

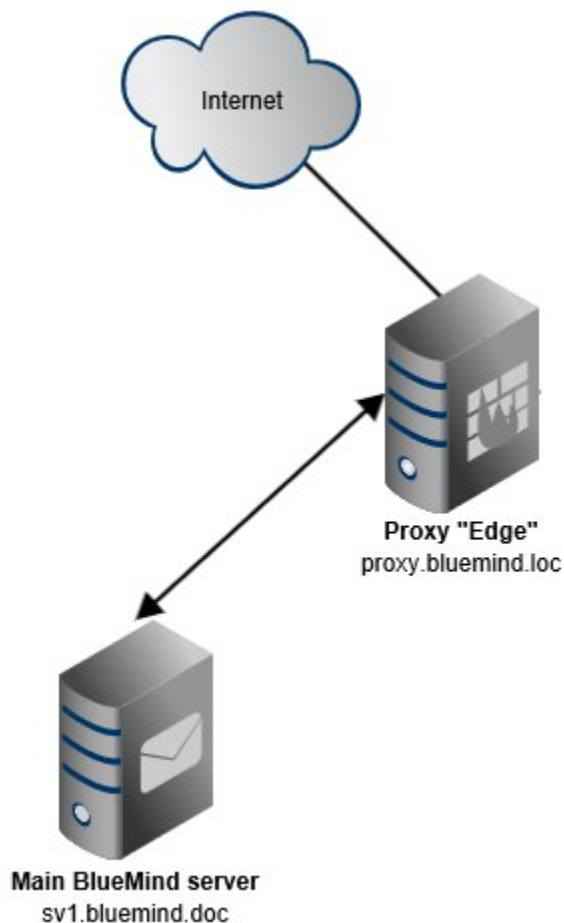
INSTALLATION D'UN SERVEUR EDGE : NGINX ET POSTFIX

INTRODUCTION

This page describes the roll-out procedure for a BlueMind Edge server as a postfix and proxy relay.

POSTULATE

- BlueMind is installed on the main server
- the role *bm-edge-role* is installed on the so-called "Edge" server
- the Edge server's nginx web server is set up as a proxy relay that serves as a main server



ROLL-OUT PROCEDURE

1. Install BlueMind on the main server following the usual procedure



The storage space for BlueMind backups must be accessible on this new server at `/var/backups/bluemind`

2. Install the subscription on the secondary server as a file

 Reminder: the text file for the subscription can be installed manually on a server

- for Ubuntu / Debian as `/etc/apt/sources.list.d/bm.list`
- for RedHat / CentOS as `/etc/yum.repos.d/bm.repo`

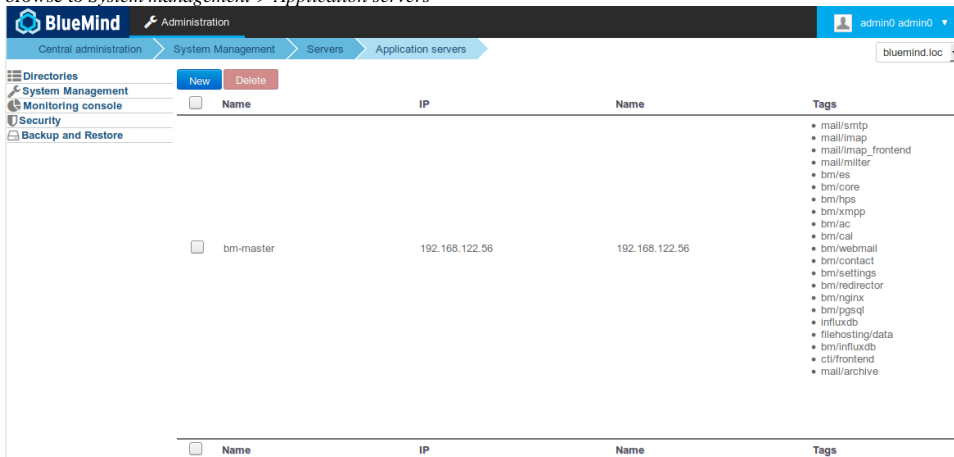
3. Install the package `bm-edge-role` on the edge server:

```
bm35-edge.bluemind.loc:~$ sudo aptitude update
bm35-edge.bluemind.loc:~$ sudo aptitude install bm-edge-role
```

```
bm35-edge.bluemind.loc:~$ sudo yum makecache
bm35-edge.bluemind.loc:~$ sudo yum install bm-edge-role
```

4. Add the smtp relay role to the edge server in the main server's admin panel:

- log into BlueMind on the main server as `admin0@global.virt`
- browse to `System management > Application servers`



