



Driver Installation Guide

FLEXnet ID Dongle

FND-1161-DIG01

Legal and Contact Information

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Contacting Acreso Software

You may contact us from anywhere in the world by visiting the Acreso Web site at <http://www.acresso.com/company.htm>.

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FLEXnet ID Dongle

This manual, *FLEXnet ID Dongle: Driver Installation Guide*, describes how to install the dongle drivers required on systems where FLEXnet ID dongles are used to anchor license rights to a machine.

Table 1-1: *FLEXnet ID Dongle: Driver Installation Guide* Chapter Overview

Topic	Content
FLEXnet ID Dongle	Provides an overview of this manual and includes details of new features in this release.
Introduction	An introduction to FLEXnet ID dongles.
Installing Dongle Drivers on Windows	Instructions for installing the dongle drivers on Windows platforms.
Installing Dongle Drivers on Mac	Instructions for installing the dongle drivers on Mac.
Installing Dongle Drivers on Linux	Instructions for installing the dongle drivers on UNIX platforms.
Testing the Dongle Driver Installation	How to test that a dongle driver is installed correctly.

Toolkit Versions

This document describes the FLEXnet ID Dongle Driver installation files provided on the download page that contains this document and with the following FLEXnet Publisher toolkits:

- 10.8.8
- 11.6.1

What's New in This Version

Support for Aladdin HASP HL Pro.

The Aladdin API on 64-bit Windows has a limitation: only one dongle attached to a machine is detected.

The Dallas Semiconductor 1-Wire parallel port adapter dongle is not supported on Windows XP x86 SP3. This is a limitation of the dongle driver.

Instructions that specify that the drivers for the FLEXnet ID dongles must always be installed using the files provided on the Acresto web site. For Windows, do not install driver updates using Windows Update.

Introduction

A FLEXnet ID dongle is a hardware device which locks FLEXnet license rights to the machine to which the dongle is attached. Each FLEXnet ID dongle contains a unique identity. This identity is used to provide a hostid. This type of hostid is referred to in this, and other documentation, as a “FLEXid”.

The FLEXid can be used either to lock license rights to a server or to an end-user machine. FLEXnet dongles are normally used with license rights that are held in license files and this document assumes that this is the case in all examples.

For the FLEXnet dongle to communicate with the computer it is attached to, the appropriate drivers must be installed on the computer. Drivers are platform and OS version specific. So you may need to download and provide updated drivers for existing products when new OS versions are released. The latest drivers are packaged with the current release version of the Licensing toolkits and also available from the support section of the Acreso Software Web site.

The drivers for the FLEXnet ID dongles must always be installed using the files provided on the Acreso Web site. Do not install drivers from any other source, for example using an automatic search and download.

This document describes how to install the FLEXnet dongle drivers and test their operation:

- [Installing Dongle Drivers on Windows](#)
- [Installing Dongle Drivers on Mac](#)
- [Installing Dongle Drivers on Linux](#)
- [Testing the Dongle Driver Installation](#)

Further information on using FLEXnet dongles is provided in the documentation supplied with your Licensing toolkit. Depending on the version of the toolkit you are using, information about FLEXnet dongles is provided in the following documents:

- *FLEXnet Licensing Programming and Reference Guide*
- *FLEXnet Licensing Programming and Reference Guide for License File-based Licensing*
- *License File-based Programming Reference and C/C++ Function Reference*

The following table lists the FLEXnet ID dongles, the platforms on which they can be used and gives details of the driver installation files.


Table 2-1: FLEXnet ID Dongles: Platform Support

Operating System	Manufacturer and Device	Hostid Keyword	Driver Installation File
Mac OS X 32-bit			
(x86 and PowerPC hardware)	Aladdin Knowledge Systems	FLEXID=9	FLEXID_OSX_V1_9.tar.gz
<ul style="list-style-type: none"> • 10.3 • 10.4 • 10.5 	HASP 4 M1 and HASP HL Pro USB memory keys		
Microsoft Windows 32-bit			
(x86 hardware)	Rainbow Technologies/ SafeNet, Inc	FLEXID=6	FLEXid_Dongle_Driver_Installer.exe
<ul style="list-style-type: none"> • XP • 2003 • Vista 	Parallel-port based iKey authentication token	(FLEXID=7 no longer available)	
Microsoft Windows 32-bit			
(x86 hardware)	Dallas Semiconductor/ Maxim Integrated Products, Inc	FLEXID=8	FLEXid_Dongle_Driver_Installer.exe
<ul style="list-style-type: none"> • XP (not SP3) • 2003 • Vista 	1-Wire parallel port adapter		



Note: The Dallas Semiconductor 1-Wire parallel port adapter dongle is not supported on Windows XP x86 SP3. This is a limitation of the dongle driver.

Table 2-1: FLEXnet ID Dongles: Platform Support

Operating System	Manufacturer and Device	Hostid Keyword	Driver Installation File
Microsoft Windows 32-bit			
(x86 hardware)			
<ul style="list-style-type: none"> • 2000 • XP (not SP3) • 2003 • Vista 	Aladdin Knowledge Systems	FLEXID=9	FLEXid_Dongle_Driver_Installer.exe
Microsoft Windows 64-bit			
(x64 hardware)			
<ul style="list-style-type: none"> • XP • 2003 • Vista 	HASP 4 M1 and HASP HL Pro USB memory keys		
			
Note: 64-bit Windows Limitation - Only one Aladdin HASP dongle is detected on these platforms even when multiple dongles are attached to the machine. This is a known limitation of the HASP HL APIs that are used by the FLEXnet licensing software.			
Red Hat Linux			
(x86, AMD Opteron hardware)			
<ul style="list-style-type: none"> • Enterprise 3.x • Enterprise 4.x • Enterprise 5.x 	Aladdin Knowledge Systems	FLEXID=9	aksusbd-redhat-1.8.1-3.i386.rpm
SuSE Linux			
(x86 and AMD Opteron hardware)			
<ul style="list-style-type: none"> • 9.x 	Aladdin Knowledge Systems	FLEXID=9	aksusbd-suse-1.8.1-3.i386.rpm

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Installing Dongle Drivers on Windows

The drivers for the FLEXnet ID dongles must always be installed using the installer provided on the Aceso Web site. Do not install drivers from any other source, for example using an automatic search and download.



Caution: Install the driver files before plugging the dongle in to your machine.

Do not allow Windows Update to install later versions of the dongle drivers. This will lead to unpredictable behavior of the dongles with FLEXnet licensing software. The following issues have been observed:

- Features that require the dongle cannot be checked out.
- `lmhostid -flexid` does not return the dongle FLEXid.
- The dongle driver cannot be removed using `FLEXid_Dongle_Driver_Installer.exe`.

These instructions are for the latest FLEXnet dongle driver installer for Windows:

`FLEXid_Dongle_Driver_Installer.exe` version 11.6.0.0

To display the driver installer version: right click on its icon and select Properties. Select the Version tab - the version is displayed as Product Version.

It can be used to install drivers for all the FLEXnet ID dongles that can be used on Windows. The following table details the dongle drivers:

Table 3-1: Windows Dongle Drivers Installed by latest version of `FLEXid_Dongle_Driver_Installer.exe`

Dongle	Manufacturer	Driver Version	OS Support
FLEXid 6	SafeNet/ Rainbow	v7.4.0	XP, 2003, Vista
FLEXid 8	Dallas	v4.01 beta	XP (not SP3), 2003, Vista

Table 3-1: Windows Dongle Drivers Installed by latest version of FLEXId_Dongle_Driver_Installer.exe

Dongle	Manufacturer	Driver Version	OS Support
FLEXid 9	Aladdin	v4.104.5.24	2000, XP (32 bit not SP3), 2003 (32 bit), Vista (32 bit) XP (64 bit), 2003 (x86-64), Vista (64 bit)

If you are installing FLEXnet dongle drivers for the first time on a machine, use the instructions in [Installing Dongle Drivers](#).

When you are replacing existing drivers with later versions we recommend that you first remove the existing drivers as described in [Removing Existing Dongle Drivers](#) and then install the drivers as described in [Installing Dongle Drivers](#).

Removing Existing Dongle Drivers

To remove existing dongle drivers follow the instructions depending on the installer used to install them:

- [FLEXId_Dongle_Driver_Installer.exe](#)
- [FLEXIdInstaller.exe](#)

When the dongle drivers have been updated by Windows Update, they can only be removed using tools provided by the dongle manufacturer. See the dongle manufacturer's Web site for details. For example, Aladdin provides a tool called HInstall on its Web site (www.aladdin.com) that can be used to remove dongle drivers.

FLEXId_Dongle_Driver_Installer.exe



Task *To remove (uninstall) dongle drivers installed with the FLEXId_Dongle_Driver_Installer.exe:*

1. From the command line run `FLEXId_Dongle_Driver_Installer.exe` using the following command:
`FLEXId_Dongle_Driver_Installer.exe /remove`
2. Select the dongle drivers to be uninstalled and click **Next**.

FLEXIdInstaller.exe

There are two methods of removing dongle drivers:

- **Using a cleanup utility** - removes all dongle drivers installed by earlier versions of `FLEXIdInstaller.exe`.
- **Using Add or Remove Programs from Control Panel** - removes the latest dongle drivers installed by `FLEXIdInstaller.exe`.



Task *To use the cleanup utility to remove dongle drivers installed by FLEXIdInstaller.exe:*

1. Remove all FLEXnet dongles from the machine before running the cleanup utility.
2. Run FLEXidCleanUtility.exe.
3. Restart the machine. This completes the cleanup.

The actions of the cleanup utility are logged to: ..Program Files\Macrovision\Macrovision FLEXid Drivers\Cleanup.log.



Task *To remove the latest dongle drivers installed by FLEXIdInstaller.exe:*

1. From **Control Panel** click **Add or Remove Programs**.
2. Select **Macrovision FLEXid Drivers** and click **Remove**.
3. Click **Yes** in response to **Do you want to remove the selected application and all of its features**.
4. Click **Yes** in response to **Do you wish to remove all FLEXid drivers associated with this package**.
5. Restart the machine to complete the process.

The actions of the FLEXIdInstaller.exe are logged to: ..Program Files\Macrovision\Macrovision FLEXid Drivers\Install.log.



Caution: If you click Yes in step 3 and No in step 4 Macrovision FLEXid Drivers is removed from the list of programs without the drivers being uninstalled.

Installing Dongle Drivers

Do not plug the dongle into your machine before installing the dongle drivers. Plugging in the dongle may cause an automatic search for driver files. The driver files found by an automatic search may not be compatible with FLEXnet ID dongles.



Task *To install one or more FLEXnet ID dongle drivers:*

1. Double click FLEXId_Dongle_Driver_Installer.exe.
2. In the FLEXId_Dongle_Driver_Installer - InstallShield Wizard click **Next**.
3. Select the dongle drivers to be installed: click to clear the check box for drivers that you do not want to install.
4. Click **Next**.

5. Click **Next** to confirm correct drivers have been selected.
6. Click **Finish**.
7. If you chose not to restart in step 6, you must restart the machine to complete the process.

The actions of the FLEXID_Dongle_Driver_Installer.exe are logged to: Program Files\Acesso\Acesso FLEXid Drivers\DriverUpdate.log. This log file is overwritten when the installer is rerun.

Installing Dongle Drivers on Mac

This chapter describes how to use FLEXID_OSX_V1_9.tar.gz the FLEXnet dongle driver installer for Mac currently available from the Acesso Software Web site.

FLEXID_OSX_V1_9.tar.gz

This installer supports the following platforms and operating systems:

- Mac OS 10.3
- Mac OS 10.4 - Intel and PowerPC
- Mac OS 10.5 - Intel and PowerPC (32-bit applications only)



Task ***To install FLEXnet dongle drivers for Mac OS 10.x***

1. Decompress FLEXID_OSX_V1_9.tar.gz using the gzip utility.
2. Extract the installer files using the tar command.
3. Follow the installation instructions in the Readme.html file.

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Installing Dongle Drivers on Linux

To install dongle drivers on Linux platforms you must be superuser (root).

Follow the instructions for the FLEXnet dongle driver installer for Linux that you have downloaded from the Acrecco Software Web site or is included in your toolkit:

- [aksusbd-redhat-1.8.1-3.i386.rpm](#)
- [aksusbd-suse-1.8.1-3.i386.rpm](#)

aksusbd-redhat-1.8.1-3.i386.rpm

This installer supports the following platforms and operating systems:

- Red Hat Enterprise Linux 3.x
- Red Hat Enterprise Linux 4.x
- Red Hat Enterprise Linux 5.x

Use the package manager utility, `rpm`, to install the driver:

```
rpm -i aksusbd-redhat-1.8.1-3.i386.rpm
```

aksusbd-suse-1.8.1-3.i386.rpm

This installer supports the following platforms and operating systems:

- SuSE Linux 9.x

Use the package manager utility, `rpm`, to install the driver:

```
rpm -i aksusbd-suse-1.8.1-3.i386.rpm
```

Chapter 5: Installing Dongle Drivers on Linux

`aksusbd-suse-1.8.1-3.i386.rpm`

Testing the Dongle Driver Installation

The following sections describe how to test that the dongle driver has been installed correctly:

1. [Obtaining the Dongle Identity: FLEXid](#)—the simplest method: dongle and lmutil or LMTOOLS required.
2. [Issuing a License that Uses a FLEXnet ID Dongle](#)—requires installation of a licensed product.

Obtaining the Dongle Identity: FLEXid

To perform this test you require:

- A dongle
- A copy of the lmutil utility, lmhostid, or a copy of LMTOOLS (only available on Windows)

This test attempts to obtain the dongle identity from the dongle. The dongle driver is used to access the dongle and request its identity and thus this tests that the dongle driver has been correctly installed.



Task *To obtain a dongle identity, FLEXid:*

1. If you have just installed the dongle driver, ensure that you restart your system to complete the installation of the driver software.
2. Connect the dongle to your machine.
3. Install a copy of the lmutil utility, lmhostid or a copy of LMTOOLS, or a copy of lmadmin on your machine.
4. If using lmadmin (available on some platforms - see Acrecco download site):
 - Run lmadmin.
 - Click on the **Administration** tab.

- Click on the **System Information** tab.
 - Verify that a valid **FLEXID** is displayed, for example **9-6b3366b2**.
5. If using LMTOOLS (only available on Windows):
- Double-click LMTOOLS.exe.
 - Click on the **System Settings** tab.
 - Verify that a valid **FLEXID** is displayed, for example **9-6b3366b2**.
6. If using lmhostid:
- Issue the following command from a command prompt:

```
lmhostid -flexid
```
 - Verify that a valid FLEXid is returned. Example output is:

```
lmhostid - Copyright <c> 1989-2008 Acresso Software Inc. All Rights Reserved.  
The FLEXnet host ID of this machine is "FLEXID=9-6b3366b2"
```

Issuing a License that Uses a FLEXnet ID Dongle

These instructions describe how to use the example FLEXenabled application (lmflex) and other example files provided in the Licensing toolkit to issue a license that uses a FLEXnet ID Dongle. Instructions are provided to test the use of the dongle:

- [On an End-User Machine](#)
- [On a License Server](#)

On an End-User Machine

These instructions describe how to create a license that uses a FLEXid and use the example FLEXenabled application `lmflex` to check out the license.



Task *To issue and use a license that uses a FLEXnet ID dongle on an end-user machine:*

1. Obtain the dongle identity as described in [Obtaining the Dongle Identity: FLEXid](#).
2. Create a license file that contains a license that uses the FLEXid:
 - Open the example license file, `uncounted.lic`, with an editor.
 - Change the feature from `f2` to `f4`.
 - Change `HOSTID=ANY` to the dongle identity obtained in step 1, for example:
HOSTID=FLEXID=9-6b3366b2
 - Save the file as `uncounted_FLEXID.lic`.

- Sign the license file using `lmcrypt`. Type the following at a command prompt:
`lmcrypt uncounted_FLEXID.lic`
3. Checkout the license:
- Run `lmflex`.
 - Type **f4** and press **Enter**.
 - `lmflex` reports that the license has been checked out.

On a License Server

These instructions describe how to create a license for a license server that uses a FLEXid. The license is for use by the example vendor daemon, `demo`. The example FLEXenabled application `lmflex` is used to check out the license.



Task

To issue and use a license that uses a FLEXnet ID dongle on a license server:

1. Obtain the dongle identity as described in [Obtaining the Dongle Identity: FLEXid](#).
2. Create a license file that contains a license that uses the FLEXid:
 - Open the example license file, `counted.lic`, with an editor.
 - Add the feature **f5** with `HOSTID` set to the FLEXid, for example:
`FEATURE f5 demo 1.0 permanent 1 HOSTID=FLEXID=9-6b3366b2 SIGN=`
 - Save the file as `counted_FLEXID.lic`.
 - Sign the license file using `lmcrypt`. Type the following at a command prompt:
`lmcrypt counted_FLEXID.lic`
3. Checkout the license:
 - Start the demo license server.
 - Run `lmflex`.
 - Type **f5** and press **Enter**.
 - `lmflex` reports that the license has been checked out.

Chapter 6: Testing the Dongle Driver Installation

Issuing a License that Uses a FLEXnet ID Dongle

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