Network Security Analysis Based on Authentication Techniques

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Overview

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- 3 Authentication Techniques
 - Password and pin based
 - Token based
 - One time security tokens
 - Biometric Based
- 4 Comparsion of Strength of Parameter of Authentication Mechanism
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introduction

While developing a secure network, the following need to be considered -

- **1. Access :** Only authorized users are allowed to communicate to and from a particular network.
- **2. Authentication :** This ensures that the users in the network are who they say they are. Actual flow of information can start only after the user has been authenticated and allowed to communicate to other systems in the network.
- **3. Confidentiality:** Data in the network remains private. This is done to ensure that the information can be viewed only by authenticated systems and it can be achieved using various encryption techniques.
- **4. Integrity**: This ensures that the message has not been changed during transmission.

Data Security and Authentication

- Securing information from hackers and crackers, authentication is the major phase in network security
- Protect network and data transmission over wired as well as wireless networks
- Authentication is one of the primary techniques of ensuring that the person who is transmitting the information
- To authenticate user or machines, different techniques can be used to perform authentication between user and machine or machine and another machine too

Attacks types	Description	
Weak password recovery	Websites permit hackers to find a way to illegal	
Brute force attacks	By trial and error, hackers can guess username,	
Insufficient authentication	Some websites dont authenticate much so hack	
Shoulder surfing attacks	Hackers directly observe user while typing passy	

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Bullet Points

- Lorem ipsum dolor sit amet, consectetur adipiscing elit
- Aliquam blandit faucibus nisi, sit amet dapibus enim tempus eu
- Nulla commodo, erat quis gravida posuere, elit lacus lobortis est, quis porttitor odio mauris at libero
- Nam cursus est eget velit posuere pellentesque
- Vestibulum faucibus velit a augue condimentum quis convallis nulla gravida

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Multiple Columns

Heading

- Statement
- 2 Explanation
- Second Example
 Second Example

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Table

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Table: Table caption

Theorem

Theorem (Mass-energy equivalence)

$$E = mc^2$$

Verbatim

Example (Theorem Slide Code)

```
\begin{frame}
\frametitle{Theorem}
\begin{theorem}[Mass--energy equivalence]
$E = mc^2$
\end{theorem}
\end{frame}
```

Figure

Uncomment the code on this slide to include your own image from the same directory as the template .TeX file.

Citation

An example of the \cite command to cite within the presentation:

This statement requires citation [Smith, 2012].

References



John Smith (2012)

Title of the publication

Journal Name 12(3), 45 - 678.

The End