

BALLUFF

Manual

Balluff Update Platform

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Welcome to the Balluff Update Platform (BUP) documentation. Here you'll find an overview of BUP, its features, and step-by-step instructions for getting started and managing updates efficiently.

This getting started guide will help you to find and download artifacts that are associated with your Balluff product, such as firmware updates or configuration files.

PREREQUISITES

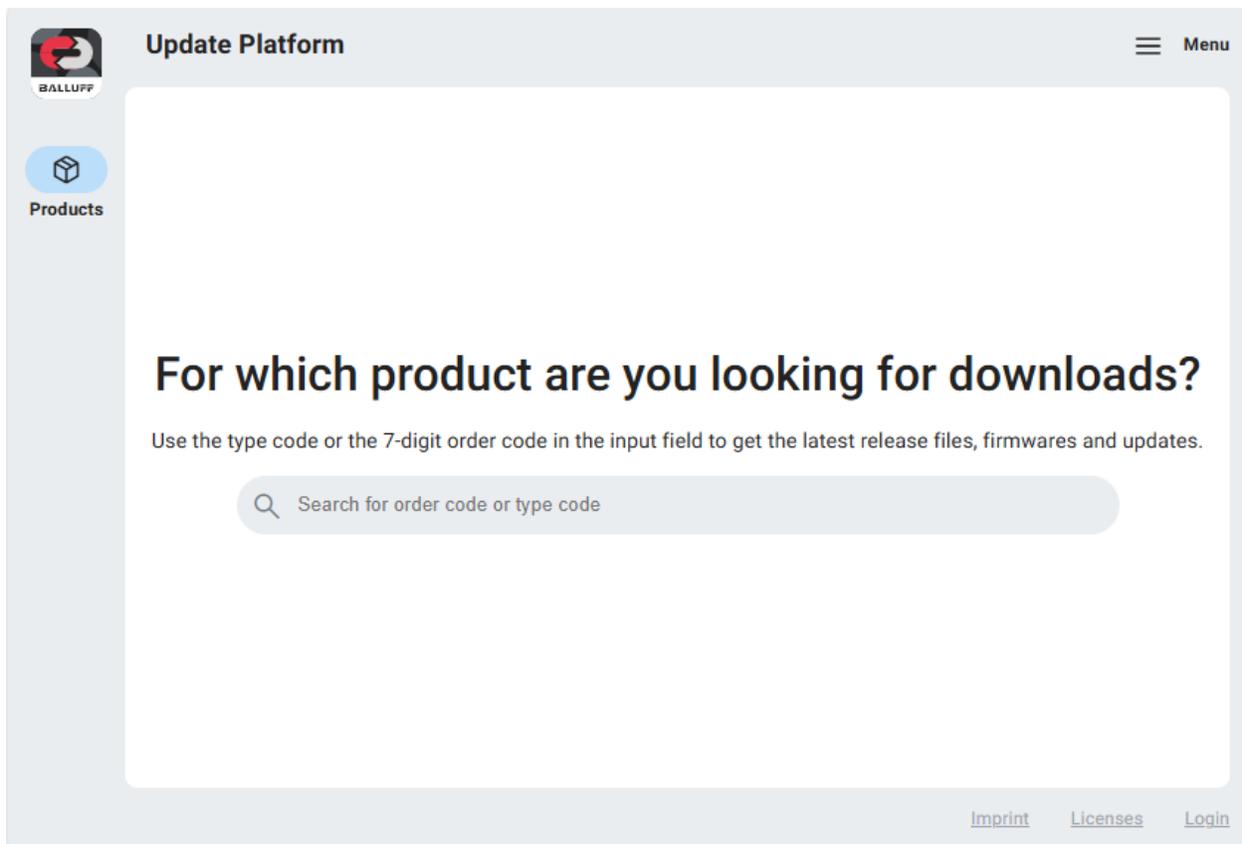
Please ensure you have the following information before proceeding:

- The 7 digit order code or the type code of your Balluff product.
This information is printed on the device or can be seen on various interfaces like *Balluff Engineering Tool* or *BNI/Network Block Module*.
- The hardware version of your product, if applicable.
This information can usually be found on the device label or in the product documentation.

FIND AND DOWNLOAD PRODUCT ARTIFACTS

To find and download product artifacts, follow these steps.

1. Access the Balluff Update Platform. To do so, open your web browser and navigate to <https://update.balluff.systems>. You will be redirected to the Products menu.



2. To find entries for your product, enter the seven digit order code or the type code in the search field. From the previewed results, click on your product to open its dedicated product page.

The product page opens and shows information about the latest available release. New artifacts in this release are marked next to the artifact version.

3. To navigate to the desired release, open the dropdown box showing the currently selected release and select the needed version. The downloadable files are presented in the table below.

