Version Control Guide

Title	Editor	Data
Version 1.0	Chaoban	2021/06/29

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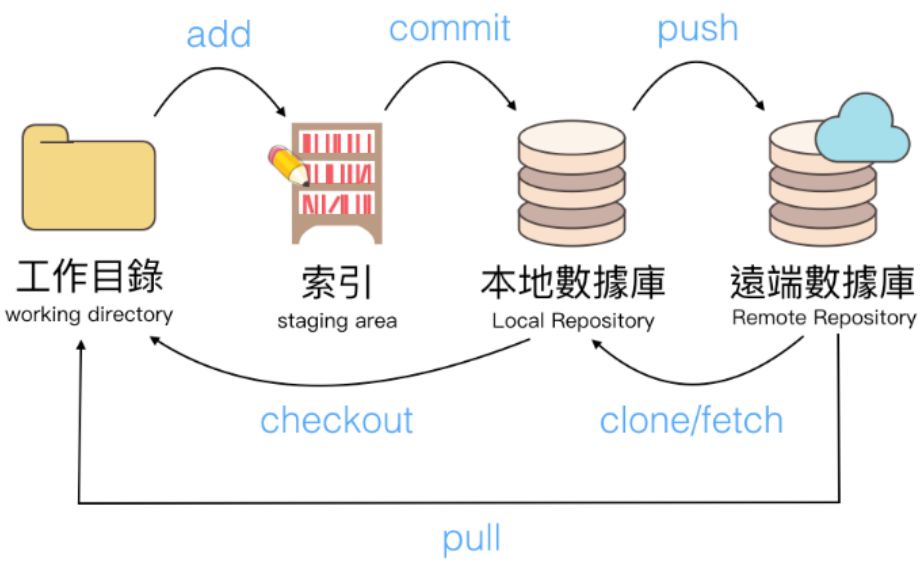
Introduction

Here we describe the general flow of *version control system*. But according to different *version control system*, they have different detailed stages, such as the ***Github*** process in the figure below, including add, commit, push, pull, clone, checkout... etc as follow graph.



Version Control

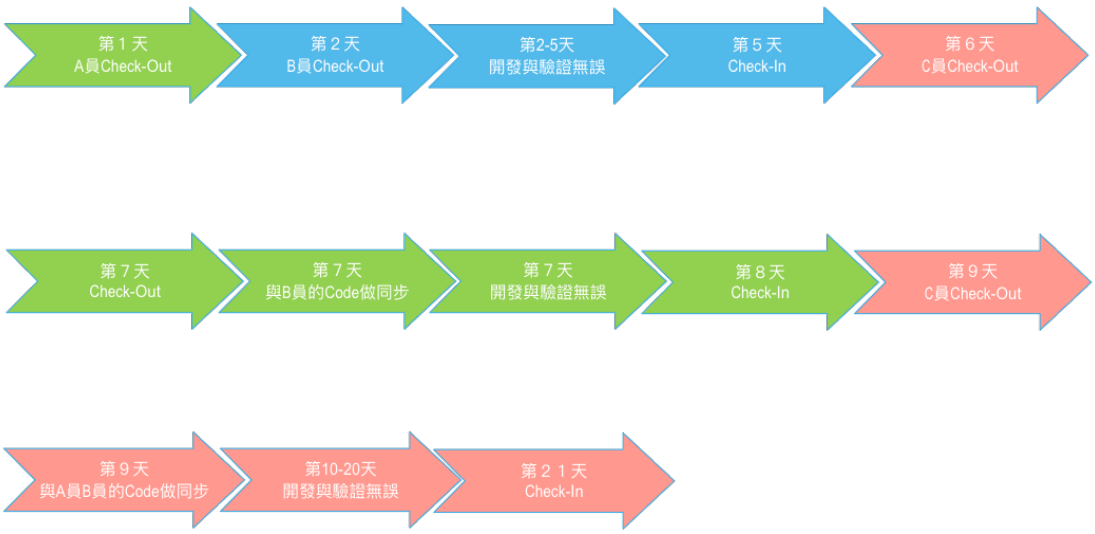
To avoid large gaps in the program code and cause side effects, please check-in as soon as possible after the development is completed and the verification is correct. Do not let the program be placed on the local side.

