



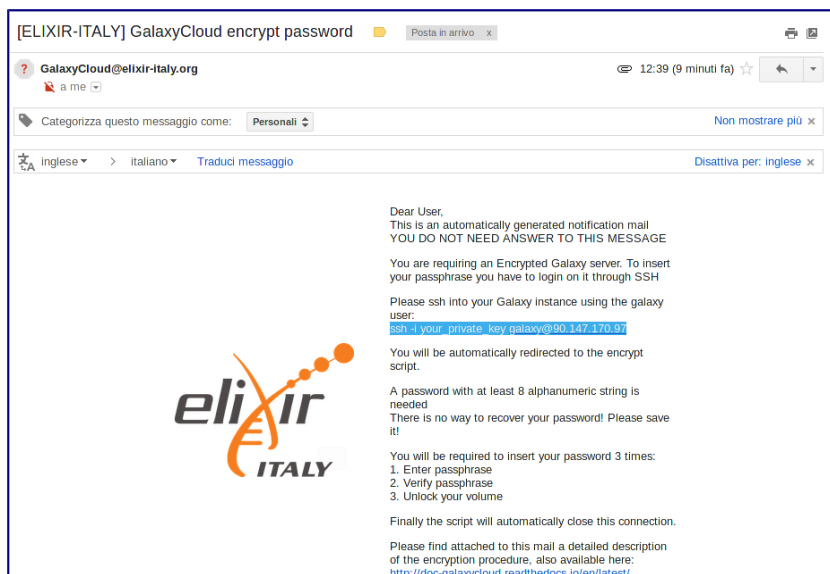
# File System encryption procedure

Log-in into your machine with:

**ssh -i your\_private\_ssh\_key.key galaxy@virtual.machine.ip.address**

A screenshot of a terminal window with a light grey background and a dark blue border. The window title bar shows menu options: File, Modifica, Visualizza, Segnalibri, Impostazioni, and Aiuto. The terminal content shows three lines of text: [marco@marco-laptop ~]\$ followed by a prompt character, [marco@marco-laptop ~]\$ followed by a prompt character, and [marco@marco-laptop ~]\$ ssh -i cloud.key galaxy@90.147.170.97 followed by a cursor. The bottom status bar of the terminal shows 'marco: bash'.

Typical ip addresses are: 90.147.170.XX or 90.147.102.XX. You can copy and past the command from the mail the system send you.



Accept the connection typing “yes”

```
File Modifica Visualizza Segnalibri Impostazioni Aiuto
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$ ssh -i cloud.key galaxy@90.147.170.97
The authenticity of host '90.147.170.97 (90.147.170.97)' can't be established.
ECDSA key fingerprint is SHA256:5FUVHmmedIaHU2r6OnqNmokBTcmfamo04sUxjZibztE.
Are you sure you want to continue connecting (yes/no)? yes
```

(galaxy) 90.147.170.97

and enter your SSH passphrase:

```
File  Modifica  Visualizza  Segnalibri  Impostazioni  Aiuto
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$ ssh -i cloud.key galaxy@90.147.170.97
The authenticity of host '90.147.170.97 (90.147.170.97)' can't be established.
ECDSA key fingerprint is SHA256:5FUVHmwedIaHU2r60nqNmokBTCMfamo04sUxjZIBztE.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '90.147.170.97' (ECDSA) to the list of known hosts.
Enter passphrase for key 'cloud.key': █

(galaxy) 90.147.170.97
```

You will be now prompted in the encryption script automatically. You will be required to insert an alphanumeric key, at least 8 characters. A key is automatically generated, as example, please do not use it for production!

You have to type your password three times:

1. inject your password
2. Confirm your password
3. Unlock your encrypted volume

Insert your volume encrypt/decrypt password for the first time:

```
File  Modifica  Visualizza  Segnalibri  Impostazioni  Aiuto
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$ ssh -i cloud.key galaxy@90.147.170.97
The authenticity of host '90.147.170.97 (90.147.170.97)' can't be established.
ECDSA key fingerprint is SHA256:5FUVHmwedIaHU2r60nqNmokBTCMfamo04sUxjZIBztE.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '90.147.170.97' (ECDSA) to the list of known hosts.
Enter passphrase for key 'cloud.key':
=====
      ELIXIR-IIB encryption script - Alpha Version
=====
A password with at least 8 alphanumeric string is needed
There's no way to recover your password! Please save it!
Example (automatic random generated passphrase): DkNkLrD6
You will be required to insert your password 3 times:
1. Enter passphrase
2. Verify passphrase
3. Unlock your volume
Finally the script will automatically close this connection.
=====
Check if the required applications are installed...
=====
Using the selected aes-xts-plain64 algorithm to luksformat the volume
Enter passphrase: █

(galaxy) 90.147.170.97
```

and confirm it:

```
File Modifica Visualizza Segnalibri Impostazioni Aiuto
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$
[marco@marco-laptop ~]$ ssh -i cloud.key galaxy@90.147.170.97
The authenticity of host '90.147.170.97 (90.147.170.97)' can't be established.
ECDSA key fingerprint is SHA256:5FUVHmwedIaHU2r60nqNmokBTCMfamo04sUxjZIbztE.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '90.147.170.97' (ECDSA) to the list of known hosts.
Enter passphrase for key 'cloud.key':
=====
ELIXIR-IIB encryption script - Alpha Version

A password with at least 8 alphanumeric string is needed
There's no way to recover your password! Please save it!

Example (automatic random generated passphrase): DkNkLrD6

You will be required to insert your password 3 times:
1. Enter passphrase
2. Verify passphrase
3. Unlock your volume

Finally the script will automatically close this connection.
=====

Check if the required applications are installed...

=====
Using the selected aes-xts-plain64 algorithm to luksformat the volume
Enter passphrase:
Verify passphrase: █

█ (galaxy) 90.147.170.97
```

Unlock the encrypted volume typing again your password:

```
File Modifica Visualizza Segnalibri Impostazioni Aiuto
The authenticity of host '90.147.170.97 (90.147.170.97)' can't be established.
ECDSA key fingerprint is SHA256:5FUVHmwedIaHU2r60nqNmokBTCMfamo04sUxjZIbztE.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '90.147.170.97' (ECDSA) to the list of known hosts.
Enter passphrase for key 'cloud.key':
=====
ELIXIR-IIB encryption script - Alpha Version

A password with at least 8 alphanumeric string is needed
There's no way to recover your password! Please save it!

Example (automatic random generated passphrase): DkNkLrD6

You will be required to insert your password 3 times:
1. Enter passphrase
2. Verify passphrase
3. Unlock your volume

Finally the script will automatically close this connection.
=====

Check if the required applications are installed...

=====
Using the selected aes-xts-plain64 algorithm to luksformat the volume
Enter passphrase:
Verify passphrase:
Command successful.

=====
Open LUKS volume
Enter passphrase for /dev/vdb: █

█ (galaxy) 90.147.170.97
```

The volume will be now encrypted and you will be automatically get out the VM, until Galaxy is installed.

```
File  Modifica  Visualizza  Segnalibri  Impostazioni  Aiuto

=====
Creating filesystem...
mke2fs 1.42.9 (28-Dec-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
655360 inodes, 2620928 blocks
131046 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=2151677952
80 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

=====
Mounting encrypted device...
[fast-luks] SUCCESSFUL. You will be automatically kicked out by this server. Galaxy will be automatically installed!
5.4.3.2.1.
Exiting.... Goodbye!
Connection to 90.147.170.97 closed.
[marco@marco-laptop ~]$ █

marco: bash
```