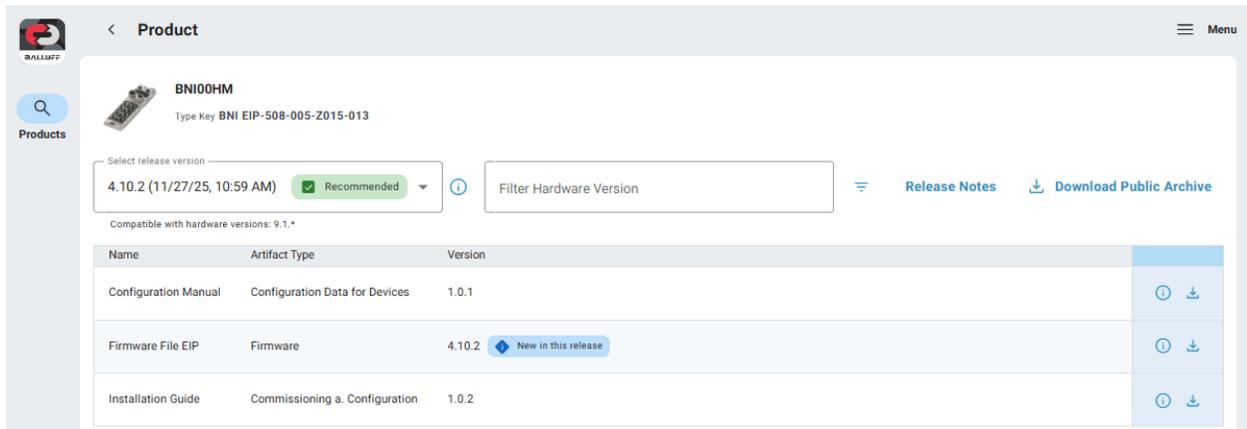
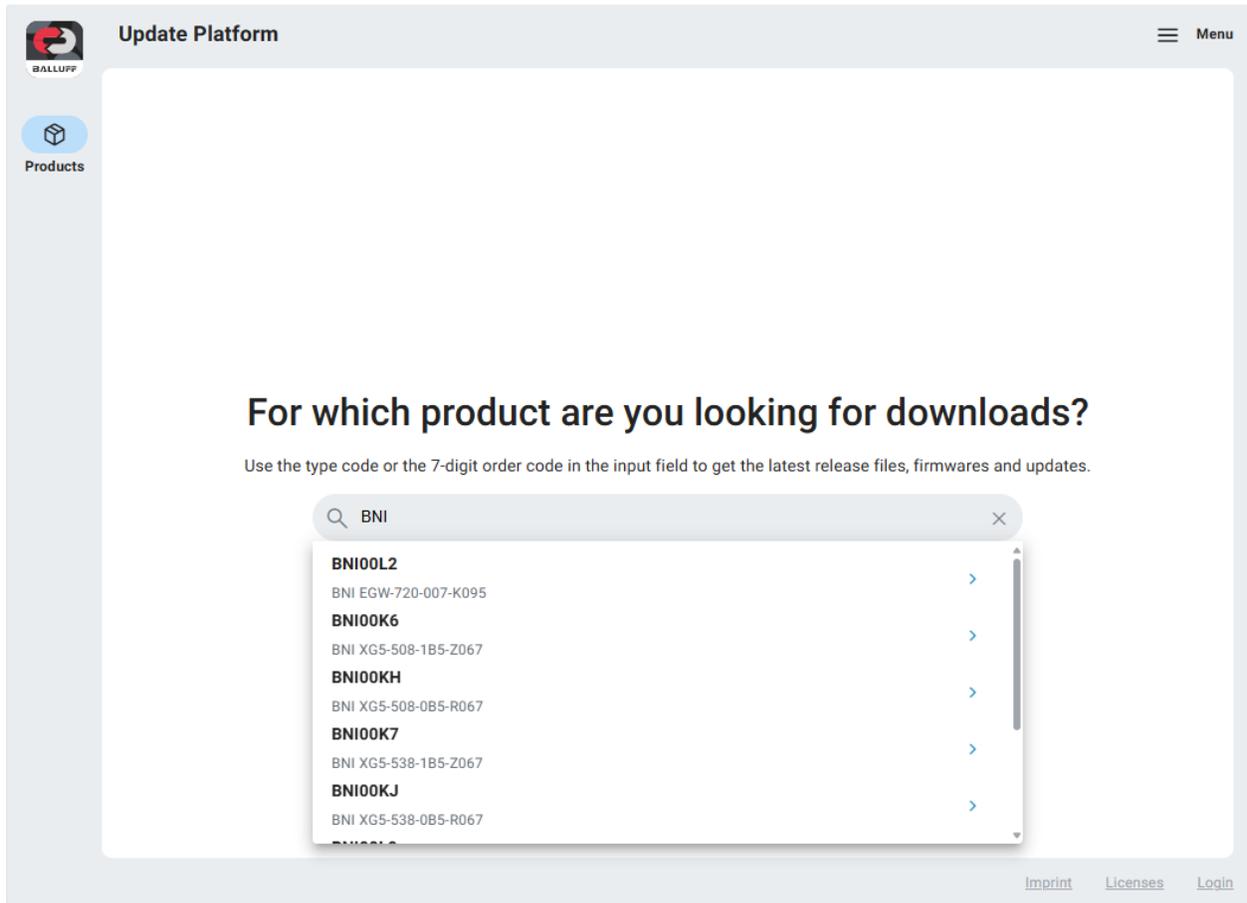
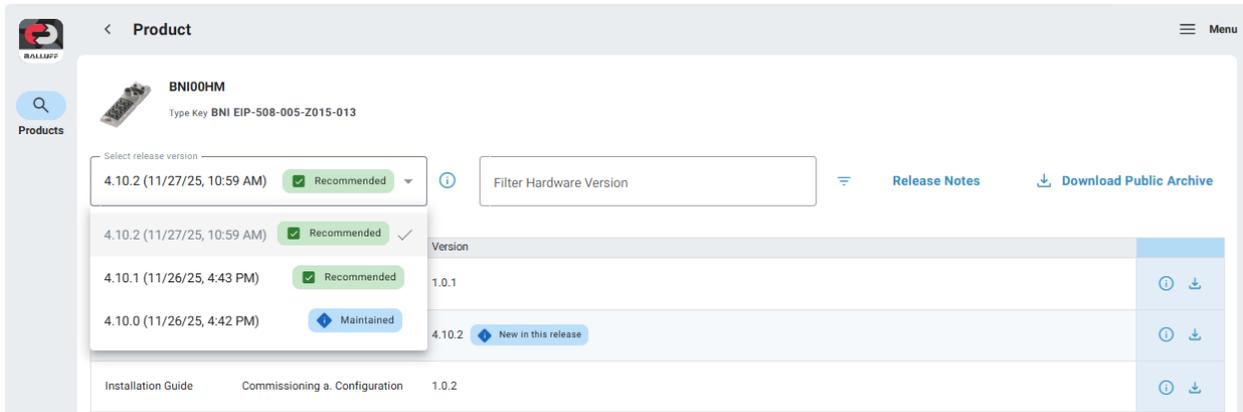


Fig. 1: Product page



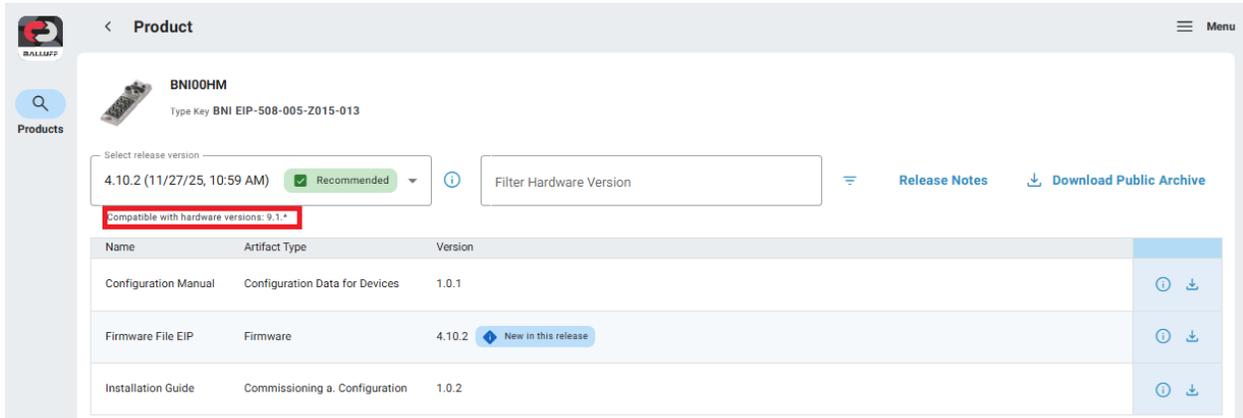
Hint

Releases can have following states:

- **Recommended** Actively maintained, fully supported, safest option
- **Maintained** Supported with essential fixes, but not the newest
- **Deprecated** Unsupported, no fixes - do not use this

4. Check if the listed files match your products hardware version. The information is displayed below the release selection.

Releases without text are compatible with all hardware versions of this product.



Note

When compatible hardware includes versions like

- **1.*.*** then the release is compatible to all versions beginning with major version 1.
- **1.1.*** then the release is compatible to all versions beginning with major and minor version 1.1.

When there is no compatible text, the release is valid for all devices containing this order code.

5. (Optional) Type in your hardware version in the filter field.
When the current release does not match it will be changed automatically.

The screenshot shows the Balluff Update Platform interface for product BNI00HM. The product name is BNI00HM and the type key is BNI EIP-508-005-Z015-013. The interface includes a search bar, a product name, a type key, and filters for release version and hardware version. A table lists artifacts with their names, types, and versions.

Name	Artifact Type	Version	
Configuration Manual	Configuration Data for Devices	1.0.1	ⓘ ⬇
Firmware File EIP	Firmware	4.10.2	ⓘ ⬇
Installation Guide	Commissioning a. Configuration	1.0.2	ⓘ ⬇

The release selection disables incompatible versions.

The screenshot shows the Balluff Update Platform interface for product BNI00HM. The product name is BNI00HM and the type key is BNI EIP-508-005-Z015-013. The interface includes a search bar, a product name, a type key, and filters for release version and hardware version. A dropdown menu is open, showing a list of release versions with their dates and status.

Version	
4.10.2 (11/27/25, 10:59 AM)	ⓘ ⬇
4.10.2 (11/27/25, 10:59 AM)	ⓘ ⬇
4.10.1 (11/26/25, 4:43 PM)	ⓘ ⬇
4.10.0 (11/26/25, 4:42 PM)	ⓘ ⬇
4.10.2	ⓘ ⬇

- (Optional) To get a bookmark of the newest release you need to save the URL without the filter after the order code.
- (Optional) You may want to verify artifact file information before download, see *Information of release files*
- To download a file, click on the download icon on the right side of the respective file row.

Warning

Do only install firmware on compatible hardware versions.

- (Optional) You can download all public files of the selected release as archive.

This archive can be handled by the Balluff Engineering Tool (BET) to update devices not connected to the internet. It has the ending .bup but is in fact a zip archive which can be extracted by any available archiver.

Warning

Do only install firmware on compatible hardware versions.



