BQS Script Spec—suite Building

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**Abstract:**

BQS script will be created to support all test suites in LSH with the same format. BQS Script Spec—suite Building focus on the suite work flow and the detail work flow on suite building.

REVISION HISTORY

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| REVISION | RELEASE DATE | COMMENTS |
| V1.0 | 4/16/2014 | Initial draft – Jason Wang |
| V1.1 | 4/23/2014 | Suite file writing detailed –Jason Wang |
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# 1 Objective

BQS Script Spec—suite Building focus on the script suite work flow and the detail work flow on suite building, including the suite structure, detail requirements and default setting for every folder or file and some demo suite.

# 2 Suite Script Work Flow

Script will run test suite step by step: get test suite, generate test suite bat file, run and report test suite file.

Here is a top level flow chart for test suite work flow.



Figure1: suite script work flow

# 3 Test suite Building

Test suite is a collection of scripts, test case suite and files. Here is an example of test suite:

[\\d25609\BQS\_script\test\_suite\top\_demo](file:///\\d25609\BQS_script\test_suite\top_demo)

## 3.1 Top directory creates:

Top directory is used to collect all files or folders which will be used in suite run flow including: script folder, test case suite folder, suite file… Top directory can be any name. Here we assume the name is “top\_demo” for future example use.

## 3.2 BQS\_scripts:

BQS\_scripts is the name of script suite, including some main scripts and application tools.

As some develop reason, sometimes we will find the suite name is “trunk”, “merge” or something else. These names are alias of “BQS\_scripts”.

To get the latest version of “BQS\_scripts”, always use the following command:

“svn export <http://d25315/auto/bqs_scripts/trunk>”, you can also get this command file “export\_script.bat” from: [\\d25609\BQS\_script\test\_suite\top\_demo](file:///\\d25609\BQS_script\test_suite\top_demo) and double click this file on windows platform (use command “source export\_script.bat” on Linux platform) to get the script suite.

## 3.3 Test case suites prepare:

Test case suites are the name of folders which construct by some test cases. To build these test case suites we need to:

1. build test case one by one
2. collect all test cases to construct test case suite

### 3.3.1 Test case build

For test case build please refer: BQS\_spec\_case\_build.docx located in: [\\d25609\BQS\_script\DOC](file:///\\d25609\BQS_script\DOC)

### 3.3.2 Test case suite build

Generally, we can put test case together to construct a test case suite. And the top folder name of all test cases will be considered as test case suite name. For example:

./suite1

./case1

./case2

./case3

./others

Here, “suite1” is the test case suite name.

### 3.3.3 Where to place our test case suite

Just copy our test case suite to the top directory. For example:

./top\_demo --test suite top directory

./suite1 --test case suite we copied to here

./case1 --test case

…

./BQS\_scripts --test script

## 3.4 Test suite file prepare:

Test suite file is a case list and configure file for test suite regression use. Since this file included the suite and case list information, sometimes we also name it “case list” file.

Although, script support test suite run without this configure file, we still recommend use this file to make test suite run clearly and safety.

## 3.4.1 with test suite file

Suite file should have a name like “xx.ini”.

#### 3.4.1.1 Suite file structure

Typically a suite file (case list file) will be constructed with the following sections:

1. suite name: --test case suite name
2. suite option: --options for all test cases in this suite
3. case name: --test case name
4. case option: --options for every test case use

Here is a demo of test suite file:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*demo.ini\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

[suite\_name1] [Suite options]

Case\_name1 [Case options]

Case\_name2 [Case options]

…

[suite\_name2] [Suite options]

Case\_name1 [Case options]

Case\_name2 [Case options]

Case\_name3 [Case options]

…

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Note:

1. Suite name (suite\_name1/2) should be the test case suite folder name.
2. [Suite options] will be applied to all test case lists in this suite.
3. Case name (case\_name1/2/3) should be the real path to the test case, see following example for details.
4. [Case options] will be only applied to the corresponding test case.

#### 3.4.1.2 Suite file options

Suite options and case options are form core script of BQS\_scrpts (run\_lattice.py).

Totally we have the following option groups can be applied to test case or suite in our suite file.

1. Public options --script usage
2. Diamond options --Diamond install path
3. Project options --project information (device, strategy…)
4. Implementation options --how to run project
5. Simulation options --how to run simulation

For detail options: see help file of BQS\_scripts.

#### 3.4.1.3 Priority and scope of suite file options

Totally we have three level options:

1. Command line level --options applied in command line (in the bat file)
2. Suite level --options applied in suite line in suite file
3. Case level --options applied in case line in suite file

The scope for these levels will be:

1. Command line level --applied to every suite and case
2. Suite level --applied to single suite
3. Case level --applied to single case

The priority for these levels will be:

Case level > Suite level > Command line level

So if the same option with different value present in different option levels, the value in the higher priority level will be used.

#### 3.4.1.4 Suite file example

Here is a real case structure:

./top\_demo --test suite

./BQS\_scripts --test script

./suite1 --test case suite 1

./sub\_suite1 --sub suite in suite1

./case1 --test case1

./case2 --test case2

./sub\_suite2 --sub suite in suite1

./case1 --test case1

./case2 --test case2

./suite2 --test suite2

./case1 --test case1 in suite2 ./case2 --test case2 in suite2

Demo.ini --suite file (case list file)

For the above test suite structure the suite file will be like the following:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*demo.ini\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

[suite1] [Suite options]

Sub\_suite1/case1 [Case options]

Sub\_suite1/case2 [Case options]

Sub\_suite2/case1 [Case options]

Sub\_suite2/case2 [Case options]

[suite2] [Suite options]

Case1 [Case options]

Case2 [Case options]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Note:

1) “suite1” is a real folder name

2) “Sub\_suite1/case1” is the real sub path to case based on suite directory

3) “Case1” is also the sub path to case based on suite directory since there is no sub suite.

4) “[Suite options]/ [Case options]” are optional and not detailed here.

## 3.4.2 without test suite file

If there is no suite file (case list) file in test suite. Suite support script will search test case by itself.

The search operation will follow the rules list here:

1. Any folder has an info file (something like xx.info), this folder will be considered as a case folder.
2. Any folder has a “par” sub-folder and with an ldf file (something like xx.ldf) in this sub folder, this folder will be considered as a case folder.

With the above rules script may searched more test cases than your expect.

So it is not recommend to ignore the suite file.

# 4 Examples

## 4.1 suite1

This suite comes from Bohong.

It is recommended to use this format.

[\\d25609\BQS\_script\test\_suite\suite\_bohong](file:///\\d25609\BQS_script\test_suite\suite_bohong)

## 4.1 suite2

This suite comes from peter.

It is not recommended to use this format.

[\\d25609\BQS\_script\test\_suite\suite\_peter](file:///\\d25609\BQS_script\test_suite\suite_peter)