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# ReView: The User Guide



# **ReView**

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# IPv4 Global / Hilco ReView



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netb	locks (74) ips (700255) sources (12	)							
Opti	ons Refresh C Add Netblock +			Vi	sibility Unign	ored Only 🗸	Show 100 V	Search	٩
Ŧ	CIDR	Used IPs	Source	In use	CIDR Org.	Direct IPs	Total IPs in tree	RIR Attributes	Options
3	8.0.0.0/12	59.06 %	scanned RIPE	Unknown	8.0.0.0/12	0	619,303	ARIN	٠
3	8.0.0.0/13	49.78 %	scanned RIPE	In Use	8.0.0.0/13	0	260,969	ARIN	٠
	8.0.0/14	39.07 %	scanned RIPE	In Use	8.0.0.0/14	0	102,411	ARIN	٠
÷	8.0.0.0/15	34.30 %	scanned RIPE	In Use	8.0.0.0/15	0	44,956	ARIN	٠
3	8.2.0.0/15	43.83 %	scanned RIPE	In Use	8.2.0.0/15	0	57,455	ARIN	٠
3	8.2.0.0/16	48.65 %	scanned RIPE	In Use	8.2.0.0/16	0	31,884	ARIN	٠
3	8.2.0.0/17	23.86 %	scanned RIPE	In Use	8.2.0.0/17	0	7,817	ARIN	٠
3	8.2.64.0/18	47.71 %	scanned RIPE	In Use	8.2.64.0/18	0	7,817	ARIN	٠
3	8.2.6	<mark>17.5</mark> 9 %	scanned RIPE	Unknown	8.2.64.0/19	0	1,441	ARIN	٠
3	·	35.18 %	scanned RIPE	Unknown	8.2.80.0/20	0	1,441	ARIN	٠
3		35.16 %	scanned RIPE	Unknown	8.2.80.0/21	0	720	ARIN	٠
		21.19 %	scanned RIPE	Unknown	8.2.80.0/22	0	217	ARIN	٠

# **Overview**

ReView is a powerful automated discovery and scanning tool that finds, catalogs, and analyzes your network topography. Using ReView, you can quickly find and view used and free IPs, giving your company the opportunity to efficiently consolidate used space and view the resulting potential market rate of your aggregated unused IP space.

## Requirements and Installation

ReView is a locally downloaded tool with minimal system requirements. The hosting system must be connected to the internet for ReView to process scans.

To install, log in as the system administrator user (or select "run as administrator") and download the provided build file for your OS (Windows, MacOS, and Linux are supported). Once downloaded, unzip the file and double click on the application name/icon in order to open.

For additional information, see the documentation sections below:

- User Guide
  - Home Page & Getting Started
  - Discovery
  - To-Do List
  - Inventory
  - Analyze
  - Planning
  - Export
- Release Notes
  - ReView 2.0.0

# User Guide

netb	locks (74) ips (700255) sources (12	)							
Opti	ons Refresh C Add Netblock +			Vi	sibility Unign	ored Only 🗸	Show 100 ~	Search	٩
Ŧ	CIDR	Used IPs	Source	In use	CIDR Org.	Direct IPs	Total IPs in tree	RIR Attributes	Options
3	8.0.0.0/12	59.06 %	scanned RIPE	Unknown	8.0.0.0/12	0	619,303	ARIN	•
Ξ	8.0.0.0/13	49.78 %	scanned RIPE	In Use	8.0.0.0/13	0	260,969	ARIN	٠
8	8.0.0/14	39.07 %	scanned RIPE	In Use	8.0.0.0/14	0	102,411	ARIN	٠
ŧ	8.0.0.0/15	34.30 %	scanned RIPE	In Use	8.0.0.0/15	0	44,956	ARIN	٠
Ξ	8.2.0.0/15	43.83 %	scanned RIPE	In Use	8.2.0.0/15	0	57,455	ARIN	٠
Ξ	8.2.0.0/16	48.65 %	scanned RIPE	In Use	8.2.0.0/16	0	31,884	ARIN	٠
Ξ	8.2.0.0/17	23.86 %	scanned RIPE	In Use	8.2.0.0/17	0	7,817	ARIN	٠
Θ	8.2.64.0/18	47.71 %	scanned RIPE	In Use	8.2.64.0/18	0	7,817	ARIN	٠
Ξ		17.5 <mark>9 %</mark>	scanned RIPE	Unknown	8.2.64.0/19	0	1,441	ARIN	٠
Θ	·····›» 8	35.18 %	scanned RIPE	Unknown	8.2.80.0/20	0	1,441	ARIN	٠
8		35.16 %	scanned RIPE	Unknown	8.2.80.0/21	0	720	ARIN	\$

This User Guide provides details on navigation, application settings, and the tabs available in ReView.

- UI Overview
  - Navigation
  - Settings
    - General Settings
      - Appearance Options
      - Cache
    - Pricing
    - Logs
- Additional Information:

## **UI** Overview

## Navigation



To navigate through ReView, click the tabs and sub-tabs at the top of the application. The major tabs are:

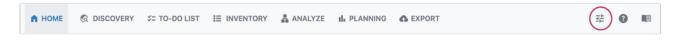
- Home The Home page is the initial page displayed while in ReView. Tiles display current discovery progress, inventory, scan to-do list, and visualization tools for your network.
- Discovery The Discovery tab is the first step to identifying network resources to add to your inventory. Here, you can use configuration files, paste text configs, or use automated scanning options to identify devices to use for Discovery. Available discovery / device identification options include: DHCP, DNS, Firewall, Generic Config, mDNS, Load Balancer, Ping Scan, RIR, Router Configs, SNMP, ARP, SSDP, and Cloud Providers.
- To-Do List The To-Do list identifies and marks neighboring devices encountered during router discovery scanning, and lists them for future scanning.
- Inventory The Inventory tab displays an organized list of all discovered netblocks, IPs, sources, and their associated metadata. Here, for each netblock you can view RIR, Source, CIDR, use status, IPs found, total IPs, IP utilization, and start/end address.

- Analyze The Analyze tab interprets the IP inventory data found during Discovery, and determines valuation of free IPv4 space based on the current network structure.
- Planning The Planning tab shows the potential value of saved plan strategies, and the configuration differences for each plan.
- Export Export will prepare a report on the state of your network and email it to both you and to IPv4.Global/ Hilco. You may also download a PDF Report, or upload data into 6connect ProVision.

Additional helpful pages include:

- Settings (slider icon) Set appearance theme, clear cache, or review pricing and log data.
- · About (question icon) Displays the EULA for ReView
- Documentation (book icon) Provides a link to ReView's online documentation.

## Settings



Click the settings icon at the top right of the navigation bar to open ReView settings.

## **General Settings**

#### **Appearance Options**

ReView supports light and dark themes according to your system settings. You may choose between light mode, dark mode, OS based, or custom appearance settings.

A HOME		∜= TO-DO LIST	E INVENTORY	뤏 ANALYZE	II. PLANNING	SEXPORT	蒜	0	
General Pric	ing Logs Databa	ISE (dev)							
Appeara	nce								
Customize yo	our UI theme. The 's	system' option change verride the default the		olor theme based	I on the OS appeara	nce. The 'custom' option allow	vs you te	o use	
Light o		Dark O	System 〇	c	custom 〇				
					© DISCOVERY 32 INVENTORY	Z ANAL			
Inventory Display collected data in 1		Inventory Display collected data in the Discovery Tab	Inventory Display collected data in the	Inventory	nventory Isplay collected data in the Discovery Tab				
netblocks 🖸 ips	50.00M ()	netblocka 📻 iça 🚥 sources 🛞	netziochs 🕥 (ps 😋	netblocks 💌 kpr	netblocks 🔘 ips 📖 sources 🕻				
Options Betrati C	,	Options Batesh C	Options Extrah C	Options Betrein	Options Betrest C				
Cache									
Clear applica	ition data. Clearing	will remove the datab	ase, preferences, cre	edentials and any	other temporary da	ata.			
clear									

For custom settings, select "Custom" and then paste the desired custom CSS to override default attributes. Edits made to Custom Styles are saved automatically.

	me. The 'system' option tributes that override		red color theme based on the OS appearance. The 'custom' option allows you to
Light .	Dark Mentory Westower () Westowy () Westower Westowe	System	Custom  Custom
<pre>div {     background-color: } body, h1, h2, h3, h4 font-family: Couri color: indigo; }</pre>	4, h5, h6 {		
Cache Clear application dat clear	a. Clearing will remove	the database, preferen	nces, credentials and any other temporary data.

## Cache

Clearing the cache clears all application data, including removing the database, preferences, credentials, and temporary data.

A Clearing the cache should only be in circumstances where a full 'reset' is necessary. Use with caution.

## Pricing

The pricing data used for estimated values under the Analyze and Planning tabs is accessible under Settings  $\rightarrow$  General  $\rightarrow$  Pricing. Searchable price lists are available for both ARIN and RIPE.

_	Logs Database (dev)						
Pricing Infor	mation ' pricing information ca	ategorized by size.					
ARIN RIPE							
Options				Show	Search by block size	٩	
Block Size	Price Per IP	Variable	Min Block Price	Max	Block Price		
/8	\$70.00	10%	\$1,056,964,608.00	\$1,29	1,845,632.00		
/9	\$68.00	10%	\$513,382,809.60	\$627	467,878.40		
/10	\$66.00	10%	\$249,141,657.60	\$304	,506,470.40		
/11	\$64.00	10%	\$120,795,955.20	\$147,	639,500.80		
,							
/12	\$62.00	10%	\$58,510,540.80	\$71,5	12,883.20		

## Logs

The Logs tab displays logging information and ignored blocks.