Update Platform

 Menu



BN100HM
Type Key BNI EIP-508-005-Z015-013

Select release version

4.10.2 (11/27/25, 10:59 AM)

 Recommended

Filter Hardware Version

[Release Notes](#)

[Download Public Archive](#)

Compatible with hardware versions: 9.1.*

Name	Artifact Type	Version	
Configuration Manual	Configuration Data for Devices	1.0.1	
Firmware File EIP	Firmware	4.10.2 New in this release	
Installation Guide	Commissioning a. Configuration	1.0.2	


bn1-ad.xg5.bff

3.9 MB/s - 3.9 MB von 5.9 MB, 0 Sek. verbleibend

[Mehr anzeigen](#)



Update Platform

 Menu



BN100HM
Type Key BNI EIP-508-005-Z015-013

Select release version

4.10.2 (11/27/25, 10:59 AM)

 Recommended

Filter Hardware Version

[Release Notes](#)

[Download Public Archive](#)

Compatible with hardware versions: 9.1.*

Name	Artifact Type	Version	
Configuration Manual	Configuration Data for Devices	1.0.1	
Firmware File EIP	Firmware	4.10.2 New in this release	
Installation Guide	Commissioning a. Configuration	1.0.2	


BN100HM_4.10.2.bup

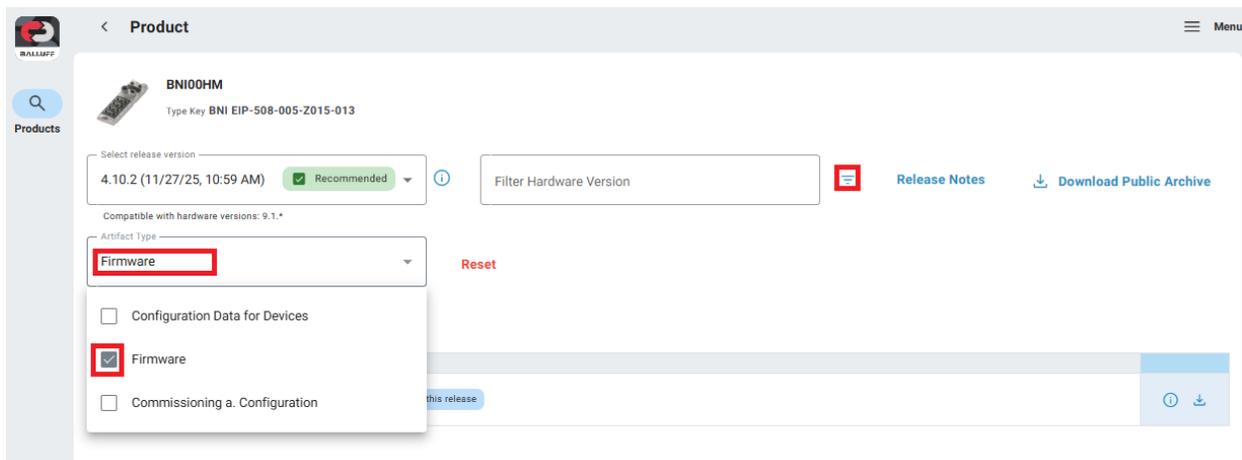
8.8 MB/s - 143 MB 9 MB, 0 Sek. verbleibend

[Mehr anzeigen](#)

FILTER FOR ARTIFACTS

To filter the available artifacts for specific types:

1. Navigate to the desired product release, see [Product page](#).
2. To open the filter options for artifact types, click on the filter icon.
3. A new box for **Artifact Types** appears. To select the filter conditions, click on the checkboxes of the desired artifact types. To confirm your selection, click outside of the box.



Hint

- A button to reset the filter appears when the artifact type filter is active
- The filter line can be hidden again by clicking on the filter icon a second time.
- To get a bookmark of always the newest release but with type filter you need to save the URL without version and releaseAt filter

RELEASE NOTES

To view the release notes of a selected release:

1. Navigate to the desired product release, see *Product page*.
2. Click on the **Release Notes** button right of the release field. The release notes will be displayed on the right side.

The screenshot shows the 'Update Platform' interface. On the left, there's a sidebar with 'Products' and a main area for 'BNI00K6' (Type code BNI XG5-508-1B5-Z067). Below this, there's a 'Select release version' dropdown showing '1.2.0 (9/5/25, 8:57 AM)' with a 'Recommended' status. To the right of the dropdown is a 'Filter Hardware Version' input field and a 'Release Notes' button highlighted with a red box. Below the dropdown is a table of releases:

Name	Artifact Type	Version
Balluff_BNI_XG5-5x8-xB5-x067_ECS_V1.2.0	Device Descr. File EtherCAT	1.2.0
BNI_XG5_API	API Specification Collection	1.2.0
BNI_XG5_EDS	Device Descr. File EtherNet/IP	1.2.0
BNI_XG5_GSDML-V2.45	Device Descr. File Profinet	2.45.0
BNI_XG5_Update	Firmware	1.2.0

On the right, a 'Release Notes' drawer is open, showing 'New Features' under 'General':

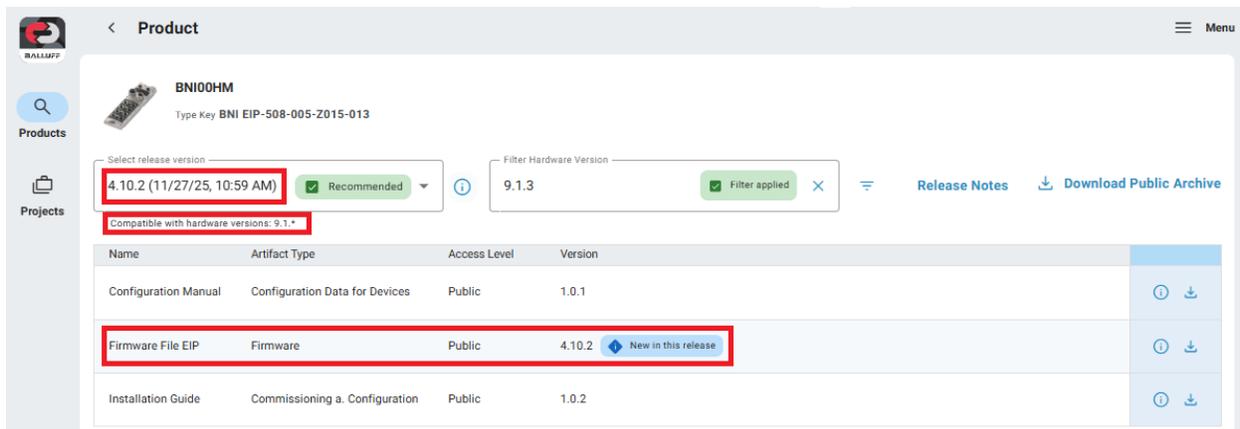
- **Autodetect**
To further simplify the commissioning of multiprotocol Networking Modules, the new default setting will be "Autodetect" mode. In this mode, the Networking Module will monitor the current network and, upon successful detection, will automatically switch to the identified fieldbus. This functionality is compatible with all fieldbuses supported by the Networking Module. While "Autodetect" mode is active, users can still access the WebUI, from which they can manually set the fieldbus. Additionally, the WebUI allows users to revert the device to "Autodetect" mode at any time.
- **HTTPs is now default**
For enhancing the security of the module HTTPs is now the default communication protocol for the WebUI and the REST API.
- **MQTTs**
MQTT traffic is now encrypted with TLS. Users can enable or disable this encryption independently of HTTPs settings via the WebUI and REST API.
- **NTP Support**
The Networking Module now supports time synchronization via NTP. Users can configure a custom NTP server through the WebUI or REST API.
- **Hardware Current Limits for BNI XG5-5x8-xB5-x067**
All Networking Modules within the XG5 family (Advanced Line) now have the capability to configure distinct current limits for Pin 2 and Pin 4 of each I/O

3. To close the release notes, click outside the release notes drawer.

INFORMATION OF RELEASE FILES

To see additional information about a file:

1. Navigate to the desired product page, see *Product page*. A Table with available release artifacts is displayed.
2. Verify the artifact you want to download:
 - Release is the correct one matching your hardware.
 - Artifact Type is correct one.
 - Artifact Name matches your needs.
 - Artifact has changed since last release.



