SafeNet Authentication Client

Integration Guide

Using SAC CBA for Blue Coat ProxySG

security to be free

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Contents

Third-Party Software Acknowledgement

This document is intended to help users of Gemalto products when working with third-party software, such as Blue Coat ProxySG.

Material from third-party software is being used solely for the purpose of making instructions clear. Screen images and content obtained from third-party software will be acknowledged as such.

Description

Remote access poses both a security and a compliance challenge to IT organizations. The ability to positively identify users (often remote users) requesting access to resources is a critical consideration in achieving a secure remote access solution. Deploying remote access solution without strong authentication is like putting your sensitive data in a vault (the datacenter), and leaving the key (user password) under the door mat.

A robust user authentication solution is required to screen access and provide proof-positive assurance that only authorized users are allowed access.

PKI is an effective strong authentication solution to the functional, security, and compliance requirements.

SafeNet Authentication Client (SAC) is a public key infrastructure (PKI) middleware that provides a secure method for exchanging information based on public key cryptography, enabling trusted third-party verification of user identities. SafeNet's certificate-based tokens provide secure remote access, as well as other advanced functions, in a single token, including digital signing, password management, network logon, and combined physical/logical access.

The tokens come in different form factors, including USB tokens, smart cards, and software tokens. All of these form factors are interfaced using a single middleware client, SafeNet Authentication Client (SAC). The SAC generic integration with CAPI, CNG, and PKCS#11 security interfaces enables out-of-the-box interoperability with a variety of security applications, offering secure web access, secure network logon, PC and data security, and secure email. PKI keys and certificates can be created, stored, and used securely with the hardware or software tokens.

SafeNet Authentication Manager (SAM) provides your organization with a comprehensive platform to manage all of your authentication requirements, across the enterprise and the cloud, in a single, integrated system. SAM enables management of the complete user authentication life cycle. SAM links tokens with users, organizational rules, and security applications to allow streamlined handling of your organization's authentication infrastructure with a flexible, extensible, and scalable management platform.

SAM is a comprehensive token management system. It is an out-of-the-box solution for Public Certificate Authorities (CA) and enterprises to ease the administration of SafeNet's hardware or software tokens devices. SAM is designed and developed based on the best practices of managing PKI devices in common PKI implementations. It offers robust yet easy to customize frameworks that meets different organizations' PKI devices management workflows and policies. Using SAM to manage tokens is not mandatory, but it is recommended for enterprise organizations.

For more information, refer to the *SafeNet Authentication Manager Administrator Guide*.

The Blue Coat ProxySG appliances provide complete control over all of your web traffic, delivering world-class threat protection. Robust features include user authentication, web filtering, data loss prevention, inspection, and visibility of SSL-encrypted traffic (including the ability to stream decrypted content to an external server with an Encrypted Tap license), content caching, bandwidth management, stream-splitting, and more.

The Blue Coat Secure Web Gateway Virtual Appliance (SWG VA) combines the market-leading security capabilities of Blue Coat ProxySG with the flexibility of virtualization to provide a cost-effective enterprise branch office solution. With the Blue Coat SWG VA, businesses can support web security and other critical remote office infrastructure on a common platform, reducing costs and IT resource requirements.

This document provides guidelines for deploying certificate-based authentication (CBA) for user authentication to Blue Coat ProxySG using SafeNet tokens.

It is assumed that the Blue Coat ProxySG environment is already configured and working with static passwords prior to implementing SafeNet multi-factor authentication.

Blue Coat ProxySG can be configured to support multi-factor authentication in several modes. CBA will be used for the purpose of working with SafeNet products.

Applicability

The information in this document applies to:

- **SafeNet Authentication Client (SAC)**—SafeNet Authentication Client is the middleware that manages SafeNet's tokens.
- **Blue Coat ProxySG (Virtual Appliance)**

Environment

The integration environment that was used in this document is based on the following software versions:

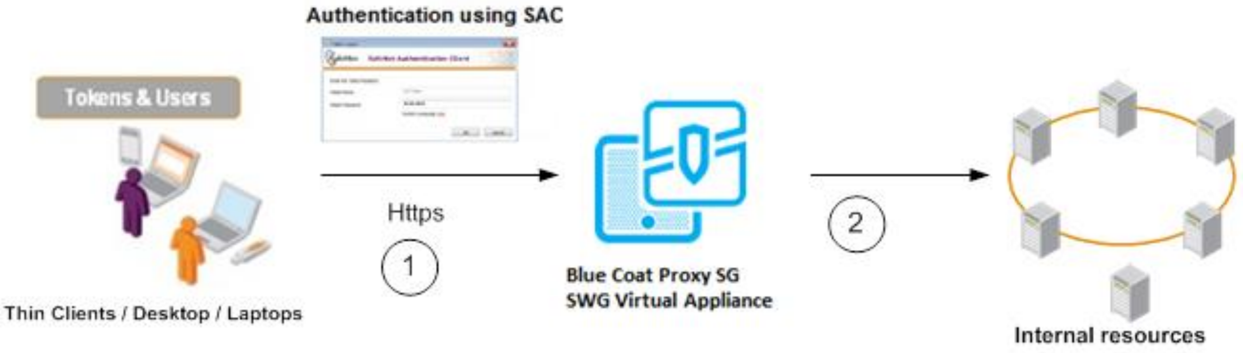
- **SafeNet Authentication Client (SAC)**—Version 9.0 GA
- **Blue Coat ProxySG (Software)**—Version SGOS 6.5.6.4 SWG Edition
- **Blue Coat ProxySG (Virtual Appliance)**—Model No. VA-100

Audience

This document is targeted to system administrators who are familiar with Blue Coat ProxySG, and are interested in adding multi-factor authentication capabilities using SafeNet tokens.

CBA Flow using SAC

The diagram below illustrates the flow of certificate-based authentication:



1. A user attempts to connect to the Blue Coat ProxySG server using the Blue Coat ProxySG client application. The user inserts the SafeNet token on which his/her certificate resides, and, when prompted, enters the token password.
2. After successful authentication, the user is allowed access to internal resources.

Prerequisites

Before implementing certificate-based authentication for Blue Coat ProxySG using SafeNet tokens, ensure the following:

- To use CBA, Microsoft Enterprise Certificate Authority must be installed and configured. In general, any certificate authority (CA) can be used. However, in this guide, integration is demonstrated using Microsoft CA.
- If SAM is used to manage the tokens, Token Policy Object (TPO) should be configured with MS CA Connector. For further details, refer to the section “Connector for Microsoft CA” in the *SafeNet Authentication Manager Administrator’s Guide*.
- Users must have a SafeNet token with an appropriate certificate enrolled on it.
- SafeNet Authentication Client (9.0) should be installed on all client machines.
- Client and Web Server Appliance certificates of type X.509 (issued from the same certificate authority) are required for testing purpose.
- Reverse proxy setup must be up and running.

Supported Tokens in SAC

SAC supports a number of tokens that can be used as a second authentication factor for users who authenticate to Blue Coat ProxySG.

SafeNet Authentication Client 9.0 (GA) supports the following tokens:

Certificate-based USB tokens

- SafeNet eToken PRO Java 72K
- SafeNet eToken PRO Anywhere
- SafeNet eToken 5100/5105
- SafeNet eToken 5200/5205
- SafeNet eToken 5200/5205 HID and VSR

Smart Cards

- SafeNet eToken PRO Smartcard 72K
- SafeNet eToken 4100

Certificate-based Hybrid USB Tokens

- SafeNet eToken 7300
- SafeNet eToken 7300-HID
- SafeNet eToken 7000 (SafeNet eToken NG-OTP)

Software Tokens

- SafeNet eToken Virtual
- SafeNet eToken Rescue

Configuring Blue Coat ProxySG

Configuring Blue Coat ProxySG for CBA requires the following:

- Configuring a CA Certificate List, page 7
- Configuring a Certificate Realm, page 15
- Configuring the HTTPS Reverse Proxy Service, page 18
- Configuring an Authentication Policy, page 20

Configuring a CA Certificate List

Configuring a CA certificate list requires:

- Creating a Keyring, page 7
- Importing the Web Server Appliance Certificate, page 9
- Importing the Client CA Certificate, page 11
- Creating a CA Certificate List, page 13

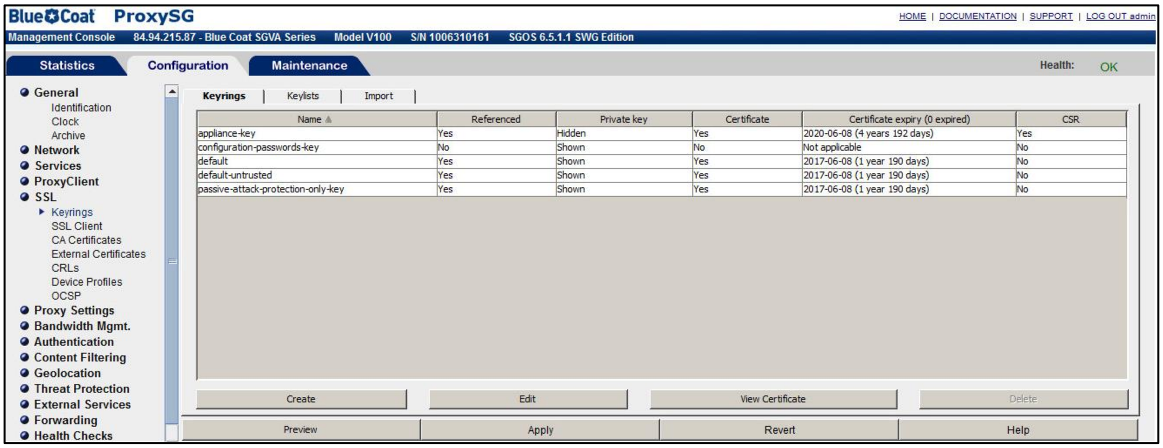
Creating a Keyring

1. In a web browser, open the following URL, and then log in as an administrator:

   https://<ProxySG_IP_Address>:8082

   Where, **<ProxySG_IP_Address>** is the IP address of the ProxySG virtual appliance, and **8082** is the default management port.

2. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **SSL > Keyrings**.



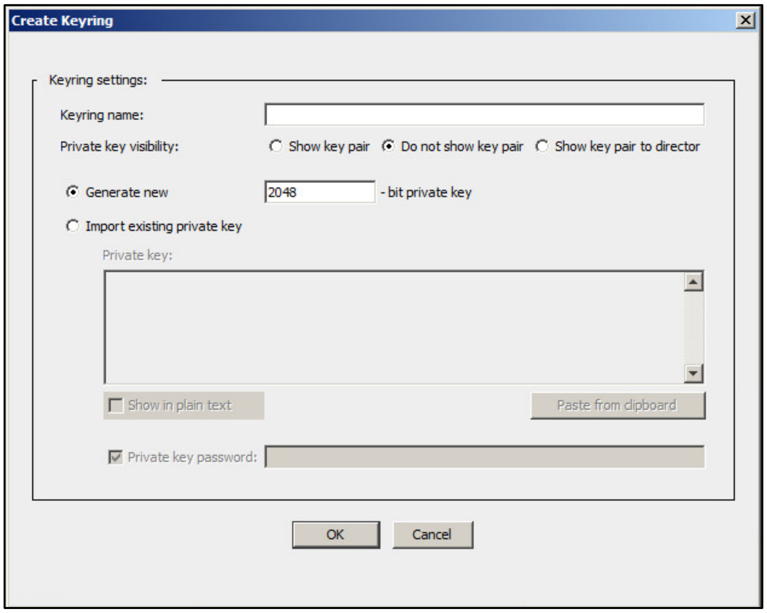
Name	Referenced	Private key	Certificate	Certificate expiry (0 expired)	CSR
appliance-key	Yes	Hidden	Yes	2020-06-08 (4 years 192 days)	Yes
configuration-passwords-key	No	Shown	No	Not applicable	No
default	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No
default-untrusted	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No
passive-attack-protection-only-key	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

3. In the right pane, on the **Keyrings** tab, click **Create**.

4. On the **Create Keyring** window, complete the following fields, and then click **OK**.

Keyring name	Enter a name for the keyring (for example, **Test**).
Private key visibility	Select **Show key pair**.



