

技術ノート KGTN 2019051701

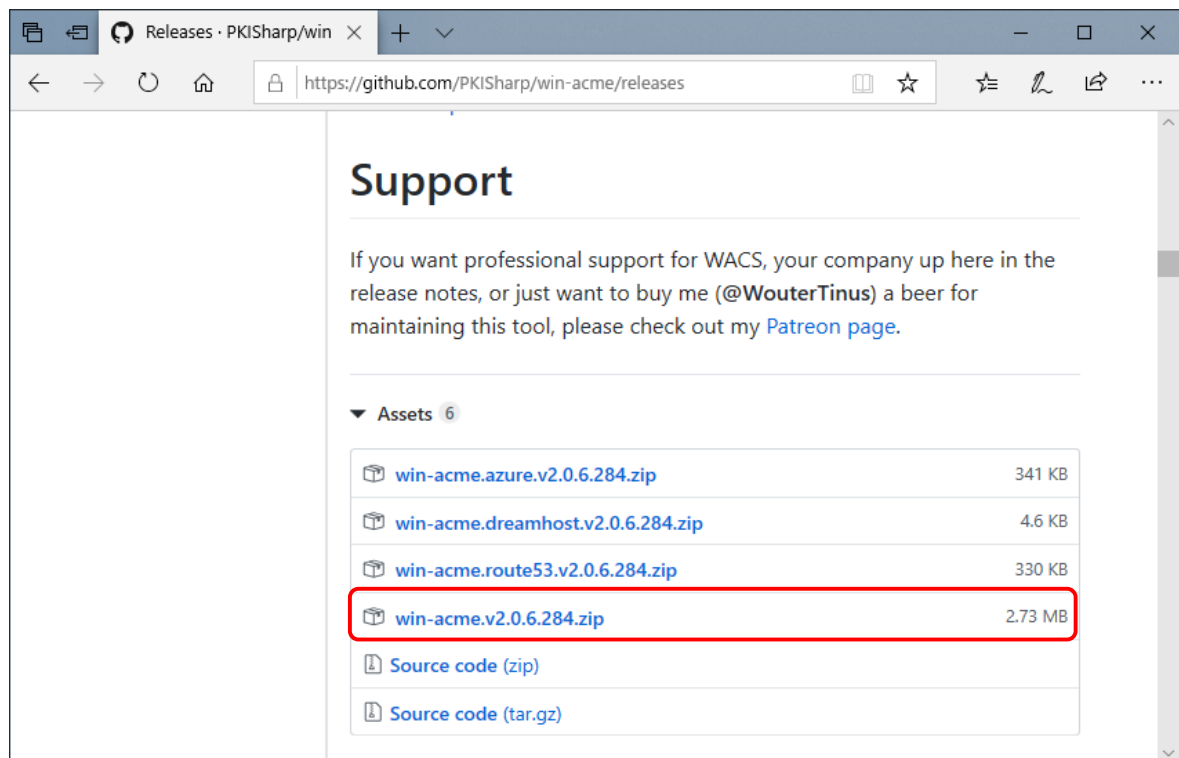
現象

[GGH5.X-6.X/SSL] Let's Encrypt の SSL 証明書を GG サーバーで利用したい。

説明

1. 下記ページ ([win-acme](https://github.com/PKISharp/win-acme) の GitHub の Web サイト) で最新の [win-acme](https://github.com/PKISharp/win-acme) をダウンロードします。この技術ノート作成時点では、バージョン 2.0.6.284 が最新です。

<https://github.com/PKISharp/win-acme/releases>

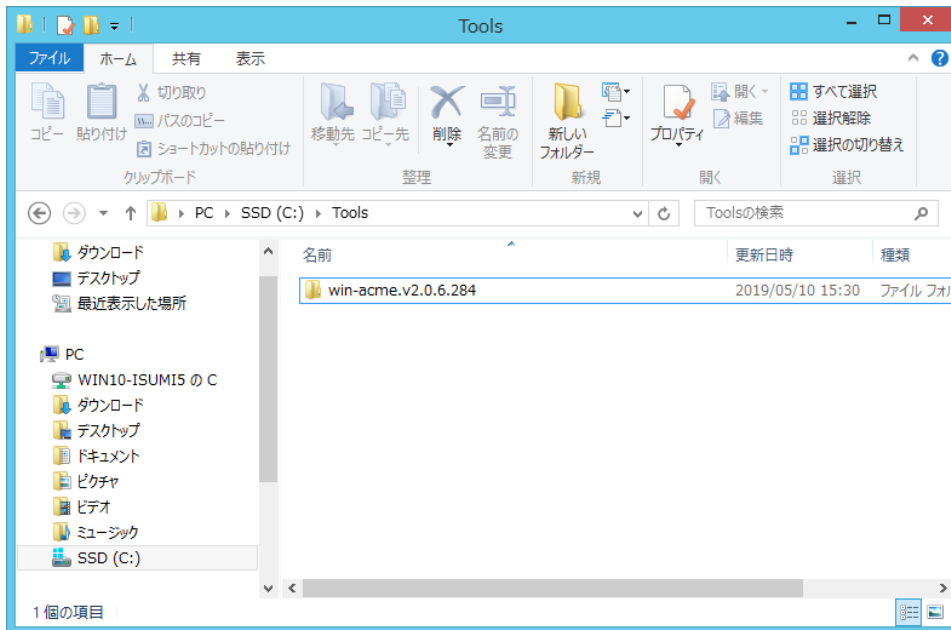


The screenshot shows a web browser window displaying the GitHub releases page for PKISharp/win-acme. The browser's address bar shows the URL <https://github.com/PKISharp/win-acme/releases>. The page content includes a 'Support' section with text about professional support and a link to a Patreon page. Below this is an 'Assets' section with a dropdown arrow and a count of 6 assets. The assets are listed in a table:

