

**NAME**

sos report – Collect and package diagnostic and support data

**SYNOPSIS****sos report**

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[-l|--list-plugins]
[-n|--skip-plugins plugin-names]
[-e|--enable-plugins plugin-names]
[-o|--only-plugins plugin-names]
[-a|--alloptions] [-v|--verbose]
[-k plug.opt|--plugin-option plug.opt]
[--no-report] [--config-file conf]
[--no-postproc]
[--preset preset] [--add-preset add_preset]
[--del-preset del_preset] [--desc description]
[--batch] [--build] [--debug] [--dry-run]
[--estimate-only] [--label label] [--case-id id]
[--threads threads]
[--plugin-timeout TIMEOUT]
[--cmd-timeout TIMEOUT]
[--namespaces NAMESPACES]
[--container-runtime RUNTIME]
[-s|--sysroot SYSROOT]
[-c|--chroot {auto|always|never}]
[--tmp-dir directory]
[-p|--profile profile-name]
[--list-profiles]
[--verify]
[--log-size]
[--all-logs]
[--since YYYYMMDD[HHMMSS]]
[--skip-commands commands]
[--skip-files files]
[--allow-system-changes]
[-z|--compression-type method]
[--encrypt]
[--encrypt-key KEY]
[--encrypt-pass PASS]
[--upload] [--upload-url url] [--upload-user user]
[--upload-directory dir] [--upload-pass pass]
[--upload-no-ssl-verify] [--upload-method]
[--upload-protocol protocol]
[--experimental]
[-h|--help]

```

**DESCRIPTION**

**report** is an sos subcommand that generates an archive of configuration and diagnostic information from the running system. The archive may be stored locally or centrally for recording or tracking purposes or may be sent to technical support representatives, developers or system administrators to assist with technical fault-finding and debugging.

Sos is modular in design and is able to collect data from a wide range of subsystems and packages that may be installed. An HTML report summarizing the collected information is optionally generated and stored within the archive.

**OPTIONS****-l, --list-plugins**

List all available plugins and their options. Plug-ins that would not be enabled by the current configuration are listed separately.

**-n, --skip-plugins PLUGNAME[,PLUGNAME]**

Disable the specified plugin(s). Multiple plug-ins may be specified by repeating the option or as a comma-separated list.

**-e, --enable-plugins PLUGNAME[,PLUGNAME]**

Enable the specified plugin(s) that would otherwise be disabled. Multiple plugins may be specified by repeating the option or as a comma-separated list.

Note that if using **-p, --profile** this option will **not** enable further plugins. Use **-o, --only-plugins** to extend the list of plugins enabled by profiles.

**-o, --only-plugins PLUGNAME[,PLUGNAME]**

Enable the specified plugin(s) only (all other plugins should be disabled). Multiple plugins may be specified by repeating the option or as a comma-separated list.

**-k PLUGNAME.PLUGOPT[=VALUE], --plugin-option=PLUGNAME.PLUGOPT[=VALUE]**

Specify plug-in options. The option PLUGOPT is enabled, or set to the specified value in the plug-in PLUGNAME.

**-a, --alloptions**

Set all boolean options to True for all enabled plug-ins.

**-v, --verbose**

Increase logging verbosity. May be specified multiple times to enable additional debugging messages.

**-q, --quiet**

Only log fatal errors to stderr.

**--no-report**

Disable HTML report writing.

**--config-file CONFIG**

Specify alternate configuration file.

**--no-postproc**

Disable postprocessing globally for all plugins. This will mean data is not obfuscated/sanitized from the archive during collection.

Note that this means data such as password, SSH keys, certificates, etc... will be collected in plain text.

To selectively disable postprocessing on a per-plugin basis, use the 'postproc' plugin option available to all plugins, e.g. '-k podman.postproc=off'.

**--preset PRESET**

Specify an existing preset to use for sos options.

Presets are pre-configured sets of options for both sos and sos plugins. For example a preset may enable a certain set of plugins, disable others, or enable specific plugin options. They may also specify sos options such as log-size or package verification.

User defined presets are saved under /var/lib/sos/presets as JSON-formatted files.

**--add-preset ADD\_PRESET [options]**

Add a preset with name ADD\_PRESET that enables [options] when called.

