

IVA Pro Licensing with FW 8.70 & CM 7.61

Whitepaper

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1 Introduction

Intelligent Video Analytics (IVA) Pro provides application-specific packages for building security and operations (IVA Pro Buildings Pack), perimeter security (IVA Pro Perimeter Pack), and traffic monitoring (IVA Pro Traffic Pack). These solutions can reliably detect and classify objects and understand object movement, providing operators with a deeper understanding of scenes. A more in-depth scene understanding enables informed decision-making for a quick response.

While some of the IVA Pro Packs are included by default on supported cameras, others can be added via licenses. This Whitepaper is dedicated to describing the license process in full. It starts with ordering the licenses, claiming the resulting software order IDs in Remote Portal, and then using Configuration Manager to add multiple licenses to multiple cameras at once. The license process also works if the cameras are in their own, protected network with no access to Remote Portal, as long as some (manual) data transfer into this network is possible.

1.1 Supported Cameras

IVA Pro is supported by the following cameras:

- FLEXIDOME 5100i (IR)

1.2 License Types

All IVA Pro licenses are permanent licenses that are activated once and remain valid afterwards. Each license can only be activated once on a single camera. Each license is independent.

1.3 Requirements

Cameras need to have at least FW 8.70. Configuration Manager needs to be at least version 7.61.

2 IVA Pro Packages

2.1 IVA Pro Buildings Pack

Based on deep learning, the IVA Pro Buildings Pack is ideal for intrusion detection and operational efficiency in and around buildings. Without the need for any calibration, it can reliably detect, count, and classify persons and vehicles in crowded scenes. It can alert operators immediately as queues begin to form. The IVA Pro Buildings Pack also covers pre-determined video analytics alarm rules such as line crossing, loitering, and object in a designated field, allowing for greater flexibility in deployment.

The IVA Pro Buildings Pack is always included by default in any camera supporting IVA Pro.

2.2 IVA Pro Perimeter Pack

The Intelligent Video Analytics (IVA) Pro Perimeter Pack is well-suited for reliable long-range intrusion detection, alongside perimeters of buildings, energy facilities, and airports even in extreme weather. Based on advanced background subtraction, it can detect crawling, rolling, and other suspicious movements inside, outside, and under various environmental and lighting conditions while minimizing false triggers.

IVA Pro Perimeter Pack is an additional, licensed option on the following cameras:

- FLEXIDOME 5100i (IR)

CTN: MVC-IVA-PER

2.3 IVA Pro Traffic Pack

Founded on deep learning, the Intelligent Video Analytics (IVA) Pro Traffic Pack is designed for ITS applications such as counting and classification, as well as Automatic Incident Detection. It supports strategies that enhance mobility, safety, and the efficient use of roadways and solutions for intersection monitoring. It achieves accuracy levels beyond 95% for real-time event detection and aggregation of comprehensive data necessary for highway and urban infrastructure planning. Data collected provides actionable insights for improving the efficient use of roadways and the safety of persons and vehicles at intersections, on highways, and in tunnels. Robust algorithms based on deep neural networks are trained to ignore potential disturbances caused by vehicle headlights or shadows, extreme weather, sun reflections, and shaking cameras.

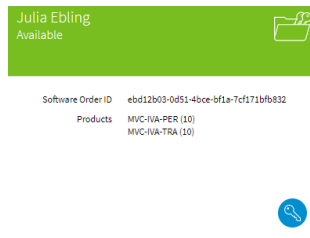
IVA Pro Traffic Pack is an additional, licensed option on the following cameras:

- FLEXIDOME 5100i (IR)

CTN: MVC-IVA-TRA

3 License Process Overview

When you order software, you will get a Software Order ID back. A Software Order ID can contain multiple different license types in different quantities. In the example here, the Software Order ID contains 10 IVA Pro Perimeter Pack licenses and 10 IVA Pro Traffic Pack licenses:



The software license activation process for camera features like IVA Pro consists of the following steps:

1. Order software products
2. Receive a Software Order ID
3. Claim the Software Order ID in Remote Portal
4. Get the system info file as hardware identification of the respective cameras
5. Assign licenses to cameras
6. Upload the licenses onto the cameras

