



BeyondTrust

Remote Support Smart Card Support

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Smart Cards for Remote Authentication

During a support session using the representative console, a support representative may need to operate with administrative rights in order to effectively troubleshoot the remote computer. Within environments where security implementations require smart card use for authentication, Remote Support enables the representative to share a local smart card within a support session so that it can be used as an authentication source on the customer system.

To achieve this, the representative's system must have a Virtual Smart Card Representative driver installed and the customer's system must have a Virtual Smart Card Customer driver installed. The Virtual Smart Card Customer driver can either be pre-installed on the customer system or pushed to the customer system during the Jump process. For the latter, the Virtual Smart Card Customer is uninstalled when the session ends. If the Jump Client is installed, the Virtual Smart Card Customer remains installed until the Jump Client is uninstalled.



Note: This feature is not supported for ARM-based Windows systems.



Note: Only the Desktop Representative Console supports sharing a smart card into a support session. The Web Rep Console does not support smart cards.



For more information about specific smart cards supported and supported smart card standards, please [Contact Support at https://www.beyondtrust.com/docs/index.htm](https://www.beyondtrust.com/docs/index.htm).

Prerequisites

To use BeyondTrust smart card support through a Jump Client, the following prerequisites must be met:

- The target being supported is a member of a PKI enabled Active Directory Domain.
- The smart card being shared into the support session contains credentials that are valid within the target Active Directory Domain.
- The representative's computer has the appropriate Remote Support Virtual Smart Card Representative installed.
- Each supported computer has the appropriate Remote Support Virtual Smart Card Customer installed.
- Each supported computer is running Windows 7 or newer.
- Each supported computer must be accessible by a Remote Support Jump Client running in elevated mode.



Note: When Jump To is used to access the remote system, the Virtual Smart Card Customer driver does NOT have to be pre-installed.

Remote Support smart card support can be used with customer-initiated sessions when the following prerequisites are met:

- The target being supported is a member of a PKI enabled Active Directory Domain.
- The smart card being shared into the support session contains credentials that are valid within the target Active Directory Domain.
- The representative's computer has the appropriate Remote Support Virtual Smart Card Representative installed.
- Each supported computer has the appropriate Remote Support Virtual Smart Card Customer installed.
- Each supported computer is running Windows 7 or newer.

Install the Smart Card Feature

1. In **/login**, navigate to **My Account > Virtual Smart Card**.
2. Download the representative installation package and the customer installation package for the appropriate versions of Windows.

VIRTUAL SMART CARD

Choose Windows® Architecture:

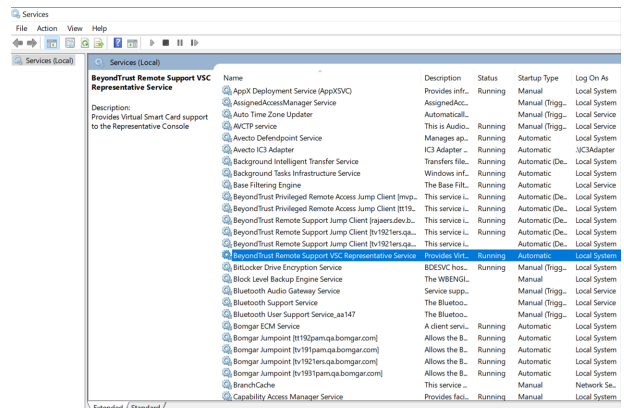
DOWNLOAD VIRTUAL SMART CARD INSTALLER

Requires Microsoft® Windows® 7 or newer.

If a Remote Support Representative needs to use their local smart card on a remote system being supported, then the BeyondTrust Remote Support Virtual Smart Card feature must be installed on both the representative and customer systems. Download and distribute the appropriate Virtual Smart Card Representative (VSC Representative Installer) to all representatives within your support center who require remote smart card functionality. This feature can be installed manually or via a software deployment tool. Once installed, it creates a service: Remote Support VSC Representative Service.

