

User Guide | PUBLIC

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SAP Cloud Transport Management



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1 What Is SAP Cloud Transport Management

Learn more about SAP Cloud Transport Management service for SAP Business Technology Platform (SAP BTP).

Manage transports of development artifacts and application-specific content.

SAP Cloud Transport Management service lets you manage software deliverables between accounts of different environments (such as Cloud Foundry, ABAP, and Neo), by transporting them across various runtimes. This includes application artifacts as well as their respective application-specific content.

SAP Cloud Transport Management service adds transparency to the audit trail of changes so that you get information about who performed which changes in your production environment, and when they did it. At the same time, the service enables a separation of concerns: For example, a developer of an application or of SAP Cloud content artifacts can trigger the transport of changes from within the development environment, while the resulting import into the test, and production environment is handled by a central operations team.

Features

Better cont	rol of changes	By enabling transport management, you add better control for the propagation of changes towards your production cloud environments
Fully cloud-	based	Handle transports without the need for an on-premise system, other additional infrastructure, or any third-party services
Integrated e	experience	Trigger transports directly from enabled app-specific content creation tools (such as SAP Cloud Integration Web UI)
Transport v of content	arious types	Handle the transport of development content (in the form of Multitarget Application archives) and application-specific content (such as SAP Cloud Integration iFlows)
Transport to environmer		Source and targets of transports can reside in different global accounts. SAP Cloud Transport Management can handle transports in the Cloud Foundry, ABAP, and Neo environments.
Model also transport la		Model logical representations of your source and target environments and connecting routes between them – allows also modelling of complex landscapes, such as of star topologies
Complement approaches		Increase control concerning the propagation of changes towards your production environment by integrating Cloud Transport Management with your continuous integration/continuous delivery (CI/CD) solution

Flexibly handle imports

Import all transport requests of an import queue in one go or import only selected requests. Full imports can also be scheduled to run automatically.

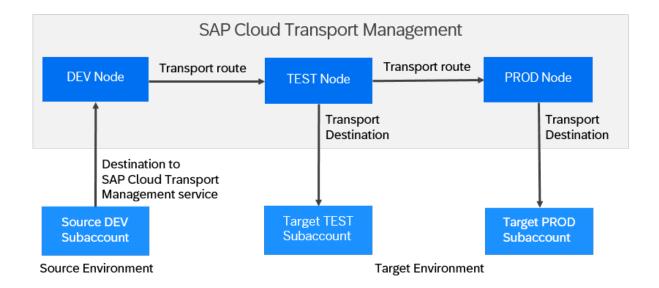
Environment

This service is available in the following environments:

- Cloud Foundry environment
- Kyma environment

SAP Cloud Transport Management is a multi-tenant aware application and provides a tenant separation.

Overview Graphic



Prerequisites

SAP Cloud Transport Management service can be accessed using a graphical user interface or using programmatic access. Before you can use the service, the following prerequisites need to be fulfilled:

- Using a graphical user interface

 To use this, you need a subscription to SAP Cloud Transport Management in your subaccount.
- Using programmatic access (API remote call)
 To use this, you need a service instance that is used to call the export functionality of SAP Cloud Transport Management. You must create this service instance in a space of the subaccount in which you have subscribed to the service.

For more information, see Initial Setup [page 14].

Tools

Tools	Description
SAP BTP Cockpit	SAP BTP Cockpit is the central point for managing all activities associated with your subaccount.

Related Information

SAP Cloud Transport Management: Feature Scope Description

Information about Regions Availability and Pricing of Cloud Transport Management in SAP Discovery Center

Best Practices for SAP BTP: Delivering Applications

SAP Cloud Transport Management FAQs in SAP Community

SAP Business Technology Platform documentation: About Services

2 What's New for SAP Cloud Transport Management

For information about What's New for SAP Cloud Transport Management, refer to the What's New Viewer for SAP BTP, filtered by Cloud Transport Management.

