SafeNet Authentication Client

Integration Guide

Using SafeNet Authentication Client CBA for VMware vCenter Server 6.5 VSphere Web Client

gemalto
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. In this case, VMware vCenter Server 6.5 VSphere Web Client.

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

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. SAC enables the implementation of strong two-factor authentication using standard certificates, as well as encryption and digital signing of data. 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 security for web access, network logon, email, and data. PKI keys and certificates can be created, stored, and used securely with the hardware or software tokens.

An effective strong authentication solution must be able to address ever more frequent data breaches to enable companies to protect their information assets and comply with privacy regulations. Data encryption is a common technique used by enterprises today, but to be most effective, it must be accompanied by strong two factor user authentication to desktop, mobile, and laptop computer applications. Working together, encryption and authentication reduce the risk of unauthorized access to sensitive data.

SafeNet smart card certificate-based tokens and secure USB certificate-based tokens are interoperable with VMware vCenter Server 6.5 VSphere Web Client, providing a solution for encryption and strong access control that prevents unauthorized access to sensitive data and stops information loss and exposure. The integrated solution delivers greater security, reduced operational costs, and improved compliance by adding smart card-based strong user authentication to VMware vCenter Server 6.5 VSphere Web Client.

Gemalto's X.509 certificate-based USB tokens and smart cards have been integrated with VMware vCenter Server 6.5 VSphere Web Client, providing two-factor authentication at both pre-boot and Microsoft Windows levels.

The Gemalto's X.509 certificate-based USB tokens and smart cards provide secure storage for the certificates needed for endpoint encryption for VMware vCenter Server 6.5 VSphere Web Client functionality to boot up. If Gemalto's X.509 certificate-based USB token or smart card is not inserted into the client machine, or if the certificates are deleted, revoked, or expired, the VMware vCenter Server 6.5 VSphere Web Client software will not boot up and the data on the laptop will stay encrypted and secure.

This document provides guidelines for deploying certificate-based authentication (CBA) for user authentication to VMware vCenter Server 6.5 VSphere Web Client using Gemalto tokens or smart cards.

It is assumed that the VMware vCenter Server 6.5 VSphere Web Client environment is already configured and working with static passwords prior to implementing Gemalto multi-factor authentication.

VMware vCenter Server 6.5 VSphere Web Client can be configured to support multi-factor authentication in several modes. CBA will be used for the purpose of working with Gemalto products.

Applicability

The information in this document applies to:

- **SafeNet Authentication Client (SAC) Typical installation mode**— SafeNet Authentication Client is public key infrastructure (PKI) middleware that manages Gemalto's tokens and smart cards.
- **SafeNet Authentication Client (SAC), IDGo800 Compatible mode** - IDGo800 Minidriver based package, using Microsoft Smart Card Base Cryptographic Provider to manage Gemalto IDPrime MD smart cards. For more details about different SAC installation modes, refer to the SafeNet Authentication Client Administration Guide.

For more details about different SAC installation modes, please refer to the Customization section in *SafeNet Authentication Client Administrator Guide*.

Environment

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

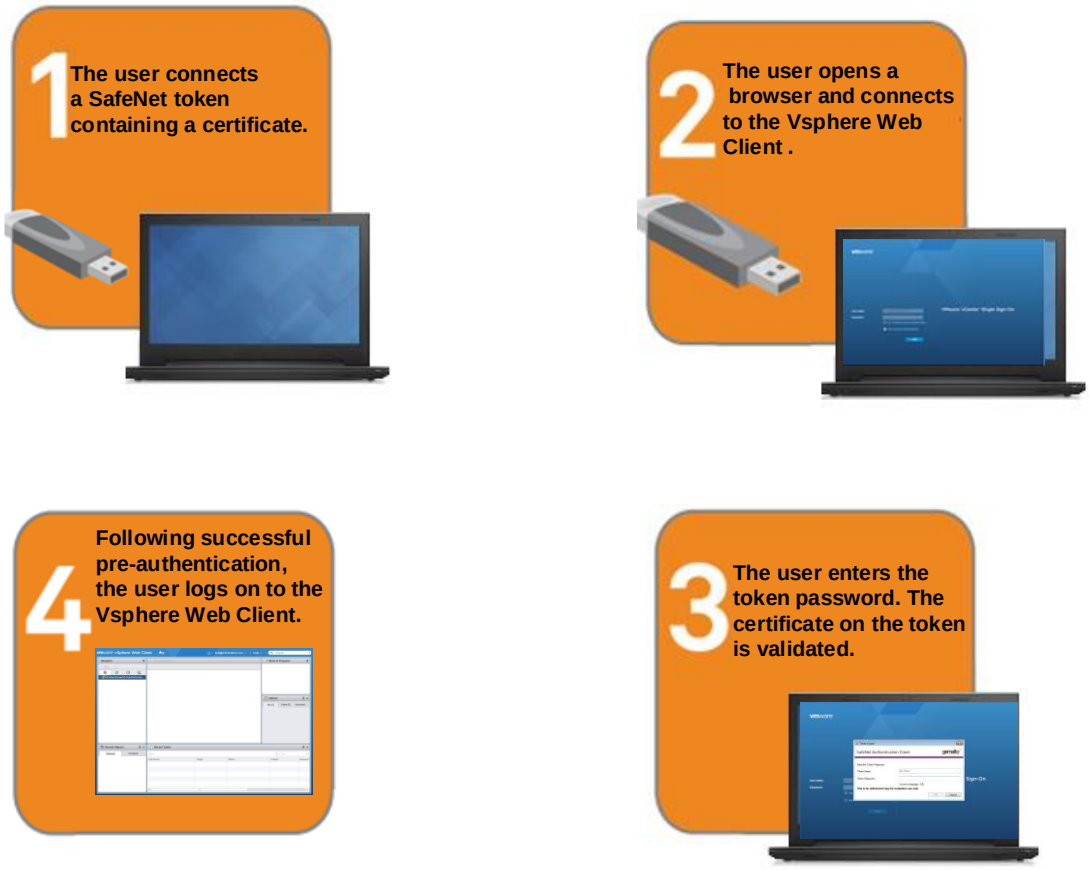
- **SafeNet Authentication Client (SAC)** - SAC 10.4 Post GA
- **VMware vCenter Server 6.5 Update 1b –** installed on Windows server 2012R2
- **Windows Server 2008R2 –** installed with Active Directory, Certificate Authority.
- **Win 7 x32/x64 –** Domain Joined using IE 11.

