USC

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ISI.DETERLAB.NET: New Experiment Started: USC558L/LabTwo

testbed-ops@isi.deterlab.net <testbed-ops@isi.deterlab.net> Fri, Aug 31, 2012 at 7:38 PM
To: Supriya Singh <sc558bf@isi.deterlab.net>

Your experiment `LabTwo' in project `USC558L' has been started.
Here is the experiment summary detailing the nodes that were
allocated to you. You may use the `Qualified Name' to log on
to your nodes. See /etc/hosts on your nodes (when running
FreeBSD, Linux, or NetBSD) for the IP mapping on each node.

User: Supriya Singh
EID: LabTwo
PID: USC558L
GID: USC558L
Description: Advanced Deter Lab
Swappable: Yes
Idle-Swap: Yes, at 4 hours
Auto-Swap: Yes, at 12 hours
Created: 2012-08-31 19:33:36
Directory: /proj/USC558L/exp/LabTwo

Appended at the end is the output of the experiment setup. If you
have any questions or comments, please include the output below
in your message to testbed-ops@isi.deterlab.net

--------- report --------
Experiment: USC558L/LabTwo
State: active

Virtual Node Info:

ID	Type	OS	Qualified Name
nodeA	pc		nodeA.LabTwo.USC558L.isi.deterlab.net
nodeB	pc		nodeB.LabTwo.USC558L.isi.deterlab.net

Physical Node Mapping:

ID	Type	OS	Physical
nodeA	pc3000	Ubuntu1204-64-STD	pc113
nodeB	pc3000	Ubuntu1204-64-STD	pc135
tbdelay0	pc3000	FBSD62-STD	pc134

Virtual Lan/Link Info:

ID	Member/Proto	IP/Mask	Delay	BW (Kbs)	Loss Rate
link0	nodeA:0	10.1.1.2	0.00	100000	0.00000000
	ethernet	255.255.255.0	0.00	100000	0.00000000
link0	nodeB:0	10.1.1.3	0.00	100000	0.00000000
	ethernet	255.255.255.0	0.00	100000	0.00000000

Physical Lan/Link Mapping:

ID	Member	IP	MAC	NodeID
link0	nodeA:0	10.1.1.2	00:0e:0c:68:a6:76	pc113
		0/1 <-> 6/1	HP10e2	
link0	nodeB:0	10.1.1.3	00:04:23:ae:cc:3c	pc135
		0/1 <-> 5/5	HP10e2	

Virtual Queue Info:

ID	Member	Q Limit	Type	weight/min_th/max_th/linterm
link0	nodeA:0	50 slots	GRED	0.004/7/20/11
link0	nodeB:0	100 slots	RED	0.002/5/15/10

Physical Delay Info:

ID	Member	Delay Node	Delay	BW (Kbs)	PLR	Pipe
link0	nodeA	tbdelay0	0.00	100000	0.00000000	110
link0	nodeB	tbdelay0	0.00	100000	0.00000000	120

Physical Queue Info:

ID	Member	Q Limit	Type	weight/min_th/max_th/linterm
link0	nodeA	50 slots	GRED	0.004/7/20/11
link0	nodeB	100 slots	RED	0.002/5/15/10
link0	nodeA	50 slots	GRED	0.004/7/20/11
link0	nodeB	100 slots	RED	0.002/5/15/10

Delay Node Switch Info:

ID	Member	Delay Node	Card/Port	Switch	Card/Port
link0	nodeA	tbdelay0	0/1 eth0	HP10e2	5/1
link0	nodeB	tbdelay0	1/1 eth1	HP10e2	5/2

--------- /usr/testbed/expwork/USC558L/LabTwo/startexp.dmdUKQ --------
Running 'tbprerun -e 29177 LabTwo.ns'
Beginning pre run for USC558L/LabTwo. 19:33:40:939233
Running parser ... 19:33:41:557624
Parser done! 19:33:45:433659
Precomputing visualization ...
Image rendering proceeding in background mode ...
Setting up static routes (if requested) ...
Generating topomap ...
Verifying parse ...
'red' != 'gred' in
ns: l nodeA nodeB 100000000 0.0000 0.000000 link0 red
db: l nodeA nodeB 100000000 0.0000 0.000000 link0 gred
*** ERROR: verify-ns: Topology verification failed!
Doing a pre-assign: '/usr/testbed/bin/vtopgen -p USC558L LabTwo' ...
Minimum nodes = 3
Maximum nodes = 3
Writing environment strings ...
Setting up additional program agent support ...
Setting up additional network agent support ...
Writing program agent info ...

