

Getting Started with the DDoS Mitigation and Reporting Portal

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Signing in to the portal

Your DDoS Mitigation service from Lumen, comes with a portal containing an extensive volume of dashboards and reports. Use this guide to acquaint yourself with the information available and how to navigate through the various pages.

When your service was activated, you received an email with instructions on how to activate your portal account. To summarize, you should have access to the following things:

- The link to the service: <u>https://globalview.lumen.com</u>
- Login credentials established during service activation
- Username
- PIN
- The RSA SecurID app available from your app store
- A Token for the RSA Secure

Each user will have a unique username and will use an auto-generated token for the password, combined with a PIN that you specify. You will need access to the RSA Token generation app that can be found at your app store.

Once you have your Username, PIN and RSA Token app, you are ready to sign in. When you click the portal link you will be provided with the following dialog.



Enter your unique Username in the top box. Your password will be the 4-digit PIN number you have established concatenated with the number generated by the RSA Token app.

Once signed in, you have access to all the DDoS Mitigation portal information that is applicable to your business.

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If you are already signed in to Control Center, you can navigate to the DDoS Mitigation portal: click **Reports**, then click **Security Solutions Analytics**.

LUM	1EN' Control Cen	ter	Logged in as: EID 1117181			EID 11171811 Ent	erprise 1117181
A Home	Reports	×		_		EXPLORE LUMEN HELP	CONTACT U
⊖ Admin	Billing Reports Voice Reports	v v	14 OPEN TICKETS	624 OFFEN ORDERS	2	Learn More About Control Center	
Inventory Orders	Network Reports Security Solutions Analytics		Contraction of the second seco	A Totaris Octors V	Frequently Visited	> Billing Indices > View Quites > Change Requests	
Mgmt		•	i i		Scheduled Maintenanc (S M	e October 2020 T W T F	60 5

From the Security Solutions Analytics page select "DDoS Mitigation and Reporting" as shown here.

uri	ity Solutions Analytics
Re	eports
	CenturyLink Security Solutions Reporting (powered by CenturyLink) Adaptive Network Security (ANS), Security Log Monitoring (SLM)
	DDoS Mitigation and Reporting Please use this link for DDoS mitigation reporting you have been migrated to the new CenturyLink DDoS mitigation platform. CenturyLink Security Solutions Reporting (powered by Splunk) Adaptive Network Security (ANS) report. Adaptive Threat Intelligence. DDoS Mitigation & Monitoring. DDoS Provy, Managed Exercise & UTM (CPE
	Adaptive Threat Intelligence with Domain Analytics (powered by CenturyLink) High fidelity threat intelligence reporting
	Akamai (Prolexic) DDoS Reporting DDoS attack/mitigation reports

You will need to sign in to the DDoS Mitigation and Reporting portal separately as described above, using your unique username, RSA PIN, and RSA token-generated code.



The DDoS Mitigation and Reporting dashboard

The first page presented to the Portal User is the DDoS Mitigation and Reporting dashboard. A snapshot is below.

arbor_portal_user_mddos_user Summary	Alerts			
(-in/+out) arbor_portal_user_mddos_user Summary jan 2021	Severity Level	Ongoing	Recent	Last 24 Hours
-100 k	High	Q	1	0
-200 k	Medium	<u>0</u>	<u>0</u>	0
-300 k	Low	<u>0</u>	<u>0</u>	0
-400 k	Total	<u>0</u>	1	0
-500 k				
-600 k				
1200 1400 1600 1800 2000 2200 200 400 600 800 1000 Tue 26				
View more				

Navigating by means of the top menu bar, portal customers can examine characteristics of their network traffic at any time, independent of DDoS events and alerts. Alerts can be examined through the menu bar, or from the Alerts panel in the Status page.

Traffic into (top) and out of (bottom) of the customer network appears on the left of the Status screen. On the right, a summary of current and recent DDoS alerts is presented in the upper right, note three control icons, illustrated below.