Audience

This document is targeted to system administrators who are familiar with VMware vCenter Server 6.5 VSphere Web Client, and are interested in adding multi-factor authentication capabilities using SafeNet tokens.

Authentication Flow

The diagram below illustrates the flow of certificate-based authentication to VSphere Web Client:



Prerequisites

To enable users to perform pre-boot authentication with VMware vCenter Server 6.5 VSphere Web Client using Gemalto tokens and smart cards, ensure the following:

- Users can authenticate the VMware vCenter Server 6.5 VSphere Web Client environment with a static password before configuring to use Gemalto tokens and smart cards.
- If SafeNet Authentication Manager (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 have a Gemalto token or smart card enrolled with valid certificate.
- To use CBA, the Microsoft Enterprise Certificate Authority must be installed and configured. Any CA can be used. In this guide, integration is demonstrated using Microsoft CA.
- SafeNet Authentication Client (SAC 10.4) must be installed on all client machines.

Supported Tokens and Smart Cards in SafeNet Authentication Client

SafeNet Authentication Client (SAC 10.4) supports the following tokens and smart cards:

Certificate-based USB tokens

- SafeNet eToken 5110 GA
- SafeNet eToken 5110 FIPS
- SafeNet eToken 5110 CC

Smart Cards

- Gemalto IDPrime MD 830
- Gemalto IDPrime MD 840

For all supported devices please refer to *SafeNet Authentication Client Customer Release Notes*.

Configuring vCenter Server

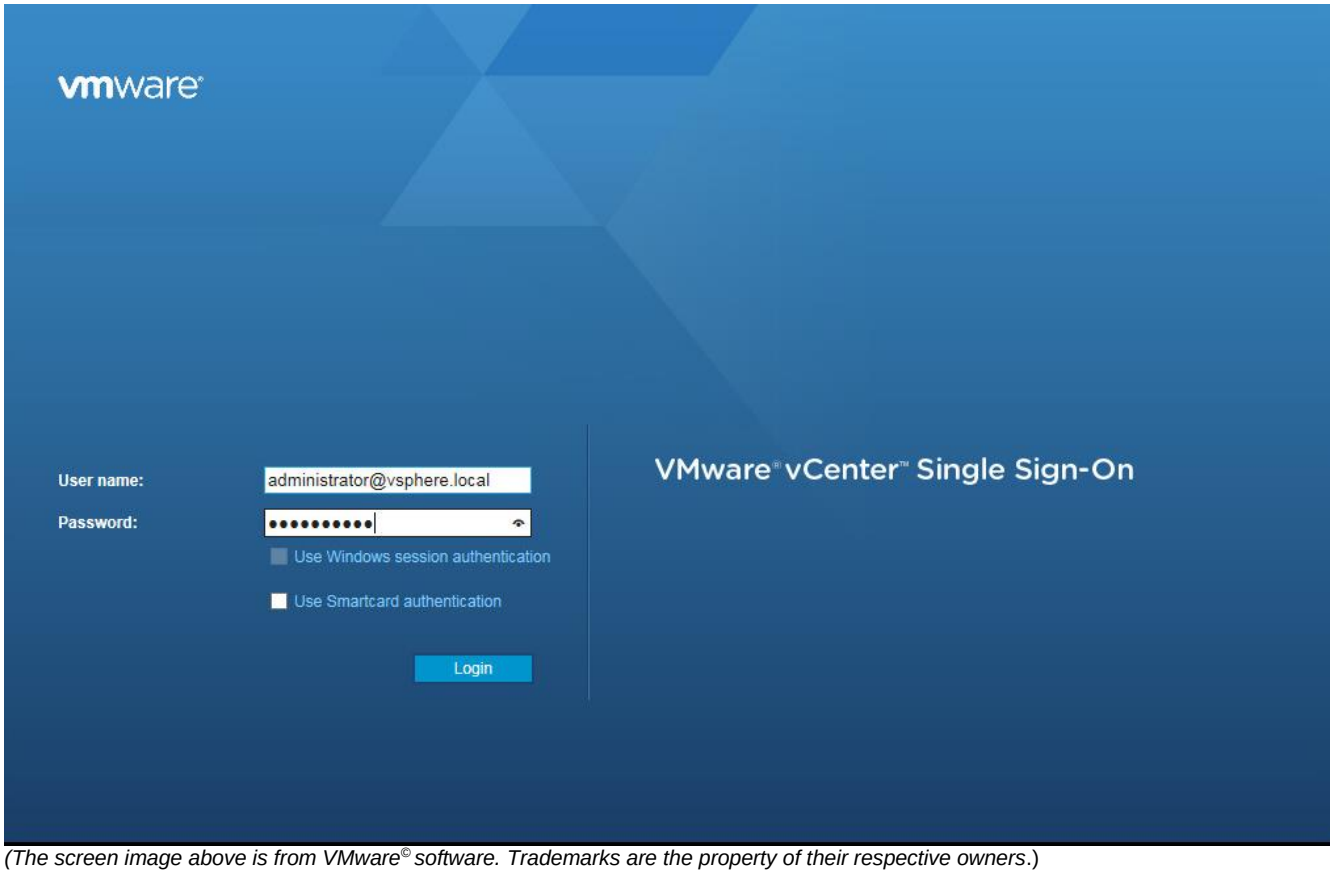
Complete the procedures in this section to configure CBA Authentication for two-factor authentication so users can authenticate using certificates on their smart cards or Tokens.