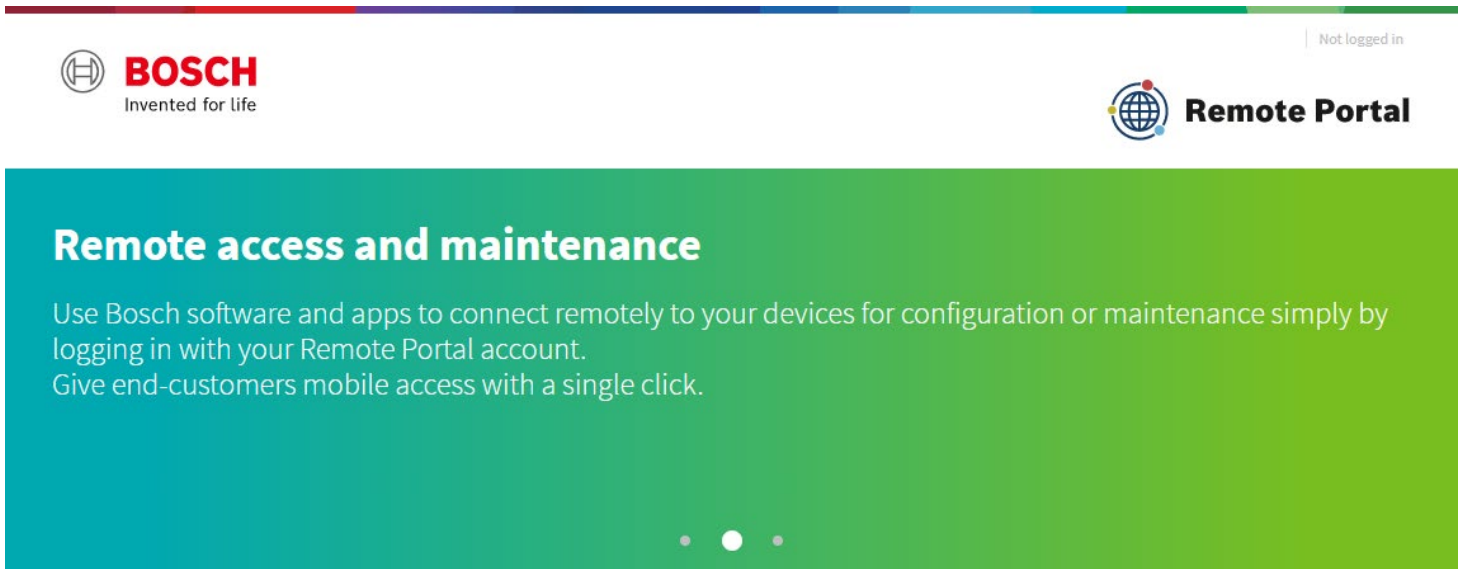
All licenses are administered in the Remote Portal. You will need to register there in order to claim the Software Order IDs, see Section 4.

In order to support activating licenses on multiple cameras at once, the Configuration Manager has been chosen as the main tool for camera license handling. Configuration Manager will communicate between cameras and Remote Portal to automate the license activation steps 4-6 as much as possible, see Section 5.

In order to accommodate for cameras that reside in dedicated networks with no direct access to Remote Portal, the splitting of tasks and changing between networks is supported. Configuration Manager needs to be connected to the cameras for step 4 & 6, and to the Remote Portal for step 5.

4 Remote Portal: Claiming Software Order IDs

The Remote Portal is located at <https://remote.boschsecurity.com/>. You need to register an account in Remote Portal in order to access any licenses. Afterwards, login to the Remote Portal.



Welcome to the Remote Portal

Bosch Remote Portal connects you to your Bosch Security devices from anywhere and lets you perform remote administration and maintenance anytime.

Registration is free.

