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# MIC0003: Computer Networking

## Assignment 7: Network Address Translation

Deadline: 30 May, 2011

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The goal of the assignment is to familiarize yourselves with a typical router functionality, namely the network address translation (NAT). In short, NAT is the translation of packets between the external and internal networks.

### 1 Assignment

You are required to implement a simple tool that will route incoming packets from one port to another machine/port.

- The tool should support both TCP and UDP traffic.
- The NAT table should be configurable through command line arguments.
- GUI/CLI is not required, but might be useful for debugging purposes.

### 2 Notes

- Although the NAT should work over the network, during testing you can simply use a service running on localhost.
- You can easily test TCP NAT by redirecting a port to the university's web server, and UDP by redirecting to the DNS server.

Google is your friend.

### 3 Deliverables

The programming language is not fixed (i.e. you can use whatever you like), but a compilation script **must** be provided (makefile for C/C++, ant file for Java, etc). The compilation script requirement is waived if the solution is presented in class, and strictly before the deadline.

All the source files must include your full name, user name and group identifier (the lack thereof leading to a failed assignment).

The source files, compilation script and other data files should be uploaded in a single archive to the usual location (<http://www.scs.ubbcluj.ro/~labhu/laborok.php>).