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Step-by-Step Guide

Remote Snapshot Control with CLI/API of Data Storage Software V7

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The aim of this document is to demonstrate how set up remote snapshot control with CLI/API on DSS V7. It shows in step-by-step, how to set up DSS V7 and install key generation utility and command line interface wit use plink program.

To set up remote snapshot control with CLI/API, perform the following steps:

1. Download PuTTYgen and Plink for Windows

2. Create an iSCSI Logical Volume with Snapshot

3. Configure CLI/API on DSS V7

4. Convert key with PuTTY Key Generator

5. Issue the "snapshot_task" command with "start", "status" and "stop" options.

1. Download PuTTYgen and Plink for Windows
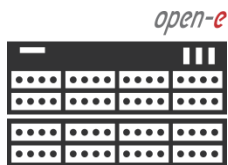
Data Server (DSS)
IP Address: 192.168.0.220

Download PuTTYgen and Plink from
http://putty.nl/download.html
and install on your PC

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2. Create iSCSI Logical Volume with Snapshot

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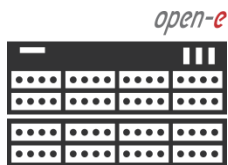
Data Server (DSS)
IP Address: 192.168.0.220

After logging on the DSS V7, please go to "**CONFIGURATION**" tab, select "**Volume manager**" and "**Volume groups**". Next select the appropriate volume group (**vg00**) from the list on the left.

Next , select the required size of iSCSI volume. In this eg. aadding 200 GB for the iSCSI volume. After assigning an appropriate amount of space for the iSCSI volume, click the **apply** button
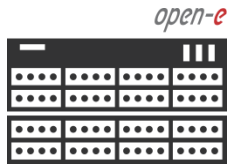
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2. ... Continue

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After reloading the page in the field **Action** select "**new snapshot** " of the required size (in this example 20 Gb), and click **apply** button.

2.   ... Continue

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Use **Snapshot definition** to assign an appropriate logical volume (in this example lv0000) , and click **apply** button.

HINT:
For additional details about creating targets for the logical volume and the snapshot volume, please refer to the documents in the How-to Resources section on the web.

3. Configure CLI/API on DSS V7

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Next please go to "**SETUP**" tab, "**Administrator settings**". In **CLI/API Configuration** function, check box "**Use CLI/API**" and in field "**Password**", please enter the **Password** and retype password. In order to confirm click **apply** button.

After reloading page, click on "**Show advanced**"

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SETUP   CONFIGURATION   MAINTENANCE   STATUS   HELP

You are here: Setup ▶ Administrator settings

Remote console access

☐ Remote access set

apply

CLI/API Configuration

☑ Use CLI/API

Allow IP:

Set port: 22223

Password: ●●●●●●

Confirm password: ●●●●●●

Show advanced >>

apply

Please apply changes or press "reload" button to discard

★ Event Viewer

3.   ... Continue
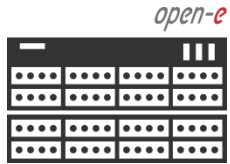
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Please click on **generate and download** button.

(Screenshot of Open-E Data Storage Software V7 interface showing:)

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SETUP | CONFIGURATION | MAINTENANCE | STATUS | HELP

You are here: Setup ▸ Administrator settings

CLI/API Configuration

☑ Use CLI/API

Allow IP:

Set port: 22223

Password:

Confirm password:

Hide advanced <<

Please generate and download a key if you want to use the CLI/API functionality without a password.

1. Generate and download new key by clicking "Generate and download"

generate and download

2. Download already existing key by clicking "Download"

download

apply

⭐ Event Viewer

3. ... Continue
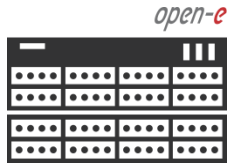
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IP Address: 192.168.0.220

Next, save the generated key into a local folder, e.g. C:\API.