Pre run finished. 19:33:51:387299
Running 'tbswap in USC558L LabTwo'
Beginning swap-in for USC558L/LabTwo (29177). 08/31/2012 19:33:52
TIMESTAMP: 19:33:52:104453 tbswap in started
Checking with Admission Control ...
Mapping to physical reality ...
TIMESTAMP: 19:33:52:137435 mapper wrapper started
Starting the new and improved mapper wrapper.
Clearing physical state before updating.
Minimum nodes   = 3
Maximum nodes   = 3
Assign run 1
ptopargs: '-p USC558L -e LabTwo '
assign command: 'assign -P USC558L-LabTwo-39094.ptop USC558L-LabTwo-39094.vtop'
Reading assign results.
  Creating VLAN cns29177 as VLAN #8 on HP4t1 ...
  Creating VLAN cns29177 as VLAN #8 on Bhp1 ...
  Creating VLAN cns29177 as VLAN #8 on HP10c1 ...
Succeeded
VLAN creation succeeded.
Could not signal(USR2) process 99647 for log pc113.run at /usr/testbed/sbin/console_setup.proxy line 136.
*** Failed: /usr/testbed/bin/sshtb -n serial4 /usr/testbed/sbin/console_setup.proxy pc135 USC558L pc113 USC558L pc134 USC558L: 768
WARNING: /usr/testbed/libexec/console_setup [Node: pc135] [Node: pc113] [Node: pc134] failed!
Successfully reserved all physical nodes we needed.
TIMESTAMP: 19:34:10:277250 mapper wrapper finished
Mapped to physical reality!
Fetching tarballs and RPMs (if any) ...
TIMESTAMP: 19:34:10:280218 tarfiles_setup started
TIMESTAMP: 19:34:10:953369 tarfiles_setup finished
TIMESTAMP: 19:34:10:955258 extra_nodes started
TIMESTAMP: 19:34:11:5504 extra_nodes finished
Setting up mountpoints.
TIMESTAMP: 19:34:11:6933 mountpoints started
TIMESTAMP: 19:34:17:867867 mountpoints finished
TIMESTAMP: 19:34:17:869401 portal_setup started
TIMESTAMP: 19:34:18:493599 portal_setup finished
TIMESTAMP: 19:34:18:495180 named started
Setting up named maps.
TIMESTAMP: 19:34:19:536328 named finished
TIMESTAMP: 19:34:19:538215 gentopofile started
Generating ltmap (again) ...
TIMESTAMP: 19:34:20:234442 gentopofile finished
Resetting OS and rebooting.
TIMESTAMP: 19:34:20:236692 launching os_setup
Setting up VLANs.
TIMESTAMP: 19:34:20:242986 snmpit started
TIMESTAMP: 19:34:20:742231 os_setup started
TIMESTAMP: 19:34:20:767783 rebooting/reloading nodes started
osload (pc134): Changing default OS to [OS 375: emulab-ops,FBSD62-STD]
Setting up reload for pc134 (mode: Frisbee)
  Creating VLAN 437036 as VLAN #34 on HP10e2 ...
reboot (pc113): Attempting to reboot ...
reboot (pc135): Attempting to reboot ...
reboot (pc113): Successful!
reboot (pc135): Successful!
reboot: Done. There were 0 failures.

