

## **CodeMeter 6.90a**

### **Release Date**

2019-Oct-02

### **Operating systems**

Windows, Linux, macOS

### **New**

#### **Optional activation of the WebAdmin access in Windows Installer**

When installing under Windows, you can now optionally enable the ports for CodeMeter WebAdmin (22352, 22353). If this option is set, read access from remote computers is also activated in addition to the firewall configuration.

### **Bugfixes:**

FB64957: CodeMeter Installer: Windows CodeMeter Runtime 6.90 32-/64-Bit and 64-Bit could not be installed on Windows Server 2008 R2 (VM).

FB64465: CodeMeter Installer: Windows Installer: When using the "Change" option in the Control Panel, the CodeMeter service was not restarted and changes made were not effective.

FB64500: CodeMeter License Server: Unclosed license accesses to entries (entry handles) caused CodeMeter to crash during a field update.

FB64552: CodeMeter License Server: Errors occurred during the license transfer of a product item that has many module items.

FB64832: CodeMeter License Server: WibuCmNET.dll: For 'CmLtCreateContext()', 'CmLtDoTransfer()' and 'CmLtCreateReceipt()' the required buffer size was not increased.

FB65273: CodeMeter License Server: Time delays after replugging could occur after a field update.

FB65030: CodeMeter WebAdmin: Displaying special characters in product item texts caused display problems.

FB65390: CodeMeter WebAdmin: TMR: Problems occurred when using the TMR configuration page.

FB65084: CodeMeter WebAdmin: TMR: The TMR WebAdmin could not be reached by other systems despite correct configuration.

FB65570: cmu: Creating a CmDust log file on 32-bit Windows systems didn't work anymore.

FB65306: cmu: Communication problems occurred under macOS when creating a CmDust log file while simultaneously a CmDongle with memory was connected.

FB65276: cmu: The switch of the communication mode from MSD to HID was not allowed for CmASICs.

## **CodeMeter 6.90**

### **Release Date**

2019-Aug-05

### **Operating systems**

Windows, Linux, macOS

### **Info**

#### Discontinuation:

Internet Explorer 8 support for CodeMeter WebAdmin is discontinued (FB63084).

### **New**

#### **Changes in Network Communication Settings**

During the installation under Windows you can now decide whether CodeMeter License Server is to be set up as a server in a network environment and the corresponding TCP port 22350 is to be registered in the Windows firewall. By default, CodeMeter License Server is only available locally (localhost).

When installing CodeMeter under Windows, an automatic search of network servers is set as default. This is implemented by a broadcast via UDP (User Datagram Protocol) and the registering of the associated UDP port 22350 for communication in the Windows firewall.

A fundamental change to these settings is possible via a change installation. A change during operation via CodeMeter WebAdmin requires a restart of the CmWebAdmin service or the entire system. This does not affect the necessity to configure the corresponding firewall settings yourself (FB35653).

Remote read access to CodeMeter WebAdmin is prohibited by default during a new installation (FB63646).

When installing under Windows, CodeMeter WebAdmin will no longer be enabled for ports (22352, 22353). If access to CodeMeter WebAdmin from other computers is to be permitted, the ports in the firewall must be configured by yourself.

#### **Changed behavior of CmActLicense in Container (e.g. Docker)**

Depending on the binding schemes and binding options used, only certain licenses are loaded into the container (FB63236).

**Hardware form factors CmStick/MC and CmStick/MI**

The new form factors are supported and display in the corresponding applications (FB64266).

**Features:**

FB63166: CodeMeter Installer: Windows: In the case of a direct update from CodeMeter Version before 6.40, profiling values set by previous installers are no longer transferred and applied.

FB63650: CodeMeter Installer: macOS: The installer is compatible with macOS version 10.15.

FB58476: CodeMeter Installer: 64 bit systems for ARM HF: A runtime installer (no graphical programs) is now available.

FB63617: CodeMeter License Server: For Windows systems running on the Azure cloud computing platform, newly created CmActLicense licenses with the CodeMeter SmartBind binding scheme are now explicitly bound to the cloud computing platform.

FB62807: CodeMeter License Server: When blocking licenses due to EWF (Enhanced Write Filter) rules, license information is issued.

FB61871: CodeMeter License Server: The function 'CmCheckEvents(CM\_CE\_RELEASE\_EVENT)' is now also available under Windows. This allows to open 'CmCheckEvents' calls to be resolved in the same process and to properly terminate these threads.

FB61879: CodeMeter License Server: The checking of CmActLicense update files for CmActLicense Firm Codes has been improved.

FB35813: CodeMeter License Server: Improved CmActLicense check for licensed use of protected applications on Virtual Machines (VM).

FB63207, 64522, 47974, 51215: CodeMeter WebAdmin: The auto-completion for large active directories holding a larger number of users and groups in the 'Advanced Mode Configuration' of the navigation item "Configuration | Server | License Access Permissions" has been improved.

FB63424: CodeMeter Control Center: The shortcut of the menu item "Copy Event Sequence" has been removed to facilitate copying operations from the "Events" tab and the interface itself.

FB63521: CmDust: The output of information has been extended by information about CodeMeter Certificate Vault.

**Bugfixes:**

FB63042: CodeMeter Installer: Windows: The 'Reduced Runtime Merger'/'Runtime Installer' will no longer contain CodeMeter WebAdmin.

FB55239: CodeMeter License Server: Under Windows, error 100 may have occurred when using server search lists (DNS, Domain Name System).

FB61723: CodeMeter License Server: Improved internal management of related handles for StationShare.

FB61777: CodeMeter License Server: During the license transfer on license creation for a further transfer problems occurred.

FB62417: CodeMeter License Server: WibuCmNET / CodeMeter.exe: There is no more limitation of the number of elements when reading 'CmNetInfoUserExt'.

FB64544: CodeMeter License Server: When calling 'CmActLicenseControl' and using the 'CmActFileInfo2' structure under Java errors occurred.

FB61166: CodeMeter Control Center: When creating license transfer context files, not needed NULL bytes are removed now.

FB63068: CodeMeter Control Center: After activating a Universal Firm Code-CmActLicense license with the tool 'cmu' it was still displayed as deactivated in CodeMeter Control Center.

FB63619: CodeMeter WebAdmin: The path for automatically generated certificate key file was adapted in macOS.

FB63130: CodeMeter WebAdmin: Errors occurred when configuring the certificate path settings.

FB63131: CodeMeter WebAdmin: Several bugs in certificate handling have been fixed and improved warnings are issued for such bugs.

FB60336: cmu: Wrong upper and lower case of file names has been corrected.

FB63405: TMR-Server: When plugging in and unplugging a CmContainer in short intervals, there are no more communication problems with the Backend Servers.

**CodeMeter 6.81****Release Date**

2019-Apr-05

## Operating systems

Windows, Linux, macOS

## Info

- Discontinuation of support for Java 6 + 7.  
CodeMeter supports Java only starting with Version 8 (FB61414).

## Features:

FB60122: Windows write filters EWF (Enhanced Write Filter) and FBWF (File Based Write Filter) are now supported for Universal Firm Codes, but must be explicitly activated by the software vendor during programming and configured for use.

FB60396: CodeMeter License Server: Implementation of Windows Server 2019 detection.

FB59319: CodeMeter License Server: The update behavior has been improved, if updates that had already been applied were part of updates.

FB50908: CodeMeter License Server: Logging now includes improved information about StationShare accesses.

## Bugfixes:

FB61708: CodeMeter License Server: Errors occurred when establishing new network connections in connection with the server search list.

FB60991: CodeMeter License Server: Calling CmRelease via StationShare access to a reserved Firm Code caused a crash.

FB61491: CodeMeter License Server: Errors occurred during Product Item update of a Secret Data data field for CmActLicense.

FB61722: CodeMeter License Server: Errors occurred when calling 'CmGetSecureData' with 'MP\_REQUIRED' and 'Release-Date' set.

FB58487: CodeMeter License Server: When forwarding HTTP requests a 'URL encoding' is executed now.

FB59220: CodeMeter License Server: The logging of 'CmActDiag' and 'CmActInspect' has been improved.

FB62223: CodeMeter License Server: During license tracking, errors occurred in the log output in the case of failed accesses.

FB60268: CodeMeter License Server: Reading 'CmGetInfo' / 'CM\_GEI\_NETINFO\_USER\_EXT' now also works for a larger number of handles.

FB60990: CodeMeter License Server: During the automatic restart of CodeMeter License Server it did eventually not start with administrative privileges.

FB61153: CodeMeter License Server: With a high 'CleanUpTimeout' value (greater than  $2^{31}$ ), licenses were wrongly released immediately after allocation.

FB61244: WibuCmNET: Errors occurred when detecting zip archives for Triple Mode Redundancy (TMR) by calling 'CmExecuteRemoteUpdate'.

FB58485: WibuCmJava: Errors occurred during the transfer of objects in CmActLicense structures (serialization).

FB58199: CodeMeter Control Center: CodeMeter Control Center now displays entries in italics when an update from within the runtime failed.

FB60939: CodeMeter WebAdmin: Inherited properties of 'Module Items' were not displayed correctly on the "License Monitor" page.

FB61727: CodeMeter WebAdmin: When restoring a backup file an error occurred.

FB54206: CodeMeter WebAdmin: License access permissions were not configurable when the network/CmWAN server was turned off.

## **CodeMeter 6.80**

### **Release Date**

2018-Dec-21

### **Operating systems**

Windows, Linux, macOS

### **Info**

- Universal Firm Codes with Smart Bind functionality now supported on Raspi (FB59727).
- CmCards (SD/ $\mu$ SD) are now supported for Linux (FB52938).

### **Features:**

FB58441: CodeMeter WebAdmin: On the 'License access permissions' page, the access protection lists are now also displayed to users who have read-only and no write permissions.

FB52232: cmu: Extension to list network information from remote servers.

FB48796: cmu: The '--set-proxy' option to set the proxy (with password and user name) is now available.

FB58102: cmu: The version of the static library can now be read via "cmu --version --file <lib>".

FB55892: CmDust: The log output has been extended by an end identifier / footer.

FB56656: CmDust: Linux: The output was extended by "udev rules".

FB47609: CodeMeter License Server: The Windows UWF functionality (Unified Write Filter) is now supported. This means that data is no longer stored permanently on the system, write accesses are stored in the working memory, and are available until the system is restarted.

### **Bugfixes:**

FB57801: CodeMeter License Server: A potential memory leak was fixed in CodeMeter.exe.

FB59406: CodeMeter License Server: Errors occurred when Station Share and Linger Time were used with Access Control Lists.

FB58376: CodeMeter License Server: CmActLicense: On Windows a problem occurred with updating of CmActLicenses.

FB55790: CmDust: Corrections were made to the conversion of non-ASCII characters (UTF8 representation).

FB56675: CmDust: The CmDust-Log did not display a status for Universal Firm Code-CmActLicenses.

## ***CodeMeter 6.70a***

### **Release Date**

2018-Sep-28

### **Operating systems**

Windows, Linux, macOS

### **Features:**

FB56160: CodeMeter License Server: On using an invalid handle now a precise message text displays. Also on an automatic release of a handle a message text precisely specifies the reason.

**Bugfixes:**

FB58034: CodeMeter License Server: On a valid license access with license option 'NoUserLimit' errors occurred on using the extended access control list.

FB58385: CodeMeter License Server: On reading a serial number of a CmActLicense license a buffer overflow error occurred.

FB58180: CodeMeter License Server: For licenses featuring a Linger Time now rules can be added to the extended access control list without the result that the license is still blocked after a release.

FB58168: CodeMeter License Server: On using the static CodeMeter library eventually an error occurred for Windows XP.

FB55283: CodeMeter License Server: A broken CmActLicense license incorrectly displayed a 'reserved' in CodeMeter WebAdmin.

FB57689: CodeMeter License Server: The repair mechanism of the 'CodeMtrlo' file on macOS by CodeMeter did not work.

FB58245: CodeMeter License Server: The 'IOCF PluginInterfaces' were not cleared after use.

FB58422: CodeMeter License Server: A 'CleanupTimeOut' for a local handle now is performed only, if it has been explicitly set on access.

FB58106: CodeMeter License Server: After wake-up from sleep mode the communication from browsers to CodeMeter via web sockets did not work.

FB58187: CodeMeter WebAdmin: On changing the server search list in Internet Explorer errors occurred.

FB57665: cmu: The commandline call for reading the system settings of the proxy server did not work.

**CodeMeter 6.70****Release Date**

2018-Jul-23

**Operating systems**

Windows, Linux, macOS

**New****New Product Item Option (PIO) "Universal Data" (UvD)**

The PIO Universal Data allows you to save longer keys used by encryption algorithms.

The data is stored in the secure CmDongle memory.

For Advanced Encryption Standard (AES) currently the key length of 256 bit, for asymmetric RSA encryptions a key length of 4096 bit is supported (FB55165).

**Features:**

FB55000: CodeMeter Installer: For Debian armhf now the package 'codemeter-lite' and 'codemeter-dev-lite' are available instead of previous 'codemeter' package.

FB27449: CodeMeter License Server: For the access to proxy server now authentication can be applied by explicit use of credentials. The authentication procedure NTLM (NT LAN Manager) is supported.

FB56987: CodeMeter License Server: In the future, CodeMeter License Server will no longer automatically register UDP, TCP port exceptions with the Windows Firewall.

FB50828: CodeMeter License Server: Now the Reset Time is now readable using 'CmGetInfo(CM\_GEI\_RESET\_TIME)'. This feature requires a Firmware version 4.10.

FB56307: CodeMeter License Server: If a license transfer of type 'MOVE LICENSE' fails due to lack of memory in the CmDongle, starting with Firmware 4.10 CodeMeter License Server is able to detect this and returns the error CMERROR\_MEMORYFULL (59) instead of the previous error CMERROR\_UNKNOWN (303).

FB55137: CodeMeter License Server: If an error scenario is detected that an import of a \*.WibuCmRaU file fails because the Firmware not yet supports the PIO Universal Data format versions (PKCS7 container), then error CMERROR\_WRONG\_BOX\_VERSION (224) is returned instead of a generic error, such as, CMERROR\_UPDATE\_FAILED (233).

FB49264: CodeMeter License Server: The Binding Extension for CmActLicense (Universal Firm Code) licenses is now also supported on Raspi.

FB44877: CodeMeter License Server: The safeguarding of CmActLicense licenses (on all platforms) has been changed in a way that system management steps less likely result in inadvertently breaking of licenses.

FB55335: CodeMeter WebAdmin: The server search list in "Configuration | Basic | Server Search List" has been extended by the special entry "Automatic Server Search". Then automatically licenses are sought on the server, first locally then in the network (broadcast).

FB52984: cmu: On an offline Firmware update using cmu not only the build number of the (previous + new) Firmware version is returned but also the current version.

FB54974: cmu: The option '-v' has been revised: the display of the CodeMeter WebAdmin version has been added, the display of the CmActLicense and SecurityLib versions have been removed.

**Bugfixes:**

FB56125: CodeMeter Installer: Windows Installer: On Windows CodeMeter License Server was not always started at the end of the installation. Thus also CodeMeter Control Center was not started.

FB54385: CodeMeter Installer: macOS: On uninstalling of Runtime and SDK kits some files remained on the system.

FB54203: CodeMeter License Server: For Firmware 4.05 on returning of borrowed licenses (BorrowLocalLicense) problems occurred for several CmContainer.

FB56638: CodeMeter License Server: Java: Using 'CmGetInfo()' was not able to read a CmActID from the 'CodeMeter.jar'.

FB57482: CodeMeter License Server: On starting CodeMeter License Server from within CodeMeter Control Center errors occurred.

FB56506: CodeMeter License Server: Now Windows Server 2012R2 in cmu / CmDust no longer displays as Windows 95.

FB55770: CodeMeter License Server: On executing an encrypted application eventually an encryption communication error (error 302) or an overload error (error 309) occurred.

FB55361: CodeMeter License Server: Eventually using the ShellExtension did not work on creating context files via the Windows secondary menu.

FB50773: CodeMeter License Server: On license transfer (BorrowLocalLicense) of CmActLicense licenses with at least one history entry, licenses could be temporarily lost.

FB52915: CodeMeter License Server: On detecting USB device classes (HID, MSD) eventually improper "hotplug" Windows messages displayed.

FB53306: CodeMeter License Server: On querying or reading the Usage Period for Module Items errors occurred.

FB54716: CodeMeter License Server: The behavior of CmActLicense in the case of a license transfer (BorrowLocalLicense) and existing licenses of status 'return' has been adapted to the behavior of CmDongle.

FB56424: CodeMeter Control Center: On creating context files using the CmFAS Assistant errors occurred (Error 100).

FB56693: CodeMeter Control Center: macOS: On importing \*.WibuCmRaU files eventually the process blocked and could not be finalized.

FB57339: CodeMeter WebAdmin: On the page License Access Permission special characters could not be used.

FB56517: CodeMeter WebAdmin: The security header X-Frame-Options, X-XSS-Protection, X-Content-Type options has been added.

FB54762: CodeMeter WebAdmin: On the page License Monitoring the License Quantity did not properly display.

FB57010: cmu: On searching matching updates for all connected CmDongles in the specified directory and the execution of a field update (option '-d -f <directory>') errors occurred.

FB54676: cmu: The specification of '--serial 0-0' was improperly interpreted as valid serial number (default).

## **CodeMeter 6.60b**

### **Release Date**

2018-May-17

### **Operating Systems**

Windows, Linux, macOS

### **Bugfixes:**

FB55793: CodeMeter License Server: Hostnames saved to the server search list were changed in the case of hostname aliases.

FB55123: CodeMeter License Server: Despite prohibitive access to Firm Items encryptions could be performed.

FB54852: CodeMeter WebAdmin: Internet Explorer 8 did not correctly display licenses in CmActLicense CmContainer.

FB54994: CodeMeter WebAdmin: On displaying the backup settings errors occurred.

FB5512: CodeMeter WebAdmin: Non-ASCII characters in Named User licenses did not correctly display.

FB55290: CodeMeter WebAdmin: In Microsoft Edge errors in the menu display occurred.

FB55107: CodeMeter WebAdmin: The 'Cancel' control did not display in the case of a prepared license borrowing on setting an invalid Maximum Borrowing Period.

FB55108: CodeMeter WebAdmin: The colored display of expired borrowing entries for prepared license borrowing was incorrect.

FB55110: CodeMeter WebAdmin: On returning a license within prepared license borrowing the expiration date did not correctly display.

FB55111: CodeMeter WebAdmin: For prepared license borrowing the IP address of the client displayed instead of the DNS name.

FB55112: CodeMeter WebAdmin: For prepared license borrowing the "Maximum Borrowing Period" was not used on clicking the button 'Apply'.

FB55215: CodeMeter WebAdmin: For Named User licenses in the Japanese localization display errors occurred.

FB55262: CodeMeter Control Center: After disconnecting a CmDongle the dongle entry remained on the list.

FB54708, FB55707: CmDust: The 'CmWebAdmin.exe' and the related version were not listed.

## ***CodeMeter 6.60a***

### **Release Date**

2018-Feb-28

### **Operating Systems**

Windows, Linux, macOS

### **Features:**

FB37594, FB53961: .NET API: The algorithms used in WibuCmNet have been changed to using the FIPS-compliant variant. This allows assemblies using the .NET API to be used even when FIPS mode is enabled. Prerequisite is the use of the .NET Framework 4.0.

### **Bugfixes:**

FB53138: CodeMeter License Server: Although all product items were borrowed, module items could be accessed and used.

FB53877, FB53985: CodeMeter License Server: The time required for license borrowing with activated license tracking and many existing license handles has risen sharply with increasing number of license handles. This has now been significantly improved.

FB53261: CodeMeter License Server: The access restrictions of the Advanced Access Control List did not work correctly for IPv6 in all cases.

FB53879: CodeMeter License Server: When rebooking a handle, e.g. on license borrowing or reprogramming, this was logged as a new license assignment in CodeMeter Log. There are no more log entries now.

FB54342: CodeMeter License Server: Linux: Under certain circumstances (time server timeout), the certified time update might have mistakenly been reported as failed.

FB54164: CodeMeter Control Center: The Japanese localization has been revised.

FB53691: CodeMeter WebAdmin: When creating the self-signed certificate, the certificate is now created for all IP addresses and names of the computer.

FB53692: CodeMeter WebAdmin: It is now possible in all configurations of read and write access to lock access to the WebAdmin again. For this purpose, a menu has been introduced in the navigation bar.

FB53920: CodeMeter WebAdmin: When displaying module items, on some pages inherited properties were not displayed in the module item itself.

FB54079: CodeMeter WebAdmin: The License Monitor page now displays Module Items again.

FB54023: CodeMeter WebAdmin: On the License Monitor Details page, the user is now displayed again instead of the computer name.

FB54120: CodeMeter WebAdmin: In the server search list, the IP address of a registered CodeMeter server was displayed instead of the stored host name. When saving again, this resulted in saving the IP address instead of the computer name.

FB54327: CodeMeter WebAdmin: On the CmContainer pages, the license count for Universal Firm Code was not interpreted correctly if it was 0.

FB54721: CodeMeter WebAdmin: The expiration time of a handle is displayed correctly on the License Monitor Details page again.

FB54439: CodeMeter WebAdmin: When using Internet Explorer, the Access Control List could not be configured.

FB53208, FB53221: CodeMeter WebAdmin: Missing translations were added.

FB51435: cmu: The parameters for setting and deleting passwords for WebAdmin have been adapted to the new authentication system of WebAdmin. The option "--reset-access-data" clears the read and write password and deactivates the authentication. The option "--set-access-data --password <password>" sets the write password and enables write authentication.

FB54329: .NET API: When creating a context file via CmGetRemoteContext(), the contents were miscompiled so that an invalid file was produced.

FB53916: .NET API: Listing the contents of a CmContainer with CmGetBoxContents2() threw an exception on CmContainers with lots of data.

FB49740: .NET API: In certain cases, computers with .NET Framework 4.0 installed could throw a MissingMethodException.

## **CodeMeter 6.60**

### **Release Date**

2017-Dec-20

### **Operating Systems**

Windows, Linux, macOS

### **Info**

- macOS installer for versions previous to 10.10 are no longer supported (FB47538).

### **New**

- Introduction of the new CmDongle hardware type label CmStick/BMC (FB51071).
- The access to CodeMeter WebAdmin now supports the HTTPS protocol and can be certificate-based (FB43903).

### **Features:**

FB51084: cmu: The commandline tool cmu can now also be used on macOS as root without any restrictions.

FB44771: cmu: Introduction of the new option for the server search list: "--clear-serversearchlist, --delete-server, --show-serversearchlist".

FB45987: CmDust: CmDust now returns additional information on WibuCmNET in the Global Assembly Cache (GAC) of .NET 4.0.

### **Bugfixes:**

FB51572: CodeMeter License Server: WibuCmJava: CodeMeter.jar now supports at least Java Version 1.6.

FB52445: CodeMeter License Server: WibuCmJava: On license accesses using StationShare on Linux and Windows errors occurred for remote desktop connections.

FB51319: CodeMeter License Server: On importing Universal Firm Code (UFC) licenses using 'CmExecuteRemoteUpdate' errors occurred.

FB46829: CodeMeter License Server: The detection of HID-SLE97 dongles on Virtual Machines eventually lasted longer than expected.

FB49432: CodeMeter License Server: On returning of already reverted Universal Firm Code (UFC) license using CmDongle errors occurred.

FB38615: CodeMeter License Server: The performance of programming operations on macOS has been increased and now match those on Windows and Linux.

FB51241: CodeMeter License Server: Improvements in "CmCheckEvents" combined with CodeMeter Runtime Extensions.

FB53073: CodeMeter License Server: On reaching the maximum number of open CodeMeter handles eventually CmAccess or CmAccess2 returned an invalid handle instead of error code 107. This immediately resulted in error 106.

FB50808: CodeMeter Control Center: On importing Universal Firm Code (UFC) updates for a not yet existing Firm Code errors occurred.

FB49770: CodeMeter Control Center: On creating and handling of very large context files errors occurred.

FB33022: cmu: Adding servers to the server search list using 'cmu' now no longer deletes the existing list.

## ***CodeMeter 6.50c***

### **Release Date**

2017-Sep-14

### **Operating Systems**

Windows, Linux, macOS

### **Info**

- The CmDust reporting output has been extended by information on actual .NET Framework versions (FB49908).

**Bugfixes:**

FB50710: CodeMeter License Server: Improved exception handling for Universal CmActLicense licenses, if license files had been broken due to, for example, system crashes or other events.

FB51109: CodeMeter License Server: The exception handling on using 'CmCalculatePioCoreKey' has been corrected. In some cases, calls eventually resulted in a crash of the CodeMeter runtime.

FB49107: CodeMeter License Server: On macOS eventually errors occurred for an upgrade installation.

FB50537: CodeMeter License Server: The memory management – in particular for license transfer has been improved.

FB49636: cmu: The handling of large context files has been improved.

***CodeMeter 6.50b*****Release Date**

2017-July-04

**Operating Systems**

Windows, Linux, macOS

**Bugfixes:**

FB49552: CodeMeter Installer: The Merge Module WibuCmNET v6.50 and higher was not installed, if on the target PC NET Framework 4.0 Client but not .NET Framework 4.0 Full was installed.

FB49964: CodeMeter License Server: On using Product Items with programmed Usage Periods coupled with Module Items without Usage Period eventually display problems occurred.

## ***CodeMeter 6.50a***

### **Release Date**

2017-May-31

### **Operating Systems**

Windows, Linux, macOS

### **Bugfixes:**

FB49368: cmu: The command 'cmu32 --add-server' in some case resulted in a stopped CodeMeter process.

FB48884: CodeMeter License Server: If a Windows computer was powered off without correct shutdown, eventually Universal Firm Code / CmActLicense licenses became invalid.

FB49463: CodeMeter License Server: If a Product Item had been added via license update immediately after a Product Item had been added via license transfer, eventually an error occurred.