А НОМЕ		\$= TO-DO LIST	INVENTORY	<sup>嚞</sup> ANALYZE	III PLANNING	C EXPORT		群	8	
General Prici	ng Logs Databas	e (dev)								
Logs Display loggir Ignored Blo	ng information									
Results 2										
CIDR		Description	7041 Cashina 0.0		Start Address		End Address			
0.0.0.0/8		'This network" [RFC			6.0.0.0		6.255.255.255			
10.0.0.0/8		Private-Use [RFC191			10.0.0.0		10.255.255.25			
11.0.0.0/8		DoD Intel Information			11.0.0.0		11.0.0.0	•		
22.0.0.0/8		Defense Information			22.0.0.0		22.0.0.0			
26.0.0.0/8	(	Defense Information	Systems Agency		26.0.0.0		26.0.0.0			
29.0.0.0/8	(	Defense Information	Systems Agency		29.0.0.0		29.0.0.0			
20.0.0.0/0										

# Additional Information:

See the following sections for details on working within ReView:

- Home Page & Getting Started
- Discovery
- To-Do List
- Inventory
- Analyze
- Planning
- Export

# **ReView Home Page**

The Hilco ReView IP Scanner helps you identify un	View Details used IP assets on your network.	I INVENTORY	Inventory over time
And the best place to start is the <u>RIR Scan</u> on the I	iscovery tab.		
Explore ReView's Discovery Scan Tools		Used ps 5.43%	11.094.730 IPs 4.934 Netblocks
✓ RIR ✓ Ping Scan ✓ Router Configs	DHCP Firewall		
Generic Config ARP DNS Zones mD	NS SSDP Cloud Providers		From all sources 🗸
		Free IPs 89.13%	<ul><li>Free IPs</li><li>Used IPs</li></ul>
Get Started With Discovery		Check the Inventory details	
➤ TO-DO When a scan process is executed, some devices o added automatically to the TO-DO section. Later o to kick off new scans.		II: 3D VISUALIZATION Netblock type Utilizatik /24 ~ All	Expand card
LAST 6 ADDRESES ADDED	STATUS		
16.14.0.0	scanned		
216.33.127.0	pending		
209.225.29.48	pending		
209.225.28.0	pending		
209.225.16.32	pending		Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
209.225.7.96	pending		
Review the full TO-DO list			
Review the full TO-DO list			

The Home page is the initial page displayed while in ReView. Here, dashboard tiles show current discovery progress, inventory, scan to-do list, and visualization tools for your network. Links will be displayed to set up initial configuration and discovery steps to start using the scanning tool.

## **Getting Started**

When you first open ReView, take a look at the links available on the Home page.

Demo data is available for you to explore the features and visualizations of ReView prior to importing your own network data.

If desired, open settings to customize your appearance to light mode, dark mode, or system-based.

## Workflow:

When you are ready to start scanning, we recommend proceeding in the following order:

## 1) Network Discovery & Scans

Where: Home; Discovery Tab; To-Do List

- The best place to start is using the RIR Scan on the Discovery tab. Enter an IP (or use the default public IP found), click "scan", and it
  and will query ARIN, RIPE, APNIC, LACNIC, and AFRINIC for officially allocated IP resources.
- Next, identify sub-blocks and hosts by supplying Router Configs or DNS Zones, or by scanning ARP tables or scanning DHCP leases files.
- Additional options under Discovery include items such as Firewalls, Load Balancers, SNMP, SSDP, and even a "Generic Config" option for other non-supported devices.
  - Data may be provided either by uploading config files (Note: Must be either .zip or .tar files) or by pasting the configuration text.
- Check the To-Do List to perform Ping Scans
  - If neighboring devices are encountered during an SNMP, SSH, Config, or Ping scan, they are added to the To-Do list and flagged for later user review and scanning to complete network segments.

## 2) Review and Update Inventory Status

Where: Inventory Tab

- During discovery scanning, found netblocks, ips and sources will be added to the Inventory page for review.
  - You may manually add additional blocks, update or change block status, add attributes, ignore blocks, or add sources from this area.
- Confirm the use status for the netblocks / IPs in inventory the use status (unknown, in use, free, ignored) will determine whether the block is sellable and optimization strategy steps.

## 3) Analyze Inventory and Get Suggested Plans

Where: Analyze Tab

- After discovery scans and any necessary inventory review is complete, proceed to the Analyze tab. The tab will display an estimated value of your public IP space based on the current inventory. It can be used to identify areas where your network can be made more efficient. Suggested plans may be saved for later review.
  - If any change occurs in the data, click on "Reinitialize" to refresh the analysis.

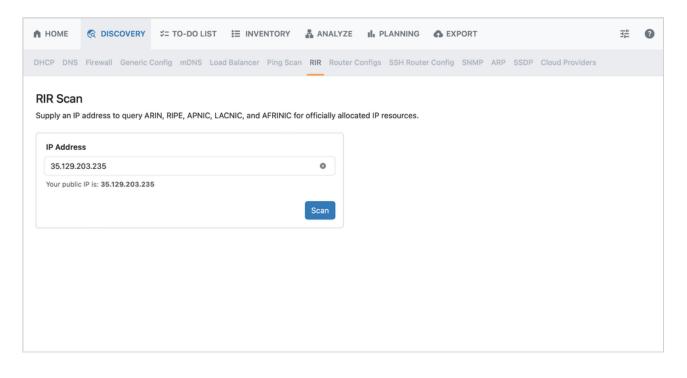
## 4) Review Plans and Export

Where: Planning Tab; Export Tab

- The Planning tab shows the potential value of saved plan strategies, and the configuration differences for each plan.
- If desired, you may navigate to the Export tab to prepare a report on the state of your network and email it to both you and to IPv4Global. You may also download a PDF report, or upload your data into 6connect ProVision.

# Next Steps:

Continue on to the Discovery section for to start scanning your network.



The Discovery tab is first step to identifying network resources to add to your inventory. Here, you can use configuration files, paste text configs, or use automated scanning options to identify devices to use for discovery.

The Discovery tab allows the user to gather IP topography data via the following methods, organized as sub-tabs: DHCP, DNS, Firewall, Generic Config, mDNS, Load Balancer, Ping Scan, RIR, Router Configs, SSH Router Config, SNMP, ARP, and SSDP.

# **Discovery Tab Options**

## RIR

RIR Scan is the recommended first step in discovering your network assets.

RIR discovery establishes a baseline of public space. From here, ReView will use the current user's IP / provided IP, and then query the WHOIS system to find its ASN. From there, it queries again in order to discover netblock allocations.

When you open RIR Scan, your public IP is automatically populated, though you may also manually enter an IP.



## **RIR Scan**

Supply an IP address to query ARIN, RIPE, APNIC, LACNIC, and AFRINIC for officially allocated IP resources.

IP Address	
67.221.240.0	0
Your public IP is: 35.129.203.235	Scan

## Enter the desired IP address and click "Scan".

	S= TO-DO LIST ≣ INV	(388049) ENTORY 🛔 ANALYZE 👖	PLANNING 🔥 EXPORT		計	7
DHCP DNS Firewall Generic	Config mDNS Load Balance	Ping Scan <b>RIR</b> Router Config		4 Netblocks saved to Inventory		×

## **RIR Scan**

Supply an IP address to query ARIN, RIPE, APNIC, LACNIC, and AFRINIC for officially allocated IP resources.

P Address	
67.221.240.0	0
our public IP is: 35.129.203.235	

#### Activity

#### Last status: Search completed! 4 netblocks discovered.

Output

```
SUCCESS | Search completed! 4 netblocks discovered.
WARNING | Unable to discover any additional route/route6 prefixes
INFO | Found netblock 67.221.240.0/20
INFO | Found netblock 2607:fc28:0:306:0:0:0/64
INFO | Found netblock 2607:fae0:4000:0:0:0:0:0/48
INFO | Found netblock 2607:fae0:0:0:0:0:0:0/32
INFO | Getting netblocks...
INFO | Getting netblocks...
INFO | Organization info: {"CONNE-81":"6connect, Inc."}
INFO | Getting organization info...
INFO | RIR detected: ARIN
INFO | Process started...
```

After a successful scan, flags will appear on the To-Do List and Inventory tabs to indicate pending actions.

## DHCP

Connects to DHCP usage logs. ReView uses this to determine whether allocated DHCP subnets can be shrunk. Currently supports ISC DHCP, though Microsoft support is expected in a future release.

🕈 НОМЕ  📀	DISCOVERY \$= T	O-DO LIST 🗮 INVENTOR	Y 홃 ANALYZE	II. PLANNING	S EXPORT		비비	8
DHCP DNS Fire	wall Generic Config	mDNS Load Balancer Ping	Scan RIR Router C	Configs SSH Router	Config SNMP ARP	P SSDP Cloud Providers		
DHCP Disco Supply DHCP files	-	SC DHCP Server to discover h	osts and add them to	the inventory.				
ISC DHCP Leas	ISC DHCP Cont	fig SSH Discovery						
Start by 🖪 Uploa	ding a File or 🍘 Past	te a configuration text						
Select a dhcpd Choose File	no file selected							
	t configuration file or a c se. ZIP and TAR files are	compressed file with several config supported. Reset	Parse File					

## DNS

Supply DNS Zone files or credentials to an ISC Bind DNS Server to discover hosts. A config file may be uploaded or configuration text pasted directly into the text field.

	•	ରି DISC	OVERY	\$= т	0-DO LI	st 🗄 I	NVENTORY	Ā AI	NALYZE	ılı P	LANNING	<b>G</b> EX	PORT				0
DHCP DI	NS F	irewall	Generic C	Config	mDNS	Load Balan	cer Ping Scan	RIR	Router Co	onfigs	SSH Router	Config	SNMP	ARP	SSDP	Cloud Providers	

## **DNS** Zones

Supply DNS Zone files or credentials to an ISC Bind DNS Server to discover hosts and add them to the inventory.

Input File	SSH Discovery

## Start by 🚯 Uploading a File or 📋 Paste a configuration text

elect a zone c	.oning me.
Choose File	no file selected
	ct configuration file or a compressed file with several configurations to se. ZIP and TAR files are supported.

## Firewall

Connects to Firewall configs (OPNsense, Palo Alto, Fortinet). A config file may be uploaded or configuration text pasted directly into the text field.

А НОМЕ		¥= TO-DO LIST	E INVENTORY	矗 ANALYZE	III PLANNING	S EXPORT		8
DHCP DNS	Firewall Generic C	Config mDNS Loa	ad Balancer Ping Scan	RIR Router C	onfigs SSH Route	r Config SNMP ARP	SSDP Cloud Providers	

## **Firewall Config**

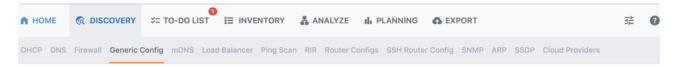
Supply a config file for a OPNsense, PaloAlto, or Fortinet Firewall device to discover network objects and add them to the Inventory.

