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Frequently Asked Questions for SAP Warehouse Robotics

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1 General

How can I report an incident?

To report an incident, create a BCP incident under the component *SCM-WR*-*.

For more information about reporting an incident, see <https://support.sap.com/en/index.html> .

How do I change the app language?

To change your app language, choose  *Settings*  *Language & Region* .

2 Onboarding

I need a user. How do I create one?

Your administrator for the SAP BTP cockpit needs to create the users (and assign roles to them) on behalf of their colleagues. The administrator (**not the network**) is responsible for creating and maintaining the users. Also, when someone leaves the company, the administrator is responsible for deleting the user.

Why do I have mixed data for SAP Warehouse Robotics in my different subaccounts?

For example, if you have two subaccounts for the same global account in the SAP BTP cockpit, and both subaccounts have subscribed to SAP Warehouse Robotics, it is possible that your data will be mixed.

Make sure that you don't define the same destination names and URLs for these two subaccounts, so the system can better distinguish the destinations.

3 Define EWM Integration Settings

Why can't I connect my warehouse number to a destination warehouse number, for example, an SAP EWM warehouse number?

It could be for one or more of the following reasons:

- The destination warehouse number is already deleted or changed.
- The destination URL isn't correct for your subaccount in SAP BTP cockpit.

You can check the destination in the SAP BTP cockpit and the Cloud Connector.

SAP BTP Cockpit

In the SAP BTP cockpit, perform the following actions:

1. Go to your subaccount.
2. Choose ► [Connectivity](#) ► [Destinations](#) ►.
3. Check the availability of the destination connection.

Before the check, make sure that the following parameters are correct:

- URL
The URL in the destination is a virtual host and a port that you have configured in your Cloud Connector. For example, if you defined a virtual host `my-virtual-host` and a port `8080`, enter the URL `http://my-virtual-host:8080`.
- User and Password
- Location ID
You must use the same location ID as the ID that is configured in the Cloud Connector.

If the connection test is successful, check whether your on-premise system has implemented the required OData service in the relevant SAP Notes in the document [Connecting to SAP EWM](#).

If the connection test is unsuccessful, continue with the following step.

4. Choose [Cloud Connectors](#).
Make sure that everything is set up correctly here. Otherwise, check the configurations in the Cloud Connector.

Cloud Connector

In the Cloud Connector, perform the following actions:

1. Go to your subaccount.
2. Choose [Cloud To On-Premise](#).

Check the following entries:

- Virtual Host
Use the same host as the one for the destination URL in the SAP BTP cockpit.
- URL Path
Use the path that is in the path list of the virtual host.
If the entries are incorrect, create a new connector because the virtual host isn't changeable.
Otherwise, change the destination URL in the SAP BTP cockpit.

Then check the connection. If the connection is still unsuccessful, change the internal host, or check your on-premise system.

4 Relevant SAP Notes

Do you have a complete list of SAP Notes for SAP Warehouse Robotics?

Yes. Here is the list of all SAP Notes for integration services for SAP Warehouse Robotics:

SAP Note	Description
3198030 	How-to Guides for SAP Warehouse Robotics
3329638 	How-To Guides for Integration Services for SAP Warehouse Robotics
3147663 	Integration with EWM in S/4HANA 2021 and SAP EWM 9.5
3335287 	Integration with EWM in S/4HANA 2020 and 1909
3247030 	SAP Warehouse Robotics: Enhancements to Integration with SAP EWM
3200063 	Download Data from SAP EWM
3338208 	Test Tenants for SAP Warehouse Robotics
3297110 	SAP Warehouse Robotics: Charging Points

Here is the list of all SAP Notes in SAP Warehouse Robotics for the integration with fleet management systems:

SAP Note	Description
3198030 	How-to Guides for SAP Warehouse Robotics
3147663 	Integration with EWM in S/4HANA 2021 and SAP EWM 9.5
3335287 	Integration with EWM in S/4HANA 2020 and 1909
3247030 	SAP Warehouse Robotics: Enhancements to Integration with SAP EWM
3200063 	Download Data from SAP EWM
3296106 	Test & Demo License for SAP Warehouse Robotics: Mock Service for SAP EWM
3338208 	Test Tenants for SAP Warehouse Robotics
3381809 	Integration with SAP EWM for Determination of Destination Storage Bins by Fleet Management Systems

5 Service Level Agreement

The maintenance and major upgrade windows for SAP Warehouse Robotics are defined in the Service Level Agreement for Cloud Services. SAP may update these windows from time to time in accordance with the Agreement.