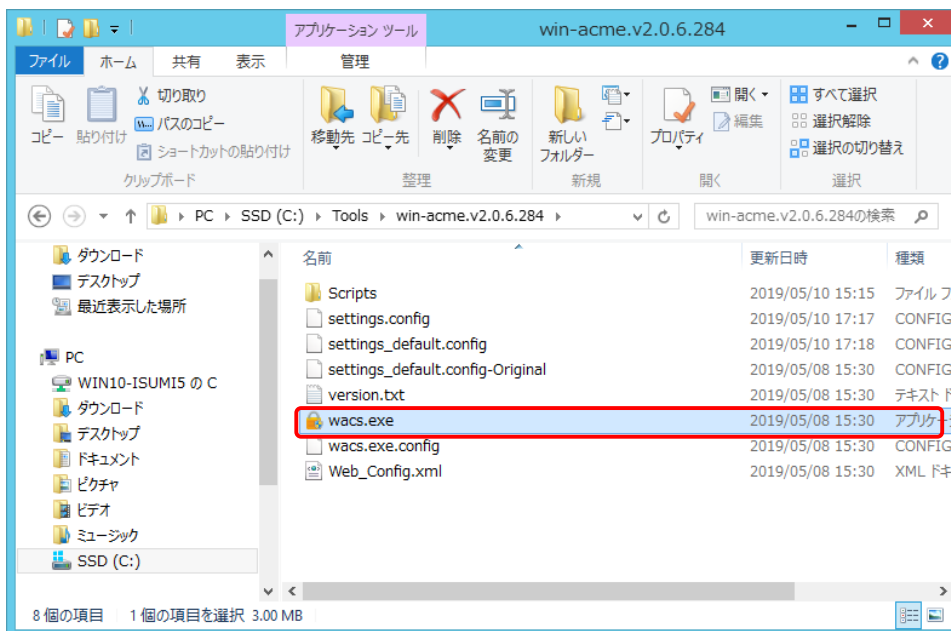
| Asset Name | Size |
|---|---------|
| win-acme.azure.v2.0.6.284.zip | 341 KB |
| win-acme.dreamhost.v2.0.6.284.zip | 4.6 KB |
| win-acme.route53.v2.0.6.284.zip | 330 KB |
| win-acme.v2.0.6.284.zip | 2.73 MB |
| Source code (zip) | |
| Source code (tar.gz) | |

The asset [win-acme.v2.0.6.284.zip](#) is highlighted with a red rectangular box.

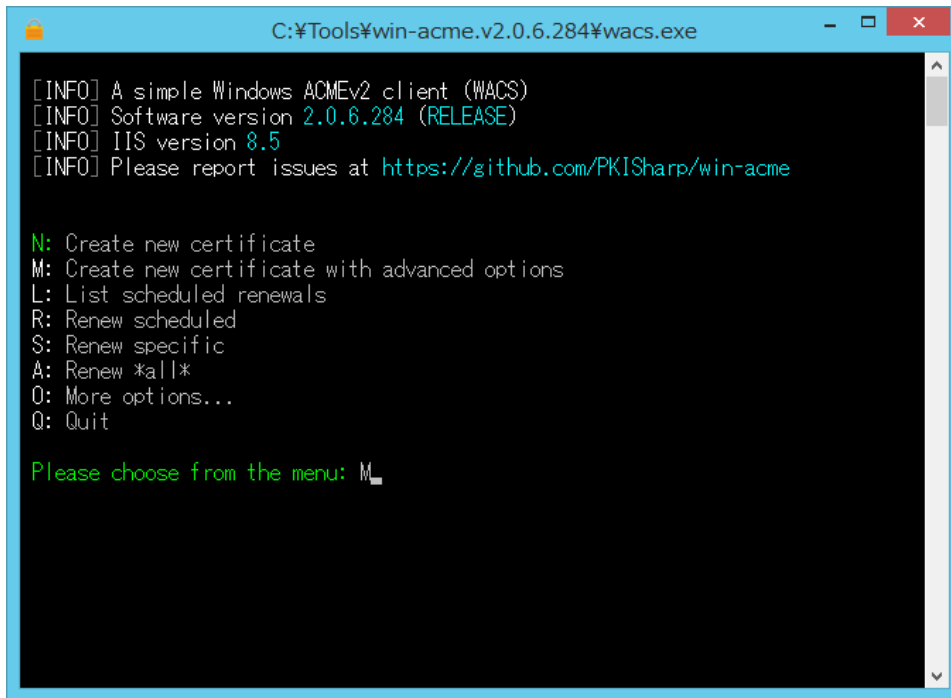
2. ダウンロードしたファイルを適当なフォルダーに展開します。



3. プログラム wacs.exe を“管理者として実行”します。



4. メニューで M を選択し、アドバンスオプション付きで証明書を生成します。



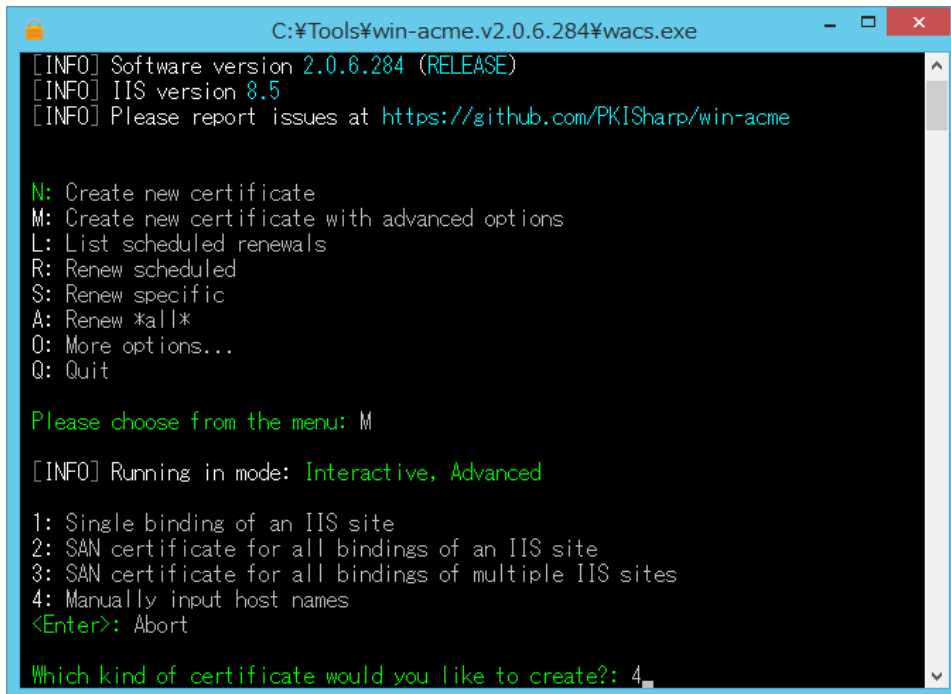
```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

[INFO] A simple Windows ACMEv2 client (WACS)
[INFO] Software version 2.0.6.284 (RELEASE)
[INFO] IIS version 8.5
[INFO] Please report issues at https://github.com/PKISharp/win-acme

N: Create new certificate
M: Create new certificate with advanced options
L: List scheduled renewals
R: Renew scheduled
S: Renew specific
A: Renew *all*
O: More options...
Q: Quit

Please choose from the menu: M_
```

