KEYnote 21

THE WIBU MAGAZINE

Made in Germany @ Wibu-Systems

FURTHER TOPICS

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- Selling Upgrades to Increase Profits
- Creating Custom Interfaces for License Central

WIBU SYSTEMS

Content

Dear customers and partners,

New products are always exciting to talk about and this issue of KEYnote has the first pictures of our two newest additions to the CodeMeter line-up, the CmStick/T and /C variants. Some customers want and need a real time clock with a battery backup so we created the /T ("time") variant for them. Other customers need a USB stick with a very small form factor; for them we have created the world's smallest USB dongle: the CmStick/C ("compact") variant, which is functionally identical to its larger brother. Now the world's most secure dongle is also the smallest.

As the world's economy begins to recover from the current recession, protecting intellectual property is even more important to revive revenue and profits. We are pleased to share with your some exciting and useful information on how.

CodeMeter and License Central together can help you not only secure your software with the strongest protection known, but also sell or lease it in almost limitless ways. In this issue you'll find some information on how to use this combination to maximize your revenue streams with the new maintenance period license.

You'll also find an article about "Made in Germany @ Wibu-Systems." We are of course extremely proud of the very fine reputation that German companies have for technical product development. In keeping with that, we invest about 40 percent of our total revenue back into research and development. All our hardware and software development happens in-house (no outsourcing here). We have recently added automated test equipment (ATE) to our capabilities to improve our quality and productivity.

One of the things Wibu-Systems does differently from other software protection companies is to publically challenge the cracking community to break our system. I recently returned from a trip to China where once again in a hacking contest not one of the 139 contestants was able to collect the prize of $15,000. Protecting your software from the bad guys is what we do best.

Finally, let me add that I will once again this year try to get to as many road shows, conferences and fairs as possible and would like the chance to meet with each of you personally.

With best regards from Karlsruhe,

Oliver Winzenried (CEO)

Russia and CIS Countries

As a global player, Wibu-Systems provides excellent local support on almost all continents. Customers can get local support and buy products quickly and conveniently in many countries without having to deal with inconvenient customs and import procedures.

Global Reach and Local Presence: Russia aboard

Rainbow Security from Russia is the latest member of Wibu-Systems distributor family. A leading distributor of information security solutions for over 12 years, Rainbow Security in 2009 became the sole distributor of Wibu-Systems products in Russia and the CIS (Commonwealth of Independent States).

With a professional team of highly qualified specialists, Rainbow Security has an impressive business track record and provides world-class products in the field of information security to the Russian market.

Rainbow Security office building in Moscow

Russian SAPR group of companies banks on CodeMeter

Russian SAPR group of companies (www.rusapr. ru) switched to CodeMeter for protecting and licensing from a competing product.

The corporate group provides fully integrated solutions for automating engineering, information, and management tasks. Customers include engineering companies, design institutes, and construction departments in Russia and CIS. These solutions are based on Autodesk's AutoSAPR group of companies graphic platform and vertically integrated lifecycle solutions such as Bentley Systems.

Requirements

In the search for a more modern and reliable way of protecting and licensing their software, Russian SAPR group of companies defined the following requirements:

- maximum security against illegal copying and reverse engineering
- a more robust set of features compared to the preceding product featuring internal memory, key programming, and flexible API functions
- easy installation
- a reliable and comprehensible network licensing capability.

Why CodeMeter?

After thorough market analysis and testing several products, Russian SAPR group of companies selected Wibu-Systems and CodeMeter as their software protection and licensing system. This was because CodeMeter met the requirements for:

- protecting software from unlicensed and unauthorized use
- implementing advanced encryption technology using efficient applications, tools, and APIs
- providing local and network licenses at the same time.

Using CodeMeter, Russian SAPR group of companies now successfully protects its flagship products: the SAPR LAP software package and software adaptations for Bentley Systems.

In addition, CodeMeter helps make possible online product demos that are completely protected from reverse engineering or stealing sensitive data.

Wibu-Systems Distribution Team at Rainbow Security

Creating Trial Versions with CodeMeter

Independent Software Vendors (ISVs) may disagree over which platform (Windows, Mac, or Linux) to target, or which development platform (C++, .NET, or Java) to use, but one thing they all agree on: trial versions sell software.

Microsoft, Adobe, Autodesk…virtually every large ISV and most small ones have demo or trial versions available free for download. Two common approaches include:

- A trial version is a fully-functioning copy of the product, but will only run for some period of time (frequently 30 days). At the expiration date it stops running or degrades in performance. Also known as a grace period.
- A demo version often has no time limits, but has reduced functionality compared to the full version. For example, you may be able to create a project, but not save it.

In the past developers had to painstakingly create special versions to make either a trial or demo copy for marketing purposes. Today with CodeMeter it's so simple there's no reason not to do it. Here's how:

License without activation

We've been asked by customers for a simple check box in AxProtector to create a trial version. Why didn't we put one in?

The answer is simple. 22 years ago we decided a fundamental concept at Wibu-Systems would be separating the executable from the licensing. So ever since the first WibuBox we have allowed you to create one executable, then decide (via licensing schemes) how to sell it. Trial versions are no different. (This idea, by the way, has been broadly copied by our competitors. Now you know who thought of it first.)

The idea behind this is simple: protect your software once (with AxProtector) and license it any way you wish, including as a free trial version. Even if you choose to use a demo with some functions disabled, you still only need to protect it once: use IxProtector with AxProtector to do function-level protection. A demo version license doesn't include licenses for protected functions, while a paid-version license does.