#### Start by 🚯 Uploading a File or 📋 Paste a configuration text

Select a plain text configuration file or a compressed file with several configurations to start a batch parse. ZIP and TAR files are supported.	Choose File	no file selected
		t configuration file or a compressed file with several configurations to

# **Generic Config**

Attempts to parse non-supported devices via a config file in order to identify network resources and add them to the inventory.



## **Generic Config**

Supply a config file for a non-supported device and the Generic Parser will attempt to identify network resources and add them to the inventory.

Start by 🚹	Uploading a File or	Paste a config	juration text
------------	---------------------	----------------	---------------

Select a config	g file:	
Choose File	no file selected	
	xt configuration file or a compressed file with several configurations rse. ZIP and TAR files are supported.	; to
	Reset Pars	e File
	Reset Pars	e Fi

## **mDNS**

Scans for Multicast DNS identifiable devices. Simply enter a service, domain, and a timeout (in seconds).

HOME		≎= TO-DO LIST	I≡ INVENTORY	홃 ANAL	YZE 航 P	LANNING	C EXPORT			111	?
OHCP DNS	Firewall Generic	Config mDNS Loa	ad Balancer Ping Sc	an RIR Ro	uter Configs	SSH Router (	Config SNMP	ARP SSD	P Cloud Providers		
Multicas											
		mDNS-identifiable d	evices and add them	to the inven	tory. Depend	ing on the set	tings, not all d	levices may b	e discovered.		
Service											
Enter a s	service name. Exam	ple: _httptcp									
Specify the	e service you want to o	discover on your local	network.								
Domain											
Enter a d	domain name. Exam	ple: local									
Enter the c	domain name for the se	ervice you're looking fo	or.								
Timeout (	seconds)										
15				٢							
Set the tim seconds.	ne in seconds for the s	canner to search for se	ervices. The default val	ue is 15							
				Scan							

## Load Balancer

Connects to Load Balancer configs (F5). A config file may be uploaded or configuration text pasted directly into the text field.

角 НОМЕ		\$= TO-DO LI	ST <sup>1</sup> ☷ INVE	NTORY	AN 🗛	NALYZE	ılı P	LANNING	<b>G</b> EXI	PORT				밵	0
DHCP DNS	Firewall Generic C	Config mDNS	Load Balancer	Ping Scan	RIR	Router Co	onfigs	SSH Router	Config	SNMP	ARP	SSDP	Cloud Providers		

## Load Balancer

Supply a config file for a F5 Load Balancer to discover network objects and add them to the inventory.

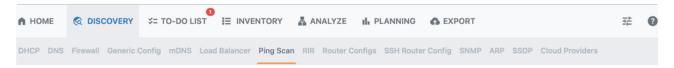
Start by	F	Uploading a File or	Ĉ	) Paste a	config	guration	text
----------	---	---------------------	---	-----------	--------	----------	------

Choose File no file selected elect a plain text configuration file or a compressed file with several configuration	e File r	no filo coloctori			
elect a plain text configuration file or a compressed file with several configuration		to me selected			
tart a batch parse. ZIP and TAR files are supported.	atch parse.	ZIP and TAR files are	supported.		

# **Ping Scan**

Enter a CIDR to detect hosts and add to the inventory. The scan can be adjusted via a slider to emphasize either speed or accuracy or balanced between the two options.

It is recommended to perform a ping scan after an RIR scan in order to discover individual hosts.



## **Ping Scan**

Supply a scan range in CIDR notation (ex: 192.168.0.0/24) to detect hosts and add them to the inventory.

CIDR:	
16.98.0.0/16	
Adjust scan accuracy ( 2 )	
Faster	Reliable
	Scan Clear results

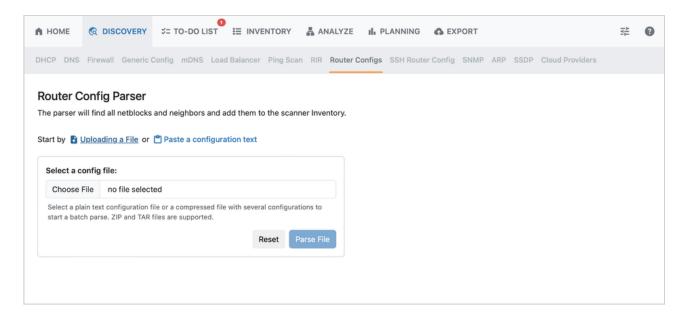
# **Router Configs**

The Router Config page allows the user to either paste full router configs, upload a single config file, or provide an archive of files. ReView parses these configs for configured networks.

Currently supported router configs include the following:

- Cisco IOS
- Cisco IOS-XR
- Juniper
- Arista

To upload a config file, from the "Uploading a File" section; select a plain text configuration file or a compressed file with several configurations, and click "Parse File".



To paste a router config, select "Paste a configuration text", paste your content, and click "Parse File".

А НОМЕ		∜= TO-DO L	IST 🗄 INVE	NTORY	4A 🗛	NALYZE 👖 P		EXPORT				백	0
DHCP DNS	Firewall Generic (	Config mDNS	Load Balancer	Ping Scan	RIR	Router Configs	SSH Router Co	onfig SNM	P ARP	SSDP	Cloud Providers		

## **Router Config Parser**

The parser will find all netblocks and neighbors and add them to the scanner Inventory.

St	art by 🚡 Uploading a File or (🖱 Paste a configuration text
	Paste config file content:
	Paste Config Here
1	
	Reset Parse File

# SSH Router Config

You may also provide credentials for a router, connect via SSH, and then extract the router config in order to integrate it into the tool.

Select a router type from the dropdown and then click "Add Credentials".

角 НОМЕ		≍= to-do li	ST <sup>1</sup> ☷ INVE	NTORY	AA 🗸	IALYZE 📊	PLANNING	🔥 EX	PORT				?
DHCP DNS	Firewall Generic C	Config mDNS	Load Balancer	Ping Scan	RIR	Router Configs	SSH Router	Config	SNMP	ARP	SSDP	Cloud Providers	

## SSH Router Config

Provide SSH credentials and specify the router type to extract the Router Config and integrate it into the network tool.

SSH Credentials	Router Type	
+ Add Credentials	Cisco XE Router	Scan
Apply SSH Credentials in order to analyze a router's loaded configuration. If you don't have direct connectivity add a sequence of SSH Routes (jump hosts).		

Enter SSH credentials in the resulting form and click the "Add" button.

		€ S= TO-DO LIST	E INVENTORY	홃 ANALY2	E III PLANNING					8
DHCP DNS	Firewall Generic	Add Credent	ials							
	ter Config credentials and spe	Host: enter SSH Host	←		Port:					
	Credentials	Username:	ame		Password:	←		- (	Scan	
	Credentials in order to	Clear			C	Cancel Add Credenti	ials			

# SNMP

To initiate an SNMP scan, enter credentials and a router IP.

▲ HOME S DISCOVERY S	TO-DO LIST 🗄 INVENTORY	ANALYZE 🔒 PLANNING 🚯 EXPORT	幸 0
DHCP DNS Firewall Generic Conf	ig mDNS Load Balancer Ping Scan	RIR Router Configs SSH Router Config SNMP A	RP SSDP Cloud Providers
SNMP Scan Enter SNMP credentials appropriate	to your network and a Router IP to discor	ver network objects and add them to the Inventory SSH Credentials	Router IP
+ Add SNMP Community	+ Add User	+ Add Credentials	X.X.X.X OF XXXX:XXXX Scan
		Apply SSH Credentials in order to perform an SNMP Scan using a jump host.	

# ARP

Supply SSH credentials and a router type to fetch the ARP table and add its contents to the inventory

角 НОМЕ		\$= TO-DO LIST	INVENTORY	홃 ANALYZE	ılı P	LANNING	<b>G</b> EX	PORT					•	3
DHCP DNS	Firewall Generic	Config mDNS Load	d Balancer Ping Sca	n RIR Router	Configs	SSH Rout	er Config	SNMP	ARP	SSDP	Cloud Providers			
ARP Supply SSH		uter type to fetch the	e ARP table and add i		he invent Router T									
	Credentials				Cisco XE						~	Sca	an	
			If you don't have direct H Routes (jump hosts).											

Select a router type and click "Add Credentials". Enter credentials in the resulting form, and click the "Add" button.

Add Credentials	
Host:	Port:
enter SSH Host ┥	22
Username:	Password:
enter SSH Username ┥	enter SSH Password
Clear	Cancel Add Credentials

## SSDP

Initiates a scan to search for devices responding to SSDP. The default timeout is 15 seconds.



## Simple Service Discovery

Initiate a scan to search for devices responding to SSDP and add them to the inventory. Depending on the settings, not all devices may be discovered.

Timeout (seconds)	
15	٢
Set the time in seconds for the scanner to sea seconds.	rch for services. The default value is 15
	Scan

# **Cloud Providers**

Select a cloud provider and enter credentials to scan cloud provider hosts and add them to the inventory.

HOME		∜= TO-DO LIST	☷ INVENTORY & ANAL	YZE 📊 PLANNING 🏠 EX	KPORT	
ICP DNS	Firewall Generic	Config mDNS Loa	d Balancer Ping Scan RIR Ro	outer Configs SSH Router Config	SNMP ARP SSDP	Cloud Providers
	ntials to a cloud pre	ovider to discover ho	osts and add them to the inventor			
Google JS	ON Credentials			Cloud Provider		
Choose F	ile no file select	ted	Test credentials	Google Cloud		✓ Scan
Select a cre	dentials file to start.	JSON files are support	ed			

# Next Steps

If neighboring devices have been discovered via the router config discovery option, those devices will be populated into the To Do List tab for further scanning.

Once one or more of the available Discovery modules has been processed, all found space will be loaded into the Inventory tab for display and auditing.

