

# DVC release:

主要明确了工程师（engineer）与项目经理（PM）所使用的命令与职责范围，增添了本地中心项目目录（工程师管理对象）及针对此目录的操作命令。

## 1.本地公用数据目录与环境变量

- 公用 DVC 路径： `/lyg/projects/<proj_code>/DVC/`
- 环境变量设置：

```
setenv DVC_LOCAL /lyg/projects/<project_code>/DVC/
```

- 工程师操作所有 local create/put/delete 命令时，所指定的 `<PHASE>/<BLOCK>/<STAGE>/<VERSION>` 路径皆相对于 `$DVC_LOCAL`。

## 2.A段：工程师指令（dvc local create/put/delete）

### 2.1 命令

- `dvc local create <PHASE>/<BLOCK>/<STAGE>/<VERSION>`
- `dvc local put <PATH> <SRC[:DST]> [--link]`
- `dvc local put <path> STG_REQ_FILE_LIST --reqlist`
- `dvc local delete <PATH> [--force]`

### 2.2使用场景与具体命令范例

工程师日常工作中，需将设计数据依项目结构存储于 DVC 公用目录，以便团队协作与数据追踪。

## 创建版本文件夹 (dvc local create)



```
dvc local create P3_Final/block/300_DFT/SCAN/20250505_init
```

注意：每次需创建四层及以上的目录结构

### Created normally:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local create P3_Final/block/300_DFT/SCAN/20250505_init
Using central repository: /lyg/projects/rdti407a/DVC
Creating directory: P3_Final/block/300_DFT/SCAN/20250505_init in /lyg/projects/rdti407a/DVC
Creating directory structure: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
Successfully created directory structure
```

### Create the directory that is less than four levels:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local create P3_Final/block/300_DFT
Using central repository: /lyg/projects/rdti407a/DVC
Creating directory: P3_Final/block/300_DFT in /lyg/projects/rdti407a/DVC
Error: Path must have at least 4 levels (e.g., phase/block/stage/version)
Provided path: P3_Final/block/300_DFT
Error: Failed to create directory structure
```

### Create the directory at central directory exist:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local create P3_Final/block/300_DFT/SCAN
Using central repository: /lyg/projects/rdti407a/DVC
Creating directory: P3_Final/block/300_DFT/SCAN in /lyg/projects/rdti407a/DVC
Creating directory structure: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN
Error: Destination directory already exists: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN
Please create a new version using: dvc local create Phase/Block/Stage/<other_version>
Error: Failed to create directory structure
```

## 放置文件与目录 (dvc local put)

### 常规操作命令及输出信息



#1 复制目录至文件夹中

```
dvc local put P3_Final/block/300_DFT/SCAN/20250505_init
test
```

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

```
[rdti407ac02@zhuunxetx01 ~]$ tree /lyg/projects/rdti407a/DVC/P3_Final/
/lyg/projects/rdti407a/DVC/P3_Final/
├── block
│   ├── 300_DFT
│   │   └── SCAN
│   │       └── 20250505_init
│   │           └── test
│   │               ├── design.vhd
│   │               ├── DFA
│   │               │   ├── definition.tcl
│   │               │   ├── design1.sv
│   │               │   ├── dqi.tcl
│   │               │   └── ticket.tcl
│   │               ├── DVC
│   │               │   └── 20250630.sdc
│   │               └── scripts
│   │                   └── test.tcl
└──
```



## #2 改名复制

```
dvc local put P3_Final/block/300_DFT/SCAN/20250505_init
test:new_test
```

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test:new_test
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test:new_test
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

```
[rdti407ac02@zhuunxetx01 ~]$ tree /lyg/projects/rdti407a/DVC/P3_Final/
/lyg/projects/rdti407a/DVC/P3_Final/
├── block
│   ├── 300_DFT
│   │   └── SCAN
│   │       └── 20250505_init
│   │           └── new_test
│   │               ├── design.vhd
│   │               ├── DFA
│   │               │   ├── definition.tcl
│   │               │   ├── design1.sv
│   │               │   ├── dqi.tcl
│   │               │   └── ticket.tcl
│   │               ├── DVC
│   │               │   └── 20250630.sdc
│   │               └── scripts
│   │                   └── test.tcl
│   └── test
│       ├── design.vhd
│       ├── DFA
│       │   ├── definition.tcl
│       │   ├── design1.sv
│       │   ├── dqi.tcl
│       │   └── ticket.tcl
│       ├── DVC
│       │   └── 20250630.sdc
│       └── scripts
│           └── test.tcl
└──
```

12 directories, 14 files

### #3 创建符号链接

