

# Exinda How To Guide: Exinda Management Center Quick Start Guide

Exinda Management Center Version 1.5.0  
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# Using this guide

Before using this guide, become familiar with the Exinda documentation system. See the following for more information:

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# Documentation conventions

These documentation conventions apply across all of the Exinda documentation sets. All instances of the following may not appear in this documentation

## Typographical conventions

- **bold** - Interface element such as buttons or menus. For example: Select the **Enable** checkbox.
- *italics* - Reference to other documents. For example: Refer to the *Exinda Application List*. Also used to identify in the various procedures the response the systems provide after applying an action.
- > - Separates navigation elements. For example: Select **File > Save**.
- `monospace text` - Command line text.
- `<variable>` - Command line arguments.
- `[x]` - An optional CLI keyword or argument.
- `{x}` - A required CLI element.
- | - Separates choices within an optional or required element.

## Links

All links throughout the documentation are [blue](#). Most links refer to topics within the documentation, but there may be links that take you to web pages on the Internet. In this documentation we differentiate between these types of links by [underlining](#) only the external links.

## Tips, Notes, Examples, Cautions, etc.

Throughout this manual, the following text styles are used to highlight important information:

- **Tips** include hints and shortcuts. Tips are identified by a pale green background.



**TIP**  
*text*

- **Notes** provide information that is useful at the points where they are encountered. Notes are identified by a light blue background.



**NOTE:**  
*Text*

- **Important** notes provide information that is important at the point where they are encountered. Important notes are identified by a light yellow background.



**IMPORTANT**  
*Text*

- **Cautions** provide warnings of areas of operation that could cause damage to appliances. Cautions are identified by a light red background.



**CAUTION:**  
*Text*

- **Examples** are presented throughout the manual for deeper understanding of specific concepts. Examples are identified by a pale green background.

**EXAMPLE**

*Text*

- **Best Practices** identify Exinda recommended methods for achieving the best from your Exinda appliances and the Exinda Management Center. Best Practices are identified by their light blue background and the "thumbs-up" icon.



***Best Practice:***  
*It is a best practice to*

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## Quickly setting up Exinda Appliances in the EMC

To quickly set up your Exinda Network Orchestrator appliances in the Exinda Management Center, use the following as a guide. The instructions focus on the set up of individual appliances, so just repeat the steps for each of your appliances .

# How to Get Your Appliance Configured Quickly

## 1. Appliance Settings

Make sure all your appliances are configured to call EMC.

1. On each appliance, navigate to the **Configuration > System Setup > SDP** page.
2. Enable the SDP Client option and program `mc.exinda.com` as the SDP Server.



The screenshot shows the 'System Setup' interface with three tabs: 'Date and Time', 'Access', and 'SDP'. The 'SDP' tab is selected. Below the tabs, there is a heading 'Connect this appliance to Exinda's Service'. Underneath, there is a section titled 'SDP Options' containing two items: 'SDP Client' with a checked checkbox and the word 'Enable', and 'SDP Server' with a text input field containing 'mc.exinda.com'. A red rectangular box highlights the 'SDP Server' input field. At the bottom of the section is an 'Apply Changes' button.

## 2. Logging into the Cloud-based EMC



### NOTE

*If you are using an on-premises instance of the EMC, you can skip this step.*

1. Navigate to [mc.exinda.com](http://mc.exinda.com) and insert your credentials.

# Exinda Management Center

Email

Password

[Forgot your password?](#)

## 2. Read and accept the license agreement.



### Exinda End User License Agreement

Please read and accept the EULA before continuing.

Exinda End User License Agreement

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I accept

## 3. Tenant Summary Page Overview

This page provides a high-level snapshot of your tenant status. It shows how many appliances have been deployed, are online, and are offline. This page also displays a warning if configuration has not been pushed to the appliance(s) under Configured Appliances.

## Summary Page

Tenant Summary

Category	Count
Deployed Appliances	1
Online	1
Offline	0

1 appliance has configuration changes that haven't been sent. [Learn More](#)

- Deployed Appliances:** This box displays the total number of appliances in the Configured Appliances group.
- Online:** This box displays the total number of appliances successfully enrolled into the EMC. The number of online appliances does not indicate the number of appliances appearing in the Configured Appliances group, these must be manually shifted into an appliance group. Please read further for more information.
- Offline:** This box displays the total number of appliances that are successfully enrolled into EMC, but are offline.
- If appliances need configuration updates, a warning appears below the summary.

## Appliances Page

This page lists all the appliances within your tenant; their status, group affiliation, and other details:

Appliances

Move appliances into groups to manage and monitor appliances similarly.

