

Final SBA

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Lab Images

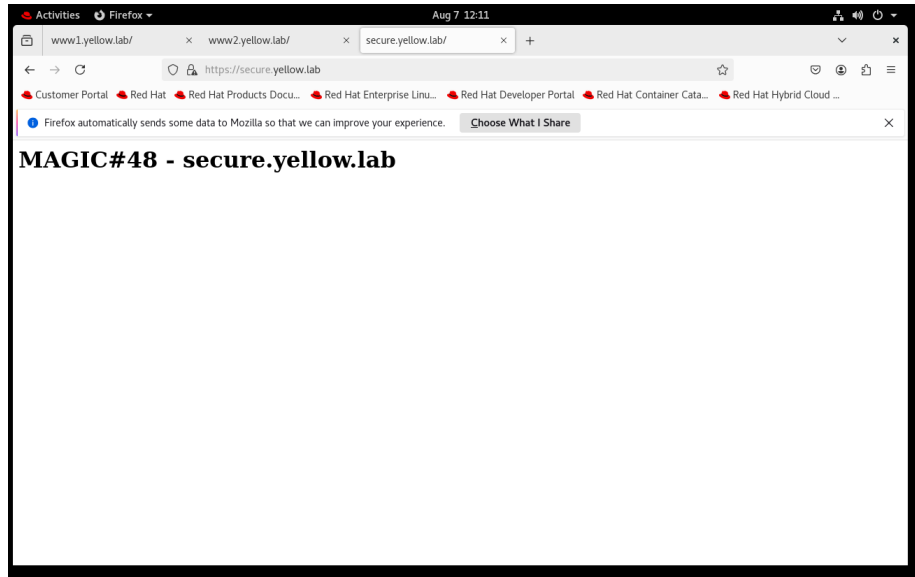


Figure 1: 01-secure

01-secure

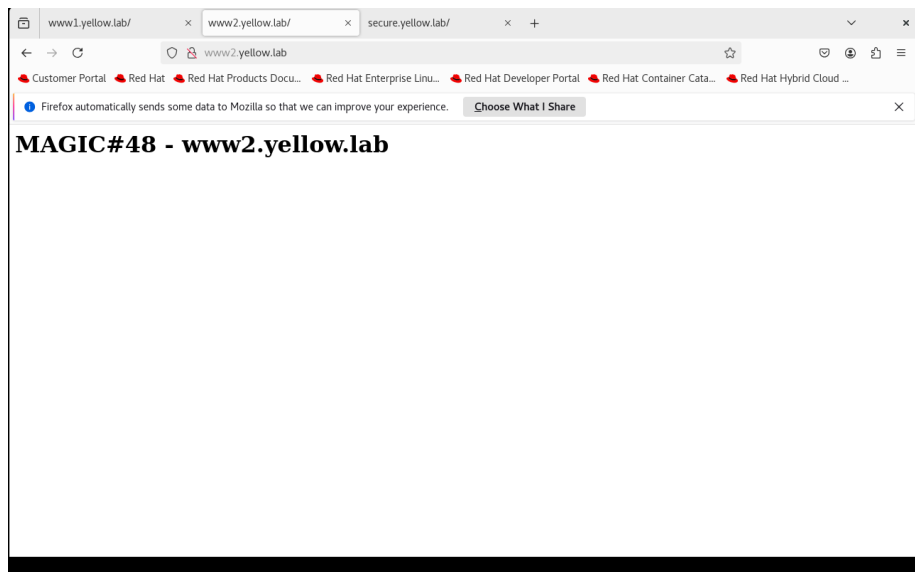


Figure 2: 02-www2

02-www2

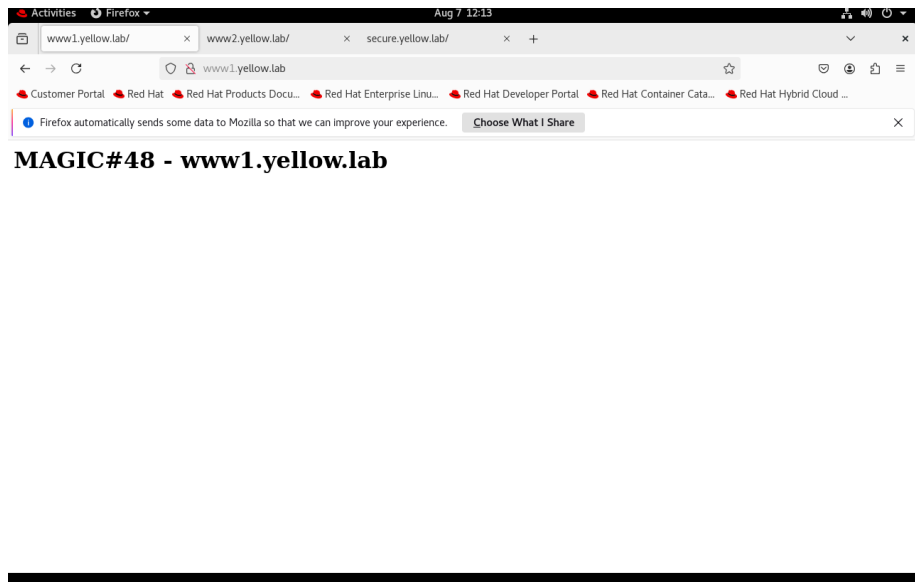


Figure 3: 03-www1

03-www1

```

File Edit View Search Terminal Help
1543 168K ACCEPT all -- * * 0.0.0.0/0 0.0.0.0/0 ctsta
te RELATED,ESTABLISHED
0 0 ACCEPT all -- * * 172.16.31.0/24 0.0.0.0/0
0 0 ACCEPT all -- * * 172.16.0.0/24 0.0.0.0/0

Chain LIBVIRT_INP (0 references)
pkts bytes target prot opt in out source destination

Chain LIBVIRT_OUT (0 references)
pkts bytes target prot opt in out source destination

Chain LIBVIRT_FWO (0 references)
pkts bytes target prot opt in out source destination

Chain LIBVIRT_FWI (0 references)
pkts bytes target prot opt in out source destination

Chain LIBVIRT_FWX (0 references)
pkts bytes target prot opt in out source destination
== Done ==
[root@haja0013-SBA ~]# ls /mnt/nfs/nfs_test.txt
/mnt/nfs/nfs_test.txt
[root@haja0013-SBA ~]# umount /mnt/nfs
umount: /mnt/nfs: not mounted.
[root@haja0013-SBA ~]# sudo mount -t nfs ${PRIMARY_IP}:${NFS_EXPORT} /mnt/nfs
mount.nfs: Failed to resolve server : Name or service not known
[root@haja0013-SBA ~]# sudo mount -t nfs 172.16.30.48:/srv/nfs /mnt/nfs
[root@haja0013-SBA ~]# su foo
[foo@haja0013-SBA root]$ cat /mnt/nfs/
cat: /mnt/nfs/: Is a directory
[foo@haja0013-SBA root]$ cat /mnt/nfs/*
Hello from NFS client
Created by Hmoad Hajali
[foo@haja0013-SBA root]$ mkdir /mnt/nfs/hello
mkdir: cannot create directory '/mnt/nfs/hello': Read-only file system
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
[foo@haja0013-SBA root]$
desertblume$

```

Figure 4: 05

05

```

Hello from dont work server
== iptables rules ==
Chain INPUT (policy DROP 0 packets, 0 bytes)
  pkts bytes target    prot opt in     out     source                 destination
  305 48653 ACCEPT    all  --  lo      *       0.0.0.0/0              0.0.0.0/0
  1381 2839K ACCEPT    all  --  *       *       0.0.0.0/0              0.0.0.0/0          ctsta
te RELATED,ESTABLISHED
  1    74 ACCEPT    all  --  *       *       172.16.31.0/24         0.0.0.0/0
  0    0 ACCEPT    all  --  *       *       172.16.0.0/24          0.0.0.0/0
  0    0 ACCEPT    udp  --  *       *       172.16.0.0/16          0.0.0.0/0          udp d
pt:53
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:53
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:80
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:443
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:139
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:445
  0    0 ACCEPT    udp  --  *       *       172.16.0.0/16          0.0.0.0/0          udp d
pt:137
  0    0 ACCEPT    udp  --  *       *       172.16.0.0/16          0.0.0.0/0          udp d
pt:138
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:2049
  0    0 ACCEPT    udp  --  *       *       172.16.0.0/16          0.0.0.0/0          udp d
pt:2049
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:111
  0    0 ACCEPT    udp  --  *       *       172.16.0.0/16          0.0.0.0/0          udp d
pt:111
  0    0 ACCEPT    tcp  --  *       *       172.16.0.0/16          0.0.0.0/0          tcp d
pt:20048
  0    0 ACCEPT    udp  --  *       *       172.16.0.0/16          0.0.0.0/0          udp d
pt:20048

Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
  pkts bytes target    prot opt in     out     source                 destination
  0    0 ACCEPT    all  --  *       *       172.16.31.0/24         0.0.0.0/0
  0    0 ACCEPT    all  --  *       *       172.16.0.0/24          0.0.0.0/0

Chain OUTPUT (policy ACCEPT 0 packets, 0 bytes)
  pkts bytes target    prot opt in     out     source                 destination
  1543 168K ACCEPT    all  --  *       *       0.0.0.0/0              0.0.0.0/0          ctsta

```

Figure 5: 06

06

```

//172.16.30.48/samba-public    35G  6.7G  29G  20% /mnt/pub-u1
//172.16.30.48/samba-private  35G  6.7G  29G  20% /mnt/priv-u1
//172.16.30.48/samba-public    35G  6.7G  29G  20% /mnt/pub-u2
//172.16.30.48/samba-private  35G  6.7G  29G  20% /mnt/priv-u2
172.16.30.48:/srv/nfs         35G  6.7G  29G  20% /mnt/nfs
tmpfs                         178M  4.0K  178M   1% /run/user/1000
[root@haja0013-CLT ~]#

desertblume$ ssh root
Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Thu Aug  7 11:57:11 2025 from 172.16.0.1
[root@haja0013-SBA ~]# cat /srv/nfs/
nfs_test.txt  readme.nfs
[root@haja0013-SBA ~]# cat /srv/nfs/nfs_test.txt
Hello from NFS client
[root@haja0013-SBA ~]# cat /srv/nfs/readme.nfs
Created by Hmoad Hajali
[root@haja0013-SBA ~]# car /home/ansible/verification.log
bash: car: command not found...
^[[A^[[A^C
[root@haja0013-SBA ~]# cat /home/ansible/verification.log
== Creating mount points ==

=== Mounting Samba shares ===
== Mounting NFS share ==
mount.nfs: access denied by server while mounting 172.16.30.48:/srv/nfs
== Writing to shares ==
Trying to write as user2 to private (should fail)
/home/ansible/verify_helper.sh: line 52: /mnt/priv-u2/u2_priv.txt: Permission denied
Permission denied as expected
Writing to NFS
== Results ==
--- /mnt/pub-u1/u1_pub.txt ---
Hello from user1 public
--- /mnt/priv-u1/u1_priv.txt ---
Hello from user1 private
--- /mnt/pub-u2/u2_pub.txt ---
Hello from user2 public
--- /mnt/priv-u2/u2_priv.txt (should fail or be empty) ---
[Failed to read]
--- /mnt/nfs/nfs_test.txt ---
Hello from dont work server

```

Figure 6: 07

```

Hello from user1 private
--- /mnt/pub-u2/u2_pub.txt ---
Hello from user2 public
--- /mnt/priv-u2/u2_priv.txt (should fail or be empty) ---
[Failed to read]
--- /mnt/nfs/nfs_test.txt ---
Hello from NFS client
fwd.yellow.lab
rev.16.172
h[Q
yellowlab9nx1yellowladnsadminyellowlabxG} :QDQ
yellowlabnx1yellowlabnx2yellowlab*Qnx1
yellowlab*Qnx2yellowlab 0-Qsecureyellowlab 0+Qwww1yellowlab0+Qwww2yellowlab0hdQ161
72in-addrarpa9nx1yellowladnsadminyellowlabxG} :QM16172in-addrarpanx1yellowlabnx2yellowla
bg
Q83016172in-addrarpanx1yellowlabwww1yellowlabwww2yellowlabV
Q83216172in-addrarpanx2yellowla
bsecureyellowlabbind-slave
h[Q
yellowlab9nx1yellowladnsadminyellowlabxG} :QDQ
yellowlabnx1yellowlabnx2yellowlab*Qnx1
yellowlab*Qnx2yellowlab 0-Qsecureyellowlab 0+Qwww1yellowlab0+Qwww2yellowlab0hdQ161
72in-addrarpa9nx1yellowladnsadminyellowlabxG} :QM16172in-addrarpanx1yellowlabnx2yellowla
bg
Q83016172in-addrarpanx1yellowlabwww1yellowlabwww2yellowlabV
Q83216172in-addrarpanx2yellowla
bsecureyellowlab== Done ==
[root@haja0013-CLT ~]# ls /mnt/priv-u1/
u1_priv.txt
[root@haja0013-CLT ~]# echo "hello" >> /mnt/priv-u1/u1_priv.txt
[root@haja0013-CLT ~]# ls /mnt/nfs/
nfs_test.txt  readme.nfs
[root@haja0013-CLT ~]# df -h
Filesystem                Size      Used Avail Use% Mounted on
devtmpfs                  861M        0   861M   0% /dev
tmpfs                      890M    84K   890M   1% /dev/shm
tmpfs                      890M    18M   872M   2% /run
tmpfs                      890M        0   890M   0% /sys/fs/cgroup
/dev/mapper/rhel-root      17G    7.3G   9.7G  43% /
/dev/sda1                 1014M   307M   708M  31% /boot
tmpfs                      178M    12K   178M   1% /run/user/42
shm                        63M        0    63M   0% /var/lib/containers/storage/overlay-contai
ners/1fe03299caade28cf5a841753b66e4c6fdafaac2a2fc450b667fa3ba1d444c9/userdata/shm
overlay                   17G    7.3G   9.7G  43% /var/lib/containers/storage/overlay/08e20b
05bb00aee4ff025bd24e3ddb78f5d87b3e209b7411804436ba86abf939/merged
//172.16.30.48/samba-public 35G    6.7G   29G  20% /mnt/pub-u1

```

Figure 7: 08

08


```

48.30.16.172.in-addr.arpa. 86400 IN PTR www2.yellow.lab.
48.30.16.172.in-addr.arpa. 86400 IN PTR nx1.yellow.lab.
48.30.16.172.in-addr.arpa. 86400 IN PTR www1.yellow.lab.

;; AUTHORITY SECTION:
16.172.in-addr.arpa. 86400 IN NS nx2.yellow.lab.
16.172.in-addr.arpa. 86400 IN NS nx1.yellow.lab.

;; Query time: 0 msec
;; SERVER: 172.16.30.48#53(172.16.30.48)
;; WHEN: Thu Aug 07 12:00:24 EDT 2025
;; MSG SIZE rcvd: 199

=== HTTP Test for www1.yellow.lab ===
$ curl -s http://www1.yellow.lab
<h1>MAGIC#48 - www1.yellow.lab</h1>

=== HTTP Test for www2.yellow.lab ===
$ curl -s http://www2.yellow.lab
<h1>MAGIC#48 - www2.yellow.lab</h1>

=== HTTPS Test for secure.yellow.lab ===
$ curl -sk https://secure.yellow.lab
<h1>MAGIC#48 - secure.yellow.lab</h1>

=== Mounting Samba shares ===
== Mounting NFS share ==
== Writing to shares ==
Trying to write as user2 to private (should fail)
/usr/local/bin/verify_helper.sh: line 78: /mnt/priv-u2/u2_priv.txt: Permission denied
Permission denied as expected
Writing to NFS
== Results ==
--- /mnt/pub-u1/u1_pub.txt ---
Hello from user1 public
--- /mnt/priv-u1/u1_priv.txt ---
Hello from user1 private
--- /mnt/pub-u2/u2_pub.txt ---
Hello from user2 public
--- /mnt/priv-u2/u2_priv.txt (should fail or be empty) ---
[Failed to read]
--- /mnt/nfs/nfs_test.txt ---

```

Figure 8: 09

09

```

; <<>> DiG 9.11.36-RedHat-9.11.36-16.el8_10.4 <<>> www1.yellow.lab +norecurse
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 40996
;; flags: qr aa ra; QUERY: 1, ANSWER: 1, AUTHORITY: 2, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; COOKIE: 84209dd2a1b87bb2010000006894cd98e06962f375c829e8 (good)
;; QUESTION SECTION:
;www1.yellow.lab.          IN      A

;; ANSWER SECTION:
www1.yellow.lab.          86400   IN      A      172.16.30.48

;; AUTHORITY SECTION:
yellow.lab.               86400   IN      NS      nx1.yellow.lab.
yellow.lab.               86400   IN      NS      nx2.yellow.lab.

;; ADDITIONAL SECTION:
nx1.yellow.lab.           86400   IN      A      172.16.30.48
nx2.yellow.lab.           86400   IN      A      172.16.32.48

;; Query time: 0 msec
;; SERVER: 172.16.30.48#53(172.16.30.48)
;; WHEN: Thu Aug 07 12:00:24 EDT 2025
;; MSG SIZE rcvd: 156

=== Reverse Lookup Check ===
$ dig -x 172.16.30.48

; <<>> DiG 9.11.36-RedHat-9.11.36-16.el8_10.4 <<>> -x 172.16.30.48 +norecurse
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 36236
;; flags: qr aa ra; QUERY: 1, ANSWER: 3, AUTHORITY: 2, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; COOKIE: 55d86152949610f9010000006894cd983277089cc2f58842 (good)
;; QUESTION SECTION:
;48.30.16.172.in-addr.arpa. IN      PTR

```

Figure 9: 10

```

Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Sun Aug  3 15:44:16 2025 from 172.16.0.1
[cst8246@haja0013-CLT ~]$ sudo -i
[root@haja0013-CLT ~]# cat verification.log
== Creating mount points ==
=== DNS Full Zone Transfer Check ===
$ dig @172.16.30.48 yellow.lab AXFR

; <<>> DiG 9.11.36-RedHat-9.11.36-16.el8_10.4 <<>> @172.16.30.48 yellow.lab AXFR
; (1 server found)
;; global options: +cmd
yellow.lab.                86400    IN      SOA      nx1.yellow.lab. dnsadmin.yellow.lab. 202508070
1 3600 1800 604800 86400
yellow.lab.                86400    IN      NS       nx1.yellow.lab.
yellow.lab.                86400    IN      NS       nx2.yellow.lab.
nx1.yellow.lab.            86400    IN      A        172.16.30.48
nx2.yellow.lab.            86400    IN      A        172.16.32.48
secure.yellow.lab.         86400    IN      A        172.16.32.48
www1.yellow.lab.           86400    IN      A        172.16.30.48
www2.yellow.lab.           86400    IN      A        172.16.30.48
yellow.lab.                86400    IN      SOA      nx1.yellow.lab. dnsadmin.yellow.lab. 202508070
1 3600 1800 604800 86400
;; Query time: 0 msec
;; SERVER: 172.16.30.48#53(172.16.30.48)
;; WHEN: Thu Aug 07 12:00:24 EDT 2025
;; XFR size: 9 records (messages 1, bytes 281)

=== Forward Lookup Check ===
$ dig www1.yellow.lab

: <<>> DiG 9.11.36-RedHat-9.11.36-16.el8 10.4 <<>> www1.vellow.lab +norecurse

```

Figure 10: 11