How to build and run a custom checker

1. Please refer to the following document for writing a custom checker:

Extend sdk checker:

<http://ctu-coverity-prod.wrs.com/doc/en/cov_extend_sdk_checker_dev_guide.html>

CodeXM checker：

<http://ctu-coverity-prod.wrs.com/doc/en/Learning_Coverity_CodeXM.pdf>

1. Login the server ctu-coverity-prod with your linux account.
2. Configuration environment variables:

$ export PREVENT\_ROOT=/ctu-coverity1/cov-analysis-201903

$ export CONFIG\_FILE=/ctu-coverity1/cov-config/config871/coverity\_config.xml

1. Build a sample custom sdk checker

$ cd /ctu-coverity1/cov-analysis-201903-with-sdk/sdk/samples/

Take the hello checker as an example:

$ cd hello

$ make

The hello checker is generated under the hello directory.

ctu-coverity-prod: /ctu-coverity1/cov-analysis-201903-with-sdk/sdk/samples/hello $ ll

total 46M

-rwxrwxrwx 1 svc-sa users 224 Mar 7 2019 checker.mk\*

-rwxrwxrwx 1 pma users 46M Sep 17 16:50 hello\*

-rwxrwxrwx 1 svc-sa users 763 Mar 7 2019 hello.cpp\*

-rwxrwxrwx 1 svc-sa users 204 Mar 7 2019 Makefile\*

drwxrwxrwx 2 svc-sa users 4.0K Sep 17 16:51 test1/

drwxrwxrwx 2 svc-sa users 4.0K Apr 24 01:38 test2/

drwxrwxrwx 2 svc-sa users 4.0K Apr 24 01:38 test-big-fn/

1. Run a custom sdk checker

4.1 Run a sample checker against sample test code.

Take the hello checker as an example:

$ cd /ctu-coverity1/cov-analysis-201903-with-sdk/sdk/samples/hello/test1/

$ make

You can see the test results in the file checker.stdout.out and checker.errors.out.

* 1. Run a Custom checker against VxWorks 7 source code.

Please use the Jenkins job:

<http://ctu-coverity-prod.wrs.com:8080/job/Coverity_user_defined/>

Add the following option into USER\_DEFINED\_OPTIONS:

--command <checker\_pathname>

1. Build a codexm checker

Don’t need to build a codexm checker.

1. Run a codexm checker

6.1 Run a codexm checker against test code

$PREVENT\_ROOT/bin/cov-build --config $CONFIG\_FILE --dir mycxm gcc -o test.o test.c

$PREVENT\_ROOT/bin/cov-analyze --dir mycxm --codexm goto.cxm

$PREVENT\_ROOT/bin/cov-format-errors --dir mycxm --html-output errs

* 1. Run a codexm checker against VxWorks 7 source code.

Please use the Jenkins job:

<http://ctu-coverity-prod.wrs.com:8080/job/Coverity_user_defined/>

Add the following option into USER\_DEFINED\_OPTIONS

--codexm <checker-file>