# CamelotFAQ

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#### **Camelot on Linux**

# Q. What is the minimum hardware requirement for Camelot on Linux?

A. You can use any UCS hardware (or other hardware) as long as it meets the following minimum requirements:

Any UCS Box with Hyper-threading enabled VM instance having 4vCPU and 6GB RAM VMware ESXi 5.5+

#### Q. What Linux version can I use?

A. Camelot for CEL 5.5, Cent OS 5.5 (CoL rpm) is discontinued. Latest Camelot is supported on Cent OS 6.5+ 64 bit version OR CEL 6.3+ 64 bit (CoC rpm) OR Cent OS 7 (CoC7 rpm).

OVA file details can be found in our installation wiki

#### Q. What ESXi version can I use?

**A.** ESXi 5.5+

#### Q. Is there an OVA?

A. For CentOS 6 (for installing CoC rpms) or CentOS 7 (for installing CoC7 rpms) ova files please check the installation wiki

#### Q. Is there documentation on how to install a camelot server?

A. Below are two links and some steps for the CEL installation.

http://wwwin-vts.cisco.com/camelot/CoLInstallation.pptx http://wwwin-vts.cisco.com/camelot/userquides/camelot 9 0 0/camelotquide.html# Toc168111654

CEL (cisco enterprise linux 6.x 64 bit) installation steps.

You can create the cel boot disk from the following link. (It's a network installation)

http://wwwin-kickstart-rcdn.cisco.com/cgi-bin/kicker/index.cgi

```
1.
          First step will be, creating a vm(RHEL 5.0 64 bit) in your esxi
server. (4vCPU, 4GB RAM, 42 GB) Start the vm and note down the mac address.
          Then decide the hostname and ip address of the machine. (add
hostname and ip details to the DNS server)
         Go to the above link, select
       Cisco Enterprise Linux Client 6.30-Client (x86_64)
4.
          Then select Generic Desktop
          Select cisco enterprise linux workstation
5.
6.
         Again click next
7.
         Give the mac address, hostname & click Lookup. It should fill-up
the ip details automatically.
8.
         Give NIS details
9.
         Click next
          In the next page, give timezone information, root passwd; also
select all the optional packages
          Click next
           Give the following partition info (below is the config, which
we are using in our setup)
/boot 200
/ 16384
/var 8192
/var/tmp 8192
/tmp 8192
           Also unselect the Grow option and set max size to 0 for all the
13.
fields. Click next
           Generate the boot disk
Mount the iso image using vmware vsphere client, then boot from it.
Continue the installation. If network connection is not proper,
installation will fail.
```

# Q. Is Camelot Supported as a background process

A. You can run Camelot as background process using the screen command on linux. If it's not present, please install it by "yum -y install screen" as root

To run a Camelot instance as a background process on linux you need to run this command

If running from a script as using ssh use : screen -dmS camserv\_5000 bash -c '/usr/bin/camserv -vp 5000; exec bash'

The above screen command will start a new screen session in background with name camserv\_5000 and start /usr/bin/camserv on port 5000 in it.

To list all screen sessions in a machine do. screen -Is

To get into a screen session do screen -r <screen name> OR screen -r process id of screen>

Press "Ctrl+a+d" to detach the screen and it will keep running as a background process.

Even if the ssh session is terminated, screen continues to run and maintain consoles for each running session inside screen (like a text only VNC). You can reconnect to the screen session using the command screen -r <screen id>

To kill/stop a particular screen session screen -S <screen name> -p 0 -X quit
To kill/stop all running screen sessions in a machine, do killall screen

Sometimes screen sessions won't stop even after kill, do screen -wipe to remove those zombie screen sessions.

Enabling logs on Camelot running under screen without getting inside the screen

screen -S <screen name>-p 0 -X stuff "logmask -moduleid \* -level debug\_5 -device file^M" screen -S <screen name> -p 0 -X stuff "ves^M"

Refer below attachment for screen examples. screen-examples.txt

For more on screen command please see the man pages.

# Q. Does Camelot support endpoint X?

A. Camelot does not implement the firmware of the underlying phones. It is designed to test the backend servers with signaling and media. In order to do so, the Camelot team looks at the functionality of the endpoint and implements it for a "camelot" endpoint. Testers must understand that when using Camelot, they are testing the backend servers, not the phone.

For instance, if you are looking to validate IPMA functioning on Zydeco, that is, how the IPMA applet and call handling work on the Zydeco firmware and hardware, as a tester, you can reasonably expect to be able to find a defect on IPMA for Zydeco that may not exist on IPMA for RT phones.

If Camelot were to implement IPMA functionality, however, you would not be testing IPMA on the phones as above, you would be testing CUCM's handling of IPMA endpoints generically. Any defect you would find would be in CUCM and most likely would be applicable to both Zydeco and RT phones. If you are already using a phone automation tool like Modena with one phone type, you are already testing that functionality implicitly when you run through the IPMA on RT phone test suite, therefore you are not gaining anything from doing the same thing on Camelot.

Unless CUCM implements separate IPMA code paths for Zydeco endpoints than it does for RT endpoints, implementing IPMA on Camelot will not be a productive use of Camelot dev time nor would it likely meet a tester's test objective.

If you wish to use automation to test "through the phone firmware", then you will need a phone automation interface in the phone and support of a tool like Modena.

If you still want to define new phone types in Camelot, you can use a new feature: US99810 Scripted SIP Messaging: user defined model numbers

You can find demo and script sample below

	sipx endpoints using US99810	https://cisco.webex.com/ciscosales /lsr.php? AT=pb&SP=MC&rID=66999542&rKe y=58b5e6875dacf9fd	[http://wikicentral.cisco.com /download/attachments/259036344 /Zydecco.tcl? version=1&modificationDate=136444 2703000 ]
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# Q. Since Camelot endpoints can use different IP addresses per phone, how do I put the IP addresses on the server?

A. If you are using the Linux-based Camelot, then you can set virtual IP addresses on the interface config files.

For example, if you want to add multiple IP addresses to eth0, you can create and modify an eth0 range file like this: % vi /etc/sysconfig/network-scripts/ifcfg-eth0-range0

Add the following lines. Below is an example: IPADDR\_START=10.12.48.2 IPADDR\_END=10.12.48.3 CLONENUM\_START=2

Restart the interface or reboot the server.

This will add two IP addresses to your system (10.12.48.2 and 10.12.48.3). If you want more, keep increasing the IPADDR\_END number. Note that this file only allows /24 range of addresses. So if you want to add more than that, you have to create another file with range value increased, eg ifcfg-eth0-range1. CLONENUM would start with a relatively increased value so it can properly add the virtual interfaces. Search on redhat and ifconfig range files on google to learn more about it.

# Q. We run single Camelot on a server with an IP address and provide port number, what is the significance of the port number provided? Is this port

# number which is used for SIP and Media communication? How does Camelot software differentiate the media packets received among different phone instances?

**A.** The port number you use when you start Camelot is simply a Camelot communication port that is used by user-side scripts. This port is not used for communication to CUCM or for signaling or media. For signaling, Camelot simply asks the OS to provide an available port (for the the IP that the endpoint is using). For media, though it eventually asks the OS for an available port, it could be made to be governed by an application on Camelot called UPM (UDP Port Management). If this is enabled (by specifying a range using the '-sp' and '-ep' options on camserv, then UDP will ask for a port from the OS from that particular range. If it is disabled, Camelot will ask OS to give any available port.

Information on UPM can be found here http://wwwin-vts.cisco.com/camelot/userguides/camelot\_9\_5\_0\_0\_9\_7/camelotguide. html#UDPPortsManager

#### **Performance and Scale**

# Q. How many BHCA (or endpoints) does one server support?

A. It depends heavily on the configuration and the types of calls you do. Below is a link to some guidelines, but YMMV.

http://wikicentral.cisco.com/display/GROUP/Camelot+Performance+data

#### **General Questions**

### Q. Can we provide the Camelot tool to one of our partners?

A. Camelot is an internal only tool for internal test teams for product or system testing. It cannot be used by any outside party including CA, partners and customers. This is mostly because the Camelot team is not staffed to be able to support anybody other than the needs of internal BU test teams.

# **NCS Support Questions**

# Q. Does Camelot currently support Early Offer, that is including SDP information in SIP invite message? We would like to be able to test making calls using Early Offer and Delayed Offer in NCS.

**A.** Camelot by default supports early offer for both sending and receiving. To enable delayed offer, sip.protocol.sdpwithinvite to be set as 0. You can find more info in the sip.protocol config section of the user guide. Configuration is on a per endpoint basis.

# **TNGpi and Camelot**

TNGpi is more than just for Camelot. But since there are a lot of questions about TNGpi when talking about Camelot, here is some useful info to get started.

#### Mailer Lists for the Support:

tngpi-camelot-support: for support questions about using TNGpi with Camelot.

#### **API Documentation for TNGpi**

More than just camelot

http://qaci.rd.tandberg.com/job/tngpi/User\_Docs

#### Camelot TNGpi WIKI

Includes info on GIT repository, OVA file details, installation, Sample scripts

http://wiki.cisco.com/display/AUTOMATION/Camelot+Support+in+TNGpi

#### TOI

Yes, http://wiki.cisco.com/display/AUTOMATION/Getting+started+with+TNGpi

Also: https://cisco.webex.com/ciscosales/lsr.php?AT=pb&SP=MC&rID=70832797&rKey=c83330536bf481b7

# **Camelot Docker**

Refer Wiki page Camelot Docker

# **Troubleshooting**

Moved to Troubleshooting