The screenshot shows a product page for BN100HM. The 'Select release version' dropdown is set to 4.10.2 (11/27/25, 10:59 AM), which is highlighted with a red box. Below it, a note indicates 'Compatible with hardware versions: 9.1.*'. The 'Filter Hardware Version' dropdown is set to 9.1.3. A table of release artifacts is displayed below, with the 'Firmware File EIP' row highlighted in red. The version '4.10.2' for this artifact is also highlighted in red, and a 'New in this release' badge is visible next to it. The table has columns for Name, Artifact Type, Access Level, and Version.

Name	Artifact Type	Access Level	Version
Configuration Manual	Configuration Data for Devices	Public	1.0.1
Firmware File EIP	Firmware	Public	4.10.2 New in this release
Installation Guide	Commissioning a. Configuration	Public	1.0.2

3. Click on **Information** icon in the artifact line.

Verify the file information:

- Check *Description* if available.
- Review remaining information.

Hint

The integrity of a downloaded file can be checked by comparing the SHA256 hash with the one shown in *File information* window. For more information go here: [Check file integrity](#).

4. Click outside of the *File information* window to close it.

Product

BNI00HM
Type Key BNI EIP-508-005-Z015-013

Select release version: 4.10.2 (11/27/25, 10:59 AM) Recommended ⓘ

Filter Hardware Version: 9.1.3 Filter applied ✕

Compatible with hardware versions: 9.1.*

Name	Artifact Type	Access Level	Version	
Configuration Manual	Configuration Data for Devices	Public	1.0.1	ⓘ ⬇️
Firmware File EIP	Firmware	Public	4.10.2 New in this release	ⓘ ⬇️
Installation Guide	Commissioning a. Configuration	Public	1.0.2	ⓘ ⬇️

File information ✕

Type: Firmware
Version: 4.10.2
Name: Firmware File EIP
Hash: c18ab3f408376abba0e8e938151410209397ad5b01c2965254b69c45a575eaf7
Hash type: SHA256
Filename: bni-ad-eip.bff
Description: BNI EIP Firmware Update
Size: 5.93 MB
Date of creation: Nov 27, 2025, 10:57 AM

CHECK FILE INTEGRITY

6.1 Why do you want to check the integrity?

This list only shows some examples, but there are more:

- Check whether the downloaded file is complete or the download got corrupted.
- Check that the file that was downloaded a while ago is still the most recent one, even when the file was renamed.
- Chain of trust - Make it harder for attackers to tamper any file:
 - We can verify that the uploaded file is the one we wanted to upload.
 - You can verify that the file you downloaded is the file that was uploaded by us.

6.2 How does verifying with a hash work?

- A fingerprint of the file is generated and displayed in BUP.
- User downloads the file.
- User generates the fingerprint of the downloaded file.
- User compares both fingerprints.
=> The downloaded file is the same as in the cloud.

6.3 How to read the hash of a file on your PC via commandline?

Precondition:

- A file is downloaded from BUP.

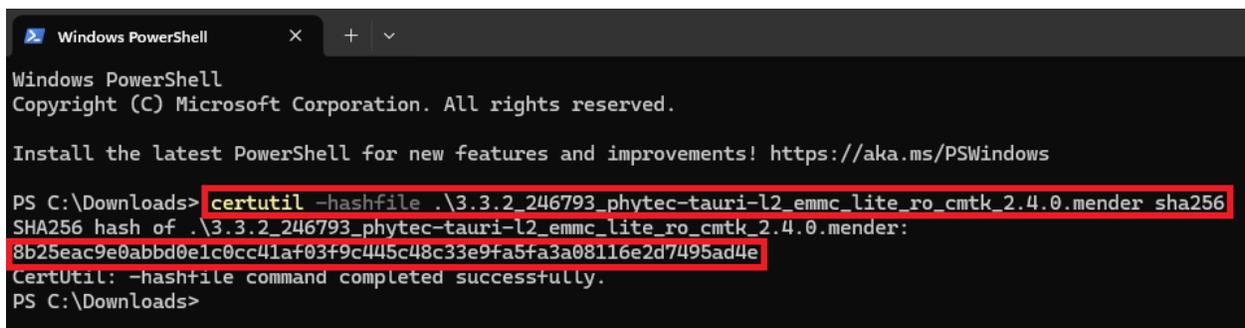
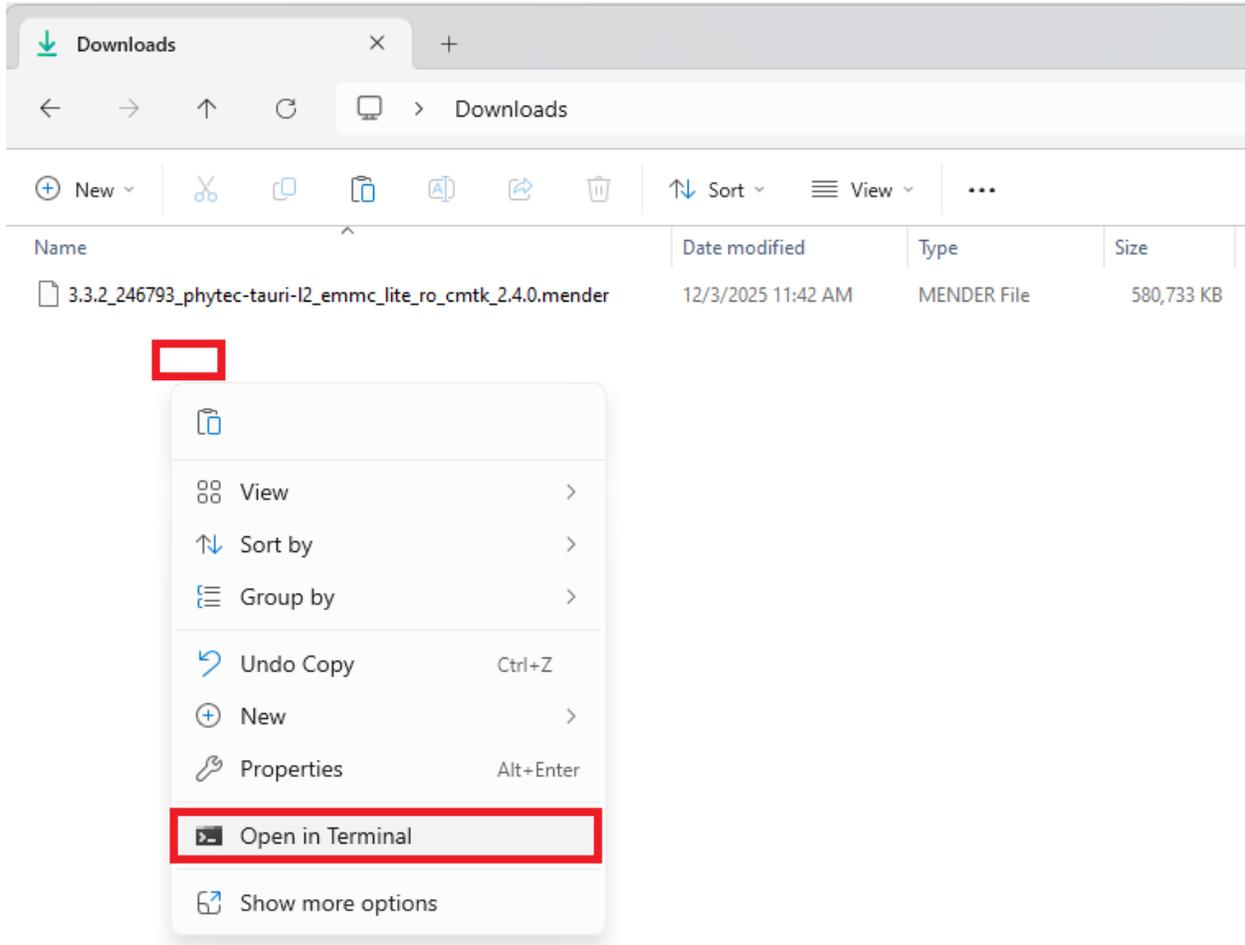
Steps:

1. Open folder of the file.
2. Right click on empty space in folder.
3. Click "Open in Terminal".
4. Write "certutil -hashfile <your-file-name> sha256"

Hint

You can just write the begin of your file and complete it by pressing tabulator key.