## ***CodeMeter 6.50***

### **Release Date**

2017-Apr-28

### **Operating Systems**

Windows, Linux, Mac OS X

### **New**

- Editing, displaying and applying license access lists have been basically revised. Now rule lists can be duplicated (FB4530), the access protection also applies for local accesses (FB46052), and modifying license access privileges now applies without the need to restart the CodeMeter service (FB45187).
- In CodeMeter WebAdmin now also receiver information displays for transferred licenses (user, computer, domain name) (FB45765). The caching configuration is done via a new profiling entry "LtClientsCleanupTime". Here specified in hours a waiting time is defined how much time has to pass until the computer information of transferred licenses is deleted.

**Features:**

FB42618: CodeMeter License Server: The debugger detection has been improved.

FB45319: CodeMeter License Server: For the extended license access rights at the Product Code level now 'Product Item Text' can be used for defining access rules.

**Bugfixes:**

FB47938: CodeMeter License Server: The behavior of 'LtDoTransfer' using too small \*.RaU buffer has been improved: the expected error is returned and the transfer data is adjusted.

FB48969: CodeMeter License Server: On detecting Windows Server 2016 errors occurred.

FB43806: CodeMeter License Server: The exclusive access to a license entry via Feature Map did not work.

FB46558: CodeMeter License Server: On using Universal Firm Codes eventually some read and write operations did not work (WupiReadData, ReadHiddenData).

FB48648: CodeMeter License Server: On Mac OS in some case communication errors with CmCards occurred.

FB47723: CodeMeter License Server: On Linux eventually the CodeMeter service had no access to the file system.

FB47139: CodeMeter License Server: Java: On 64-bit systems the native 32-bit library was loaded, if it was also available.

FB43535: CodeMeter WebAdmin: The protection against "cross site" attacks has been improved.

FB46647: CodeMeter WebAdmin: The page display performance has been improved.

FB46616: CodeMeter WebAdmin: On restoring user data eventually the error 440 occurred.

FB45617: CodeMeter Control Center: The blocking of CodeMeter Control Center coupled with the password dialog has been remedied.

FB48281: CodeMeter Control Center: On Windows the import of WibuCmRaU files via double-click did not work, if file or path names hold special characters.

**CodeMeter 6.40b****Release Date**

2017-Feb-23

**Operating Systems**

Windows, Linux, Mac OS X

**Bugfixes:**

FB47272: CodeMeter License Server: CmActLicense: For some specific Windows XP-installations, in particular on FAT file systems, eventually CmActLicense licenses became invalid.

FB46753: CodeMeter License Server: CmActLicense: In connection with virtual machines compatibility problems occurred with Universal Firm Code CmActLicense licenses.

**CodeMeter 6.40a****Release Date**

2016-Dec-22

**Operating Systems**

Windows, Linux, Mac OS X

**Bugfixes:**

FB45799: CodeMeter License Server: On automatic handle re-allocating the Minimum Firmware Version was not considered.

FB45607: CodeMeter License Server: In future, handles will not be directly reused.

FB44968: CodeMeter License Server: Compatibility problems occurred in connection with Universal Firm Code licenes in virtual machines.

FB45610: CodeMeter License Server: WibuCmNET.dll: Handles released and allocated by CodeMeter were rejected by WibuCmNET.dll (Error 127 - HandleInconsistency).

FB45606: CodeMeter License Server: On calling 'CmGetRemoteContext[Buffer]()' eventually a handle was kept open.

FB45617: CodeMeter Control Center: Coupled with the password dialog some errors occurred in CodeMeter Control Center.

FB43952: CodeMeter Control Center: After restart of CodeMeter display error in the task bar occurred.

FB45464: CodeMeter WebAdmin: A usage period exceeding the year 2100 did not display correctly.

FB45463: CodeMeter WebAdmin: On deactivated ActiveX in Internet Explorer texts were not loaded.

FB45930: CodeMeter WebAdmin: Licenses within the prepared license borrowing procedure (Firm Codes smaller 6.000.000) could not be configured. This is now featured by a separate navigation item.

## **CodeMeter 6.40**

### **Release Date**

2016-Nov-15

### **Operating Systems**

Windows, Linux, Mac OS X

### **Features:**

FB43481: CodeMeter License Server: Introduction of the CodeMeter Runtime Extension for vendor-specific license file saving in combination with Binding Extension and Universal Firm Code licenses.

FB43570: CodeMeter License Server: CodeMeter logs the detection of a debugger into the file 'LicenseLock.log'.

FB43687: CodeMeter License Server: The communication mode for the files 'WibuCmXX.dll/...dylib/...so' can be defined using the profiling value "ApiCommunicationMode". Using the value of parameter "ApiCommunicationModeServer" CodeMeter License Server (CodeMeter.exe) can be informed about the communication mode activated at the server side which defines the channels to accept CodeMeter requests and to send requests to other CodeMeter License Servers in the network.

FB44849: CodeMeter Control Center: Invalid Runtime Extension license are now display in CodeMeter Control Center.

FB39251: cmu: The command line command "cmu32 --delete-cmact-license" can now be used to delete Universal Firm Code CmActLicense licenses.

**Bugfixes:**

FB44301: CodeMeter Programming API: On pricing Universal Firm Code licenses

FB44345: CodeMeter License Server: Improvements in detecting CmDongles (HID) on Windows.

FB44127: CodeMeter License Server: The handling of randomized Secret Data and Hidden Data PIO (Product Item Option) for Universal Firm Code CmActLicense licenses has been improved.

FB43705: CodeMeter License Server: Eventually invalid Product Items displayed.

FB43891: CodeMeter License Server: Shell Extension: Multiple selection of Firm Codes for new WibuCmRaC files (Universal Firm Code) has been deactivated.

FB44770: CodeMeter WebAdmin: Double entries in the server search list are now prevented.

FB44807: cmu: Improved exception handling for Field Updates.

FB43081: cmu: Display error for License Quantity remedied.

FB33022: cmu: Adding of servers to the server search list using cmu no longer deletes the existing list.

FB42971: cmu: On automatic expiration of BorrowLocalLicense for Universal Firm Code CmActLicense licenses now the change of 'ProductItemStatus' has been implemented.

FB44803: cmu: The command "--create-lt-update" now always requires the parameter "--productdode".

***CodeMeter 6.30d*****Release Date**

2016-Oct-04

**Operating Systems**

Windows, Linux, Mac OS X

**Bugfixes:**

FB44410: CodeMeter License Server: On updating CodeMeter License Server to Version 6.30c eventually CmActLicense compatibility issues occurred.

## **CodeMeter 6.30c**

### **Release Date**

2016-Sep-23

### **Operating Systems**

Windows, Linux, Mac OS X

### **Info**

Windows 10 Anniversary Update replaces the current operating system by a new one and transfers user data. CmActLicenses became invalid after the update. Updating CodeMeter to Version 6.30c generally repairs invalid licenses to be used again.

It is recommended to update CodeMeter to Version 6.30c BEFORE updating to Windows 10 Anniversary Update (FB44325).

### **Bugfixes:**

FB43713: CodeMeter License Server: Eventually the detection of virtual machines on some 64-bit systems resulted in an error preventing the CodeMeter service to start.

FB44147: CodeMeter License Server: The behavior of CmActLicence and Universal Firm Code licenses for not properly shut down computer has been improved.

FB43902: CodeMeter License Server: XPM libraries: Some real systems eventually were wrongly detected as virtual machines. Then eventually CmActLicenses could not be activated.

FB42621: CodeMeter License Server: Mac OS X: A setting in the profiling (DeactivateBonjour=1) allows to stop the use of Bonjour. The use of Bonjour on some systems eventually lead to a CodeMeter crash after the system returned from the hibernate state.

FB44122: CodeMeter License Server: WibuCmTrigger: After the import of a CmActLicense the ActiveX object replaces the temporary serial number by the new proper one.

FB44339: CodeMeter License Server: CmTrigger: Java Trigger: After the import of a CmActLicense the Java Applet replaces the temporary serial number by the new proper one.

FB44059: CodeMeter WebAdmin: The check of the subnet input of extended license access privileges was handled too strong.

FB44265: CodeMeter WebAdmin: A CmWAN Server could not be specified into the server search list.

FB44183: CodeMeter WebAdmin: The specification of "localhost" into the server search list was not allowed.

### ***CodeMeter 6.30b***

#### **Release Date**

2016-Aug-19

#### **Operating Systems**

Windows, Linux, Mac OS X

#### **Bugfixes:**

FB43775: CodeMeter License Server: If a Universal Firm Code license was to be reimported after a License Server update to Version 6.30, the license became immediately invalid.

FB43923: CodeMeter License Server: If CodeMeter License Server was updated to Version 6.30 or 6.30a, subsequent license updates eventually resulted in invalid licenses.

### ***CodeMeter 6.30a***

#### **Release Date**

2016-Aug-02

#### **Operating Systems**

Windows, Linux, Mac OS X

#### **Bugfixes:**

FB42946: CodeMeter License Server: In some cases, for specific heavy loaded machines connection errors occurred with applications in the autostart directory.

FB43482: CodeMeter WebAdmin: In the license transfer history entries with a status '0' did not display as 'finalized'.

FB43714: CodeMeter WebAdmin: Japanese localization has been revised.

## **CodeMeter 6.30**

### **Release Date**

2016-Jul-12

### **Operating Systems**

Windows, Linux, Mac OS X

### **News**

- Starting with Firmware 3.10 CodeMeter supports the license transfer feature also for CmDongles.
- New Product Item Option (PIO) "Named User"  
It allows that a license access is restricted to providing previously defined credentials. Optional credential types cover the system logins (username / username and domain) and a user-defined text. All credentials are programmed at license creation. Depending on privacy and safety requirements, the identification information can be saved as plaintext with the PIO (FB40855).
- The binding schema 'BindingExtension' for CmActLicense is now also supported by Universal Firm Code licenses. In addition, a single plug-in serves different connected devices. An improved 'CmRevalidateBox' function features no reload of intact licenses, if the binding values of devices have not changed (FB40485, 40486, 41409, 42365, 42390).

### **Features:**

FB42604: CodeMeter Installer: Linux Installer Module: A CmRuntime RPM Lite Installer without graphical user interface (GUI) components is introduced.

FB30809: CodeMeter License Server: For CmActLicenses the protection mechanisms against PC cloning have been improved.

FB39503: CodeMeter License Server: License Transfer: The status flag "Deleted" of a borrowed Product Item is replaced by flags "Returned" and "Expired" depending on the way it became invalid.

FB42054: cmu: On importing WibuCmLiF files using the binding scheme "Binding Extension" cmu features the new parameter "--device-id". The specification is as 128 hex digits and prefixed "0x".

### **Bugfixes:**

FB42431: CodeMeter License Server: The function 'CmCreateSequence()' did not work on reprogramming an Implicit Firm Item (IFI).

FB42457: CodeMeter License Server: The function 'CmExecuteRemoteUpdate()' on importing a WibuCmLIF file returned a wrong error (general error code 233).

FB42614: CodeMeter License Server: Compatibility improvement SmartBind, Windows: CmActLicense licenses, which had been activated by the end user using 5xxx versions often broke on updating to 6xxx versions. In particular, in the case of virtual machines and a tolerance level "Tight".

FB42687: CodeMeter License Server: On updating the Firmware of a CmDongle 3-xxx with HID eventually the error 100 occurred.

FB41453: CodeMeter License Server: The update of the Firmware of a CmCard/SD 3-xxx eventually failed and set the downgrade counter to a value of 0.

FB41891: CodeMeter License Server: CmActLicense: On detecting clone installations on PCs with identical construction eventually errors occurred.

FB42164: CodeMeter License Server: On creating a license request file (WibuCmRaC) of a CmDongle using a Universal Firm Code eventually an error occurred.

FB42404: CodeMeter License Server: WibuCmNET.dll: On calling 'CmLtlImportUpdate' an error occurred.

FB42848: CodeMeter License Server: WibuCmNET.dll: On license transfer eventually a NullReferenceException occurred.

FB22823: CodeMeter Control Center: On display of long Product Item texts the window could not be zoomed out.

FB40563: CodeMeter Control Center: Opened handles in CodeMeter Control Center were eventually not closed.

FB42164: CodeMeter WebAdmin: The proxy port could not assume values smaller than 1024.

FB42592: CodeMeter WebAdmin: A missing language setting resulted in missing text display.

FB42579: cmu: On using the syntax 'cmu32 -?' the help did not display as with 'cmu32 -h' or 'cmu32 -help'.

**CodeMeter 6.20a****Release Date**

2016-May-18

**Operating Systems**

Windows, Linux, Mac OS X

**Bugfixes:**

FB42319: CodeMeter License Server: On accessing licenses with a License Quantity value larger than 1 and a simultaneously programmed Access Mode "local only" an error occurred.

FB42164: CodeMeter License Server: On creating a license request file (\*.WibuCmRaC) of a CmDongle with a Universal Firm Code an error occurred.

FB42252: CodeMeter License Server: Mac OS X: A potential crash of CodeMeterMacX at start using Kext3G has been removed.

**CodeMeter 6.20****Release Date**

2016-Apr-08

**Operating Systems**

Windows, Linux, Mac OS X

**Info**

Starting with CodeMeter 6.20 only Mac OS X operating systems versions 10.9 and higher are supported.

**Features:**

FB37306: CodeMeter License Server: License Transfer: CmActLicense Universal Firm Code licenses now also support the reimport mechanism.

FB37307: CodeMeter License Server: License Transfer: CmActLicense Universal Firm Code licenses now can also be used with "NoneBind". The license is generated in a single step, i.e. directly using the WibuCmRaU license update file.

FB41409: CodeMeter License Server: License Transfer: The function "CmRevalidateBox()" now supports also the validation of a CmActLicense Universal Firm Code license container.

FB40636: cmu: cmu now supports the a restore of the license transfer by specifying '--lt-history-index'. The respective function is also available for the Core API (Parameter 'CMLTTRANSFER::midPIOHistory bei "CmLtDoTransfer').

**Bugfixes:**

FB41336: CodeMeter License Server: On a SubSystem access using "CmAccess/2()" and a subsequent "CmRevalidateBox()" CodeMeter.exe crashed.

FB41160: CodeMeter License Server: A deadlock at "CmListRemoteUpdateBuffer" for Linux and Mac OS X has been remedied.

FB40881: CodeMeter License Server: On detecting Windows problems occurred with the virtualization software Parallels.

FB41137: CodeMeter License Server: "CmExecuteRemoteUpdate" instead of error CMERROR\_UPDATE\_FAILED (233) now returns the actual happened error, if exactly one update was performed and failed.

FB40770: CodeMeter License Server: Smaller memory leaks in the "WibuCm" library have been remedied which occurred if the DLL was often unloaded and reloaded.

FB40657: CodeMeter License Server: For locked CmDongles eventually CodeMeter License Server crashed, if code for the enabling was executed.

FB41801: CodeMeter License Server: Linux: On activating of a large number of CmActLicense licenses eventually a file descriptor leak occurred.

FB40597: CodeMeter License Server: License Transfer: If for a license borrowing the sender and the receiver represent the same PC eventually errors occurred if the sender license was to obtain an update by the software vendor.

FB40793: CodeMeter License Server: For Linux/RHEL 6.4 the detection of the CmDongle directly after installing failed.

FB40400: CodeMeter WebAdmin: After an update of the CodeMeter Runtime the user help did not open.

FB40895: CodeMeter WebAdmin: Borrowed but not receipted CmActLicense license did not display in CodeMeter WebAdmin.

FB40961: CodeMeter Control Center: In the FAS (Field Activation Service) Wizard of CodeMeter Control Center on updating classical CmActLicense licenses an error occurred.

## **CodeMeter 6.10a**

### **Release Date**

2016-Feb-05

### **Operating Systems**

Windows, Linux, Mac OS X

### **Features:**

FB40105: CodeMeter WebAdmin: Borrowed licenses display now also for the navigation item 'License Monitoring' and its subsequent items 'Session' and 'Details'.

### **Bugfixes:**

FB40488: CodeMeter License Server: On using CmActLicense universal licenses time stamps were not correctly saved. In particular coupled with the borrowing of licenses, this resulted in a sooner expiration of the licenses as expected.

## **CodeMeter 6.10**

### **Release Date**

2016-Jan-29

### **Operating System**

Windows, Linux, Mac OS X

### **Info**

Starting with Version 6.00 the license transfer feature has been introduced. The license transfer features the transfer of licenses form one CmContainer to another CmContainer. From a technical point of view, licenses are no longer transferred symmetrically safeguarded but are stored as certificates in the context of asymmetrical cryptography. The support of the license transfer feature currently covers only:

- the CmContainer Type "CmActLicense"
- the Transfer Types:
  - "Licenses" (moving 'n' from 'm' licenses)
  - "Borrow Local License"
- the Transfer Modes:
  - Push - a license is transferred from a sending CmContainer to a receiving CmContainer.
  - Return – a previously transferred license is returned from the receiving CmContainer to the sending CmContainer.

Starting with CodeMeter Version 6.10 Mac OS X 10.7 and smaller versions are no longer supported (FB36682).

Starting with CodeMeter Version 6.10 the WibuCmNET Version 3 is no longer supported (FB39605).

## News

- Starting with Firmware 3.0 CodeMeter supports the use of Universal Firm Codes in CmDongles (FB36565).
- The completely revised and redesigned CodeMeter WebAdmin displays information on connected CmContainer and stored license entries and allows configuring the service CodeMeter License Server (FB38905).

## Features:

FB39527: CodeMeter License Server: CmWAN connections are now also supported using a local proxy if it requires a user authentication.

FB37485: CodeMeter License Server: License Transfer: The existing commands used for activating / updating at the user using the Firm Security Box (FSB) are now also supported for Universal Firm Codes (CmExecuteRemoteUpdate, CmSetRemoteUpdate, CmSetRemoteUpdate2, CmSetRemoteUpdateBuffer, CmListRemoteUpdate, CmListRemoteUpdate2, CmListRemoteUpdateBuffer, CmGetRemoteContext, CmGetRemoteContext2, CmGetRemoteContextBuffer).

FB38086: CodeMeter Control Center: The borrowing tab now displays only if a client entry exists for the 'previous' borrowing feature using prepared CmContainer.

FB38174: cmu: License Transfer: cmu now supports license borrowing via network.

FB38846: cmu: License Transfer: On using the command '--import-lt-update' specifying the Firm Code and Serial Number now is optional.

FB34447: cmu: License Transfer: cmu now support the function 'CmLtCleanup' in particular the complete deletion of licenses programmed with Universal Firm Codes.

FB37498: CmDust: CmDust now detects installations of SmartShelter in Acrobat / Reader DC/2015.

## Bugfixes:

FB32145: CodeMeter Installer: Mac OS X: Java libraries on Mac OS X are now installed using the extension '.dylib' instead '.Jnilib'. However, a link using the old extension still exists.

FB39352: CodeMeter License Server: The function 'CmGetInfo(CM\_GEI\_COMMUNICATION)' now returns the actual connection data for the handle used.

FB38114: CodeMeter License Server: On using the Core API problems with thread security occurred.

FB36139: CodeMeter License Server: CodeMeter ARMHF: CmActLicense licenses programmed with the ARMHF variant using a Firm Security Box (FSB) were incomplete.

FB39076: CodeMeter License Server: Linux: After installing the runtime an already connected CmDongle was not immediately detected on some Linux distributions.

FB35603: CodeMeter License Server: WibuCmNET.dll: If the WibuCmNet library runs on a 32 bit system using .NET 1.1, CodeMeter was not automatically restarted.

FB38889: cmu: All time specifications in cmu were already issued in UTC (Universal Time Coordinated). The output now is extended by specifying the time zone "(UTC)".

## **CodeMeter 5.22b**

### **Release Date**

2015-Dec-04

### **Operating Systems**

Windows, Linux, Mac OS X

### **Bugfixes:**

FB37145: CodeMeter Installer: Mac OS X: The uninstaller had a false signature and did not open.

FB38507: CodeMeter License Server: On Windows 10 the VM detection did not work for signed applications if configured as Hyper-V. In the case of CodeMeter.exe that behavior also covered that CmActLicense licenses without VM authorization could no longer be imported.

FB38318: CodeMeter License Server: The CodeMeter Java test did not work with CmActLicense.

FB37442: CodeMeter License Server: Java/Windows: If the search for a running CodeMeter License Server (CodeMeter.exe) stops with an error, it is tried to establish a connection. If the search is not successful without returning an error, CodeMeter is restarted as usual.

FB38188: CodeMeter License Server: Windows: Encrypted binaries in the minimum runtime now are compatible with CodeMeter 5.22b.

### ***CodeMeter 5.22a***

#### **Release Date**

2015-Aug-17

#### **Operating Systems**

Windows, Mac OS

#### **Information**

In future on creating activation schemes for CmActLicense different Windows operating system versions will no longer be a distinct feature and maintenance ceases (FB37337).

### ***CodeMeter 5.22***

#### **Release Date**

2015-July-22

#### **Operating Systems**

Windows, Linux; Mac OS

#### **Information:**

Firmware Updates of a CmDongle Item-No. 1001-03 (serial number 3-xxxxxxx).

The CodeMeter Runtime and the commandline tool 'cmu' are in future also able to perform these Firmware Updates (FB35692).

Windows 10 as target platform for CmActLicenses.

The CodeMeter Runtime is now able to import and use CmActLicenses on Windows 10 (FB36048).

#### **Features:**

FB34062: CodeMeter Installer: Windows Installer: The merge module 'CmRuntimeMerger.msm' checks for the command set extension of the processor generation SSE2. If it does not exist, the installation is cancelled with an error message.

**Bugfixes:**

FB35462: CodeMeter Installer: Linux: RPM: After an upgrade, the daemon was not restarted resulting in a later self-shutdown.

FB35318: CodeMeter License Server: The internal repair behavior in the CodeMeter library has been revised so that error 127 (handle inconsistent) does not occur also if automatically reallocated handles are reused.

FB36199: CodeMeter License Server: An exception handling has been added, if the field update was tried to be performed in file IO mode.

FB33741: CodeMeter License Server: If two process access CodeMeter.exe using different communication modes, e.g. SharedMemory and IPv6, in future also the StationShare access mode will work.

FB36710: CodeMeter License Server: Mac OS X: Following the boot some CmSticks were not recognized in HID mode- Now the waiting period has been extended by 20 seconds.

FB35826: CodeMeter Windows Installer: On an update installation the installer now correctly sets the privileges for the CodeMeter License Server.

FB35619: CodeMeter License Server: CmActLicense: The CmBoxPgm parameter '-los:WinServer2008' did not work proper for Windows Server 2008 R2.

FB35553: CodeMeter License Server: On specifying the DNS name of the local machine on performing a 'CmAccess2()' in parameter 'CMACCESS2::mszServername' eventually errors occurred.

FB30839: CodeMeter License Server: Java: A CmSetCertifiedTimeUpdate is now also able using string parameter to specify time servers.

FB30839: CodeMeter License Server: Java: CmSetCertifiedTimeUpdate can be called now using an overloaded function applying a Java string parameter to specify time servers.

## **CodeMeter 5.21b**

### **Release Date**

2015-Mar-30

### **Operating Systems**

Windows, Linux; Mac OS

### **Information:**

FB34338: CodeMeter Control Center: Mac OS: On Mac OS X 10.10 (Yosemite) Japanese and Chinese language packages are no longer loaded. These languages will be available again with next CodeMeter major version.

### **Features:**

FB33303: CodeMeter License Server: The server search list now also works fine with entries of systems that only can be reached via IPv6.

FB33391: CodeMeter License Server: A non-activated CmActLicense can now be activated within 180 days instead of 21 days.

FB33494: CodeMeter WebAdmin: Version information of CodeMeter WebAdmin is no longer available in http header fields.

FB33958: CodeMeter WebAdmin: Html source code no longer contains static path information.

### **Bugfixes:**

FB33768: CodeMeter License Server: Using CmCards caused a lot of errors 21.

FB33724: CodeMeter License Server: Linux: Changes on server settings could have caused unexpected termination of CodeMeter License Server.

FB34061, FB34094: CodeMeter License Server: Linux, Mac: In some cases, CodeMeter network sockets have not been closed correctly.

FB34166: CodeMeter Control Panel: Mac OS X: CodeMeter License Server was wrongly shown as 'not installed'.

FB34188: CodeMeter WebAdmin: Layout of the pages not in all cases had enough space to show the Russian translation.

FB33957: CodeMeter Java: Sometimes error 100 has been shown.

FB33872: CodeMeter Java: If CodeMeter settings could not be loaded, a wrong default value was set (10 instead of 100 seconds).

## **CodeMeter 5.21**

### **Release Date**

2015-Jan-29

### **Operating Systems**

Windows, Linux; Mac OS

### **Features:**

FB32381: CodeMeter License Server: The detection of Windows installation clones on part of CmActLicense has been improved.

### **Bugfixes:**

FB32031: CodeMeter Installer: Mac OS X: CodeMeter PKG packages could not be installed on Mac 10.10.3.

FB31841: CodeMeter License Server: On reading of profiling entries eventually protection violations occurred.

FB30366: CodeMeter License Server: The detection of CmCards on plugin into already connected, e.g. integrated card reader has been improved.

FB33245: CodeMeter License Server: On licenses access or license release in license tracking the server name was not correctly set. Now the server name is set in the protocol for each entry.

FB28672: CodeMeter License Server: The retrieval of license tracking data at the server performs time-intensive replacements. This delayed the transfer of data to the client depending on the amount of data partly by several minutes.

FB31953: CodeMeter License Server: Windows: Certain Windows Management Instrumentation (WMI) errors in combination with CmActLicense eventually resulted in crashes.

FB32255: CodeMeter: Mac OS X Preference Pane: The CodeMeter system settings did not correctly save the server search list.

FB30872: CodeMeter: WibuCmNET.dll: In the case of an overloaded CodeMeter Server, the event 309 (RequestOverloadRejected) was not correctly intercepted.

## ***CodeMeter 5.20d***

### **Release Date**

2014-Nov-04

### **Operating Systems**

Windows, Linux; Mac OS

### **Features:**

FB31438: CodeMeter Installer: On 32-bit operating systems previous to Win XP SP3 and also 64-bit operating systems previous to Win XP the installation of the CodeMeter Runtime, the CodeMeter SDK, and the "CmRuntimeMerger" Merge module is prevented.