If you want a trial version that anyone can use, and you don't want to ship dongles to everyone who tries your software, you can use CodeMeterAct with a binding scheme of "none." Normally CodeMeterAct binds a license to up to four characteristics of a physical PC such as MAC address, CPU serial number, etc. When you set the binding scheme to "none" the software can run on any PC, since it's not bound to any one in particular. That means a single activation file (license) can be used to activate the software on any computer. For security purposes, however, the user cannot import the license twice or use it on another computer just by copying the license file. That way if your trial ends after 30 days the user either has to install it fresh on another computer or buy it in order to keep using the software.

If you set the Usage Period on your trial to 30 days, the software counts down from installation (or first use—it's up to you) and stops running after 30 days. It's up to you how to handle the countdown—you can issue periodic reminders to the
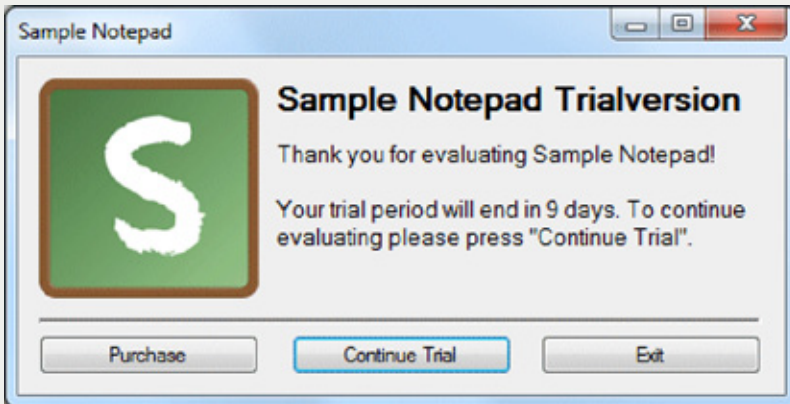
user that the product is about to expire and they should "buy now". If they purchase the software, the "real" license replaces the trial license. If not, the product can remain on their hard disk, but will not start without a license. You should, however, allow for the ability to uninstall the software after the trial period has expired.

Now suppose you have a special situation where someone–for some valid business reason–needs a longer evaluation period, like 90 days. All you need to do is create a new license with a 90 day Usage Period: you don't need to touch the executable. Protect once, sell many ways.

For a demo, you can make the license never expire (by not setting a usage period). Google Sketchup is a great example of a product with a free version and a paid "professional" version. The latter has increased functionality over the free version. Again, you can do this by using IxProtector to lock individual code modules and require separate licensing for them to work.

The "Buy Now" button
What happens when the license expires, or in a demo, when the user clicks on a disabled menu item? If the license is not present, the protected software generates a dialog, called from the UserMessagedll. You can customize that dll or replace it with your own dll. The interface is very simple so you should be able to get whatever you want with very little development effort. Our product support team has some ready-to-use solutions for you, as well.

Do trials and demos work?
In short, yes. Both trials and demos can boost sales for software products, from inexpensive consumer products to high-end vertical market applications. Is there a downside? Possibly. A 30-day trial can be reinstalled over and over again, if the user is willing to either install on a new computer or format the hard drive between instal-

lations. While that seems inconvenient to avoid paying for software that costs, perhaps, $500, it might be realistic to avoid paying for software that costs $10,000.

With both demos and trials it's helpful to have at least an email address of the person evaluating your product, so you can communicate with them about features, benefits, special pricing, and so forth. The best way to ensure this is through automatic activation: in this case, the customer downloads the trial or demo, then provides his

or her email address in order to get a free activation key. You can send the activation via email (thus allowing you to simultaneously verify the email address). Alternately, you could activate via a registration form built into your applications, using the UserMessage interface. Activation in that case would be handled via CodeMeter License Central as an activation server. However, this scenario doesn't validate the email address; you'd have to do that in a separate step. For assistance with creating this capability, please contact WibuConcepts.

CodeMeter can accommodate your marketing methods nicely, whether you want a trial period, demo without activation, or demo with automatic activation. Whether you choose to require registration before a download of a trial or not, how you market to your trial evaluators, what your conversion rates will be; these are all things you'll have to experiment with to learn what works best for you. CodeMeter gives you complete flexibility in not only how to market your product, but lets you test different scenarios easily to optimize your sales.
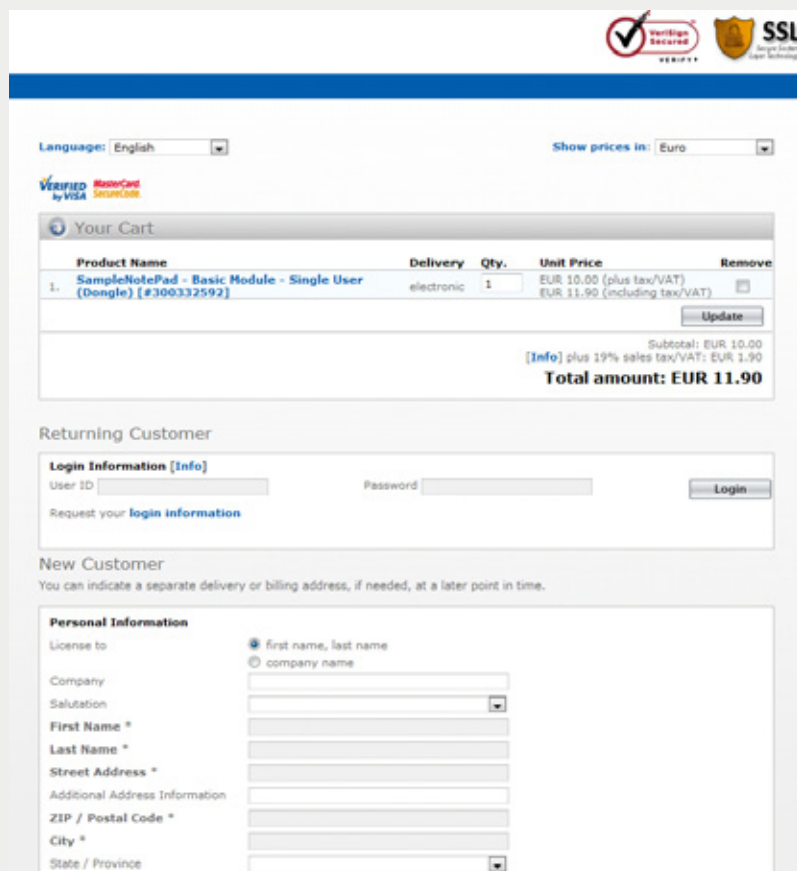
Selling Upgrades to Increase Profits