For more information, see [Maintenance Windows and Major Upgrade Windows for SAP Cloud Services](#).

6 Language Support

The web-based administration user interface of SAP Warehouse Robotics supports the following languages:

- Dutch
- English
- French
- German
- Japanese
- Portuguese
- Russian
- Simplified Chinese
- Spanish

7 Frequently Asked Questions Integration via Fleet Management Systems

Why can't SAP Warehouse Robotics receive any notifications from my fleet management system?

Ensure that you have configured the correct callback URL in the fleet management system.

To get the callback URL, perform the following actions:

1. Open the *Onboard Robots – Fleet Management* app, then the *Define Fleet Management Systems* step.
2. Choose *Obtain Callback URL*.

Why can't my robot get any warehouse orders for processing from SAP EWM?

Ensure the following settings:

- You have successfully integrated SAP Warehouse Robotics with your fleet management system. For more information, see [Connection Guide for Fleet Management Systems](#).
- You have successfully integrated your warehouse in the *Define EWM Integration Settings* configuration step.
- In SAP EWM, there are warehouse orders in the queue of the resource group of the resource that is assigned to your robot. And each warehouse order contains only one handling unit (HU) warehouse task.

8 Frequently Asked Questions for Integration Services for SAP Warehouse Robotics

How can I handle a change to the IP address of an edge node after my Kubernetes cluster is set up?

You set a fixed IP address for an edge node and install a Kubernetes cluster on the edge node.

If the IP address isn't fixed, the IP address can possibly be changed automatically. In this case, the Kubernetes cluster can't be accessed anymore.

To fix the issue, perform the following actions:

1. Use the `ifconfig` command to get the IP address of the edge node. Note it down.
2. Get the value for the server from the `~/ .kube/config` file (configuration file for the Kubernetes cluster). Note it down.
3. To align the IP addresses, assign the value for the server in step 2 to the edge node.
4. Reboot your edge node.

How can I bypass IP addresses for a Kubernetes cluster when using a proxy?

For an explicit proxy, you may have some connection issues when setting up your Kubernetes cluster. To fix this issue, you should bypass the IP addresses used by the Kubernetes cluster by configuring the `NO_PROXY` environment variable.

You should bypass the following IP addresses:

- IP address of pod
When setting up the Kubernetes cluster, you can specify a CIDR (Classless Inter-Domain Routing) address for a pod.
Depending on the network plugin that you use, the following addresses are available:
 - If you use Flannel, the default CIDR address for the pod is 10.244.0.0/16.
 - If you use Calico, the default CIDR address for the pod is 192.168.0.0/16.
 - For other network plugins, you need to refer to their official websites for the relevant addresses.
- Service address
By default, the CIDR address for the service is 10.96.0.0/12.
- Edge node address
You can use the `ifconfig` command to get the IP address of the edge node.

Use commas to concatenate the IP addresses of the pods, the service address and the edge node address. Append the value to your `NO_PROXY` environment variable. For example, `",10.244.0.0/16,10.96.0.0/12,172.16.27.143"`.

Can I activate a firewall when setting up the Kubernetes cluster?

If you activate a firewall when setting up a Kubernetes cluster, you may have some network issues. To avoid these issues, you have the following options:

- To open the ports used by the Kubernetes cluster.
- To allow the IP addresses used by the Kubernetes cluster. For more information, see IP addresses in the question "How to bypass IP addresses for Kubernetes when using a proxy?".