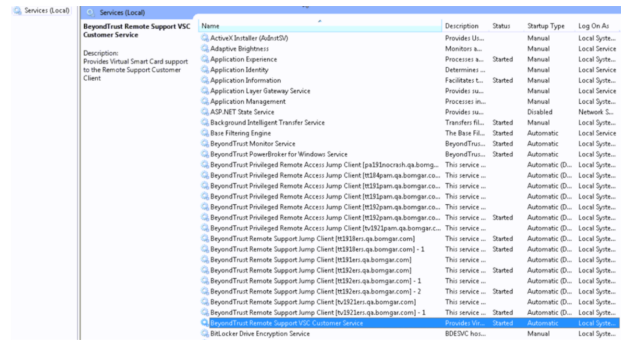
Next download and distribute the appropriate Virtual Smart Card Customer (VSC Customer Installer). (If Jump To is used to access the remote system, the Virtual Smart Card Customer feature does NOT have to be pre-installed.) Distribute the Virtual Smart Card Customer feature to all remote computers to which you will need to pass smart card credentials. This feature can be installed manually or via a software deployment tool. Once installed, it creates a service: Remote Support VSC Customer Service.

3. Install the representative virtual smart card driver.
 - Distribute the representative driver installer to all representatives within your support center who require remote smart card functionality.
 - The driver can be installed manually or via a software deployment tool.
 - Once the driver is installed, it creates a service called **BeyondTrust Representative Service**.



4. Install the customer virtual smart card driver. (If Jump To is used to access the remote system, the customer virtual smart card driver does NOT have to be pre-installed.)

- Distribute the customer driver installer to all remote computers to which you will need to pass smart card credentials.
- The driver can be installed manually or via a software deployment tool.
- Once the driver is installed, it creates a service called **BeyondTrust Customer Service**.



Name	Description	Status	Startup Type	Log On As
BeyondTrust Remote Support VSC Customer Service	Provides Virtual Smart Card support to the Remote Support Customer Client	Started	Manual	Local System
ActiveX Installer (Advt50)	Provider Ut...	Stopped	Manual	Local System
Adaptive Brightness	Monitors s...	Stopped	Manual	Local System
Application Experience	Processes a...	Started	Manual	Local System
Application Identity	Determines ...	Started	Manual	Local System
Application Information	Facilitates t...	Started	Manual	Local System
Application Layer Gateway Service	Provider su...	Stopped	Manual	Local System
Application Management	Processes in...	Stopped	Manual	Local System
ASP.NET State Service	Provider su...	Stopped	Disabled	Network L...
Background Intelligent Transfer Service	Transferer B...	Started	Manual	Local System
Base Filtering Engine	The Base Fil...	Started	Automatic	Local System
BeyondTrust Monitor Service	BeyondTrust...	Started	Automatic	Local System
BeyondTrust PowerBroker for Windows Service	PowerBroker...	Started	Automatic	Local System
BeyondTrust Privileged Remote Access Jump Client [pa4350ocresh.qa.bomg...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t514qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t515qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t516qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t517qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t518qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t519qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Privileged Remote Access Jump Client [t520qam.qa.bomgcr.co...	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5331en.qa.bomgcr.com]	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5331en.qa.bomgcr.com] - 1	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5331en.qa.bomgcr.com]	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5332en.qa.bomgcr.com]	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5332en.qa.bomgcr.com] - 1	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5332en.qa.bomgcr.com]	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5332en.qa.bomgcr.com] - 2	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5332en.qa.bomgcr.com]	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support Jump Client [t5332en.qa.bomgcr.com] - 1	This service ...	Started	Automatic (D...	Local System
BeyondTrust Remote Support VSC Customer Service	Provider su...	Started	Automatic	Local System
BitLocker Drive Encryption Service	BitLocker Ser...	Stopped	Manual	Local System

Install a Jump Client or Jumpoint for Elevated Session Start

When attempting to operate with the credentials on a smart card, the user is prompted to enter a PIN. This User Account Control (UAC) prompt is inaccessible to the support representative if the BeyondTrust customer client is not already running in elevated mode. It is therefore necessary to access the remote computer in one of these ways:

- A Jump Client running as a system service
- A Jumpoint or local network Jump, using administrative credentials

Accessing the remote computer in elevated mode allows the representative to interact with UAC prompts in order to enter the smart card PIN.