For example, 'sos report --add-preset mypreset --log-size=50 -n logs' will enable a user to run 'sos report --preset mypreset' that sets the maximum log size to 50 and disables the logs plugin.

Note: to set a description for the preset that is displayed with **--list-presets**, use the **--desc** option.

Note: to set a behaviour note of the preset, use **--note** option.

Note: The root filesystem, as seen by sos if running within a container, must be writable to save presets using this option.

**--del-preset DEL\_PRESET**

Deletes the preset with name DEL\_PRESET from the filesystem so that it can no longer be used.

**--list-presets**

Display a list of available presets and what options they carry.

**--desc DESCRIPTION**

When using **--add-preset** use this option to add a description of the preset that will be displayed when using **--list-presets**.

**-s, --sysroot SYSROOT**

Specify an alternate root file system path. Useful for collecting reports from containers and images.

**-c, --chroot {auto|always|never}**

Set the chroot mode. When **--sysroot** is used commands default to executing with SYSROOT as the root directory (unless disabled by a specific plugin). This can be overridden by setting **--chroot** to "always" (always chroot) or "never" (always run in the host namespace).

**--tmp-dir DIRECTORY**

Specify alternate temporary directory to copy data as well as the compressed report.

**--list-profiles**

Display a list of available profiles and the plugins that they enable.

**-p, --profile, --profiles NAME**

Only run plugins that correspond to the given profile. Multiple profiles may be specified as a comma-separated list; the set of plugins executed is the union of each of the profile's plugin sets.

Note that if there are specific plugins outside of the profile(s) passed to this option that you would also want to enable, use **-o, --only-plugins** to add those plugins to the list.

See **sos report --list-profiles** for a list of currently supported profiles.

**--verify**

Instructs plugins to perform plugin-specific verification during data collection. This may include package manager verification, log integrity testing or other plugin defined behaviour. Use of **--verify** may cause the time taken to generate a report to be considerably longer.

**--log-size**

Places a limit on the size of collected logs and output in MiB. Note that this causes sos to capture the last X amount of the file or command output collected.

By default, this is set to 25 MiB and applies to all files and command output collected with the exception of journal collections, which are limited to 100 MiB.

Setting this value to 0 removes all size limitations, and any files or commands collected will be

collected in their entirety, which may drastically increase the size of the final sos report tarball and the memory usage of sos during collection of commands, such as very large journals that may be several GiB in size.

#### **--all-logs**

Tell plugins to collect all possible log data ignoring any size limits and including logs in non-default locations. This option may significantly increase the size of reports.

#### **--since YYYYMMDD[HHMMSS]**

Limits the collection of log archives to those newer than this date. A log archive is any file not found in /etc, that has either a numeric or a compression-type file extension for example ".zip", ".1", ".gz" etc.). This also affects --all-logs. The date string will be padded with zeros if HH-MMSS is not specified.

#### **--skip-commands COMMANDS**

A comma delimited list of commands to skip execution of, but still allowing the rest of the plugin that calls the command to run. This will generally need to be some form of UNIX shell-style wildcard matching. For example, using a value of **hostname** will skip only that single command, while using **hostname\*** will skip all commands with names that begin with the string "hostname".

#### **--skip-files FILES**

A comma delimited list of files or filepath wildcard matches to skip collection of. Values may either be exact filepaths or paths using UNIX shell-style wildcards, for example **/etc/sos/\***.

#### **--allow-system-changes**

Run commands even if they can change the system (e.g. load kernel modules).

#### **-z, --compression-type METHOD**

Override the default compression type specified by the active policy.

#### **--encrypt**

Encrypt the resulting archive, and determine the method by which that encryption is done by either a user prompt or environment variables.

When run with **--batch**, using this option will cause sos to look for either the **SOSENCRYPTKEY** or **SOSENCRYPTPASS** environment variables. If set, this will implicitly enable the **--encrypt-key** or **--encrypt-pass** options, respectively, to the values set by the environment variable. This enables the use of these options without directly setting those options in a config file or command line string. Note that use of an encryption key has precedence over a passphrase.

Otherwise, using this option will cause sos to prompt the user to choose the method of encryption to use. Choices will be [P]assphrase, [K]ey, [E]nv vars, or [N]o encryption. If passphrase or key the user will then be prompted for the respective value, env vars will cause sos to source the information in the manner stated above, and choosing no encryption will disable encryption.