Tue 26 Jan 2021 15:53:04 MST cust_demo@arbor_portal_user_mddos_user <u>Log_Out</u>
000
jan 2021
Mart Man Mary

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The down-arrow icon is used to download this page to a PDF document. The mail icon us used to mail an image of the page. The question mark icon brings up an extensive on-line manual for the entire portal. This on-line manual is very detailed. Please note that not all features described in the manual are available to you as a user. A snapshot is below.

NETSCOUT. Arbor Sightli	ne and Threat N	Nitigation System
Contents Index	፤ 🖉 🗗 🕜	
 > Preface > Sightline and TMS User Guide > Introduction to Sightline and TMS > System Administration > Configuring Sightline Appliances 	For information about • Default content By default, your My My Sightline das	capabilities, see <u>Configuring Capability Groups</u> . of your <i>My Sightline</i> dashboard / <i>Sightline</i> dashboard contains the following gadgets: shboard default gadgets
Configuring Sightline to Learn about Y	Gadget	Description
 Configuring Monitored Network Device Configuring Managed Objects 	Introduction	A welcome gadget that describes how to use and customize the <i>My Sightline</i> dashboard.
Configuring Other Network Resources Configuring Notifications Configuring User Interface Settings	Top DoS Alerts	A summary of the top five ongoing DoS alerts on the network. Only high or medium alerts are displayed.
Configuring User Accounts, Account C Configuring ATLAS Services	Network Summary	A summary of your network's traffic over the last 24 hours.
✓ Monitoring the System	Top Customers	A summary of the top five customers consuming bandwidth on your network.
About the My Sightline Dashboar About Monitoring ABS Cloud Signs	Top Applications	A summary of the top five applications detected in your network's traffic.
About Monitoring APS Cloud Signa Monitoring Your Deployment About the Appliance Status Page Viewing General Appliance Statist Viewing Web UI Statistics Viewing Managed Services UI Stat	Top Countries	A summary of the top five countries consuming bandwidth on your network. Note IP Location data is only available when you deploy appliances that have the traffic and routing analysis role or Flow Sensor appliances with appliance- based licensing.
 Viewing TMS Appliance Statistics Monitoring Your Arbor Networks Ar About the Summary Tab on the Ap About the Per Appliance Metrics Ta About the Metric Comparison Tab Viewing ArborFlow Statistics Monitoring Account Status 	Adding content To add content to y 1. Navigate to the 2. Click Add Con 3. Hover your mo 4. Repeat Step 3	to your My Sightline dashboard rour My Sightline dashboard: e My Sightline page (System > My Sightline). tent. use pointer over the gadget that you want to add, and then click Add to Report. for each gadget that you want to add, and then click Hide.

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Navigating through the DDoS Mitigation portal

There are a couple of ways to navigate through this portal. Clicking through on clickable gadgets will typically bring the user to specific information on the gadget selected. Using the navigation bar is a quick way to get to specific spot in the portal.

Traffic > Summary > Application

Globalview displays a summary of the traffic, for all monitored networks of the customer, broken down by application.



The default period is the previous 24 hours. The period can be changed to various predefined selections or to "other" for a user-defined timeframe. The default display is bits per second (bps) but can be changed to packets per second (pps). Available graph types are Stacked, (default), Pie, and Bar.

The negative values show traffic out of the customer network ("in" to Lumen), and the positive is the traffic into the customer network ("out" of Lumen)

Any selected applications are shown in the graph with a unique color. Any unchecked applications are not represented in the graph. The table can be sorted by clicking on a column header. Click the column header again to reverse the order.

Traffic > Summary > TCP

Very similar to the Applications report, this screen constrains the report to TCP traffic broken down by TCP Port.



The default period is the previous 24 hours. The period can be changed to various predefined selections or to "other" for a user-defined timeframe. The default display is bits per second (bps) but can be changed to packets per second (pps). Available graph types are Stacked (default), Pie, and Bar.

The negative values show traffic out of the customer network ("in" to Lumen), and the positive is the traffic into the customer network ("out" of Lumen).

Any selected ports are shown in the graph with a unique color. Any unchecked ports are not represented in the graph. The table can be sorted by clicking on a column header. Click the column header again to reverse the order.

There is a similar report for UDP ports that looks, and behaves identically, constraining the report to UDP traffic aggregated by UDP port.

