

Install GNS3 on Windows XP

Application: GNS3

Submitted By: Oğlum AVD için; oglumavdicin@gmail.com and friend Roman

Date: 11/23/08

Rev: 1.0

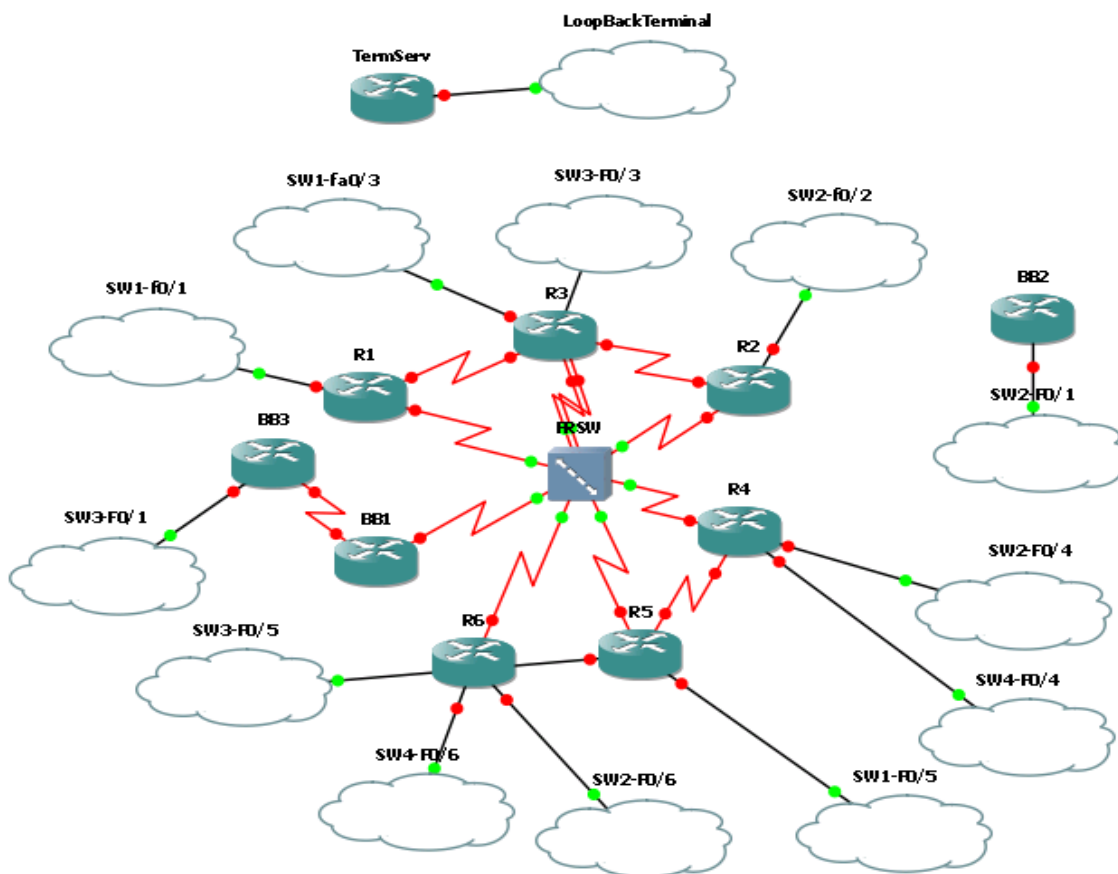
Network Location: <http://www.gns3.net/phpBB/howtos-f10.html>

Prerequisite: Install GNS3 © and minimum XP SP1A.

Overview: Install GNS3 on Windows XP, connect to real switches, frame switch, Load-Balance hypervisor with GNS3, simple network topology, and screen prints ...more.

THIS PROCEDURE MADE UP WITHIN MULTIPLE PARTS:

1. Directory structure
2. GNS3 configurations
3. Configure Hypervisor
4. Edit Dynamips on the client
5. Edit Dynamips on the Server
6. Start Dynamips on SVR and Client
7. Start GNS3 and create simple topology



PART 1: DIRECTORY STRUCTURES

Step → 1: Directory to work with... etc.

let's create some directories in the server, remote PC and call it "GNS3"

Server: C:\GNS3 and remote pc(s): C:\GNS3

Step → 2: Image directory... etc.

Server: C:\GNS3\images\ and remote pc(s): C:\GNS3\images\

Copy all the images you are planning use to both **directories**

Step → 3: Folder for "work area" ... etc.

Server: C:\GNS3\workarea\ and remote pc(s): C:\GNS3\workarea\

Step → 4: Folder for router initial configurations... etc.

Server: C:\GNS3\inital_config\ and remote pc(s): C:\GNS3\inital_config\

Step → 5: Folder for Dynamips work area... etc.