Every sales professional knows it's much easier to sell to an existing customer than to find a new one. Some clever businesses even go so far as to track the "lifetime value" of a customer, understanding that the worth of a customer—over time—is usually much greater than the initial sale. The software business is no different: most successful companies make more revenue from selling upgrades to existing customers than they do from bringing in new customers. A further benefit is it's usually less expensive to sell to an existing customer than it is to find a new one, increasing profits.

Any software upgrade should have three goals:
1) Protect upgrades against unauthorized copying
2) Make it easy for the customer to upgrade
3) Make it easy for the ISV to publish the upgrade.

Fortunately, CodeMeter makes all three simple. And a new feature just released makes it so simple to protect upgrades. You'll wonder how you lived without it. Read on:

Protecting Upgrades

Although CodeMeter is easy to update in the field, many dongles from our competitors are not. Vendors who protect an initial version of their application with non-updateable dongles have a difficult choice when it's time for the next release: either ship a new dongle to protect the upgrade or release unprotected software. Both choices have costs: either you buy more dongles or you risk piracy.
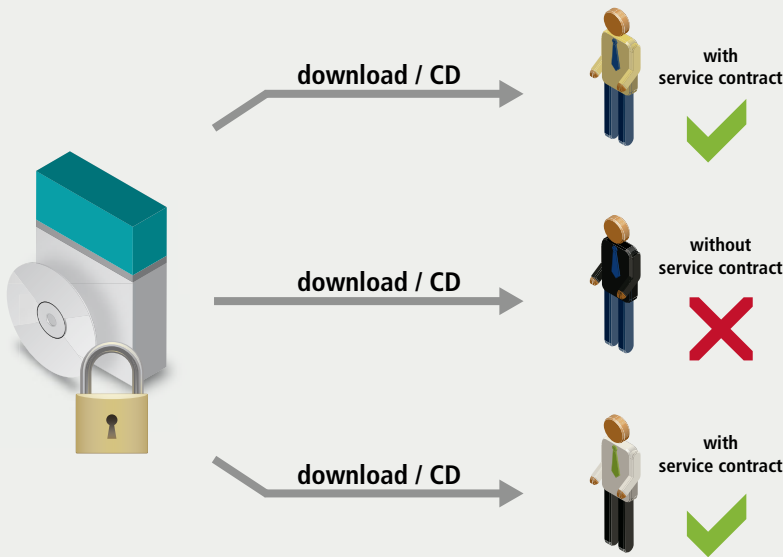
The good news is that CodeMeter provides several methods for field updates. For just a handful of upgrades per year, file exchange is the easiest way to go. For larger volumes, License Central is the best choice.

In order to update a license for a CodeMeter CmStick or CodeMeterAct, you need a context file (from the CodeMeter Control Center) which can be updated and reloaded on the customer's computer. You could publish directions to your users on using the CodeMeter Control Center to create a context file, provide an email address to send it to, update the file, and email it back to them with instructions on how to install it.

Whew! Sounds like a lot of work. For low-volume publishers, this is perhaps a feasible process, but not for ISVs with thousands of customers.

You can simplify the process by using the Wibu Core API to have your application create the context file and send it (via automatic email or TCP/IP) to a server which can perform the update and return the file. This would require you to write a lot of code, including some kind of license server. This makes it easier for your users but more work for your developers.

download / CD → with service contract ✓

download / CD → without service contract ✗

download / CD → with service contract ✓

Enter License Central

In 2008, Wibu-Systems released License Central Internet Edition to automate this process. License Central provides a license generation and management tool that is fully compatible with CodeMeter along with web services interfaces using SOAP and XML. This makes it simple to connect to your application as well as your ERP system and eCommerce web sites. A properly designed implementation of License Central should make it effortless for your customers to manage their upgrade process. You can have an "Upgrade Now!" button in the application which takes them to an ecommerce web site where they can purchase the newest version, then via License Central the new license is generated and installed in the background. Normally a complete process like this would require writing and testing a lot of code but with License Central Internet Edition you can be up and running in a few days with very little code necessary.

Downgrade Rights

For the sake of argument, let's assume you are at Version 5 of your product and you're about to release Version 6. One of the decisions you need to make is if you want to allow customers who upgrade the right to continue to use all prior versions, or if you want to restrict the versions that can run in some fashion. Regardless, you can use the Feature Code to manage this.

When you protect your software with AxProtector, you must define a Product Code and also a Feature Code for each version. Feature Codes are stored in a 32-bit Feature Map, where each bit can represent some feature. You can use some of these Feature Codes to track versions. Here's how:

Version	Feature Code	Binary view
1	1	[00000001]
2	2	[00000010]
3	4	[00000100]
4	8	[00001000]
5	16	[00010000]
6	32	[00100000]

The 32-bit Feature Map allows you to define up to 32 major versions. For example (see illustration), suppose we want to sell version 6 with the downgrade right to version 4 and 5. All we need to do is to set the Feature Map in the license to decimal 56 (8 + 16 + 32), or in binary 00111000. CodeMeter's protection process (via either automatic encryption with AxProtector or via API calls), uses the Firm Code, Product Code, and this Feature Code (of this version) for encryption. On startup, your software searches for a license with this Feature Code. If the Feature Code is included in the Feature Map, the license is valid and can be used.

