



# Unit objectives

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After completing this unit, you should be able to:

- Gain insight on configuration management
- Understand the basics of session management

# Introduction to configuration management & session management (1 of 2)



IBM ICE (Innovation Centre for Education)

- Configuration management requires the understanding of the following:
  - [Basics of configuration management](#)

# Introduction to configuration management & session management (2 of 2)



IBM ICE (Innovation Centre for Education)

- Configuration management requires the understanding (cont.) of the following:
  - Configuration management vulnerability
  - Protection from configuration management issues
  - Requirements of configuration management

# Unauthorized access to administration interfaces (1 of 3)



IBM ICE (Innovation Centre for Education)

- Configuration management requires the understanding of the following:
  - [Basics of unauthorized access to administration interfaces](#)

# Unauthorized access to administration interfaces (2 of 3)



IBM ICE (Innovation Centre for Education)

- Configuration management requires the understanding (cont.) of the following:
  - [Detailed description of unauthorized access to administration interfaces](#)

# Unauthorized access to administration interfaces (3 of 3)



IBM ICE (Innovation Centre for Education)

- Configuration management requires the understanding (cont.) of the following:
  - Black box testing
  - Grey box testing

# Unauthorized access to configuration stores



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- Unauthorized access to configuration stores requires the understanding of the following:
  - Basics of unauthorized access to configuration stores
  - Protection of configuration stores
  - Retrieval of plaintext configuration secrets



# Retrieval of clear text configuration data

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- Retrieval of clear text configuration data requires the understanding of the following:
  - [Basics of retrieval of clear text configuration data](#)

# Lack of individual accountability

- Lack of individual accountability requires the understanding of the following:
  - [Basics of lack of individual accountability](#)

# Over-privileged process and service accounts



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- Over-privileged process and service accounts requires the understanding of the following:
  - [Basics of Over-privileged process and service accounts](#)

# Basics of Session Management (1 of 2)

- Session management requires the understanding of the following:
  - Basics of session management
  - Control objectives of session management



*Session-Management-Diagram*

# Basics of Session Management (2 of 2)

- Session management requires the understanding (cont.) of the following:
  - Broken authentication and session management vulnerability
  - Protection from broken authentication and session management

# Hijacking attack

- Hijacking attack requires the understanding of the following:
  - Basics of hijacking
  - Protection from session hijacking

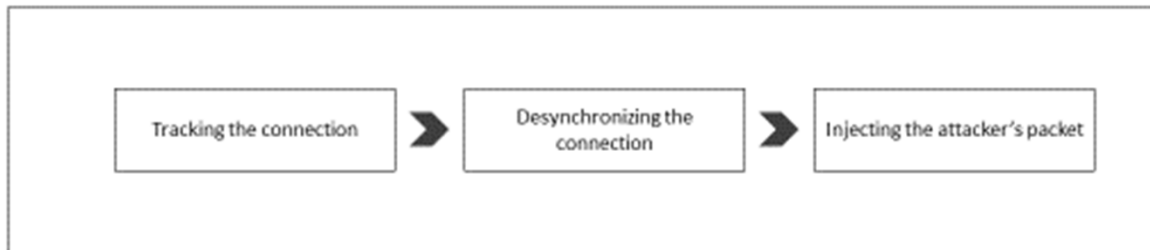


Figure: Session Hijacking Technique

# Session replay attack

- Session replay attack requires the understanding of the following:
  - [Basics of session replay attack](#)

# Man in the middle attack

- Man in the middle attack requires the understanding of the following:
  - Basics of man in the middle attack



# Checkpoint

1. Which of the following is not a configuration management threat?
  - A. Unauthorized access to administration interfaces
  - B. Unauthorized access to configuration stores
  - C. Lack of individual accountability
  - D. Under-privileged process and service accounts
  
2. Full form of DCOM:
  - A. Distributed Component Object Model
  - B. Directory Component Object Model
  - C. Direct Computer Oriented Method
  - D. Distributed Computer Object Model

# Checkpoint

3. HMACs stands for?
  - A. High Media Access Controls
  - B. Hashed Minute Authentication Codecs
  - C. Hashed Message Authentication Codes
  - D. Hashed Message Authorization Codes
  
4. A session ID should be:
  - A. Complex
  - B. Lengthy
  - C. Unpredictable random numbers
  - D. All of the above

# Checkpoint

5. A session ID should not be stored in?
  - A. Hidden HTML fields and HTTP headers
  - B. Persistent Cookies and URLs
  - C. Both A and B
  - D. Neither A nor B
  
6. Applications should not store secret data in:
  - A. Clear Text
  - B. Cypher Text
  - C. Enciphered Text
  - D. Coded Text

# Checkpoint

7. Which of the following testing mechanism is used in administrator interfaces?
  - A. Green box testing
  - B. Blue box testing
  - C. Both A and B
  - D. Neither A nor B
  
8. By avoiding XSS vulnerability you can protect your web application from broken authentication and session management.
  - A. True
  - B. False

# Checkpoint

9. \_\_\_\_\_ is used to compare the true value and the arrived value in order to validate the non-tampering of the data
- A. HMACs
  - B. MACs
  - C. XML
  - D. Matching
10. A perpetrator can steal your session through?
- A. Hijacking
  - B. Session Replay Attack
  - C. Both A and B
  - D. Neither A nor B

# Checkpoint solutions

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1. D
2. A
3. C
4. D
5. C
6. A
7. D
8. A
9. A
10. C

# Unit summary

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After completing this unit, you should be able to:

- Gain insight on configuration management
- Understand the basics of session management