5. Press enter key.
6. Read the displayed hash.



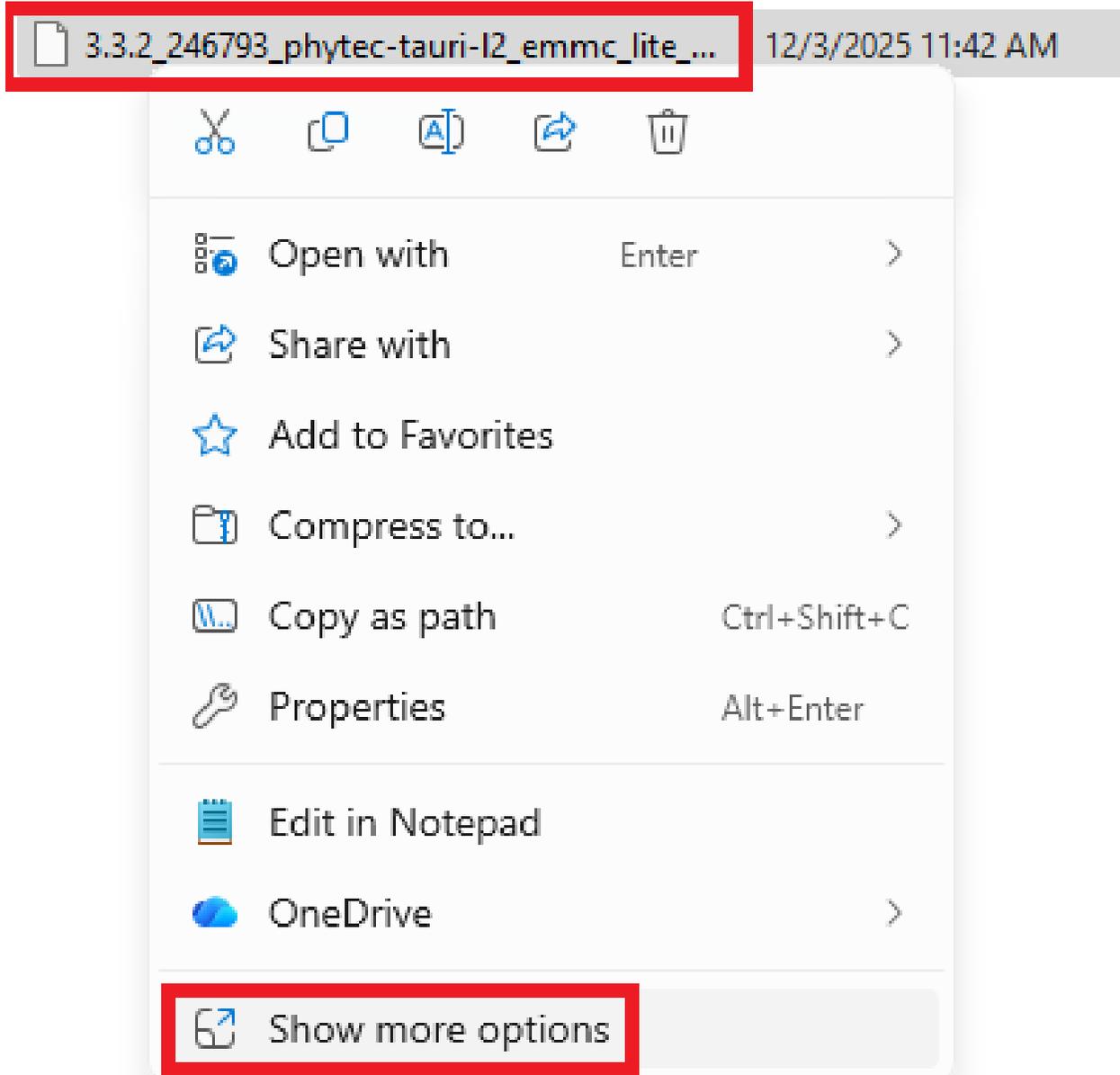
6.4 How to read the hash of a file on your PC via 7-zip?

Precondition:

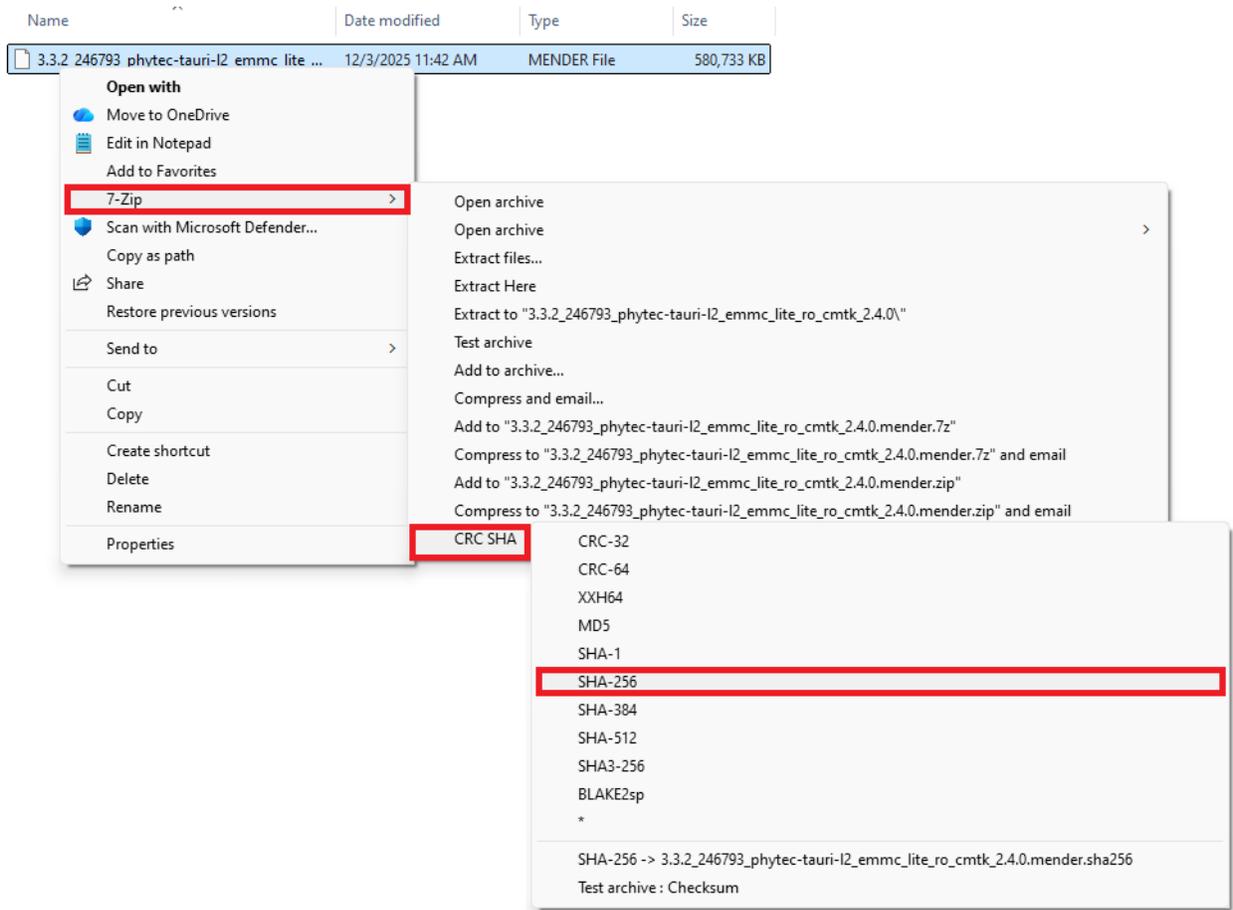
- A file is downloaded from BUP.
- The archiver program 7-zip is installed on the PC.

