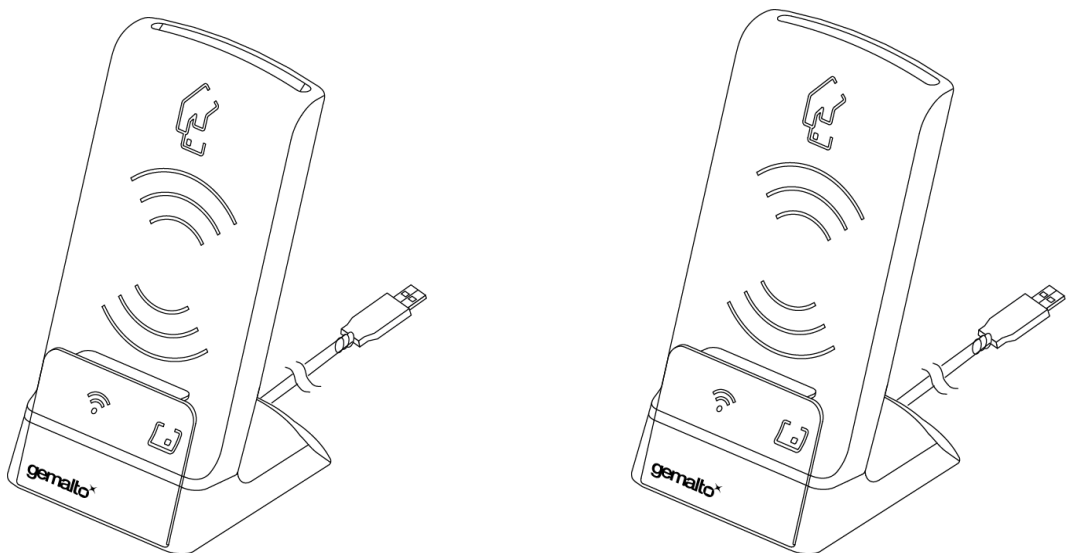


## **Prox-DU & Prox-SU**

### **Dual interface USB smart card reader**

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### **Computer Installation Guide**





## Prox-DU &amp; Prox-SU

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# Introduction

This guide provides instructions for the proper installation and test of the Prox-DU and Prox-SU dual interface (contactless and contact) USB smart card reader/writer on a personal computer.

This document is applicable to the following references, revision C and later:

Model	Reference	Comments
Prox-DU	HWP118184	Dual interface USB smart card reader Contact & contactless
Prox-SU	HWP118185	Contactless interface USB smart card reader With optional SIM/SAM slot
Prox-DU with stand	HWP118830	Prox-DU with a stand for vertical use
Prox-SU with stand	HWP118831	Prox-SU with a stand for vertical use

Table 1 – Dual interface USB smart card reader/writer models

For information on how to use the smart card reader/writer, please refer to the “Reference Manual” document.

## Who Should Read This Book

This installation guide is designed for home and office users wanting to use the Prox-DU and Prox-SU devices on their computer.

## Contact Our Hotline

If you do not find the information you need in this document, or if you find errors, contact the Gemalto hotline at <http://support.gemalto.com/>.

Please note the document reference number, your job function, and the name of your company. (You will find the document reference number at the bottom of the document.)



# Overview

## Description

The Prox-DU and the Prox-SU are Gemalto smart card reader/writers developed by Gemalto to interface contactless and contact smart cards:

- The Prox-DU is a **dual interface (contact and contactless)** USB smart card reader/writer:

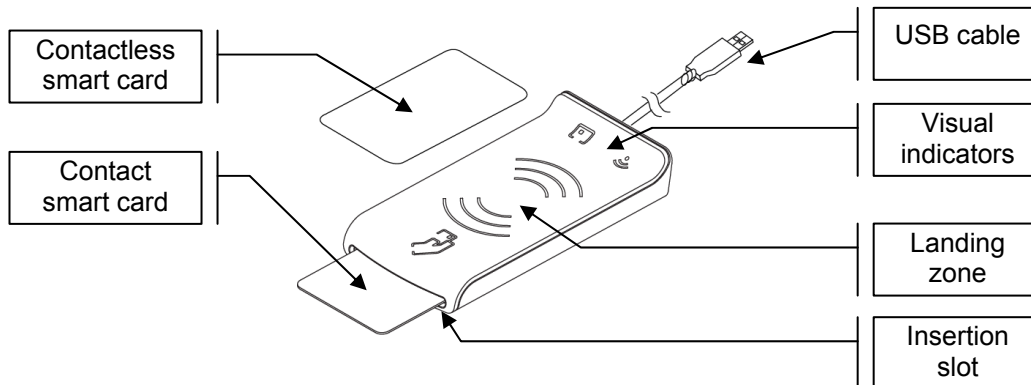


Figure 1 – Prox-DU view

- The Prox-SU is a **contactless interface** USB smart card reader including an internal SIM/SAM card slot:

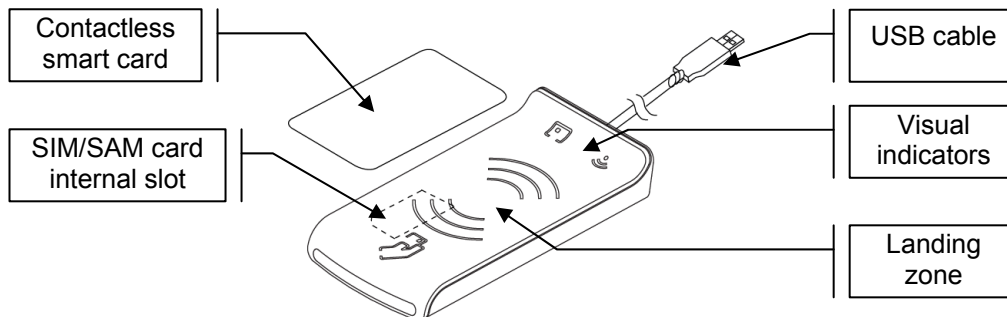


Figure 2 – Prox-SU view

The Prox-DU is dedicated for contactless and contact smart card use depending on the smart card type.

The Prox-SU is dedicated for contactless smart card use. A SIM/SAM card can be inserted into the internal slot depending on the contactless smart card usage needing or not an additional security module.

Both devices provide a visual feedback for each smart card interface.

Prox-DU & Prox-SU

A stand can be delivered for vertical use:

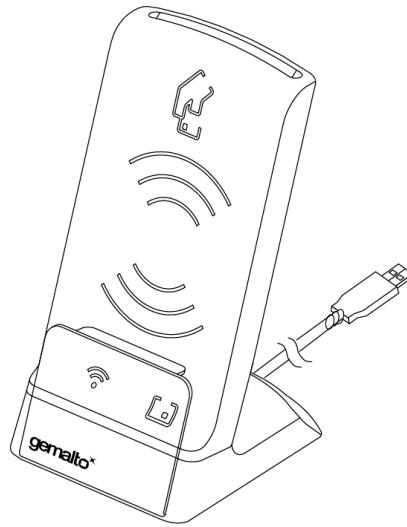


Figure 3 – Prox-DU with the stand for vertical use

The Prox-DU and The Prox-SU have been designed for any applications such as logical access control, transportation, identity, banking services and vending machines.

## BSI TR-03119 Conformity

The BSI TR-03119 certificate N° BSI-K-TR-0078-2010 recognizes the ability of the Gemalto Prox-SU and Prox-DU smart card readers to interface with the new German electronic identity cards called nPA (neue Personalausweis) as a "Basic Chip Card Reader Category B".

This certification includes a compliance with the next specifications:

- BSI TR-03105 Part 4 specification related to the test plan for ICAO compliant Proximity Coupling Device (PCD) on layer 2-4,
- Additional environmental and safety tests according to BSI TR-03119 attachment B.1,
- Functional tests according to BSI TR-03119 attachment B.2:
  - Installation of the smart card reader on different operating systems
  - Functional tests related to the use of the nPA smart card as card recognition, secret code input or change, or online authentication.

The conformity of the product Prox-SU / Prox-DU (with or without the stand) to the Technical Guideline BSI TR-03119 has been evaluated by evaluation facilities recognized according to DIN ISO/IEC 17025 and was confirmed by the German Federal Office for Information Security (BSI).



The following Test Standards have been applied for the performance of the conformity evaluation:

**BSI TR-03119** – Anforderungen an Chipkartenleser mit ePA Unterstützung (Requirements for Chipcard Reader Devices with ePA support), Version 1.1.

The product meets the requirements of the Technical Guideline BSI TR-03119.

## Prox-DU and Prox-SU differences

The main difference between the Prox-DU and Prox-SU models is related to the smart card slot:

- Prox-DU: the smart card slot located in the top cabinet is open. The user can insert or remove its **ID-1 size** smart card directly into or from the reader slot

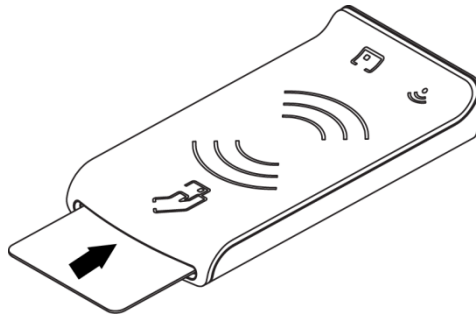


Figure 4 – Prox-DU ID-1 size slot

- Prox-SU: the smart card slot located in the top cabinet is **closed**. The user should open the casing before inserting its **ID-000 size** smart card into the dedicated connector. When the casing is closed the SIM/SAM card cannot be removed.

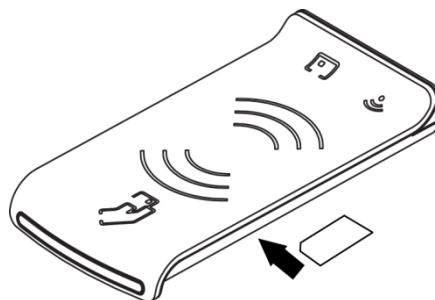


Figure 5 – Prox-SU ID-000 size slot

The following table shows all the different features supported by the Prox-DU and the Prox-SU reader/writers:

Feature	Prox-DU	Prox-SU
Contact card interface	ID-1 size format (smart card) Removable	ID-000 size format (SIM/SAM) Not removable
Product name	Gemalto Prox-DU	Gemalto Prox-SU
LEDs	The LED of contact interface is blinking when no card is inserted	The LED of contact interface is Off when no SIM/SAM is present

Table 2 – Prox-DU and Prox-SU differences

## Using Smart Cards

The Prox-DU and Prox-SU reader/writers must be used with contactless and contact smart cards. Depending on the model, the following pictures show the different ways to use the smart cards:

The Prox-DU and a contactless smart card:

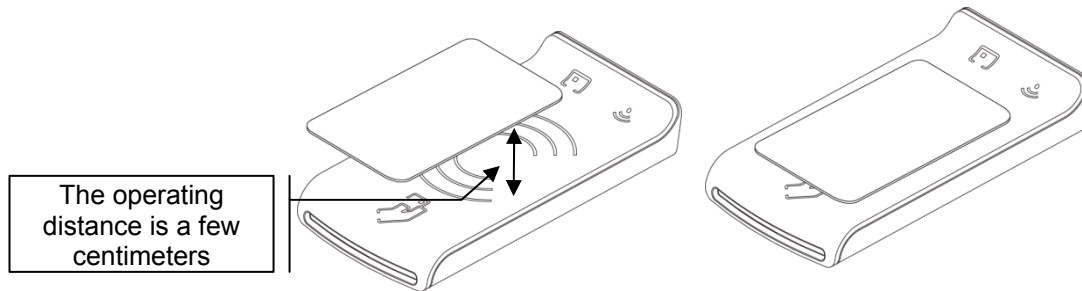


Figure 6 – The contactless smart card is put near or over the Prox-DU landing zone



Figure 7 – The contactless smart card is **not fully** inserted into the Prox-DU slot

Note: if the contactless smart card is fully inserted into the slot, the contactless interface will be deactivated because the contact interface has a higher priority than the contactless interface.

