

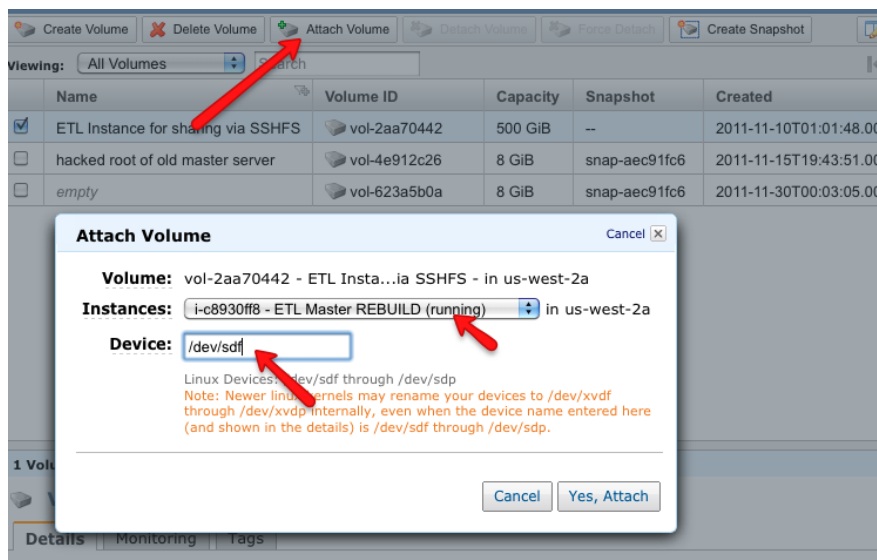
## ETL Master Rebuild Documentation

Apologies for inconsistent verb tenses.

1. Launch EBS backed Ubuntu 10.10 ami (ami-06f97436)
  1. etl-master security group
  2. master key
  3. xlarge type (64 bit)
2. Associated elastic IP with instance
3. Opened SSH in etl-master security group to single IP 22 (SSH)youriphere/32
4. Added etlclient group / user (9000 for both Ids)

```
sudo addgroup --gid 9000 etlclient
sudo adduser --uid 9000 --gid 9000 etlclient
```

---- entered in master-etlclient password
5. sudo apt-get update
6. Attached 500GB shared disk to new master



7. sudo apt-get install xfsprogs
8. Create /opt/elastic dir
  1. sudo mkdir /opt/elastic
  2. sudo chown etlclient /opt/elastic
  3. sudo chgrp etlclient /opt/elastic
9. Append line to fstab
  1. /dev/sdf /opt/elastic auto defaults,noatime,nobootwait,comment=SharedDisk 0 0
10. Reboot machine (sudo shutdown -r 0)
11. install mysql
  1. sudo apt-get install mysql
  2. shutdown mysql (service mysql stop)
  3. edit my.cnf  
change datadir to /opt/elastic/mysql-db  
added innodb\_data\_home\_dir = /opt/elastic/mysql-db
  4. edit /etc/apparmor.d/usr.sbin.mysql (change /var/lib/mysql to /opt/elastic/mysql-db)  
reload apparmor profiles (service apparmor restart)
  5. start mysql

12. Reset passwords for root
13. Remove “logger” and “phpmyadmin” user
14. Change debian-sys-maint password to match the one in /etc/mysql/debian.conf
15. drop database phpmyadmin
16. install subversion (sudo apt-get install subversion)
17. deleted, and rechecked out git
  - cd /opt/elastic
  - rm -rf elastic-etl
  - git clone git://github.com/dynamobi/elastic-etl.git
18. Regenerated etlclient key (ssh-keygen w/ no password)
  - Moved id\_rsa.pub to authorized\_keys on master
  - Copied id\_rsa to my own local file (to be updated on slaves)
  - deleted id\_rsa from \$HOME/.ssh/id\_rsa (remove private key from master)
19. Launched latest slave instance (ami-7e810c4e)
  - Removed all keys (excepting authorized\_keys of slave)
  - Changed id\_rsa in /root/ to etlclient private key
  - Shutdown slave took new image (etl\_slave\_ubuntu\_64\_29\_nov\_1823)
20. Take a “in process master image”
  - Shutdown master
  - Detach the shared disk (500GB)
  - Created an image (etl\_master\_ubuntu\_64\_29\_nov\_1840)
  - Reattached shared disk
  - Started master
  - Re-associated public IP address
21. Install apache, and requisite PHP extensions/etc
  - apt-get install php5-common php5-curl php5-mysql php5 apache2 php-pear
22. Install AWS stuff
  - pear channel-discover pear.amazonwebservices.com
  - pear install aws/sdk
23. Enabled ssl/rewrite modules
  - a2enmod rewrite
  - a2enmod ssl
  - service apache2 reload
24. Generated self signed certificate
  - openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout etl.elastic.key -out etl.elastic.crt
  - Follow the instructions and provide values you want to provide.
25. cp etl.elastic.key /etc/ssl/private/
  - cp etl.elastic.crt /etc/ssl/certs/
26. Copied default SSL configuration
  - cd /etc/apache2/sites-available
  - cp default-ssl etl.elastic.com
27. Edited and changed certs to just self signed certs
  - SSLCertificateFile /etc/ssl/certs/etl.elastic.crt
  - SSLCertificateKeyFile /etc/ssl/private/etl.elastic.key
28. Edited etl.elastic.com
  - Removed cgi section
  - Changed doc root (two places) from /var/www to /opt/elastic/elastic-etl/elastic/www/html
  - Allowed rewrite by changing

AllowOverride All

29. Enable apache to read elastic solution  
cd /opt/elastic/elastic-etl/elastic/www  
chgrp -R www-data .  
cd app  
sudo -u etlclient chmod 775 runtime  
sudo -u etlclient chmod -R 775 /opt/elastic/elastic-etl/elastic/www/html/assets
30. Edited ./app/config/auth.php  
Changed admin username  
Changed database username  
Removed nephoscale password since we're using amazon's stuff. (Or ignore it.)
31. Changed AWSKEY and AWSSECRETKEY in  
sudo -u etlclient vi ./app/components/AmazonWS.php  
(to new generated keys is recommended)
32. Install zip  
sudo apt-get install zip
33. Edited /etc/php5/apache2/php.ini  
in attempt to pick up AWSSDKforPHP/ module installed via pear.  
include\_path = ".:usr/share/php" (try without doing this)
34. Edited /opt/elastic/elastic-etl/elastic/kettle.properties  
ran [encr.sh](#) -kettle new password and placed it into that file
35. Added your public key to ubuntu/.ssh/authorized\_keys if you want to do local ssh work
36. Shutdown, took new image of machine (etl\_master\_ubuntu\_64\_29\_nov\_2331)
37. Terminate that build machine, launched new instance from image  
Re-attached shared disk  
Re-associated IP address
38. Tried to commit kettle.properties (HUNG on "transmitting file data") (should work now)
39. Added personal IP to HTTPS
40. Changed Auth token for CURL in /opt/elastic/elastic-etl/elastic/www/app/config/auth.php
41. Copied /opt/elastic/elastic-etl/elastic/www/crontab\_sample to /home/etlclient/crontab  
commented out all pieces  
edited to add new token/IP  
crontab crontab (as etlclient)
42. Changed num\_daily in master config to 2 (for testing) (for production 8 is good but can go arbitrarily high)
43. **added**  
**spl\_autoload\_register(array('CFLoader', 'autoloader'), true, true);**  
**in the AWS sdk.class.php file.**