

TECHNICAL PAPER

NETOP™

RemoteControl

Secure Remote Management and Support

Smartcard Integration



Netop develops and sells software solutions that enable swift, secure and seamless transfer of video, screens, sounds and data between two or more computers over the Internet. For more information, see www.netop.com.

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Introduction

This document presents how to configure Netop Remote Control to use smartcard authentication, either by working with Netop Security Server or directly on the Netop Host.

Prerequisites:

- 1 Domain Controller (DC) server.
- Netop Remote Control components installed: Guest, Host or Netop Security Server (NSS)
- Smartcard drivers installed on the Netop Guest.

2. Authenticate to the Host using smart card

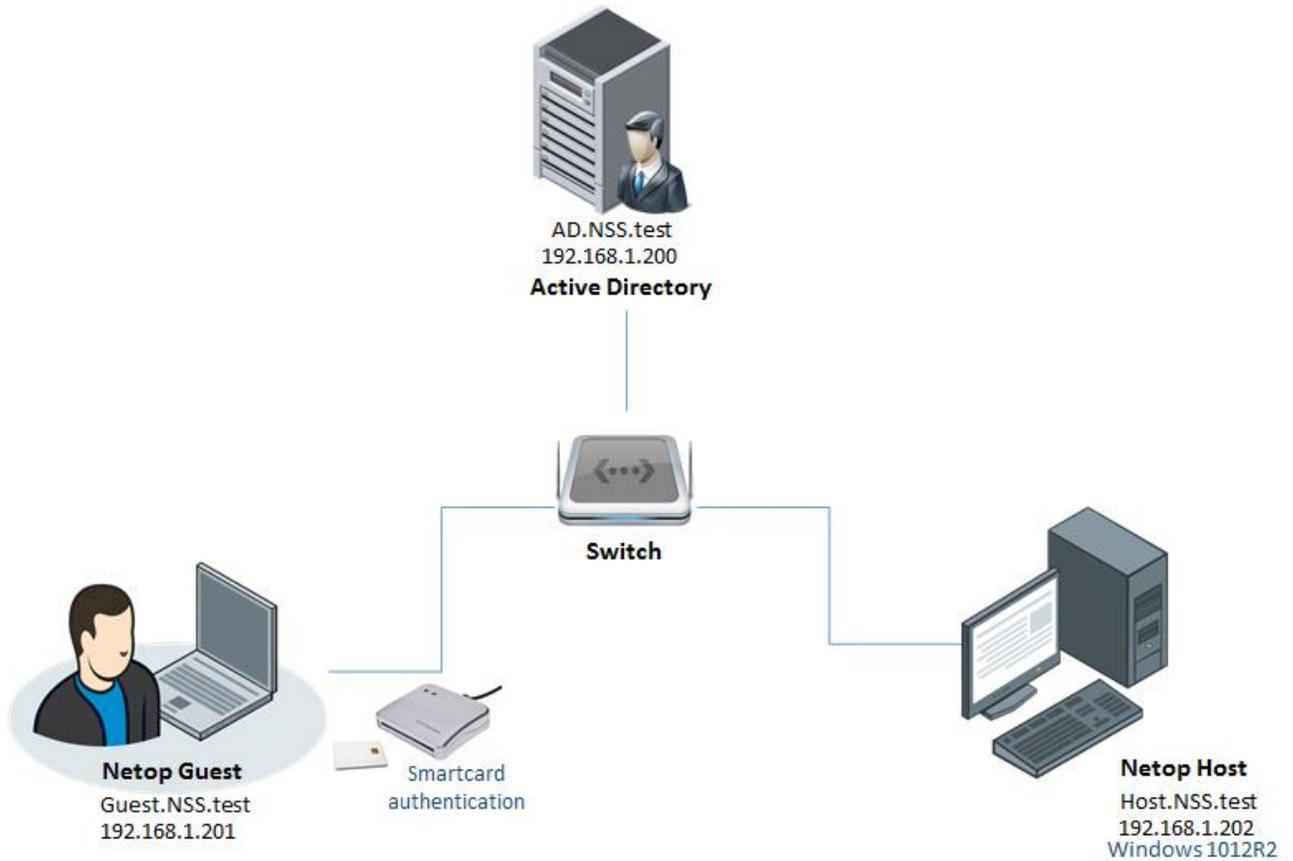
A smart card can be used to authenticate a Guest user in two ways:

- Configuration on the Host
 - Authenticate using Active Directory binding (Windows Security Management from Guest Access Method).
 - Authenticate using Directory Services (Directory services option from Guest Access Method)
- Configuration on NSS.
 - Authenticate using Active Directory binding (Windows Security Management from Guest Access Method).
 - Authenticate using Directory Services (Directory services option from Guest Access Method)

2.1. Configuration on the Host

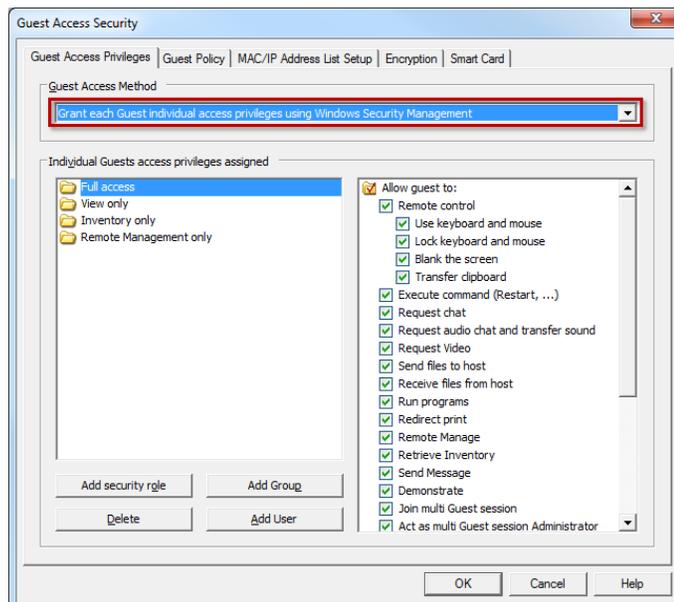
2.1.1. Authenticate using Active Directory binding

NOTE: In order for this authentication to work, smartcard drivers installed on the Netop Guest should be installed on the Netop Host.

