

IKEA vs. Shellshock: 1-0

Magnus Glantz,
Product Responsible, Linux, IKEA IT

Mattias Haern,
Solution Architect, Red Hat

2015-06-24

Reenactment 24th of September, 2014 Sweden

Ingvar Kamprad Elmtaryd Agunnarud





We have many Red Hat Enterprise Linux servers

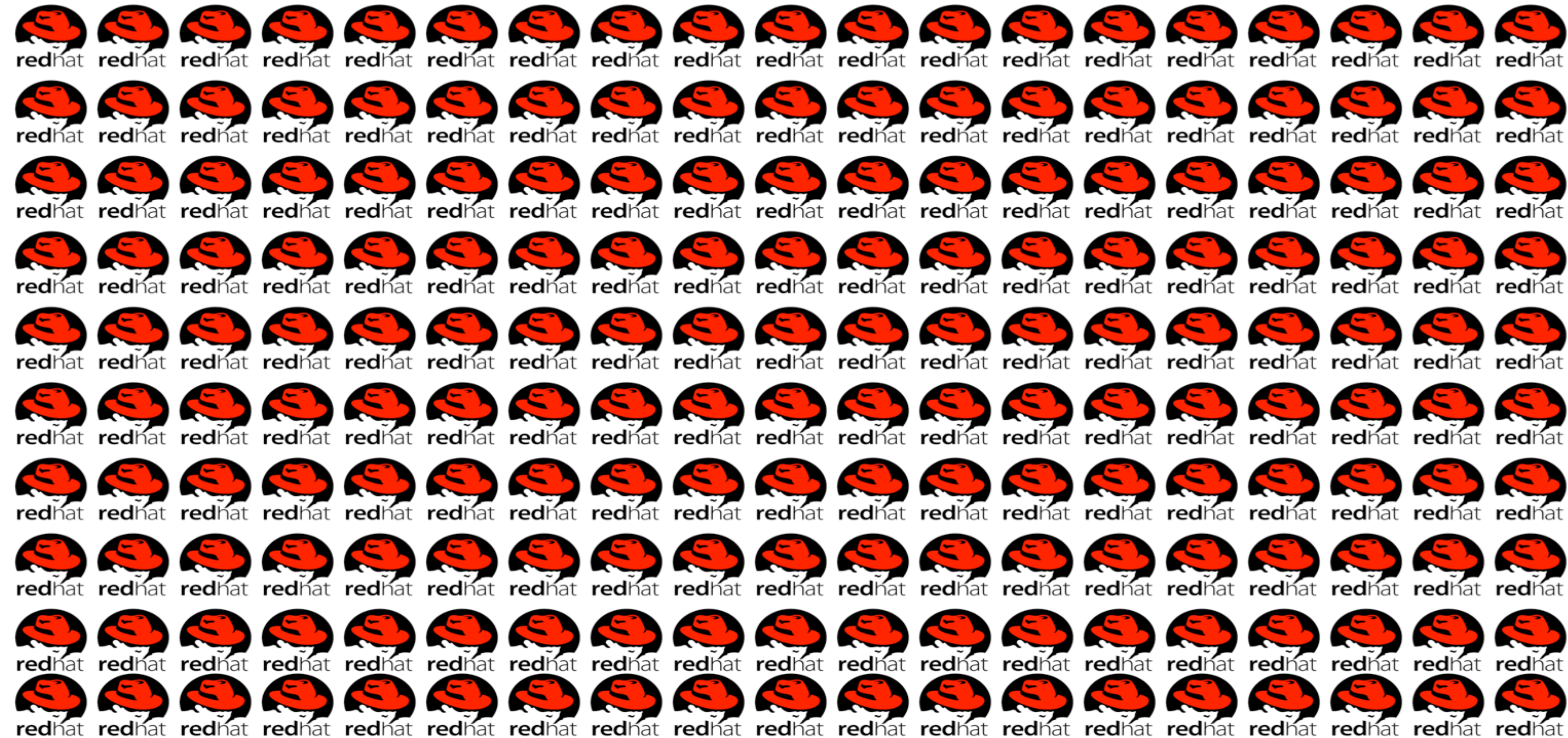


I mean

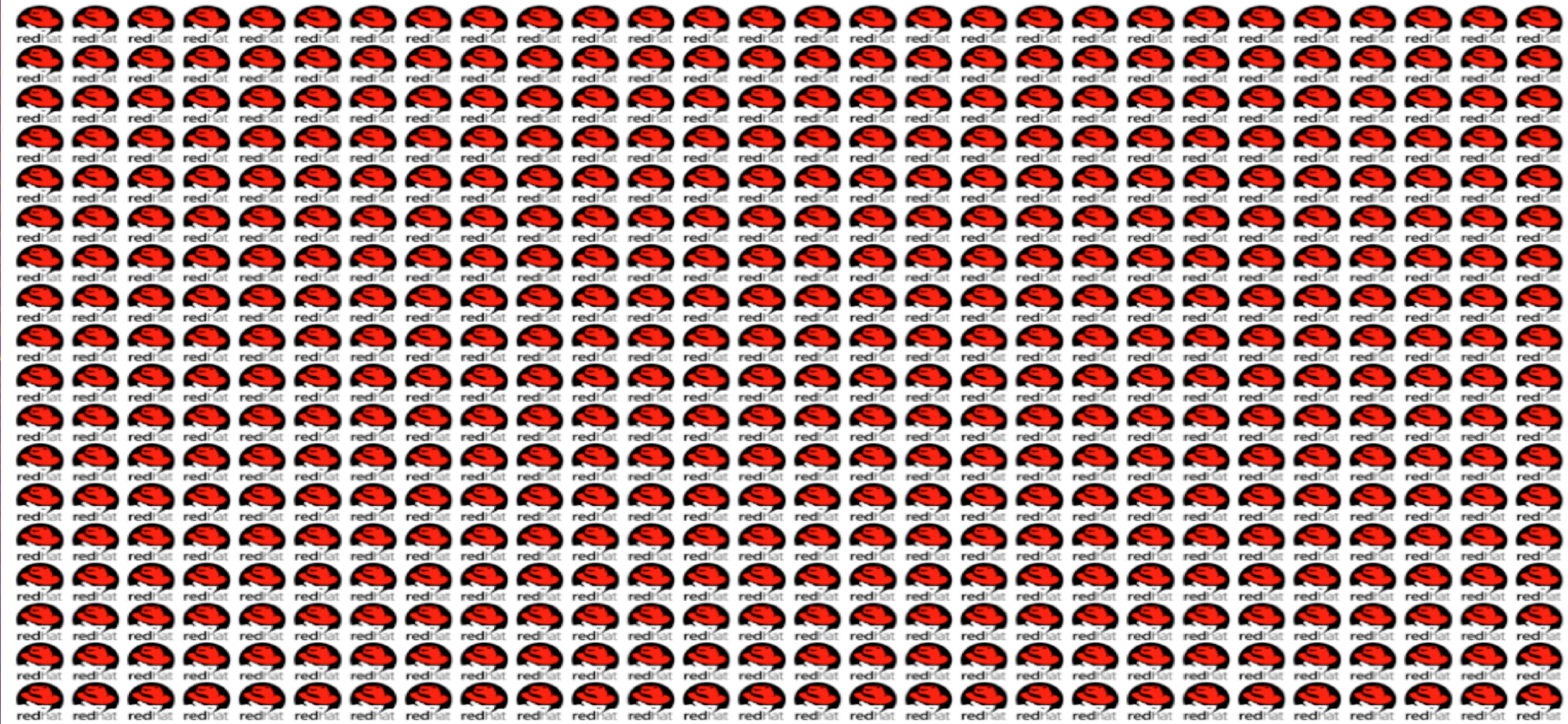
Very



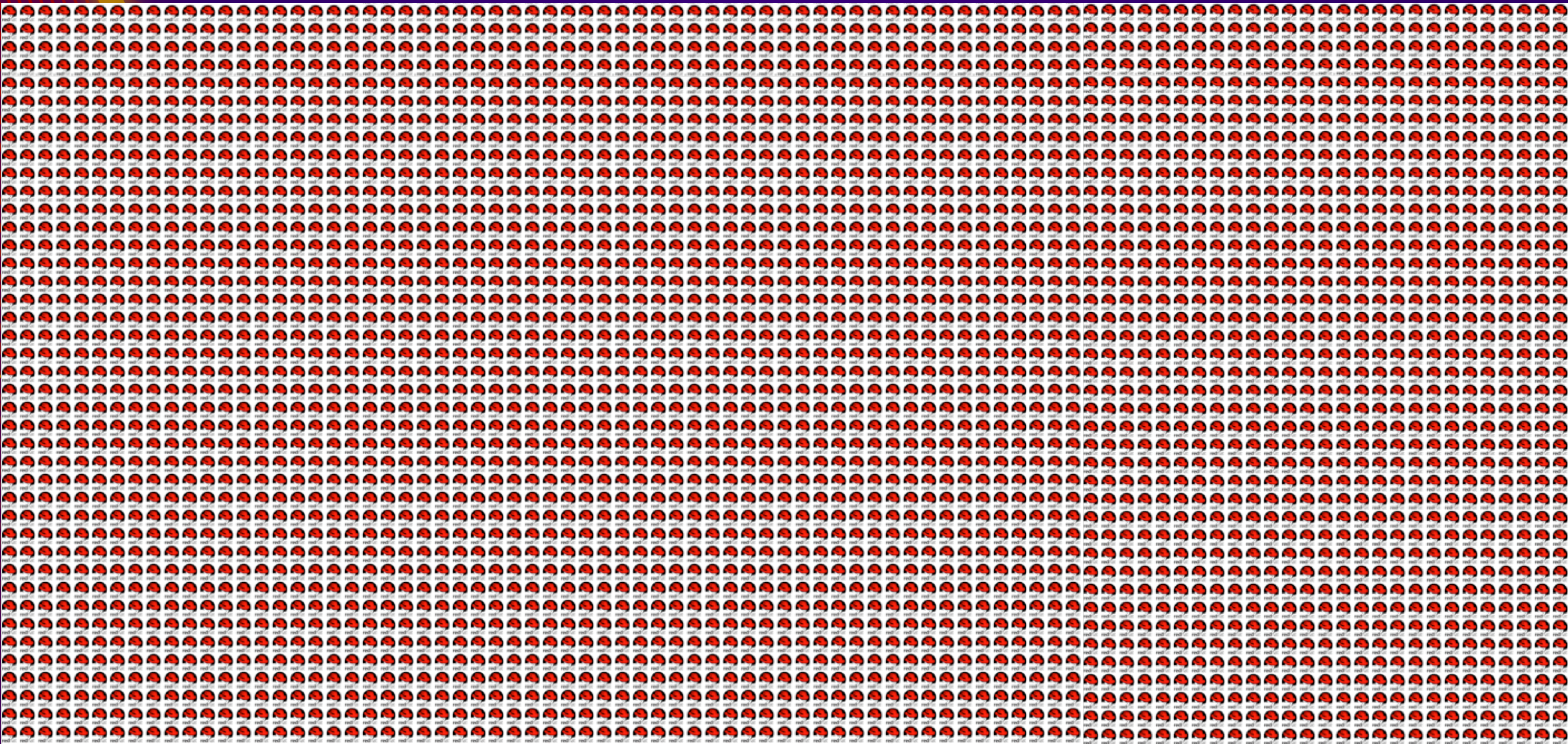
very

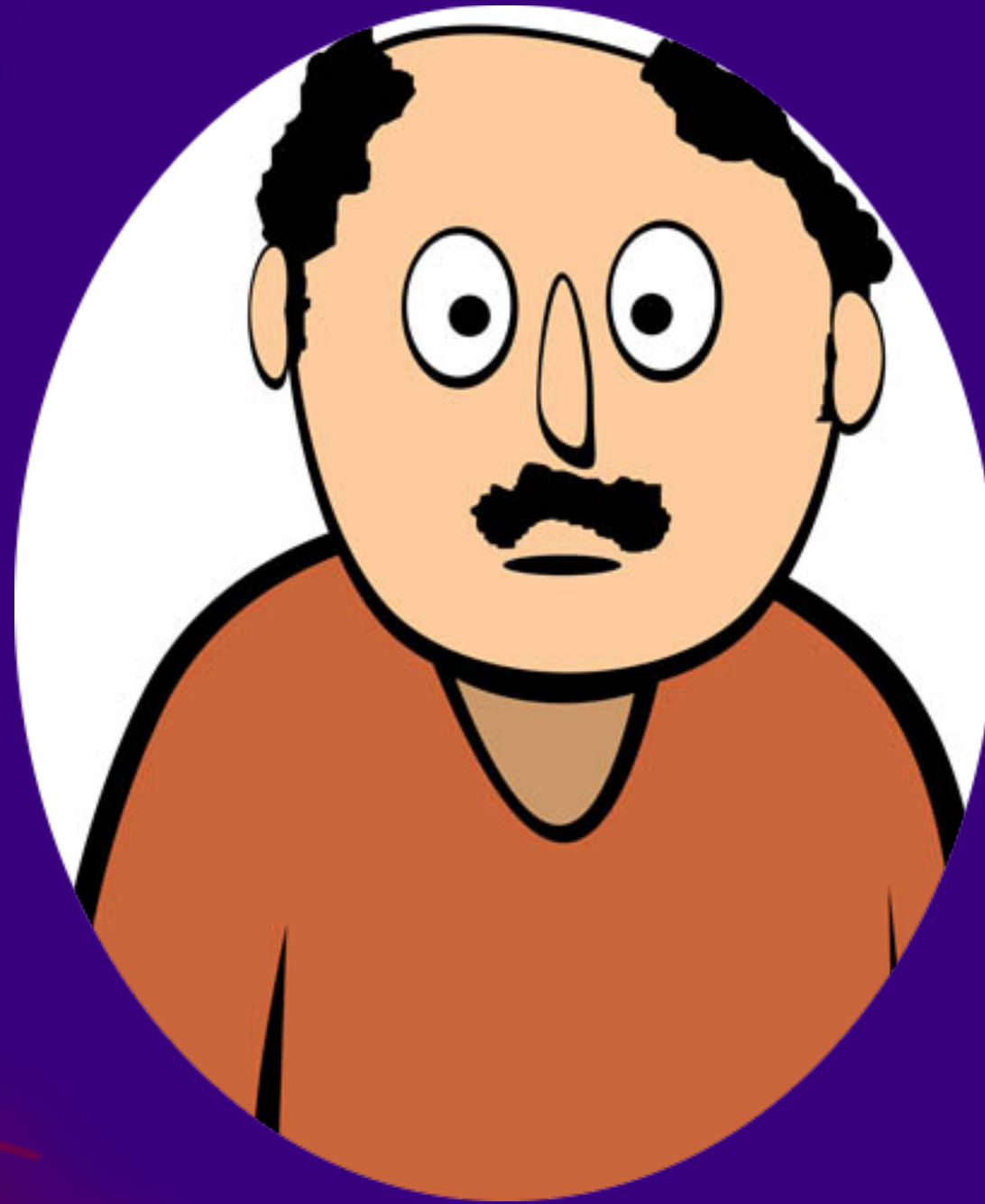


very



very many