The Prox-DU and a contact smart card:

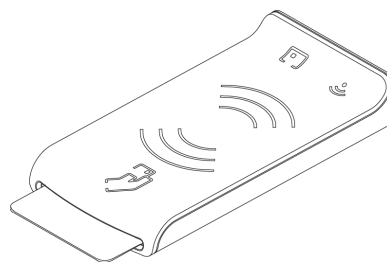


Figure 8 – The contact smart card is fully inserted into the Prox-DU slot

Prox-DU & Prox-SU

The Prox-SU and a contactless smart card:

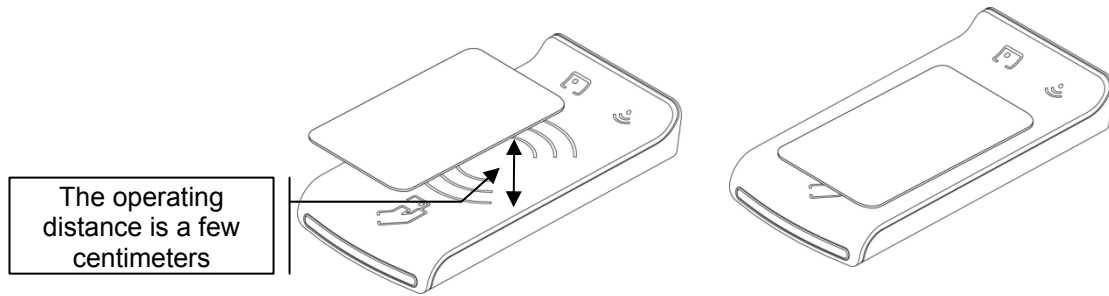


Figure 9 – The contactless smart card is put near or over the Prox-SU landing zone

The Prox-SU and a contact SIM/SAM card:

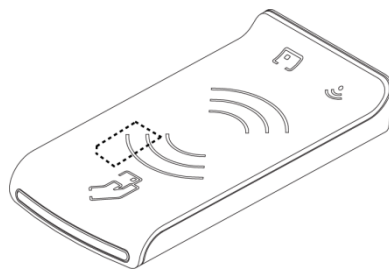


Figure 10 – The contact SIM/SAM card is inserted into the Prox-SU connector

Note: the SIM/SAM card cannot be installed or removed without opening the casing. The SIM/SAM card is permanently installed into the Prox-SU reader.

## Environmental Characteristics

For an optimal performance, operate the Prox-DU and the Prox-SU under the following environment conditions:

Description	Value or Range
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Storage Temperature	-20°C to +60°C (-4°F to +140°F)
Humidity Range	0% to 95% non-condensing

Table 3 – Environmental Characteristics

For an optimal use with contactless smart cards, please put the contactless smart card over the landing zone as shown in the next figures:

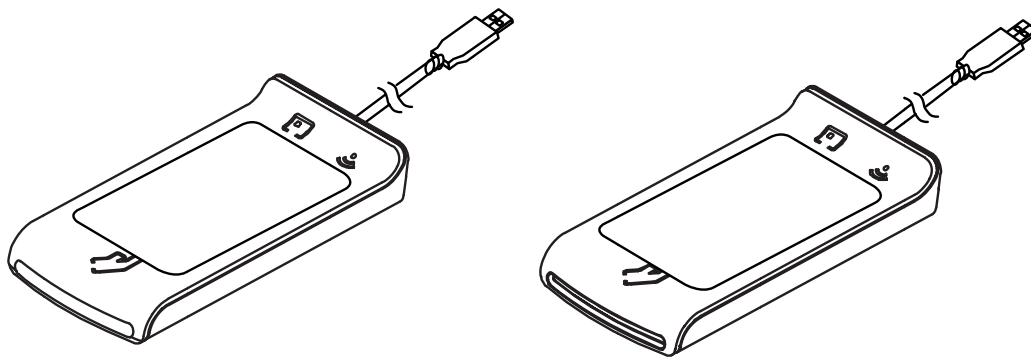


Figure 11 – Contactless smart card optimal location (Prox-SU & Prox-DU)

## Connections

The Prox-DU and the Prox-SU have a 1m80 USB cable with a standard USB A plug.

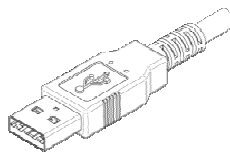


Figure 12 – Prox-DU and Prox-SU USB A Plug

## Interface capability

The Prox-DU and the Prox-SU devices support the following interfaces:

- One USB interface
- One contact smart card interface
- One contactless smart card interface
- Two visual indicators

Depending on the smart card type, the connectors used will be as shown in the next table:

Interface	Prox-DU Connector type	Prox-SU Connector type
USB	USB A plug	USB A plug
Contact card	ISO7810 ID-1 size ISO7816-2 8 pins	ISO7810 ID-000 size ISO7816-2 8 pins
Contactless card	Landing zone (No connector)	Landing zone (No connector)
Visual Indicators	One blue LED One yellow LED	One blue LED One yellow LED

Table 4 – Interface capability



# Interface features

## USB serial interface

The USB interface is available with the Prox-DU and the Prox-SU.

The USB interface is USB 2.0 full speed compliant.

The USB interface is a **composite device** composed of the following devices:

- One USB Smart Card reader for the contact interface
- One USB Smart Card reader for the contactless interface
- One USB Human Interface Device for the reader administration



Figure 13 – USB devices (Windows XP example)

The USB interface does not require a specific driver for use with various operating systems.

The standard USB CCID driver included into the operating system of the computer is used for the smart card interface.

The standard USB HID driver included into the operating system of the computer is used for the device administration.

The selective suspend is not supported by the USB interface. Only standard suspend is supported.

## Contactless interface

The contactless interface is available with the Prox-DU and the Prox-SU and is composed of a landing zone located in the front cabinet defined by the following contactless logo:



Figure 14 – Contactless logo of the landing zone

The contactless antenna is integrated into the device just under the landing zone.

This contactless interface complies with the ISO14443-A&B standard.

## Contact interface

The contact interface is available with the Prox-DU and the Prox-SU and is composed of a smart card connector with a smart card slot located in the front cabinet for the Prox-DU and located inside the casing for the Prox-SU.

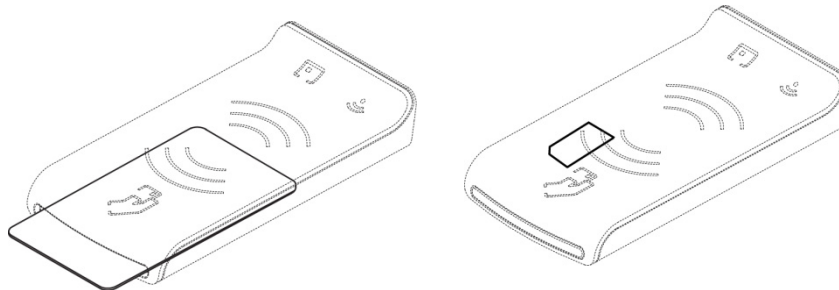


Figure 15 – Contact card slot (Prox-DU and Prox-SU)

This contact interface complies with the ISO7816 standard.

## LED interface

Two LEDs are available as visual indicators:

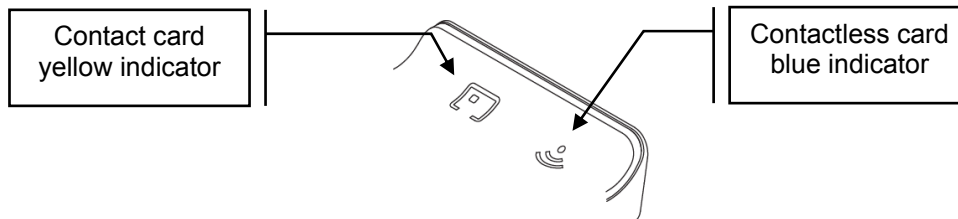


Figure 16 – Visual indicators

The indicators give information about the smart card interface as described in the next table:

Card Indicator	Description
Off	The card interface is deactivated
Slow Blink (0,2 s / 2 s)	The card interface is ready
Blink (0,5 s / 1 s )	The card is present and inactive (powered off)
On	The card is present and active (powered on)
Flashing	The card communication is in progress

Table 5 – Prox-DU and Prox-SU indicator's status

Note: When no SIM/SAM card is inserted into the Prox-SU, the yellow indicator will always be off.












# Installing the reader/writer

When the USB cable is plugged into the USB port of the computer:

- The two LED indicators will flash shortly to indicate the user that it has started properly,
- The installation wizard of the operating system (if any) will appear.

Follow the on-screen instructions, the wizard will automatically install the drivers required by the operating system.

The following table shows the driver to consider regarding the operating system:

Operating system	CCID driver	HID driver
Microsoft Windows 2000 	Use Windows Update	Inbox
Microsoft Windows XP 32/64 bits 	Use Windows Update	Inbox
Microsoft Windows Vista 32/64 bits 	Inbox	Inbox
Microsoft Windows 7 32/64 bits 	Inbox	Inbox
Microsoft Windows CE 5.0 & 6.0 	Upon request	Inbox
Microsoft Windows CE 6.0R2 	Inbox	Inbox
Linux Debian distribution Release 5.0x and higher (32 and 64 bit versions) 	Use the latest Debian installation package available in the web site <a href="http://support.gemalto.com">http://support.gemalto.com</a>	Inbox
Linux Ubuntu distribution Release 9.04 and higher (32 and 64 bit versions) 	Use the latest Ubuntu installation package available in the web site <a href="http://support.gemalto.com">http://support.gemalto.com</a>	Inbox
Linux OpenSUSE distribution Release 11.1 and higher (32 and 64 bit versions) 	Use the latest OpenSUSE installation package available in the web site <a href="http://support.gemalto.com">http://support.gemalto.com</a>	Inbox
Linux Red Hat distribution Release 5 and higher (32 and 64 bit versions) 	Use the latest CCID package (CCID driver V1.4.0 minimum). If not operating, use the Debian source code available on the following web site: <a href="http://pcslite.alioth.debian.org/ccid.html">http://pcslite.alioth.debian.org/ccid.html</a>	Inbox
Mac OS X Tiger (10.4) 32 bits edition, for Intel and Power PC platforms 	Use the latest Mac OS 10.4 installation package available in the web site <a href="http://support.gemalto.com">http://support.gemalto.com</a>	Inbox

Prox-DU & Prox-SU

<p>Mac OS X Leopard (10.5) 32 bits edition, for Intel and Power PC platforms</p>		<p>Use the latest Mac OS 10.5 installation package available in the web site <a href="http://support.gemalto.com">http://support.gemalto.com</a></p>	<p>Inbox</p>
<p>Mac OS X Snow Leopard (10.6) 32/64 bits edition, for Intel platforms</p>		<p>Use the latest Mac OS 10.6 installation package available in the web site <a href="http://support.gemalto.com">http://support.gemalto.com</a></p>	<p>Inbox</p>

Table 6 – Supported operating systems

Note that all the drivers needed for the Prox-DU and the Prox-SU reader/writer are the standard drivers available for the Microsoft Windows operating systems. No Gemalto proprietary drivers are needed, Microsoft Windows CE R5.0 & R6.0 except.