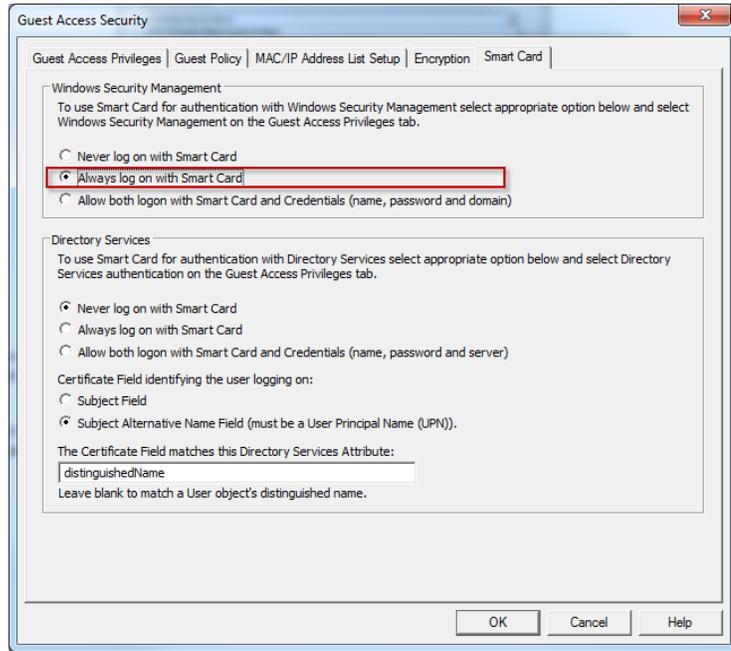


In order to authenticate on remote systems using the smart card reader via Active Directory binding:

1. On the Host machine go to **Tools > Guest Access Security** and from the Guest Access Method drop-down list select the **Grant each Guest individual access privileges using Windows Security Management**.



2. On the **Smart Card** tab in the Windows Security Management section, make sure to select the **Always log on with Smart Card** option.

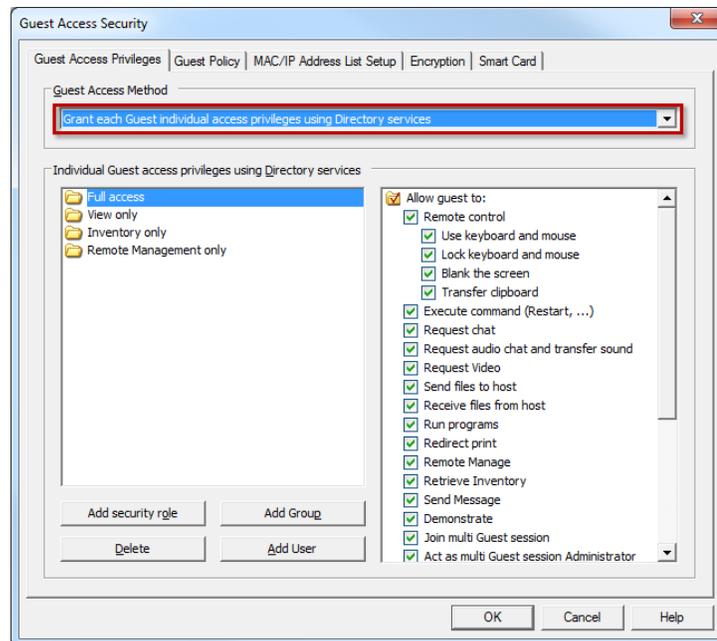


2.1.2. Authenticate using Directory Services

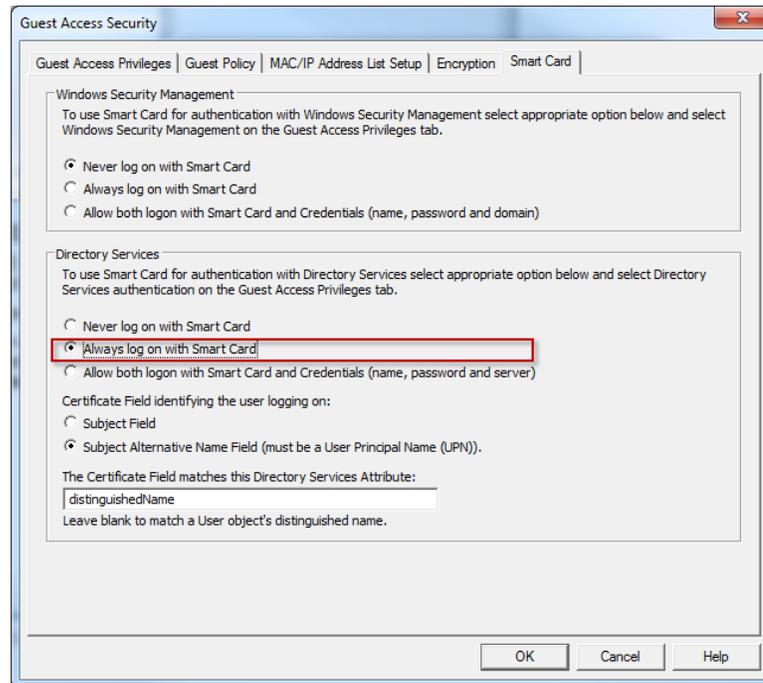
NOTE: In order for this authentication to work, smartcard drivers installed on the Netop Guest should also be installed on the Netop Host.

In order to authenticate on remote systems using the smart card reader via LDAP authentication:

1. On the Host machine go to **Tools > Guest Access Security** and from the Guest Access Method drop-down list select the **Grant each Guest individual access privileges using Directory Services**.



2. On the **Smart Card** tab in the Directory Services section, make sure to select the **Always log on with Smart Card** option.



Select the Certificate field identifying the user logging on:

- **Subject Field.** Retrieve the user identification from the Subject field of the Smart Card certificate.
- **Subject Alternative Name Field.** Retrieve the user identification from the Subject Alternative Name field of the Smart Card certificate.

Specify the directory services attribute compatible with the Smart Card certificate field contents (**The Certificate Field matches this Directory Services Attribute** field). This is necessary only if different from a user object distinguished name.

For Directory Services Smart Card logon to succeed, the Host must be able to resolve the Smart Card certificate user identification into a Directory Services user identification. If the Smart Card certificate user identification and Directory Services user identifications are incompatible, Smart Card logon will fail.