# To-Do List

ReView						- 0	
C DISCOVER	Y \$= TO-DO LIST I≣	INVENTORY & ANAL	YZE 📊 PLANNING 👩 E	XPORT			
To-Do List When new neighboring	devices are discovered, they	are added to the to-do list for	or future scanning.				
Results 124							
Address	SNMP Scan	SSH Scan	Config Scan	Ping Scan	Status	Options	
10.100.1.1	SNMP	SSH	Select type 🗸		Pending	۵	
10.100.1.20	SNMP	SSH	Select type 🗸 🗸		Pending	۵	
10.100.1.31	SNMP	SSH	Select type 🗸 🗸		Pending	۵	
10.100.1.32	SNMP	SSH	Select type 🗸 🗸		Pending	\$	
10.100.1.33	SNMP	SSH	Select type 🗸 🗸		Pending	۵	
41.91.0.0/16				Ping	Pending	۵	
41.155.128.0/17				Ping	Pending	۵	
41.190.248.0/22				Ping	Pending	\$	
45.96.0.0/13				Ping	Pending	۵	
45 404 0 0/40				Thin a	Contraction of the local division of the loc	-	

The To-Do list identifies and marks neighboring devices encountered during SNMP, SSH, router config, or ping discovery scanning. Users may then review, update the type of config scan, or mark with updated status flags.

# Working with the To-Do List

The To-Do list is only populated from discovery runs where SNMP, SSH, router config, or ping scans encounter new neighboring devices.

Once encountered, the address will be added to the list and the source marked (SNMP, SSH, Config, or Ping), so that users may return to the encountered devices to run additional scans, if needed.

n	R DISCOVERY	\$= TO-DO LIST	E INVENTORY	홃 ANALYZE	III PLANNING				
	Do List n new neighboring dev	vices are discovered, t	they are added to the	to-do list for futur	re scanning.				
Re	esults 2								
Ad	dress	SNMP Scan	SSH Sc	an	Config Scan	Pir	ng Scan	Status	Options
0.0	0.0					P	ing	Pending	•
67.	221.240.0/20					P	ing	Pending	\$

## Options

By default, the status of an encountered device is "pending", serving as a reminder to review or scan the device. You may change the status at any time from the Options  $\rightarrow$  Action menu (gear icon).

## To-Do List

n

When new neighboring devices are discovered, they are added to the to-do list for future scanning.

@ DISCOVERY SE TO-DO LIST SE INVENTORY & ANALYZE IL PLANNING ▲ EXPORT

Results 2						
Address	SNMP Scan	SSH Scan	Config Scan	Ping Scan	Status	Options
0.0.0.0				Ping		۲
67.221.240.0/20				Ping	Mark Pending Mark Scanned	٠
					Mark Ignored	

To mark the status of a device, right click anywhere on a row to open the Action Menu. You can choose from pending, scanned, or ignored.

# Next Steps

Once the To-Do List items have been reviewed, scanned, or ignored as needed, proceed to the Inventory tab to review all netblocks, ips, and sources found during discovery.

# Inventory

HOI	ME 🔞 DISCOVERY 💝 TO-DO LIST	E INVENTORY	뤏 ANALYZE	III PLANNING	EXPORT				·菲 🔞	
netk	blocks (74) ips (700255) sources (12	)								
Opt	ions Refresh C Add Netblock +			Vi	sibility Unign	ored Only 🗸	Show 100 ~	Search	٩	
ŧ	CIDR	Used IPs	Source	In use	CIDR Org.	Direct IPs	Total IPs in tree	RIR Attributes	Options	;
	8.0.0.0/12	59.06 %	scanned RIPE	Unknown	8.0.0.0/12	0	619,303	ARIN	٠	
3	8.0.0.0/13	49.78 %	scanned RIPE	In Use	8.0.0.0/13	0	260,969	ARIN	٠	
-	8.0.0.0/14	39.07 %	scanned RIPE	In Use	8.0.0.0/14	0	102,411	ARIN	٠	
÷	8.0.0.0/15	34.30 %	scanned RIPE	In Use	8.0.0.0/15	0	44,956	ARIN	٠	
=	8.2.0.0/15	43.83 %	scanned RIPE	In Use	8.2.0.0/15	0	57,455	ARIN	٠	
-	8.2.0.0/16	48.65 %	scanned RIPE	In Use	8.2.0.0/16	0	31,884	ARIN	٠	
Ξ	8.2.0.0/17	<mark>23.86</mark> %	scanned RIPE	In Use	8.2.0.0/17	0	7,817	ARIN	\$	
3	8.2.64.0/18	47.71 %	scanned RIPE	In Use	8.2.64.0/18	0	7,817	ARIN	٠	
3	8.2.6	<mark>17.5</mark> 9 %	scanned RIPE	Unknown	8.2.64.0/19	0	1,441	ARIN	٠	
3		35.18 %	scanned RIPE	Unknown	8.2.80.0/20	0	1,441	ARIN	٠	
=	i	35.16 %	scanned RIPE	Unknown	8.2.80.0/21	0	720	ARIN	•	
3		21.19 %	scanned RIPE	Unknown	8.2.80.0/22	0	217	ARIN	\$	

The Inventory tab displays an organized list of all discovered subnets, IPs, and associated metadata.

Here, for each netblock you can view RIR, Source, CIDR, use status, IPs found, total IPs, IP utilization, and start/end address.

# Netblocks List:

# Netblocks Tab

HON	AE 🔇 DISCOVERY 🌫 TO-DO LIST	INVENTORY III	홃 ANALYZE	III PLANNING	EXPORT				荘 🕖
netbl	locks (74) ips (700255) sources (12								
Opti	ons Refresh C Add Netblock +			Vi	sibility Unign	ored Only 🗸	Show 100 ~	Search	٩
ŧ	CIDR	Used IPs	Source	In use	CIDR Org.	Direct IPs	Total IPs in tree	RIR Attributes	Options
8	8.0.0.0/12	59.06 %	scanned RIPE	Unknown	8.0.0.0/12	0	619,303	ARIN	•
Ξ	8.0.0.0/13	49.78 %	scanned RIPE	In Use	8.0.0.0/13	0	260,969	ARIN	٠
8	8.0.0/14	39.07 %	scanned RIPE	In Use	8.0.0.0/14	0	102,411	ARIN	٠
÷	8.0.0.0/15	34.30 %	scanned RIPE	In Use	8.0.0.0/15	0	44,956	ARIN	٠
8	8.2.0.0/15	43.83 %	scanned RIPE	In Use	8.2.0.0/15	0	57,455	ARIN	٠
Ξ	8.2.0.0/16	48.65 %	scanned RIPE	In Use	8.2.0.0/16	0	31,884	ARIN	٠
8	8.2.0.0/17	23.86 %	scanned RIPE	In Use	8.2.0.0/17	0	7,817	ARIN	٠
Ξ	8.2.64.0/18	47.71 %	scanned RIPE	In Use	8.2.64.0/18	0	7,817	ARIN	٠
Θ	8.2.6	<mark>17.5</mark> 9 %	scanned RIPE	Unknown	8.2.64.0/19	0	1,441	ARIN	٠
Ξ	·	35.18 %	scanned RIPE	Unknown	8.2.80.0/20	0	1,441	ARIN	٠
8	i	35.16 %	scanned RIPE	Unknown	8.2.80.0/21	0	720	ARIN	٠
8		21.19 %	scanned RIPE	Unknown	8.2.80.0/22	0	217	ARIN	۵

## **View Options:**

## The following view options are available in the Inventory list:

Communication and the state of the state of

- Visibility: Select whether to view all netblocks/ips, ignored only, or unignored only.
- Show: Select the quantity of netblocks/ips to display per page.
- Search / Filter: Enter a CIDR or partial CIDR to filter to matching results.
- Column Resize: Column size may be manually adjusted by clicking and dragging on the vertical bar (pipe) between column headers.

## **Netblocks List Tree View:**

Tree View shows child blocks in a hierarchy format. Click the +/- box next to the CIDR to expand or close the tree view hierarchy for the netblock.

HOME			뵯 ANALYZE I	II: PLANNING	EXPORT				1	0	
netblock	\$ (74) ips (700255) sources (12	)									
Options	Refresh C Add Netblock +			Vi	sibility Unign	ored Only 🗸	Show 100 ~	Search		٩	
E) CID	R	Used IPs	Source	In use	CIDR Org.	Direct IPs	Total IPs in tree	RIR Attr	ibutes	Options	5
8.0.	0.0/12	59.06 %	scanned RIPE	Unknown	8.0.0.0/12	0	619,303	ARIN		\$	
Θ	8.0.0.0/13	49.78 %	scanned RIPE	In Use	8.0.0.0/13	0	260,969	ARIN		\$	
Θ	8.0.0.0/14	39.07 %	scanned RIPE	In Use	8.0.0.0/14	0	102,411	ARIN		\$	
Ð	8.0.0/15	34.30 %	scanned RIPE	In Use	8.0.0.0/15	0	44,956	ARIN		\$	
	8.2.0.0/15	43.83 %	scanned RIPE	In Use	8.2.0.0/15	0	57,455	ARIN		٠	
Β	8.2.0.0/16	48.65 %	scanned RIPE	In Use	8.2.0.0/16	0	31,884	ARIN		\$	
Θ	8.2.0.0/17	23.86 %	scanned RIPE	In Use	8.2.0.0/17	0	7,817	ARIN		\$	
Θ	8.2.64.0/18	47.71 %	scanned RIPE	In Use	8.2.64.0/18	0	7,817	ARIN		۵	
Θ	8.2.6	17.5 <mark>9 %</mark>	scanned RIPE	Unknown	8.2.64.0/19	0	1,441	ARIN		\$	
Ξ	·····» 8	35.18 %	scanned RIPE	Unknown	8.2.80.0/20	0	1,441	ARIN		۵	
Θ	L	35.16 %	scanned RIPE	Unknown	8.2.80.0/21	0	720	ARIN		\$	
8		21.19 %	scanned RIPE	Unknown	8.2.80.0/22	0	217	ARIN		٠	

## **Refresh:**

Click Refresh to check for updated data from the enabled sources.

