

PC/SC-lite 1.0 Release Notes

This distribution is a Sun Ray implementation of the PC/SC-lite API, derived from the Open Source MUSCLE project. PC/SC-lite support enables the integrated Sun Ray smart card reader to be PC/SC compliant when used with third-party middleware products. PC/SC (Personal Computer/Smart Card) is the standard framework for smart card device access on Windows, Linux, and UNIX platforms.

Supported Platforms

PC/SC-lite 1.0 requires Sun Ray Server Software (SRSS) 4.0 and is designed to run on the following operating systems:

- Solaris 10 11/06 SPARC and x86
- Solaris 10 11/06 SPARC and x86 with Trusted Extensions

Installation

Follow these instructions to install PC/SC-lite.

Note – To install PC/SC-lite in a Solaris Trusted Extensions environment, perform the following steps as root from ADMIN_LOW (global zone).

1. Remove the following packages from the Sun Ray Server:

```
SUNWsrcbp
SUNWocfd
SUNWocfh
SUNWocfr
SUNWpcslite
SUNWpcslite-devel
SUNWjcom
```

Note – If you are in a Solaris Trusted Extensions environment, follow steps 2 and 3; otherwise, skip to step 4.

2. Add shared multilevel port 5999 to the global zone.

This is necessary in order to have access from the local zone.

a. Start the SMC GUI.

```
# smc &
```

b. Under Management Tools-Select hostname: Scope=Files, Policy=TSOL option.

c. Select System Configuration->Computers and Networks ->Trusted Network Zones->global.

d. From the menu bar, select Action->Properties.

e. Perform one of the following steps:

i. Click Add under Multilevel Ports for Shared IP Addresses to enable port for shared IP addresses.

or

ii. Click **Add** under **Multilevel Ports** for **Zone's IP Addresses** to enable ports for zone-specific IP addresses.

f. Add **5999** as **Port Number**, Select **TCP** as **Protocol**, and click **OK**.

3. Restart `tnctl` service using the following command:

```
# svcadm restart svc:/network/tnctl:default
```

4. # `svcadm restart svc:/network/tnctl:default`

5. Verify that these ports are listed as shared ports by running the following command:

```
# /usr/sbin/tninfo -m global
```

6. Install the **PC/SC-lite** packages into the **global** zone.

```
# pkgadd -d . SUNWpcsc SUNWpcscdtu
```

Known Problems and Limitations

Sun Ray Connector May Hang (Bug ID 6587725)

Removing the Smart Card while the light (LED) near the Sun Ray card slot is blinking is not recommended. Hotdesking while the Smart Card reader light is blinking can cause applications to freeze for up to two minutes before recovering.

The workaround is to not remove the Smart Card while it is being accessed. If the application freezes, wait a few minutes: the application(s) should recover without user intervention.

Resetting or Power-cycling DTU Can Freeze Applications

Power-cycling or resetting Sun Ray DTU during Smart Card related activities, or doing so while applications that use Smart Cards are running, can cause those applications to freeze for up to two minutes, or make smart cards otherwise inaccessible for two minutes.

The workaround is to avoid resetting the DTU while smart card-related applications are running. If an application freezes after a reset or power-cycle event, wait a few minutes: the application(s) should recover without user intervention.

PIN Prompt to Windows May Fail Occasionally

When hotdesking with a Sun Ray Connector-based Windows session running, the PIN dialog may (occasionally) fail to appear. The user will get a password prompt.

The workaround is to:

1. Log out of the Windows Session.
2. Re-start the Sun Ray Connector for Windows session.
3. Log into Windows again.