思科电子邮件安全的Azure AD配置脚本

Contents

Introduction

本文提供可以从UNIX/Linux环境运行简化被使用的进程创建自签名证书和要求的Microsoft天蓝色的步骤，当需要配置思科电子邮件安全的一份脚本。此脚本可以用于邮箱自动修正(3月)，微软办公软件365 LDAP连接器或者思科威胁分析器办公室的365。此脚本独立，并且可以与AsyncOS一起使用所有版本电子邮件安全工具(ESA)。

Note:此条款是proof-of-concept和，假设为例基本类型。当这些步骤成功测试时，此条款主要为演示和说明目的打算。自定义脚本是在思科的范围和支持能力外面。Cisco技术支持中心(TAC)不会写，更新或者在任何时间排除故障外部脚本。在您尝试并且修建所有脚本前，请保证您有执行脚本知识，当您修建最终脚本时。

Note:没有资格Cisco TAC和Cisco支持排除故障与Microsoft Exchange的用户方面问题，Microsoft Azure AD或者办公室365。

Prerequisites

Requirements

思科建议您读并且知道[如何配置Azure AD和办公室365 ESA的邮箱设置](#)。

Components Used

This document is not restricted to specific software and hardware versions.

对于此脚本的目的和执行，它是，以为您安排Openssl安装。**从openssl或openssl版本**为了验证安装的您终端的提示符，请运行。

为此条款的目的，脚本将呼叫并且被执行作为*my_azure.sh*。感到自由命名脚本，您希望。

The information in this document was created from the devices in a specific lab environment.All of the devices used in this document started with a cleared (default) configuration.如果您的网络实际，请保证您了解所有命令潜在影响。

思科电子邮件安全的Azure AD配置脚本

从一台外部主机(UNIX/Linux)，请创建脚本并且复制和插入此文本：

```
"##########################################################################
     my_azure.shSherwin (robsherw@cisco.com) ©2018||
openssl


##########################################################################
""
openssl >/dev/null;
    "opensslopenssl!"& openssl

    "openssl"&&
fi

"
cert ""
my_cert

[-f $my_cert.key];

    "cert " &&my_cert


"
 cert""

crt=$my_cert.crt
key=$my_cert.key
pem=$my_cert.pem

$crt
$key
$pem
""

;
   - p "$ (tput smso) (y/n)$ (tput sgr0)" yn
   $yn
       [Yy] *) openssl req -x509 -sha256 --1825 - newkey rsa:2048 - keyout $key - $crt
openssl rsa -$key - $key
cat $key $crt > $pem

""
$crtbase64Thumbprint=`openssl x509 - outform der -|openssl dgst --sha1|openssl base64`
$crtbase64Value=`openssl x509 - outform der -|openssl base64 - `
keyid= `Python - c "uuid;print(uuid.uuid4())"`
"
##############################################################
 $ (tput smul) copy$ (tput rmul)Azure
##############################################################
""
"\ "keyCredentials \" [
{
\ "customKeyIdentifier \" \"$base64Thumbprint\"
\ "keyId \" \ "$keyid \"
\ "\" \"AsymmetricX509Cert\"
```

```
\ "\" \ "\"
\ "\" \"$base64Value\"
}
]"
"
##########################################################################
$ (tput smul) complete$ (tput rmul)$ (tput smso)ID$ (tput sgr0)$ (tput smso)ID$ (tput sgr0)
##########################################################################
""
"$ (tput smso) Thumbprint$ (tput sgr0)ESA$base64Thumbprint"
"$ (tput smso)Key$ (tput sgr0)ESA$pem
";; ;
        [Nn] *); ;
        *)""; ;
    esac

;
    - p "$ (tput smso) (y/n)$ (tput sgr0)" yn
    $yn
        [Yy] *) openssl x509 -$crt -;"
!"&&; ;
        [Nn] *)"!"&&; ;
        *)""; ;
    esac
```