## Add Netblock:

Click "Add Netblock" to manually add an undiscovered netblock to your inventory.

etblocks 68 ips (	5392) St	Add Netblock							
ptions <u>Refresh</u> C	Add Nett	RIR			CIDR *			earch	٩
				~	x.x.x.x/yy or x:x	cx:x:x:x:x:x/yy			
CIDR	RIR	Select a regional Internet regi	stry (RIR)		Enter the IP addre	ess		Used IPs	
2.56.14.0/24	RIPE	Source *						14.84 %	
2.57.14.0/24	RIPE						~	0.39 %	
5.104.168.0/23	RIPE	Enter the source of this netblo	ick.					41.80 %	
5.104.174.0/24	RIPE	Mark Netblock As:						25.00 %	
46.253.134.0/24	RIPE	🗿 In Use 🔵 Unknown	Free	O Ignore	d			48.05 %	
78.128.67.0/24	RIPE	* Indicates required fields						12 11 %	
78.128.72.0/24	RIPE					-		1.17 %	
78.128.79.0/24	RIPE					Gre	cancel	17.19 %	
78.128.92.0/24	RIPE	ping scan(Ping sweep)	0	Unkr	iown 71	71	256	27.73 %	
78.128.94.0/24	RIPE	ping scan(Ping sweep)	0	Unkr	iown 150	150	256	58.59 %	
78.128.98.0/24	RIPE	ping scan(Ping sweep)	0	Unkr	iown 47	47	256	18.36 %	
							512	30.86 %	

Select the RIR, enter the CIDR, and designate the source for the new netblock. If the netblock is known to be used, select the "In Use" radio to ensure that the proper status is associated with the netblock. You can also mark netblocks as Unknown, Free, or Ignored.

When done, click "Create". The netblock will be added to inventory.

## **Netblock Options**

HO	DME 🔞 DISCOVERY 💝 TO-DO LIST	E INVENTORY	뵯 ANALYZE	III PLANNING	EXPORT						0	
neti	tblocks (74) ips (700255) sources (12	)										
Opt	tions Refresh C Add Netblock +			vi	sibility Unign	ored Only $\!$	Show 100 ~	Search			٩	
Ŧ	CIDR	Used IPs	Source	In use	CIDR Org.	Direct IPs	Total IPs in tree	RIR	Attributes	Op	otions	į
	8.0.0.0/12	59.06 %	scanned RIPE	Unknown	8.0.0.0/12	0	619,303	ARIN		\$	)	
		49.78 %	scanned RIPE	In Use	8.0.0.0/13	0	260.969	ARIN		•	_	
Ξ	8.0.0/14	39.07 %	scanned RIPE	In Use	8.0.0.0/14	0	Unknown		Set Netblor	ck As		
Ŧ	8.0.0.0/15	34.30 %	scanned RIPE	In Use	8.0.0.0/15	0	In Use		Ignore this	Netblo	ock	
8	8.2.0.0/15	43.83 %	scanned RIPE	In Use	8.2.0.0/15	0	Free		Ignore Othe	ers		
8	8.2.0.0/16	48.65 %	scanned RIPE	In Use	8.2.0.0/16	0	31,884	ARIN	Add Attribu	utes		
8	8.2.0.0/17	<mark>23.86</mark> %	scanned RIPE	In Use	8.2.0.0/17	0	7,817	ARIN		•		1
		47.71 %						ARIN				

For each netblock, the following options are available under Options → Action Menu (Gear Icon)

- Set status by selecting "Set Netblock As" and then choosing:
  - Unknown
  - In Use
  - Free
- Ignore this Netblock
- Ignore Others
- Add Attributes

• Add or edit attributes by selecting "Add Attributes", entering the name-value pair, then click "Save". You may also remove existing attributes by clicking "Remove" next to the desired attribute.

Add Attributes		
cidr:		
8.0.0.0/13		
The CIDR/IP that you selecte	d	
Name*	Value*	
Demo	Data2	Add
Attr name	Attr value	Action
Demo	Data 1	Remove
		Save Cancel

## IPs Tab

## **View Options**

The ips tab displays individual ip assets discovered during scanning, for user review. It contains the same view options as the netblocks tab - visibility, display count per page, and search/filter.

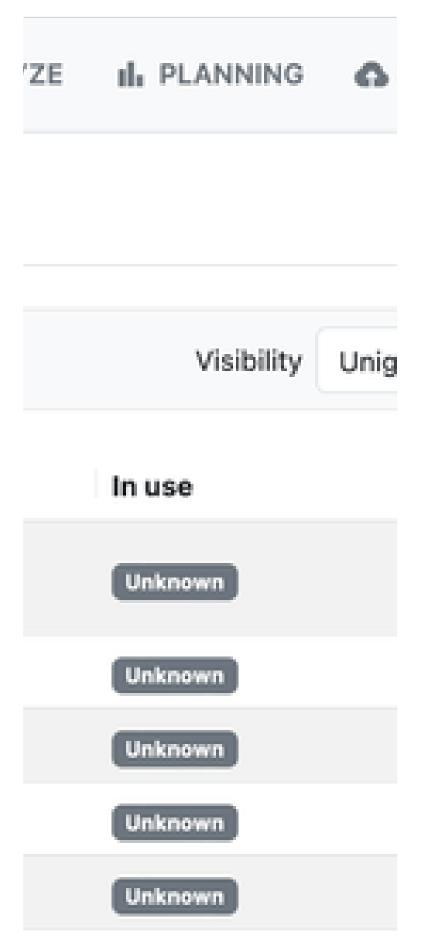
Additional CIDR-specific filtering options are available by clicking the filter icon next to the search box.

HOME		E INVENTORY	홃 ANALYZE I	ili planning 🛛 🚯 e	XPORT			3	1	
netblocks	(74) ips (700255) sources (12)									
Options	Refresh C Ignore/Unignore Range	Q	Visibility	Unignored Only $$	Show	100 ~	Search	٩	V V	
Address	Local CID	R	In use	Attribut	e Filte	ring opti	ons:	apply	clear	
2.56.14.66	2.56.14.0/	24	Unknow	attr1: val attr_arra				_		
2.56.14.67	2.56.14.0/	24	Unknow	n attr3: va	lt x.x	.x.x/yy or x	:x:x:x:x:x:x/yy 🗲			
2.56.14.68	2.56.14.0/	24	Unknow		<b>o</b> c	idr direct. r	eturns only the ips	which are direct	ly in the	
2.56.14.69	2.56.14.0/	24	Unknow	n		etblock idr.all.retu	rns all the ips in the	netblock and it	· c	
2.56.14.70	2.56.14.0/	24	Unknow			nildren	no un trio ipo in trio		0	
2.56.14.71	2.56.14.0/	24	Unknow	n						
2.56.14.76	2.56.14.0/	24	Unknow							
2.56.14.77	2.56.14.0/	24	Unknow		1					

Enter the CIDR to filter to, and select one of the following options:

- CIDR direct: Returns only the ips which are directly in the netblock
- CIDR all: Returns all of the ips in the netblock, and its children





# Unknown Unknown

To set the visibility status of an IP, right click anywhere on a row to open the Action Menu and select the desired option.

For each IP, the following options are available under Options → Action Menu (Gear Icon)

- Set visibility by selecting:
  - Ignore this IP
  - Ignore Others
  - Unignore Others
- Add Attributes
  - Add or edit attributes by selecting "Add Attributes", entering the name-value pair, then click "Save". You may also remove existing attributes by clicking "Remove" next to the desired attribute.

cidr:		
8.0.0.0/13		
The CIDR/IP that you selected		
Name*	Value*	$\sim$
Demo	Data2	Add
Attr name	Attr value	Action
Demo	Data 1	Remove

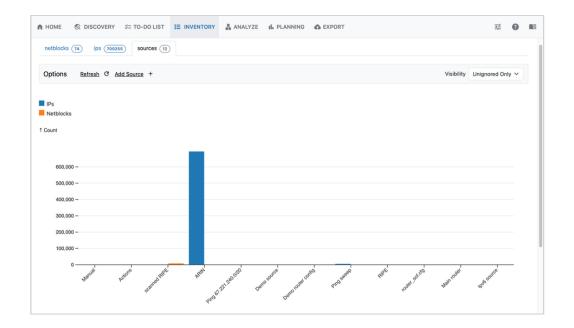
Scan for Open Ports

## Refresh

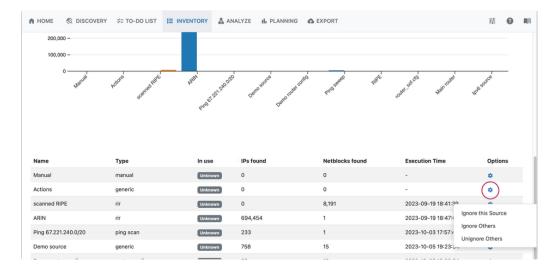
If data has changed due to additional scans, click "Refresh" to update the list.

## Sources Tab

The Sources tab displays a chart of the discovery tab configurations used to populate and update the inventory tab. Select which sources to view by visibility status via the dropdown at upper right.



Here, you may review sources and their associated count of netblocks found. Scroll down to view the list of sources and associated data.



For each source, the following options are available under Options → Action Menu (Gear Icon)

- Set visibility by selecting:
  - Ignore this Source
  - Ignore Others
  - Unignore Others

## Add Source:

If needed, you may add additional sources not found during discovery scans.

Click "Add Source" to manually add a source.

Enter the Name and IP, then click "Create".

n 🕲 DISCOVERY 🐲 TO-DO		141
netblocks (68) lps (5392) sc	Add Source	
Options Refresh C Add Sou	Name *     Visibility     Unignored Only ~       Type a name for the source     Enter the Source name	
IPs Netblocks		
† Count	Enter the Source IP * Indicates required fields	
5.000	Create Cancel	
3,000 -		
2.000		
1,000	Actions Ping sweep RIPE router sof cfg Main router Ipv6 source	
Manual	Actions Ping sweep RIPE router_soft ofg Main router Ipv6 source	

# Next Steps

After reviewing and adjusting your inventory and sources as desired, proceed to the Analyze tab to view free space and valuation based on your current network.