5. メニューで 4 を選択し、手入力でホスト名を指定します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

[INFO] Software version 2.0.6.284 (RELEASE)
[INFO] IIS version 8.5
[INFO] Please report issues at https://github.com/PKISharp/win-acme

N: Create new certificate
M: Create new certificate with advanced options
L: List scheduled renewals
R: Renew scheduled
S: Renew specific
A: Renew *all*
O: More options...
Q: Quit

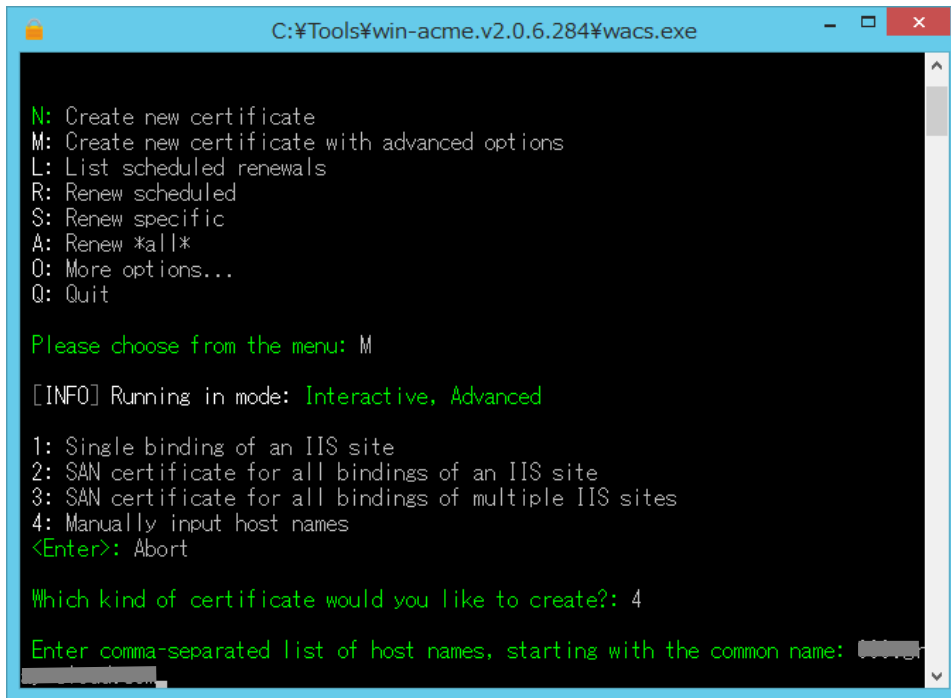
Please choose from the menu: M

[INFO] Running in mode: Interactive, Advanced

1: Single binding of an IIS site
2: SAN certificate for all bindings of an IIS site
3: SAN certificate for all bindings of multiple IIS sites
4: Manually input host names
<Enter>: Abort

Which kind of certificate would you like to create?: 4_
```

6. GG サーバーのホスト名を入力します（ホスト名がネームサーバーに登録されている必要があります）。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

N: Create new certificate
M: Create new certificate with advanced options
L: List scheduled renewals
R: Renew scheduled
S: Renew specific
A: Renew *all*
O: More options...
Q: Quit

Please choose from the menu: M

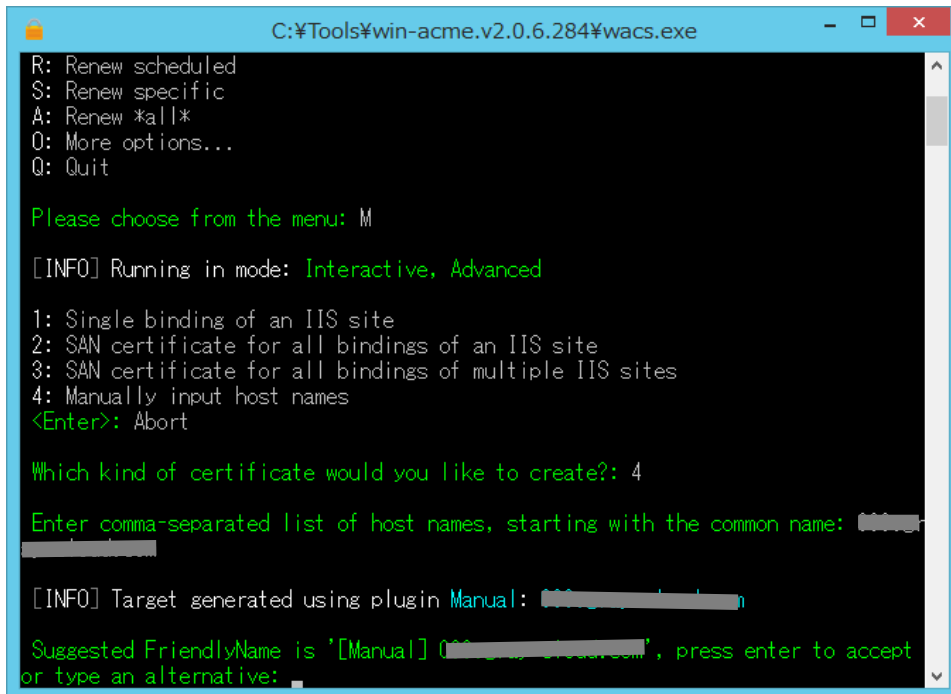
[INFO] Running in mode: Interactive, Advanced

1: Single binding of an IIS site
2: SAN certificate for all bindings of an IIS site
3: SAN certificate for all bindings of multiple IIS sites
4: Manually input host names
<Enter>: Abort

Which kind of certificate would you like to create?: 4

Enter comma-separated list of host names, starting with the common name: 
```

