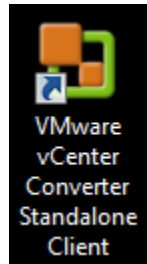


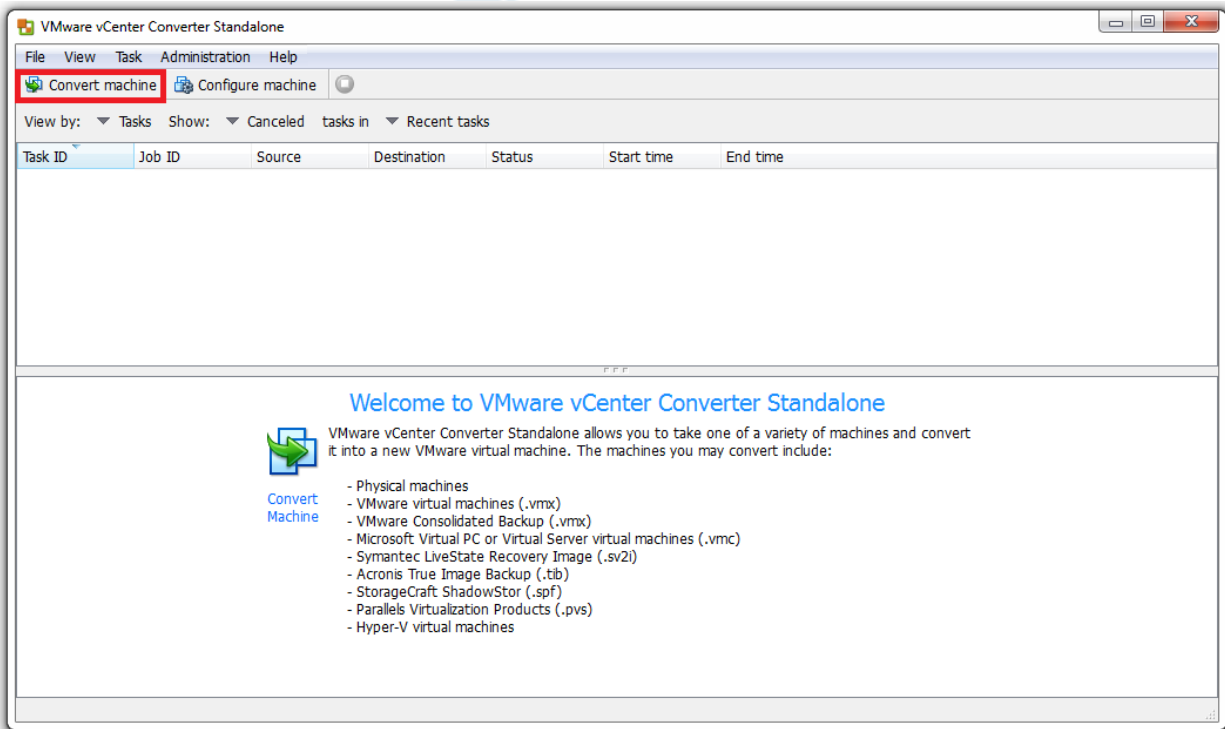
Import CUCM VMware WorkStation lên ESXi

(Bùi Quốc Kỳ - VnPro)

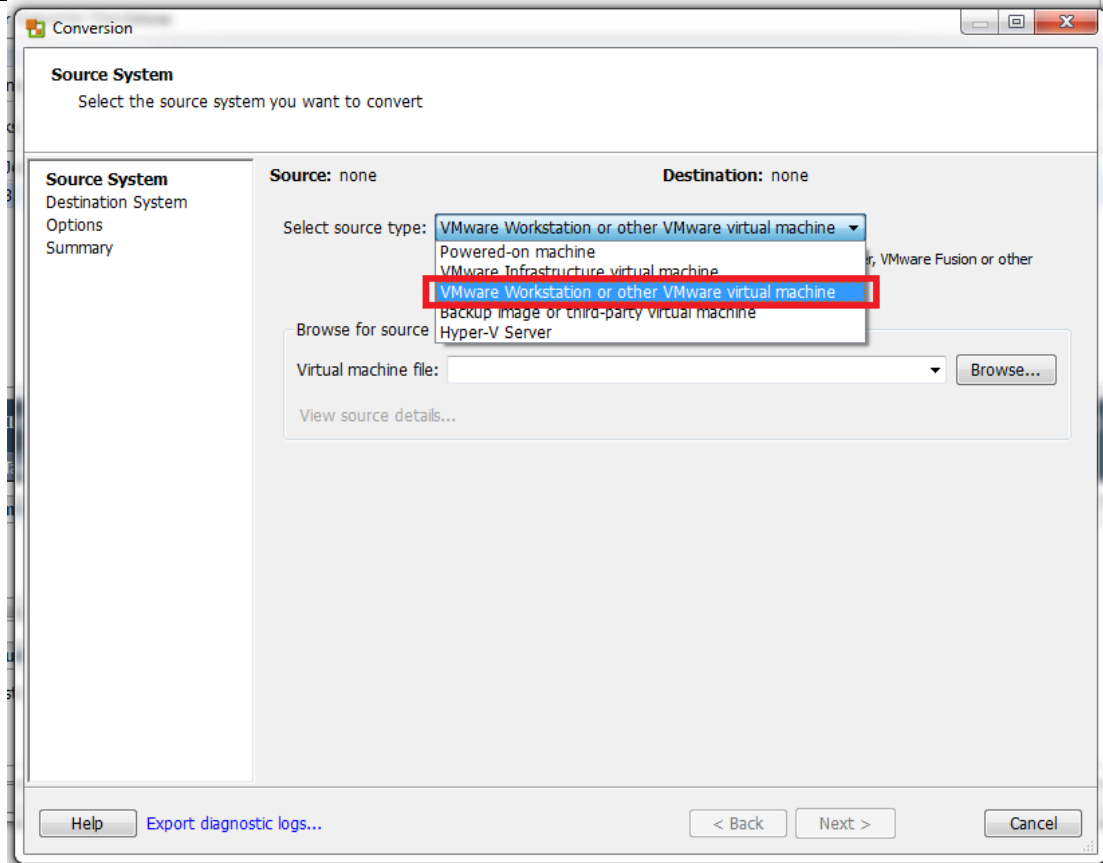
Bước 1: Khởi động chương trình VMware vCenter Converter Standalone Client. CUCM VMware WorkStation mặc định không thể Import lên ESXi server vì format cài đặt trên VMware WorkStation khác với format được cài đặt trên ESXi server. Vì thế, ta sử dụng chương trình “VMware vCenter Converter Standalone Client” có thể tải miễn phí tại trang chủ của VMware để tiến hành “convert” bản cài đặt CUCM VMware Workstation thành định dạng format phù hợp trên ESXi server.



