

PUTRAGRID REGISTRATION GUIDE FOR INSPEM HPC USERS

Step 1: Paper Request

- Download the User Certificate Application Form at <http://myifam.upm.my/requestusercert.php>
- Complete and submit your application form together with a copy of your staff/matric card & official form of identification. You may fax it to +60-3-89483514 or email to syazwina@putra.upm.edu.my
- You will be notified on your application status via email.

Step 2: Online Request (*Please use only Mozilla Firefox and official UPM email address)

- Go to <http://myifam.upm.my/generate.php> to request for certificate online. Please submit request on the computer that you want to store your public/private key.
- MYIFAM CA will send a confirmation to your email address. Please click the url to confirm your application.
- Once your certificate is issued, MYIFAM will publish it on the website and send out an email to you with a unique serial number. You can simply import/download your certificate by inputting the serial number at <https://myifam.upm.my/retreive.php>. Please use the same browser to import your user certificate.
- Please activate your Federation ID at <https://myifam.upm.my/activateidp.php> to use the Grid Portal later on.

**To use your certificate, you need to export it from your browser. Steps to export:*

- 1) Go to Firefox Menu >Options > Options >Advanced > Certificates > View Certificates > Your Certificates > Backup
- 2) Please choose a folder on your computer or any other storage media and save the certificate. Save the file as **usercred.p12** and please remember the backup password that you have created.

Step 3: Convert Certificate

- Use any SFTP client (e.g: WinSCP, FileZilla) to login to ui.inspemhpc.upm.edu.my with your credentials.
- Once connected, you will find a subfolder .globus inside your username folder. Now, copy your .p12 certificate from where you backed up it (local) to the .globus folder in the remote server.
- You may close the client and login to the server using PuTTY or OpenSSH. Please key in the password that you created for certificate backup when prompted. Once connected, please type in the following commands:

```
$ cd ~/.globus
```

```
$ openssl pkcs12 -in usercred.p12 -clcerts -nokeys -out usercert.pem
```

```
$ openssl pkcs12 -in usercred.p12 -nocerts -out userkey.pem
```

```
$ chmod 644 usercert.pem
```

```
$ chmod 400 userkey.pem
```

- Your certificate has been split and converted to PEM format for grid usage.

Step 4: PutraGrid VO Membership Registration

- Access the registration form at <https://voms.inspemhpc.upm.edu.my/voms/putragrid> or <https://voms.biruni.upm.my/voms/putragrid>. Complete the electronic form and confirm the registration via email sent email sent by the VOMS server. Upon confirmation, another email will be sent stating that your VO membership has been approved.

Step 5: Creating Grid proxy

- Log in to ui.inspemhpc.upm.edu.my using PuTTY or openSSH and type in the following commands to create the grid proxy (valid for 12 hours):

```
$ voms-proxy-init --voms putragrid
```

- If you need a longer access period (7 days), you may use the following commands:

```
$ myproxy-init -d -n
```

```
$ myproxy-init -l username
```

```
**username: your username for INSPEM HPC
```

You are now eligible to use the grid.

The Grid Portal is accessible at:

<https://ui.biruni.upm.my>

<http://academicgrid.my>

<https://scibus.cict.utm.my>