[Sign Up](#)

Login

E-mail

Password

[Forgot your password?](#)

Keep me logged in

[Login](#)

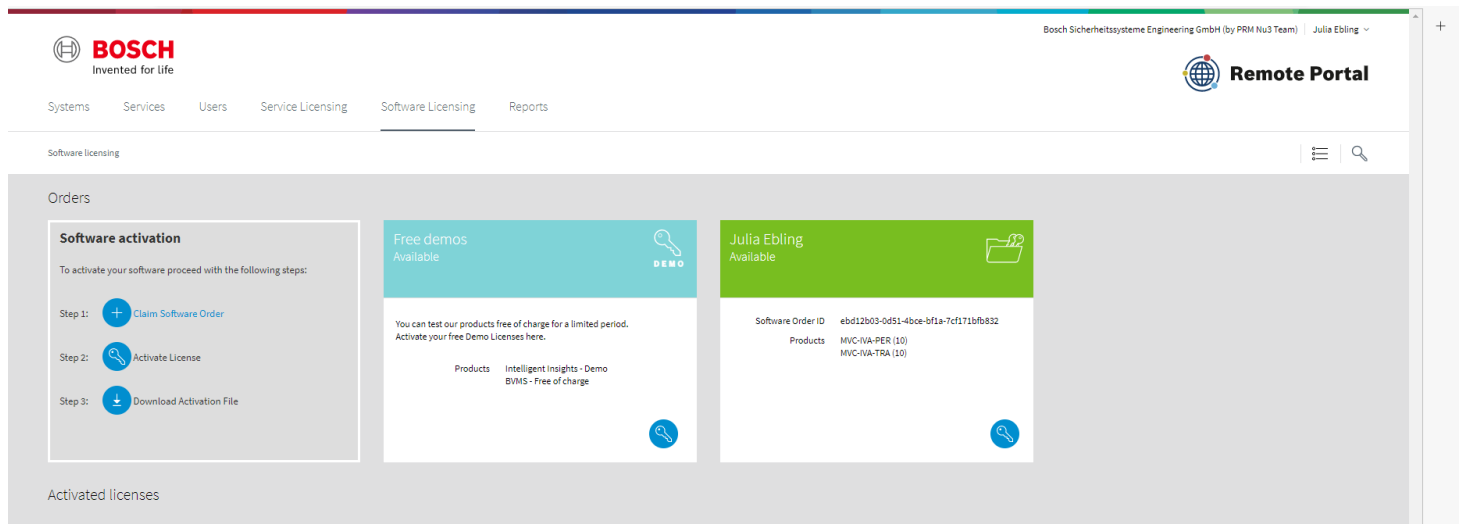
[Login with Bosch ID](#)

You need to have the Administrator role in Remote Portal in order to manage licenses, both for claiming the software order ID in the Remote Portal (see Section 4.1), and to activate the licenses via Configuration Manager.