提示：一旦写入脚本，请输入**chmod u+x <script_name>**为了做脚本可执行。

脚本的一完整示例在操作的应该导致：

```
my_host$ ./my_azure
###############################################################################
     my_azure.shSherwin (robsherw@cisco.com) ©2018||
openssl


###############################################################################

opensslopenssl!
LibreSSL 2.2.7

cert
technote_example

 cert
technote_example.crt
technote_example.key
technote_example.pem

/y
2048RSA
.................................................... +++
......................................... +++
'technote_example.key'
-----


DN


''
```

```
-----
(2) []
() []
() []**RTP**
() []
() []
() []**example.local**
[]**joe.user@example.local**
RSA
```

```
#####################################################################
Azure
#####################################################################
```

```
"keyCredentials" [
{
"customKeyIdentifier" "wWHhkWEfuhDHTXPzzmHoSEnjbNM="
"keyId" "338836b8-fc8d-4e1b-9a3f-b252f8368d34"
"" "AsymmetricX509Cert"
"" ""
""
"MIIDtDCCApwCCQDV3bbiHmaN2jANBgkqhkiG9w0BAQsFADCBmzELMAkGA1UEBhMCVVMxFzAVBgNVBAgMDk5vcnRoRoIENhcm9
saW5hMQwwCgYDVQQHDANSVFAxDjAMBgNVBAoMBUNpc2NvMRYwFAYDVQQLDA1FeGFtcGxlIERlcHQuMRYwFAYDVQQDDA1leGF
tcGxlLmxvY2FsMSUwIwYJKoZIhvcNAQkBFhZqb2UudXNlckBleGFtcGxlLmxvY2FsMB4XDTE4MTAxODAyMDA0OVoXDTIzMTA
xNzAyMDA0OVowgZsxCzAJBgNVBAYTAlVTMRcwFQYDVQQIDA5Ob3J0aCBDYXJvbGluYTEMMAoGA1UEBwwDUlRQMQ4wDAYDVQQ
KDAVDaXNjbzEWMBQGA1UECwwNRXhhbXBsZSBEZXB0LjEWMBQGA1UEAwwNZXhhbXBsZS5sb2NhbDElMCMGCSqGSIb3DQEJARY
Wam9lLnVzZXJAZXhhbXBsZS5sb2NhbDCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAKlYmW7DN+AxcZQcpc8hZhm
v9yqMHul2cjV3G088mkGtRZU5KUVNKZZSmMlny3lOKg6cTu4Ez4UuigzC/2JXEf3+wOj9YChK92bEYWjYsKeZtbIoqYRfHE+
Sk+bsJb5GpizXgPcYZGje81ecgamhDrg7NZrthPTSKa4ZxmYwpQl6xGDrMipolGoENf+eyNCo5VyAXlxuYH8m6t0GdPw+VKH
J7k+4wI9KTUw4LABoOWs8hUnDi0yz2k9mqNvTG+u75EUUMgcTWc/ISsXjC8kpbOsxteZIiU4xUvqNd1t96iccjad19n61Jds
wGX+CC1Pl+ZZMk8/IQEPtbPqs/4p3cmECAwEAATANBgkqhkiG9w0BAQsFAAOCAQEAQqq7ixBbtfhorrWk73uCoYUPRqWZLKH
lgs1UpEnmPjvLZiImY+O6kiR9icDVjFD47AW+0vYg3pHt6pKWl7TUZpilz4hNp0oYc/qjd6aCA8B2KMmbfh2DVhmpYWW8P7w
bNP/im3114F/zJvBVnHjeaY9KsuTUU54Wb8VX2FFX40/YFm/HTHrXcHHyWy5XBU9MFVmEu+Yv6JIxCaEgj5J7jV4qGQM++fn
+EpRPkVHn844Hzgxm40bRW747rjGuyKss+E2tjWJT6OmDJ4ruHCFdvhkZvvzVJyVn0PVN+cwoJ0gLM7p2oa7J3IdNZ3p2CMX
vFdZsRiFFUpBIbK3VYlFRrg=="
}
]
```

```
#####################################################################
IDID
#####################################################################
```

```
ESAThumbprint wWHhkWEfuhDHTXPzzmHoSEnjbNM=
ESAtechnote_example.pem
```