### **Bugfixes:**

FB31668: CodeMeter License Server: Transmitting big files over WebSocket protocol failed. This has been seen first Google Chrome 38.

FB31761: CodeMeter License Server: Accepting new connections could have failed in some rare cases.

FB31715: CodeMeter License Server, .NET: When the communication of WibuCmNET and License Server hangs, this is now terminated after a timeout.

## ***CodeMeter 5.20c***

### **Release Date**

2014-Oct-17

### **Operating Systems**

Mac OS

### **Features:**

FB31486: CodeMeter License Server: Mac OS: The CodeMeter KernelExtension (KEXT5G) has been signed for Mac OS X 10.10 (Yosemite).

### **Bugfixes:**

FB28127: CodeMeter License Server: On Mac OS X the support of FusionDrive drives for CmActLicense licenses has been improved.

## ***CodeMeter 5.20b***

### **Release Date**

2014-Sep-24

### **Operating Systems**

Windows, Linux

### **Features:**

FB31003: CodeMeter Installer: Linux: Linux installation packages for the CodeMeter Runtime on systems for which 'prelink' is installed now register a respective blacklist rule into '/etc/prelink.conf'.

FB31004: CodeMeter License Server: Linux: CodeMeterLin now issues a warning, if the integrity of the own executable is endangered by 'prelink'.

### **Bugfixes:**

FB30830: CodeMeter License Server: Windows: Instabilities of CodeMeter on reading HID devices have been remedied.

FB30638: CodeMeter License Server: On importing some remote license update files for 'CmCheckEvents' no log entry was triggered.

FB30620: CodeMeter Control Center: The import of license update files (\*.WibuCmRaU) holding many Product Codes in CodeMeter Control Center did not work via drag&drop.

FB31038: CodeMeter WebAdmin: The page "Configuration" for the access control did not work for all localized languages.

## ***CodeMeter 5.20a***

### **Release Date**

2014-Aug-15

### **Operating Systems**

Windows, Mac OS, Linux

### **Features:**

FB30087: WibuCmTrigger: The ActiveX control now features the new method 'FirstBoxWithFilter' for better handling in the WebDepot.

**Bugfixes:**

FB28843: CodeMeter License Server: On local license access the specified server name was interpreted.

FB30583: CodeMeter License Server: On reading the Feature Map of a network licenses for a protected .NET application an error occurred.

FB26200: CodeMeter WebAdmin: On direct opening (without specifying the serial number) the page "Content" sporadically data of another CmContainer displayed.

FB30478: CodeMeter WebAdmin: On the page "Server" now also FSB entries are listed – independent of whether they are available for all/specific users.

**CodeMeter 5.20****Release Date**

2014-July-25

**Operating Systems**

Windows, Mac OS X, Linux

**Info**

- Starting with CodeMeter Version 5.20 Linux packages require a Linux distribution with GLIBC 2.7 or higher, Debian packages require a multiarch capable distribution. This allows, for example, installing packages starting with Ubuntu 12.04, openSUSE 12.3, SLES 11 or RHEL 6.

**News****Advanced License Access to CodeMeter Network Server**

Setting access rules with global and /or entry-specific reach (Firm Code, Product Code) allows to define or reserve license access for single computer, staff members but also for separate active directory groups (FB3728, 24797).

**Secure License Tracking**

Log file data on license accesses is now written manipulation-safe. Manipulation is prevented by authenticated check of data integrity using signatures (FB25171).

**Reducing client-sided borrowing period on license borrowing using CmBorrow**

On license borrowing a reduced borrowing period in minutes can be specified. However, it is not to exceed the maximum borrowing time defined at the server (FB3423).

**SmartBind improvements**

The patented binding procedures has been improved. On firmware update the binding stays intact (FB27590). The protection preventing cloning under Windows has been

extended (FB28480). The license behavior on copying or moving virtual machines on Linux has been adapted to the behavior on Windows (FB26111). SmartBind handling for mobile computer has been improved (FB27953).

**Features:**

FB21681: CodeMeter Installer: Mac OS: CodeMeter Mac OS installation remains operative also after updating the operating system.

FB28871, 28872, 25914: CodeMeter Installer: Linux: The installer for Linux have been fundamentally revised.

FB27606: CodeMeter License Server: On license accesses the Product Item Option "Maintenance Period" now will be considered in the allocation sequence.

FB27659: CodeMeter License Server: Server-sided the Shared Memory communication concept has been fundamentally revised.

FB27385: CodeMeter License Server: On logon to a remote CodeMeter server now also the Windows domain is transferred.

FB29230: CodeMeter License Server: On an unsuccessful license access now the same information is written to the log file as with a successful license access.

FB27212: CodeMeter License Server: On updating the certified time, the respective success or error messages are written to the CodeMeter event log file.

FB15155: CodeMeter License Server: On accessing the same licenses the license access will now preferably allocate local licenses.

FB21117: CodeMeter License Server: The new profiling entry "EnabledContainerTypes" now allows to alternatively deactivate the support of CmActLicense licenses or CmDongle licenses addressed as mass storage or HID devices.

FB29644: CodeMeter License Server: The output of the event for Station Share has been extended.

FB25975: CodeMeter License Server: Linux: On Linux SSH sessions are now handled the same ways as remote desktop sessions on other systems; i.e., for Station Share a single license is allocated for each SSH session.

FB24502: CodeMeter WebAdmin: The local IP address displayed in WebAdmin now updates, if the IP of the computer changes during operation.

FB22206: CodeMeter Control Center: The GUI language of CodeMeter Control Center is set if possible to the system's display language settings.

FB26349: cmu: The new option "--add-server" allows to add server to the server search list.

FB26158: cmu: The parameter "UserName" and "Password" required for the access to CodeMeter WebAdmin can now be set using cmu.

FB29251: CmDust: For inactive CmActLicense licenses the log file now includes eventual error causes and messages.

FB25936: License Tracking: After deleting a Firm Item or adding, updating or deleting a Product Item via direct programming the list of allocated licenses is now also updated.

**Bugfixes:**

FB28235: CodeMeter Installer: On installing eventually the system's language was not used.

FB28276: CodeMeter Installer: On installing on Raspian eventually the backup directory was not created.

FB26199: CodeMeter Installer: Mac OS: On an update installation eventually the backup path information was not detected.

FB29116: CodeMeter Installer: Linux: The handling of a missing or incomplete configuration file (Server.ini) on starting the service has been improved. Moreover, on a missing configuration the default value of the option "StartDaemon" now is "1" (previously "0") meaning that the service will now start although the option is eventually missing.

FB29393: CodeMeter License Server: If a CmDongle was without power supply (hibernate), eventually a Maintenance Period was not listed.

FB29611: CodeMeter License Server: Following the deletion of a license entry for which a handle was still open eventually a subsequent release resulted in an access violation.

FB28895: CodeMeter License Server: Problems eventually occurring with aggressive power saving functions for some SD Card reader are now prevented.

FB26171: CodeMeter License Server: The behavior of the handle management on changing or not displayed licenses has been improved.

FB28024: CodeMeter License Server: On OpenSuse eventually the CmWAN connection could not be established.

FB28883: CodeMeter License Server: On the simultaneous use of CmDongles as HID and not blocked accesses by uninterruptable power supply third party software eventually errors occurred.

FB28187: CodeMeter License Server: Runtime: On extreme overload eventually the communication between WibuCm or the protected application and CodeMeter License Server broke down.

FB26870: CodeMeter License Server: On starting of mobile applications programmed in in .NET eventually error occurred.

FB22480: CodeMeter License Server: On Linux the support of CmCards has been improved.

FB30055: CodeMeter License Server: On Linux CmDongles in Field Update Mode (FUM) eventually were only detected after performing an "Refresh".

FB29720: CodeMeter License Server: CmActLicense: Now CmActLicense license files can be imported holding more than 200 license entries.

FB28893: CodeMeter License Server: CmActLicense: Setting back the start time after updating a relative usage period was not supported.

FB26530: CodeMeter License Server: CmActLicense: Now also Windows 8.1 licenses released for Windows 8 are supported.

FB29041: CodeMeter License Server: CmActLicense: On reading the Unit Counter after a "power state change" the error "UnitCounter is zero" was issued.

FB30089: CodeMeter Control Center: On listing hardware in the repair dialog for empty drives no longer error messages display.

FB26296: CodeMeter Control Center: On Linux (Gnome) eventually CodeMeter Control Center crashed.

FB29652: CodeMeter Control Center: On Linux eventually the window management did not work.

FB26721: CodeMeter Control Center: The behavior of the "Delete license" button for CmActLicense licenses has been revised.

FB27118: CodeMeter WebAdmin: The content of not yet activated CmActLicense licenses was not displayed.

FB28818: License Tracking: CmDongles with a 'Disabled' status were not listed in License Tracking.

FB28827: cmu: On simultaneous firmware update of several CmDongles eventually errors occurred.

FB27939: cmu: On a firmware update cmu returned a wrong value.

## ***CodeMeter 5.10c***

### **Release Date**

2014-Mar-18

### **Operating Systems**

Windows

### **Bugfixes:**

FB20454: CodeMeter License Server: Windows Server 2008: During extended runtimes of CodeMeter License Server eventually a memory leak caused a crash.

FB28026: CodeMeter Control Center: On license update using CmFAS Assistant (Extend existing License) eventually the list of Firm Codes was not correctly built.

## ***CodeMeter 5.10b***

### **Release Date**

2014-Feb-21

### **Operating Systems**

Windows, Mac OS X, Linux

### **Features**

FB22221: CodeMeter License Server: The CmDust log has been extended by the detection of HID devices.

FB27522: CodeMeter License Server: The import of license update files now is more tolerant towards text format exceptions.

### **Bugfixes:**

FB24108: CodeMeter: Runtime Installer: Windows: The registration of the ShellExtension for \*.WibuCmRaC/\*.RaM/\*.RaU files was partially not transferred on using own installer (Installshield).

FB27671: CodeMeter License Server: Linux: On Linux eventually CodeMeter License Server did not automatically start after a restart.

FB26841: CodeMeter License Server: The import of a 'CmFirm.wbc' file was successful only, if a file already existed.

FB27088: CodeMeter License Server: Java: Reading an existing Usage Period eventually did not work.

FB23703: CodeMeter WebAdmin: The generation of the web pages has been improved.

## **CodeMeter 5.10a**

### **Release Date**

2013-Nov-20

### **Operating Systems**

Windows, Mac OS X, Linux, Solaris

### **Info**

#### **CmWebSocket API Version 2 available**

In the API Version 2 on remote update the new command "GetCmVersion" is implemented allowing to query the CodeMeter Runtime version used via browser (FB26340). Also with Version 2 the command "SetUpdate" now expects Base64 coded input data. Clients using Version 1 the old procedure without any special content encoding is valid (FB26348).

### **Bugfixes:**

FB26395: CodeMeter Installer: On an update installation coupled with some configuration settings running program instances were not terminated although possible. This resulted in the call to restart the system.

FB26126: CodeMeter License Server: Deregistering CodeMeter as Windows service was not performed on calling "CodeMeter.exe /u".

FB26265: CodeMeter License Server: If differing CodeMeter versions were used on remote update errors were issued although the remote update file was correctly imported.

FB26305: CodeMeter License Server: Linux: The script for manual starting CodeMeterLin did not work with the call using 'sudo'.

FB26268: CodeMeter WebAdmin: The Chinese location covered display errors on the server settings page.

## **CodeMeter 5.10**

### **Release Date**

2013-Oct-29

### **Operating Systems**

Windows, Mac OS X, Linux, Solaris

### **News**

#### **WebSockets: additional communication type between CodeMeter and web based applications**

The communication between browser components and CodeMeter can additionally to ActiveX (Windows), Java (Windows, Mac OS, Linux), and Firefox plugins (Windows, Mac OS, Linux) performed by the bidirectional, TCP based WebSocket protocol. The WebSocket API only provides functions involving remote updating (FB24176).

#### **CmActLicenses now also with Certified Time**

On programming a CmActLicense initially its Certified Time is set. The source is the Certified Time of the programming Firm Security Box (FSB). If this time should deviate more than 24 hours of the system time (CmDongle), a Certified Time update of the FSB is performed. If required, setting a separate option may prevent this update process (FB19106).

#### **License Tracking display in CodeMeter WebAdmin**

After configuration a detailed analysis of how network licenses have been used at runtime can be displayed by a separate navigation menu item (FB23446).

#### **Accesses to the FirmSecurity Box (FSB) with CodeMeter Runtime**

A fully installed CodeMeter Software Development Kit (SDK) is no longer required for accesses to the FSB. For example, a lean installation of CodeMeter as FSB server in a network environment now requires only the runtime and the 'CmFirm.wbc' file (FB25254).

#### **CodeMeter now supports the new form factor CmCard/CFast (FB24251)**

### **Features:**

FB25203: CodeMeter License Server: On remote desktop accesses now a separate error message displays, if the access was denied due to a local access only restriction.

FB25420, FB24251: CodeMeter License Server: The access to local licenses via remote desktop is granted again if no server operating system is involved.

FB23794: CodeMeter License Server: The update of CmDongles covering large remote update files has considerably improved and speeded up.

FB23596: CodeMeter License Server: Chinese localization has been revised.

FB23443: CodeMeter License Server: Accesses via LAN has been further optimized.

FB23671: CodeMeter License Server: CmActLicense: Changed exception handling, if the buffer size was too small on calculating a remote context file of a CmActLicense.

FB22998: CodeMeter License Server: CmActLicense: The concept of the locking behavior of CmActLicenses on the global blacklist has been security relevant extended.

FB22992: CodeMeter License Server: CmActLicense: The automatically created CmActDiag logs are now saved in shorter intervals.

FB25669: CodeMeter License Server: CmActLicense: The scenario that a license broke because the operating system was updated on a version the independent software vendor (ISV) did not allow now is completely supported. The ISV now can later activate the new operating system version via license update.

FB23760: CodeMeter License Server: Windows: CmActLicense: CmActLicense licenses are now protected against damage by the Windows system restore.

FB24871: CodeMeter License Server: Java: If on Windows the option 'StartAlways' was set and CodeMeter.exe is configured as service it is also started as service from within Java applications.

FB18428: CodeMeter License Server: Linux: On Linux the dynamic check of the code integrity has been further improved.

FB20421: CodeMeter Control Center: In the password dialog a symbol displays if the caps lock is activated.

FB25365: CodeMeter WebAdmin: In the list of allowed server for remote license access now the specification of subnets is supported.

FB17602: CodeMeter WebAdmin: On the log page the log always displays. Previously this depended on whether the log was written to a file.

FB23601: CodeMeter WebAdmin: Chinese localization has been revised.

FB23593: cmu: cmu is now able to process special activations (composite files).

FB22954: cmu: The return value on calling the import option '-i' now has a value of 9, if an update was not successful.

FB23442: CmDust: The log now also covers information on installed Hyper-V Guest and Hyper-V Root-VMs.

FB22487: CmDust: The log now covers information on currently allocated licenses.

FB23600: Shell Extension: Chinese localization has been processed.

FB25064: Password Manager: In Password Manager Utility a function supports the export of data in a CSV file.

## Bugfixes

FB25128: CodeMeter: Installer: Mac OS X: CmUninstall now also removes installer receipts from '/var/db/receipts'.

FB23970: CodeMeter License Server: A CodeMeter.exe started as an application now properly shuts down, even if a second CodeMeter instance is started as service via the Service Manager.

FB25605: CodeMeter License Server: On the attempt to reprogram remote update files which already had been programmed in a CmDongle no error was issued.

FB25268: CodeMeter License Server: For a borrow server license now double-assigned Product Items are supported.

FB24794: CodeMeter License Server: On access to the Firm Item using invalid parameters errors occurred.

FB22475: CodeMeter License Server: Exception handling with functions accessing a Secure Disk has been improved.

FB25433: CodeMeter License Server: CmActLicense: On using 'CmRevalidateBox' with CmActLicenses licenses on some machines CodeMeter.exe crashed.

FB25161, FB25054: CodeMeter License Server: CmWAN: An already established CmWAN connection is now reused only, if not only the URL but also the user name matches. In addition, the attempt to reuse an established connection using a password other than the one used on authenticating triggers an error (error code 237: CMERROR\_CMWAN\_CREDENTIALS\_CHANGED).

FB25401: CodeMeter License Server: CmWAN: An error of sporadic connection failures was fixed with CmWAN server which occurred on using a reverse proxy with activated backend connection pooling.

FB17841: CodeMeter License Server: Windows: If on Windows the CodeMeter service is installed but does not run, then CodeMeter is not started as application from the WibuCm library (WibuCm32/64.dll) but as Windows service.

FB24293: CodeMeter License Server: Windows: The CodeMeter Windows service now responds as registered at the Service Control Manager only if it really is. This is important, if another (protected) service is depending on the CodeMeter service.

FB25412: CodeMeter License Server: Mac OS X: Eventually occurring crashes of CodeMeter with CmDongles (HID communication) in connection with idle status, start and exit of CodeMeter are resolved.

FB25413: CodeMeter License Server: Mac OS X: On plugin or plugout of CmDongles (HID communication) eventually CodeMeterMacX crashed.

FB22899: CodeMeter License Server: Linux: CmActLicense: If on Linux SLES10 the package "glibc-locale" was not available, errors with CmActLicense licenses occurred if licenses held special characters.

FB18577: CodeMeter License Server: Linux: On updating the CodeMeter Runtime creating a context file of a CmActLicense license did not work.

FB24512: CodeMeter Library: Java: CmGetInfo(CM\_GEI\_ENABLEBLOCKITEMS) now returns all correct values in the case of several Enabling Blocks.

FB24474: CodeMeter Library: Java: CodeMeter.exe is now detected independent of lower and upper case.

FB22918: CodeMeter Library: Java: Improvement of handle management on unexpected application crash.

FB23177: CodeMeter Library: Java: CmActLicense: An error was remedied when CodeMeter.exe did not start although option 'StartAlways' was set.

FB24940: CodeMeter Library: Java: CmActLicense: On releasing the Tomcat memory when using the HIP webservice errors occurred.

FB19341: CodeMeter Control Center: Linux: OpenSuse now can be also restarted on open CodeMeter Control Center.

FB25496: CodeMeter Control Center: Mac OS X: The short cuts using 'Alt' were replaced by 'Alt'+ 'Cmd'.

FB25537: cmu: 'CmGetServers' now lists only servers available based on the current configuration of communication modes.

FB25018: Customer Tools: Charismatics CSSI Middleware: In CSSI Version 5.0.2 the timeout has been corrected occurring after two hours of not using the PKCS#11 module.

FB24893: Customer Tools: Charismatics CSSI Middleware: In CSSI Version 5.0.2 an eventual crash was remedied occurring on starting high-performance machines.

**CodeMeter 5.00e****Release Date**

2013-July-30

**Operating Systems**

Linux

**Bugfixes**

FB25013: CodeMeter License Server: Starting with CodeMeter Version 5.00c errors with CodeMeter License Server on Linux and Mac OS X could occur if operated in an virtual environment. In particular, CmActLicense licenses could not be imported or used.

**CodeMeter 5.00d****Release Date**

2013-July-19

**Operating Systems**

Windows, Mac OS X, Linux

**Bugfixes**

FB24820: CodeMeter License Server: In the case of not resolvable DNS names in the server search list, it was not retried for solving the names.

FB24888: CodeMeter License Server: CmActLicense: On updating to CodeMeter Runtime Version 5.0c CmActLicense licenses broke in the case a Windows operating system with Hyper-V was involved.

FB24871: CodeMeter License Server: Windows 64-bit: WebAdmin: On Windows XP 64-bit the server search list was not displayed/saved.

## **CodeMeter 5.00c**

### **Release Date**

2013-July-03

### **Operating Systems**

Windows, Mac OS X, Linux

### **Features**

FB24302: CodeMeter License Server: CmactLicense: CmActLicense and anti-VM (virtual machine) check now do not any longer detect a Hyper-V root system as virtual machine.

### **Bugfixes**

FB24122: CodeMeter License Server: Under certain conditions following a Windows STOP error a reboot eventually resulted in errors using 'CmAccess'.

FB23782: CodeMeter License Server: Linux: On high network load coupled with extensive write accesses CodeMeter License Server eventually could not access the CmCard/CF. In rare cases the error 'BOXLOST (70)' occurred.

FB24291: CodeMeter License Server: Windows: If the library 'WibuCm32.dll' was used by several DLLs within a process, in certain cases (mixed mode assemblies) programm starts eventually resulted in access violations.

FB24443: CodeMeter License Server: Java: Hidden Data entries of some lengths were not correctly read.

FB24253: CodeMeter WebAdmin: The localized French pages did not allow to add network server; on the page "Content" a JavaScript error occurred if the CmDongle was connected.

## ***CodeMeter 5.00b***

### **Release Date**

2013-May-16

### **Operating Systems**

Windows, Mac OS X, Linux

### **Bugfixes**

FB23514: CodeMeter License Server: On creating CmActLicense licenses errors in the memory management occurred.

FB23777: CodeMeter License Server: Servers in mode 'Stationshare' were remembered beyond the vailidity of handles.

FB23801: CmDust: In the CmDust log eventually double entries existed.

## ***CodeMeter 5.00a***

### **Release Date**

2013-Apr-08

### **Operating Systems**

Windows, Mac OS X, Linux

### **Features**

FB23204: cmu: cmu has been advanced to allow field update files containing several update paths.

### **Bugfixes**

FB23117: CodeMeter Installer: Windows Installer: On the second installation of the same CodeMeter runtime on the PC the installation without GUI (silent mode, -q) automatically an uninstalling occurred.

FB22976: CodeMeter License Server: WibuCmJava: The handling of remote accesses was adapted to the Standard API.

FB22921: CodeMeter License Server: Introduction of further server-sided measures that prevent unauthorized accesses to the IFI level (Implicit Firm Item) by remotely connected CmDongles.

FB23051: CodeMeter License Server: The output of more detailed error messages was improved, if a CmWAN client could not verify the server certificate.

FB22937: CodeMeter License Server: Entries deleted from the server search list were still considered after a restart of CodeMeter.

FB23243: CodeMeter License Server: WebAdmin: On the page 'Settings | Server' the default 'Bind Address' displays 'All (Default)' again instead of '0.0.0.0'.

FB22894: CodeMeter License Server: WebAdmin: IP addresses served to the server search list were not automatically resolved.

FB22959: License Tracking: If on update of a CmContainer a license entry was removed and an existing access was automatically closed, the reallocation was not logged.

FB23157: License Tracking: On local IPv6 accesses a placeholder text displayed instead of the correct address '::1'.

FB22968, FB23156: License Tracking: Several improvements and corrections were implemented.

## **CodeMeter 5.00**

### **Release Date**

2013- Mar-01

### **Operating Systems**

Windows, Windows CE, Mac OS X, Linux, Solaris

### **Info**

- With 5.00 CodeMeter support for Mac OS X operating system versions smaller than or equal to 10.5 is ceased (FB21542).
- CmActLicense cannot be used on WinPE. CmActLicense is automatically deactivated by profiling entry "CmActDisabled" (FB20911).

### **News**

#### **Support of device class HID (Human Interface Device) of the USB standard**

For the operating systems Windows, Mac OS, and Linux, all CmDongles without flash memory (not CmCards) can alternatively to the Mass Storage Device display also display as HID (Human Interface Device) without drive status. A separate driver installation is not required and a switch in both directions possible.

#### **Requirements**

- CmContainer with the ID "2-xxxxxxx"

- Minimum CodeMeter Firmware 2.02

More details in the separate CodeMeter Developer Guide (FB20954).

### **Communication via WAN (Wide Area Networks)**

Version 5.0 introduces next to CmLAN the communication type CmWAN for Wide Area Networks (WAN). In the case of a WAN, the communication takes place between CodeMeter License Servers on clients and a network CodeMeter License Server via the HTTPS protocol and the communication type CmWAN. The respective CodeMeter applications and tools have been adapted. More details in the separate CodeMeter Developer Guide (FB21397).

### **Writing user data to CmActLicense licenses (WupiWriteData)**

User data in CmActLicense licenses can now be changed end-user-sided. This holds also for other properly prepared data such as Product Item Options (e.g. Hidden-Data). This enables using the function 'WupiWriteData'.

### **Features:**

FB20570: Installation CodeMeter Runtime: The new CodeMeterRuntime.exe introduces the new, combined 32-/64-bit Runtime installer.

FB20892: CodeMeter License Server: The return of borrowed licenses is now supported, if the CmContainer holding the server license is connected with or bound to another computer.

FB21334: CodeMeter License Server: Improved handling of CmActLicense licenses, if programs of other vendors exclusively open license files thus preventing write operations.

FB12309: CodeMeter License Server: If information on 'ComputerName' and 'UserDefinedText' exist, on license access this information displays in the event log of CodeMeter Control Center.

FB17948: CodeMeter Programming API: The Programming API now supports the use of relative values on programming the Product Item Option of type 'Maintenance Period'.

FB15248: CodeMeter License Server: Memory optimization of WibuCmNET.dll. Using the Large Object Heap has been minimized and allocated memory resources are reused.

FB22477: CodeMeter License Server: License Tracking: The license list is now relisted after import of a CmActLicense license or a license update.

FB22320: CmDust: CmDust now holds more information on SmartShelter PDF.

### **Bugfixes**

FB22452: CodeMeter Installer: Mac OS X: On an update installation the CmActLicense files were moved to the new location even if the directory already existed.

FB22408: CodeMeter Installer: Solaris: On uninstalling CodeMeter Control Center was not automatically shut down.

FB22153: CodeMeter License Server: If a local station share license access used IPv4 and IPv6 at the same time, the license was counted twice.

FB20267: CodeMeter License Server: License Borrowing: On creating the borrow dummies the ServerID was not considered.

FB20337: CodeMeter License Server: On CmAccess with a specified Product Item Reference the other additional parameter are still checked.

FB22241: CodeMeter License Server: If a network access fails due to a missing entry in the white list now the error 231 CMERROR\_ACCESS\_DENIED is issued. The same holds if the client is listed on the blacklist.

FB20310: CodeMeter License Server: On using CmExecuteRemoteUpdate with a subsystem access eventually error 302 occurred.