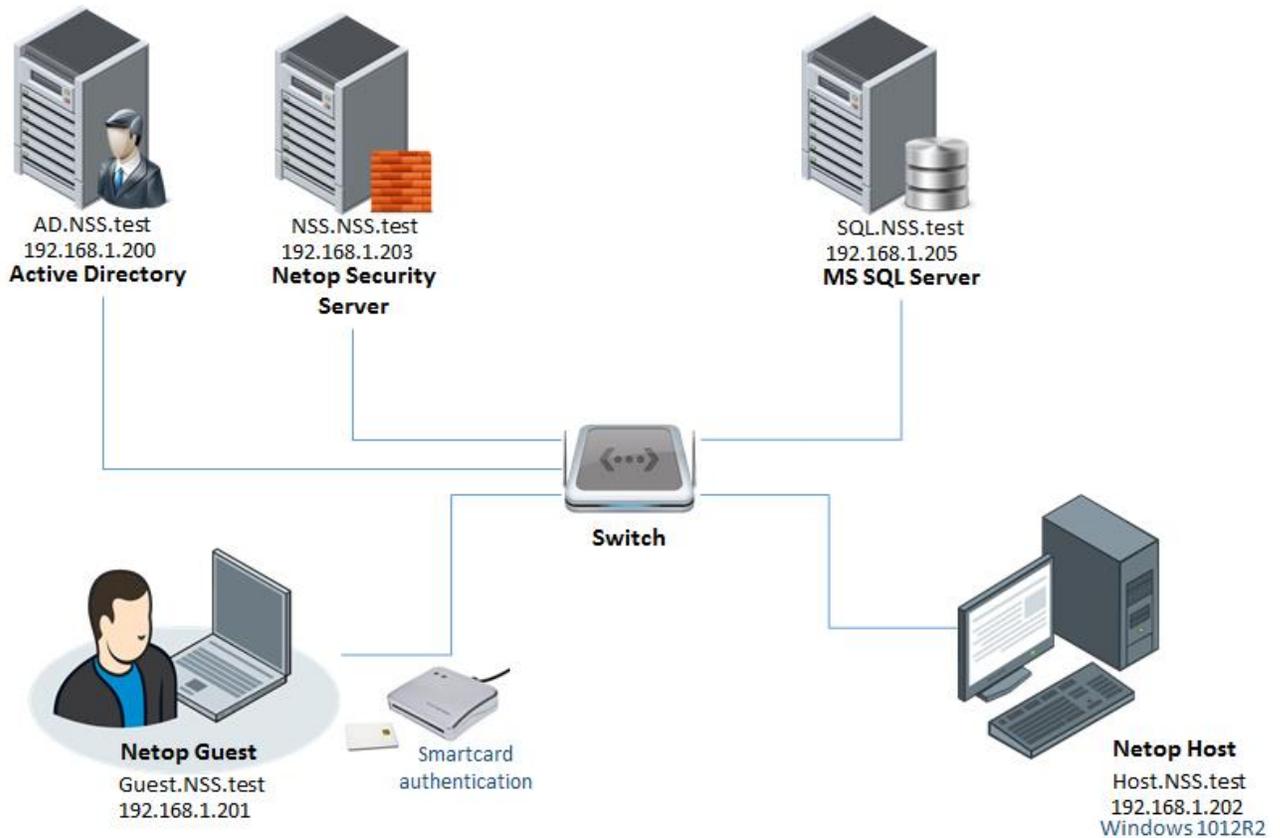
To find available Smart Card certificate user identifications insert the Smart Card and in Internet Explorer click the **Internet Options** command on the **Tools** menu to display the **Internet Options** dialog box.

On the Content tab, click **Certificates** to display the Certificates dialog box.

On the **Personal** tab, double-click the appropriate certificate record to display the Certificate dialog box. The **Details** tab displays the contents of available certificate fields including **Subject** and **Subject Alternative Name**.

If you need to authenticate with a custom attribute from the Subject field instead of using the whole content of the field, follow the steps provided in this [technical article](#).

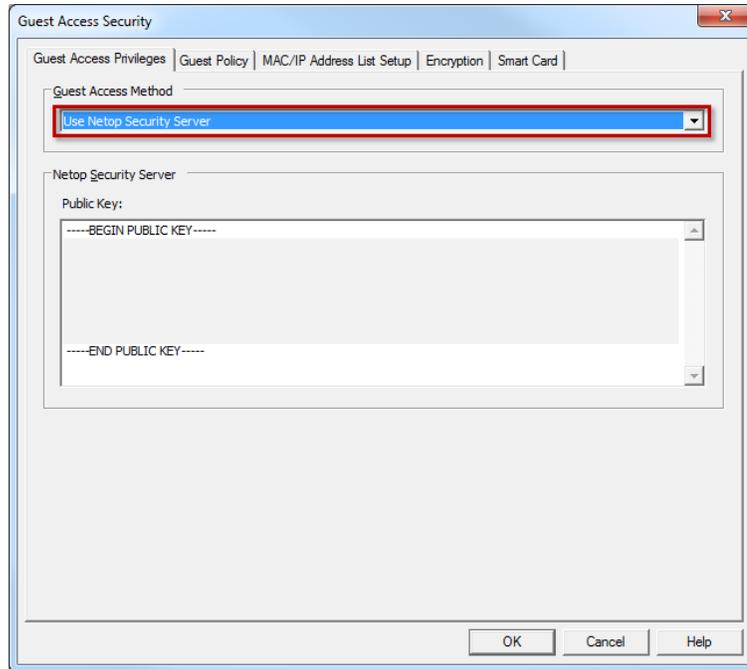
2.2. Configuration on the Netop Security Server



