

# Check Your Knowledge

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# Module Goals



**Review boot process**

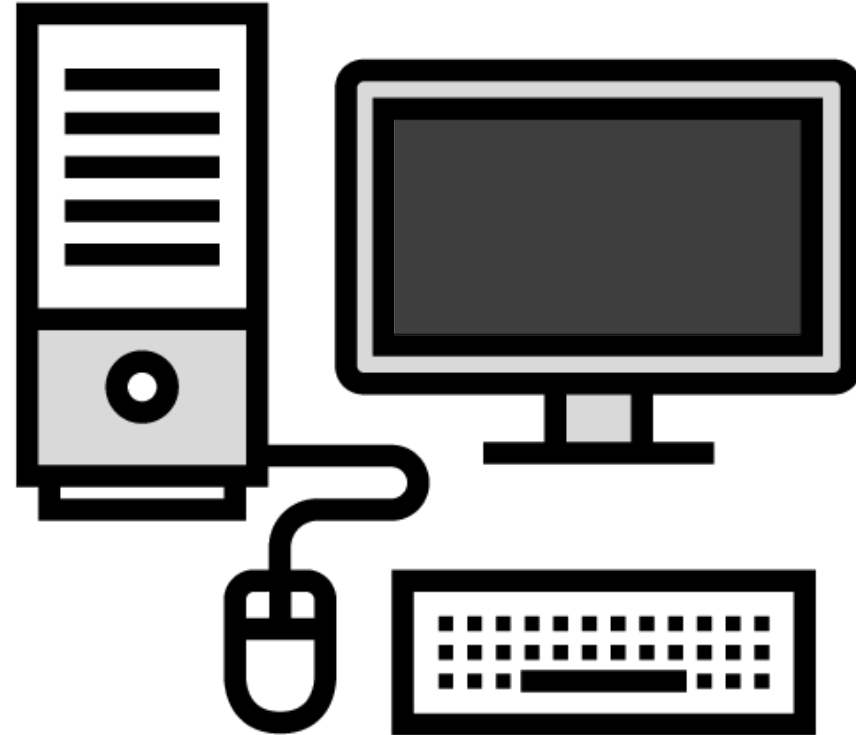
**Explain and Demonstrate the password recovery procedure**

**Examine a router booting without IOS**

**Demonstrate useful commands in IOS**

# PC Boot Process

Power On Self Test



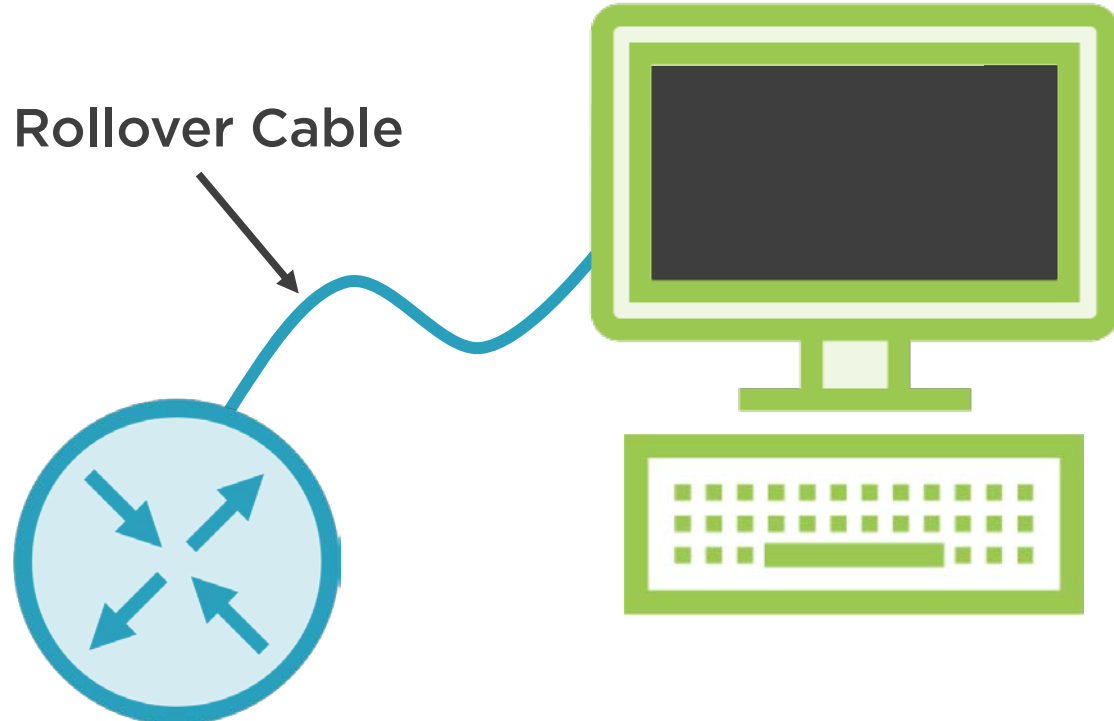
Power On Self Test  
Load BIOS from ROM  
Load Operating System  
Load Personal Settings