FB6085: CodeMeter License Server: In the case of a station share multiple license allocation when several server exist in future only a single server is used.

FB21325: CodeMeter License Server: After deleting a Product Item for which a license access handle was still open, the subsequent CmRelease resulted in an access violation.

FB19986: CodeMeter License Server: Mac OS X: Changes in the CodeMeter system settings were not always applied.

FB19981: CodeMeter License Server: Mac OS X: Starting the License Server eventually resulted in a crash.

FB20825: CodeMeter License Server: Linux application linked to a 'libwibucm' eventually froze after starting (occurred on for Ubuntu 12.04 64-bit).

FB20788: CodeMeter License Server: Java: Communication stability of 'CmLanDirect' mode has been improved.

FB22156: CodeMeter License Server: Java: A returning error on 'CmGetInfo' using the parameter 'CM\_GEI\_ENABLEINFO' was remedied.

FB22052: CodeMeter License Server: Java: An error on calculating seconds passed since 2000 of the CMTIME structure was remedied.

FB22505: CodeMeter License Server: Java: An error occurred with a corrupt server.ini file resulting in a failed connection.

FB22055: CodeMeter License Server: CmActLicense: The blacklist entries in the profiling (network server) were ignored.

FB20490: CodeMeter License Server: CmActLicense: On remote activation using a remote update file at the enduser CodeMeter did not consider the required minimum runtime version.

FB20951: CodeMeter License Server: CmActLicense: Depending on the procedure relative negative changes in the Unit Counter resulted in unexpected Unit Counter balances-

FB21235: CodeMeter License Server: CmActLicense: Using VLANs and the binding scheme SmartBind eventually resulted in broken licenses.

FB22387: CodeMeter License Server: WibuCmNET.dll: The API command 'CmGetInfo(CmActLicenseInfo2)' returned a byte[] instead of the expected 'CodeMeter.CmActLicenseInfo2' object.

FB22259: CodeMeter License Server: The invalid "NetworkTimeout" entry in the settings has been corrected.

FB21105: CodeMeter License Server: The application F-Secure shut down the running CodeMeter License Server and prevented its start.

FB21736: CodeMeter License Server: After the successful import of a remote update file the message boxes displayed the wrong icon.

FB22408: CodeMeter Control Center: Inconsistent message in "Update licenses" in CodeMeter Control Center has been removed.

FB20444: CodeMeter WebAdmin: Configuring the proxy ports now is limited to valid values.

FB22523: CodeMeter WebAdmin: On Mac OS and Linux CodeMeter WebAdmin did not open with 'IpV6 only' setting as 'ApiCommunicationMode'.

FB22288: CodeMeter WebAdmin: CodeMeter WebAdmin display for Chrome browser improved.

FB20534: Shell Extension: The Russian localization of the dialogs was faulty and has been corrected.

FB22450: cmu: Improved error handling on a field update via cmu from within a file directory.

FB19990: CmDust: On Linux CmDust generally issued that the signature of CodeMeterLin is invalid. This was a display problem only.

FB21502: CmPasswordManager: A downloaded CmPasswordManager of Version 4.50a on Mac OS X 10.8 returned the Gatekeeper message.

FB20894: CmPasswordManager: Firefox Plugin: The HTML field of type "Email" (new in HTML5) was not learned (e.g. Google login).

**CodeMeter 4.50d****Release Date**

2012-Dec-13

**Operating Systems**

Mac OS X

**Features**

FB21666: CodeMeter Runtime, Mac OS X: New Runtime Installer for Mac OS X that by default installs the kernel extension for CmSticks without flash memory (KEXT3G).

**Bugfixes**

FB21102: CodeMeter License Server, Mac OS X: The server stability on corrupt network queries has been improved.

FB21679: CodeMeter License Server, Mac OS X: On Mac OS X 10.5 CodeMeter was prematurely terminated due to a defective code signature check.

**CodeMeter 4.50c****Release Date**

2012-Nov-23

**Operating Systems**

Windows, Mac OS X; Linux

**Features**

FB20986, FB20993: CodeMeter Runtime, Windows: CodeMeter successfully passed the Windows 8 Logo test and now is certified for Windows 8 and Windows Server 2012.

FB17707: CodeMeter Library, Windows: If the CodeMeter service starts late, now protected applications and CodeMeter Control Center wait longer before CodeMeter is started as an application.

FB20780: CodeMeter License Server: The fixing of borrow licenses has been improved and simplified on fault operations.

**Bugfixes**

FB20483: CodeMeter License Server, Windows: Stability improvements for CmActLicense licenses using binding scheme 'SmartBind' on defect, i.e. "aged" installations of Windows.

FB21284: CodeMeter License Server: If the list of allowed clients (access protection) held serial numbers these numbers were not considered.

FB21073: CodeMeter License Server, Mac OS X: Specific network configuration settings eventually led to sporadic crashes of CodeMeter License Server.

***CodeMeter 4.50b*****Release Date**

2012-Sep-18

**Operating Systems**

Windows

**Bugfixes**

FB20521: Installation CodeMeter: Windows: WibuCmNet: The policy for adapting the library 'WibuCmNet.dll' of Version 4.50a Build 901 has been corrected for programs compiled with Version 4.50 and now is part of the installer Version 4.50b Build 901.

***CodeMeter 4.50a*****Release Date**

2012-Sep-11

**Operating Systems**

Windows, Windows CE, Mac OS X, Linux

**Features:**

FB19985: Installation CodeMeter: Mac OS X: The new installer installs CodeMeter in flat format from a single file including a digital signature for Version 10.8 (Mountain Lion).

## Bugfixes

FB20000: Installation CodeMeter Runtime: On an update installation on non-English Windows-XP operating systems the CmActLicense files were not transferred to the proper location.

FB19806: CodeMeter License Server: Linux: In connection with ARM processors CodeMeterLin caused malfunctions, e.g. blocking with error 100 or 101.

FB20351, FB20352: CodeMeter License Server: WibuCmNET.dll: The transferred data of 'SetCertifiedTimeUpdate()' did not match with the WibuCm32.dll data. This eventually caused a license server crash.

FB20205: CodeMeter License Server: WibuCmTrigger: CmStick names with mutated vowels did not properly display.

FB17100: CodeMeter WebAdmin: Disabling remote read access to CodeMeter WebAdmin did not work.

## **CodeMeter 4.50**

### Release Date

2012-Jul-13

### Operating Systems

Windows, Windows CE, Mac OS X, Linux, Solaris

### Info

- Starting with this version CodeMeter supports Java version 5 or newer. Previous versions (1.3 and 1.4) are no longer supported.
- To enable local CmDongle detection on Solaris 11 the package 'SUNWlibusbugen' must be installed. Download this package from Oracle 'Package Repository' <<http://pkg.oracle.com/solaris/release/en/index.shtml>>.

### News

#### **New Log File for License Tracking**

CodeMeter License Server now optionally writes license access data in a logfile, which can be analyzed by License Tracking software. For more detailed information see the separate section "License Tracking" in the CodeMeter User Help (FB16138; FB18841).

#### **New functionalities of CmActLicense**

- **Support of CmActLicense on Windows 8 and Windows Server 2012**  
CmActLicense is now supported also on Windows 8 and Windows Server 2012.

- **License Information File can now be used universally**

License Information Files (LIF) (.wbb) can now be imported on all supported operating systems. The restriction to operating systems now is initially time-checked during programming by the licensor. This is also valid for License Information Files that have been created with older versions of CodeMeter (FB17929, FB18816, FB18854).

**Access on local licenses via Remote Desktop no longer available**

Remote sessions on a remote desktop can no longer access local licenses (FB18517).

**Features:**

FB10744: CodeMeter License Server: In the case of network connection problems to a already connected remote server, the response time has been improved.

FB19728: CodeMeter License Server: Starting with Firmware 2.00 an integrity check of CmDongle is performed after a field update and if errors occur a message issued.

FB13436: CodeMeter License Server, Windows: CmDongles can now be safely removed from the system using the "Remove Hardware" feature of Windows. A previous "Eject" within CodeMeter Control Center is no longer necessary.

FB13981: CodeMeter License Server, Linux: CmCard/SD and CmCard/CF are now detected also if the drive is "/dev/sde" or higher. The detection is now dynamically, there is no longer a restriction to 1024 drives.

FB12607: CodeMeter License Server, Java: CodeMeter Java now optionally can directly contact a remote CodeMeter License Server. This allows to access licenses without an installed CodeMeter Runtime on the client side.

FB17100: CodeMeter WebAdmin: Changes in CodeMeter WebAdmin can now optionally be controlled by username / password.

FB19263: CodeMeter WebAdmin: For test licenses (Firm Codes 10 und 5010) now the following message text displays: "CodeMeter Evaluation License - not for commercial use!".

FB19280: CodeMeter Password Manager. Mac: New drag & drop installer.

FB17206: CmIdentity: The Firefox Plugin now uses the automatic update functionality for new plugin versions.

FB15205: cmu: The file system for CmDongles without memory (2-xxxxxxx) cannot be configured via cmu to simulate FAT16.

**Bugfixes**

FB18654: CodeMeter License Server: Station Share calls to a local license (License Quantity = 0) using shared memory communication failed.

FB18773: CodeMeter License Server: The check for Station Share accesses has been improved. Also on using routers and firewalls a unique identification of the client is now guaranteed.

FB19717: CodeMeter License Serve: CodeMeter did not detect CmCards on SLES 10.

FB18245: CodeMeter License Server: Annoying messages of CmActLicense licenses in the event log during eject of CmDongles have been removed.

FB15409: CodeMeter License Server: Detection problems for CmCard/SD are solved when the card was used in the internal reader of a Dell using a O2Micro Controller (E6520).

FB7683: CodeMeter License Server: The Core API calls of CmActLicenseControl() that required a box access now also accept Firm Item access or Entry access.

FB18146: CodeMeter License Server, CmActLicense: Deletion of Product Items in combination with relative changes of Unit Counters could lead to malfunction.

FB18852: CodeMeter License Server, CmActLicense: Repeated activation by phone could result in errors.

FB18874: CodeMeter License Server, CmActLicense: Programming of large data in one Product Item sometimes failed with error 23 („Product Item Reference is invalid“).

FB18714: CodeMeter License Server, Linux, Mac OS X: On Linux and Mac OS X changing the system time e.g. by NTP could lead to wrong times in CmActLicense licenses.

FB18460: CodeMeter License Server, Linux, Mac OS X: In rare cases CodeMeter crashed on Mac OS X and Linux.

FB18902: CodeMeter License Server, Mac OS X: Detection of CmCard/SD failed on 15" MacBookPro with integrated SDXC slot.

FB19242: CodeMeter License Server, Mac OS X: Detection a hotplug of CmCard/SD on Mac OS X 10.7 with integrated SDXC slot failed.

FB14372: CodeMeter License Server, Mac OS X: CodeMeterMacX now is faster on shutting down and does no longer delay the shutdown of the system.

FB18031: CodeMeter License Server, .NET: If no license was found, the wrong error 125 („Server version too old“) has been set.

FB19035: CodeMeter License Server, Java: A call of cmValidateSignature did not set an error code if the validation failed.

FB17899: CodeMeter License Server, Java: The return value of cmGetPioDataKey() was not filled correctly.

FB18145: CodeMeter License Server, Java: The length of a derived Product Item Text now is correct.

FB17843: CodeMeter License Server, Windows, Java: The automatic launch of CodeMeter.exe now works as expected.

FB18577: CodeMeter License Server, Linux: After an update of CodeMeter License Server it was not possible to create a remote context file of a CmActLicense license.

FB19371: CodeMeter License Server, Linux: In the hotplug event of CmCards/SD and CmCard/CF on SuSE 12.1 and Ubuntu 10.04 eventually errors occurred.

FB12297: CodeMeter License Server, CmActLicense: Additional measures have been implemented to prevent the damage of CmActLicense licenses on improper computer shutdown.

FB19434: CodeMeter License Server, CmActLicense: SmartBind stability has been improved in cases where massive errors in the WMI existed.

FB12678: CodeMeter WebAdmin: The Russian localization layout has been revised.

FB19747: CodeMeter Control Center: Starting and Stopping the CodeMeter Service on Solaris and Linux has been removed from CodeMeter Control Center.

## ***CodeMeter 4.40b***

### **Release Date**

2012-Mar-23

### **Operating Systems**

Windows, Mac OS X, Linux

### **Bugfixes**

FB17931: CodeMeter Runtime: Parameter responsible for the CodeMeter Control Center start behavior have been revised. On an update installation CodeMeter Control Center now does no longer open in a window.

## **CodeMeter 4.40a**

### **Release Date**

2012-Feb-23

### **Operating Systems**

Windows, Mac OS X, Linux

### **Info**

Russian localization of several CodeMeter components has been revised and supplemented (FB17311, FB14911, FB16608).

### **Features:**

FB17484: CodeMeter Runtime: In the process of IPv6 support by CodeMeter now also mixed local StationShare accesses by old (IPv4) and new (IPv6) clients is featured.

FB17422: CodeMeter Runtime: In the library WibuCmNET.dll the memory for communication is allocated only once for single processes.

### **Bugfixes**

FB17334: CodeMeter Installer: CmRuntime Merger: If CmRuntime merge modules were integrated into other product installer, a requirement was not able to be interpreted and CmActLicense licenses files were not moved.

FB16870: CodeMeter: Installer: CmRuntimeMerger 32-Bit: On an update installation now also the registry values are correctly transferred in the case of a 64-bit runtime environment.

FB17648: CodeMeter: Installer: On 64-bit Windows a silent update installation did not move the backup and log files into the new folder.

FB17496: CodeMeter Runtime: On access using Shared Memory access to local licenses were not admitted.

FB16734: CodeMeter Runtime: The form factor CmCard/SD on DELL Latitude SD (Tablet PC) using Windows 7 was not detected at the internal SD card slot.

FB17147: CodeMeter Runtime: On local communication covering only Shared Memory effected an increased CPU load by CodeMeter.exe.

FB15412: CodeMeter Runtime: Linux: Hotplug rules now explicitly consider older distributions, such as, SLES10 and RHEL 5.5. Previously, subsequent to a CodeMeter installation the CD-ROM drive was not automatically mounted.

## **CodeMeter 4.40**

### **Release Date**

2011-Dec-20

### **Operating Systems**

Windows, Windows CE, Mac OS X, Linux, Solaris

### **Info**

For Mac OS X the Version 10.5 is defined as minimum version. At the same time, support for PowerPC (PPC) hardware is stopped. For Mac OS 10.4 and/or PPC hardware you can use CodeMeter Version 4.30d (FB15184).

### **News**

#### **CodeMeter masters Internet protocol IPv6**

Immediately starting, the Internet protocol IPv6 can be used for the communication between CodeMeter components. In the default configuration CodeMeter selects from the existing protocols the optimal protocol.

By editing the registry entry 'ApiCommunicationMode' IPv6 (0x08) can be used next and simultaneously to the communication modes IPv4 (0x04) and SharedMemory (0x02). The default value (0x01) currently uses IPv4 and SharedMemory (corresponds to 0x06); the value 0x0E activates all three communication modes at the same time (FB16317).

For Windows in this version the restriction holds that for using IPv6 the servers must be configured in the server search list. Currently, multicast (automatic server search) is not supported.

Depending on the configuration, all communication modes can be used in parallel (FB4113).

### **Features:**

FB12483: Installation CodeMeter: In future, on Windows CmActLicense license locate in the directory '%Programdata%\CodeMeter\CmAct'. An update installation moves these file into this directory.

FB13806: Installation CodeMeter: In future, the CodeMeter Control Center will always start with parameter '/q' and does not open during installation.

FB3530: CodeMeter License Server: A remote update already finished in parts now can be continued by restart.

FB14984: CodeMeter License Server: The license borrowing behavior has been revised if borrow entries were missing in the registry.

FB12139: CodeMeter License Server: CmActLicense: Using CmActLicenses now can be deactivated by a control in the registry.

FB13440: CodeMeter License Server: CmActLicense: The exception handling if a CmActLicense license has been unintentional re-imported has been improved . Now error 262 is issued instead of 264.

FB13180: CodeMeter Control Center: On a time update CmActLicense license information files (LIFs) and broken CmActLicense licenses are ignored.

FB13786: cmu: The option '--set-configdisk' has been extended by the parameter 'VbrBoot' (volume boot record).

FB16120: CodeMeter Password Manager: For Linux 64-bit operating systems a separate installer is available (rpm/deb).

### **Bugfixes**

FB16012: CodeMeter Runtime: Windows: For individual Windows installations problems occurred on starting CodeMeter License Server.

FB15354: CodeMeter Runtime: CmActLicense: On creation of CmActLicense license request files via network and when using other commands eventually error 16 occurred.

FB16088: CodeMeter Runtime: CmActLicense: On activation by telephone when using Smart Bind eventually eventually errors occurred.

FB8691, FB14706: CodeMeter Runtime: CmActLicense: On Linux the binding to hardware characteristics ("Disk") eventually problems occurred.

FB15347: CodeMeter License Server: If several protected applications simultaneously started CodeMeter, the start of CodeMeter will no longer fail.

FB13567: CodeMeter License Server: A vulnerability to denial-of-service attacks has been remedied.

FB16465: CodeMeter License Server, Mac OS: On Mac OS 64-bit the consecutive performance of time updates for a CmContainer eventually led to a crash.

FB14858: CodeMeter License Server, Windows: On Windows XP changes in the time settings (changeover daylight saving time; Windhuk) eventually errors occurred.

FB16480: CodeMeter License Server: The detection of CmContainer after wakeup from standby has been improved.

FB13603: CodeMeter License Server: On Windows using the SharedMemory mode for several clients resulted in errors (error 100).

FB15457: CodeMeter License Server, Mac OS: The integration in the system settings (PreferencePane) now ensures that the 'Launchd' service is registered.

FB15458: CodeMeter License Server, Mac OS: If in the CodeMeter logging directory data other than a CodeMeter event log, the "View protocol" item of the control panel showed these data instead of the event log.

FB16352: CodeMeter License Server, Mac OS: On usual shutdown and stopping the CodeMeter service an error report was created. Now an error report is not created and CodeMeter License Server stops faster.

FB15499: CodeMeter License Server, Mac OS: The command 'CodeMeterMacX -h' did not display help information.

FB16475: CodeMeter Control Center, Windows: A Windows error message will no longer display on access to an already removed CmCard/SD.

FB13870: CodeMeter License Server: In the event log no longer a plug-in will be displayed as plug-out.

FB14935: cmu: On remote updating of CmActLicense licenses now the error 267 is issued, if CodeMeter.exe does not run as service.

FB16440: CodeMeter Password Manager: On changing entries of type "WebForm" on Mac eventually already existing descriptions were overwritten by other values.

FB16439: CodeMeter Password Manager: The error message "CmStick full" now properly display on Mac/Linux in the Firefox plug-in.

FB8640: CodeMeter Password Manager: TAN data from files located in a directory named by using Chinese characters were not properly imported.

## ***CodeMeter 4.30d***

### **Release Date**

2011-Aug-24

### **Operating Systems**

Windows, Mac OS X, Linux

### **Features**

On Windows operating systems CmActDiag log, i.e. the automatic logging for the licensing system CodeMeterAct, has been considerably improved (FB14952).

Logging now additionally comprises information:

- from relevant entries in the system event log

- on processes related to damaged files
- on error persistence after critical errors occurred

Additional measures to ensure operability of CodeMeterAct licenses in the case of serious computer problems (STOP errors, switching off during operation) (FB14953).

### **Bugfixes**

FB14378: CodeMeter Runtime: For some variants of 'Windows Server 2003' the detection of the operating system was not correct (error 119, Unknown OS).

FB14958: CodeMeterAct Runtime: Improved security preventing defect CmAct licenses after STOP errors ("zeroised licenses").

## **CodeMeter 4.30c**

### **Release Date**

2011-Jul-08

### **Operating Systems**

Windows, Mac OS X, Linux

### **Bugfixes**

FB14359: CodeMeter Runtime: The WibuCm Framework signature on Mac OS 10.7 (Lion) was incorrect.

FB14383: CodeMeter Runtime: On Mac OS 10.7 (Lion) CodeMeter Control Center did not display CmSticks.

FB14050: CodeMeter Runtime Occurring access errors using the option 'station share' were fixed.

FB14101: CodeMeter Identity: The Firefox extension was adapted to Firefox Version 5.0.

## ***CodeMeter 4.30b***

### **Release Date**

2011-Jun-08

### **Operating Systems**

Windows, Mac OS X, Linux

### **Bugfixes**

FB2027: CodeMeter Runtime: While a protected application is running a restart of CodeMeter License Server could result in error 106 on using a newly accessed license.

FB13895: CodeMeter Runtime: In versions before 4.30 CmSetRemoteUpdate() returned an error on executing updates of a CodeMeterAct license if no update was done. This behavior is now restored.

FB13920: CodeMeter Runtime: Executing an update with several programming steps could lead to error 24 in version 4.30.

FB13702: CodeMeter License Server, Windows: In the first two minutes after starting CodeMeter License Server (e.g. after system boot) often error 10038 occurred. In this period access to CodeMeter licenses was not possible.

FB13861: SDK Installer, Mac OS X: The document Readme.rtf contained the text of the runtime version instead of the developer version.

FB13880: Programming-API: A memory leak on programming CodeMeterAct licenses was fixed.

FB13591: CodeMeter WebAdmin: WebAdmin interface protected against cross-site scripting.

FB13803: CmIdentity, PHP Sample: Page for registration did not work with Java applets.

## ***CodeMeter 4.30a***

### **Release Date**

2011-May-17

### **Operating Systems**

Windows

## **Bugfixes**

FB13448: CodeMeter Installer: Assembly and SDK help components were installed a directory level too high.

FB13459: CodeMeter Runtime: After TCP timeout (CmLan) CmCrypt fails with error 302.

FB13582: CodeMeter Producer: In Version 4.30 CmProducer did not correctly program the PIO HiddenData; 0 bytes were written.

FB13252: CodeMeter WebAdmin: The access using Internet Explorer 9 on some systems did not work.

## **CodeMeter 4.30**

### **Release Date**

2011-April-20

### **Operating Systems**

Windows, Windows CE, Mac OS X, Linux

### **Info**

#### **Support of Windows 2000 is discontinued**

With the present release the support of Windows 2000 is discontinued. The final supported CodeMeter Version for Windows 2000 is Version 4.20d. The single AxProtector variants continue to encrypt executables capable to start on Windows 2000, however, at the same time, this requires a CodeMeter Runtime Version 4.20d or older.

### **News**

**CodeMeter is compatible with Windows 7, and meets the Windows 7 Client Software Logo Program requirements.**

#### **Introducing the new PIO Maintenance Period**

With the Maintenance Period an absolute time-span can be stored in the CmStick. Then the use of a license is limited to software versions which have been created, i.e. released, within this period. The new PIO has been introduced for the hardware and upgraded for all CodeMeter tools and applications. Requires CodeMeter Firmware version 1.18 or higher.

#### **Changes in the feature Enabling**

Now temporary enabling also works for Enabling Blocks not located at the Implicit Firm Item (IFI) level. CodeMeter Firmware 1.18 or newer is required.

With CodeMeter Firmware 1.18 or newer, by default, the 'Required Flag' is set when attaching an Enabling Block to a Lookup Table entry.

If at least one 'Required Flag' is set when several attachment targets exist, a logic AND conjunction defines that all settings of attachments having a 'Required Flag' must match before a defined operation is allowed to access a complete CmStick, a license container, or a license entry.

### **Restructuring of locations of important CodeMeter files**

An efficient restructuring of file locations has been performed for the operating systems Windows, Mac OS X, and Linux. This to prevent unintentional deleting of important CodeMeter files when performing a new or an update installation.

After an update on Windows the directories "Log" and "Backup" are moved from „%ProgramFiles(x86)%\CodeMeter“ into the new hidden directory "%ProgramData%\CodeMeter"; the CmFirm.wbc file is moved to "%ProgramData%\CodeMeter\DevKit".

On Mac OS X the directories "Log", "Backup", and "CmAct" are moved to the directory "library/Application.Support/CodeMeter". Previously they located in the directory "Applications/CodeMeter.app/".

On Linux the directories "backups", "CodeMeter", and "CodeMeterAct" were restructured and move to the directory "/var/lib/CodeMeter". Previously they located in the directory "/var/backups/". The CmFirm.wbc file is moved from "/usr/share/CodeMeter/" to "/etc/wibu/CodeMeter/".

### **CodeMeter SmartBind**

The new CodeMeterAct binding scheme "CodeMeter SmartBind" optimizes assuring the validity of CodeMeterAct licenses, in the case of changing hardware properties of the PC to which the licenses are bound. Wibu-Systems recommends to use this option to handle the allowed variation between the initial hardware configuration of the PC when the license was activated the first time and the current configuration.

### **Licensing change of the CodeMeterAct binding scheme 'None'**

Using CodeMeterAct without binding to the PC (binding scheme 'None') is now linked to a new entry in the Firm Security Box (FSB). For the licensed use of this option, please contact Wibu-Systems Sales.

### **New hardware form factors CmStick/C and CmStick/T**

The new compact CmStick/C and the CmStick/T with battery-buffered clock are supported..

### **CodeMeter Licensor Center has been renamed to CodeMeter Start Center**

### **Features:**

FB11262: CodeMeter: All time reference in CodeMeter can now be specified according to ISO 8601.

FB6956: CodeMeter: CodeMeter now also supports Linux Power PC.

FB11239: CodeMeter: The value range of the Unit Counter has been increased from 24 to 32 bytes.

FB11152: Installation CodeMeter SDK: Solaris: After installing the Development Kit on Solaris now the CodeMeter service is restarted.

FB11887: Installation CodeMeter SDK: The old, no longer required 'WibuCmWeb' library has been removed.

FB6916: Installation CodeMeter SDK: The 'CmFirm.wbc' file can be coded also according to UTF-8; coding is no longer restricted to the ANSI character set.

FB4725: CodeMeter Installer, Windows: Windows now features CodeMeter License Server as non-interactive service.

FB11832: CodeMeter Runtime: Trigger: The trigger now returns the name of the CmStick/CmAct Name with the property "Boxname".

