

Hôtes virtuels et restriction des accès :

Configuration apache debian :

www.rt1.mrt.conf :

```
<VirtualHost *:80>
    ServerName www.rt1.mrt

    ServerAdmin tp@reims.com
    DocumentRoot /var/www/html/rt1

    <Directory "/var/www/html/rt1">
        Options -Indexes
        order deny,allow
        allow from 172.18.10.10
        allow from 172.18.10.11
        allow from 172.18.10.12
        deny from all
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

www.rt2.mrt.conf :

```
<VirtualHost *:80>
    ServerName www.rt2.mrt

    ServerAdmin tp@reims.com
    DocumentRoot /var/www/html/rt2

    <Directory "/var/www/html/rt2">
        Options -Indexes
        order deny,allow
        allow from 172.18.10.10
        allow from 172.18.10.11
    </Directory>
```

```
deny from all
</Directory>
```

```
ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

www.rt3.mrt.conf :

```
<VirtualHost *:80>
    ServerName www.rt3.mrt

    ServerAdmin tp@reims.com
    DocumentRoot /var/www/html/rt3

    <Directory "/var/www/html/rt3">
        Options -Indexes
        order deny,allow
        allow from 172.18.10.10
        allow from 172.18.10.12
        deny from all
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

```
mkdir -p /var/www/html/{rt1,rt2,rt3}
chown www-data:www-data /var/www/html/rt*
a2ensite www.rtx.mrt.conf
systemctl reload apache2
```

Configuration DNS :

```
/etc/bind/db.grp1.mrt :
www.rt1.mrt IN CNAME ip2
www.rt2.mrt IN CNAME ip2
www.rt3.mrt IN CNAME ip2
```

Modifier le serial puis systemctl reload bind9.

Vérification :

```
curl -I www.rt1.mrt/index.html
```

HTTPS pour debian :

Installation et configuration openssl :

```
apt install openssl
```

Pour générer un certificat valable 1 an avec un clé de 2048 bit :

```
openssl req -x509 -nodes -days 365 -newkey rsa:2048 -sha256 -out  
/etc/ssl/certs/server.crt -keyout /etc/ssl/private/server.key :
```

Country Name (2 letter code) [AU]:**FR**

State or Province Name (full name) [Some-State]:**Reims**

Locality Name (eg, city) []:**Reims**

Organization Name (eg, company) [Internet Widgits Pty Ltd]:**URCA**

Organizational Unit Name (eg, section) []:**URCA**

Common Name (e.g. server FQDN or YOUR name) []:**www.rt4.mrt**

Email Address []:**tp@reims.com**

Création du vhost /etc/apache2/sites-available/www.rt4.mrt.conf :

```
<IfModule mod_ssl.c>  
    <VirtualHost _default_:443>  
        ServerName www.rt4.mrt  
        ServerAdmin tp@reims.com  
  
        DocumentRoot /var/www/html/rt4  
  
        ErrorLog ${APACHE_LOG_DIR}/error.log  
        CustomLog ${APACHE_LOG_DIR}/access.log combined  
  
        <Directory "/var/www/html/rt4">  
            Options -Indexes  
            Require all granted  
        </Directory>  
  
        SSLEngine on
```

```
SSLCertificateFile /etc/ssl/certs/server.crt
SSLCertificateKeyFile /etc/ssl/private/server.key
```

```
.....
</VirtualHost>
</IfModule>
```

Activer le module ssl d'apache ainsi que le vhosts par `www.rt4.mrt.conf` :

```
a2enmod ssl
a2ensite www.rt4.mrt.conf

mkdir /var/www/html/rt4
chown www-data:www-data /var/www/html/rt4
a2ensite www.rt4.mrt.conf
systemctl restart apache2
```

Configuration DNS :

```
/etc/bind/db.grp1.mrt :
www.rt4.mrt IN CNAME ip2
```

Modifier le serial puis `systemctl reload bind9`.

HTTPS pour alpine :

Installation et configuration openssl :

```
apk add apache2-ssl openssl
```

Pour générer un certificat valable 1 an avec un clé de 2048 bit :

```
openssl req -x509 -nodes -days 365 -newkey rsa:2048 -sha256 -out
/etc/ssl/certs/server.crt -keyout /etc/ssl/private/server.key.
```

Création du vhost `/etc/apache2/conf.d/ssl.conf` :