Server: C:\GNS3\workarea\dynamips-work-dir\ and remote pc(s): C:\GNS3\workarea\dynamips-work-dir\

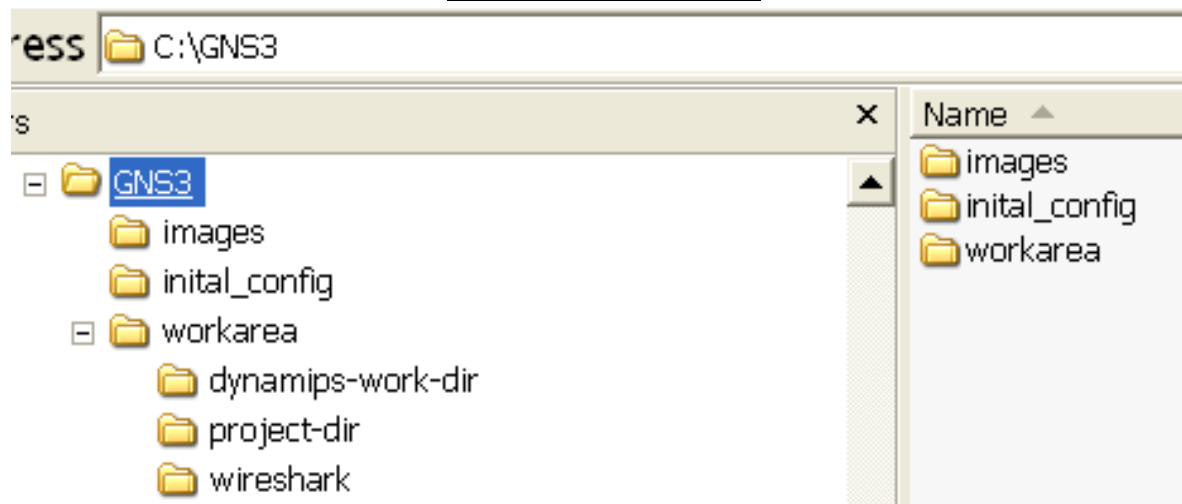
Step → 6: Folder for your project directory... etc.

Server: C:\GNS3\workarea\project-dir\ and remote pc(s): C:\GNS3\workarea\project-dir\

Step → 7: Folder for capture directory... etc.

Server: C:\GNS3\workarea\wireshark\ and remote pc(s): C:\GNS3\workarea\wireshark\

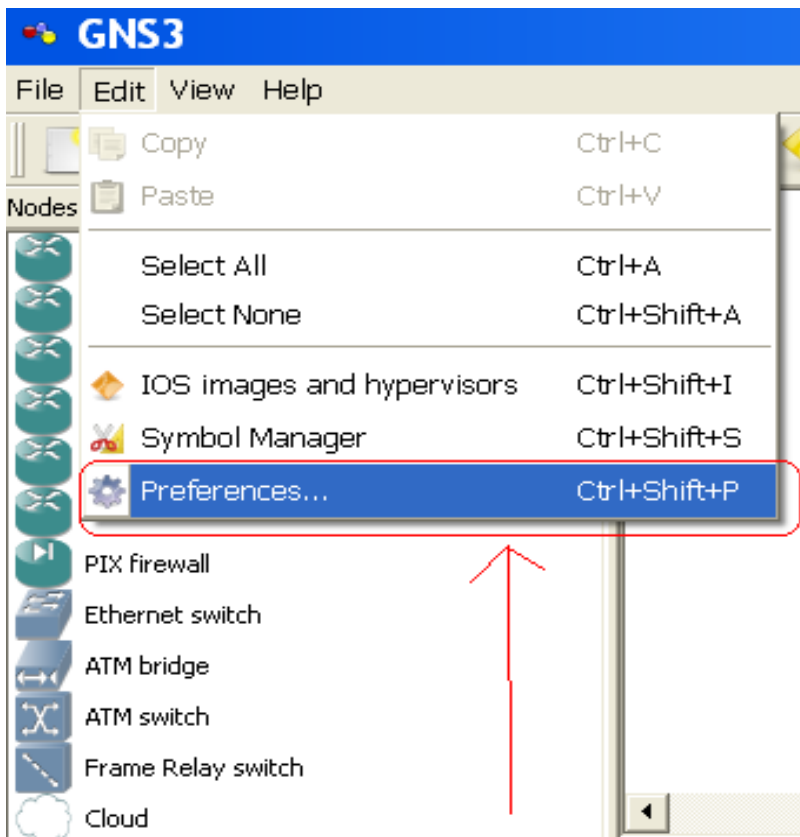
Your directory should look like this or what is best works for you...



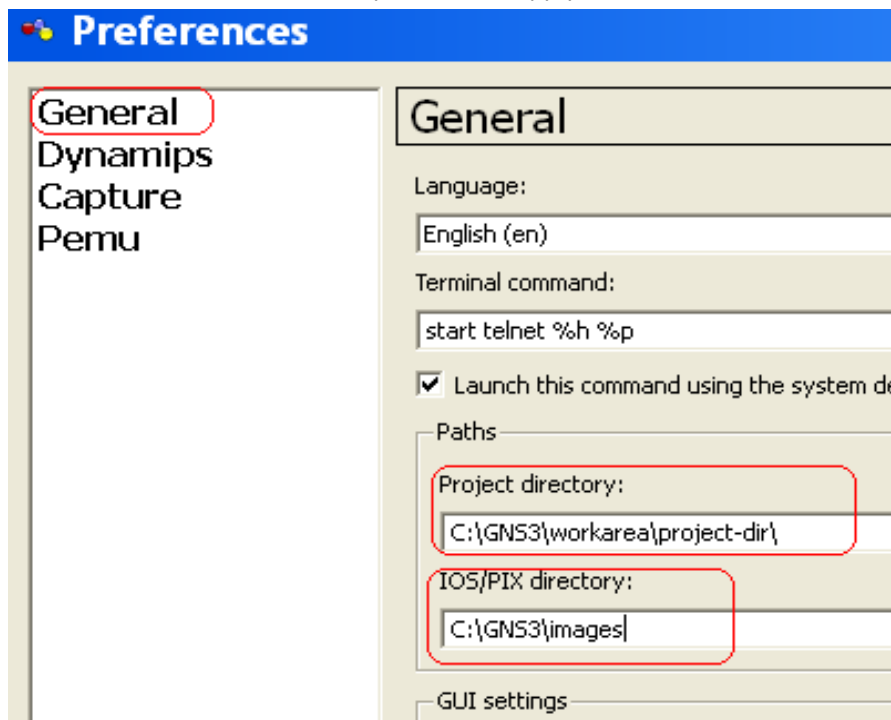
PART 2: CONFIGURE GNS3

Step → 1: Configure Preferences General... etc.