When attempting to operate with the credentials on a smart card, the user is prompted to enter a PIN. This UAC prompt is inaccessible to the support representative if the BeyondTrust customer client is not already running in elevated mode. It is therefore necessary to access the remote computer via a pre-installed Jump Client, which must be running as a system service, or through a Jumpoint or local network Jump using administrative credentials. Jumping to a remote computer via an elevated Jump allows the representative to interact with UAC prompts in order to enter the smart card PIN.

Jumpoint Installation

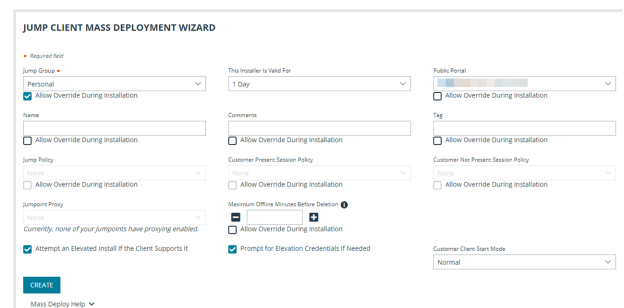


To install a Jumpoint, please see [Jumpoint: Set Up Unattended Access to a Network at https://www.beyondtrust.com/docs/remote-support/getting-started/admin/jumpoint.htm](https://www.beyondtrust.com/docs/remote-support/getting-started/admin/jumpoint.htm). No special setup is required.

Jump Client Installation

To install a Jump Client in preparation for using smart card support, you must set certain options as described below.

1. From the **/login** interface of your B Series Appliance, go to **Jump > Jump Clients**.
2. Configure the Jump Client settings as needed.
 - Be sure to check **Attempt an Elevated Install if the Client Supports It** as well as **Prompt for Elevation Credentials if Needed**.
3. Click **Create**.




4. From this page, you may email the Jump Client installer to one or more remote users.
5. Alternatively, select a platform and download the Jump Client installer to your local system. You may then distribute this installer to multiple systems for manual installation, or you may distribute it via a software deployment tool.

JUMP CLIENT MASS DEPLOYMENT WIZARD

Download or Install the Client Now:

Platform

Windows® (x64) 

 **DOWNLOAD**

Direct Download Link:

[https://\[redacted\]/download_client_1](https://[redacted]/download_client_1) 

Deploy to Email Recipients:

EMAIL



For more information, please see [Jump Clients: Manage Settings and Install Jump Clients for Unattended Access at https://www.beyondtrust.com/docs/remote-support/getting-started/admin/jump-clients.htm](https://www.beyondtrust.com/docs/remote-support/getting-started/admin/jump-clients.htm).

Use a Virtualized Smart Card

To use smart card credentials on a remote system, you must Jump to that system, or you must start a customer-initiated session with a system that has the BeyondTrust Customer Service pre-installed.

If using a Jump Client, the Jump Client must be running in service mode, or the remote system must also have the elevation service pre-installed with its service running. The virtual smart card drivers must be installed on both your local system and the remote system, with their services running.

Alternatively, a system can be accessed using the Jump To functionality from within the representative console. Using the Jump To functionality does not require the VSC Customer Service to be pre-installed on the customer's system. In this scenario, BeyondTrust installs the BeyondTrust Customer Service as part of the Jump to the end system being accessed.



Note: The VSC Customer Service is only installed during a Jump To push when the representative performing the Jump has the VSC Representative Service installed on their local system.

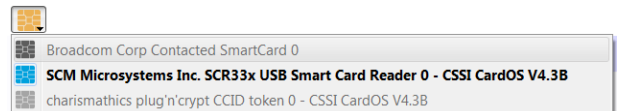
If using a customer-initiated session, the VSC Customer Service must be pre-installed on the remote computer, and its service must be running. Also, the appropriate smart card drivers must be installed on both your local system and the remote system, with their services running.

Begin a screen sharing session, and then click the **Smart Card** button to access a dropdown of available smart card readers on your system.



