

CsharpSimpleModule – writing OmNet++ models with C# and mono

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What is CsharpSimpleModule?

- An extension for OmNet++
- Similar to and based on JSimpleModule by Andras Varga
- Allows writing OmNet++ modules in **C#**
- **Integration** of **existing** OmNet++ modules and **frameworks** is possible
- A library which **integrates** a (small) part of the INET framework is available

What can I do with it?

- Use your C# code in OmNet++ simulations
- Mix C# modules freely with C++ modules
- Access most of OmNet++'s runtime functions from **within** your C# code
- Add access to your **own** (C++) modules for C# using SWIG

Why would I want to use it?

- Because you ...
- ... want to use **existing** C# code in your simulations
- ... plan to develop distributed applications with C#
 - e.g an application for a mobile ad hoc network with PDAs
 - or some large scale Internet application
- ... are building distributed applications where nodes running C++ code and nodes running C# programs **work together**
- ...

How do I use it? (The C# part)

- Create your module in C# the same way you would do it in C++
- in particular provide the methods `initialize()` and `handleMessage()`
- derive from `CsharpSimpleModule` class
- compile your C# code into one assembly

How do I use it? (The NED part)

- add instances of *CsharpSimpleModule* to your .ned file
- add the class name and namespace of your module as well as the assembly name as parameters
- run your simulation and have fun!

Where can I learn more?

- Visit me at my poster!!
- On www-bs.informatik.tu-cottbus.de you will shortly find information on CsharpSimpleModule.
- Thank your for your attention!