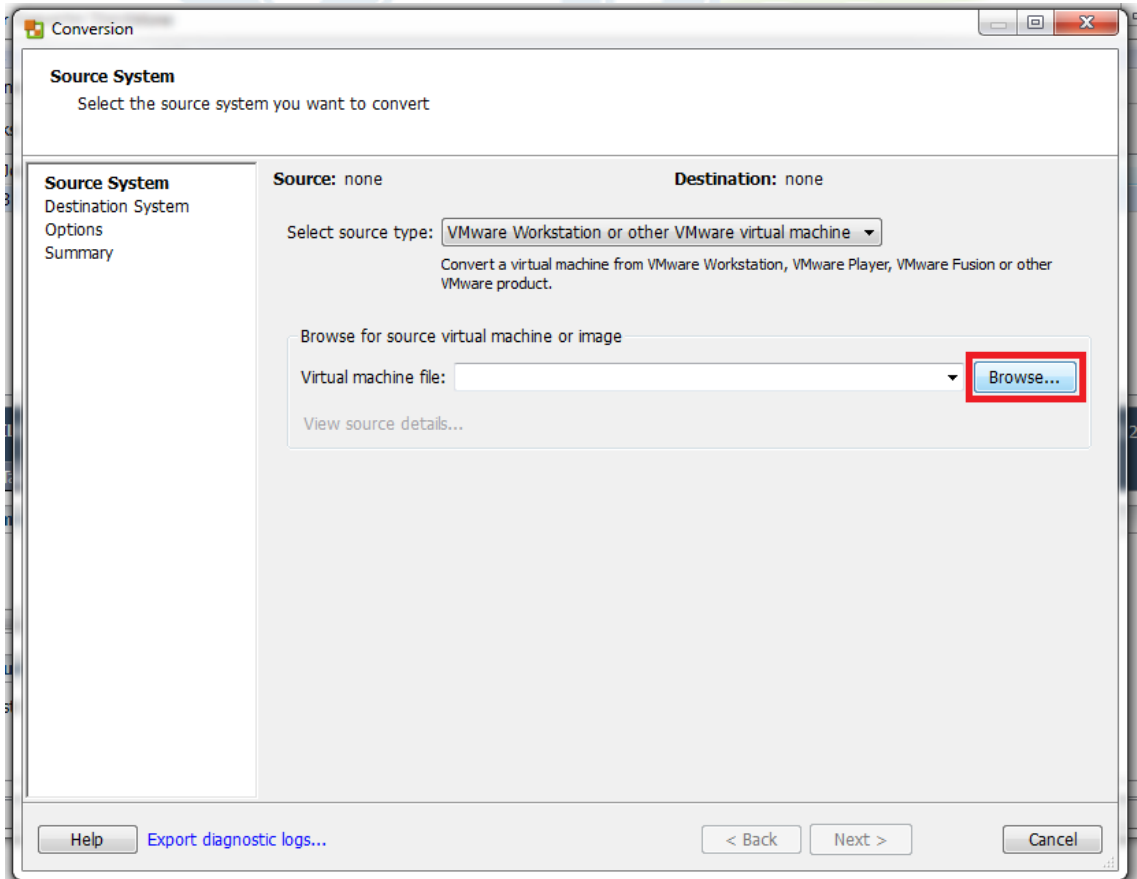
Bước 2: Click vào nút Convert machine



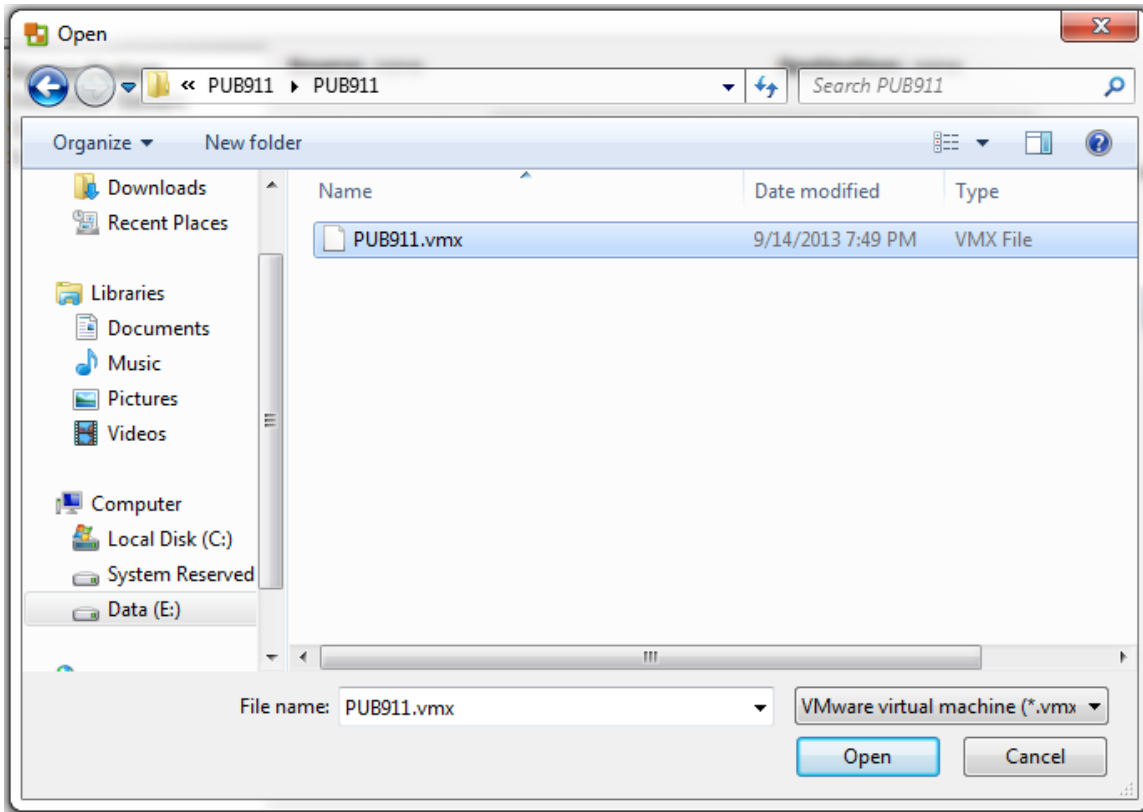
Bước 3: Chọn option VMware Workstation or other VMware virtual machine tại danh sách Select source type drop-down list.



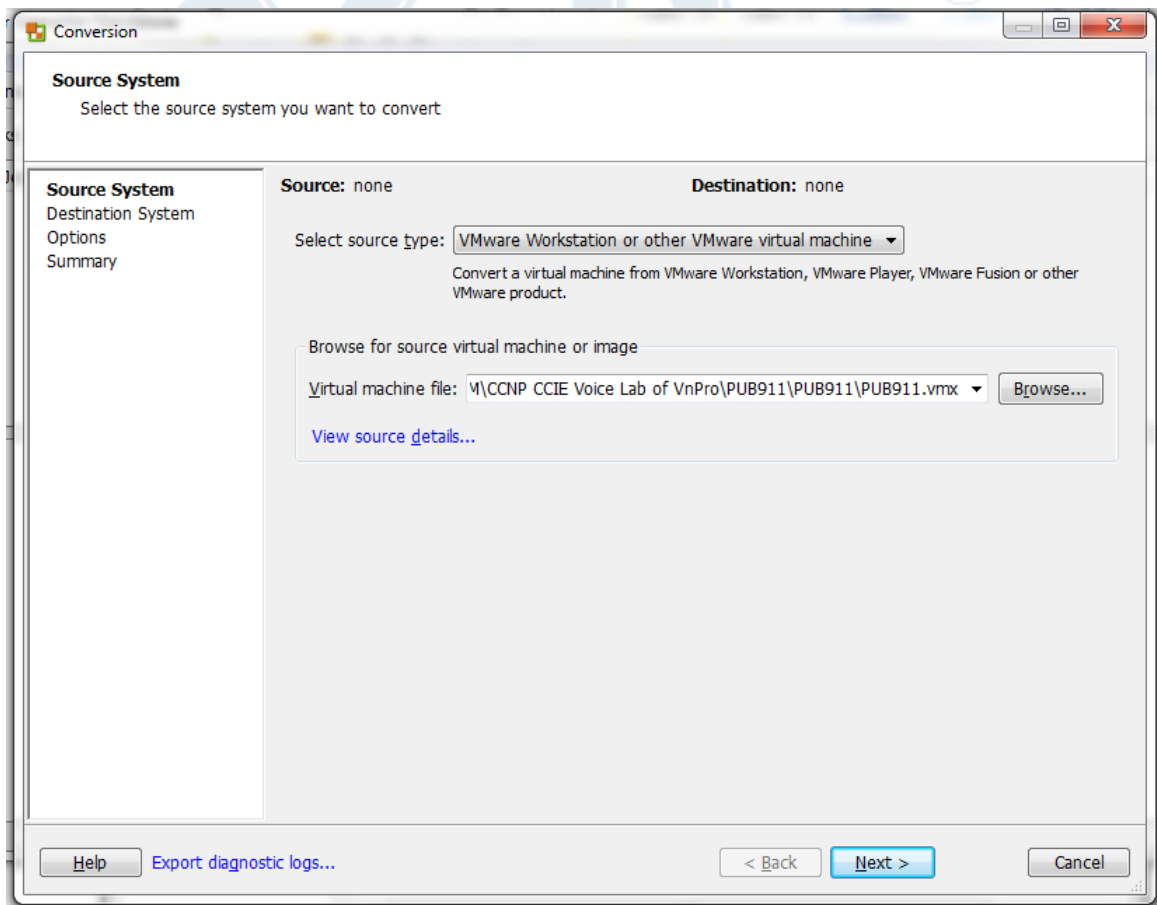
Click nút Browse



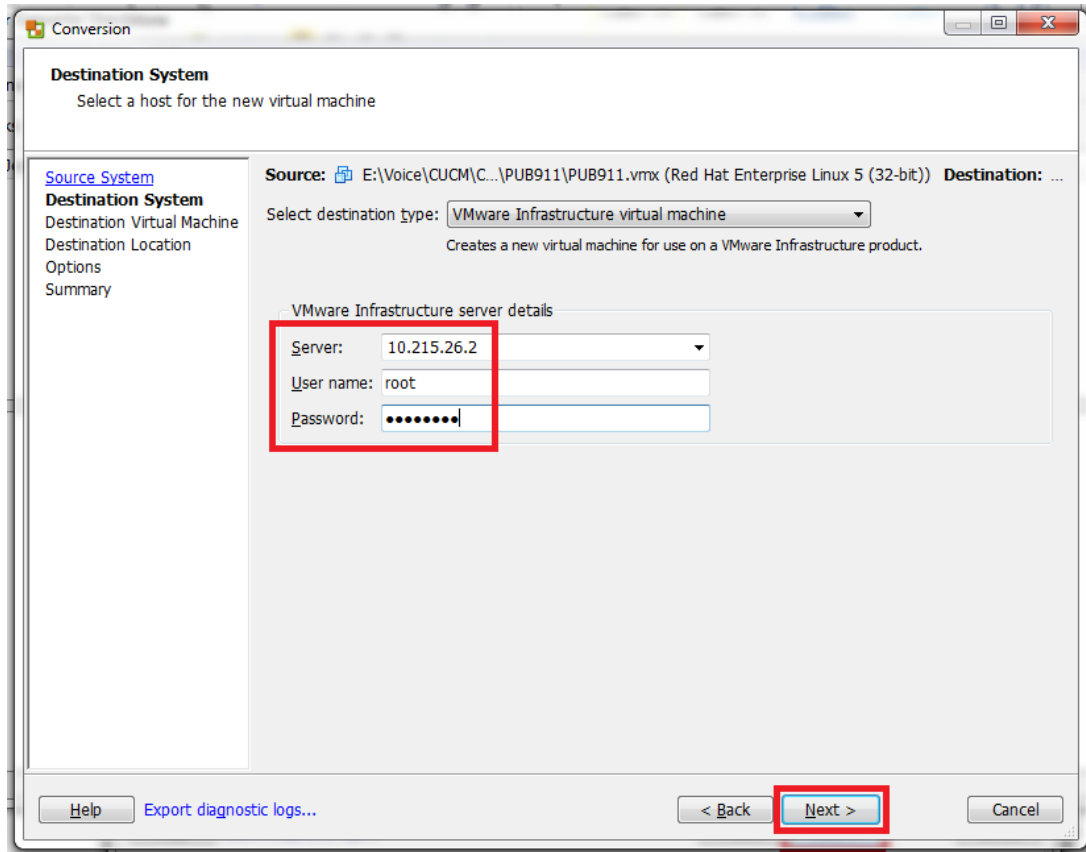
Chọn VMware Workstation của CUCM là PUB911.vmx rồi click nút Open.



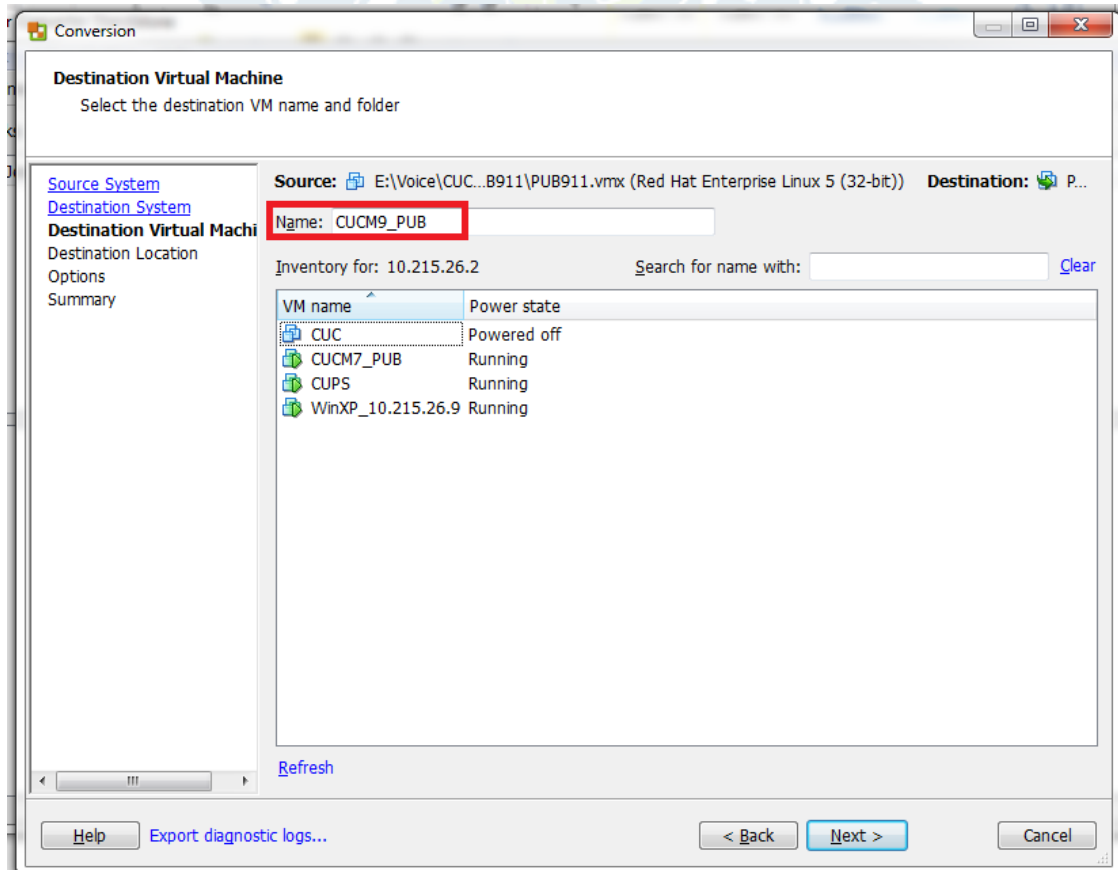
Tiếp tục click Next.



