



服务器证书安装配置指南

F5

二〇二一年一月

第一步：生成证书请求文件(CSR)

如果你已经生成了**CSR**，并且证书已经颁发了，请从第三步开始阅读，如果没有请从第一步开始阅读。

进入OpenSSL安装目录下的Bin目录，运行如下命令生成私钥（KEY）：

```
openssl genrsa -out server.key 2048
Generating RSA private key, 2048 bit long modulus
.....+++++
.....+++++
e is 65537 (0x10001)
```

运行如下命令生成证书请求文件（CSR）

```
openssl req -new -key server.key -out server.csr
```

如是Windows系统，请使用下面命令生成证书请求文件（CSR）

```
set OPENSSL_CONF=C:\Program Files\OpenSSL-Win64\bin\openssl.cfg
openssl req -new -key server.key -out server.csr
```

接下来提示输入私钥密码和申请证书的详细信息

```
Enter pass phrase for server.key:
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) []:CN
State or Province Name (full name) []:Shanghai
Locality Name (eg, city) []:Shanghai
Organization Name (eg, company) []:GlobalSign China Co., Ltd.

Organizational Unit Name (eg, section) []:IT Dept.
Common Name (eg, your websites domain name) []:cn.globalsign.com
Email Address []:

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
```

从Email地址开始，下面的信息都不需要，请保留为空，直接回车即可。

需要输入的信息说明请见下表：

字段	说明	示例
Country Name	ISO 国家代码(两位字符)	CN
State or Province Name	所在省份	Shanghai
Locality Name	所在城市	Shanghai
Organization Name	公司名称	GlobalSign CN Co., Ltd.
Organizational Unit Name	部门名称	IT Dept.
Common Name	申请证书的域名	Cn.globalsign.com
Email Address	不需要输入	
A challenge password	不需要输入	

完成以上的操作后会在对应的目录下生成server.key 和 server.csr，请妥善保存这两个文件。

第二步：提交CSR，申请证书

递交证书申请表及相关资料，并同时把证书请求文件（CSR）提交给GlobalSign销售。

第三步：获取服务器和中级证书

1.获取服务器证书，也就是 Globalsign 给你颁发的证书，绑定了你的域名或公网IP 的 SSL 证书，从收到的证书邮件中复制第一段代码，此证书由GlobalSign系统通过 Email 方式发送给用户，证书文件的内容为（从 “-----BEGIN CERTIFICATE-----” 开始，并到 “-----END CERTIFICATE-----” 结束的所有内容），请把此内容在文本编辑器中保存为 server.cer。

2.如果你申请的是域名型 SSL 证书，请获取域名型（DV）中级证书从收到的证书邮件中复制第二段代码（包含中级证书及交叉证书），此证书由 GlobalSign 系统通过 Email方式发送给用户，证书文件的内容为（从 “-----BEGIN CERTIFICATE-----” 开始，并到 “-----END CERTIFICATE-----” 结束的所有内容），请把此内容在文本编辑器中保存为域名型（DV）中级证书，文件名为dvroot.cer

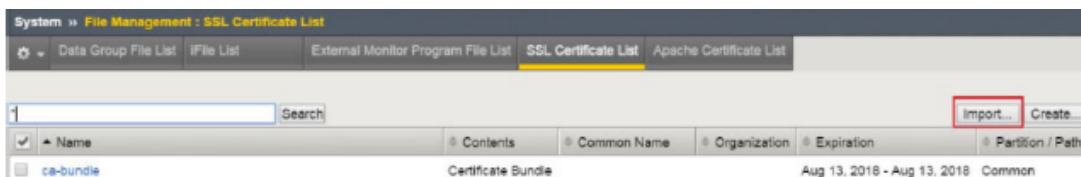
或

如果你申请的是企业型 SSL 证书，请获取企业型（OV）中级证书 从收到的证书邮件中复制第二段代码（包含中级证书及交叉证书），此证书由 GlobalSign 系统通过 Email 方式发送给用户，证书文件的内容为（从 “-----BEGINCERTIFICATE-----” 开始，到

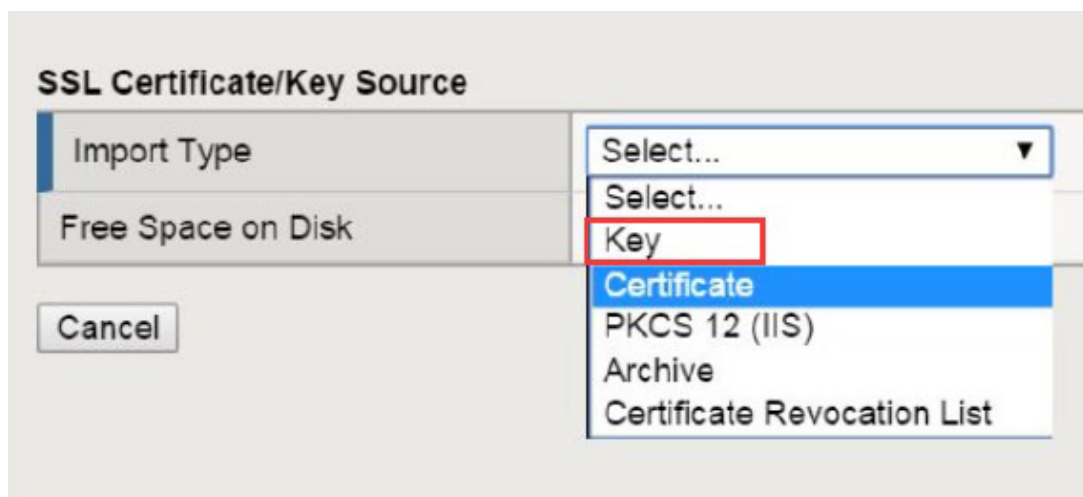
“-----ENDCERTIFICATE-----” 结束的所有内容) , 请把此内容在文本编辑器中保存为企业型 (OV) 中级证书 , 文件名为 ovroot.cer 或如果你申请的是增强型 (EV) SSL 证书 , 获取增强型 (EV) 中级证书 , 从收到的证书邮件中复制第二段代码 (包含中级证书及交叉证书) , 此证书由 GlobalSign 系统通过 Email 方式发送给用户 , 证书文件的内容为 (从 “-----BEGINCERTIFICATE-----” 开始 , 到 “-----ENDCERTIFICATE-----” 结束的所有内容) , 请把此内容在文本编辑器保存为增强型 (EV) 中级证书 , 文件名为 evroot.cer

第四步：配置证书

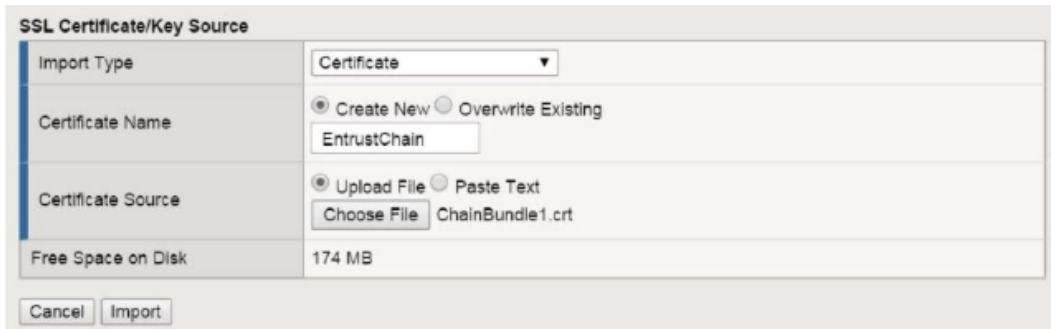
1. 进入F5的System □ File Management : SSL Certificate List目录 , 点击 import , 导入私钥文件、服务器证书和中级证书。



(1) 导入私钥文件 , 此例私钥名称设置为Mykey



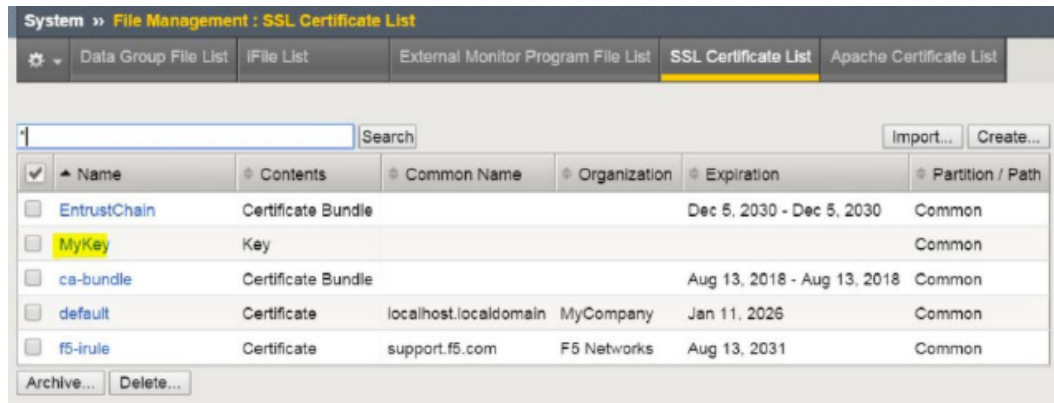
(2) 导入中级证书，certificate name此例设置为Entrustchain