Now the customer has a single license, which can be used for version 6 or version 5 or version 4. If you think of network licenses this scheme also works well. If you sell 10 licenses the customer can use any combination up to 10 licenses. For example, eight copies of Version 6, two copies of Version 5, and no copies of Version 4, would work under this licensing scheme.

Introducing Maintenance Periods

One of the most exciting features we've added to CodeMeter in years is the Maintenance Period (available in firmware version 1.18). Many ISVs who sell to larger enterprises also sell maintenance agreements, where for a fixed fee all users get support, bug fixes, and any software releases, including upgrades, during the contractual period (usually a year). Before the introduction of the Maintenance Period, it could be a lot of work to keep track of which users had a maintenance agreement and ship them software, since each upgrade could require an update, which in turn required a context file.

Maintenance Period simplifies this dramatically. When you protect your software you specify a "release date", then when you create the license you set a Maintenance Period. At a minimum the Maintenance Period requires an expiration date; optionally it can include a starting date as well.

Suppose your company signs a contract for 1000 copies of your product along with a maintenance agreement from Jan. 1, 2011, to Dec. 31, 2011 with a customer. So you create for them a license that specifies a Maintenance Period with expiration date of Dec. 31, 2011. Now further suppose that on March 15 you release a new version of your product, protected with AxProtector and with the Release Date set to March 15, 2011. Some customers will have to pay for the upgrade, so they need a new license. But your customer with the maintenance agreement? When they get the new executable, it will just run with no need for license updates, because the Release Date is within the Maintenance Period in the license.

If your company does another upgrade with a Release Date of, say, Feb. 1, 2012, your maintenance customer will need a new license for it to run, since it's beyond the Maintenance Period. However, the licenses within the valid Maintenance Period will still run forever unless you set a Usage Period for the license separate from the Maintenance Period.

In those cases where, for business reasons, you want to restrict the use of older versions, you can set a start date, as well as an end date, in the Maintenance Period. No software with a Release Date earlier than the start date in the Maintenance Period will run under that license.

Finding new ways to deliver more value to existing customers is a guaranteed ticket to greater sales and profits. Using software upgrades may just be the way for you to do it.

Made in Germany @ Wibu-Systems

All research and development, as well as final testing of all our products, is done at Wibu-Systems headquarters in Karlsruhe, Germany. Outsourcing of these critical activities is out of the question: we are completely committed to handling all this in-house. We believe this provides a significant advantage for our customers.

Kaizen: Continuous Improvements

Nobody is perfect; no product either. We do, however, in accordance with our company vision "Perfection in Software, Document, Media and Access Protection" improve our products and services in a continuous improvement process (CIP). Our quality management system, LRQA certified to ISO 9000:2008 standards, helps our staff, along with their enthusiasm for excellent solutions and best-in-class features. The economic independence of Wibu-Systems allows us to pursue our long-term goals and vision.

Your advantage is continuity and long-term product availability, proven for more than 20 years.

Teams in Software Development

Our software development processes use test-driven development (TDD), daily builds with automated testing and continuous integration. Small developer teams work closely on the different areas: run-time environment and protection technologies, Ax-/IxProtectors for different operating systems and languages, or the backend systems such as License Central. In any case, more than one developer knows every piece of code. Your benefits are stable software solutions and rapid response to new customer requirements.

Test and production of customized devices

All CmSticks, WibuBoxes, and CmCard/SD and /CF are ultrasonically welded with high-quality machines from Sonotronic. The benefits are extremely robust standard products and short lead times for customized versions or colors. Individual stickers or laser engravings are possible, too. Here we use label printers and industrial fiber lasers by CAB.
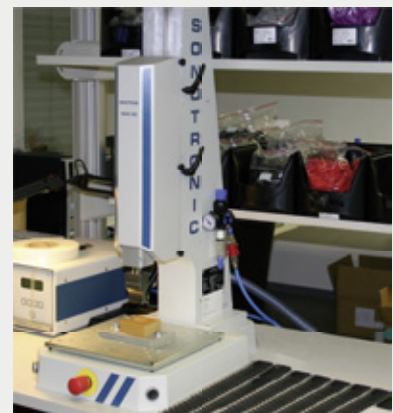
Sonotronic Ultrasonic Welding Machine

Robust metal housing with computer-controlled glue process

The metal cases of the CmSticks are extremely robust: small rugged LED window, large label or laser marking area due to laser-etched marks on the side. The glue dispensing is reproducible with plotted contour and volume accurately computer

Hermes label printer with applicator from CAB

Intermec 2D lable printer, individual single unit bag, labeled CmSticks and WibuBoxes.

Computer numerical controlled glue dispenser from Datron for CmStick metal cases

Automatic Test Equipment robots picker arm with a CodeMeter CmCard/CF

controlled. The process, developed with experts from an adhesive manufacturer, ensures that you get highly robust products with long-life expectancy.

Automatic Test Equipment

CmSticks for USB, CmCard/µSD /SD, and CF are tested in our automatic test equipment (ATE). Laser engraving, pre-programming and data duplication are optionally available. The products are fed either in bulk or in trays supplied via stack magazines and transported by a SCARA robot for the test sockets, laser unit, and outputting the finished parts. Each and every product and every package is provided with a 2D matrix code. You get the highest product traceability and the possibility of individual identification and programming. From Q2/2011, the ATE will be used for the majority of our products. The older semi-automatic test stations remain for "exotic" custom device and sample testing.