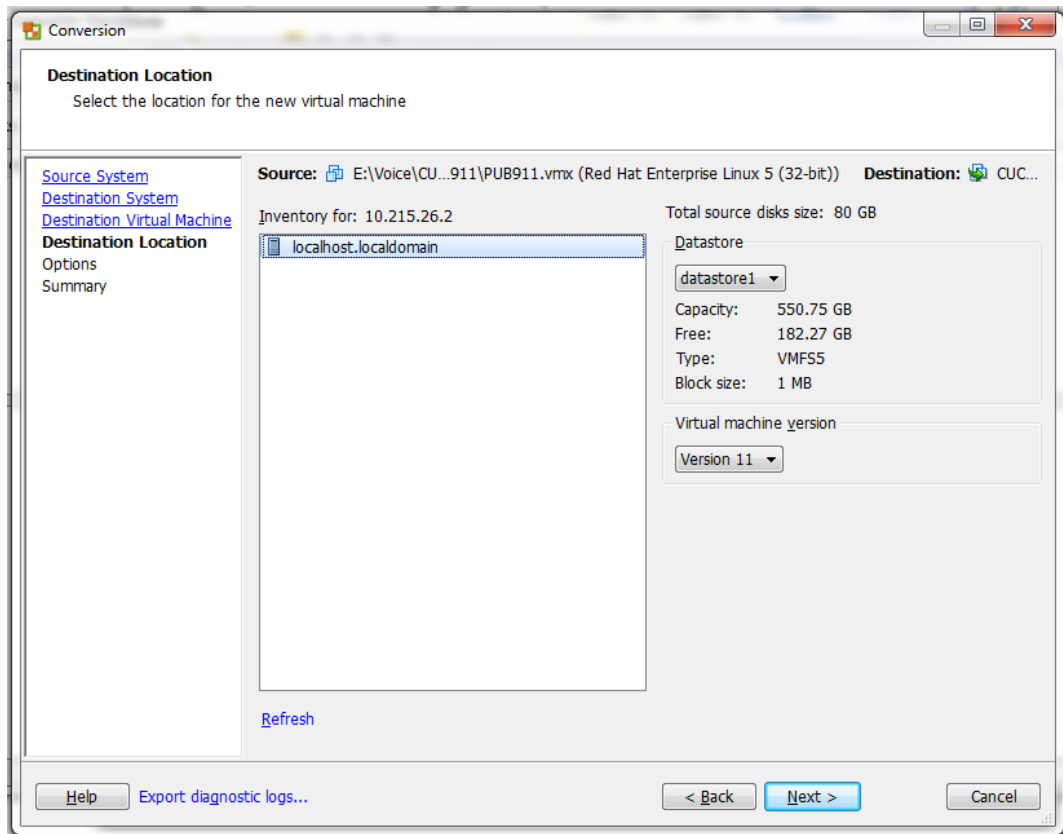
Bước 4: Khai báo thông tin đăng nhập tới ESXi server. Click nút Next.



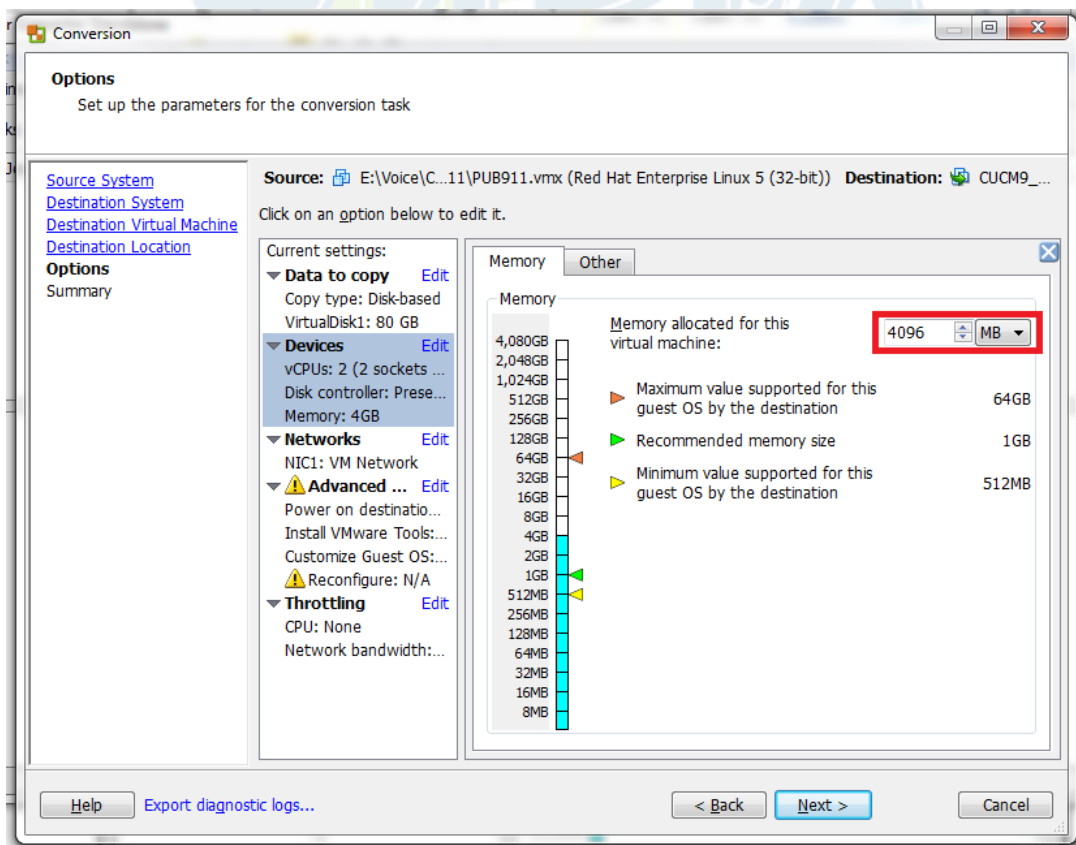
Bước 5: Khai báo tên của máy ảo đích là CUCM9_PUB rồi click nút Next button.

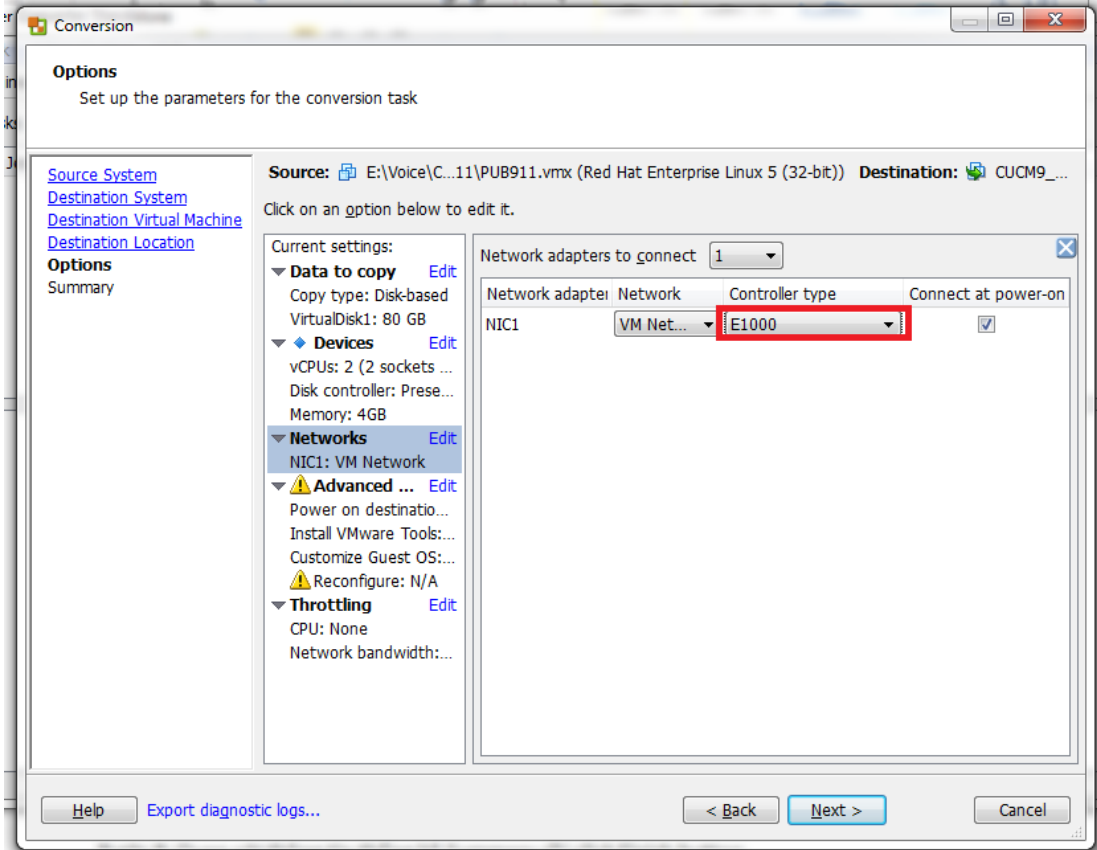


Bước 6: Tiếp tục click Next button.