..Red Hat Enterprise Linux servers.

**And this is how we patched all 3500 servers for
shellshock..
..in 2 ½ hours.**


```
[me@ingvar5 ~]$ ./patch  
Wed Sep 24 23:14:15 UTC 2014: Issuing 'yum -y update bash' to all servers..  
Wed Sep 25 01:44:15 UTC 2014: Done.  
[me@ingvar5 ~]$ █
```

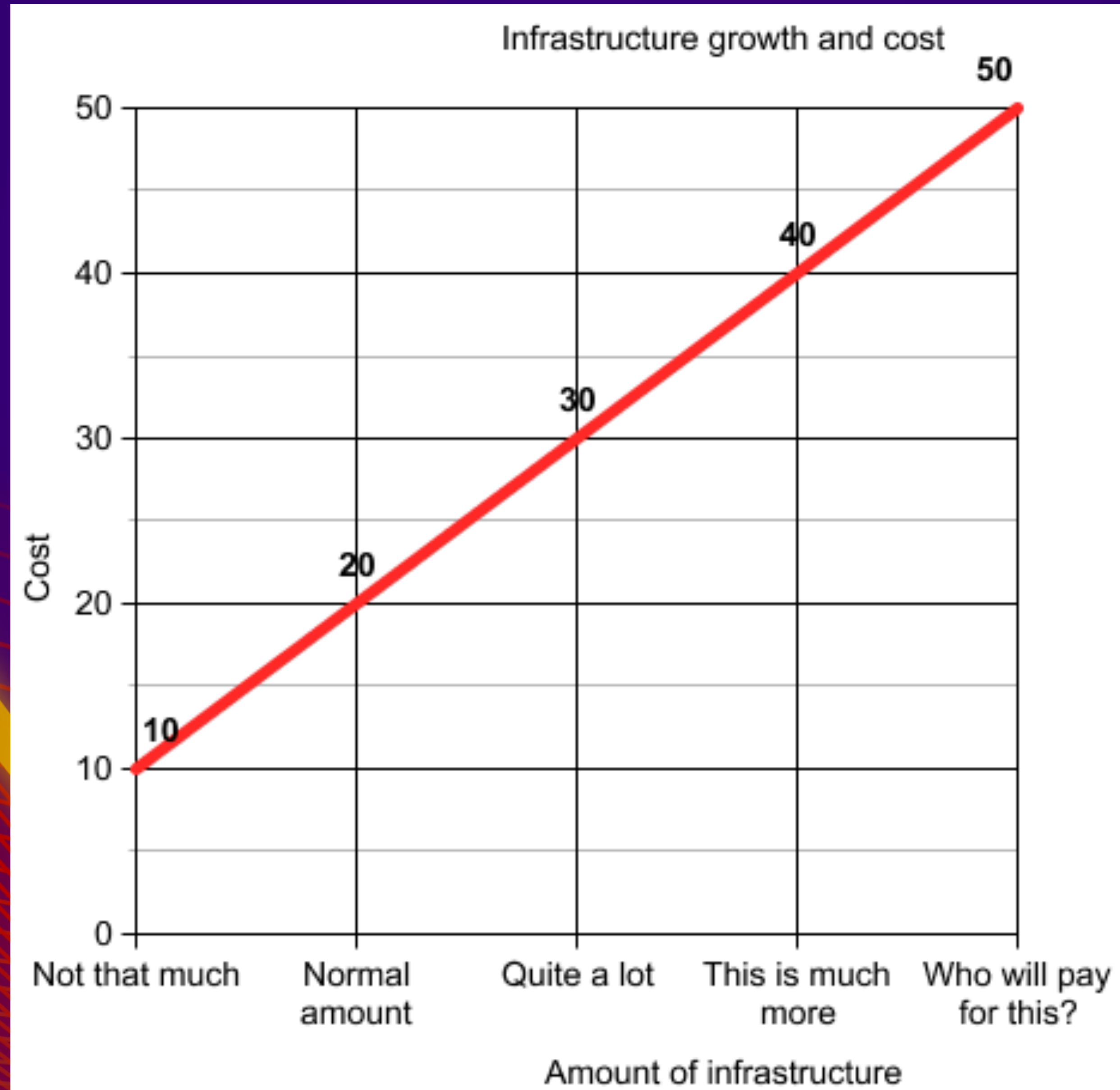

RED HAT **SUMMIT**

**LEARN. NETWORK.
EXPERIENCE OPEN SOURCE.**

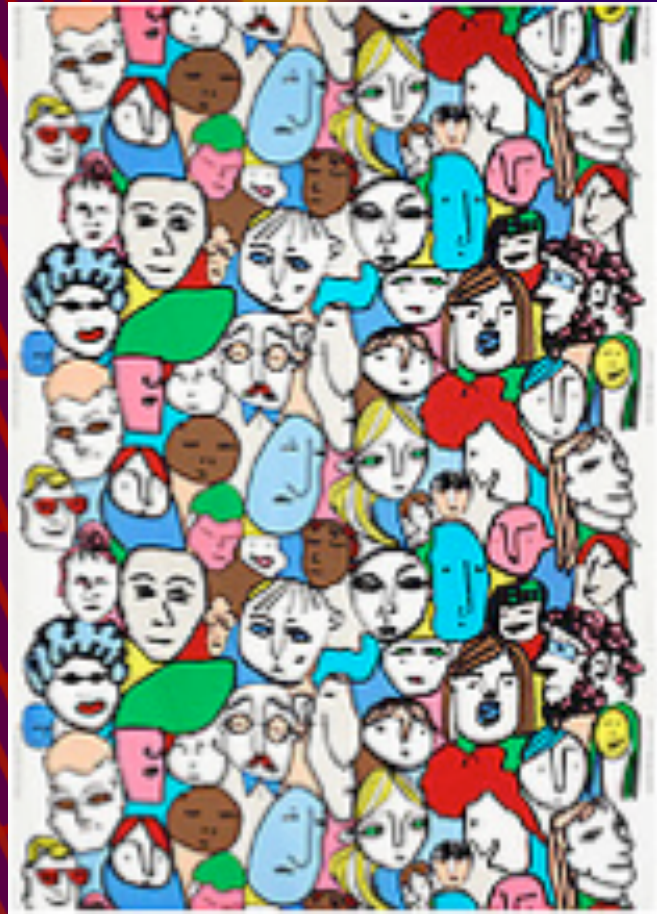
We used to run mainly old school UNIX and mainframes



