CodeMeter License Central

SECURITY
LICENSING
PERFECTION IN PROTECTION

Best Practices for
License Management

Ruediger Kuegler | VP Professional Services
rk@wibu.com

Joerg Jans | Professional Services
joerg.jans@wibu.com

Time Limited Licenses

- Period from first usage (Call of CmCrypt/2)

- Used mainly for emergency licenses

- No renewal and no extension via CodeMeter License Central

- No move to a different CmContainer possible

- "New license" in case you need to reactivate and restore

- No exact information in CodeMeter License Central about license expiration date

Try to avoid the use of Usage Period with CodeMeter License Central! ☟

- Fixed end date

- Used for subscription, evaluation, and other time based licenses

- Set during license creation or activation

- Add

  - Adds *x* days from activation date

  - Renews existing license for *x* days

- Set

  - Sets fixed end date

  - Overwrites an existing license

- Easy renewal via CodeMeter License Central

- Moving to a different CmContainer will keep the original date, also in case of "Add"

- Reactivate and Restore keep the original date, also in case of "Add"

- Reporting in CodeMeter License Central, when the license expires

- Used for checkpoint licenses with an activation specific parameter

  - The next activation will reset the usage period to x days

Use Expiration Time rather then Usage Period!

Editing Licenses

- Overwrites an existing license

  - Merges existing Product Item Options and new Product Item Options

  - Differential Updates

- Used for Pay-Per-Use licenses (Unit Counter)

- Used for simple license models

  - Simple update paths of existing licenses (no updates for dedicated items)

  - Doesn't work for complex models with price configuration

Used for simple license models and simple update paths! ☞

- The new item replaces the existing item completely

- Update for a dedicated item

- Often used if a third party system is already managing the licenses

  - SAP: Equipment

  - Salesforce: Projects with assets

- Used for complex price models

Best practice tip for SAP, Salesforce, and complex price models!

Modular Licenses

- Writing a feature mask into Hidden Data, Extended Protected Data or Customer Own License Information

- Often used for migration from Hardlock, HASP, Sentinel, and dongles from other vendors

- Easy migration of the protected software, but it needs a tool to create custom data fields

- This migration path doesn't use the full capabilities of CodeMeter

Try to avoid modules in custom data fields except for a small transition period! 👎

- Creating multiple Product Items in one CodeMeter License Central Item

- Manual configuration of the same options multiple times

- Complex update paths

- Use Bundles instead

Try to avoid multiple Product Items in one CodeMeter License Central Item!

- Creating one CodeMeter License Central Item for every feature

- One Product Item per CodeMeter License Central Item

- Creating Bundles with single features

  - Included | Opt-In | Opt-Out

- Simple product structure, no dependencies (no dynamic pricing, no price configurator)

- Integration with an e-commerce solution

Use Bundles for non-complex product structures! ☞

- Creating features as Module Items (Child)

- Creating products as Product Items (Parent)

- Assigning features to products

- Similar to bundles except for

  - Module Items inherit options from parent, single options can be overwritten by child

  - Products are transferred as an not dividable package, including all Module Items

  - Replace is only possible for a product and replaces the product, including all Module Items

  - Configuration of Module Items is simpler

- Mainly used if the leading system already stores the license in a corresponding object

  - SAP: Equipment

  - Salesforce: Project with assets

- Easy usage with the Replace feature

Module Items are the recommended way for modular licenses. 👍

Licenses for Offline Devices

- Licenses are transferred via an intermediate CmDongle

  - The field engineer carries the CmDongle with the license to an offline device

- CodeMeter License Central doesn't know exactly where licenses are

- No simple update paths

- Recommendations for usage, if necessary:

  - No return to CodeMeter License Central allowed

  - No return to intermediate CmDongle allowed

Try to avoid License Transfer (Move) with CodeMeter License Central! 👎

- Creation of an initial license at the device during production

  - Basic license or dummy license

- Fingerprint and Update Counter is available in CodeMeter License Central

- CodeMeter License Central creates new licenses as push updates for dedicated devices

  - The field engineer needs a memory device only to carry it to the offline device

- The user doesn't need to upload CodeMeter Context Files

Using Push Updates is the recommended way for offline devices!

Automatic Updates

- All features of one license are stored in the same ticket

- All changes are stored into the same ticket

- One ticket is activated into one CmContainer (1:1)

- The ticket should be stored either on a computer (CmActLicense) or in the license (all CmContainers)

- Software Activation Wizard uses the ticket to retrieve updates

- Restoring and moving the license to a different CmContainer is easy

Requires the ticket and tickets are getting larger over the time! ☞

- First license / feature is activated via a ticket

- Changes are executed via:

  - Assign to a CmContainer (add)

  - Replace (change)

  - Withdraw (remove)

- Software / user doesn't need to know the ticket

- The update is delivered based on Container Serial No. or Context File

User doesn't need the ticket! Ticket shows current state! Recommended way! 👍

External Tools

- Creates Items in CodeMeter License Central

- Based on external description and an item list

  - Usage of revision control systems

- Reproducible process to create items

- No manual interaction – fewer errors

- Semi-automatic synchronization with a 3rd party system that cannot communicate with CodeMeter License Central directly

Troubleshooting

- Unexpected State

  - Same CmContainer at different systems (P, Q, D)

  - Don't use "Accept externally created license entries"

  - How to solve: Accept state manually, or recycle CmContainer

- Internal Error

  - Check Webserver log

  - Check system log in CodeMeter License Central User Interface

Thank you very much for your attention

Europe: +49-721-931720

USA: +1-425-7756900

China: +86-21-55661790

Japan: +81-3-43608205

https://www.wibu.com

info@wibu.com