# **Licensing Guide**

# Smart Building Manager

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## 1. Summary

This document contains information about the licensing models for using Smart Building Manager (SBM).

If you need assistance for choosing the right licensing model for your specific application please contact your MICROSENS representative.

## 2. Terms & Definitions

This chapter contains the definitions of basic terms for managing MICROSENS licences.

Term	Defintion
Commercial Licence	A commercial licence defines the permission to do or use something only in a productive environment.
Evaluation Licence	Same as trial licence. For more details see "Trial Licence".
Licence	The term "licence" is used as short name refering to the right to use something.
Licence Dongle	A licence dongle is a special USB stick with a unique hardware ID (cannot be changed). This identifiuer is also known as unique dongle ID
Licence Key File	A licence key file contains one ore more licence records. A licence key file is created for a certain single server instance and must not be used elsewhere. Therefore a licence key file is bound to a global unique ID. The global unique ID can be either a unique system identifier or a licence dongle ID.
Licence Record	A licence record defines the usage rights for something where permissions have to be granted. A licensing record is stored in a "licence key file".
Managed Device	All switches that can be managed by the respective MICROSENS device and network management software (except OTN devices).
Maintenance Licence	A maintenance licence is required to update the soft- ware.
Product Licence	The product licence defines the number of objects that can be managed by a software instance and adheres the right to update the software during the first year after product licence activation.
Trial Licence	A trial licence defines the permission to do or use some- thing only for a certain time frame.
Usage Rights	The right to use something. This can be related to give the right to update a software instance or the right to manage a certain number of objects.

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## **3. The Licensing Model**

This chapter explains how the MICROSENS licensing model works.

#### What is a Licence?

A licence officially grants the licence owner the "right to do something" ("usage rights", for short).

#### What are the Usage Rights?

The following list defines the diffent types of usage rights in the context of working with MICROSENS applications and devices:

- The right to manage something
- The right to update a software version

#### What is a Product Licence?

A product licence defines the number of objects that can be managed by a software instance and adheres the right to update the software during the first year after product licence activation.

This means that every initial installation of a server application requires at least one licence record of the type "Product Licence".

This licence record contains the definition of the permission, i.e. normally the number of objects that can be managed and the right to update the application in the first year.

A product licence does not expire, technically.

Once, the first year of usage has elapsed, it is furthermore possible to manage the number of objects contained in the respective licence record.

But to update the software version after the first year it is necessary to purchase a maintenance licence during the oneyear limit of the product licence.

#### What is a Maintenance Licence?

**IMPORTANT** 

A maintenance licence is required to update the software.

A product licence includes the right to update the software within one year. After the first year it is required to buy a maintenance licence.



The number of usage rights for the maintenance must always match the number of the usage rights as defined by the product licence.

A maintenance licence expires. The duration depends on the purchased licence key file variant. It can vary from one year up to five years.



#### Example 1. Example

If you want to manage 500 devices in the device list then the following usage rights are required:

- Sum of the rights as defined by the product licence records must exceed 500 for the first year.
- Sum of the rights as defined by all maintenance licence records must exceed 500 for every subsequent year.

## 4. Managing Licences

### 4.1. Managing Licences via Application

Start the licence manager of the respective application with a click on the menu entry **Settings > Licence Info**.

The following dialog opens.

🗾 Licence n	nanager										_		×
Info Software Cla End of softw Max possible Unique Syste USB key ID:	ss: are maintenanc : number of ma :m ID:	:e: maged obji	NMI 202 ects: 100 ION 123	P Software 2-03-23 Is softwa Allowed 10fwbx1aRwk8h3/4E 1456789	Variant: re update possible: number of managed o DkbPrGtwmT42HGKb	Pi Yi bjects: 10 IIUIMLKUqS	ROFESSIO ES DO Cur 1vo9+ERh	NAL rrent n OIEQI	iumber of ma B9NP3nmZ1	naged ob XwsrV+C	ojects: 2		
Licence files File license_P_1	616526961_N	Version 2.0 [N]	Type Commercia	Licence holder	Order no VAB_Internal_use_Su	pport_MS	SW class NMP	SW	variant DFESSIONAL	Status OK	Maintenanc 0 y, 10 m, 19	e period 9 d	Ō
Article No MS200072	Record type Product	Maintena 1 (YEARS)	nce period	Start of maintenance 23-03-2021	End of maintenance 23-03-2022	Managed o	ibjects S Ir	tatus 1 use	Maintenanc	e period ∂d			
							Sh	ow lic	ence agreem	ent Ins	tall new licen	ce file	Close

Figure 1. Licence Manager

### 4.1.1. Licence Info

The section "Licence Info" contains the most important information like:

- What software is installed (software class, software variant)
- End of maintenance time period
- Indicator whether software update is permitted/possible
- Number of max. possible managed objects (definition of managed objects depends on installed software class)
- Current number of managed objects
- Allowed number of managed objects.