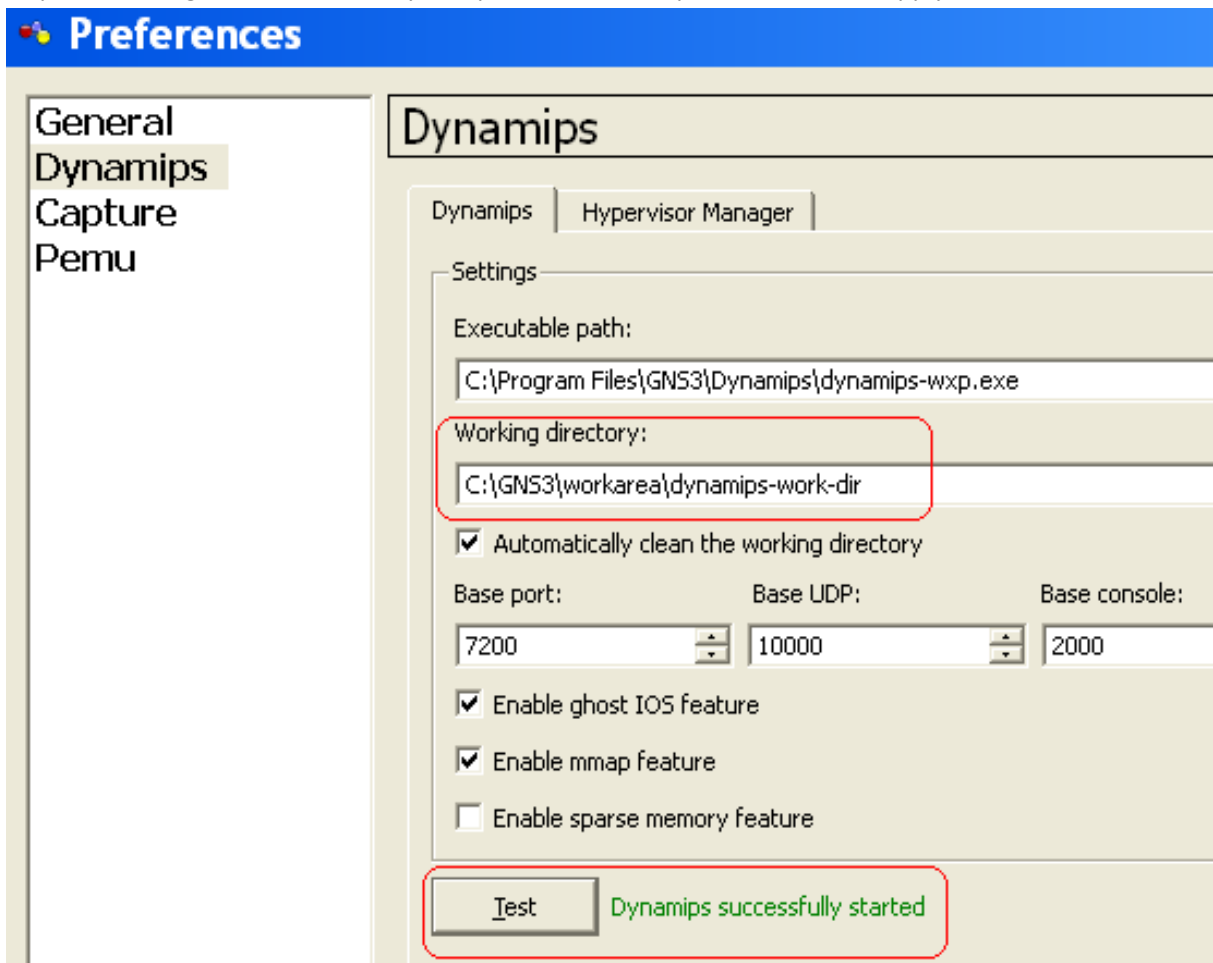
Select → Edit → Preferences



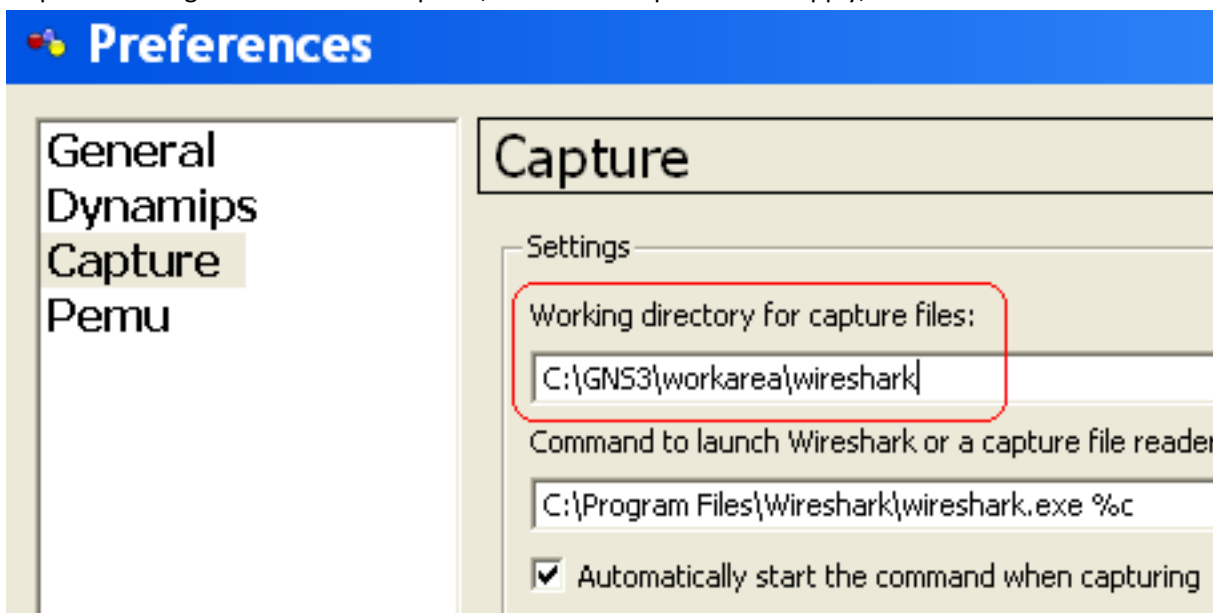
Select → General; fill out the required fields apply, OK.



Step → 2: Configure Preferences Dynamips; fill out the required fields, test, apply and OK.

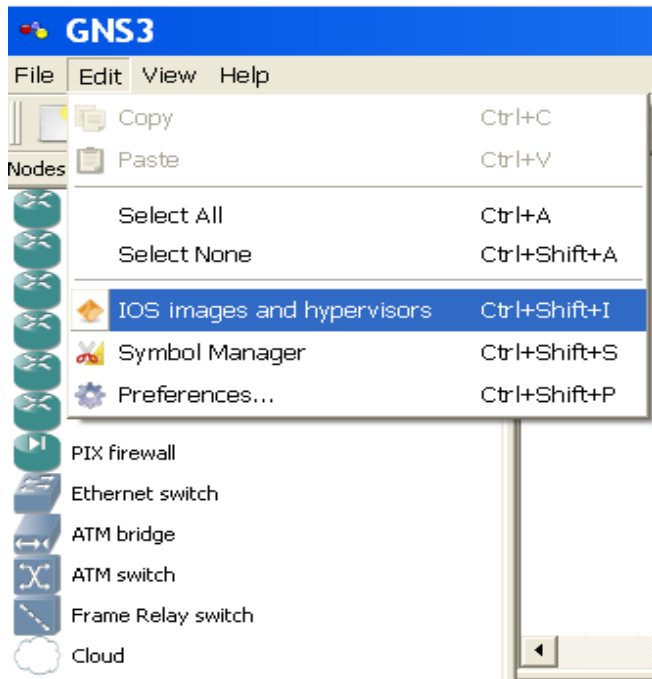


Step → 3: Configure Preferences Capture; fill out the required fields apply, OK.

