Examples of earlier exam questions covering the area of authentication.

2011-12-19

Problem 2

When discussing the principles of authentication we often assume that the subjects for authentication are users, but these are by no means the only kinds of objects that require authentication.

Suggest three realistic situations where other objects than users might require authentication in IT based systems. Describe suitable authentication methods for each of these three situations. Your answer should show a breadth of understanding of varying methods of authentication. Discuss also measures that might be taken to ensure that your authentication methods are as secure and effective as is appropriate for the given scenarios.

2010-11-27

Problem 3

Why is it important to change passwords after a period of time? Give well motivated arguments based on explanations of the kind of threats that passwords that are not regularly changed can suffer from.

2010-10-22

Problem 2

Suggest diverse possible ways in which a computer might be authenticated within a network, and discuss your methods' relative strengths and weaknesses. Good answers will cover a breadth of possible methods.

2009-12-07

Problem 4

Describe each of the following IT security related terms. Also, for each of these terms further illustrate the concept by choosing a closely connected IT security concept and explaining the relationship between the concepts. Furthermore, give an example of an application of these tools/threats/concepts. Give concrete examples wherever possible. Structure each of your answers with headings *description*, *relationship to [your chosen related concept]*, and *example*.

- Military security policy
- Dictionary Attack
- Challenge response
- Computer worm

Problem 3

Suggest and describe two alternative methods that could be used to authenticate that a server that I access on the network is not an imposter. Discuss your methods' respective strengths and weaknesses.

2008-12-06

Problem 3

Describe each of the following IT security related terms. Also, clearly relate each of your descriptions to a closely connected IT security concept of your own choosing, and give an example of an application of these tools/threats/concepts:

- One-time pad.
- Biba
- Biometrics
- SQL Injection

2007-12-20

Problem 2

Describe the general purpose and principles of challenge-response protocols. Describe also a concrete example of its use. In your example show how a specific kind of attack (of your own choice) that would otherwise constitute a threat is thwarted (i.e. made impossible) because of the use of this challenge- response protocol.