

Maldev Academy Tool - MiniShell

Introduction

This is another Maldev Academy tool, similar to `HellShell`, which allows encryption of raw payloads. The tool only supports RC4 and AES.

Features

- Outputs the decryption function of the selected encryption type
- Outputs the encrypted bytes as a `bin` file
- Randomly generated keys for the encryption algorithms

Usage

```
#####
# MiniShell - Designed By MalDevAcademy @NUL0x4C |
@mrd0x #

#####

[!] Usage: C:\Users\User\source\repos\MiniShell\x64\Debug\MiniShell.exe
<Input Payload FileName> <Enc *Option*> <Output FileName>
[i] Encryption Options Can Be :
    1.>>> "aes"      ::: Output The File As A Encrypted File Using AES-
256 Algorithm With Random Key And IV
    2.>>> "rc4"      ::: Output The File As A Encrypted File Using Rc4
Algorithm With Random Key
```

Examples

- `.\MiniShell.exe .\calc.bin rc4 encpayload.bin` - Use RC4 for encryption, write the encrypted bytes to `encpayload.bin`, output the decryption functionality to the console
- `.\MiniShell.exe .\calc.bin rc4 encpayload.bin > rc4.c` - Use RC4 for encryption, write the encrypted bytes to `encpayload.bin` - output the decryption function to `rc4.c`.
- `.\MiniShell.exe .\calc.bin aes calcenc.bin` - Use AES for encryption, write the encrypted bytes to `calcenc.bin`, and output the decryption function to the console.

- `.\MiniShell.exe .\calc.bin aes calcenc.bin > aes.c` - Use AES for encryption, write the encrypted bytes to `calcenc.bin`, and output the decryption function to `aes.c`.

Demo

The image below shows `MiniShell` being used to encrypt the `calc.bin` file with the encrypted bytes being written to `AesCalc.bin` and the decryption function being saved to `Aes.c`.

```

C:\Users\User> source > repos > MiniShell > x64 > Release > C:\Aes.c > ...
1 #include <windows.h>
2 #include <stdio.h>
3 #include <bcrypt.h>
4 #pragma comment(lib, "Bcrypt.lib")
5
6
7 #define NT_SUCCESS(status) (((NTSTATUS)(status)) >= 0)
8 #define KEYSIZE 32
9 #define IVSIZE 16
10
11 typedef struct _AES {
12     PBYTE pPlainText; // base address of the plain text data
13     DWORD dwPlainTextSize; // size of the plain text data
14
15     PBYTE pCipherText; // base address of the encrypted data
16     DWORD dwCipherSize; // size of it (this can change from dwPlainTextSize)
17
18     PBYTE pKey; // the 32 byte key
19     PBYTE pIv; // the 16 byte iv
20 }AES, * PAES;
21
22 // the real decryption implementation
23 BOOL InstallAesDecryption(PAES pAes) {
24
25     BOOL bState = TRUE;
26
27     BCRYPT_ALG_HANDLE hAlgorithm = NULL;
28     BCRYPT_KEY_HANDLE hKeyHandle = NULL;
29
30     ULONG cbResult = NULL;
31     DWORD dwBlockSize = NULL;
32
33     DWORD cbKeyObject = NULL;
34     PBYTE pbKeyObject = NULL;
35
36     PBYTE pbPlainText = NULL;
37     DWORD cbPlainText = NULL;
38
39     NTSTATUS STATUS = NULL;
40
41     // initializing "hAlgorithm" as AES algorithm Handle
42     STATUS = BCRYPTOpenAlgorithmProvider(&hAlgorithm, BCRYPT_AES_ALGORITHM, NULL, 0);
43     if (NT_SUCCESS(STATUS)) {
44         printf("[!] BCRYPTOpenAlgorithmProvider Failed With Error: 0x%X\n", STATUS);
45         bState = FALSE; goto EndOfFunc;
46     }
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