For **Windows** operating system the following web link can be used to get a cabinet containing the driver files:

<http://catalog.update.microsoft.com/v7/site/Search.aspx?q=Microsoft%20ccid>

For **Linux and Mac** operating systems use the installation packages available in the Gemalto support web site <http://support.gemalto.com>, Linux Red Hat except.

The next paragraphs will detail the installation for different operating systems.

## Windows 2K/XP installation

Two Microsoft drivers are required: the HID driver and the CCID driver.

The HID driver is always available in the operating system and the HID device will be installed automatically when the device is plugged on your computer.

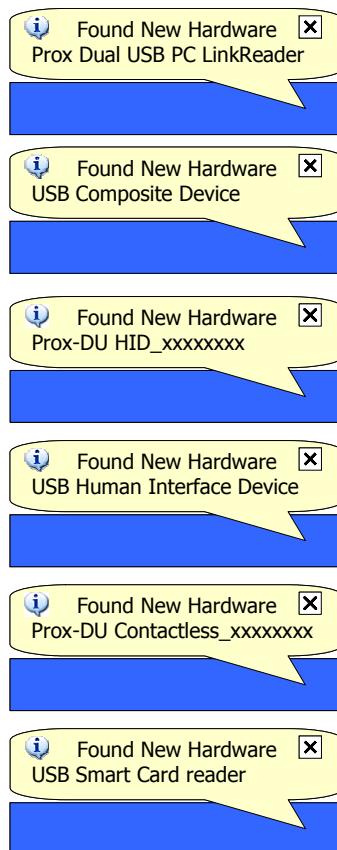
If the CCID driver is available in the operating system, the two CCID devices will be installed automatically, as described in the next paragraph “Windows 2K/XP installation without the Windows Update procedure”.

If the CCID driver is not available in the operating system, the two CCID devices will be installed after the Windows Update procedure, as described in the next paragraph “Windows 2K/XP installation using the Windows Update procedure”.

### Windows 2K/XP installation without the Windows Update procedure

These installation steps will be effective only if the CCID driver is available in the operating system.

When the USB cable is plugged into the USB port of the computer the following popup dialog boxes will be successively displayed over the task bar:



Prox-DU & Prox-SU

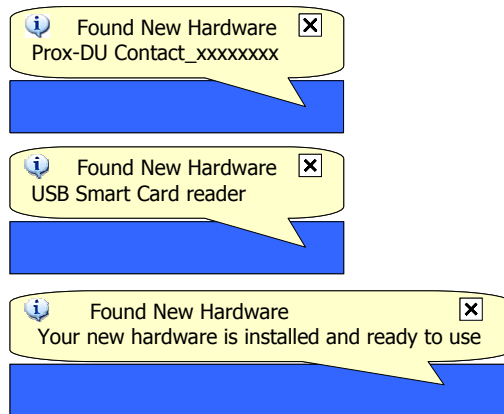


Figure 17 – Prox-DU Installation popup dialog boxes (Windows 2K/XP)

xxxxxxx is the serial number printed on the label located on the back of the reader/writer.

Your Prox-DU or Prox-SU device is now ready to use.

---

Note: the popup dialog boxes will only appear the first time the device is connected to the computer.

---

## Windows 2K/XP installation using the Windows Update procedure

These installation steps will be effective if the CCID driver not available in the operating system.

The next paragraphs will detail the Windows XP procedure. For Windows 2K, the procedure is roughly the same with some differences in the screen captures.

When the USB cable is plugged into the USB port of the computer the previous popup windows and the following wizard will appear:



Figure 18 – Windows XP Installation wizard: first window

- Click the “**Yes, this time only**” button to start the Windows Update procedure
- Click the “**Next**” button to continue (in the picture below 09A00235 is the serial

Prox-DU & Prox-SU

number printed on the label located on the back of the reader/writer)

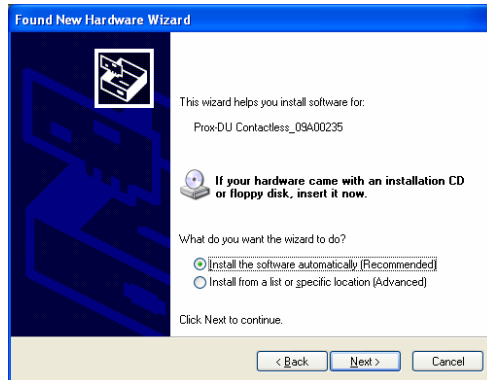


Figure 19 – Windows XP Installation wizard: second window

- Click the “**Install the software automatically (Recommended)**” button
- Click the “**Next**” button to continue

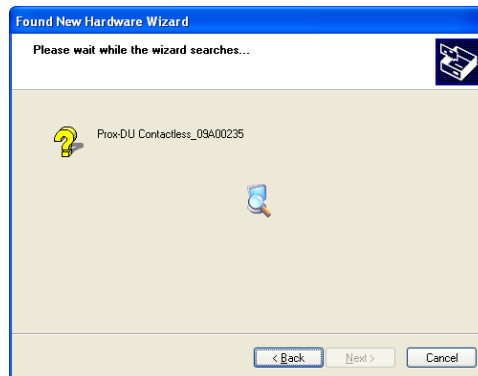


Figure 20 – Windows XP Installation wizard: third window

The Windows Update procedure will be running. Wait until the installation is completed:

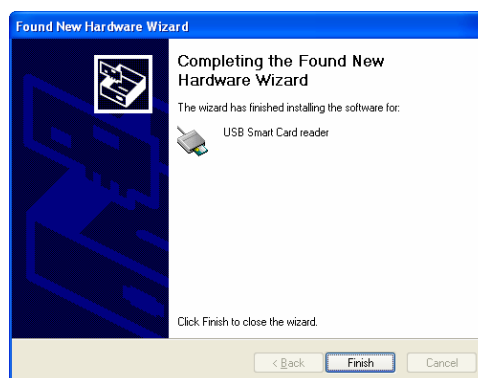


Figure 21 – Windows XP Installation wizard: final window

Now the installation is finished. Your Prox-DU or Prox-SU device is ready for use.

Note: depending on the network configuration, the Windows Update procedure can take a **long** time. Please wait until the end of the procedure.

## Windows Vista installation

Because the required drivers are always available in the operating system the Prox-DU and Prox-SU devices will be installed automatically.

One popup dialog box will be displayed over the task bar to tell the user the installation is in progress:



Figure 22 – Windows Vista popup dialog box

## Windows 7 installation

Because the required drivers are always available in the operating system the Prox-DU and Prox-SU devices will be installed automatically.

One popup dialog box will be displayed over the task bar to tell the user the installation is in progress:

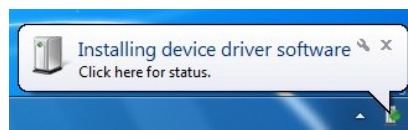


Figure 23 – Windows Seven popup dialog box

## Windows CE 5.0 & CE 6.0 installation

The HID driver is always available in the operating system and the HID device will be installed automatically.

The CCID driver is not available by default in the operating system. The CCID driver should be included into the operating system when the CE platform is built.

To get information about the CCID driver to be used with CE platforms, please contact the Gemalto support website: <http://support.gemalto.com>

## Windows CE 6.0R2 installation

Because the required drivers are always available in the operating system the Prox-DU and Prox-SU devices will be installed automatically when the device is plugged on your computer.



## Linux Ubuntu distribution installation

Please note that all components of the installation package described below are supported by the Linux community and will be included in the next revisions of the Ubuntu distribution.

The components considered in the next paragraph are generic components and are not specific to the Gemalto Prox-DU and Prox-SU devices.

### Installation pre requisites

The Linux Ubuntu distribution should be installed on the computer.

Update first your Linux Ubuntu operating system:

- Click on “System” ► “Administration” ► “Update Manager”
- Click on “Check”
- Enter your password
- Then click on “Install Updates”
- Close the “Update Manager” window when completed.

Then download the required Ubuntu package (a common package for the Prox-DU and the Prox-SU) available in the Gemalto support website: <http://support.gemalto.com>.

Note that before running the “dpkg” commands listed hereafter it is preferable to remove the older versions of the required packages if they are already installed to avoid error messages.

### Installation procedure for Ubuntu 9.04 32bits

The Ubuntu 9.04 distribution is not a long term support one, so several packages should be manually installed:

Use the “File Manager” and copy the following installation packages under your home directory (e.g. /home/yourname/Desktop):

- libusb-1.0-0\_1.0.8-2\_i386.deb
- libpcsc-lite1\_1.5.3-1ubuntu1\_i386.deb
- libccid\_1.4.0-1\_i386.deb
- pcscd\_1.5.3-1ubuntu4.1\_i386.deb

Click on “Application” ► “Accessories” ► “Terminal”, then type the following commands in the terminal window and type the “Enter” key at the end of each line:

```
cd /home/yourname/Desktop
sudo dpkg -i libpcsc-lite1_1.5.3-1ubuntu1_i386.deb
sudo dpkg -i libusb-1.0-0_1.0.8-2_i386.deb
sudo dpkg -i libccid_1.4.0-1_i386.deb
sudo dpkg -i pcscd_1.5.3-1ubuntu4.1_i386.deb
```

If a password is required after each line, please enter it.

You can close the terminal window.

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Installation procedure for Ubuntu 10.04 32bits

First check that some packags are already installed:

- Click on “System” ► “Administration” ► “Synaptic Package Manager”

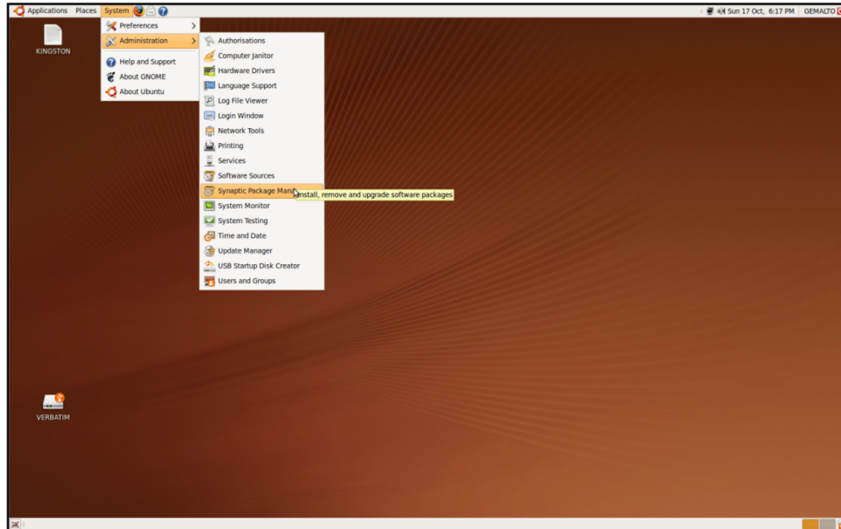


Figure 24 – Synaptic Package Manager Window

- Enter your password:

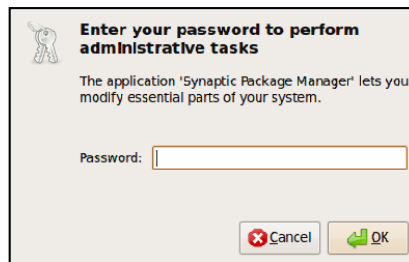


Figure 25 – Synaptic Package Manager Password window

- In the search tab, type “libusb-1.0-0” (and then “libpcsc-lite1”)

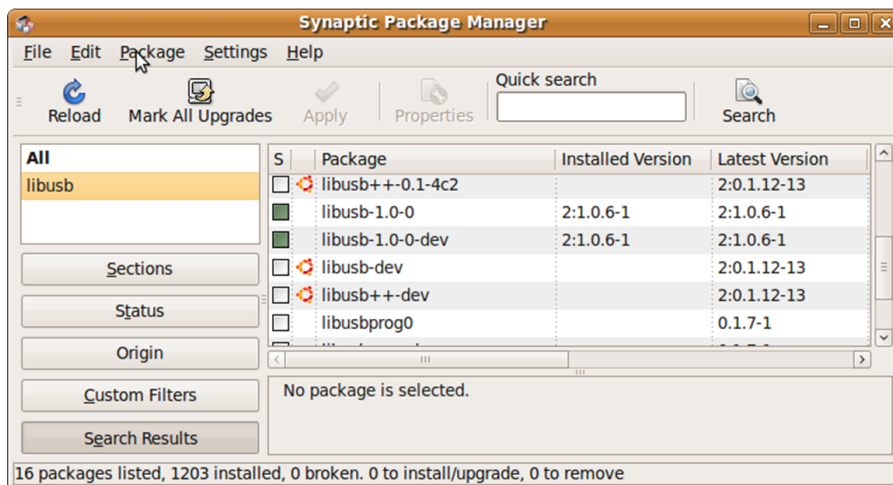


Figure 26 – Synaptic Package Manager search window

- Check if the libusb-1.0-0 (version 1.0.6), libpcsc-lite1 (version 1.5.3-1ubuntu4.1).