Prerequisites:

- Platform Services Controller Web interface certificate is trusted by the end user's workstation
- Active Directory identity source is added to vCenter Single Sign-On as an identity source
- In the vCenter Server, assign the required role permissions to one or more users in the Active Directory identity source.

Configure the Platform Services Controller

1. Open and login to the **Platform Services Controller** using web browser URL: **https://psc_hostname_or_IP/psc**



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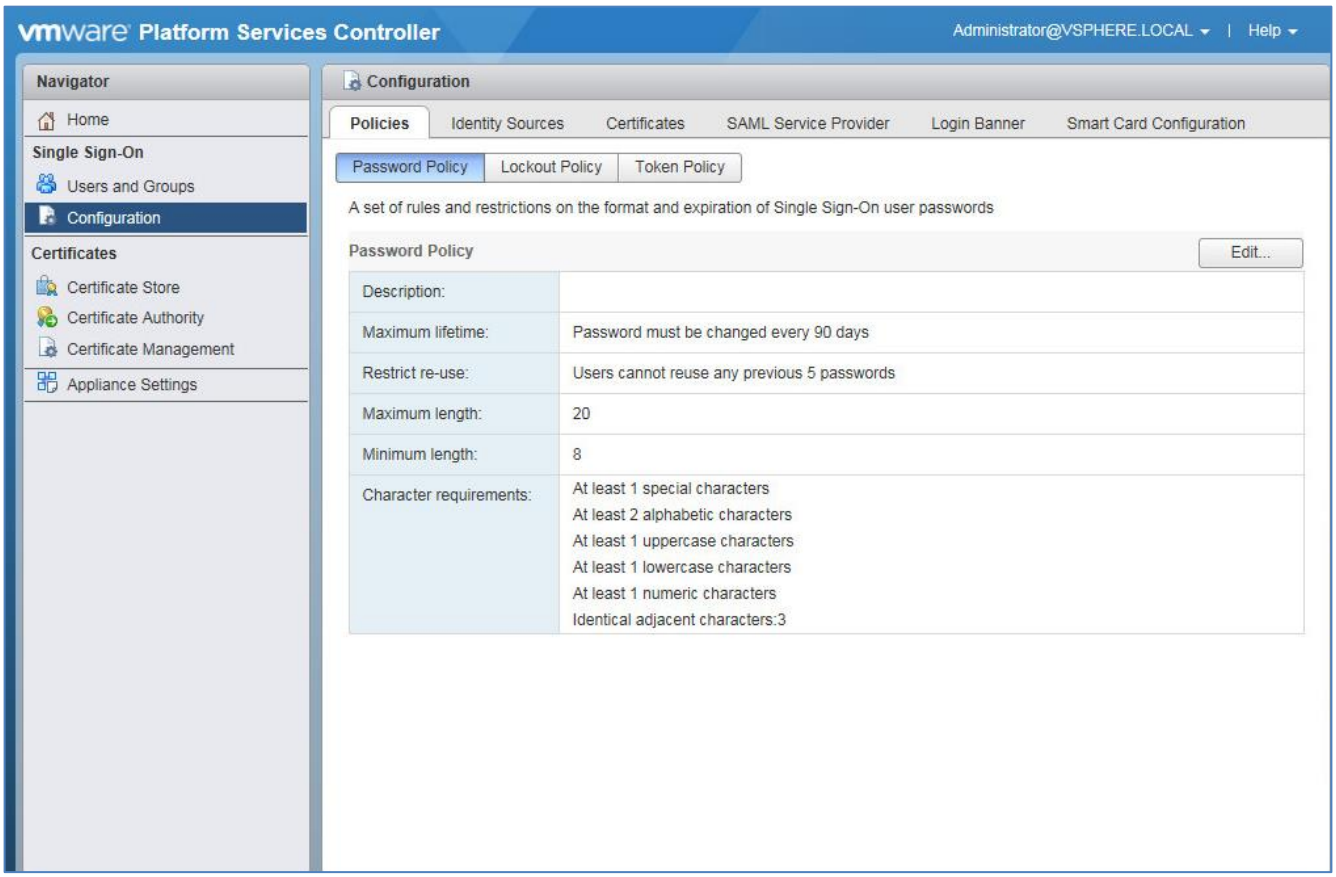
2. Navigate to **Single Sign-On > Configuration**.