3 Supported Content Types

SAP Cloud Transport Management service can be used to transport the following entities, called content types:

- Multitarget Application archives (MTAs -.mtar files) between different spaces in SAP BTP subaccounts
 MTAs can consist of a cloud application itself, or content created in a cloud application, which you want
 to transport between two subaccounts. For example, SAP Cloud Integration content is packaged and
 transported as an MTA.
- **BTP ABAP**: references to ABAP objects in a Git repository between different SAP BTP, ABAP environment instances. A reference can consist of the name of the software component, the commit ID, the branch name, and the tag name. When a reference of type *BTP ABAP* is imported, the referenced content of the Git repository is pulled to the target instance.
- Application content transported in an application-specific format between different cloud subaccounts and tenants
 - In general, application content is packed in archive files, for example, <code>.zip</code> files, or <code>.rar</code> files. The archives can contain any kind of application-specific content. The application that has created such an archive file must provide a method to deploy the application-specific content into the target environment. This means, such an archive file can only be used for transport if the application-specific deployment service in the target environment is able to handle it. For more information, see the documentation of the individual applications.
- **Delivery units** (DUs) of SAP HANA XS classic model between different SAP HANA instances that are assigned to cloud subaccounts

These content types (files or references) can be transported in one of the following scenarios:

- Directly from within another application
- They are uploaded from a Continuous Integration pipeline.
- They are available on local file systems.

For more information, see SAP Cloud Transport Management Scenarios [page 55].

3.1 Overview: Supported Content

The table contains a list of development artifacts and application-specific content that can be transported using SAP Cloud Transport Management service.

The table contains the following information:

- Content: Application-specific content and development artifacts to be transported.
- Environment: SAP BTP environment where the content is created, either SAP BTP, ABAP environment, Cloud Foundry, or Neo.
- Content Type: Entity to transport that you can select when you create a new node in SAP Cloud Transport Management. See Supported Content Types [page 9].
- Design Time Integration: Can the transport be triggered directly in the design time tool of the application where the content is produced?

- Content Agent Service: Is the integration with SAP Cloud Transport Management realized using SAP Content Agent service? (Cloud Foundry only)
- Solution Export Wizard: Is the integration with SAP Cloud Transport Management realized using Solution Export Wizard? (Neo only)
- Continuous Integration (CI) Pipeline Upload: Is there a CI pipeline template available with the option of uploading content to SAP Cloud Transport Management?

 For more information about integration into CI pipelines, see the links to More Information listed in the Integration Scenario: Receiving transports comprising release candidates qualified by automated pipelines in SAP Continuous Integration and Delivery service [page 127], in particular the series of turial videos.
- More Information about the Integration: Link to more information about the integration with SAP Cloud Transport Management in the relevant section of:Integration in Development and Change Management Processes and with Other Services [page 123], where more information is available.

Table: Content Supported by SAP Cloud Transport Management

Content	Environ- ment	Content Type	Design Time Inte- gration	Content Agent Service	Solution Export Wiz- ard	CI Pipeline Upload	Remarks	More Infor- mation about the Integration
Reference to SAP BTP, ABAP environmen t content	environmen	BTP ABAP	Yes	n/a	n/a	No	Export to SAP Cloud Transport Manageme nt takes place using the Manage Software Component s app.	SAP BTP, ABAP Envi- ronment [page 124]
API Management content	Cloud Foundry	МТА	Yes	Yes (for content se- lection and deploy- ment)	n/a	No	Using API manage- ment UI	SAP API Manage- ment [page 123]
Destination	Cloud Foundry	MTA	No	Yes	n/a	No	Using the integration of SAP Destination Service in SAP Content Agent service. Note that secrets and passwords are not transported.	SAP Content Agent Service [page 128]
HTML5 app	Cloud Foundry	MTA	No	No	n/a	Yes		