8.1 Monitor Robots for Integration Services

Why doesn't my robot move anymore while processing warehouse orders?

The reason could be that someone has manually paused the robot in your warehouse. Check the physical robot.

If the robot is paused for too long, a timeout can occur for the warehouse order that the robot is currently processing. In this case, there can be a system error for the robot in the [Monitor Robots](#) app. To continue, solve the exception in the monitor. For more information about solving a system error, see [Exception Handling](#).

Why can't my robot get any warehouse orders for processing from SAP EWM?

Ensure the following settings:

- You have successfully integrated your warehouse in the [Define EWM Integration Settings](#) configuration step.
- The edge node of the robot is connected to SAP Warehouse Robotics.
- The edge node and the robot are connected.
- In SAP EWM, there are warehouse orders in the queue of the resource group of the resource that is assigned to your robot. And each warehouse order contains only one handling unit (HU) warehouse task.

8.2 Exception Handling for Monitoring Robots for Integration Services

What can I do when I have a source bin error in the [Monitor Robots](#) app?

When a robot can't pick a handling unit (HU) from a source bin, you see a source bin error in the monitor.

The robot can continue to process the next warehouse order. SAP Warehouse Robotics puts the warehouse order with errors into the queue for exception handling.

You need to process the warehouse order with exceptions manually in SAP EWM.

What can I do when I have a destination bin error in the [Monitor Robots](#) app?

Here are some tips for the following situations:

- A robot can't unload an HU at a destination bin.
The robot unloads the HU at a clarification bin and then begins to process the next warehouse order. SAP Warehouse Robotics puts the warehouse order with errors into the queue for exception handling and confirms the warehouse order with the exception code CHBD ([Change Destination Bin](#)) in SAP EWM.

You need to perform the following actions:

1. In the physical warehouse, manually move the HU from the clarification bin to a destination bin.
2. In SAP EWM, make relevant stock changes.
3. In SAP Warehouse Robotics, set the exception to *Solved*.

Then, SAP Warehouse Robotics sets the status of the clarification bin to *Vacant*.

- A robot can't unload an HU at a clarification bin.

You need to perform the following actions:

1. In the physical warehouse, manually remove the HU from the robot.
2. In SAP Warehouse Robotics, set the exception to *Solved*. Then, SAP Warehouse Robotics assigns the next warehouse order to the robot.

- A robot stops to wait for a vacant clarification bin because clarification bins are occupied. You see a destination bin in the monitor.

You can perform the following actions:

1. In the physical warehouse, choose a clarification bin and manually remove the HU from this clarification bin.
2. In SAP Warehouse Robotics, set the exception to *Solved*.

Or, set the clarification bin to *Vacant*.

Then, SAP Warehouse Robotics assigns the clarification bin to the robot that is waiting.

What can I do when I have a system error in the *Monitor Robots* app?

Here are some tips for the following situations:

- System errors relevant to SAP EWM
The robot continues to process warehouse orders. SAP Warehouse Robotics puts the warehouse order with errors into the queue for exception handling.
You manually confirm the warehouse order in SAP EWM.
- System errors relevant to edge nodes, for example, no response or timeout
The robot stops to wait for human intervention. SAP Warehouse Robotics puts the warehouse order with errors into the queue for exception handling.
You can perform the following actions:
 1. In the physical warehouse, check the processing of the warehouse orders. If necessary, manually process the warehouse orders. After you solve the error, ensure that there are no HUs on the robot.
 2. In SAP Warehouse Robotics, set the exception to *Solved*. Then, SAP Warehouse Robotics assigns the next warehouse order to the resource that the robot is mapped to.

What can I do when I have a robot error in the *Monitor Robots* app?

A robot error is an error that happens to the physical robot, and the robot stops and waits for human intervention.

SAP Warehouse Robotics puts the warehouse order with errors into a queue for exception handling. A warehouse worker needs to manually process the warehouse order.

After the robot error is fixed, you can set the exception to *Solved* in SAP Warehouse Robotics. After that, the robot can process warehouse orders again.

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