7. ホスト名が正しいことを確認し、エンターキーを押します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

R: Renew scheduled
S: Renew specific
A: Renew *all*
O: More options...
Q: Quit

Please choose from the menu: M

[INFO] Running in mode: Interactive, Advanced

1: Single binding of an IIS site
2: SAN certificate for all bindings of an IIS site
3: SAN certificate for all bindings of multiple IIS sites
4: Manually input host names
<Enter>: Abort

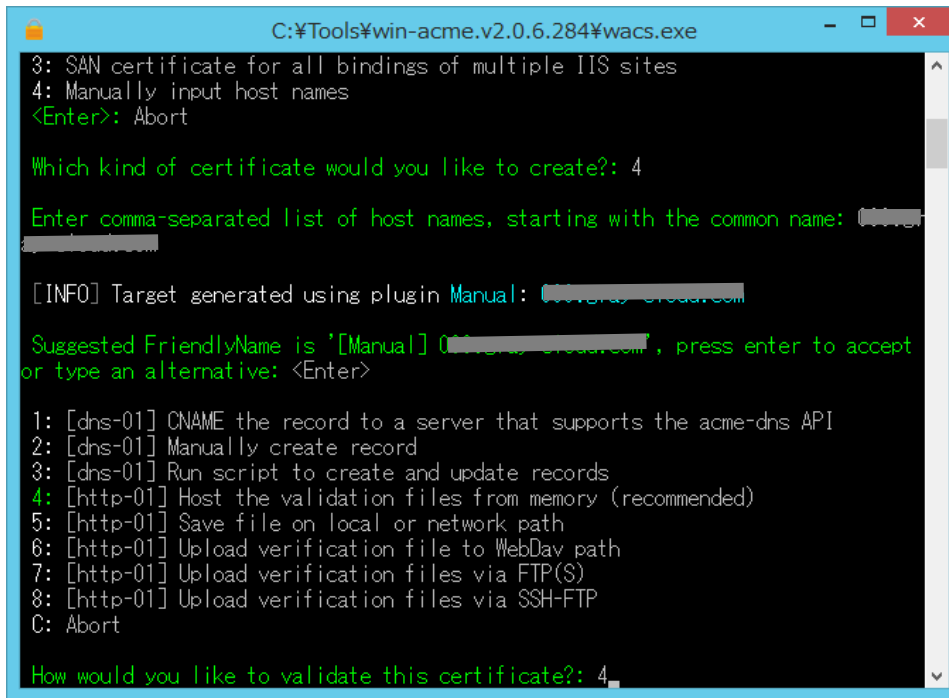
Which kind of certificate would you like to create?: 4

Enter comma-separated list of host names, starting with the common name:
[redacted]

[INFO] Target generated using plugin Manual: [redacted]

Suggested FriendlyName is '[Manual] [redacted].[redacted].com', press enter to accept
or type an alternative: 
```

8. メニューで 4 を選択します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe
3: SAN certificate for all bindings of multiple IIS sites
4: Manually input host names
<Enter>: Abort

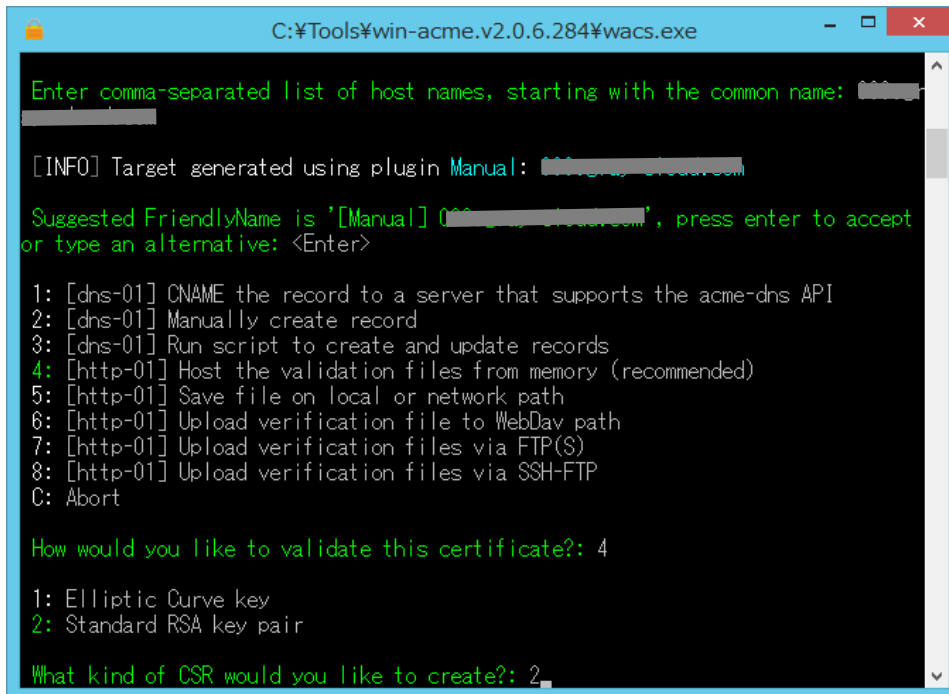
Which kind of certificate would you like to create?: 4

Enter comma-separated list of host names, starting with the common name:
[INFO] Target generated using plugin Manual:
Suggested FriendlyName is '[Manual] ', press enter to accept or type an alternative: <Enter>

1: [dns-01] CNAME the record to a server that supports the acme-dns API
2: [dns-01] Manually create record
3: [dns-01] Run script to create and update records
4: [http-01] Host the validation files from memory (recommended)
5: [http-01] Save file on local or network path
6: [http-01] Upload verification file to WebDav path
7: [http-01] Upload verification files via FTP(S)
8: [http-01] Upload verification files via SSH-FTP
C: Abort

How would you like to validate this certificate?: 4
```