## Prox-DU &amp; Prox-SU

- Close the “Synaptic Packet Manager” windows

You need now to install the CCID driver:

Use the File Manager and copy the libccid\_1.4.0-1\_i386.deb and pcscd\_1.5.3-1ubuntu4.1\_i386.deb into your home directory (e.g. /home/yourname/Desktop)

Click on “Application” ► “Accessories” ► “Terminal”, then type the following commands in the terminal window and type the “Enter” key at the end of each line:

```
cd /home/yourname/Desktop
sudo dpkg -i libccid_1.4.0-1_i386.deb
sudo dpkg -i pcscd_1.5.3-1ubuntu4.1_i386.deb
```

If a password is required, please enter it.

You can close the terminal window.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Installation procedure for Ubuntu 9.04 64bits

The Ubuntu 9.04 distribution is not a long term support one, so several packages should be manually installed:

Use the File Manager and copy the following installation packages under your home directory (e.g. /home/yourname/Desktop):

- libusb-1.0-0\_1.0.8-2\_amd64.deb
- libpcsc-lite1\_1.5.3-1ubuntu1\_amd64 .deb
- libccid\_1.4.0-1\_amd64 .deb
- pcscd\_1.5.3-1ubuntu4.1\_amd64 .deb

Click on “Application” ► “Accessories” ► “Terminal”, then type the following commands in the terminal window and type the “Enter” key at the end of each line:

```
cd /home/yourname/Desktop
sudo dpkg -i libusb-1.0-0_1.0.8-2_amd64.deb
sudo dpkg -i libpcsc-lite1_1.5.3-1ubuntu1_amd64.deb
sudo dpkg -i libccid_1.4.0-1_amd64.deb
sudo dpkg -i pcscd_1.5.3-1ubuntu4.1_amd64.deb
```

If a password is required after each line, please enter it.

You can close the terminal window.

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Installation procedure for Ubuntu 10.04 64bits

First check if the “libusb-1.0-0” and “libpcsc-lite1” packages are already installed in the system as described for Ubuntu 10.4 32bits distribution.

You need now to install the CCID driver:

## Prox-DU &amp; Prox-SU

Use the “File Manager” and copy the libccid\_1.4.0-1\_amd64.deb into your home directory (e.g. /home/yourname/Desktop)

Click on “Application” ► “Accessories” ► “Terminal”, then type the following commands in the terminal window and type the “Enter” key at the end of each line:

```
cd /home/yourname/Desktop
sudo dpkg -i libccid_1.4.0-1_amd64.deb
```

If a password is required, please enter it.

You can close the terminal window.

Now the “pcscd” installation is required:

- Click on “System” ► “Administration” ► “Synaptic Package Manager”
- Search “pcscd”
- Click and select “Mark for Installation”
- Click on “Apply” top button

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Linux Debian distribution installation

Please note that all components of the installation package described below are supported by the Linux community and will be included in the next revisions of the Debian distribution.

The components considered in the next paragraph are generic components and are not specific to the Gemalto Prox-DU and Prox-SU devices.

### Installation pre requisites

The Linux Debian distribution should be installed on the computer.

Update first your Linux Debian operating system:

- Click on “System” ► “System administration” ► “Update Manager”
- Enter your password
- Click on “Verify”
- Then click on “Update”

Then download the required Debian package (a common package for the Prox-DU and the Prox-SU) available in the Gemalto support website: <http://support.gemalto.com>.

Note that before running the “dpkg” commands listed hereafter it is preferable to remove the older versions of the required packages if they are already installed to avoid error messages.

### Installation procedure for Debian 5.0.x 32 bits

Several packages should be manually installed:

Use the File Manager and copy the following installation packages under your home directory (e.g. /home/yourname/Desktop):

- libusb-1.0-0\_1.0.6-1~bpo50+1\_i386.deb
- libpcsc-lite1\_1.5.5-3\_i386.deb
- libccid\_1.4.0-1\_i386.deb
- pcscd\_1.5.5-3\_i386.deb

Click on “Application” ► “Accessories” ► “Terminal”, then type the following commands in the terminal window and type the “Enter” key at the end of each line:

```
cd /home/yourname/Desktop
sudo dpkg -i libusb-1.0-0_1.0.6-1~bpo50+1_i386.deb
sudo dpkg -i libpcsc-lite1_1.5.5-3_i386.deb
sudo dpkg -i libccid_1.4.0-1_i386.deb
sudo dpkg -i pcscd_1.5.5-3_i386.deb
```

If a password is required after each line, please enter it.

You can close the terminal window.

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Installation procedure for Debian 5.0.x 64 bits

Several packages should be manually installed:

Use the File Manager and copy the following installation packages under your home directory (e.g. /home/yourname/Desktop):

- libusb-1.0-0\_1.0.6-1~bpo50+1\_amd64.deb
- libpcsclite1\_1.5.5-3\_amd64 .deb
- libccid\_1.4.0-1\_amd64 .deb
- pcscd\_1.5.5-3\_amd64 .deb

Click on “Application” ► “Accessories” ► “Terminal”, then type the following commands in the terminal window and type the “Enter” key at the end of each line:

```
cd /home/yourname/Desktop
sudo dpkg -i libusb-1.0-0_1.0.6-1~bpo50+1_amd64.deb
sudo dpkg -i libpcsclite1_1.5.5-3_amd64.deb
sudo dpkg -i libccid_1.4.0-1_amd64.deb
sudo dpkg -i pcscd_1.5.5-3_amd64.deb
```

If a password is required after each line, please enter it.

You can close the terminal window.

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Linux OpenSUSE distribution installation

Please note that all components of the installation package described below are supported by the Linux community and will be included in the next revisions of the OpenSUSE distribution.

The components considered in the next paragraph are generic components and are not specific to the Gemalto Prox-DU and Prox-SU devices.

### Installation pre requisites

Download the required OpenSUSE package (a common package for the Prox-DU and the Prox-SU) available in the Gemalto support website: <http://support.gemalto.com>.

### Installation procedure for OpenSUSE 11.x 32 bits

Before installing the new CCID driver, we will have to prepare the packages. Some commands should be entered through a terminal window.

First open a terminal window:

- For Gnome desktop:
  - Click on “Computer” ► “Gnome Terminal”
- For KDE desktop:
  - Click on the “Green SUSE” button (in the bottom left corner, in the task bar) then click on “Terminal”

Note: for Gnome Desktop, if Gnome terminal is not in the application list, click on “More Applications...”. Then select “System” group and click on “Gnome Terminal”.

Do not close the terminal window until the end of the installation.

Then perform the package preparation:

Open a File Manager:

- For KDE desktop:
  - Click on the “Green SUSE” button, then “File Manager”
- For Gnome Desktop:
  - Click on “Computer” ► “Nautilus” (in the Application tab)

Using the file manager, open the package and copy the content into your home directory.

In the terminal window, type the next command: (do not forget the space between d and~)

```
cd ~/Driver_CCID_openSuse11x32b
```

Press “Enter” at the end of the line.

Your prompt should seem like:

```
user@yourmachine:~/Driver_CCID_openSuse11x32b>
```

Now install (or update) the next packages:

- Update/installation of the libusb package for OpenSUSE 11.1:

In the terminal window type the next command:

```
sudo rpm -i -U --force usb_11.1/libusb-1_0-0-0.9.3-4.20.i586.rpm
```

Press “Enter” at the end of the line.

You'll have to enter your root password to allow the package installation.

## Prox-DU &amp; Prox-SU

- Update/installation of the libusb package for OpenSUSE 11.2:

In the terminal window type the next command:

```
sudo rpm -i -U --force usb_11.2/libusb-1_0-0-1.0.2-2.2.i586.rpm
```

Press “Enter” at the end of the line.

You may have to enter your root password to allow the package installation.

- Update/installation of the PCSC package:

In the terminal window type the next command:

```
sudo rpm -i -U --force pcsc-lite/libpcsclite1-1.5.5-8.6.dislibhal.i586.rpm
sudo rpm -i -U --force pcsc-lite/pcsc-lite-1.5.5-8.6.dislibhal.i586.rpm
```

Press “Enter” at the end of each line.

You may have to enter your root password to allow the package installation.

- Installation of the CCID driver:

In the terminal window type the next command:

```
sudo rpm -i -U --force ccid/pcsc-ccid-1.4.0-0.0.i586.rpm
```

Press “Enter” at the end of the line.

You may have to enter your root password to allow the package installation.

To finish check the driver installation:

- In the terminal window type the next command:

```
rpm -qa | grep "pcsc"
```

Press “Enter” at the end of the line.

The command should return:

```
pcsc-lite-1.5.5-8.6.dislibhal
pcsc-ccid-1.4.0-0.0
libpcsclite1-1.5.5-8.6.dislibhal
```

If you cannot see the three lines, something went wrong. Please restart the installation procedure.

You can close the terminal window.

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Installation procedure for OpenSUSE 11.x 64 bits

Before installing the new CCID driver, we will have to prepare the packages. Some commands should be entered through a terminal window.

First open a terminal window:

- For Gnome desktop:
  - Click on “Computer” ► “Gnome Terminal”
- For KDE desktop:



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- Click on the “Green SUSE” button (in the bottom left corner, in the task bar) then click on “Terminal”

Note: for Gnome Desktop, if Gnome terminal is not in the application list, click on “More Applications...”. Then select “System” group and click on “Gnome Terminal”.

Do not close the terminal window until the end of the installation.

Then perform the package preparation:

Open a File Manager:

- For KDE desktop,
  - Click on the “Green SUSE” button, then “File Manager”
- For Gnome desktop,
  - Click on “Computer” ► “Nautilus” (in the Application tab)

Using the file manager, open the package and copy the content into your home directory.

In the terminal window, type the next command: (do not forget the space between d and~)

```
cd ~/Driver_CCID_openSuse11x64b
```

Press “Enter” at the end of the line.

Your prompt should seem like:

```
user@yourmachine:~/Driver_CCID_openSuse11x64b>
```

Now install (or update) the next packages:

- Update/installation of the libusb package for OpenSUSE 11.1:

In the terminal window type the next command:

```
sudo rpm -i -U --force usb_11.1/libusb-1_0-0-1.0.8-18.1.x86_64.rpm
```

Press “Enter” at the end of the line.

You’ll have to enter your root password to allow the package installation.

Note that a warning message will be displayed because the libusb is not signed.

- Update/installation of the libusb package for OpenSUSE 11.2:

In the terminal window type the next command:

```
sudo rpm -i -U --force usb_11.2/libusb-1_0-0-1.0.8-18.1.x86_64.rpm
```

Press “Enter” at the end of the line.

