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Sysdump utility

User guide

Contents

1 Introduction

In case Paragon team requires additional information on the test storage device and/or test platform itself for the issue troubleshooting with specific NTFS/HFS+/exFAT volume(s), the sysdump utility can be used to capture very compact images of volumes with file system inconsistencies. Additionally it could be used to collect test platform system information: storage device summary, Kernel version, loaded UFSD driver version and so on. Metadata images and generated text files may then be uploaded to Paragon corporate FTP server for analysis. This helps us to improve our products.

As volume images only include file system metadata, the risk of leaking sensitive data when using sysdump is minimized.

The utility (built for Windows, Linux, Mac or custom platform) can be obtained from Paragon Software Group by request.

2 Main functions

Main functions of the sysdump utility are:

- Capturing metadata image of the test volume
- Collecting HW sample system information.

Note that sysdump utility requires root privileges as they are needed for working with storage devices on Linux platform.

When utility is run without additional options basic help is displayed

```
# ./sysdump
Dump NTFS/HFS/Ext volumes (metafiles only) and collect system information.
Paragon's Sysdump utility doesn't collect any personal or user-sensitive information.
Please refer to the 'Privacy policy' described in the Sysdump utility guide for more information.
Usage: sysdump [-s] [device] [-o <filename>]
-s      collect system information
-o      new file name (if name without suffix ".tar", then suffix ".tar" will be added automatically)
E.g. sysdump /dev/hdb1
```

3 Using the sysdump utility to capture metadata from NTFS/HFS+/exFAT volumes

I Extract sysdump utility to a folder on the drive with read/write access.

II In terminal, change to the folder with the extracted sysdump utility. Use the following command to capture the metadata image of the test volume.

```
#./sysdump /path/to/partition
```

III This will create an archive named, based on platform parameters <Architecture>.<Kernel version>.<date>.tar with storage device metadata image and its md5 sum:

```
# ./sysdump /dev/sdd1
Scanning NTFS...
Added 13 files/dirs from $Extend                                .
Recognized as NTFS.
Dumping "/dev/sdd1" (465.76 Gb) ...
Dump finished. File size 1248330752 bytes (including tail)
System information was saved to /home/UFSD_utilites/i686.3.13.0.20141027.tar

Please send this file to your support contact at Paragon Software via e-mail or via
'My account' page at Paragon Software Support Portal or upload it to your
folder on Paragon Software FTP server at https://ftp.paragon-software.com
```

IV Upload the image to our FTP site (use manual on accessing our FTP site provided to you by your Paragon contact).

4 Using the sysdump utility to collect platform system information

I Extract sysdump utility to a folder on the drive with read/write access.

II In terminal, change to the folder with the extracted sysdump utility. Run sysdump utility with additional '-s' parameter:

```
./sysdump -s
```

III This will create an archive named, based on platform parameters <Architecture>.<Kernel version>.<date>.tar with storage device metadata image, its md5 sum and sample system information:

```
./sysdump -s
Collecting system information...
System information was saved to /home/UFSD_utilities/x86_64.3.11.9.20131211.tar
```

5 Using the sysdump utility to collect both platform system information and metadata

1. Extract sysdump utility to a folder with read/write access.
2. In terminal change to the folder with the extracted sysdump utility. Use the following command to capture the metadata image and to collect platform system information:

```
./sysdump -s /path/to/partition
```

3. This will create an archive named, based on platform parameters <Architecture>.<Kernel version>.<date>.tar with storage device metadata image, its md5 sum and sample system information:

```
./sysdump -s /dev/sdc1
Scanning NTFS...
Added 13 files/dirs from $Extend                                    .
Recognized as NTFS.
Dumping "/dev/sdc1" (465.76 Gb) ...
Dump finished. File size 1248334848 bytes (including tail)
Collecting system information...
System information was saved to /home/UFSD_utilites/i686.3.13.0.20141105.tar
```

6 Changing the name of output archive

Name of the output archive can be changed by using the additional '-o' parameter and adding new file name. For example:

```
./sysdump -s /dev/sdc1 -o test.tar
Scanning NTFS...
Added 13 files/dirs from $Extend                                    .
Recognized as NTFS.
Dumping "/dev/sdc1" (465.76 Gb) ...
Dump finished. File size 1248334848 bytes (including tail)
Collecting system information...
System information was saved to /home/UFSD_utilites/test.tar
```

7 Output file description

The Sysdump utility creates a single tar archive in the working folder with its' work results for easier data transfer to Paragon team. This archive can be easily uncompressed with the tar utility, e.g.:

```
# tar -xf ./x86_64.3.11.9.20131211.tar
```

There are several files inside archive:

- dmesg - contents of the 'dmesg' command output
- dumpbin.gz - compressed metadata image of the test volume
- dumpbin.md5 -md5 checksum for the collected image itself, not the archive file
- modules - list of all Kernel modules (*.ko files) found on the platform
- sysinfo - file with platform system information: list of storage devices, Linux Kernel version, version of the loaded UFSD driver, CPU, memory information, etc.

8 Delivering collected data to Paragon

Please send the tar file, generated by the 'Sysdump' utility to your support contact at Paragon Software via e-mail, via 'My account' page at Paragon Software Support Portal or upload it to your folder on Paragon Software FTP server at https://ftp.paragon-software.com

9 Privacy policy

Paragon's Sysdump utility doesn't collect any personal or user-sensitive information. Platform data is obtained via usage of the native Linux utilities and standard system files (e.g. fdisk, parted, /proc/cpuinfo, /proc/meminfo and others). The resulted volume metadata image includes only file system metadata and risk of leaking sensitive data when using sysdump utility is minimized. Nevertheless, collected information is also covered by the mutual Non-disclosure agreement and couldn't be forwarded to any third party.

10 Troubleshooting

To be updated.

11 Contact information

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