## Analyze

HOME	O-DO LIST IE INVENTO	RY 👗 ANA	LYZE II P	LANNING	C EXPORT				0
Analyze (381) Virtual (20)									
ESTIMATED TOTAL VALUE TX Min Sum: \$2,538,662.40 Max Sum: \$3,102,809.60	DTAL								
Options Refresh C Reinitialize	ර <u>Get Suggestions</u> II					Show 20 V	Search by CIDR		۹
CIDR	RIR	In use	Status	Mask	Minimum value	Maximum value	Aggregatable	Option	IS
	RIR	In use Unknown	Status Unknown	Mask 22	Minimum value \$0.00	Maximum value \$0.00	Aggregatable	Option \$	IS
8.3.184.0/22									IS
8.3.184.0/22	ARIN	Unknown	Unknown	22	\$0.00	\$0.00	10	٠	IS
8.3.184.0/22	ARIN ARIN	Unknown Unknown	Unknown Unknown	22 23	\$0.00 \$0.00	\$0.00 \$0.00	m m	•	IS
<ul> <li>8.3.184.0/22</li> <li>6.3.184.0/23</li> <li>8.3.184.0/24</li> <li>8.3.185.0/24</li> </ul>	ARIN ARIN ARIN	Unknown Unknown Unknown	Unknown Unknown Sellable	22 23 24	\$0.00 \$0.00 \$10,828.80	\$0.00 \$0.00 \$13,235.20		0 0	IS
<ul> <li>8.3.184.0/22</li> <li>6.3.184.0/23</li> <li>8.3.184.0/24</li> <li>8.3.185.0/24</li> </ul>	ARIN ARIN ARIN ARIN	Unknown Unknown Unknown Unknown	Unknown Unknown Sellable Sellable	22 23 24 24	\$0.00 \$0.00 \$10,828.80 \$10,828.80	\$0.00 \$0.00 \$13,235.20 \$13,235.20	10 10 10 10	0 0 0	IS
8.3.184.0/22         8.3.184.0/23	ARIN ARIN ARIN ARIN ARIN	Unknown Unknown Unknown Unknown	Unknown Unknown Sellable Sellable Unknown	22 23 24 24 23 23	\$0.00 \$0.00 \$10,828.80 \$10,828.80 \$0.00	\$0.00 \$0.00 \$13,235.20 \$13,235.20 \$0.00		0 0 0 0	IS
8.3.184.0/22	ARIN ARIN ARIN ARIN ARIN ARIN	Unknown Unknown Unknown Unknown Unknown Unknown	Unknown) Unknown) Seilable Seilable Unknown) Seilable	22 23 24 24 23 23 24	\$0.00 \$0.00 \$10,828.80 \$10,828.80 \$0.00 \$10,828.80	\$0.00 \$0.00 \$13,235.20 \$13,235.20 \$0.00 \$13,235.20			15

The Analyze tab interprets the IP inventory data found during Discovery, and determines valuation of free IPv4 space based on the current network structure.

## Analyze Blocks List

The Analyze tab Blocks List displays block inventory according to CIDR. It displays use status, sellable status, aggregatable status, and estimated min/max value of sellable space.

List Display options include the following:

### Filter / Search List:

At the top of the list, you can select the number of blocks to view per page (default is set to 20), and search/ filter for blocks.

9	CIDR	RIR	In use	Status	Mask	Minimum value	Maximum value	Aggregatable	Options
3	8.3.184.0/22	ARIN	Unknown	Unknown	22	\$0.00	\$0.00	no	•
9	8.3.184.0/23	ARIN	Unknown	Unknown	23	\$0.00	\$0.00	no	٠
	8.3.184.0/24	ARIN	Unknown	Sellable	24	\$10,828.80	\$13,235.20	no	•
	8.3.185.0/24	ARIN	Unknown	Sellable	24	\$10,828.80	\$13,235.20	no	٠
3	8.3.186.0/23	ARIN	Unknown	Unknown	23	\$0.00	\$0.00	no	•
	8.3.186.0/24	ARIN	Unknown	Sellable	24	\$10,828.80	\$13,235.20	no	•
	8.3.187.0/24	ARIN	Unknown	Sellable	24	\$10,828.80	\$13,235.20	no	•

#### Tree View:

Tree View shows child blocks in a hierarchy format. Click the +/- box next to the CIDR to expand or close the tree view hierarchy for the netblock.

Op	tions <u>Refresh</u> C <u>Reinitialize</u> ひ <u>Get S</u>	ugg <u>estions</u> II.					Show 20 V	8.3.184.0/22	0
÷	CIDR	RIR	In use	Status	Mask	Minimum value	Maximum value	Aggregatable	Options
3	8.3.184.0/22	ARIN	Unknown	Unknown	22	\$0.00	\$0.00	no	•
Ŧ	8.3.184.0/23	ARIN	Unknown	Unknown	23	\$0.00	\$0.00	no	•
Ξ	8.3.186.0/23	ARIN	Unknown	Unknown	23	\$0.00	\$0.00	no	•
	8.3.186.0/24	ARIN	Unknown	Sellable	24	\$10,828.80	\$13,235.20	no	٠
	8.3.187.0/24	ARIN	Unknown	Sellable	24	\$10,828.80	\$13,235.20	no	•

## List Options

Options Refresh C Reinitialize O Get Suggestions II.

List management options are available in the top header of the analyze list view:

- · Refresh: Refreshes the list data from the database.
- Reinitialize: Performs a more intensive re-analysis of data and status from provided sources this may take some time, depending on the amount of blocks in inventory and sources.
- Get Suggestions: Provides optimization strategies based on the current use and status of the netblocks. Suggestions may be saved as a named optimization plan to compare against additional suggested plans under the Planning tab.

## Virtual Blocks Tab

HOME & DISCOVERY STO-DO LIS	ST INVENTOR	Y 👗 ANALYZE	III PLANNING	C EXPORT			0
Analyze (391) Virtual (20)							
ESTIMATED TOTAL VALUE TOTAL Min Sum: \$21,554,521.60 Max Sum: \$23,922,342.40							
Options Refresh C				Show 20	✓ Search by CIDF	2	٩
CIDR	RIR	In use St	tatus Mask	Minimum value	Maximum value	Aggregatable	3
5.104.168.0/23	RIPE	Unknown	/irtual 23	\$21,196.80	\$25,907.20	no	
78.142.4.0/23	RIPE	Unknown	/irtual 23	\$21,196.80	\$25,907.20	no	
82.118.246.0/23	RIPE	Unknown	/irtual 23	\$21,196.80	\$25,907.20	no	
178.132.84.0/23	RIPE	Unknown	/irtual 23	\$21,196.80	\$25,907.20	no	
46.253.134.0/24	RIPE	Unknown	/irtual 24	\$10,828.80	\$13,235.20	no	
78.128.92.0/24	RIPE	Unknown	/irtual 24	\$10,828.80	\$13,235.20	no	
78.128.94.0/24	RIPE	Unknown	/irtual 24	\$10,828.80	\$13,235.20	no	
78.142.1.0/24	RIPE	Unknown	/irtual 24	\$10,828.80	\$13,235.20	no	

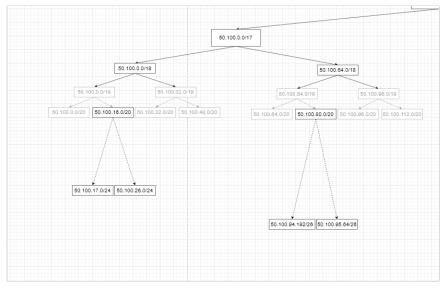
The Virtual tab displays blocks that are not directly created or in use, but are inherited subnets under the netblocks discovered by scans. These blocks have an estimated total value based on the full netblock mask being free. Virtual blocks which have real children are not sellable.

### Virtual Blocks: Example

In this example, we use a /17 at the top of the block tree, split down to eight /20s, with one /20 split down into two /24s, and another into two /26s on the other side of the tree.

In this diagram, the "real" created netblocks are displayed in black - these are the netblocks that would be displayed in the Analyze tab - Blocks list. These blocks may or may not be sellable, depending on use status and whether IPs exist under them.

The lighter grey blocks - the /19s and remaining /20s - are virtual blocks. They have not been created as "real" blocks, but can be inferred based on the ownership of the parent /18s and tree structure.



Virtual Blocks vs Real Blocks example diagram

#### Virtual Blocks and Sellable Status

In our standard Blocks list tab, if our example /20 with the /24 from it contains 50 IPs, none of the real netblocks are considered sellable - the /20 is not a leaf and the /24 (although it is a leaf) has IPs in it. This would result in a \$0 value estimation for the known existing blocks - which is not accurate when considering the entire tree structure. The /20 has many other netblocks under it which are not created or in use, and thus are free to be sold. These "not created" netblocks are displayed under the Virtual tab in ReView.

Virtual netblocks which have real children are not sellable, but those that are fully free without real children may be sellable. These show in the Virtual Blocks tab with an estimated value based on the full mask value being free.

Under our example parent block CIDR 50.100.16.0/20, the parent masks (/21, /22, /23) of our /24s - 50.100.17.0/24 and 50.100.26.0/24 - are not sellable, due to the /24s being real children. The same would apply to the parent blocks between our 50.100.80.0/20 and /26s on the other side of the tree. The remaining virtual blocks without real child blocks, however, would be sellable in this example.

## Working with the Analyze Tab

## Before You Begin

The Analyze tab interprets the netblock information gained from the Discovery and Inventory tabs and then combines that data with current available pricing estimations to provide an as-is valuation of free blocks.

Here are some steps that should be completed to ensure the Analyze tab has the best possible data available to determine pricing.

- 1. Ensure that Discovery steps are complete double check that sources, devices, ping scans, etc have been comprehensively added to discovery and cover the desired extent of your network.
- 2. Go through the To-Do List tab and verify listed blocks have been scanned or ignored as needed.
- Confirm blocks under the Inventory tab have the correct use status flags (in-use, free, unknown, ignored) assigned, and that any non-discoverable netblocks under consideration have been manually added to the Inventory List.

Once the data has been confirmed, you're ready to work under the Analyze tab!

## Step 1: Review Netblock Status

The Analyze list is populated with netblocks which have been marked as unused or unknown, and are sellable or potentially sellable blocks.

Sellable blocks: Blocks are considered "sellable" if they meet one of these conditions

- are marked as "Free"
- · are leaf only netblocks with "Unknown" status, and no IPs in them

In this tab, it is best to review netblock status (in-use, free, unknown, ignored) to confirm the correct status was assigned under the Inventory list.