# PC Boot Process



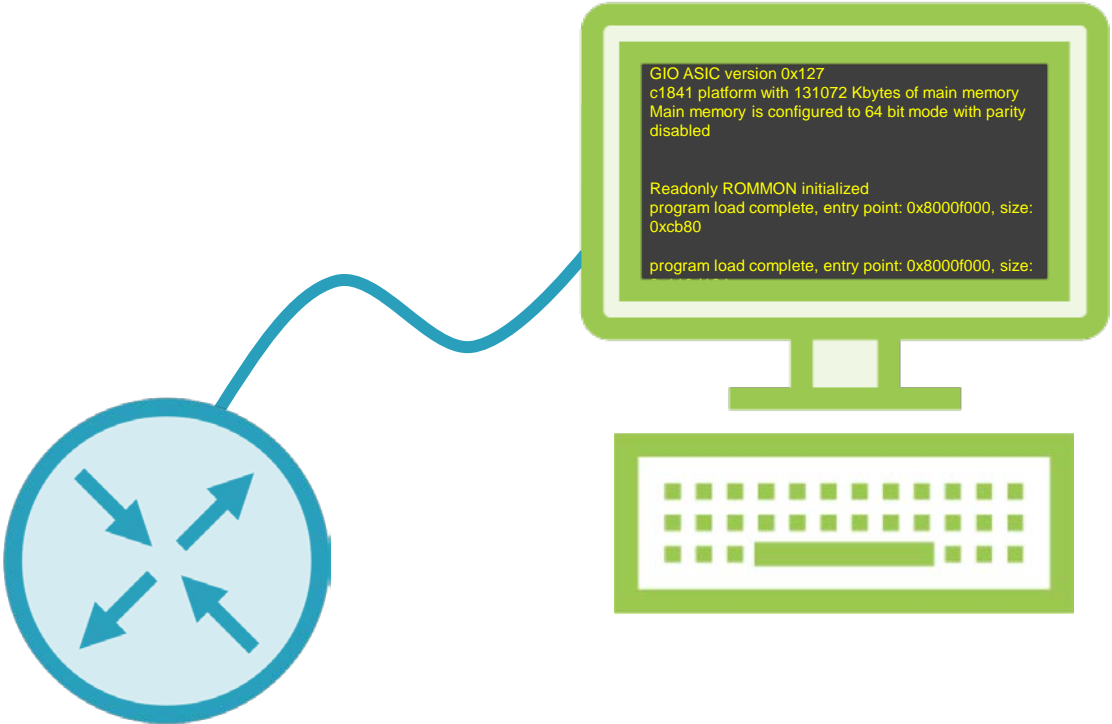
# Router Boot Process

Power On Self Test



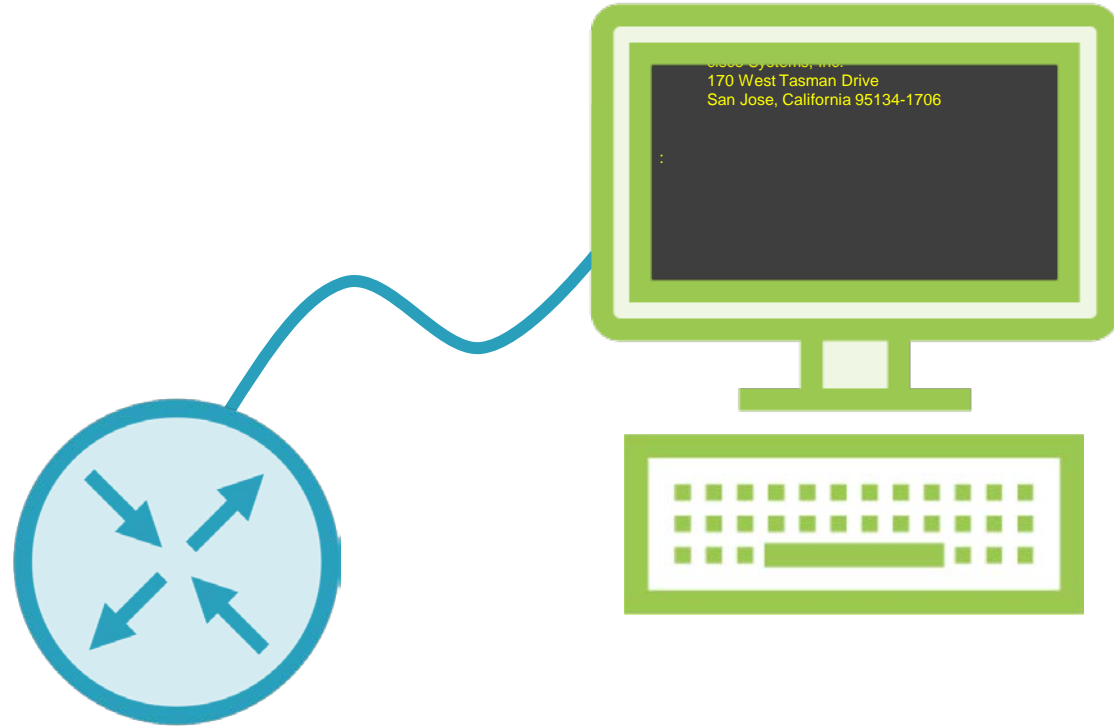
# Router Boot Process

Power On Self Test  
Load Bootstrap



# Router Boot Process

- Power On Self Test
- Load Bootstrap
- Load IOS
- Load Configuration



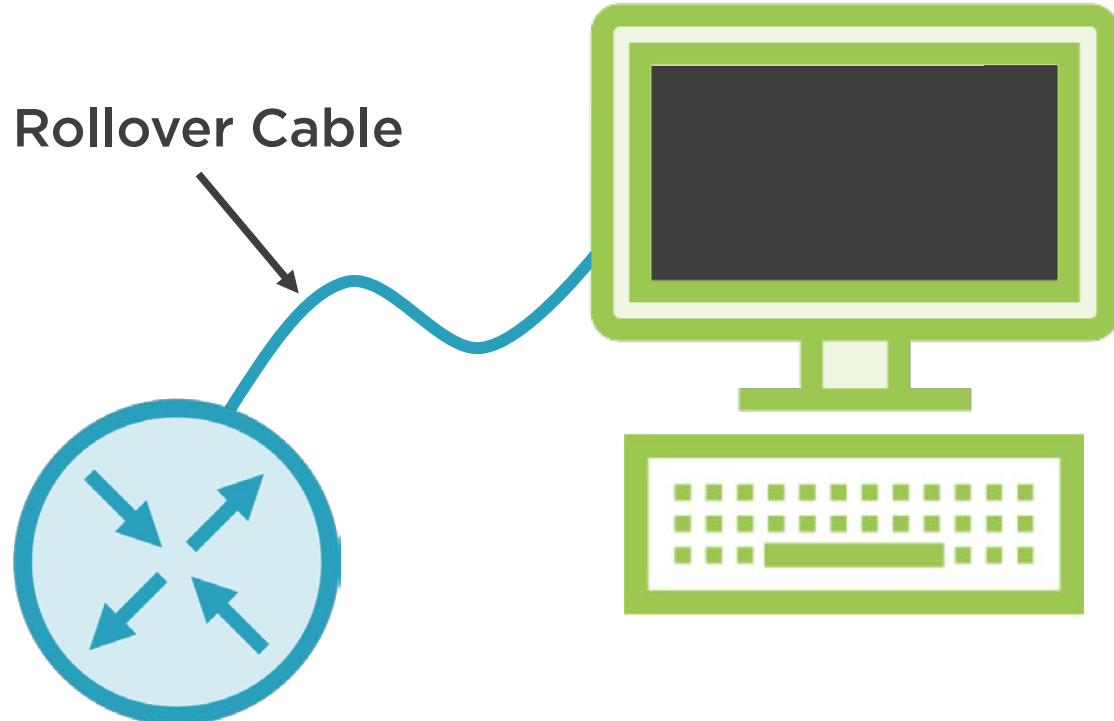
# Interrupt Boot Process

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# Router Boot Process

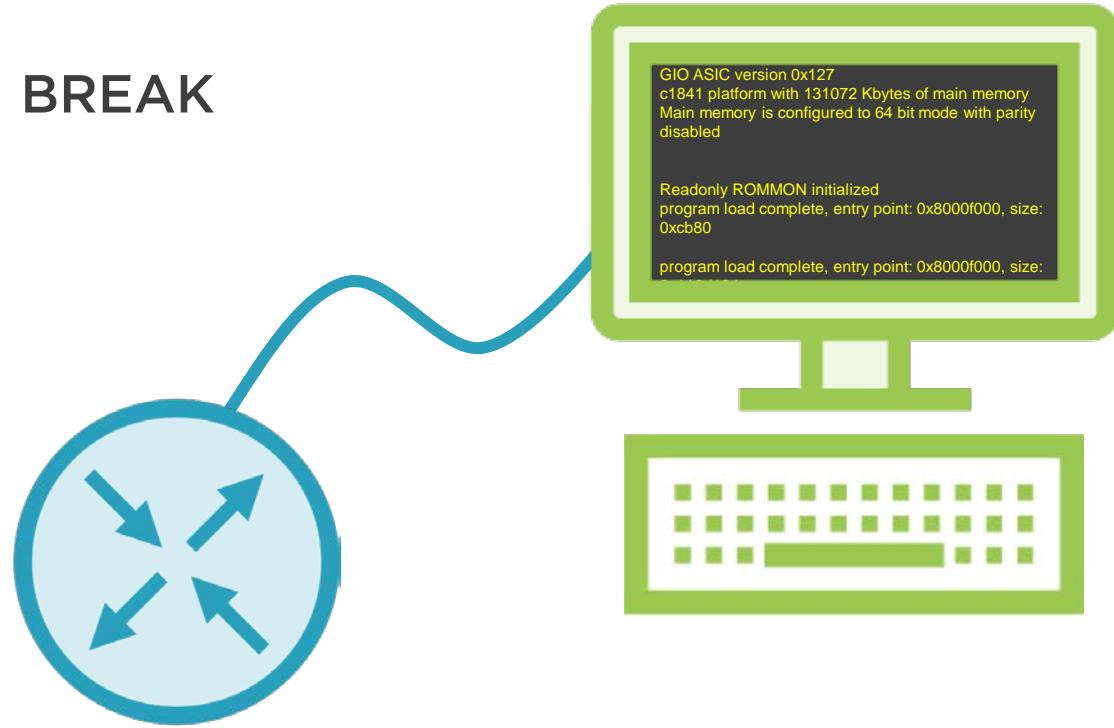
