

Gazzang ezNcrypt™ v2.1 Quick Reference

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INSTALLATION

1. Using your internet browser, download the ezNcrypt software that corresponds to your architecture from the Gazzang download site: www.gazzang.com/download.
2. Run the installer script:

```
sudo ./ezncrypt-2.1-linux-installer.run
```
3. The installer starts the validation process. If your system passes, you will be welcomed to the installation of ezNcrypt.
4. Read the License Agreement, and select the **I accept the agreement** option.
5. Accept the default ezNcrypt installation directory (**/opt/ezNcrypt**) or specify another directory.
6. The installer displays a list of the necessary dependencies, and verifies whether or not the necessary dependencies are installed. At this point, you can stop the installer (**Ctrl C**) and use your package manager to install the necessary dependencies, or you can let the installer script call the package manager for you.
7. Select the desired cipher.
8. The installer prompts you for your ezNcrypt product key and activation code. These should have been provided to you by a Gazzang representative.
9. If you ran the installation script with the default options, the installer will prompt you for a passphrase to encrypt your data. Using a passphrase is the recommended option in most cases. Type a passphrase and/or salt.

Note: You can view help for any command using the **-h** argument. For example: **[root@host]# /usr/sbin/ezncrypt-service -h**

ACCESS CONTROL MANAGEMENT

Gazzang ezNcrypt manages file system permissions through an access control list (ACL). This ACL is a security access control (created by Gazzang) that permits a Linux process to access a file or directory handled by ezNcrypt. The ACL is set by rules. These rules tell the file system whether or not a Linux process has access right permissions to read/write a specific ezNcrypt path.

Adding Rules

To add a rule by passing it as a parameter:

```
[root@host]# /usr/sbin/ezncrypt-access-control -a "ALLOW @mysql * /usr/sbin/mysqld"
```

To add two or more rules by using a policy file:

```
[root@host]# /usr/sbin/ezncrypt-access-control -a -f my-policy-file
```

To override the policy file with a set of rules stored in an input file:

```
[root@host]# /usr/sbin/ezncrypt-access-control -o -f my-policy-file
```

Deleting Rules

To delete a rule by passing it as a parameter:

```
[root@host]# /usr/sbin/ezncrypt-access-control -d "ALLOW @mysql * /usr/sbin/mysqld"
```

To delete a rule by passing a line number:

```
[root@host]# /usr/sbin/ezncrypt-access-control -d -l 2
```

Printing Rules

To view all rules added to the ezNcrypt policy file:

```
[root@host]# /usr/sbin/ezncrypt-access-control -p
```

To send the rules directly to a file:

```
[root@host]# /usr/sbin/ezncrypt-access-control -p -f policy-backup
```

To show extra information about the organization of the policy file:

```
[root@host]# /usr/sbin/ezncrypt-access-control -L
```

Loading Rules

To reload the access control list (ACL) to the ezNcrypt file system:

```
[root@host]# /usr/sbin/ezncrypt-access-control -r
```

Updating a Process Signature

```
[root@host]# /usr/sbin/ezncrypt-access-control -u
```

USING THE SERVICE

ezNcrypt Service

```
[root@host] # /usr/sbin/ezncrypt-service [OPTIONS] [start|stop|restart|status]
```

Encrypt/Decrypt MySQL Tables

```
[root@host] # /usr/sbin/ezncrypt-mysql --encrypt DATABASE [TABLE]
[root@host] # /usr/sbin/ezncrypt-mysql --decrypt DATABASE [TABLE]
```

Show Encrypted Databases

```
[root@host] # /usr/sbin/ezncrypt-mysql --show
```

Encrypt/Decrypt a File

```
[root@host] # /usr/sbin/ezncrypt --encrypt @CATEGORY FILE|DIRECTORY
[root@host] # /usr/sbin/ezncrypt --decrypt @CATEGORY FILE|DIRECTORY
```

Encrypt/Decrypt Standalone Files

```
[root@host] # /usr/sbin/ezncrypt --encrypt --file --in=SOURCE --out=DEST
[root@host] # /usr/sbin/ezncrypt --decrypt --file --in=SOURCE --out=DEST
```

EXECUTING SCRIPTS

```
[root@host]# /usr/sbin/ezncrypt-run SCRIPT
```

Example:

```
[root@host] # /usr/sbin/ezncrypt-run ./list-databases.sh
```

CHANGING THE ENCRYPTION KEY

Decrypt All Tables

```
[root@host] # /usr/sbin/ezncrypt-mysql --decrypt DBNAME %
```

Decrypt Files or Directories

```
[root@host] # /usr/sbin/ezncrypt --decrypt @CATEGORY FILE/DIRECTORY
```

Change Encryption Key

```
[root@host] # /usr/sbin/ezncrypt-change-key
```

UTILITIES

Check Key

To validate a given key against the KSS and current encrypted data:

```
[root@host] # /usr/sbin/ezncrypt-check-key
```

Processes Accessing ezNcrypt

To display process activity in real time:

```
[root@host] # /usr/sbin/ezncrypt-top
```

UNINSTALLING

To uninstall ezNcrypt, stop the ezNcrypt service and run the uninstall script:

```
[root@host] # /usr/sbin/ezncrypt-service stop
sudo /opt/ezncrypt/uninstall
```

ACCESSING THE EZNCRYPT MYSQL DIRECTORY

```
[root@host]# /usr/sbin/ezncrypt-load-key
```

MYSQL LOG ENCRYPTION

To encrypt your logs into the @log category:

```
/etc/init.d/mysqld stop
[root@host] # /usr/sbin/ezncrypt --encrypt @log /var/log/mysql.err
/etc/init.d/mysqld start
```