Hardware Test and Qualification

We apply high quality standards for our hardware. In addition to testing during development and milestone approvals, we perform tests at external accredited testing laboratories like Underwriters Laboratories (UL). Tests include temperature and climate tests, tests on substances like REACH or RoHS, tests for safety at VDE and UL and EMC tests according to various international and national standards.

Your advantages are legal security and trouble-free use all over the world.

Production Capacity

In the current single shift, the following product quantities can be tested monthly. More than sufficient and multiple shifts would increase capacity easily.

WibuBox:	100,000 pieces
CmStick:	100,000 pieces
CmStick/M:	50,000 pieces
CmCard:	40,000 pieces

Samples of custom specific CmSticks with individual housing, case color and laser engraving

Creating Custom Interfaces for License Central

Once your application is finished and protected with CodeMeter, administrators, accountants, product managers, and sales reps will all use License Central–either a little or a lot–to handle the sales and marketing. Each of those people has specific needs and tasks to perform with License Central. Since it is a web service, License Central can offer a customized user interface to anyone who needs to use it. Read on to find out what options and methods you have to build custom user interfaces in License Central.

Accessing License Central

There are multiple ways to access License Central's services, either directly or via back-end automation. One way is via the standalone web front end that ships with the product. That interface support the concept of roles, including admins, sales users, and support users. The role determines what you can do. For example, admin users can create users while sales users cannot create items. When you create a new user, you can specify as many different roles as you want; the user below has all roles (screenshot).

Admin Interface

The Admin Interface is available as a ready-to-use web interface or alternatively as a web service. In most cases the software developer uses the web interface to combine CodeMeter

User settings

properties with SKUs (stock keeping units). Each time that Product Management decides to develop a new feature, the software developer has–of course–to implement the feature in the software. And the software developer configures the same product in CodeMeter License Central using Admin Interface.

If there are new license models–like time limited version, or network licenses–the software developer or the product manager generates new items with different license options.

Controllers and support employees can also use the web interface. However this is typically made possible by the web service interface as an integrated solution into the existing ERP system. This type of integration varies, depending on the existing system.

Sales Interface

While Admin Interface is mostly used as out-of-the-box web interface, Sales Interface is mostly customized. On one hand there are integrations in ERP systems.

Automatic Integration

License Central includes an easy to use web service for integration with external ERP systems. This web service gets a request, including the login information (user name, password) and an order. A connector links the external system with CodeMeter License Central. This connector gets the information, transforms it into a web request for CodeMeter License Central, sends it to CodeMeter License Central and gives the answer back to the ERP system.

License Central requires authentication from your ERP system: most of our customers are using one account for the whole system. The login information for CodeMeter License Central is hardcoded in the connector and the connector makes the authentication with the external system. So it is simple to implement the authentication with the external system; it doesn't matter if an online shop uses certificate

Internal SKU ID (from ERP)	License Central Item ID	Description
10001	10001	Single user, perpetual license
10010	10010	10 user, perpetual license
20001	20001	1 user 365 day usage period

Mapping of SKU ID and License Central Item ID

based authentication via https, or if the connector makes an IP address check.

The second part in the web request is the order, which includes customer ID, order ID and all the Item IDs. Customer ID and Order ID can come from your ERP system; License Central will store whatever you input there. Additional information—such as the name of the customer—can also be transferred in the web request.

Item IDs in License Central represent SKUs. Each SKU represents something a customer can order from you. Here are some examples (table).

Note that the internal SKU ID and the Item ID from License Central don't have to be identical. But each orderable item must be defined in License Central. For example, here's a 10 unit item in License Central (screenshot ID 10010).

Note it has a defined Item ID, a name, and the LicenseQuantity value = 10.

Integration between your ERP system and License Central is simple and can be done by you—the ISV. Of course Wibu-Systems also offers Professional Services to do the integration with you. All you have to do is to implement the request to the connector. Connectors are available for SAP, Microsoft Sharepoint, Digital River (element 5 and share*it!), Salesforce.com, and Cleverbridge ecommerce solutions.

Customized Sales Clerk Interface

With CodeMeter License Central is it possible to sell items manually. If there is no external ERP the user needs this feature. Of course the business process is slightly different for each ISV, so we decided to offer a web service interface to generate your own user interface. The

