

RSA Encryption Analysis Report

1. RSA Encryption Details

Message: winner

Key Length: 32 bits

Maximum bytes per chunk: 3

Encrypted chunks: [368458264, 24912151]

RSA Values: n = 1891649797, e = 65537, d = 1876293953

2. Decryption Algorithm Results

Results of various decryption algorithms:

| Algorithm | Time (s) | Success | Decrypted |
|----------------------------|----------|-----------|-----------|
| Brute Force | 0.0107s | [Success] | winner |
| Euler's Factorization | 0.0000s | [Success] | winner |
| Quadratic Sieve | 60.0002s | [Failed] | Failed |
| General Number Field Sieve | 60.0002s | [Failed] | Failed |
| Shor's Algorithm | 6.5400s | [Success] | winner |

3. RSA-OAEP Performance

RSA-OAEP Encryption Time: None s

RSA-OAEP Decryption Time: None s

Decrypted Message: None