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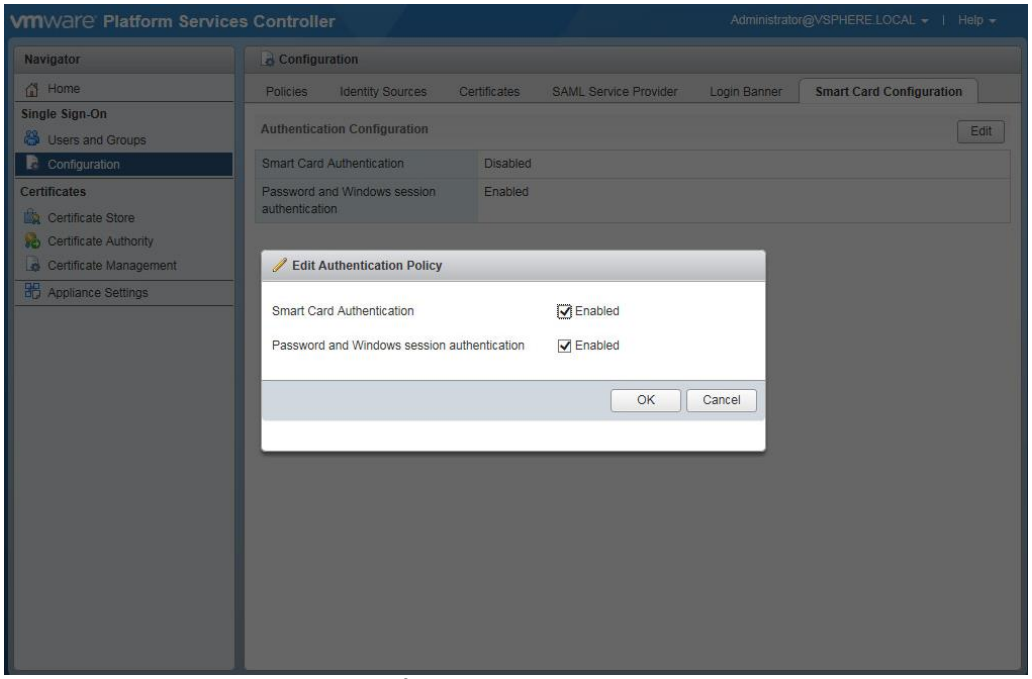
3. Select the **Smart Card Configuration** tab, click **Edit** and select **Smart Card Authentication Enabled,** then click **OK**.



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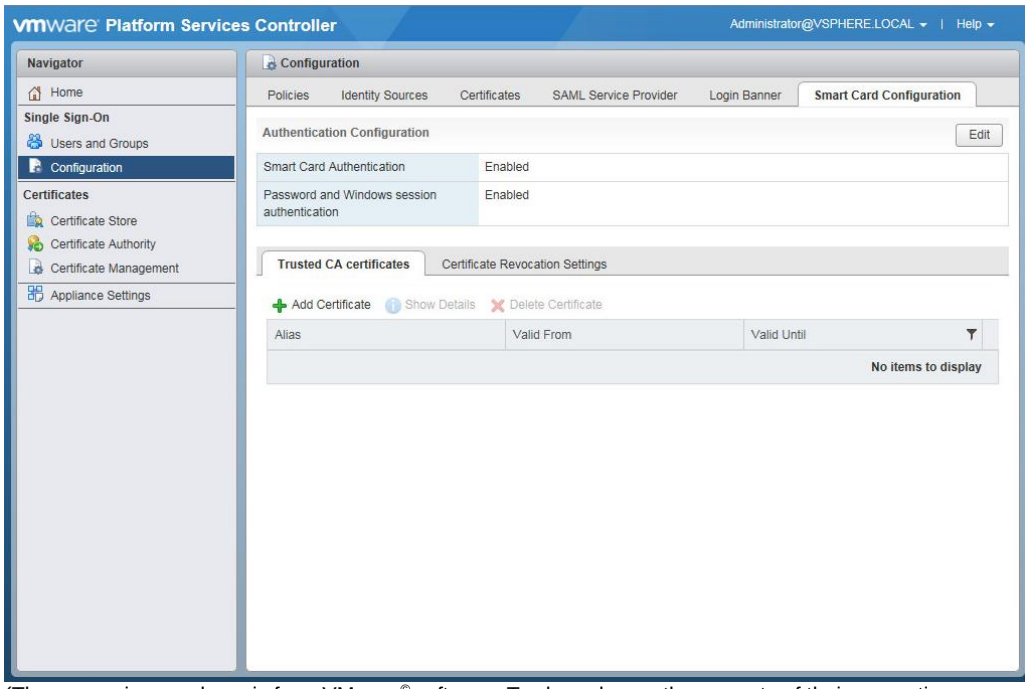
4. Select the **Trusted CA certificates** tab.



