

# Membuat Repository Debian dengan Reprepro

Tulisan ini mendokumentasikan pembuatan repository lokal Debian untuk sekolah, sekaligus tugas dari pak Darian Rizaludin selaku koordinator tim Infrastruktur BlankOn Linux Uluwatu. Semestinya catatan ini juga dapat diterapkan di turunan Debian.

Sistem operasi yang saya gunakan saat mengerjakan LAB ini adalah Debian 8, di atas sistem virtualisasi KVM di Debian 8 juga.

- Buat user **reprepro** (yang ini bebas sih namanya, yang penting konfigurasi selanjutnya harus disesuaikan).

```
root@docker:~# adduser reprepro
```

- Masukkan user **reprepro** tersebut ke grup **sudo**

```
root@docker:~# usermod -aG sudo reprepro
```

- Login ke user tersebut

```
root@docker:~# su - reprepro
```

- Install paket-paket yang diperlukan

```
reprepro@docker:~$ sudo apt-get install reprepro nginx haveged
```

- Buat kunci GnuPG untuk paket yang akan ditandatangani

```
reprepro@docker:~$ gpg --gen-key
```

Catatan :

\* Pembuatan kunci GPG ini memerlukan waktu beberapa saat, dan ikuti langkah-langkahnya hingga selesai.

\* Untuk password dapat dikosongkan saja.

\* Kunci akan tersimpan di direktori ~/.gnupg/

```
reprepro@docker:~$ gpg --gen-key
gpg (GnuPG) 1.4.18; Copyright (C) 2014 Free Software Foundation, Inc.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
```

Please select what kind of key you want:

- (1) RSA and RSA (default)
- (2) DSA and Elgamal
- (3) DSA (sign only)
- (4) RSA (sign only)

Your selection? 1

RSA keys may be between 1024 and 4096 bits long.

What keysize do you want? (2048)

```
Requested keysize is 2048 bits
Please specify how long the key should be valid.
    0 = key does not expire
    <n> = key expires in n days
    <n>w = key expires in n weeks
    <n>m = key expires in n months
    <n>y = key expires in n years
Key is valid for? (0)
Key does not expire at all
Is this correct? (y/N)
Key is valid for? (0)
Key does not expire at all
Is this correct? (y/N) y

You need a user ID to identify your key; the software constructs the user ID
from the Real Name, Comment and Email Address in this form:
    "Heinrich Heine (Der Dichter) <heinrichh@duesseldorf.de>"

Real name: Samsul Ma'arif
Email address: hay@samsul.web.id
Comment: Junior System Adminstrator
You selected this USER-ID:
    "Samsul Ma'arif (Junior System Adminstrator) <hay@samsul.web.id>"

Change (N)ame, (C)omment, (E)mail or (O)kay/(Q)uit? o
You need a Passphrase to protect your secret key.

You don't want a passphrase - this is probably a *bad* idea!
I will do it anyway. You can change your passphrase at any time,
using this program with the option "--edit-key".

We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.

Not enough random bytes available. Please do some other work to give
the OS a chance to collect more entropy! (Need 282 more bytes)
.+++++
.....+++++
We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.
.+++++
+++++
gpg: key 89441F3C marked as ultimately trusted
public and secret key created and signed.
```

```

gpg: checking the trustdb
gpg: 3 marginal(s) needed, 1 complete(s) needed, PGP trust model
gpg: depth: 0 valid: 1 signed: 0 trust: 0-, 0q, 0n, 0m, 0f, 1u
pub 2048R/89441F3C 2017-04-24
    Key fingerprint = F90D F428 CFEF E7AD 518A 10B6 C1F8 30CC 8944 1F3C
uid                               Samsul Ma'arif (Junior System Adminstrator)
<hay@samsul.web.id>
sub 2048R/1056625C 2017-04-24

reprepro@docke:~$

```

- Konfigurasi web server **nginx**

Buat berkas dan tautkan ke **/etc/nginx/sites-enabled/reprepro**

```
reprepro@docke:~$ sudo vim /etc/nginx/sites-available/reprepro
```

Isi berkas tersebut dengan

```

server {
    listen 80;
    server_name $DOMAIN;
    access_log /var/log/nginx/reprepro.access.log;
    location / {
        root /home/reprepro/repo/;
        index index.html index.htm;
        autoindex on;
    }
}

```

- Lakukan symlink konfigurasi **nginx**

```
reprepro@docke:~$ sudo ln -s /etc/nginx/sites-available/reprepro
/etc/nginx/sites-enabled/reprepro
```

- Restart nginx

```
reprepro@docke:~$ sudo /etc/init.d/nginx restart
```

- Konfigurasi **reprepro**

Buat direktori untuk area kerja reprepro

```

reprepro@docke:~$ mkdir -p conf
reprepro@docke:~$ mkdir -p repo/blankon
reprepro@docke:~$ mkdir -p db

```

- Periksa gpg yang dibuat sebelumnya

```

reprepro@docke:~$ gpg --list-key
/home/reprepro/.gnupg/pubring.gpg
-----

```

```
pub 2048R/89441F3C 2017-04-24
uid Samsul Ma'arif (Junior System Administrator)
<hay@samsul.web.id>
sub 2048R/1056625C 2017-04-24
```

- Export pgp/gpg

```
reprepro@docker:~$ gpg --armor --output arsip-archive-keyring.gpg --export
hay@samsul.web.id
```

Kegunaan ini untuk didistribusikan ke client atau bisa juga dengan memaketkan dan masukkan ke dalam repo.