Traffic > Summary > TCP

This screen breaks down the customer's traffic by IP-level protocol.

1こN [®] Status Alerts	Traffic Mitigation	Administration			cust_demo@arbor_p	Tue 26 Jan 202 ortal_user_mddos
'arbor_portal_user_mddos_us	er' TCP Applications					
'arbor_portal_user_mddos_use DETAILS Period: This Month	r' TCP Applications Summa <u>ヽ</u> ン Units: bps ゝ Graj	ry 0 oh Type: Stacked ~	C Update			
her (In (+ Out)						
-10 k -20 k -30 k						
-40 k Thu 31 S 2021	un 3 Tue 5 Thu 7	Sat 9 Mon 11	Wed 13 Fri 15	Sun 17 Tue 19	Thu 21 Sat 23	Mon 25
Select All 🗙 Clear All	C Update				Avera	ge <u>Max</u> <u>PCT95</u>
TCP Application		Port	<u>In</u>	Out		Total (In + Out) 🗸
snpp		444	375.00 bps	0.00 bps		375.00 bps
www-http		80	369.00 bps	0.00 bps		369.00 bps
1024		1024	321.00 bps	0.00 bps		321.00 bps
submission		587	305.00 bps	0.00 bps		305.00 bps
submit		773	271.00 bps	0.00 bps		271.00 bps
ms-sql-s		1433	261.00 bps	0.00 bps		261.00 bps
mdbs-daemon		800	240.00 bps	0.00 bps		240.00 bps
smtp		25	238.00 bps	0.00 bps		238.00 bps
imaps		993	230.00 bps	0.00 bps		230.00 bps
nntps		563	225.00 bps	0.00 bps		225.00 bps

Those shown here, TCP, ESP (for VPN traffic), UDP, and ICMP are the most likely to be seen. This screen is very similar in appearance, and function to those discussed previously.

The default period is the previous 24 hours. The period can be changed to various predefined selections, or to "other" for a user-defined timeframe. The default display is bits per second (bps) but can be changed to packets per second (pps). Available graph types are Stacked, (default), Pie, and Bar.

The negative values show traffic out of the customer network ("into" Lumen), and the positive is the traffic into the customer network ("out" of Lumen).

Any selected protocols are shown in the graph with a unique color. Any unchecked protocols are not represented in the graph. The table can be sorted by clicking on a column header. Click the column header again to reverse the order.

Traffic > Profiles > Top Talkers

This screen identifies the systems generating the most traffic on the network that traverses the Lumen network:



The period is selectable from a pre-defined list. The graph type can be Bar (default), or Pie. Units can be bits per second (default) or packets per second.

For each of the top-ranked hosts, the time, and rate of their individual peak rate is shown. Those hosts that are checked are shown on the graph with a unique color. Those hosts left unchecked are not shown in the graph.

If the DNS name of host can be resolved, it is shown to the left of the IP address. None of the addresses in the example above can be resolved. If resolved, the name would appear in the blank space to the left of the address.

The table can be sorted by clicking on a column heading. The order of the sort can be reversed by clicking on the column heading a second time.

Traffic > Profiles > Profile Detail

The summary reports above are for all the networks being monitored that are associated with the Arbor portal account. If you have multiple profiles (a.k.a. "managed objects", or "zones"), you can view traffic reports restricted to one specific profile, with the options under Traffic \rightarrow Profiles. This is a traffic summary report for one profile.



A different profile can be chosen from the selection box. The time period is selectable and customizable. Graph type can be Stacked (default), Pie, or Bar. Units can be bits per second (default), or packets per second. When any of these options is changed the "Update" button must be clicked.

Traffic is displayed as "IN" represents, into the Lumen network, hence out of the customer's networks. Likewise, "OUT" represents, out of the Lumen network and into the customer's networks.

Traffic shown as "dropped" is traffic reported as dropped by backbone routers, not by the Arbor TMS DDoS mitigation devices. This data is unrelated to DDoS mitigations.

Only those directions/categories of traffic checked in the table are shown in the graph.