This number must always fit the max. number of managed objects.

Only, if the maintenance or trial period is expired the number might be different.

• A hardware key ID which identifies this instance of the software installation.

### 4.1.2. Licence Files

The section "Licence Files" lists all activated licence key files, containing information about among others the licence holder and licence period.

#### 4.1.3. Licence Records

The section "Licence Records" shows a list of all purchased licensing packages including their respective expiration dates.

#### 4.1.4. Install New Licence Key File

The button **Install new licence file** on the bottom of the dialogue allows to upload additional licence key files.

### 4.1.5. Delete Existing Licence Key File

Each licence key file entry in section "Licence Files" shows a trash can icon on the right.

Click on this trash icon to remove the respective licence key file from the server.

### 4.1.6. Licence Agreement

Click on the button **Show licence agreement** at the bottom of the dialogue to show the licence agreement for this software installation.

## **5. Server-side Verification of Licence Key File**

The following different procedures are possible for verifying the vailidity of a registered licence key.

Scenario	Behavior					
On server start	The server checks whether the licence key requires a dongle ID.					
	<ul> <li>If this is the case the server checkes whether</li> </ul>					
	<ul> <li>a USB dongle is plugged-in and</li> </ul>					
	<ul> <li>the dongle ID covered by the licence key matches the ID of this USB dongle.</li> </ul>					
	In case a dongle ID is required but the corresponding USB dongle is missing or the dongle ID mismatches the server stops.					
	Afterwards the server checks whether the licence key requires a unique system ID.					
	<ul> <li>The server checks whether the current system ID matches the unique system ID covered by the licence key.</li> </ul>					
	If the current system ID mismatches the system ID cov- ered by the licence key the server stops.					
	<b>NOTE</b> In case of licensing problems please con- tact your MICROSENS representative.					
Server check at runtime	If the server is started the server checks every 30 sec. whether a valid USB dongle is plugged-in or the unique system ID of the licence key file matches the current unique system ID.					
	If the USB dongle is removed or the unique system ID does not match the server stops.					
Evaluation licence check	An evaluation licence does not require a valid dongle ID or unique system ID.					
	Therefore the server checks whether the evaluation licence is expired after a determined time frame (e.g. days).					

### **5.1. Special Scenarios**

Scenario	Behaviour
Licence violation is detected	The app will notify users on a regular basis (default: 15 min). In case email notification is enabled, a notification email will be send.
Maintenance Licence expires (<= 10 days)	The app will notify users on a regular basis (default: 15 min). In case email notification is enabled, a notification email will be send.

## 6. Using the Licence Activation Code Generator

For purchasing a valid product licence key file the use of the MICROSENS Licence Activation Code Generator is mandatory.

The application is available on the MICROSENS web site (www.microsens.com) and needs to be installed on the workstation or server where the software will be used.

#### NOTE

When using a licensed application like NMP oder SBM the Licence Activation Code Generator is part of the respective application. Please refer to the user manual on how to use the included generator to purchase e.g. additional maintenance licence key files.

🔤 License Activation Code Generator 🛛 🛛 🗙					
File Help					
Organization:	MyCompany				
Contact person:	Alice				
Contact E-Mail:	alice@mycompany.com				
Identification Key User Alias:	mycompany.datacenter				
Identification Key:					
Wio9SikGlWkHHimHp+86CDptkMvd9k8n SkqVm/g58SZP77QOomQQutU9ftrAs4Nl Mtiwx2ugWJIOHl10SfWzHA==					
QR Code:	[refresh]				
	Save as PDF Exit				

Figure 2. Licence Activation Code Generator

Directly on start-up the application calculates the unique system ID and generates the corresponding hash sum.

**NOTE** The application does not scan hard disk or memory content.

• **Organization:** Name of the organization (e.g. the company name) which orders the licence key file (optional).