9. メニューで 2 を選択します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

Enter comma-separated list of host names, starting with the common name:
[INFO] Target generated using plugin Manual:
Suggested FriendlyName is '[Manual] ', press enter to accept or type an alternative: <Enter>

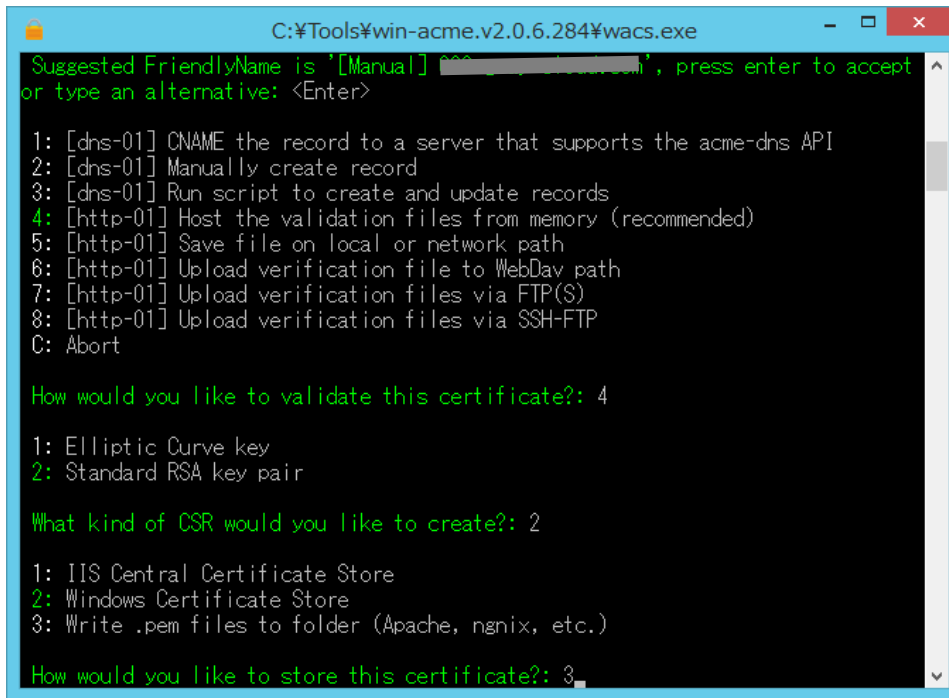
1: [dns-01] CNAME the record to a server that supports the acme-dns API
2: [dns-01] Manually create record
3: [dns-01] Run script to create and update records
4: [http-01] Host the validation files from memory (recommended)
5: [http-01] Save file on local or network path
6: [http-01] Upload verification file to WebDav path
7: [http-01] Upload verification files via FTP(S)
8: [http-01] Upload verification files via SSH-FTP
C: Abort

How would you like to validate this certificate?: 4

1: Elliptic Curve key
2: Standard RSA key pair

What kind of CSR would you like to create?: 2
```

10. メニューで 3 (OpenSSL 向けの証明書) を選択します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe
Suggested FriendlyName is '[Manual] [REDACTED]', press enter to accept
or type an alternative: <Enter>

1: [dns-01] CNAME the record to a server that supports the acme-dns API
2: [dns-01] Manually create record
3: [dns-01] Run script to create and update records
4: [http-01] Host the validation files from memory (recommended)
5: [http-01] Save file on local or network path
6: [http-01] Upload verification file to WebDav path
7: [http-01] Upload verification files via FTP(S)
8: [http-01] Upload verification files via SSH-FTP
C: Abort

How would you like to validate this certificate?: 4

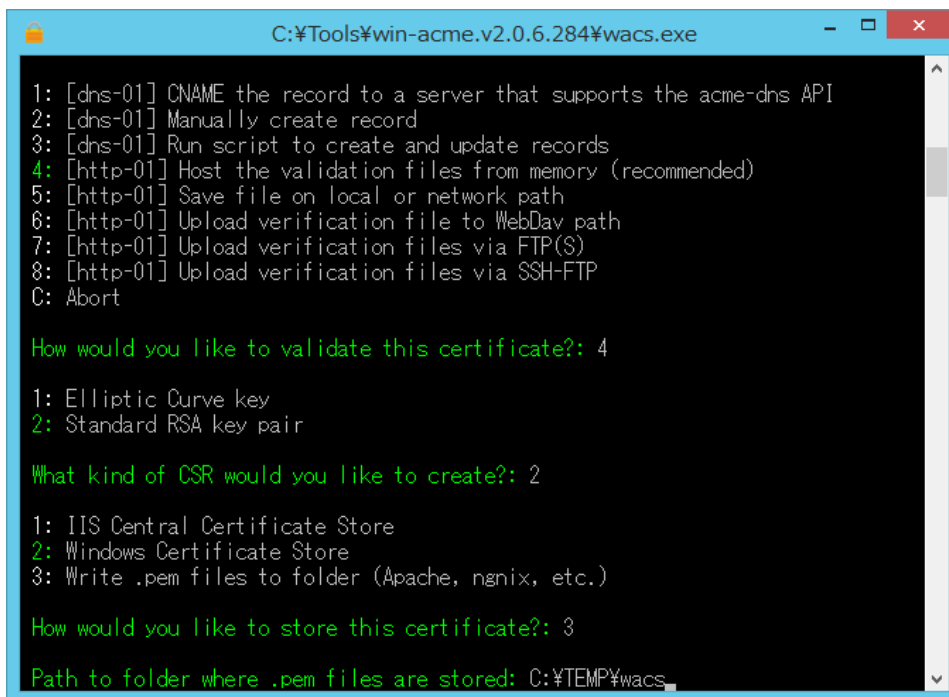
1: Elliptic Curve key
2: Standard RSA key pair

What kind of CSR would you like to create?: 2

1: IIS Central Certificate Store
2: Windows Certificate Store
3: Write .pem files to folder (Apache, nginx, etc.)

How would you like to store this certificate?: 3
```