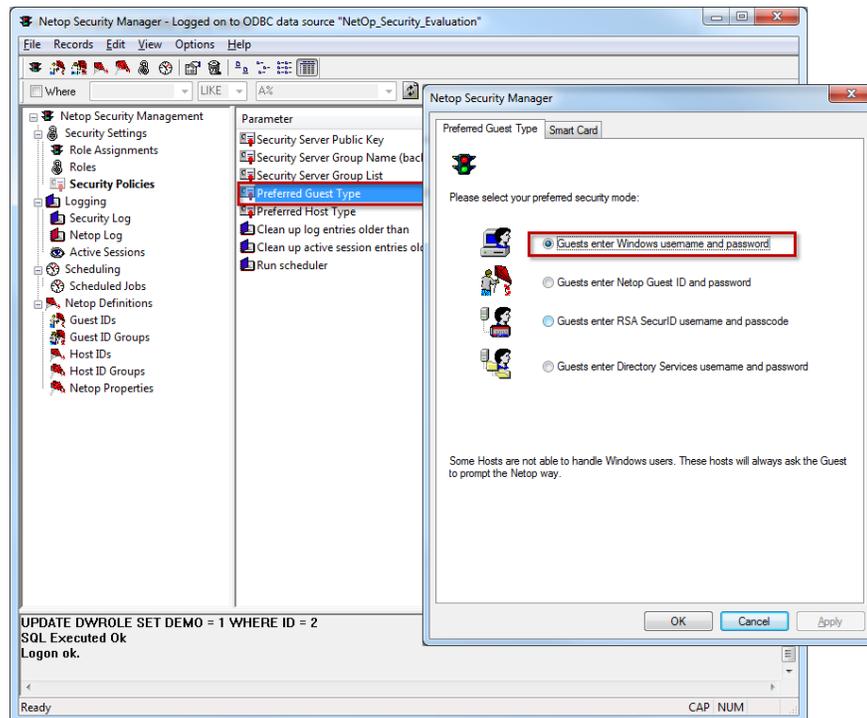
2.2.1. Authenticate using Active Directory binding

In order to authenticate on remote systems using the smart card reader via Active Directory authentication:

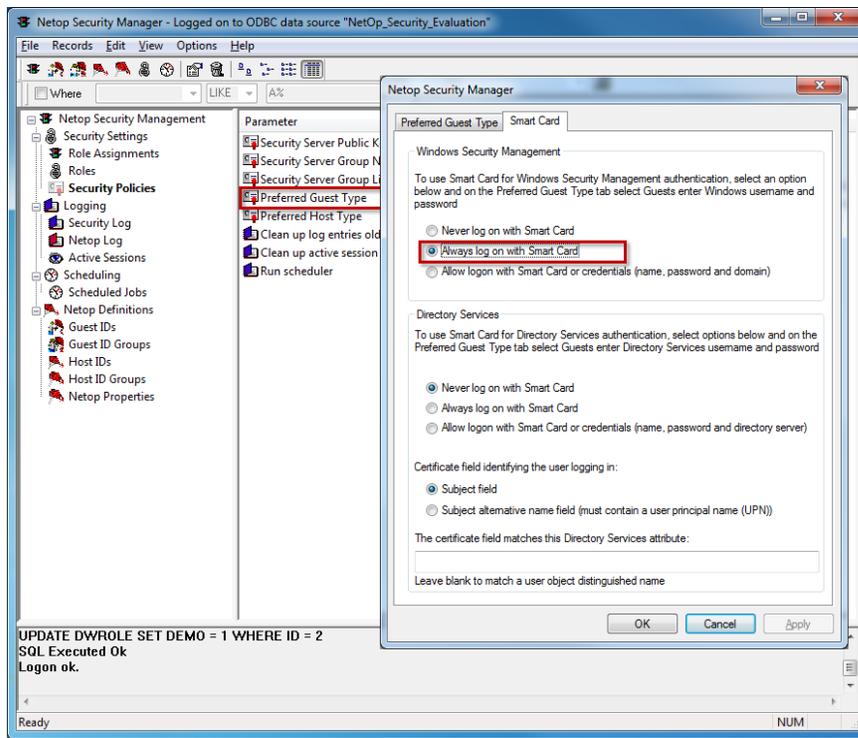
1. On the Host machine go to **Tools > Guest Access Security** and from the Guest Access Method drop-down list select the **Use Netop Security Server** option and configure the Host to work with NSS.



1. On the NSS machine, in the Security Manager, under **Security Policy - Preferred Guest Type** select the **Guests enter Windows username and password** security mode.



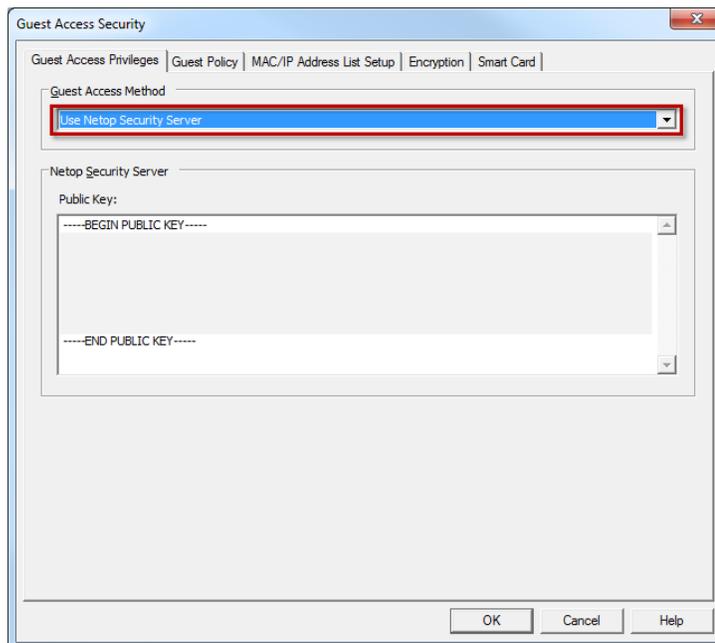
2. Click the **Smart Card** tab and under the Windows Security Management section make sure to select the **Always log on with Smart Card** option.