#### **Update Netblock Use**

To make changes to the use status of a block, right click anywhere on a row to open the Action Menu and select to mark netblock use as unknown, in use, free, or ignored.

Jpt	ions <u>Refresh</u> C <u>Reinitialize</u> ひ <u>Get Su</u>	ggestions II.					Show 20 V	Search by CIDR	(
3	CIDR	RIR	In use	Status	Mask	Minimum value	Maximum value	Aggregatable	Options
Э	185.148.160.0/24	RIPE	Unknown	Unknown	24	\$0.00	\$0.00	no	٠
Ð	185.148.160.0/25	RIPE	Unknown	Unknown	25	\$0.00	\$0.00	no	٠
		RIPE	Unknown	Sellable	28	\$604.80	\$739.20	no	٠
	185.148.160.128/25	RIPE	Unknown	Sellable	25	\$5,184.00	\$6,336.00	no	\$
	185.148.161.0/25	RIPE	Unknown	Sellable	25	\$5,184.00	\$6,336.00	no	
9	185.148.161.128/25	RIPE	Unknown	Unknown	25	\$ Unknown		Set Netblock As	
	185.148.161.128/26	RIPE	Unknown	Sellable	26	\$ In Use		no	٠
	185.148.161.192/26	RIPE	Unknown	Sellable	26	\$ Free		no	٠
	178.132.84.0/23	RIPE	Unknown	Sellable	23	Ignored \$.		no	•

To make changes to the use status of a block, right click anywhere on a row to open the Action Menu and select to mark netblock use as unknown, in use, free, or ignored. The marked use will be considered when determining sellable status, valuation estimates, and optimization suggestions.

Step 2: Get Suggestions

Get Suggested Plan

# after execution):

# M: \$29,060,774.40

Ľ

.0/12

8.0.0.0/13

8.0.0.0/14

8.0.0.0/15

8.0.0.0/16

8.0.0.0

		 8
		_
		D

Once netblock use status has been reviewed for accuracy, click "Get Suggestions" to see optimization strategies (Note: Depending on the size of netblock inventory, the suggested strategy may take a minute to load).

Get Suggestions displays three panels and their associated values:

- Network structure before plan This shows the network structure as currently discovered, with pricing estimates based on keeping sellable blocks as-is at their current hierarchy location and size.
- <u>Results (after execution)</u> This shows the network structure optimized to locate as many sellable blocks as possible contiguously, within the current structure strategy. This consolidates as many sellable blocks as possible, without otherwise making changes to the network structure.
  - The Optimization algorithm takes the following steps, generally:
    - Remove empty leaves
    - Shrink netblocks
    - Renumber netblocks, while preserving the number of levels as originally structured
  - If the structure after removing empty leaves- was 4 levels, after optimization it will have 4 levels as well, with each parent containing exactly the same number of children.
  - This plan should be applicable to the existing network of the customer as we preserve parent-child relations.
- <u>Minimal Structure</u> Minimal structure proposes the greatest possible consolidation of sellable blocks, including minimizing the existing network hierarchy and reallocating
  assignments to only use the fewest blocks needed. This allows for far greater availability of contiguous sellable blocks, larger masks, and higher profit potential, but may not be
  realistically applicable to some needs.
  - The Minimal Structure algorithm takes the following steps:
    - Get only the leaves with IPs in them
    - Remove all intermediary netblocks
    - Consolidate to a single parent

After getting the suggested plan, you may opt to review the Config Dif or the list of free netblocks.

### **Config Dif**

Click the "Config Dif" tab under Get Suggestions to review a detailed list of configuration differences between the current state and suggested plan. This will assist in implementing the suggested plan.

Sugg	ested plan		
Plan	Configs Diff		
Config			1
Demo	source		
Old C	onfig	New Config	1
	Expand 38 lines		
39	ip route 10.10.25.2 0.255.255.255 dialer 0	39 ip route 10.10.25.2 0.255.255.255 dialer 0	
40	1	40 !	
41	ip dhcp excluded-address 50.100.80.1 50.100.80.1.10	41 ip dhcp excluded-address 50.100.80.1 50.100.80.1.10	
42	- ip dhcp excluded-address 50.100.228.1 50.100.228.10	42 + ip dhcp excluded-address 8.0.192.1 8.0.192.10	
43	ip dhcp excluded-address 50.100.90.1 50.100.90.10	43 ip dhcp excluded-address 50.100.90.1 50.100.90.10	
44	!	44 !	
45	ip dhcp pool vlan1	45 ip dhcp pool vlan1	
	Expand 7 lines		
53	ip dhcp pool vlan3	53 ip dhcp pool vlan3	
54	network 50.100.230.0 255.255.255.0	54 network 50.100.230.0 255.255.255.0	
55	- default-router 50.100.230.1	55 + default-router 8.0.194.1	
		FC 1	
Free	Netblocks A Plan Na	ame • Type plan name Copy to clipboard Save plan Cance	

You may save the plan, copy it to clipboard, and view free netblocks.

## Free Netblocks

Click on "Free Netblocks" and select a plan strategy to view a list of free netblocks under the plan.

Plan Configs Diff						
Network structure befo	re plan:	Resul	ts (after execution):	Minimal structure:		
INITIAL SUM: \$23,922,34	2.40	FINA	L SUM: \$29,060,774.40	MINIMAL SUM: \$29,455,032.20		
CIDR		8	CIDR	CIDR		
8.0.0.0/12		Θ	8.0.0.0/12	8.0.0.0/12		
8.0.0.0/13		Θ	8.0.0.0/13			
	14		8.0.0.0/14	8.0.18.0/24		
8.0	0.0.0/15	Θ		8.0.22.0/24		
E i	. 8.1.0.0/16	Θ	8.0.0.0/16	8.0.24.0/24		
8	8.1.0.0/17	Θ	8.0.0.0/20	8.0.28.0/24		
	8.1.0.0/18		8.0.5.0/24	8.0.38.0/24		
8	8.1.0		8.0.7.0/24	8.0.40.0/24		
nitial Free Netblocks	i			8.0.41.0/24		
Optimized Free Netblocks			8.0.11.0/2	8.0.43.0/24		

The Free Netblocks list will display with a list of CIDRS, and the estimated min/max values associated with them.

Results 602		
Netblock	Min value	Max value
50.100.0.0/16	\$3,299,737.60	\$3,647,078.40
8.10.128.0/17	\$1,525,350.40	\$1,685,913.60
8.2.0.0/18	\$731,545.60	\$808,550.40
8.7.0.0/18	\$731,545.60	\$808,550.40
8.11.128.0/18	\$731,545.60	\$808,550.40
8.12.0.0/18	\$731,545.60	\$808,550.40
8.13.192.0/18	\$731,545.60	\$808,550.40
8.15.128.0/18	\$731,545.60	\$808,550.40
8.0.96.0/19	\$357,990.40	\$395,673.60
8.0.224.0/19	\$357,990.40	\$395,673.60
8.3.64.0/19	\$357,990.40	\$395,673.60
8.5.96.0/19	\$357,990.40	\$395.673.60

## Save Suggested Plan(s)

Save the suggested plan by entering a plan name and clicking "Save Plan". Saved plans are available for review and comparison under the "Planning" Tab.

lan	Configs Diff					
Vetwor	k structure before plan:	Result	s (after execution):	N	/inimal structure:	
INITIAL	SUM: \$4,653,465.60	FINAL	SUM: \$32,872,960.00	MINIMAL SUM: \$37,855,641.60		
E CI	DR	8.1	CIDR		E CIDR	
8.0	0.0.0/12		8.0.0.0/12		8.0.0.0/13	
8		Θ				
Θ	8.0.0.0/14	Θ	8.0.0.0/14		8.2.0.0/17	
Ξ		Θ	8.2.0.0/15		8.2.128.0/19	
Ξ	8.1.0.0/16	Θ	8.2.0.0/16		8.2.160.0/24	
8	8.1.0.0/17		8.2.0.0/17		8.2.161.0/24	
8		Θ	8.2.128.0/17		8.2.162.0/24	
8	» 8.1.0.0/19	Θ	8.2.192.0/18		8.2.163.0/24	
Ξ	8.1.0.0/20	Θ	8.2.192.0/19		8.2.164.0/24	
Θ		Θ	8.2.192.0 <i>f</i> :		8.2.165.0/24	
Θ	i	Θ			8.2.166.0/24	
Θ		Θ	i		8.2.167.0/24	
		8			8.2.168.0/24	

# Next Steps

Next, proceed to the Planning tab to review and compare saved plans.

# Planning

	(c) DISCOVERY	¥= TO-DO LIST	INVENTORY ■	룗 ANALYZE	III PLANNING	C EXPORT		0
annir	ng							
	ew Analyze' algorithm s e' and save the optimize					To get started, first identify your s as you'd like.	available IP resources. Then,	navigate
lect Pla	in							
Plan Sug	ggestion 2	~						
Initial S	RATION SUMS VALUES Sum: \$23,922,342.4 I Sum: \$29,455,032	0						
Optimiz	ed Plan Minimal Pla	n Configs Diff						
Optimiz Resul		n Configs Diff						
Resul		n Configs Diff		Original	CIDR		Children IPs	
8	ts 🕦	n Configs Diff		Original 0			Children IPs	
Resul	ts 1	n Configs Diff		8.0.0.0/12				
Resul	ts 1 CIDR 8.0.0.0/12			8.0.0.0/12	!		no	
Resul	ciDR 8.0.0.0/12	4		8.0.0.0/12	8.0.0.0/13	5	no no	

The Planning tab shows the potential value for plans saved under the Analyze tab. Here, you may view the Optimized Plan, Minimal Plan, and Configs Diff for each plan saved from the Analyze Tab - Get Suggestions step.

# Select Plan

At the top of the page, click on "Select plan" to open the list of saved plans.

А НОМЕ	C DISCOVERY	∜= TO-DO LIST	INVENTORY INVENTORY	튧 ANALYZE	III PLANNING	C EXPORT	=;	0	
Planning	3								
			work infrastructure b led by the app. Feel f			To get started, first identify your ava s as you'd like.	ailable IP resources. Then	navigate	Ð
Select Plan						,			
Plan Sugg	estion 1	$\sim$							
	m: \$4,653,465.60 d Sum: \$32,872,9								
Optimized	d Plan Minimal Pl	an Configs Diff							
Optimized		an Configs Diff							

Then, select which saved plan to view.