11. 証明書を配置するフォルダーを指定します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

1: [dns-01] CNAME the record to a server that supports the acme-dns API
2: [dns-01] Manually create record
3: [dns-01] Run script to create and update records
4: [http-01] Host the validation files from memory (recommended)
5: [http-01] Save file on local or network path
6: [http-01] Upload verification file to WebDav path
7: [http-01] Upload verification files via FTP(S)
8: [http-01] Upload verification files via SSH-FTP
C: Abort

How would you like to validate this certificate?: 4

1: Elliptic Curve key
2: Standard RSA key pair

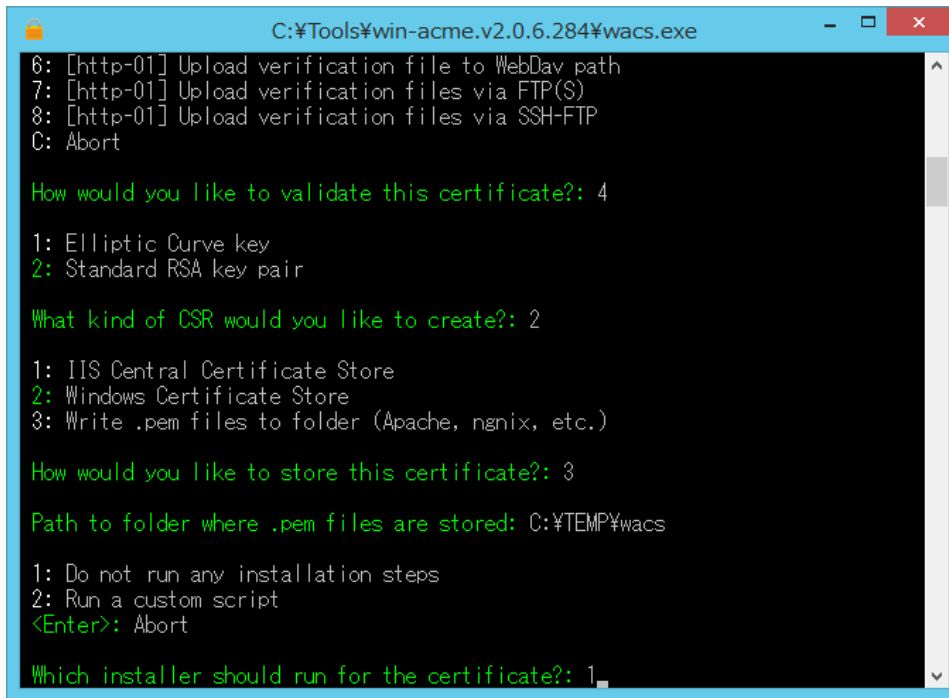
What kind of CSR would you like to create?: 2

1: IIS Central Certificate Store
2: Windows Certificate Store
3: Write .pem files to folder (Apache, nginx, etc.)

How would you like to store this certificate?: 3

Path to folder where .pem files are stored: C:\TEMP\wacs
```

12. メニューで 1 を選択します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe
6: [http-01] Upload verification file to WebDav path
7: [http-01] Upload verification files via FTP(S)
8: [http-01] Upload verification files via SSH-FTP
C: Abort

How would you like to validate this certificate?: 4

1: Elliptic Curve key
2: Standard RSA key pair

What kind of CSR would you like to create?: 2

1: IIS Central Certificate Store
2: Windows Certificate Store
3: Write .pem files to folder (Apache, nginx, etc.)

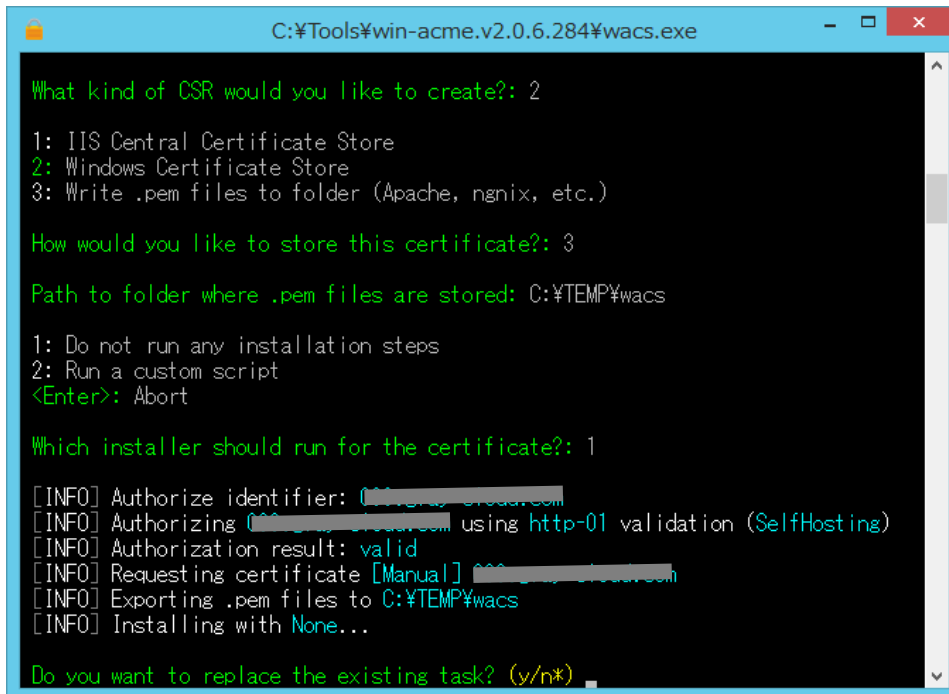
How would you like to store this certificate?: 3

Path to folder where .pem files are stored: C:\TEMP\wacs

1: Do not run any installation steps
2: Run a custom script
<Enter>: Abort

Which installer should run for the certificate?: 1
```

13. 内容を確認し、エンターキーを押します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

What kind of CSR would you like to create?: 2

1: IIS Central Certificate Store
2: Windows Certificate Store
3: Write .pem files to folder (Apache, nginx, etc.)