Name	IP	Name	Tags
<input type="checkbox"/> bm-master	192.168.122.56	192.168.122.56	<ul style="list-style-type: none">• mail/smtp• mail/imap• mail/imap_frontend• mail/milter• bm/es• bm/core• bm/hps• bm/xmpp• bm/ac• bm/cal• bm/webmail• bm/contact• bm/settings• bm/redirector• bm/nginx• bm/pgs-ql• influxdb• filehosting/data• bm/influxdb• cti/frontend• mail/archive

- click `New > Host`
- fill in the information for the new server:

- click "Create & edit" or "Create" then click the corresponding row to edit it
- in the *Server roles* tab, check the *Mail relay* box then click Save:

- back in the servers list, the server is shown with the mail relay tag *mail/smt-edge*:

	Name	IP	Name	Tags
<input type="checkbox"/>	bm-master	192.168.122.56	192.168.122.56	<ul style="list-style-type: none"> • mail/smt • mail/imap • mail/imap_frontend • mail/milter • bm/es • bm/core • bm/hps • bm/xmpp • bm/ac • bm/call • bm/webmail • bm/contact • bm/settings • bm/redirector • bm/nginx • bm/pgsql • influxdb • filehosting/data • bm/influxdb • cti/frontend • mail/archive
<input type="checkbox"/>	bm35-edge	192.168.122.10	bm35-edge.bluemind.loc	<ul style="list-style-type: none"> • mail/smt-edge

5. Set up the domain so that the edge server is used as a mail relay:

- still signed in as *admin0@global.virt*, browse to *System management > Manage domains*
- click the row for the domain you want to configure

- in the *Mail system* tab, select the edge server you have created as mail server and click *Save*:

General | Filters | Email Archiving Policy | Tags | **Mail System** | Mailflow rules | Indexing / Searching | BM Services | File hosting(general) | Nextcloud | Telephony

BLUEMIND MAIL SERVERS

Internal mail server: bm-master

Mail relay: **bm35-edge**

Mailbox storage server: bm-master

Mailbox connection server: bm-master

Mailbox archive server: bm-master

MAIL STORAGE

Maximum user quota: Set quota to 0 MIB No quota

Default user quota: Set quota to 0 MIB No quota

Maximum mailshare quota: Set quota to 0 MIB No quota

Default mailshare quota: Set quota to 0 MIB No quota

MAIL ROUTING

Cancel Save

- Set up the server to send outgoing messages through the relay:

- still signed in as *admin0@global.virt*, browse to *System Management > System Configuration*
- in the *Mail* tab, fill in the *Relay host* field with the IP address or the edge server's host name and click *Save*:

BlueMind Administration

Central administration > System Management > Servers > System Configuration

Directories

System Management

Security

Monitoring console

Backup and Restore

Mail | Reverse Proxy | EAS Server | Authentication | File hosting(general) | Nextcloud

POSTFIX

My networks: 127.0.0.0/8, 192.168.122.56/32

Maximum mail size (MB): 50

Relay host: **bm35-edge.bluemind.loc**

CYRUS

Max child:

NGINX

Setting up web access

- Log in as root in the edge server
- Browse to the folder `/etc/nginx/sites-available`:

```
bm35-edge.bluemind.loc:~# cd /etc/nginx/sites-available
```

- Create a configuration file `bm-proxy` and edit it, e.g. using `vim`:

```
bm35-edge.bluemind.loc:/etc/nginx/sites-available# vim bm-proxy
```

