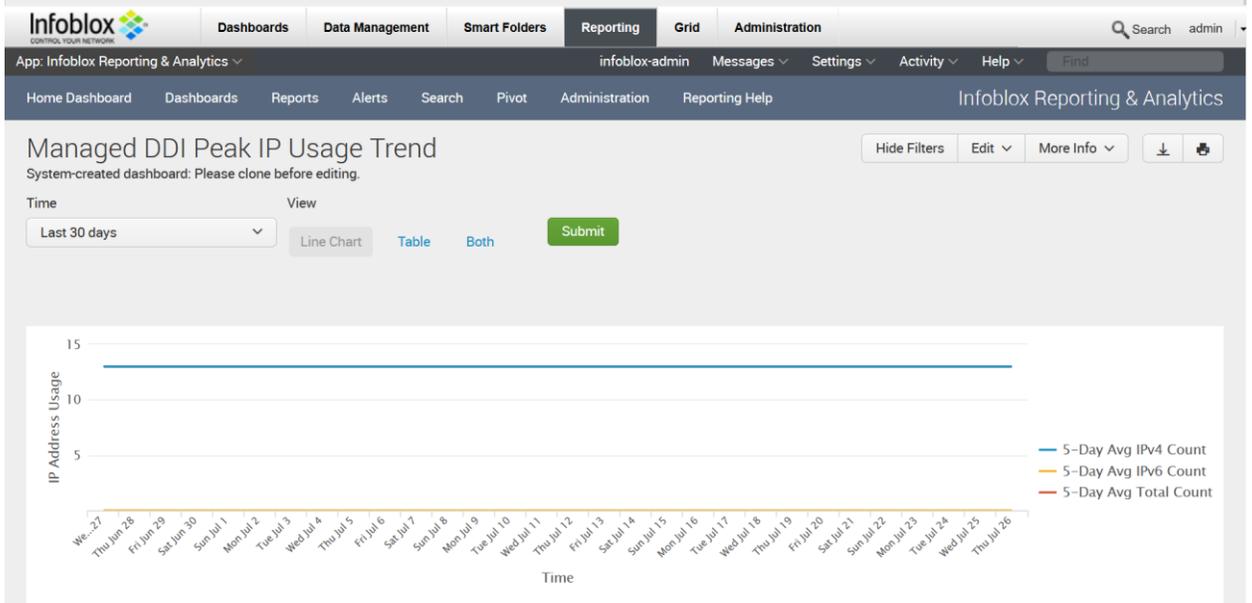
Home Dashboard Dashboards Reports Alerts Search Pivot Administration Reporting Help Infoblox Reporting & Analytics

Dashboards Create New Dashboard

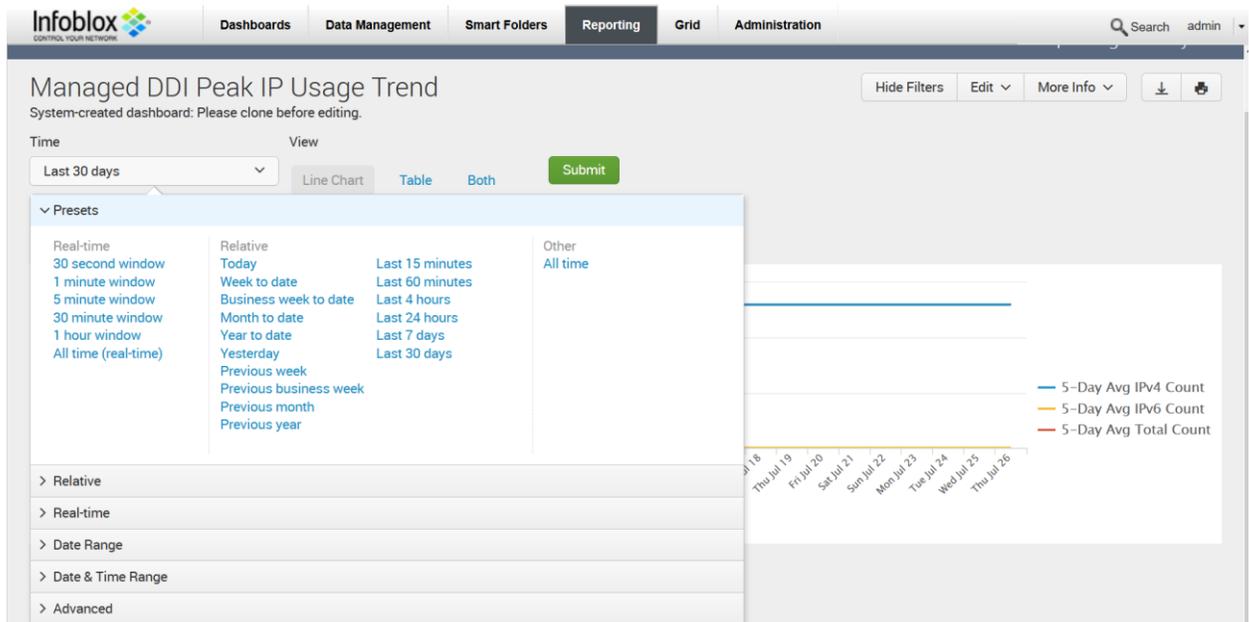
Dashboards are comprised of multiple reports or inline searches.