See the sections on **--encrypt-key** and **--encrypt-pass** below for more information.

#### **--encrypt-key KEY**

Encrypts the resulting archive that sosreport produces using GPG. KEY must be an existing key in the user's keyring as GPG does not allow for keyfiles. KEY can be any value accepted by gpg's 'recipient' option.

Note that the user running sosreport must match the user owning the keyring from which keys will be obtained. In particular this means that if sudo is used to run sosreport, the keyring must also be set up using sudo (or direct shell access to the account).

Users should be aware that encrypting the final archive will result in sos using double the amount of temporary disk space - the encrypted archive must be written as a separate, rather than

replacement, file within the temp directory that sos writes the archive to. However, since the encrypted archive will be the same size as the original archive, there is no additional space consumption once the temporary directory is removed at the end of execution.

This means that only the encrypted archive is present on disk after sos finishes running.

If encryption fails for any reason, the original unencrypted archive is preserved instead.

**--encrypt-pass PASS**

The same as --encrypt-key, but use the provided PASS for symmetric encryption rather than key-pair encryption.

**--batch**

Generate archive without prompting for interactive input.

**--name NAME**

Deprecated. See --label

**--label LABEL**

Specify an arbitrary identifier to associate with the archive. Labels will be appended after the system's short hostname and may contain alphanumeric characters.

**--threads THREADS**

Specify the number of threads sosreport will use for concurrency. Defaults to 4.

**--plugin-timeout TIMEOUT**

Specify a timeout in seconds to allow each plugin to run for. A value of 0 means no timeout will be set. A value of -1 is used to indicate the default timeout of 300 seconds.

Note that this option sets the timeout for all plugins. If you want to set a timeout for a specific plugin, use the 'timeout' plugin option available to all plugins - e.g. '-k logs.timeout=600'.

The plugin-specific timeout option will override this option. For example, using '--plugin-timeout=60 -k logs.timeout=600' will set a timeout of 600 seconds for the logs plugin and 60 seconds for all other enabled plugins.

**--cmd-timeout TIMEOUT**

Specify a timeout limit in seconds for a command execution. Same defaults logic from --plugin-timeout applies here.

This option sets the command timeout for all plugins. If you want to set a cmd timeout for a specific plugin, use the 'cmd-timeout' plugin option available to all plugins - e.g. '-k logs.cmd-timeout=600'.

Again, the same plugin/global precedence logic as for --plugin-timeout applies here.

Note that setting --cmd-timeout (or -k logs.cmd-timeout) high should be followed by increasing the --plugin-timeout equivalent, otherwise the plugin can easily timeout on slow commands execution.

**--namespaces NAMESPACES**

For plugins that iterate collections over namespaces that exist on the system, for example the networking plugin collecting 'ip' command output for each network namespace, use this option to limit the number of namespaces that will be collected.

Use '0' (default) for no limit - all namespaces will be used for collections.

Note that specific plugins may provide a similar 'namespaces' plugin option. If the plugin option is used, it will override this option.

**--container-runtime RUNTIME**

Force the use of the specified RUNTIME as the default runtime that plugins will use to collect data from and about containers and container images. By default, the setting of **auto** results in the local policy determining what runtime will be the default runtime (in configurations where multiple runtimes are installed and active).

If no container runtimes are active, this option is ignored. If there are runtimes active, but not one with a name matching RUNTIME, sos will abort.

Setting this to **none**, **off**, or **disabled** will cause plugins to **NOT** leverage any active runtimes for collections. Note that if disabled, plugins specifically for runtimes (e.g. the podman or docker plugins) will still collect general data about the runtime, but will not inspect existing containers or images.

Default: 'auto' (policy determined)

**--case-id NUMBER**

Specify a case identifier to associate with the archive. Identifiers may include alphanumeric characters, commas and periods (',' '.').

**--build**

Do not archive copied data. Causes sosreport to leave an uncompressed archive as a temporary file or directory tree.

**--debug**

Enable interactive debugging using the python debugger. Exceptions in sos or plug-in code will cause a trap to the pdb shell.