- Add the following command lines:

```
■
```

```

server {
    listen 80;
    # <url_externe_bluemind> is the external url users use connect to
    server_name <url_externe_bluemind>;

    location / {
        return 301 https://<url_externe_bluemind>$request_uri;
    }
}

server {
    listen ssl 443;
    server_name <url_externe_bluemind>;

    ssl_certificate /etc/ssl/certs/bm_cert.pem;
    ssl_certificate_key /etc/ssl/certs/bm_cert.pem;
    ssl_session_timeout 5m;
    ssl_prefer_server_ciphers on;

    ssl_protocols TLSv1 TLSv1.1 TLSv1.2;
    ssl_ciphers 'EDH+CAMELLIA:EDH+aRSA:EECDH+aRSA:AESGCM:EECDH+aRSA:SHA256:EECDH:+CAMELLIA128:
+AES128:+SSLv3:!aNULL:!eNULL:!LOW:!3DES:!MD5:!EXP:!PSK:!DSS:!RC4:!SEED:!IDEA:!ECDSA:kEDH:
CAMELLIA128-SHA:AES128-SHA';
    add_header Strict-Transport-Security max-age=15768000; # six months

    proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;

    location / {
        # <srv_interne> is the main BlueMind server
        proxy_pass https://<srv_interne>;
    }

    location /webmail/ {
        client_max_body_size 0m;
        proxy_pass https://<srv_interne>/webmail/;
    }

    location /Microsoft-Server-ActiveSync {
        proxy_pass https://<srv_interne>/Microsoft-Server-ActiveSync;
        proxy_read_timeout 1200s;
        proxy_headers_hash_bucket_size 128;
        proxy_headers_hash_max_size 2048;
        client_max_body_size 0m;
        proxy_pass_header Server;
    }

    location /eventbus {
        proxy_pass https://<srv_interne>;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection "upgrade";
    }

    location /api/filehosting/ {
        client_max_body_size 0m;
        proxy_pass https://<srv_interne>$request_uri;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_http_version 1.1;
        proxy_buffering off;
    }

    location /api/attachment/ {
        client_max_body_size 0m;
        proxy_pass https://<srv_interne>$request_uri;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_http_version 1.1;
        proxy_buffering off;
    }
}

```

```
location /fh/ {
    proxy_pass https://<srv_interne>/fh/;
    proxy_http_version 1.1;
    proxy_buffering off;
}
```

5. Save file and exit the editor

6. Run the following commands to set up the configuration:

```
bm35-edge.bluemind.loc:/etc/nginx/sites-available# ln -s /etc/nginx/sites-available/bm-proxy
/etc/nginx/sites-enabled/
bm35-edge.bluemind.loc:/etc/nginx/sites-available# rm /etc/nginx/sites-enabled/default
```

7. Reload the nginx server configuration:

```
bm35-edge.bluemind.loc:/etc/nginx/sites-available# service bm-nginx reload
```

```
bm35-edge.bluemind.loc:/etc/nginx/sites-available# service nginx reload
```

Setting up the mail service

1. On the edge server, copy the main server's configuration file located at `/etc/nginx/global.d/bm-proxy-mail.conf`. You can use `scp` to do this:

```
bm35-edge.bluemind.loc:~# scp root@srv1.bluemind.loc:/etc/nginx/global.d/bm-mail-proxy.conf
/etc/nginx/global.d/
```

2. Edit the file `/etc/nginx/global.d/bm-mail-proxy.conf` on the relay server and replace the IP address in the line `auth_http` by the main server's IP address

3. Reload the nginx configuration:

```
bm35-edge.bluemind.loc:~# service bm-nginx reload
```

```
bm35-edge.bluemind.loc:~# service nginx reload
```

Setting up XMPP

For the server to manage the XMPP flow:

1. create a file `/etc/nginx/global.d/bm-xmpp-proxy.conf` with the following contents:

```
stream {
    upstream backend_xmpp {
        least_conn;

        server 1.2.3.4:5222;
        server 1.2.3.5:5222 backup;
    }

    server {
        listen 5222;
        proxy_pass backend_xmpp ;
    }
}
```

- and replacing 1.2.3.4 by the main server's IP address or the server [with the XMPP role](#) if appropriate
2. Reload the nginx configuration:

```
bm35-edge.bluemind.loc:~# service bm-nginx reload
```

```
bm35-edge.bluemind.loc:~# service nginx reload
```

APACHE

You can also use Apache as a proxy instead of Nginx. To do this, you need a version of Apache equal to or above 2.4 and enable the following modules:

- mod_ssl
- mod_proxy and mod_proxy_wstunnel
- mod_rewrite

VirtualHost example for Apache:

```
<VirtualHost *:80>
    Redirect / https://<url_externe_bluemind>/
</VirtualHost>

<VirtualHost *:443>
    SSLEngine On

    SSLCertificateFile      "/etc/ssl/certs/bm_cert.pem"
    SSLCertificateKeyFile   "/etc/ssl/certs/bm_cert.pem"

    SSLProxyEngine On
    SSLProxyCheckPeerCN Off
    SSLProxyCheckPeerName Off
    SSLProxyVerify none

    # Websocket proxy
    RewriteEngine on
    RewriteCond %{HTTP:UPGRADE} ^WebSocket$ [NC]
    RewriteCond %{HTTP:CONNECTION} Upgrade$ [NC]
    RewriteRule .* wss://<srv_interne>{%REQUEST_URI} [P]

    ProxyPreserveHost On
    <Location />
        ProxyPass https://<srv_interne>/
        ProxyPassReverse https://<srv_interne>/
    </Location>
</VirtualHost>
```