

Bandwidth Management on R/V Sikuliaq



Britton Anderson

*Senior Network Communications Specialist
University of Alaska, OIT Network Operations*

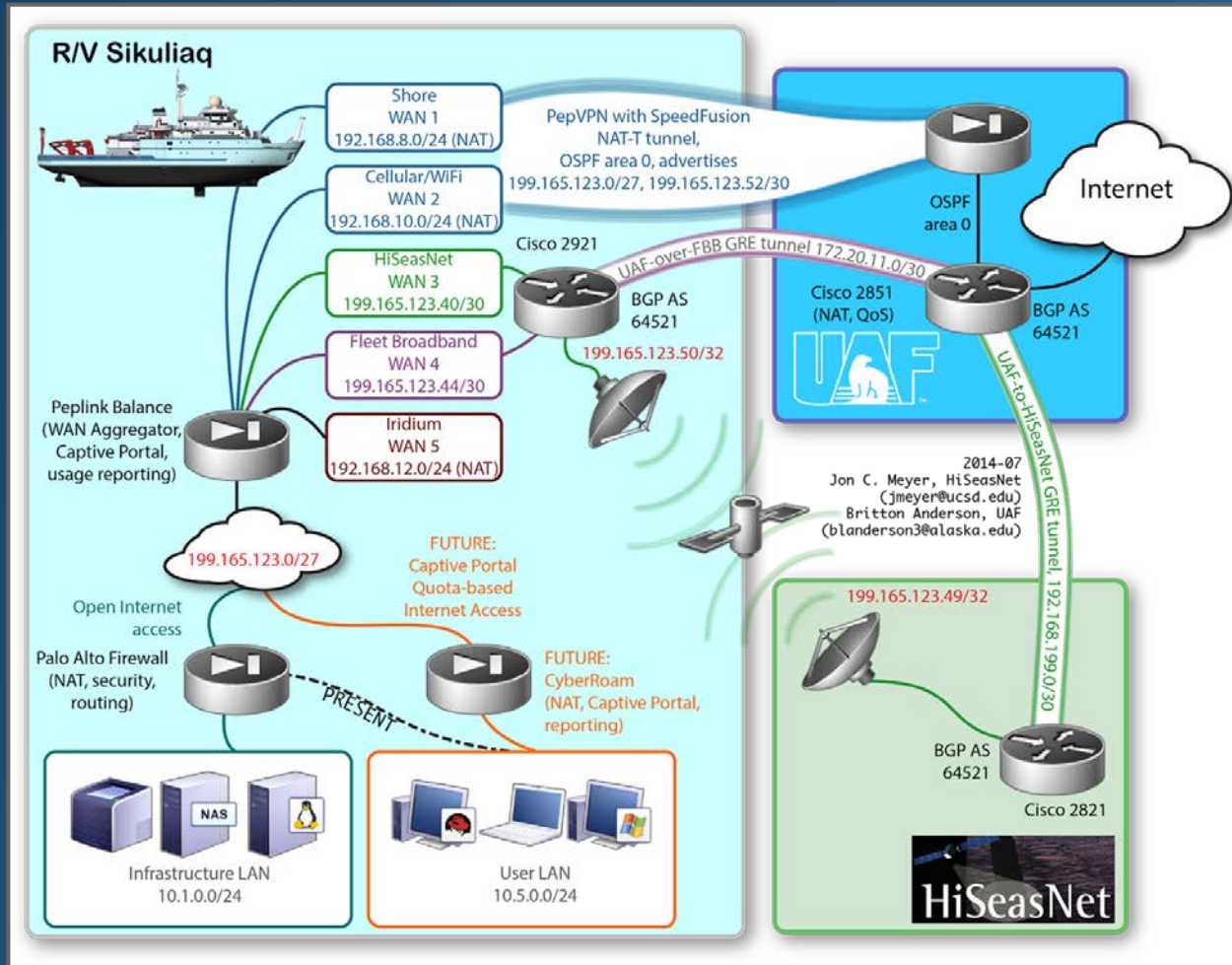


R/V SIKULIAQ

<http://www.sikuliaq.alaska.edu>