Content	Environ- ment	Content Type	Design Time Integration	Content Agent Service	Solution Export Wiz- ard	CI Pipeline Upload	Remarks	More Infor- mation about the Integration
Java app	Cloud Foundry	МТА	No	No	n/a	Yes		
NodeJs app	Cloud Foundry	MTA	No	No	n/a	Yes		
Configura- tion Set- tings of SAP Batch Re- lease Hub for Life Sci- ences	Cloud Foundry	Application- specific	Yes	No	n/a	No	Export to SAP Cloud Transport Manage- ment takes place using the Transport Configurati on Settings app.	SAP Batch Release Hub for Life Sciences [page 123]
SAP Build Process Au- tomation projects	Cloud Foundry	MTA	Yes	Yes (for export and import)	n/a	No	Transporting is called promoting.	SAP Build Process Au- tomation [page 124]
SAP Cloud Integration content	Cloud Foundry	MTA	Yes	Yes (for content se- lection and deploy- ment)	n/a	No	Using SAP Cloud Integration UI	SAP Cloud Integration [page 125]
SAP HANA Deploy- ment Infra- structure (HDI) con- tent	Cloud Foundry	MTA	No	No	n/a	Yes		
SAP Analytics Cloud Network Package content	Cloud Foundry / Neo	Application Content	Yes	No	n/a	No		SAP Analytics Cloud [page 123]
SAP Build Work Zone, advanced edition con- tent	Cloud Foundry	Application Content	Yes	No	n/a	No	Using the integration of SAP Build Work Zone, standard edition in SAP Build Work Zone, advanced edition	SAP Build Workzone, advanced edition [page 126]

Content	Environ- ment	Content Type	Design Time Inte- gration	Content Agent Service	Solution Export Wiz- ard	CI Pipeline Upload	Remarks	More Infor- mation about the Integration
SAP Build Work Zone, standard edition con- tent	Cloud Foundry	Application Content	Yes	No	n/a	No		SAP Build Workzone, standard edition [page 126]
SAP Entitlement Manageme nt (configu- ration con- tent)	Cloud Foundry	Application Content	Yes	No	n/a	No		SAP Entitle- ment Man- agement [page 125]
SAP Excise Tax Manageme nt (ware- houses)	Cloud Foundry	Application Content	Yes	No	n/a	No	Warehouse address details are not transported with a warehouse. They must be maintained in the Address Types for Warhouses app.	SAP Excise Tax Man- agement [page 125]
SAP Group Reporting Data Collection (forms and folders)	Cloud Foundry	Application Content	Yes	No	n/a	No	In the Manage Packages app, forms and folders can be exported to SAP Cloud Transport Manageme nt.	SAP Group Reporting Data Col- lection for SAP S/ 4HANA [page 126]
SAP Mobile Services application configura- tions	Cloud Foundry	MTA	No	Yes	n/a	No		SAP Mobile Services [page 126]
Authoriza- tion group	Neo	MTA	No	n/a	Yes	No		
Destination	Neo	MTA	No	n/a	Yes	No		
HTML5 app	Neo	MTA	No	n/a	Yes	Yes		
HTML 5 role	Neo	MTA	No	n/a	Yes	No		

Content	Environ- ment	Content Type	Design Time Inte- gration	Content Agent Service	Solution Export Wiz- ard	CI Pipeline Upload	Remarks	More Infor- mation about the Integration
Java app	Neo	MTA	No	n/a	No	No		
SAP Cloud Integration content	Neo	МТА	Yes	n/a	Yes	No		SAP Cloud Integration [page 125]
SAP Fiori app	Neo	MTA	No	n/a	Yes	Yes		
SAP Fiori Portal	Neo	МТА	No	n/a	Yes	No	Only complete Portal sites	
SAP Fiori role	Neo	MTA	No	n/a	Yes	No		
Delivery unit (DU) of SAP HANA XS classic model	Neo	XSC DU	No	n/a	No	No	On Delivery Unit (DU) level	

More Information

- Multitarget Applications in the Cloud Foundry Environment
- Multitarget Applications for the Neo Environment
- For more information about the integration of specific content in SAP Cloud Transport Management, see Integration in Development and Change Management Processes and with Other Services [page 123].

