

# Consumption-Based Licenses

How and Why to Create and Sell  
Consumption-Based Licenses

**SECURITY  
LICENSING  
PERFECTION IN PROTECTION**



Ruediger Kuegler  
VP Sales & Professional Services



Florian Schneider  
Product Manager

To access the on-demand replay of this masterclass, please visit

[www.wibu.com/wibu-systems-webinars/consumption-based-licensing/access](http://www.wibu.com/wibu-systems-webinars/consumption-based-licensing/access)

# License Models

- **One-off purchases and perpetual licenses**
  - Optionally, with Maintenance Subscriptions
  - Optionally, Features-on-Demand
- **License Subscriptions**
  - Recurring Revenue
  - Optionally, a few packages (2..3)
- **Consumption-based licenses**
  - Pay-per-Click / Pay-per-Time / ...

## ■ Pro Consumption-Based Licensing

- Reaching new target groups (sporadic users)
- Fair charging of values for user

## ■ Contra Consumption-Based Licensing

- Expensive (too high?) price for power users
- Less predictable than subscription licenses or maintenance subscriptions

## Online and Offline Scenarios

- In **Online** scenarios, license usage can be recorded easily and monitored in real time
  - License Server at vendor side (in the Cloud)
- In **Offline** scenarios, license usage needs to be recorded offline and transferred securely to the vendor
  - Prepaid contingents
  - Storage in the license, automatic transfer with the next license update
  - Storage in a protected license tracking file and file transfer
- **CodeMeter** offers tracking in Online **and** Offline scenarios

## Implementation with CodeMeter



- Defining a separate Product Code per Features
- Defining a Unit Counter
- Click-based measurement
  - Decrement via API in Software
- Time-based measurement
  - Decrement via API in Software
  - Decrement via AxProtector
- Offline: Getting Feedback from Context File
- Online: Checking Unit Counter in CodeMeter Cloud

- Definition of a separate Product Code per Features
- Activating License Tracking
- Getting Feedback from reporting file
- Reporting in CodeMeter WebAdmin available for user

## Use Case 1


It's Christmas Time

## ■ Customer Journey

- 15 Lines maximum capacity
- Before Xmas: 2 more special counters in the front of the store
- Customer needs: 15 permanent licenses + 2 overflow licenses

## ■ CodeMeter Implementation

- 1 Product Item with 15 licenses (License Quantity = 15)
- 1 additional Product Item with same Product Code, 2 licenses and Unit Counter
- Software decrements Unit Counter every minute
- Check and refill Unit Counter once per year



Sample Company

130-219236722

CmActLicense/UFC 3.00

^ Licenses

▼ CmContainer Info

▼ User Data

^ 6000947 Sample Company

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1000	POS cash register	n/a	n/a	15	n/a
1000	POS cash register (Overflow Licenses)	1000000	n/a	2	n/a

## Use Case 2

Complete Software Suite

## ■ Customer Journey

- Vendor offers 40+ different products
- Some users need different products, but only for a short time
- Creation of time-based complete suite package

## ■ CodeMeter Implementation

- Different Product Codes for every product – One additional for complete suite
- Encryption with AxProtector and 2 Product Codes (product + suite)
- Decrement of Unit Counter every minute
- Selling different time contingents (Units) online

**Licensing systems:**

**Licenses:**

{CodeMeter Universal Firm Code   6000947   1002   0   Local   Station share   6.20   3.00     0   None }
{CodeMeter Universal Firm Code   6000947   9999   0   Local   Station share   6.20   3.00     0   None }

**Runtime settings:**

**Runtime check:**

☒ Activate runtime check
 

Period (hh:mm:ss):
 

00

:

01

:

00

Allowed ignores:
 

3

☐ Activate plug-out check  
 (CmDongle only)

User Defined Text
 

☐ Activate User Defined Text

**Unit Counter decrement:**

Decrement by:
 

1

☒ Also at runtime check

**Thresholds:**

Unit counter:
 

0

Expiration time (days):
 

0

Advanced



## Use Case 3

Pay-per-Exam

## ■ Customer Journey

- Software is sold with pay-per-click model
- Every exam costs xx €
- No perpetual license available

## ■ CodeMeter Implementation

- CodeMeter Core API is used to decrement the Unit Counter when an exam is taken (after print of exam result)
- Packages with  $n$  Units are sold
- Software is protected using AxProtector (to prevent reverse engineering)

```
CmAccess2 cmacc2 = new CmAccess2();  
cmacc2.FirmCode = 6000947;  
cmacc2.ProductCode = 1001;  
var handle = api.CmAccess2(CmAccessOption.Local, cmacc2);  
  
CmCrypt2 cmcrypt = new CmCrypt2();  
byte[] data = GetRandomData(16);  
cmcrypt.BaseCrypt.EncryptionCodeOptions |= 1; // decrement by 1  
var res = api.CmCrypt2(handle, CmCryptOption.AesEncryptEcb, cmcrypt, data);  
  
api.CmRelease(handle);
```

# Summary

- **CodeMeter** supports all license models:
  - Perpetual, Features-on-Demand, Subscription, **Consumption-Based**, and any combination thereof
- **CodeMeter** supports **Online** and **Offline** scenarios
- **Unit Counter** measures Time and Actions (Clicks)
  - Pre- and post-paid billing
- APIs for process integration
- **License Tracking**
  - Detailed usage statistics for user and vendor

Many thanks for your kind attention



Europe: +49-721-931720  
USA: +1-425-7756900  
China: +86-21-55661790  
Japan: +81-45-5659710

<https://www.wibu.com>  
[info@wibu.com](mailto:info@wibu.com)