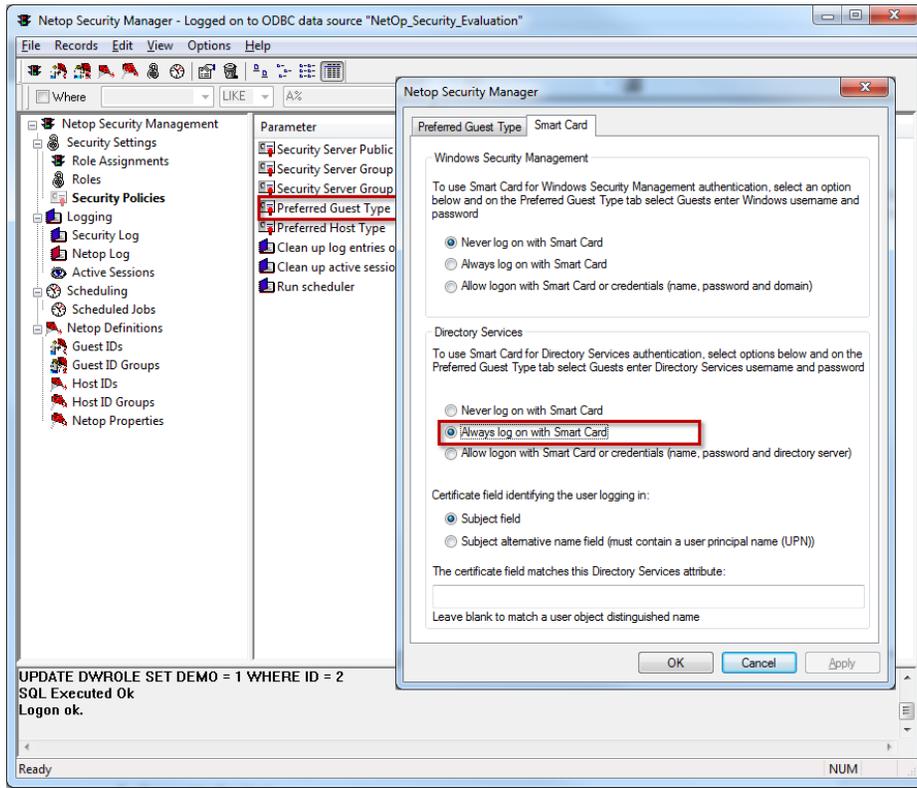
2.2.2. Authenticate using Directory Services

In order to authenticate on remote systems using the smart card reader through NSS via LDAP authentication:

1. On the Host machine go to **Tools > Guest Access Security** and from the Guest Access Method drop-down list select the **Use Netop Security Server** option.



2. On the NSS machine, In the Security Manager, under **Security Policy - Preferred Guest Type** on the **Smart Card** tab, under the Directory Services section make sure to select the **Always log on with Smart Card** option.

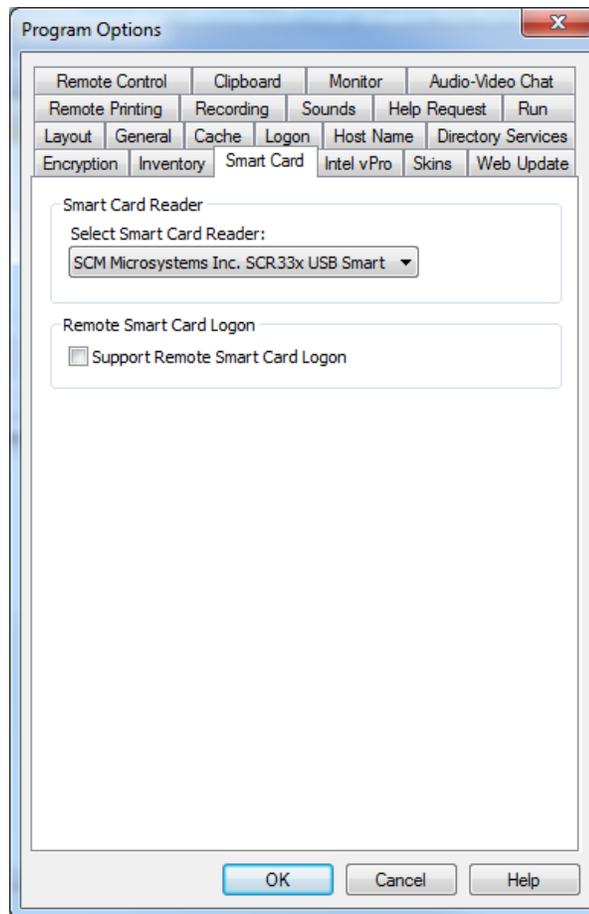


3. On the **Smart Card** tab in the Directory Services section, make sure to select the **Always log on with Smart Card** option. For details on how to select the Certificate field identifying the user logging on, see [Select the Certificate field identifying the user logging on](#)

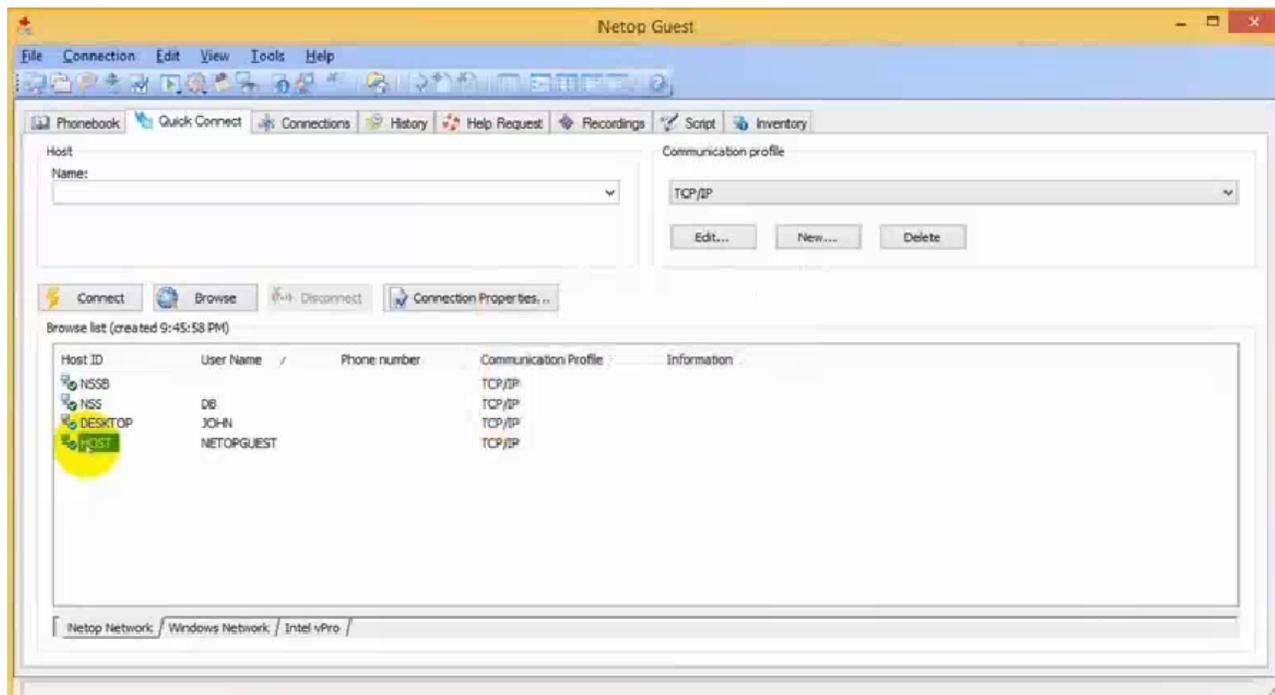
2.3. How it works

To connect from a Guest to a Host via Smart Card authentication:

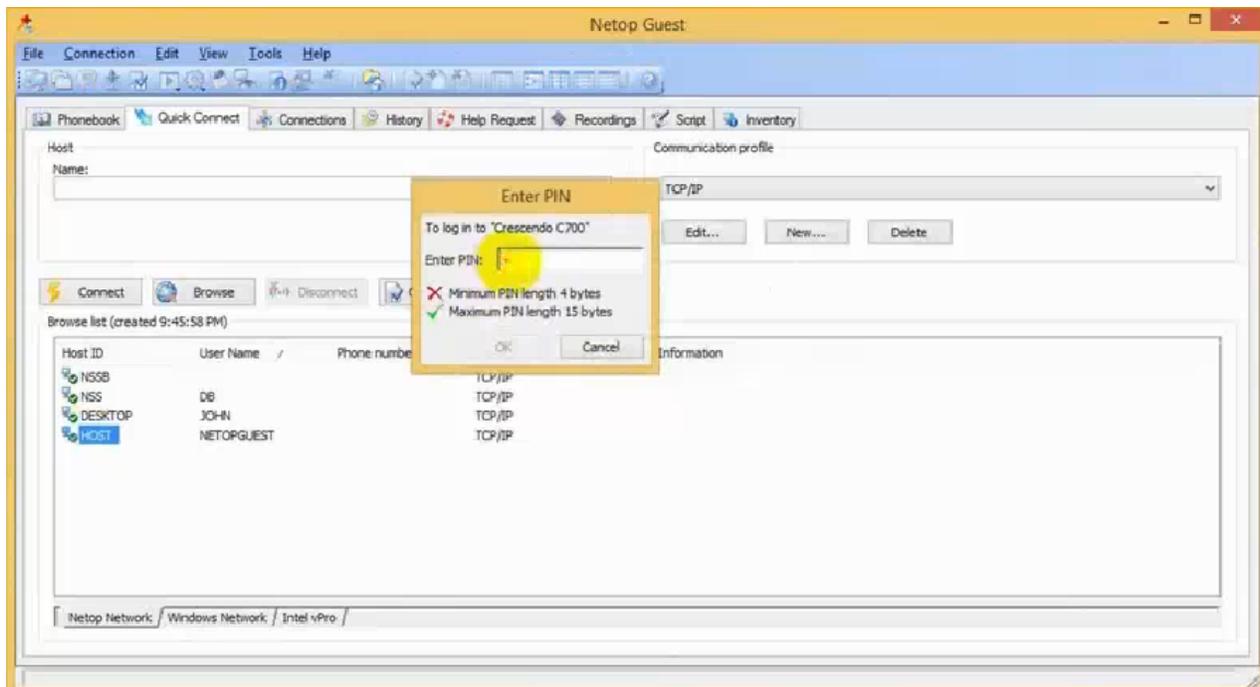
1. Connect the smart card reader to the Guest PC:
2. Open the Guest and go to **Tools > Program options > Smart card** and select the smart card reader from the drop down menu



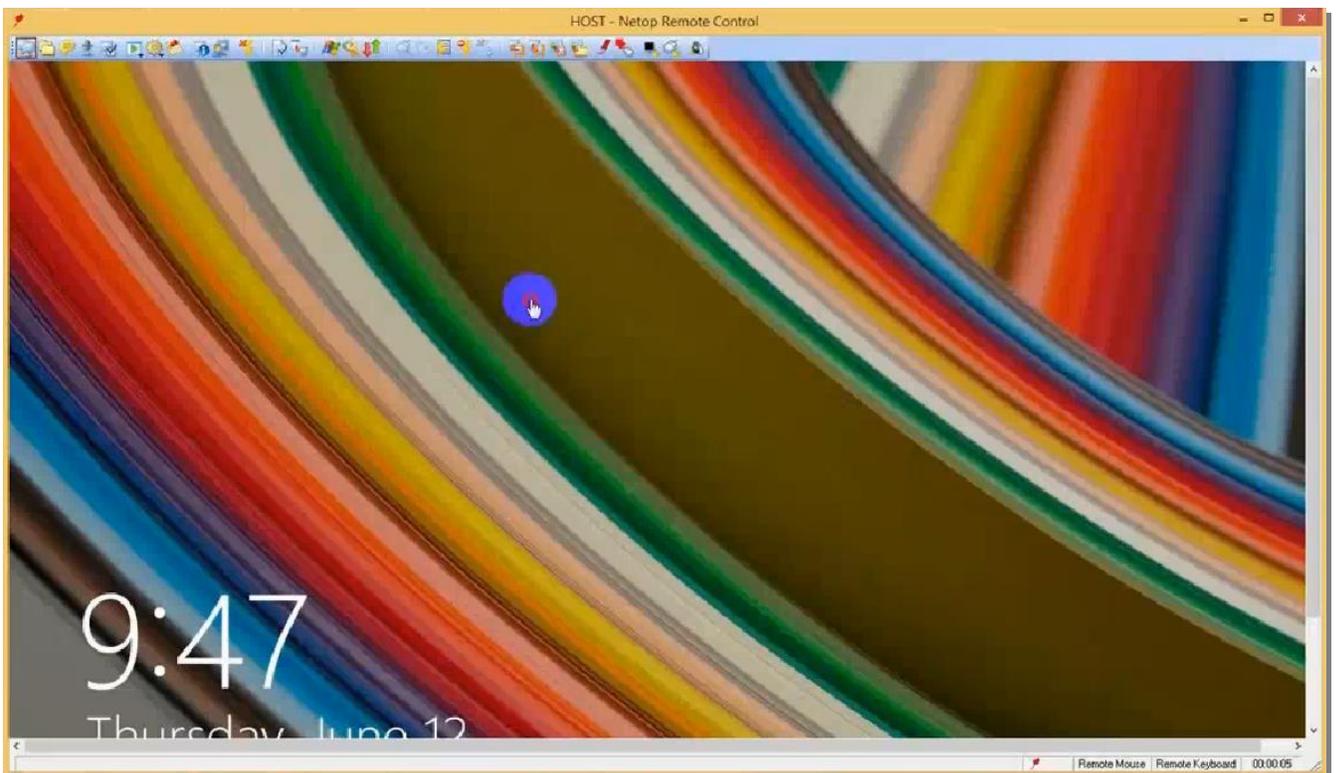
3. Connect to the Host.