But



Many different systems



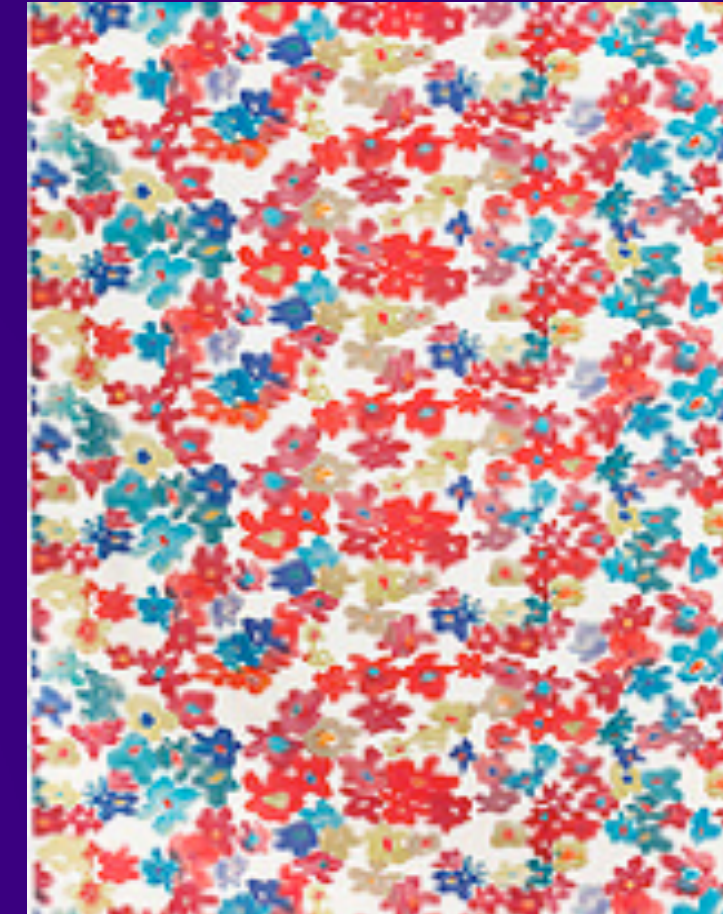
ITSM



Databases



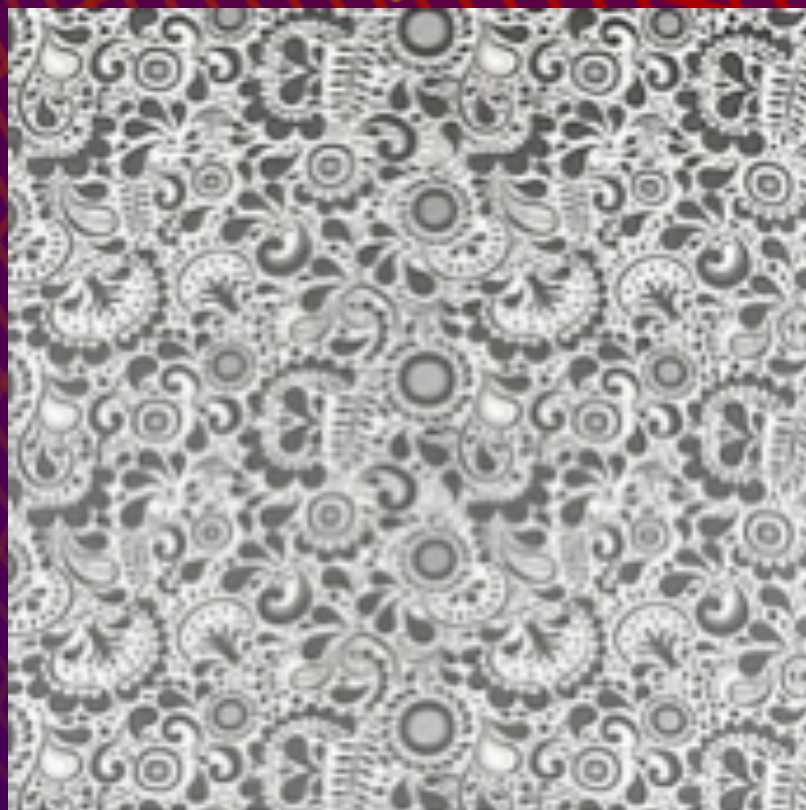
App servers



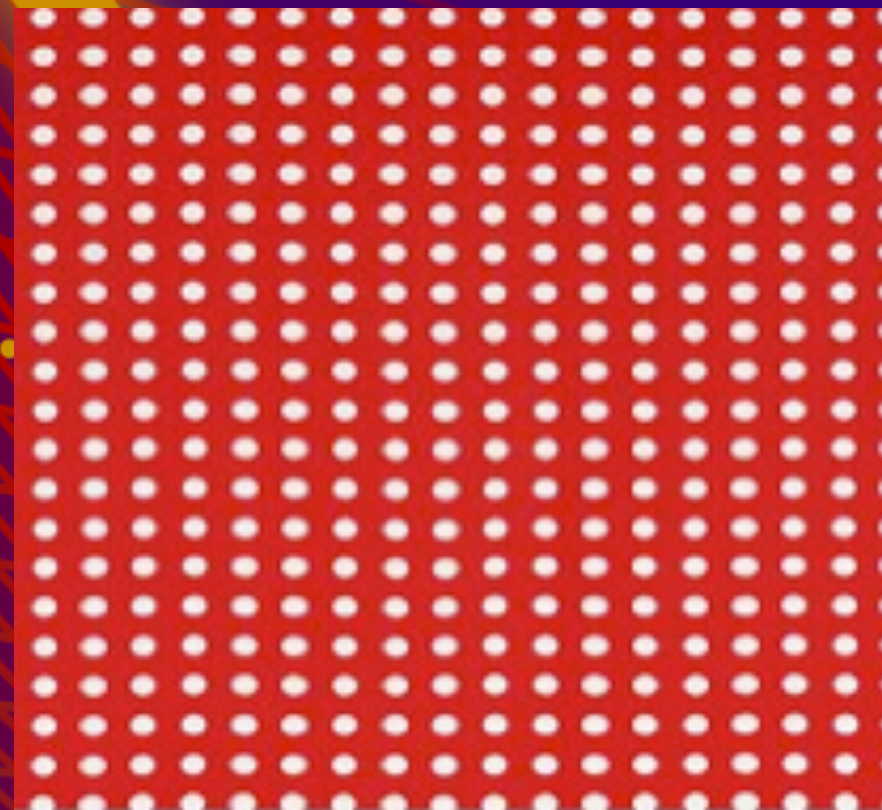
In-house



Network mgmt



Log mgmt



IP services



Integration



Directory

On many different platforms



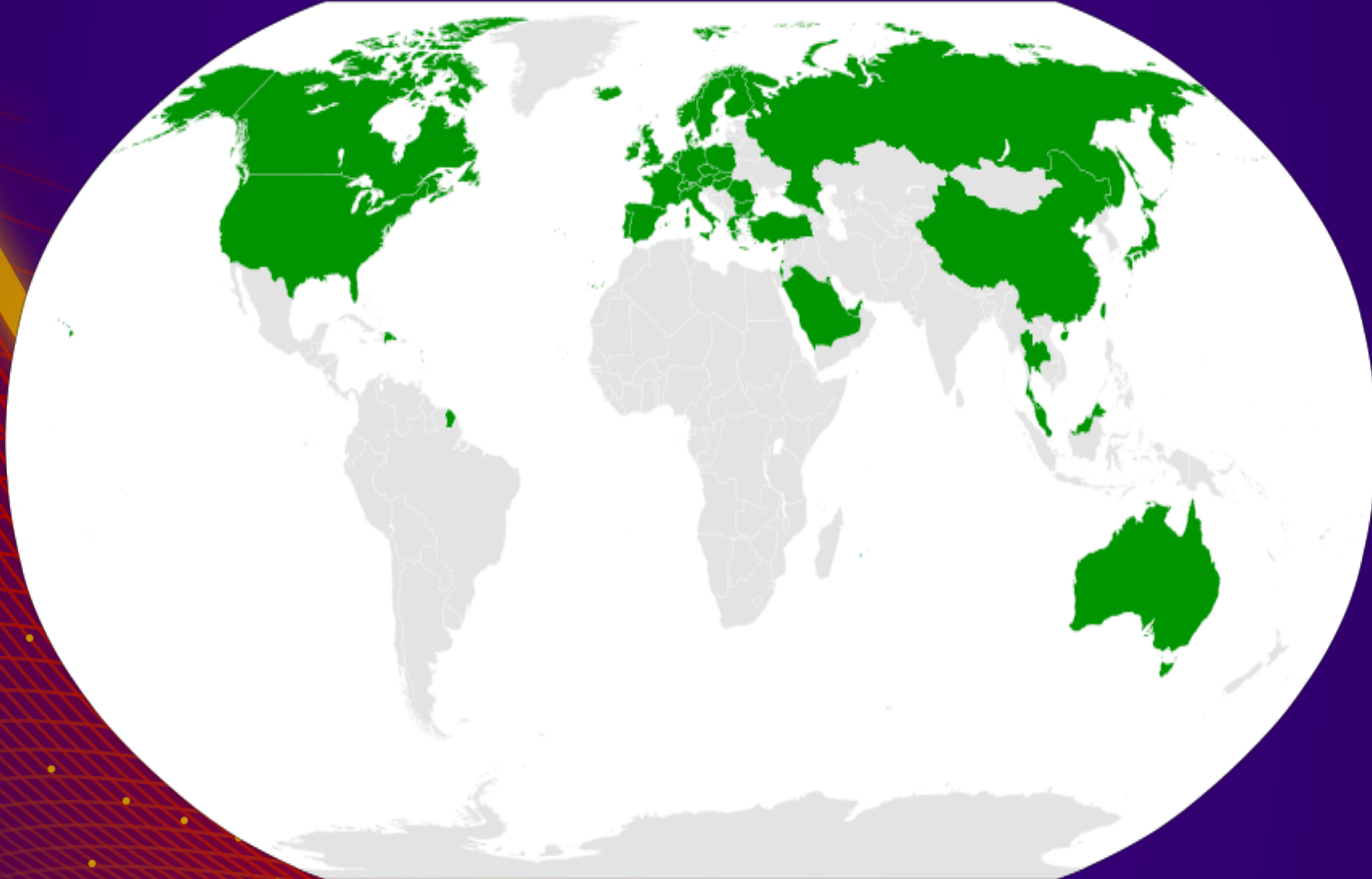
On 400+ different sites



In 35+ different countries



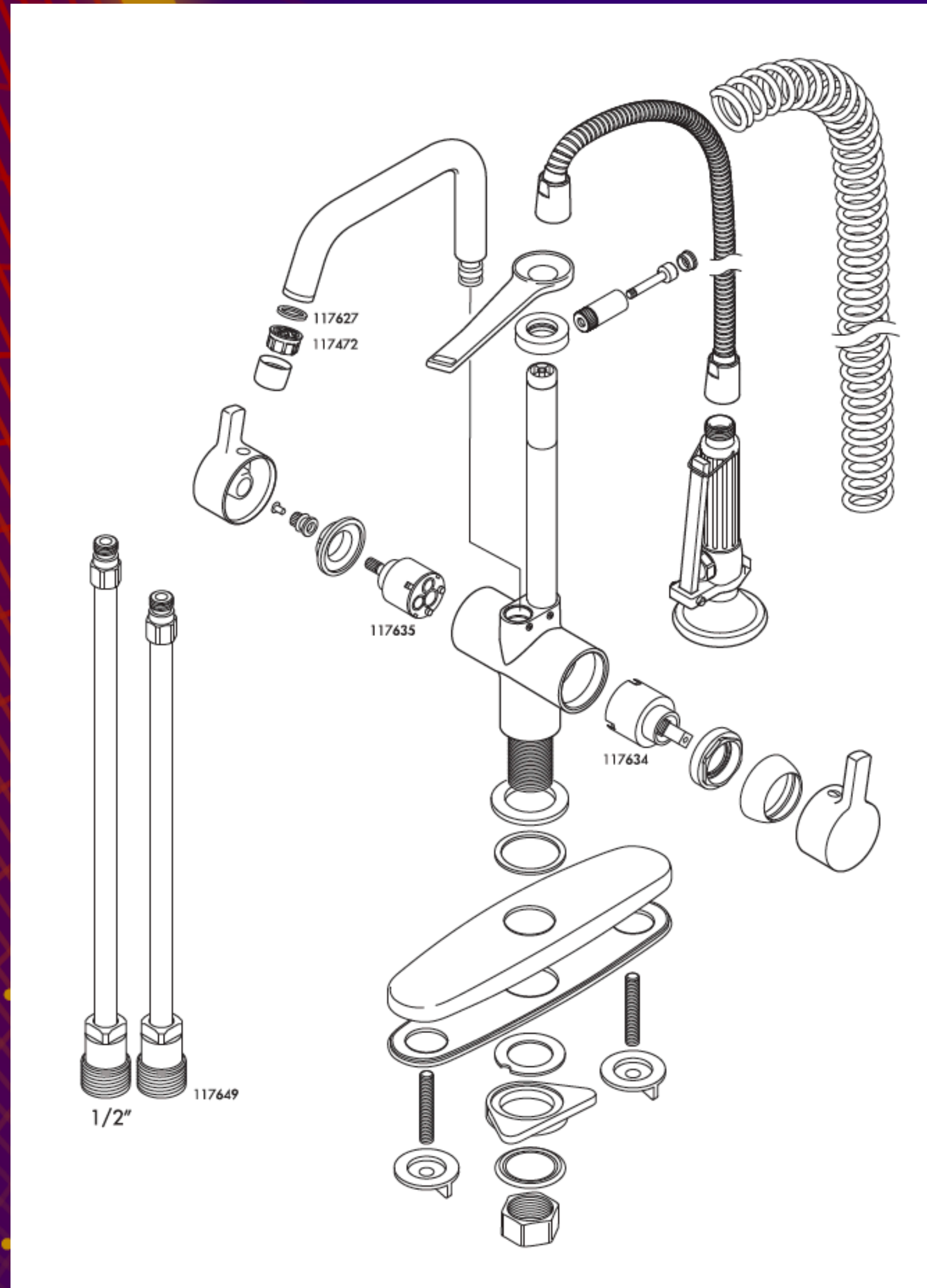
On 4 different continents



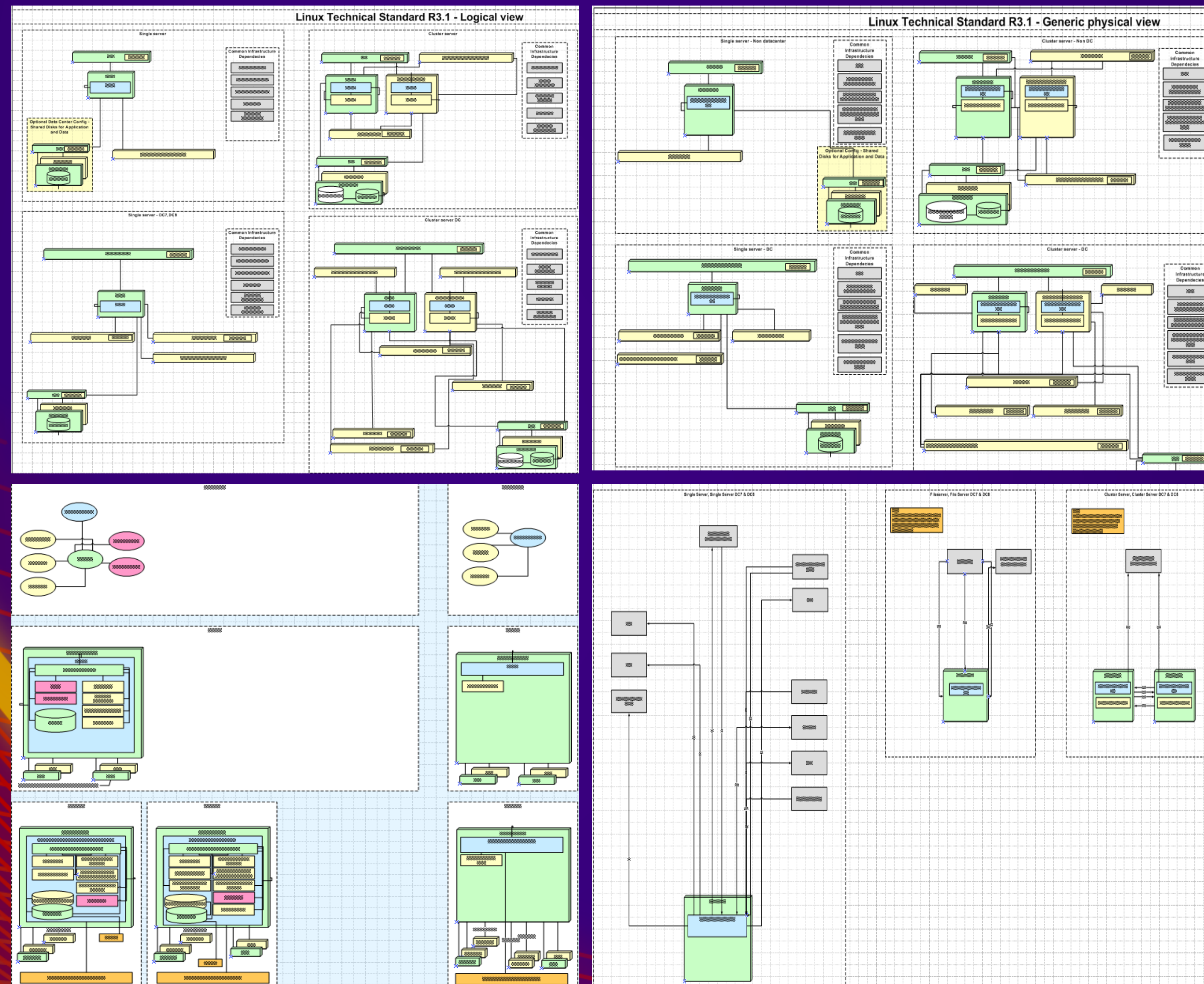
“One does not simply” patch a server



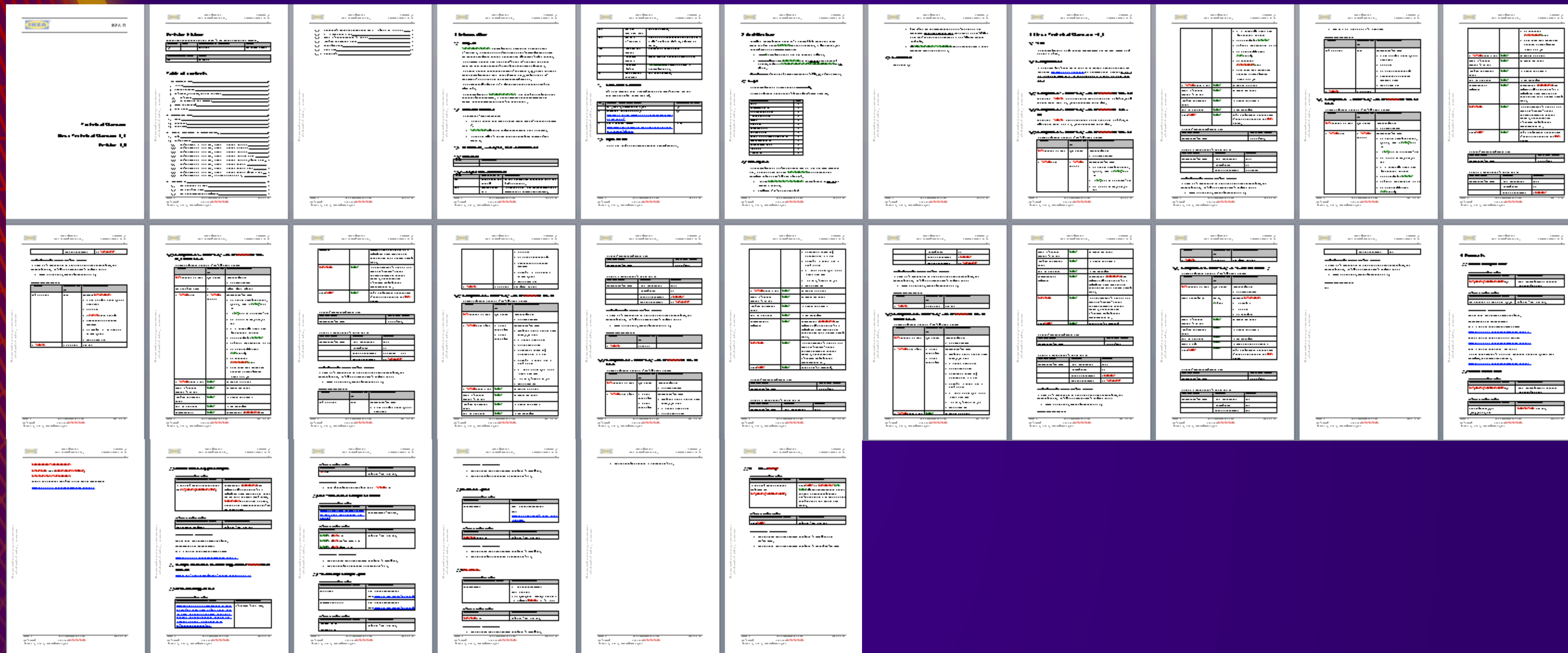
You have to create a well defined product (SOE) (..and follow some simple instructions)



Architectural model



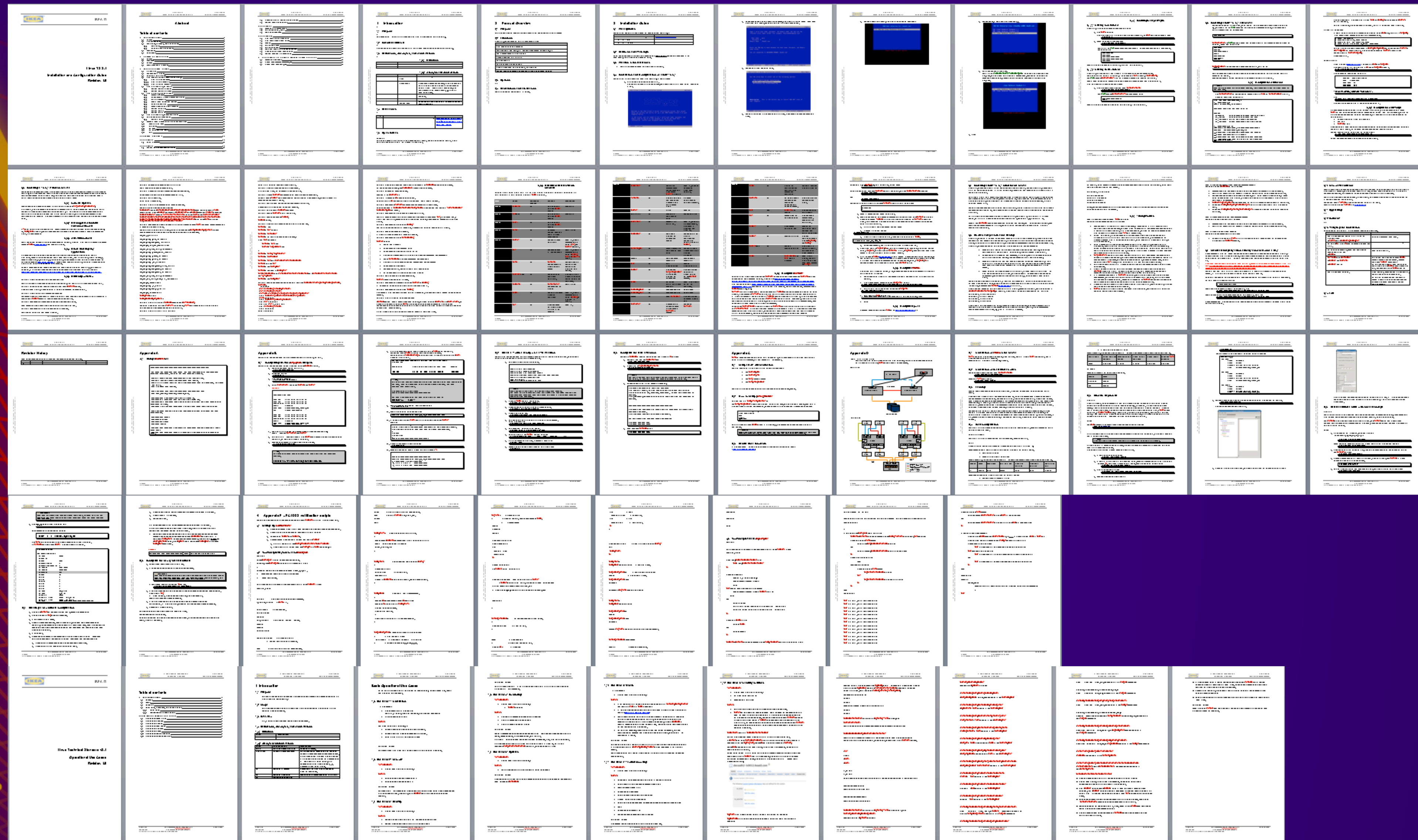
Product description



Communication contract

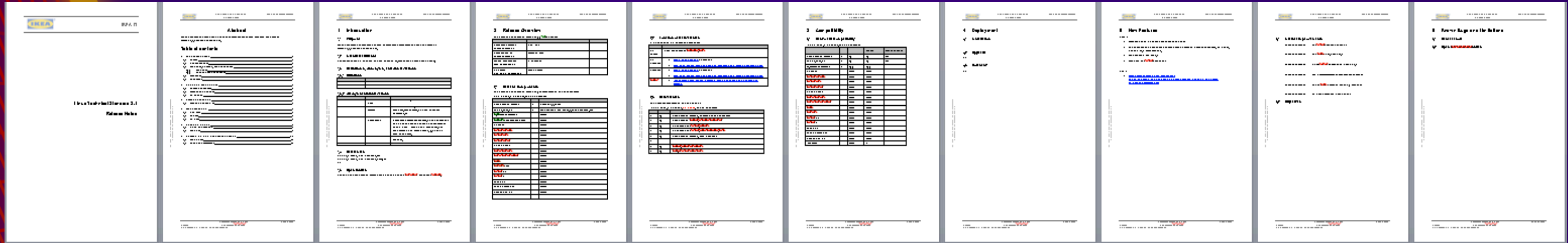
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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Installation and Configuration manual



Test cases

Release notes



Life Cycle Management Plan

<p>Product LCM Plan Product Plan for Open 18 Version 1.0 Approved by: [Signature] Author: [Signature]</p>	<p>Table of contents</p> <ul style="list-style-type: none">1. Introduction2. Product Summary3. Product Details4. Product Lifecycle5. Product Support6. Product End of Life	<p>1. Introduction</p> <p>1.1 Purpose</p> <p>1.2 Scope</p> <p>1.3 