FB9765, 9902: CodeMeter Runtime: The function 'CmCrypt2' now supports complete software-sided encrypting and decrypting using AES.

FB5674: CodeMeter Runtime, Mac OS X: On using Kernel Extension 5G CodeMeter now detects CmStick and CmStick/M as license memory even if no user is logged in.

FB6786: CodeMeter Runtime: Now the CmCard/CF is also supported as NTFS boot device on Windows XP at an internal IDE/SATA adapter.

FB8192: CodeMeter Runtime: The return value of 'CmGetVersion()' has been complemented by the build number.

FB2020, 10238: CodeMeter Runtime: Starting with Firmware 1.18 creating a context file uses an already existing Reserved Firm Item allowing imports.

FB11884: CodeMeterAct: Runtime: Now reimporting of CmAct activation files is supported if the related option has been activated.

FB10791: CodeMeterAct Runtime: 'CMCHIPINFO.musProductYear' now informs on the year when activated CmAct licenses have been created. In the case of inactive licenses, the year of the CodeMeter version used is returned.

FB9902: CodeMeterAct Runtime: CodeMeterAct now also supports the RSA algorithm.

FB6854: CodeMeterAct: Binding Extension: Plugins should be load from the subdirectory <Firmcode>. The plugins (and necessary files) for the Binding Extension should be installed in a subdirectory of the plugin directory. The subdirectory name corresponds to the Firm Code. This avoids unintentional interactions, such as, name collisions ("Readme.txt") or DLL conflicts.

FB9842: CodeMeterAct: Now the Boxtime is kept when updating a license; eventually it is forward adjusted.

FB12357: CodeMeter: Introducing the new service 'WibuSLSocketProxy.exe' allowing the communication between CodeMeter protected Silverlight applications and CodeMeter License Server. This service is available in a separate installer.

FB9315: Programming API: The Programming API (HIP) features the new method "CmActControl::SplitInstallationId()" to calculate the TelephoneId and the ClientSecKey from the InstallationID.

FB5620: Programming API, Windows: The public CodeMeter Programming API interface now provides inline implementations of all methods which use STL objects as parameter or return values. Now it is possible to use these methods in application code generated by the STL incompatible MS Studio Version translated for the 'WibuCmHipApi32/64.dll'.

FB11435: Programming API: Java: The HIP API for Java now contains the HIP Loader which automatically tries to load the 'JNI DLL' on start. It is no longer required to use the 'HipLoader.jar' library.

FB10035: Programming API: Activation by phone: Using the method "SplitActivationCode" allows to read the serial number from the Activation Code.

FB11760: CmIdentity: The 'PublicSerialKey' now can be read in the 'WibuCmId' Browser plugins (Java Applet, ActiveX, Firefox Extension).

FB10754: CmIdentity: Authentication is now also possible using an entry of the Secret Data field of an Product Item.

FB9848: CmIdentity: The default paths of the standard installation have been adapted.

FB5397: cmu: Deleting CodeMeterAct licenses is now able using the new function 'cmu --delete-cmact-license'.

FB5236: CodeMeter WebAdmin: The 'Content' page's time displays has been revised.

FB10031: CodeMeter WebAdmin: The "Content | Backup/Restore" now displays the information on the currently used directory for restoring a backup.

FB11604: CodeMeter Control Center: The results of a time update now displays in a dialog.

FB10856: CodeMeter Control Center/CodeMeter WebAdmin: The version information now hold a standard total version number, e.g. "4.30b".

FB12232: CmDust: CmDust outputs the files located in the relevant part of the virtual store.

FB5221: CmDust: The events displayed in CodeMeter Control Center are now appended to CmDust.

FB6881: CmDust: CmDust now also contains information on CodeMeterAct Binding Extension. CmDust checks if related DLL files exist for the CmAct plugins.

FB10842: CmDust: The features CmStick configuration and the boot code are now part of CmDust in the area "Specific CmStick Data".

**Bugfixes:**

FB10110: CodeMeter Installer, Ubuntu: With Ubuntu 10.04 several libraries were missing. Now package dependencies are solved for Ubuntu 10.04/64bit.

FB12578: CodeMeter Installer, Windows: On Windows Embedded Standard 7 the runtime setup aborted on firewall configuration.

FB9805: CodeMeter Installer, Windows: On 64-bit systems the CodeMeter command prompt is now executed with the 64-bit command shell.

Fb10054: CodeMeter Installer: Buttons in text fields for several languages were not adjusted to the text length.

FB6790: CodeMeter Runtime: CodeMeterAct: If a CmAct switched from "activated" to "deactivated" and a 'CmAccess' without Force was performed on the Product Item, error 200 instead of error 263 displayed.

FB8773: CodeMeterAct, Windows: In the case of licenses with the binding scheme "D" eventually licenses switched from "broken" to "intact"(or vice versa) depending on the start time of CodeMeter License Server (system start or later).

FB8608: CodeMeterAct: On using CodeMeterAct an error in the Kernel mode driver of a third party provider eventually lead to a blue screen when booting. The respective driver is now detected and named by CodeMeter. Until the (free of charge) driver update is performed CodeMeterAct is not available.

FB11431: CodeMeter License Server: Repairing the 'codemtr.io' file did not work for the CmStick/M.

FB8693: CodeMeter License Server: The performance after booting, hibernating or standby if more than one CmStick is connected has been improved.

FB10428: CodeMeter License Server: On performing a 'CmAccess' an error occurred when the access took place before the start time of a Usage Period.

FB10429:CodeMeter License Server: In the case of a second station share access the analysis of the privileges is more thoroughly performed.

FB10437: CodeMeter License Server: Calling 'CmGetRemoteContext' via network now also works without server search list.

FB9015: CodeMeter License Server: The directory for the logging files is now created if it does not exist.

FB10448: CodeMeter License Server: Windows: Starting CodeMeter License server using option "CodeMeter.exe -u" removed all service dependencies, however, option o"CodeMeter.exe -i" did not set them. Now option CodeMeter.exe -i" sets the necessary service dependencies. Previously this was possible only by using the CodeMeter Runtime Installer.

FB12454: CodeMeter License Server: .NET: In VB.NET several Enums for classes with const members could not be converted.

FB10299: CodeMeter License Server: .NET: GUID in '\*.WibuCmRaC'/\*.WibuCmRaM' files used capital letters.

FB10018: CodeMeter License Server, .NET: Reading the 'CmNetInfoUserExt' structure using CmGetInfo() resulted in errors.

FB12431: CodeMeter License Server, .NET: 'CmGetInfo(null,Version)' induced an error ( 'BadHandle').

FB9809: CodeMeter License Server, Java: Compatibility errors occurred when using an old CodeMeter jar file.

FB9136: CodeMeter License Server, Java: On 'CmGetBoxContents()' a wrong return value was issued if an error occurred.

FB9814: CodeMeter License Server, Java: The Product Item Reference was missing in the CmBoxEntry structure. The 'CMBOXENTRY::productItemRef' has been added.

FB11327:CodeMeter License Server, Java: On 'CmGetServer()' a wrong return value was issued if an error occurred (0 instead of -1.

FB11808:CodeMeter License Server, Java: 'CmGetBoxContents' returned an empty Firm/Product Item Text if it contained unicode character.

FB7689: CodeMeter License Server, Linux: On Kontron boards using Debian 5.03 CodeMeter did not detect the CmCard-CF.

FB7987: CodeMeter License Server, Linux: Performing a hotplug/rescan included an access to the CD-ROM drive. The access to SATA DVD drives is now suppressed when searching for CmSticks.

FB5177: CodeMeter License Server, Linux: CodeMeter now also detects CmCards/CF on Linux when these are connected via USB-CardReader adapter and CodeMeterLin is not equipped with root privileges.

FB10382: CodeMeter License Server, Linux: The installation warning for "udev" was removed in the case of installing on Ubuntu 10.04/Server.

FB9654: CmBoxPgm: Using options /PED (Extended Protected Data), /PHD (Hidden Data), /PPD (Protected Data), /PSD (Secret Data), and /PUD (User Data) now also accepts as argument the specification of explicit byte sequences of a length of Null. This allows either to create empty Product Item Options of the types mentioned above, or to delete the PIO contents without removing the PIOs themselves.

FB7035: CmBoxPgm: On interpreting PIO removing options of type '/P<xx>-' CmBoxPgm now considers existing PIOs.

FB6973, 6975: CmBoxPgm: Also on Unix platforms the complete value range for time specifications from 01.01.2000 00:00:00 UTC to 31.12.2099 23:59:59 UTC is supported.

FB12231: CmBoxPgm: On updating Enable Block operations affecting only Enabling Flags, the cached Enabling Block data was not refreshed.

FB5268: Programming API: The HIP API WrapperWrapper can be used only with Borland C++ Builder 5.5. Necessary files and data locate in "\Docu\_and\_Samples\cm\DevKit\Samples\C++\CmHipWrapper".

FB12721, FB12722: CodeMeter: API Guide: The API Guide on Mac OS did not respond to "Apple" shortcuts 'H' and 'M'.

FB9450: Programming API: Java: Programming a Firm Item resulted in error 9008. The selection of boxes to be programmed now performs only 'Local' and not 'LocalLan'.

FB12008: Programming API: The HIP API - C# crashed when working with 'toStdString()' and .NET Framework 4.0 .

FB12640: Programming API: The CodeMeter Programming API now properly handles license profile texts containing special characters.

FB12659: Programming API: The error codes and enumeration types were missing and now are documented in the JavaDoc Help.

FB11582: Programming API: The description of the 'initialize' functions using 'CmActParamSet' have been corrected.

FB12694: Programming API: The error constant 'CMHIP\_ERROR\_PI\_EXISTS' in the generated languages (Delphi, C, VB) is not properly named (CMHIP\_CMHIP\_ERROR\_PI\_EXISTS = 9049);correct name is 'CMHIP\_ERROR\_PI\_EXISTS = 9049'.

FB10350: Programming API: The check of the Firmware of a CmStick for supporting the programming a Usage Period did not consider the correct version number.

FB9853: CodeMeter Identity: The work on CmIdentity/PHP includes adjustments to Opera Browser 10.60.

FB11754: CodeMeter Identity: If the privileges for executing external commands in PHP was missing the error message 10999 (Configuration Error) was not telling. The PHP pages have been revised.

FB9991: CodeMeter Control Center: The layout of the message windows was not standardized.

FB9275: CodeMeter Control Center: Improved display of different CodeMeter devices.

FB9469: CodeMeter Control Center: The CmCard/E is now included in the CmSticks list of the Control Center.

FB12803: CodeMeter WebAdmin: The button for data backup was activated although a CmStick was locked.

FB9768: CodeMeter WebAdmin: The data backup for CmAct licenses has been deactivated.

FB9721: cmu: The listing of CmStick contents with a activation status "disabled" crashed.

## ***CodeMeter 4.20d***

### **Release Date**

2011-February-02

### **Operating Systems**

Windows, Mac OS X, Linux

### **Bugfixes**

FB11788: CodeMeterAct: Now the binding scheme "D" also works in the case of RAID hardware drivers.

FB11919: CodeMeterAct, Mac OS X, Linux: The detection of virtual machines has been improved. Systems falsely detected as virtual now are handled correctly.

## ***CodeMeter 4.20b***

### **Release Date**

2011-January-13

## Operating Systems

Mac OS X

### Bugfixes

FB11236: CodeMeter Installer, Mac OS X: In the case of updating the operating system to 10.6.5/10.6.6, eventually CmSticks weren't detected anymore.

## *CodeMeter 4.20c*

### Release Date

2010-Oktober-21

## Operating Systems

Windows

### Bugfixes

FB10351: CodeMeter Installer, Windows: The automatic proxy detection during the installation process did not work in all cases.

FB10369: CodeMeter Runtime, Windows: Timeout problems (WB410) with subst drives and CodeMeter hardware detection were fixed.

FB10398: CodeMeterAct: Repairing a broken license using reactivation did not work.

FB10735: CodeMeterAct: Workaround for defective file system on Windows Vista / Windows 7 were enhanced.

## *CodeMeter 4.20b*

### Release Date

2010-September-08

## Operating Systems

Windows, Mac OS X, Linux

### Info

FB10109: CodeMeter, Windows: After uninstalling of CodeMeter the directory "Logs" including the log files remains on the hard drive to allow later analyses.

FB9956: CodeMeterAct, Runtime: When using CodeMeterAct an additional encrypted log file is automatically written. In the case of technical problems this file allows for error detection.

### **Bugfixes**

FB10071: CodeMeter Installer, Windows: Privilege inconsistencies were responsible for errors in the uninstalling process of the CodeMeter service.

FB5902: CodeMeter Installer, Windows: Errors occurring on installing the MSM merge module were corrected.

FB10019: CodeMeter Installer, Windows: A Windows 64-bit Installer using the provided MSM merge modules could not be uninstalled.

FB9950: CodeMeterAct: The command CmCheckEvents() checking for hardware changes did not deliver returns when importing CodeMeterAct license updates.

FB10086: CodeMeter Runtime Installation: On using the CodeMeter Runtime update installation partly registry entries were overwritten.

FB10269: CodeMeter Runtime, Windows Server: In some cases the detection of virtual machines did not work correct.

FB9175: CodeMeter Runtime, Windows: Detection problems of CmCard/SD form factor were corrected. The error occurred when the CmCard/SD was used under Windows XP together with an integrated SD card reader and a special vendor driver (not Microsoft) which does not provide "Physical Access Support".

FB10227: CodeMeter Runtime: Detection Problems of CmCards/SD 2GB and 4GB for the internal card reader were corrected. The error occurred when the CmCard/SD was used under Windows XP together with an integrated SD card reader and a special vendor driver (not Microsoft) which does not provide "Physical Access Support".

FB9875: CodeMeterAct, Windows: In the case of licenses using the binding scheme "D" the license status eventually changed from "broken" to "intact" or vice versa depending on whether the CodeMeter License Server (codemeter.exe ) was started on system startup or later.

FB9988: CodeMeterAct: In the case of expired or no longer valid licenses no remote context file (\*.rac) could be created.

FB10007/FB9899: CodeMeterAct: Reoccurring problems with defect licenses after power off the computer without shutting down were corrected.

## **CodeMeter 4.20a**

### **Release Date**

2010-July-02

### **Operating Systems**

Windows, Mac OS X, Linux

### **Info**

FB8812: CodeMeterAct, Win2000: CodeMeterAct licenses again will be installed and will run on Windows 2000 machines.

FB9374: CodeMeter Installer, Linux: SuSE 9.1 through SuSE 9.3 will no longer be supported starting with CodeMeter 4.20a.

### **Bugfixes**

FB9422: CodeMeterAct: The simultaneously use of the PIOs Unit Counter and User Period for CodeMeterAct licenses on encrypting produced error 70.

FB9266: CodeMeterAct: Relative updates of a Unit Counter eventually resulted in a higher value.

FB9298: CodeMeterAct, Windows: Due to file system problems not to be remedied by using chkdsk.exe on some machines CodeMeterAct licenses did not work. This affected all licenses on this machine, and could not be remedied by re-activation.

FB9157: CodeMeter Installer: The CodeMeter Runtime installation could abort when on operating systems Windows Vista or newer the firewall service was not running.

FB9423: CodeMeter Installer: The .NET Installer WibuCmNET.msi in Version 4.20 required the .NET Framework 3.5. However, the .NET Framework 2.0 is sufficient.

FB8866: CodeMeter Installer: On uninstalling the CodeMeter service now SuSE-specific "\*.depend" files are better handled. Previously a deadlock could occur on computer shutdown since the SuSE-specific scripts stucked after deleting CodeMeter.

FB8923: CodeMeter Installer: After installing the CodeMeter Runtime on openSUSE 11.2 the CodeMeter service did not automatically start.

FB9155: CodeMeter Installer: The check whether the service "winmgmt" runs has been improved.

FB9024: CodeMeter Installer: A re-installation of the CodeMeter Runtime Version 4.20 resulted in a stopping the CodeMeter service.

FB9131: CodeMeter License Server: Importing files using cmu or importing vendor-specific code eventually resulted in a crash.

FB9059: CodeMeter License Server, Mac: The server search (broadcast) partly did not work in the case an explicit IP address was specified.

FB9013: WIBU Shell Extension: The Windows Explorer extension partly shows incorrect languages.

FB9072: WIBU Shell Extension: The context menu of the \*.WibuCmRaC file holds typing errors.

FB8930: CodeMeter WebAdmin: The display of a CodeMeterAct license in the WebAdmin from a remote machine returned a JavaScript error message.

FB8946: CodeMeter WebAdmin: In the WebAdmin the Product Item Option description did not display for the user data.

FB8973:cmu, Windows: The option "--detect-proxy" not always returned the manually set proxy.

FB8726:CmBoxPgm: On using the communication mode SharedMemory eventually the program freezed.

FB9450: Programming-API: On creating a Firm Item the Firm Security Box (FSB) was always searched on the network.

FB9095: CmProducer: Settings changed in the dialog "Settings | Options" for "Do not allow Firm Security Boxes as programming targets" is now saved in the programming settings.

FB9017: CodeMeterIdentity: The CmIdentity applet returned a incorrect BoxKeyId in the case a CodeMeterAct license existed on the client.

FB9177: CodeMeter Samples, CmHipDemo-C#: Incorrect indexing for the logging resulted in a crash.

FB7666: CodeMeter, Samples, CmDemo: The static linking was no longer current- The Linux Makefiles in the CodeMeter Samples have been revised.

FB9382: CodeMeter Samples, WupiCalculator: The 'include' path was incorrectly set.

## ***CodeMeter 4.20***

### **Release Date**

2010-May-03

## Operating Systems

Windows, Mac OS X, Linux

## Info

FB8812: CodeMeterAct, Windows 2000: CodeMeterAct under Windows 2000 has been deactivated. That means no CodeMeterAct license can be installed or further operated on a Windows 2000 PC. The use as client on a network is still possible.

## New Features

FB7618: CodeMeter: Russian localization has been integrated into the CodeMeter Runtime.

FB7745: CodeMeter: The support of CmTalk has been removed.

FB4617: CodeMeterAct: As an option, CodeMeterAct can also be used within virtual machines (VM). This requires a special activation for the licensor to prevent an accidental use.

FB3403: CodeMeterAct: Linux 64-bit is supported.

FB3682: CodeMeterAct: Function access to the virtual CmStick, e.g. CmCrypt has been considerably accelerated.

FB8018: Runtime Installer, Windows: For the 64-bit version the Runtime Version information is additionally inserted in  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\WIBU-SYSTEMS\CodeMeter.

FB8350: Runtime Installer, Windows: On installation a check for an existing TCP/IP service is performed. In the case the service is found, the service dependency is registered in the CodeMeter service.

FB7560: Runtime Installer, Windows: On installation a check for an existing winmgmt service. In the case the service is found, the service dependency is registered in the CodeMeter service.

FB7479: CodeMeter License Server, Windows: CodeMeter.exe now holds an external manifest, i.e. when omitting the manifest in the case of a mobile use CodeMeter.exe starts in quiet mode.

FB6787: CodeMeter License Server, Linux: CmCards/CF are identified in case they are used as root devices and are ext3 formatted.

FB4734 CodeMeter License Server, Mac OS X: For Mac OS X 10.6.2 and higher the CmCard/SD is supported by the internal Apple card reader, e.g. MacBook Pro, iMac.

FB8007: CodeMeter WebAdmin: WebAdmin buttons are deactivated in case of insufficient privileges.

FB6316 CodeMeter Library, Windows: The default load address of the WibuCm32.dll has been changed from 0x20000000 to 0x67600000.

FB6820: CodeMeter Library: In case of Windows, the static libraries also hold the English error message texts and allow reading using CmGetLastErrorText / CmGetLastErrorText2.

FB7077: SDK Installer, Windows: The localized Chinese version of the CodeMeter Developer Guide is included in the installation.

FB7843: CodeMeter Installer: The new menu item "CodeMeter Command prompt" in Codemeter | Tools starts a cmd input in the user directory, extends the Path variable by the path to the Runtime/bin directory, and calls cmu32 -v.

FB5238: License Editor: The License Editor has been localized in Chinese.

FB5090: CmApiGuide: Flags to be set in CMBOXENTRY::mflSetPios are now complete.

FB6508: CmApiGuide: The result display of an issued CMBOXENTRY structure has been improved.

FB6602: CmBoxPgm: The performance in programming CmStick entries using CmBoxPgm has been improved by default deactivation of the obligatory verification check.

FB6784: CmBoxPgm: The validation of the verification sequence returned by the box after programming is now only performed on explicit user request. The commandline option /VAL requests the validation.

FB5313: CmBoxPgm: Creating and deleting of basic entries required to use a CmStick as PKCS#11 token are implemented.

FB2304: Core API: CmGetServers returns the server in the sequence of an existing server search list.

FB6687: Core API: The command CmExecuteRemoteUpdate represents a new alternative to CmSetRemoteUpdate2. It supports filtering and improves error reporting. This command identically applies to CodeMeterAct and CodeMeter hardware.

FB6485: Core API: The structure CMNETINFOUSER\_EXT now also holds the time of last access.

FB6952: Core API: On reading data the flag for Extended Protected Data is set in case this entry has a special interpretation (Usage Period, Borrow Client, Borrow Server).

FB8057: Core API, Java: The command CmGetLicenseInfo() is implemented in the Java API.

FB6414: Core API: The structure CMCREDENTIAL has been extended by the Handle Access Type.

FB 5582: .NET Core API: The Core API is now also available for Silverlight 3.

FB6601: Programming API: The performance in programming CmStick entries using CmBoxPgm has been improved by default deactivation of the obligatory verification check.

FB8607: Programming API: The support of Visual Basic 6 has been removed but available by WIBU Support on request.

FB4435: Programming API: Creating, editing, and deletion of Enable Blocks and Enable Lookup Entries is now supported.

FB6821: Programming API: The validation of the verification sequence returned by the box after programming is now only performed on explicit user request.

FB5463: Programming API: The relative update of an Usage Period is introduced.

FB7389: Programming API: The saving of given binary data in continuous areas to Hidden Data blocks now is supported. Optionally, the binary data is transferred either by a CmByteArray object, or by a file.

## **Bugfixes**

FB6497: CodeMeter License Server: Logging of the CodeMeter License Server now is written every 10 seconds into the log file.

FB6637: CodeMeter License Server, Windows: The status management of the Windows service "CodeMeter.exe" has been improved.

FB8601: CodeMeter License Server: The rare error 104 on establishing a new client connections has been removed.

FB7944: CodeMeter License Server: Information on borrowed licenses could get lost on restart of CodeMeter (server).

FB5838: CodeMeter License Server, Windows CE: The detection of CmSticks has been improved.

FB8567: CodeMeter License Server: In the future, temporarily enabled SimplePins are internally identified with an enabled status.

FB8143: CodeMeter License Server: In mobile mode the CmAct directory was created although in this mode the change of data on the computer is not allowed.

FB7398: CodeMeter License Server, Windows: Under Windows Vista and Windows 7 exceptions for the Windows Firewall are now registered in the public profile.

FB6961: CodeMeter License Server: A Terminal Server is no longer identified as virtual machine.

FB6871: CodeMeter License Server: The event log will now display again the correct remote IP address.

FB8620: CodeMeter License Server: On permanent operation under Windows XP eventually a memory leak occurred which has been removed.

FB2338: CodeMeter License Server, Solaris: The Firmware update now works correct.

FB6085: CodeMeter License Server: When licenses are multiple allocated in case of several servers and the license option station share, in the future, the search for licenses will first seek already allocated licenses and use them.

FB6119: CodeMeter License Server: Improved time response on restarting the connection to a previously shut-down CodeMeter server.

FB5985: CodeMeter License Server: Fixing an error which occurred on importing a WibuCmRaU file created on a little endian machine to a big endian machine.

FB5598: CodeMeter License Server: The search of plugged-in drives will no longer cover the diskette drive.

FB8346: CodeMeter License Server: In case a binding to an explicitly specified address fails, following a waiting period a second try is performed to consider DHCP timeout problems.

FB7548: CodeMeterAct: Using the binding scheme "B" eventually resulted in deactivated licenses in the case a laptop was alternately used with or without a docking station. The solution requires the software vendor to use at least CodeMeter Version 4.20 in order to activate licenses in Version 4.20.

FB6970: CodeMeterAct: Sporadically defect licenses on using the binding extension with third party USB dongles do no longer occur.

FB8083: CodeMeterAct: When a CodeMeterAct license was remote-updated the use required a CodeMeter restart (error 88).

FB7000: CodeMeterAct: Changes of the PC Time eventually resulted in an incorrect setting of the Box Time.

FB 6850: CodeMeterAct: Improvements in DLL reloading using Binding Extension plug-ins: these DLLs are now first sought in the plug-in directory.

FB5863: CodeMeterAct: The Binding Extension plug-ins return the feature values no longer as string but fill a binary buffer.

FB7252: CodeMeterAct: Pre-calculated activation codes (activation by phone) did not work on other PCs than the one from which the Installation-ID originated.

FB7983: CodeMeter WebAdmin: Depending on the browser used and related settings some pages in the Japanese WebAdmin were not displayed.

FB8225: CodeMeter Control Center: The return button on the borrowing tab will no longer misleadingly grayed out.

FB8273: CodeMeter Control Center: A memory leak on using the SharedMemory modes has been removed.

FB6782: CodeMeter Control Center: Also in the case of many licenses/CmSticks in the future the CmStick list will display all licenses/CmSticks.

FB5499: CodeMeter Control Center: The CmStick status in the future will be properly displayed in all cases.

FB6083: CodeMeter Control Center: The context menu will be displayed also under Vista 64-bit.

FB5561: CodeMeter Libraries, Linux: Static libraries are now also able to be linked using GCC 3.

FB6788: CodeMeter WebAdmin: When a CmAct licenses changed between status "activated" and "deactivated", the WebAdmin list of PIOs was empty until the next CodeMeter start.

FB7721: CodeMeter WebAdmin: Correction in the display of CmStick/M holding a flash memory larger than 2GB.

FB6418: CodeMeterAct: CmListRemoteUpdate2() did not always returned a serial number for CmAct licenses.