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- **Contact person** : Name of the contact person for queries relating the purchase order (optional).
- **Contact E-Mail:** Preferred e-mail address of the the contact person (optional).
- **Identificatin Key User Alias:** This string can be used to assign a mnemonic identifier to the unique system ID.

This simplifies locating the system ID in the licence manager later on instead of searching for a counterintuitive multiple-digit hash sum (optional, but recommended).

• **Identification key:** Contains the hash sum of the system ID as a string.

This is used to protect the privacy of the machine.

- **QR Code:** The QR code is the graphical representation of the hash sum and therefore simplifies its handling.
- Save as PDF: After entering the additional data click on the button Save as PDF. This will create a PDF file containing all respective information for ordering the licence key file.
- **Exit:** Click the button **Exit** to close the application.

#### IMPORTANT

The system ID (and therefore the resulting hash sum) represents the actual hardware and software configuration of the system. When changing this configuration after obtaining a valid licence key file it is necessary to order a new licence key file that fits the new system configuration.

#### 6.1. Steps for Ordering a Licence Key File

1. Download and install the Licence Activation Code Generator

Moreover, the code generator is part of your application (i.e. NMP or SBM). If you are using a valid licence key already, start the code generator from your application.

- 2. Enter all data (i.e. organization, contact information and alias)
- 3. Save the activation code as PDF file
- 4. Send the PDF file to your MICROSENS representative.

MICROSENS will generate a licence key file corresponding to this activation code.

- 5. After receiving the licence key file register it with the licence manager of your application.
  - **NOTE** For more information about using the licence manager please refer to the user manual of your application.

## 7. SBM Licensing Model

The licensing model is based on the number of managed data points and managed devices which can be managed by Smart Building Manager.

### 7.1. Managed Devices

SBM allows to manage a certain number of devices. A managed device can be one of the following device types:

- any network switches where SMartOffice is enabeled
- any modbus device, that is registered with SBM

NOTE:

- (Central) Smart Lighting Controllers or Smart I/O Controllers (Digital) do not count as managed devices.
- A switch with a running SmartDirector app will be treated as a single managed device.
- A Switch where SmartOffice is disabled and is marked an un-manged device.
- OTN devices like MSP1000 cannot be managed by SBM and not counted as managed devices
- devices paired with smart director like SLCs, SIOs, EnOcean buttons etc. are not counted as managed device

### 7.2. Managed Data Points

SBM allows to define a central list of managed data points. These are data endpoints can be defined as READONLY or READWRITE access and represend atomic values from connected sensors and actuators.

SBM Server counts the number of data points as defined in the central data point list, independently of which managed device is managing which data point.

So the number of data points is relevant for the licence key and deternmines the maximal number of data points in the central data point list that can be managed by a single SBM Server instance.

#### NOTE

For more information about using data points see also SBM Customizing Guide.

### 7.3. Requirements

The initial step is to order a product licence key file from MICROSENS.

The included licence key provides basic usage rights to manage a certain amount of data points and devices (depending on licence key product variant) as well as the right to update SBM to the latest version for one year.



#### 7.4. What is required if the networks growth?

In case the network managed by SBM is growing and the maximum number of managed devices or data points exceeds the licence record, ordering a "Licence Key Extension Pack" is required.

An extension pack allows to add permissions for additional managed devices or data points.

So it is possible to react flexibly to changes in demands.

**NOTE** For more details please contact your MICROSENS representative.

#### 7.5. Software Update After First Year of Usage

Within the first year the product licence key contains the permission to update the software to the latest version.

After the first year it is required to install a maintenance licence key file.

Software updates are only supported in case a valid maintenance licence key file is installed.

NOTE

The number of managed devices and data points included in the maintenance licence key must always match the respective number as defined by the product licence.

[SBM lic figures1] | ../../sbm/images/licensing/SBM-lic-figures1.png Figure 3. SBM Licensing Example

- 1. The first year starts with a basic product licence key.
- 2. Later on a product licence key extension was ordered to manage additional data points and devices.
- 3. In the following year it is required to order a maintenance licence key file to allow further software updates.

Our General Terms and Conditions of Sale (GTCS) apply to all orders (see https://www.microsens.com/fileadmin/files/downloads/Impressum/MICROSEN-S\_AVB\_EN.pdf).

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