Definitions</p>	<p>2. Product Summary</p> <table><thead><tr><th>Product Name</th><th>Version</th><th>Release Date</th><th>End of Life Date</th></tr></thead><tbody><tr><td>Open 18</td><td>1.0</td><td>2018-01-01</td><td>2023-01-01</td></tr></tbody></table>	Product Name	Version	Release Date	End of Life Date	Open 18	1.0	2018-01-01	2023-01-01	<p>3. Product Details</p> <p>3.1 Product Overview</p> <p>3.2 Product Features</p> <p>3.3 Product Architecture</p>	<p>4. Product Lifecycle</p> <p>4.1 Product Development</p> <p>4.2 Product Testing</p> <p>4.3 Product Deployment</p> <p>4.4 Product Support</p> <p>4.5 Product End of Life</p>	<p>5. Product Support</p> <p>5.1 Product Support Policy</p> <p>5.2 Product Support Channels</p> <p>5.3 Product Support Tools</p>	<p>6. Product End of Life</p> <p>6.1 Product End of Life Policy</p> <p>6.2 Product End of Life Channels</p> <p>6.3 Product End of Life Tools</p>
Product Name	Version	Release Date	End of Life Date												
Open 18	1.0	2018-01-01	2023-01-01												

Delivery Plan

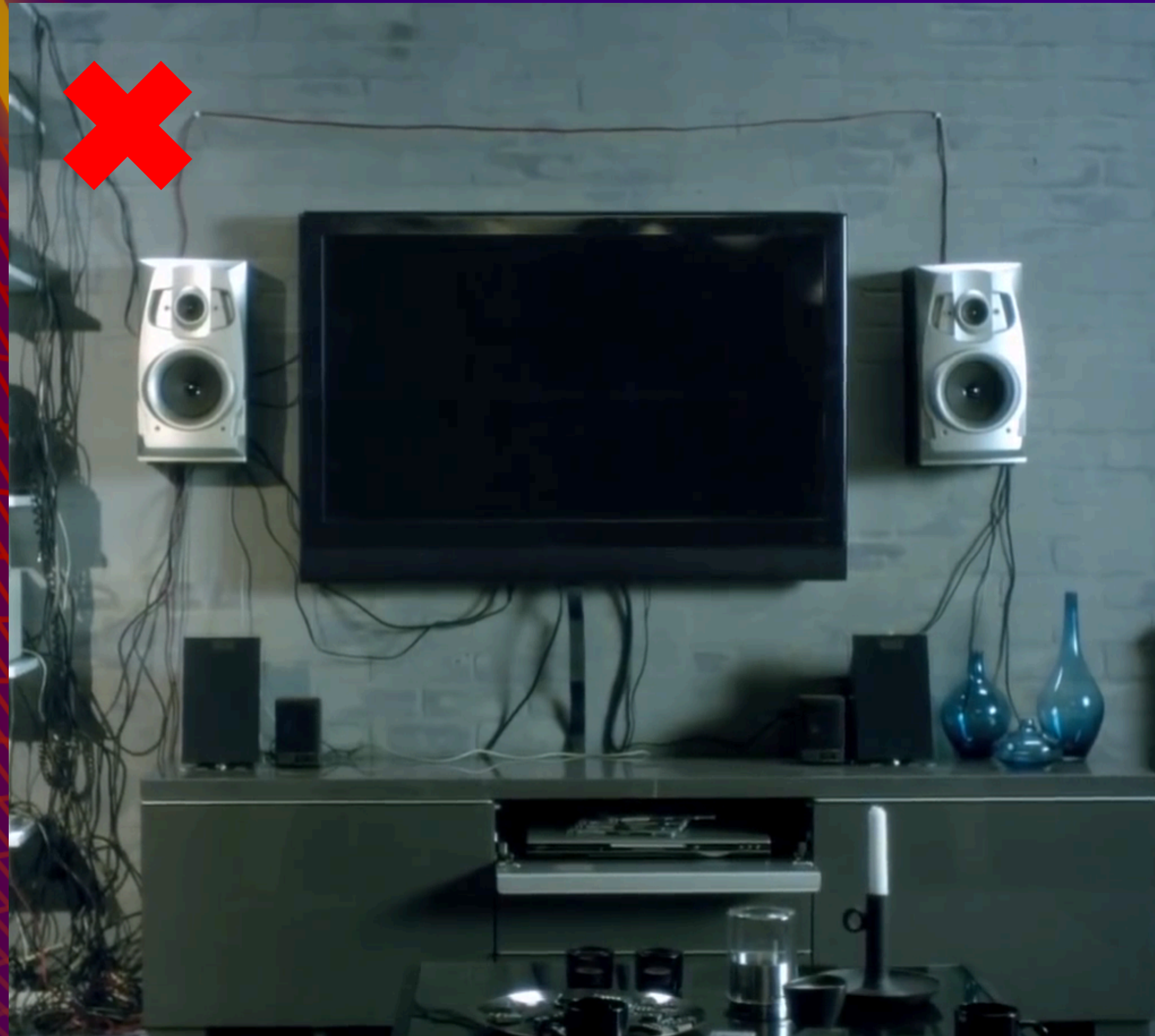
The figure displays a sequence of 10 screenshots from the IIS 7.0 installation wizard on Windows Server 2008. The screenshots are arranged horizontally, showing the progression of the installation process. Each screenshot includes a title bar with the IIS 7.0 logo and a window title. The content of the screenshots is as follows:

- Screenshot 1:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 2:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 3:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 4:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 5:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 6:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 7:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 8:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 9:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.
- Screenshot 10:** Shows the 'IIS 7.0 Installation' window with the 'IIS 7.0 Installation' tab selected. It displays the 'IIS 7.0 Installation' progress bar and the 'IIS 7.0 Installation' status.

Create an organized release management process



Make it a requirement to use latest versions



Enforce your SOE!



New app
installed

SOE
enforced

Improvement

If app breaks
in dev

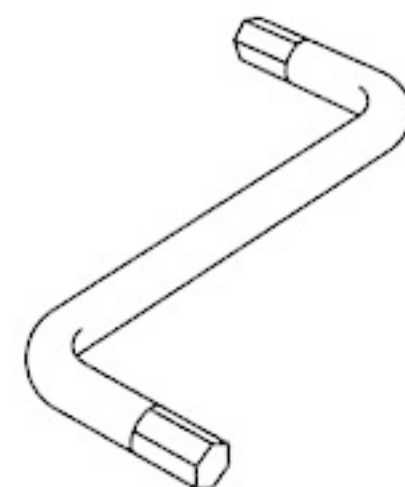
Oh, I thought this would be a technical talk...



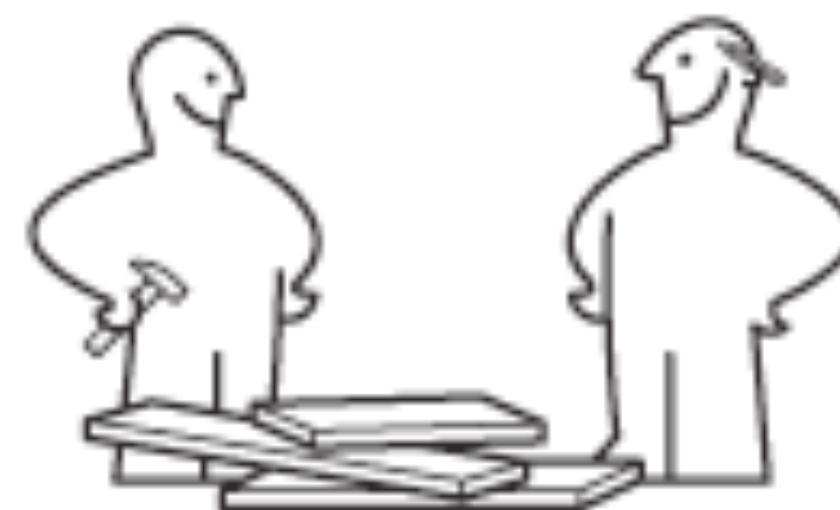
-Yeah. Can we please have some technical slides?



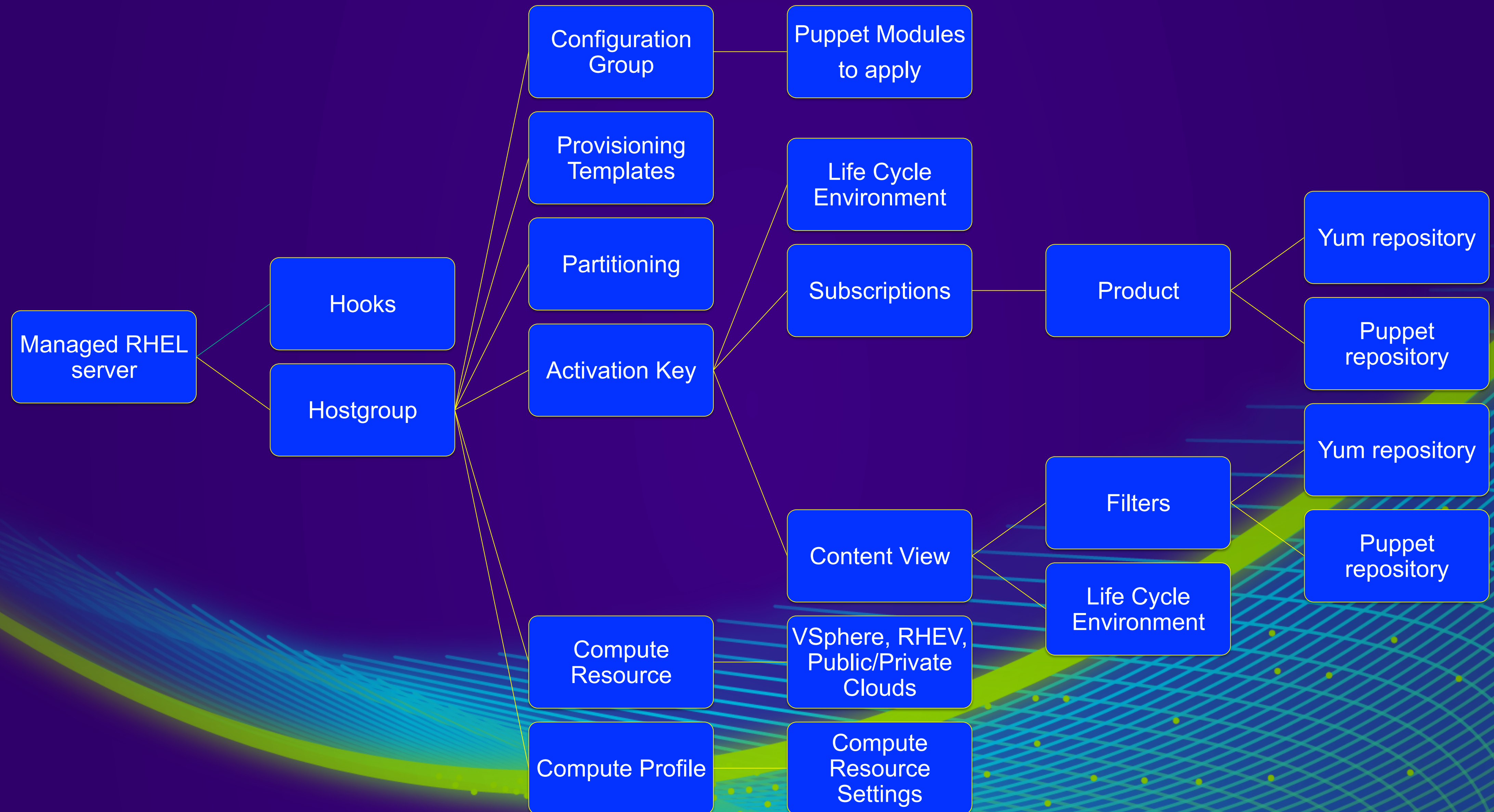
Red Hat Enterprise Linux 7 SOE with Red Hat Satellite 6.0



DHCP, OOB
Sat6, RHEL

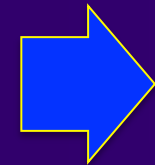


Red Hat Satellite 6.0 components – Simplified view

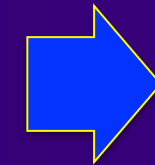


Red Hat Satellite 6.0 components – Simplified view

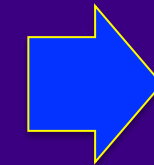
Content View:
RHEL7 SOE,
Version 1



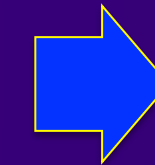
Change in content
(repository, version
of RPM or Puppet
module)



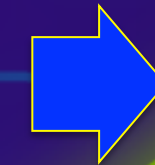
Creation of new
content view
version



Promotion of new
version to Life
Cycle Environment:
Development

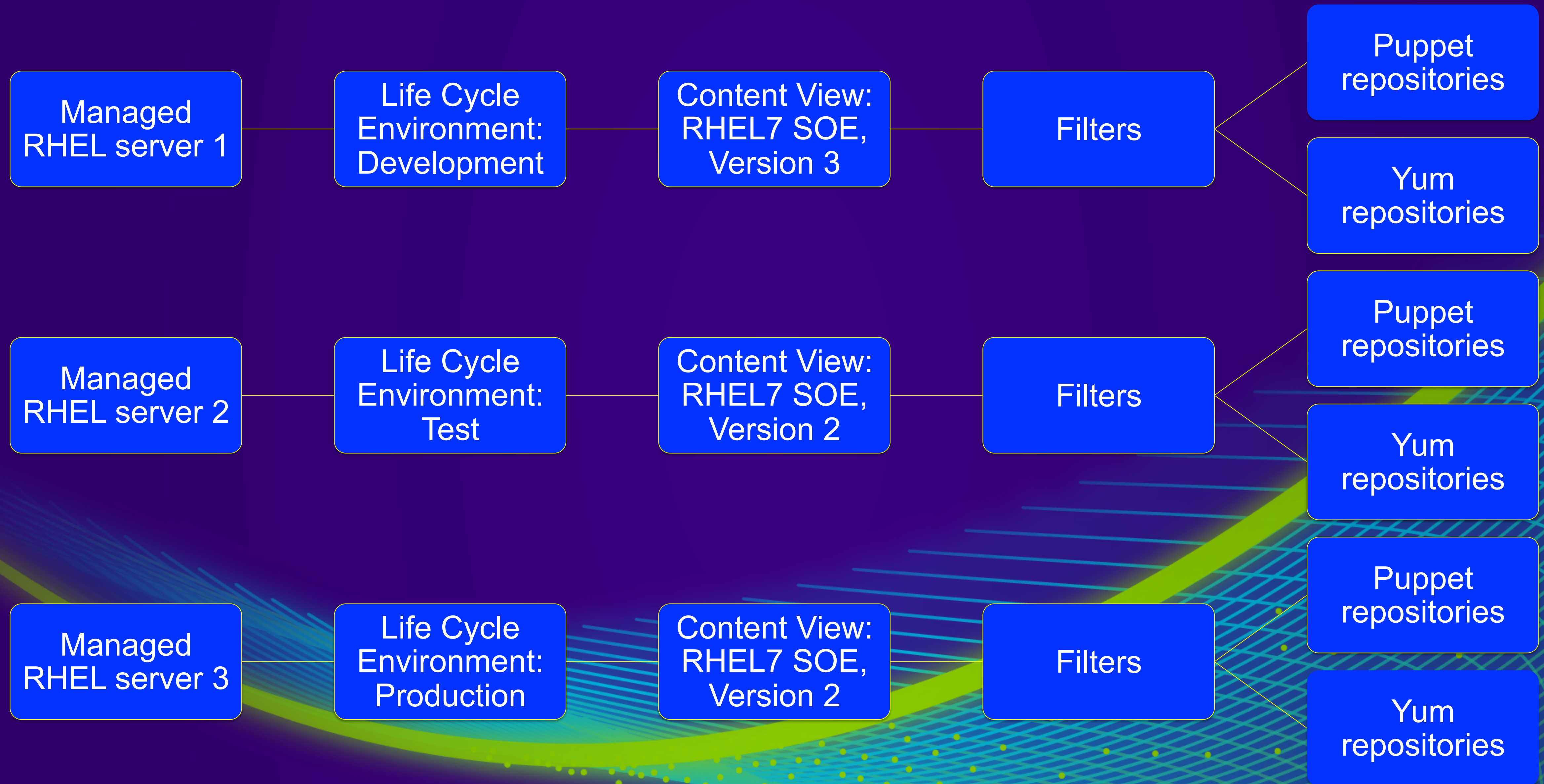


Promotion of new
version to Life
Cycle Environment:
Test

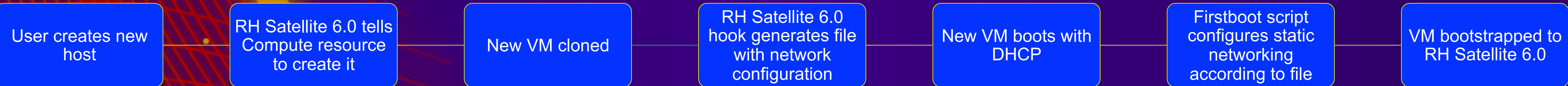


Promotion of new
version to Life
Cycle Environment:
Production

Red Hat Satellite 6.0 components – Simplified view



Overview - Deployment of VM with RH Satellite 6.0



Finish scripts for template deployed servers:

Firstboot script: What's my name?

```
SATELLITE_SERVER=https://satellite6-server.domain/api/v2/
VMINFO_FILE=/var/tmp/vm_info.txt

function jsonValue() {
    KEY=$1
    FILE=$2
    cat $FILE | awk -F"[,:}" '{for(i=1;i<=NF;i++){if($i~/\042'$KEY'\042/){print $(i+1)}}}' | tr -d '"'
}

getMAC(){
    NIC=$1
    ip addr show $NIC | awk -F'ether' '/ether/ {print $2}' | sed 's/ //' | awk '{print $1}'
}

getHostname(){
    jsonValue name $VMINFO_FILE
}

getVMInfo(){
    curl -s -o $VMINFO_FILE -user theuser:thepass -H "Content-Type:application/json" -H "Accept:application/json" -k ${SATELLITE_SERVER}hosts?search="$(getMAC eth0)"
    result=$(getHostname)
    if [ -z $result ]; then
        echo "$MAC : is not known to the Satellite 6 server"
        exit 1
    fi
}

getVMInfo; setupNetworking $(getHostname)
```


Red Hat Enterprise Linux 7 SOE VM Deployment

RED HAT SATELLITE

Default_Organization ▾

Monitor ▾

Content ▾

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Infrastructure ▾

New Host

Host

Puppet Classes

Network

Operating Systems

Additional Information

Name

Organization

Default_Organization

Location

Default_Location

Host Group

Deploy on

Bare Metal

Lifecycle Environment

Puppet Environment

PROVISIONING SETUP

Operating systems

Provisioning templates ▾

Partition tables

Installation media ▾

Hardware models

Architectures

Capsule Settings

Content Source

Use this as a source for installation and updates.

Puppet CA

Use this puppet server as a CA server

Puppet Master

Use this puppet server as an initial Puppet Server or to execute puppet runs

Cancel

Submit

Red Hat Enterprise Linux 7 SOE VM Deployment

RED HAT SATELLITE

Default_Organization ▾Monitor ▾Content ▾Hosts ▾Configure ▾Infrastructure ▾

New Host

Host

Puppet Classes

Network

Operating System

Virtual Machine

Parameters

Additional Information

Name

devsedh2-lx9059

Organization

Default_Organization ▾

Location

Default_Location ▾

Host Group

Infrastructure Test/Linux TS 4.0 ▾

Deploy on

(VMWare) ▾

Compute profile

Linux TS 4.0 ▾

Lifecycle Environment

Infrastructure_Test ▾

Puppet Environment

Linux_TS_4_0 ▾

Capsule Settings

Content Source

devsedh2-lx9033

Use this as a source for installation and updates.

Puppet CA

devsedh2-lx9033

Use this puppet server as a CA server

Puppet Master

devsedh2-lx9033

Use this puppet server as an initial Puppet Server or to execute puppet runs

Cancel

Submit

Red Hat Enterprise Linux 7 SOE VM Deployment

RED HAT SATELLITE

Default_Organization ▾Monitor ▾Content ▾Hosts ▾Configure ▾Infrastructure ▾

New Host

HostPuppet ClassesNetworkOperating SystemVirtual MachineParametersAdditional Information

General Settings

Domain

Realm

Primary Interface

Subnet

IP address

[Suggest new](#)

[IP address auto-suggest](#)

+ Add Interface

Cancel

Submit

Red Hat Enterprise Linux 7 SOE VM Deployment

RED HAT SATELLITE

Default_Organization ▾ Monitor ▾ Content ▾ Hosts ▾ Configure ▾ Infrastructure ▾

New Host

Host Puppet Classes Network **Operating System** Virtual Machine Parameters Additional Information

Architecture

Operating system

Provisioning Method ☐ Network Based ☒ Image Based

Image

Provisioning templates

Display the templates that will be used to provision this host

Red Hat Enterprise Linux 7 SOE VM Deployment

Host

Puppet Classes

Network

Operating System

Virtual Machine

Parameters

Additional Information

CPU

CPU

1

Cores per socket

Cores per socket

1

Memory (MB)

Memory (MB)

2048

Cluster

Cluster

Folder

Folder

Linux

Guest OS

Guest OS

Red Hat Enterprise Linux 6 (64-bit)

Network interfaces

NIC type

NIC type

E1000

Network

Network

-VLAN

NIC type

NIC type

E1000

Network

Network

VLAN

+ Add Interface

Storage

SCSI controller

SCSI controller

LSI Logic Parallel

Data store

Data store

LUN01c (free: 177 GB, prov: 2.63 TB, total: 2 TB)

Name

Name

Hard disk

Size (GB)

Size (GB)

35

Thin provision

Thin provision

☒

Red Hat Enterprise Linux 7 SOE VM Deployment

RED HAT SATELLITE

Default_Organization ▾ Monitor ▾ Content ▾ Hosts ▾ Configure ▾ Infrastructure ▾

New Host

Host Puppet Classes Network Operating System Virtual Machine Parameters **Additional Information**

Owned By Magnus Glantz ()

Enabled ☒
Include this host within Satellite 6 reporting

Comment Deployment Request 123456789

Additional information about this host

Cancel Submit

80 seconds

Red Hat Enterprise Linux 7 SOE VM Deployment

Default_Organization ▾

Monitor ▾

Content ▾

Hosts ▾

Configure ▾

Infrastructure ▾

Administer ▾

New Host

New in Progress

🔄 running - Set up compute instance devsedh2-lx9059 [REDACTED]

⏸ pending - Query instance details for devsedh2-lx9059 [REDACTED]

⏸ pending - Hook: [REDACTED] network_info

⏸ pending - Power up compute instance devsedh2-lx9059 [REDACTED]

⏸ pending - Prepare post installation script for devsedh2-lx9059 [REDACTED]

⏸ pending - Wait for devsedh2-lx9059 [REDACTED] to come online

⏸ pending - Enable certificate generation for devsedh2-lx9059 [REDACTED]

⏸ pending - Configure instance devsedh2-lx9059 [REDACTED] via SSH

Red Hat Enterprise Linux 7 SOE VM Deployment

Default_Organization ▾

Monitor ▾

Content ▾

Hosts ▾

Configure ▾

Infrastructure ▾

Administer ▾

New Host

New in Progress

✔ completed - Set up compute instance devsedh2-lx9059

✔ completed - Query instance details for devsedh2-lx9059

🔄 running - Hook: network_info

⏸ pending - Power up compute instance devsedh2-lx9059

⏸ pending - Prepare post installation script for devsedh2-lx9059

⏸ pending - Wait for devsedh2-lx9059 to come online

⏸ pending - Enable certificate generation for devsedh2-lx9059

⏸ pending - Configure instance devsedh2-lx9059 via SSH

Red Hat Enterprise Linux 7 SOE VM Deployment

Default_Organization ▾

Monitor ▾

Content ▾

Hosts ▾

Configure ▾

Infrastructure ▾

Administer ▾

New Host

New in Progress

✔ completed - Set up compute instance devsedh2-lx9059 [REDACTED]

✔ completed - Query instance details for devsedh2-lx9059 [REDACTED]

✔ completed - Hook: [REDACTED]network_info

🔄 running - Power up compute instance devsedh2-lx9059 [REDACTED]

⏸ pending - Prepare post installation script for devsedh2-lx9059 [REDACTED]

⏸ pending - Wait for devsedh2-lx9059 [REDACTED] to come online

⏸ pending - Enable certificate generation for devsedh2-lx9059 [REDACTED]

⏸ pending - Configure instance devsedh2-lx9059 [REDACTED] via SSH

Red Hat Enterprise Linux 7 SOE VM Deployment

Default_Organization ▾

Monitor ▾

Content ▾

Hosts ▾

Configure ▾

Infrastructure ▾

Administer ▾

New Host

New in Progress

✔ completed - Set up compute instance devsedh2-lx9059 [REDACTED]

✔ completed - Query instance details for devsedh2-lx9059 [REDACTED]

✔ completed - Hook: [REDACTED] network_info

✔ completed - Power up compute instance devsedh2-lx9059 [REDACTED]

🔄 running - Prepare post installation script for devsedh2-lx9059 [REDACTED]

⏸ pending - Wait for devsedh2-lx9059 [REDACTED] to come online

⏸ pending - Enable certificate generation for devsedh2-lx9059 [REDACTED]

⏸ pending - Configure instance devsedh2-lx9059 [REDACTED] via SSH

Red Hat Enterprise Linux 7 SOE VM Deployment

Default_Organization ▾

Monitor ▾

Content ▾

Hosts ▾

Configure ▾

Infrastructure ▾

Administer ▾

New Host

New in Progress

✔ completed - Set up compute instance devsedh2-lx9059 [REDACTED]

✔ completed - Query instance details for devsedh2-lx9059 [REDACTED]

✔ completed - Hook: [REDACTED] network_info

✔ completed - Power up compute instance devsedh2-lx9059 [REDACTED]

✔ completed - Prepare post installation script for devsedh2-lx9059 [REDACTED]

🔄 running - Wait for devsedh2-lx9059 [REDACTED] to come online

⏸ pending - Enable certificate generation for devsedh2-lx9059 [REDACTED]

⏸ pending - Configure instance devsedh2-lx9059 [REDACTED] via SSH

Red Hat Enterprise Linux 7 SOE VM Deployment

Default_Organization ▾

Monitor ▾

Content ▾

Hosts ▾

Configure ▾

Infrastructure ▾

Administer ▾

New Host

New in Progress

✔ completed - Set up compute instance devsedh2-lx9059 [REDACTED]

✔ completed - Query instance details for devsedh2-lx9059 [REDACTED]

✔ completed - Hook: [REDACTED] network_info

✔ completed - Power up compute instance devsedh2-lx9059 [REDACTED]

✔ completed - Prepare post installation script for devsedh2-lx9059 [REDACTED]

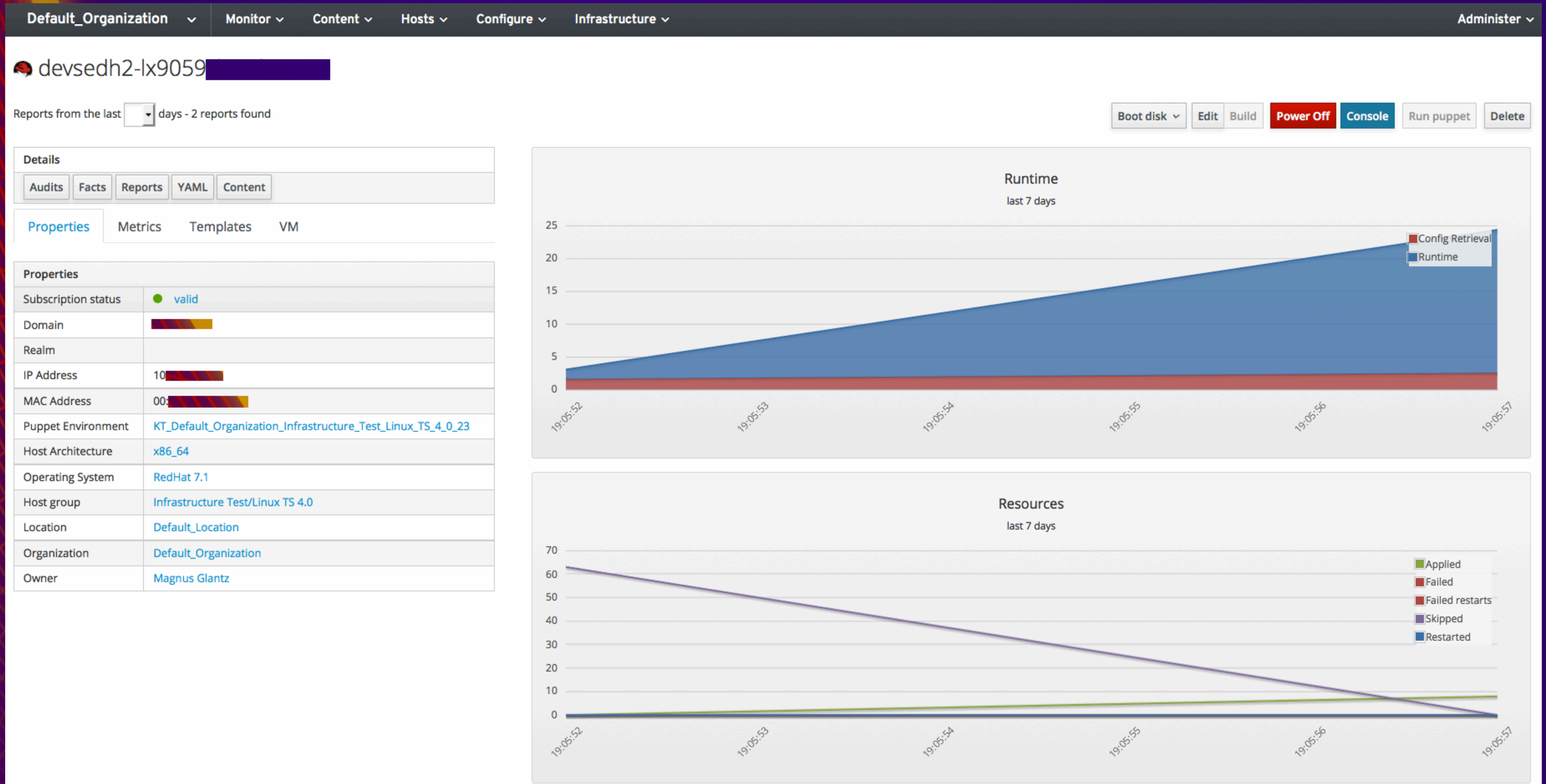
✔ completed - Wait for devsedh2-lx9059 [REDACTED] to come online

