NAME

machine-id - Local machine ID configuration file

SYNOPSIS

/etc/machine-id

DESCRIPTION

The /etc/machine-id file contains the unique machine ID of the local system that is set during installation. The machine ID is a single newline-terminated, hexadecimal, 32-character, lowercase machine ID string. When decoded from hexadecimal, this corresponds with a 16-byte/128-bit string.

The machine ID is usually generated from a random source during system installation and stays constant for all subsequent boots. Optionally, for stateless systems, it is generated during runtime at boot if it is found to be empty.

The machine ID does not change based on user configuration or when hardware is replaced.

This machine ID adheres to the same format and logic as the D-Bus machine ID.

Programs may use this ID to identify the host with a globally unique ID in the network, which does not change even if the local network configuration changes. Due to this and its greater length, it is a more useful replacement for the **gethostid(3)** call that POSIX specifies.

The **systemd-machine-id-setup(1)** tool may be used by installer tools to initialize the machine ID at install time.

RELATION TO OSF UUIDS

Note that the machine ID historically is not an OSF UUID as defined by **RFC 4122**[1], nor a Microsoft GUID; however, starting with systemd v30, newly generated machine IDs do qualify as v4 UUIDs.

In order to maintain compatibility with existing installations, an application requiring a UUID should decode the machine ID, and then apply the following operations to turn it into a valid OSF v4 UUID. With id being an unsigned character array:

/* Set UUID version to 4 --- truly random generation */
id[6] = (id[6] & 0x0F) | 0x40;
/* Set the UUID variant to DCE */
id[8] = (id[8] & 0x3F) | 0x80;

(This code is inspired by generate_random_uuid() of drivers/char/random.c from the Linux kernel sources.)

HISTORY

The simple configuration file format of /etc/machine-id originates in the /var/lib/dbus/machine-id file introduced by D-Bus. In fact, this latter file might be a symlink to */etc/machine-id*.

SEE ALSO

systemd(1), **systemd-machine-id-setup(1)**, **gethostid(3)**, **hostname(5)**, **machine-info(5)**, **os-release(5)**, **sd-id128(3)**, **sd_id128_get_machine(3)**

NOTES

1. RFC 4122
   https://tools.ietf.org/html/rfc4122