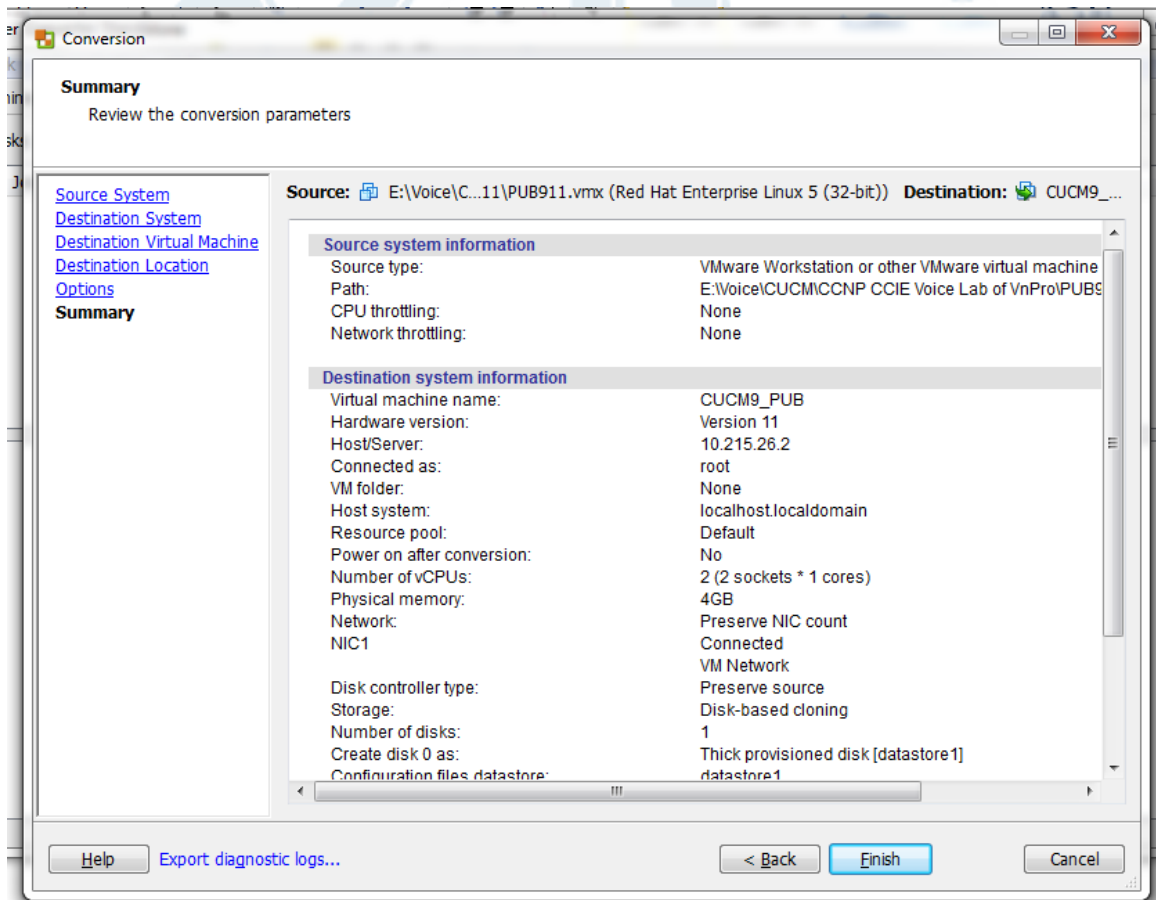


Bước 7: Hiệu chỉnh các tham số cho máy ảo như RAM, NIC như hình bên dưới. Click nút Next.



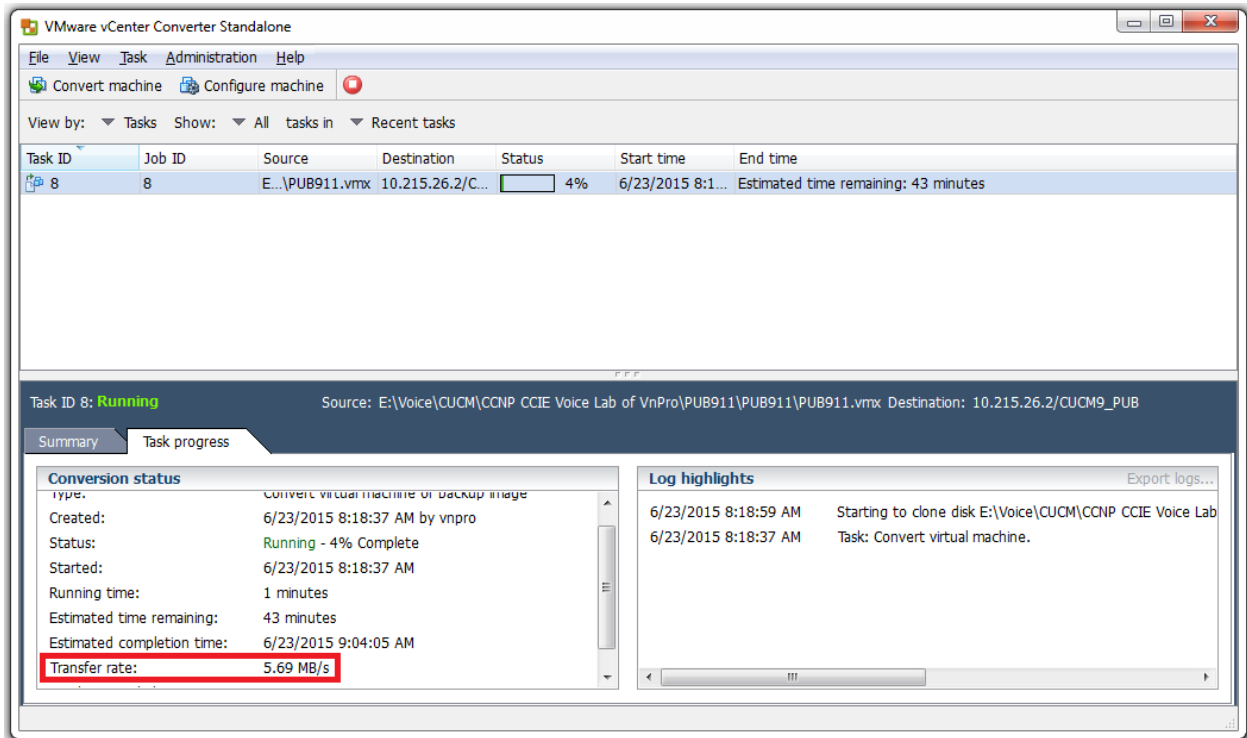


Bước 8: Quan sát thông tin thống kê Summary rồi click Finish button.

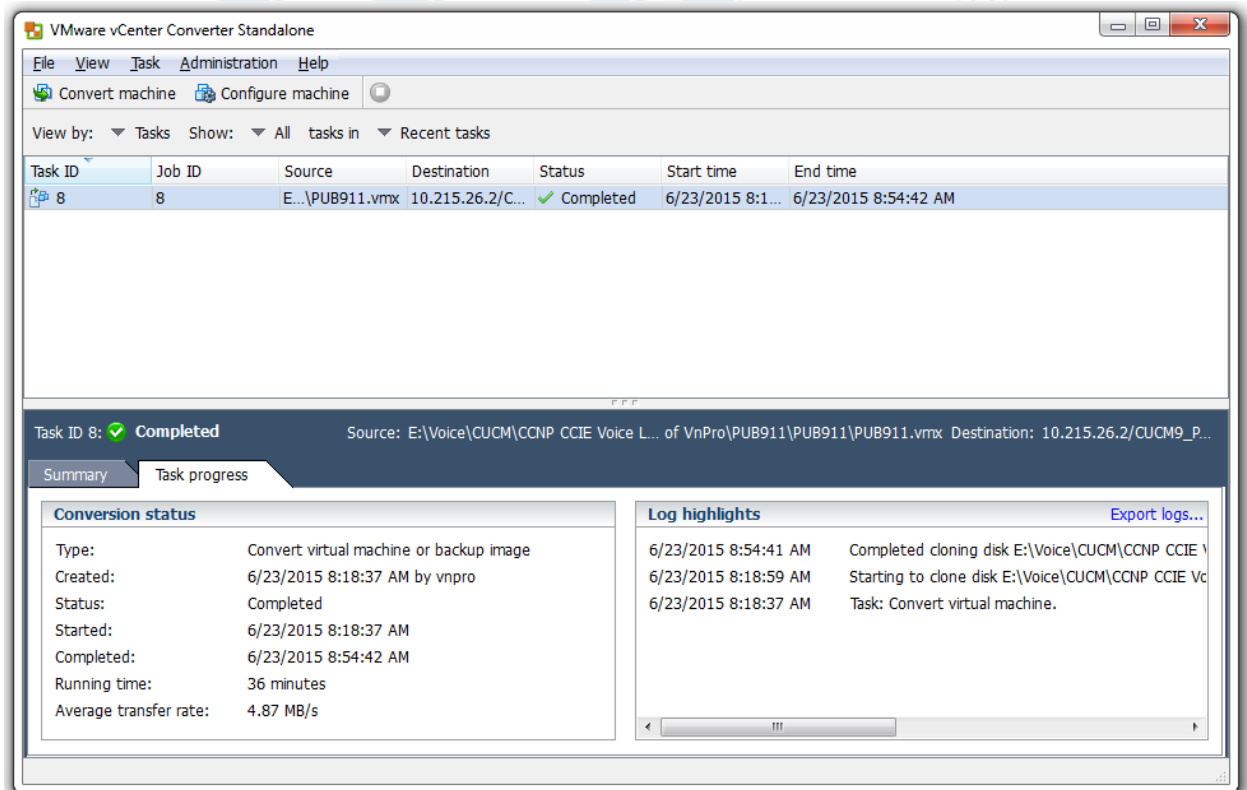


Bước 9: Theo dõi tiến trình import CUC VMware WorkStation lên ESXi.

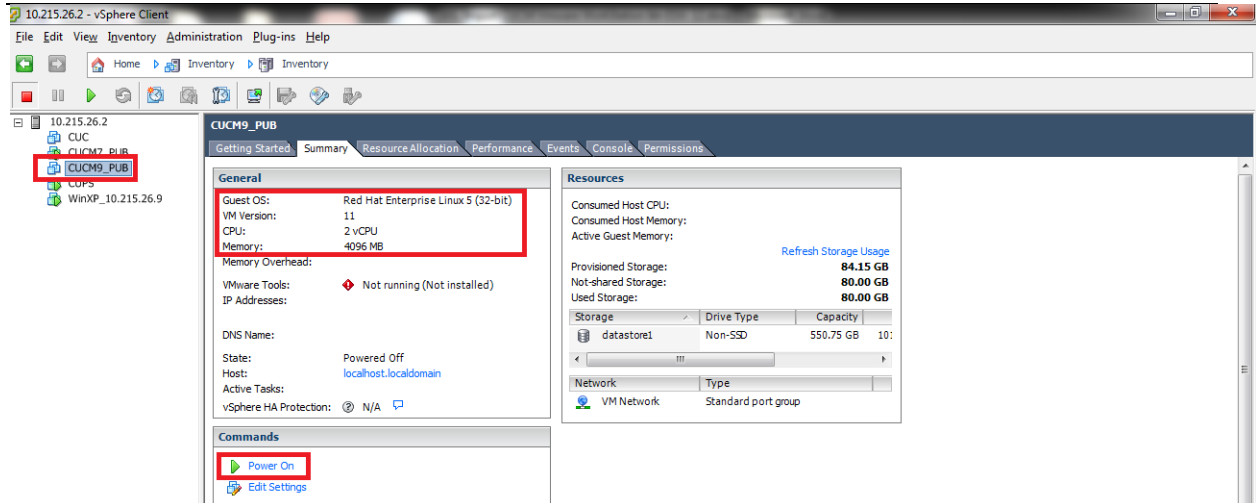
Quan sát tốc độ upload lên ESXi server.