How would you like to store this certificate?: 3

Path to folder where .pem files are stored: C:\TEMP\wacs

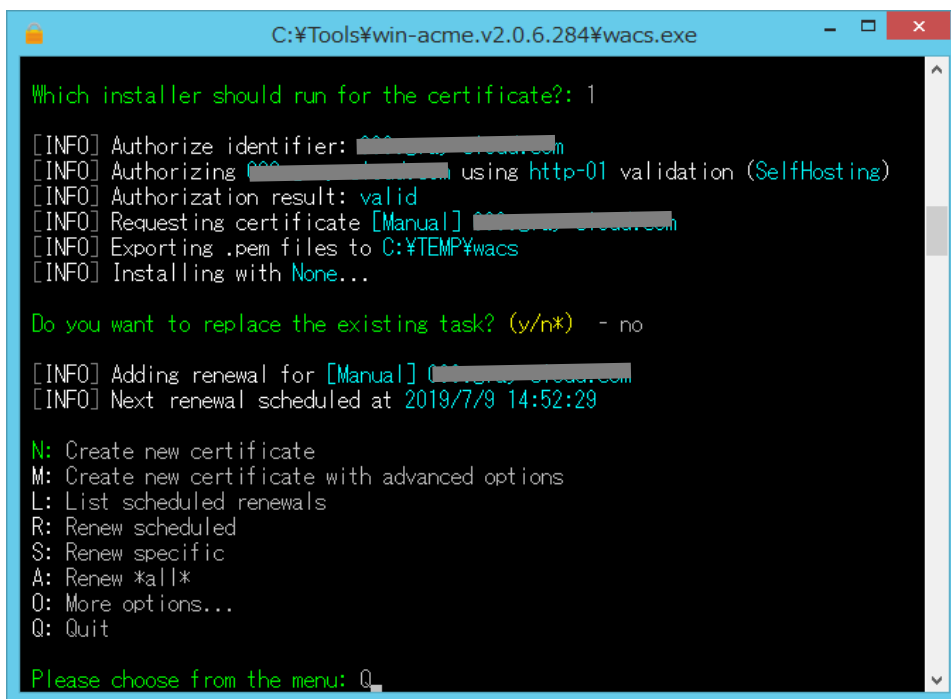
1: Do not run any installation steps
2: Run a custom script
<Enter>: Abort

Which installer should run for the certificate?: 1

[INFO] Authorize identifier: [redacted]
[INFO] Authorizing [redacted] using http-01 validation (SelfHosting)
[INFO] Authorization result: valid
[INFO] Requesting certificate [Manual] [redacted]
[INFO] Exporting .pem files to C:\TEMP\wacs
[INFO] Installing with None...

Do you want to replace the existing task? (y/n*)
```

14. メニューで Q を選択します。



```
C:\Tools\win-acme.v2.0.6.284\wacs.exe

Which installer should run for the certificate?: 1

[INFO] Authorize identifier: [redacted]
[INFO] Authorizing [redacted] using http-01 validation (SelfHosting)
[INFO] Authorization result: valid
[INFO] Requesting certificate [Manual] [redacted]
[INFO] Exporting .pem files to C:\TEMP\wacs
[INFO] Installing with None...

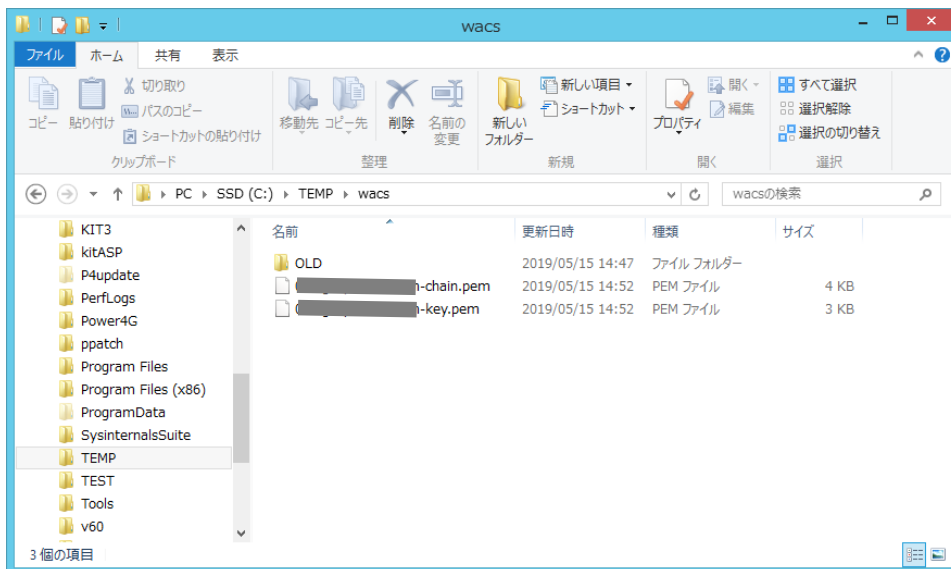
Do you want to replace the existing task? (y/n/*) - no

[INFO] Adding renewal for [Manual] [redacted]
[INFO] Next renewal scheduled at 2019/7/9 14:52:29