FB7759: CmDust: The language files of CodeMeterCC are now listed.

FB7969: CodeMeter WebAdmin: The detection of mobile operating systems) Windows Mobile) has been improved.

FB7970: CodeMeter WebAdmin, Windows CE: The display of the drive letter in the WebAdmin was incorrect.

FB6962: CmDust: Using ChunkSizeMode in future no warning will be issued.

FB6484: CmDust: Accessing an exclusively borrowed entry resulted in a crash.

FB8681: CmDust: Now also the values of the type REG\_MULTI\_SZ are now read from the Windows registry.

FB5948: cmu: The firmware update mode "cmu --firmware-update" will function again.

FB6466: cmu, Mac: The return of the local IP address of "cmu -k" under PPC Mac was incorrect.

FB8245: cmu: The command cmu --borrowlist returned a list where eventually some client licenses were missing.

FB6051: CodeMeter Installer, Windows: The CodeMeter SDK Installer will now include the setting of the environment variables %CODEMETER\_SDK% and %AXPROTECTOR\_SDK%.

FB5826: CodeMeter Installer, Windows: CodeMeter SDK: The CmRuntimeMerger64.msm package could not be installed within a Visual Studio Installer project.

FB5707: CodeMeter Installer: The file WibuCmHipJni64.dll was not replaced on an update installation.

FB8645: CodeMeter Installer: The Chinese translation has been intergrated in Wise.

FB8246: License Editor, Mac OS X: Now remote programming is also supported for PowerPC.

FB3226: CmApiGuide: The tab CmGetServes() has been completed.

FB3312, 5312: CmApiGuide: Also the repeated calling of encryption blocks in the CmApiGuide in the future will return correct results.

FB2093: Cm ApiGuide: The results of a CmGetInfo (CM\_GEI\_ENTRYINFO) did not display whether a Usage Period has been set.

FB4347: Cm ApiGuide: The generated code for CmCryptSim in Java and C# was not complete.

FB5905: CmApiGuide: For CmGetBoxes() the port constant for CodeMeterAct (CM\_GB\_ACT) has been completed.

FB5907: CmApiGuide: CmGetBoxes() will in future display the complete CodeMeterAct-Box-Mask.

FB4600: Cm ApiGuide: For the function CmSetCertifiedTimeUpdate non-working code for Delphi was created.

FB6509: CmApiGuide: Non existing Product Item Options misleadingly were displayed as "0".

FB5138: CmApiGuide: In the CmApiGuide in future the key combination Ctrl + H will open the history page.

FB8236: CmBoxPgm: When programming a Borrowing Client license the CodeMeter License Server crashed.

FB4748: Programming API: Adaptations have been made in reference to changed names of CodeMeterAct parameters.

FB8024: Programming API: Context \*.RaC files originating from a CmStick with CodeMeter firmware <1.08 are now separately dealt with. When the validation mode has been activated a firmware problem resulted in a failure of decryption operations and an error is returned.

FB7942: Programming API: Product Item Text and User Data are now also editable without a FSB in the case of CmSticks with the Firmware 1.05.

FB8213: Programming API: An Delphi adaption now consistently uses Unicode only (Wide Strings).

FB7912: Programming API: The support of CodeMeter hardware using Firmware <1.10 has been improved.

FB5906: Programming API: The exception handling of initialization using corrupt Context files or files of a wrong file type has been improved.

FB5359: Programming API: The return value of CmByteArray::SetData() in the C++ wrapper now works correct.

FB4326: Programming API, Java: The calling of CmBoxProgrammer.createRemoteContext resulted in a crash.

FB2397: Programming API, Java: The methods From/ToStdString and From/ToStdWString of the CmString classes are supported (Linux/Windows). However, there exist only a CmString constructor which includes a Java string as parameter. This Java string is required to be coded in Unicode.

FB6927, 6928: CmBoxPgm: When setting an ActivationTime or an ExpirationTime only time specifications before January, 1st, 2100 00:00:00 UTC are accepted.

FB6351: CmBoxPgm: Programming License Borrowing entries now mandatory requires the CodeMeter Firmware 1.10 or higher.

FB7942: CmBoxPgm: The PIOs Product Item Text and User Data are now editable also for CmSticks with Firmware 1.05 without Firm Security Box (FSB).

FB 6811: Core API: The member of the structure CMCREDENTIAL mulEpireTime has been renamed to mulExpirationTime.

FB 6337: Core API, Java: The commands for a CodeMeterAct activation (CmActLicenseControl etc.) has been implemented.

## ***CodeMeter 4.10c***

### **Release Date**

2010-Jan-20

### **Operating Systems**

Windows, Mac OS X, Linux

### **New Features**

FB7495: Windows: The CodeMeter Runtime has been localized in Spanish.

FB7533: Windows: The Runtime Installer has been customized to the Spanish localization.

### **Bugfixes**

FB7397: Windows Vista, 7: A fix in the WibuCm32.dll re-enables CmAccess to work reliable on Windows 7 and Vista.

FB6826: CodeMeterAct: The programming of Usage Periods for a license longer than 49 days were not correctly supported.

FB7150: Mac OS X: The version number of the Kernel extension now is correctly displayed.

FB7494: Linux64-Bit: The file libWibuCmWeb64.so was missing under Linux 64-bit.

FB7491: Linux64-Bit: The Java plug-in for remote activation in the browser did not work.

FB7392: CodeMeterAct: On using the binding scheme "SER" the installation-IDs differed for different PCs. Now the behaviour is correct, and allows the precalculation of activation codes.

## ***CodeMeter 4.10b***

### **Release Date**

2009-Oct-19

### **Operating Systems**

Windows, Mac OS X, Linux

## **New Features**

FB3861: CodeMeter SD/CF-Cards are now also supported under Linux. Requirements are that the CodeMeter License Server (CodeMeterLin) runs with root privileges or has read/write access to the respective /dev/sg\* /dev/sd\* device. Currently, hotplug mechanisms for SD/CF-Cards are not implemented.

FB6135: CodeMeter License Editor: Now localized in Chinese.

FB5663: CodeMeter Control Center: By default, the entry for deleting a CodeMeterAct license now is created in profiling allowing for a simple activation. In the case of an installed SDK, the delete-button is active, otherwise not active.

## **Bugfixes**

FB4765: CodeMeter License Server, Mac OS X: The CodeMeter License Server eventually crashed when on disconnecting a CmStick it was simultaneously accessed. Therefore the "Eject" button was removed from the CodeMeter Control Center. A CmStick now must be disconnected by using the Finder, or desktop functions.

FB5956: CodeMeterAct: After a PC crash a license eventually became invalid and had to be reactivated.

FB6082: CodeMeter Installer: Display errors in the French installation programs have been removed.

FB6004: CodeMeter Control Center: In the case one tries to import a file while the CodeMeter Service is stopped, now an instant error message displays and a long waiting time is avoided.

FB6132: CodeMeter Control Center: The Japanese localization has been completed.

FB5818, FB5917: CodeMeter WebAdmin: The Chinese localization has been completed.

FB5540: CmProducer, Linux 64-bit: The CmProducer v. 4.10 could not be started on Linux 64-bit.

## **CodeMeter 4.10a**

### **Release Date**

2009-August-31

### **Operating Systems**

Windows, Win CE, Mac OS X

### **Bugfixes**

FB4318: On installation the proxy settings are automatically completed in WebAdmin. This to provide for accesses to the time server or for firmware updates without manual configuration.

FB5595: CodeMeter License Server: In the case that the network cable is plugged off, CodeMeter stays active and stable even when licenses are searched in the network.

FB5506: CodeMeter License Server: In rare cases the search for network licenses blocked the local CodeMeter License Server over a lengthy period if no additional network server was available.

FB5530: CodeMeter License Server: Under certain circumstances CodeMeter License Server crashed on calling CmGetBoxes().

FB5596: CodeMeter License Server: In license borrowing the server name is saved to the Client CmStick. In some network configuration settings this results in problems. Now WebAdmin allows for the setting that the IP address is saved instead of the server name.

FB5610: CodeMeter WebAdmin: The usability of license borrowing in WebAdmin has been improved.

FB4833: CodeMeter Control Center: The QT library has been updated in order to prevent a sporadically occurring CodeMeter Control Center bug on OS X.

FB5611: CodeMeter Control Center: The French localization of CodeMeter Control Center has been repaired.

FB5423: CodeMeter Control Center: The events were not displayed as long after the start no CmStick was connected.

FB5353: CodeMeter API Guide: The Chinese localization of CodeMeter Control Center has been revised.

FB5500: .NET API: Now CmGetRemoteContextBuffer / CmSetRemoteUpdateBuffer also work with CodeMeterAct

FB5647: .NET API: The policy.3.31.WibuCmNET.dll file is correctly installed.

FB5496: CmCard/CF support for WinCE 5.0 and WinCE 6.0 if the CmCard/CF is connected via an internal ATA/SATA interface.

FB5788: Mac OS X: During installation of kernel extension kext.3G an error occurred. It worked properly but the installation was marked as erroneous.

FB5790: Mac OS X: The kernel extension kext.3G can now also be used on Mac OS 10.6 together with 64bit kernel K64 on Xserve computers.

FB5791: Mac OS X: The kernel extension kext.5G can now also be used on Mac OS 10.6 together with 64bit kernel K64 Xserve and Mac Pro computers.

FB5800: Mac OS X: On Mac OS 10.6 the CodeMeter control panel supports also 64bit.

## **CodeMeter 4.10**

### **Release Date**

2009-August-12

## Operating Systems

Solaris

### Bug Fixes

FB2338: Now the firmware update of a CmStick also works under Solaris.

Improved CmStick on-start detection on heavy loaded systems.

## CodeMeter 4.10

### Release Date

2009-August-06

### New Features

FB3860, FB3861, FB3862: The new hardware from factors CmCard/CF (CF-Card) and CmCard/SD (SD-Card) are now supported by the operating systems Windows, Windows CE and Linux.

FB5378: CodeMeter License Server: The performance in case of invalid entries in the server search list has been improved.

FB3724, FB4464: CodeMeterAct: The new binding schema "IP-Address" has been added. It allows to bind the license to the IP Address by which CodeMeter License Server is addressable from the network.

FB3679, FB4223, FB4339: CodeMeterAct: The new binding schema "Custom" has been added. It allows the binding to customer-specific features.

FB75, FB3869: CodeMeterAct: The product identification is no longer case sensitive.

FB4821: CodeMeter Control Center: The new button "Revalidate license" has been added. It allows to start a re-interpretation of the binding schemes in case of deactivated CodeMeterAct licenses. This is useful in particular when using the binding scheme "Custom".

FB4082: cmu: License Borrowing now is also available in the commandline tool cmu.

FB4067: cmu: The functionality CmDustConsole.exe has been transferred to the commandline tool cmu. The option "`--cmdust`" allows to query a variety of information. This functionality is now available for all operating systems supported by CodeMeter.

FB3112: cmu: The import of all CodeMeterAct file types (empty license container, remote updates and Firm Item templates) and the creation of CodeMeterAct remote context files is now supported.

FB3731: cmu: The option "`-v`" to read out version information is now also available under Windows.

FB5238: CodeMeter License Editor: A new localization in Chinese is available.

FB3149: For Sun Solaris now a 64-bit installer exists.

FB3535: Core API: The command CmCheckEvents now is also implemented for Linux.

FB4750: Core API: The new function CmRevalidateBox() allows for a regular check of the Host-ID in case of the binding scheme "Custom".

FB16, FB3672: .NET Core API: Now .NET Compact Framework on Windows CE is supported.

FB70: .NET Core API: License Borrowing now is also supported by the .NET Core API.

FBFB4102: Programming API: The Programming API supports the new hardware form factors CmCard/CF, CmCard/SD and CmCard/μSD.

FB3809: Programming API: The Programming API supports reading out and programming of Customer Owned License Information (COLI).

FB3540, FB3541: Programming API: The specification of a CodeMeterAct Product Major ID using CmActParamSet::SetProductIdMajor() now is optional. Unless specified otherwise the string "0001" is set as Product Major ID.

FB3485: Programming API: The Programming API is now independent of the STL and thus independent of the gcc version installed of a Linux system.

FB11: Programming API: The Programming API now supports the programming of borrowing entries.

### **Information**

FB3646: The CodeMeter functionality is not available when using Kext5G, when the user is not logged in, or when the CmStick is "ejected". Thus Kext5G is not suited for operation on a server. Install Kext3G instead.

### **Bugfixes**

FB3526: CodeMeter License Server: The exit time has been improved.

FB5094: CodeMeter License Server: A remote update of a license now also works with borrowed licenses as expected.

FB4112: CodeMeter License Server: CmAccess() (without force) worked defective when several enabling blocks were set to a single Product Item.

FB4094: CodeMeter License Server: In the case a serial number was specified for CmAccess, a stationshare access eventually accessed the wrong CmStick.

FB4086: CodeMeter License Server: The return of a borrowed license from a different PC eventually did not work.

FB5288: CodeMeter License Server: Under Mac now in all cases license borrowing entries are realized via profiling.

FB4736: CodeMeter License Server: In the case expired borrowing licenses were re-borrowed and then returned error 200 was issued.

FB4065: CodeMeter License Server: CmAccess() did not return valid handles when an entry with activated SimplePin was accessed.

FB5152: CodeMeter License Server: Problems with deactivated CmSticks on PCC Macs have been corrected.

FB4137, FB4138: CodeMeter License Server: In the case the internal Extended Protected Data field 131 was set in the Firm Item 0, this entry was interpreted as license borrowing.

FB5144: CodeMeter License Server: Enabling on Big Endian Machines (Mac PPC) partly did not work correctly.

FB4145: CodeMeterAct: In the case of CodeMeterAct licenses activated usage periods were set to 0 when CodeMeter License Server was restarted.

FB4751: CodeMeterAct: Improved error message when attempting to use CodeMeterAct on PCs which do not support CodeMeterAct (currently Lin/64bit, Mac/PPC, Solaris, WinCE)

FB5166: CodeMeterAct: An error was fixed which in some cases lead to the incorrect function of the binding scheme Disk.

FB4856: WebAdmin: The restore function of CodeMeter Backup now supports all established browser.

FB4244: WebAdmin: Display errors in Japanese have been fixed.

FB4627: CodeMeter Control Center: License borrowing entries of the Borrowing tab are now refreshed, when the refresh button is clicked, or the Borrowing tab is selected.

FB5244: CodeMeter Control Center: Starting CodeMeter Control Center also started CodeMeter License Server as a service despite of a local configuration via CodeMeter.ini.

FB3683: CodeMeter Control Center: Now in the communication type Shared Memory WebAdmin and the related menu item are not visible.

FB4474: CmBoxPgm: The option /cau did not work correctly for Product Code 0.

FB4548: CmBoxPgm: In CmBoxPgm command files now may hold specified command lines which exceed the length of 32 kByte.

FB5392: CmBoxPgm: Borrowing entries are now correctly created also on platforms with Big Endian Byte Order

FB4676: CmBoxPgm: The attempt to program an enabling block set to "Disabled" in the IFI with CmBoxPgm, resulted in Error 53 (FI locked).

FB4444: CmConfigDisk: The duration to build up the list of all available CmSticks has been considerably reduced.

FB4363, FB4430: CmConfigDisk now is also able to configure CmSticks of the new generation with serial numbers 2-xxxxxx as "Removable Device".

FB5127: CmConfigDisk now also runs under a non-privileged user.

FB2080: License Editor: The numeric fields now accept only valid values.

FB3827: CmApiGuide: The Chinese language setting has been repaired.

FB2146: The SDK-Installer can now be executed without an error message in the case no .NET framework exists. The explicit de-selection is no longer required.

FB3829: In Mac Installer the CmFirm.wbc was created holding incorrect privileges.

FB3740: The runtime merge module 64-bit could not be merged into the Visual Studio Installer.

FB4764: Core API: CmGetRemoteContext / CmSetRemoteUpdate functions are now able to handle CodeMeterAct files.

FB5399: Core API: CmGetRemoteContextBuffer() at times returned wrong information.

FB4536: Core API: CmSetCertifiedTimeUpdate() now works via FirmItem access also on a CmStick in a network.

FB5058: Core API: When specifying a server name as URL which does not exist using CmAccess2() within the ACCESS structure now the error message "ServerNotFound" is issued instead of searching for another matching server.

FB4705: Core API: CmGetBoxContents now also correctly considers the flag CM\_GBC\_USELOCALTIME.

FB4665: Core API: On CmAccess() the Firm Precise Time was not co-checked resulting in a possible invalid access.

FB3813: Core API: CmCheckEvents() returned no event when connecting CmSticks under MacOS.

FB5049: .NET Core API: The localization of the merge module for the WibuCmNET.dll has been switched from "English" to "Neutral".

FB5157: Programming API: The C interface has been customized for the use in the Borland C++ Builder.

FB2397: Programming API: Under Java mutated vowels and characters in other languages are now correctly programmed in the CmStick when available in format Utf8.

FB4148: CmIdentity: Web authentication now also works under Vista using the Internet Explorer and CodeMeter in SharedMemory mode.

## **CodeMeter 4.01**

### **Release Date**

2009-April-09

### **New Features**

FB3006: On a Mac, now using KEXT 5G with a CmStick/M simultaneous access to the DRM part and the flash memory is possible.

FB3061: Super floppy support with Kext.5G detection on a Mac is available.

FB8: In future WebAdmin will display License Borrowing licenses.

FB15: In case a false WibuCmRau file is imported, now a more detailed error message will be issued.

FB3613: CmDust: display of License Borrow information.

FB101: CodeMeter License Server creates a new log file when the old log file size reaches a certain size.

FB10: Protected Windows applications now run under Linux using Wine ProgramLoader.

FB7: CmBoxPgm now supports the programming of License Borrowing entries. Using the new option /BLC creates, modifies, and deletes client-sided Borrow entries. The option BLS supports the programming of server-sided Borrow entries.

FB3040: CmBoxPgm now supports the extended WibuCmRaU format. Now, next to the data required for programming also the original value of the Firm Update Counter of the respective Firm Item is saved in the update file.

FB19: CmBoxPgm: All Enabling options supported by CmBoxPgm now may be also processed using CmFAS (Option /RA).

FB3172: CmAccess now reports occurring network errors in greater detail.

FB3228: CmGetInfo(... CM\_GEI\_VERSION, ) now also recognizes version "Windows 7".

FB174: Deactivated licenses require CmAccess()/CM\_ACCESS\_FORCE to be accessed. This is a change in default behavior.

FB3045: Java Core API: The Java API was extended by the License Borrowing functions.

FB3200: The CMBOXENTRY structure has new flags to detect Borrow licenses (CM\_GF\_BORROWCLIENT, CM\_GF\_BORROWSERVER & CM\_GF\_LICENSEQUANTITY).

FB3083: Programming API: The new extended WibuCmRaU format now is supported. Now, next to the data required for programming also the original value of the Firm Update Counter of the respective Firm Item is saved in the update file.

FB3114: Programming API: Now the programming of CodeMeterAct licenses is supported.

## **Bugfixes**

FB3645: The Kernel extension of the 5th Generation (Kext.5G) now allows the simultaneous access to security functions and the flash memory. CmSticks detection requires that a user is logged in. For operating as license server without user logon Kext.3G is to be used, this allows the access to the security functions even without logon.

FB3261: Now update of CmAct licenses by double-clicking in the Explorer works.

FB3010: In the allocation order of CM/CmAct licenses earlier expired TimePin Enabling Blocks were not considered.

FB3022: CodeMeter now intermediately saves results of a network search for a short time.

FB3335: Explaining of CmCalculateSignature() in the CodeMeter Core API help was improved.

FB3300: Dispensable help files in the CodeMeter SDK were deleted.

FB3196: CmApiGuide: A deficient handling of unknown error codes in CmApiGuide was corrected.

FB3232: Core API: CmGetLastErrorText() now does not overwrite the internally set LastErrorCode.

FB3341: Core API: Bugfix in CmGetInfo(CM\_GEI\_NETINFO\_CLUSTER)

FB3065: Explicit TCP/IP Binding to Mac now works.

FB3345: CmBoxPgm: On programming in SharedMem mode under certain conditions error CM100 occurred.

FB3070: CmBoxPgm: The error 2005 on option /EDET has been corrected when a PI reference is specified.

FB3706: CmProducer: Due to an error now corrected, changing a product data record resulted in a change of the related product configuration. Specifications of the product were overwritten.

FB3366: Programming API: The methods CmBox::TotalMemorySize() and CmBox::UsedMemorySize() returned a correct value only when CmBox::FreeMemorySize() was called before.

FB3383: Programming API: On reading a context file an unneeded CmAccess was issued on the CmStick which generally was not connected which lead to error 201.

## **CodeMeter 4.00a**

### **Release Date**

Windows: 2008-Dec-19

### **All Operating Systems**

- CodeMeter / Java
  - Bugfix #1356 – using method CodeMeter.cmDecryptPioData() the result was not transferred.
- WebAdmin / Japanese
  - Bugfix #1381 - page 'content' held wrong characters on using the Internet Explorer.
- CodeMeterCC / French
  - Translation improved.

### **Windows**

- CodeMeter Runtime Server
  - Bugfix #1363 - Import of a CmAct activation file into a FAT file system returned error 264.
- CodeMeter DLL (WibuCm32.dll)
  - Bugfix #1372 – Despite existing CodeMeter.ini file data was nevertheless written to the registry.
- CmRmtAct[32|64].dll
  - Bugfix #1340 – On creation of a context file from several CmSticks using the shell extension the file at times held only a single CmStick entry.
  - Bugfix #1376 - CmRmtAct.dll on error exception always returned error 0.

## **CodeMeter 4.00**

### **Release Date**

2008-Dec-02

### **All operating systems**

- CodeMeter Runtime Server
  - integration of the software-based copy protection system called CodeMeterAct
  - support of the new CmStick (Release 2008-Oct-28) with license memory more than 64 KB
  - improvement of USB communication with the CmStick, especially in exception handling at bus level
  - improvements in exiting CodeMeter.exe
  - bugfixing of two memory gaps
  - improvements related to CmStick detection and hotplug
- CodeMeterCC
  - new graphical user interface (GUI) with adjustments for CodeMeterAct
  - redesign of GUI to achieve better usability and clearness
  - CmFAS including support for activating CodeMeterAct licenses
  - support of import and drag & drop of files (CodeMeter license files)
  - improvement of "eject" CmStick function under Windows
  - new function under Windows for mobile-LastExit handling (UseMobileHandling)
  - improvement of firmware updating process and support of new CmSticks (Release 2008-Oct-28)
  - enhancement of output scope of the event log
- cmu
  - enhanced output on listing CmStick contents
  - bugfixing for firmware update related to the network proxy
- Bugfixes
  - 900, 1027, 1030, 1042, 1044, 1094, 1123, 1124, 1125, 1127, 1136, 1152, 1067, 1068, 1172, 1174, 1205, 1228, 1245
- WebAdmin
  - revised, in particular improved language support and internationalization
  - enhancements in support of CodeMeterAct licenses
  - asteriks on "start as server" removed – the current CodeMeter does not require a restart
  - bugfix in CmTalk test page: in case the ProxyPort was void, the page did not work (JavaScript problem)
- WibuCmNET

- bugfixes
- new, easy-to-use interfaces
- CodeMeterAct specific classes and methods

## Windows

- Installer
  - user help in separate merge module, and as an option able for switch deactivation
- CodeMeterCC
  - Bugfixing of screensaver and CardSpace conflicts

## Mac

- revised CodeMeter Uninstaller, especially support for CodeMeterAct licenses and language support ger/fr
- added CodeMeter applet for system control for central configuration
- improved Launch-support to start CodeMeter as a system service
- enhanced cmu for improved output of version information on installed CodeMeter files
- supporting of Snow Leopard (Build 10A190)

## Linux

- packages exempted from dependency to libstdc++
- special packages for cc4 vs. gcc3 support are now omitted, the current installation packages now support both
- 64bit installation packages now include 32bit support and consider the directories /usr/lib and /usr/lib32
- support of current distributions, such as, Ubuntu 8.04, Fedora Core 9 etc.
- some small improvements for supporting 64bit distributions, in particular by reduced system dependencies
- adjusted USB hotplug rules for SuSE 11.x
- bugfixing especially for SLES 10/64bit on starting the daemon after reboot and coldplug
- enhanced cmu for improved output of version information on installed CodeMeter files

## Developer

- C/C++ CM-Core-API
  - CodeMeter.h now includes preprocessor version information CODEMETER\_VERSION
  - new API command CmActLicenseControl() included
  - API command CmGetBoxes() limited to 800 boxes
  - API command CmGetBoxInfo() enhanced by CodeMeterAct relevant functions

- API command CmGetBoxInfo() enhanced by function CM\_GEI\_MEMINFO2
- API command CmGetBoxes() enhanced by CodeMeterAct selection  
CM\_GB\_ACT
- API command CmGetInfo() CM\_GEI\_BOXSTATUS enhanced by  
CodeMeterAct status information
- introducing CodeMeterAct specific error codes 260-270
  
- Java-API
  - CodeMeter.jar
    - enhancement of CMBOXSTATUS structure by Enabling-Status as Boolean
    - CodeMeter.jar now includes the option for version query
      - `java -jar CodeMeter.jar -v`
  
- CmApiGuide
  - support of WUPI functions in a separate tab
  - bugfixes in the display of ProductItemOptions
  - use of standard Windows Icons
  
- CmProducer
  - revised "Execute Order"
  - warning when FSB has been selected as target
  - additional application setting "Do not allow Firm Security Boxes as programming targets" introduced
  - Bugs fixed:
    - Bug #1097: CmProducer adds dependencies dsu to ProductItem Text in WibuCmRaM file
    - Bug #1162: Package contains two products for the same PI -> two PIs will be created
    - Bug #1204: Option "Replace Firm Item" must be deactivated with Remote Programming
    - Bug #1220: Error 1001 in CmProducer using CmFAS and path to RaC-file with umlauts
  
- CmBoxPgm
  - revised command line parser, ""\ sequences now are required only in special cases
  - supporting CodeMeterAct
  
- WibuCmHipApi
  - implementation of the methods CmBox::FreeMemorySize(), CmBox::UsedMemorySize() and CmBox::TotalMemorySize() now fall back on the API function CmGetInfo(CM\_GEI\_MEMINFO2). Now these methods also support CmSticks with Samsung controller
  - interface modification: Method CmDateTime::FromSecondsSince2000Jan01Utc() now checks whether the argument resides within the value range supported wbslib, and returns a corresponding error code.

