

# Workshop #2

2D1490

KTHNOC

20040203

## Abstract

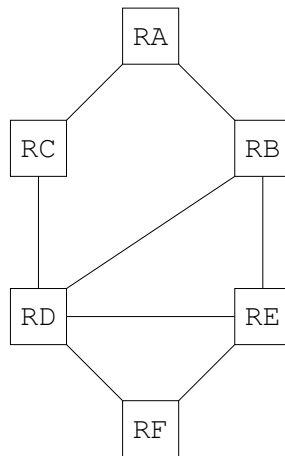
The questions should be answered before the workshop begins on the 3rd of February. They can be solved in groups, but each student should be prepared to present his/her solution in front of the class at the blackboard.

The questions below should be possible to answer if you have payed attention in the lectures and if you read the course literature.

Every answer you give should be well motivated.

## 1 Basic routing

Write down what the routing table in router **RA** looks like given that it can forward packets *to* all other routers in the topology below.



## 2 Routing algorithm types

As you have learned, there are two types of Routing Algorithms in use today.

- What are the basic principles behind Distance Vector Protocols?
- What are the basic principles behind Link State Protocols?
- What are their advantages and disadvantages?
- Which of these two types does the Gnutella protocol implement?

## 3 The algorithms in more detail

Describe, in words and diagrams:

- how the Bellman-Ford algorithm works
- how Dijkstra's algorithm works