Gathering System Information for Support

supportconfig is a command-line diagnostic tool for SUSE Linux Enterprise Server for NVIDIA that collects and organizes comprehensive system information, hardware data and log files into a single TAR archive. By automating log collection for Global Technical Support, **supportconfig** reduces service request resolution times, simplifies troubleshooting complex system issues and ensures efficient, standardized diagnostic reporting.

Prerequisites

- The `supportutils` package installed

Publication Date: 05 Nov 2026

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1 Why collect system information and logs?

The **supportconfig** command-line tool collects and organizes detailed system information and logs in a way that helps to reduce service request resolution times.

Private system information can be disclosed during the process of collecting information from the tool. If this is a concern, you can remove the private data from the log files. There are other options to exclude more sensitive data. `supportconfig` data is used only for diagnostic purposes and is confidential. For more information on data privacy, refer to http://www.suse.com/company/policies/privacy/.

2 The **supportconfig** tool

The tool creates a tar ball in the `/var/log` directory. Attach the log file tar ball to your service request or if you cannot, email it to the engineer. For more detailed information on working with SUSE Technical Support, see https://www.suse.com/support/handbook/.

If problems occur, use the **supportconfig** command-line tool to collect and organize system information and logs. This helps reduce the time needed to resolve service requests. The collected data includes details such as the current kernel version, hardware, installed packages, partition setup and more, and is automatically attached to your service request.

The command-line tool is provided by the package `supportutils`, which is installed by default. If the package is not installed, install it with:

The **supportconfig** tool can integrate plug-ins that run automatically each time the command is executed. Which plug-ins are available on your system, depends on the installed packages. The plug-ins are stored in the `/usr/lib/supportconfig/plugins/` directory.

The **supportconfig** tool creates a TAR archive with detailed system information that you can hand over to Global Technical Support.

3 Collecting system information with **supportconfig**

To create a TAR archive with detailed system information that you can hand over to Global Technical Support, follow the procedure:

1. Run **supportconfig** as `root`. Usually, it is enough to run this tool without any options. For common options, refer to *Section 3.1, "Common **supportconfig** options"*.

```
# supportconfig


           Support Utilities - Supportconfig
                         Script Version: 3.1.11-46.2
                         Library Version: 3.1.11-29.6
                         Script Date: 2022 10 18
[...]
Gathering system information
  Data Directory:    /var/log/scc_d251_180201_1525 ❶

  Basic Server Health Check...                 Done ❷
  RPM Database...                              Done ❷
  Basic Environment...                         Done ❷
  System Modules...                            Done ❷
[...]
  File System List...                          Skipped ❸
[...]
  Command History...                           Excluded ❹
[...]
  Supportconfig Plugins:                       1 ❺
    Plugin: pstree...                          Done
[...]
Creating Tar Ball

==[ DONE ]=====================================================================
  Log file tar ball: /var/log/scc_d251_180201_1525.txz ❻
  Log file size:     732K
  Log file md5sum:   bf23e0e15e9382c49f92cbce46000d8b
================================================================================/
```

The command output is described below this procedure.

2. Wait for the tool to complete the operation.
3. The default archive location is `/var/log`, with the file name format being `sc-c_HOST_DATE_TIME.txz`. For the archive content description, refer to *Section 4, "Overview of the archive content"*.

❶ The temporary data directory to store the results. This directory is archived as a tar file, see ❻.

❷ The feature was enabled (either by default or selected manually) and executed successfully. The result is stored in a file (see *Table 1, "Comparison of features and file names in the TAR archive"*).

❸ The feature was skipped because certain files of one or more RPM packages were changed.

❹ The feature was excluded because it was deselected via the `-x` option.

5 The script found one plug-in and executes the plug-in **pstree**. The plug-in was found in the directory `/usr/lib/supportconfig/plugins/`. See the man page for details.

6 The tar file name of the archive, compressed with **xz** by default.

3.1 Common **supportconfig** options

Usually, it is sufficient to run **supportconfig** without any options. However, you may need to use the following options:

`-E` *MAIL*
: To provide the contact e-mail.

`-N` *NAME*
: To provide your name.

`-O` *COMPANY*
: To provide your company name.

