PC/SC-lite 1.1 Release Notes

This distribution is an updated release — the previous version was PC/SC-lite 1.0 — an implementation of the PC/SC-lite API, derived from the Open Source M.U.S.C.L.E. project.

PC/SC (Personal Computer/Smart Card) is the standard framework for smart card device access on Windows, Linux, and UNIX platforms.

The distribution contains a base package that installs the PC/SC-lite infrastructure for the Solaris platform, and an optional package that enables interoperability with the integrated Sun Ray smart card readers on Sun Ray thin clients (Solaris platform only). Support for external USB readers is supplied by the CCID handler, as a separate download.

Supported Platforms

PC/SC-lite 1.1 is designed to run on the following operating systems:

Solaris 10 11/06 or later on SPARC and x86
Solaris 10 11/06 or later on SPARC and x86 with Trusted Extensions

NOTES:

1. Sun PC/SC-lite 1.1 is not currently available for the Linux platform.

2. At least one of the available optional packages must be installed along with the PC/SC-lite base package to enable it to work with a respective set of readers.   The two optional packages currently available are a package that provides PC/SC-lite access to readers on Sun Ray thin clients, and a package that provides PC/SC-lite access to external USB readers.

   If both the Sun Ray support package and the USB support package are installed, then USB readers connected to Sun Ray units can be utilized, which goes beyond the access to system console USB readers afforded by the USB support package alone.

3. The optional Sun Ray support package SUNWpcscdtu requires Sun Ray Server Software (SRSS) 4.0, patch-02 or later.

Installation

Follow these instructions to install PC/SC-lite 1.1.

Note – To install PC/SC-lite 1.1 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
   SUNWpcsclite
   SUNWpcsclite-devel
   SUNWjcom
   ```

   Note – If you are in a Solaris Trusted Extensions environment, follow steps 2 and 3;
   otherwise, skip to step 5.

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

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

 # /usr/sbin/tninfo -m global

5. Install the PC/SC-lite 1.1 base package SUNWpcsc, and optional Sun Ray package SUNWpcscdtu.

 # pkgadd –d . SUNWpcsc

To enable PC/SC-lite 1.1. Sun Ray support. install optional SUNWpcscdtu package:

 # pkgadd –d . SUNWpcscdtu

To enable PC/SC-lite 1.1 external USB reader support, download and install the package from the optional CCID distribution using the instructions provided with that separate download.

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.