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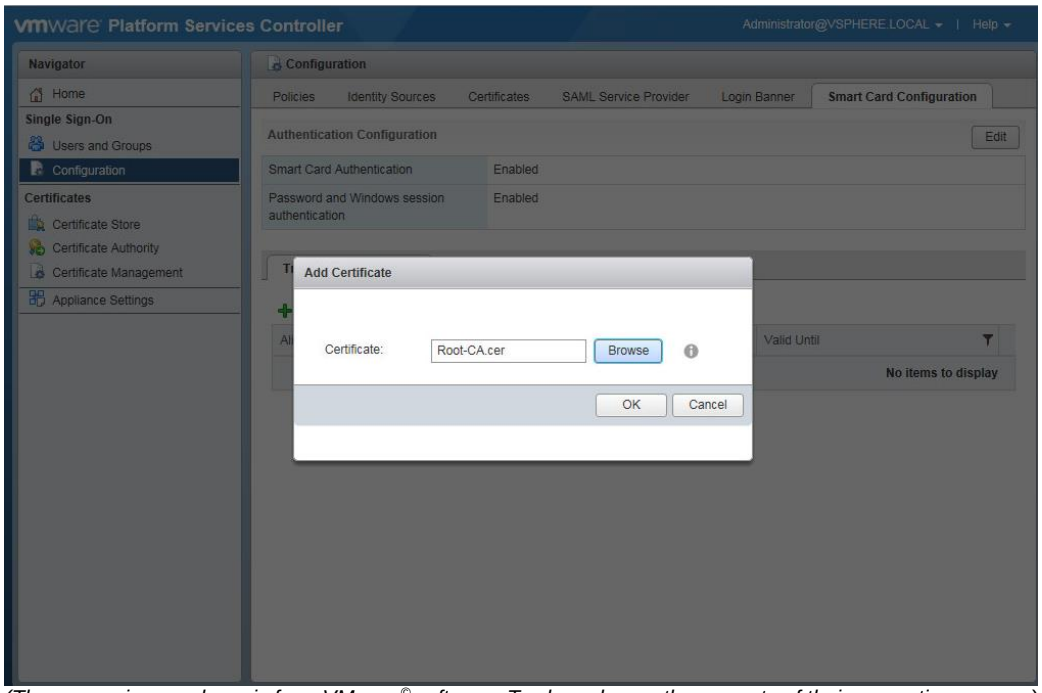
5. Click **Add Certificate**, click **Browse**, select a certificate from a trusted CA, and click **OK**.



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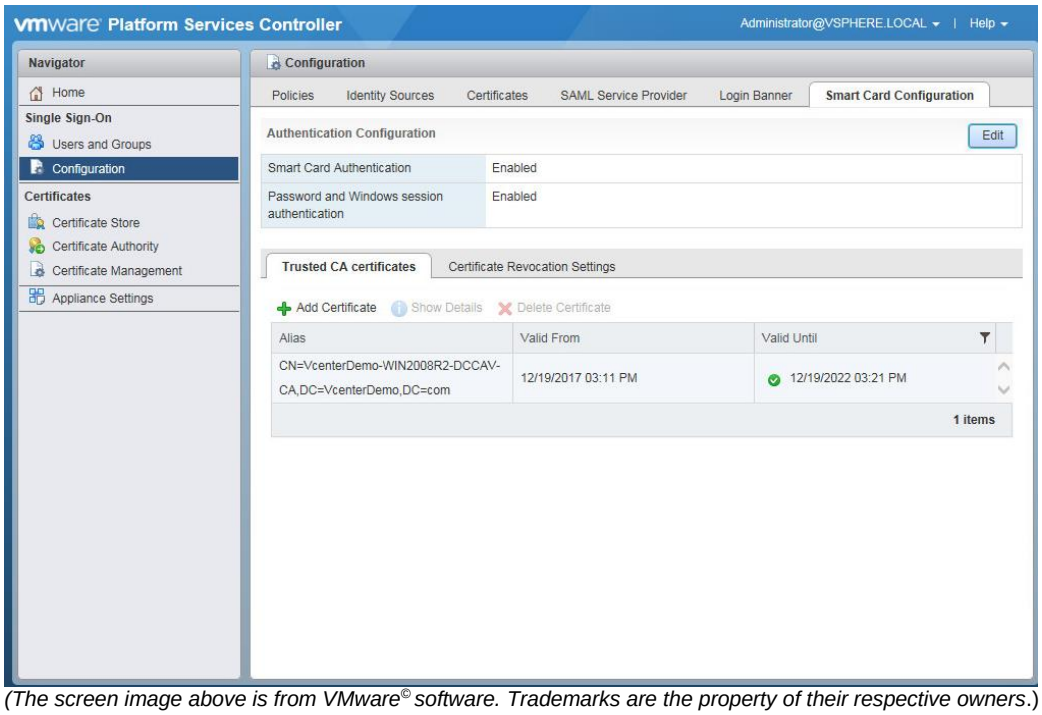
The trusted CA is added.



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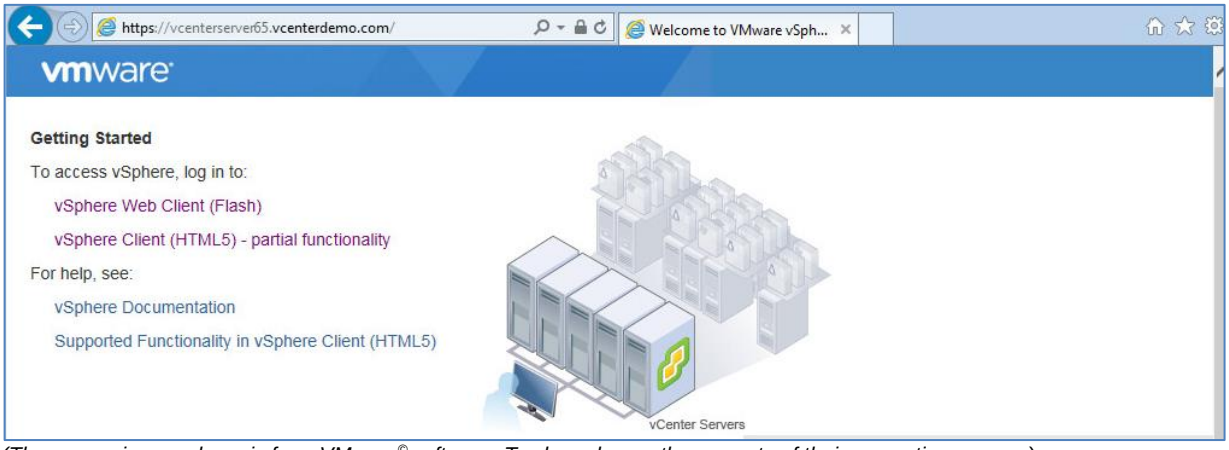
Running the Solution