Create Keyring

Keyring settings:

Keyring name:

Private key visibility: ○ Show key pair ● Do not show key pair ○ Show keypair to director

● Generate new 2048 - bit private key

○ Import existing private key

Private key:

□ Show in plain text

☑ Private key password:

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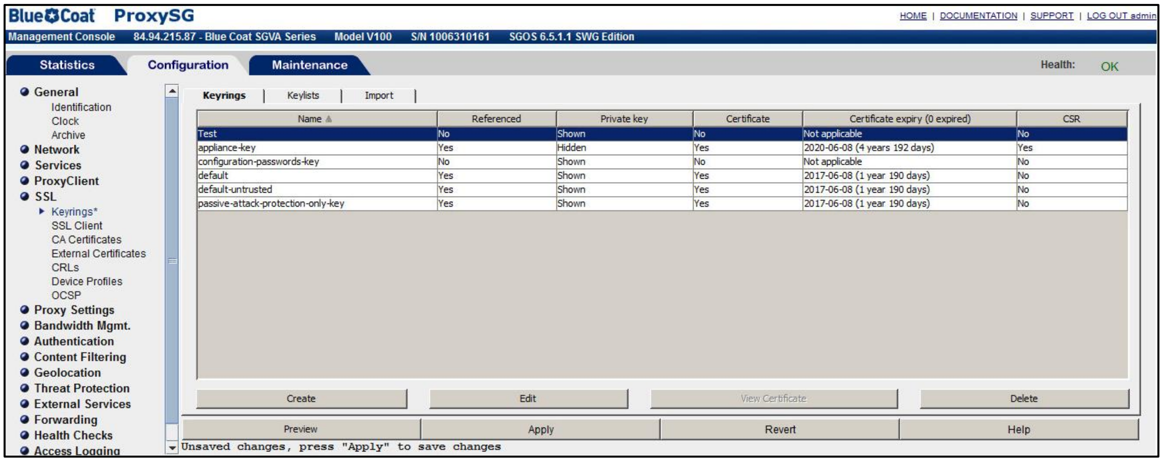
On the **Blue Coat ProxySG Management Console** window, in the right pane, the newly created keyring is listed.



Management Console 84.94.215.87 - Blue Coat SGVA Series Model V100 S/N 1006310161 SGOS 6.5.1.1 SWG Edition

Health: OK

Name	Referenced	Private key	Certificate	Certificate expiry (0 expired)	CSR
Test	No	Shown	No	Not applicable	No
appliance-key	Yes	Hidden	Yes	2020-06-08 (4 years 192 days)	Yes
configuration-passwords-key	No	Shown	No	Not applicable	No
default	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No
default-untrusted	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No
passive-attack-protection-only-key	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No

```
Unsaved changes, press "Apply" to save changes
```

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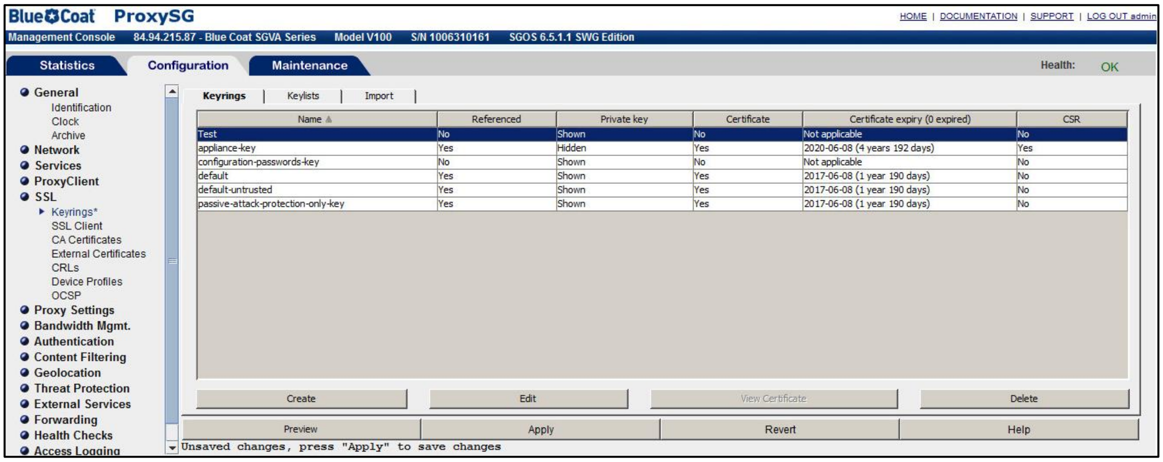
Importing the Web Server Appliance Certificate

1. Copy the text of the Web Server Appliance certificate (including the **Begin Certificate** and **End Certificate** statements) to the system clipboard.

2. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **SSL > Keyrings**.



Name	Referenced	Private key	Certificate	Certificate expiry (0 expired)	CSR
Test	No	Shown	No	Not applicable	No
appliance-key	Yes	Hidden	Yes	2020-06-08 (4 years 192 days)	Yes
configuration-passwords-key	No	Shown	No	Not applicable	No
default	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No
default-untrusted	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No
passive-attack-protection-only-key	Yes	Shown	Yes	2017-06-08 (1 year 190 days)	No

```
Unsaved changes, press "Apply" to save changes
```

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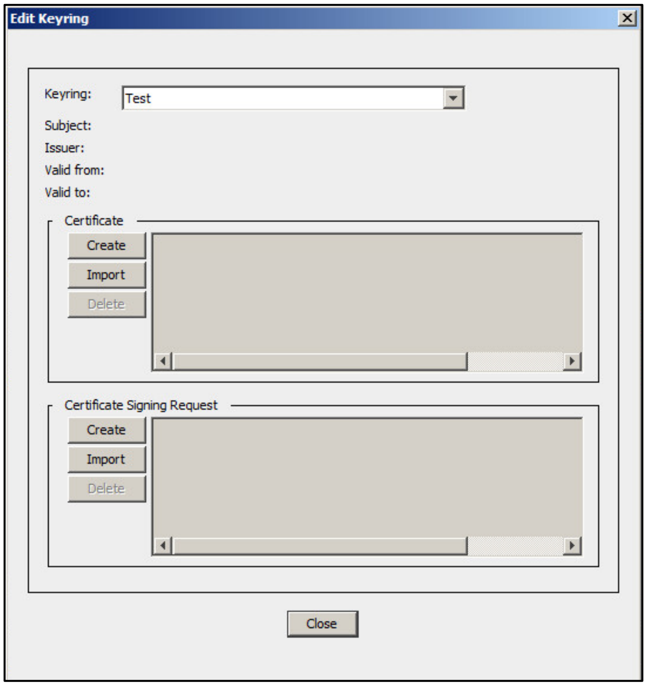
3. In the right pane, on the **Keyrings** tab, select the keyring (for example, **Test**) that you created earlier in step 4 of "Creating a Keyring" on page 7, and then click **Edit**.

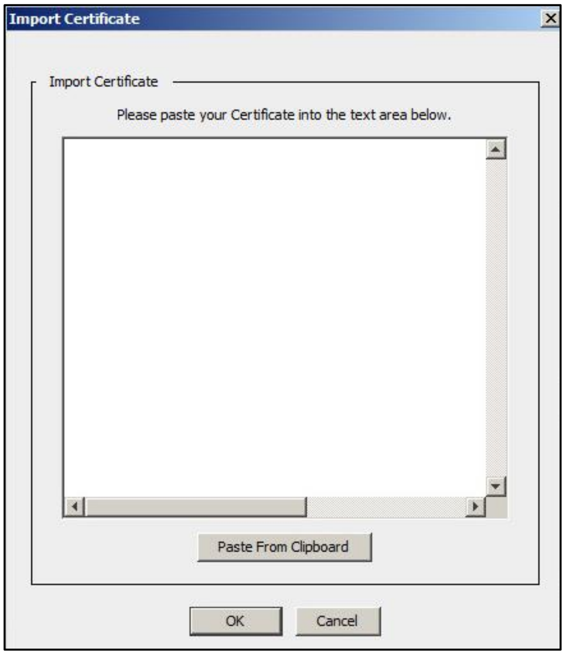
4. On the **Edit Keyring** window, under **Certificate**, click **Import**.



Keyring: Test

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

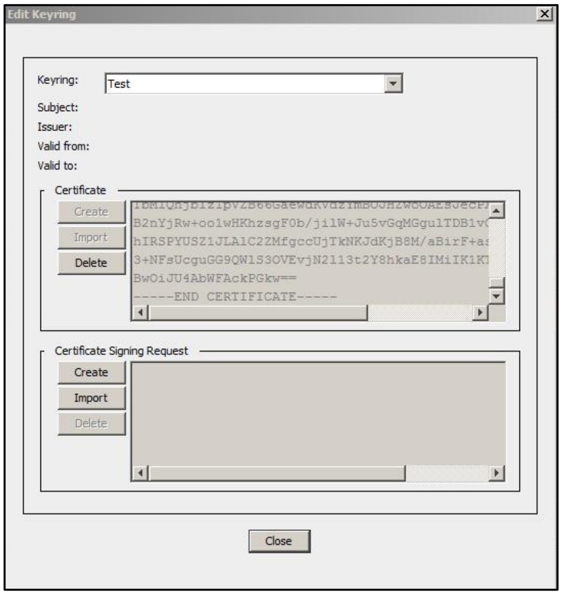
5. On the **Import Certificate** window, click **Paste From Clipboard**, and then click **OK**.



Please paste your Certificate into the text area below.

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

6. Click **Close**.



Keyring: Test
Subject:
Issuer:
Valid from:
Valid to:

```
B2nYjRw+oo1wHKhzsgF0b/ji1W+Ju5vGqMGgu1TDB1v
hIRSPYUSZ1JLA1C2ZMfgccUjTkNKJdKjB8M/aBirF+as
3+NFsUcguGG9QW1S3OVEvjN2113t2Y8hkaE8IMiIK1K
BwOiJU4AbWFAckPGkw==
-----END CERTIFICATE-----
```

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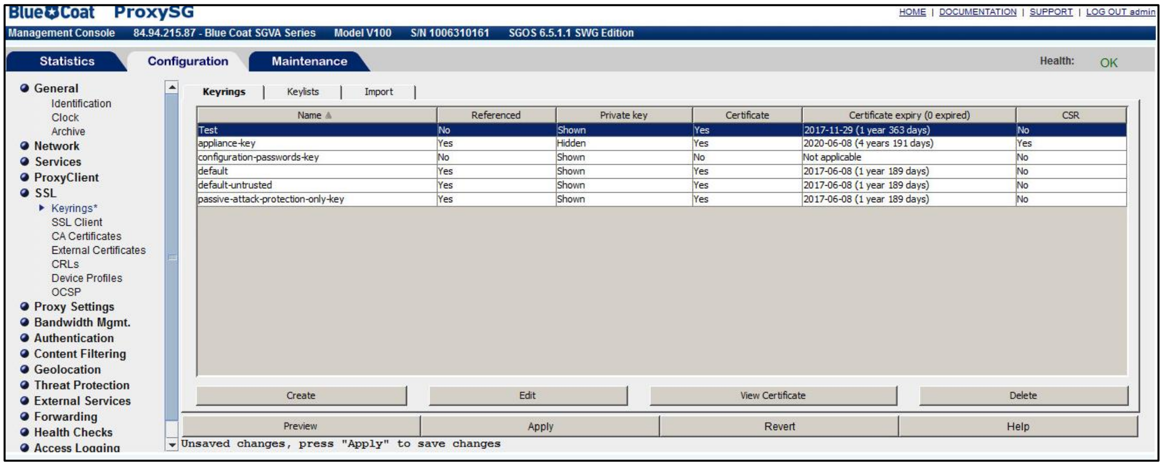
7. On the **Blue Coat ProxySG Management Console** window, click **Apply**.

