Virtual smart cards function the same way as physical smart cards that are continuously

inserted into a system. The machine gets the same benefits and results. To set up virtual

smart cards, you need to build a certificate authority (CA) server in your organization, and

all of your Windows clients need to be Windows 8 or higher.

After the CA is built, you then need to build a certificate template for the virtual smart

cards to use. Then, to create the TPM virtual smart card for a Windows 10 system, open a

command prompt with Administrative credentials on a Windows 10 domain computer and

type in the following command:

tpmvscmgr.exe create /name tpmvsc /pin default /adminkey random /generate

After you run this command, you will create a virtual smart card with the name tpmvsc.

The system will then prompt you for a PIN. You will need to enter and confirm a PIN of at

least eight characters. After a few seconds, the process will complete. The TPM application

(tpmvscmgr.exe) will then provide you with the device instance ID for the virtual smart

card. You may want to store this ID in case you will need it to manage or remove the virtual

smart card later.

Finally, you will need to enroll the certificate into the CA by requesting a new certificate

and then choosing the TPM Virtual Smart Card Logon check box. When you are prompted

for a device, select the Microsoft virtual smart card that you created earlier