8 Dashboards All Yours This App's managed

i	Title ^	Actions	Owner	App	Sharing
>	IP Address Inventory	Edit	nobody	infoblox	App
>	IPAMv4 Network Usage Statistics	Edit	nobody	infoblox	App
>	IPAMv4 Top Utilized Networks	Edit	nobody	infoblox	App
>	Managed DDI Features Enabled	Edit	nobody	infoblox	App
>	Managed DDI Peak IP Usage Trend	Edit	nobody	infoblox	App
>	Managed DNS Peak Usage Trend	Edit	nobody	infoblox	App
>	Network Inventory	Edit	nobody	infoblox	App
>	Reporting Help	Edit	nobody	infoblox	App



- Under Time option, you can select the frequency of the data to be pulled.



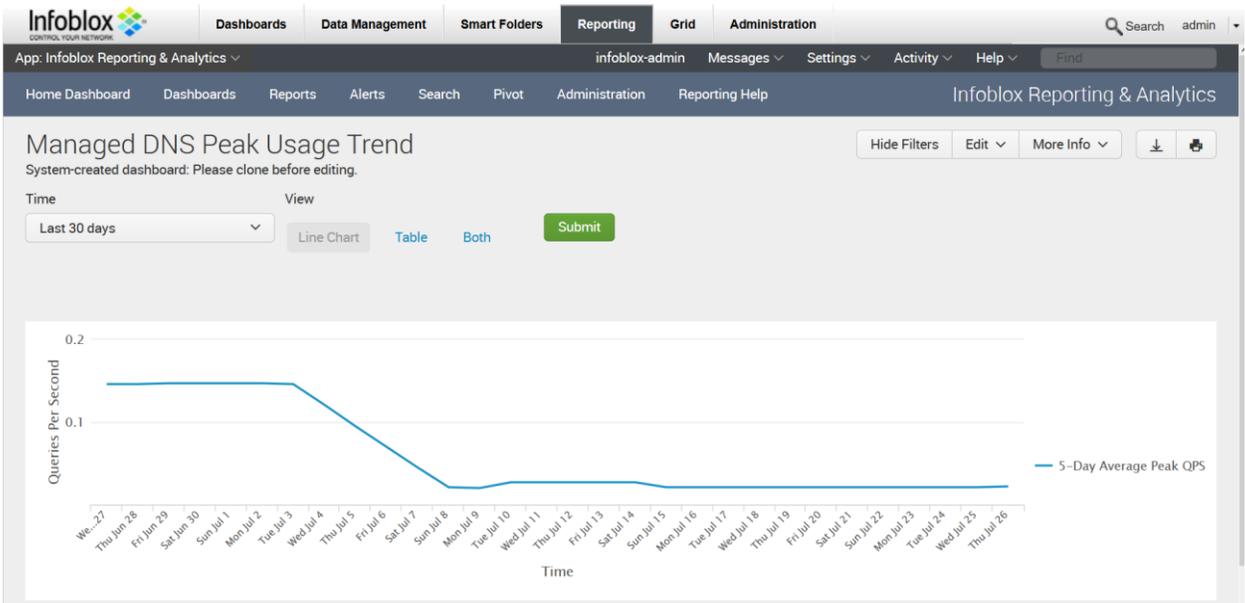
Accessing Managed DNS Peak Usage Trend

This report enables MSPs to view the five-day average for total peak DNS QPS calculated for all IB-FLEX members in the grid. The peak DNS QPS is calculated as maximum per day of average QPS calculated for 10-minute intervals.

1. Click on “Managed DNS Peak Usage Trend” to get this report details.

The screenshot shows the 'Dashboards' section of the Infoblox Reporting & Analytics interface. The dashboard list is filtered by 'managed' and shows 8 dashboards. The 'Managed DNS Peak Usage Trend' dashboard is highlighted.

i	Title ^	Actions	Owner	App	Sharing
>	IP Address Inventory	Edit	nobody	infoblox	App
>	IPAMv4 Network Usage Statistics	Edit	nobody	infoblox	App
>	IPAMv4 Top Utilized Networks	Edit	nobody	infoblox	App
>	Managed DDI Features Enabled	Edit	nobody	infoblox	App
>	Managed DDI Peak IP Usage Trend	Edit	nobody	infoblox	App
>	Managed DNS Peak Usage Trend	Edit	nobody	infoblox	App
>	Network Inventory	Edit	nobody	infoblox	App
>	Reporting Help	Edit	nobody	infoblox	App



2. Under **Time** option, you can select the frequency of the data to be pulled.

Presets			
Real-time	Relative		Other
30 second window	Today	Last 15 minutes	All time
1 minute window	Week to date	Last 60 minutes	
5 minute window	Business week to date	Last 4 hours	
30 minute window	Month to date	Last 24 hours	
1 hour window	Year to date	Last 7 days	
All time (real-time)	Yesterday	Last 30 days	
	Previous week		
	Previous business week		
	Previous month		
	Previous year		