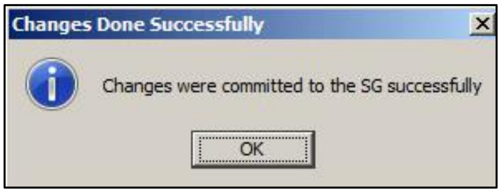


Name	Referenced	Private key	Certificate	Certificate expiry (0 expired)	CSR
Test	No	Shown	Yes	2017-11-29 (1 year 363 days)	No
appliance-key	Yes	Hidden	Yes	2020-06-08 (4 years 191 days)	Yes
configuration-passwords-key	No	Shown	No	Not applicable	No
default	Yes	Shown	Yes	2017-06-08 (1 year 189 days)	No
default-untrusted	Yes	Shown	Yes	2017-06-08 (1 year 189 days)	No
passive-attack-protection-only-key	Yes	Shown	Yes	2017-06-08 (1 year 189 days)	No

Unsaved changes, press "Apply" to save changes

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

8. A successful message is displayed. Click **OK**.



Changes were committed to the SG successfully

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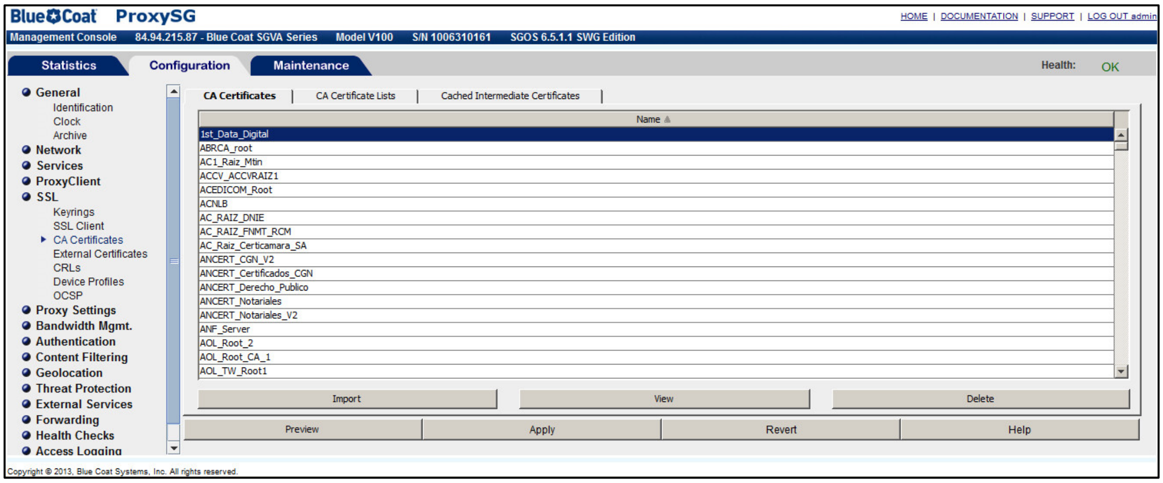
Importing the Client CA Certificate

A CA certificate verifies the identity of a Certificate Authority. It is used by the Blue Coat ProxySG to verify Web Server and Client certificates.

1. Copy the text of the CA certificate to the system Clipboard.
2. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **SSL > CA Certificates**.

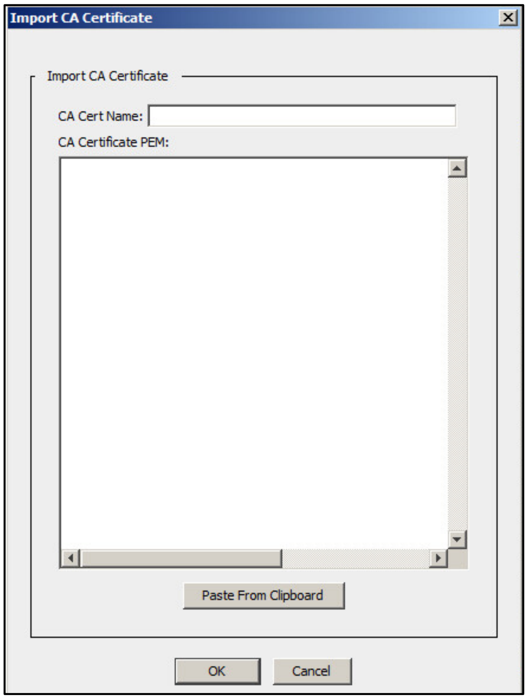


Name
1st_Data_Digital
ABRCA_root
AC1_Raiz_Mtin
ACCV_ACCVRAIZ1
ACEDICOM_Root
ACNLB
AC_RAIZ_DNIE
AC_RAIZ_FNMT_RCM
AC_Raiz_Certicamara_SA
ANCERT_CGN_V2
ANCERT_Certificados_CGN
ANCERT_Derecho_Publico
ANCERT_Notariales
ANCERT_Notariales_V2
ANF_Server
AOL_Root_2
AOL_Root_CA_1
AOL_TW_Root1

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

3. In the right pane, on the **CA Certificates** tab, click **Import**.

4. On the **Import CA Certificate** window, perform the following steps:
    a. In the **CA Cert Name** field, enter the name of the CA certificate (for example, **ProxySGCA**).
    b. Click **Paste From Clipboard**.
    c. Click **OK**.



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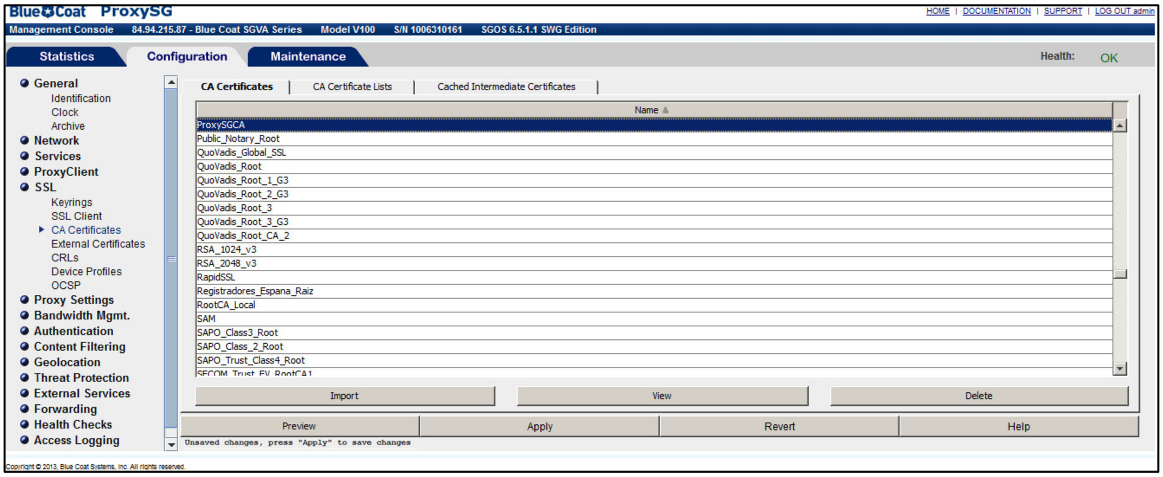
5. On the **Blue Coat ProxySG Management Console** window, in the right pane, the CA certificate is listed. Click **Apply**.



Name ▲
ProxySGCA
Public_Notary_Root
QuoVadis_Global_SSL
QuoVadis_Root
QuoVadis_Root_1_G3
QuoVadis_Root_2_G3
QuoVadis_Root_3
QuoVadis_Root_3_G3
QuoVadis_Root_CA_2
RSA_1024_v3
RSA_2048_v3
RapidSSL
Registradores_Espana_Raiz
RootCA_Local
SAM
SAPO_Class3_Root
SAPO_Class_2_Root
SAPO_Trust_Class4_Root
SECOM_Trust_EV_RootCA1

```
Unsaved changes, press "Apply" to save changes
```

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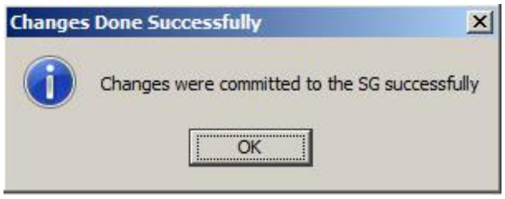
6. A successful message is displayed. Click **OK**.



Changes Done Successfully

Changes were committed to the SG successfully

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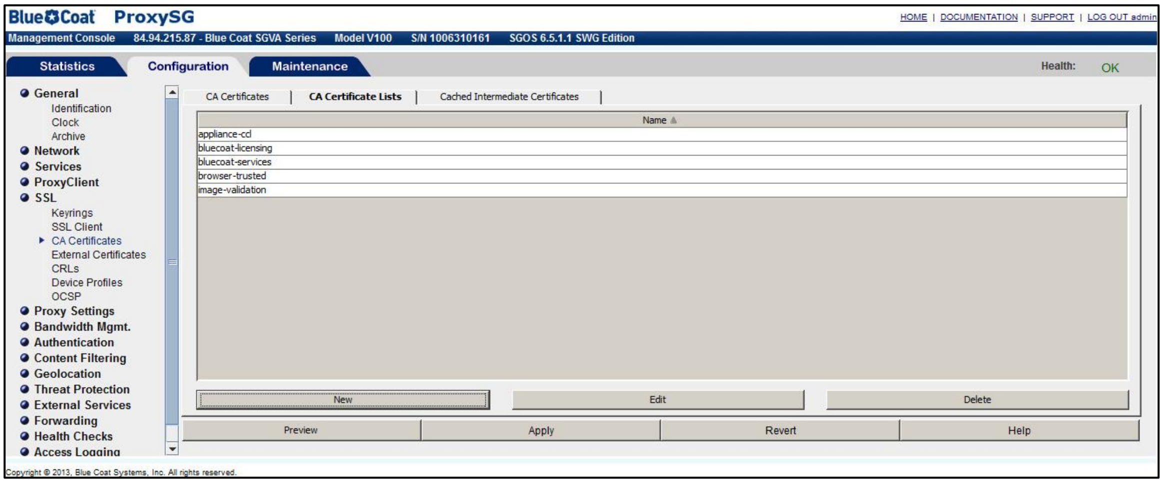
Creating a CA Certificate List

1. On the **Blue Coat ProxySG Management Console window**, click the **Configuration** tab, and then in the left pane, click **SSL > CA Certificates**.

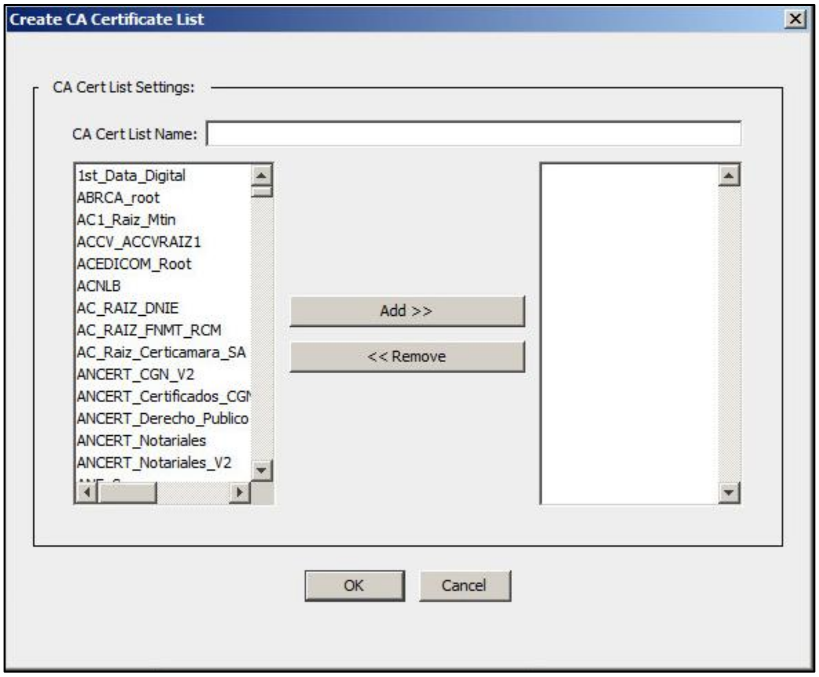


Name
appliance-ccl
bluecoat-licensing
bluecoat-services
browser-trusted
image-validation

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

2. In the right pane, on the **CA Certificate Lists** tab, click **New**.

3. On the **Create CA Certificate List** window, perform the following steps:
   a. In the **CA Cert List Name** field, enter a name for the certificate list (for example, **ReverseProxyCCL**).
   b. In the list box on the left, select the imported CA certificate (for example, **ProxySGCA**) that you imported earlier in step 4 of “Importing the Client CA Certificate” on page 11.
   c. Click **Add >>** to move the selected certificate to the list box on the right.
   d. Click **OK**.