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4. Convert the key with PuTTY Key Generator

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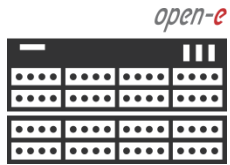
Data Server (DSS)
IP Address: 192.168.0.220

Please run puttygen.exe and select **Conversions** and **Import Key** in the main menu.

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4. ... Continue

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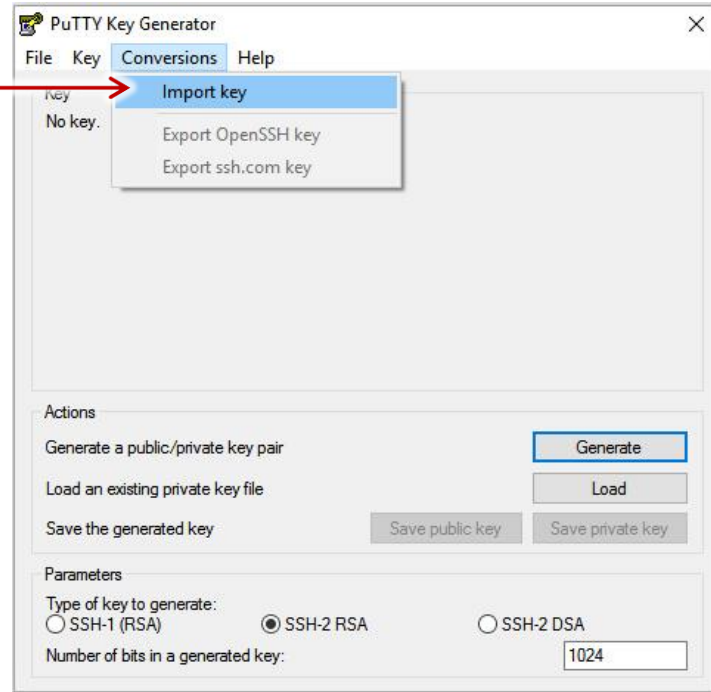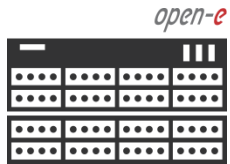
Data Server (DSS)
IP Address: 192.168.0.220

Next, load key from e.g. C:\API.

4. ... Continue

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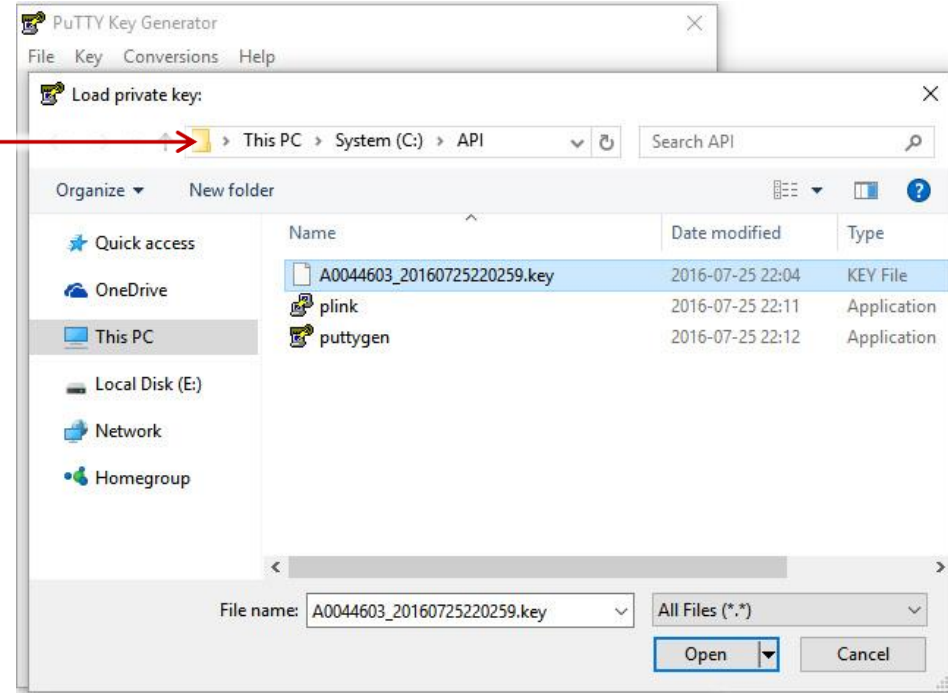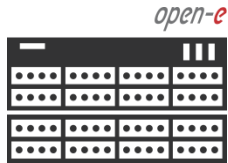
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Then, click on **Save private key** button.

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4. ... Continue

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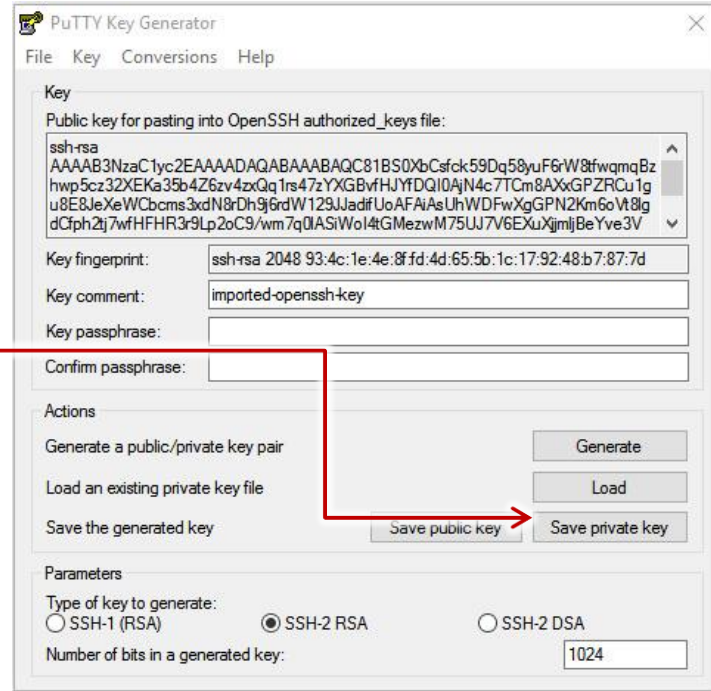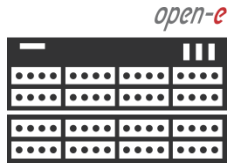
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Next, click on **YES** button

4. ... Continue

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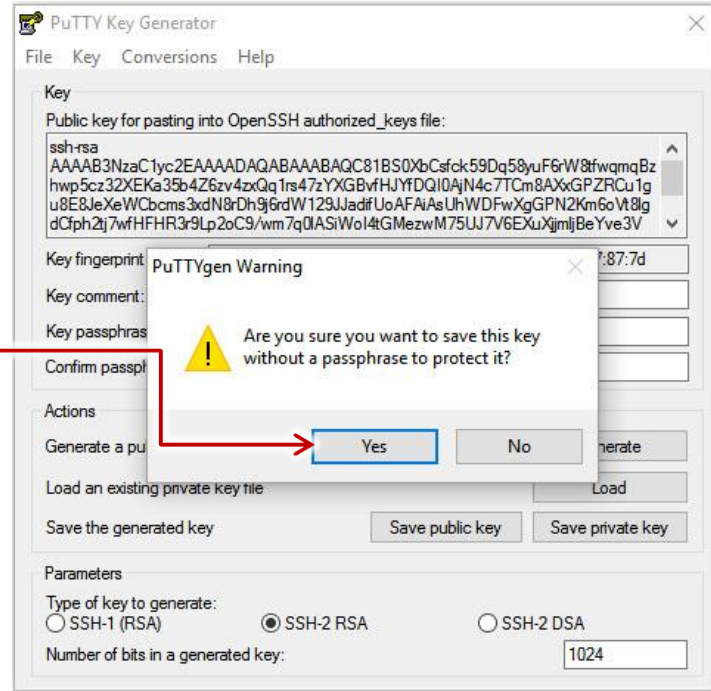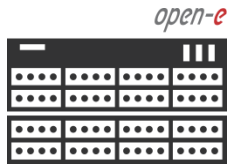
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IP Address: 192.168.0.220

Please save new **private_key.ppk** on C:\API folder.

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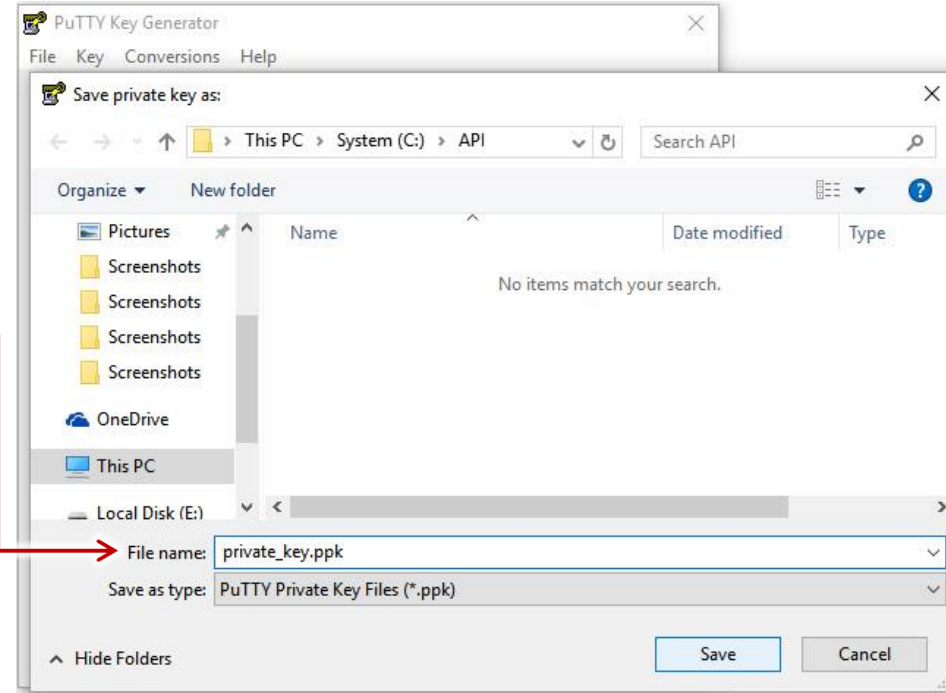
Syntax examples for the plink command using the key:

plink -i path_to_the_downloaded_key -2 -p 22223 -l api ip_address command

- option: **-i** sets the path to the downloaded key file,

- option: **-2** sets the version of the SSH protocol used for the connection,

- option: **-p** sets the connection port (default: 22223),

- option: **-l** sets the user (the user must be **api**),

- option: **ip_address** sets the IP address of the storage server you want to connect to,

- option: **command**; the command consist of the command name and optional parameters

    and optional object names.

NOTE:
Plink uses capital "P" and the ssh use small "p" in the command line

HINT:
In order to list the full command set, please issue the 'help' command. If you enter a command with missing parameters or missing object name, the system will prompt with full syntax of the command. Once complete command is entered, it will run at once and non- interactive. A user script with API commands must be executed first on a testing system, not on a production system.

5. **Issuing "snapshot_task" command with "start", "status" and "stop" options.**

Please run the DOS command prompt box and change directory to the directory where you have saved the key, e.g.: C:\API


```
Command Prompt                                                        —  □  ×

C:\API>plink.exe -i private_key.ppk -2 -P 22223 -l api 192.168.0.220 snapshot_task start snap00000
The server's host key is not cached in the registry. You
have no guarantee that the server is the computer you
think it is.
The server's rsa2 key fingerprint is:
ssh-rsa 1024 e6:ca:0e:b8:7f:3a:e6:de:32:7a:bc:fe:98:e3:e0:f4
If you trust this host, enter "y" to add the key to
PuTTY's cache and carry on connecting.
If you want to carry on connecting just once, without
adding the key to the cache, enter "n".
If you do not trust this host, press Return to abandon the
connection.
Store key in cache? (y/n) y

C:\API>
```
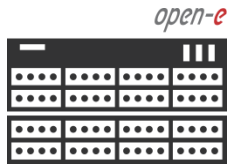
Please enter the "snapshot_task" CLI/API command with "**start**" option.

HINT:
Entering the command line, please use the tab key for auto-complete of the program and key path or name

5.   ... Continue

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Please use "**STATUS**" tab, and "**Tasks**". In **Running tasks** function to check snapshot status. It should be **in use/active**.

5. ... Continue

You can check the snapshot status with the following API command: "snapshot_task" with option "**status**".


```
C:\API>plink.exe -i private_key.ppk -2 -P 22223 -l api 192.16.0.220 snapshot_task status snap00000
active

C:\API>
```

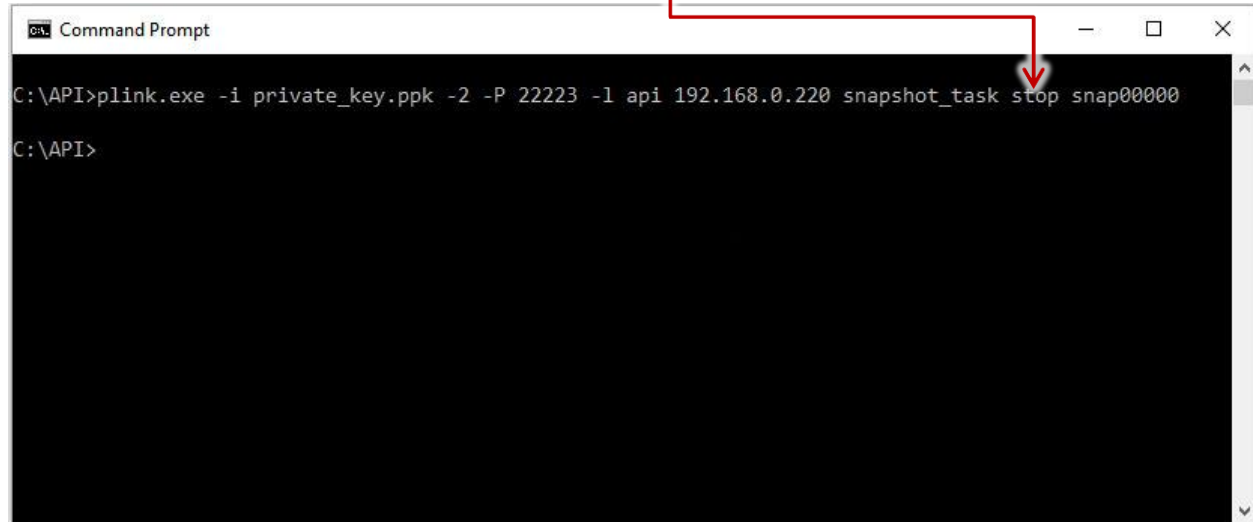The API command "**snapshot_task status**" returns status: "active"

HINT:
Entering the command line please use tab key for auto-complete of the program and key path or name

5. ... Continue

> In order to stop the snapshot remotely, please issue the "snapshot_task" command with option "**stop**".
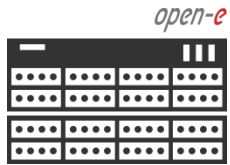

HINT:
Entering the command line, please use tab key for auto-complete of the program and key path or name.

5. ... Continue

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Data Server (DSS)
IP Address: 192.168.0.220

Now go to the "**STATUS**" tab, and "**Tasks** ".
Running tasks fonction show no active snapshot.

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You are here: Status ▶ Tasks

Tasks

- Backup
- Restore from backup
- Data (File) Replication
- Antivirus
- Volume Replication
- Snapshots

Running tasks

Info
No running tasks!

Tasks log

	Time	Name	Type	Status	Action
∨	2016-07-25 23:16:55	snap00000	Snapshot	OK	Stopped
∨	2016-07-25 22:52:39	snap00000	Snapshot	OK	Started

★ Event Viewer

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Thank You!