Power On Self Test



# Router Boot Process

Power On Self Test  
Load Bootstrap

BREAK



# Configuration Register

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**0x2102**

# Configuration Register

---

0x2102

0010 0001 0000 0010

# Configuration Register

---

0x2102

0010 0001 0000

010

Boot Fields

Boot as configured in Boot System field in Startup-  
Config

# Configuration Register

---

0x2102

0010 0001 0000

0001

Boot Fields

Boot First Image in Flash

# Configuration Register

---

0x2102

0010 0001 0000

0000

Boot Fields

Boots into ROM Monitor mode

# Configuration Register

---

0x2102

0010 0001 0000

010



# Configuration Register

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0x2102

0010 0001 0000 0010

NVRAM Contents

Load the contents of NVRAM  
Load startup-config

# Configuration Register

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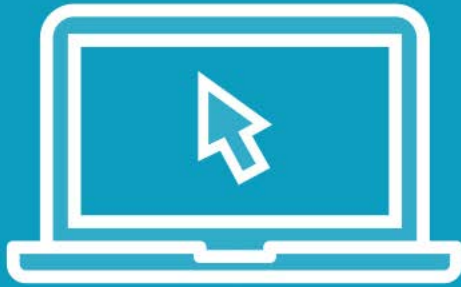
0x2102

0010 0001 0 **1** 00 0010

NVRAM Contents

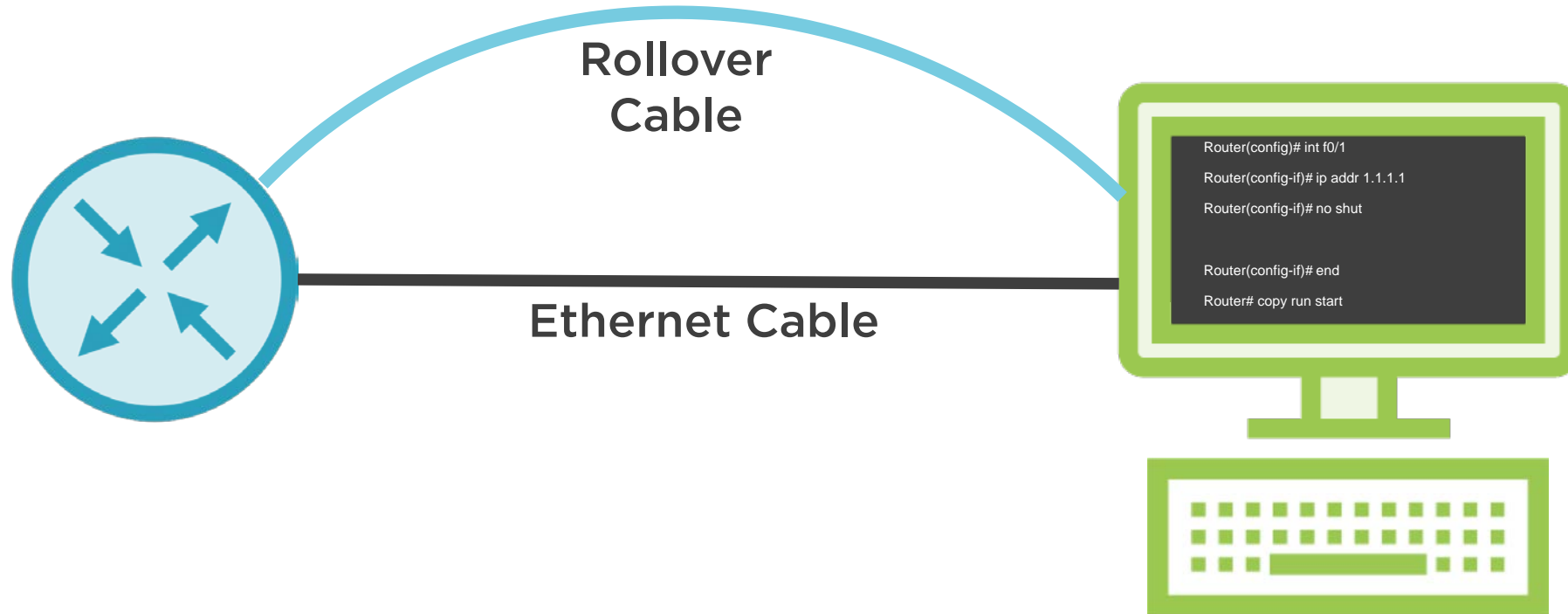
Do NOT load contents of NVRAM  
Do Not load the startup-config file

Demo



**Router Password Recovery**

# Password Recovery IOS

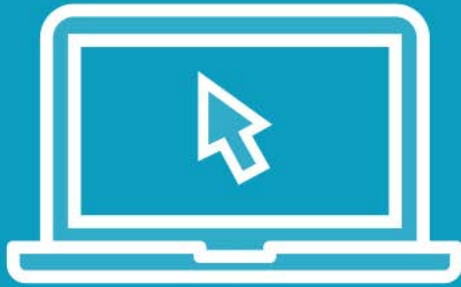


Demo



**Troubleshooting Boot Process**

Demo



Useful IOS commands

# Summary



**Review boot process**

**Explain and Demonstrate the password recovery procedure**

**Examine a router booting without IOS**

**Demonstrate useful commands in IOS**