```
dvc local put P3_Final/block/300_DFT/SCAN/20250505_init
test:link_test --link
```

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test:link_test --link
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test:link_test
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

```
[rdti407ac02@zhuunxetx01 ~]$ tree /lyg/projects/rdti407a/DVC/P3_Final/
/lyg/projects/rdti407a/DVC/P3_Final/
├── block
│   ├── 300_DFT
│   │   └── SCAN
│   │       ├── 20250505_init
│   │       │   ├── link_test -> /lyg/projusers/rdti407a/rdti407ac02/test
│   │       │   ├── new_test
│   │       │   │   ├── design.vhd
│   │       │   │   ├── DFA
│   │       │   │   │   ├── definition.tcl
│   │       │   │   │   ├── design1.sv
│   │       │   │   │   ├── dqi.tcl
│   │       │   │   │   └── ticket.tcl
│   │       │   │   ├── DVC
│   │       │   │   │   └── 20250630.sdc
│   │       │   │   └── scripts
│   │       │   │       └── test.tcl
│   │       │   └── test
│   │       │       ├── design.vhd
│   │       │       ├── DFA
│   │       │       │   ├── definition.tcl
│   │       │       │   ├── design1.sv
│   │       │       │   ├── dqi.tcl
│   │       │       │   └── ticket.tcl
│   │       │       ├── DVC
│   │       │       │   └── 20250630.sdc
│   │       │       └── scripts
│   │       │           └── test.tcl
```

### #4 复制至子目录（子目录需先使用`dvc local create`创建）

```
dvc local put
P3_Final/block/300_DFT/SCAN/20250505_init/subdir test
```

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local create P3_Final/block/300_DFT/SCAN/20250505_init/subdir
Using central repository: /lyg/projects/rdti407a/DVC
Creating directory: P3_Final/block/300_DFT/SCAN/20250505_init/subdir in /lyg/projects/rdti407a/DVC
Creating directory structure: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/subdir
Successfully created directory structure
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init/subdir test
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/subdir
[rdti407ac02@zhuunxetx01 ~]$ tree -L 6 /lyg/projects/rdti407a/DVC/P3_Final/
/lyg/projects/rdti407a/DVC/P3_Final/
├── block
│   ├── 300_DFT
│   │   └── SCAN
│   │       └── 20250505_init
│   │           ├── link_test -> /lyg/projusers/rdti407a/rdti407ac02/test
│   │           ├── new_test
│   │           │   ├── design.vhd
│   │           │   ├── DFA
│   │           │   ├── DVC
│   │           │   └── scripts
│   │           └── subdir
│   │               └── test
│   └── test
│       ├── design.vhd
│       ├── DFA
│       ├── DVC
│       └── scripts
```

create subdirectory

## #5 复制文件操作

1. `dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test.txt`
2. `dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test.txt:A.txt`
3. `dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test.txt:B --link`

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test.txt
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test.txt
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
[rdti407ac02@zhuunxetx01 ~]$
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test.txt:A.txt
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test.txt:A.txt
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
[rdti407ac02@zhuunxetx01 ~]$
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test.txt:B --link
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test.txt:B
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

1

2

3

```
[rdti407ac02@zhuunxetx01 ~]$ tree -L 6 /lyg/projects/rdti407a/DVC/P3_Final/
/lyg/projects/rdti407a/DVC/P3_Final/
├── block
│   ├── 300_DFT
│   │   └── SCAN
│   │       └── 20250505_init 2
│   │           ├── A.txt
│   │           ├── B -> /lyg/projusers/rdti407a/rdti407ac02/test.txt 3
│   │           ├── link_test -> /lyg/projusers/rdti407a/rdti407ac02/test
│   │           ├── new_test
│   │           │   ├── design.vhd
│   │           │   ├── DFA
│   │           │   ├── DVC
│   │           │   └── scripts
│   │           ├── subdir
│   │           │   └── test
│   │           ├── test
│   │           │   ├── design.vhd
│   │           │   ├── DFA
│   │           │   ├── DVC
│   │           │   └── scripts 1
│   │           └── test.txt
└──
```

#6 以相对或绝对路径来指定要复制的（文件/目录）

1. `dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test/design.vhd`
2. `dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test/design.vhd:new_design.vhd`
3. `dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test/design.vhd:vhd --link`