Tip: If the **Smart Card** button does not appear in the screen sharing tool bar, make sure the VSC Representative Service is running on your local computer. If the **Smart Card** button is present but disabled, make sure the VSC Customer Service is running on the remote computer.

The smart card dropdown menu displays the name(s) of the available smart card readers and smart cards. A reader in bold text is being shared in the current active session. An icon indicates the availability of each card reader or presence of each card:



- **Black icon:** Card not present
- **Blue icon:** Card present
- **Gray icon:** Reader/card is shared in another session

Click the reader you would like to share with the remote computer. Once the reader has been virtualized on the remote system, a message indicating that you have shared this reader is logged in the chat window. The selected reader is now available to use on the remote computer, and a smart card inserted locally is virtualized and operates as if it were physically present on the remote system being supported.

Once you have shared a reader, it remains selected and available for use throughout the session, as long as you do not log out the current user. If you do log out the current user on the remote computer, the shared reader is unshared and must be shared again if you need it later in the session.

When screen sharing, use a virtual smart card to perform administrative actions. You can run programs in another user context, or even log in as a different user.

If the virtual smart card feature is available in a session that is not elevated and a smart card reader has been shared into the session, then certificates stored on the inserted smart card can be selected and used for elevation, provided the certificates are associated with accounts that have the appropriate permissions.



Note: Elevation performed using this feature takes slightly longer due to the extra transactions required to the virtual smart card reader.

Elevation causes the customer client to restart in order to become elevated. The restart makes the shared reader unshared, and it must be shared again with the elevated session if it is required for use.



Note: A smart card reader can be attached to only one active session at a time. From the **Smart Card** dropdown in the support session in which the reader was shared, you can deselect a virtualized reader to free it for use in another session.

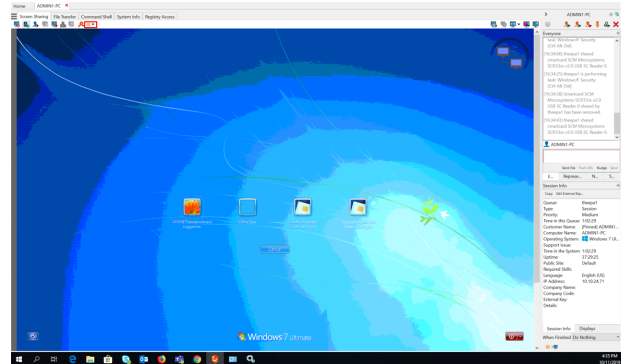


Note: This feature is not supported for ARM-based Windows systems.

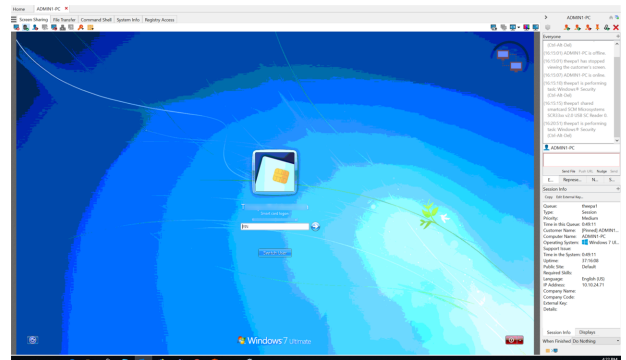
Use Case 1: Log in to the Remote Computer Using Smart Card Credentials

After Jumping to a remote computer, you may find that the computer is locked. Alternatively, you may need to perform administrative functions not permitted in the current user context.

Go to the remote login screen, logging out the current user if necessary. Click the **Smart Card** button and select a smart card reader to virtualize on the remote system. The smart card will now appear as a user login option.



Click the smart card user, enter the PIN, and log in.



Use Case 2: Run As the Smart Card User

While supporting a remote computer, you may need to run a specific application with privileges not available in the current user context. Within a screen sharing session, click the **Smart Card** button and select a smart card reader to virtualize on the remote system. Right click the desired application and choose **Run As**. From the UAC prompt that appears, select the smart card and enter the PIN to run the application in the smart card user context.



Note: Smart card credentials cannot be used to run elevated tasks from the **Special Actions** menu.

