

Internetnetwork Expert's CCIE Routing & Switching Dynamips Hardware Specification

The following document outlines the “physical” topology used in Internetnetwork Expert's CCIE Routing & Switching Dynamips Lab Workbook. For more information refer to the Dynagen .net files from “Using Dynamips for CCIE Lab Preparation” located at: <http://www.internetnetworkexpert.com/resources/dynamips.htm>.

This topology mapping can be used for all Internetnetwork Expert CCIE R&S products and classes, as only the logical topology changes between lab exercises. While the real hardware specification uses six routers running 12.4 IOS, two Catalyst 3560s, and two Catalyst 3550s, the Dynamips topology emulates this hardware by using all 3640 series routers. Switching functionality is emulated using the NM-16ESW EtherSwitch module, and does not support all features tested on in the Catalyst 3550 and 3560 series switches.

For more information on the Dynamips project visit:

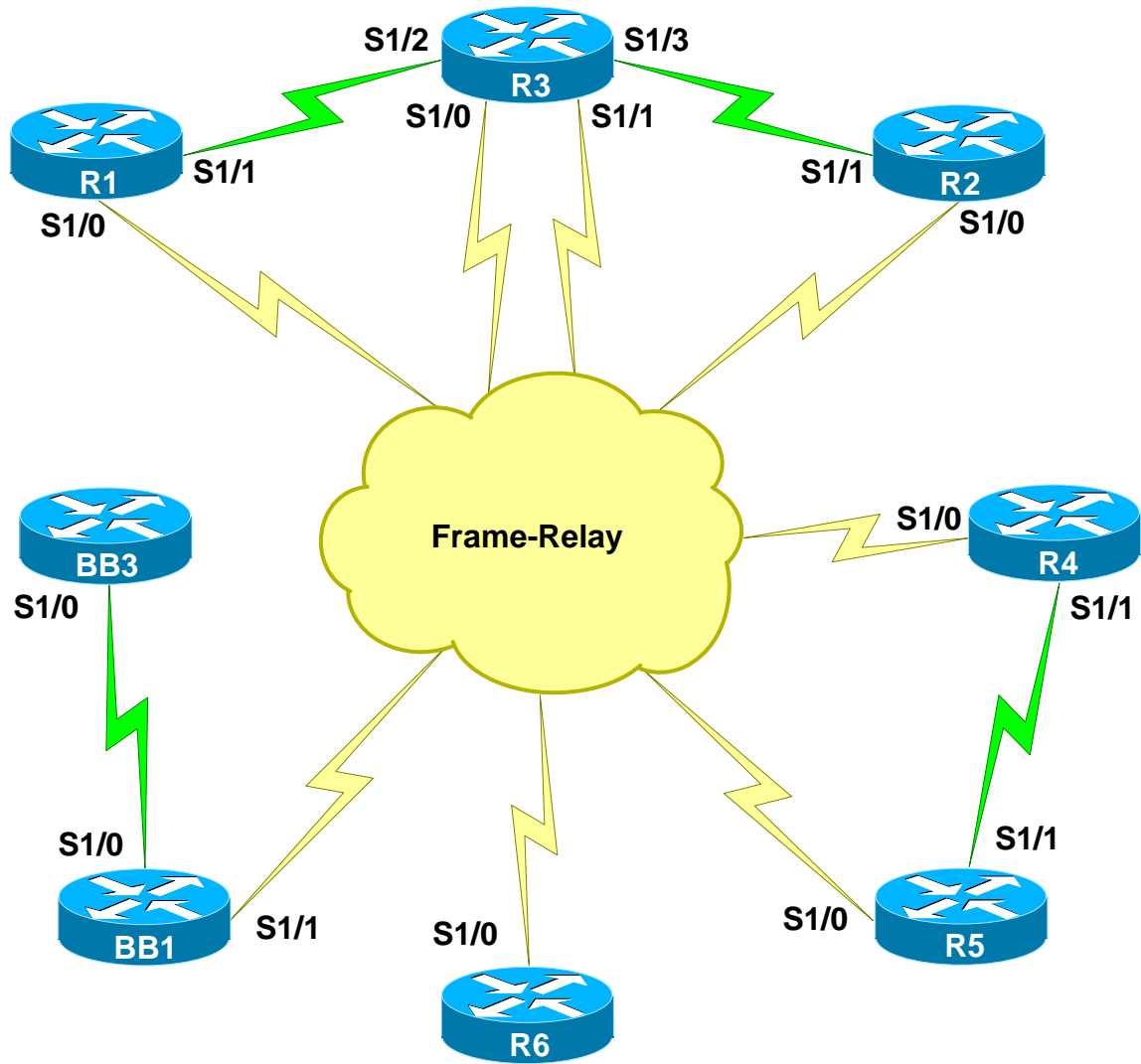
Official Dynamips Homepage: http://www.ipflow.utc.fr/index.php/Cisco_7200_Simulator