You may have to enter your root password to allow the package installation.

Note that a warning message will be displayed because the libusb is not signed.

- Update/installation of the PCSC package:

In the terminal window type the next command:

```
sudo rpm -i -U --force pcsc-lite/libpcsclite1-1.5.5-8.6.dislibhal.x86_64.rpm
sudo rpm -i -U --force pcsc-lite/pcsc-lite-1.5.5-8.6.dislibhal.x86_64.rpm
```

Press “Enter” at the end of each line.

You may have to enter your root password to allow the package installation.

- Installation of the CCID driver:

In the terminal window type the next command:

## Prox-DU &amp; Prox-SU

```
sudo rpm -i -U --force ccid/pcsc-ccid-1.4.0-0.0.x86_64.rpm
```

Press “Enter” at the end of the line.

You may have to enter your root password to allow the package installation.

To finish check the driver installation:

- In the terminal window type the next command:

```
rpm -qa | grep “pcsc”
```

Press “Enter” at the end of the line.

The command should return:

```
pcsc-lite-1.5.5-8.6.dislibhal.x86_64  
pcsc-ccid-1.4.0-0.0.x86_64  
libpcsclite1-1.5.5-8.6.dislibhal.x86_64
```

If you cannot see the three lines, something went wrong. Please restart the installation procedure.

You can close the terminal window.

The packages are now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

## Linux Red Hat distribution installation

No dedicated package is now available for the Red Hat distribution. It is needed to compile the CCID driver source code. This operation is reserved to Linux experienced user.

### CCID driver installation from source code

First get the source code:

- The source code is available online at the next website:  
[https://alioth.debian.org/frs/?group\\_id=30105](https://alioth.debian.org/frs/?group_id=30105)
- The latest version at the date of writing this guide is: 1.4.0

Then compile the source code:

- In a terminal just run the commands:

```
./configure  
make
```

To finish install the driver:

- In a terminal just run the command:

```
sudo make install
```

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Linux computer.

The device will then be ready for use.

### Dependencies

The CCID driver uses external software. A (non exhaustive) list is:

- pcsc-lite 1.6.4
- libusb 1.0.8

You may have to install the software before building the CCID driver. If the needed software is not present you will be warned and the configuration of the CCID driver will fail.

#### pcsc-lite

You can get the latest version of pcsc-lite at the next website:

[https://alioth.debian.org/frs/?group\\_id=30105](https://alioth.debian.org/frs/?group_id=30105)

The latest version at the date of writing this guide is: 1.6.4

Follow the included documentation to build and install the software.

#### libusb

You can get the latest version of libusb at:

<http://sourceforge.net/projects/libusb/files/libusb1.0/>

The latest version at the date of writing this guide is: 1.0.8

Follow the included documentation to build and install the software.

## Mac OS X Tiger (10.4) installation

Install the required installation package (a common package for the Prox-DU and the Prox-SU) using the dedicated binary installer available in the Gemalto support website:

<http://support.gemalto.com>:

- Download the file on your Mac computer:

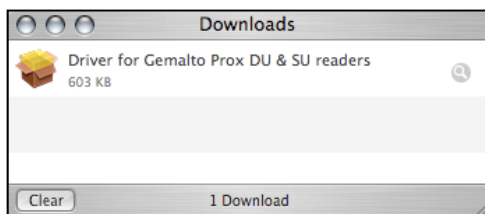
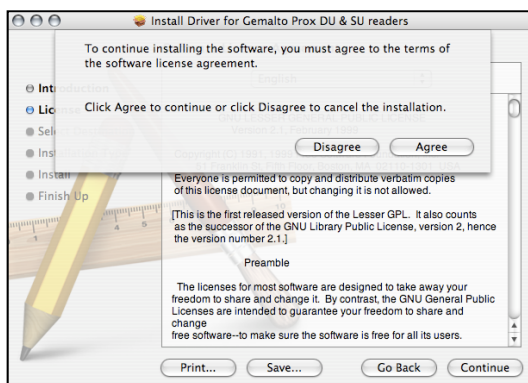
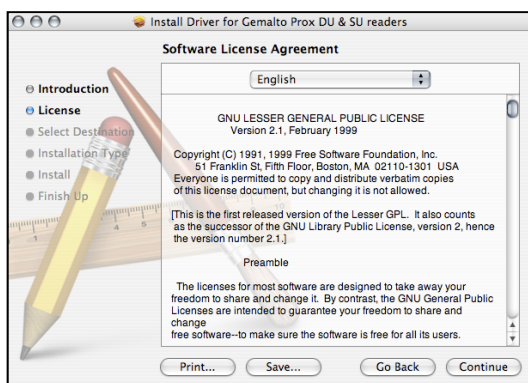
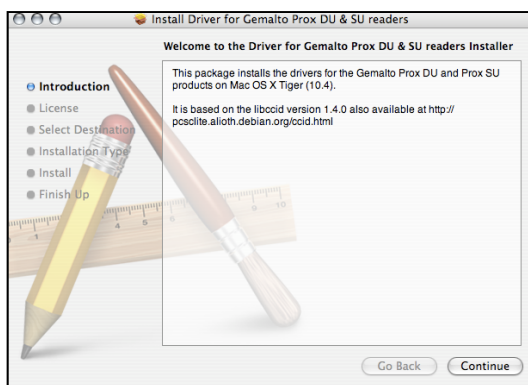
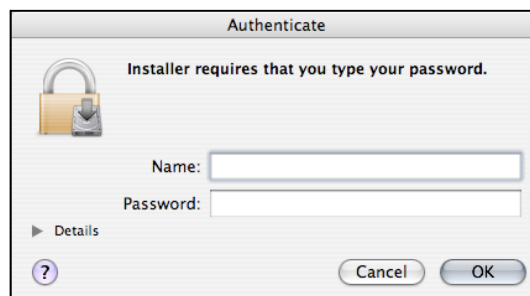
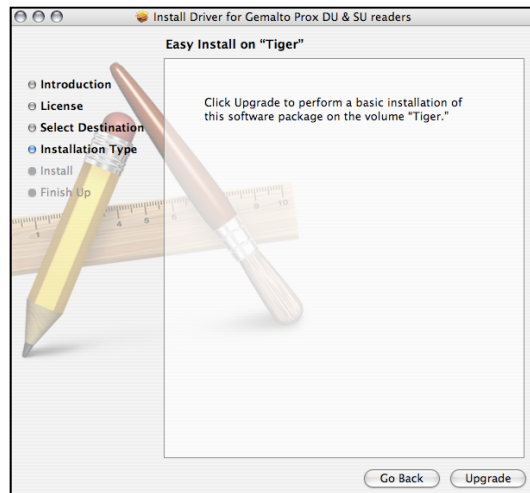
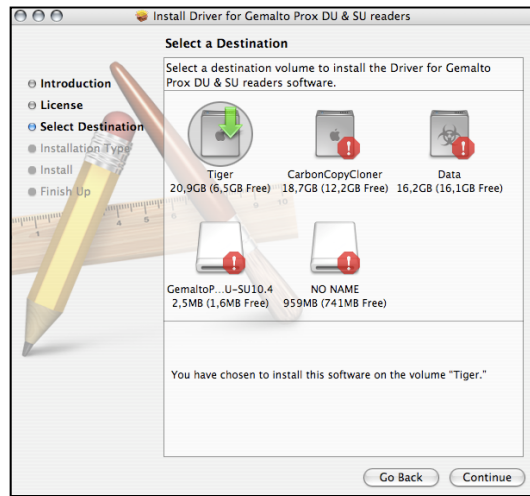


Figure 27 – Mac OS X Tiger (10.4) download window

- Click on the installation package icon and complete the installation process:



Prox-DU & Prox-SU



Prox-DU & Prox-SU

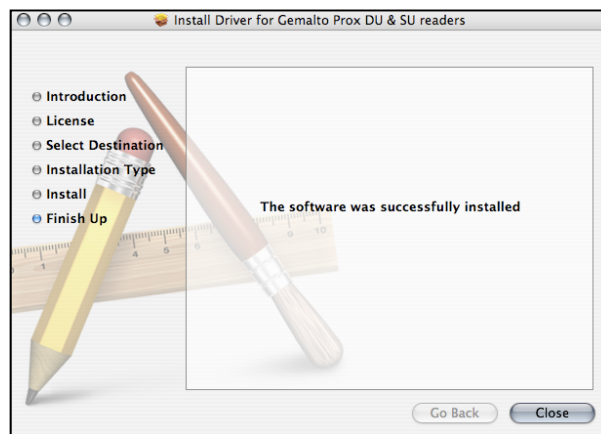


Figure 28 – Mac OS X Tiger (10.4) installation windows

The package is now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Mac computer.

The device will then be ready for use.

## Mac OS X Leopard (10.5) installation

Install the required installation package (a common package for the Prox-DU and the Prox-SU) using the dedicated binary installer available in the Gemalto support website:

<http://support.gemalto.com>:

- Download the file on your Mac computer:

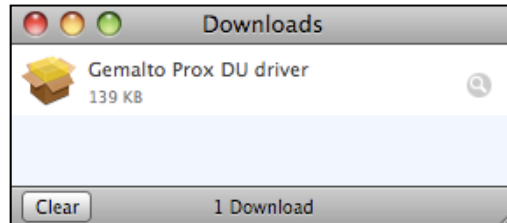
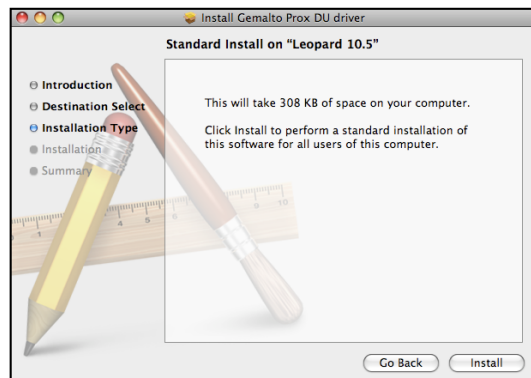
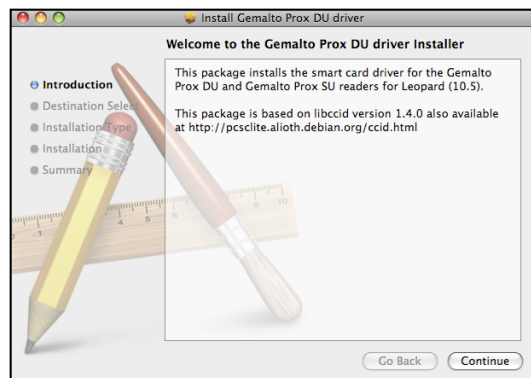


Figure 29 – Mac OS X Leopard (10.5) download window

- Click on the installation package icon and complete the installation process:



Prox-DU & Prox-SU

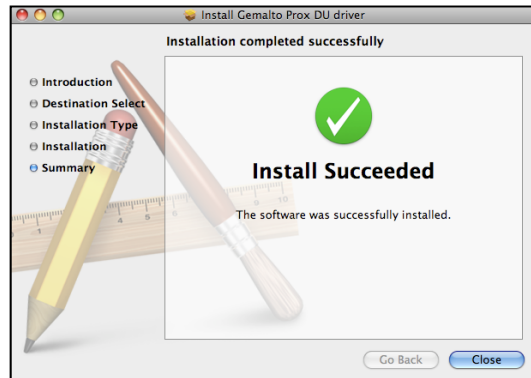


Figure 30 – Mac OS X Leopard (10.5) installation windows

The package is now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Mac computer.

The device will then be ready for use.