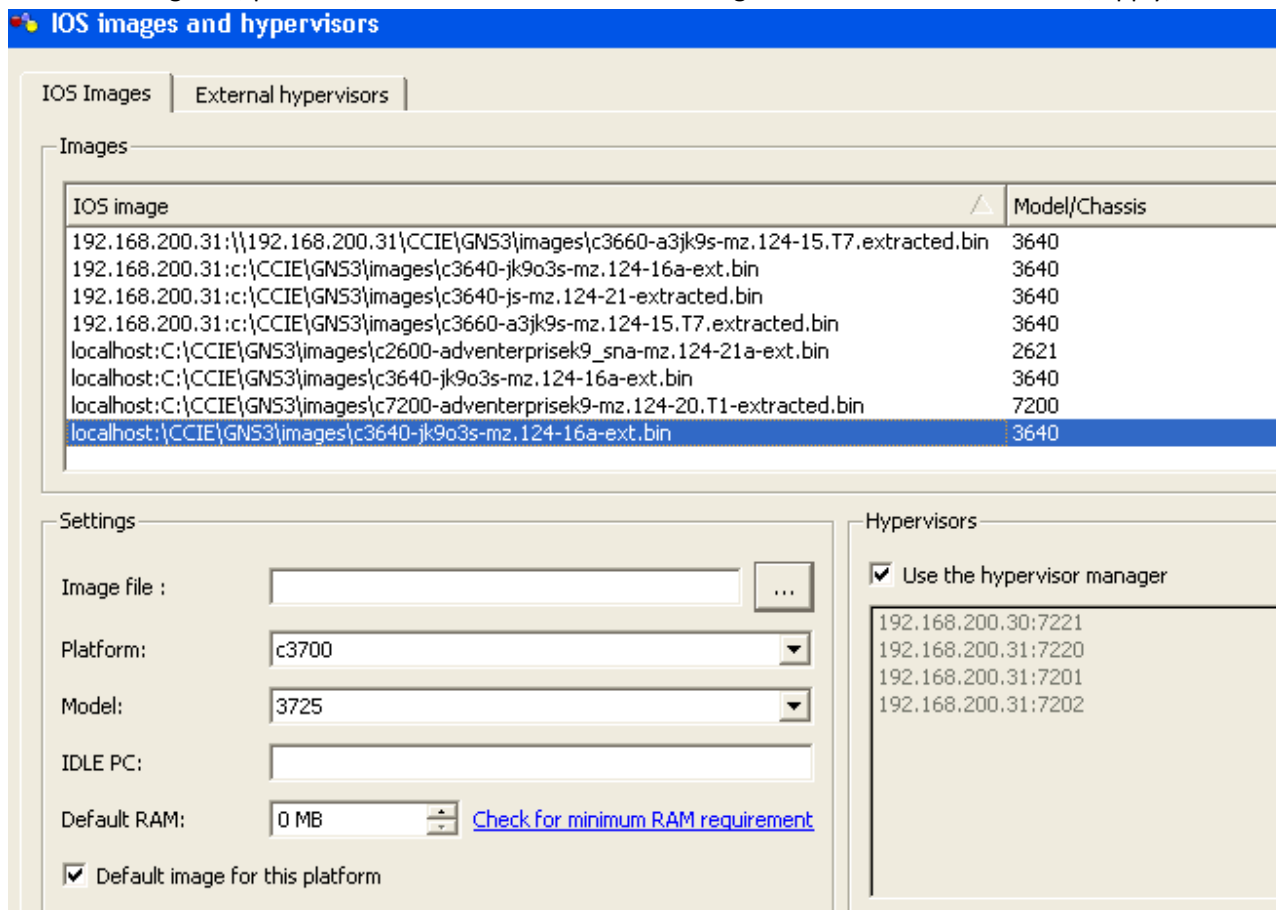


Step → 4: Configure hypervisor..... etc.

Select; Edit → IOS images and hypervisor



Select the image file, platform, model and uncheck default image... box and leave rest default, apply, OK.



PART 3: CONFIGURE HYPERVISOR

Step → 1: Configure hypervisor... etc.

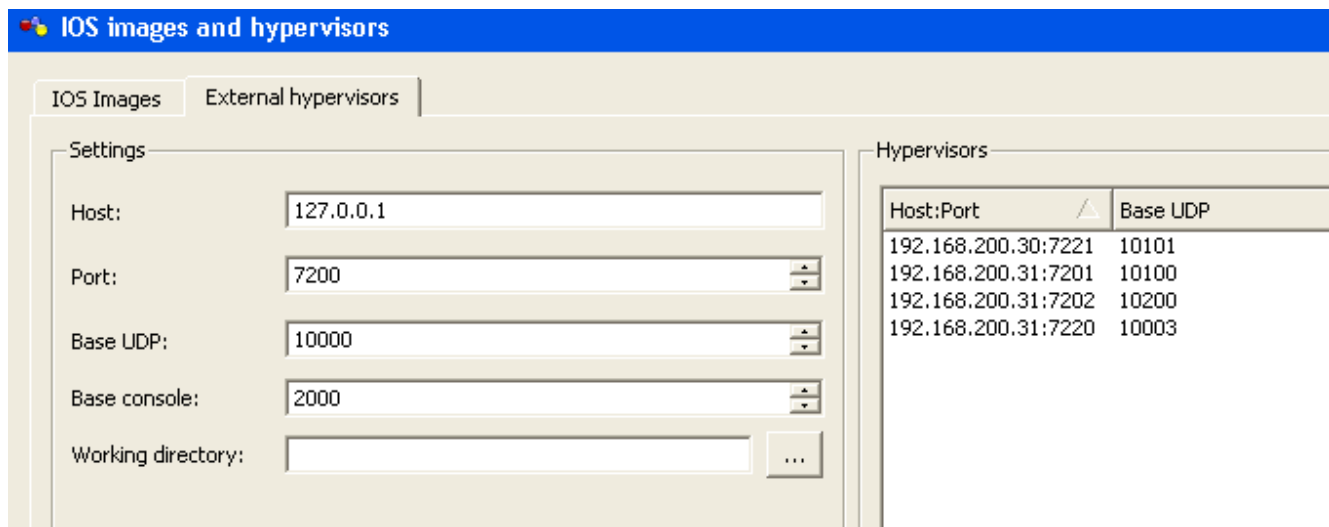
Select; Edit → IOS images and hypervisor and click on “External Hypervisor” tab

Host: Your remote PC, to add more host, simply follow same steps, change IP, Port, UDP and console port

Note: XP SP2 or SP3 users; either turn of your firewall or create exceptions for dynamips and ports!

Select; Start → Control Panel → Windows Firewall; click on Exception tab. Click on “Add Program” for dynamips and click on “Add Port”

→ After filling out rest of the fields, click on “save” and click on “IOS Images” tab

