### **NAME**

trust - Tool for operating on the trust policy store

## **SYNOPSIS**

trust list

**trust extract** —filter=<what> —format=<type>/path/to/destination

trust anchor /path/to/certificate.crt

trust dump

## **DESCRIPTION**

trust is a command line tool to examine and modify the shared trust policy store.

See the various sub commands below. The following global options can be used:

# -v, --verbose

Run in verbose mode with debug output.

#### -q, --quiet

Run in quiet mode without warning or failure messages.

## LIST

List trust policy store items.

\$ trust list

List information about the various items in the trust policy store. Each item is listed with it's PKCS#11 URI and some descriptive information.

You can specify the following options to control what to list.

#### --filter=<what>

Specifies what certificates to extract. You can specify the following values:

## ca-anchors

Certificate anchors

## trust-policy

Anchors and blocklist (default)

# blocklist

Distrusted certificates

# certificates

All certificates

# pkcs11:object=xx

A PKCS#11 URI to filter with

If an output format is chosen that cannot support type what has been specified by the filter, a message will be printed.

None of the available formats support storage of blocklist entries that do not contain a full certificate. Thus any certificates distrusted by their issuer and serial number alone, are not included in the extracted blocklist.

## --purpose=<usage>

Limit to certificates usable for the given purpose You can specify one of the following values:

## server-auth

For authenticating servers

# client-auth

For authenticating clients

### email

For email protection

#### code-signing

For authenticated signed code

#### 1.2.3.4.5...

An arbitrary purpose OID

#### **ANCHOR**

Store or remove trust anchors.

\$ trust anchor /path/to/certificate.crt

\$ trust anchor —remove /path/to/certificate.crt

\$ trust anchor -- remove "pkcs11:id=%AA%BB%CC%DD%EE;type=cert"

Store or remove trust anchors in the trust policy store. These are usually root certificate authorities.

Specify either the --store or --remove operations. If no operation is specified then --store is assumed.

When storing, one or more certificate files are expected on the command line. These are stored as anchors, unless they are already present.

When removing an anchor, either specify certificate files or PKCS#11 URI's on the command line. Matching anchors will be removed.

It may be that this command needs to be run as root in order to modify the system trust policy store, if no user specific store is available.

You can specify the following options.

#### --remove

Remove one or more anchors from the trust policy store. Specify certificate files or PKCS#11 URI's on the command line.

# --store

Store one or more anchors to the trust policy store. Specify certificate files on the command line.

# **EXTRACT**

Extract trust policy from the shared trust policy store.

\$ trust extract —format=x509—directory —filter=ca—anchors /path/to/directory

You can specify the following options to control what to extract. The ——filter and ——format arguments should be specified. By default this command will not overwrite the destination file or directory.

#### --comment

Add identifying comments to PEM bundle output files before each certificate.

#### --filter=<what>

Specifies what certificates to extract. You can specify the following values:

### ca-anchors

Certificate anchors (default)

# trust-policy

Anchors and blocklist

### blocklist

Distrusted certificates

### certificates

All certificates

pkcs11:object=xx

#### A PKCS#11 URI

If an output format is chosen that cannot support type what has been specified by the filter, a message will be printed.

None of the available formats support storage of blocklist entries that do not contain a full certificate. Thus any certificates distrusted by their issuer and serial number alone, are not included in the extracted blocklist.

## --format=<type>

The format of the destination file or directory. You can specify one of the following values:

#### x509-file

DER X.509 certificate file

## x509-directory

directory of X.509 certificates

# pem-bundle

File containing one or more certificate PEM blocks

#### pem-directory

Directory of PEM files each containing one certificate

## pem-directory-hash

Directory of PEM files each containing one certificate, with hash symlinks

# openssl-bundle

OpenSSL specific PEM bundle of certificates

#### openssl-directory

Directory of OpenSSL specific PEM files

## java-cacerts

Java keystore 'cacerts' certificate bundle

# --overwrite

Overwrite output file or directory.

## --purpose=<usage>

Limit to certificates usable for the given purpose You can specify one of the following values:

#### server-auth

For authenticating servers

# client-auth

For authenticating clients

## email

For email protection

# code-signing

For authenticated signed code

# 1.2.3.4.5...

An arbitrary purpose OID

# **EXTRACT COMPAT**

Extract compatibility trust certificate bundles.

\$ trust extract-compat

OpenSSL, Java and some versions of GnuTLS cannot currently read trust information directly from the

trust policy store. This command extracts trust information such as certificate anchors for use by these libraries.

What this command does, and where it extracts the files is distribution or site specific. Packagers or administrators are expected customize this command.

## **DUMP**

Dump PKCS#11 items in the various tokens.

\$ trust dump

Dump information about the various PKCS#11 items in the tokens. Each item is dumped with it's PKCS#11 URI and information in the .p11-kit persistence format.

You can specify the following options to control what to dump.

```
--filter=<what>
```

Specifies what certificates to extract. You can specify the following values:

all

All objects. This is the default

# pkcs11:object=xx

A PKCS#11 URI to filter with

# **BUGS**

Please send bug reports to either the distribution bug tracker or the upstream bug tracker at <a href="https://github.com/p11-glue/p11-kit/issues/">https://github.com/p11-glue/p11-kit/issues/</a>.

## **SEE ALSO**

```
p11-kit(8)
```

An explanatory document about storing trust policy:

https://p11-glue.github.io/p11-glue/doc/storing-trust-policy/

Further details available in the p11-kit online documentation at

https://p11-glue.github.io/p11-glue/p11-kit/manual/.