4. Enter the Smart Card PIN and click **OK**.



The Smart Card identifies the Guest user that logs on and allows remote controlling the Host:

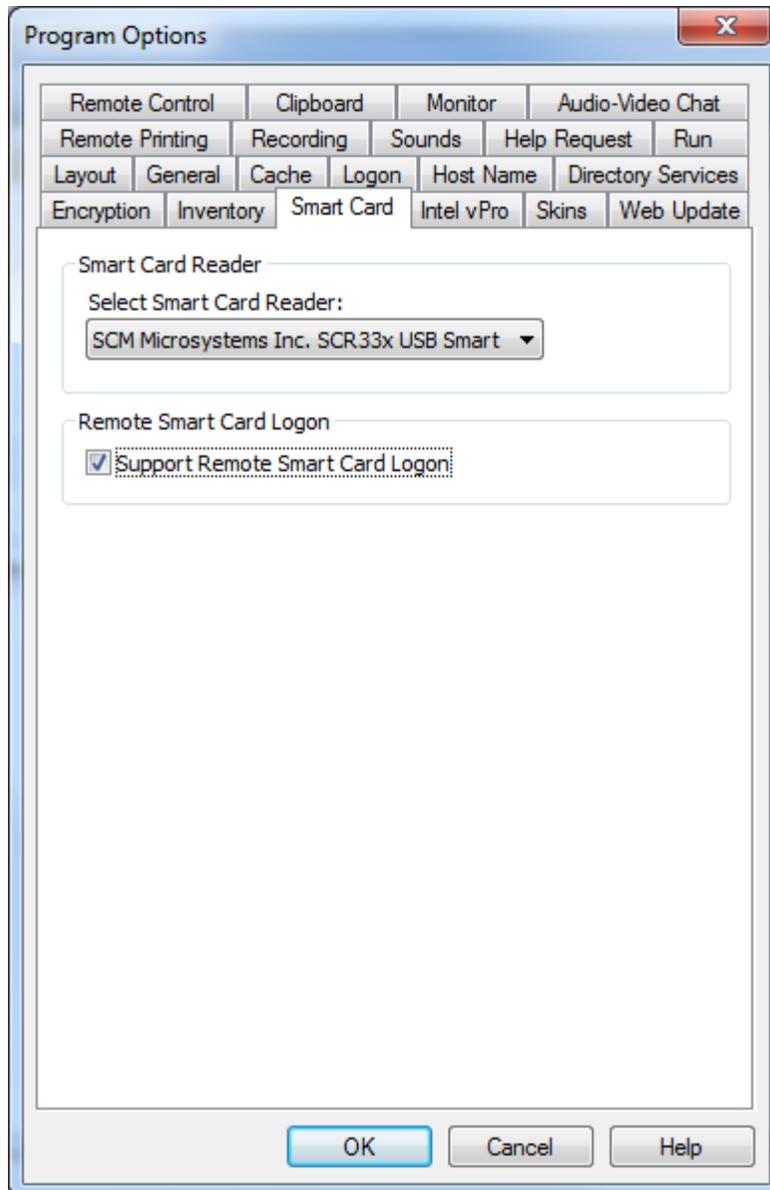


3. Use the smart card on the target device

3.1. Configuration

In order to authenticate on remote systems using the smart card reader, the following option needs to be checked. Once checked the smart card connected to the Guest machine can be used on the Host machine (E.g.: authenticate into Windows on the Host device using a smart card).

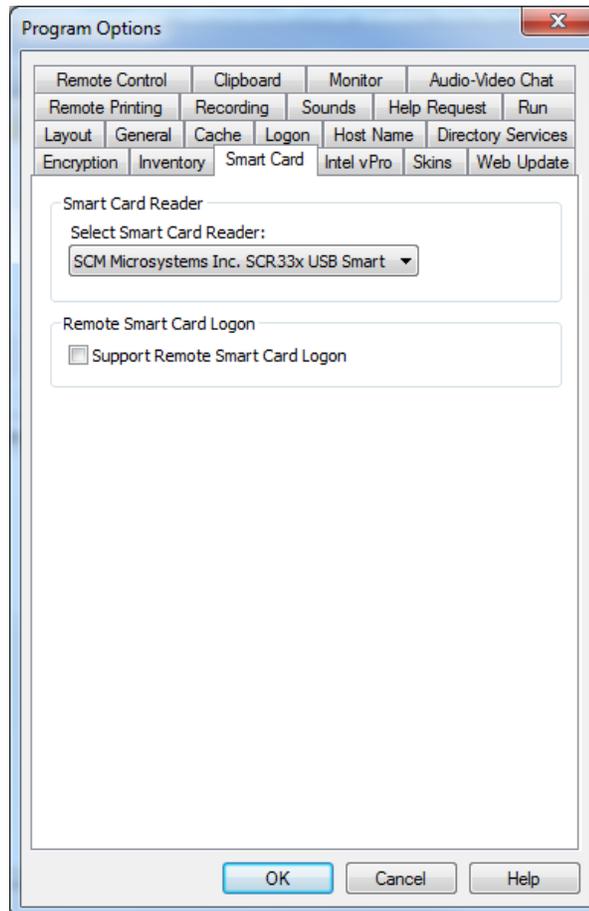
NOTE: In order for this authentication to work, smartcard drivers installed on the Netop Guest should be also installed on the Netop Host.