The dialog box 'SSL Certificate/Key Source' contains the following fields and options:

- Import Type: Certificate
- Certificate Name: Create New (selected) / Overwrite Existing. Value: EntrustChain
- Certificate Source: Upload File (selected) / Paste Text. Value: ChainBundle1.crt
- Free Space on Disk: 174 MB
- Buttons: Cancel, Import

(3) 返回SSL Certificate List，点击列表里的私钥名称Mykey



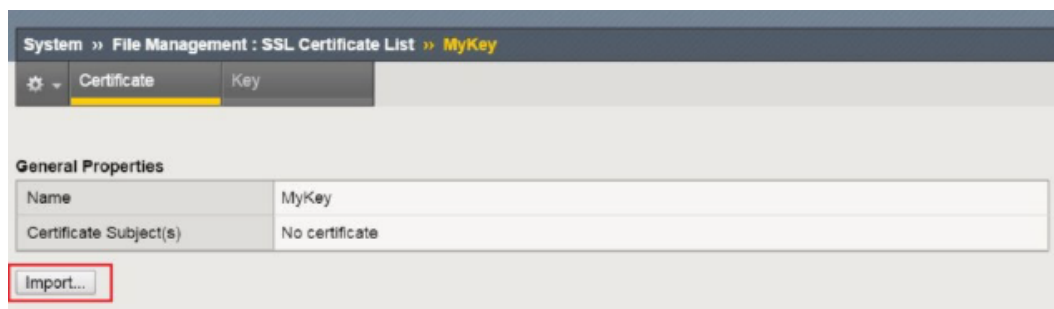
System » File Management : SSL Certificate List

Search: | Import... Create...

Name	Contents	Common Name	Organization	Expiration	Partition / Path
EntrustChain	Certificate Bundle			Dec 5, 2030 - Dec 5, 2030	Common
MyKey	Key				Common
ca-bundle	Certificate Bundle			Aug 13, 2018 - Aug 13, 2018	Common
default	Certificate	localhost.localdomain	MyCompany	Jan 11, 2026	Common
f5-irule	Certificate	support.f5.com	F5 Networks	Aug 13, 2031	Common

Archive... Delete...

(4) 点击导入



System » File Management : SSL Certificate List » MyKey

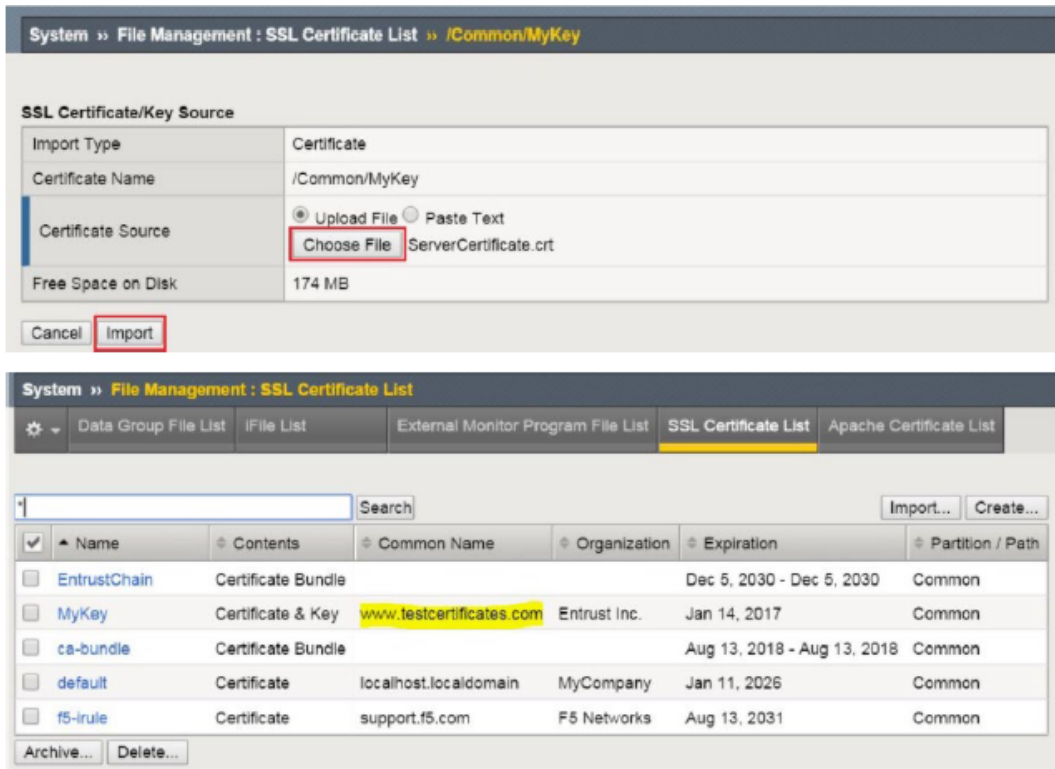
Certificate Key

General Properties

Name	MyKey
Certificate Subject(s)	No certificate

Import...