脚本将提示您详细查看证书。输入y或n为了完成脚本。

```
/y


      1 (0x0)
      (S):15410674582220606938 (0xd5ddb6e21e668dda)
   sha256WithRSAEncryption
      C=US ST= L=RTP O=Cisco OU=Example CN=example.local/emailAddress= joe.user@example.local

          18 02:00:49 2018GMT
          17 02:00:49 2023GMT
      C=US ST= L=RTP O=Cisco OU=Example CN=example.local/emailAddress= joe.user@example.local

          rsaEncryption
              (2048)
```

```
                00:a9:58:99:6e:c3:37:e0:31:71:94:1c:a5:cf:21
                66:19:af:f7:2a:8c:1e:e9:76:72:35:77:1b:4f:3c
                9a:41:ad:45:95:39:29:45:4d:29:96:52:98:c9:67
                cb:79:4e:2a:0e:9c:4e:ee:04:cf:85:2e:8a:0c:c2
                ff:62:57:11:fd:fe:c0:e8:fd:60:28:4a:f7:66:c4
                61:68:d8:b0:a7:99:b5:b2:28:a9:84:5f:1c:4f:92
                93:e6:ec:25:be:46:a6:2c:d7:80:f7:18:64:68:de
                f3:57:9c:81:a9:a1:0e:b8:3b:35:9a:ed:84:f4:d2
                29:ae:19:c6:66:30:a5:09:7a:c4:60:eb:32:2a:68
                94:6a:04:35:ff:9e:c8:d0:a8:e5:5c:80:5e:5c:6e
                60:7f:26:ea:dd:06:74:fc:3e:54:a1:c9:ee:4f:b8
                c0:8f:4a:4d:4c:38:2c:00:68:39:6b:3c:85:49:c3
                8b:4c:b3:da:4f:66:a8:db:d3:1b:eb:bb:e4:45:14
                32:07:13:59:cf:c8:4a:c5:e3:0b:c9:29:6c:eb:31
                b5:e6:48:89:4e:31:52:fa:8d:77:5b:7d:ea:27:1c
                8d:a7:75:f6:7e:b5:25:db:30:19:7f:82:0b:53:e5
                f9:96:4c:93:cf:c8:40:43:ed:6c:fa:ac:ff:8a:77
                72:61
            65537 (0x10001)
   sha256WithRSAEncryption
        42:aa:bb:8b:10:5b:b5:f8:68:ae:b5:a4:ef:7b:82:a1:85:0f
        46:a5:99:2c:a1:e5:82:cd:54:a4:49:e6:3e:3b:cb:66:22:26
        63:e3:ba:92:24:7d:89:c0:d5:8c:50:f8:ec:05:be:d2:f6:20
        de:91:ed:ea:92:96:97:b4:d4:66:98:a5:cf:88:4d:a7:4a:18
        73:fa:a3:77:a6:82:03:c0:76:28:c9:9b:7e:1d:83:56:19:a9
        61:65:bc:3f:bc:1b:34:ff:e2:9b:7d:75:e0:5f:f3:26:f0:55
        9c:78:de:69:8f:4a:b2:e4:d4:53:9e:16:6f:c5:57:d8:51:57