Official Dynagen Homepage: <http://dyna-gen.sourceforge.net/>

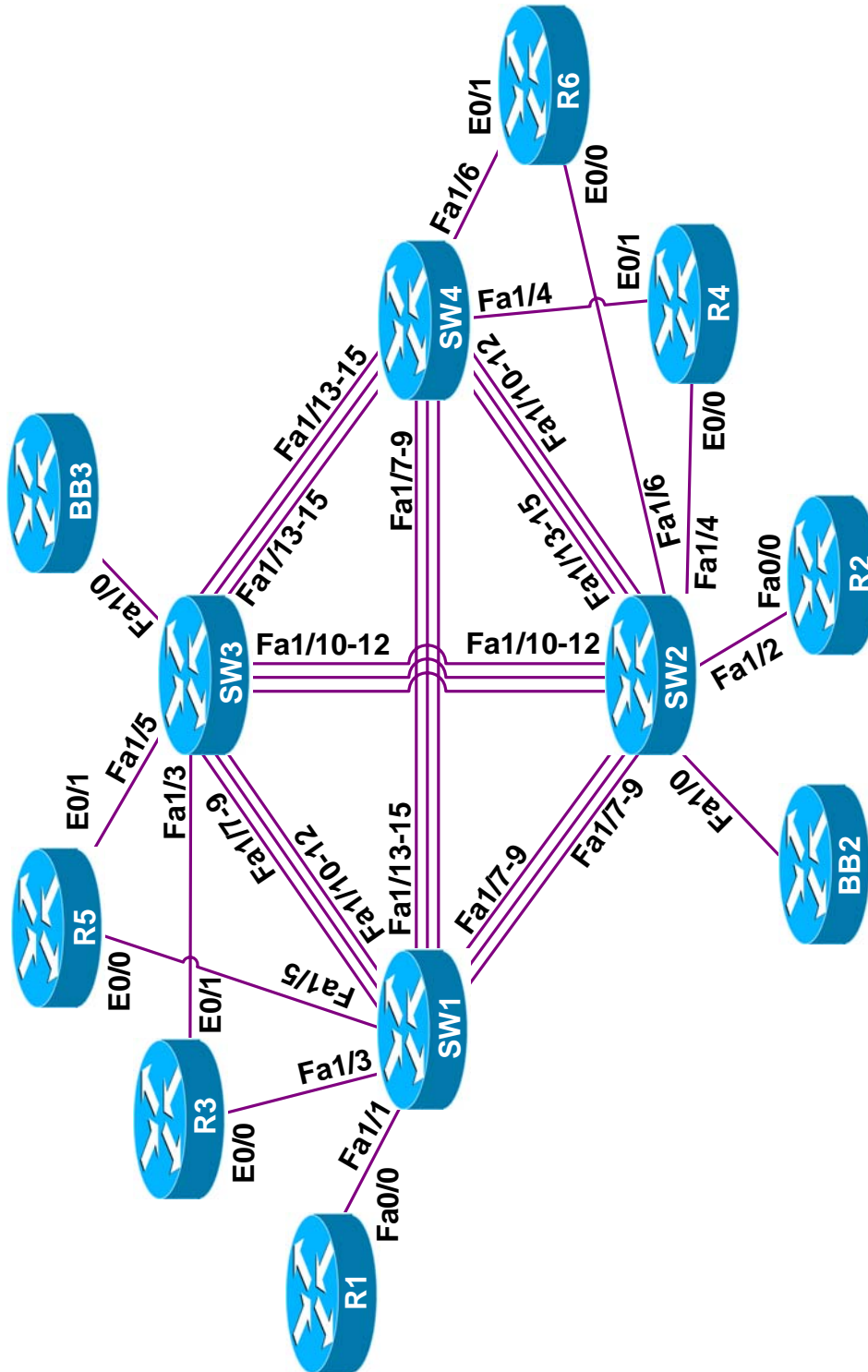
Hacki's Dynamips Support Forum: <http://7200emu.hacki.at/>

Internetnetwork Expert's Discussion Forum: <http://forum.internetnetworkexpert.com>