## Mac OS X Snow Leopard (10.6) installation

Install the required installation package (a common package for the Prox-DU and the Prox-SU) using the dedicated binary installer available in the Gemalto support website:

<http://support.gemalto.com>:

- Download the file on your Mac computer:

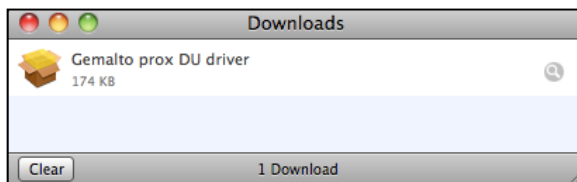
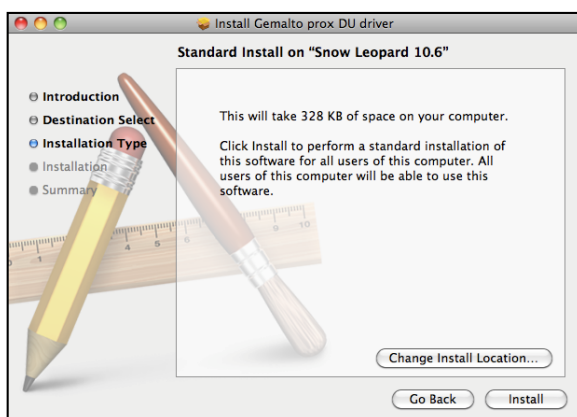
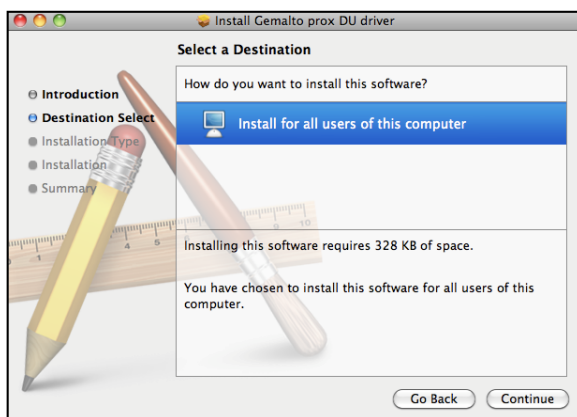


Figure 31 – Mac OS X Snow Leopard (10.6) download window

- Click on the installation package icon and complete the installation process:



Prox-DU & Prox-SU

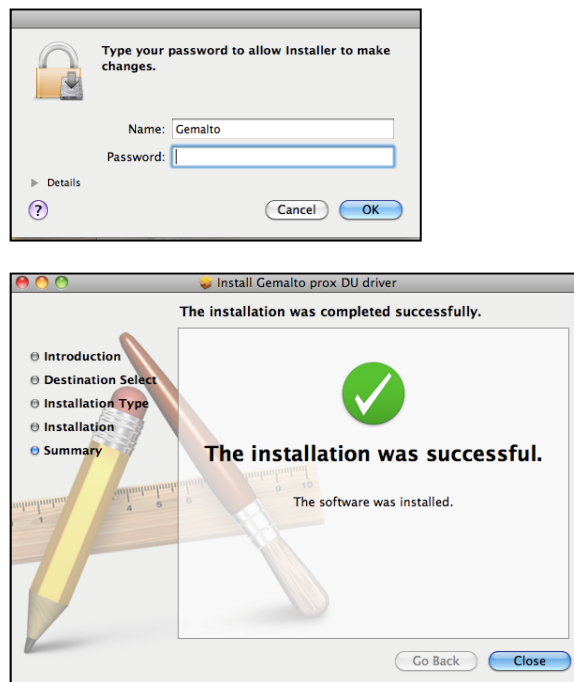


Figure 32 – Mac OS X Snow Leopard (10.6) installation windows

The package is now installed on your computer.

You can plug the USB cable of the Prox-DU or Prox-SU into a USB port of your Mac computer.

The device will then be ready for use.

# Checking the installation

To check if all the drivers have been properly installed, perform the following steps:

## Windows 2K/XP operating system

Check that the device is recognized by the Device Manager (Windows XP):

- Open the “**Control Panel**” of your computer
- Select the “**System**” menu
- Select the “**Hardware**” menu
- Click the “**Device Manager**” menu
- Click the “**Smart card readers**” icon

Two “**USB Smart Card reader**” icons should be displayed as shown in the next figure:

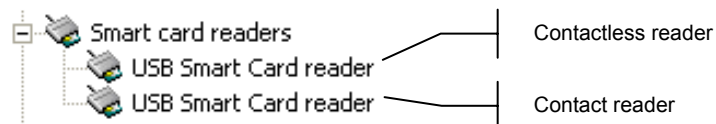


Figure 33 – USB smart card reader icons in the Device Manager window (Windows XP)

The first USB Smart Card reader is the contactless interface reader.

The second USB Smart Card reader is the contact interface reader.

- Click the “**Human Interface Devices**” icon

Two “**HID devices**” icons should be displayed as shown in the next figure:

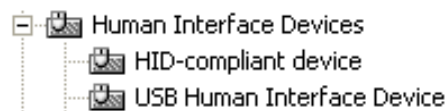


Figure 34 – USB HID icons in the Device Manager window (Windows XP)

## Windows Vista operating system

Check that the device is recognized by the Device Manager:

- Open the “**Control Panel**” of your computer
- Select the “**System**” menu
- Click the “**Device Manager**” menu
- Click the “**Smart card readers**” icon

Two “**USB Smart Card reader**” icons should be displayed as shown in the next figure:

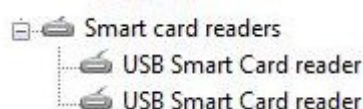


Figure 35 – Smart card reader icons in the Device Manager window (Windows Vista)

- Click the “**Human Interface Devices**” icon

Two “**HID devices**” icons should be displayed as shown in the next figure:

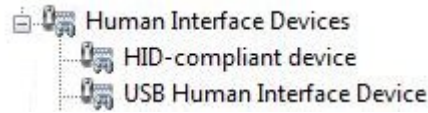


Figure 36 – USB HID icons in the Device Manager window (Windows Vista)

## Windows 7 operating system

Check that the device is recognized by the Device Manager:

- Open the “**Control Panel**” of your computer
- Select the “**System and Security**” menu
- Select the “**System**” menu
- Click the “**Device Manager**” menu
- Click the “**Smart card readers**” icon

Two “**Microsoft Usbccid Smartcard Reader (WUDF)**” icons should be displayed as shown in the next figure:

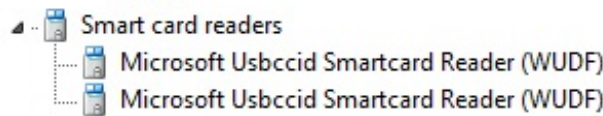


Figure 37 – Smart card reader icons in the Device Manager window (Windows 7)

- Click the “**Human Interface Devices**” icon

Two “**HID devices**” icons should be displayed as shown in the next figure:

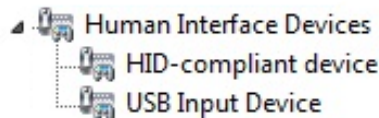


Figure 38 – USB HID icons in the Device Manager window (Windows 7)

## Linux operating system

No PC/SC application is available by default in the Linux operating system.

So there is no easy way to check the operation with the Prox-DU or Prox-SU reader.

The simplest way is to check that your PC/SC application is able to find the Prox-DU or the Prox-SU reader. Refer to the “Prox-DU and Prox-SU reader name” paragraph for more information.

### Checking the installation for experienced user

However it is still possible to check the installation, but the user is required to have the capability to build the “pcsc\_scan” application. The next operations listed below are not recommended for non-experienced user.

- First install the libpcsclite-dev package (using the package manager or an apt-get command)

Then the installation of the pcsc-tools package and all the dependencies is required:

- Get the pcsc-tools package included into the downloaded Gemalto package,
- Extract the tar.gz package into you home directory (e.g. /home/yourname/Desktop),
- Build the binary,
- Install the binary,
- Then type the « pcsc\_scan » command:

```
cd /home/fred/Desktop
tar xvzf pcsc-tools-1.4.17.tar.gz
cd pcsc-tools-1.4.17
make
sudo make install
pcsc_scan
```

If a password is required after each line, please enter it.

Now, plug the reader.

The name of the reader is displayed in the Terminal window:

```
pcsc_scan
PC/SC device scanner
V 1.4.16 (c) 2001-2009, Ludovic Rousseau <ludovic.rousseau@free.fr>
Compiled with PC/SC lite version: 1.5.3
Scanning present readers...
Waiting for the first reader...found one
Scanning present readers...
0: Gemalto Prox-SU (09A00009) 00 00
Tue Oct 19 11:24:34 2010
Reader 0: Gemalto Prox-SU (09A00009) 00 00
Card state: Card removed,
```

## Prox-DU &amp; Prox-SU

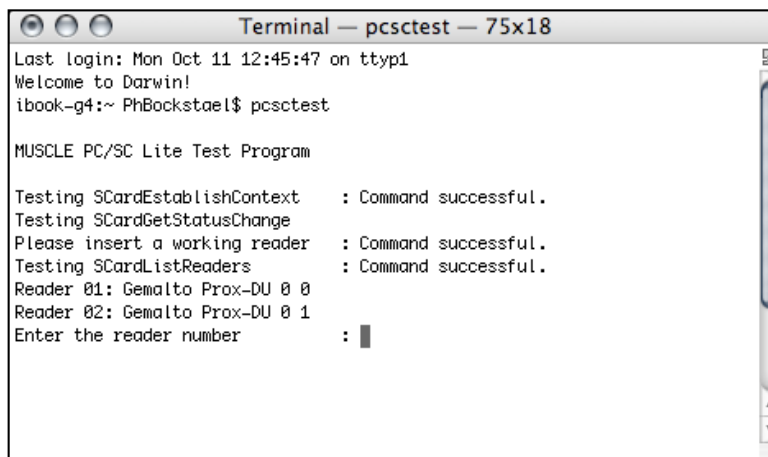
```
Scanning present readers...
0: Gemalto Prox-SU (09A00009) 00 00
1: Gemalto Prox-SU (09A00009) 00 01
Tue Oct 19 11:24:34 2010
Reader 0: Gemalto Prox-SU (09A00009) 00 00
Card state: Card removed,
Tue Oct 19 11:24:34 2010
Reader 1: Gemalto Prox-SU (09A00009) 00 01
Card state: Card removed,
```

Figure 39 – Installation check terminal window (Linux)

## Mac OS X Tiger (10.4) operating system

Check that the device is recognized by the computer:

- Open the “**Terminal**” application of your computer,
- Enter the “**pcsctest**” command and type the “Enter” key
- The next window will be displayed:



```
Terminal — pcsctest — 75x18
Last login: Mon Oct 11 12:45:47 on ttty1
Welcome to Darwin!
ibook-g4:~ PhBockstael$ pcsctest

MUSCLE PC/SC Lite Test Program

Testing SCardEstablishContext : Command successful.
Testing SCardGetStatusChange
Please insert a working reader : Command successful.
Testing SCardListReaders      : Command successful.
Reader 01: Gemalto Prox-DU 0 0
Reader 02: Gemalto Prox-DU 0 1
Enter the reader number      : █
```

Figure 40 – Terminal window: Prox-DU display (Mac OS X Tiger)

Reader 01 is the contactless interface reader.

Reader 02 is the contact interface reader.