- Buat berkas distributions

```
reprepro@docker:~$ vim conf/distributions
```

Tambahkan konfigurasi berikut, atau sesuaikan kebutuhan. Dalam hal ini saya tidak menyertakan paket sumber (source).

```
Origin: Blankon
Label: Blankon
Codename: nusantara
Suite: nusantara
Components: main restricted extras extras-restricted
UDebComponents: main
Architectures: i386 amd64
Version: 1.0
Description: BlankOn 1.0 nusantara
# Jangan kasih "-" di kolom Update, nanti paket2 khas2 akan dihapus
Update: merge.nusantara
SignWith: yes
DebIndices: Packages Release . .gz .bz2 tiffany.py
UDebIndices: Packages . .gz .bz2
DscIndices: Sources Release . .gz .bz2 tiffany.py
Contents: udebs nodebs . .gz
ContentsArchitectures: i386 amd64
ContentsComponents: main restricted extras extras-restricted
ContentsUComponents: main
Log: /home/reprepro/nusantara.log
#--type=dsc changelogs
```

- Buat berkas updates

```
reprepro@docker:~$ vim conf/updates
```

Isi dengan

```
Name: merge.nusantara
Suite: jessie-backports
```

```
VerifyRelease: blindtrust
Method: http://kambing.ui.ac.id/debian
Architectures: i386 amd64
Components: main
```

- Buat berkas options

```
reprepro@docker:~$ cat conf/options
```

Isi dengan

```
basedir /home/reprepro/
confdir /home/reprepro/conf
dbdir /home/reprepro/db
outdir /home/reprepro/repo/blankon/
gnupghome /home/reprepro/.gnupg
```

- Unduh berkas **tiffany.py**

```
reprepro@docker:~$ wget
https://raw.githubusercontent.com/dotovr/repo/master/conf/tiffany.py -O
conf/tiffany.py
```

- Menggunakan repositori

masuk ke direktori kerja, jalankan perintah

```
reprepro@docker:~$ cd ~
reprepro@docker:~$ reprepro -v -v -v update nusantara
```

Proses ini akan memakan waktu yang sangat lama, terutama ketika menggunakan koneksi internet yang terbatas.

- Membuat berkas index Packages.gz

```
reprepro@docker:~$ reprepro export nusantara
```

- Memasukkan berkas .deb/.Udeb Sources dengan berkas .changes

```
reprepro@docker:~$ reprepro -C COMPONENT -P PRIORITY -S SECTION include
DIST /PATH/T0/PACKAGE.changes
```

- Memasukkan paket .deb

```
reprepro@docker:~$ reprepro -C COMPONENT -P PRIORITY -S SECTION includedeb
DIST /PATH/T0/PACKAGE.deb
```

- Memasukkan paket debian-installer (udeb)

```
reprepro@docker:~$ reprepro -C COMPONENT -P PRIORITY -S SECTION
includeudeb DIST /PATH/T0/PACKAGE.udeb
```

- Memasukkan Kode Sumber

```
reprepro@docker:~$ reprepro -C COMPONENT -P PRIORITY -S SECTION includedsc  
DIST /PATH/T0/PACKAGE.dsc
```

- Menghapus Paket

```
reprepro@docker:~$ reprepro remove DIST NAMA_PAKET
```

- Membekukan Rilis

Tambahkan opsi ReadOnly dan hilangkan tiffany.py , pada distributions contoh:

```
Origin: Blankon  
Label: Blankon  
Codename: nusantara  
Suite: nusantara  
.....  
ReadOnly: Yes <-----
```

- Hasil Pekerjaan:

[http://\\$DOMAIN/blankon/](http://$DOMAIN/blankon/) dapat dipasang di **/etc/apt/sources.list**

```
deb http://$DOMAIN/blankon nusantara main restricted extras extras-  
restricted  
deb-src http://$DOMAIN/blankon nusantara main restricted extras extras-  
restricted
```

Keterangan:  
deb: Binary Deb  
deb-src: Source  
[http://\\$DOMAIN/blankon](http://$DOMAIN/blankon) : Alamat Repo  
nusantara: Dist>Nama Rilis  
main: Repo Utama Bebas  
restricted: Repo Utama Terbatas Lisensinya  
extras: Repo Komunitas  
extras-restricted: Repo Komunitas Terbatas Lisensinya

- Dari client coba lakukan update dan pasang package

```
samsul@blankon:~$ sudo apt-get update  
samsul@blankon:~$ sudo apt-get install nusantara-keyring
```

dan install aplikasi-aplikasi lainnya, baik dengan apt-get, aptitude, synaptic atau software center, jika tidak ada galat/error maka repo sudah siap digunakan.

## Referensi

Tulisan ini merupakan *remake* dan hasil ujicoba dari tulisan pak **Mahyuddin Idram Ahmad** a.k.a

**dotovr** di blognya <http://dotovr.blogspot.co.id/2016/05/membuat-repository-debian-dengan.html>

Lainnya :

- <https://blog.sileht.net/create-a-smart-debian-repository-with-reprepro.html>
- <http://www.infrastructureanywhere.com/documentation/additional/mirrors.html>

~~DISQUS~~

From:  
<https://wiki.samsul.web.id/> - **Samsul Maarif**

Permanent link:  
<https://wiki.samsul.web.id/linux/Membuat.Repository.Debian.dengan.Reprepro>

Last update: **2020/12/14 20:13**

