



How to Generate an SSL Certificate and Enable SSL Service

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Applied to

GV-System

GV-IP Camera

GV-Recording Server/GV-Video Gateway

Summary

The GV-System, GV-IP Camera and GV-Recording Server/GV-Video Gateway all support Secure Sockets Layer (SSL) protocol to ensure the security and privacy of remote connection. To enable the SSL service, you need to import an SSL Certificate file and/or a Private Key file into the server or GV device. The document will guide you through the steps of generating a Certificate Signing Request (CSR) and a Private Key (RSA) through a third-party tool. Then verify the CSR by a SSL authority to obtain a SSL Certificate. Finally, import the SSL Certificate and Private Key files into the server or GV device.

Note: The CSR verification by an SSL authority is normally a charged service.

Instructions

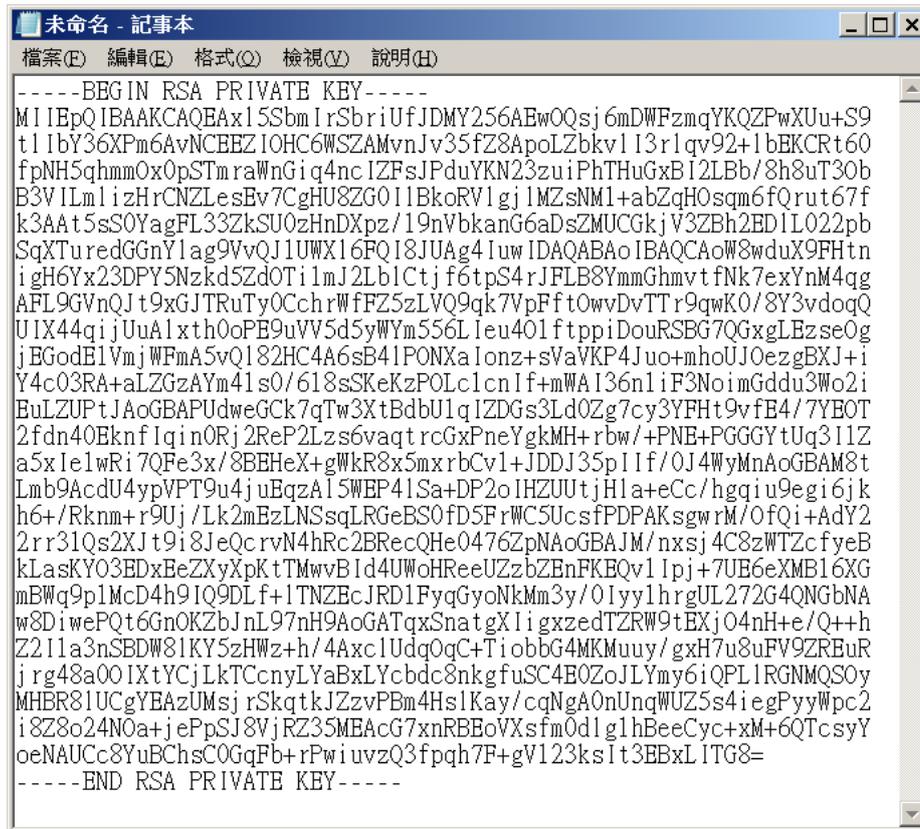
1. Generate a Certificate Signing Request (CSR) and Private Key (RSA) through a third-party tool.

A 、 We use the following third-party tool as the example:

http://www.gogetssl.com/eng/support/online_csr_generator/



C、 Copy the RSA Private Key contents, and paste into a plain text file.



D、 Save the file with a .cer extension. Then your Private Key file is created, e.g.



Note: If you want to import the Private Key to the GV-Recording Server/GV-Video Gateway, you need to save the file with a .key extension.



D、 Copy the certificate contents, and paste into a plain text file.

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未命名 - 記事本
檔案(E) 編輯(E) 格式(O) 檢視(V) 說明(H)
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-----END CERTIFICATE-----
    
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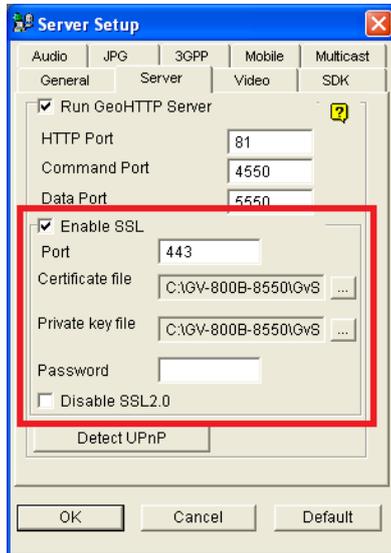
E、 Save the file with a .cer extension. Then your SSL Certificate file is created, e.g.