## Mac OS X Leopard (10.5) & Snow Leopard (10.6) operating system

Check that the device is recognized by the computer:

- Open the “**Terminal**” application of your computer,
- Enter the “**pcsctest**” command and type the “Enter” key
- The next window will be displayed:

Prox-DU & Prox-SU

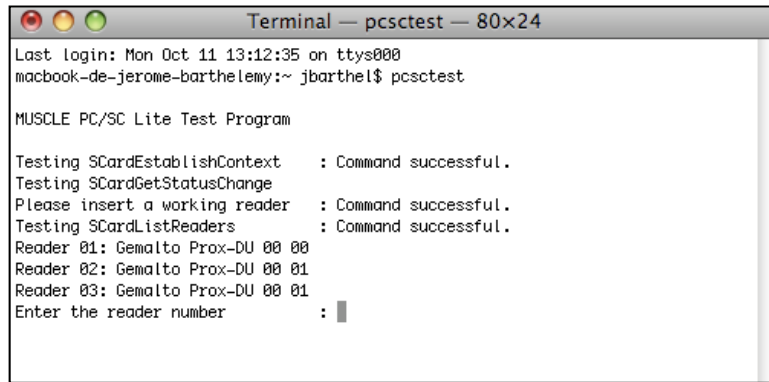


Figure 41 – Terminal window: Prox-DU display (Mac OS X Leopard & Snow Leopard)

Note: According to Mac OS X Leopard (10.5) and Snow Leopard (10.6) limitations the contact smart card reader is displayed twice (Reader 02 & Reader 03). Reader 03 is a **ghost** device and should not be used.



## Checking the smart card detection

To check if the Prox-DU or the Prox-SU reader/writer is able to detect contactless smart cards put a smart card near the reader/writer's antenna:

The blue LED should be set to an enlightened state.

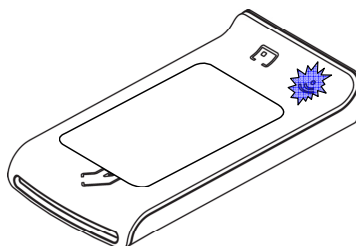


Figure 42 – Contactless smart card check

---

Note: The blue LED should return to the blinking state after a short time depending on the computer operating system. The smart card used for the check should be of course ISO14443-A or ISO14443-B compliant. Otherwise, no LED change will occur.

---

To check if the Prox-DU reader/writer is able to detect contact smart cards insert a smart card into the reader/writer's slot:

The yellow LED should be set to an enlightened state.



Figure 43 – Contact smart card check

---

Note: The yellow LED should return to the blinking state after a short time depending on the computer operating system. The smart card used for the check should be of course ISO7816-3 compliant. Otherwise, no LED change will occur. The second test is not available for the Prox-SU model.

---

# Prox-DU and Prox-SU reader name

The Prox-DU and the Prox-SU devices will be recognized using their PC/SC name.

The string name depends on the operating system.

## Windows operating systems

The name will comply with the following string format:

- “Gemalto Prox-DU Contactless\_xxxxxxxx N1” for the Prox-DU contactless interface
- “Gemalto Prox-DU Contact\_xxxxxxxx N2” for the Prox-DU contact interface
- “Gemalto Prox-SU Contactless\_yyyyyyyy N3” for the Prox-SU contactless interface
- “Gemalto Prox-SU Contact\_yyyyyyyy N4” for the Prox-SU contact interface

N1, N2, N3, N4 are numbers delivered by the computer. xxxxxxxx or yyyyyyyy is the 8-byte reader/writer’s serial number printed on the label located on the rear cabinet.

The next figure displays the name for one Prox-DU connected to the computer:

```
Gemalto Prox-DU Contactless_xxxxxxxx 0
Gemalto Prox-DU Contact_xxxxxxxx 1
```

Figure 44 – Prox-DU PC/SC name (Windows)

The next figure displays the name for one Prox-SU connected to the computer:

```
Gemalto Prox-SU Contactless_xxxxxxxx 0
Gemalto Prox-SU Contact_xxxxxxxx 1
```

Figure 45 – Prox-SU PC/SC name (Windows)

The next figure displays the name for one Prox-DU and one Prox-SU both connected to the computer:

```
Gemalto Prox-DU Contactless_xxxxxxxx 0
Gemalto Prox-DU Contact_xxxxxxxx 1
Gemalto Prox-SU Contactless_yyyyyyyy 2
Gemalto Prox-SU Contact_yyyyyyyy 3
```

Figure 46 – Prox-DU and Prox-SU PC/SC names (Windows)

The next figure displays the name for two Prox-DU devices both connected to the computer:

```
Gemalto Prox-DU Contactless_xxxxxxxx 0
Gemalto Prox-DU Contact_xxxxxxxx 1
Gemalto Prox-DU Contactless_yyyyyyyy 2
Gemalto Prox-DU Contact_yyyyyyyy 3
```

Figure 47 – Two Prox-DU PC/SC names (Windows)

Prox-DU & Prox-SU

The two first names belong to the first Prox-DU device. The two next names belong to the second Prox-DU device.

Note: The application should use the name of the device for connecting the appropriate smart card interface.

## Linux and Mac OS X operating systems

The name will comply with the following string format:

- “Gemalto Prox-DU (xxxxxxx) N1 00” for the Prox-DU contactless interface
- “Gemalto Prox-DU (xxxxxxx) N1 01” for the Prox-DU contact interface
- “Gemalto Prox-SU (yyyyyyy) N2 00” for the Prox-SU contactless interface
- “Gemalto Prox-SU (yyyyyyy) N2 01” for the Prox-SU contact interface

N1, N2 are numbers delivered by the computer. xxxxxxx or yyyyyy is the 8-byte reader/writer’s serial number printed on the label located on the rear cabinet.

The next figure displays the name for one Prox-DU connected to the computer:

```
Gemalto Prox-DU (xxxxxxx) 00 00
Gemalto Prox-DU (xxxxxxx) 00 01
```

Figure 48 – Prox-DU PC/SC name (Linux)

The next figure displays the name for one Prox-SU connected to the computer:

```
Gemalto Prox-SU (xxxxxxx) 00 00
Gemalto Prox-SU (xxxxxxx) 00 01
```

Figure 49 – Prox-SU PC/SC name (Linux)

The next figure displays the name for one Prox-DU and one Prox-SU both connected to the computer:

```
Gemalto Prox-DU (xxxxxxx) 00 00
Gemalto Prox-DU (xxxxxxx) 00 01
Gemalto Prox-SU (yyyyyyy) 01 00
Gemalto Prox-SU (yyyyyyy) 01 01
```

Figure 50 – Prox-DU and Prox-SU PC/SC names (Linux)

The next figure displays the name for two Prox-DU devices both connected to the computer:

```
Gemalto Prox-DU (xxxxxxx) 00 00
Gemalto Prox-DU (xxxxxxx) 00 01
Gemalto Prox-DU (yyyyyyy) 01 00
Gemalto Prox-DU (yyyyyyy) 01 01
```

Figure 51 – Two Prox-DU PC/SC names (Linux)

The two first names belong to the first Prox-DU device. The two next names belong to the

Prox-DU & Prox-SU

second Prox-DU device.

---

Note: The application should use the name of the device for connecting the appropriate smart card interface.

---

# Application example

The next paragraph will describe the operation with the German “AusweisApp” test application commonly used in Germany to interface the contactless new electronic identity card named “nPA” (neue Personal Ausweis).

That paragraph will explain to the user how to connect the Gemalto Prox-SU or Prox-DU device to the AusweisApp application using the name returned by the application. The Prox-SU device is used in the next paragraphs. The Prox-DU device will display similar figures including the “DU” suffix.

## Windows XP operating system

The version of the AusweisApp test application used in that example is shown in the next figure:



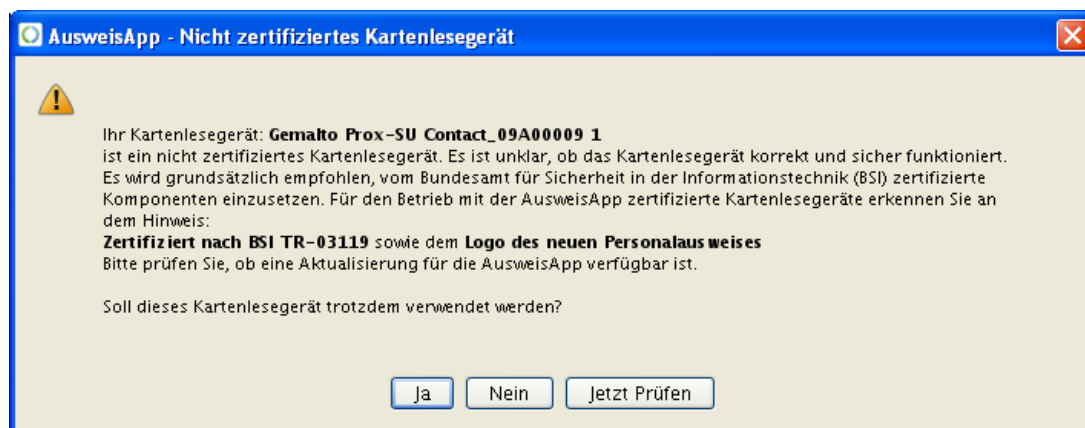
Figure 52 – AusweisApp Version (Windows XP)

When the AusweisApp application is started the next logo will be displayed in the toolbar:



Figure 53 – AusweisApp logo (Windows XP)

When the Prox-SU device is plugged in your computer the next window will be displayed:



Prox-DU & Prox-SU

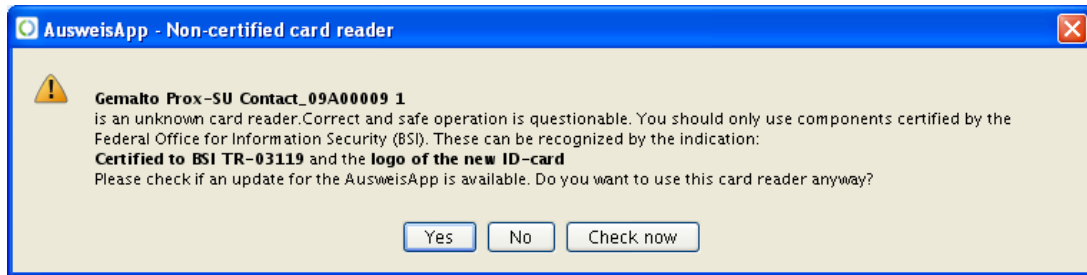


Figure 54 – AusweisApp contact reader detection (Windows XP)

The name of the reader is “Gemalto Prox-SU Contact\_xxxxxxx 1” where xxxxxxxx is the serial number printed on the label located in the rear of the plastic cabinet of the device.

Click the “**Nein**” (“**No**”) button because only the contactless reader should be considered by the AusweisApp.