License Details

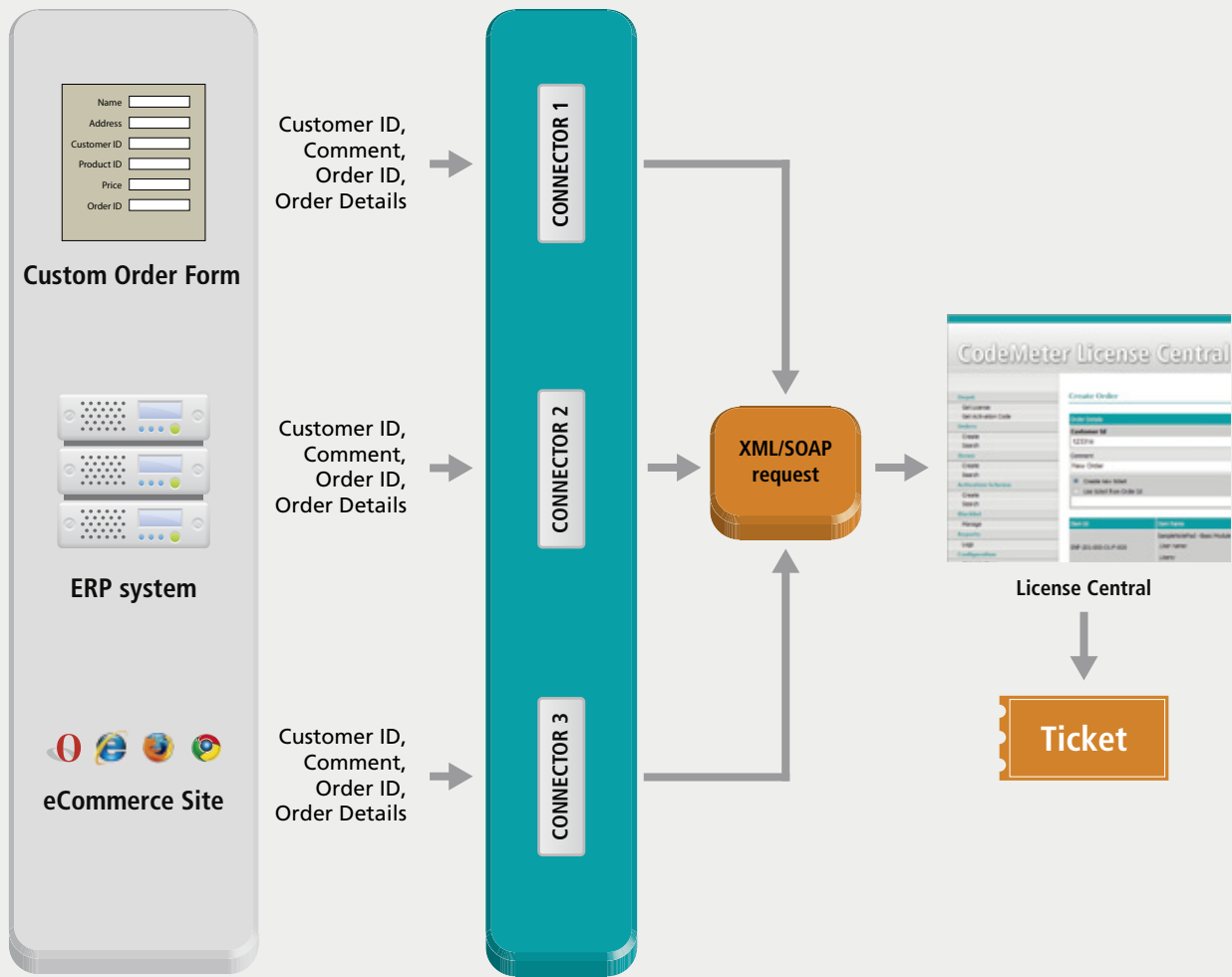| Item Id	10010
Name	10 User Perpetual License
Status	active

Licensing System	Activation Count	
CodeMeter FirmCode: 10	1	

License Entries

Product Code	Action	Option	Operation	Value
13	Add	ProductText	Set	MyApp V2 10 User License Perpetual
		FirmAccessCounter	Set	1
		FirmItemText	Set	Wibu-Systems
		LicenseQuantity	Set	10

License Details ID 10010

Initial Order Process

Custom Order Form

Name
Address
Customer ID
Product ID
Price
Order ID

Customer ID, Comment, Order ID, Order Details

ERP system

Customer ID, Comment, Order ID, Order Details

eCommerce Site

Customer ID, Comment, Order ID, Order Details

CONNECTOR 1

CONNECTOR 2

CONNECTOR 3

XML/SOAP request

CodeMeter License Central

License Central

Ticket

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user interface can be implemented in C# as a native client or in PHP as a web based application. The web service interface is so easy to use, that you can build your own user interface in a few hours.

Let's assume that you don't have an external system (otherwise you would not need your own user interface). You can display your items in the way you like and you can name the options with your terminology. Only you know that your software developer has used the highest bit of the Feature Map as a marker for an educational version. You might want to have all available items with check boxes or require the user to input the item ID manually. CodeMeter License Central will behave like you want.

At the end of the sales process License Central generates a ticket. With this ticket, your customer can get a license via the Depot Inter-

face. Of course, the Depot Interface can also be integrated into your own user interface for the sales clerk.

Depot Interface

License Central supports six separate ways to collect a license from the Depot Interface. These are discussed below.
1) Direct from your software (via API)
2) Direct via webpage
3) Via file upload / download over a webpage
4) Via email
5) Per phone using an activation code (CodeMeterAct only)
6) Per web service, for instance from your Sales Clerk User Interface

Software API calls

CodeMeter License Central uses an HTTP gateway (different from the connector) to accept a ticket and Remote Context File and return a Remote Update File (See figure Initial Order Process).

That sounds very technical and complex, but it isn't. All you need to do is to use our out-of-the-box Activation Wizard. You simply customize the design of the dialogs, configure the IP address of your CodeMeter License Central and that's it. There is a dialog, which asks the user for the ticket. The rest is done automatically in the background.

First, the Activation Wizard generates a fingerprint of the computer (in case of CodeMeterAct) or a fingerprint of the dongle (in the case of CodeMeter). We call this fingerprint a Remote Context File. It includes the serial number of the dongle, a unique ID of the computer (in the case of CodeMeterAct), and the content of all licenses.