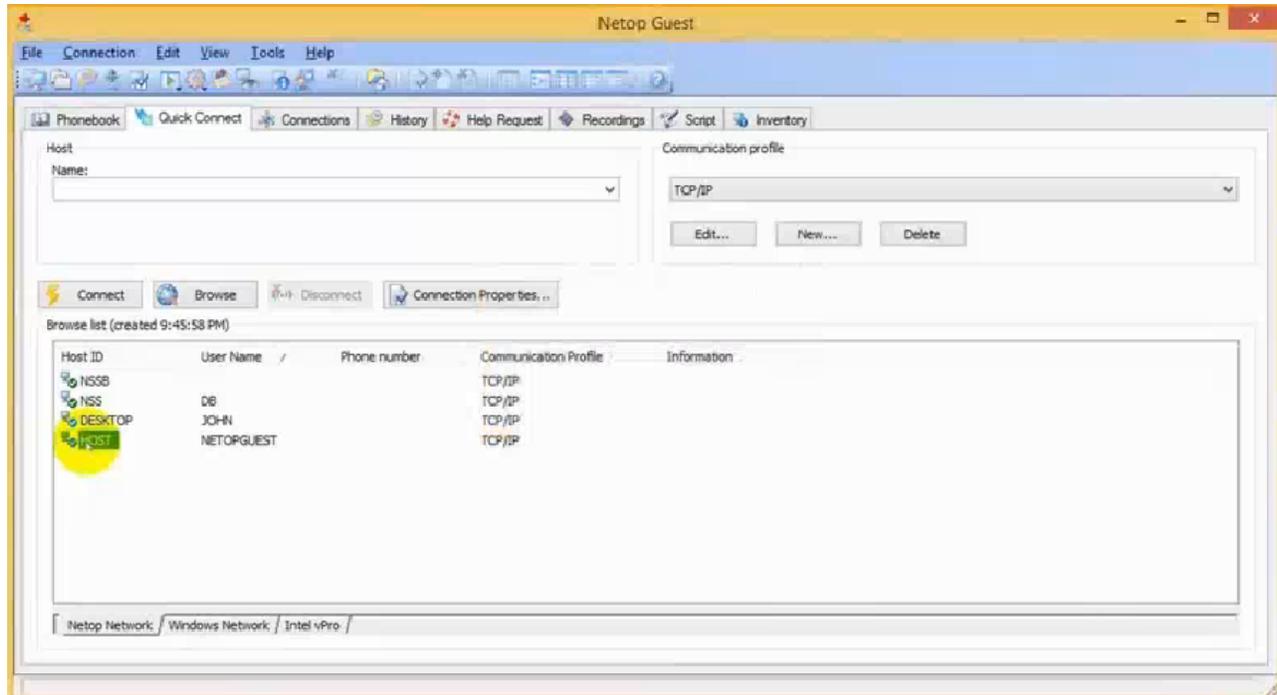
3.2. How it works

To authenticate on remote systems using the smart card reader:

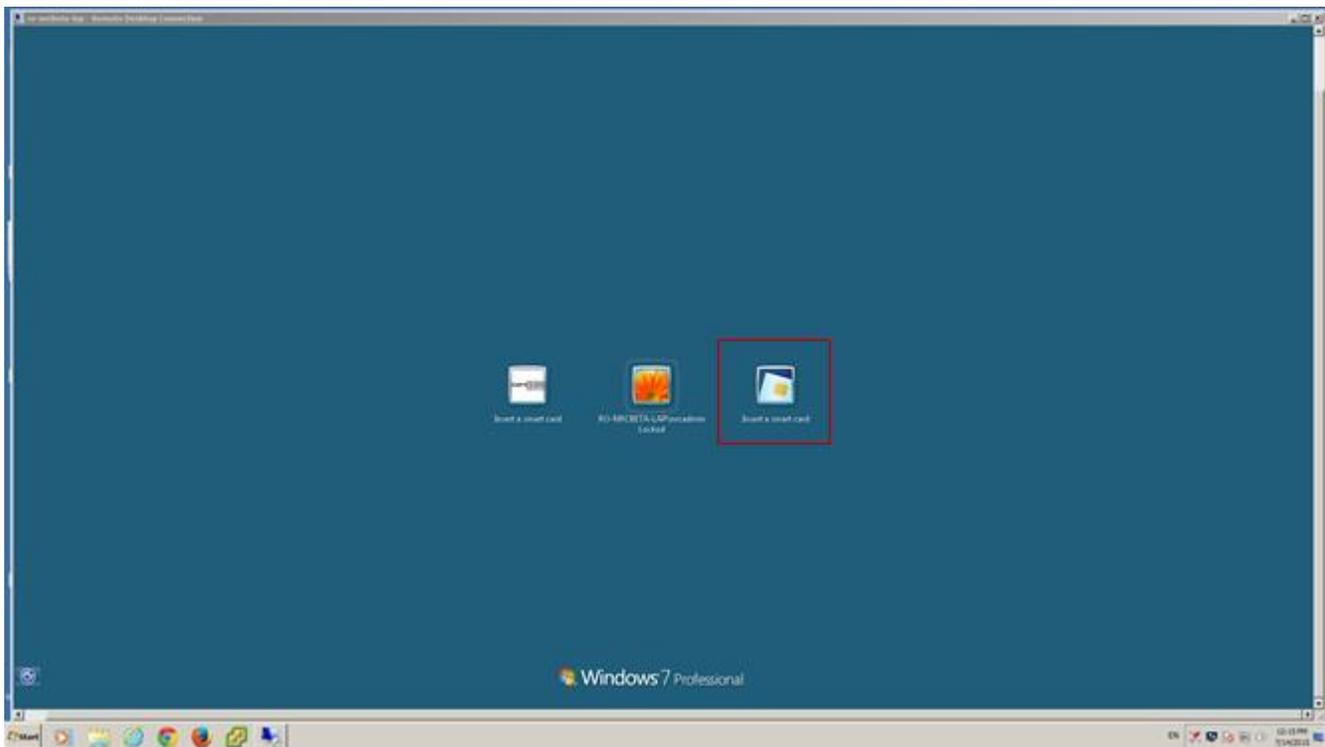
1. Connect the smart card reader to the Guest PC.
2. Open the Guest and go to **Tools > Program options > Smart card** and select the smart card reader from the drop down menu



3. Connect to the Host.



4. Select to authenticate on the Host using the smart card:



5. Enter the Smart Card PIN and click **OK**.

The Smart Card identifies the Guest user that logs on and allows remote controlling the Host: