



## Convenient Installation of Protected Applications

<b>Described Version:</b>	InstallShield Professional
<b>Also applicable for:</b>	InstallShield Express
<b>Target platforms:</b>	Windows Vista 32/64 /XP/2000
<b>MARX hardware:</b>	CRYPTO-BOX® USB

### Quick and efficient hardware based software protection!

Software and information piracy costs billions of dollars in annual losses to software vendors, distributors and content providers worldwide. The internet role in software and data distribution is growing rapidly and it increases the tenseness of the situation dramatically.

Hardware based protection can be used for creating robust and reliable secure demo versions of applications in a straightforward manner. While benefiting from strong and effective application protection provided by hardware based approach you can create flexible and secure demo versions with ease. The CRYPTO-BOX USB can make it happen!

- On-board encryption of data with Rijndael algorithm
- Encrypted with 4kByte of on-board memory (up to 64 kByte available upon request)
- Reliable communication and CRYPTO-BOX identification



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## 1. Introduction

After selecting the protection strategy and scenario suited best for your needs, protecting your software and formatting the CRYPTO-BOXes, it is time to send everything to the end user.

At this point it is important to include SmarxOS runtime components and CRYPTO-BOX driver installation to your product setup. MARX provides a special program, called **CBUSetup**, which can be added to your installation scripts or batch files.

## 2. CBUSetup

CBUSetup performs automatic installation of CRYPTO-BOX-related components depending on the operating system. The installer is a self-extracting tool containing all files needed to support the CRYPTO-BOX, thus it is self-sufficient. You can use the "Quiet" installation mode. This feature allows you to integrate the setup into other proprietary installations.

After setup completes the installation there is **no need** to reboot because required components are registered and the driver is loaded and started right away!

Check our Website [www.cryptotech.com](http://www.cryptotech.com) or contact a support representative to get the latest CRYPTO-BOX device drivers.

CRYPTO-BOX USB with firmware version 2.0 or higher requires a driver not older than December 2004, the latest digitally signed driver is highly recommended (cbusb.sys version 2.x, see table below). You can determine the version of your currently installed CRYPTO-BOX driver using **MarxProbe** diagnostics utility available on [www.cryptotech.com](http://www.cryptotech.com) for downloads.

	<b>CRYPTO-BOX firmware 1.x</b>	<b>CRYPTO-BOX since firmware 2.2</b>
<b>driver (cbusb.sys) Version 1.x (before December 2004)</b>	Combination possible, update to driver vers. 2.x recommended!	No function
<b>driver (cbusb.sys) version 2.0.x</b>	Combination possible*	Combination possible*
<b>driver (cbusb.sys) version 2.2.x (February 2007)</b>	Combination possible*	Combination possible**

\* No parallel usage for software protection and security applications

\*\* Allows parallel usage for software protection and security applications

The following operating systems are currently supported by CBUSetup:

Windows Vista/XP/2000/Me/98SE

If you use Windows Vista64 or XP Professional x64 CBUSetup will install the appropriate 64bit drivers automatically.

## 3. Syntax and Exit Codes

Please, use the following syntax when running the setup:

CBUSetup.exe /?	get a help screen
CBUSetup.exe /Q /CRYPTOKEN	run setup in quiet mode and install CRYPTO-BOX USB (Versa, XS, XL) driver
CBUSetup.exe /Q /U /CRYPTOKEN	perform "quiet" uninstall of CRYPTO-BOX USB driver

As already mentioned, you can run the setup in “quiet” or in normal mode. The “quiet” setup is useful when you wish to redistribute the setup and include it in proprietary installations. By analyzing the return value of the setup, the proprietary installation can find out, if CBUSetup.exe was executed successfully.

The following is a list of CBUSetup exit codes:

Exit Code	Description
0	No errors occurred.
-1	The installer could not detect your operating system.
-2	The user aborted installation.
-3	Wrong version of the operating system.
-4	Setup internal error – please, contact your distributor.
-5	The user has requested the installer to run in “quiet” mode but the device was specified incorrectly. Run the installer with a help switch (/?) to learn more about the command line syntax.
-6	The user does not have enough rights to install the driver (Windows XP/2000/NT4). Contact your System Administrator.
-7	The installer could not perform registration of device driver(s). Please, run the installer again. If this error code is issued again, contact your distributor.

## 4. Installation script sample for InstallShield

The following is a sample of a CRYPTO-BOX installation script for InsatllShield (without exit code check):

```
function InstDrivers()
    string szPath,szTargetFile;
begin
    szPath=TARGETDIR^"\Drivers\CBUSetup\CBUSetup.exe";
    szTargetFile=WINSYSDIR^"\CBUSetup.exe";
    CopyFile (szPath, szTargetFile);
    LongPathToQuote(szTargetFile,TRUE);
    LaunchAppAndWait (szTargetFile, "/Q /CRYPTOKEN", WAIT);
end;

function UnInstDrivers()
    string szTargetFile
begin
    szTargetFile=WINSYSDIR^"\CBUSetup.exe";
    LongPathToQuote(szTargetFile,TRUE);
    LaunchAppAndWait (szTargetFile, "/Q /U /CRYPTOKEN", WAIT);
    DeleteFile(szTargetFile);
end;
```

## 5. CRYPTO-BOX® USB (technical data)

The CRYPTO-BOX USB is the "short" answer to your questions about software protection under Windows, Mac OS or Linux.

- First key on market with AES/Rijndael implemented in hardware - encryption key never leaves hardware platform!
  - RSA support for digital signatures and access control systems. \*
  - Ideal for establishing 2-Factor Authentication.
  - Extremely short and robust metal case: shields electronic circuitry perfectly!
  - Supports the [Smarx OS Application Framework](#), a sophistic all-in-one solution which protects software and data and provides flexible End-User Management, including Remote Updates.
  - Complete operating system support: Windows XP/2000/NT4, Me/98, Microsoft .NET, Mac OS, Linux.
  - Unique Serial number for every CRYPTO-BOX USB \*
  - Huge memory: from 4 to 64 kBytes. \*\*
  - Network support without hardware surcharge (protect your application with only one CRYPTO-BOX per network)
  - Individual network license counter configuration for every CRYPTO-BOX USB possible - via License Control System (LCS®). \*
  - Remotely programmable with Remote Update Management System, incl. network license counter reprogramming
- 
- CRYPTO-BOX USB XS and XL only
  - \*\* CRYPTO-BOX USB Versa only available with 4 kByte



<b>Supported features</b>	<b>CRYPTO-BOX USB Versa</b>	<b>CRYPTO-BOX USB XS</b>	<b>CRYPTO-BOX USB XL</b>
<b>Special feature</b>	<i>Extremely short!</i>		<i>True White Noise Generator</i>
<b>Metal case, perfectly shielded</b>	✓	✓	✓
<b>Unique serial number</b>		✓	✓
<b>AES/Rijndael on chip</b>	✓	✓	✓
<b>RSA support</b>		✓	✓
<b>Memory</b>	4 kB	4-64 kB	
<b>Windows, Linux, Mac OS Support</b>	✓	✓	✓
<b>Network license management</b>	<i>Floating License</i>	✓	✓
<b>License Control System (LCS)</b>		✓	✓
<b>Remote Update</b>	✓	✓	✓
<b>AutoCrypt (automatic protection)</b>	✓	✓	✓
<b>Implementation with API</b>	✓	✓	✓

## Appendix

### Appendix A – Distributors

#### USA

MARX CryptoTech LP  
 4485 Tench Rd. #310  
 Peachtree Commons Office Park  
 Suwanee, GA 30024  
 U.S.A.  
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### Appendix B - CrypToken Certifications and MARX Memberships



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