Internet Services



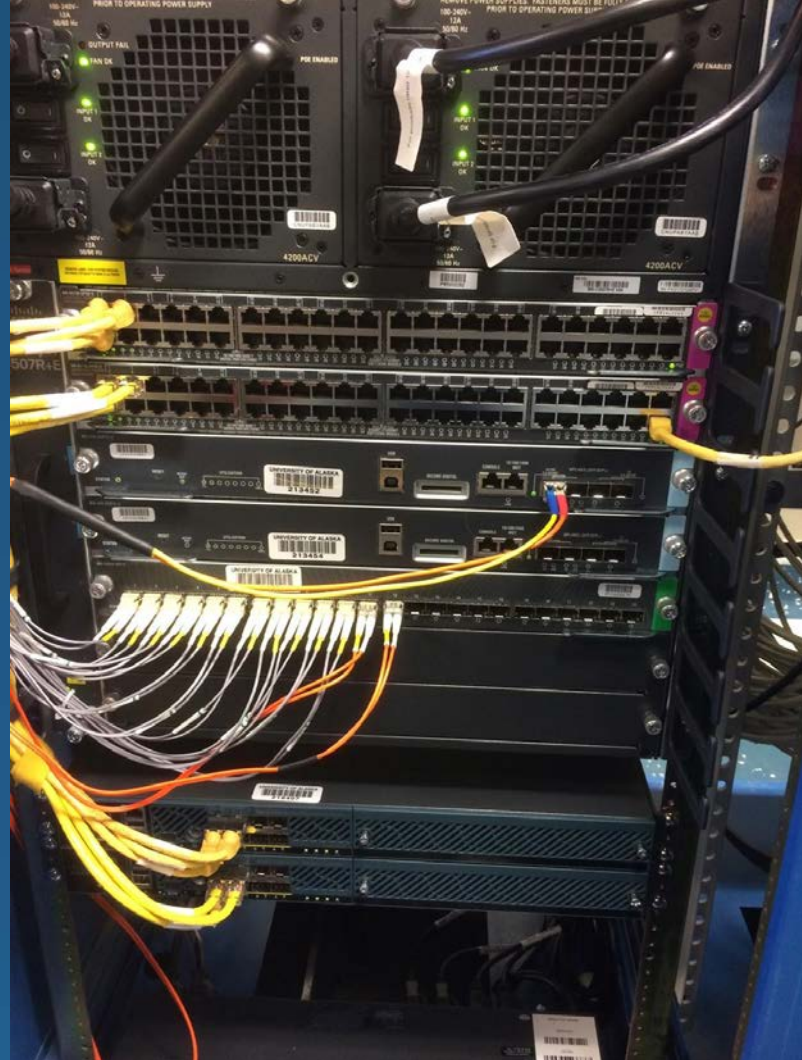
Service Provided by UA OIT Network Operations



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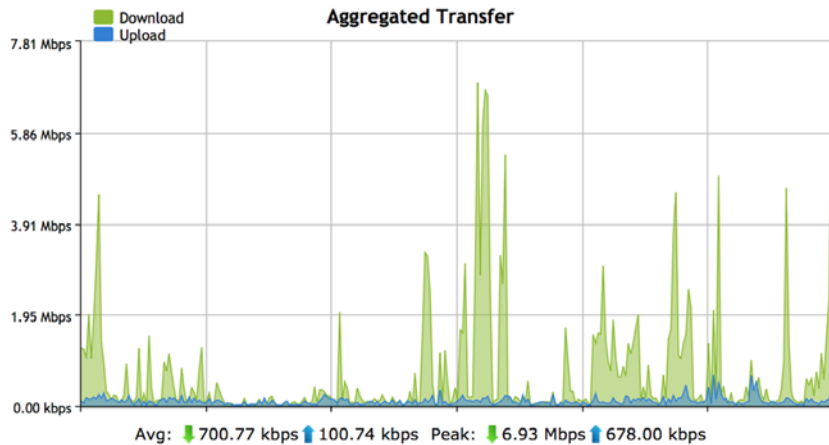
Peplink Web UI

