

## ***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 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 "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 simultaneous 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 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-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 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 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.

## ***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 usefull 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, orr 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-cklicking 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 disable 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 enablet or disablet or if several temporary enablet 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 separat product with its own installer on all platforms
- The CodeMeter ControlCenter now allows:
  - Selective hardware informations for a CM-Stick
  - Selektive 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/funtion 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