Dynamips WAN Cabling



Dynamips LAN Cabling



Dynamips Interface Connections

Frame Relay Switch Configuration					
Local Router	Local Interface	Local DLCI	Remote Router	Remote Interface	Remote DLCI
R1	S1/0	102	R2	S0/0	201
R1	S1/0	103	R3	S1/0	301
R1	S1/0	113	R3	S1/1	311
R1	S1/0	104	R4	S0/0	401
R1	S1/0	105	R5	S0/0	501
R2	S1/0	202	R1	S0/0	102
R2	S1/0	203	R3	S1/0	302
R2	S1/0	213	R3	S1/1	312
R2	S1/0	204	R4	S0/0	402
R2	S1/0	205	R5	S0/0	502
R3	S1/0	301	R1	S0/0	103
R3	S1/0	302	R2	S0/0	203
R3	S1/0	304	R4	S0/0	403
R3	S1/0	305	R5	S0/0	503
R3	S1/1	311	R1	S0/0	113
R3	S1/1	312	R2	S0/0	213
R3	S1/1	314	R4	S0/0	413
R3	S1/1	315	R5	S0/0	513
R4	S1/0	401	R1	S0/0	104
R4	S1/0	402	R2	S0/0	204
R4	S1/0	403	R3	S1/0	304
R4	S1/0	413	R3	S1/1	314
R4	S1/0	405	R5	S0/0	504
R5	S1/0	501	R1	S0/0	105
R5	S1/0	502	R2	S0/0	205
R5	S1/0	503	R3	S1/0	305
R5	S1/0	513	R3	S1/1	315
R5	S1/0	504	R4	S0/0	405
R6	S1/0	51	BB1	S0	51
R6	S1/0	100	BB1	S0	100
R6	S1/0	101	BB1	S0	101
R6	S1/0	201	BB1	S0	201
R6	S1/0	301	BB1	S0	301
R6	S1/0	401	BB1	S0	401

Ethernet Connections			
Local Device	Local Interface	Remote Device	Remote Interface
R1	Fa0/0	SW1	Fa1/1
R2	Fa0/0	SW2	Fa1/2
R3	E0/0	SW1	Fa1/3
R3	E0/1	SW3	Fa1/3
R4	E0/0	SW2	Fa1/4
R4	E0/1	SW4	Fa1/4
R5	E0/0	SW1	Fa1/5
R5	E0/1	SW3	Fa1/5
R6	E0/0	SW2	Fa1/6
R6	E0/1	SW4	Fa1/6
SW1	Fa1/1	R1	Fa0/0
SW1	Fa1/3	R3	E0/0
SW1	Fa1/5	R5	E0/0
SW2	Fa1/2	R2	Fa0/0
SW2	Fa1/4	R4	E0/0
SW2	Fa1/6	R6	E0/0
SW2	Fa1/0	BB2	E0/0
SW3	Fa1/3	R3	E0/1
SW3	Fa1/5	R5	E0/1
SW3	Fa1/0	BB3	E0/0
SW4	Fa1/4	R4	E0/1
SW4	Fa1/6	R6	E0/1

Switch to Switch Connections			
Local Switch	Local Interface	Remote Switch	Remote Interface
SW1	Fa1/7	SW2	Fa1/7
SW1	Fa1/8	SW2	Fa1/8
SW1	Fa1/9	SW2	Fa1/9
SW1	Fa1/10	SW3	Fa1/7
SW1	Fa1/11	SW3	Fa1/8
SW1	Fa1/12	SW3	Fa1/9
SW1	Fa1/13	SW4	Fa1/7
SW1	Fa1/14	SW4	Fa1/8
SW1	Fa1/15	SW4	Fa1/9
Local Switch	Local Interface	Remote Switch	Remote Interface
SW2	Fa1/7	SW1	Fa1/7
SW2	Fa1/8	SW1	Fa1/8
SW2	Fa1/9	SW1	Fa1/9
SW2	Fa1/10	SW3	Fa1/10
SW2	Fa1/11	SW3	Fa1/11
SW2	Fa1/12	SW3	Fa1/12
SW2	Fa1/13	SW4	Fa1/10
SW2	Fa1/14	SW4	Fa1/11
SW2	Fa1/15	SW4	Fa1/12
Local Switch	Local Interface	Remote Switch	Remote Interface
SW3	Fa1/7	SW1	Fa1/10
SW3	Fa1/8	SW1	Fa1/11
SW3	Fa1/9	SW1	Fa1/12
SW3	Fa1/10	SW2	Fa1/10
SW3	Fa1/11	SW2	Fa1/11
SW3	Fa1/12	SW2	Fa1/12
SW3	Fa1/13	SW4	Fa1/13
SW3	Fa1/14	SW4	Fa1/14
SW3	Fa1/15	SW4	Fa1/15
Local Switch	Local Interface	Remote Switch	Remote Interface
SW4	Fa1/7	SW1	Fa1/13
SW4	Fa1/8	SW1	Fa1/14
SW4	Fa1/9	SW1	Fa1/15
SW4	Fa1/10	SW2	Fa1/13
SW4	Fa1/11	SW2	Fa1/14
SW4	Fa1/12	SW2	Fa1/15
SW4	Fa1/13	SW3	Fa1/13
SW4	Fa1/14	SW3	Fa1/14
SW4	Fa1/15	SW3	Fa1/15