Next, the http gateway gets the request from the Activation Wizard and forwards it to CodeMeter License Central. License Central checks if the ticket is still open; if so it generates the license. This license can only be applied to

Ticket

`12EEF-56432-75632-EED7A`

User's Computer

Remote Context File

GATEWAY

CodeMeter License Central

License Central
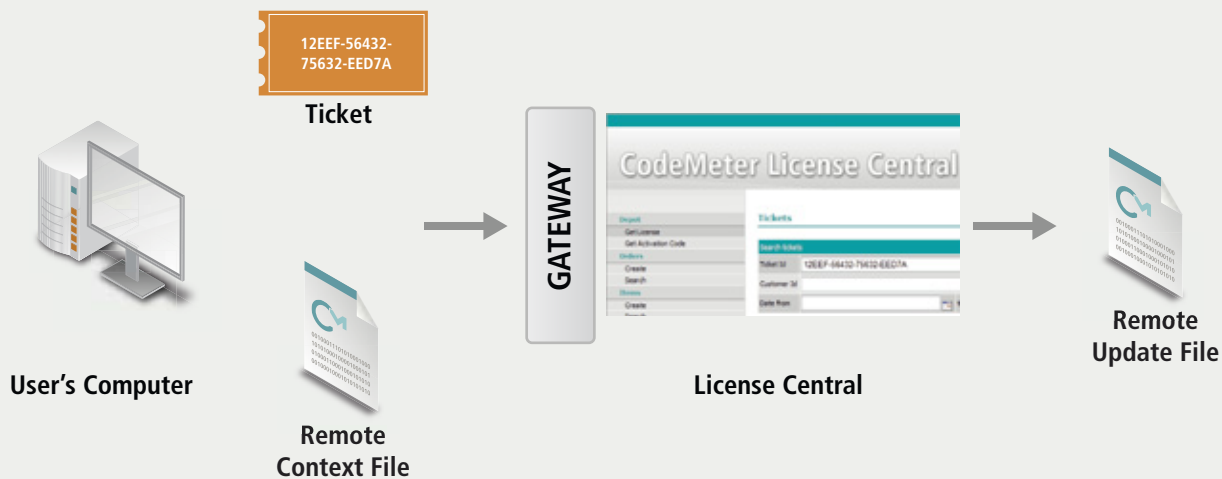
Remote Update File

the matching dongle or at the matching computer. We call this license a Remote Update File. The http gateway now delivers this license to the Activation Wizard.

Finally, the Activation Wizard applies the license to the local dongle or to the local computer. The Activation Wizard is also available as source code, so you can customize it to your needs or implement your own version.

Direct via webpage

An alternative way to get the license is via a webpage. The user navigates to your webpage, inputs the ticket and he sees all the licenses which are included in the ticket. This webpage can be adapted to your corporate website design.

There is a set of tools and samples in PHP available to integrate these depot webpages into your corporate website. After the ticket is input, the webpage calls CodeMeter License Central and shows all the available licenses for this ticket. It can also show the licenses already taken. If the user has a locally connected CodeMeter dongle, or if the license should be transferred to users computer, the user only needs to click "Get License". Now everything else happens in the background. A Remote Context File will be generated and a license returned.

The webpage works well with all major browsers: Internet Explorer, Firefox, Google Chrome, and Safari; and all major operating systems: Windows, Linux and Mac OS.

Via upload / download

Both the scenarios above require an Internet connection and the Internet Edition of License

Central. What if the computer in question doesn't have an Internet connection, as, for example, in an embedded application? In such cases it is possible to generate the Remote Context File manually. This could be an option in your Activation Wizard, if the online activation fails. The generation of the Remote Context File is also part of CodeMeter Control Center, a local tool included in the standard CodeMeter Runtime.

Let's assume we have the Remote Context File. Using a computer that is connected to the Internet, the user navigates to your webpage and inputs the ticket. The available licenses are shown and the user selects the Remote Context File. Now the user downloads the Remote Update File and applies it to the dongle or the computer where the Remote Context File has been created. Whether you want to use CmSticks or CodeMeterAct, the computer where the license is stored doesn't need a direct connection to the Internet. All you need is to transfer a file from and to this computer. That's a great flexibility, which allows the usage of CodeMeterAct also in offline cases.

The upload and download uses standard web technologies. So it is available for every browser and all operating systems.

Via email

The email activation is similar to the upload and download case. The only difference is that the user sends the ticket and the Remote Context File via email. A support employee inputs both into License Central and sends the resulting Remote Update File back to the user.

Via phone (CodeMeterAct only)

Activation via phone is completely different

from the cases above. You need to prepare a special phone license, which includes all the modules the customer has purchased. This special license is a file that you deliver with your software. Upcoming version 1.20 of CodeMeter License Central will do this automatically for you.

When the user wants to activate, he or she starts the Activation Wizard and chooses "Activation via phone". The Activation Wizard automatically takes the prepared phone file (which is already included with your application) and generates the installation ID. The installation ID includes a fingerprint of the computer and an internal ID of this license.

The user now reads out the ticket and the installation ID via phone to the support clerk. The support clerk inputs both at CodeMeter License Central. If the ticket is valid, the support clerk gets an activation code and gives this code to the user. After the input of this code, the software is activated and works.

Sales Clerk User Interface

Let's return briefly to the customized interface for your sales clerks. Depending on your processes, the sales clerk just sends the ticket to the user, or programs a dongle and sends it to the user.

In the case of the dongle programming, this can be integrated into the user interface for the sales clerk. After retrieving the ticket the user interface automatically gets the license from CodeMeter License Central and puts it into the dongle. Maybe you can guess how it works? It generates a Remote Context File, sends it to the web service and applies the Remote Update File.

New Products

This month we're excited to announce three new products: the world's smallest dongle, a CmStick with a battery, and a CmCard for extreme environments. Data sheets are available from the download section of our website.

CmStick/C: World's Smallest Dongle

Projecting only 4 mm from a USB port, the new CmStick/C has all the same capabilities and technology as its larger USB CmSticks, except the option of additional flash memory. All the electronics, including the smart card chip, are integrated into the USB plug. Despite the tiny size, customers can order specific laser engraving or individual colors. The new CodeMeter hardware is perfectly suited for notebooks, embedded devices, medical devices or controls for machinery and equipment. The CmStick/C is available for an extended temperature range.

