- ✓ Enter Express Setup Mode
  - ■ Press MODE button 3 secs, ALL LED lights turn green
  - ■ If blinking, reset the switch by pressing more than 7 secs

  - ■ Default IP 10.0.0.1 serve as an DHCP server. Assigning 10.0.0.2 for your machine. Telnet the switch by telnet 10.0.0.1 or http://10.0.0.1, default account and pwd are (cisco, cisco).
- ✓ Basic setting

  ref: https://dotblogs.com.tw/box5068/2011/01/19/20893
  - ■ enable => Privileged Mode
  - ■ conf t => Configuration Global Mode
  - ■ (config)# hostname HOST-test => change hostname to HOST-test
  - ■ (config)# enable secret ENABLE_PASSWORD => 特權模式加密式密碼設定
  - ■ (config)# interface vlan 1 => Interface Mode
  - ■ (config-if)# ip address X.X.X.X 255.255.255.0 => Set the IP of the Interface
- ✓ Set up ssh

  http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960x/software/15-0_2_EX/security/configuration_guide/b_sec_152ex_2960-x_cg/b_sec_152ex_2960-x_cg_chapter_01001.html

  Local or remote access
  - ■ (config)# ip domain-name *example.com* => Set the host domain for switch
  - ■ (config)# crypto key generate rsa [general-keys modulus 1024(for option)]

  Switch as an SSH server
  - ■ (config)# ip ssh version [1 | 2] => optional, default selects the latest SSH version supported by the SSH client.
    - ◆ (config)# line vty *line_number* [*ending_line_number*] => line configuration mode to configure the virtual terminal line settings, range is 0~15
    - ◆ (config)# transport input ssh
  - ■ login local => 用 local 端的帳密檢查 authentication

  Check local account and pwd during authentication
  - ■ aaa new-model
  - ■ aaa authentication login default local

  See the configuration
  - ■ sh ru

line console 是用 console 線插入登入的模式, line vty 是 telnet/ssh

- ✓ Close unused web interface
    - no ip http server
    - no ip http secure-server
- ✓ Switch get IP from dhcp

  http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/12-4t/dhcp-12-4t-book/config-dhcp-client.html

    - (config)# interface Gi 0/20
    - (config-if)# ip address dhcp => acquires IP on an interface from DHCP
    - show dhcp lease => check switch current IP
- ✓ Bpdu guard setting

  cisco 預設 spanning tree protocal(stp)是打開的，為了防止破壞原有 stp 架構，你插上孔要跑 stp 時，bpdu guard 會發現，接著導致自己的孔變 blocked，所以須要把它關掉，讓它變成一般的 switch

    - spanning-tree bpdufilter enable
    - spanning-tree bpdufilter disable
    - bpdufilter => Don't send or receive BPDUs on this interface
    - bpduguard => Don't accept BPDUs on this interface

因為弄 console 線很麻煩，又怕 ssh 設壞連不進去無法登入，通常會在某一個 port 設置特殊的 vlan (ex.101)，讓他在那個 vlan 上有 static ip，接著只要電腦設定好同一個 subnet，插上指定的 port，便可以直接碰到 switch