Data transferred since installation Thu Jul 31 19:05:58 WET 2014

	Download	Upload	Total
All WAN Connections	623.92 GB	123.21 GB	747.12 GB

Data transferred since last reboot

	Download	Upload	Total
▼ All WAN Connections	584.89 GB	116.74 GB	701.63 GB
WAN1-Shore	370.19 GB	61.36 GB	431.55 GB
WAN2-Pepwave	144.83 GB	35.64 GB	180.46 GB
WAN3-HiSeasNet	67.30 GB	17.83 GB	85.13 GB
WAN4-FleetBroadband	2.58 GB	1.92 GB	4.50 GB
WAN 5-Iridium	0.00 MB	0.00 MB	0.00 MB



	Download	Upload	Total
Overall	5.80 Mbps	332.00 kbps	6.12 Mbps

Captive Portal Settings

Enable	<input type="checkbox"/>
Hostname	<input type="text" value="captive-portal.peplink.com"/> Default
Access Mode	<input type="radio"/> Open Access <input checked="" type="radio"/> User Authentication
Authentication	<input type="text" value="LDAP Server"/>
LDAP Server	<input type="text" value="199.165.123.25"/> Port <input type="text" value="389"/> Default
	<input checked="" type="checkbox"/> Use DN/Password to bind to LDAP Server
Bind DN	<input type="text" value="cn=Manager,dc=sikuliaq,dc=alaska,dc=edu"/>
Bind Password	<input type="password" value="....."/> <input checked="" type="checkbox"/> Hide Characters
Base DN	<input type="text" value="dc=sikuliaq,dc=alaska,dc=edu"/>
Base Filter	<input type="text" value="ou=people"/>
Access Quota	0 mins (0: Unlimited) 25 MB (0: Unlimited)
Quota Reset Time	<input checked="" type="radio"/> Daily at 08 :00 <input type="radio"/> 1440 minutes after quota reached
Allowed Networks	<input type="text" value="Domain Name / IP"/>
Splash Page	<input checked="" type="radio"/> Built-in <input type="radio"/> External, URL: <input type="text" value="http://"/>

Portal Customization



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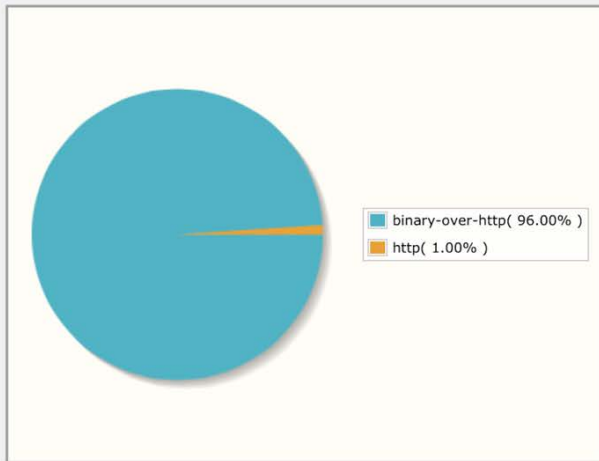


Cisco WLC Web UI

Application Last 90 Secs Stats

App Name	Packet Count	Byte Count	Average Packet Size	Usage(%)
binary-over-http	57135	53.14 MB	975	96.00
http	1900	960.99 KB	517	1.00
ssl	1051	369.88 KB	360	0.00
cifs	352	304.59 KB	886	0.00
yahoo-mail	2622	231.22 KB	90	0.00
facebook	275	82.68 KB	307	0.00
google-services	294	60.81 KB	211	0.00
dns	322	45.40 KB	144	0.00
skype	130	32.77 KB	258	0.00
snmp	89	13.51 KB	155	0.00

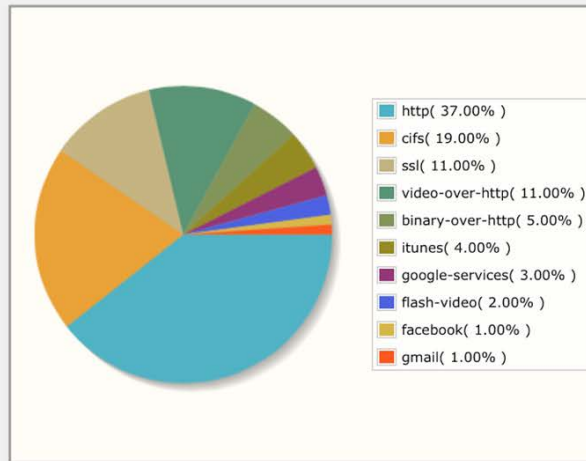
Application Last 90 Secs Usage(%)



Application Cumulative Stats

App Name	Packet Count	Byte Count	Usage(%)
http	679907378	542.46 GB	37.00
cifs	340546338	283.61 GB	19.00
ssl	426172284	165.14 GB	11.00
video-over-http	154649223	163.88 GB	11.00
binary-over-http	77673521	79.61 GB	5.00
itunes	66860152	58.55 GB	4.00
google-services	109151536	50.49 GB	3.00
flash-video	43162632	36.00 GB	2.00
facebook	43594215	28.47 GB	1.00
gmail	92649573	24.14 GB	1.00

Application Cumulative Usage(%)



Override Per-User Bandwidth Contracts (kbps) ¹⁶

	DownStream	UpStream
Average Data Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
Burst Data Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
Average Real-Time Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
Burst Real-Time Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
<input type="button" value="Clear"/>		

Override Per-SSID Bandwidth Contracts (kbps) ¹⁶

	DownStream	UpStream
Average Data Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
Burst Data Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
Average Real-Time Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
Burst Real-Time Rate	<input type="text" value="0"/>	<input type="text" value="0"/>
<input type="button" value="Clear"/>		

Palo Alto Firewall Policies

The screenshot displays the Palo Alto Networks firewall policy configuration interface. The 'Policies' tab is active, showing a list of 12 policies. An 'Application' dialog box is open, displaying a list of applications including 'Any', 'adobe-media-player', 'amazon-cloud-drive', 'apple-update', 'bittorrent', 'bittorrent-sync', 'dropbox', 'generic-p2p', 'google-update', 'google-video', 'http-video', 'itunes', 'mtb.tv', 'ms-update', 'napster', 'netflix', 'pandora', and 'vimeo'. The background table shows columns for Name, Tags, Zone, Source (Address, User, HIP Profile), Destination (Zone, Address), Application, and Service.

Name	Tags	Zone	Source Address	User	HIP Profile	Destination Zone	Destination Address	Application	Service
1. Blocked-Services	none	DMZ trust	any	any	any	DMZ untrust	any	adobe-media..., amazon-clou..., appleupdate..., bit torrent, bit torrent-syn..., dropbox, generic-p2p, more...	application
2. Shipwide-Privileged	none					DMZ untrust	any		application
3. Shipwide-UA	none					DMZ untrust	UA-Network, UA-Network2		application
4. Shipwide-Internet	none					DMZ untrust	any	InstantMesca...	application
5. Shipwide-DMZ-Allow	none					DMZ untrust	FBB-Net, HSN-Net, Peplink-Net, Ship-Public		application
6. Shipwide-Internal-Policy	none					DMZ trust	CoreCIDR, DataCIDR, VideoCIDR		application
7. Koski-Internet-Only	none					DMZ untrust	any		application
8. Shipwide-Block	none					DMZ untrust	any		application
9. Core-WLC-Comms	none					DMZ untrust	199.165.123.6, 199.165.123.7		application
10. Block-Inbound-to-Protected...	none	DMZ trust	CoreCIDR	any	any	DMZ trust	InfrastructureC...		application
11. Allow Core-Data	none	DMZ trust	CoreCIDR	any	any	DMZ trust	CoreCIDR		application
12. Block-Protected-Returns...	none	DMZ trust	DataCIDR, CoreCIDR, DataCIDR, VideoCIDR	any	any	DMZ trust	DataCIDR		application

The Beginning...



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