CA Cert List Name:

1st_Data_Digital
ABRCA_root
AC1_Raiz_Mtin
ACCV_ACCVRAIZ1
ACEDICOM_Root
ACNLB
AC_RAIZ_DNIE
AC_RAIZ_FNMT_RCM
AC_Raiz_Certicamara_SA
ANCERT_CGN_V2
ANCERT_Certificados_CGN
ANCERT_Derecho_Publico
ANCERT_Notariales
ANCERT_Notariales_V2

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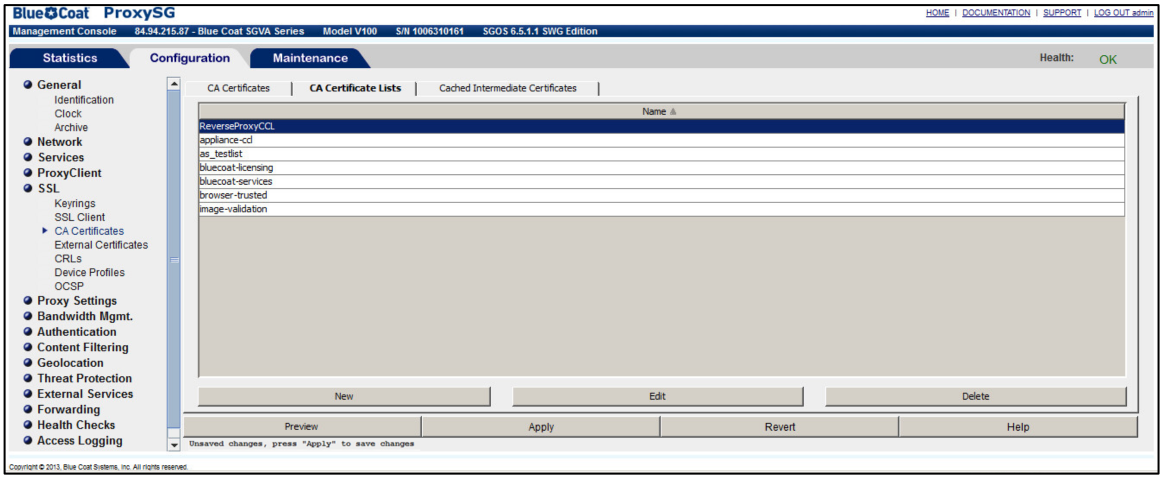
4. On the **Blue Coat ProxySG Management Console** window, in the right pane, the CA certificate list is listed. Click **Apply**.



Name ▲
ReverseProxyCCL
appliance-ccl
as_testlist
bluecoat-licensing
bluecoat-services
browser-trusted
image-validation

```
Unsaved changes, press "Apply" to save changes
```

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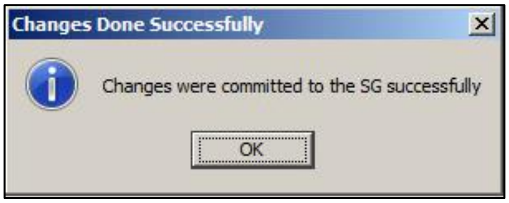
5. A successful message is displayed. Click **OK**.



Changes Done Successfully

Changes were committed to the SG successfully

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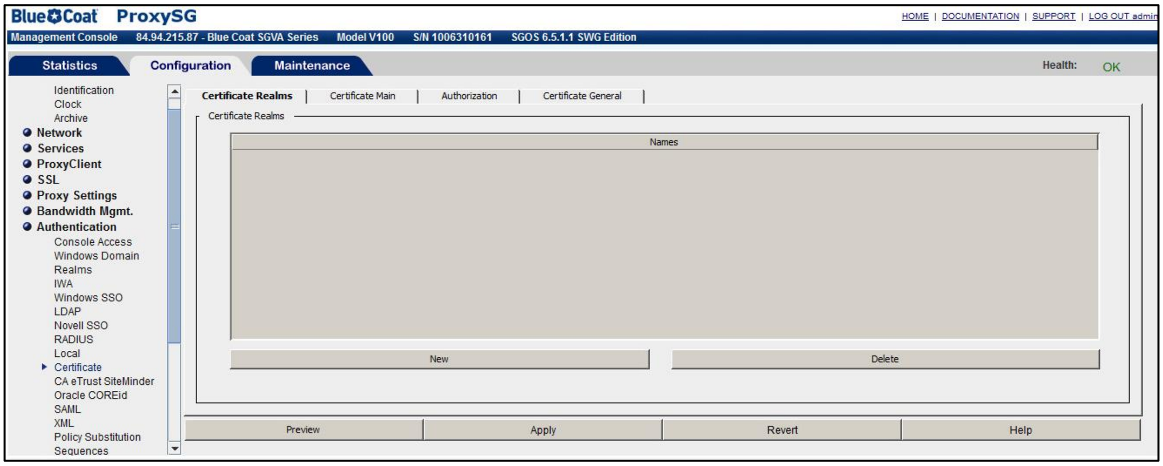
Configuring a Certificate Realm

Configuring a Certificate Realm requires:

- Creating a Certificate Realm, page 15
- Configuring the Certificate Realm Main Properties, page 16
- Configuring the Certificate Realm General Properties, page 17

Creating a Certificate Realm

1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **Authentication > Certificate**.



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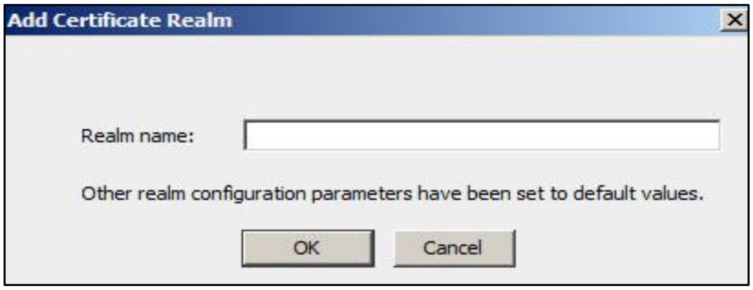
2. In the right pane, on the **Certificate Realms** tab, click **New**.
3. On the **Add Certificate Realm** window, in the **Realm name** field, enter a name for certificate realm (for example, **SAC_CBA**), and then click **OK**.



Add Certificate Realm

Realm name:

Other realm configuration parameters have been set to default values.

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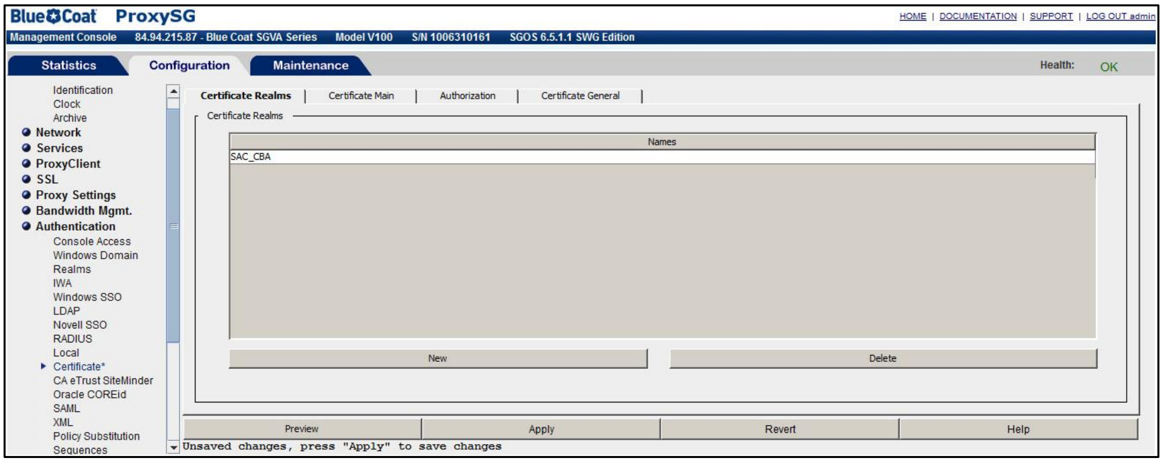
4. On the **Blue Coat ProxySG Management Console** window, in the right pane, the newly created certificate realm is listed. Click **Apply**.



Unsaved changes, press "Apply" to save changes

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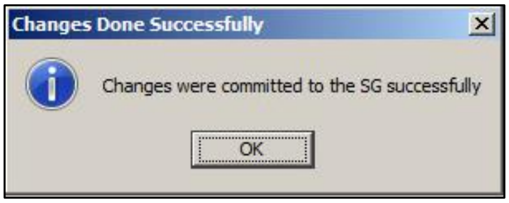
5. A successful message is displayed. Click **OK**.



Changes were committed to the SG successfully

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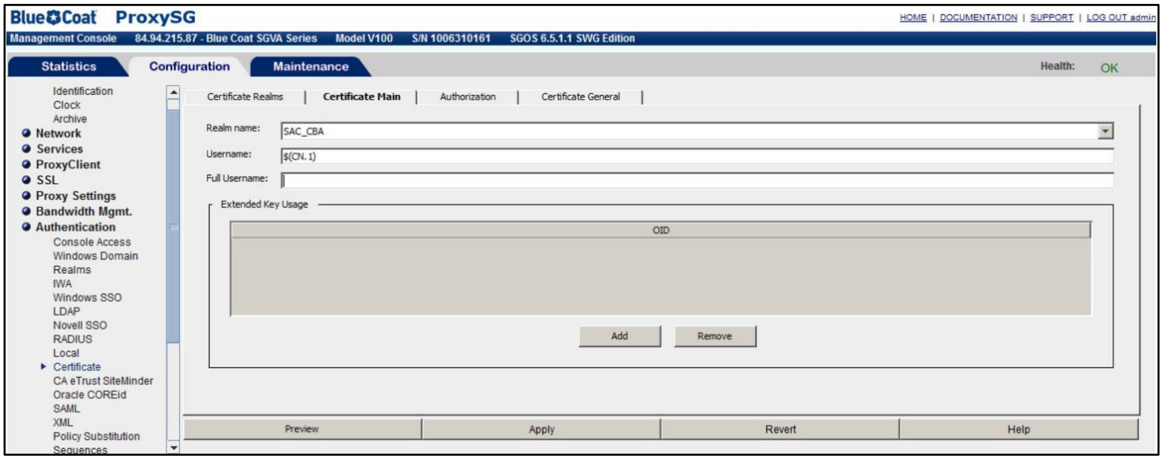
Configuring the Certificate Realm Main Properties

1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **Authentication > Certificate**.

2. In the right pane, on the **Certificate Main** tab, in the **Realm name** field, select the certificate realm (for example **SAC_CBA**) that your created earlier in step 3 of “Creating a Certificate Realm”, on page 15, and then click **Add**.