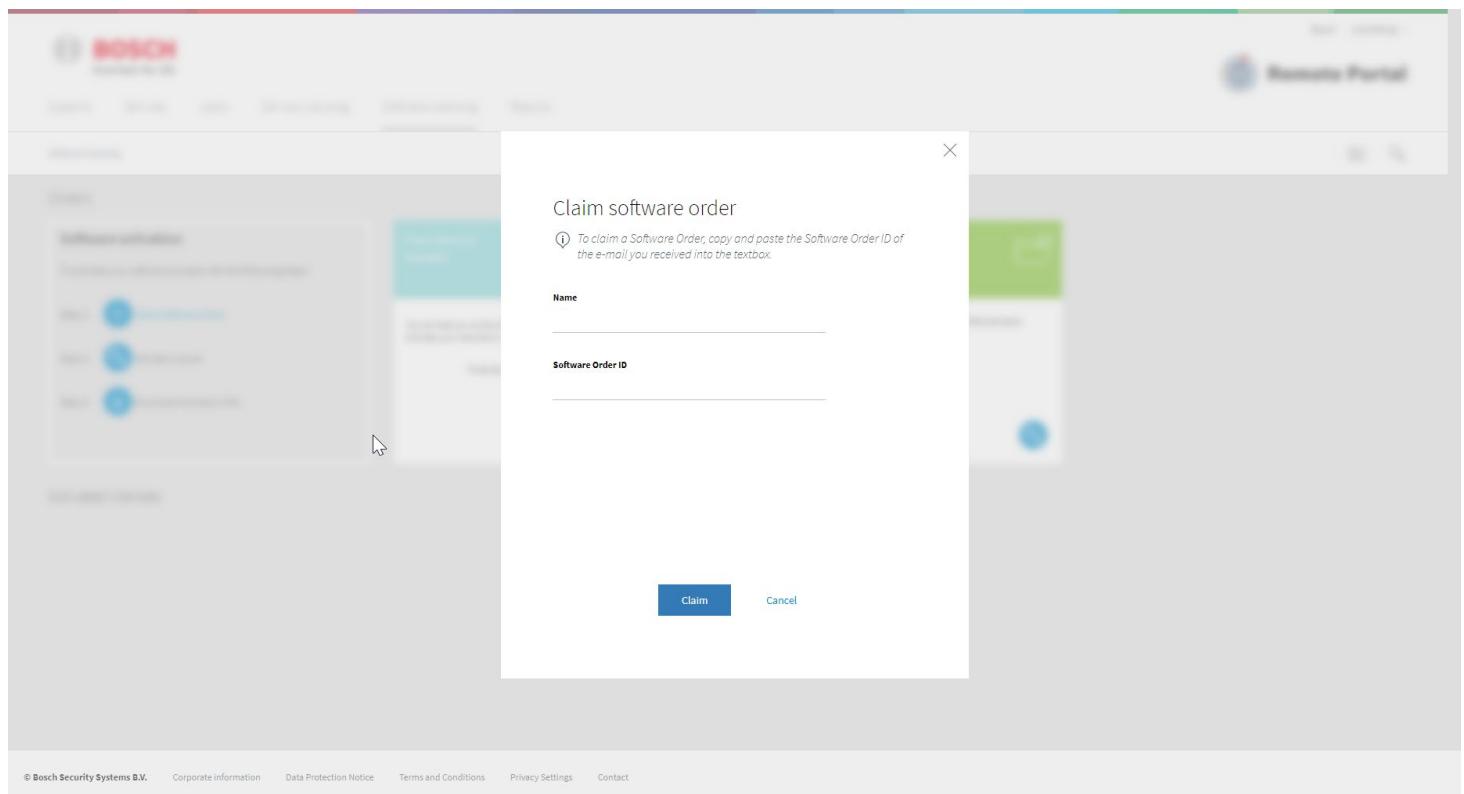
In case of an account in Remote Portal with several companies assigned, the default commissioning company has to be set in the Remote Portal (see Section 4.2) for the licensing in Configuration Manager to work properly. Note that the default commissioning company will only be active temporarily.

4.1 Claim software order ID

Go to Software Licensing. You will see an overview of your order there.



Now click on Claim Software Order on the left of that page. A popup will appear, where you enter a name and the Software Order ID you received from your software order. Press Claim afterwards.



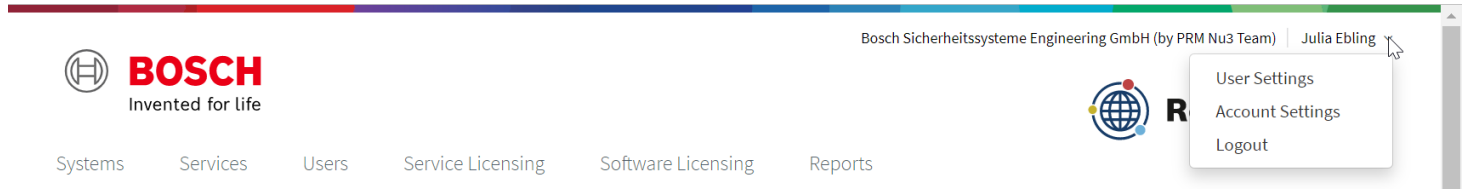
Your software order will now appear on the Software License overview page, and is ready for deployment to your cameras.

With the current implementation, it is not necessary nor possible to activate IVA Pro licenses further on this page and you need to continue in Configuration Manager.