If you check-out and develop your software, it is also recommended that you regularly check whether there is another person's check-in and perform synchronization. To avoid too much difference in the program after a long time.

If necessary, you can make a branch to check-in, then integrate the trunk at the right time.

Flow Chart

This is an example showing the check-in process of member A, B, and C.



1. Check Out

When developing software, you need to check-out the latest version of the source code first.

2. Synchronization

After your software development is completed, check-out again and synchronize with your local source code.

3. Verification

Confirm that your program is correct after integrating with other people's programs.

4. RCT Verification

Verified and passed by the RCT department.

5. Check-In

Before check-in, you can repeat the second and third points. Make sure that no one else checks-in during the period. You can check-in after confirming that it is correct.

Commit message / Check-In Notes

When you are ready to check-in, please fill out the ***commit message***. If you have solved the Issues/Bugs, also record the Root Cause & Solution. Under different *version control system*, ***released note*** or ***commit message*** may be used. But the purposes of the record are the same.

Why is commit message important?

1. Speed up and simplify code reviews.
2. Help understand a change.
3. Explain the "why" that cannot only be described by the code.
4. Help future maintainers figure out why and how the changes were made, so that troubleshooting and debugging are easier.

The following is an example of a released note.

Description

Sync Ubuntu sisTP driver with moblin about C90 warning.

Keyword

SYNC_UBUNTU_MOBLIN

File affected

drivers/input/touchscreen/sisTP/ParserInput/sistrans.c
drivers/input/touchscreen/sisTP/TrackerAlgo/floating/tracker.c
drivers/input/touchscreen/sis_i2c.c
drivers/hid/usbhid/hid-core.c

Tracker

We use CTPD to tracker the software development and verification progress. This is another topic that can be reported later.

CTPD

http://sportal.sis.com.tw/pri/ctpd/Pages/default.aspx

"**Project**" is current **ongoing** project.

"**Issue**" is **report by external**, ex: customer.

"**Bug**" is **report by internal**, ex: FAE/RCT…

"**Experiment**" is **internal project** or **test** or **info** for share,

example 92 series changes to 95/98 series of tools.

"**Application**" **new tool** or **modify tool**, report by **FAE** or **customer**; it doesn't show on CTPD home.

RCT Verification

Need to discuss the details of verification with RCT department how to do regression. That can be classified in several directions:

1. Issue
    1. Bugs reported by customers.
2. Bug
    1. Bugs reported by internal.
3. Application
    1. Verification of new developed tools/Utilities.
    2. Add functions or improve features.
4. Upgrade the development software.
    1. Verify after recompiling the program.
    2. Ex. QT, MSVC upgrade.

SiS Version Control Servers

There are four types of *version control servers*:

1. CVS
2. SVN
3. GIT
4. SAMBA

Each of one contains the following source code:

1. CVS (Concurrent Versions System)

Touch firmware:

1. 95xx_Hydra: Hydra
2. 98xx_Draco: Draco //For 98xx B
3. 98xx_Draco_C: Draco_P6496C //For 92XX C

2. SVN (Subversion)

1. MIC: AP, FW, and Batch file:

Project	Version
MEMS MIC AP Single device	SVN revision number : 26 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_AP Local folder : Mems_AP_20200414
MEMS MIC AP Multi device	SVN revision number : 26 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_AP_Multi_device Local folder : Mems_AP_MultiDevice_20210505
MEMS MIC Control Board FW	**DMIC:** SVN revision number : 23 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_Control_Board_FW/D_MIC_FW Local folder : DMIC_20210412 **AMIC:** SVN revision number : 5 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_Control_Board_FW/A_MIC_FW Local folder : AMIC_20200909 CASE for Sound Skrit SVN revision number : 25 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_Control_Board_FW_for_SoundSkrit/D_MIC_FW Local folder : DMIC_20210426 _forSoundSkrit
MEMS MIC Batchfile	SVN revision number : 30 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_BatchFile CASE for Sound Skrit SVN revision number : 31 http://172.18.210.163/svn/MEMS_MIC_Data/MEMS_MIC_BatchFile_for_SoundSkrit