✔ completed - Enable certificate generation for devsedh2-lx9059 [REDACTED]

🔄 running - Configure instance devsedh2-lx9059 [REDACTED] com via SSH



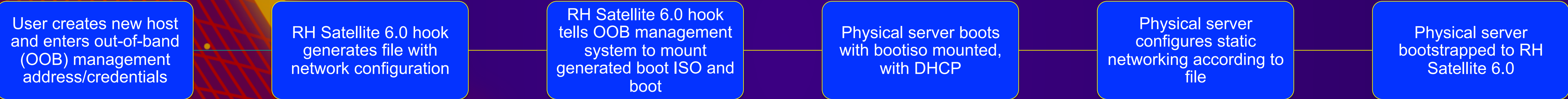
Red Hat Enterprise Linux 7 SOE VM Deployment



-Wow. This is great.



Overview - Deployment of physical server with RH Satellite 6.0



Satellite 6.0 OOB Hook Concept

Provision physical server (after_commit hook)

```
LOGFILE=/some/place/$2.log
VMINFO_FILE=/some/place/$2.vminfo
NICINFO_FILE=/some/place/$2.nicinfo
BUILDFILE=/some/place/$2.new # Created by a separate 'create' hook (just 'touch $BUILDFILE').
if [ ! -f $BUILDFILE ]; then
    exit 0 # Prevents further execution for hosts that are not in build mode.
fi
# jsonValue function to extract info from $VMINFO_FILE ..

curl -s -o $VMINFO_FILE --user theuser:thepass -H "Content-Type:application/json" -H "Accept:application/json" -k https://satellite6-server/api/v2/hosts?search="$2"

if [ -f $BUILDFILE ]; then
    rm -f /var/www/html/pub/hooks/info/$2.new
    if grep -i vmware $VMINFO_FILE >/dev/null 2>&1; then
        exit 0 # Exit if it's not a physical server
    else
        curl -s -o $NICINFO_FILE --user theuser:thepass -H "Content-Type:application/json" -H "Accept:application/json" -k https://satellite6-server/api/v2/hosts/$(jsonValue id $VMINFO_FILE)/interfaces

        if grep "Nic::BMC" $NICINFO_FILE >/dev/null; then
            sudo foreman-rake bootdisk:generate:full_host NAME=$2 OUTPUT=/var/www/html/some/place/$2.iso >> $LOGFILE 2>&1 # full_host requires ruby193-rubygem-foreman_bootdisk-3.2.1>
            sudo /bin/chmod a+r /var/www/html/some/place/$2.iso
            # Code here to extract OOB details from $NICINFO_FILE and put into variables
            oob_integration_script $OOB_IP $OOB_USER $OOB_PASS ..
        fi
    fi
fi
exit 0
```


Kickstart %POST

Set hostname, register and install/run stuff

```
THEHOSTNAME="<<%= @host.name %>"
hostname $THEHOSTNAME

# Fetch network configuration from Satellite 6 generated by host create hook andand setup proper static network
setupNetwork $THEHOSTNAME

# Subscription manager stuff
# Add: --force to subscription-manager command to get reinstallations working

# Update system to latest available errata
yum -t -y -e 0 update

# Mimic Satellite 5 activation keys
HOSTGROUP="<<%= @host.hostgroup.to_s %>"

case $HOSTGROUP in
    *aaa)
        yum -t -y -e 0 install nmap-ncat perf screen
        ;;
    *bbb)
        yum -t -y -e 0 install httpd tomcat6
        ;;
esac

# Execute in case some RPM (usually related to a hostgroup) drops it off
if [ -x /tmp/post-script ]; then
    /tmp/post-script
fi
```


Red Hat Enterprise Linux 7 SOE PHY Deployment

RED HAT SATELLITE

Default_Organization ▾Monitor ▾Content ▾Hosts ▾Configure ▾Infrastructure ▾

New Host

HostPuppet ClassesNetworkOperating SystemAdditional Information

Name

OrganizationDefault_Organization

LocationDefault_Location

Host Group

Deploy onBare Metal

Lifecycle Environment

Puppet Environment

PROVISIONING SETUP

Operating systems

Provisioning templates

Partition tables

Installation media

Hardware models

Architectures

Capsule Settings

Content Source

Puppet CA

Puppet Master

Use this as a source for installation and updates.

Use this puppet server as a CA server

Use this puppet server as an initial Puppet Server or to execute puppet runs

Cancel

Submit

Red Hat Enterprise Linux 7 SOE PHY Deployment

RED HAT SATELLITE

Default_Organization ▾Monitor ▾Content ▾Hosts ▾Configure ▾Infrastructure ▾

New Host

Host

Puppet Classes

Network

Operating System

Parameters

Additional Information

Name

devsedh2-lx9056

Organization

Default_Organization ▾

Location

Default_Location ▾

Host Group

Infrastructure Test/Linux TS 4.0 ▾

Deploy on

Bare Metal ▾

Lifecycle Environment

Infrastructure_Test ▾

Puppet Environment

Linux_TS_4_0 ▾

Capsule Settings

Content Source

devsedh2-lx9033 ▾

Use this as a source for installation and updates.

Puppet CA

devsedh2-lx9033 ▾

Use this puppet server as a CA server

Puppet Master

devsedh2-lx9033 ▾

Use this puppet server as an initial Puppet Server or to execute puppet runs

Cancel

Submit

Red Hat Enterprise Linux 7 SOE PHY Deployment

Host

Puppet Classes

Network

Operating System

Parameters

Additional Information

General Settings

Domain

Realm

Primary Interface

MAC address

00:aa:bb:cc:dd:ee

MAC address for this host

Subnet

IP address

1.2.3.4

IP address auto-suggest

Suggest new

Interface

Type

BMC

MAC address

00:aa:bb:cc:dd:dd

Name

oob.domain.name.or.just.ip

DNS name

Domain

Subnet

No subnets

IP address

4.3.2.1

Username

user

Password

....

Red Hat Enterprise Linux 7 SOE PHY Deployment

```
Tue May 26 12:07:41 UTC 2015: Completed gathering network information for: devsedh2-lx9056[REDACTED]
Tue May 26 12:07:42 UTC 2015: Detected that devsedh2-lx9056[REDACTED] is in build mode.
Tue May 26 12:07:42 UTC 2015: devsedh2-lx9056[REDACTED] is a non-VMware host.
Tue May 26 12:07:42 UTC 2015: Initializing generation of bootiso for: devsedh2-lx9056[REDACTED]
Size of boot image is 4 sectors -> No emulation
 24.34% done, estimate finish Tue May 26 12:08:16 2015
 48.73% done, estimate finish Tue May 26 12:08:16 2015
 73.03% done, estimate finish Tue May 26 12:08:16 2015
 97.44% done, estimate finish Tue May 26 12:08:16 2015
Total translation table size: 2048
Total rockridge attributes bytes: 0
Total directory bytes: 2048
Path table size(bytes): 22
Max brk space used 0
20539 extents written (40 MB)
Wrote /var/www/html/[REDACTED]/devsedh2-lx9056[REDACTED].iso
Tue May 26 12:08:17 UTC 2015: generated bootiso for: devsedh2-lx9056[REDACTED]
Tue May 26 12:08:17 UTC 2015: ILO DNS name not set on ILO interface.
ILO info for devsedh2-lx9056[REDACTED]
ILODNS:
ILOIP: 10.[REDACTED]
ILOUSER: [REDACTED]
ILOPASS: *****
ISO: /var/www/html/[REDACTED]/devsedh2-lx9056[REDACTED].iso
Tue May 26 12:08:17 UTC 2015: Working network connection to devsedh2-lx9056[REDACTED] ILO (10.[REDACTED]) on port 443.
>>> my_ilo.hold_pwr_btn()
>>> my_ilo.insert_virtual_media(device="cdrom", image_url="http://[REDACTED]/devsedh2-lx9056[REDACTED].iso")
>>> my_ilo.set_vm_status(device="cdrom", boot_option="boot_once")
>>> my_ilo.set_host_power()
Tue May 26 12:08:43 UTC 2015: ILO integration executed successfully.
```


-I'm so happy right now.



The ~~Red Hat Enterprise Linux~~ IKEA ABI



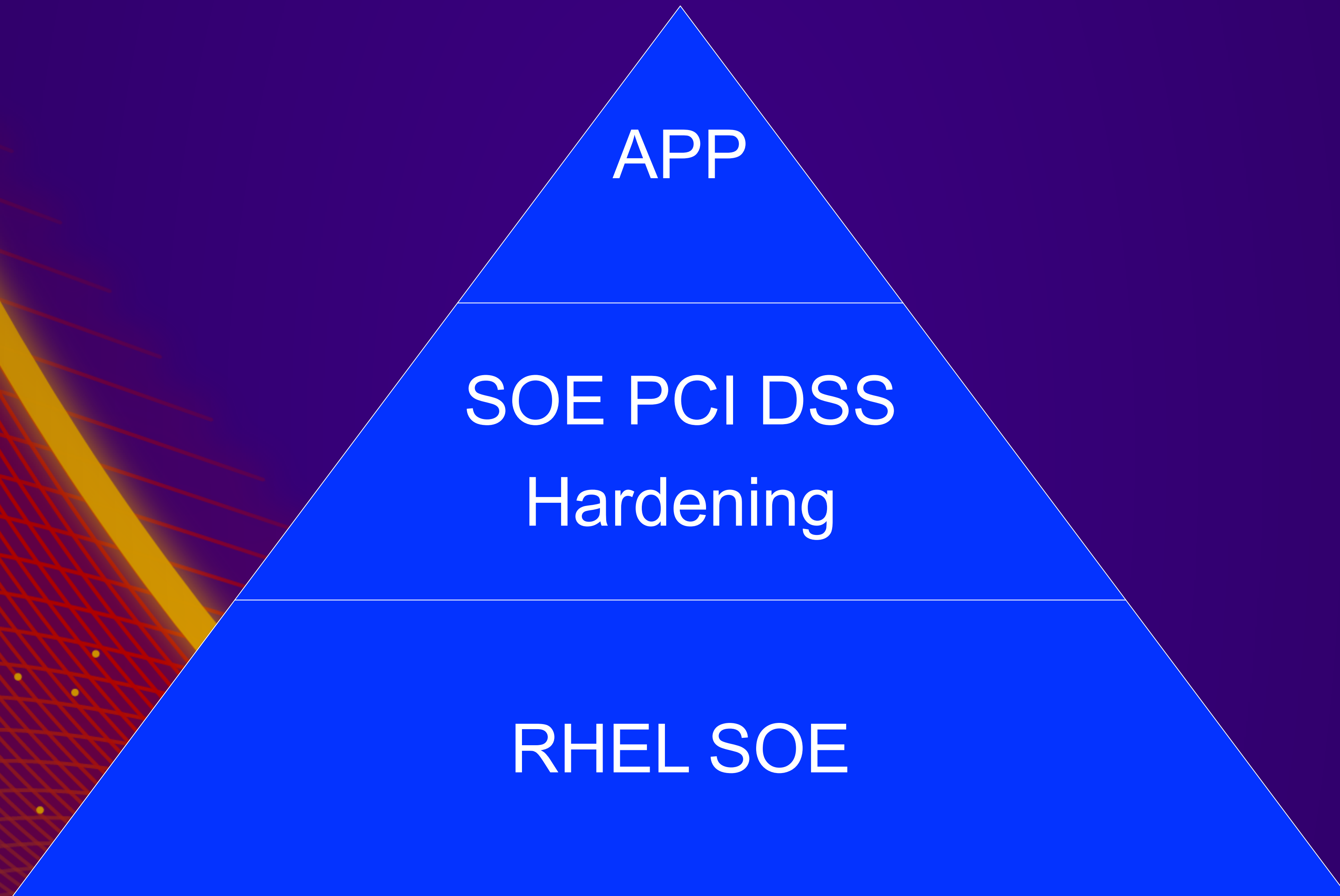
Behold the IKEA ABI.

