



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'gnome-session.1' command

\$ man gnome-session.1

GNOME-SESSION(1) General Commands Manual GNOME-SESSION(1)

NAME

gnome-session - Start the GNOME desktop environment

SYNOPSIS

```
gnome-session [-a|--autostart=DIR] [--session=SESSION] [--failsafe|-f]
               [--debug] [--whale]
```

DESCRIPTION

The `gnome-session` program starts up the GNOME desktop environment. This command is typically executed by your login manager (either `gdm`, `xdm`, or from your X startup scripts). It will load either your saved session, or it will provide a default session for the user as defined by the system administrator (or the default GNOME installation on your system). Note that `gnome-session` is a wrapper script for `gnome-session-binary`.

The default session is defined in `gnome.session`, a `.desktop-like` file that is looked for in `$XDG_CONFIG_HOME/gnome-session/sessions`, `$XDG_CONFIG_DIRS/gnome-session/sessions` and `$XDG_DATA_DIRS/gnome-session/sessions`.

When saving a session, `gnome-session` saves the currently running applications in the `$XDG_CONFIG_HOME/gnome-session/saved-session` directory.

Saving sessions is only supported with the legacy non-systemd startup method.

`gnome-session` is an X11R6 session manager. It can manage GNOME applica?

tions as well as any X11R6 SM compliant application.

OPTIONS

The following options are supported:

`--autostart=DIR`

The directory DIR to be searched for autostart .desktop files.

This option can be used multiple times. When this option is present, then default autostart directories will not be searched.

`--session=SESSION`

Use the applications defined in SESSION.session. If not specified, gnome.session will be used.

`--builtin`

Use the legacy non-systemd method of managing the user session.

This is the opposite of the `--systemd` option.

`--systemd`

Use the systemd method of managing the user session. This is the opposite of the `--builtin` option.

`--failsafe`

Run in fail-safe mode. User-specified applications will not be started.

`--debug`

Enable debugging code.

`--whale`

Show the fail whale in a dialog for debugging it.

SESSION DEFINITION

Sessions are defined in .session files, that are using a .desktop-like format, with the following keys in the GNOME Session group:

Name Name of the session. This can be localized.

RequiredComponents

List of component identifiers (desktop files) that are required by the session. The required components will always run in the session.

Here is an example of a session definition:

[GNOME Session]

Name=GNOME

RequiredComponents=gnome-shell;gnome-settings-daemon;

In systemd managed sessions the RequiredComponents may be provided by systemd units instead. In this case the corresponding .desktop file needs to contain X-GNOME-HiddenUnderSystemd=true. gnome-session will ignore these components and rely on systemd to manage them appropriately, see the systemd for more information on how this works.

The .session files are looked for in \$XDG_CONFIG_HOME/gnome-session/sessions, \$XDG_CONFIG_DIRS/gnome-session/sessions and \$XDG_DATA_DIRS/gnome-session/sessions.

systemd

gnome-session can pass much of the session management over to systemd (see the --systemd option which may be the default since 3.34). In this case, startup components that have X-GNOME-HiddenUnderSystemd=true set in their .desktop file will be ignored by gnome-session. It instead relies on the fact that these components are managed by systemd.

As of GNOME 3.34 the systemd support is new and the customizing the configuration is not yet easily possible. With GNOME 3.34 it may be best to use --builtin if session customizations are required. This is due to the way that GNOME currently defines the components that will be started on each session type.

systemd provides the two special targets graphical-session.target and graphical-session-pre.target which are fully functional and should be used. gnome-session provides the following main targets:

gnome-session.target

Generic unit that will be active throughout the session. Similar to graphical-session.target.

gnome-session-pre.target

Used for tasks that need to be done before session startup. Similar to graphical-session-pre.target.

gnome-session-x11@SESSION.target gnome-session-wayland@SESSION.target

Main unit started for X11/wayland based session. SESSION is set

according to the session that is passed in --session.

gnome-session-x11.target gnome-session-wayland.target

Convenience units without the session embedded into the target.

gnome-session@SESSION.target

Convenience unit with just the SESSION information embedded.

gnome-session-x11-services.target

Special unit started when X11 services are needed. This will be used from GNOME 3.36 onwards. Programs will need to use the special GNOME_SETUP_DISPLAY environment variable instead of DISPLAY.

Note that care must be taken to set appropriate After= rules. It is also strongly recommended to always do this in combination with BindTo= or PartOf= on one of the core targets (e.g. graphical-session.target).

Units are required to set CollectMode=inactive-or-failed. In addition, it is strongly recommended to set TimeoutStopSec=5 so that logout will not be delayed indefinitely in case the process does not stop properly.

ENVIRONMENT

gnome-session sets several environment variables for the use of its child processes:

SESSION_MANAGER

This variable is used by session-manager aware clients to contact gnome-session.

DISPLAY

This variable is set to the X display being used by gnome-session. Note that if the --display option is used this might be different from the setting of the environment variable when gnome-session is invoked.

Behavior of gnome-session itself can be modified via the following environment variable:

GNOME_SESSION_AUTOSTART_DIR

This variable specifies a list of directories to be searched for autostart files. This variable overrides all directories

specified via the --autostart option, as well as all default au?

to start directories.

FILES

`$XDG_CONFIG_HOME/autostart` `$XDG_CONFIG_DIRS/autostart`

`/usr/share/gnome/autostart`

Applications defined via `.desktop` files in those directories

will be started on login.

`$XDG_CONFIG_HOME/gnome-session/sessions` `$XDG_CONFIG_DIRS/gnome-ses?`

`sion/sessions` `$XDG_DATA_DIRS/gnome-session/sessions`

These directories contain the `.session` files that can be used

with the `--session` option.

`$XDG_CONFIG_HOME/gnome-session/saved-session`

This directory contains the list of applications of the saved

session.

BUGS

If you find bugs in the `gnome-session` program, please report these on

<https://gitlab.gnome.org/GNOME/gnome-session/issues>.

SEE ALSO

`gnome-session-quit(1)`

GNOME

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