

Permutation-based DGA Generation

Explanation: This DGA generates domains by permuting the characters of a base domain.

Usefulness: This type of DGA can be useful for malware authors to create a unique set of domains for C&C communication or data exfiltration, based on a shared base domain.

Strengths: The generated domains are unpredictable without knowledge of the base domain and the permutation algorithm used.

Weaknesses: If the base domain or the permutation algorithm is compromised, the generated domains can be predicted.

Deception: This DGA can be deciphered by analyzing the pattern of generated domains and attempting to reverse-engineer the base domain and the permutation algorithm.

www.elxempa.com

www.eelxampmm.org

www.eaxmelpm.net

www.explaemee.biz

www.epaelmxee.org

www.ampelexaaa.info

www.lmaxepe.com

www.leeamxp111.com

www.plamxee.biz

www.mpaxelem.org

Regex for Permutation-based Generated DGAs: `[r|w|m|e|x|a|o|b|c|p|i|l|g|n|z]+[^t.f]{0,2}{1,3}`

Yara rule:

```
rule dga_domain_detection {
  meta:
    description = "Detects DGA-generated domain names"
  strings:
    $dga_regex = /[r|w|m|e|x|a|o|b|c|p|i|l|g|n|z]+[^t.f]{0,2}{1,3}/ nocase
  condition:
    $dga_regex
}
```

Note: Can use <https://riskmitigation.ch/yara-scan/> or MalwareBazaar <https://bazaar.abuse.ch/> but will need API Key