2. Bridge firmware:

Project	**Version**
F321 9257	http://172.18.210.163/svn/Bridge_FW/trunk/F321_9257 release Version V04.01.06 (2020/10/15)
F321 8A 6596	http://172.18.210.163/svn/Bridge_FW/trunk/F321_8A_6596 release Version V8A.01.1E (2018/09/10)
F321 8A 6496	http://172.18.210.163/svn/Bridge_FW/trunk/F321_8A_6496 release Version V8A.01.2E (2020/08/28)
F321 8A 6760	http://172.18.210.163/svn/Bridge_FW/trunk/F321_8A_6760 release Version V8A.60.08 PTP format (2019/10/17)
F381 9A 6x96	http://172.18.210.163/svn/Bridge_FW/trunk/F381_9A_6x96 release Version V9A.00.07 (2021/04/13)
F381 9A 6x96 for7701 Pen	http://172.18.210.163/svn/Bridge_FW/trunk/F381_9A_6x96_7701_Pen release Version V9A.90.02 (2021/04/13)

3. GIT (GNU Interactive Tools)

http://172.18.251.243:8080/

1. Tools / Utility / Library
   1. CT
   2. Lib
   3. NewQMtgest
   4. QLicenseLib
   5. QOpenShort
   6. QUnityLibProject
   7. SiSDeviceServer
   8. SiSExpressionLib
   9. SiSLog
   10. ParameterTool
   11. Hades
   12. QAutoTool
   13. QShowVoltage
   14. TouchUtility

2. ChormeOS Utility
   1. ShowVoltage

4. SAMBA

1. SW member release

   Touch Driver (I2C, USB, UART), Tool, and CFU

   \\172.18.210.146\Public2\driver_release\Android\92xxI2cDriver_arm
   \\172.18.210.146\Public2\driver_release\Android\92xxUsbDriver
   \\172.18.210.146\Public2\driver_release\Android\92xxUartDriver
   \\172.18.210.146\Public2\driver_release\CentOS\UsbDriver_x86
   \\172.18.210.146\Public2\driver_release\Debian\UsbDriver_x86
   \\172.18.210.146\Public2\driver_release\Fedora\UsbDriver
   \\172.18.210.146\Public2\driver_release\Mac
   \\172.18.210.146\Public2\driver_release\OpenSUSE
   \\172.18.210.146\Public2\driver_release\RHEL\UsbDrv_x86
   \\172.18.210.146\Public2\driver_release\SUSE\UsbDriver_x86
   \\172.18.210.146\Public2\driver_release\Ubuntu\92xxUsbDriver
   \\172.18.210.146\Public2\driver_release\Tool\Judge
   \\172.18.210.146\Public2\driver_release\Tool\EventTransfer
   \\172.18.210.146\Public2\driver_release\Windows\CFU

2. RCT release

   Touch Driver

   http://sportal.sis.com.tw/pri/ctpd/RCT_Release/Android/Android_I2C_Driver/V30103_1026_A409-arm.zip
   http://sportal.sis.com.tw/pri/ctpd/RCT_Release/Android/Android_USB_Driver/V0513_1221_A440-arm.zip
   http://sportal.sis.com.tw/pri/ctpd/RCT_Release/Debian/V0201_1107_D419_x86.zip
   http://sportal.sis.com.tw/pri/ctpd/RCT_Release/Ubuntu/Ubuntu_USB_Driver/V0402_0326_U5030-x86.zip

Backup the Version Control Servers

All *version control servers* are backed up by the IT department, except CVS, which is backed up by the CAD department.