In this example Win 7x64 is demonstrated

To enroll a Smartcard User certificate on the Smart Card/Token:

1. Connect the token.
2. Browse to the vSphere server web address



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3. Click **VSphere Web Client**

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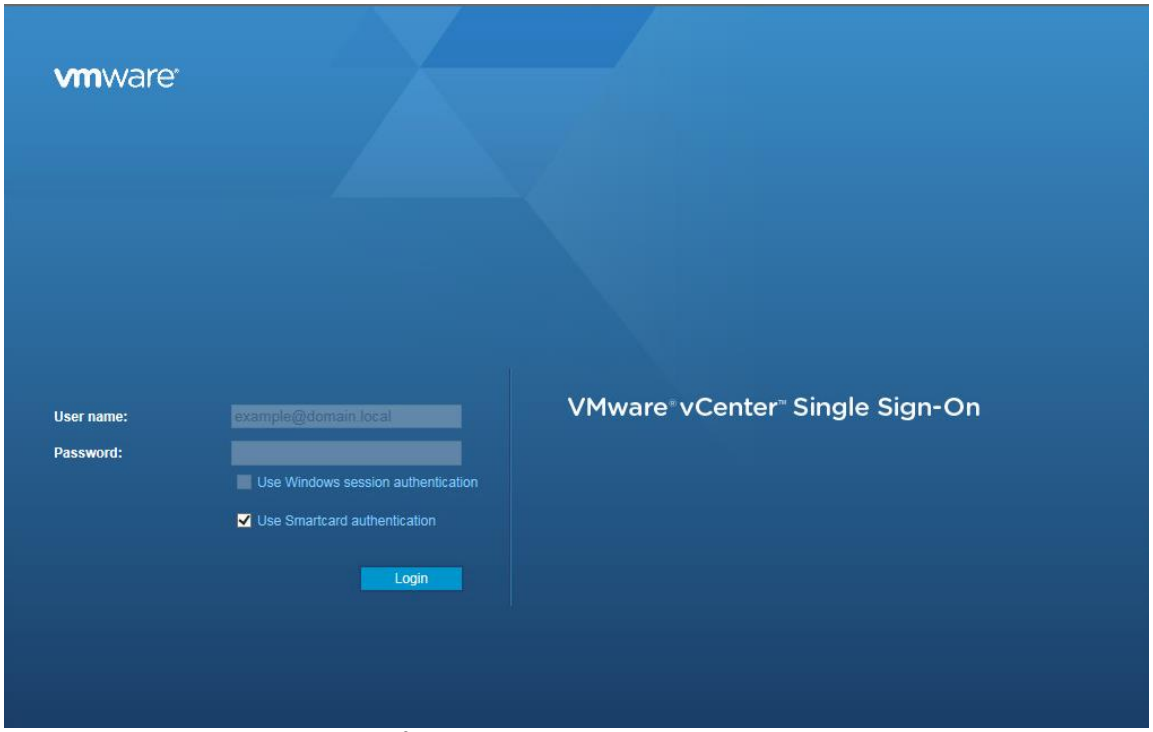
4. Select **Use Smartcard authentication** and click **Login**.