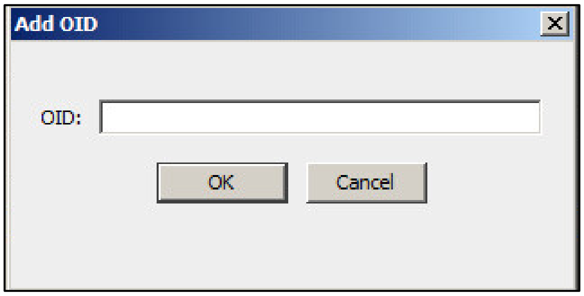
Realm name: SAC_CBA

Username: $(CN.1)

Full Username:

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

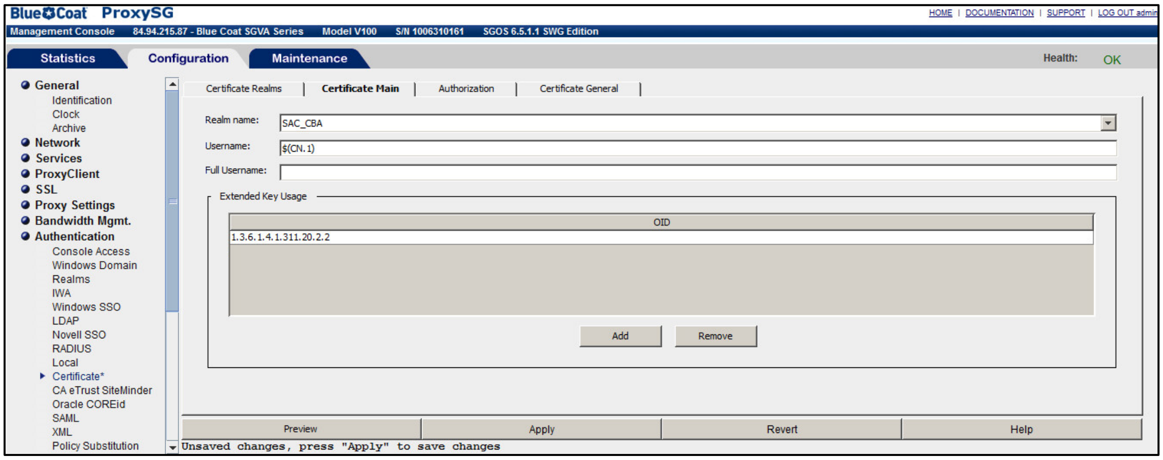
3. On the **Add OID** window, enter the OID value, and then click **OK**.



(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

NOTE: The OID value is available in the **Enhanced Key Usage** field of the client certificate.

4. On the **Blue Coat ProxySG Management Console** window, in the right pane, under **Extended Key Usage**, the OID value is listed. Click **Apply**.



Management Console 84.94.215.87 - Blue Coat SGVA Series Model V100 S/N 1006310161 SGOS 6.5.1.1 SWG Edition

Realm name: SAC_CBA

Username: $(CN.1)

Full Username:

Extended Key Usage

OID
1.3.6.1.4.1.311.20.2.2

```
Unsaved changes, press "Apply" to save changes
```

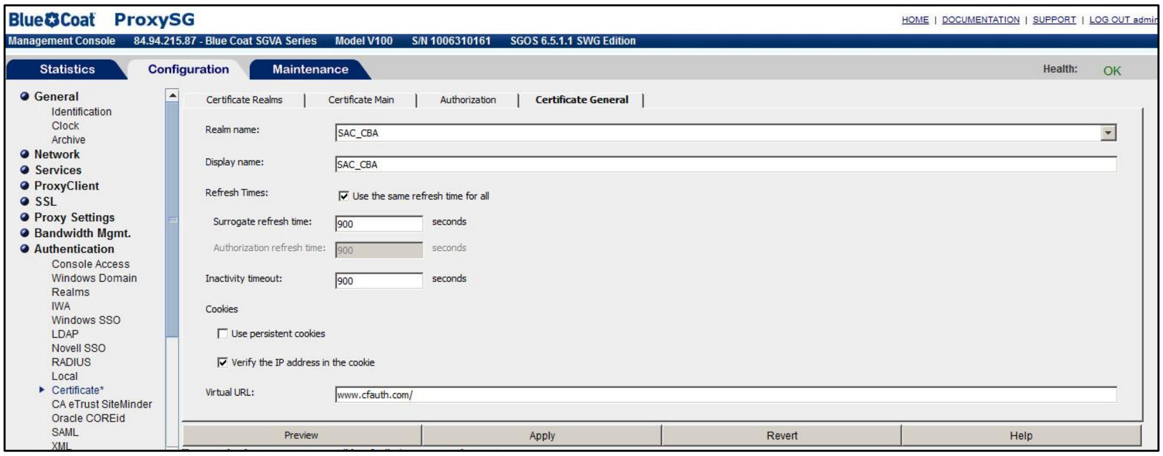
(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

Configuring the Certificate Realm General Properties

1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **Authentication > Certificate**.

2. In the right pane, on the **Certificate General** tab, complete the following fields, and then click **Apply**.

Realm name	Select the certificate realm (for example **SAC_CBA**) that you created in step 3 of “Creating a Certificate Realm” on page 15.
Virtual URL	Enter the virtual URL configured for reverse proxy setup.



Realm name: SAC_CBA

Display name: SAC_CBA

Refresh Times: ☑ Use the same refresh time for all

Surrogate refresh time: 900 seconds

Authorization refresh time: 900 seconds

Inactivity timeout: 900 seconds

Cookies

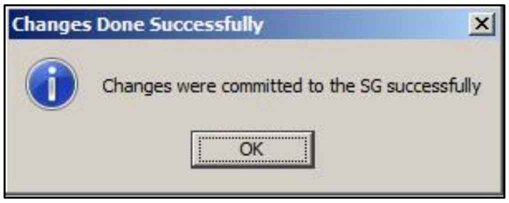
☐ Use persistent cookies

☑ Verify the IP address in the cookie

Virtual URL: www.cfauth.com/

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

3. A successful message is displayed. Click **OK**.



Changes Done Successfully

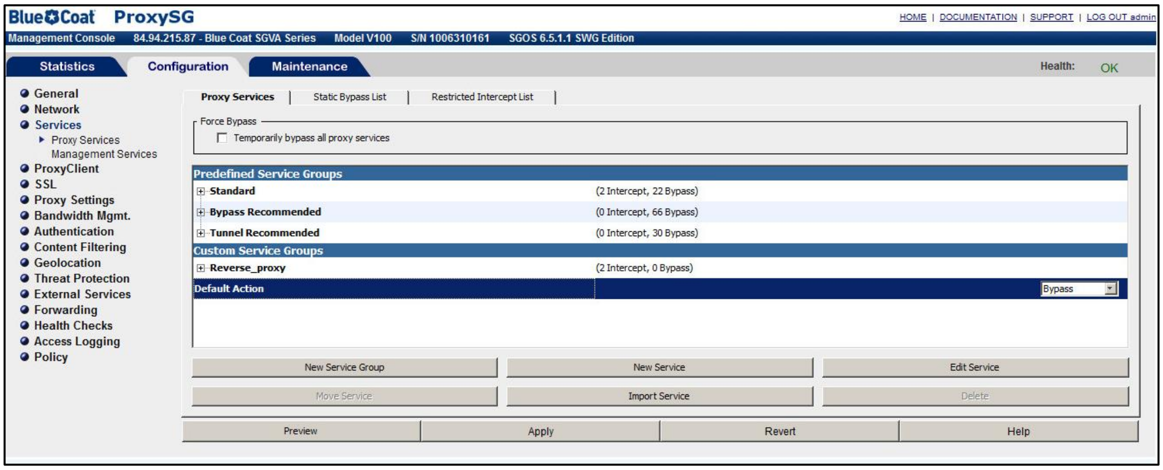
Changes were committed to the SG successfully

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

Configuring the HTTPS Reverse Proxy Service

Ensure that your reverse proxy setup is up and running before configuring the HTTP reverse proxy service.

1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **Services > Proxy Services**.



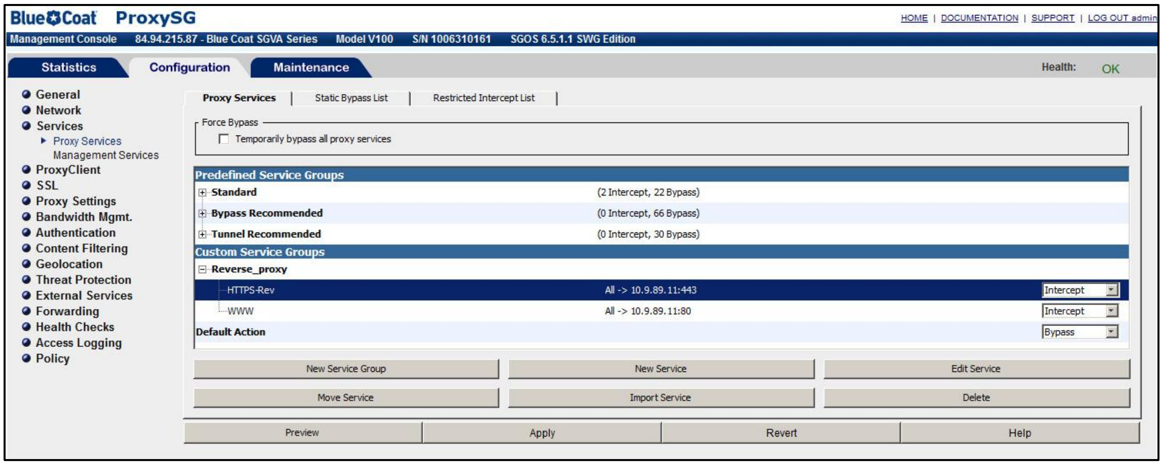
Force Bypass

☐ Temporarily bypass all proxy services

Predefined Service Groups	
Standard	(2 Intercept, 22 Bypass)
Bypass Recommended	(0 Intercept, 66 Bypass)
Tunnel Recommended	(0 Intercept, 30 Bypass)
Custom Service Groups	
Reverse_proxy	(2 Intercept, 0 Bypass)
Default Action	Bypass

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

2. In the right pane, on the **Proxy Services** tab, expand **Reverse_proxy**, select the HTTPS service (for example, **HTTPS-Rev** that you created at the time of creating the reverse proxy setup), and then click **Edit Service**.



Management Console 84.94.215.87 - Blue Coat SGVA Series Model V100 S/N 1006310161 SGOS 6.5.1.1 SWG Edition

Health: OK

Force Bypass

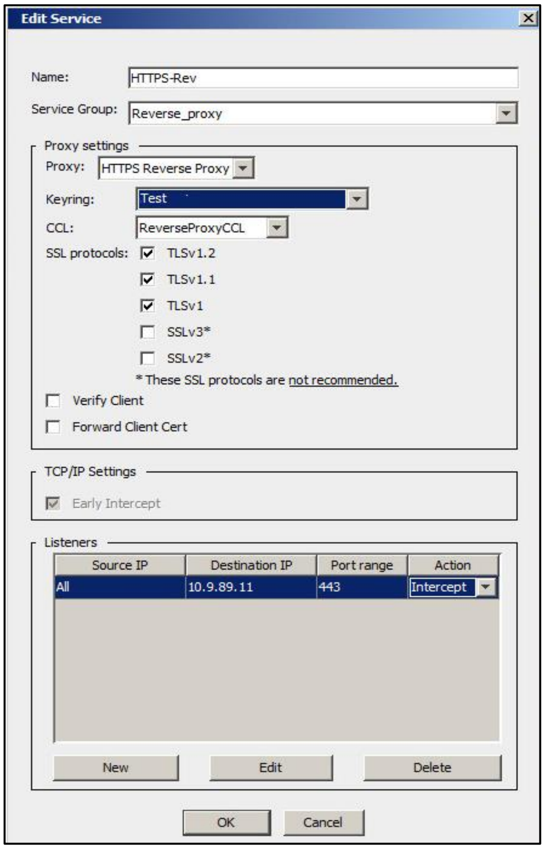
□ Temporarily bypass all proxy services

Predefined Service Groups		
Standard	(2 Intercept, 22 Bypass)	
Bypass Recommended	(0 Intercept, 66 Bypass)	
Tunnel Recommended	(0 Intercept, 30 Bypass)	
Custom Service Groups		
Reverse_proxy		
HTTPS-Rev	All -> 10.9.89.11:443	Intercept
WWW	All -> 10.9.89.11:80	Intercept
Default Action		Bypass

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

3. On the **Edit Service** window, complete the following fields, and then click **OK**.

Keyring	Select the keyring (for example, **Text**) that you created earlier in step 4 of “Creating a Keyring” on page 7.
CCL	Select the CA Certificate List (for example, **ReverseProxyCCL**) that you created earlier in step 3 of “Creating a CA Certificate List” on page13.



