TCM User Guide

TCM – Test Case Manager, is used to manage your “File State Databases” (which are used by CART).

Usage:

./tcm.py <version> [create|clear|verify|install|edit] <name> [path/to/myfile]

<version> : a version file in ./testpackages/* (without the '.conf' extension)
<name> : name of file to make.

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The CONFIG variable

IMPORTANT... check the value of variable called “CONFIG” in tcm.py.

CONFIG = "testpackages"

This has to match the value that CART uses to find your *.conf files.
Example

[victor@VCCK_DEV cart]$ ll testpackages/
total 12
drwxrwxr-x. 4 victor victor 4096 Dec 30 11:00 files
-rw-rw-r--. 1 victor victor 277 Dec 30 12:22 v1.000.conf
-rw-rw-r--. 1 victor victor 282 Dec 29 12:32 v1.100.conf

Right now CART uses “ testpackages” for that directory. Make sure TCM's value is same. It's just where your v1.000.conf, v1.100.conf, etc files are.

This should really never change.

Glossary

FSDB – file state database.

CREATE operation

To create a File State database (FSDB) , simply create all required files and directories then run...

[victor@VCCK_DEV cart]$ **./tcm.py v1.000 create mytest**

VERSION: v1.000
OPERATION: create
NAME: mytest

*WARNINGS:

dir 'kk' - doesn't exist.

This will create a file in

testpackages/files/v1.000/mytest.tar.gz

It builds that path based on the VERSION and NAME parameters at the command line.
How does it know to say there is a warning about missing directory “kk” ???

TCM consults (continuing the example above), **“testpackages/v1.000.conf”...**
it opens testpackages/v1.000.conf and checks for lines “state_dirs = ….” and “state_files = ...”

Any files that are given in the “state_files” that do not exist when it creates the FSDB, you are told.
For example, if **testpackages/v1.000.conf** says there should be a file “myfile” when you create a v1.000 FSDB, and you don't have one, it warns about it.
Reason is – we want to enforce, for example, when creating any v1.000 FSDB, that certain files and folders are included.

CLEAR operation

If you want to get rid of all files that are part of a given FSDB, use “clear”.
This deletes all files/folders that were installed in (copied from being extracted from testpackages/files/v1.000/).

Example, if you used “create” to extract all files that are in testpackages/files/v1.000/myFsdb.tar.gz, then use “clear” to remove all those files.

INSTALL operation

If you issue the command..

./tcm.py v1.000 install myfsdb

TCM will do...

tar zxf testpackages/files/v1.000/myfsdb -C .

It unzips and extracts the given FSDB and puts into current directory (where vcck.py, cart.py, tcm.py exist). The files are appear can be later removed by “clear” operation.

VERIFY operation

If you create an FSDB it is for specific version of VCCK. If we have an FSDB called “my.v.1000.fsdb.tar.gz” (in testpackages/files/**v1.000/**), then it SHOULD have all the files/directories specified in the **“state_dirs = “** and **“state_files = “** in the **testpackages/v1.000.conf file.** Is there a way to check if **my.v.1000.fsdb.tar.gz** really DOES have those folders and files ?? Yes, with “verify” operation.

Issue the command...

./tcm.py v1.000 verify my.v.1000.fsdb

TCM will tell you if my.v.1000.fsdb.tar.gz is missing any files/folders (according to **testpackages/v1.000.conf).**

EDIT operation

What if you wanted to change a file in **my.v.1000.fsdb.tar.gz** (where it exists in testpackages/files/v1.000/) ??

Let's say the archive (FSDB) **./testpackages/files/v1.000/ my.v.1000.fsdb.tar.gz** contained the following...

./subdir_1/file_x.txt
./file_y.txt

So file_y.txt is in the root directory of the FSDB tar.gz. And file_x.txt is in a subdirectory (' subdir_1') of the FSDB tar.gz file.

How can we update these two files?? Easy.. place files with the same name in the "updates" folder (sub directory of where ./tcm.py is).

./updates/file_x.txt
./updates/file_y.txt

So ./updates/file_x.txt will end up overwriting /subdir_1/file_x.txt inside **./testpackages/files/v1.000/ my.v.1000.fsdb.tar.gz .**
And ./updates/file_y.txt will end up overwriting ./file_y.txt inside **./testpackages/files/v1.000/ my.v.1000.fsdb.tar.gz .**

To make the change to **file_x.txt,** run....

./tcm.py v1.000 edit **my.v.1000.fsdb** /subdir_1/file_x.txt

TCM will then edit the FSDB file **./testpackages/files/v1.000/ my.v.1000.fsdb.tar.gz** and replace /subdir_1/file_x.txt with file ./updates/ file_x.txt.
Of course it doesn't do that "inline" – it unzips, extracts, overwrites, and then does a "create".

To replace file_y.txt inside **./testpackages/files/v1.000/ my.v.1000.fsdb.tar.gz** with ./updates/file_y.txt... just issue...

./tcm.py v1.000 edit **my.v.1000.fsdb** /file_y.txt

that's it !!