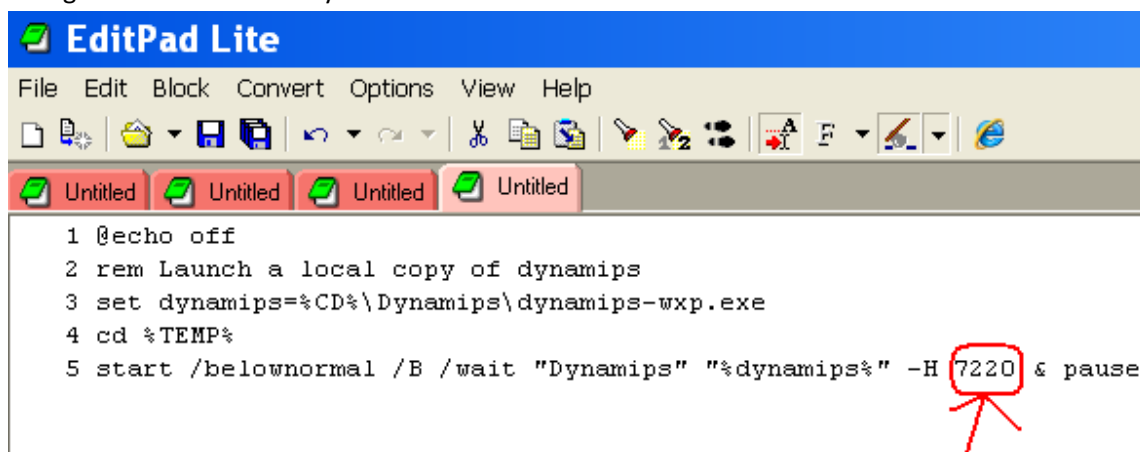


PART 4: EDIT DYNAMIPS FILE ON THE CLIENT

Step → 1: Remote or login the remote PC and → Start → Run → type “C:\Program Files\GNS3\”

Find “dynamips-start.cmd” edit with your favorite editor;

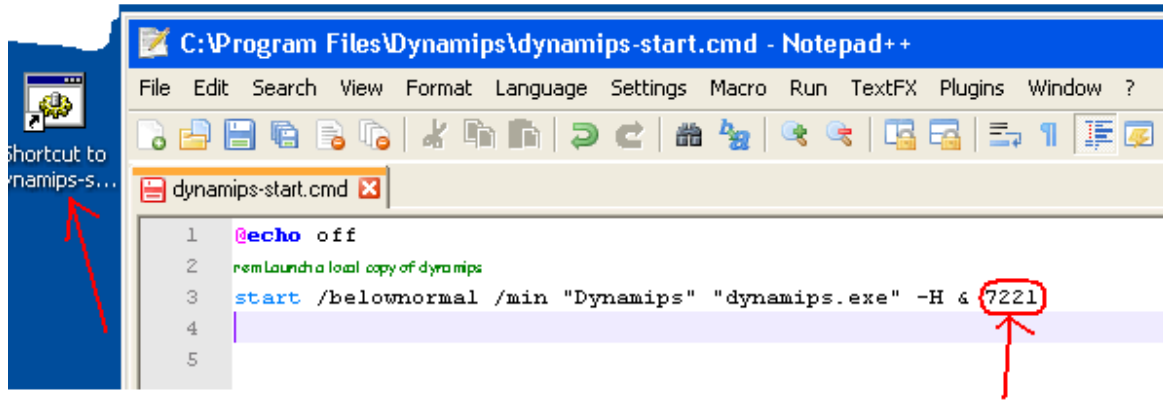
Change line five where it says 7200 to 7220



Recommend creating a shortcut for “dynamips-start.cmd” to on your desktop, because your going to use this quite frequently because everything stop the router, you need to shutdown and restart it ☺

PART 5: EDIT DYNAMIPS FILE ON SERVER

Step → 1: Remote or login the remote PC and →Start → Run →type “C:\Program Files\GNS3\”
Find “dynamips-start.cmd” edit with your favorite editor;
Change line five where it says 7200 to 7221



Recommend creating a shortcut for “dynamips-start.cmd” to on your desktop, because your going to use this quite frequently because everything stop the router, you need to shutdown and restart it ☺

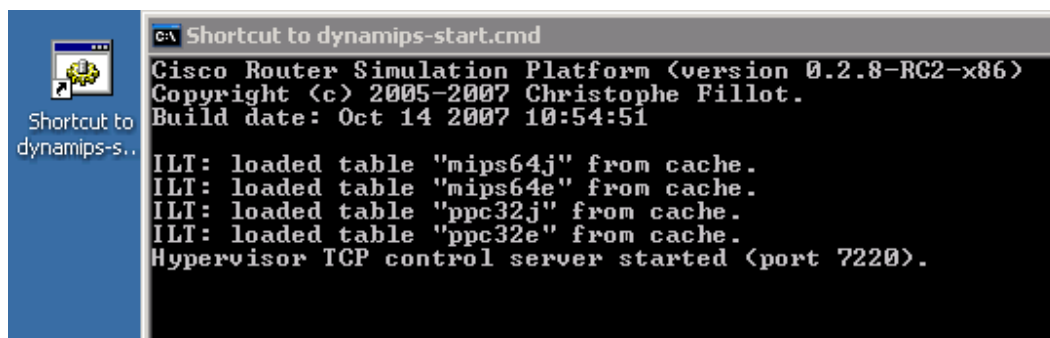
PART 6: START DYNAMIPS ON SERVER AND CLIENT

Server:

Step → 1: Double on dynamips shortcut on the server’s desktop;

Clients:

Step → 2: Double on dynamips shortcut on the remote PC’s desktop;



PART 7: START GNS3 ON THE SERVER AND CREATE SIMPLE TOPOLOGY

Step → 1: Start GNS3 on the Server;

Step → 2: Drag and drop router....

Step → 3: Select one router from Server and the other router from Remote as shown here...

