



**ENTRUST**

# nShield Remote Administration

## Feature Overview

### HIGHLIGHTS

- Lets you administer distantly-located nShield Solo and Connect hardware security modules (HSMs) from any location, whenever you choose
- Cuts travel time and cost while adding 24 × 7 access to your HSMs
- Enables a wide variety of functions via the remote presentation of nShield smart cards including upgrading firmware, checking HSM status, and running utilities
- Eliminates the risk of carrying high value smart cards to remote locations

Remote Administration uses the following components to locally manage remote HSMs:

- Remote Administration cards—Custom smart cards equipped with an Entrust applet
- Trusted verification devices (TVDs)—Entrust smart card readers used with Remote Administration cards to create a secure connection with the target HSM (includes Type A USB connector)
- Remote Administration Client (RAC) software—Simple GUI run on client laptop or workstation to configure connection to HSM

Remote Administration smart cards



Trusted verification device



nShield Solo



nShield Connect





# nShield Remote Administration

nShield Remote Administration creates a secure connection between your remote HSM and your local Remote Administration cards and TVD, letting you present your quorum of smartcards and administer your HSMs as if physically present with the device. Communicating over your VPN, you control the HSM from a laptop or workstation via remote desktop or secure shell session.

## Operational features

Remote Administration lets you perform the vast majority of typical HSM functions including:

- Configuring new nShield HSMs
- Creating new nShield Security Worlds—Entrust’s unique key management architecture—and enrolling new HSMs into existing Security Worlds
- Upgrading firmware and image files for maintenance and feature updates
- Monitoring and changing HSM status and re-booting as required

## Security features

Remote Administration includes the following to safeguard your transactions:

- Mutual authentication between Remote Administration cards and HSM utilizing factory-issued warrants (analogous to digital certificates) using Diffie-Hellman ephemeral key exchange AES256-equivalent crypto connection between Remote Administration cards and HSM

- HSM electronic serial number verification by the card holder
- FIPS 140-2 certified firmware and Remote Administration cards
- TVDs certified to Secoder protocol—inhibits malware on the client workstation from spoofing the HSM identity being passed to Remote Administration Cards

Please request the Entrust Remote Administration Security White Paper to learn more.

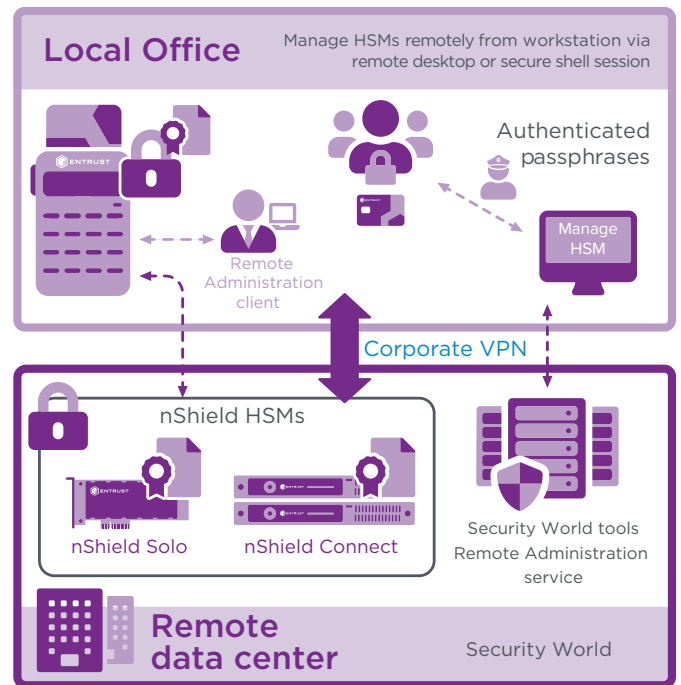


Figure 1. High level illustration of the components used in a typical remote administration deployment



# nShield Remote Administration

## Getting Started with nShield Remote Administration kits

Remote Administration Kits are available in a variety of tiers depending on HSM estate size. Additionally, Remote Administration can be expanded to support larger estates post-installation by purchasing upgrade kits. The table below shows the kit tiers available for purchase.

Tier	Remote HSMs Served	Remote Admin Cards	TVDs	Client DVDs
1	1 to 10	20	2	2
2	11 to 20	50	5	5
3	21 to 40	100	10	10
4	40 or more	200	20	20

## nShield Remote Administration compatibility and prerequisites

- nShield Solo PCIe and Connect HSMs
- RAC software compatible with Microsoft Windows, Linux and OS X
- nShield Security World v12.00 and above software and 2.61.2 and above firmware
- Customer-supplied LAN or VPN and remote access solution

## Learn more

To find out more about Entrust nShield HSMs visit [entrust.com/HSM](https://www.entrust.com/HSM). To learn more about Entrust's digital security solutions for identities, access, communications and data visit [entrust.com](https://www.entrust.com)

To find out more about  
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## ABOUT ENTRUST CORPORATION

Entrust keeps the world moving safely by enabling trusted identities, payments and data protection. Today more than ever, people demand seamless, secure experiences, whether they're crossing borders, making a purchase, accessing e-government services or logging into corporate networks. Entrust offers an unmatched breadth of digital security and credential issuance solutions at the very heart of all these interactions. With more than 2,500 colleagues, a network of global partners, and customers in over 150 countries, it's no wonder the world's most entrusted organizations trust us.

Learn more at  
**entrust.com/HSM**

