File Backup

> **NOTE:**
>
> Only N3048EP-ON and N3132PX switches support this feature.

N3048EP-ON uses the OverlayFS file system which doesn't allow the user files on the switch to be saved from the RAM to the flash automatically. This results in the loss of user files when the switch is powered off. The user can add the file path (the file that you want to be saved even after power off) to the backup list, and then run the **save_config** command. With this technique, the user files on the backup list are backed up to the flash ensuring that the user files are not lost when the power is turned off.

PICOS has built-in default backup files, as listed below.

```
root@Xorplus$ cat /etc/picos/backup_files.lst
 /etc/passwd
 /etc/shadow
 /etc/group
 /etc/gshadow
 /etc/resolv.conf
 /etc/picos/picos_start.conf
 /etc/picos/switch-public.key
 /etc/picos/pica.lic
 /pica/config/pica_startup.boot
 /pica/config/pica.conf.01
 /pica/config/pica.conf.02
 /pica/config/pica.conf.03
 /pica/config/pica.conf.04
 /pica/config/pica.conf.05
 /ovs/ovs-vswitchd.conf.db
 /ovs/function.conf.db
 /ovs/config/meters
 /ovs/config/groups
 /ovs/config/flows
 /ovs/var/lib/openvswitch/pki/
 /var/log/report_diag.log
 /var/log/report_diag.log.1
 /var/log/report_diag.log.2
 /var/log/report_diag.log.3
 /var/log/report_diag.log.4
 /var/log/report_diag.log.5
/cftmp/upgrade.log
/cftmp/upgrade2.log
```

If the user operation makes change to the above files, you need to manually run the configuration saving command to save these files from the RAM to the flash. For details, please refer to Configuration Saving Guide and copy running-config startup-config.

However, if you want to save a user files that are not in the above default backup file list, you can follow the backup operation steps described below.

Step1   Check whether the running system is PICOS or PICOS2 (determine the path of *backup_files* described in Step 2).

Issue the following command under Linux bash. If the result contains **picos1.sqsh**, the running system is PICOS; if **picos2.sqsh**, the running system is PICOS2.

```
root@XorPlus:~$ cat /proc/cmdline
root=/picos/picos1.sqsh quiet rw console=ttyS0,115200 maxcpus=2 mem=2032m envaddr=0x1C400000
```

Step2   Add the file path to the backup list (the file that you want to be saved even after power off), to *backup_files* file.

The path of the *backup_files* file corresponding to the running system is as follows:

PICOS: */mnt/open/picos/config1/backup_files*

PICOS2: */mnt/open/picos/config2/backup_files*

For example, regarding the running system is PICOS, if you want to backup **/home/admin/a.txt**, you need to add **/home/admin/a.txt** to the backup file list.

Then check if **/home/admin/a.txt** is on the backup list.

```
root@Xorplus$ cat /mnt/open/picos/config1/backup_files
/home/admin/a.txt
```

Step3   Under Linux bash, issue the following command manually to begin file backup.

```
root@Xorplus$ save_config
```

After the above steps, the user file **/home/admin/a.txt** will be backed up to the flash. This file will not be lost when the power is turned off.