- bug #1086: So far the Reserved Firm Item entries of a RaC file were not considered when building the Firm Item table which indirectly contributed to the CmLicenseEditor problems as specified in bug #1086.
- bug #1114: Copy constructor of class PioParamSet.
- bug #1224: After execution of a RaU file, the access modes in the CmStick are not the same like in the RaM file
- CmLicenseEditor
  - now also as version for Mac/Linux operating systems

## **CodeMeter 3.30b**

### **Release Date**

2008-Jul-11

### **All Platforms**

- CodeMeter Server
  - Bugfix #1123: A subsystem access handle pointed to a wrong subsystem, if CodeMeter itself ran as network server.
  - Bugfix #1124: If the server name was given when calling CmAccess2(), the access didn't work.
  - Bugfix #1127: The server search list was internally always sorted according to IP addresses.
  - Bugfix #1134: Disabled entries were ignored in the license allocation sequence using CmAccess().
- SDK
  - Bugfix #1138: Static libraries for VC6 now include the following functions:
    - CmGetRemoteContextBuffer()
    - CmSetRemoteUpdateBuffer()
    - CmListRemoteUpdateBuffer()

### **Linux**

- Bugfix in cmu: correct display of version information on SuSE/64bit.

### **Windows**

- Installer
  - Bugfix #1111: Calling WUPI help from the program group displayed the CM API help.
  - Bugfix #1099: Windows x64 installation failed with with error 2318, because WibuShellExt.dll could not be deleted.
  - Bugfix #1012: CodeMeter kept on running after uninstallation.
- CodeMeter DLL
  - Bugfix #1108: Autostart did not work with ApiCommunicationMode=2.

- Bugfix #1136: Eliminated unnecessary waiting time of 10 seconds during startup of the CodeMeter service via CodeMeterCC.
- CmIdentity ActiveX Control
  - Bugfix #1129: Improved the error handling.
  - Bugfix #1075: Uninstaller did not delete the "CodeMeter" group from "Programs".

## **CodeMeter 3.30a**

### **Release Date**

2008-May-06

### **All Platforms**

- CodeMeter Server
  - Bugfix: Proxy settings for a firmware update are now effective at once. No restart of CodeMeter is necessary.
- CodeMeterCC\_en.qm
  - Superfluous file 'CodeMeterCC\_en.qm' was removed from the Runtime\bin-folder.
- cmu
  - Bugfix output when using option '-k'.
  - Bugfix FieldUpdate with proxy is now working.
- WebAdmin
  - Options for changing the password were removed from all languages (CN/FR/JP/IT).
- CodeMeter JNI library (wibucmJNI)
  - Bugfix in CodeMeter.cmProgram(CMPROGRAM\_UPDATE\_PRODUCTITEM).

### **Windows**

- Runtime Installation
  - The runtime installer now stops, if an SDK is already installed. This circumvents incompatibilities with wrong security libs.
- CodeMeter.h
  - Was extended for the usage of static VC9 (Visual Studio 2008) libraries.
  - Support of Borland C/C++.
- CodeMeter Server
  - Support of the shared memory API communication mode (no TCP/IP).
- CodeMeter Control Center
- Japanese language support was improved.

### **Developer**

- CodeMeter.jar

- New method to read a CMUSAGEPERIOD from a CMENTRYDATA object: CMUSAGEPERIOD.readFrom(CMENTRYDATA).
  - The return value type of method CodeMeter.cmGetInfo(CMCREDENTIAL) was changed from 'int' to 'boolean'.
- CmJavaApiHelp
  - Revised and updated.
- WibuCmHipApi
  - Bugfix: Reading a Remote Activation Context containing Product Items with Usage Period PIO now works.
  - Bugfix: When creating a Firm Item in remote activation mode internally a wrong Firm Item type was used afterwards. As a result further programming operations like the creation of a Product Item within this Firm Item failed.
  - Calling CmFirmItemProgrammerImpl::Update() resulted in a crash, if the Firm Item did not exist and fAutomaticAdd was set to false.
  - When reading a Remote Activation context the decryption of Hidden Data PIOs sporadically failed with error 9001.
  - When reading a Remote Activation context the validation of Signed List data failed, if the FSB was not connected locally.
  - Linux/Mac OS X: In the special variant of the Remote Activation mode, where a CmByteArray object is used, only part of the update date where written into the CmByteArray object.
- Import library for Borland C++.
- New: Static lib for VC9 64-Bit (WibuCm64StaticV9MT.lib)
- CodeMeter.h
  - Adapted for new libraries:
    1. Borland C++
    2. VC9 / 64-Bit
- CmApiGuide
  - EncryptionCodeOptions of CMAUTHENTICATE in all programming languages.
  - Correction of the screen layout for MAC.

## **CodeMeter 3.30**

### **Release Date**

2008-Feb-15

### **All Platforms**

- All user input may be given in **unicode** characters. For example the CodeMeter password or the CmStick name may contain Chinese characters. This is true for programs with a graphical user interface like the CodeMeter Control Center as well as command line tools like CmBoxPgm.
- The **UDP waiting time** (the waiting time while searching for CodeMeter servers in the network) was optimized, die performance improved.
- Enabling and CM-FAS are now possible without usersite security module.
- **CodeMeter Control Center** improvements:

- For a firmware update the CodeMeter password is needed. But now the default password "CodeMeter" is tried automatically.
- New features:
  - Eject the selected CmStick.
  - Let blink the selected CmStick.
  - CM-FAS (import of CmStick remote update files) with progress bar.
  - Tray icon with status text. It displays the number of plugged-in CmSticks.
  - Cancelling the CodeMeter service is only possible with sufficient rights.
  - Update certified time for all connected CmSticks.
- New **CodeMeter Universal Support Tool cmu** for all supported platforms.
  - List and test connected CmSticks.
  - Display the versions of installed CodeMeter components.
  - CM-FAS and Enabling can be performed from the command line and hence integrated into batch files.
  - Network search for CodeMeter servers.
- New and improved **API commands**.
  - CmAccess2(). Extension of CmAccess() providing more possibilities such as setting the minimal version of the hardware, setting fix values for the server timeouts, setting of application specific values.
  - CmConvertString(). Helper function for the conversion of strings between different encodings.
  - Extension of the CMBOXENTRY structure by ProductItemReference.
  - CmGetInfo() provides more information, e.g. the new CMNETINFOUSER\_EXT structure, which contains information about allocated licenses and includes the extended information handled by the CmAccess2() function.
  - CmGetLastErrorText2() allows the retrieval of error messages in a given encoding.
  - The new Cm\*RemoteBuffer() functions of the CM-FAS API share the same functionality as the old Cm\*Remote() functions but use a memory buffer instead of a file.
  - CmGetServers(CM\_GS\_REMOTE\_SERVERS\_ONLY) returns name/IP-address only of remote CodeMeter servers.
- **CmBoxPgm** improvements:
  - Simplified deletion of Product Item Options by just appending a "-" to the options.
  - Option -plq for the programming of the License Quantity replaces the deprecated Option -pnwc (but -pnwc still works).
  - Support of the Customer Owned License Info (-pcoli) and the Usage Period (-pup).
- **CmProducer** improvements:
  - Table view with search bar for data records.
  - Extended search dialog for executed orders.
  - A modification of the Feature Map is now possible.
  - The Firm Access Counter can be defined.
- **CmTalk** improvements:
  - Support of the Usage Period.
- Better detection and fixing of communications problems on the USB layer.

## Windows

- Improved support of CmSticks with flash memory and two partitions (dual lun).
- New graphical tool **CodeMeter License Editor** for easy programming of CmSticks.
- Better CmStick detection in a VMWare for CmSticks with or without flash memory. A field update cannot be performed in a VMWare.

## Linux

- CmSticks without flash memory are no longer mounted as disks on the desktop (no automount).
- CodeMeterLin now supports up to 1024 SCSI devices or CmSticks.
- Support of OpenSuSE 10.3, SLES10 64 bit and RHEL 4/5.1.
- New default directory for backups (/var/backups/CodeMeter).

## Mac

- Experimental support for CmSticks with flash memory. Therefore the options "Customize" and then "Kext.4G" have to be chosen during installation.

## **CodeMeter 3.20.503 Mac**

### Release Date

2007-Sep-25

## Mac

- Two modes of CmStick communication:
  - Kernel-extended (kext ver.3G) - default, no mass storage support
  - Apple USB mass storage kext (only for 32-bit systems up to Tiger)
- FieldUpdate now available
- CodeMeter with new features, for instance:
  - change box name
  - FieldUpdate
  - bug fix in CM-FAS for serial numbers > 2<sup>31</sup>
  - enabling/disabling per CodeMeterCC
  - CodeMeterCC now localized (de/fr/it)
- Extended event logging in CodeMeterCC
- Improved communication between CodeMeterCC and CodeMeterMacX
- Improved USB communication
- Fixed stability problems
- Support of Mac OS X 10.5 (Tested on Leopard Beta Build 9A466)
- CodeMeterMacX support for UsagePeriod
- CmBoxPgm support for CM-FAS and UsagePeriod

- Includes now Java CM-API functions for the programming of CmSticks
- Native Uninstaller included in DMG package

### ***CodeMeter 3.21.500 Linux***

#### **Release Date**

2007-Sep-09

#### **Linux**

- Supports additional distributions: SLES 10, SuSE 10.2, Mandriva Spring 2007, Ubuntu 7.04, Fedora 7
  - full support for gcc3 and gcc4 based distributions
- Improved stability
- Bugfixes

### ***CodeMeter 3.20c***

#### **Release Date**

2007-Aug-29

#### **Windows**

- This release provides the following bug fixes:
  - On multi-processor systems exhaustive usage of CodeMeter Api calls could lead to a crash of WibuCmXX.dll.
  - If a server search list was configured an additional but incorrect server entry was added at the end. Depending on the system configuration this could lead to long timeouts.

### ***CodeMeter 3.20b***

#### **Release Date**

2007-Jul-27

#### **Windows**

- The CodeMeter API now also supports the programming of CmSticks under Java.
- This release provides a couple of bug fixes:
  - Under Vista right clicking a CmFAS file resulted in a crash of Windows explorer.

- While upgrading from CodeMeter 3.10 to 3.20 the ShellExtension was not updated correctly.
- An Error 103 occurred during longer intermissions of the communication.
- The access to a CmStick in the rarely used File I/O mode did not work correctly under Windows Vista.
- In the CodeMeter JNI-library incompatible name changes in the CMACCESS structure were undone.
- The API function CmCheckEvents did not work correctly under Vista.
- If a Firm Item was programmed and accessed simultaneously a crash of CodeMeter could happen.

## ***CodeMeter 3.20a***

### **Release Date**

2007-Mar-27

### **All Platforms**

- Bugfix CodeMeterCC: Application sometimes stopped if a disabled CM-Stick was plugged in
- For CodeMeterCC and CodeMeter the English translations were improved
- Improved CmApiHelp.chm (online help)

### **Windows**

- Improved language localizations for LicensorCenter and AxProtectorGui
- CodeMeter.exe now also deactivates the firewall for CodeMeter on Windows XP x64
- CodeMeter.exe now correctly rebuilds the internal entry list, if a CM-Stick is enabled or disabled or if several temporary enabled CM-Sticks are plugged in
- Depending on the CM-Stick hardware used the 'Low Level Rescan' is no longer available for CM-Stick/M 1024/2048, because the hardware itself already provides a repair mechanism

### **Solaris**

- Service configuration improvements: Restarting of the CodeMeter service via 'svcadm refresh codemeter' works now

## **CodeMeter 3.20**

### **Release Date**

2007-Mar-09

### **All Platforms**

- The Password Manager with new graphical user interface and various themes improves the usability
  - Automatic learning and filling of application dialogs (only Windows)
  - Support of the Mac OS X keychain via keychain bridge
  - Firefox plug-in for Mac OS X and Linux
  - New design with tree view
  - Settings like position and coordinates of the main window are saved
  - Exception list for domains and processes can be modified
  - The preferred browser can be configured
  - Password Manager is now a separate product with its own installer on all platforms
- The CodeMeter ControlCenter now allows:
  - Selective hardware information for a CM-Stick
  - Selective enabling/disabling of a CM-Stick
  - Modifying the CM-Stick name
  - CM-FAS Update
  - Update of a CM-Stick with new firmware
  - Enhanced language support: de/en/it/fr/ha/ja/zh
  - Multi-user support, especially for fast user switch on Mac OS X
- Support of terminal server licences
- Improved Java support
- Java trigger supports transaction ID
- WebAdmin with multi-user support
- Bug fix in access control list
- Support of usage period

### **Windows**

- Support of Windows Vista
- CodeMeter is started as service by default
- CodeMeter is separated into a service and a graphic user interface (CodeMeter ControlCenter)
- Improved SecuriKey-Lite support
- Improved Steganos-Safe support
- New AxProtector for .NET encrypts applications on a class/function base. This results in a higher security level and allows the usage of ActiveX, remoting or reflection. The version information and the application icon are taken from the original assembly. Executables (EXE) and DLLs are supported

**Linux**

- Support of SuSE 10.2, Ubuntu 6.10, Fedora Core 6
- 64 Bit Platform is now supported via a native x86\_64 installer
- Improved udev support
- CodeMeter started as daemon by default
- Improved CM-Stick recognition when using a USB hub

**Mac OS X**

- Is shipped in version 3.0

**Sun Solaris**

- CodeMeter now supports Solaris 10 on SPARC processors. CodeMeter service, ControlCenter and Webadmin are supported. End user applications like the CM Password Manager are not supported yet

***CodeMeter 4.30b*****Release Date**

2011-Jun-08

**Operating Systems**

Windows, Mac OS X, Linux

**Bugfixes**

FB2027: CodeMeter Runtime: While a protected application is running a restart of CodeMeter License Server could result in error 106 on using a newly accessed license.

FB13920: CodeMeter Runtime: Executing an update with several programming steps could lead to error 24 in version 4.30.

FB13702: CodeMeter License Server, Windows: In the first two minutes after starting CodeMeter License Server (e.g. after system boot) often error 10038 occurred. In this period access to CodeMeter licenses was not possible.

FB13591: CodeMeter WebAdmin: WebAdmin interface protected against cross-site scripting.

## ***CodeMeter 4.30a***

### **Release Date**

2011-May-17

### **Operating Systems**

Windows

### **Bugfixes**

FB13252: CodeMeter WebAdmin: The access using Internet Explorer 9 on some systems did not work.

FB13459: CodeMeter Runtime: After TCP timeout (CmLan) CmCrypt fails with error 302.

## ***CodeMeter 4.30***

### **Release Date**

2011-April-20

### **Operating Systems**

Windows, Windows CE, Mac OS X, Linux

### **Info**

#### **Support of Windows 2000 is discontinued**

With the present release the support of Windows 2000 is discontinued. The final supported CodeMeter Version for Windows 2000 is Version 4.20d. Encrypted applications are capable to start on Windows 2000. However, at the same time, this requires a Codemeter Runtime Version 4.20d or older.

### **News**

**CodeMeter is compatible with Windows 7, and meets the Windows 7 Client Software Logo Program requirements.**

**Restructuring of locations of important CodeMeter files**

An efficient restructuring of file locations has been performed for the operating systems Windows, Mac OS X, and Linux. This to prevent unintentional deleting of important CodeMeter files when performing a new or an update installation.

After an update on Windows the directories "Log" and "Backup" are moved from „%ProgramFiles(x86)%\CodeMeter“ into the new hidden directory "%ProgramData%\CodeMeter"; the CmFirm.wbc file is moved to "%ProgramData%\CodeMeter\DevKit".

On Mac OS X the directories "Log", "Backup", and "CmAct" are moved to the directory "library/Application.Support/CodeMeter". Previously they located in the directory "Applications/CodeMeter.app".

On Linux the directories "backups", "CodeMeter", and "CodeMeterAct" were restructured and move to the directory "/var/lib/CodeMeter". Previously they located in the directory "/var/backups/". The CmFirm.wbc file is moved from "/usr/share/CodeMeter/" to "/etc/wibu/CodeMeter/".

#### **New hardware form factors CmStick/C and CmStick/T**

The new compact CmStick/C and the CmStick/T with battery-buffered clock are supported..

#### **Features**

FB6956: CodeMeter: CodeMeter now also supports Linux Power PC.

FB4725: CodeMeter Installer, Windows: Windows now features CodeMeter License Server as non-interactive service.

FB6786: CodeMeter Runtime: Now the CmCard/CF is also supported as NTFS boot device on Windows XP at an internal IDE/SATA adapter.

FB9848: CmIdentity: The default paths of the standard installation have been adapted.

FB5236: CodeMeter WebAdmin: The 'Content' page's time displays have been revised.

FB10031: CodeMeter WebAdmin: The "Content | Backup/Restore" now displays the information on the currently used directory for restoring a backup.

FB11604: CodeMeter Control Center: The results of a time update now displays in a dialog.

FB10856: CodeMeter Control Center/CodeMeter WebAdmin: The version information now hold a standard total version number, e.g. "4.30b".

#### **Bugfixes**

FB8693: CodeMeter License Server: The performance after booting, hibernating or standby if more than one CmStick is connected has been improved.

FB9015: CodeMeter License Server: The directory for the logging files is now created if it does not exist.

FB7689: CodeMeter License Server, Linux: On Kontron boards using Debian 5.03 CodeMeter did not detect the CmCard-CF.

FB7987: CodeMeter License Server, Linux: Performing a hotplug/rescan included an access to the CD-ROM drive. The access to SATA DVD drives is now suppressed when searching for CmSticks.

FB5177: CodeMeter License Server, Linux: CodeMeter now also detects CmCards/CF on Linux when these are connected via USB-CardReader adapter and CodeMeterLin is not equipped with root privileges.

FB10382: CodeMeter License Server, Linux: The installation warning for "udev" was removed in the case of installing on Ubuntu 10.04/Server.

FB9853: CodeMeter Identity: The work on CmIdentity/PHP includes adjustments to Opera Browser 10.60.

FB9991: CodeMeter Control Center: The layout of the message windows was not standardized.

FB9275: CodeMeter Control Center: Improved display of different CodeMeter devices.

FB9469: CodeMeter Control Center: The CmCard/E is now included in the CmSticks list of the Control Center.

## ***CodeMeter 4.20d***

### **Release Date**

2011-February-02

### **Operating Systems**

Windows, Mac OS X, Linux

**Bugfixes**

FB11788: CodeMeterAct: Now the binding scheme "D" also works in the case of RAID hardware drivers.

FB11919: CodeMeterAct, Mac OS X, Linux: The detection of virtual machines has been improved. Systems falsely detected as virtual now are handled correctly.

***CodeMeter 4.20b*****Release Date**

2011-January-13

**Operating Systems**

Mac OS X

**Bugfixes**

FB11236: CodeMeter Installer, Mac OS X: In the case of updating the operating system to 10.6.5/10.6.6, eventually CmSticks weren't detected anymore.

***CodeMeter 4.20c*****Release Date**

2010-Oktober-21

## Operating Systems

Windows

### Bugfixes

FB10351: CodeMeter Installer, Windows: The automatic proxy detection during the installation process did not work in all cases.

FB10369: CodeMeter Runtime, Windows: Timeout problems (WB410) with subst drives and CodeMeter hardware detection were fixed.

FB10398: CodeMeterAct: Repairing a broken license using reactivation did not work.

FB10735: CodeMeterAct: Workaround for defective file system on Windows Vista / Windows 7 were enhanced

## **CodeMeter 4.20b**

### Release Date

2010-September-08

### Operating Systems

Windows, Mac OS X, Linux

### Info

FB10109: CodeMeter, Windows: After uninstalling of CodeMeter the directory "Logs" including the log files remains on the hard drive to allow later analyses.

FB9956: CodeMeterAct, Runtime: When using CodeMeterAct an additional encrypted log file is automatically written. In the case of technical problems this file allows for error detection.

### Bugfixes

FB10086: CodeMeter Runtime Installation: On using the CodeMeter Runtime update installation partly registry entries were overwritten.

FB10269: CodeMeter Runtime, Windows Server: In some cases the detection of virtual machines did not work correct.

FB9175: CodeMeter Runtime, Windows: Detection problems of CmCard/SD form factor were corrected. The error occurred when the CmCard/SD was used under Windows XP

together with an integrated SD card reader and a special vendor driver (not Microsoft) which does not provide "Physical Access Support".

FB10227: CodeMeter Runtime: Detection Problems of CmCards/SD 2GB and 4GB for the internal card reader were corrected. The error occurred when the CmCard/SD was used under Windows XP together with an integrated SD card reader and a special vendor driver (not Microsoft) which does not provide "Physical Access Support".

FB9875: CodeMeterAct, Windows: In the case of licenses using the binding scheme "D" the license status eventually changed from "broken" to "intact" or vice versa depending on whether the CodeMeter License Server (codemeter.exe ) was started on system startup or later.

FB9988: CodeMeterAct: In the case of expired or no longer valid licenses no remote context file (\*.rac) could be created.

FB10007/FB9899: CodeMeterAct: Reoccurring problems with defect licenses after power off the computer without shutting down were corrected.

## **CodeMeter 4.20a**

### **Release Date**

2010-July-02

### **Operating Systems**

Windows, Mac OS X, Linux

### **Info**

FB8812: CodeMeterAct, Win2000: CodeMeterAct licenses again will be installed and will run on Windows 2000 machines.

FB9374: CodeMeter Installer, Linux: SuSE 9.1 through SuSE 9.3 will no longer be supported starting with CodeMeter 4.20a.

### **Bugfixes**

FB9422: CodeMeterAct: The simultaneously use of the PIOs Unit Counter and User Period for CodeMeterAct licenses on encrypting produced error 70.

FB9298: CodeMeterAct, Windows: Due to file system problems not to be remedied by using chkdsk.exe on some machines CodeMeterAct licenses did not work. This affected all licenses on this machine, and could not be remedied by re-activation.

FB9157: CodeMeter Installer: The CodeMeter Runtime installation could abort when on operating systems Windows Vista or newer the firewall service was not running.

FB9423: CodeMeter Installer: The .NET Installer WibuCmNET.msi in Version 4.20 required the .NET Framework 3.5. However, the .NET Framework 2.0 is sufficient.

FB8866: CodeMeter Installer: On uninstalling the CodeMeter service now SuSE-specific "\*.depend" files are better handled. Previously a deadlock could occur on computer shutdown since the SuSE-specific scripts stucked after deleting CodeMeter.

FB8923: CodeMeter Installer: After installing the CodeMeter Runtime on openSUSE 11.2 the CodeMeter service did not automatically start.

FB9155: CodeMeter Installer: The check whether the service "winmgmt" runs has been improved.

FB9024: CodeMeter Installer: A re-installation of the CodeMeter Runtime Version 4.20 resulted in a stopping the CodeMeter service.

FB9131: CodeMeter License Server: Importing files using cmu or importing vendor-specific code eventually resulted in a crash.

FB9059: CodeMeter License Server, Mac: The server search (broadcast) partly did not work in the case an explicit IP address was specified.

FB9013: WIBU Shell Extension: The Windows Explorer extension partly shows incorrect languages.

FB9072: WIBU Shell Extension: The context menu of the \*.WibuCmRaC file holds typing errors.

FB8930: CodeMeter WebAdmin: The display of a CodeMeterAct licnese in the WebAdmin from a remote machine returned a JavaScript error message.

FB8946: CodeMeter WebAdmin: In the WebAdmin the Product Item Option description did not display for the user data.

FB8973:cmu, Windows: The option "--detect-proxy" not always returned the manually set proxy.

## ***CodeMeter 4.20***

### **Release Date**

2010-May-03

## Operating Systems

Windows, Mac OS X, Linux

## New Features

FB7618: CodeMeter: Russian localization has been integrated into the CodeMeter Runtime.

FB3403: CodeMeterAct: Linux 64-bit is supported.

FB3682: CodeMeterAct: Function access to the virtual CmStick, e.g. CmCrypt has been considerably accelerated.

FB8018: Runtime Installer, Windows: For the 64-bit version the Runtime Version information is additionally inserted in  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\WIBU-SYSTEMS\CodeMeter.

FB8350: Runtime Installer, Windows: On installation a check for an existing TCP/IP service is performed. In the case the service is found, the service dependency is registered in the CodeMeter service.

FB7560: Runtime Installer, Windows: On installation a check for an existing winmgmt service. In the case the service is found, the service dependency is registered in the CodeMeter service.

FB7843: CodeMeter Installer: The new menu item "CodeMeter Command prompt" in Codemeter | Tools starts a cmd input in the user directory, extends the Path variable by the path to the Runtime/bin directory, and calls cmu32 -v.

FB7479: CodeMeter License Server, Windows: CodeMeter.exe now holds an external manifest, i.e. when omitting the manifest in the case of a mobile use CodeMeter.exe starts in quiet mode.

FB6787: CodeMeter License Server, Linux: CmCards/CF are identified in case they are used as root devices and are ext3 formatted.

FB4734 CodeMeter License Server, Mac OS X: For Mac OS X 10.6.2 and higher the CmCard/SD is supported by the internal Apple card reader, e.g. MacBook Pro, iMac.

FB8007: CodeMeter WebAdmin: WebAdmin buttons are deactivated in case of insufficient privileges.

FB6316 CodeMeter Library, Windows: The default load address of the WibuCm32.dll has been changed from 0x20000000 to 0x67600000.

## Bugfixes

FB8645: CodeMeter Installer: The Chinese translation has been intergrated in Wise.

FB6497: CodeMeter License Server: Logging of the CodeMeter License Server now is written every 10 seconds into the log file.

FB6637: CodeMeter License Server, Windows: The status management of the Windows service "CodeMeter.exe" has been improved.

FB7944: CodeMeter License Server: Information on borrowed licenses could get lost on restart of CodeMeter (server).