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test/design.vhd
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test/design.vhd
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

1

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test/design.vhd:new_design.vhd
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test/design.vhd:new_design.vhd
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

2

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test/design.vhd:vhd --link
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test/design.vhd:vhd
Successfully copied to /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init
```

3



```
[rdti407ac02@zhuunxetx01 ~]$ tree -L 5 /lyg/projects/rdti407a/DVC/P3_Final/
/lyg/projects/rdti407a/DVC/P3_Final/
├── block
│   ├── 300_DFT
│   │   └── SCAN
│   │       └── 20250505_init
│   │           ├── A.txt
│   │           ├── B -> /lyg/projusers/rdti407a/rdti407ac02/test.txt
│   │           ├── design.vhd 1
│   │           ├── link_test -> /lyg/projusers/rdti407a/rdti407ac02/test
│   │           ├── new_design.vhd 2
│   │           ├── new_test
│   │           ├── subdir
│   │           ├── test
│   │           ├── test.txt
│   │           └── vhd -> /lyg/projusers/rdti407a/rdti407ac02/test/design.vhd 3
```

## 特殊情况及输出信息

### 1.复制到local central目标目录中的（文件/目录）名已存在:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test
The destination '/lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/test' already exists.
You can:
1. Rename the file for placement: dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test:new_name
2. Overwrite the target file: dvc local put P3_Final/block/300_DFT/SCAN/20250505_init test --force
```

可根据提示信息进行overwrite/rename

### 2.目标目录（stage version）不存在:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505 test
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: test
Target path does not exist in central repository
Error: Target path does not exist
Please create it first with: dvc local create P3_Final/block/300_DFT/SCAN/20250505
```

可根据提示信息，确认目标目录输入 是否正确或进行stage version 创建

### 3.要复制的文件或目录不存在:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P3_Final/block/300_DFT/SCAN/20250505_init TEST
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: TEST
Error: Source path 'TEST' does not exist
```

请确定源（目录/文件）路径是否正确

### 4.遇到无法复制的目录或文件:

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local put P2-stable/block1/stage1/version1 netlist
Using central repository: /lyg/projects/rdti407a/DVC
Copying folder/directory: netlist

Failed to copy the following items:
  netlist/innovus/.cadence/test.txt
  netlist/innovus/.cadence/APR
  netlist/innovus/.cadence/test
Total failed items: 3
```

注：若遇到无法复制的文件或目录，dvc local put命令会打印出未复制的文件/目录的信息并计数，且日志文件中也会记录这部分信息

## 删除数据 (dvc local delete)

#1 删除特定文件或目录(需二次确认)

```
dvc local delete
P3_Final/block/300_DFT/SCAN/20250505_init/test
```

#2 强制删除特定文件或目录

```
dvc local delete
P3_Final/block/300_DFT/SCAN/20250505_init/new_test --force
```

#3 删除整个 version/Stage/Block/Phase (四层及以下删除都需二次确认)

```
dvc local delete P3_Final/block/300_DFT/SCAN/20250505_init
dvc local delete P3_Final/block/300_DFT/SCAN
dvc local delete P3_Final/block/300_DFT
dvc local delete P3_Final/block
```

注：删除版本 (Version) 以上层级时，使用 --force 无效，且系统会提示用户二次确认。

```
[rdti407ac02@zhuunxetx01 ~]$ dvc local delete P3_Final/block/300_DFT/SCAN/20250505_init/test
Using central repository: /lyg/projects/rdti407a/DVC
Removing: P3_Final/block/300_DFT/SCAN/20250505_init/test from /lyg/projects/rdti407a/DVC
You are about to delete: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/test
Are you sure? (y/n): n
Operation canceled by user
[rdti407ac02@zhuunxetx01 ~]$
[rdti407ac02@zhuunxetx01 ~]$ dvc local delete P3_Final/block/300_DFT/SCAN/20250505_init/test
Using central repository: /lyg/projects/rdti407a/DVC
Removing: P3_Final/block/300_DFT/SCAN/20250505_init/test from /lyg/projects/rdti407a/DVC
You are about to delete: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/test
Are you sure? (y/n): y
Deleted file/directory: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/test
Deleted completed
[rdti407ac02@zhuunxetx01 ~]$
[rdti407ac02@zhuunxetx01 ~]$ dvc local delete P3_Final/block/300_DFT/SCAN/20250505_init/new_test --force
Using central repository: /lyg/projects/rdti407a/DVC
Removing: P3_Final/block/300_DFT/SCAN/20250505_init/new_test from /lyg/projects/rdti407a/DVC
Deleted file/directory: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/20250505_init/new_test
Deleted completed
[rdti407ac02@zhuunxetx01 ~]$
[rdti407ac02@zhuunxetx01 ~]$ dvc local delete P3_Final/block/300_DFT/SCAN --force
Using central repository: /lyg/projects/rdti407a/DVC
Removing: P3_Final/block/300_DFT/SCAN from /lyg/projects/rdti407a/DVC
You are about to delete: /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN
Are you sure? (y/n):
```

1

2

3



## 2.3设计文件需求清单检查机制



命令:

```
dvc local put <phase>/<block>/<stage>/<version>
STG_REQ_FILE_LIST --reqlist
dvc local put <phase>/<block>/<stage> STG_REQ_FILE_LIST --
reqlist
dvc local checkreq <phase>/<block>/<stage>/<version>
dvc local checkreq <phase>/<block>/<stage>
```

为确保每一个设计阶段都已提交必要的设计文件，DVC引入  
STG\_REQ\_FILE\_LIST 文件机制，由项目负责人（PM/PL）或项目成员事先定义  
各阶段所需文件类型与规则。

示例范本:



```
# Sample STG_REQ_FILE_LIST
VERILOG_FILE      += /*\.*v/ /*\.*gv/ /*\.*gs/ /*\.*v\.*gz/
/*\.*gv\.*gz/ /*\.*gs\.*gz/
VERILOG_TOP       += /*_top\.*v/

DEF_FILE          *= /*\.*def/

SYMBOL_TABLE      += /*\.*tbl/
```

1.PL将特定的STG\_REQ\_FILE\_LIST上传到特定的stage/version目录里:



```
dvc local put <phase>/<block>/<stage>/<version>
STG_REQ_FILE_LIST --reqlist
dvc local put <phase>/<block>/<stage> STG_REQ_FILE_LIST --
reqlist
```

```

zhuunxetx01:/lyg/projusers/rdti407a/rdti407ac02> dvc local put P3_Final/block/300_DFT STG_REQ_FILE_LIST --reqlist
Using central repository: /lyg/projects/rdti407a/DVC
Successfully Copied STG_REQ_FILE_LIST :/lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/STG_REQ_FILE_LIST
zhuunxetx01:/lyg/projusers/rdti407a/rdti407ac02>
zhuunxetx01:/lyg/projusers/rdti407a/rdti407ac02> dvc local put P3_Final/block/300_DFT/SCAN STG_REQ_FILE_LIST --reqlist
Using central repository: /lyg/projects/rdti407a/DVC
Successfully Copied STG_REQ_FILE_LIST :/lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/STG_REQ_FILE_LIST
zhuunxetx01:/lyg/projusers/rdti407a/rdti407ac02>
zhuunxetx01:/lyg/projusers/rdti407a/rdti407ac02> dvc local put P3_Final/block/300_DFT/SCAN/20250505_init STG_REQ_FILE_LIST --reqlist
Using central repository: /lyg/projects/rdti407a/DVC
Error: Target path must have 3 or 4 levels (e.g. phase/block/stage or phase/block/stage/version)
Error: Failed to copy requirement list

```

## 2.检查特定stage/version成员上传的文件是否齐全:

● ● ●

```

dvc local checkreq <phase>/<block>/<stage>/<version>
dvc local checkreq <phase>/<block>/<stage>

```

```

[rdti407ac02@zhuunxetx01 ~]$ tree /lyg/projects/rdti407a/DVC/P1-trial/block1/stage1/version1
/lyg/projects/rdti407a/DVC/P1-trial/block1/stage1/version1
├── design.vhd
├── DFA
│   ├── definition.tcl
│   ├── design1.sv
│   ├── dq1.tcl
│   └── ticket.tcl
├── DVC
│   └── 20250630.sdc
├── scripts
│   └── test.tcl
└── STG_REQ_FILE_LIST

```

directory structure

