

Risk Analysis

Consider the threat diagram in Figure 1.

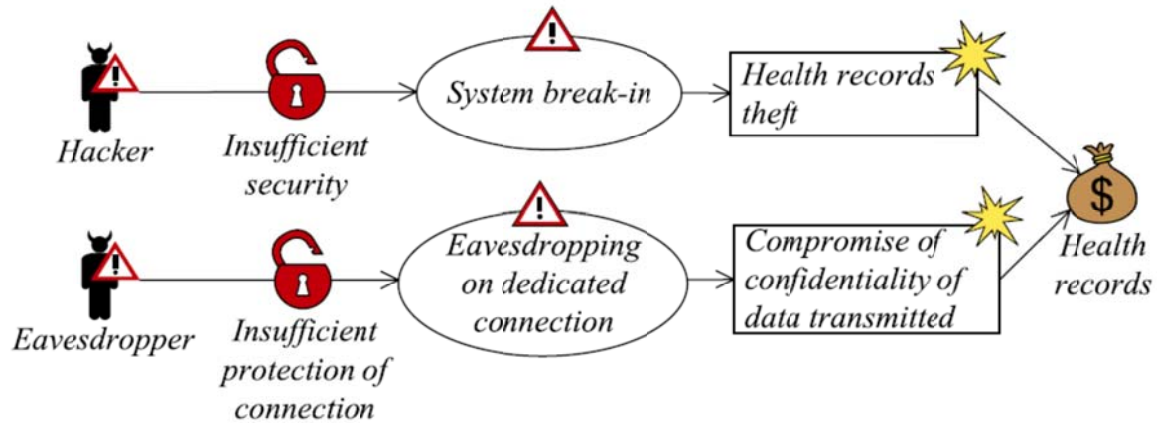


Figure 1 Threat diagram

1) Understanding

- How many risks are described by the threat diagram in 1. Explain your answer.
- How would you represent **Hacker** in a sequence diagram matching the diagram in Figure 1. Explain your answer.
- How would you represent **Health records** in a sequence diagram matching the diagram in Figure 1. Explain your answer.
- How would you represent **Health records theft** in a sequence diagram matching the diagram in Figure 1. Explain your answer.
- How would you represent **System break-in** in a sequence diagram matching the diagram in Figure 1. Explain your answer.

2) Reasoning

- Annotate the initiate-relations, the leads-to relations, the threat scenarios and the unwanted incidents with exact probabilities such that the diagram is **consistent** under the assumption that it is **complete**. Explain your answer.
- Give an example of a threat scenario that is not separate from the threat scenario **Eavesdropping on dedicated connection**. Explain your answer.
- The two threat scenarios in Figure 1 are not mutually exclusive. Update the text within the threat scenarios so that they become mutually exclusive. Explain your answer.