Mobile IP Tutorial

1. A mobile host M belongs to a home network, HomeNet where Mobile IP is running.

   Assume M has moved from the home network HomeNet to a foreign network ForeignNet. Discuss how the Mobile IP protocol solves the problem of routing to the mobile host. Provide diagram in your discussion. (8 marks)

2. How does mobile node detect which networks it is located in? (2 marks)

3. Illustrate the main component in the deployment of Mobile IP (5 marks)

4. What is the main objective of mobile node to register with the agents? What is the process of registration? (3 marks)

5. Why is location registry used? Assume mobile host has moved from one foreign network to another foreign network, workout how this location registry is updated following this movement? (7 marks)

6. Explain triangle routing problem and what is the drawback of location caching? (4 marks)

7. How can security in Mobile IP be maintained? (4 marks)

8. What attack can occur during registration process and how can it be dealt with? (4 marks)

9. How can improved handoff be achieved by Mobile IP? (5 marks)

10. How can a rouge node be prevented from setting up the mobility binding for mobile node on the home agent? (5 marks)

11. Describe reverse tunneling (2 marks)

12. Why proxy ARP is used by the home agent? (2 marks)