Application, Ports, Protocols, and Top Talker reports, identical to those previously discussed but restrained to a specific profile, are available under the Traffic \rightarrow Profiles menu.

DDoS Alerts

DDoS Alerts can be viewed under Alerts \rightarrow All Alerts, or by clicking on the number of ongoing or recent alerts on the status page. Here is a page resulting from clicking on the number of recent high alerts.

LUM	ΞN.	Status	Alerts	Traffic	Mitigation	Administration				T cust_demo@arbor_portal	ue 26 Jan 2021 _user_mddos_u	12:42:53 MST Jser <u>Log Out</u>
	All Alerts										000	
						Q , Search	Wizard	1 results (1	1.63 seconds)			
	<u>ID</u> ↓	Max Impact	Importan	<u>ce</u> 🖯	Alert			<u>s</u>	tart Time	Classification & Annotations		
	<u>10362460</u>	No Data	691.8% of 5	gh 53 pps	DoS Alert Incoming II to [NA]_C	Pv4 DoS Profiled Router Ba TL_BRM_lab_demo	ndwidth Attack	N (0	ov 20 02:12 2020 - 02:45 :33)	Possible Attack 🗩		
										Page generation took 1.89 s	econds (<u>Details</u>)	

Alerts matching the selection criteria are listed up to 10 per page. They can be sorted in various ways by clicking on the column headers. The small graph shows the traffic rates for the affected destination IPs for the duration of the alert.

The Importance is assigned automatically by the Peakflow system based on various criteria.

The Alert details shows the type of Alert (bandwidth, misuse, profiled, e.g.) and the name of the managed object (often called "zone") that is affected.

The start time and, if applicable, the end time of each alert is shown in the time zone configured for the portal account (defaults to UTC).

The Classification is initially assigned automatically by the Peakflow system as "Possible Attack". This can be manually changed by operators to one of None, Flash Crowd, Network Failure, Trivial, or Verified Attack. This is for notational purposes only and has no effect on the operation of the system, and Lumen operators may omit setting this after investigating an alert.

Annotations, shown with the Classification, display the last automatic, or manual comment added to the alert. The third line above shows an example of an automatic comment added when a mitigation of that attack was initiated from the alert. (It is possible to initiate mitigations in other ways that don't associate the mitigation with the alert, in which case, no annotation such as this would be created.)

DDOS Alert Summary

An alert can be inspected by clicking on the alert ID number:



The graph shows the total traffic associated with the affected IPs during the alert, along with some information about the alert, such as the data rates, the type of alert, and the affected profile. (Most customers have one profile, a.k.a. zone, some may have multiple.)

The Alert Characteristics panel shows the most relevant source, and destination IPs, ports, and protocols. Protocolappropriate information will also be shown, such as TCP Flags, ICMP codes, etc. The characteristics may be more or less specific, depending on the variation seen in the traffic. In this example, the source IPs are widespread on the Internet, some of the traffic has been narrowed down as coming from the same /10 network, but other traffic cannot be so categorized and is shown as coming from the Internet as a whole (0.0.0.0/0).

TCP Flags, list those flags commonly being seen in the traffic flow. These are all normal flags. A SYN Flood, e.g. would likely list only flag "S" as it would predominate.

DDoS Alert Traffic Details

More detail about the traffic generating a DDoS alert is available in the data from individual routers in the Lumen backbone. The list of affected interfaces on individual routers is shown on the Alert Summary page, and the detail coming from a specific interface is accessed with the "Detail" button for a specific interface.