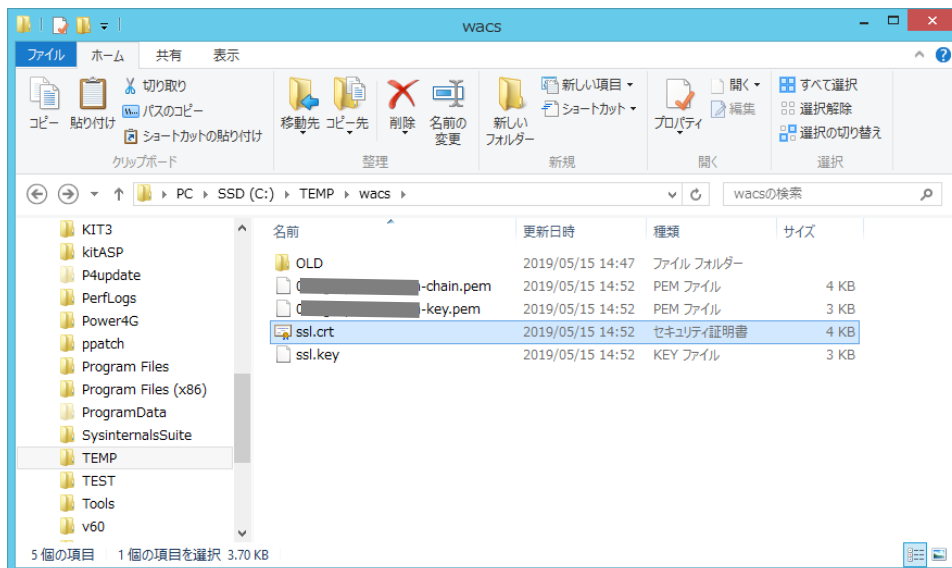
N: Create new certificate
M: Create new certificate with advanced options
L: List scheduled renewals
R: Renew scheduled
S: Renew specific
A: Renew *all*
O: More options...
Q: Quit

Please choose from the menu: Q
```

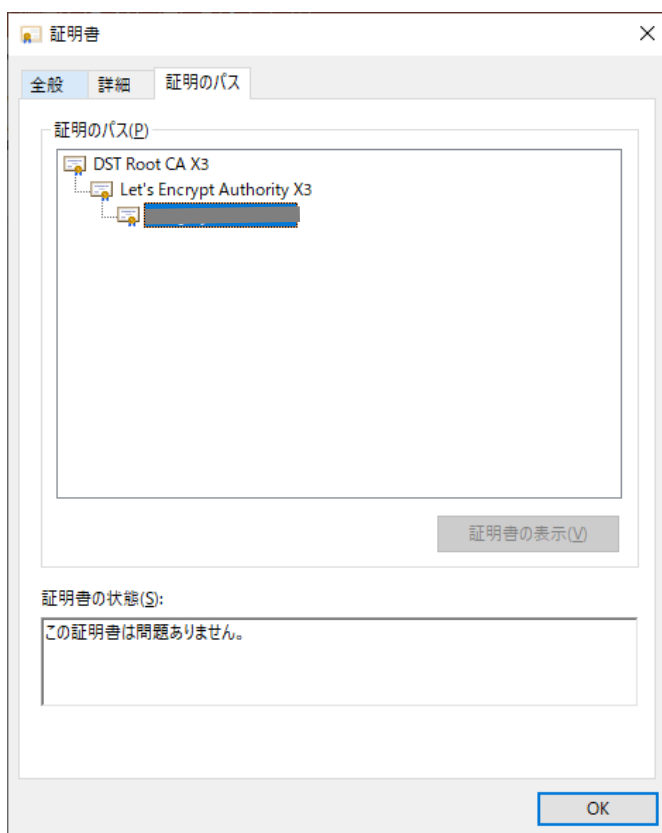
15. 証明書を配置したフォルダーを開き、ファイル <ホスト名>-chain.pem と <ホスト名>-key.pem があることを確認します。



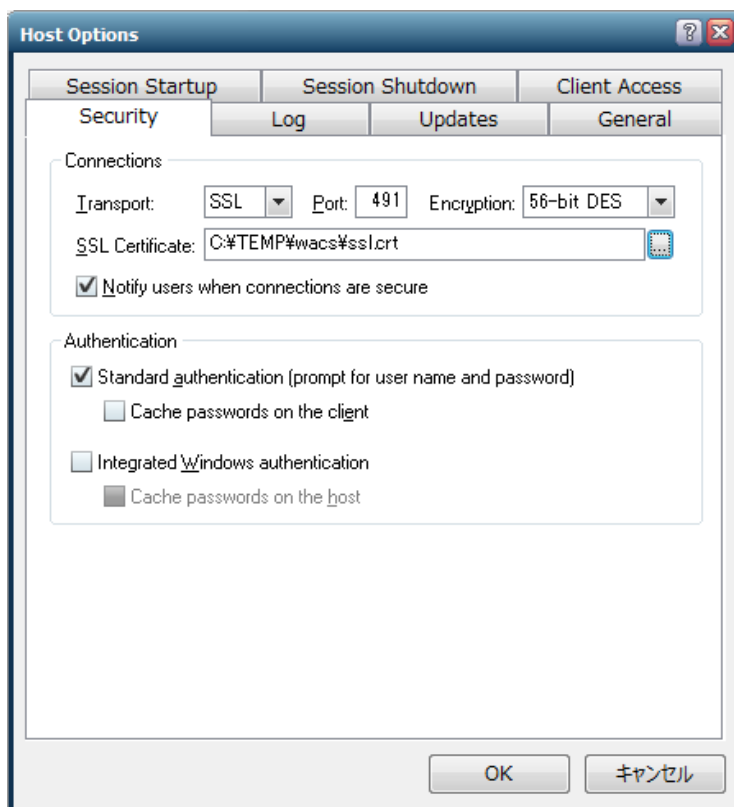
16. これらのファイルをコピーし、コピーした<ホスト名>-chain.pemの方をssl.crtに、コピーした<ホスト名>-key.pemの方をssl.keyにそれぞれファイル名を変更します。



ssl.crt をダブルクリックすると、証明書の内容を確認することができます。



17. アドミンコンソール(クラスターマネージャー)の [Host Options] → [Security] → [Connections] で, [Transport] を SSL に変更, [SSL Certificate] で前ステップのファイル ssl.crt を指定, 最後に [Notify users when connections are secure] にチェックを入れます.



18. 操作や設定に誤りがなければ, GG クライアントから GG サーバーにアクセスすると, 次のダイアログ (通信がセキュアという情報) が表示されます. [OK] をクリックすると, SSL 通信で GG を利用することができます.