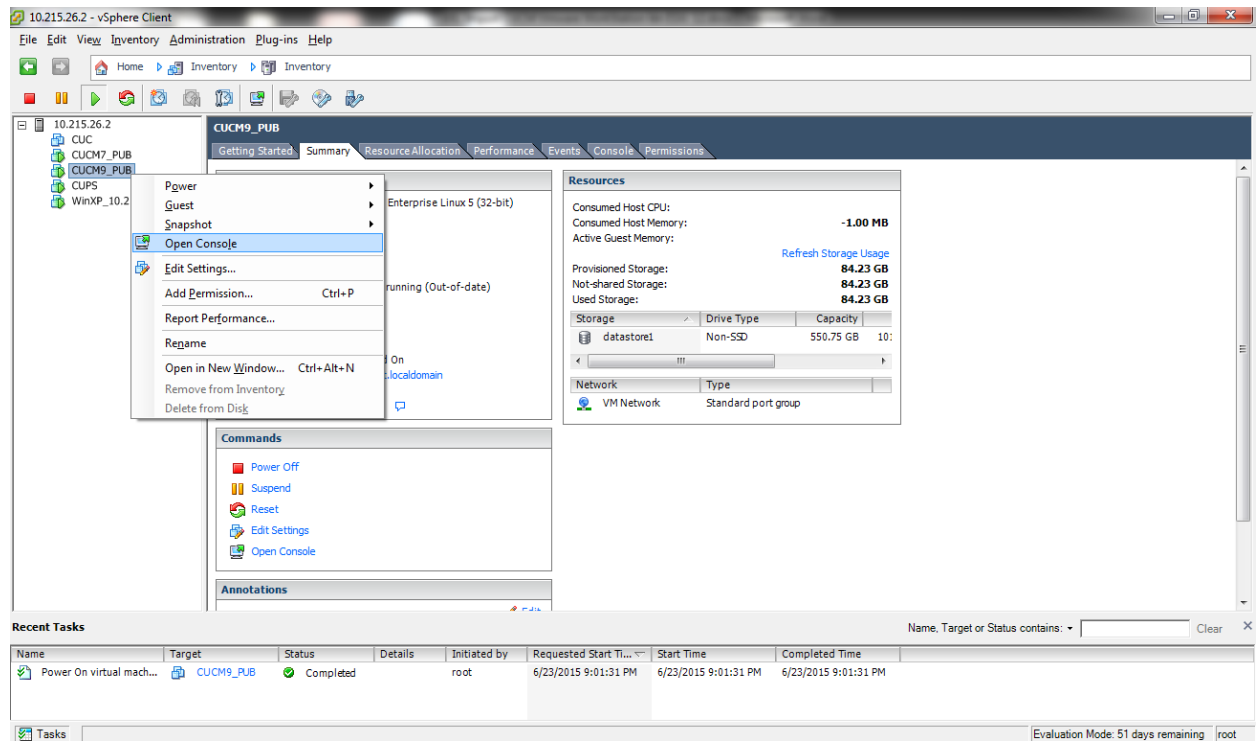
Tiến trình Import hoàn tất.



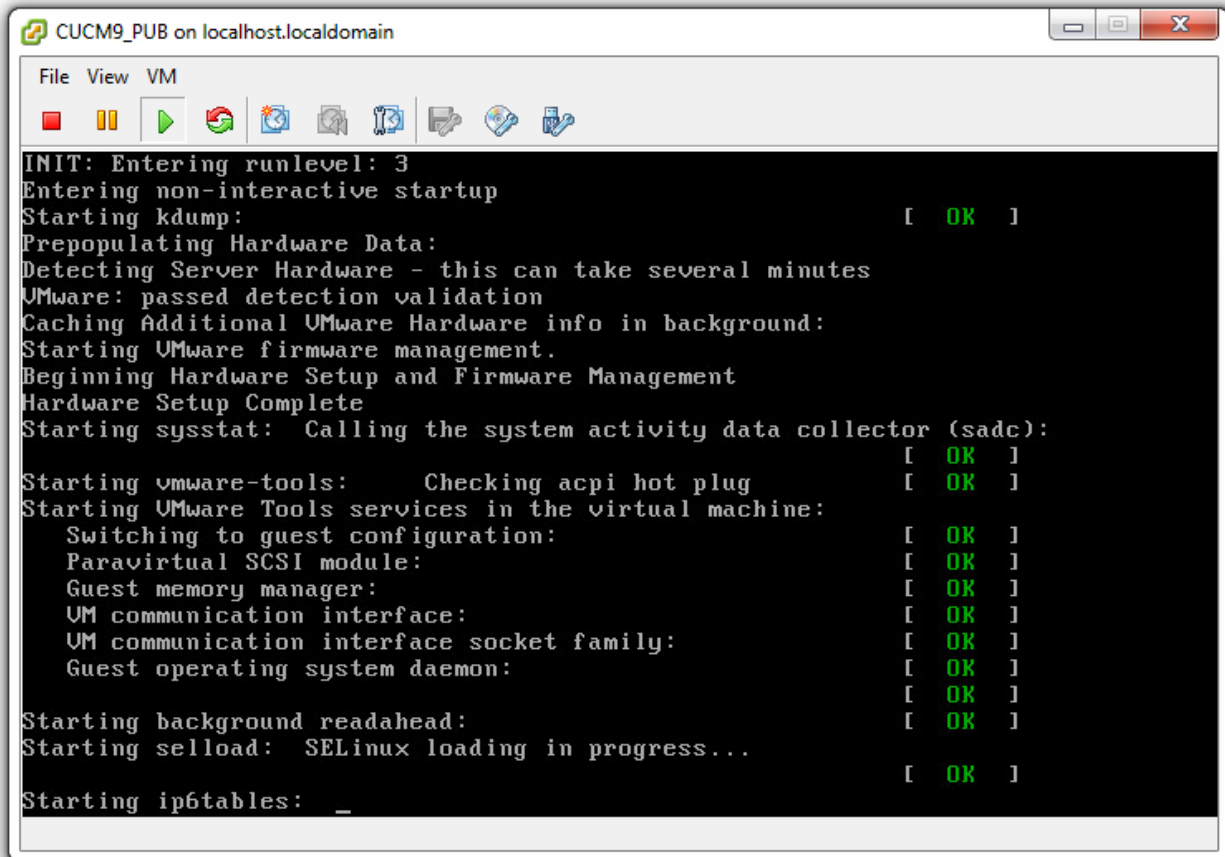
Bước 10: Tiến hành đăng nhập tới ESXi server, ta có thể thấy, CUCM VMware Workstation đã được import thành công lên ESXi server. Click vào Power On để tiến hành khởi động.



Bước 11: Click vào máy ảo CUCM chọn Open Console.

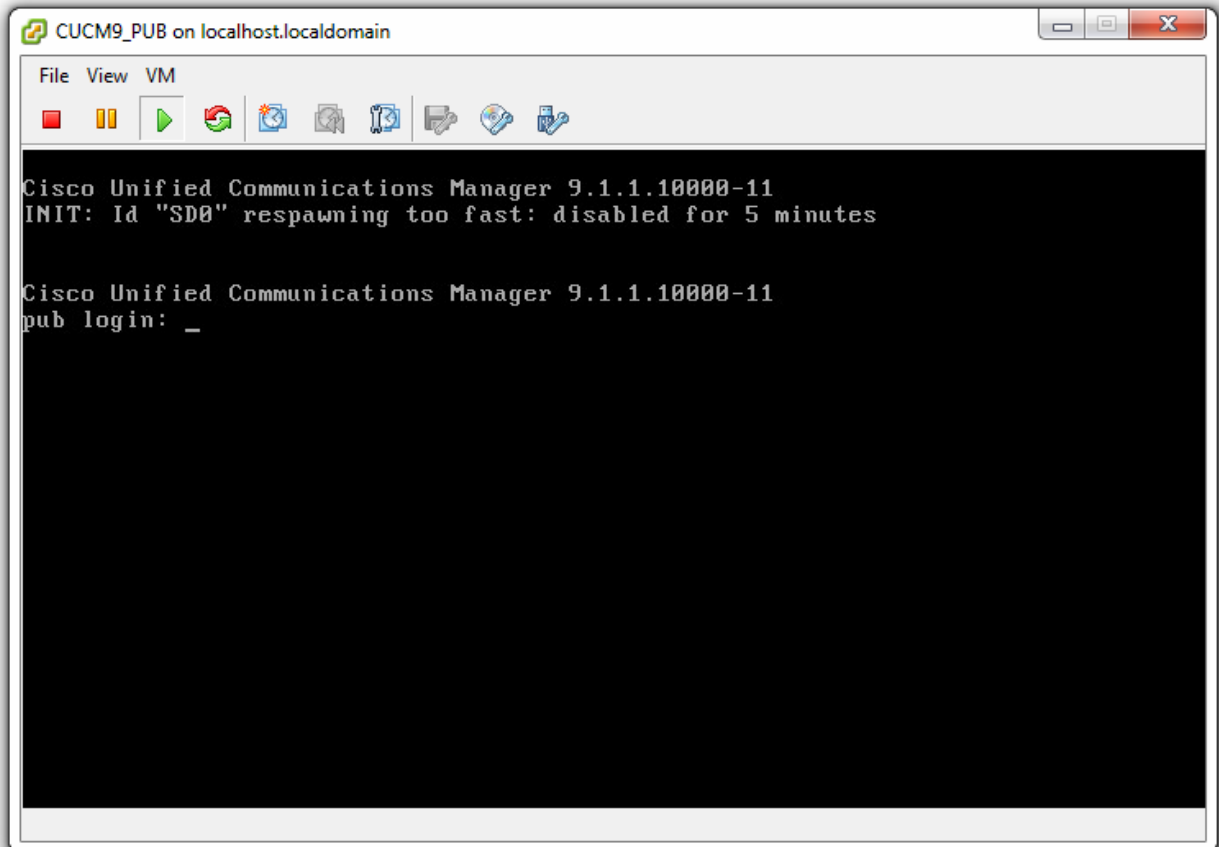


Tiến trình khởi động của CUCM server.



```
CUCM9_PUB on localhost.localdomain
File View VM
INIT: Entering runlevel: 3
Entering non-interactive startup
Starting kdump: [ OK ]
Prepopulating Hardware Data:
Detecting Server Hardware - this can take several minutes
VMware: passed detection validation
Caching Additional VMware Hardware info in background:
Starting VMware firmware management.
Beginning Hardware Setup and Firmware Management
Hardware Setup Complete
Starting sysstat: Calling the system activity data collector (sadc): [ OK ]
Starting vmware-tools: Checking acpi hot plug [ OK ]
Starting VMware Tools services in the virtual machine:
Switching to guest configuration: [ OK ]
Paravirtual SCSI module: [ OK ]
Guest memory manager: [ OK ]
VM communication interface: [ OK ]
VM communication interface socket family: [ OK ]
Guest operating system daemon: [ OK ]
Starting background readahead: [ OK ]
Starting selload: SELinux loading in progress... [ OK ]
Starting iptables: _
```