It is possible to store shirts in all versions of the PAX Wardrobe.

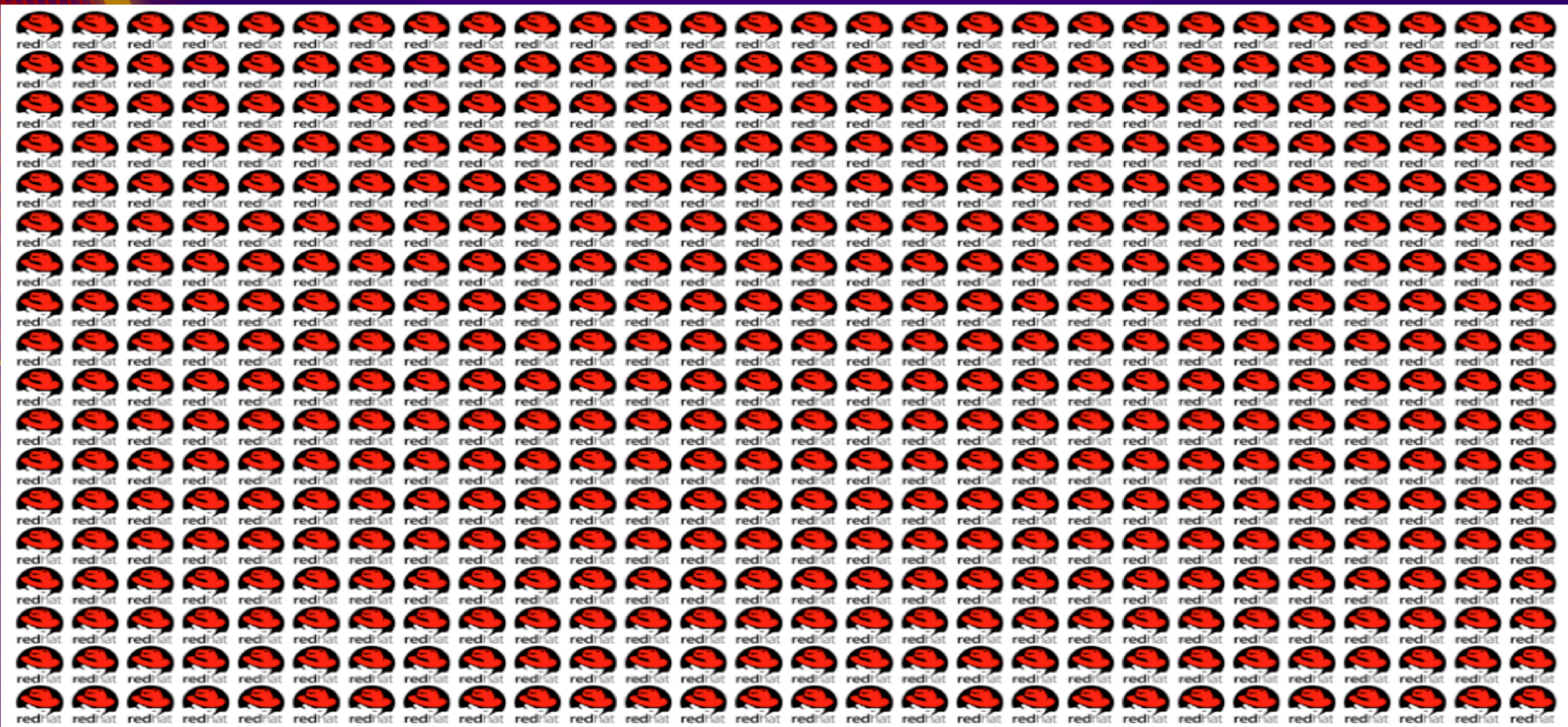
Payment Card Industry Data Security Standard PCI DSS

[Imagine dramatic music being played]

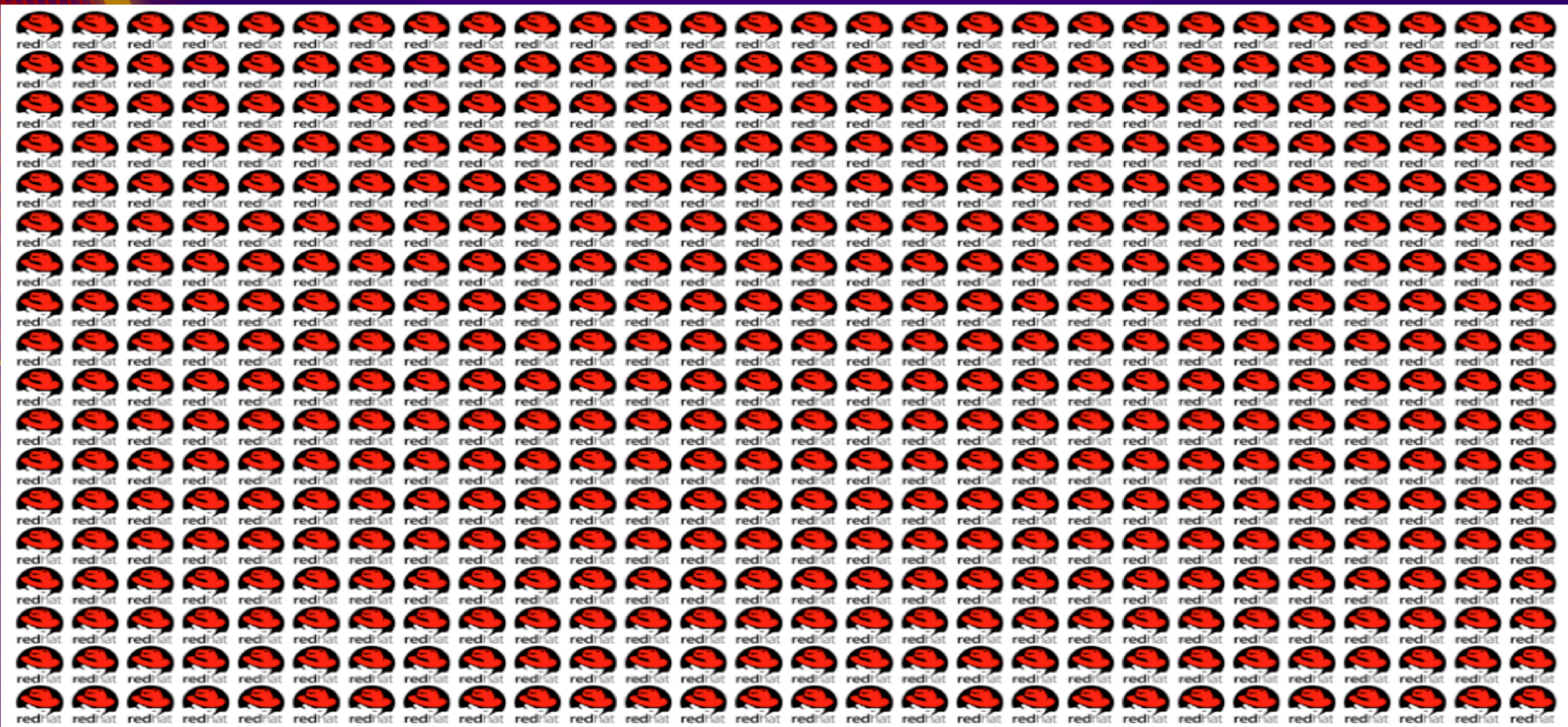
PCI DSS configuration of SOE is required for all systems affected



Number of systems affected by PCI DSS compliance



Number of systems patched to RHEL-latest every 30 days



**Number of people required for patching 3500 servers
..in 2 ½ hours:**



Me and Briju

Total number of people working with Linux at IKEA IT



Red Hat personnel



**Account
Manager**



**Technical
Account
Manager**



**Solution
Architects
(Regularly)**



**Consultants
(on a need-
to basis)**

Would it be an army of people..



BILLY

Bookcase, white

~~\$59.99~~ **\$1,000,000.99**

The price reflects selected options

Article Number: 836.882.10

Adjustable shelves can be arranged according to your needs. A simple unit can be enough storage for a limited space or the foundation for a larger storage solution if your needs change. [Read more](#)

Color

white

Size

31 1/2x11x79 1/2 "

1

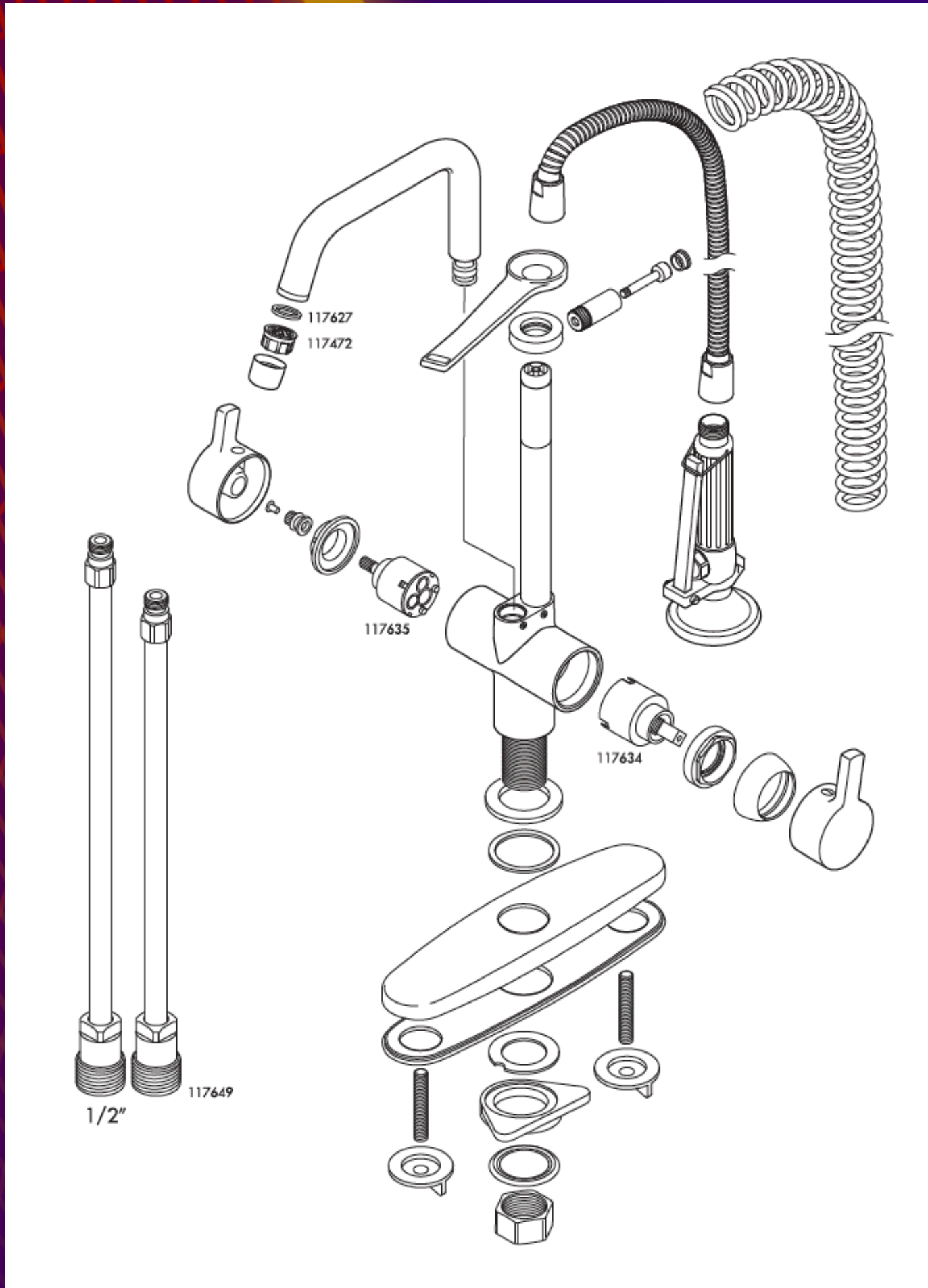
Buy online

Save to list

Coordinating Products



[View all coordinating products](#)



+



+




```
[me@ingvar5 ~]$ ./patch  
Wed Sep 24 23:14:15 UTC 2014: Issuing 'yum -y update bash' to all servers..  
Wed Sep 25 01:44:15 UTC 2014: Done.  
[me@ingvar5 ~]$ █
```


RED HAT **SUMMIT**

**LEARN. NETWORK.
EXPERIENCE OPEN SOURCE.**