4 Initial Setup

Follow the initial setup steps to be able to use SAP Cloud Transport Management service.

You can get started with SAP Cloud Transport Management using the standard procedures for SAP BTP Cloud Foundry environment.

Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

Prerequisites

- You're a global account administrator.
- You've set up your global account and at least one subaccount on SAP BTP. For an overview of the required steps, see Getting Started in the Cloud Foundry Environment

Context

SAP Cloud Transport Management is offered using the Consumption-Based Commercial Model.

Before executing the initial setup, you must determine whether you'll use the service to transport content archives that are available on local file systems, or to transport content archives directly in another application, for example, SAP Cloud Integration, or integrated in SAP Cloud ALM. Depending on the scenario, different configuration steps are involved. For more information about known integrations in SAP Cloud Transport Management, see Integrating the Service [page 123].

The following topics contain an overview of the steps involved for each scenario:

Set Up the Environment to Transport Content Archives directly in an Application [page 15]

Before you can transport content archives directly in an application, cloud administrators perform the following initial setup steps.

Set Up the Environment to Transport Content Archives that are available on a Local File System [page 33]

Before you can transport content archives that are available on a local file system, cloud administrators perform the following setup steps.

Related Information

SAP Cloud Transport Management Scenarios [page 55]

4.1 Set Up the Environment to Transport Content Archives directly in an Application

Before you can transport content archives directly in an application, cloud administrators perform the following initial setup steps.

① Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

① Note

Most of the steps described in the topics linked below can be done either using SAP BTP Cockpit or Cloud Foundry command line interface.

The topics describe the steps in SAP BTP Cockpit. For each step, they contain links to general documentation about the actions. There, you will also find information about how to perform the steps using the Cloud Foundry command line interface.

Configuring Entitlements to SAP Cloud Transport Management [page 16]

To define access of your subaccount to SAP Cloud Transport Management service, assign entitlements for the subaccount in which you want to use the service.

Subscribing to Cloud Transport Management [page 21]

To enable the usage of the user interface of SAP Cloud Transport Management service, subscribe to the Cloud Transport Management application.

Setting Up Role Collections [page 24]

To configure user access and permissions, set up role collections for the different roles available for SAP Cloud Transport Management.

Creating a Service Instance and a Service Key [page 28]

Follow these steps to enable the usage of SAP Cloud Transport Management service using programmatic access (using API Remote Call).

4.1.1 Configuring Entitlements to SAP Cloud Transport Management

To define access of your subaccount to SAP Cloud Transport Management service, assign entitlements for the subaccount in which you want to use the service.

① Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

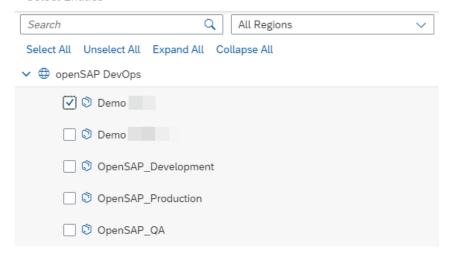
① Note

If you use SAP Cloud Transport Management integrated in SAP Cloud ALM, proceed as described under Enabling SAP Cloud ALM API. Depending on the provisioning date of your SAP Cloud ALM tenant, different steps are required. It is possible that the entitlements are already configured.

Step	Action	Action					
1.	In your global account, want to use SAP Cloud	Create a Subaccount					
2.	1. In the Cloud Found						
3.	Assign entitlements to do this, in your global at Assignments.	Configure Entitlements and Quotas for Subac- counts					
	Account Explorer Entitlements Entity Assignments	⊕ openSAP DevOps ∨ Global Account: openSAP DevOps - Entity Assignments Select Entities:					
	Service Assignments						

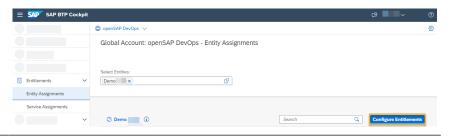
4. Enter your subaccount name in the search field, or select it from the list, and choose *Select*.