Or sample.net

utostart = False

[192.168.200.30:7221]

workingdir = C:\CCIE\GNS3\workarea\dynamip-work-dir

udp = 10100

[[3640]]

image = c:\CCIE\GNS3\images\c3640-jk9o3s-mz.124-16a-ext.bin

idlepc = 0x6050a078

chassis = 3640

[[ROUTER SVR-R1]]

model = 3640

console = 2004

slot0 = NM-4E

e0/0 = Remote-R1 e0/0

[192.168.200.31:7220]

workingdir = <\\192.168.200.31\CCIE\GNS3\remote-work>

[[3640]]

image = c:\CCIE\GNS3\images\c3640-js-mz.124-21-extracted.bin

idlepc = 0x60431368

chassis = 3640

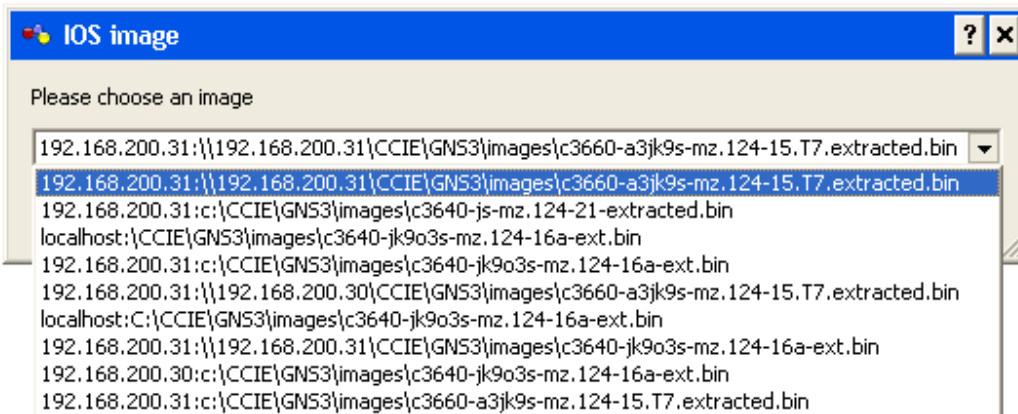
[[ROUTER Remote-R1]]