Name: HTTPS-Rev

Service Group: Reverse_proxy

Proxy: HTTPS Reverse Proxy

Keyring: Test

CCL: ReverseProxyCCL

SSL protocols: ☑ TLSv1.2 ☑ TLSv1.1 ☑ TLSv1 □ SSLv3* □ SSLv2*

* These SSL protocols are not recommended.

□ Verify Client

□ Forward Client Cert

☑ Early Intercept

Source IP	Destination IP	Port range	Action
All	10.9.89.11	443	Intercept

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

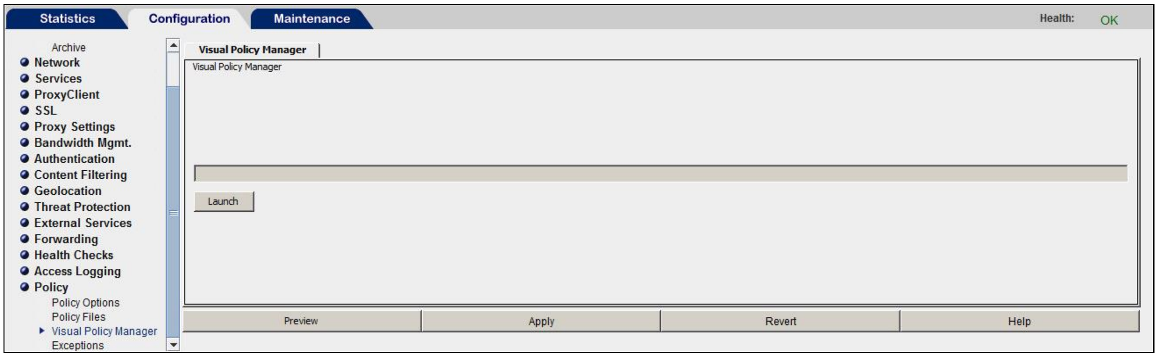
Configuring an Authentication Policy

With an authentication realm configured, now configure a policy on the ProxySG appliance to authenticate, log, and control user access to the web server.

The sections below explain about setting up rules to authenticate users, restrict access for specific users and groups, and deny all other access to the web server.

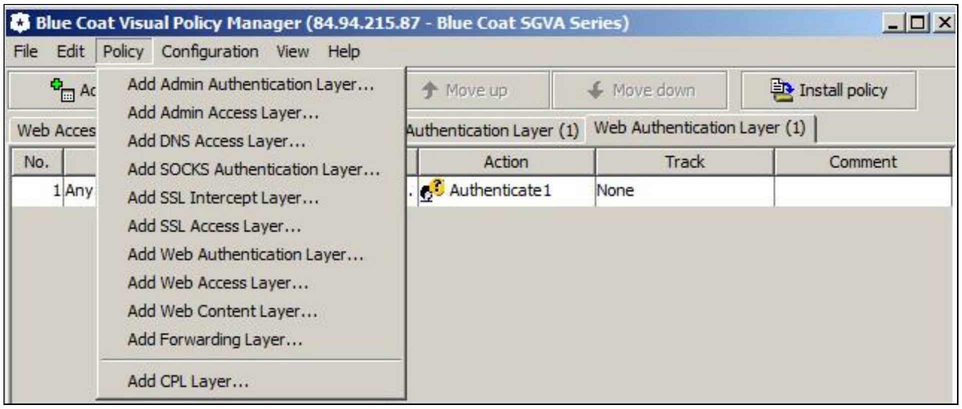
Creating the Web Authentication Layer

1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and in the left pane, click **Policy > Visual Policy Manager**.



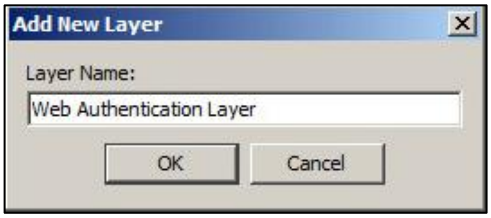
(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

2. In the right pane, click **Launch**.
3. On the **Blue Coat Visual Policy Manager** window, click **Policy** > **Add Web Authentication Layer**.



(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

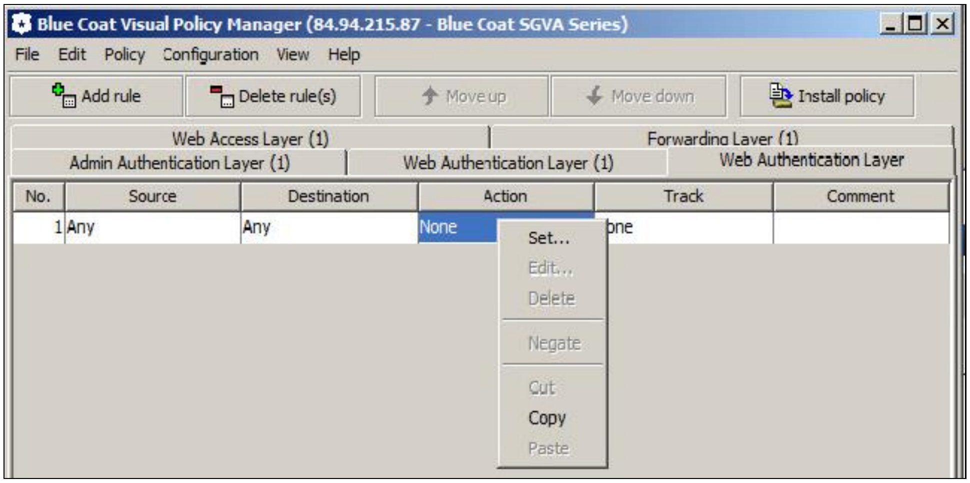
4. On the **Add New Layer** window, enter a name for the web authentication layer, and then click **OK**.



Layer Name: Web Authentication Layer

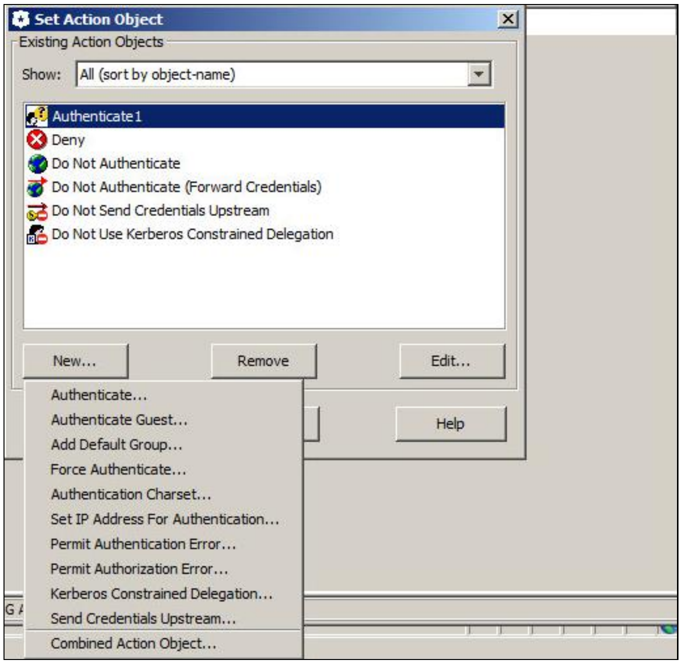
(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

5. On the **Blue Coat Visual Policy Manager** window, on the newly created authentication layer (for example, **Web Authentication Layer**), right-click in the **Action** column of the default rule, and then click **Set**.



(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

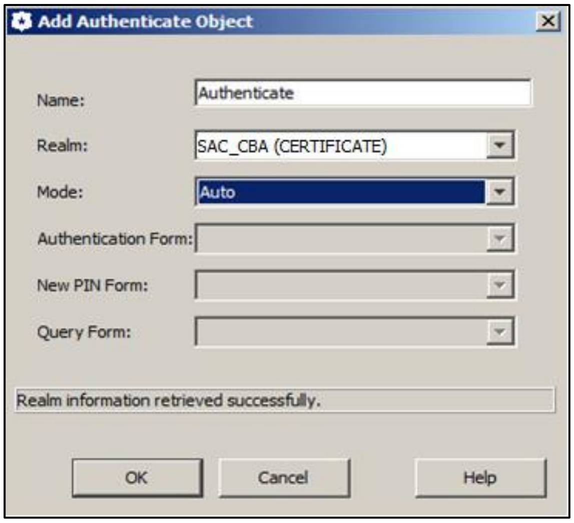
6. On the **Set Action Object** window, click **New > Authenticate**.


Set Action Object
Existing Action Objects
Show:
All (sort by object-name)
Authenticate1
Deny
Do Not Authenticate
Do Not Authenticate (Forward Credentials)
Do Not Send Credentials Upstream
Do Not Use Kerberos Constrained Delegation
New...
Remove
Edit...
Help
Authenticate...
Authenticate Guest...
Add Default Group...
Force Authenticate...
Authentication Charset...
Set IP Address For Authentication...
Permit Authentication Error...
Permit Authorization Error...
Kerberos Constrained Delegation...
Send Credentials Upstream...
Combined Action Object...

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

7. On the **Add Authenticate Object** window, complete the following fields, and then click **OK**.

Name	Enter a name for the authenticate object (for example, **Authenticate**).
Realm	Select the certificate realm (for example, **SAC_CBA**) that you created earlier in step 3 of “Creating a Certificate Realm” on page 15.
Mode	Select **Auto**.



Add Authenticate Object

Name: Authenticate

Realm: SAC_CBA (CERTIFICATE)

Mode: Auto

Authentication Form:

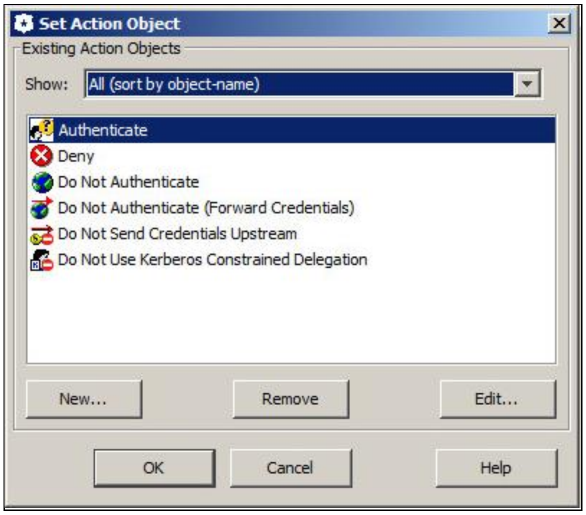
New PIN Form:

Query Form:

Realm information retrieved successfully.