HOME	C DISCOVERY	\$= TO-DO LIST	E INVENTORY	뤏 ANALYZE	III PLANNING	C EXPORT		荘 0	
Analyze' and lect Plan lan Suggest 'lan 1 - Initia lan Suggest COMPARATI	I save the optimiz	TOTAL	work infrastructure b led by the app. Feel f			To get started, first identify your a	available IP resources. Th	en, navigal	e
Optimized S Optimized Pl	um: \$29,060,73								
	an Minimal Pla								
Optimized Pl	an Minimal Pla			Original	CIDR		Children IPs		
Dptimized Pl	an Minimal Pla			Original 8.0.0.0/12			Children IPs no		
Dptimized Pl Results C CIDR 8.0.0	an Minimal Pla			8.0.0.0/12					
Dptimized Pl Results C CIDR 8.0.0	an Minimal Pic	n Configs Diff		8.0.0.0/12	2		no		
Dptimized Pl Results C CIDR 8.0.0	an Minimal Pla	n Configs Diff		8.0.0.0/12	8.0.0.0/13	15	no no		

The plan will load organized into three subtabs: Optimized Plan, Minimal Plan, and Config Diff.

For each plan, the plan CIDR, original CIDR, and child IP status is displayed.

The Optimized Plan shows the optimal consolidation plan, keeping the current network structure and number of levels intact:

角 ном	e 🕲 DISCOVERY	\$= TO-DO LIST	E INVENTORY	홃 ANALYZE	III PLANNING	C EXPORT		0	
	-					To get started, first identify your available I s as you'd like.	P resources. Then, n	avigate	0
Select I	Plan								
Plan S	suggestion 1	~							
Initia Optin Optin	PARATION SUMS VALUES I Sum: \$4,653,465.60 nized Sum: \$32,872,96 nized Plan Minimal Plar	0.00	r						
Res	ults 2								
8	CIDR			Original	CIDR		Children IPs		
	67.221.240.0/20			67.221.24	0.0/20		Show (464)		
⊟	8.0.0.0/12			8.0.0.0/12	:		no		
⊟	8.0.0.0/13			i	8.0.0.0/13		no		
Θ	8.0.0/14	L.			8.0.0.0/14		Show (30664)		
	8.2.0	.0/15			8.2.0.0/	5	no		

The Minimal Plan displays the highest value strategy to give the most free space, consolidating the structure into the fewest possible netblocks:

NOME       © DISCOVERY       2: TO-DO LIST       EI INVENTORY       ▲ ANALYZE       L. PLANNINO       ▲ EXPORT       2: E										
The 'ReView Analyza' algorithm streamlines your network infrastructure by maximizing free space utilization. To get started, first identify your available IP resources. Then, navigate to 'navigate gate as many plans as you'd like.  Select Plan Plan Suggestion 2  COMPARATION SUMS VALUES TOTAL Initial Sum: \$23,922,342.40 Uniminal Sum: \$23,922,342.40 Uniminal Sum: \$23,922,342.40 Confrigs Diff  Results Confrigs Diff  ColDR Confrigs Diff  ColDR Confrigs Diff  ColDR Confrigs Cold Automation Autom	1	номе	C DISCOVERY	\$= TO-DO LIST	INVENTORY	홃 ANALYZE	III PLANNING	S EXPORT		0 10
COMPARATION SUMS VALUES         TOTAL           Initial Sum: \$23,922,342.40         Minimal Sum: \$23,922,342.40           Minimal Sum: \$23,9455,032.20         Optimized Plan           Optimized Plan         Minimal Plan         Configs Diff           E         Configs Diff         Children IPs           B         8.00.0/12         E           B         4.00.0/13         E           B         4.00.0/14         E           B         4.00.0/15         E		The 'ReV to 'Analy;	iew Analyze' algorithm ze' and save the optimiz						ailable IP resources. Then, navi	gate
Initial Sum: \$23,922,342.40         Minimal Sum: \$29,455,032.20         Optimized Plan       Minimal Plan       Configs Diff         Results •       Original CIDR       Children Ps         •       0.00/12       80.00/12       10         •       + 80.00/13       10       10         •       + 80.00/14       10       10         •       + 80.00/15       10       10		Plan Su	uggestion 2	~						
CIDR         Original CIDR         Children IPs           8.00.0/12         600         600		Initial : Minim	Sum: \$23,922,342.4 al Sum: \$29,455,032	40 2.20						
B         B		Resu	ilts 🕦							
Image: Second region     Image: Second region		8	CIDR			Original	CIDR		Children IPs	
Image: second		8.0.0.0/12				8.0.0.0/12			no	
□ L									no	
									no	
□         ↓		Θ	·	0.0.0/15			8.0.0/1	5	no	
		A	L	8.1.0.0/16			8.1.0	0.0/16	no	

Configs Diff shows the side-by-side differences in the configuration for the plan implementation:

Planni	ing						
	iew Analyze' algorithm streamlines your network infrastructure by maximizing free : and save the optimized plan recommended by the app. Feel free to create and save	space utilization. To get started, first identify your available IP resources. Then, navigate to e as many plans as you'd like.					
Select P	lan						
Plan St	uggestion 2 V						
COMP	PARATION SUMS VALUES TOTAL						
Initial	Sum: \$0.00						
	al Sum: \$0.00						
Ontim	ized Plan Minimal Plan Configs Diff						
Config	s List						
Della	-						
Old C	onfig	New Config					
	Expand 38 lines						
39	ip route 10.10.25.2 0.255.255.255 dialer 0	39 ip route 10.10.25.2 0.255.255.255 dialer 0					
40	!	40 !					
41	<pre>ip dhcp excluded-address 50.100.80.1 50.100.80.1.10 - ip dhcp excluded-address 50.100.228.1 50.100.228.10</pre>	41 ip dhcp excluded-address 50.100.80.1 50.100.80.1.10 42 + ip dhcp excluded-address 8.0.192.1 8.0.192.10					
43	ip dhcp excluded-address 50.100.90.1 50.100.90.10	43 ip dhcp excluded-address 50.100.90.1 50.100.90.10					
44	1	44 !					
45	ip dhcp pool vlan1	45 ip dhcp pool vlan1					
	Expand 7 lines						
53	ip dhcp pool vlan3	53 ip dhcp pool vlan3					
		6. 33C 33C 8.00 C0.00 C					

The Configs Diff files may be copied to clipboard to save to paste into a local file for later implementation.

	source ~		
old Co	onfig	New C	Config
	Expand 38 lines		
39	ip route 10.10.25.2 0.255.255.255 dialer 0	39	ip route 10.10.25.2 0.255.255.255 dialer 0
40	1	40	1
41	ip dhcp excluded-address 50.100.80.1 50.100.80.1.10	41	ip dhcp excluded-address 50.100.80.1 50.100.80.1.10
42	- ip dhcp excluded-address 50.100.228.1 50.100.228.10	42	+ ip dhcp excluded-address 8.0.192.1 8.0.192.10
43	ip dhcp excluded-address 50.100.90.1 50.100.90.10	43	ip dhcp excluded-address 50.100.90.1 50.100.90.10
44	1	44	1
45	ip dhcp pool vlan1	45	ip dhcp pool vlan1
	Expand 7 lines		
53	ip dhcp pool vlan3	53	ip dhcp pool vlan3
54	network 50.100.230.0 255.255.255.0	54	network 50.100.230.0 255.255.255.0
55	- default-router 50 . 100 . 230 .1	55	+ default-router 8.0.194.1
56	1	56	1
57	ip ips po max-events 100	57	ip ips po max-events 100
58	no ftp-server write-enable	58	no ftp-server write-enable
59	1	59	1
	Expand 191 lines		

At this point, you may wish to review and compare multiple strategies for different plans, and decide on which version you may wish to implement.

# Next Steps

After reviewing plans from the Planning tab, you may optionally select to proceed to the Export tab to generate a network status report.

# Export

-	Summary to IP		r network and email	it to both you and	to IPv4.GLOBAL.		
Organiza	tion Name *						
Some C	)rg						
Company	name						
Your Ema	ail *						
example	e@someorg.com						
Enter a val	id email address						
* Indicates	required fields	Downloa	d PDF Upload				
pload	to Free ProVisi	on Trial					
	roVision						

## **Upload Summary**

The Export tab will prepare a report on the state of your network and email it to both you and to Ipv4.GLOBAL.

Enter an Organization Name and an email address and click "Upload" to send the report.

## **Generate PDF**

You may download a PDF of the report by clicking "Download PDF".

The PDF format will be downloaded as a tabular montetization report, displaying CIDR, RIR, Use, Status, Min Sum, and Max Sum.

Email: example@	someorg.co	om					
			By <b>Hilco</b> . Streambank				
Basic Monetiz	ation Pla	ın		Jurean	IDdHK™		
CIDR	RIR	In Use	Status	Min Sum	Max Sum		
8.3.184.0/24	ARIN	Unknown	Sellable	\$10,828.80			
8.3.185.0/24	ARIN	Unknown	Sellable	\$10,828.80			
8.3.184.0/23	ARIN	Unknown	Unknown	\$0.00			
8.3.186.0/24	ARIN	Unknown	Sellable	\$10,828.80			
8.3.187.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.3.186.0/23	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.3.184.0/22	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.9.112.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.9.113.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.9.112.0/23	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.9.114.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.9.115.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.9.114.0/23	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.9.112.0/22	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.11.112.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.11.113.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.11.112.0/23	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.11.114.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.11.115.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.11.114.0/23	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.11.112.0/22	ARIN	Unknown	Unknown	\$0.00	\$0.00		
8.2.80.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.2.81.0/24	ARIN	Unknown	Sellable	\$10,828.80	\$13,235.20		
8.2.80.0/23	ARIN	Unknown	Unknown	\$0.00	\$0.00		

# Upload to ProVision

If you are a ProVision user, or wish to trial ProVision using the inventory discovered in ReView, click "Export" to export data into your ProVision instance.