Summary

- Password Recovery (on the router)
- The CDP protocol
- The TFTP protocol
- Practical work

Password Recovery (1/2)

1. Restart the router

2. While the router is just booting, press simultaneously Alt + Shift + B

3. The router then enter in « Rommon » mode

```
Rommon1>confreg 0x2142

You must reset or power cycle for new config to take effect
Rommon2>reset
```

- **Warning: Don't make mistake with the configuration register value.**

Password Recovery (2/2)

- Resetting the router in the initial state

```
Router>enable
Router#>configure terminal
Enter configuration commands, one per line. End with CNTL/Z
Router(config)#>config-register 0x2102
Router(config)#>hostname lab1-ro1841-1
Lab1-ro1841-1(config)#>enable secret cisco
Lab1-ro1841-1(config)#>exit
Lab1-ro1841-1#>reload
System configuration has been modified. Save ? [yes/no]: yes
Proceed with reload ? [confirm]
```

The CDP protocol (1/2)

- CDP (Cisco Discovery Protocol) is a layer 2 TCP/IP protocol allowing a network equipment to discover its neighbour directly connected.

- Activating CDP

  ✧ On all interfaces

  ```
  Lab1-ro1841-1(config)#>cdp run
  ```

  ✧ On a single interface

  ```
  Lab1-ro1841-1(config)#>interface fastEthernet 0/0
  Lab1-ro1841-1(config-if)#>cdp enable
  ```

The CDP protocol (2/2)

- Clear CDP

```
Lab1-ro1841-1#>clear cdp table
Counters          Clear      CDP Counters
Table             Clear      CDP Table
```

- Neighbour detailed informations

```
Lab1-ro1841-1#>show cdp neighbors detail
```

- Other command: « show cdp »

```
Lab1-ro1841-1#>show cdp ?
Entry              Information for specific neighbor entry
Interface          CDP interface status and configuration
Neighbors          CDP neighbors entries
```

The TFTP protocol (1/2)

- TFTP (Trivial File Transfer Protocol) is a simplified file transfer protocol, running over UDP.

- Send a router configuration file to a remote TFTP server

```
Lab1-ro1841-1#>copy running-config tftp:
Address or name of remote host [] ? 192.168.2.1
Destination filename [running-config] ? Lab1-ro1841-1-config
!!
896 bytes copied in 0.836 secs
Lab1-ro1841-1#>
```

The TFTP protocol (2/2)

- Download a configuration file from a TFTP server

```
Lab1-ro1841-1#>copy tftp running-config:
Address or name of remote host [] ? 192.168.2.1
Source filename [lab1-ro1841-1-config] ?
Destination filename [running-config] ?
Accessing tftp://192.168.2.1/lab1-ro1841-1-config
Loading lab1-ro1841-1-config from 192.168.2.1 (via FastEthernet 0/0): !
[OK - 896/1024 bytes]
896 bytes copied in 0.836 secs
```

Practical work
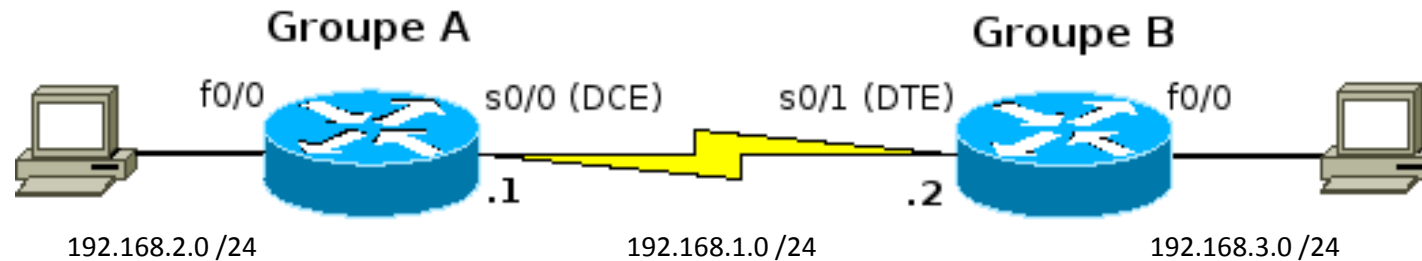
- Recover the password on your router

- Install a TFTP server on a PC and plug it on router « Groupe A ».

- Copy the file configuration of router « Groupe A » on the TFTP server and retrieve this configuration on router « Groupe B »

- Find the IOS version, the hostname and IP address of the router « Group B » (from router « Group A »), using CDP commands.