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

8. On the **Set Action Object** window, click **OK**.



Set Action Object

Existing Action Objects

Show: All (sort by object-name)

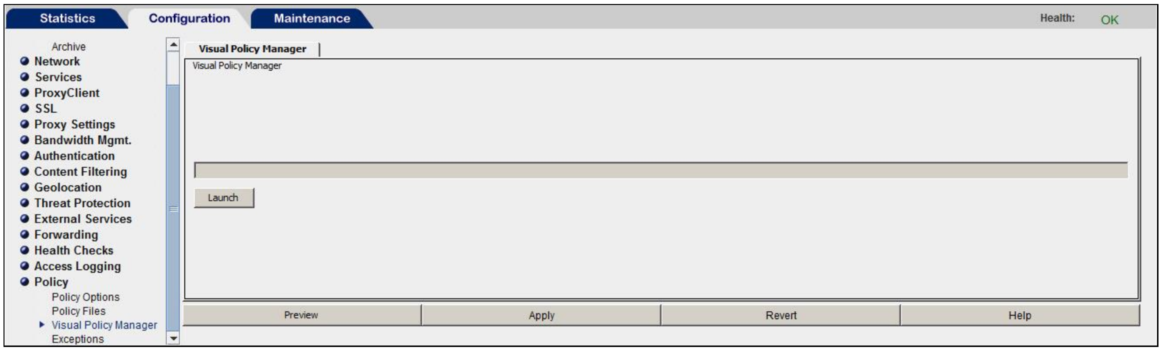
- Authenticate
- Deny
- Do Not Authenticate
- Do Not Authenticate (Forward Credentials)
- Do Not Send Credentials Upstream
- Do Not Use Kerberos Constrained Delegation

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

Creating a Web Access Layer

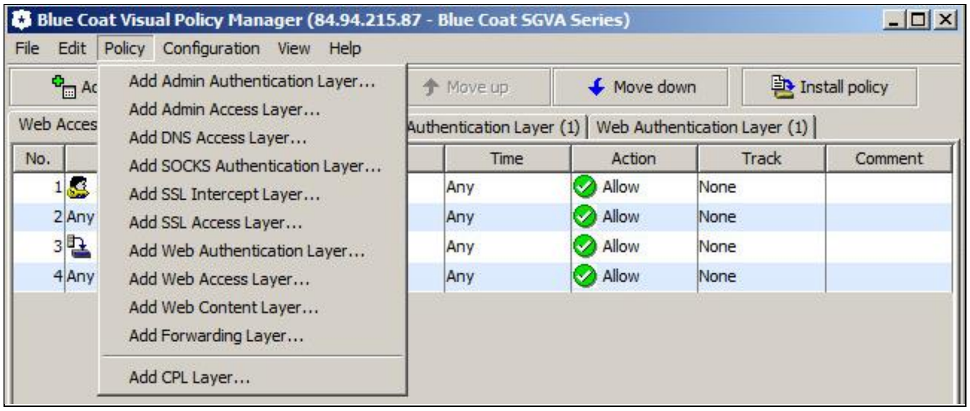
Create a policy rule that enables the ProxySG appliance to grant users access to the network.

1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and in the left pane, click **Policy > Visual Policy Manager**.



(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

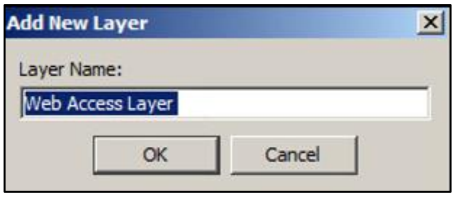
2. In the right pane, click **Launch**.
3. On the **Blue Coat Visual Policy Manager** window, click **Policy** > **Add Web Access Layer**.


Blue Coat Visual Policy Manager (84.94.215.87 - Blue Coat SGVA Series)
File
Edit
Policy
Configuration
View
Help
Ac
Move up
Move down
Install policy
Add Admin Authentication Layer...
Add Admin Access Layer...
Add DNS Access Layer...
Add SOCKS Authentication Layer...
Add SSL Intercept Layer...
Add SSL Access Layer...
Add Web Authentication Layer...
Add Web Access Layer...
Add Web Content Layer...
Add Forwarding Layer...
Add CPL Layer...
Web Acces
Authentication Layer (1)
Web Authentication Layer (1)

No.		Time	Action	Track	Comment
1		Any	Allow	None	
2	Any	Any	Allow	None	
3		Any	Allow	None	
4	Any	Any	Allow	None	

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

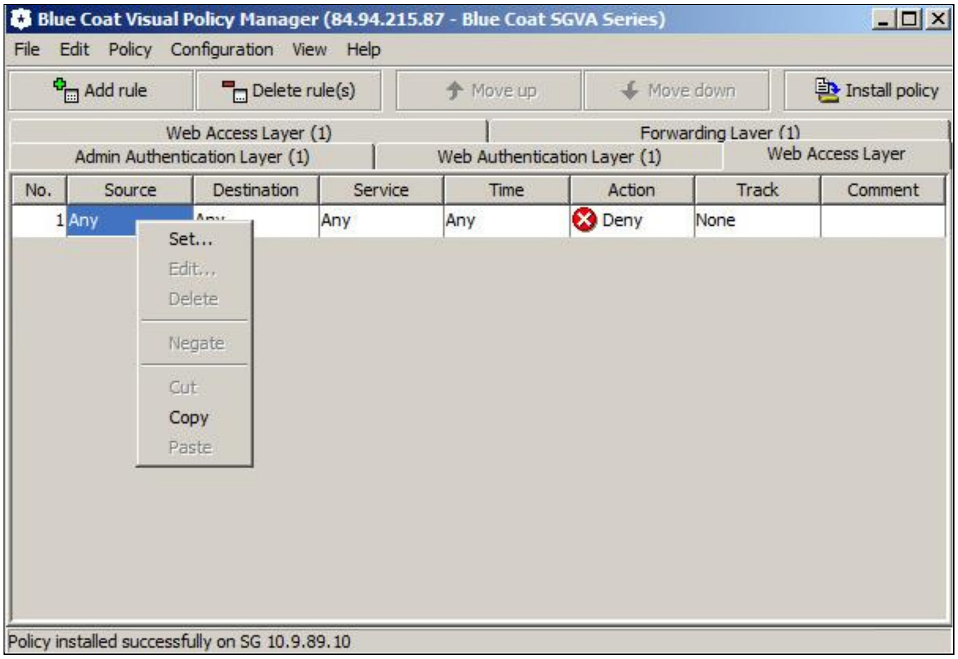
4. On the **Add New Layer** window, enter a name for the web access layer, and then click **OK**.



Layer Name: Web Access Layer

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

5. On the **Blue Coat Visual Policy Manager** window, on the newly created web access layer (for example, **Web Access Layer**), right-click in the **Source** column of the default rule, and then click **Set**.

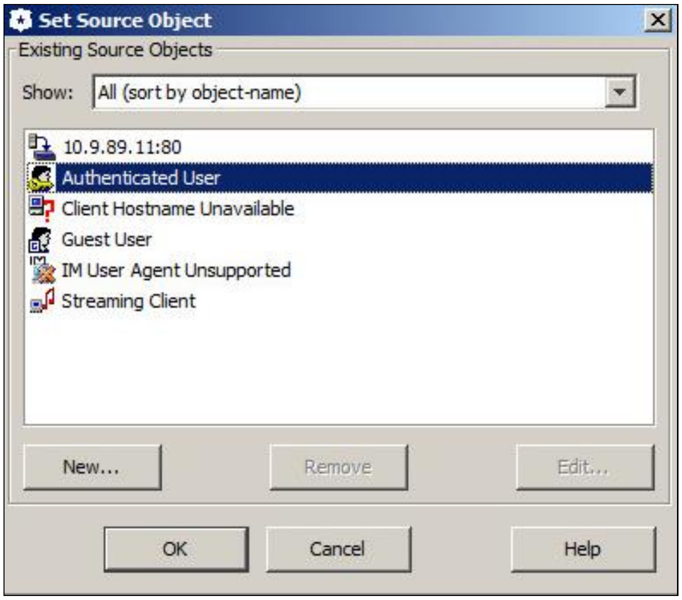


No.	Source	Destination	Service	Time	Action	Track	Comment
1	Any	Any	Any	Any	Deny	None	

Policy installed successfully on SG 10.9.89.10

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

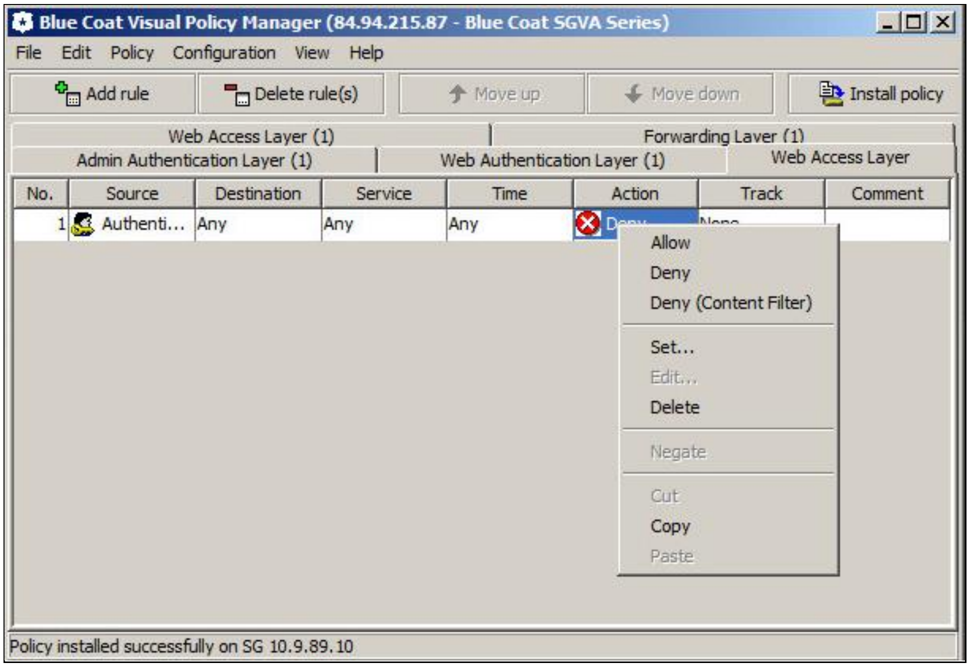
6. On the **Set Source Object** window, select **Authenticated User**, and then click **OK**.



Show: All (sort by object-name)

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

7. On the **Blue Coat Visual Policy Manager** window, on the newly created web access layer (for example, **Web Access Layer**), right-click in the **Action** column of the default rule, and then click **Allow**.

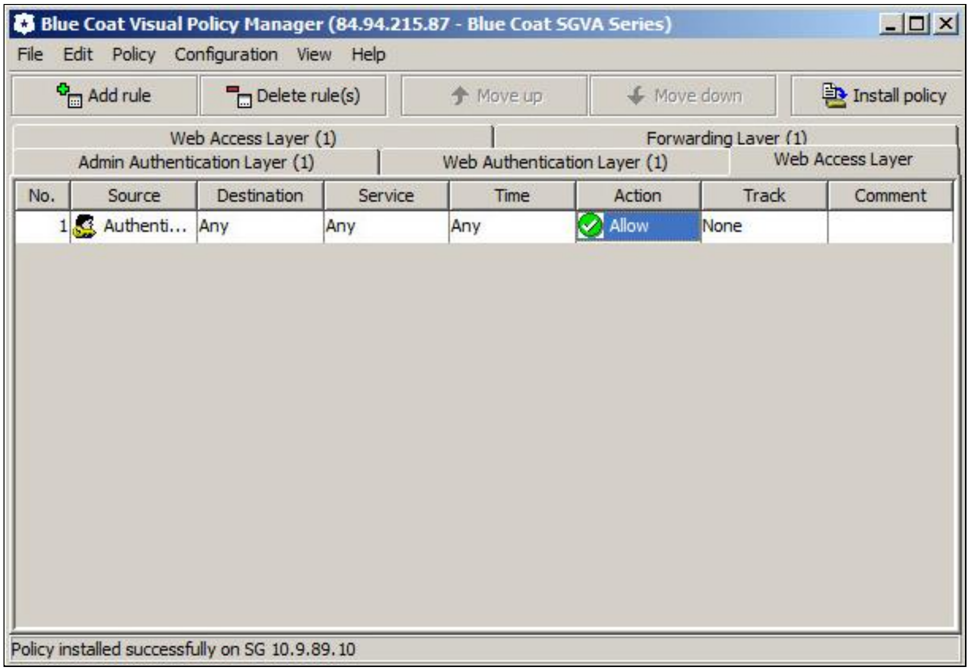


No.	Source	Destination	Service	Time	Action	Track	Comment
1	Authenti...	Any	Any	Any	Deny	None	