**--dry-run**

Execute plugins as normal, but do not collect any file content, command output, or string data from the system. The resulting logs may be used to understand the actions that sos would have taken without the dry run option.

**--estimate-only**

Estimate disk space requirements when running sos report. This can be valuable to prevent sosreport working dir to consume all free disk space. No plugin data is available at the end.

Plugins will be collected sequentially, size of collected files and commands outputs will be calculated and the plugin files will be immediately deleted prior execution of the next plugin. This still can consume whole free disk space, though.

Please note, size estimations may not be accurate for highly utilized systems due to changes between an estimate and a real execution. Also some difference between estimation (using 'stat' command) and other commands used (i.e. 'du').

A rule of thumb is to reserve at least double the estimation.

**--upload**

If specified, attempt to upload the resulting archive to a vendor defined location.

This option is implied if --upload-url is used.

You may be prompted for a username and password if these are not defined by the vendor as well. If these credentials are not provided, sos will still run and create an archive but will not attempt an automatic upload, instead relying on the end user to upload it as needed.

The sosreport archive will still remain on the local filesystem even after a successful upload.

Note that depending on the distribution sos is being run on, or the vendor policy detected during execution, there may be dependencies that are not strictly required by the package at installation time.

For example, for HTTPS uploads the python-requests library must be available. If this library is not available, HTTPS uploads will not be attempted.

**--upload-url URL**

If a vendor does not provide a default upload location, or if you would like to upload the archive to a different location, specify the address here.

A support protocol **MUST** be specified in this URL. Currently uploading is supported for HTTPS, SFTP, and FTP protocols.

If your destination server listens on a non-standard port, specify the listening port in the URL.

**--upload-user USER**

If a vendor does not provide a default user for uploading, specify the username here.

If this option is unused and upload is request, and a vendor default is not set, you will be prompted for one. If --batch is used and this option is omitted, no username will be collected and thus uploads will fail if no vendor default is set.

You also have the option of providing this value via the SOSUPLOADUSER environment variable. If this variable is set, then no username prompt will occur and --batch may be used provided all other required values (case number, upload password) are provided.

**--upload-pass PASS**

Specify the password to use for authentication with the destination server.

If this option is omitted and upload is requested, you will be prompted for one.

If --batch is used, this prompt will not occur, so any uploads are likely to fail unless this option is used.

Note that this will result in the plaintext string appearing in 'ps' output that may be collected by sos and be in the archive. If a password must be provided by you for uploading, it is strongly recommended to not use --batch and enter the password when prompted rather than using this option.

You also have the option of providing this value via the SOSUPLOADPASSWORD environment variable. If this variable is set, then no password prompt will occur and --batch may be used provided all other required values (case number, upload user) are provided.

**--upload-directory DIR**

Specify a directory to upload to, if one is not specified by a vendor default location or if your destination server does not allow writes to '/'.

**--upload-method METHOD**

Specify the HTTP method to use for uploading to the provided --upload-url. Valid values are 'auto' (default), 'put', or 'post'. The use of 'auto' will default to the method required by the policy-default upload location, if one exists.

This option has no effect on upload protocols other than HTTPS.

**--upload-no-ssl-verify**

Disable SSL verification for HTTPS uploads. This may be used to allow uploading to locations that have self-signed certificates, or certificates that are otherwise untrusted by the local system.

Default behavior is to perform SSL verification against all upload locations.

**--upload-protocol PROTO**

Manually specify the protocol to use for uploading to the target **upload-url**.

Normally this is determined via the upload address, assuming that the protocol is part of the address provided, e.g. 'https://example.com'. By using this option, sos will skip the protocol check and use the method defined for the specified PROTO.

For RHEL systems, setting this option to **sftp** will skip the initial attempt to upload to the Red Hat Customer Portal, and only attempt an upload to Red Hat's SFTP server, which is typically used as a fallback target.

Valid values for PROTO are: 'auto' (default), 'https', 'ftp', 'sftp'.

**--experimental**

Enable plugins marked as experimental. Experimental plugins may not have been tested for this port or may still be under active development.

**--help** Display usage message.

**SEE ALSO**

**sos(1)** **sos-clean(1)** **sos-collect(1)** **sos.conf(5)**

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**TRANSLATIONS**

Translations are handled by transifex (<https://fedorahosted.org/transifex/>)