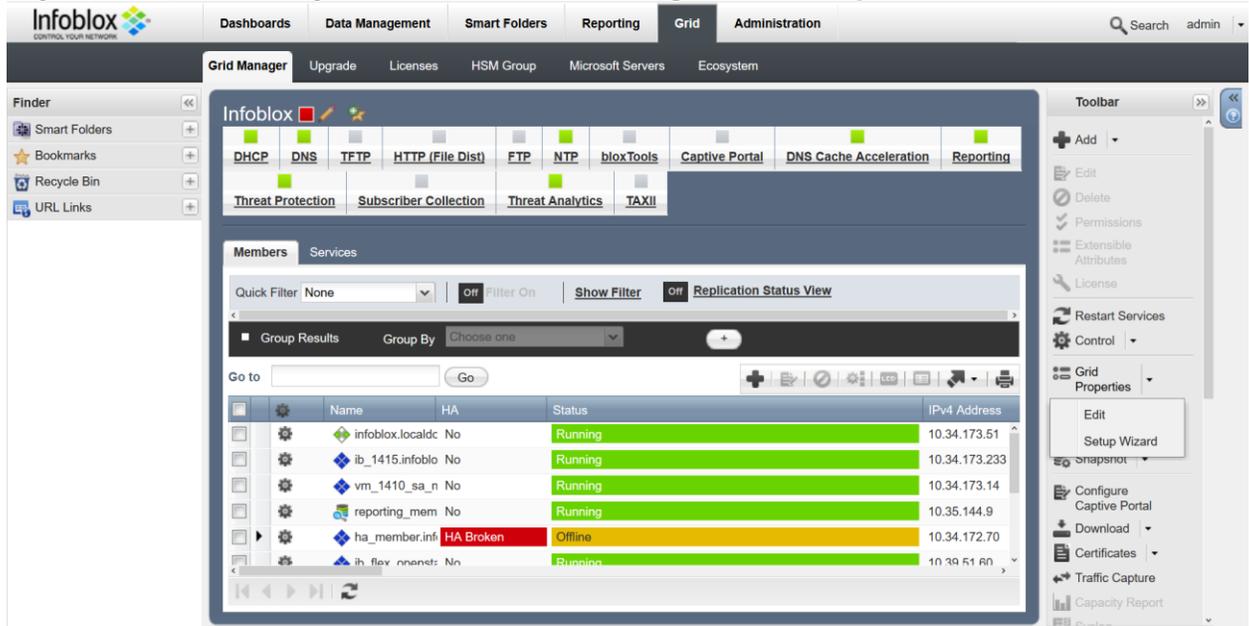
Alerts

Infoblox ships multiple alerts out of the box which MSPs can use based on their preferred billing