model = 3640

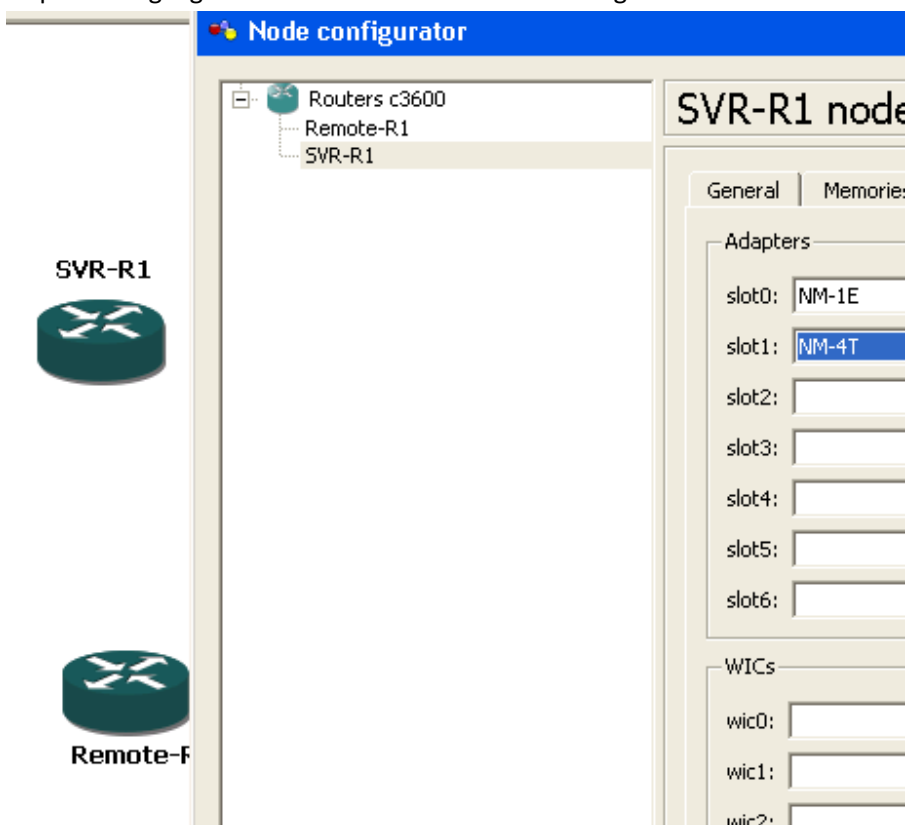
console = 2003

slot0 = NM-4E

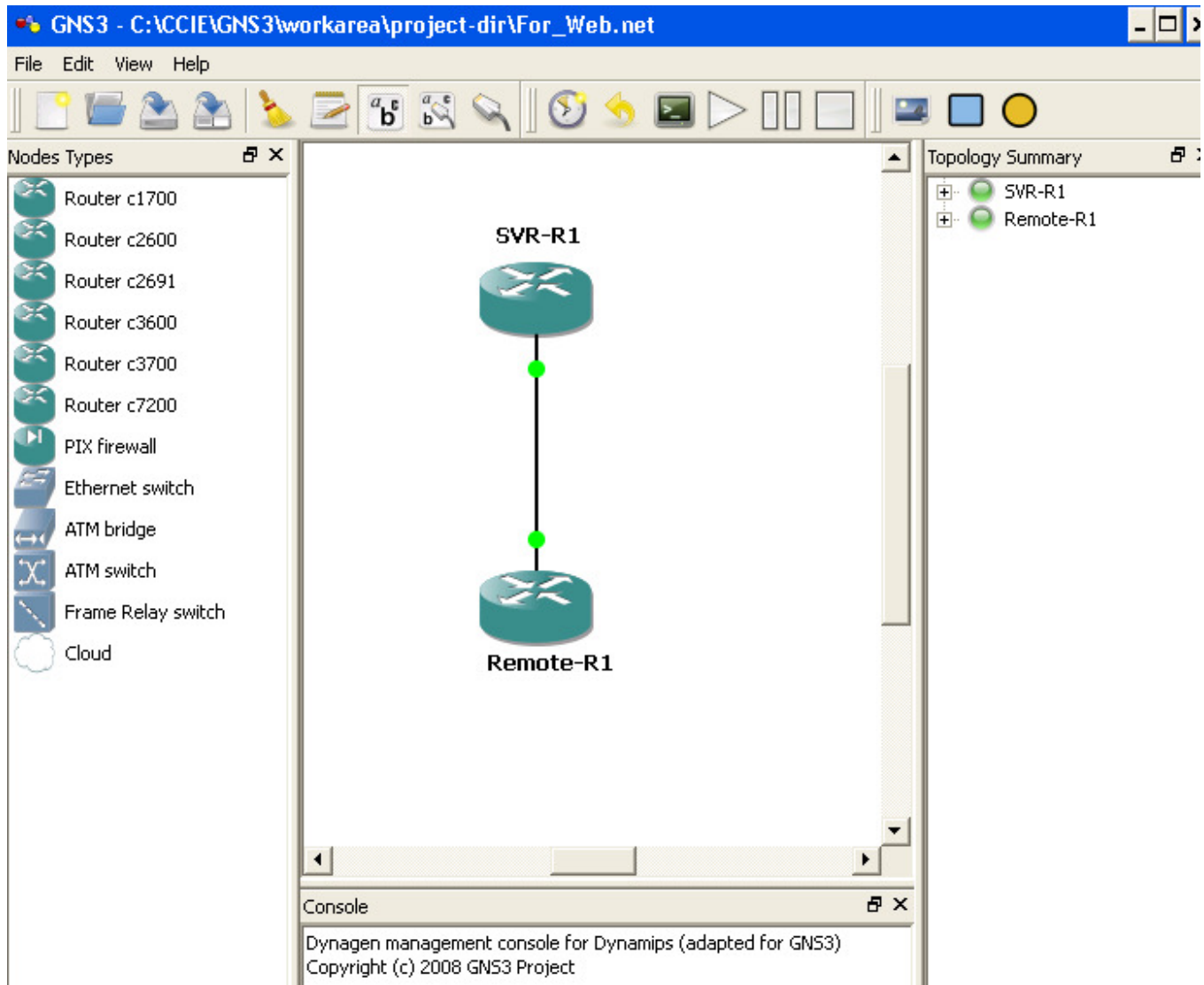
e0/0 = SVR-R1 e0/0



Step → 4: Highlight both the routers and select configure..



Step → 5: Connect them together using Ethernet interface and start...



Step → 6: Check your Local Dynamips status

```
isco Router Simulation Platform (version 0.2.8-RC2-x86)
copyright (c) 2005-2007 Christophe Fillot.
build date: Nov  9 2007 09:54:39

LT: loaded table "mips64j" from cache.
LT: loaded table "mips64e" from cache.
LT: loaded table "ppc32j" from cache.
LT: loaded table "ppc32e" from cache.
Supervisor TCP control server started (port 7221).
Shutdown in progress...
Shutdown completed.
PU0: carved JIT exec zone of 16 Mb into 512 pages of 32 Kb.
URAM is empty, setting config register to 0x2142
3600 instance 'SUR-R1' (id 0):
  VM Status   : 0
  RAM size    : 128 Mb
  NURAM size  : 128 Kb
  Chassis     : 3640
  IOS image   : c:\CCIE\GNS3\images\c3640-jk9o3s-mz.124-16a-ext.bin

Loading ELF file 'c:\CCIE\GNS3\images\c3640-jk9o3s-mz.124-16a-ext.bin'...
ELF entry point: 0x80008000