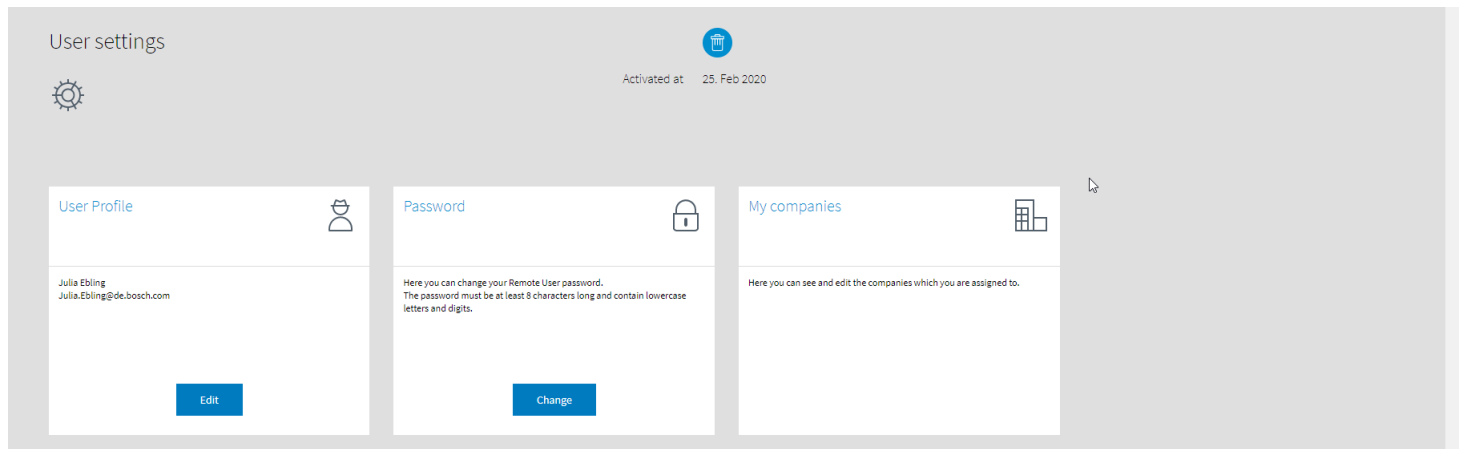
4.2 Set default commissioning company


In case of an account in Remote Portal with several companies assigned, the default commissioning company has to be set in the Remote Portal for Configuration Manager to access the correct license information in the Remote Portal. Note that the default commissioning company will only be active temporarily.

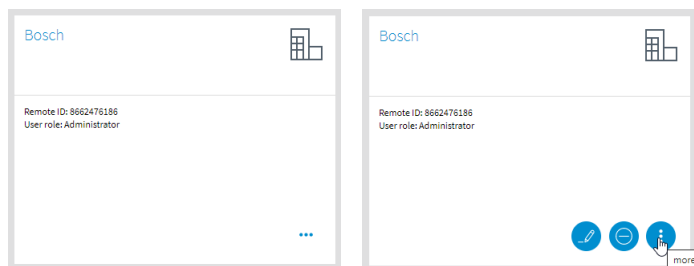
Click on your account to the top right, and then on User Settings.



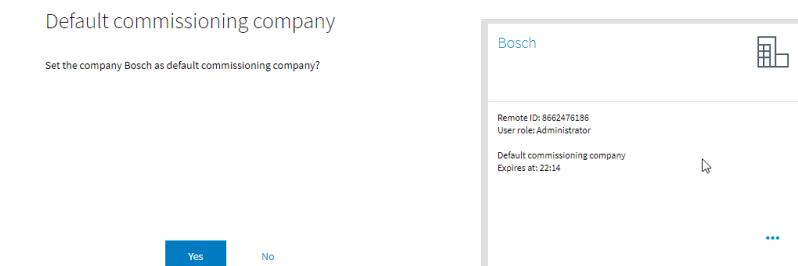
In the User Settings, select “My companies”.



You will get a tiles of all your companies, and the roles you have in them. Ensure that you have the user role “Administrator” for any license handling. Click on the three dots in the lower right of the company tile for a small menu to appear, and select the edit icon .




A popup appears and ask for confirmation to set this company as default commissioning company. Press yet. Afterwards, the company tile will show that this is now the default commissioning company, and when the temporary default will expire.



5 Configuration Manager: Assigning Licenses to Cameras

5.1 Connecting Configuration Manager to Remote Portal

Click on the Remote Portal Icon in the left toolbar: 

Enter your Remote Portal credentials in the popup and click OK.

Remote Portal ✕

User ▼

Password 👁

Remember

OK
Cancel

Now Configuration Manager will automatically connect to Remote Portal whenever possible.

5.2 Select the cameras from the device overview list


Multi-selection is available, and it is recommended to use this to speed up the process.

Filter 🔍 📎

Name	URL
▶️ 172.26.9.115	172.26.9....
▶️ 172.26.9.125	172.26.9....