frequency. Each alert generates email with attached CSV.

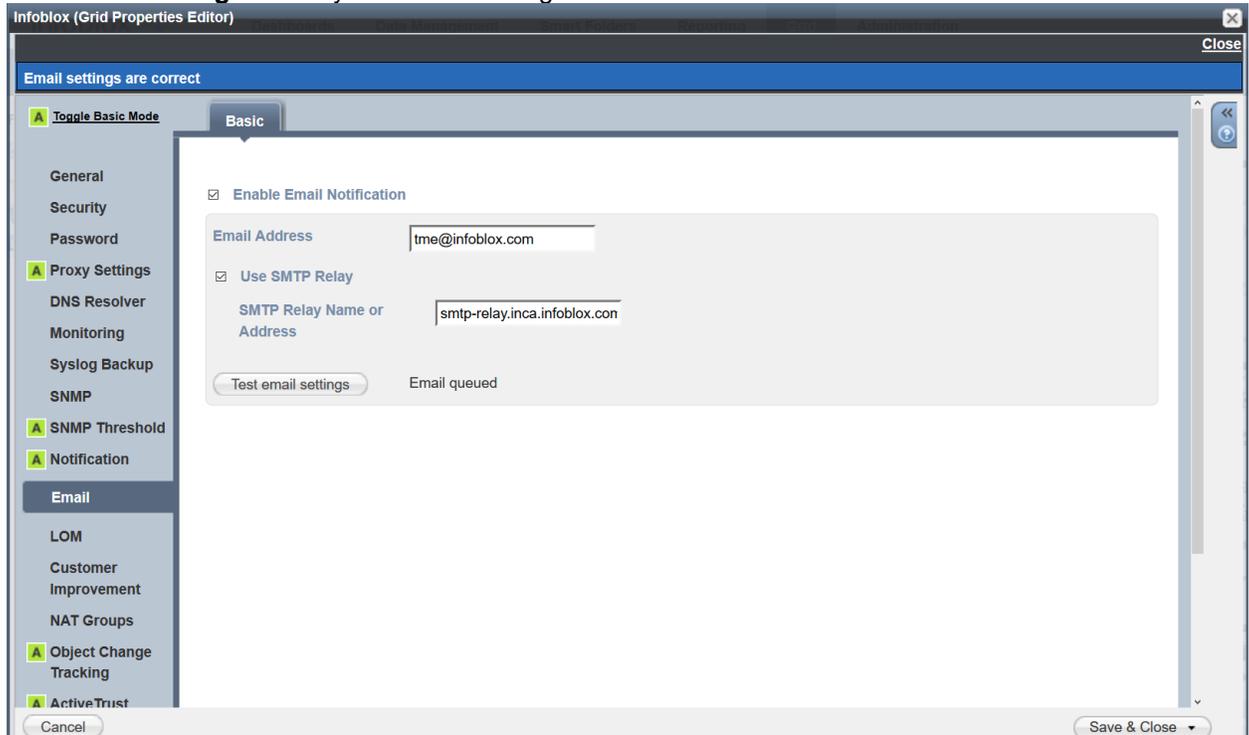
Alerts are disabled by default and has to be enabled manually.