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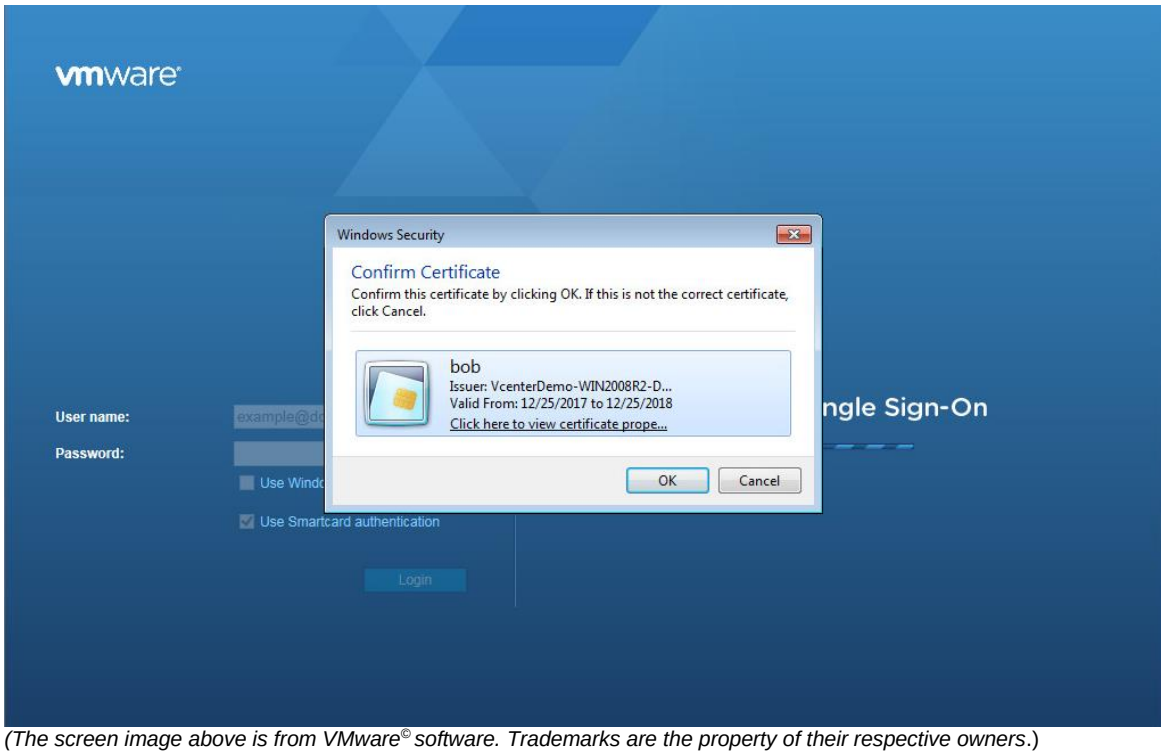
5. In the **Confirm Certificate** window, click **OK.**



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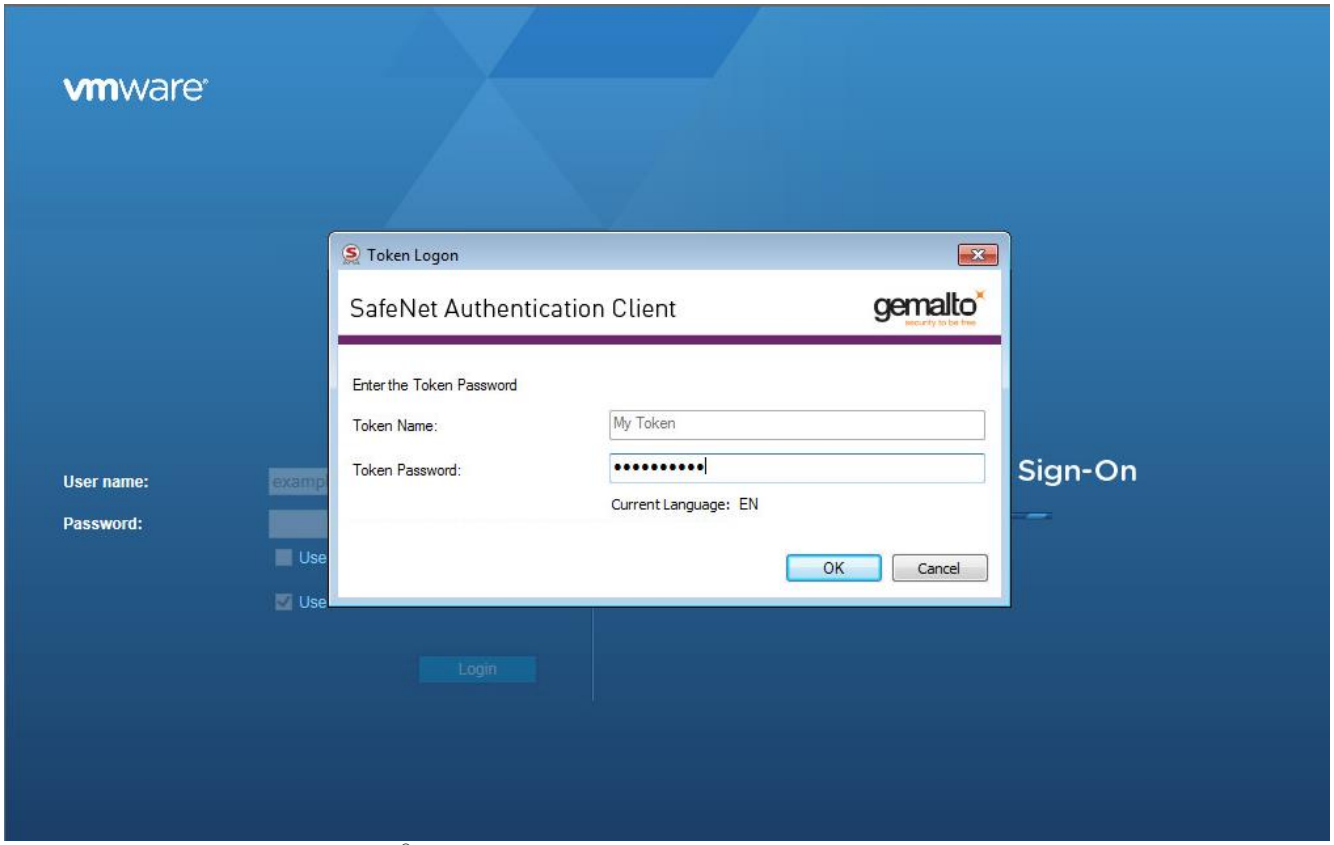
6. In the **Token Logon** window, enter smart card credentials and click **OK**.



