

// Fifth.cc

```
#include "ns3/core-module.h"
#include "ns3/network-module.h"
#include "ns3/csma-module.h"
#include "ns3/applications-module.h"
#include "ns3/internet-apps-module.h"
#include "ns3/internet-module.h"
#include "ns3/netanim-module.h"
using namespace ns3;

int
main ()
{
    std::string animFile="fifth.xml";

    NodeContainer nodes;
    nodes.Create (3);

    CsmaHelper csma;
    csma.SetChannelAttribute ("DataRate", DataRateValue
(DataRate (5000000)));
    csma.SetChannelAttribute ("Delay", TimeValue
(Milliseconds (2)));
    NetDeviceContainer devs = csma.Install (nodes);
```

```
InternetStackHelper ipStack;  
ipStack.Install (nodes);
```

```
Ipv4AddressHelper ip;  
ip.SetBase ("10.0.1.0", "255.255.255.0");  
Ipv4InterfaceContainer interface = ip.Assign (devs);
```

```
V4PingHelper ping = V4PingHelper  
(interface.GetAddress (2));  
NodeContainer pingers;  
pingers.Add (nodes.Get (0));  
pingers.Add (nodes.Get (1));  
ApplicationContainer apps = ping.Install (pingers);  
apps.Start (Seconds (2.0));  
apps.Stop (Seconds (5.0));
```

```
csma.EnablePcapAll ("csma-ping", true);
```

```
AnimationInterface anim(animFile);  
anim.SetConstantPosition(nodes.Get(0),10.0,60.0);  
anim.SetConstantPosition(nodes.Get(1),10.0,100.0);  
anim.SetConstantPosition(nodes.Get(2),50.0,60.0);
```

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```
Simulator::Run ();  
Simulator::Destroy ();  
}
```

Output:

```
student@isl08-27:~/ns-allinone-3.33/ns-3.33$ ./waf --run scratch/fifth.cc  
Waf: Entering directory `/home/student/ns-allinone-3.33/ns-3.33/build'  
[2848/2897] Compiling scratch/fifth.cc  
[2858/2897] Linking build/scratch/fifth  
Waf: Leaving directory `/home/student/ns-allinone-3.33/ns-3.33/build'  
Build commands will be stored in build/compile_commands.json  
'build' finished successfully (2.991s)  
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary  
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary  
AnimationInterface WARNING:Node:2 Does not have a mobility model. Use SetConstantPosition if it is stationary  
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary  
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary  
AnimationInterface WARNING:Node:2 Does not have a mobility model. Use SetConstantPosition if it is stationary  
student@isl08-27:~/ns-allinone-3.33/ns-3.33$
```