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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'systemd-notify.1' command**

**\$ man systemd-notify.1**

SYSTEMD-NOTIFY(1)      systemd-notify      SYSTEMD-NOTIFY(1)

### **NAME**

systemd-notify - Notify service manager about start-up completion and other daemon status changes

### **SYNOPSIS**

systemd-notify [OPTIONS...] [VARIABLE=VALUE...]

### **DESCRIPTION**

systemd-notify may be called by daemon scripts to notify the init system about status changes. It can be used to send arbitrary information, encoded in an environment-block-like list of strings. Most importantly, it can be used for start-up completion notification.

This is mostly just a wrapper around `sd_notify()` and makes this functionality available to shell scripts. For details see `sd_notify(3)`.

The command line may carry a list of environment variables to send as part of the status update.

Note that systemd will refuse reception of status updates from this command unless `NotifyAccess=` is set for the service unit this command is called from.

Note that `sd_notify()` notifications may be attributed to units correctly only if either the sending process is still around at the time PID 1 processes the message, or if the sending process is explicitly runtime-tracked by the service manager. The latter is the case if the service manager originally forked off the process, i.e. on

all processes that match NotifyAccess=main or NotifyAccess=exec.

Conversely, if an auxiliary process of the unit sends an sd\_notify()  
message and immediately exits, the service manager might not be able to  
properly attribute the message to the unit, and thus will ignore it,  
even if NotifyAccess=all is set for it. When --no-block is used, all  
synchronization for reception of notifications is disabled, and hence  
the aforementioned race may occur if the invoking process is not the  
service manager or spawned by the service manager.

Hence, systemd-notify will first attempt to invoke sd\_notify()  
pretending to have the PID of the invoking process. This will only  
succeed when invoked with sufficient privileges. On failure, it will  
then fall back to invoking it under its own PID. This behaviour is  
useful in order that when the tool is invoked from a shell script the  
shell process ? and not the systemd-notify process ? appears as sender  
of the message, which in turn is helpful if the shell process is the  
main process of a service, due to the limitations of NotifyAccess=all.

Use the --pid= switch to tweak this behaviour.

## OPTIONS

The following options are understood:

--ready

Inform the init system about service start-up completion. This is  
equivalent to systemd-notify READY=1. For details about the  
semantics of this option see sd\_notify(3).

--pid=

Inform the service manager about the main PID of the daemon. Takes  
a PID as argument. If the argument is specified as "auto" or  
omitted, the PID of the process that invoked systemd-notify is  
used, except if that's the service manager. If the argument is  
specified as "self", the PID of the systemd-notify command itself  
is used, and if "parent" is specified the calling process' PID is  
used ? even if it is the service manager. This is equivalent to  
systemd-notify MAINPID=\$PID. For details about the semantics of  
this option see sd\_notify(3).

--uid=USER

Set the user ID to send the notification from. Takes a UNIX user name or numeric UID. When specified the notification message will be sent with the specified UID as sender, in place of the user the command was invoked as. This option requires sufficient privileges in order to be able manipulate the user identity of the process.

--status=

Send a free-form status string for the daemon to the init systemd. This option takes the status string as argument. This is equivalent to `systemd-notify STATUS=....`. For details about the semantics of this option see `sd_notify(3)`.

--booted

Returns 0 if the system was booted up with systemd, non-zero otherwise. If this option is passed, no message is sent. This option is hence unrelated to the other options. For details about the semantics of this option, see `sd_booted(3)`. An alternate way to check for this state is to call `systemctl(1)` with the `is-system-running` command. It will return "offline" if the system was not booted with systemd.

--no-block

Do not synchronously wait for the requested operation to finish. Use of this option is only recommended when `systemd-notify` is spawned by the service manager, or when the invoking process is directly spawned by the service manager and has enough privileges to allow `systemd-notify` to send the notification on its behalf.

Sending notifications with this option set is prone to race conditions in all other cases.

-h, --help

Print a short help text and exit.

--version

Print a short version string and exit.

## EXIT STATUS

On success, 0 is returned, a non-zero failure code otherwise.

## EXAMPLE

### Example 1. Start-up Notification and Status Updates

A simple shell daemon that sends start-up notifications after having set up its communication channel. During runtime it sends further status updates to the init system:

```
#!/bin/sh

mkfifo /tmp/waldo

systemd-notify --ready --status="Waiting for data..."

while : ; do

    read -r a < /tmp/waldo

    systemd-notify --status="Processing $a"

    # Do something with $a ...

    systemd-notify --status="Waiting for data..."

done
```

## SEE ALSO

[systemd\(1\)](#), [systemctl\(1\)](#), [systemd.unit\(5\)](#), [sd\\_notify\(3\)](#), [sd\\_booted\(3\)](#)

[systemd 252](#)

[SYSTEMD-NOTIFY\(1\)](#)