Configuring Email Settings

1. Login to the Grid and navigate to the **Grid → Grid Manager → Grid Properties → Edit**



2. Click on **Email** option. Check the **Enable Email notification**. In the Email Address option enter the email address which will be used to send email alerts to Infoblox. In case you wish to use SMTP relay, check the **Use SMTP Relay** option and enter the SMTP server address. Click on **Test email settings** to verify that email settings are valid.



3. Click in **Save & Close** to come out of the Email configuration wizard.

Configuring Alerts

1. Login to the Grid and navigate to **Reporting** → **Alerts**. In the search box, type **ib-managed** and hit on enter. You will get 6 alert types.
 - a. Alerts for generating IP address usage report email
 - i. **ib-managed-ddi-ip-usage-report-per-month**
 - ii. **ib-managed-ddi-ip-usage-report-per-quarter**
 - b. Alerts for generating DNS usage report email
 - i. **ib-managed-dns-usage-report-per-month**
 - ii. **ib-managed-dns-usage-report-per-quarter**
 - c. Alert for generating Feature usage report email
 - i. **ib-managed-ddi-feature-usage-report-per-month**
 - ii. **ib-managed-ddi-feature-usage-report-per-quarter**

The screenshot shows the 'Alerts' section of the Infoblox Reporting & Analytics interface. A search filter 'ib-managed' is applied, resulting in 6 alerts. The table below summarizes the visible alerts:

i	Title ^	Actions	Owner	App	Sharing
>	ib-managed-ddi-feature-usage-report-per-month	Open in Search Edit	nobody	infoblox	App
>	ib-managed-ddi-feature-usage-report-per-quarter	Open in Search Edit	nobody	infoblox	App
>	ib-managed-ddi-ip-usage-report-per-month	Open in Search Edit	nobody	infoblox	App
>	ib-managed-ddi-ip-usage-report-per-quarter	Open in Search Edit	nobody	infoblox	App
>	ib-managed-dns-usage-report-per-month	Open in Search Edit	nobody	infoblox	App
>	ib-managed-dns-usage-report-per-quarter	Open in Search Edit	nobody	infoblox	App

Configuring Email Alerts

1. Click on **ib-managed-ddi-feature-usage-report-per-month** alert. Click on Enable option to enable this alert. After enabling, click on Edit option to edit the alert settings.

The screenshot shows the configuration page for the alert 'ib-managed-ddi-feature-usage-report-per-month'. The alert is currently disabled. The configuration details are as follows:

- Enabled:** No. [Enable](#)
- App:** infoblox
- Permissions:** Shared in App. Owned by nobody. [Edit](#)
- Alert Type:** Scheduled. Cron Schedule. [Edit](#)
- Trigger Condition:** Number of Results is > 0. [Edit](#)
- Actions:** 2 Actions [Edit](#)
 - [Add to Triggered Alerts](#)
 - [Send email](#)

- Click on **Edit** option and expand the **Send email** option. Enter the email address, where you want to send the email alerts.

Edit Actions
✕

Alert ib-managed-ddi-feature-usage-report-per-month

Trigger Actions

+ Add Actions ▾

When triggered

> 🔔 Add to Triggered Alerts Remove

▾ ✉ Send email Remove

To Comma separated list of email addresses. [Show CC and BCC](#)

Priority

Subject The email subject and message can include tokens that insert text based

Cancel
Save

- In the message option, enter details like MSP Name, End Customer Name(which MSP will be servicing) and Grid License UID. In the **Include** section select **Attach CSV** to send out CSV reports.

Edit Actions
✕

addresses. [Show CC and BCC](#)

Priority

Subject The email subject and message can include tokens that insert text based on the results of the search. [Learn More](#)

Message

Include

<input type="checkbox"/> Link to Alert	<input type="checkbox"/> Link to Results
<input type="checkbox"/> Search String	<input type="checkbox"/> Inline Table ▾
<input type="checkbox"/> Trigger Condition	<input checked="" type="checkbox"/> Attach CSV
<input type="checkbox"/> Trigger Time	<input type="checkbox"/> Attach PDF

Cancel
Save

- Repeat all these steps, to configure other email alerts.