Then the next window will be displayed:

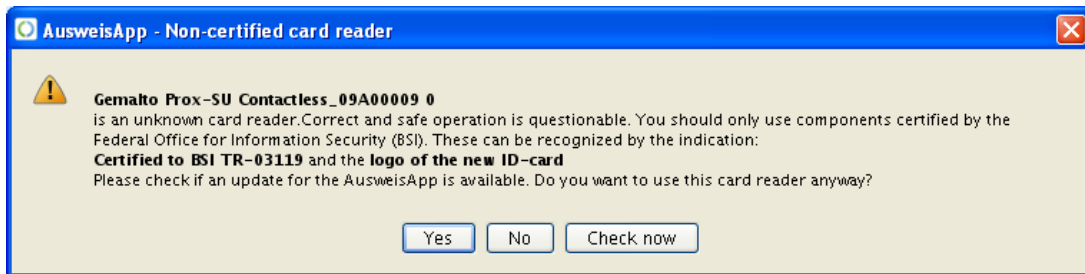
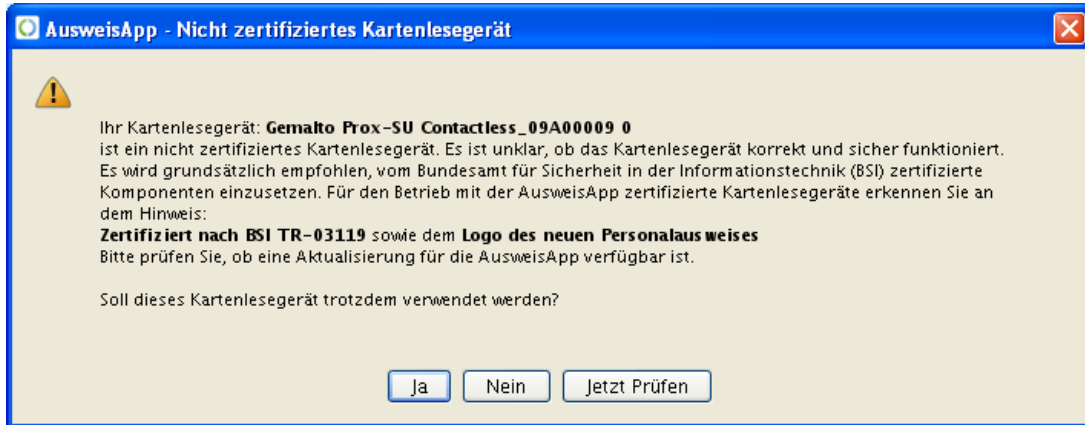


Figure 55 – AusweisApp contactless reader detection (Windows XP)

The name of the reader is “Gemalto Prox-SU Contactless\_xxxxxxx 0” where xxxxxxxx is the serial number printed on the label located in the rear of the plastic cabinet of the device.

Click the “**Ja**” (“**Yes**”) button to select the Prox-SU contactless reader for the AusweisApp operation.

## Linux Ubuntu operating system

The version of the AusweisApp test application used in that example is shown in the next figure:



Figure 56 – AusweisApp Version (Linux Ubuntu)

When the AusweisApp application is started the next logo will be displayed in the menu bar:



Figure 57 – AusweisApp logo (Linux Ubuntu)

When the Prox-SU device is plugged in your computer the next window will be displayed:

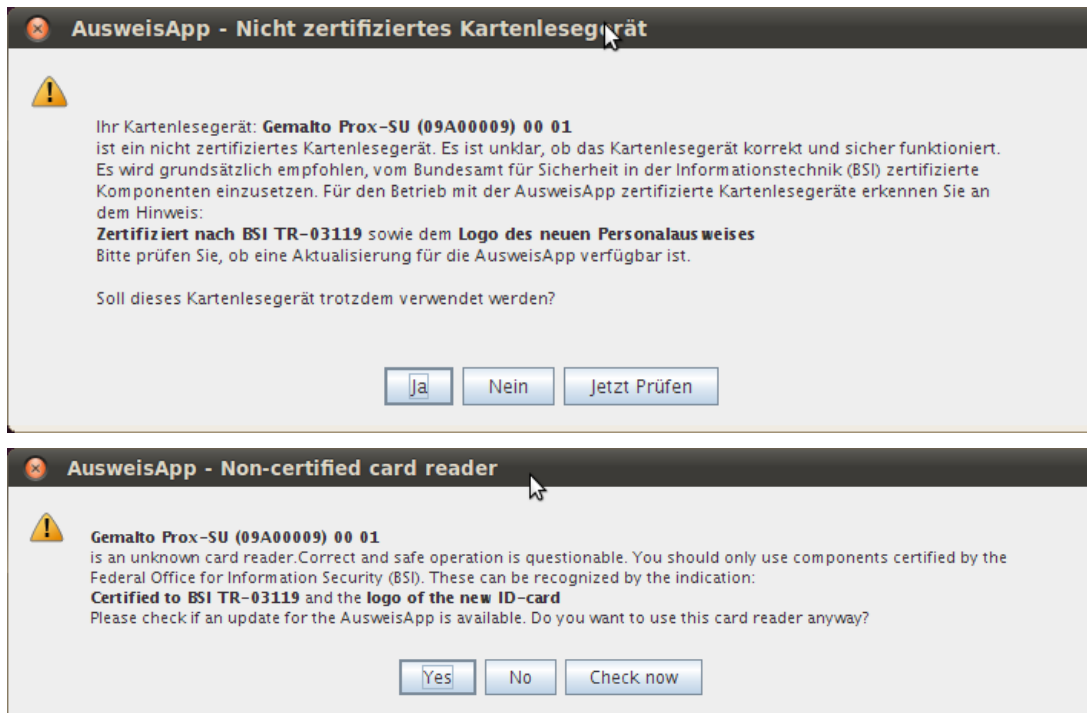


Figure 58 – AusweisApp contact reader detection (Linux Ubuntu)

The name of the reader is “Gemalto Prox-SU (xxxxxxx) 00 01” where xxxxxxxx is the serial number printed on the label located in the rear of the plastic cabinet of the device.

Prox-DU & Prox-SU

Click the “**Nein**” (“**No**”) button because only the contactless reader should be considered by the AusweisApp. (**01 identifies the contact reader**)

Then the next window will be displayed:

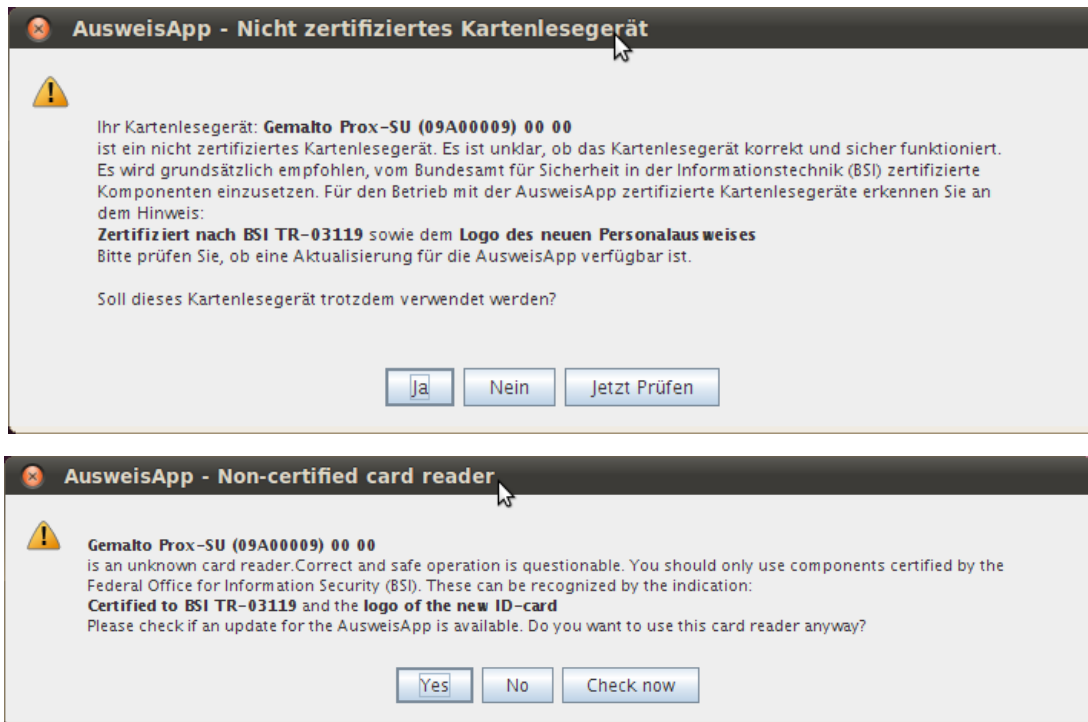


Figure 59 – AusweisApp contactless reader detection (Linux Ubuntu)

The name of the reader is “Gemalto Prox-SU (xxxxxxx) 00 00” where xxxxxxxx is the serial number printed on the label located in the rear of the plastic cabinet of the device.

Click the “**Ja**” (“**Yes**”) button to select the Prox-SU contactless reader for the AusweisApp operation. (**00 identifies the contactless reader**)



## Mac OS X 10.6 operating systems

The version of the AusweisApp test application used in that example is shown in the next figure:

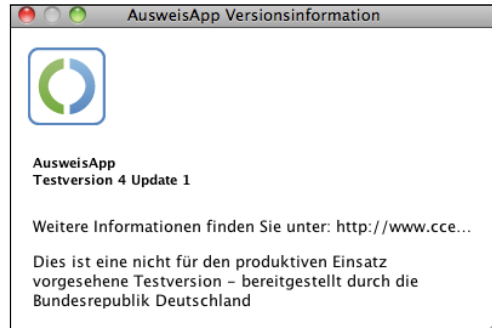


Figure 60 – AusweisApp Version (Mac OS X)

When the AusweisApp application is started the next logo will be displayed in the menu bar:



Figure 61 – AusweisApp logo (Mac OS X)

When the Prox-SU device is plugged in your computer the next window will be displayed:



Figure 62 – AusweisApp contact reader detection (Mac OS X)

The name of the reader is “Gemalto Prox-SU (xxxxxxx) 00 **01**” where xxxxxxxx is the serial number printed on the label located in the rear of the plastic cabinet of the device.

Click the “**Nein**” (“**No**”) button because only the contactless reader should be considered by the AusweisApp. (**01 identifies the contact reader**)

Then the next window will be displayed:

Prox-DU & Prox-SU



Figure 63 – AusweisApp contactless reader detection (Mac OS X)

The name of the reader is “Gemalto Prox-SU (xxxxxxx) 00 00” where xxxxxxxx is the serial number printed on the label located in the rear of the plastic cabinet of the device.

Click the “**Ja**” (“**Yes**”) button to select the Prox-SU contactless reader for the AusweisApp operation. (**00 identifies the contactless reader**)

# Troubleshooting

## The Prox device icon is not in the Device Manager window

As the Prox-DU and Prox-SU devices are standardized USB devices they will be displayed in the device manager window as USB Composite Device including two USB Smart Card readers and one USB Human Interface Device:

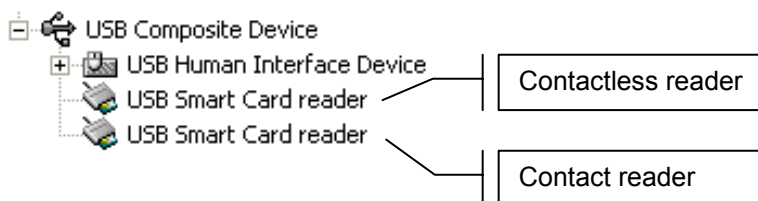


Figure 64 – Device Manager display (Devices by connection view)

No specific names will be displayed.

Double click the first smart card reader icon, select the “Details” tab and chose the “Hardware Ids”:

- The contactless interface identifier string will finish with the “MI\_01” characters

Double click the second smart card reader icon, select the “Details” tab and chose the “Hardware Ids”:

- The contact interface identifier string will finish with the “MI\_02” characters

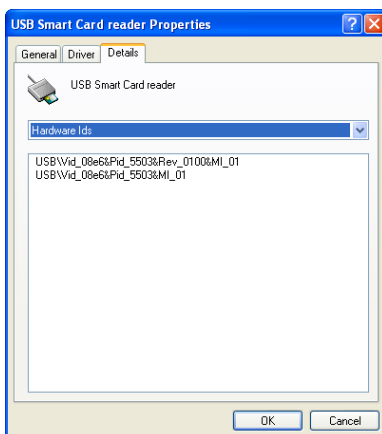


Figure 65 – USB Smart Card reader Properties (Details view)

## Unable to detect cards

No more than one card can be presented at the reader’s antenna. Only one card is selected as active for data exchange with the reader.

For a safe operation, only use one contactless smart card.

End of Document