```
.....
<VirtualHost _default_:443>
```

```
DocumentRoot "/var/www/localhost/rt4"
```

ServerName www.rt4.mrt
ServerAdmin tp@reims.com

ErrorLog logs/ssl_error.log
TransferLog logs/ssl_access.log

<Directory "/var/www/localhost/rt4">
 Options -Indexes
 Require all granted
</Directory>

SSLEngine on
SSLCertificateFile /etc/ssl/certs/server.crt
SSLCertificateKeyFile /etc/ssl/private/server.key

.....
</VirtualHost>

Création du répertoire :

```
mkdir /var/www/localhost/rt4
```

Configuration DNS :

```
/etc/bind/db.grp1.mrt :  
www.rt4.mrt IN CNAME ip1
```

Modifier le serial puis `systemctl reload bind9`.

Vérification :

```
curl -Ik https://www.rt4.mrt
```

```
curl -kv https://www.rt4.mrt 2>&1 | awk 'BEGIN { cert=0 } /\^* Server certificate:/ { cert=1 } /\^*/ { if (cert) print }' :
```

```
* Server certificate:  
* subject: C=FR; ST=Reims; L=Reims; O=URCA; OU=URCA; CN=www.rt4.mrt;  
emailAddress=tp@reims.com  
* start date: Nov  5 14:01:07 2019 GMT  
* expire date: Nov  4 14:01:07 2020 GMT
```

- * issuer: C=FR; ST=Reims; L=Reims; O=URCA; OU=URCA; CN=www.rt4.mrt; emailAddress=tp@reims.com
- * SSL certificate verify result: self signed certificate (18), continuing anyway.
- * TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
- * TLSv1.3 (IN), TLS handshake, Newsession Ticket (4):
- * old SSL session ID is stale, removing
- * Connection #0 to host www.rt4.mrt left intact

SSI :

Configuration SSI :

```
vi /etc/httpd/conf/httpd.conf :  
XBitHack on  
<Directory "/var/www/html">  
    Options +Includes  
</Directory>
```

```
chmod +x index.html
```

Création page html :

```
<html>  
<body>  
<p>  
hostname : centos-tp2<br>  
Adresse ip : <!--#exec cmd="ip a | awk '/.*inet.*eth0/ {print $2}'" --><br>  
Taille disque : <!--#exec cmd="df -h --total -x devtmpfs -x tmpfs | awk '/^total/ {print $4}'" --><br>  
Charge CPU : <!--#exec cmd="vmstat | awk 'NR==3 {print 100-$15}'" --><br>  
</p>  
</body>  
</html>
```

Vérification SSI :

```
curl ip3  
<html>  
<body>  
<p>  
hostname : centos-tp2<br>
```

Adresse ip : 172.18.10.12/24

Taille disque : 1.5G

Charge CPU : 0

</p>

</body>

</html>

Répertoire partagé (WebDav) :

Configuration du répertoire webdav :

```
mkdir /var/www/html/rt1/webdav
chown -R www-data:www-data /var/www/html/rt1
a2enmod dav_fs dav
systemctl restart apache2
```

Configuration de l'utilisateur apache2 :

```
htpasswd -c /etc/apache2/passwd superv
```

Configuration du vhost apache :

www.rt1.mrt.conf :

```
<VirtualHost *:80>
    ServerName www.rt1.mrt

    <Directory "/var/www/html/rt1/webdav">
        Options +Indexes
        DAV On
        AuthType Basic
        AuthName webdav
        AuthUserFile /etc/apache2/passwd
        Require valid-user
    </Directory>

</VirtualHost>
```

Vérification :

```
curl -I -u superv:password www.rt1.mrt/webdav/
```

Installation de davfs2 :

```
yum install epel-release  
yum install davfs2
```

Création du device fuse :

```
/var/lib/lxc/centos-tp2/config :  
lxc.autodev=1  
lxc.hook.autodev=sh -c "mknod -m 0666 ${LXC_ROOTFS_MOUNT}/dev/fuse c 10 229"
```

Configuration de l'authentification :

```
/etc/davfs2/secrets :  
http://www.rt1.mrt/webdav superv password
```

Montage du filesystem :

```
mkdir /webdav  
mount -t davfs www.rt1.mrt/webdav/ /webdav/
```