FB5838: CodeMeter License Server, Windows CE: The detection of CmSticks has been improved.

FB8143: CodeMeter License Server: In mobile mode the CmAct directory was created although in this mode the change of data on the computer is not allowed.

FB7398: CodeMeter License Server, Windows: Under Windows Vista and Windows 7 exceptions for the Windows Firewall are now registered in the public profile.

FB6961: CodeMeter License Server: A Terminal Server is no longer identified as virtual machine.

FB6871: CodeMeter License Server: The event log will now display again the correct remote IP address.

FB6085: CodeMeter License Server: When licenses are multiple allocated in case of several servers and the license option station share, in the future, the search for licenses will first seek already allocated licenses and use them.

FB6119: CodeMeter License Server: Improved time response on restarting the connection to a previously shut-down CodeMeter server.

FB5985: CodeMeter License Server: Fixing an error which occurred on importing a WibuCmRaU file created on a little endian machine to a big endian machine.

FB5598: CodeMeter License Server: The search of plugged-in drives will no longer cover the diskette drive.

FB8346: CodeMeter License Server: In case a binding to an explicitly specified address fails, following a waiting period a second try is performed to consider DHCP timeout problems.

FB8620: CodeMeter License Server: On permanent operation under Windows XP eventually a memory leak occurred which has been removed.

FB2338: CodeMeter License Server, Solaris: The Firmware update now works correct.

FB8083: CodeMeterAct: When a CodeMeterAct license was remote-updated the use required a CodeMeter restart (error 88).

FB7983: CodeMeter WebAdmin: Depending on the browser used and related settings some pages in the Japanese WebAdmin were not displayed.

FB8225: CodeMeter Control Center: The return button on the borrowing tab will no longer misleadingly grayed out.

FB8273: CodeMeter Control Center: A memory leak on using the SharedMemory modes has been removed.

FB6782: CodeMeter Control Center: Also in the case of many licenses/CmSticks in the future the CmStick list will display all licenses/CmSticks.

FB5499: CodeMeter Control Center: The CmStick status in the future will be properly displayed in all cases.

FB6083: CodeMeter Control Center: The context menu will be displayed also under Vista 64-bit.

FB6788: CodeMeter WebAdmin: When a CmAct licenses changed between status "activated" and "deactivated", the WebAdmin list of PIOs was empty until the next CodeMeter start.

FB7721: CodeMeter WebAdmin: Correction in the display of CmStick/M holding a flash memory larger than 2GB.

FB7759: CmDust: The language files of CodeMeterCC are now listed.

FB7969: CodeMeter WebAdmin: The detection of mobile operating systems) Windows Mobile) has been improved.

FB7970: CodeMeter WebAdmin, Windows CE: The display of the drive letter in the WebAdmin was incorrect.

FB6962: CmDust: Using ChunkSizeMode in future no warning will be issued.

FB6484: CmDust: Accessing an exclusively borrowed entry resulted in a crash.

FB8681: CmDust: Now also the values of the type REG\_MULTI\_SZ are now read from the Windows registry.

FB5948: cmu: The firmware update mode "cmu --firmware-update" will function again.

FB6466: cmu, Mac: The return of the local IP address of "cmu -k" under PPC Mac was incorrect.

FB8245: cmu: The command cmu --borrowlist returned a list where eventually some client licenses were missing.

## **CodeMeter 4.10c**

### **Release Date**

2010-Jan-19

### **Operating Systems**

Windows, Mac OS X, Linux

### **New Features**

FB7495: Windows: The CodeMeter Runtime has been localized in Spanish.

FB7533: Windows: The Runtime Installer has been customized to the Spanish localization.

### **Bugfixes**

FB7397: Windows Vista, 7: A fix in the WibuCm32.dll re-enables CmAccess to work reliable on Windows 7 and Vista.

FB6816: CodeMeter Runtime Modules (CodeMeter.exe + WibuCm), Windows: When the CodeMeter Runtime Server was accessed immediately after starting, eventually crashes or other irregularities occurred.

FB6826: CodeMeter Runtime (CmAct): The programming of Usage Periods for a license longer than 49 days were not correctly supported.

FB7150: CodeMeter Runtime Modules (CodeMeter.exe + WibuCm), Windows: The version number in Kext is now correctly displayed.

FB7494: CodeMeter Runtime (CmTrigger), Linux64 bit: The file libWibuCmWeb64.so was missing under Linux 64-bit

FB7491: CodeMeter Runtime (CmTrigger), Linux64 bit: The Java plug-in for remote activation in the browser did not work.

FB7392: CodeMeter Runtime (CmAct): On using the binding scheme "SER" the installation-IDs differed for different PCs. Now the behaviour is correct, and allows the precalculation of activation codes.

FB7547: CodeMeter Runtime (general): The dates of the copyright information in the CodeMeter 'About' Box have been updated.

## ***CodeMeter 4.10b***

### **Release Date**

2009-Oct-19

### **Operating Systems**

Windows, Mac OS X, Linux

### **New Features**

FB3861: CodeMeter SD/CF-Cards are now also supported under Linux. Requirements are that the CodeMeter Licence Server (CodeMeterLin) runs with root privileges or has read/write access to the respective /dev/sg\* /dev/sd\* device. Currently, hotplug mechanisms for SD/CF-Cards are not implemented.

FB5663: CodeMeter Control Center: By default, the entry for deleting a CodeMeterAct license now is created in profiling allowing for a simple activation. In the case of an installed SDK, the delete-button is active, otherwise not active.

### **Bugfixes**

FB4765: CodeMeter License Server, Mac OS X: The CodeMeter License Server eventually crashed when on disconnecting a CmStick it was simultaneously accessed. Therefore the "Eject" button was removed from the CodeMeter Control Center. A CmStick now must be disconnected by using the Finder, or desktop functions.

FB5956: CodeMeterAct: After a PC crash a license eventually became invalid and had to be reactivated.

FB6082: CodeMeter Installer: Display errors in the French installation programs have been removed.

FB6004: CodeMeter Control Center: In the case one tries to import a file while the CodeMeter Service is stopped, now an instant error message displays and a long waiting time is avoided.

FB6132: CodeMeter Control Center: The Japanese localization has been completed.

FB5818, FB5917: CodeMeter WebAdmin: The Chinese localization has been completed.

## ***CodeMeter 4.10a***

### **Release Date**

2009-August-31

## Operating Systems

Windows, Win CE, Mac OS X

### Bugfixes

FB4318: On installation the proxy settings are automatically completed in WebAdmin. This to provide for accesses to the time server or for firmware updates without manual configuration.

FB5595: CodeMeter License Server: In the case that the network cable is plugged off, CodeMeter stays active and stable even when licenses are searched in the network.

FB5506: CodeMeter License Server: In rare cases the search for network licenses blocked the local CodeMeter License Server over a lengthy period if no additional network server was available.

FB5530: CodeMeter License Server: Under certain circumstances CodeMeter License Server crashed on calling CmGetBoxes().

FB5596: CodeMeter License Server: In license borrowing the server name is saved to the Client CmStick. In some network configuration settings this results in problems. Now WebAdmin allows for the setting that the IP address is saved instead of the server name.

FB5610: CodeMeter WebAdmin: The usability of license borrowing in WebAdmin has been improved.

FB4833: CodeMeter Control Center: The QT library has been updated in order to prevent a sporadically occurring CodeMeter Control Center bug on OS X.

FB5611: CodeMeter Control Center: The French localization of CodeMeter Control Center has been repaired.

FB5423: CodeMeter Control Center: The events were not displayed as long after the start no CmStick was connected.

FB5500: .NET API: Now CmGetRemoteContextBuffer / CmSetRemoteUpdateBuffer also work with CodeMeterAct

FB5647: .NET API: The policy.3.31.WibuCmNET.dll file is correctly installed.

FB5496: CmCard/CF support for WinCE 5.0 and WinCE 6.0 if the CmCard/CF is connected via an internal ATA/SATA interface.

FB5788: Mac OS X: During installation of kernel extension kext.3G an error occurred. It worked properly but the installation was marked as erroneous.

FB5790: Mac OS X: The kernel extension kext.3G can now also be used on Mac OS 10.6 together with 64bit kernel K64 on Xserve computers.

FB5791: Mac OS X: The kernel extension kext.5G can now also be used on Mac OS 10.6 together with 64bit kernel K64 Xserve and Mac Pro computers.

FB5800: Mac OS X: On Mac OS 10.6 the CodeMeter control panel supports also 64bit.

## **CodeMeter 4.10**

### **Release Date**

2009-August-06

### **New Features**

FB3860, FB3861, FB3862: The new hardware form factors CmCard/CF (CF-Card) and CmCard/SD (SD-Card) are now supported by the operating systems Windows, Windows CE and Linux.

FB5378: CodeMeter License Server: The performance in case of invalid entries in the server search list has been improved.

FB4821: CodeMeter Control Center: The new button "Revalidate license" has been added. It allows to start a re-interpretation of the binding schemes in case of deactivated CodeMeterAct licenses. This is useful in particular when using the binding scheme "Custom".

FB4082: cmu: License Borrowing now is also available in the commandline tool cmu.

FB4067: cmu: The functionality CmDustConsole.exe has been transferred to the commandline tool cmu. The option "--cmdust" allows to query a variety of information. This functionality is now available for all operating systems supported by CodeMeter.

FB3112: cmu: The import of all CodeMeterAct file types (empty licence container, remote updates and Firm Item templates) and the creation of CodeMeterAct remote context files is now supported.

FB3731: cmu: The option "-v" to read out version information is now also available under Windows.

### **Information**

FB3646: The CodeMeter functionality is not available when using Kext5G, when the user is not logged in, or when the CmStick is "ejected". Thus Kext5G is not suited for operation on a server. Install Kext3G instead.

### **Bugfixes**

FB3526: CodeMeter License Server: The exit time has been improved.

FB5094: CodeMeter License Server: A remote update of a license now also works with borrowed licenses as expected.

FB4086: CodeMeter License Server: The return of a borrowed license from a different PC eventually did not work.

FB5288: CodeMeter License Server: Under Mac now in all cases license borrowing entries are realized via profiling.

FB4736: CodeMeter License Server: In the case expired borrowing licenses were re-borrowed and then returned error 200 was issued.

FB5152: CodeMeter License Server: Problems with deactivated CmSticks on PCC Macs have been corrected.

FB5144: CodeMeter License Server: Enabling on Big Endian Machines (Mac PPC) partly did not work correctly.

FB4145: CodeMeterAct: In the case of CodeMeterAct licenses activated usage periods were set to 0 when CodeMeter License Server was restarted.

FB4751: CodeMeterAct: Improved error message when attempting to use CodeMeterAct on PCs which do not support CodeMeterAct (currently Lin/64bit, Mac/PPC, Solaris, WinCE)

FB5166: CodeMeterAct: An error was fixed which in some cases lead to the incorrect function of the binding scheme [D]isk.

FB4856: WebAdmin: The restore function of CodeMeter Backup now supports all established browser.

FB4244: WebAdmin: Display errors in Japanese have been fixed.

FB4627: CodeMeter Control Center: License borrowing entires of the Borrowing tab are now refreshed, when the refresh button is clicked, or the Borrowing tab is selected.

FB5244: CodeMeter Control Center: Starting CodeMeter Control Center also started CodeMeter License Server as a service despite of a local configuration via CodeMeter.ini.

FB3683: CodeMeter Control Center: Now in the communication type Shared Memory WebAdmin and the related menu item are not visible.

FB4444: CmConfigDisk: The duration to build up the list of all available CmSticks has been considerably reduced.

FB4363, FB4430: CmConfigDisk now is also able to configure CmSticks of the new generation with serial numbers 2-xxxxxx as "Removable Device".

FB5127: CmConfigDisk now also runs under a non-privileged user.

## ***CodeMeter 4.01***

### **Release Date**

2009-April-09

### **New Features**

FB3006: On a Mac, now using KEXT 5G with a CmStick/M simultaneous access to the DRM part and the flash memory is possible.

FB3061: Super floppy support with Kext.5G detection on a Mac is available.

FB8: In future WebAdmin will display LicenseBorrowing licenses.

FB15: In case a false WibuCmRau file is imported, now a more detailed error message will be issued.

FB3613: CmDust: display of License Borrow information.

FB101: CodeMeter License Server creates a new log file when the old log file size reaches a certain size.

FB10: Protected Windows applications now run under Linux using Wine ProgramLoader.

## **Bugfixes**

FB3645: The Kernel extension of the 5th Generation (Kext.5G) now allows the simultaneous access to security functions and the flash memory. CmSticks detection requires that a user is logged in. For operating as license server without user logon Kext.3G is to be used, this allows the access to the security functions even without logon.

FB3261: Now update of CmAct licenses by double-clicking in the Explorer works.

FB3010: In the allocation order of CM/CmAct licenses earlier expired TimePin Enabling Blocks were not considered.

FB3022: CodeMeter now intermediately saves results of a network search for a short time.

FB3065: Explicit TCP/IP Binding to Mac now works.

## **CodeMeter 4.00a**

### **Release Date**

Windows: 2008-Dec-19

### **All Operating Systems**

- CodeMeter / Java
  - Bugfix #1356 – using method CodeMeter.cmDecryptPioData() the result was not transferred.
- WebAdmin / Japanese
  - Bugfix #1381 - page 'content' held wrong characters on using the Internet Explorer.
- CodeMeterCC / French
  - Translation improved.

### **Windows**

- CodeMeter Runtime Server
  - Bugfix #1363 - Import of a CmAct activation file into a FAT file system returned error 264.
- CodeMeter DLL (WibuCm32.dll)
  - Bugfix #1372 – Despite existing CodeMeter.ini file data was nevertheless written to the registry.
- CmRmtAct[32|64].dll
  - Bugfix #1340 – On creation of a context file from several CmSticks using the shell extension the file at times held only a single CmStick entry.

- Bugfix #1376 - CmRmtAct.dll on error exception always returned error 0.

## **CodeMeter 4.00**

### **Release Date**

2008-Dec-02

### **All operating systems**

- CodeMeter Runtime Server
  - integration of the software-based copy protection system called CodeMeterAct
  - support of the new CmStick (Release 2008-Oct-28) with license memory more than 64 KB
  - improvement of USB communication with the CmStick, especially in exception handling at bus level
  - improvements in exiting CodeMeter.exe
  - bugfixing of two memory gaps
  - improvements related to CmStick detection and hotplug
- CodeMeterCC
  - new graphical user interface (GUI) with adjustments for CodeMeterAct
  - redesign of GUI to achieve better usability and clearness
  - CmFAS including support for activating CodeMeterAct licenses
  - support of import and drag & drop of files (CodeMeter license files)
  - improvement of "eject" CmStick function under Windows
  - new function under Windows for mobile-LastExit handling (UseMobileHandling)
  - improvement of firmware updating process and support of new CmSticks (Release 2008-Oct-28)
  - enhancement of output scope of the event log
- cmu
  - enhanced output on listing CmStick contents
  - bugfixing for firmware update related to the network proxy
- Bugfixes
  - 900, 1027, 1030, 1042, 1044, 1094, 1123, 1124, 1125, 1127, 1136, 1152, 1067, 1068, 1172, 1174, 1205, 1228, 1245
- WebAdmin
  - revised, in particular improved language support and internationalization
  - enhancements in support of CodeMeterAct licenses
  - asteriks on "start as server" removed – the current CodeMeter does not require a restart
  - bugfix in CmTalk test page: in case the ProxyPort was void, the page did not work (JavaScript problem)

- WibuCmNET
  - bugfixes
  - new, easy-to-use interfaces
  - CodeMeterAct specific classes and methods

## **Windows**

- Installer
  - user help in separate merge module, and as an option able for switch deactivation
- CodeMeterCC
  - Bugfixing of screensaver and CardSpace conflicts

## **Mac**

- revised CodeMeter Uninstaller, especially support for CodeMeterAct licenses and language support ger/fr
- added CodeMeter applet for system control for central configuration
- improved Launchd-support to start CodeMeter as a system service
- enhanced cmu for improved output of version information on installed CodeMeter files
- supporting of Snow Leopard (Build 10A190)

## **Linux**

- packages exempted from dependency to libstdc++
- special packages for cc4 vs. gcc3 support are now omitted, the current installation packages now support both
- 64bit installation packages now include 32bit support and consider the directories /usr/lib and /usr/lib32
- support of current distributions, such as, Ubuntu 8.04, Fedora Core 9 etc.
- some small improvements for supporting 64bit distributions, in particular by reduced system dependencies
- adjusted USB hotplug rules for SuSE 11.x
- bugfixing especially for SLES 10/64bit on starting the daemon after reboot and coldplug
- enhanced cmu for improved output of version information on installed CodeMeter files

## **CodeMeter 3.30b**

### **Release Date**

2008-Jul-11

## All Platforms

- CodeMeter Server
  - Bugfix #1123: A subsystem access handle pointed to a wrong subsystem, if CodeMeter itself ran as network server.
  - Bugfix #1124: If the server name was given when calling CmAccess2(), the access didn't work.
  - Bugfix #1127: The server search list was internally always sorted according to IP addresses.
  - Bugfix #1134: Disabled entries were ignored in the license allocation sequence using CmAccess().

## Linux

- Bugfix in cmu: correct display of version information on SuSE/64bit.

## Windows

- Installer
  - Bugfix #1099: Windows x64 installation failed with error 2318, because WibuShellExt.dll could not be deleted.
  - Bugfix #1012: CodeMeter kept on running after uninstallation.
- CodeMeter DLL
  - Bugfix #1108: Autostart did not work with ApiCommunicationMode=2.
  - Bugfix #1136: Eliminated unnecessary waiting time of 10 seconds during startup of the CodeMeter service via CodeMeterCC.
- CmIdentity ActiveX Control
  - Bugfix #1129: Improved the error handling.
  - Bugfix #1075: Uninstaller did not delete the "CodeMeter" group from "Programs".

## CodeMeter 3.30a

### Release Date

2008-Apr-06

## All Platforms

- CodeMeter Server
  - Bugfix: Proxy settings for a firmware update are now effective at once. No restart of CodeMeter is necessary.
- CodeMeterCC\_en.qm
  - Superfluous file 'CodeMeterCC\_en.qm' was removed from the Runtime\bin-folder.
- cmu
  - Bugfix output when using option '-k'.

- Bugfix FieldUpdate with proxy is now working.
- WebAdmin
  - Options for changing the password where removed from all languages (CN/FR/JP/IT).
- CodeMeter JNI library (wibucmJNI)
  - Bugfix in CodeMeter.cmProgram(CMPROGRAM\_UPDATE\_PRODUCTITEM)

## Windows

- Runtime Installation
  - The runtime installer now stops, if an SDK is already installed. This circumvents incompatibilities with wrong security libs.
- CodeMeter.h
  - Was extended for the usage of static VC9 (Visual Studio 2008) libraries.
  - Support of Borland C/C++.
- CodeMeter Server
  - Support of the shared memory API communication mode (no TCP/IP).
- CodeMeter Control Center
  - Japanese language support was improved.

## CodeMeter 3.30

### Release Date

2008-Feb-15

### All Platforms

- All user input may be given in **unicode** characters. For example the CodeMeter password or the CmStick name may contain Chinese characters.
- The **UDP waiting time** (the waiting time while searching for CodeMeter servers in the network) was optimized, the performance improved.
- Enabling and CM-FAS are now possible without usersite security modul.
- **CodeMeter Control Center** improvements:
  - For a firmware update the CodeMeter password is needed. But now the default password "CodeMeter" is tried automatically.
  - New features:
    - Eject the selected CmStick.
    - Let blink the selected CmStick.
    - CM-FAS (import of CmStick remote update files) with progress bar.
    - Tray icon with status text. It displays the number of plugged-in CmSticks.
    - Cancelling the CodeMeter service is only possible with sufficient rights.
    - Update certified time for all connected CmSticks.
- New **CodeMeter Universal Support Tool cmu** for all supported platforms.
  - List and test connected CmSticks.
  - Display the versions of installed CodeMeter components.

- CM-FAS and Enabling can be performed from the command line and hence integrated into batch files.
- Network search for CodeMeter servers.
- 
- Better detection and fixing of communications problems on the USB layer.

## **Windows**

- Improved support of CmSticks with flash memory and two partions (dual lun).
- Better CmStick detection in a VMWare for CmSticks with or without flash memory. A field update cannot be performed in a VMWare.

## **Linux**

- CmSticks without flash memory are no longer mounted as disks on the desktop (no automount).
- CodeMeterLin now supports up to 1024 SCSI devices or CmSticks.
- Support of OpenSuSE 10.3, SLES10 64 bit and RHEL 4/5.1.
- New default directory for backups (/var/backups/CodeMeter).

## **Mac**

- Experimental support for CmSticks with flash memory. Therefore the options "Customize" and then "Kext.4G" have to be chosen during installation.

## **CodeMeter 3.20.503 Mac**

### **Release Date**

2007-Sep-25

### **Mac**

- Two modes of CmStick communication:
  - Kernel-extention (kext ver.3G) - default, no mass storage support
  - Apple USB mass storage kext (only for 32-bit systems up to Tiger)
- FieldUpdate now available
- CodeMeter with new features, for instance:
  - change box name
  - FieldUpdate
  - bug fix in CM-FAS for serial numbers  $> 2^{31}$
  - enabling/disabling per CodeMeterCC
  - CodeMeterCC now localized (de/fr/it)
- Extended event logging in CodeMeterCC
- Improved communication between CodeMeterCC and CodeMeterMacX

- Improved USB communication
- Fixed stability problems
- Support of Mac OS X 10.5 (Tested on Leopard Beta Build 9A466)
- CodeMeterMacX support for UsagePeriod
- CmBoxPgm support for CM-FAS and UsagePeriod
- Includes now Java CM-API functions for the programming of CmSticks
- Native Uninstaller included in DMG package

### ***CodeMeter 3.21.500 Linux***

#### **Release Date**

2007-Sep-09

#### **Linux**

- Supports additional distributions: SLES 10, SuSE 10.2, Mandriva Spring 2007, Ubuntu 7.04, Fedora 7
  - full support for gcc3 and gcc4 based distributions
- Improved stability
- Bugfixes

### ***CodeMeter 3.20c***

#### **Release Date**

2007-Aug-29

#### **Windows**

- This release provides the following bug fixes:
  - On multi-processor systems exhaustive usage of CodeMeter Api calls could lead to a crash of WibuCmXX.dll.
  - If a server search list was configured an additional but incorrect server entry was added at the end. Depending on the system configuration this could lead to long timeouts.

### ***CodeMeter 3.20b***

#### **Release Date**

2007-Jul-27

## Windows

- The CodeMeter API now also supports the programming of CmSticks under Java.
- This release provides a couple of bug fixes:
  - Under Vista right clicking a CmFAS file resulted in a crash of Windows explorer.
  - While upgrading from CodeMeter 3.10 to 3.20 the ShellExtension was not updated correctly.
  - An Error 103 occurred during longer intermissions of the communication.
  - The access to a CmStick in the rarely used FileIO mode did not work correctly under Windows Vista.
  - In the CodeMeter JNI-library incompatible name changes in the CMACCESS structure were undone.
  - The API function CmCheckEvents did not work correctly under Vista.
  - If a Firm Item was programmed and accessed simultaneously a crash of CodeMeter could happen.

## *CodeMeter 3.20a*

### Release Date

2007-Mar-27

### All Platforms

- Bugfix CodeMeterCC: Application sometimes stopped if a disabled CM-Stick was plugged in
- For CodeMeterCC and CodeMeter the English translations were improved
- Improved CmApiHelp.chm (online help)

## Windows

- Improved language localizations for LicensorCenter and AxProtectorGui
- CodeMeter.exe now also deactivates the firewall for CodeMeter on Windows XP x64
- CodeMeter.exe now correctly rebuilds the internal entry list, if a CM-Stick is enabled or disabled or if several temporary enabled CM-Sticks are plugged in
- Depending on the CM-Stick hardware used the 'Low Level Rescan' is no longer available for CM-Stick/M 1024/2048, because the hardware itself already provides a repair mechanism

## Solaris

- Service configuration improvements: Restarting of the CodeMeter service via 'svcadm refresh codemeter' works now

## **CodeMeter 3.20**

### **Release Date**

2007-Mar-09

### **All Platforms**

- The Password Manager with new graphical user interface and various themes improves the usability
  - Automatic learning and filling of application dialogs (only Windows)
  - Support of the Mac OS X keychain via keychain bridge
  - Firefox plugin for Mac OS X and Linux
  - New design with tree view
  - Settings like position and coordinates of the main window are saved
  - Exception list for domains and processes can be modified
  - The preferred browser can be configured
  - Password Manager is now a separate product with its own installer on all platforms
- The CodeMeter ControlCenter now allows:
  - Selective hardware informations for a CM-Stick
  - Selective enabling/disabling of a CM-Stick
  - Modifying the CM-Stick name
  - CM-FAS Update
  - Update of a CM-Stick with new firmware
  - Enhanced language support: de/en/it/fr/ha/ja/zh
  - Multi user support, especially for fast user switch on Mac OS X
- Support of terminal server licences
- Improved Java support
- Java trigger supports transaction ID
- WebAdmin with multi user support
- Bug fix in access control list
- Support of usage period

### **Windows**

- Support of Windows Vista
- CodeMeter is started as service by default
- CodeMeter is separated into a service and a graphic user interface (CodeMeter ControlCenter)
- Improved SecuriKey-Lite support
- Improved Steganos-Safe support
- New AxProtector for .NET encrypts applications on a class/function base. This results in a higher security level and allows the usage of ActiveX, remoting or reflection. The version information and the application icon are taken from the original assembly. Executables (EXE) and DLLs are supported

**Linux**

- Support of SuSE 10.2, Ubuntu 6.10, Fedora Core 6
- 64 Bit Platform is now supported via a native x86\_64 installer
- Improved udev support
- CodeMeter started as daemon by default
- Improved CM-Stick recognition when using a USB hub

**Mac OS X**

- Is shipped in version 3.0

**Sun Solaris**

- CodeMeter now supports Solaris 10 on SPARC processors. CodeMeter service, ControlCenter and Webadmin are supported. End user applications like the CM Password Manager are not supported yet