CWD Lab Infrastructure: Network

This page intends to describe the setup and configuration of the CWD lab network. **Documentation work is currently ongoing**.

Overview

Details

- **General Considerations**

  The lab network was implemented originally not fully redundant, due to the amount of switches available at the time.
  An upgrade to full redundancy was in process when the strategy change went effective. As the future of this ab remains uncertain at this stage, no more progress was made.

  A second S4810 was placed in rack 06 to be a secondary core router, either via VLTi or OSPF. In either case, more configuration and cabling will be required.

  There are 2 Juniper Firewalls (https://cwdiffwjun01.saas.local/ and http://cwdiffwjun02.saas.local/), which are running a basic configuration and can be implemented right away by cabling and configuring to specs. Credentials are listed here .

  The SilverPeak is sitting between the core router and another S60 as media converter. There should be no changes made to that to keep things running. This Silerpeak is owned by the SLS lab.

- **Diagrams**

The view below shows the racks and the location of the switches in there.

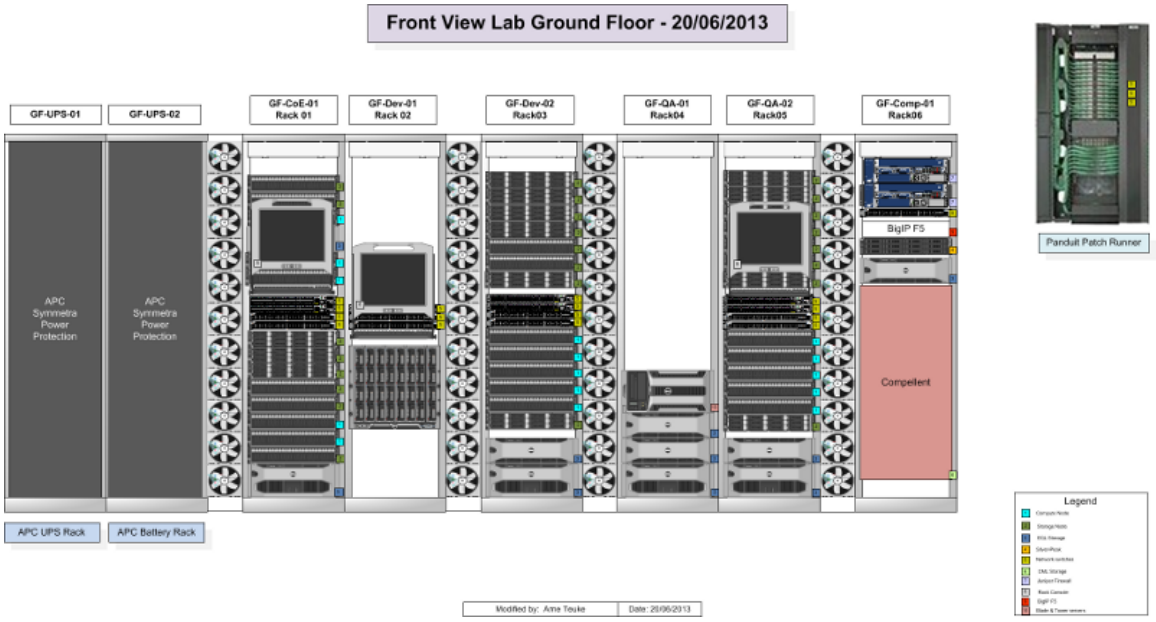


Illustration: CWD front view showing racks and switches highlighted.

The current core router is located in the telco rack (Panduit patch runner) slot 11.

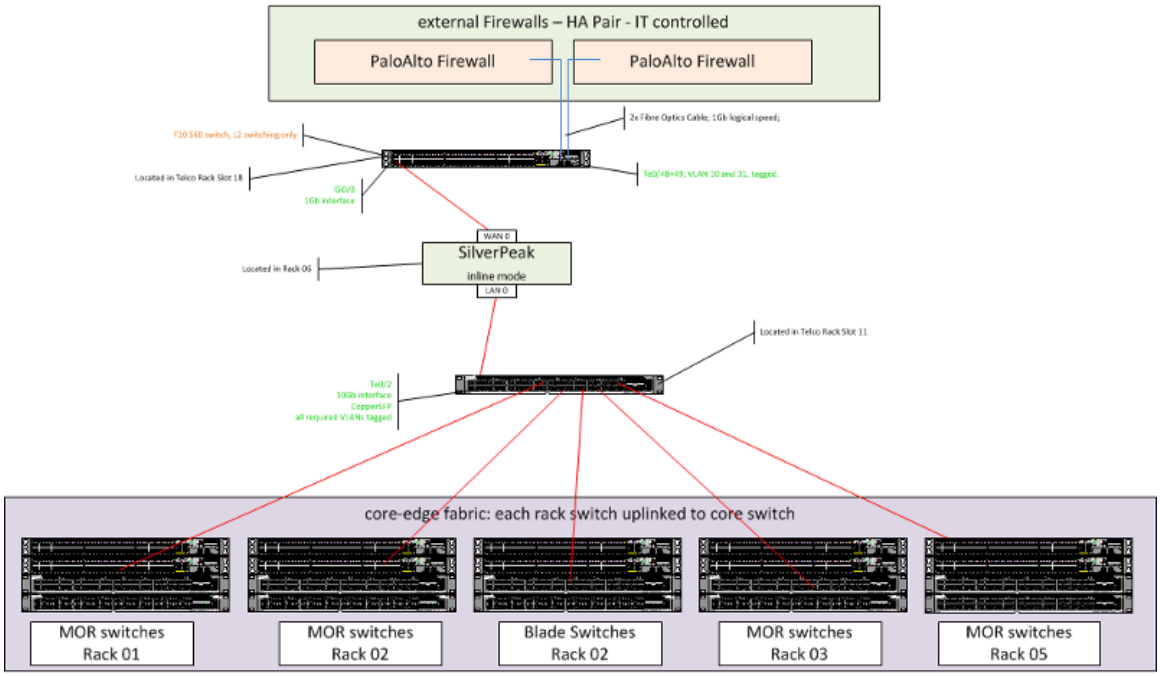
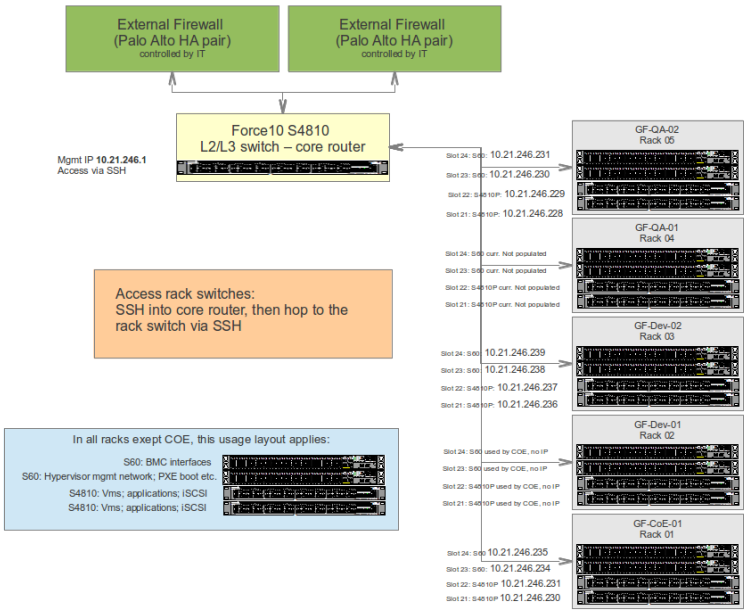


Illustration: relationship Router and rack switches.

passwords are here: CWD Infrastructure: Accounts and Passwords#switches . Readonly account: Readonly | readonly.



Note: All switches can be accessed now directly from within the lab network, or by use of a jump box, i.e. 10.21.255.208

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- **Security Exceptions (SEC)**

  Current SEC: for CWD: 28149

- **IP Addresses and VLAN Allocation**
  - **Pools**
    - **VLAN**

      Limitations

      The currently used hardware (Force 10 switches S60 and S4810P) can hold up to **500 L3 VLANs and 4096 L2 VLANs.** As such we will have to look after the L3 VLAN usage.

      The following pools have so far been preliminary allocated, where many of the VLANs are not used yet:

VLAN Pool	Team	Comments

0-100	Dev	requires clean-up and re-inventory
500-700	CoE	requires inventory
557 - 560	CoE	STaaS POC
551 - 554	CoE	OpenStack environment
510 - 550	CoE	OpenStack environment
2500 - 2536	QA	documented
3480 - 3832	Dev	documented
2529	Console Team	
3900 - 4000	Infrastructure	documented (being transferred into here)

****This table requires verification and completion!****

- **IP addresses**
  - **Internal Addresses**

IP pool	IP addresses	Team	Comments
10.21.152.0/21	10.21.152.1 - 10.21.159.254	CoE	Partially in use IP allocation is controlled by Keith & Greg

See allocation table below

  - **External Addresses**

The CWD lab has 2 external IP address blocks:

a) one in the range of 163.244.64.64/28, to be used in the **internet DMZ. Use of these addresses is absolutely restricted and must be manually requested by the lab team under all circumstances. Systems running a non-authorised address will be shut down and blocked immediately!**

IP Address	VLAN	Team	Project	Comments
163.244.64.65	31	IT	access gateway	external firewall
163.244.64.66	31	F5	Self IP	Loadbalancer

163.244.64.67	31	QA	CWDMVMSIT cwdqamvmsit vcd01-console proxy	vCD consoleproxy interface
163.244.64.68	31	QA	**CWDMVMSIT cwdqamvmsi tvcd01-http**	vCD https interface
163.244.64.69	31	QA	**CWDMVMSIT CWDVMCCA TQAWEB**	Console Web interface
163.244.64.70	31	CoE	**CoE STaaS POC**	
163.244.64.71	31	CoE	**CoE STaaS POC**	
163.244.64.72	31	QA	**CWDQAMVM SIT CWDQACLD DIR03-https**	vCD https interface
163.244.64.73	31	QA	**CWDQAMVM SIT** CWDQACLD DIR03-consol eproxy	vCD consoleproxy interface
163.244.64.74	TBD	COE	Citrix VPX external interface	see SLSOPS-198 2
163.244.64.75	31	CS	**CWDMVMDIT** CWDMVMDIT VCD01-http	https interface
163.244.64.76	31	CS	**CWDMVMDIT** CWDMVMDIT VCD01-consol e	consoleproxy interface
163.244.64.77	31	CS	**CWDMVMDIT** CWDMVMDIT WEB.slscloudl ab,com	Console Web interface
163.244.64.78	31	Infra	Citrix GSLBS INterface	see SLSOPS-198 2

b) the connection to the corporate network and outbound internet. IP addresses cannot be allocated and are in a range only allowing enough addresses to connect to

the firewall:

IP Address	VLAN	Allocation	Comments
10.205.126.170	10	VRRP address on the core router	configured as address on VLAN 10
10.205.126.171	10	Interface address on the core router	
10.205.126.172	10	not used as we have only a single router	secondary address in VRRP if we ever go dual
10.205.126.169	10	net hop address on the Palo Alto Firewall	our gateway of last resort, i.e. 0.0.0.0/0

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- **Address / VLAN Allocation Table**

  Data below is also available in IPAM .

  Primary contact for all VLANs is Arne Teuke !

IP address range	Gateway	VLAN	L2/L3	purpose	team allocation	IPAM	comments
n/a		1		VLAN 1 is unused	unused		default VLAN is unused!
10.21.237.0/24	10.21.237.1	3	L3	Developer network common servers	Dev Team	yes	shared developer infrastructure, important! Contact: Daniel Leyden

10.205.126.168/29	10.205.126.168	10	L3	VLAN 10 is the connection to the Palo Alto Firewalls connecting to both Corporate network and Internet	IT / MIS	yes	main route to corpnet and internet
10.21.251.0/30	10.21.251.1	11	L3	Connection Router Juniper Firewall	Lab Team	yes	
10.21.245.0/24	10.21.245.0	20	L3	Workstation Network	Lab Team	yes	
n/a	n/a	30	L2	description castor - slav 1	Dev	no	shutdown **verify**
163.244.64.64/27	163.244.64.65	31	L2	Internet DMZ via Palo ALto	IT / MIS	yes	inbound internet
n/a	n/a	32	L2	former management network	Dev	no	shutdown **verify**
n/a	n/a	40	L2	description castor - slav 2	Dev	no	shutdown **verify**
n/a	n/a	50	L2	description nova-reserved network	Dev	no	shutdown **verify**
n/a	n/a	70	L2	description castor - vlad	Dev	no	shutdown **verify**
n/a	n/a	80	L2	description castor - nova 2	Dev	no	shutdown **verify**

10.21.152.0/27	10.21.152.1	500	L3	CoE vCloud Management	CoE	yes	contact: Keith Tobin
10.21.153.0/24	10.21.153.1	502	L3	COE vCloud Public Internet Pool	CoE	yes	contact: Keith Tobin
10.21.152.64/27	10.21.152.64	504	L3	Coe CloudStack Managment Network	CoE	yes	contact: Keith Tobin
10.21.146.0/27	10.21.146.1	557	L3	CoE Staas POC "Staas Screened Network"	CoE	yes	Contact Greg Jacobs
10.21.146.32/27	10.21.146.33	558	L3	CoE_Staas_POC "DCIAM Network"	CoE	yes	Contact Greg Jacobs
10.21.146.64/27	10.21.146.65	559	L3	CoE_Staas_POC "Castor Storage"	CoE	yes	Contact Greg Jacobs
n/a	n/a	560	L3	CoE STaas POC DMZ access	CoE	no	not fully set up yet.
n/a	n/a	800		CoE POC mini Solution	CoE	no	not fully set up yet.

10.21.140.0/25	10.21.140.1	2480	L3	QA PIE Cluster	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.140.128/25	10.21.140.129	2481	L3	description QA DHCP-01	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.141.0/27	10.21.141.1	2482	L3	description QA-CAstor-01	QA	yes	Contact: Gael Rehault
10.21.141.32/27	10.21.141.33	2483	L3	description QA-CAstor-02	QA	yes	Contact: Gael Rehault
10.21.141.64/27	10.21.141.65	2484	L3	description QA-CAstor-03	QA	yes	Contact: Gael Rehault
10.21.244.0/24	10.21.244.1	2485	L3	description datastore cluster 01 qa03.cloud.internal	QA	yes	Contact: Gael Rehault
10.21.243.0/24	10.21.243.1	2486	L3	description datastore cluster 02 qa04.cloud.internal	QA	yes	Contact: Gael Rehault
10.21.242.0/24	10.21.242.1	2487	L3	description datastore cluster 03 qa05.cloud.internal	QA	yes	Contact: Gael Rehault

10.21.241.0/24	10.21.241.1	2488	L3	description datastore cluster 04 qa06.cloud.internal	QA	yes	Contact: Gael Rehault
10.21.240.0/24	10.21.240.1	2489	L3	description DCAM cluster 01 qa07.cloud.internal	QA	yes	Contact: Gael Rehault
10.21.239.0/24	10.21.239.1	2490	L3	description DCAM cluster 02 qa08.cloud.internal	QA	yes	Contact: Gael Rehault
10.21.238.0/24	10.21.238.1	2491	L3	description DCAM cluster 03 qa09.cloud.internal	QA	yes	Contact: Gael Rehault
10.21.141.96/27	10.21.141.97	2492	L3	description dvPG_QA02_dhcp	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.141.128/27	10.21.141.129	2493	L3	dvPg_QA02_dhcp	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.141.160/27	10.21.141.161	2494	L3	description dvPG_QA04_DHCP	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local

10.21.141.192/27	10.21.141.193	2495	L3	description dvPG_QA05_DHCP	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.141.224/27	10.21.141.225	2496	L3	description dvPG_QA01_DHCP	QA	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.142.0/28	10.21.142.1	2497	L3	description vCloudQA-EXTERNAL-VLAN01	QA	yes	Contact: Gael Rehault
10.21.142.16/28	10.21.142.17	2498	L3	description vCloudQA-EXTERNAL-VLAN02	QA	yes	Contact: Gael Rehault
10.21.142.32/28	10.21.142.33	2499	L3	description vCloudQA-EXTERNAL-VLAN03	QA	yes	Contact: Gael Rehault
10.21.142.48/28	10.21.142.49	2500	L3	description vCloudQA-EXTERNAL-VLAN04	QA	yes	Contact: Gael Rehault
10.21.142.64/28	10.21.142.65	2501	L3	description vCloudQA-EXTERNAL-VLAN05	QA	yes	Contact: Gael Rehault

10.21.142.80/28	10.21.142.81	2502	L3	description vCloudQA-EXTERNAL-VLAN06	QA	yes	Contact: Gael Rehault
10.21.142.96/28	10.21.142.97	2503	L3	description vCloudQA-EXTERNAL-VLAN07	QA	yes	Contact: Gael Rehault
10.21.142.112/28	10.21.142.113	2504	L3	description vCloudQA-EXTERNAL-VLAN08	QA	yes	Contact: Gael Rehault
10.21.142.128/28	10.21.142.129	2505	L3	description vCloudQA-EXTERNAL-VLAN09	QA	yes	Contact: Gael Rehault
10.21.142.144/28	10.21.142.145	2506	L3	description vCloudQA-EXTERNAL-VLAN10	QA	yes	Contact: Gael Rehault
10.21.142.160/28	10.21.142.161	2507	L3	description vCloudQA-EXTERNAL-VLAN11	QA	yes	Contact: Gael Rehault
10.21.142.176/28	10.21.142.177	2508	L3	description vCloudQA-EXTERNAL-VLAN12	QA	yes	Contact: Gael Rehault
10.21.142.192/28	10.21.142.193	2509	L3	description vCloudQA-EXTERNAL-VLAN13	QA	yes	Contact: Gael Rehault

10.21.142.208/28	10.21.142.209	2510	L3	description vCloudQA-EXTERNAL-VLAN14	QA	yes	Contact: Gael Rehault
10.21.142.224/28	10.21.142.225	2511	L3	description vCloudQA-EXTERNAL-VLAN15	QA	yes	Contact: Gael Rehault
10.21.143.0/27	10.21.143.1	2512	L3	CWD QA MVM-SIT	QA team	yes	Contact: Gael Rehault DHCP scope on CWDIFDC02.saas.local
10.21.144.0/26	10.21.144.1	2513	L3	CCAT_KEMP_NETWORK	QA team	yes	KEMP VLM network
10.21.145.0/28	10.21.145.1	2514	L3	QA-MVMSIT	QA team	yes	VCD-external VLAN01 Contact: Gael Rehault
10.21.145.16/28	10.21.145.17	2515	L3	QA-MVMSIT	QA team	yes	VCD-external VLAN02 Contact: Gael Rehault
10.21.145.32/28	10.21.145.33	2516	L3	QA-MVMSIT	QA team	yes	VCD-external VLAN03 Contact: Gael Rehault
10.21.145.48/28	10.21.145.49	2517	L3	QA-MVMSIT	QA team	yes	VCD-external VLAN04 Contact: Gael Rehault

10.21.145.64/28	10.21.145.65	2518	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN05 Contact: Gael Rehault
10.21.145.80/28	10.21.145.81	2519	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN06 Contact: Gael Rehault
10.21.145.96/28	10.21.145.97	2520	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN07 Contact: Gael Rehault
10.21.145.112/28	10.21.145.113	2521	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN08 Contact: Gael Rehault
10.21.145.128/28	10.21.145.129	2522	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN09 Contact: Gael Rehault
10.21.145.144/28	10.21.145.145	2523	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN10 Contact: Gael Rehault
10.21.145.160/28	10.21.145.161	2524	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN11 Contact: Gael Rehault
10.21.145.176/28	10.21.145.177	2525	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN12 Contact: Gael Rehault

10.21.145.192/28	10.21.145.193	2526	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN13 Contact: Gael Rehault
10.21.145.208/28	10.21.145.209	2527	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN14 Contact: Gael Rehault
10.21.145.224/28	10.21.145.225	2528	L3	QA-MVM SIT	QA team	yes	VCD-external VLAN15 Contact: Gael Rehault
10.21.147.0/26	10.21.147.1	2529	L3	Console MVM-DIT	Console Team	yes	Contact: Yaqing Liu
10.21.147.64/28	10.21.147.65	2530	L3	CWDQA MVMSIT VC2	QA Team	yes	MVM-SIT MCD VC4 Contact: Gael Rehault
10.21.147.80/28	10.21.147.81	2531	L3	CWDQA MVMSIT VC4	QA Team	yes	MVM-SIT MCD VC4 Contact: Gael Rehault
10.21.160.0/28	10.21.160.1	2532	L3	CWDQA MVMSIT site2site VPN 01	QA team	yes	Contact: Arne Teuke
10.21.160.16/28	10.21.160.17	2533	L3	CWDQA MVMSIT site2site VPN 02	QA team	yes	Contact: Arne Teuke
10.21.160.32/28				unused	unused	no	unused
10.21.160.64/26	10.21.160.65	2534	L3	Console MVM-DIT	Console Team	yes	Contact: Yaqing Liu

10.21.160.128/26	10.21.160.129	2535	L3	Console MVM-DIT	Console Team	yes	Contact: Yaqing Liu
10.21.160.192/26	10.21.160.193	2536	L3	Console MVM-DIT	Console Team	yes	Contact: Yaqing Liu
10.21.149.0/26	10.21.149.1	551	L3	CoE OpenStack Management	CoE Team	yes	Contact: Greg Jacobs
10.21.149.128/26	10.21.149.129	552	L3	CoE OpenStack Baremetal	CoE Team	yes	Contact: Greg Jacobs
10.21.149.192/28	10.21.149.193	553	L3	CoE OpenStack Public	CoE Team	yes	Contact: Greg Jacobs
10.21.149.208/29	10.21.149.209	554					
10.21.150.0/28	10.21.150.1	555					
10.21.128.0/27	10.21.128.1	3480	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.128.32/27	10.21.128.33	3481	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.128.64/27	10.21.128.65	3482	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.128.96/27	10.21.128.97	3483	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.128.128/27	10.21.128.129	3484	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.128.160/27	10.21.128.161	3485	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden

10.21.128.192/27	10.21.128.193	3486	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.128.224/27	10.21.128.225	3487	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.0/27	10.21.129.1	3488	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.32/27	10.21.129.33	3489	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.64/27	10.21.129.65	3490	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.96/27	10.21.129.97	3491	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.128/27	10.21.129.65	3492	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.160/27	10.21.129.161	3493	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.192/27	10.21.129.193	3494	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.129.224/27	10.21.129.225	3495	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.130.0/27	10.21.130.1	3496	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.130.32/27	10.21.130.33	3497	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.130.64/27	10.21.130.65	3498	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.130.96/27	10.21.130.97	3499	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden

10.21.131.0/26	10.21.131.1	3500	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.131.64/26	10.21.131.65	3501	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.131.128/26	10.21.131.129	3502	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.131.192/26	10.21.131.193	3503	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.132.0/26	10.21.132.1	3504	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.132.64/26	10.21.132.65	3505	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.132.128/26	10.21.132.129	3506	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.132.192/26	10.21.132.193	3507	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.133.0/26	10.21.133.1	3508	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.133.64/26	10.21.133.65	3509	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.133.128/26	10.21.133.129	3510	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.133.192/26	10.21.133.193	3511	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.134.0/26	10.21.134.1	3512	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.134.64/26	10.21.134.65	3513	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden

10.21.134.128/26	10.21.134.129	3514	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.134.192/26	10.21.134.193	3515	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.135.0/26	10.21.135.1	3516	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.135.64/26	10.21.135.65	3517	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.135.128/26	10.21.135.129	3519	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.135.192/26	10.21.135.193	3520	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.136.0/26	10.21.136.1	3521	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.136.64/26	10.21.136.65	3522	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.136.128/26	10.21.136.129	3523	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.136.192/26	10.21.136.193	3524	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.137.0/26	10.21.137.1	3525	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.137.64/26	10.21.137.65	3526	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.137.128/26	10.21.137.129	3527	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.137.192/26	10.21.137.193	3528	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden

10.21.138.0/26	10.21.138.1	3529	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.138.64/26	10.21.138.65	3530	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.138.128/26	10.21.138.129	3531	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.138.192/26	10.21.138.193	3532	L3	Dev KVM servers	Dev team	yes	Contact: Daniel Leyden
10.21.139.0/24	10.21.139.1	3533	L3				
10.21.152.0/27	10.21.152.1	500	L3	Coe vCloud Management	CoE Team	yes	Contact: Keith Tobin
10.21.152.64/27	10.21.152.65	504	L3	CoE CloudStack Management	CoE team	yes	Contact: Keith Tobin
10.21.153.0/24	10.21.152.1	502	L3	vCloud Public Internet pool	Coe Team	yes	Contact: Keith Tobin
10.21.234.16/28	10.21.234.17	3988	L3	CWD MySQL CLuster internal VLAN	Lab team	yes	MySQL cluster internal communication network
10.21.234.8/29	10.21.234.9	3989	L3	Router + Netscaler + GSLB	Lab Team	yes	connection router - netscaler for GSLB
10.21.148.0/24	10.21.148.1	3990	L3	Virtual ESXi Hosts	Lab team	yes	used for connecting ESXi hosts

10.21.232.0/24	10.21.232.1	3991	L3	Gerenal purpose User VMs in vSphere environment	Lab Team	yes	
10.21.233.0/24	10.21.233.1	3992	L3	vCloud Dev user VMs.	Dev Team	yes	external network in infrastructure vCloud Director
10.21.234.0/30	10.21.234.1	3993	L3	Router - F5	Lab team	yes	used as connection between router and F5
10.21.250.0/29	10.21.250.1	3994	L3	Router + Silverpeak	Lab Team	yes	used as connection between router and SP GW: 10.21.250.1/29 on S4810 router
10.21.235.0/24	10.21.235.1	3995	L3	iSCSI routable	Lab Team	yes	general iSCSI network, can be used for replication
10.21.236.0/24	10.21.236.1	3996	L3	PXE boot environment, currently not used	Lab Team	yes	currently not used
10.21.246.0/24	10.21.246.1	3997	L3	BMC Interfaces & management network	Lab team	yes	

10.0.10.0/24	10.0.10.1	3998	L3	vMotion network & priovate network on MSCS clusters	Lab team	yes	CWD only network
172.20.0.0/24	172.20.0.1	3999	L2	non-routable iSCSI network	Dev-Team	yes	used by Dev -team, to be faded out and decomissioned this year
10.21.255.0/24	10.21.255.1	4000	L3	General Infrastructure	Lab team	yes	

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- **DHCP**

  Server: CWDIFDC02.saas.local (Site Domain controiler)
  IP address: 10.21.255.201
  OS: Windows 2008

- Network Switches
  - Core Router

    FQDN: CWDROUTER01.saas.local
    Management IP: 10.21.246.1

  - Rack Switches

Rack	Location in Rack	Switch type	Switch Purpose	Management IP	Comments
01 (GF-COE_01)	slot 24	S60 1Gb	BMC interfaces	10.21.246.235	switch has problems at boot, so don't reboot the switch
01 (GF-COE_01)	slot 23	S69 1Gb	Hypervisor mgmt interfaces	10.21.246.234	
01 (GF-COE_01)	slot 22	S4810	application / iSCSI	10.21.246.233	

01 (GF-COE_01)	slot 21	S4810	application / iSCSI	10.21.246.23 2	
02 (GF-Dev-01)	slot 24	S60 1Gb		n/a	currently used by CoE, to be freed up until March
02 (GF-Dev-01)	slot 23	S69 1Gb		n/a	currently used by CoE, to be freed up until March
02 (GF-Dev-01)	slot 22	S4810		n/a	currently used by CoE, to be freed up until March
02 (GF-Dev-01)	slot 21	S4810		n/a	currently used by CoE, to be freed up until March
03 (GF-Dev_02)	slot 24	S60 1Gb	BMC interfaces	10.21.246.23 9	
03 (GF-Dev_02)	slot 23	S69 1Gb	Hypervisor mgmt interfaces	10.21.246.23 8	
03 (GF-Dev_02)	slot 22	S4810	application / iSCSI	10.21.246.23 7	
03 (GF-Dev_02)	slot 21	S4810	application / iSCSI	10.21.246.23 6	
04 (GF-QA-01)	slot 24	S60 1Gb			slot currently not populated
04 (GF-QA-01)	slot 23	S69 1Gb			slot currently not populated
04 (GF-QA-01)	slot 22	S4810			slot currently not populated
04 (GF-QA-01)	slot 21	S4810			slot currently not populated
05 (GF-QA-02)	slot 24	S60 1Gb	BMC interfaces	10.21.246.23 1	
05 (GF-QA-02)	slot 23	S69 1Gb	Hypervisor mgmt interfaces	10.21.246.23 0	
05 (GF-QA-02)	slot 22	S4810	application / iSCSI	10.21.246.22 9	

05 (GF-QA-02)	slot 21	S4810	application / iSCSI	10.21.246.228	

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- **Loadbalancers**
  - **F5**

    Management Interface: https://cwdifvipf501.saas.local
    Management IP address: 10.21.246.9

    Credentials: CWD Infrastructure: Accounts and Passwords#appliances

  - **Kemp**

    Management Interface: https://cwdifvlm1k01.saas.local/
    Management IP address: 10.21.44.2

    Credentials: CWD Infrastructure: Accounts and Passwords#appliances
  - **Netscaler**

    Management Interface: https://cwdvpx01.saas.local |
    Management IP address: 10.21.246.40

    Credentials: *CWD Infrastructure: Accounts and Passwords#appliances*

    More details about the Netscaler configuration is here.

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- **Security**
  - **Firewalls**
    - **Juniper**
      To be populated
- **WAN Optimisation**
  - **SilverPeak**

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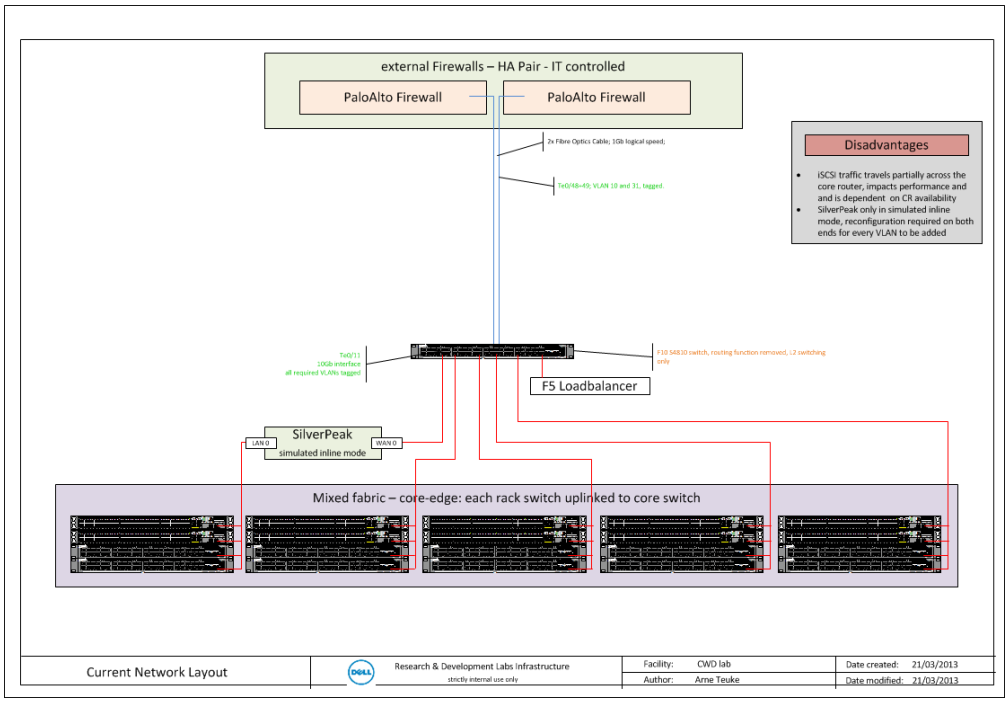
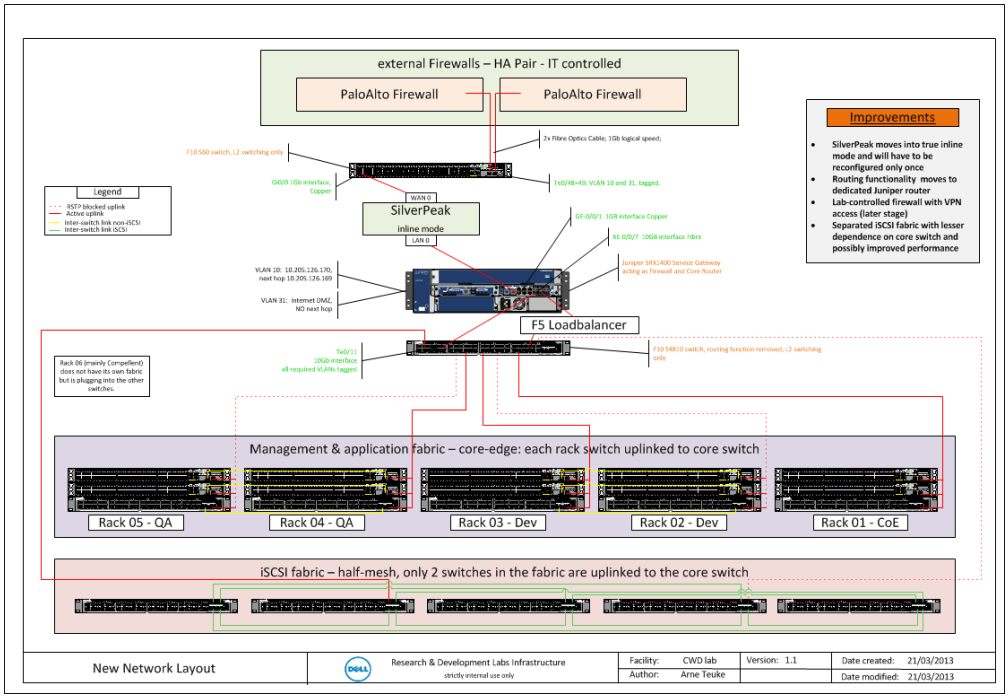
- **Improvement Plan**

  Current overall layout, subject to change;



Improved network layout, still in planning phase and to be implemented :



Main improvement points:
- move routing away from F10 switch to Juniper router
- bring SilverPeak into full inline mode
- separate iSCSI fabric fully so iSCSI traffic will not hit the core switch / router at typically

The new topology is currently being developed and will be implemented at multiple stages.

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Contact: Yaqing Liu

Navigate space

- JIRA
- FISHEYE
- ZEPHYR
- vmware vSphere
- solarwinds