CmStick/C at notebook

CmStick/T: Battery Powered

Although all CodeMeter hardware devices have an on-board clock built into the smart card chip, it is only powered up when the PC is turned on and the dongle is attached. For those cases where a continuously-running clock is required, the new CmStick/T contains a battery-powered real time clock (RTC). Like all CmSticks, the device is designed to be tamper-proof: removing the battery will be detected avoiding a wrong time to be used. Even if the physical clock is modified, the time on the smart card chip will remain correct. After many years, if the battery is empty, the CmStick/T will continue to keep time with the standard on-board clock. The CmStick/T combines the benefits of our unique approach with a real time clock. This gives users maximum user comfort, safety, and long product life.

CmCard for extreme environment

The CmCard/µSD /SD and CF and the standard CmStick and CmStick/C are now available for extreme temperatures from -25 °C to +85 °C, non condensing. For those cases where extreme resistance to moisture and corrosion are required, such as in a marine environment, we can provide them with a conformal coating: typically this is a special protective coating, such as SL1301 by Peters, which was developed for extreme technical, ecological, and physiological requirements, UL listed (E80315) and according to IPC-CC-830B. No matter where you need to run your software, CodeMeter can keep it safe.

Current Software Releases:
- CodeMeter SDK 4.20d 2011-02-02
- CodeMeter SDK 4.30 Beta on request
- CodeMeter License Central 1.20 2011-02-28
- CmIdentity 4.20d 2011-02-02
- WibuKey SDK 6.0b 2011-02-03
- AxProtector 7.10 2010-12-22
- SmartShelter PDF: 5.30a 2011-02-14

Current Firmware:
- CmStick, CmStick/M: 1.18
- CmCard/µSD, /SD, /CF: 1.18

The latest software gives you state-of-the-art improvements and benefits of new functions and maximum stability. Please make sure you always update to the latest firmware.

Dataton WATCHOUT™

Dataton has been firmly established in the international events and entertainment industries since the 1980s. The Swedish company's key products include the award-winning Dataton WATCHOUT™ multi-display production and presentation system, as well as the intuitive Dataton PICKUP™ audio guide.

Dataton WATCHOUT software is used to create large-scale AV shows across multiple screens in corporate and cultural installations.

Recent high-profile WATCHOUT projects include digital signage at the flagship H&M store on the Champs Elysées in Paris, outdoor architectural projection in Gothenburg city centre and the opening and closing ceremonies of the 2010 Commonwealth Games in India. For over 10 years, Dataton has used WIBU products such as WibuKey, CodeMeter and CodeMeterAct for software protection.

Michael Engström, Director of Sales, Dataton: "We have worked with Wibu-Systems ever since the launch of WATCHOUT in 1999 and really appreciate the reliability of the product. Our systems are used in very prestigious projects, with literally millions of viewers on occasion, and everything has to run perfectly."

WATCHOUT was recently used at the spectacular opening and closing ceremonies of the 2010 Commonwealth Games. Designed to showcase the host country's culture, history and civilization, the ceremonies were broadcast to a massive global TV audience from the 60,000 seater venue.

The centerpiece was a gigantic helium balloon, believed to be the largest of its kind, which provided a 360° projection surface on its underbelly. To cover the surface, 32 Barco 20K projectors were fed with images from a WATCHOUT system. The 16 pairs of projectors, positioned around the venue, were driven by 16 channels of WATCHOUT, each with a live back-up machine.

The WATCHOUT system handled all of the blending and warping functions, and, with WATCHOUT at the helm, all 16 projector images could be displayed as a single seamless image on the balloon.

Giant images were projected onto the huge helium balloon with Dataton WATCHOUT™ multi-display software. Photo courtesy of Creative Technology.

Roadshow, Fairs, and Events

Wibu-Systems organizes several product training sessions each year for the implementation of software protection, software licensing, document protection, media protection, and access control.

You can register for open training or a special in-house session with an unlimited amount of participants from your company. The open trainings start at 09.00 a.m.; the maximum amount of participants is 12. The sessions can be held in English, Dutch, or Spanish. If a training session for more than three participants, booking an in-house training pays off. The number of participants then is unlimited. In-house trainings can be adapted to meet your specific requirements.

Training location	Protection & Licensing of Software 1 day, £ 373/ € 399 per participant	CodeMeter License Central Desktop 1 morning, £ 186 / € 199 per participant	CodeMeter License Central Internet & Back-Office Int. 1 day, £ 373 / € 399 per participant
Hengelo (NL)	8 March	9 March	9 March
Edegem (B)	11 May	12 May	12 May
Bletchley Park (UK)	9 June	10 June	10 June
Madrid (ES)	16 June	17 June	17 June
Driebergen (NL)	28 June	29 June	29 June

Secure Code Seminar

Wibu-Systems offers you the opportunity to participate in one of the special seminars programmed for this spring:

- Code protection against illegal use
- Software protection against reverse engineering
- Licensing of software, hardware and software-based
- Back office integration.

18 March 2011	Bletchley, UK
27 April 2011	Utrecht NL
25 May 2011	Eindhoven, NL
7 June 2011	Amsterdam, NL
8 June 2011	Oxford, UK
14 June 2011	Madrid, ES
21 June 2011	Edegem, BE
23 June 2011	Enschede, NL

embedded world 2011
March 01-03, 2011
Nuremberg, Germany

Hannover Messe 2011
April 04-08, 2011
Hanover, Germany

MEDIA ACCESS
PERFECTION IN SOFTWARE PROTECTION DOCUMENT

WIBU SYSTEMS