[Move Appliances](#)
[Import Configuration](#)
[Upgrade firmware](#)

Status	Host ID	Hostname	IP Address	Current Firmware	Model	Group
Online	0024e83dcaed	exinda-Riz-122	10.10.7.122	7.0.4.3714	4061	Unallocated
Online	b8ac6f879ce7	exinda-Riz-104	10.10.6.104	7.0.4.3708	4061	Unallocated

## 4. Create an Appliance Group (Optional)

An appliance group is the concept of bundling appliances with same configuration into one single group. The benefits of creating appliance groups are:

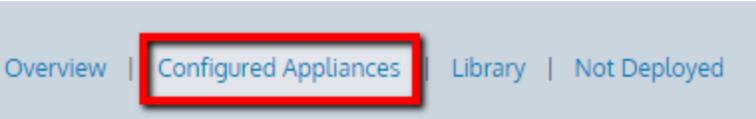
- Organizing your appliances by region
- If your network topology requires a set of Exinda appliances to have a particular set of policies, and other sets of appliances require a different set of policies, then it is best to group the appliances by their similarity.



### NOTE

*You do not need to create an appliance group if all your appliances within your network require same configuration.*

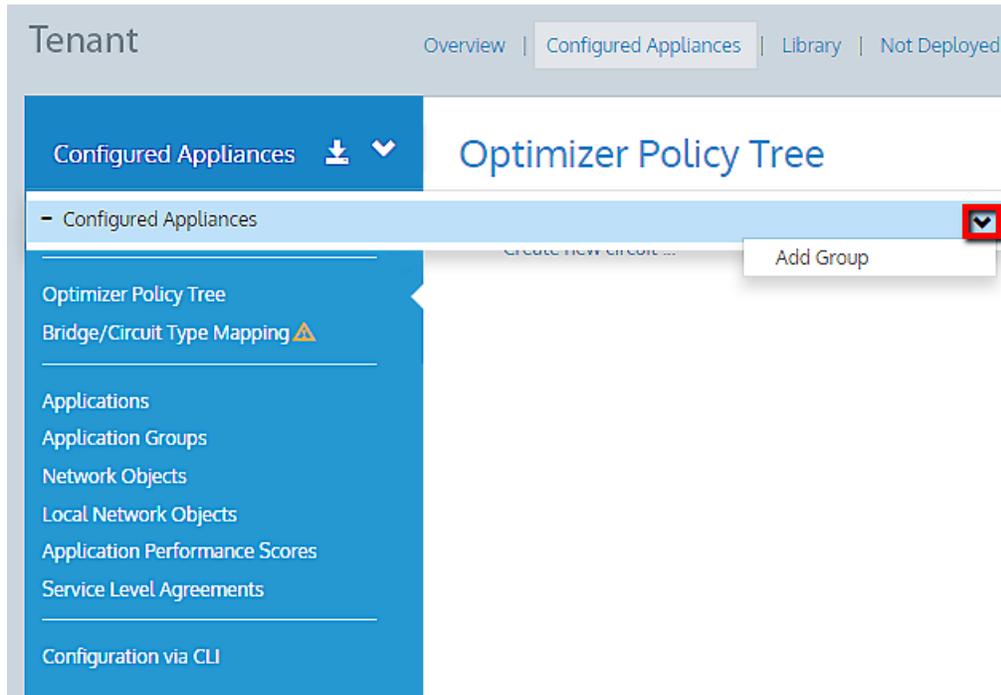
1. Navigate to Configured Appliances page.



Overview | **Configured Appliances** | Library | Not Deployed

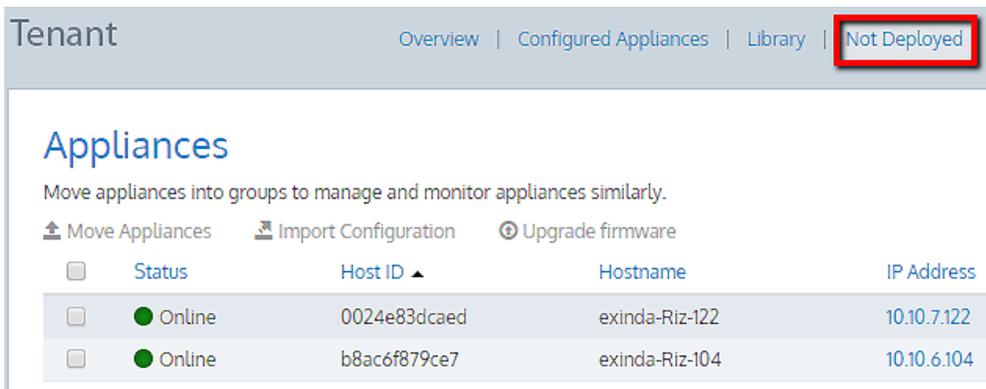
2. Click the drop down icon to view and navigate to appliance groups.

- To add an appliance group, click the second drop down icon and click Add Group.



## 5. Migrate an Appliance into a Group

After configuring your appliance with the EMC information, it takes roughly 20 minutes for an appliance to successfully appear in the EMC. The appliance is then listed on the **'Not Deployed'** page.



Appliances on the **Not Deployed** page do not belong to any appliance group and so any configuration push has no affect on these appliances.

1. On the **Not Deployed** page, select an appliance and click **Move Appliances**

<input type="checkbox"/>	Status	Host ID ▲	Hostname	IP Address
<input checked="" type="checkbox"/>	● Online	0024e83dcaed	exinda-Riz-122	10.10.7.122
<input type="checkbox"/>	● Online	b8ac6f879ce7	exinda-Riz-104	10.10.6.104

2. Select a desired appliance group for the appliance and click **'Move'**.

**Select Destination**  
Move 1 selected appliance to the following location

- Unallocated Appliances
- Configured Appliances
  - Toronto, Ontario
  - Waterloo, Ontario**

⚠ The first user-initiated push of the configuration to the appliance will delete the following configuration on the appliance:

- Definitions for 'local' and 'private net' network objects
- Circuits in the Optimizer (and hence the entire optimizer tree)
- 'After Work' and 'Work Hours' Schedules

If you haven't already, you should first consider taking note of the configuration on your appliance. Note you can import network objects if the appliance is in the 'Not Deployed' appliances area.

**Move** Cancel

3. The moved appliance will now show up under **Configured Appliances** and listed under the appliance group to which it belongs.

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

Appliances

Optimizer Policy Tree  
Bridge/Circuit Type Mapping

Applications  
Application Groups  
Network Objects  
Local Network Objects  
Application Performance Scores  
Service Level Agreements

Configuration via CLI

### Appliances

Move appliances into groups to manage and monitor appliances similarly.

Move Appliances Import Configuration Upgrade firmware

Status	Host ID	Hostname	IP Address	Current Firmware	Model	Group
Online	0024e83dcaed	exinda-Riz-122	10.10.7.122	7.0.4.3714	4061	Waterloo, Ontario
Online	b8ac6f879ce7	exinda-Riz-104	10.10.6.104	7.0.4.3708	4061	Toronto, Ontario

## 6. Import Configuration (Optional)

If you would like to retain your appliance network objects and policies, you have the option to transfer them into a common library for future use and/or integrate them into the global configuration for your group.

1. On the **Configured Appliances** page, navigate to **Appliances**.
2. Select an appliance and click **Import Configuration**.

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

Appliances

Optimizer Policy Tree  
Bridge/Circuit Type Mapping

### Appliances

Move appliances into groups to manage and monitor appliances similarly.

Move Appliances Import Configuration Upgrade firmware

Status	Host ID	Hostname
Online	0024e83dcaed	exinda-Riz-122

### Step 1 – Import Network Objects

1. If you would like to import your network objects, click **Import Network Objects**, otherwise click **Next** to skip this step.

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

- Appliances
- Optimizer Policy Tree
- Bridge/Circuit Type Mapping
- Applications
- Application Groups

## Import Configuration

Network objects from the configuration file can be imported into the

The system will warn when a network object is not available for impc

Step 1 - Network Objects

**Import Network Objects** Next Close

The network objects that exist on the appliance appear in the grid



### NOTE

If any network objects already exist in the library, a green checkmark appears in front of it. Once used, you will not be able reuse it.

## 2. Click **Add Selected Network Objects to the Library**.

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

- Appliances
- Optimizer Policy Tree
- Bridge/Circuit Type Mapping
- Applications
- Application Groups
- Network Objects
- Local Network Objects
- Application Performance Scores
- Service Level Agreements
- Configuration via CLI

## Import Configuration

Network objects from the configuration file can be imported into the librar

The system will warn when a network object is not available for import or.

Step 1 - Network Objects

<input type="checkbox"/>	Name
<input type="checkbox"/>	www
<input type="checkbox"/> ✓	Rizwan-Sche-245
<input type="checkbox"/> ✓	Rizwan

**Add Selected Network Objects to the Library** Next Close

## Step 2 – Import Applications

1. If you need to import any applications that exist in the configuration of the appliance, click **Import Applications**, or skip this step by clicking **Next**.

The application appear in the grid.

2. Select the checkboxes next to each of the applications you need to import.
3. Click **Add Selected Application to Library**.
4. Click **Next**.

## Step 3 – Import Schedules

1. If you need to import any schedules that exist in the configuration of the appliance, click **Import Schedules**, or skip this step by clicking **Next**.  
*The schedules appear in the grid.*
2. Select the checkboxes next to each of the schedules you need to import.
3. Click **Add Selected Schedules to Library**.
4. Click **Next**.

## Step 4 – Import VLANs

1. If you need to import any VLANs that exist in the configuration of the appliance, click **Import VLANs**, or skip this step by clicking **Next**.  
*The VLANs appear in the grid.*
2. Select the checkboxes next to each of the VLANs you need to import.
3. Click **Add Selected VLANs to Library**.
4. Click **Next**.

## Step 5 – Import Circuits

1. If you need to import any circuits that exist in the configuration of the appliance, click **Import Circuits**, or skip this step by clicking **Next**.  
*The circuits appear in the grid.*
2. Select the checkboxes next to each of the circuits you need to import.
3. Click **Add Selected Circuits to Library**.
4. Click **Next**.

## Step 6 – Import Virtual Circuits

1. If you need to import any virtual circuits that exist in the configuration of the appliance, click **Import Virtual Circuits**, or skip this step by clicking **Next**.  
*The virtual circuits appear in the grid.*
2. Select the checkboxes next to each of the virtual circuits you need to import.
3. Click **Add Selected Virtual Circuits to Library**.
4. Click **Next**.

## Step 7 – Import Policies

1. If you need to import any policies that exist in the configuration of the appliance, click **Import**

**Policies**, or skip this step by clicking **Next**.  
*The policies appear in the grid.*



#### NOTE

*You will not be able to import policies that already exist in library and policies tied to a network object that is not available in the library. Hover over the error icon to see the specific error message.*

2. Select the checkboxes next to each of the virtual circuits you need to import.
3. Click **Add Selected Polices to Library**.
4. Click **Next**.
5. Click **Import Policies** to import the current policies from the appliance.

6. You will not be able to import policies that already exist in library and policies tied to a network object that is not available in the library. Hover over the error icon to see the specific error message. Make sure to click **Add Selected Policies to the Library** to successfully add selected

policies into the library:

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

Appliances

Optimizer Policy Tree

Bridge/Circuit Type Mapping

Applications

Application Groups

Network Objects

Local Network Objects

Application Performance Scores

Service Level Agreements

Configuration via CLI

### Import Configuration

Policies from the configuration file can be imported into the library. The system will warn when a policy is not available for import or already exists in the library.

The system will warn when a policy is not available for import or already exists in the library.

Step 2 - Policies

<input type="checkbox"/>	Name
<input type="checkbox"/>	A (Optimize: )
<input type="checkbox"/>	B (Optimize: )
<input type="checkbox"/>	Everything (Optimize: 128 kbps-2048 kbps, Priority 1, Accelerated)
<input type="checkbox"/>	FTP (Optimize: 2000 kbps-8500 kbps, Priority 1, Accelerated)
<input type="checkbox"/>	HTTP (Optimize: 3000 kbps-8000 kbps, Priority 1, Accelerated)
<input type="checkbox"/>	RizDesktop (Optimize: 8000 kbps-100%, Priority 1, Accelerated)

Previous **Add Selected Policies to the Library** Close

## Step 8 – Import Service Level Agreements

1. If you need to import any service level agreements that exist in the configuration of the appliance, click **Import Service Level Agreements**, or skip this step by clicking **Close**.  
*The virtual circuits appear in the grid.*
2. Select the checkboxes next to each of the virtual circuits you need to import.

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

Appliances

Optimizer Policy Tree

Bridge/Circuit Type Mapping

Applications

Application Groups

Network Objects

Local Network Objects

Application Performance Scores

Service Level Agreements

Configuration via CLI

### Import Configuration

Service level agreements from the configuration file can be imported into the library. The system will warn when a service level agreement already exists in the library, has the same definition, or has the same name.

The system will warn when a service level agreement already exists in the library, has the same definition, or has the same name.

Step 8 - Service Level Agreements

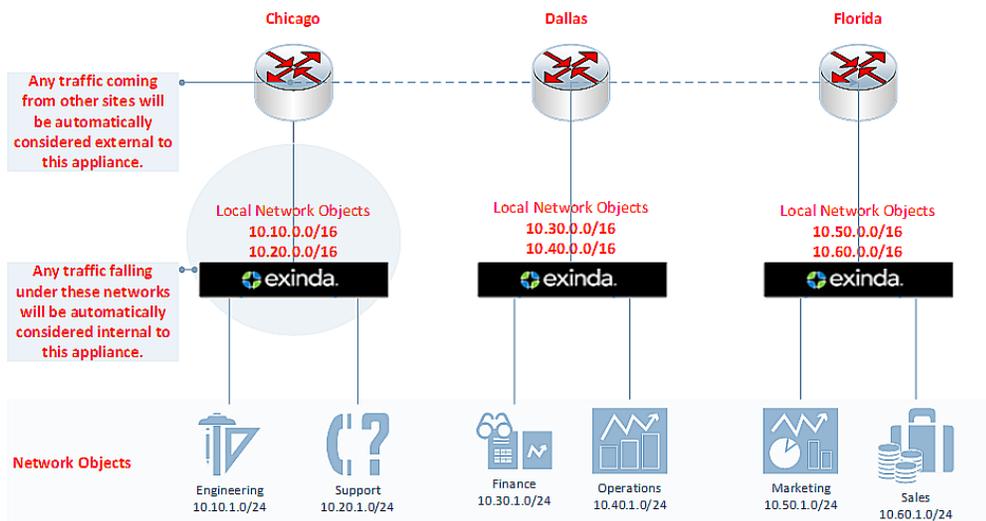
<input checked="" type="checkbox"/>	Name
<input checked="" type="checkbox"/>	Service Level Agreement name (Ping 10.10.9.55 with ping size of 1024 bytes, allowing for 5 ms of delay. Ping 10.10.9.195 with ping size of 1024 bytes, allowing for 30 ms of delay.)
<input checked="" type="checkbox"/>	Service Level Agreement name 2 (Ping 10.10.9.195 with ping size of 1024 bytes, allowing for 5 ms of delay. Ping 10.10.9.55 with ping size of 1024 bytes, allowing for 30 ms of delay.)
<input checked="" type="checkbox"/>	XOXOX (Ping 10.10.9.55 with ping size of 1024 bytes, allowing for 5 ms of delay. Ping 10.10.9.195 with ping size of 1024 bytes, allowing for 30 ms of delay.)
<input checked="" type="checkbox"/>	YOYOYO (Ping 10.10.9.195 with ping size of 1024 bytes, allowing for 30 ms of delay. Ping 10.10.9.55 with ping size of 1024 bytes, allowing for 5 ms of delay.)

Previous **Add Selected Service Level Agreements to the Library** Close

3. Click **Add Selected Service Level Agreements to Library**.
4. Click **Close**.

## 7. Configure Local Network Objects

The local network object is the subnet that resides behind (or is local to) the appliance on the network. Local network objects take their definition from an IP network address and mask length to identify the range of IP addresses that exist in the LAN behind the appliance. You define a local network object for each appliance, so that each appliance can differentiate between traffic that is external and internal to the LAN on which it operates. In the EMC configuration, local network objects are appliance specific, so appliances cannot share these objects.



To configure the local network object, do the following:

1. Click **Configured Appliances > Local Network Objects**.  
*The page on the right refreshes to display the configured appliances.*
2. For each appliance where you need to configure the local network object, click the entry under the **Local to Appliance (Host ID)** column heading.  
*The page refreshes to display the Local Network Objects by Subnet configuration.*

## Local Network Objects by Subnet

Local network objects represent the subnet local to each Exinda appliance in the system to-local traffic. The local network objects cannot be deleted.

Local to Appliance (Host ID)

65458c8ea68c	 <b>Click the Host ID</b>
6b06a98e3572	

3. In the **IP Network Address** and **Mask Length** fields type the needed information.

## Local Network Objects by Subnet

Local network objects represent the subnet local to each Exinda appliance in the system to-local traffic. The local network objects cannot be deleted.

Location: Internal To 65458c8ea68c

Reporting: Do NOT include in subnet reporting

Subnets: 172.24.32.0/24

Define which subnets to include in this network object.

IP Network Address	/	Mask Length	
<input type="text" value="172.24.32.0"/>	/	<input type="text" value="24"/>	 

[+ Add Another Subnet](#)

**Provide the IP address and Mask length**

4. Click **Save**.



## NOTE

*If the IP address and mask length you define are illegal, the EMC returns a warning and provides a suggestion for correcting the issue. Click Save.*

Tenant Overview | Configured Appliances | Library | Not Deployed

**Configured Appliances** ↓ ∨

Appliances

Optimizer Policy Tree

Bridge/Circuit Type Mapping ⚠

Applications

Application Groups

Network Objects

Local Network Objects

Application Performance Scores

Service Level Agreements

Configuration via CLI

### Local Network Objects by Subnet

Local network objects represent the subnet local to each Exinda appliance in the system. The local network object to-local traffic. The local network objects cannot be deleted.

> Location: Internal To 0024e83dcaed

> Reporting: Do NOT include in subnet reporting

∨ Subnets: 10.10.0.0/16 ⚠ The IP network address and mask length combination is illegal. A suggestion has been made. Click save again to use the supplied suggestion.

Define which subnets to include in this network object.

IP Network Address / Mask Length

10.10.0.0 / 16 ✖

+ Add Another Subnet

Save Cancel

## 8. Configure Network Objects

A network object represents the hosts on a network. They can be subnets, single hosts, groups of one or other, or groups of both. A network object can either be created in the Library or on the Network Objects page under Configured Appliances. When adding a network object to an appliance group, you can create what you need first, or use an existing network object from the library. To create and apply a network object, do the following:

1. Do *one* of the following:
  - a. Under the **Library**, click **Network Objects**.
  - b. Under **Configured Appliances**, click **Network Objects**.
2. Click **Create network object....**  
*Network objects created under Configured Appliances are also saved in the Library.*

## Network Objects

Define network objects to represent subsets of your network, which can

[+ Create network object ...](#)

[+ Add Network Object from Library ...](#)

Name ▲

Engineering

Finance

Operations

Support

3. Open the **Name** section and type a meaningful name for the object.

### Network Object

Define network objects to represent subsets of your network, which can include multiple subnets :

▼ Name

Name

> Reporting: Include in subnet reporting in the selected appliance group

> Subnets

Create Cancel

4. Open the **Subnets** section and provide the **IP Network Address** and **Mask Length** in the appropriate fields.

## Network Object

Define network objects to represent subsets of your network, which can include multiple :

> Name

> Reporting: Include in subnet reporting in the selected appliance group

▼ Subnets

Define which subnets to include in this network object.

IP Network Address / Mask Length

/  ✕

+ Add Another Subnet

Create Cancel

5. Click **Create**.  
Once created, you add the network object to the appliance group from the Library.
6. Open the Network Objects page under Configured Appliances.
7. Click **Add network object from Library...**

## Network Objects

Define network objects to represent subsets of your network, which can include multiple

+ Create network object ...    + Add network object from library ...

Name ▲

Network Object
Test Network Object

**Click here**

*The Add network object from Library dialog box opens.*

**NOTE**

*You have to manually enable monitoring of the network object if it is required for subnet reporting. If the entry for the network object does not have a check mark under the Monitoring column, subnet reporting is not available.*

## Network Objects

Define network objects to represent subsets of your network, which can include multiple subnets and multiple hosts. The network objects can then be used to monitor traffic or to configure traffic policy.

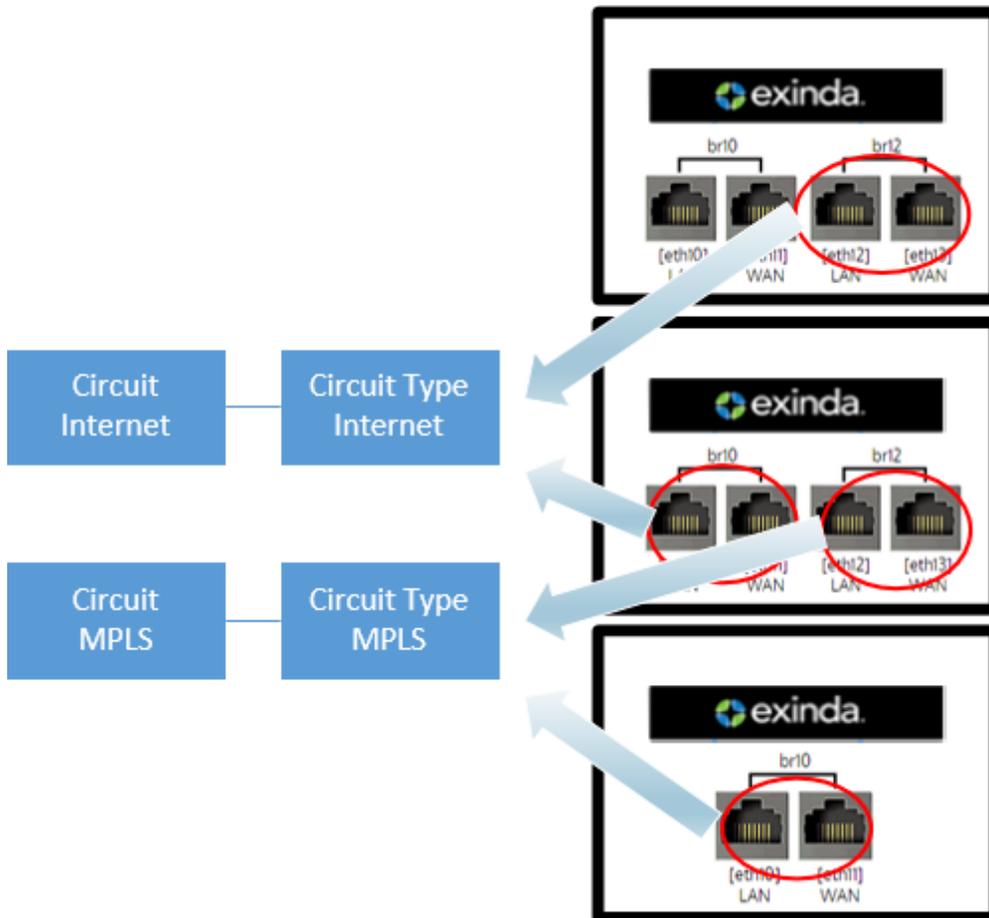
+ Create network object ...

+ Add Network Object from Library ...

Name ▲	IP Network Address	Monitoring	
Engineering	10.10.1.0/24	✓	🔒
Finance	10.11.0.0/16	✓	🔒
Marketing	10.50.1.0/24	<input type="checkbox"/>	✕
Operations	10.30.0.0/16	✓	🔒
Support	10.10.10.5/32	✓	🔒

## 9. Define Circuit Types

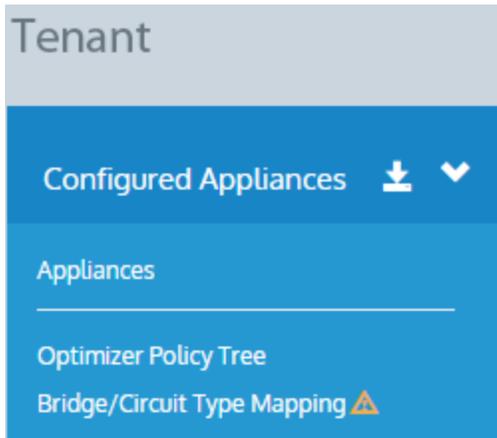
A Circuit Type is a container that binds appliance bridges to a circuit so policies within the circuit apply only to the bridges in that circuit type. The following example will further clarify the concept of circuit types:



Consider the following:

- Bridge **br12** from first appliance and bridge **br10** from second appliance are both bound to circuit type "Internet". If this circuit type is tied to the "Internet" circuit, then all the policies within this circuit will apply to bridge br12 on the first appliance and br10 on the second appliance.
- Bridge **br12** on the second appliance and bridge **br10** from third appliance are bound to circuit type "MPLS". If this circuit type is tied to the "MPLS" circuit, then all the policies within this circuit will apply to bridge br12 on the second appliance and br10 on the third appliance.
- If an appliance is moved in the Configured Appliances group, by default the appliance bridge will not bind to the circuit type and a warning icon appears next to the Bridge/Circuit Type Mapping

item.:



## 9a. Create Circuit Type

1. Navigate to the Bridge/Circuit Type Mapping page within Configured Appliances page.
2. Click either the **Host ID** or **Bridge ID** of the appliance to bind the circuit type to the bridge.

### Bridge/Circuit Type Mapping

Map the circuit types to the appliance's bridges. Circuits are mapped to the circuit type. The circuit types allow the appliance bridges to be bound to circuits according to their circuit type.

Host ID ▲	Hostname	IP Address	Group	▲	Bridge/Circuit Type Mapping
0024e83dcaed	exinda-Riz-122	10.10.7.122	Rizwan	▲	br10 ->

3. You could select the already created circuit types from the drop down menu or create a new

circuit type.

## Appliance Bridge to Circuit Type Mapping

Map the circuit types to the appliance's bridges. Circuits are mapped to the circuit types. The circuit types allow the appliance bridges to be bound to circuits according to their circuit type.

▼ Appliance bridge to circuit type mapping

Host ID 0024e83dcaed

Hostname exinda-Riz-122

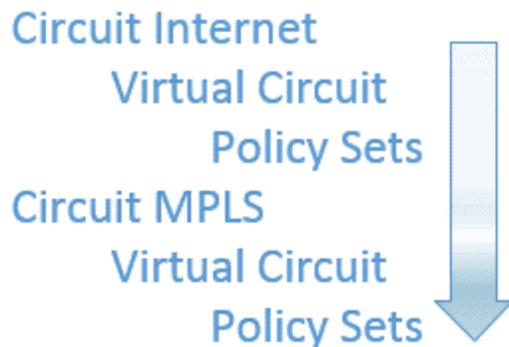
br10

[+ Create new circuit type in the library ...](#)

The recommendation is that you give the circuit type the same name as circuit as it makes it easier to map them together.

## 10. Optimizer Policy Tree (OPT)

The Optimizer Policy Tree outlines what actions can be taken on different types of traffic going through the appliance. The tree is processed in a top-down order and policies on traffic are applied in that order.



Navigate to Optimizer Policy Tree within Configured Appliances Page.

The screenshot shows a web interface for a 'Tenant'. At the top, there are navigation tabs: 'Overview', 'Configured Appliances' (selected), 'Library', and 'Not Deployed'. On the left, a blue sidebar contains a menu with 'Configured Appliances' (selected), 'Appliances', 'Optimizer Policy Tree', and 'Bridge/Circuit Type Mapping'. The main content area is titled 'Optimizer Policy Tree' and includes the text 'The Optimizer policy tree defines what actions are taken on different types' and a link 'Create new circuit ...'.

## 10a. Circuits

1. Define physical connections to the WAN/Internet. Click **Create new circuit...**
2. Name the circuit, program the desired bandwidth and bind the circuit to the circuit type.

### Circuit

Define physical connections to the WAN/Internet.

You can bind different circuits to each bridge or you can treat all bridges as one combined circuit. Typically, one circuit would be created for each physical link. Ensure each bridge policy and will be monitored in a catch-all circuit.

Note that the order of the circuits is important.

The screenshot shows a configuration form for a circuit. It has several sections: 'Name' (with a right-pointing arrow), 'Bandwidth' (with a downward-pointing arrow), and 'Bind to Circuit Type' (with a right-pointing arrow). The 'Bandwidth' section contains the text 'Identify the inbound and outbound bandwidth of the circuit.' and two rows of input fields. The first row is for 'Inbound Bandwidth' with a text input and a dropdown menu set to 'kbps'. The second row is for 'Outbound Bandwidth' with a text input and a dropdown menu set to 'kbps'. At the bottom of the form are two buttons: 'Create and Add' (highlighted in green) and 'Cancel'.

3. If a circuit exists in a library then you can add it from there. Click **Add Circuit from Library...** and select a desired circuit.

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

Appliances

Optimizer Policy Tree

Bridge/Circuit Type Mapping

### Optimizer Policy Tree

The Optimizer policy tree defines what actions are taken on different

Create new circuit ... **Add Circuit from Library ...**

## Optimizer Policy Tree

The Optimizer policy tree defines what actions are taken on different

Create new circuit ... | Select a circuit

Internet

## 10b. Virtual Circuits

Virtual circuits logically partition the circuit. The virtual circuit defines the traffic that is processed in the partition and how much bandwidth it will use. Each virtual circuit has its own set of policies.