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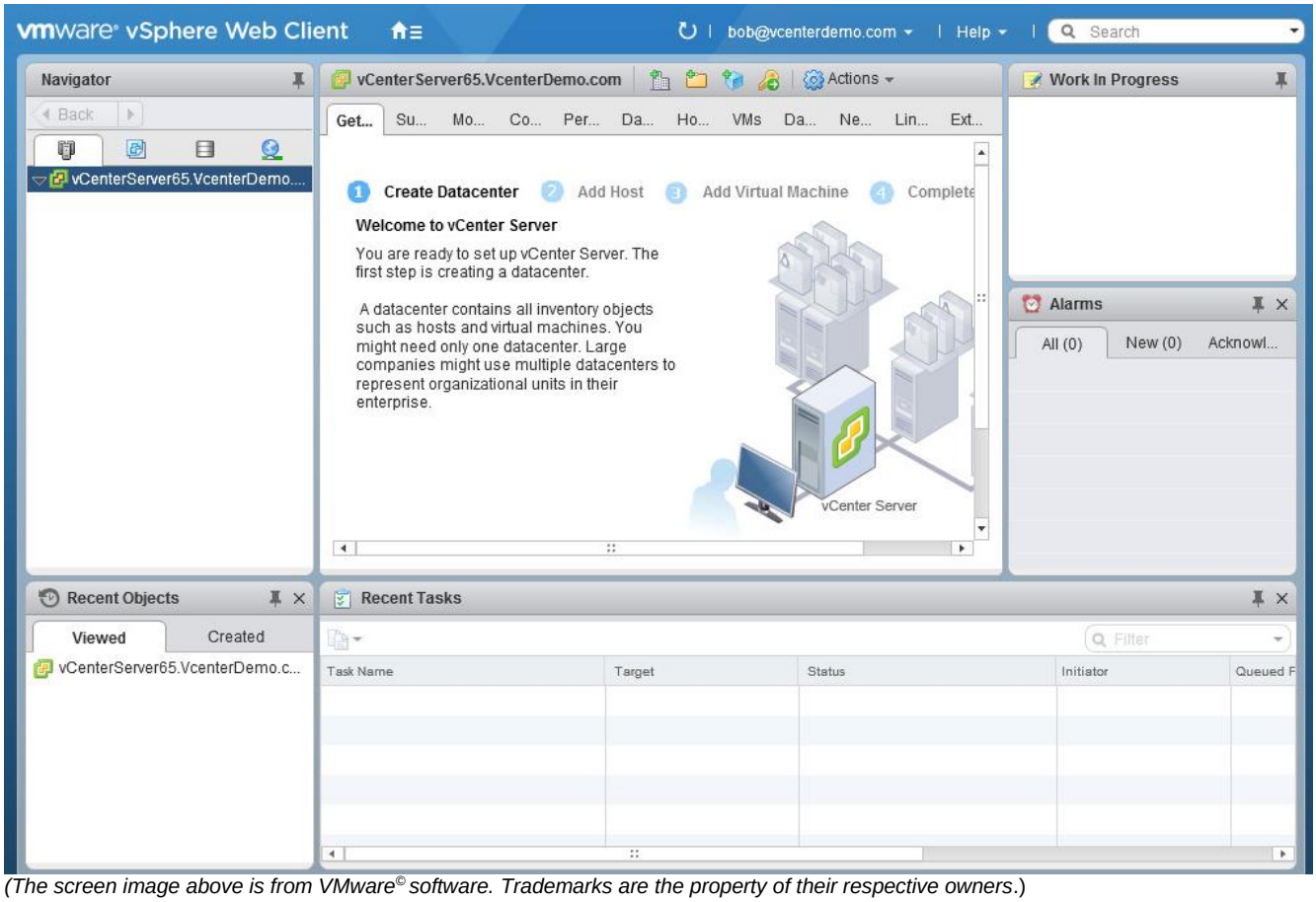
The user is connected.



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Support Contacts

If you encounter a problem while installing, registering, or operating this product, refer to 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.

Customer Support Portal

The Customer Support Portal, at https://supportportal.gemalto.com, is a where you can find solutions for most common problems. The Customer Support Portal is a comprehensive, fully searchable database of support resources, including software and firmware downloads, release notes listing known problems and workarounds, a knowledge base, FAQs, product documentation, technical notes, and more. You can also use the portal to create and manage support cases.

NOTE: You require an account to access the Customer Support Portal. To create a new account, go to the portal and click on the **REGISTER** link.

Telephone Support

If you have an urgent problem, or cannot access the Customer Support Portal, you can contact Customer Support by telephone. Calls to Customer Support are handled on a priority basis.

Region	**Telephone number** (Subject to change. An up-to-date list is maintained on the Customer Support Portal)
Global	+1-410-931-7520
Australia	1800.020.183
China	North: 10800-713-1971 South: 10800-1301-932
France	0800-912-857
Germany	0800-181-6374
India	000.800.100.4290
Israel	180-931-5798
Italy	800-786-421
Japan	0066 3382 1699
Korea	+82 2 3429 1055

Region	Telephone number (Subject to change. An up-to-date list is maintained on the Customer Support Portal)
Netherlands	0800.022.2996
New Zealand	0800.440.359
Portugal	800.863.499
Singapore	800.1302.029
Spain	900.938.717
Sweden	020.791.028
Switzerland	0800.564.849
United Kingdom	0800.056.3158
United States	(800) 545-6608