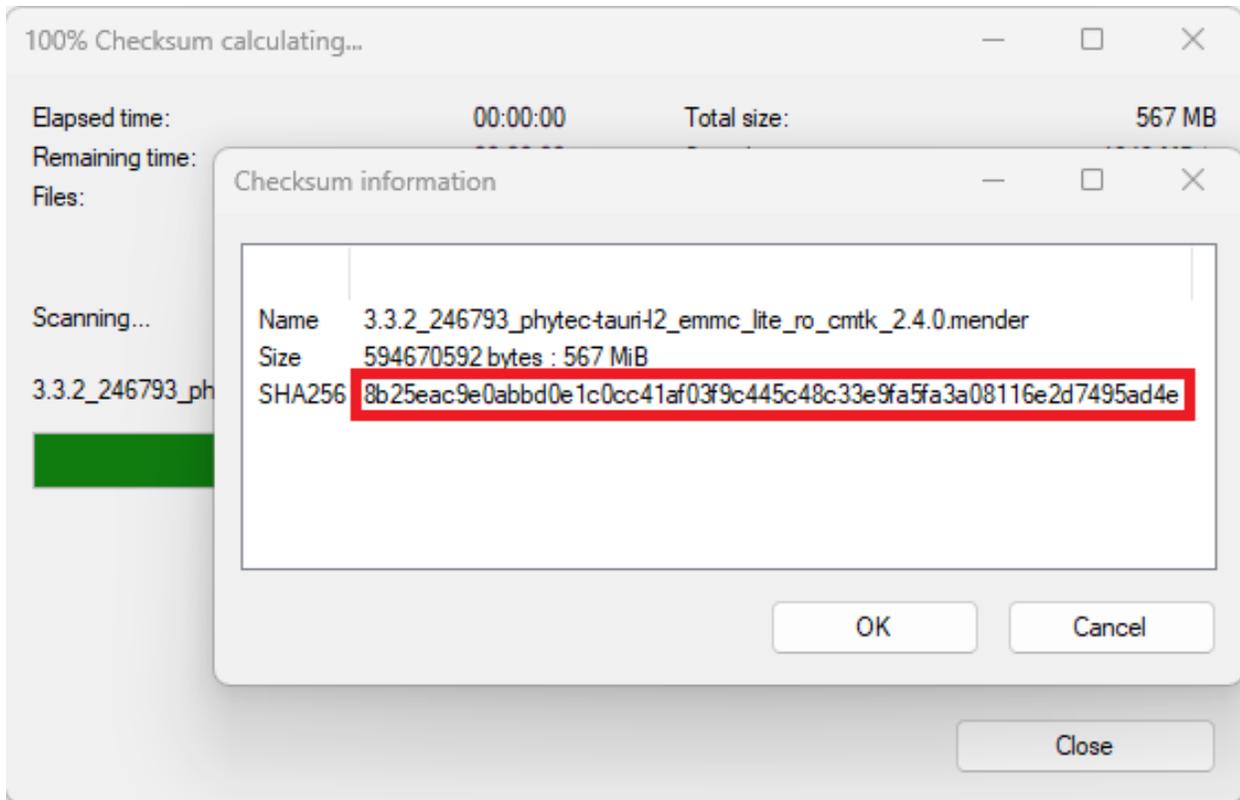
Steps:

1. Right click on file in folder.
2. Click “Show more options”.
3. Navigate to “7-zip > CRC SHA > SHA-256”
4. Click on “SHA-256”
5. Read the displayed hash.