        e3:4f:d8:16:6f:c7:4c:7a:d7:70:71:f2:5b:2e:57:05:4f:4c
        15:59:84:bb:e6:2f:e8:92:31:09:a1:20:8f:92:7b:8d:5e:2a
        19:03:3e:f9:f9:fe:12:94:4f:91:51:e7:f3:8e:07:ce:0c:66
        e3:46:d1:5b:be:3b:ae:31:ae:c8:ab:2c:f8:4d:ad:8d:62:53
        e8:e9:83:27:8a:ee:1c:21:5d:be:19:19:be:fc:d5:27:25:67
        d0:f5:4d:f9:cc:28:27:48:0b:33:ba:76:a1:ae:c9:dc:87:4d
        67:7a:76:08:c5:ef:15:d6:6c:46:21:45:52:90:48:6c:ad:d5
        62:51:51:ae
----------
```

```
MIIDtDCCApwCCQDV3bbiHmaN2jANBgkqhkiG9w0BAQsFADCBmzELMAkGA1UEBhMC
VVMxFzAVBgNVBAgMDk5vcnRoIENhcm9saW5hMQwwCgYDVQQHDANSVFAxDjAMBgNV
BAoMBUNpc2NvMRYwFAYDVQQLDA1FeGFtcGxlIERlcHQuMRYwFAYDVQQDDA1leGFt
cGxlLmxvY2FsMSUwIwYJKoZIhvcNAQkBFhZqb2UudXNlckBleGFtcGxlLmxvY2Fs
MB4XDTE4MTAxODAyMDA0OVoXDTIzMTAxNzAyMDA0OVowgZsxCzAJBgNVBAYTAlVT
MRcwFQYDVQQIDA5Ob3J0aCBDYXJvbGluYTEMMAoGA1UEBwwDUlRQMQ4wDAYDVQQK
DAVDaXNjbzEWMBQGA1UECwwNRXhhbXBsZSBEZXB0LjEWMBQGA1UEAwwNZXhhbXBs
ZS5sb2NhbDElMCMGCSqGSIb3DQEJARYWam9lLnVzZXJAZXhhbXBsZS5sb2NhbDCC
ASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAKlYmW7DN+AxcZQcpc8hZhmv
9yqMHul2cjV3G088mkGtRZU5KUVNKZZSmMlny3lOKg6cTu4Ez4UuigzC/2JXEf3+
wOj9YChK92bEYWjYsKeZtbIoqYRfHE+Sk+bsJb5GpizXgPcYZGje81ecgamhDrg7
NZrthPTSKa4ZxmYwpQl6xGDrMipolGoENf+eyNCo5VyAXlxuYH8m6t0GdPw+VKHJ
7k+4wI9KTUw4LABoOWs8hUnDi0yz2k9mqNvTG+u75EUUMgcTWc/ISsXjC8kpbOsx
teZIiU4xUvqNd1t96iccjad19n61JdswGX+CC1Pl+ZZMk8/IQEPtbPqs/4p3cmEC
AwEAATANBgkqhkiG9w0BAQsFAAOCAQEAQqq7ixBbtfhorrWk73uCoYUPRqWZLKHl
gs1UpEnmPjvLZiImY+O6kiR9icDVjFD47AW+0vYg3pHt6pKWl7TUZpilz4hNp0oY
c/qjd6aCA8B2KMmbfh2DVhmpYWW8P7wbNP/im3114F/zJvBVnHjeaY9KsuTUU54W
b8VX2FFX40/YFm/HTHrXcHHyWy5XBU9MFVmEu+Yv6JIxCaEgj5J7jV4qGQM++fn+
EpRPkVHn844Hzgxm40bRW747rjGuyKss+E2tjWJT6OmDJ4ruHCFdvhkZvvzVJyVn
0PVN+cwoJ0gLM7p2oa7J3IdNZ3p2CMXvFdZsRiFFUpBIbK3VYlFRrg==
-----END-----
```

此时，您有三个文件：.crt、.key和.pem。

当您设置App注册时，请使用*keyCredentials*输出如提示，并且复制输出对Azure。*Thumbprint*输出和*证书专用密钥*(.pem)是需要的，当您运行在思科电子邮件安全时的配置步骤。

Related Information

- [思科电子邮件安全工具-最终用户指南](#)
- [Technical Support & Documentation - Cisco Systems](#)