Policy installed successfully on SG 10.9.89.10

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

8. The icon in the **Action** column changes from red to green. Click **Install policy**.

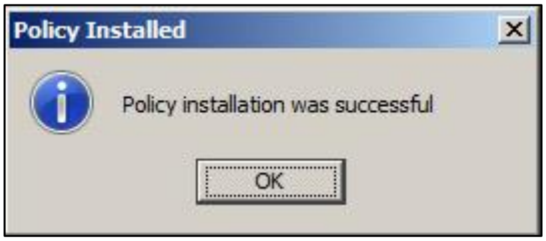


No.	Source	Destination	Service	Time	Action	Track	Comment
1	Authenti...	Any	Any	Any	Allow	None	

Policy installed successfully on SG 10.9.89.10

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

9. A successful message is displayed. Click **OK**.

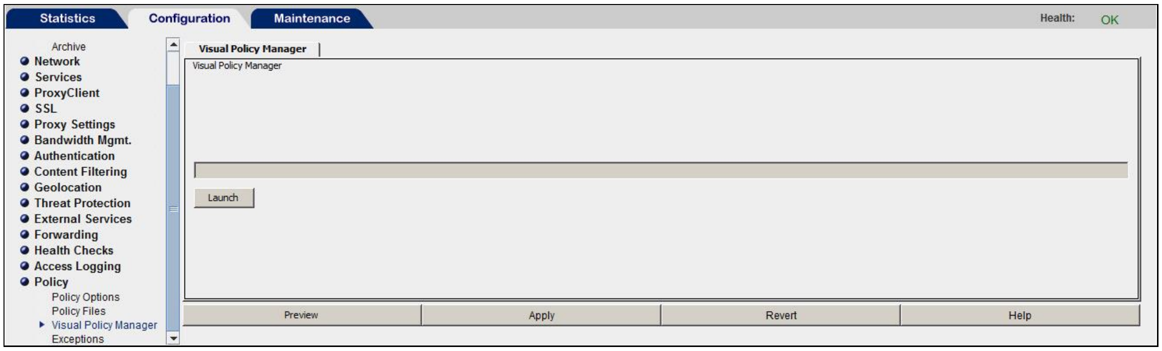


Policy installation was successful

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

Creating a CPL Layer

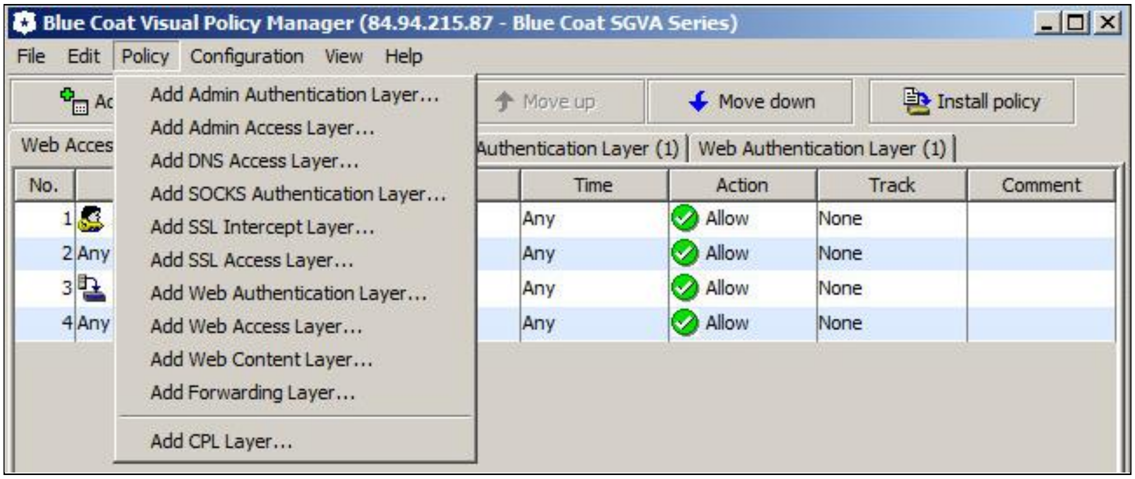
1. On the **Blue Coat ProxySG Management Console** window, click the **Configuration** tab, and then in the left pane, click **Policy > Visual Policy Manager**.



(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

2. In the right pane, click **Launch**.

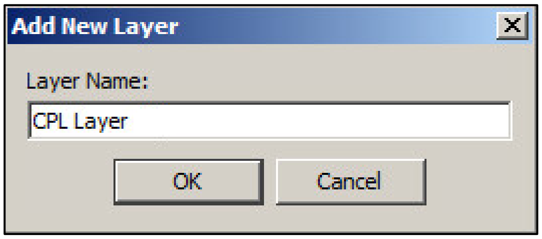
3. On the **Blue Coat Visual Policy Manager** window, click **Policy** > **Add CPL Layer**.



No.		Time	Action	Track	Comment
1		Any	✓ Allow	None	
2	Any	Any	✓ Allow	None	
3		Any	✓ Allow	None	
4	Any	Any	✓ Allow	None	

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

4. On the **Add New Layer** window, enter a name for the CPL layer, and then click **OK**



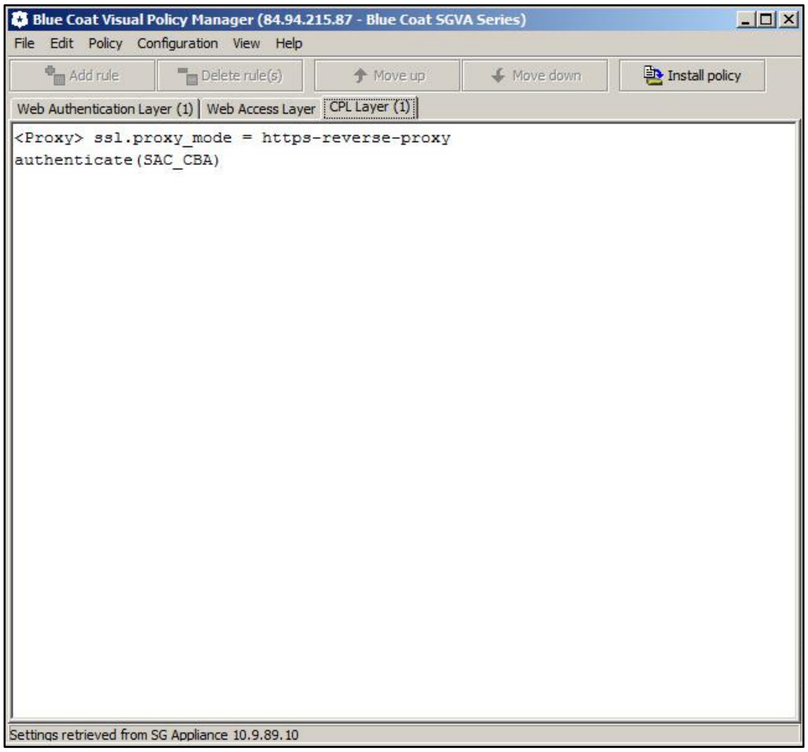
Layer Name: CPL Layer

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

5. On the **Blue Coat Visual Policy Manager** window, on the **CP Layer** tab, enter the following code:

   <Proxy> ssl.proxy_mode = https-reverse-proxy
   authenticate(<certificate realm>)

   Where, **<certificate realm>** is the certificate realm (for example **SAC_CBA**) that you created earlier in step 3 of “Creating a Certificate Realm” on page 15.



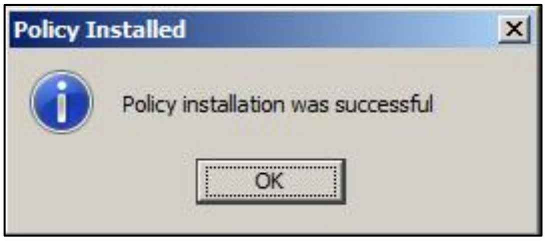
```
<Proxy> ssl.proxy_mode = https-reverse-proxy
authenticate(SAC_CBA)
```

Settings retrieved from SG Appliance 10.9.89.10

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

6. Click **Install policy**.

7. A successful message is displayed. Click **OK**.



Policy installation was successful

(The screen image above is from Blue Coat® software. Trademarks are the property of their respective owners.)

Running the Solution

Before running the solution, ensure that the Blue Coat ProxySG virtual appliance is configured as a reverse proxy with HTTPS service. Also, a user certificate must be present on the SafeNet USB token.

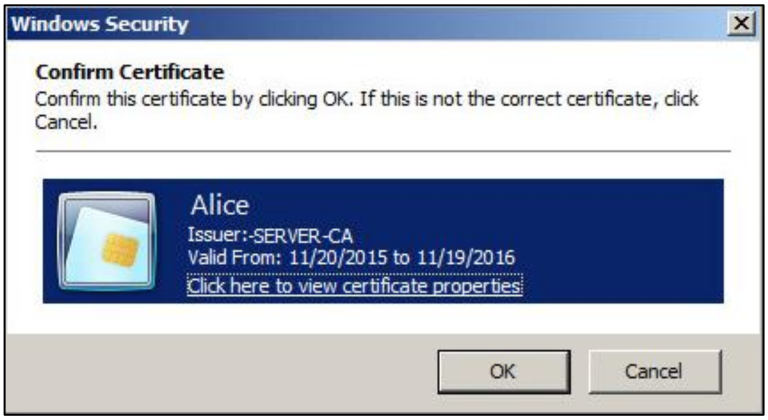
1. In a web browser, open the following URL:

   https://<Virtual IP of BlueCoat>

   Where, **<Virtual IP of Bluecoat>** is an IP address that is configured on the BlueCoat ProxySG appliance.

2. The browser displays all the certificates available on the machine. Select the end user certificate that is added on the SafeNet USB token.

3. You will be redirected to the **Confirm Certificate** window. Click **OK**.



Windows Security

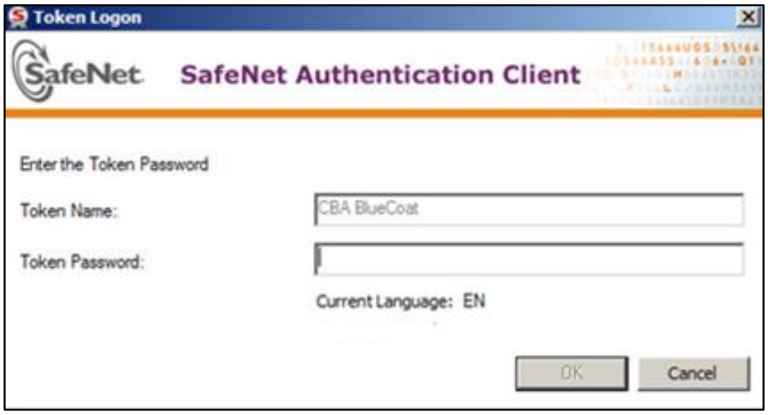
Confirm Certificate

Confirm this certificate by clicking OK. If this is not the correct certificate, click Cancel.

Alice
Issuer:-SERVER-CA
Valid From: 11/20/2015 to 11/19/2016
Click here to view certificate properties

(The screen image above is from Microsoft®. Trademarks are the property of their respective owners.)

4. On the **SafeNet Authentication Client** login window, enter the token password, and then click **OK**.



Token Logon

SafeNet Authentication Client

Enter the Token Password

Token Name: CBA BlueCoat

Token Password:

Current Language: EN

After successful authentication, you are redirected to access the web page.

Support Contacts

If you encounter a problem while installing, registering, or operating this product, please make sure that you have read the documentation. If you cannot resolve the issue, contact your supplier or Gemalto Customer Support. Gemalto Customer Support operates 24 hours a day, 7 days a week. Your level of access to this service is governed by the support plan arrangements made between Gemalto and your organization. Please consult this support plan for further information about your entitlements, including the hours when telephone support is available to you.

Contact Method	Contact Information	
Address	Gemalto, Inc. 4690 Millennium Drive Belcamp, Maryland 21017 USA	
Phone	United States	1-800-545-6608
	International	1-410-931-7520
Technical Support Customer Portal	https://serviceportal.safenet-inc.com Existing customers with a Technical Support Customer Portal account can log in to manage incidents, get the latest software upgrades, and access the Gemalto Knowledge Base.	