1. Click **Create new virtual circuit...**

Tenant Overview | Configured Appliances | Library | Not Deployed

Configured Appliances

Appliances

Optimizer Policy Tree

Bridge/Circuit Type Mapping

### Optimizer Policy Tree

The Optimizer policy tree defines what actions are taken on different

- Internet - Circuit (1024 kbps on circuit type 'Internet')

**Create new virtual circuit ...**

Create new circuit ...

## 2. Define the virtual circuit and click 'Create and Add'.

### Virtual Circuit

Define how to logically partition the circuit. The virtual circuit defines what traffic will be processed in this partition and how much bandwidth it is allowed. Each virtual circuit will have its own set of policy rules.

▼ Name: Local<-->All

The name will be used to identify this virtual circuit when applying to policy trees. Keeping the Local Site name generic will be better for use across different appliances and different scenarios.

Auto-suggest the name

Name

Local Site

---

> Filter: Bi-directional to/from All

> Bandwidth

> Dynamic Virtual Circuit: Disabled

> Schedule: Always

Similar to circuits, virtual circuits can be added from the library, if present.

## 10c. Policy/Policy Sets

Policies define what actions are to be taken on different types of traffic.

1. There are two options:
  - a. Click **Create new policy set...** to create your own set of policies.

### Optimizer Policy Tree

The Optimizer policy tree defines what actions are taken on different types of traffic.

- Internet - Circuit (1024 kbps on circuit type 'Internet')
- Local<-50%>All - Virtual Circuit (50% in/out matching 'All')
- 
- 
-

- b. Click **Add Policy Set from Library...** to select a pre-defined policy set template for a different type of traffic.

## Optimizer Policy Tree

The Optimizer policy tree defines what actions are taken on different types of traffic.

The screenshot shows a tree view of the Optimizer Policy Tree. The root node is "Internet - Circuit (1024 kbps on circuit type 'Internet')". Underneath it is a node "Local<-50%>-All - Virtual Circuit (50% in/out matching 'All')". A dropdown menu is open over the "Local<-50%>-All" node, showing a list of policy sets to select. The options in the dropdown are: "Internet inbound", "Internet outbound", "Monitor Only", "WAN inbound", "WAN inbound (Service Provider)", "WAN outbound", "WAN outbound (Service Provider)", and "WAN outbound (with acceleration)".

- 2. In this example, the Internet outbound policy set is selected and it automatically populates all the policies within this set into the virtual circuit:

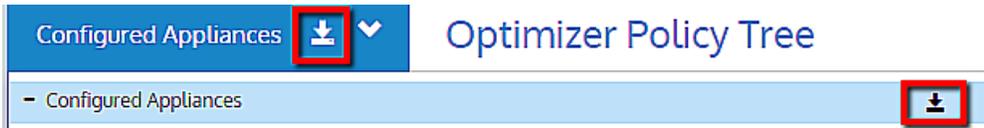
## Optimizer Policy Tree

The Optimizer policy tree defines what actions are taken on different types of traffic. Each element in the

The screenshot shows the Optimizer Policy Tree with the "Internet inbound - Policy Set" selected and expanded. The tree structure is as follows: "Internet - Circuit (1024 kbps on circuit type 'Internet')", "Local<-50%>-All - Virtual Circuit (50% in/out matching 'All')", and "Internet inbound - Policy Set". Under "Internet inbound - Policy Set", the following policies are listed: "P2P - Choke 1%-3% (Optimize: 1%-3%, Priority 10)", "Streaming - Limit Low 2%-10% (Optimize: 2%-10%, Priority 10)", "Software Updates - Limit Med 3%-50% (Optimize: 3%-50%, Priority 9)", "Voice - Guarantee Critical 15%-100% (Optimize: 15%-100%, Priority 1)", "Thin Client - Guarantee High 10%-100% (Optimize: 10%-100%, Priority 3)", "Files - Guarantee Med 8%-100% (Optimize: 8%-100%, Priority 5)", "Web - Guarantee High 10%-100% (Optimize: 10%-100%, Priority 3)", "Mail - Guarantee Med 8%-100% (Optimize: 8%-100%, Priority 5)", "Unified Communications - Guarantee Med 8%-100% (Optimize: 8%-100%, Priority 3)", and "ALL - Guarantee Low 5%-100% (Optimize: 5%-100%, Priority 7)".

## 11. Push Configuration

Once all the desired changes have been made to the group, you can simply push the configuration by clicking on the download icon:



If multiple appliance groups exist, then you can push the configuration individually for an appliances group by clicking on the main Configured Appliances download button. This pushes the configuration to all the appliances groups and appliances within them. Pushing the configuration restarts the Optimizer and saves the configuration on the appliance:

When sending the configuration:

- Restart the Optimizer on the appliances
- Save the running configuration on the appliances

Send Configuration

Cancel

When the configuration is being edited, the configuration status is **Needs Sending**. When the configuration is pushed, the status changes to **Pending**, and when the appliance receives the configuration, the status changes to **Delivered**.

Life cycle of configuration status:

