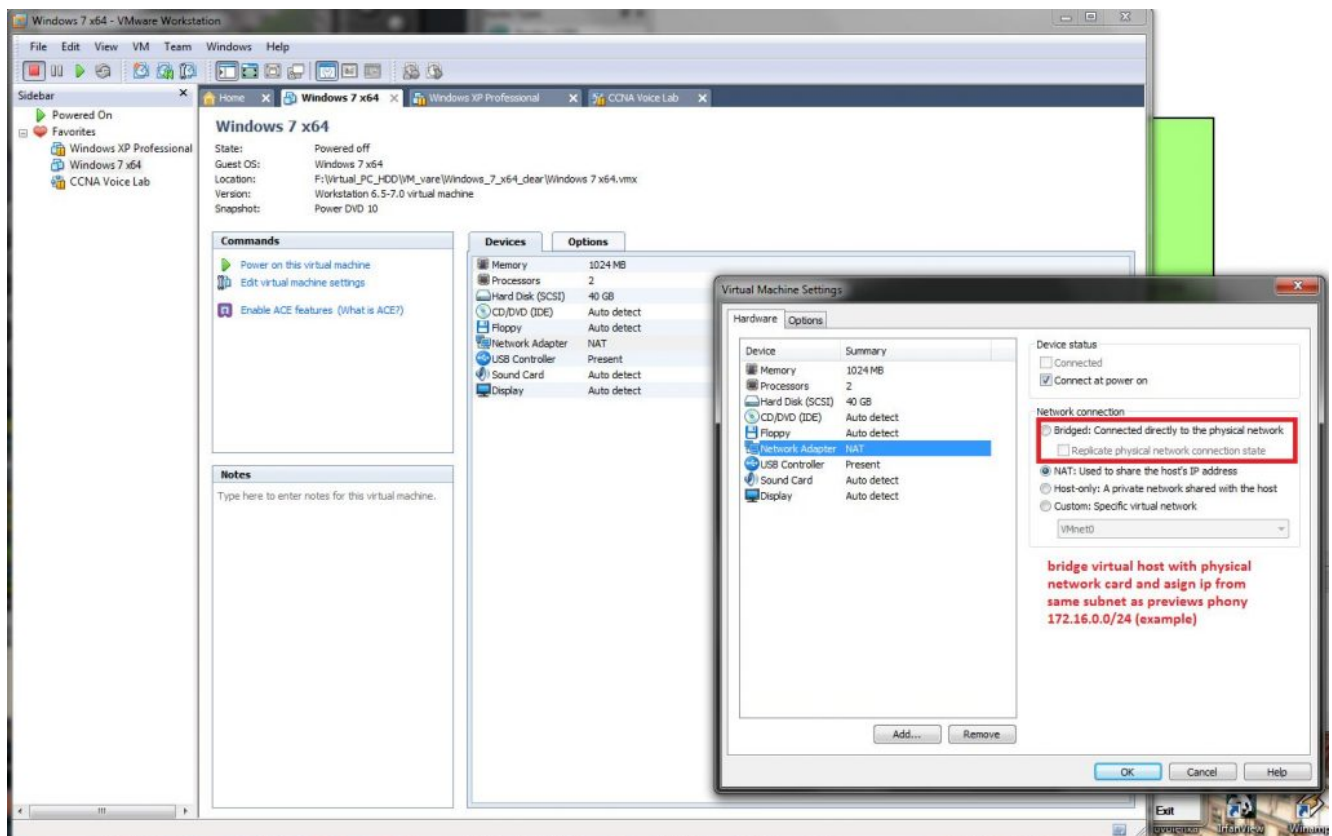


1. Basic VoIP lab with two ephone for upcoming experiments

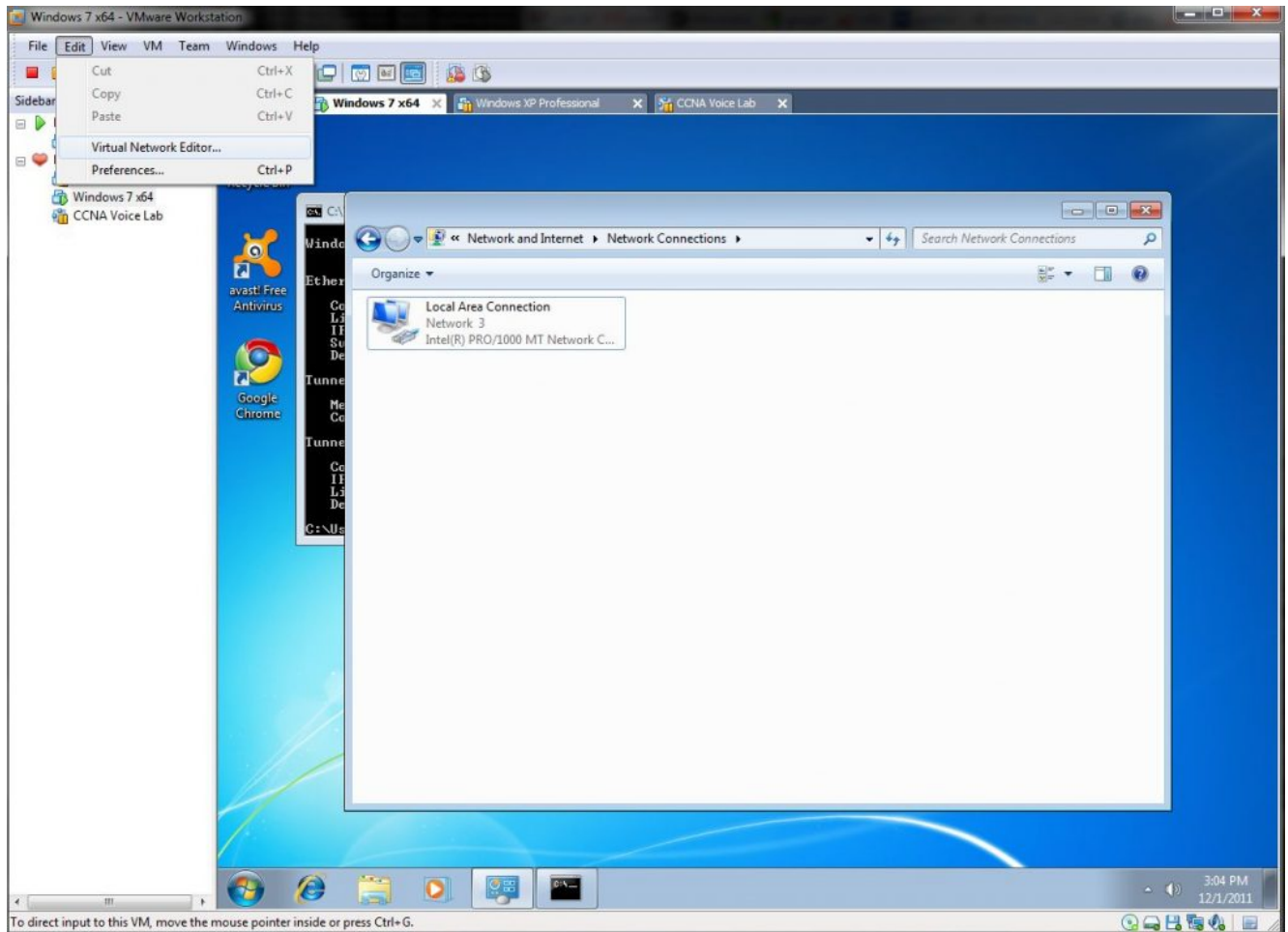
At first we must add second ephone (cheaper training solution is second cisco IP communicator) on VMware hosted client. As obvious install os on virtual PC. Next you need to configure network bridging with hosting pc. In our scenario hosting (physical PC) belong to network 172.16.0.0/24 with default gateway 172.16.0.1/24 and CME gateway was configured with 172.16.0.20/24, first ephone is on hosting pc with IP 172.16.0.10/24.

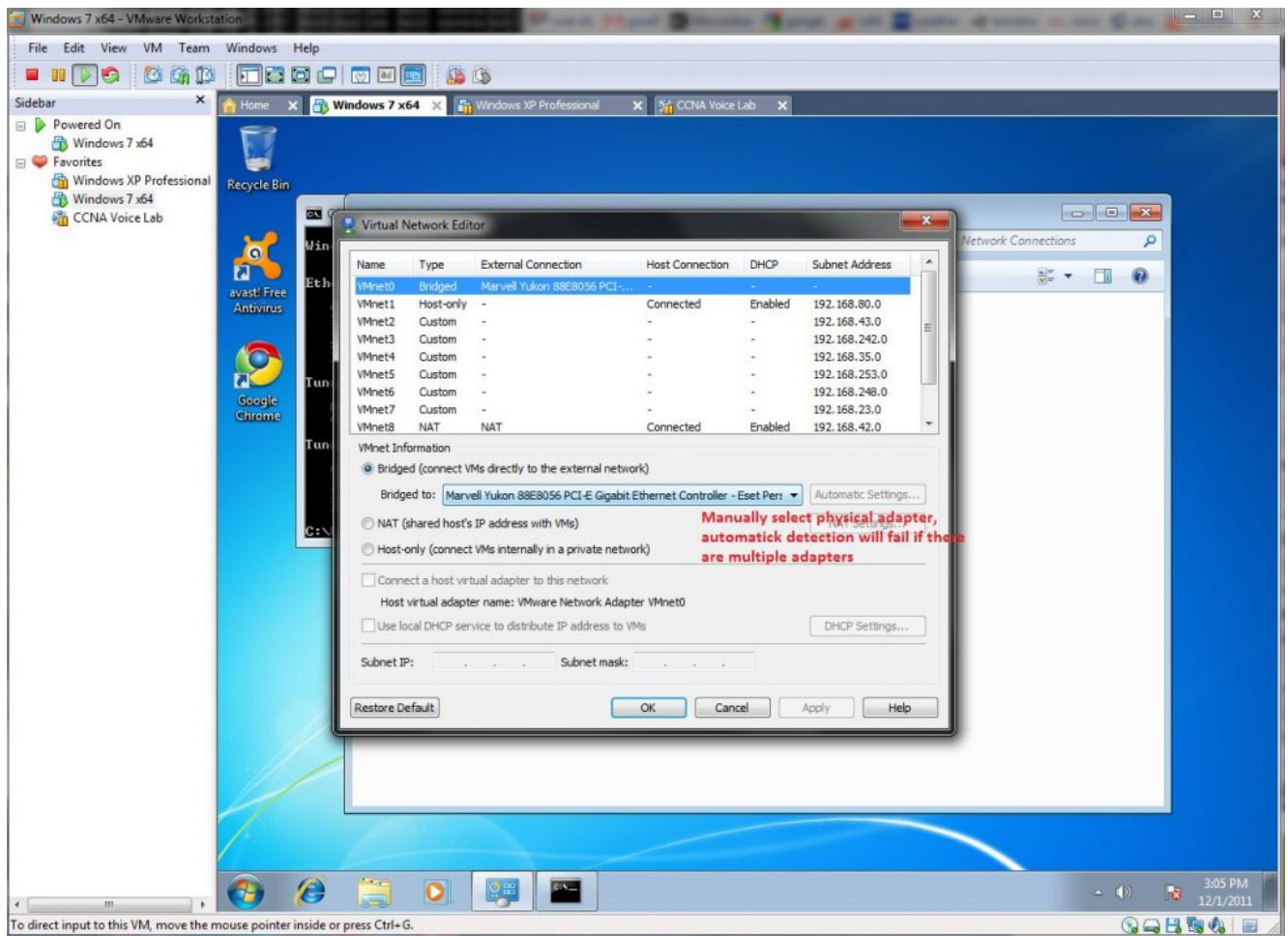
Setup process for bridging hosted pc to hosting network adapter is described in next pictures:

1) *Open Virtual Network settings dialog and set bridged (not NAT)*

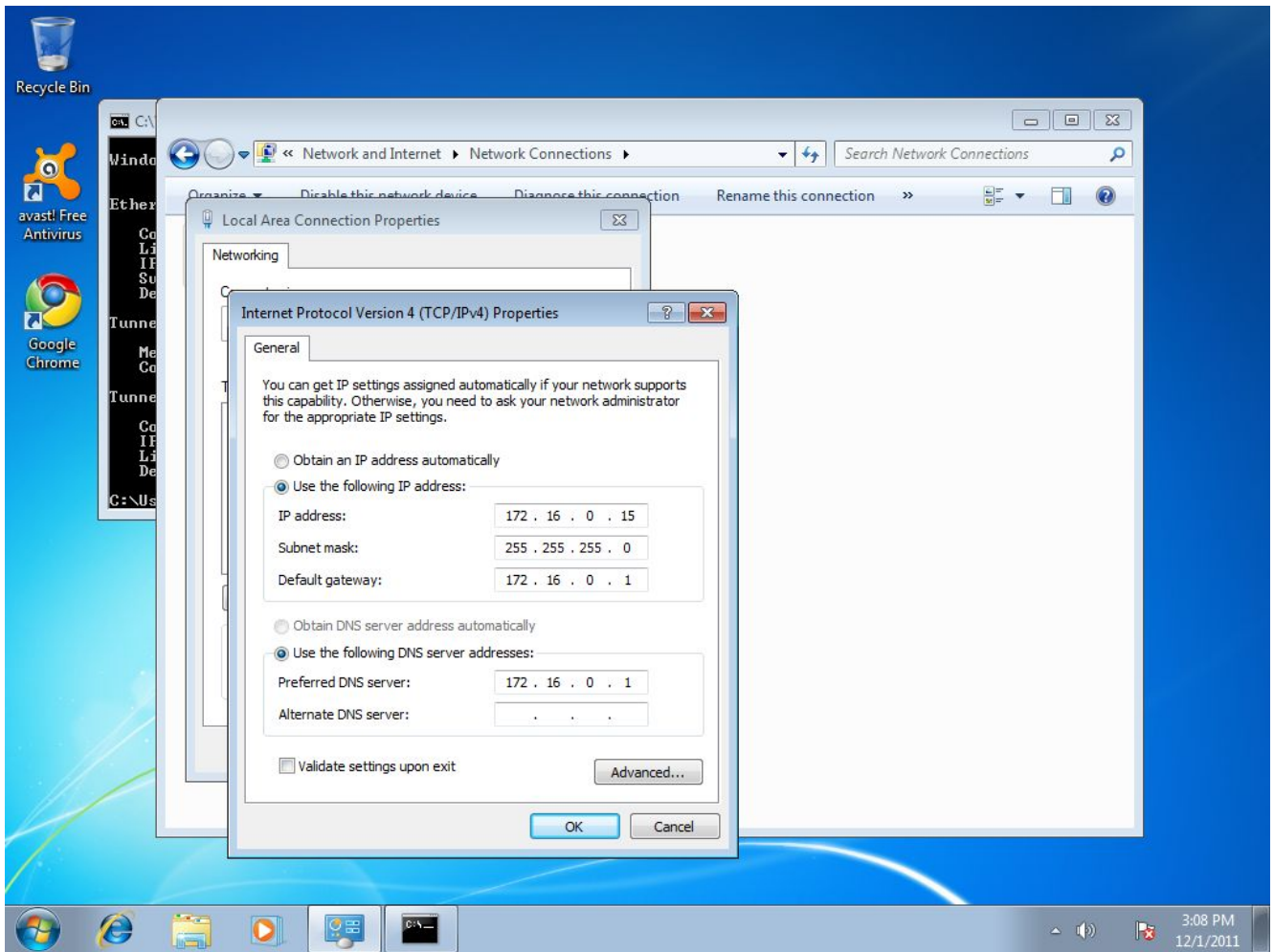


2) If you have more than one installed network adapter (WiFi, second network card, or virtual card of VMware) you must manually select appropriate bridging adapter as hosting client physical adapter (better is if you check it)

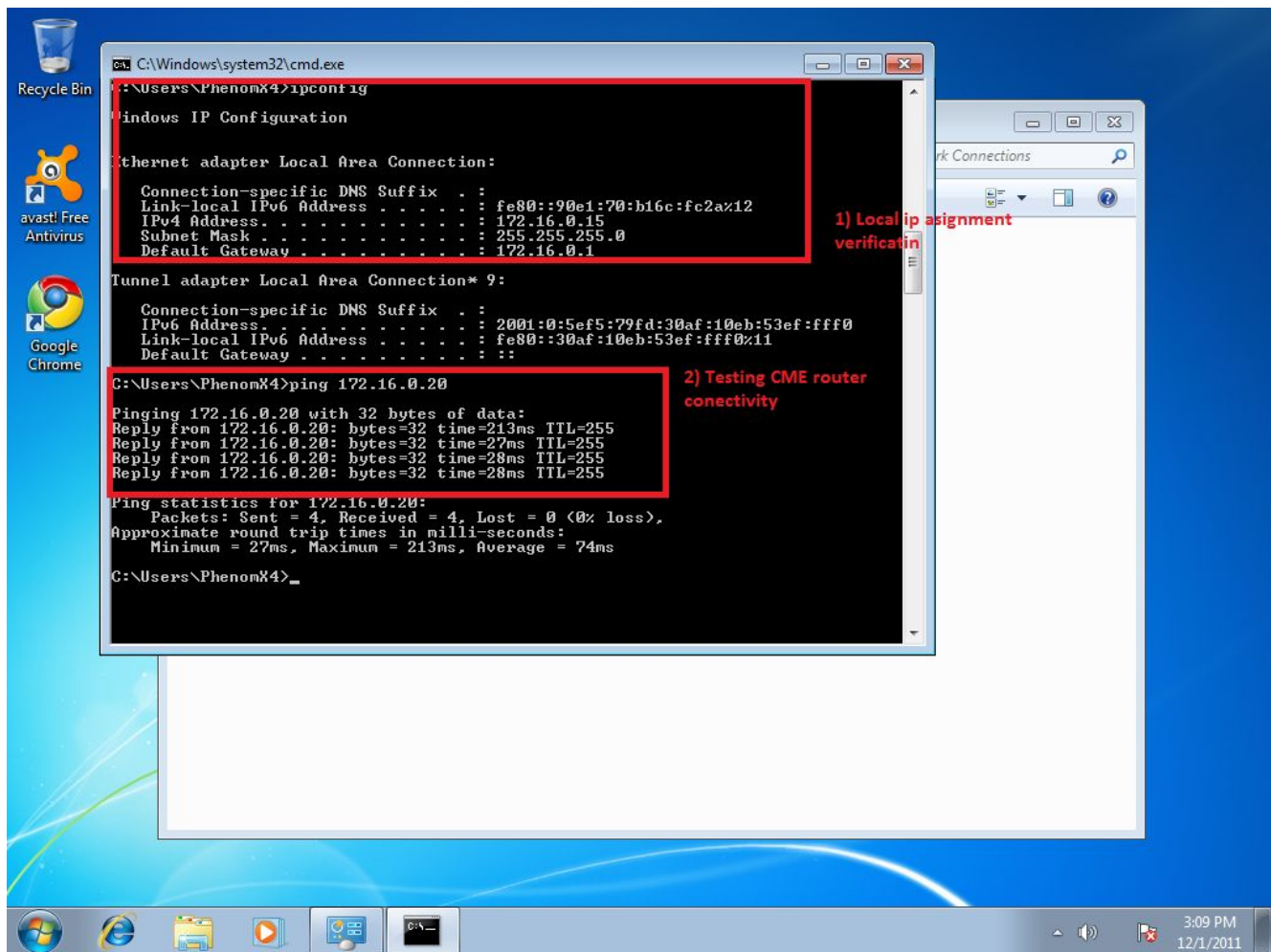




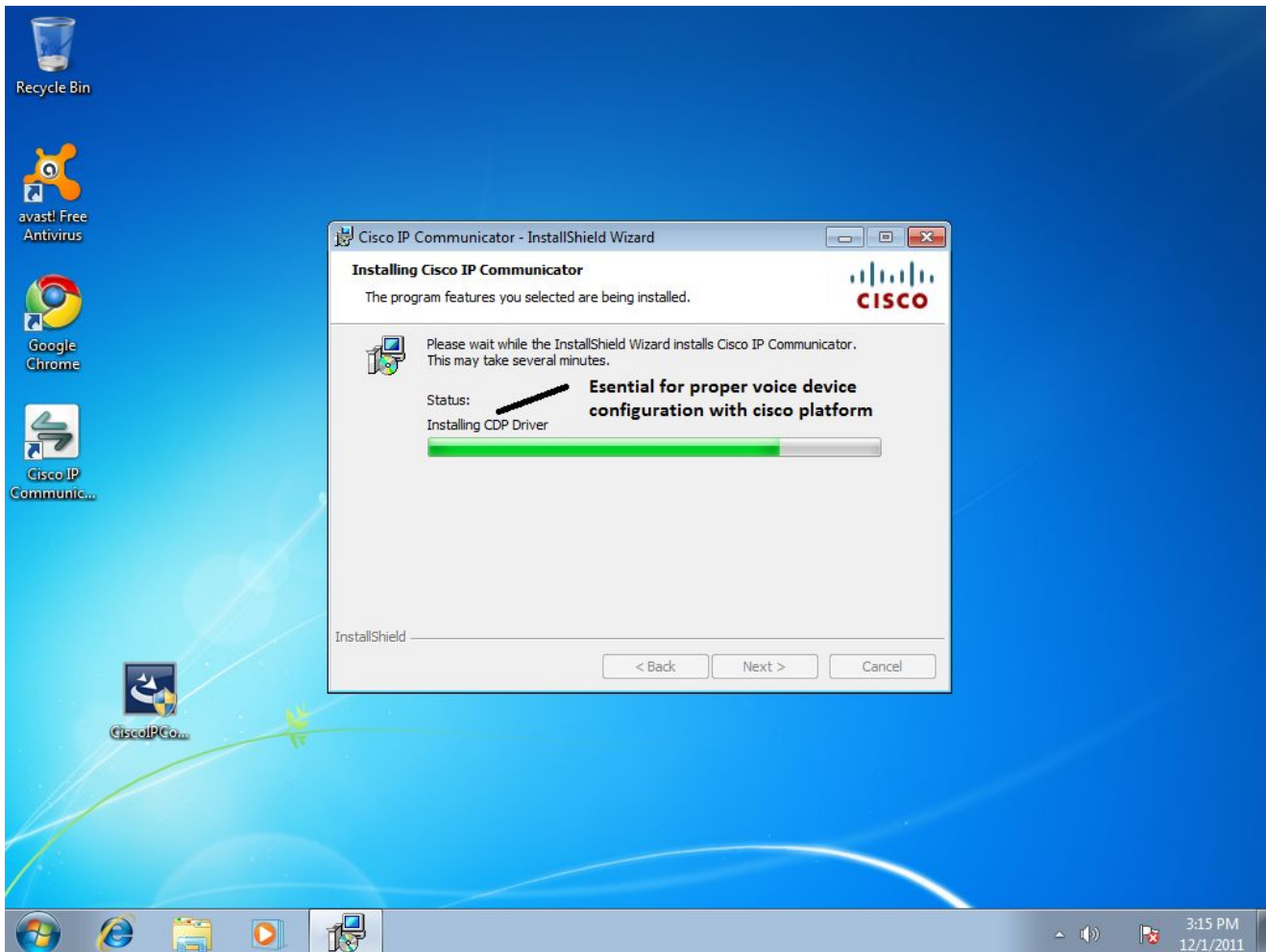
3) *Configure IP address in hosted PC* (in our scenario we used 172.16.0.15/24 and 172.16.0.1 as default gateway) -address assignment must be derived from your home network config – CME router and ephones are in this simple scenario in same subnet.

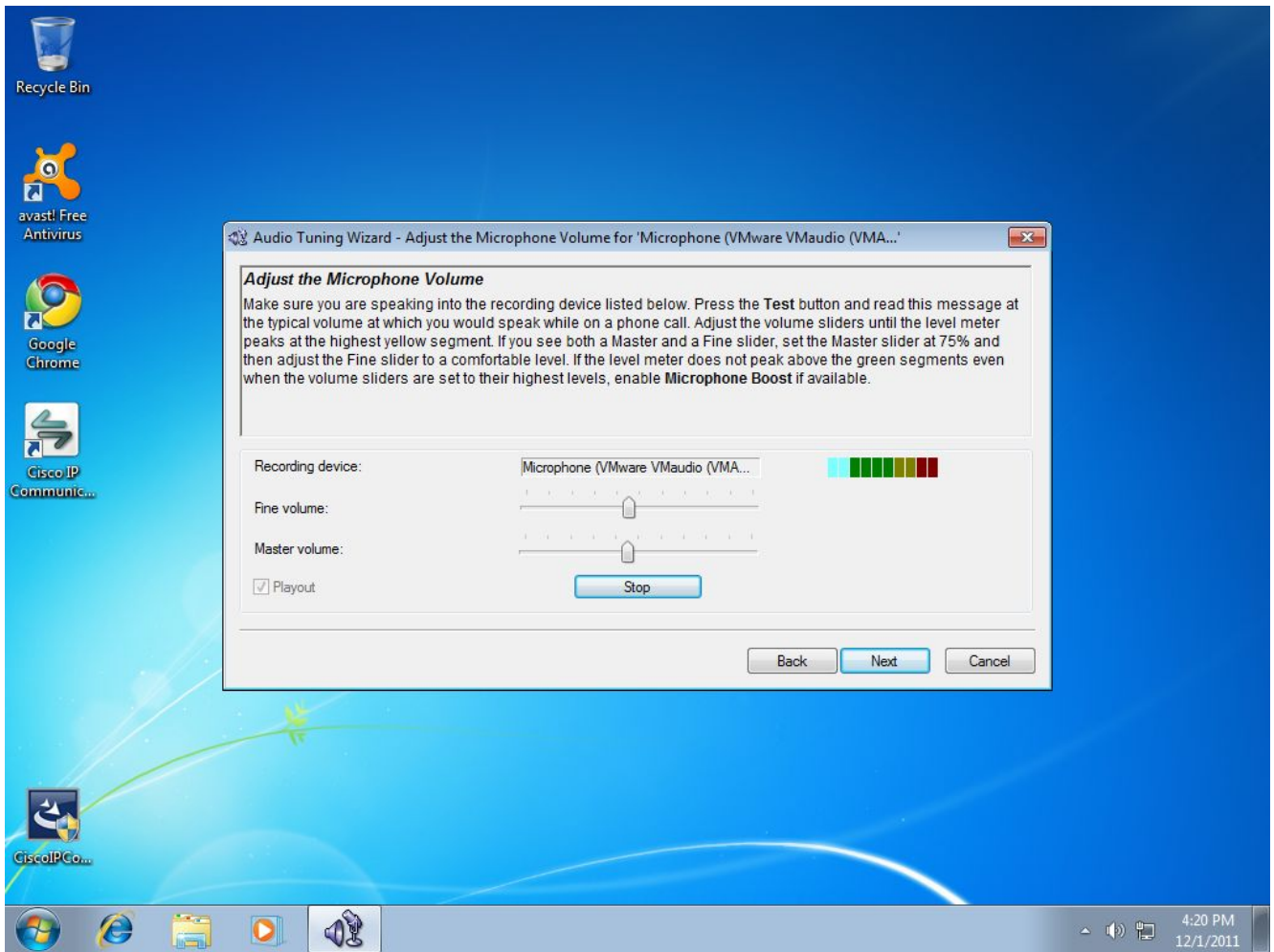


4) *Verification of local stack* and connectivity with CME router 172.16.0.20/24 from hosted PC (installed in VMware)



When we successfully configured network adapter bridging for hosted PC, next step is install and setup of cisco IP communicator:





When all is done, our testing home lab will look like this:

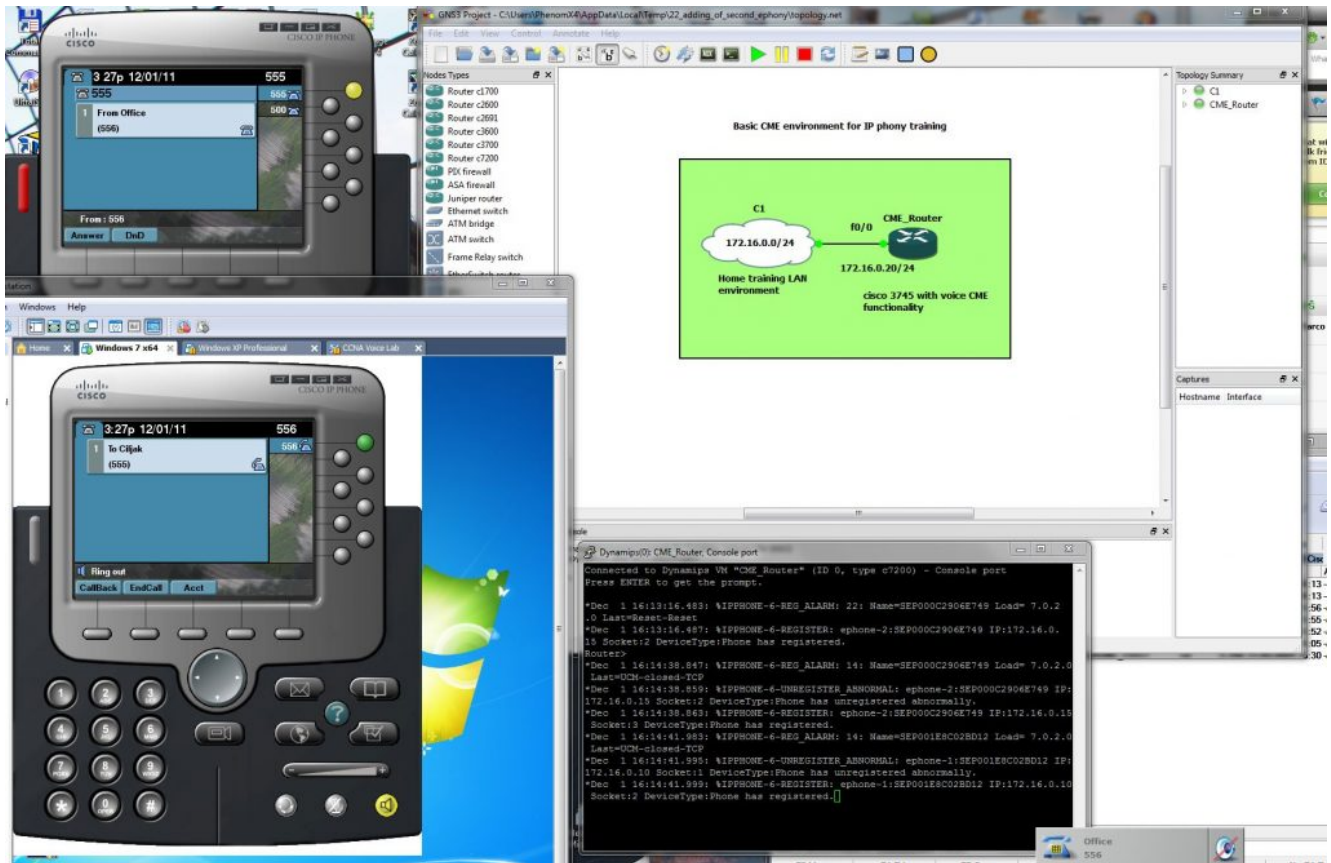


Ephone at top is installed in hosting PC with 172.16.0.10/24 IP, bottom ephone installed in hosted (virtualized) PC with 172.16.0.15/24 IP and GNS emulated cisco IOS with telephony service has its fa0/0 interface configured with ip 172.16.0.20/24 and acting as CME router (voice gateway).

Our first tested config (it will be explained in next articles) is

```
ephone-dn 1
  number 555
  name Ciljak
!
!
ephone-dn 2
  number 556
  name Office
!
ephone-dn 3
  number 500
!
ephone 1
  mac-address 001E.8C02.BD12
  type CIPC
  button 1:1,2f3
!
!
!
ephone 2
  mac-address 000C.2906.E749
  button 1:2
- some output was omitted
```

Now lets go for call placement from Office (bottom) ephone to Ciljak (me) top ephone:



Closer look at phones during call processing is:



For obtaining info about ephones and ephone-dn to buttons (lines) of physical ephone use #show ephone CLI command:

```
Dynamips(0): CME_Router, Console port

Router#show ephone

ephone-1[0] Mac:001E.8C02.BD12 TCP socket:[2] activeLine:1 whisperLine:0 REGISTERED in SCCP ver 15/12 max_streams=5
mediaActive:1 whisper_mediaActive:0 startMedia:1 offhook:1 ringing:0 reset:0 reset_sent:0 paging 0 debug:0 caps:10
IP:172.16.0.10 62673 CIPC keepalive 12 max_line 8 available_line 8
button 1: dn 1 number 555 CH1 CONNECTED
button 2: dn 3 number 500 CH1 IDLE feature-ring
Preferred Codec: g711ulaw
Active Call on DN 1 chan 1 :555 172.16.0.10 24576 to 172.16.0.15 24576 via 172.16.0.10
G711Ulaw64k 160 bytes no vad
Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Jitter 0 Latency 0 callingDn 2 calledDn -1

ephone-2[1] Mac:000C.2906.E749 TCP socket:[3] activeLine:1 whisperLine:0 REGISTERED in SCCP ver 15/12 max_streams=5
mediaActive:1 whisper_mediaActive:0 startMedia:1 offhook:1 ringing:0 reset:0 reset_sent:0 paging 0 debug:0 caps:10
IP:172.16.0.15 49291 CIPC keepalive 11 max_line 8 available_line 8
button 1: dn 2 number 556 CH1 CONNECTED
Preferred Codec: g711ulaw
Active Call on DN 2 chan 1 :556 172.16.0.15 24576 to 172.16.0.10 24576 via 172.16.0.15
G711Ulaw64k 160 bytes no vad
Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Jitter 0 Latency 0 callingDn -1 calledDn 1

Router#
```