Sample email alert.

Managed DDI IP Address Usage Monthly Report - April 27, 2018 - Inbox

Message

Delete Archive Reply Reply All Forward Attachment Move Rules Read/Unread Categorize Follow Up

Managed DDI IP Address Usage Monthly Report - April 27, 2018

splunk@infoblox.com <splunk@infoblox.com>
 Saturday, April 28, 2018 at 12:25 AM
 To: mspreports@infoblox.com; Nithya Puthan Veetil; Jeppu Shantharama Swaroop
 📎: [ib-managed-ddi-ip-usage-report-per-month-2018-04-27.csv](#) (2.3 KB) [Preview](#)

Monthly IP Address Usage Report for Infoblox-based Managed DDI Services.
 Date: April 27, 2018
 MSP Name: AT & T
 End Customer Name: ABC Inc
 Grid License UID: 123456789

If you believe you've received this email in error, please see your Splunk administrator.
 splunk > the engine for machine data

Sample IP Address Usage CSV file

ib-managed-ddi-ip-usage-report-per-month-2018-04-27

Home Insert Page Layout Formulas Data Review View

Calibri (Body) 12 Bold Italic Underline

Conditional Formatting Format as Table Cell Styles

	A	B	C	D	E	F	G	H	I	J
1	Peak Time	IPv4 Count	IPv6 Count	Total Count	5-Day Avg IPv4 Count	5-Day Avg IPv6 Count	5-Day Avg Total Count			
2	2018-03-28 02:03:45 UTC	3259	1810	5069	1842	2460	4302			
3	2018-03-29 02:26:13 UTC	1279	3226	4505	1487	2694	4181			
4	2018-03-30 00:08:12 UTC	1887	1720	3607	1528	2640	4168			
5	2018-03-31 03:34:05 UTC	0	4302	4302	1663	2604	4267			
6	2018-04-01 14:17:58 UTC	2784	1241	4025	1663	2505	4167			
7	2018-04-02 02:52:01 UTC	1485	2982	4467	1654	2509	4164			
8	2018-04-03 21:47:39 UTC	1486	2954	4440	1935	2158	4093			
9	2018-04-04 11:20:06 UTC	2559	1543	4102	2539	1567	4106			
10	2018-04-05 21:20:12 UTC	0	3803	3803	2315	1916	4231			
11	2018-04-06 10:58:35 UTC	2742	1265	4007	3091	1473	4564			
12	2018-04-07 13:17:20 UTC	2890	1223	4113	2542	2120	4663			

ib-managed-ddi-ip-usage-report- +

Ready 100%

Sample DNS Usage CSV file

Date	Peak QPS	5-Day Average Peak QPS
4/7/18	0.085	0.085
4/8/18	0.083	0.084
4/9/18	0.085	0.084
4/10/18	0.083	0.084
4/11/18	0.085	0.084
4/12/18	0.087	0.084
4/13/18	0.083	0.085
4/14/18	0.085	0.085
4/15/18	0.083	0.085
4/16/18	0.085	0.085
4/17/18	0.085	0.084
4/18/18	0.081	0.084

Sample Feature Usage CSV file

Feature	Status
Active Trust Plus	No
Active Trust Standard	No
Authoritative DNS	No
Captive Portal	Yes
Cloud Network Automation	Yes
DHCP	No
DNS Cache Acceleration	Yes
DNS Traffic Control	No
Fireeye	No
Microsoft Management	No
Recursive DNS	No
Security Ecosystem	No
Subscriber Services	No
Threat Analytics	No
Threat Protection	Yes

Some useful Information

- In case of Email generation issues, validate that email configuration in Splunk is setup correctly and DNS resolver is configured in Grid Properties
- Dashboards will take atleast 1 day to display results.