`-P` *PHONE*
: To provide your phone number.

`-i` *KEYWORDS*
: To specify keywords that limit the features to check. *KEYWORDS* is a comma-separated list of case-sensitive keywords.

  This option is particularly useful if you have already localized a problem that relates to a specific area or feature set only. For example, you have detected problems with LVM and want to test a recent change that you introduced to the LVM configuration. In this case, it makes sense to gather the minimum **supportconfig** information around LVM only:

```
# supportconfig -i LVM
```

`-F`
: To list all keywords that you can use to limit the features to check.

-m
: To reduce the amount of the information being gathered.

-l
: To collect already rotated log files. This is especially useful in high-logging environments or after a kernel crash when syslog rotates the log files after a reboot.

Use **supportconfig -help**command to get a list of all the options.

4 Overview of the archive content

The TAR archive contains all the results from the features. Depending on what you have selected (all or only a small set), the archive can contain more or fewer files. The set of features can be limited using the `-i` option (see *Section 3.1, "Common* **supportconfig** *options"*).

To list the contents of an `xz` compressed tar file:

```
# tar -tJf /var/log/NAME_OF_TAR_FILE.txz
  scc_localhost.localdomain_250618_1154/basic-environment.txt
  scc_localhost.localdomain_250618_1154/basic-health-check.txt
  scc_localhost.localdomain_250618_1154/boot.txt
  scc_localhost.localdomain_250618_1154/bpf.txt
  scc_localhost.localdomain_250618_1154/cimom.txt
  scc_localhost.localdomain_250618_1154/crash.txt
  scc_localhost.localdomain_250618_1154/dbus.txt
  scc_localhost.localdomain_250618_1154/dhcp.txt
  scc_localhost.localdomain_250618_1154/dns.txt
  scc_localhost.localdomain_250618_1154/docker.txt
  scc_localhost.localdomain_250618_1154/email.txt
  scc_localhost.localdomain_250618_1154/env.txt
  scc_localhost.localdomain_250618_1154/etc.txt
  scc_localhost.localdomain_250618_1154/fs-autofs.txt
  scc_localhost.localdomain_250618_1154/fs-btrfs.txt
  scc_localhost.localdomain_250618_1154/fs-diskio.txt
  scc_localhost.localdomain_250618_1154/fs-gfs2.txt
  scc_localhost.localdomain_250618_1154/fs-iscsi.txt
  scc_localhost.localdomain_250618_1154/fs-softraid.txt
  scc_localhost.localdomain_250618_1154/ha.txt

  [...]
```

The following file names are always available inside the TAR archive:

MINIMUM FILES IN ARCHIVE

`basic-environment.txt`

Contains the date when this script was executed and system information like version of the distribution, hypervisor information, and more.

`basic-health-check.txt`
: Contains basic health checks, such as uptime, virtual memory statistics, free memory and hard disk, checks for zombie processes, and more.

`hardware.txt`
: Contains basic hardware checks like information about the CPU architecture, a list of all connected devices, interrupts, I/O ports, kernel boot messages, and more.

`messages.txt`
: Contains log messages from the system journal.

`rpm.txt`
: Contains a list of all installed RPM packages, their names and versions and where they come from.

`summary.xml`
: Contains information in XML format, such as distribution, version and product-specific fragments.

`supportconfig.txt`
: Contains information about the **`supportconfig`** script itself.

`y2log.txt`
: Contains YaST-specific information like specific packages, configuration files and log files.

The following table lists some of the available features and their file names.

TABLE 1: COMPARISON OF FEATURES AND FILE NAMES IN THE TAR ARCHIVE

Feature	File name
`AUDIT`	`security-audit.txt`
`AUTOFS`	`fs-autofs.txt`
`BOOT`	`boot.txt`
`BTRFS`	`fs-btrfs.txt`
`DAEMONS`	`systemd.txt`
`CIMOM`	`cimom.txt`
`CRASH`	`crash.txt`
`DHCP`	`dhcp.txt`
`DISK`	`fs-diskio.txt`