3600 'SUR-R1': starting simulation (CPU0 PC=0xffffffffbfc00000), JIT enabled
```

Step → 7: Check your Remote Dynamips status;

```
c:\ Shortcut to dynamips-start.cmd
Copyright (c) 2005-2007 Christophe Fillot.
Build date: Oct 14 2007 10:54:51

ILT: loaded table "mips64j" from cache.
ILT: loaded table "mips64e" from cache.
ILT: loaded table "ppc32j" from cache.
ILT: loaded table "ppc32e" from cache.
Hypervisor TCP control server started (port 7220).
Shutdown in progress...
Shutdown completed.
CPU0: carved JIT exec zone of 16 Mb into 512 pages of 32 Kb.
NURAM is empty, setting config register to 0x2142
C3600 instance 'Remote-R1' (id 1):
  UM Status   : 0
  RAM size    : 128 Mb
  NURAM size  : 128 Kb
  Chassis     : 3640
  IOS image   : c:\CCIE\GNS3\images\c3640-js-mz.124-21-extracted.bin

Loading ELF file 'c:\CCIE\GNS3\images\c3640-js-mz.124-21-extracted.bin'...
ELF entry point: 0x80008000

C3600 'Remote-R1': starting simulation (CPU0 PC=0xffffffffbfc00000), JIT enabled
```

SPECIAL THANKS to GNS3 TEAM!!!

Let me know if you have any suggestion or comments and good luck everybody!!!

I hope this is helpful

Oğlumavd ☺