

Test jobs and developing tests

Files

All files related to testing should be placed inside the related project source in the testing directory.

Test scripts file names should all use the template test-<project>.sh and be lower case.

Files when using run_tests()

When using run_tests() all those tests should be placed inside a directory named test.d inside the testing directory.

Test scripts file names when using run_tests() must be called test.sh and placed in a directory inside the test.d and that directory should have an appropriated name regarding the test:

```
testing/test-project.sh
testing/test.d/00-simple-test/test.sh
testing/test.d/10-simple-test2/test.sh
```

Test example / templates

Here are some test examples and/or templates.

Test without run_tests()

Here is a simple test that runs a command and checks the output if it was successfully.

```
#!/usr/bin/env bash
source `dirname "$0"`/lib.sh && init || exit 1

check_if_tested softhsm && exit 0
start_test softhsm

test_ok=0
(
    log_this softhsm-init-token softhsm --init-token --slot 0 --label OpenDNSSEC --pin 1234 --so-pin 1234 &&
    log_grep softhsm-init-token stdout "The token has been initialized."
) &&
test_ok=1

if [ "$test_ok" -eq 1 ]; then
    log_cleanup
    set_test_ok softhsm || exit 1
    exit 0
fi

exit 1
```

Tests with run_tests()

Using run_tests() is good if you have many tests for a project. This example gives the tests additionally functions to use that are directly related to the project.

Main test-<project.sh>

```

#!/usr/bin/env bash
source `dirname "$0"`/lib.sh && init || exit 1

ods_reset_env ()
{
    echo "ods_reset_env: resetting opendsnsec environment"
    echo "y" | ods-ksmutil setup &&
    log_this softhsm-init-token softhsm --init-token --slot 0 --label OpenDNSSEC --pin 1234 --so-pin 1234 ||
    return 1

    if ! log_grep softhsm-init-token stdout "The token has been initialized."; then
        return 1
    fi
}

require opendsnsec

check_if_tested opendsnsec && exit 0
start_test opendsnsec

test_ok=0
(
    run_tests test.d
) &&
test_ok=1

if [ "$test_ok" -eq 1 ]; then
    set_test_ok opendsnsec || exit 1
    exit 0
fi

exit 1

```

Simple test.d/00-start-stop/test.sh

This simple test starts and stop the program and checks the syslog for the appropriated messages that the start and stop was successful.

```

#!/usr/bin/env bash

ods_reset_env &&
log_this ods-control-start ods-control start &&
syslog_waitfor 60 'ods-signerd: \[engine\] signer started' &&
syslog_grep 'ods-enforcerd: Sleeping for' &&
log_this ods-control-stop ods-control stop &&
syslog_waitfor 60 'ods-signerd: \[engine\] signer shutdown' &&
syslog_grep 'ods-enforcerd: all done'

```