reboot (pc135): child returned 0 status.
reboot (pc113): child returned 0 status.
osload: Issuing reboot for pc134 and then waiting ...
reboot (pc134): Attempting to reboot ...
reboot (pc134): Successful!
reboot: Done. There were 0 failures.
reboot (pc134): child returned 0 status.
  Creating VLAN 437037 as VLAN #27 on HP10e2 ...
TIMESTAMP: 19:34:30:977184 snmpit finished
Setting up email lists.
TIMESTAMP: 19:34:30:980025 genelists started
TIMESTAMP: 19:34:31:806601 genelists finished
Clearing port counters.
TIMESTAMP: 19:34:31:808985 portstats started
TIMESTAMP: 19:34:32:764178 portstats finished
osload (pc134): still waiting; it has been 1 minute(s)
osload: Done! There were 0 failures.
reload (pc134): child returned 0 status.
TIMESTAMP: 19:36:12:77042 rebooting/reloading finished
Waiting for local testbed nodes to finish rebooting ...
TIMESTAMP: 19:36:12:78907 Local node waiting started
pc135 is alive and well
Still waiting for pc134 - it's been 1 minute(s).
pc134 is alive and well
pc113 is alive and well
TIMESTAMP: 19:38:07:277843 Local node waiting finished
OS Setup Done.
TIMESTAMP: 19:38:07:285251 os_setup finished
Starting the event system.
TIMESTAMP: 19:38:07:503401 eventsys_control started
TIMESTAMP: 19:38:11:122152 eventsys_control finished
TIMESTAMP: 19:38:11:124246 setup_commercial_routers started in
TIMESTAMP: 19:38:11:599591 setup_commercial_routers: The experiment USC558L/LabTwo has no commercial routers allocated.

TIMESTAMP: 19:38:11:816759 setup_commercial_routers ended in
TIMESTAMP: 19:38:11:818179 Starting event time
Successfully finished swap-in for USC558L/LabTwo. 19:38:14:389265
TIMESTAMP: 19:38:14:390195 tbswap in finished (succeeded)
Running 'tbreport -b USC558L LabTwo'
Doing a savepoint on the experiment archive ...
Experiment USC558L/LabTwo has been successfully created!

--------- LabTwo.ns --------
```
source tb_compat.tcl
set ns [new Simulator]

# Create four nodes
set nodeA [$ns node]
set nodeB [$ns node]

# Create a RED duplex link
set link0 [$ns duplex-link $nodeA $nodeB 100Mb 0ms RED]

# Get the queue object for the nodeA/nodeb link and modify its RED params.
set queue0 [[$ns link $nodeA $nodeB] queue]
$queue0 set gentle_ 1
```

```
$queue0 set queue-in-bytes_ 0
$queue0 set limit_ 50
$queue0 set maxthresh_ 20
$queue0 set thresh_ 7
$queue0 set linterm_ 11
$queue0 set q_weight_ 0.004

# Create a UDP agent and attach it to nodeA
set udp0 [new Agent/UDP]
$ns attach-agent $nodeA $udp0

# Create a CBR traffic source and attach it to udp0
set cbr0 [new Application/Traffic/CBR]
$cbr0 set packetSize_ 500
$cbr0 set interval_ 0.005
$cbr0 attach-agent $udp0

# Create a TCP agent and attach it to nodeA
set tcp0 [new Agent/TCP]
$ns attach-agent $nodeA $tcp0

# Create a CBR traffic source and attach it to tcp0
set cbr1 [new Application/Traffic/CBR]
$cbr1 set packetSize_ 500
$cbr1 set interval_ 0.005
$cbr1 attach-agent $tcp0

# Create a Null agent (a UDP traffic sink) and attach it to node nodeB
set null0 [new Agent/Null]
$ns attach-agent $nodeB $null0

# Create a TCPSink agent (a TCP traffic sink) and attach it to node nodeB
set null1 [new Agent/TCPSink]
$ns attach-agent $nodeB $null1

# Connect the traffic sources with the traffic sinks
$ns connect $udp0 $null0
$ns connect $tcp0 $null1

# And some events.
$ns at 60.0  "$cbr0  start"
$ns at 70.0  "$link0 bandwidth 10Mb duplex"
$ns at 80.0  "$link0 delay 10ms"
$ns at 90.0  "$link0 plr 0.05"
$ns at 100.0 "$link0 down"
$ns at 110.0 "$link0 up"
$ns at 115.0 "$cbr0  stop"

$ns at 120.0 "$cbr1  start"
$ns at 130.0 "$cbr1  set packetSize_ 512"
$ns at 130.0 "$cbr1  set interval_ 0.01"
$ns at 140.0 "$link0 down"
$ns at 150.0 "$cbr1  stop"

#Run the simulation
$ns run
```