- Filename: eccouncil-ceh31250-v11-6-5-1-password-cracking-enhancement-techniques.md
- Show Name: CEHv11 (312-50)
- Topic Name: System Hacking Phases and Attack Techniques System Hacking
- Episode Name: Password Cracking Enhancement Techniques

## **Password Cracking Enhancement Techniques**

## **Objectives:**

- Enhance password cracking attack efforts by utilizing techniques such as Combinator, PRINCE, Toggle-Case, and Markov-Chain Attacks
- Combinator
  - · Combine 2 or more dictionaries together
- PRINCE
  - PRobability INfinite Chained Elements
    - Like a Combinator approach except
      - Only uses 1 dictionary
  - Create a useful dictionary based on known criteria
    - Example: passwords must be 6 chars long
      - Use only 6+ char words in dictionary
      - Create 6+ char words using combinations of smaller words
        - 2 char words + 4 char words = 6 char words
- Toggle-case
  - Try every case possibility
    - aaa, aaA, aAA, AAA, AAa, Aaa
- Markov Chain
  - · A statistical analysis of the passwords cracked through normal means
    - A file is generated with the most common elements
      - · 'C' is the most common letter and is most commonly followed by 'a'
    - It then uses those stats to perform a dictionary/brute-force hybrid attack