5.3 Assign the licenses to cameras

The Licenses page is located under “Services” -> “Licenses”. It shows whether connection to Remote Portal is available. Any time you enter this page, the Configuration Manager will check and download any missing the system info files of the selected cameras, which are used for camera hardware identification.

General Connectivity Camera Recording Alarm VCA Network Service


Licenses Maintenance Certificates Logging Compatibility


▼ Licenses



No connection to remote portal licensing server ⚠ Connect to internet to retrieve additionally available licenses

▼ Advanced

Connection to Remote Portal is needed at least once for the Configuration Manager to learn what licenses are available. Once that is done, the available licenses will be shown even if no connection to Remote Portal is available. The example here is from a single camera, with the IVA Pro Traffic Pack already installed:


General Service 

Licenses

Remote portal licensing server available

CTN	Name	Action	Status	Available licenses
MVC-IVA-TRA	IVA Pro Traffic Pack		Installed	2
MVC-IVA-PER	IVA Pro Perimeter Pack		Unassigned	10


When multiple cameras are selected, the license page will list the amount of cameras for each license and status, and the Action will always work on all of them. The example here uses three cameras:


General Service 

Licenses

Remote portal licensing server available

CTN	Name	Action	Status	Available licenses
MVC-IVA-TRA	IVA Pro Traffic Pack		1 Unassigned, 2 Installed	4
MVC-IVA-PER	IVA Pro Perimeter Pack		2 Unassigned, 1 Installed	5


Now ensure connection to Remote Portal. Click on the  icon in the Action column to assign a licenses to one or multiple cameras. Note that when multiple cameras are selected, then all of them will be assigned the licenses. The status will now show “Request pending”. Here another multi-selection example with different status for different cameras:


General Service 

Licenses

Remote portal licensing server available

CTN	Name	Action	Status	Available licenses
MVC-IVA-TRA	IVA Pro Traffic Pack		1 Downloaded, 2 Installed	4
MVC-IVA-PER	IVA Pro Perimeter Pack		1 Request pending, 1 Downloaded, 1 Installed	5

Click on save  next, to confirm your choice . Configuration Manager will now request the licenses bound to the respective cameras, and download the (hardware bound) licenses. Once the Configuration Manager has received the licenses, the status will change to “Downloaded”.


General **Service** 

Licenses

Remote portal licensing server available

CTN	Name	Action	Status	Available licenses
MVC-IVA-TRA	IVA Pro Traffic Pack		Installed	4
MVC-IVA-PER	IVA Pro Perimeter Pack		Downloaded	5


Afterwards, ensure that the Configuration Manager again has connection to the cameras.


General **Service** 

Licenses

Remote portal licensing server available

CTN	Name	Action	Status	Available licenses
MVC-IVA-TRA	IVA Pro Traffic Pack		Installed	4
MVC-IVA-PER	IVA Pro Perimeter Pack		Downloaded	5

The license status will stay at “Downloaded”, until you click save  to confirm again. Then, the licenses will be uploaded into the cameras, the cameras will reboot, and the status will change to “Installed”.

General Connectivity Camera Recording Alarm VCA Network **Service** 

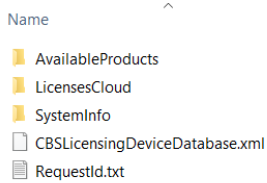
Licenses Maintenance Certificates Logging Compatibility

No connection to remote portal licensing server Connect to internet to retrieve additionally available licenses

CTN	Name	Action	Status	Available licenses
MVC-IVA-TRA	IVA Pro Traffic Pack		Installed	4
MVC-IVA-PER	IVA Pro Perimeter Pack		Installed	5

5.4 Storage of license information

The Configuration Manager stores all license related information in a dedicated folder. To find that folder, click on in the left toolbar, then select “About”. In the resulting popup, select “System”. Enlarge the popup and look for “CBS licensing folder”. Click on that row, and the respective folder will open. The folder contains the information about available licenses, all system info files downloaded from the cameras, and the hardware bound licenses downloaded from the Remote Portal. Note that the licenses cannot be stolen as they are bound to the respective camera hardware.



This folder can also be manually transferred to another Configuration Manager, if necessary, to transfer system info files or licenses. For that, ensure that all relevant devices are in the respective device trees of the Configuration Managers, e.g. by copying the “Device database” vdb.xml. The link to the device database can also be found in “About” -> “System”.

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