Duration: Nov 20 02:12 2020 - 0 Summary Traffic Details J DETAILS Period: Alert Timefra	2:45 (0:33) Annotations me v Units: bps v View Ale	r: Managed Object B ert Traffic for To	oundary CUpdate	Mitigate Alert: 0	Generate Filter 🗮 View Scratchpad (0)
Summary Traffic Details	Annotations me v Units: bps v View Ale	r. Managed Object B ert Traffic for To	loundary C Update	ISSES	
DETAILS Period: Alert Timefra	me ∨ Units: bps ∨ View Ale	r: Managed Object B ert Traffic for To	Boundary C Update	sses	
bps	Al	ert Traffic for To	op Source IP Addre	sses	
bps	Al	ert Traffic for To	op Source IP Addre	sses	
300 k					Fri Nov 20 20 20
.00 K					
.00 k					
0 k 215	220	225	230	235	240 245
- 123.233.65.57752 - 124.2	5.25.111/52				
op Traffic Patterns (last 5 min of se	ected timeframe) 🕕				Lownload All Patterns
o patterns found in the last 5 minutes	of the selected timeframe.				
op 5 Items by Alert Traffic					
Course ID Addresses			Destination ID Add		
Source IP Addresses		66 DEN	Destination IP Add	resses	10.000
123.253.63.97/32	89.29 Kbps	22.65%	- 8.39.237.94/32		58.76 Kbps 43.66%
124.23.23.111/32	45.29 K0ps	33.03%	8.39.237.3/32		45.29 Kbps 22.68%
	Q View Grap	ph 2 reported	0.00.207.127732		Q View Graph 3 reported
Source TCP Ports			Destination TCP Po	orts	
⇒ 37742	5.88 Kbps 4	1.37%	▼ 1196	netmagic	5.88 Kbps 4.37%
- 9010 sdr	5.88 Kbps 4	1.37%	- 1806	musiconline	5.88 Kbps 4.37%
- 61906	4.53 Kbps 3	3.37%	- 219	uarps	4.53 Kbps 3.37%
···· 39557	4.53 Kbps 3	3.37%	· 401	ups	4.53 Kbps 3.37%
- 51322	4.53 Kbps 3	3.37%	- 1555	livelan	4.53 Kbps 3.37%
	Q View Grap	ph 🚯 View More	1		Q View Graph 🚯 View More
Source UDP Ports			Destination UDP P	orts	
 1024-65535 Dynamic 	9.97 Kbps 7	7.41%	- 92	npp	5.88 Kbps 4.37%
··· 13144	5.88 Kbps 4	1.37%	- 817		5.88 Kbps 4.37%
= 5583 tmo-icon-syn	c 5.88 Kbps 4	1.37%	- 1507	symplex	5.88 Kbps 4.37%
44788	5.88 Kbps 4	1.37%	991	nas	5.88 Kbps 4.37%
17710	5.88 Kbps 4	1.3/%	640	entrust-sps	5.88 Kbps 4.3/%
	Q View Grap	ph 🕒 View More			QView Graph 🚯 View More
Source ASNs			Destination ASMs		
	1010010	100.00%	Destination ASINS		100.000
U NULL	134.59 Kbps	100.00%	0	NULL	134.59 Kbps 100.00%
	Q View Grap	ph 1 reported			QView Graph 1 reported

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Administration → My Account

This page will display details of your account:

LUMEN Status	Alerts Traffic Miti	gation Administration	Tue 26 Jan 2 cust_demo@arbor_portal_user_mdd
	Edit My Account		0
	Account Configuration	Username Real Name Email Address Password Change Old Password for cust_demo New Password Confirm New Password	cust demo Demo account
		User Interface	
		Timezone Ul Menu	Default (America/Denver) mssp_noadmin.xml
		X Cancel Save	Page generation took 2.92 seconds (<u>Details</u>)

For more information

The DDoS Mitigation and Reporting portal offers excellent visibility into your DDoS Mitigation service. Make sure to use the Help selection often by selecting the "?" icon in the upper-right of every page for detailed descriptions of each page.

Additional information on DDoS Mitigation and other products can be found at the following locations:

- Lumen Security Solutions: https://www.lumen.com/en-us/solutions/connected-security.html
- DDoS Mitigation and Application Security: <u>https://www.lumen.com/en-us/security/ddos-and-web-application.html</u>
- Black Lotus LabsL: the Lumen Threat Research Lab: <u>https://www.lumen.com/en-us/security/black-lotus-labs.html</u>
- View a list of Lumen products: <u>https://www.lumen.com/en-us/resources/product-finder.html</u>
- Sign in to Control Center: <u>https://www.lumen.com/login</u>
- Learn more about Lumen: <u>www.lumen.com</u>

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