(5) 上传服务器证书文件

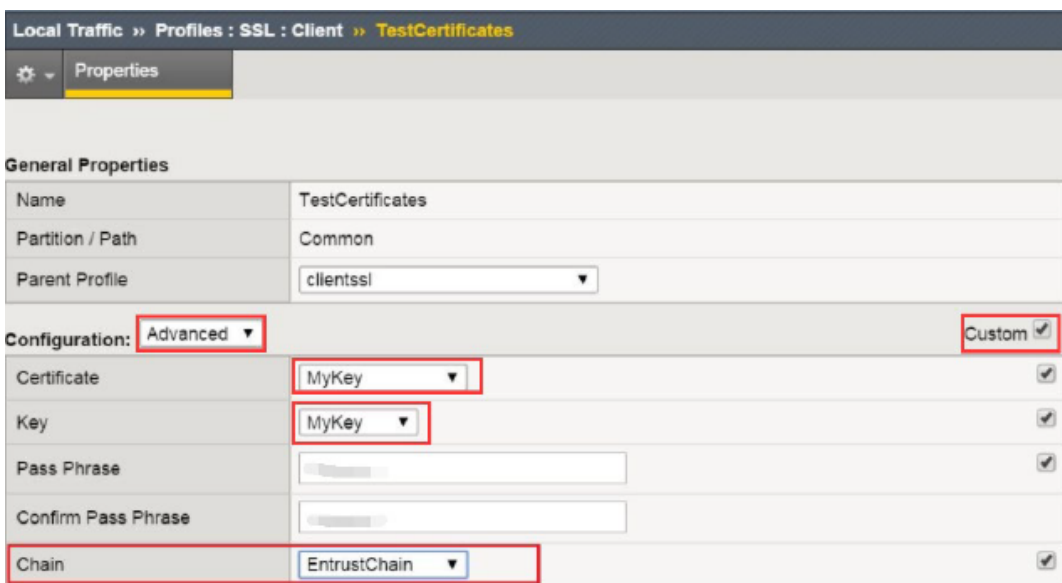


The screenshot shows the 'SSL Certificate/Key Source' form. The 'Import Type' is set to 'Certificate'. The 'Certificate Name' is '/Common/MyKey'. Under 'Certificate Source', the 'Upload File' radio button is selected, and the 'Choose File' button is highlighted with a red box. The file 'ServerCertificate.crt' is listed. The 'Free Space on Disk' is 174 MB. At the bottom, the 'Import' button is highlighted with a red box.

The second screenshot shows the 'SSL Certificate List' table with the following data:

Name	Contents	Common Name	Organization	Expiration	Partition / Path
EntrustChain	Certificate Bundle			Dec 5, 2030 - Dec 5, 2030	Common
MyKey	Certificate & Key	www.testcertificates.com	Entrust Inc.	Jan 14, 2017	Common
ca-bundle	Certificate Bundle			Aug 13, 2018 - Aug 13, 2018	Common
default	Certificate	localhost.localdomain	MyCompany	Jan 11, 2026	Common
f5-irule	Certificate	support.f5.com	F5 Networks	Aug 13, 2031	Common

2.进入Local TrafficProfiles : SSL : Client目录，新建一个client ssl profile，选择当前Profile所使用的证书（Certificate）、私钥（key），以及在 Chian 处，设置与该证书相关联的证书链（之前导入的中级证书），完成后，选择“Update”保存。



The screenshot shows the 'Properties' page for the 'TestCertificates' profile. The 'General Properties' section shows the Name as 'TestCertificates', Partition / Path as 'Common', and Parent Profile as 'clientssl'. The 'Configuration' section is set to 'Advanced' and 'Custom'. The 'Certificate' dropdown is set to 'MyKey', the 'Key' dropdown is set to 'MyKey', and the 'Chain' dropdown is set to 'EntrustChain'. The 'Pass Phrase' and 'Confirm Pass Phrase' fields are empty. Checkmarks are visible next to the Certificate, Key, and Chain fields.

3.将ssl profile关联到对应的virtual server

完成证书配置后，请备份私钥与公钥文件，便于以后，有需要可以使用备份文件来恢复。

GlobalSign China Co., Ltd

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