6.4.1 General Settings



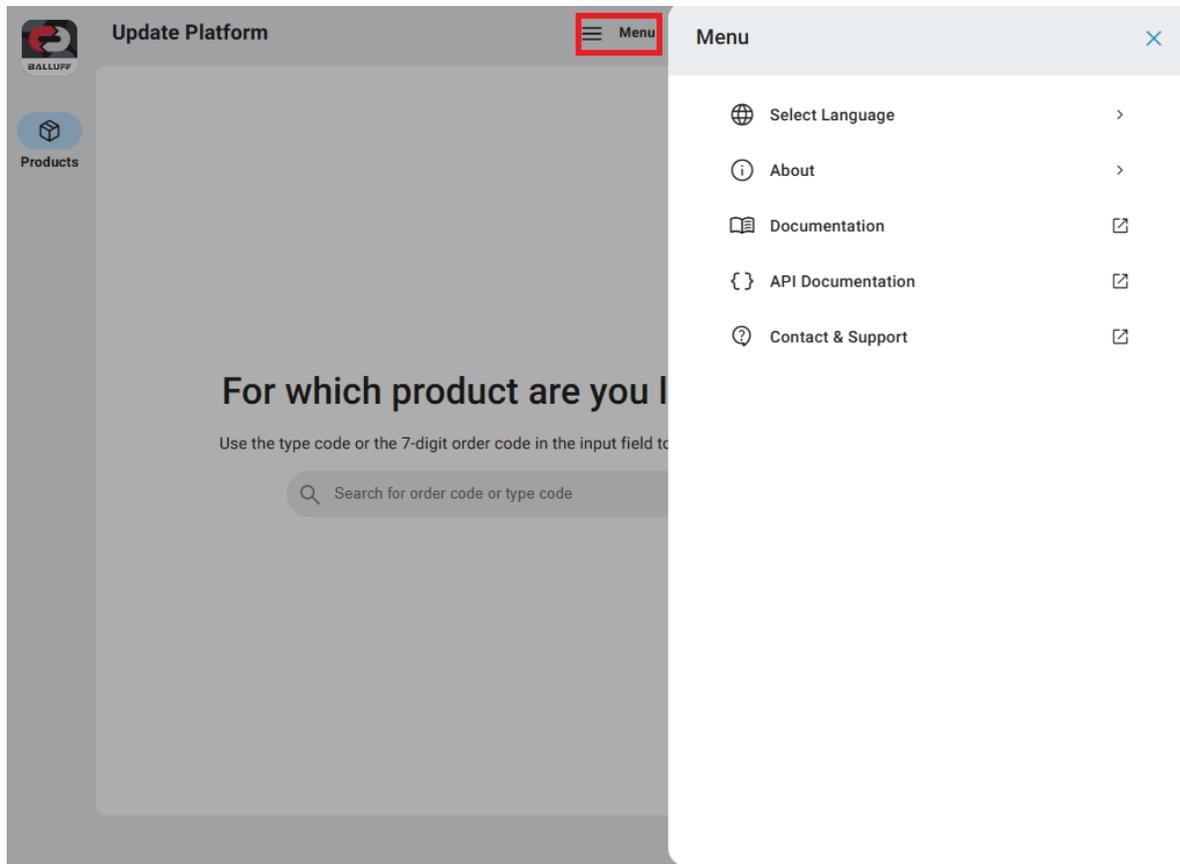


Change language

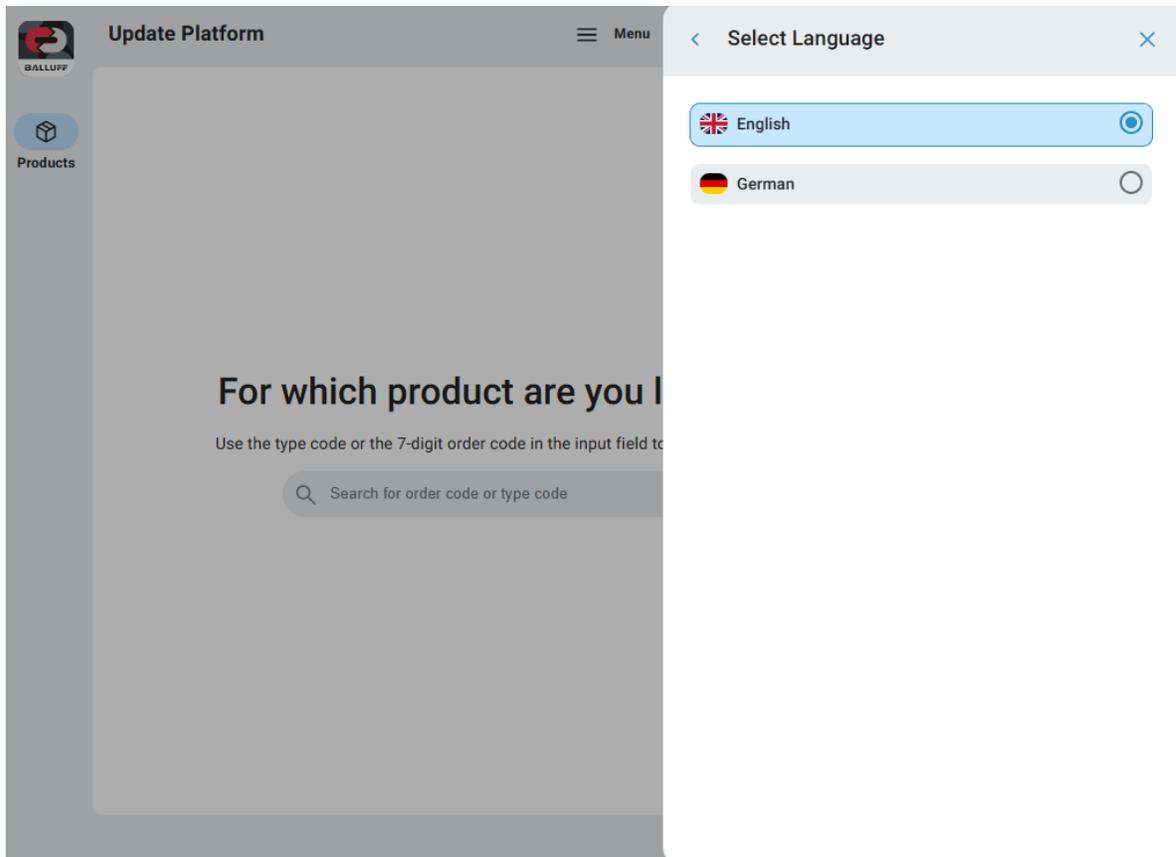
Note

You should already be on the Balluff Update Platform URL.

- Click on the menu button on the top right corner.



- Click on **Select Language**.
- Select your preferred language.



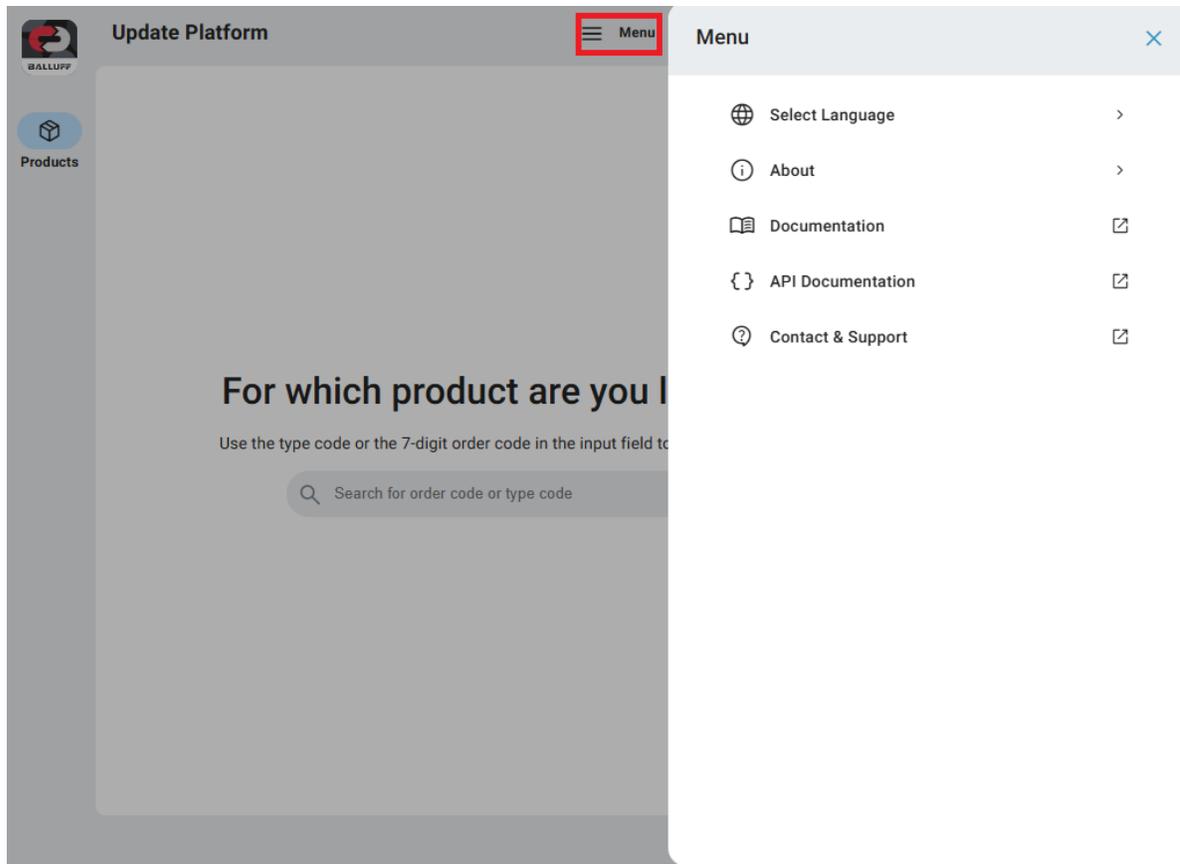
- Click on the grey background to close the menu.

Get current version

Note

You should already be on the Balluff Update Platform URL.

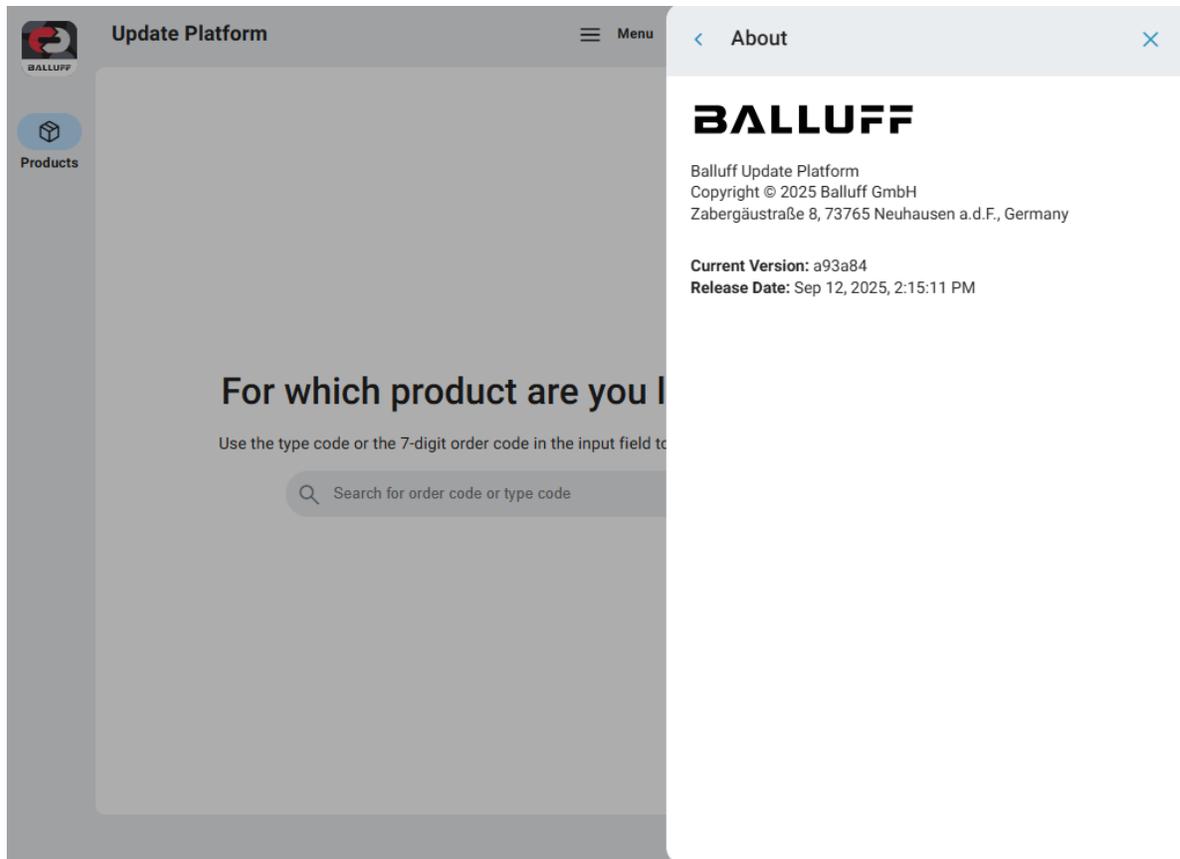
- Click on the menu button on the top right corner.



- Click on **About**.

Information is displayed:

- Company address
- Current Version
- Release Date

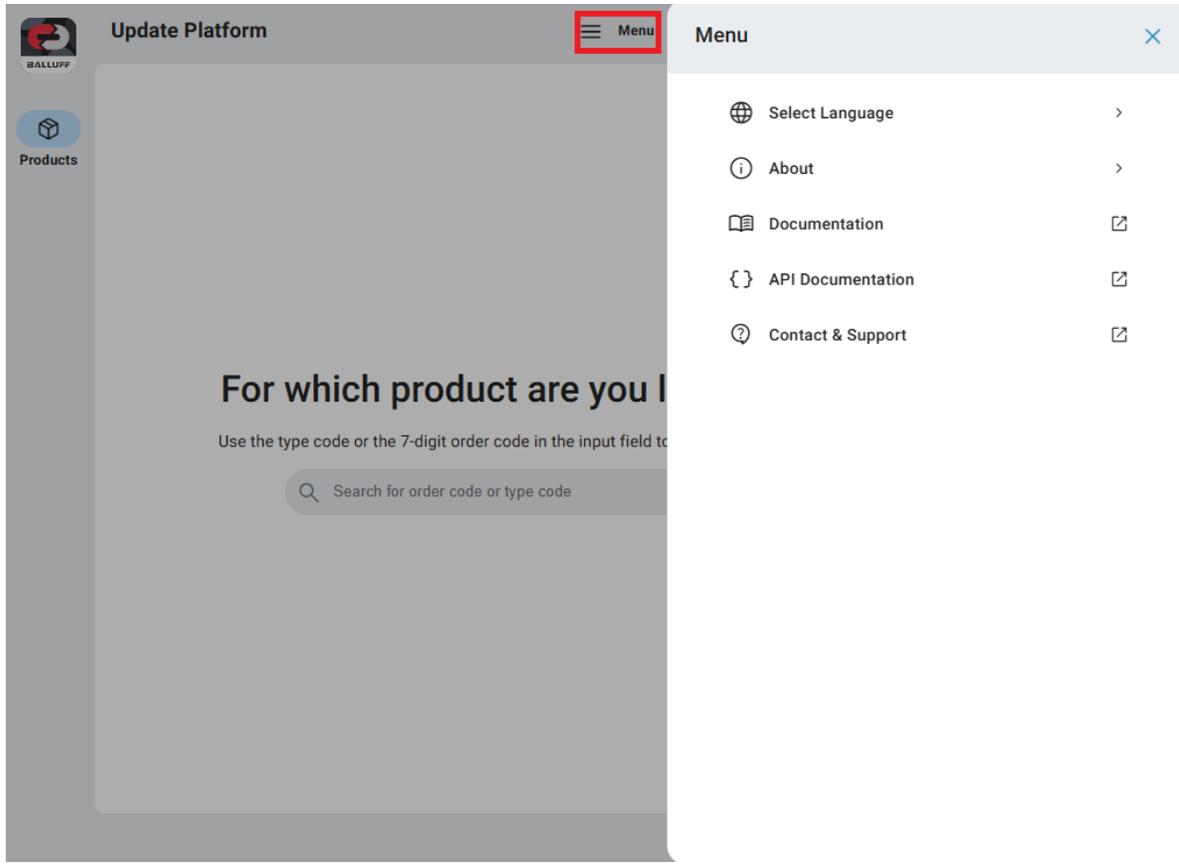


API Documentation

Note

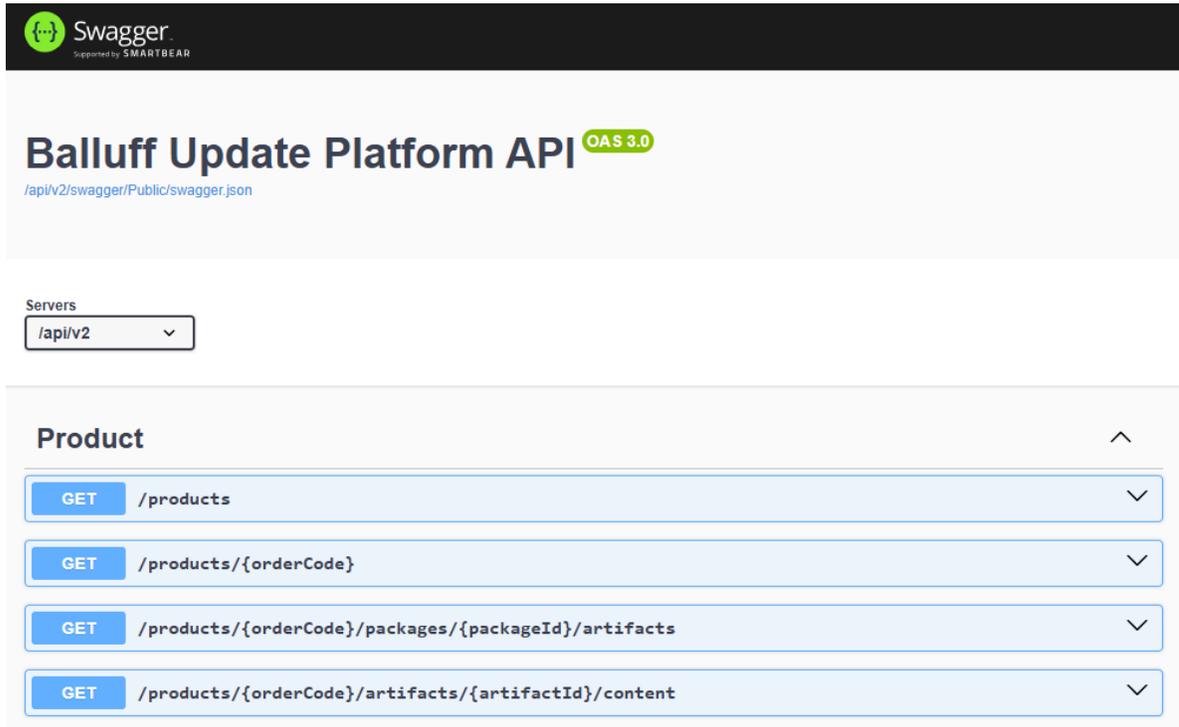
You should already be on Balluff Update Platform URL.

- Click on the menu button on the top right corner.



- Click on **API Documentation**.

A swagger API document appears including the API endpoints usable for update automation.



Note

The URL for a complete request can look like this: <https://update.balluff.systems/api/v2/products>

Hint

You can try out each endpoint receiving real live data.

The screenshot displays the Swagger UI for the Balluff Update Platform API. At the top, the Swagger logo and 'Supported by SMARTBEAR' are visible. The main heading is 'Balluff Update Platform API' with an 'OAS 3.0' badge. Below this, the URL '/api/v2/swagger/Public/swagger.json' is shown. A 'Servers' dropdown menu is set to '/api/v2'. The selected endpoint is 'GET /products'. A 'Try it out' button is highlighted with a red box. Below the endpoint details, there is a 'Parameters' section with a table:

Name	Description
filter	

The 'filter' parameter is a string (query) with a text input field containing the value 'filter'. Below the parameters is a large blue 'Execute' button, also highlighted with a red box. At the bottom, the 'Responses' section shows a table:

Code	Description	Links
200	OK	No links

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