

**Workshop:**        **Networking Personal Computers**

**Tutors:**            **Andrei Petrovski\* and Iain Bell\***

**Pre-requisites:**   **Familiarity with the main concepts of computer networking**

**Necessary equipment:**   **Some means of displaying PowerPoint slides, desk space for accommodating four laptops and two hubs, distributed power supply (optional)**

**Class Size:**        **~ 16 students max. Can be done in groups if necessary.**

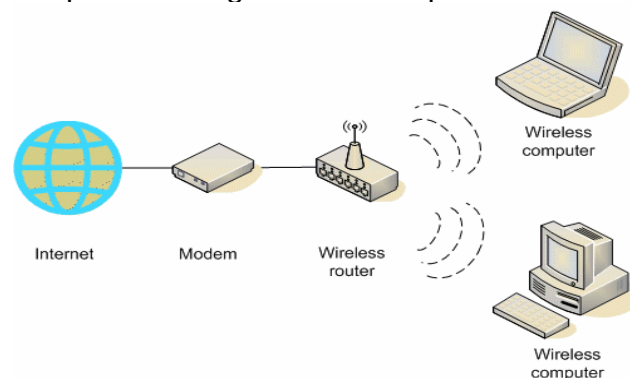
**Duration:**         **~ 2 hours**

This workshop aims at providing the necessary knowledge and practical skills for connecting a few personal computers into a network that enables the users to share computing resources. The workshop consists of two main parts – theoretical and practical. During the first part a brief overview of computer networks is presented that covers the main networking concepts such as the network types, hardware, LAN topologies and protocols, as well as network operating systems and the services they provide.

The second part of the workshop is a practical session, which gives the participants a chance to:

- connect two computers with a crossover cable and share files stored on them;
- connect multiple computers using a hub, switch or router;
- build an ad hoc and infrastructure wireless networks.

On request, the practical session may include a short quiz that is designed to reinforce the knowledge and skills acquired during the workshop.



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