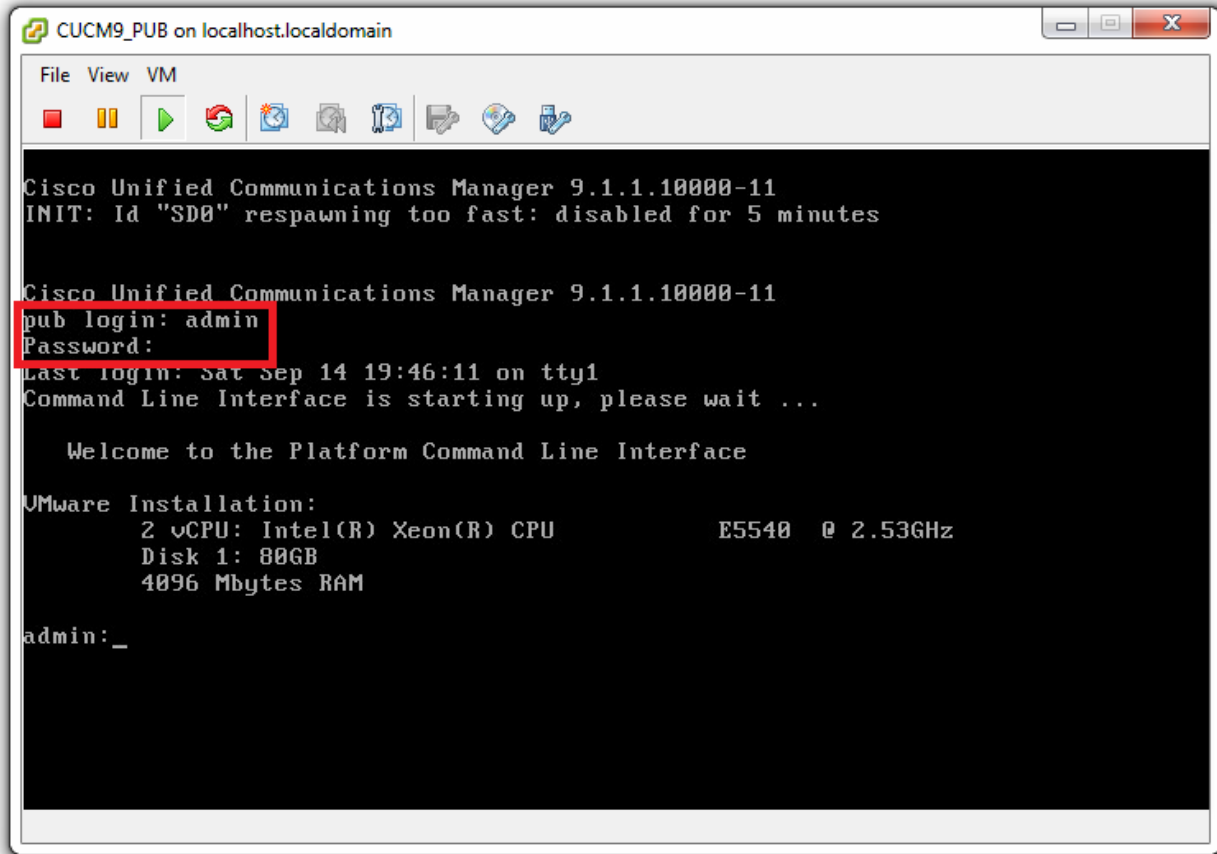
Bước 12: Đăng nhập vào CUCM bằng CLI.



```
CUCM9_PUB on localhost.localdomain
File View VM
Cisco Unified Communications Manager 9.1.1.10000-11
INIT: Id "SD0" respawning too fast: disabled for 5 minutes

Cisco Unified Communications Manager 9.1.1.10000-11
pub login: _
```

Đăng nhập với tài khoản Platform Administration access (console user): admin/c1sco123



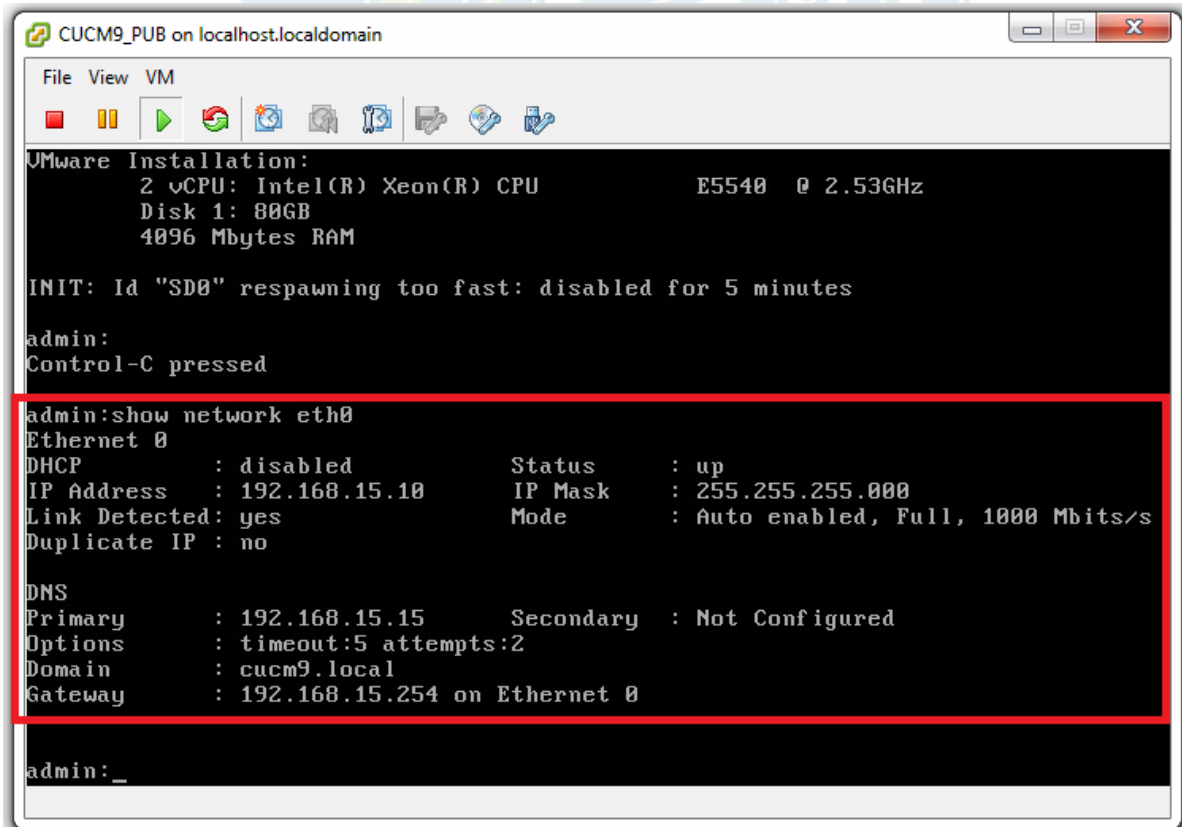
```
CUCM9_PUB on localhost.localdomain
File View VM
Cisco Unified Communications Manager 9.1.1.10000-11
INIT: Id "SD0" respawning too fast: disabled for 5 minutes
Cisco Unified Communications Manager 9.1.1.10000-11
pub login: admin
Password:
Last login: Sat Sep 14 19:46:11 on tty1
Command Line Interface is starting up, please wait ...

Welcome to the Platform Command Line Interface

VMware Installation:
 2 vCPU: Intel(R) Xeon(R) CPU           E5540 @ 2.53GHz
Disk 1: 80GB
4096 Mbytes RAM

admin: _
```

Bước 13: Kiểm tra địa chỉ của CUCM server bằng câu lệnh “show network eth0”



```
CUCM9_PUB on localhost.localdomain
File View VM
VMware Installation:
 2 vCPU: Intel(R) Xeon(R) CPU           E5540 @ 2.53GHz
Disk 1: 80GB
4096 Mbytes RAM

INIT: Id "SD0" respawning too fast: disabled for 5 minutes

admin:
Control-C pressed

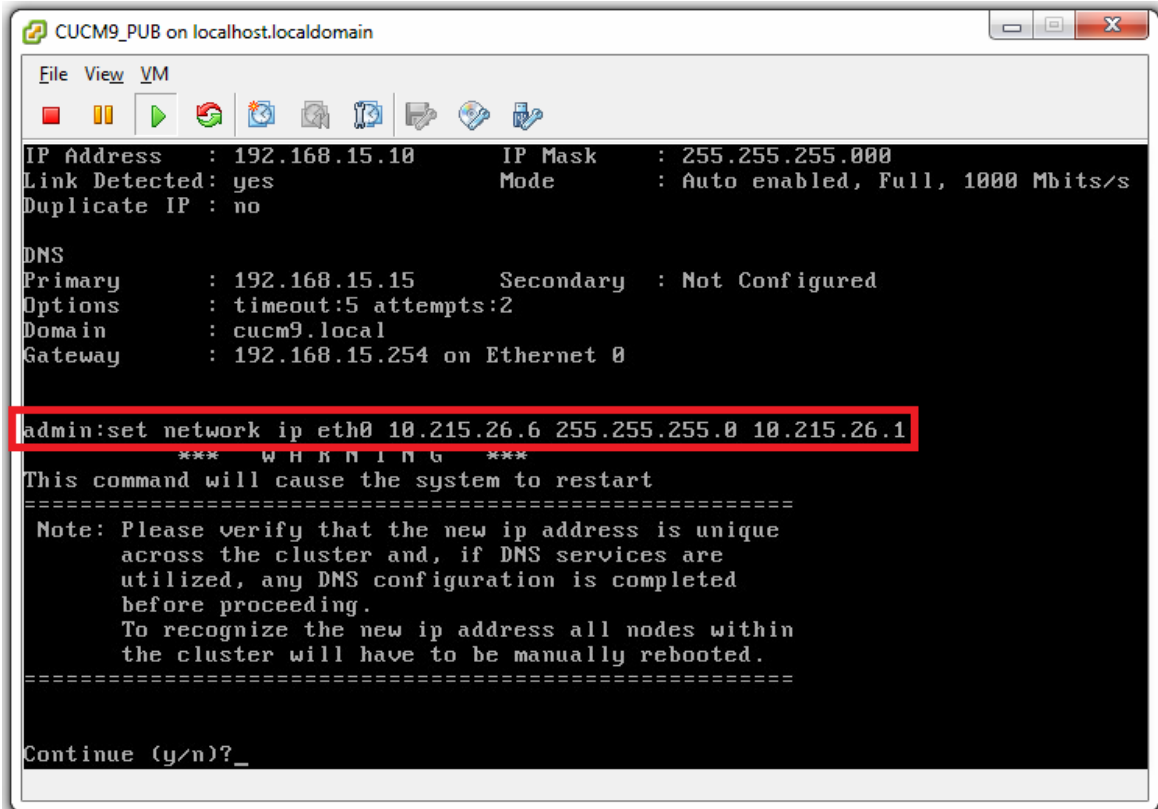
admin:show network eth0
Ethernet 0
DHCP      : disabled          Status      : up
IP Address : 192.168.15.10     IP Mask     : 255.255.255.000
Link Detected: yes           Mode        : Auto enabled, Full, 1000 Mbits/s
Duplicate IP : no

DNS
Primary   : 192.168.15.15     Secondary   : Not Configured
Options   : timeout:5 attempts:2
Domain    : cucm9.local
Gateway   : 192.168.15.254 on Ethernet 0

admin: _
```