Note: If you want to import the Certificate to the GV-Recording Server/GV-Video Gateway, you need to save the file with a .crt extension.

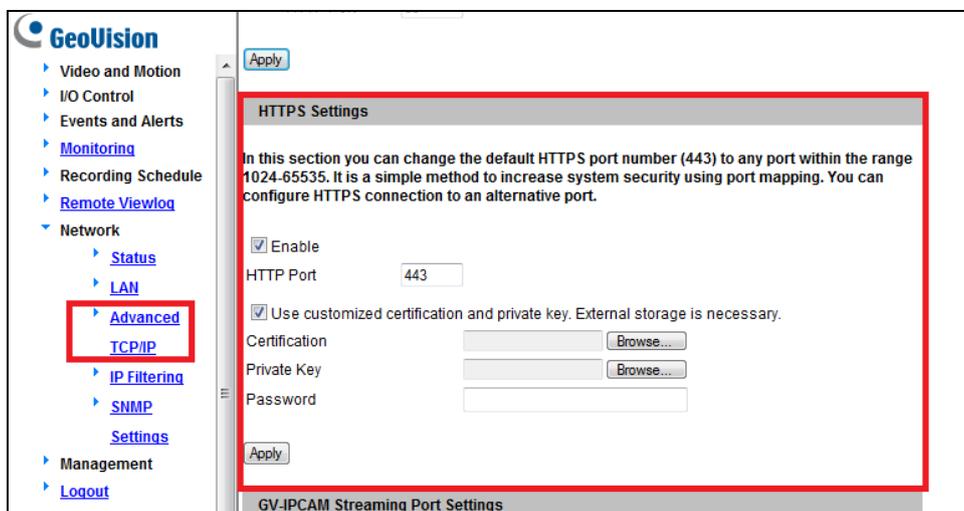


3. Import the SSL Certificate and Private Key files to the server or GV device.
 - A. On the GV-System, click the **Network** button, select **WebCam Server** and click the **Server** tab to display the following dialog box. Select **Enable SSL**, click the Browse button of **Certificate file** to import the SSL Certificate file (.cer), and click the Browse button of **Private key file** to import the Private Key file (.cer).



- B. On the Web Interface of GV-IP Camera, select **Network** and select **Advanced TCP/IP** to display the following page. Enable **HTTPS Settings** and select **Use customized certification and private key**. Click the Browse button of **Certificate** to import the SSL Certificate file (.cer), and click the Browse button of **Private Key** to import the Private Key file (.cer).

Note: These SSL options are only enabled after you install a memory card in the GV-IP Camera. And save the created SSL Certificate and Private Key files in the memory card first.





- C、 On the Web Interface of GV-Recording Server/GV-Video Gateway, select **Network** to display the following page. Enable **SSL**, click the Browse button of **Certificate File (.crt)** to import the SSL Certificate file, and click the Browse button of **Certificate Key File (.key)** to import the Private Key file.

The screenshot shows the 'Recording Server' web interface. On the left is a navigation menu with categories like Information, Camera, Server, Network, and Advanced Management. The 'Network' option is highlighted with a red box. The main content area is titled 'Network' and contains two sections: 'Information' and 'Setup'. The 'Information' section displays network details for the 'Intel(R) Gigabit CT Desktop Adapter(192.168.0.26)', including Mac Address (6805ca00-6845), IP Address (192.168.0.26), Subnet mask (255.255.252.0), Gateway (0.0.0.0), and DNS settings. The 'Setup' section includes an 'HTTP Port' set to 80 and an 'SSL' section. The 'SSL' section has a checked 'Enable' checkbox and three input fields: 'Port' (443), 'Certificate File(.crt):' (server.crt), and 'Certificate Key File(.key):' (server.key). Each of these three fields has a 'Browse' button next to it. A third field, 'Certificate Chain File(.crt):' (ca.crt), also has a 'Browse' button. At the bottom of the SSL section are 'Save' and 'Reload' buttons.

Note: You might obtain a Certificate Chain File from some SSL authorities. In this case, you can also import the file to the server.