```

[rdti407ac02@zhuunxetx01 ~]$ cat /lyg/projects/rdti407a/DVC/P1-trial/block1/stage1/version1/STG_REQ_FILE_LIST
# STG_REQ_FILE_LIST
# =====
This document defines the requirements specification of the design document
#
# Grammar:
# < Project Name > < Operator > / Regular Expression Pattern 1/ / Regular Expression Pattern 2/...
#
# Operator:
# += : Required items
# *= : Optional item
#
# Example:
# Required Design Specification Document (VHDL)
design_spec += /*\.vhd?/ /*\.vhd?/
# Necessary test case files (SystemVerilog)
test_cases += /DFA/*\.sv?/ /*_test\.v/
# Required constraint Files (SDC format)
constraints += /DVC/*\.sdc/
# Required Script File (TCL)
scripts += /scripts/*\.tcl/
# Optional Document (PDF format)
documentation *= /docs/*\.pdf/
# Optional log file
logs *= /*\.log/ /*\.txt/

```

STG\_REQ\_FILE\_LIST

required

optional

```

[rdti407ac02@zhuunxetx01 ~]$ dvc local checkreq P1-trial/block1/stage1/version1
Using central repository: /lyg/projects/rdti407a/DVC
pass
Design file requirements check failed

```

## 2.4记录日志文件 (dvc\_local.log)

使用以上 `dvc local` 命令时，会将用户的信息、操作及产生的效果都记录于 `/lyg/projects/<project_code>/DVC/dvc_local.log`，

即： `$DVC_LOCAL/dvc_local.log`

注：若日志文件不存在，会先创建再记录相关信息，文件名与位置仍旧为：  
`$DVC_LOCAL/dvc_local.log`

日志内容如下：

```
●●●
<User_name>  <DATE_time>
Pwd: <current_folder_path>
Cmd: <user's whole command in CLI>
Rlt:
    <command result message>
-----

<User_name>  <DATE_time>
Pwd: <current_folder_path>
Cmd: <user's whole command in CLI>
Rlt:
    <command result message>
-----

..... (dvc local create)
rdti407ac02  2025-07-08 09:39:25
Pwd: /lyg/projusers/rdti407a/rdti407ac02
Cmd: dvc local create
P3_Final/block/300_DFT/SCAN/20250505_init
Rlt:
    Created directory structure
:/lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/202
50505_init
```

-----  
rdti407ac02 2025-07-08 09:43:38

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local create P3\_Final/block/300\_DFT/SCAN

Rlt:

Error: Destination directory already exists:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN  
-----

rdti407ac02 2025-07-08 09:43:50

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local create P3\_Final/block/300\_DFT

Rlt:

Error: Path must have at least 4 levels (e.g.,  
phase/block/stage/version)  
-----

.....

.....(dvc local put)

rdti407ac02 2025-07-08 10:38:17

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put

P3\_Final/block/300\_DFT/SCAN/20250505\_init/subdir test

Rlt:

Copied directory:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/2025  
0505\_init/subdir/test  
-----

rdti407ac02 2025-07-08 10:51:19

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put

P3\_Final/block/300\_DFT/SCAN/20250505\_init test.txt

Rlt:

Copied file:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/20250505\_init/test.txt

-----  
rdti407ac02 2025-07-08 10:51:55

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put

P3\_Final/block/300\_DFT/SCAN/20250505\_init test.txt:B --link

Rlt:

Created symlink:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/20250505\_init/B

-----  
rdti407ac02 2025-07-08 13:32:02

Pwd: /lyg/projusers/rdti407a/rdti407ac02/test

Cmd: dvc local put

P3\_Final/block/300\_DFT/SCAN/20250505\_init test/design.vhd

Rlt:

Error: Source path 'test/design.vhd' does not exist

-----  
rdti407ac02 2025-07-08 13:57:27

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put

P3\_Final/block/300\_DFT/SCAN/20250505\_init test

Rlt:

Failure: Destination already exists:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/20250505\_init/test

-----  
rdti407ac02 2025-07-08 14:00:10

Pwd: /lyg/projusers/rdti407a/rdti407ac02

```
Cmd: dvc local put
P3_Final/block/300_DFT/SCAN/20250505_init test --force
Rlt:
    Overwritten directory:
    /lyg/projects/rdti407a/DVC/P3_Final/block/300_DFT/SCAN/2025
    0505_init/test
-----
rdti407ac02  2025-07-08 14:02:18
Pwd: /lyg/projusers/rdti407a/rdti407ac02
Cmd: dvc local put P3_Final/block/300_DFT/SCAN/20250505
test
Rlt:
    Error: Target path does not exist
-----
rdti407ac02  2025-07-08 14:05:06
Pwd: /lyg/projusers/rdti407a/rdti407ac02
Cmd: dvc local put
P3_Final/block/300_DFT/SCAN/20250505_init TEST
Rlt:
    Error: Source path 'TEST' does not exist
-----
rdti407ac02  2025-07-08 14:36:27
Pwd: /lyg/projusers/rdti407a/rdti407ac02
Cmd: dvc local put P2-stable/block1/stage1/version1 netlist
Rlt:
    Error opening source directory: Permission denied (Total
    failed items: 3)
-----
.....

.....(dvc local delete)
rdti407ac02  2025-07-08 14:18:03
```



Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local delete

P3\_Final/block/300\_DFT/SCAN/20250505\_init/test

Rlt:

Error: Operation canceled by user

-----  
rdti407ac02 2025-07-08 14:18:09

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local delete

P3\_Final/block/300\_DFT/SCAN/20250505\_init/test

Rlt:

Deleted file/directory:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/20250505\_init/test

-----  
rdti407ac02 2025-07-08 15:06:07

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local delete

P3\_Final/block/300\_DFT/SCAN/20250505\_init/new\_test --force

Rlt:

Error: No such file or directory:

/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/20250505\_init/new\_test

-----  
.....

.....dvc local put --reqlist

rdti407aa00 2025-07-08 16:19:18

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put P3\_Final/block/300\_DFT

/lyg/projusers/rdti407a/rdti407ac02/STG\_REQ\_FILE\_LIST --reqlist

Rlt:

Success: Copied STG\_REQ\_FILE\_LIST

:/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/STG\_REQ\_FILE\_LIST

-----  
rdti407aa00 2025-07-08 16:19:31

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put P3\_Final/block/300\_DFT/SCAN

/lyg/projusers/rdti407a/rdti407ac02/STG\_REQ\_FILE\_LIST --  
reqlist

Rlt:

Success: Copied STG\_REQ\_FILE\_LIST

:/lyg/projects/rdti407a/DVC/P3\_Final/block/300\_DFT/SCAN/STG\_REQ\_FILE\_LIST

-----  
rdti407aa00 2025-07-08 16:19:42

Pwd: /lyg/projusers/rdti407a/rdti407ac02

Cmd: dvc local put

P3\_Final/block/300\_DFT/SCAN/20250505\_init

/lyg/projusers/rdti407a/rdti407ac02/STG\_REQ\_FILE\_LIST --  
reqlist

Rlt:

Failure: Error: Target path must have 3 or 4 levels (e.g.  
phase/block/stage or phase/block/stage/version)

-----  
.....

## 3. B段：PM/PL指令区段（only <project\_a00>）

### 3.1 可用指令

- `dvc project checkout`
- `dvc folder create <PHASE>/<BLOCK>/<STAGE>/<VERSION>`
- `dvc folder checkout <PHASE>/<BLOCK>/<STAGE>/<VERSION>`
- `dvc object copy <SRC> <DST>`
- `dvc dvcpath checkin <PHASE>/<BLOCK>/<STAGE>/<VERSION>`

### 3.2 使用情境与范例

PM 在 CID review 完成后，将设计 milestone 的 golden version 数据从工程师交付的目录中取出，并签入至 DVC SVN 仓库以作长期保存。

```
●●●
# 建立项目工作区（checkout）
dvc project checkout

# 创建结构目录
dvc folder create
P3_Final/block/300_DFT/SCAN/20250505_init

# 检出版本到本地
dvc folder checkout
P3_Final/block/300_DFT/SCAN/20250505_init

# 复制设计数据到目标目录
dvc object copy /tmp/test.v test.v

# 签入至DVC SVN
dvc dvcpath checkin
P3_Final/block/300_DFT/SCAN/20250505_init
```

## 4. 命名规范摘要（依照 User Manual 定义）

| 层级      | 命名格式          | 示例                             |
|---------|---------------|--------------------------------|
| Phase   | P<数字>-<描述>    | P3-final                       |
| Block   | 小写字母缩写        | block、cpu、ddr                  |
| Stage   | 三位数字-大写用途     | 000-DATA、300-DFT、400-APR       |
| Version | YYYYMMDD_<描述> | 20250505_init、20250610_scanout |

## 5. 总结与建议

- 工程师请于每日或阶段完成时，将数据通过 `dvc local` 指令存入共用目录。
- PM 将数据统整后，通过 `dvc folder / dvc object copy / dvc dvcpath checkin` 签入 SVN 作为永久版本。
- DVC 系统确保数据可追溯、可共享、可备份，建议结合 DQI 评估报告，作为版本准入标准。