Bước 14: Thiết lập lại thông tin network cho server

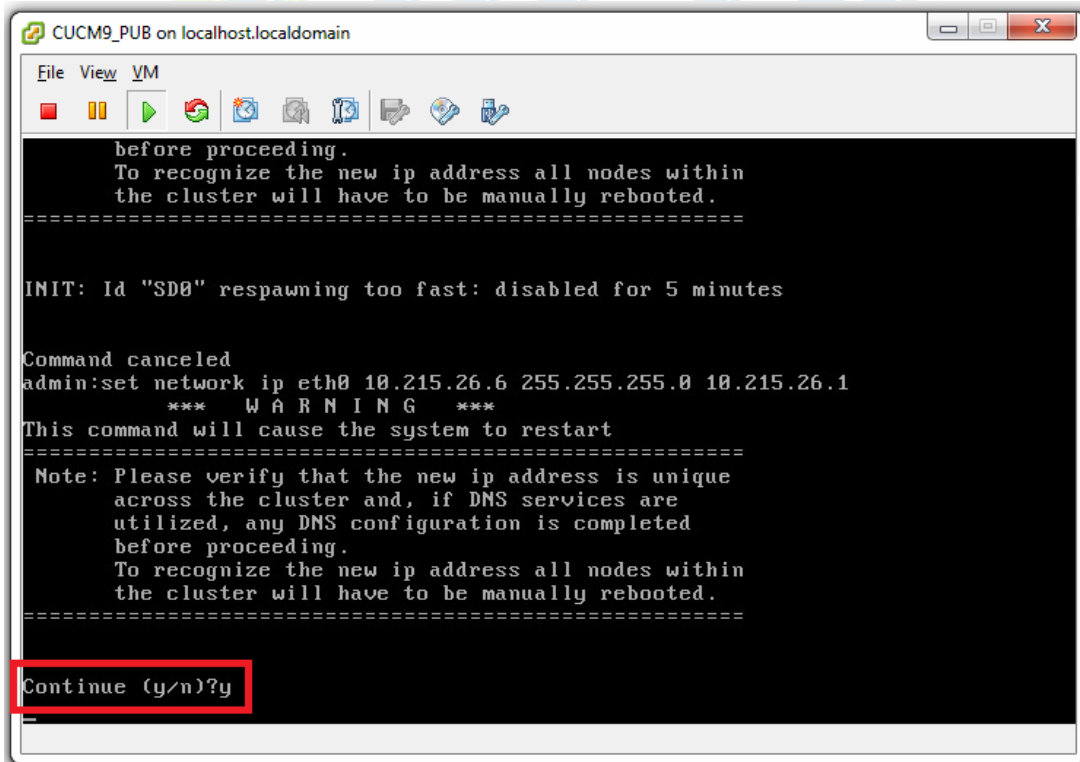
IP Address: 10.215.26.6
IP Mask: 255.255.255.0
Gateway: 10.215.26.1



```
CUCM9_PUB on localhost.localdomain
File View VM
*** W A R N I N G ***
This command will cause the system to restart
Note: Please verify that the new ip address is unique
across the cluster and, if DNS services are
utilized, any DNS configuration is completed
before proceeding.
To recognize the new ip address all nodes within
the cluster will have to be manually rebooted.
Continue (y/n)?_

admin:set network ip eth0 10.215.26.6 255.255.255.0 10.215.26.1
```

Chọn “y” rồi nhấn enter để khởi động lại CUCM server.



```
before proceeding.
To recognize the new ip address all nodes within
the cluster will have to be manually rebooted.
INIT: Id "SD0" respawning too fast: disabled for 5 minutes
Command canceled
admin:set network ip eth0 10.215.26.6 255.255.255.0 10.215.26.1
*** W A R N I N G ***
This command will cause the system to restart
Note: Please verify that the new ip address is unique
across the cluster and, if DNS services are
utilized, any DNS configuration is completed
before proceeding.
To recognize the new ip address all nodes within
the cluster will have to be manually rebooted.
Continue (y/n)?y
```

```

CUCM9_PUB on localhost.localdomain
File View VM
Note: Please verify that the new ip address is unique
across the cluster and, if DNS services are
utilized, any DNS configuration is completed
before proceeding.
To recognize the new ip address all nodes within
the cluster will have to be manually rebooted.
=====
Continue (y/n)?y
calling 1 of 3 component notification script: adns_verify.sh
Verifying 10.215.26.6 against primary DNS server 192.168.15.15 ...
No response received from 192.168.15.15
No Secondary DNS server defined
No hostname returned by for 10.215.26.6
No IP address returned by for pub.cucm9.local
calling 2 of 3 component notification script: ahostname_callback.sh
Info(0): Processnode query returned =
name
=====
192.168.15.10
updating server table from:'192.168.15.10', to: '10.215.26.6'
Rows: 1
updating database, please wait 90 seconds

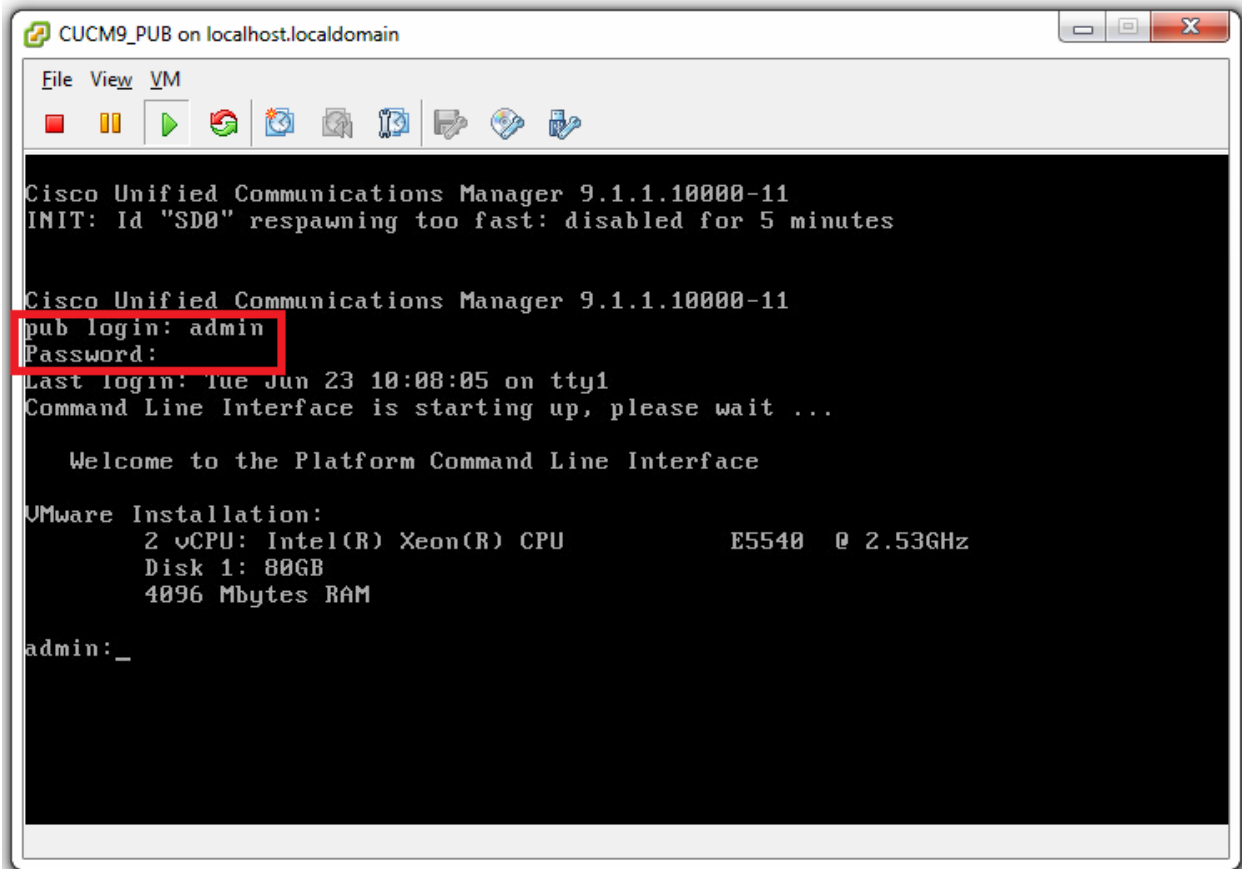
```

```

CUCM9_PUB on localhost.localdomain
File View VM
calling 1 of 3 component notification script: adns_verify.sh
Verifying 10.215.26.6 against primary DNS server 192.168.15.15 ...
No response received from 192.168.15.15
No Secondary DNS server defined
No hostname returned by for 10.215.26.6
No IP address returned by for pub.cucm9.local
calling 2 of 3 component notification script: ahostname_callback.sh
Info(0): Processnode query returned =
name
=====
192.168.15.10
updating server table from:'192.168.15.10', to: '10.215.26.6'
Rows: 1
updating database, please wait 90 seconds
updating database, please wait 60 seconds
updating database, please wait 30 seconds
calling 3 of 3 component notification script: clm_notify_hostname.sh
Verifying update across cluster nodes...
Shutting down interface eth0: [ OK ]
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
Bringing up interface eth0: [ OK ]
INIT: Sending processes the TERM signal
INIT: Id "SD0" respawning too fast: disabled for 5 minutes
i_ Restarting Cluster Manager service... Please Wait

```

Sau khi khởi động thành công, đăng nhập với tài khoản Platform Administration access (console user): admin/c1sco123



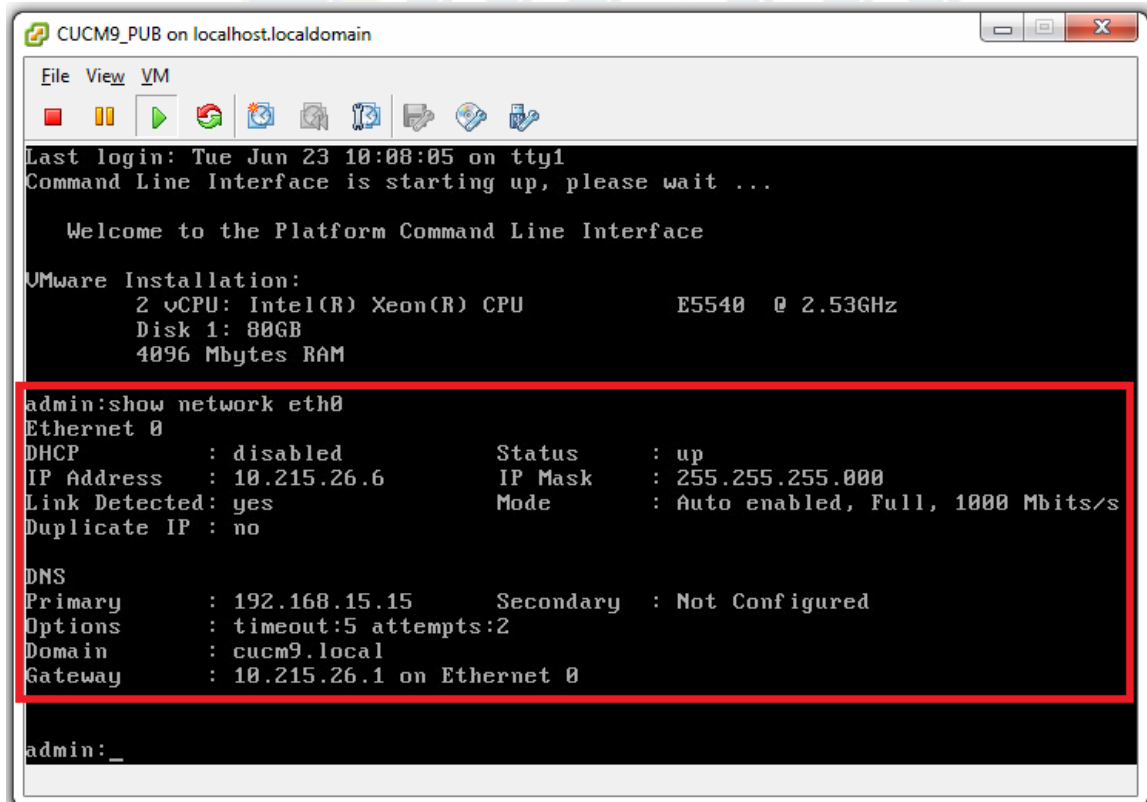
```
CUCM9_PUB on localhost.localdomain
File View VM
Cisco Unified Communications Manager 9.1.1.10000-11
INIT: Id "SD0" respawning too fast: disabled for 5 minutes
Cisco Unified Communications Manager 9.1.1.10000-11
pub login: admin
Password:
Last login: Tue Jun 23 10:08:05 on tty1
Command Line Interface is starting up, please wait ...

Welcome to the Platform Command Line Interface

VMware Installation:
  2 vCPU: Intel(R) Xeon(R) CPU           E5540 @ 2.53GHz
  Disk 1: 80GB
  4096 Mbytes RAM

admin:_
```

Bước 15: Kiểm tra địa chỉ của CUCM server bằng câu lệnh “show network eth0”



```
CUCM9_PUB on localhost.localdomain
File View VM
Last login: Tue Jun 23 10:08:05 on tty1
Command Line Interface is starting up, please wait ...

Welcome to the Platform Command Line Interface

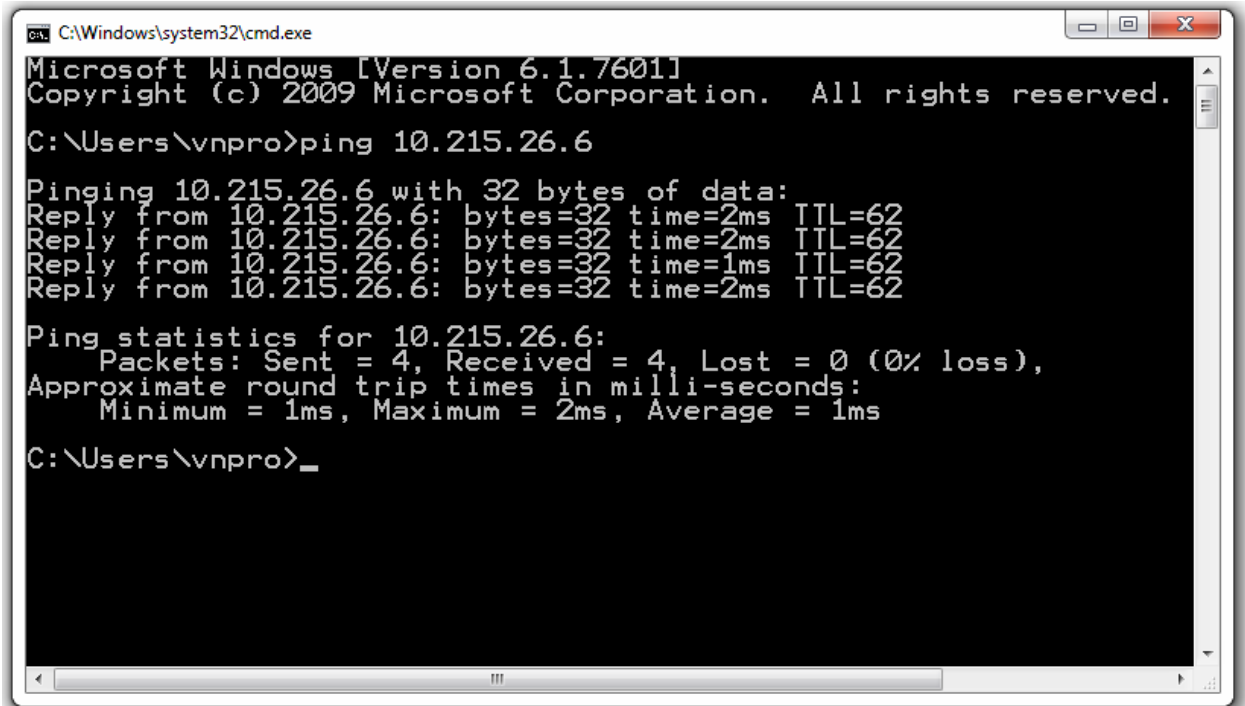
VMware Installation:
  2 vCPU: Intel(R) Xeon(R) CPU           E5540 @ 2.53GHz
  Disk 1: 80GB
  4096 Mbytes RAM

admin:show network eth0
Ethernet 0
DHCP      : disabled           Status      : up
IP Address : 10.215.26.6         IP Mask     : 255.255.255.000
Link Detected: yes           Mode        : Auto enabled, Full, 1000 Mbits/s
Duplicate IP : no

DNS
Primary   : 192.168.15.15       Secondary   : Not Configured
Options   : timeout:5 attempts:2
Domain    : cucm9.local
Gateway   : 10.215.26.1 on Ethernet 0

admin:_
```

Kiểm tra kết nối tới CUCM server.



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\vnpro>ping 10.215.26.6

Pinging 10.215.26.6 with 32 bytes of data:
Reply from 10.215.26.6: bytes=32 time=2ms TTL=62
Reply from 10.215.26.6: bytes=32 time=2ms TTL=62
Reply from 10.215.26.6: bytes=32 time=1ms TTL=62
Reply from 10.215.26.6: bytes=32 time=2ms TTL=62

Ping statistics for 10.215.26.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

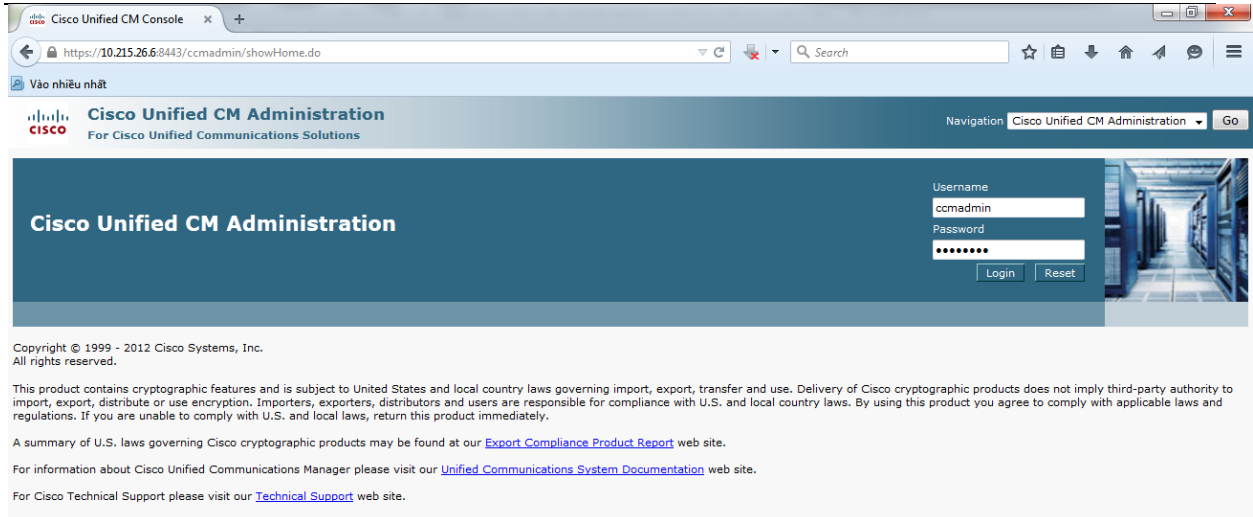
C:\Users\vnpro>
```

Bước 16: Đăng nhập vào giao diện quản trị của CUCM server.

CUCM server được thiết lập với các thông tin tài khoản sau.

- Web administration access (<https://10.215.26.6:8443/ccmadmin>):
 - ✓ Cisco Unified Reporting: ccmadmin/c1sco123
 - ✓ Cisco Unified CM Administration: ccmadmin/c1sco123
 - ✓ Disaster Recovery System: admin/c1sco123
 - ✓ Cisco Unified Serviceability: ccmadmin/c1sco123
 - ✓ Cisco Unified OS Administration: admin/c1sco123

Từ ESXi client tiến hành đăng nhập tới CUCM server bằng liên kết <https://10.215.26.6:8443/ccmadmin>. Đăng nhập vào CUCM server bằng tài khoản username: ccmadmin & password: c1sco123.



Giao diện “Cisco Unified CM Administration” sau khi đăng nhập thành công vào CUCM server.

