

# Front-end

- 
- 
- 
- Front-end
- Front-end
  - Apache2
- 
- 
- VNC SPICE HTTPS

Front-end – .

- (. ()).
- 
- 

## Front-end

 , Front-end, .

:

```
sudo apt install fly-all-main firefox
```

, , .

ALD FreeIPA. :

- ALD
- FreeIPA

. /etc/default/grub , :

### /etc/default/grub

```
GRUB_CMDLINE_LINUX_DEFAULT="parsec.max_ilev=127 parsec.ccnr_relax=1 quiet net.ifnames=0"
```

:

```
sudo pdpl-user -i 127 <local-admin>
```

grub:

```
sudo update-grub
```



.

## Front-end

:

```
sudo apt install postgresql-9.6
sudo apt install brestcloud-ald
```

```
sudo apt install postgresql-9.6
sudo apt install brestcloud-ipa
```

( FreeIPA):



Front-end,

```
sudo brestcloud-ipa-configure
```

brestadmin.

C OpenSSL:

- ( "" 2.6 ):

```
sudo mkdir /etc/apache2/ssl
```

- :

```
sudo openssl req -x509 -nodes -newkey rsa:2048 -days 3650 -keyout /etc
/apache2/ssl/<front-N-hostname>.key -out /etc/apache2/ssl/<front-N-
hostname>.crt
```

- :

```
Country Name (2 letter code) [AU]: - / ( )
State or Province Name (full name) [Some-State]: - ( )
Locality Name (eg, city) []: - ( )
Organization Name (eg, company) [Internet Widgits Pty Ltd]: - ( )
Organizational Unit Name (eg, section) []: - , .( )
Common Name (e.g. server FQDN or YOUR name) []: - , , <front-N-
hostname>.<domain>
Email Address []: - ( )
```

:

```
sudo openssl x509 -noout -text -in /etc/apache2/ssl/<front-N-hostname>.crt
```

## Apache2

- /etc/apache2/sites-available/000-default.conf, 80 443, . :

```

<VirtualHost *:80>
    ServerName <front-N-hostname>.<domain>
    Redirect permanent / https://<front-N-hostname>.<domain>
</VirtualHost>
<VirtualHost _default_:443>
    ServerName <front-N-hostname>.<domain>
    ServerAdmin webmaster@localhost
    <Directory />
        Options FollowSymLinks
        AllowOverride None
    </Directory>

    DocumentRoot /usr/lib/one/sunstone/public

    SSLEngine on
    SSLCertificateFile /etc/apache2/ssl/<front-N-hostname>.crt
    SSLCertificateKeyFile /etc/apache2/ssl/<front-N-hostname>.key

    <Proxy balancer://unicornservers>
        BalancerMember http://127.0.0.1:9869
    </Proxy>

    ProxyPass /brestcloud !
    ProxyPass / balancer://unicornservers/
    ProxyPassReverse / balancer://unicornservers/
    ProxyPreserveHost on

    <Proxy *>
        AuthType Kerberos
        KrbAuthRealms <DOMAIN>
        KrbServiceName HTTP/<front-N-hostname>.<domain>
        Krb5Keytab /etc/apache2/apache2.keytab
        KrbMethodNegotiate on
        KrbMethodK5Passwd off
        KrbSaveCredentials on
        require valid-user
        AllowOverride all

        RewriteEngine On
        RewriteCond %{DOCUMENT_ROOT}/%{REQUEST_FILENAME} !-f
        RewriteRule ^/(.*)$ balancer://unicornservers%{REQUEST_URI} [P,QSA,L]
        RewriteCond %{LA-U:REMOTE_USER} (.+)
        RewriteRule . - [E=RU:%1]
        RequestHeader add X-Forwarded-Remote-User %{RU}e
    </Proxy>

    ScriptAlias /brestcloud/ /usr/lib/one/brestcloud/
    <Directory /usr/lib/one/brestcloud/>
        Options +ExecCGI
        AddHandler cgi-script .cgi
        AuthType Kerberos
        KrbAuthRealms <DOMAIN>
        KrbServiceName HTTP/<front-N-hostname>.<domain>
        Krb5Keytab /etc/apache2/apache2.keytab
        KrbMethodNegotiate on
        KrbMethodK5Passwd off
        KrbSaveCredentials on
        require valid-user
        AllowOverride all
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/error.log

    # Possible values include: debug, info, notice, warn, error, crit,
    # alert, emerg.
    LogLevel warn

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

```

- ssl -:

```
sudo a2enmod ssl
```

- Apache. , - .

:

```
sudo apachectl configtest
```

apache2.service:

```
sudo systemctl restart apache2
```

"" 2.6 . . .

- Firefox.



, Fly Astra Linux Special Edition, brestadmin.  
Firefox. about:config :

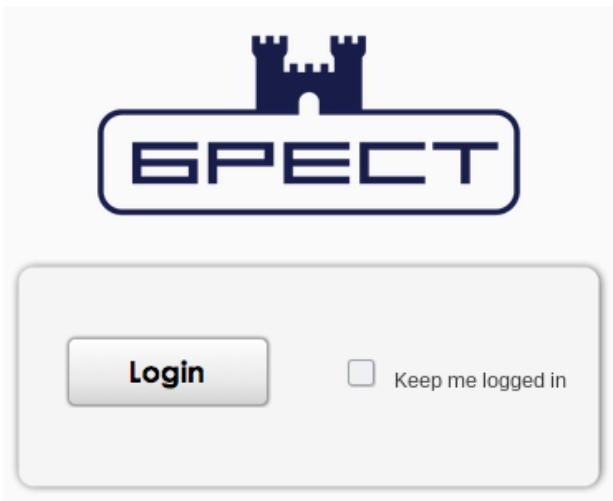
```
network.negotiate-auth.delegation-uris  
network.negotiate-auth.trusted-uris
```

"http://,https://" ( ).

OpenNebula "" :

https://<front-N-ip>.<domain>

:



Login - !



## VNC SPICE HTTPS

VNC SPICE HTTPS, :