Feature	File name
DNS	dns.txt
DOCKER	docker.txt
ENV	env.txt
ETC	etc.txt
ISCSI	fs-iscsi.txt
LDAP	ldap.txt
LIVEPATCH	kernel-livepatch.txt
LVM	lvm.txt
MEM	memory.txt
MOD	modules.txt
MPIO	mpio.txt
NET	network-*.txt
NFS	nfs.txt
NTP	ntp.txt
OCFS2	ocfs2.txt
PAM	pam.txt
PODMAN	podman-root.txt
PRINT	print.txt
PROC	proc.txt
SAR	sar.txt
SLERT	slert.txt
SLP	slp.txt
SMT	smt.txt

Feature	File name
SMART	fs-smartmon.txt
SMB	samba.txt
SRAID	fs-softraid.txt
SSH	ssh.txt
SSSD	sssd.txt
SYSCONFIG	sysconfig.txt
SYSFS	sysfs.txt
TRANSACTIONAL	transactional-update.txt
TUNED	tuned.txt
UDEV	udev.txt
UP	updates.txt
WEB	web.txt

5 Submitting information to Global Technical Support

After you have created the archive using the **supportconfig** tool, you can submit the archive to SUSE.

5.1 Creating a service request number

Before handing over the **supportconfig** data to Global Technical Support, you need to generate a service request number first. You will need it to upload the archive to support.

To create a service request, go to https://scc.suse.com/support/requests and follow the instructions on the screen. Write down the service request number.



Note: Privacy statement

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5.2 Uploading targets

After having created a service request number, you can upload your **supportconfig** archives to Global Technical Support. In the examples below, *12345678901* serves as a placeholder for your service request number. Replace the placeholder with the service request number you created in *Section 5.1, "Creating a service request number"*.

The following procedures assume that you have already created a **supportconfig** archive but have not uploaded it yet.

PROCEDURE 1: SUBMITTING INFORMATION TO SUPPORT ON SERVERS WITH INTERNET CONNECTIVITY

1. Run the **supportconfig** tool as follows:

   a. To use the default upload target `https://support-ftp.us.suse.com/incoming/upload.php?file=TARBALL`, run:

   ```
   > sudo supportconfig -ur 12345678901
   ```

   b. For the FTPS upload target `ftps://support-ftp.us.suse.com`, use the following command:

   ```
   > sudo supportconfig -ar 12345678901
   ```

   To use a different upload target, for example, for the EMEA area, use the `-U` followed by the particular URL, either `https://support-ftp.emea.suse.com/incoming/upload.php?file=TARBALL` or `ftps://support-ftp.emea.suse.com/incoming/`:

   ```
   > sudo supportconfig -r 12345678901 -U https://support-ftp.emea.suse.com/
   incoming
   ```

2. After the TAR archive arrives in the incoming directory of our FTP server, it becomes automatically attached to your service request.

If the servers do not provide Internet connectivity, follow the steps below:

PROCEDURE 2: SUBMITTING INFORMATION TO SUPPORT ON SERVERS WITHOUT INTERNET CONNECTIVITY

1. Run the following:

```
> sudo supportconfig -r 12345678901
```

2. Manually upload the `/var/log/scc_SR12345678901*txz` archive to one of our servers. The selection of a server depends on your location in the world:

   - North America: HTTPS `https://support-ftp.us.suse.com/incoming/upload.php?file=TARBALL`, FTPS `ftps://support-ftp.us.suse.com/incoming/`
   - EMEA, Europe, the Middle East, and Africa: FTP `https://support-ftp.emea.suse.com/incoming/upload.php?file=TARBALL`, FTPS `ftps://support-ftp.emea.suse.com/incoming/`

3. After the TAR archive arrives in the incoming directory of our FTP server, it becomes automatically attached to your service request.

6 More information

The SUSE Technical Support Handbook provides detailed information on how to work with SUSE technical support. Below are links to key sections, but you may also find it helpful to review the full handbook.

- Types of support and what is technical support (https://www.suse.com/support/handbook/what-is-technical-support/)
- What is supported (https://www.suse.com/support/handbook/what-is-supported/)
- Severity Types (https://www.suse.com/support/handbook/severity-types/)
- How to effectively work with support (https://www.suse.com/support/handbook/how-to-effectively-work-with-support/)
- Additional support options (https://www.suse.com/support/handbook/additional-support-options/)
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