Select Entities



Select Cancel

5. Choose *Configure Entitlements* for the selected subaccount.

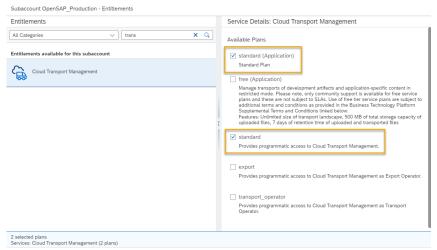


6. Choose Add Service Plans.



7. In the Entitlements section, search for Cloud Transport Management, and select it.

8. In the Service Details, the available service plans are displayed.



For more information about the instance plans with reduced authorizations available for SAP Cloud Transport Management, see the section Service Plans with Specific Authorizations in the topic Security [page 116].

Add 2 Service Plans Cancel

The displayed plans depend on what was previously assigned to your global account.

SAP Cloud Transport Management service offers the following plans:

Plan Name	Type of Plan	Use Case
standard (Application)	Application	Default plan to access the user interface of SAP Cloud Transport Management.
free (Application)	Application	Plan to access the user interface of SAP Cloud Transport Management with a reduced scope for testing purposes.
standard	Instance	Default plan to access SAP Cloud Transport Management using programmatic access.
export	Instance	Plan to access SAP Cloud Transport Management using programmatic access with reduced authorizations for export actions only. Use it to restrict access to SAP Cloud Transport Management, if

Plan Name	Type of Plan	Use Case
		enhanced security require- ments are required.
transport_operator	Instance	Plan to access SAP Cloud Transport Management using programmatic access with reduced authorizations for transport operator actions only. Use it to restrict access to SAP Cloud Transport Management, if enhanced
		security requirements are required.

Select the following plans:

- Transport of Content Archives that are available on Local File Systems scenario:
 For access to the user interface of SAP Cloud Transport Management, select an application plan, for example, standard (Application).
- Transport of Content Archives directly in another Application scenario:
 - 1. For access to the user interface of SAP Cloud Transport Management, select an application plan, for example, *standard (Application)*.
 - 2. For programmatic access to SAP Cloud Transport Management, select one of the instance plans, for example, *standard*.

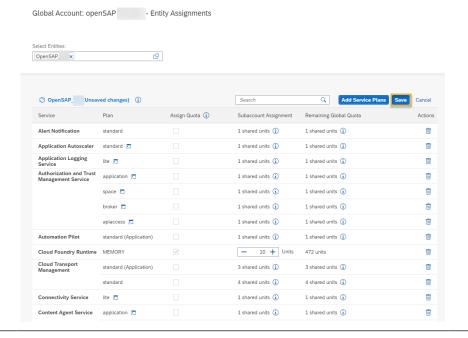
O Note

If you plan to create several service instances with different access rights, you can also assign more than one instance plan.

9. Choose Add <number > Service Plans.

Configure Entitlements and Quotas for Subaccounts

10. To save the entitlements, choose *Save*.



The service plans for SAP Cloud Transport Management are assigned to your subaccount.

4.1.2 Subscribing to Cloud Transport Management

To enable the usage of the user interface of SAP Cloud Transport Management service, subscribe to the Cloud Transport Management application.

① Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

① Note

This step isn't necessary if you use the integration of SAP Cloud Transport Management in SAP Cloud ALM. The subscription to SAP Cloud Transport Management is already configured in your SAP Cloud ALM subaccount. No extra setup is required. For more information, see SAP Cloud Transport Management Service in the SAP Cloud ALM documentation.

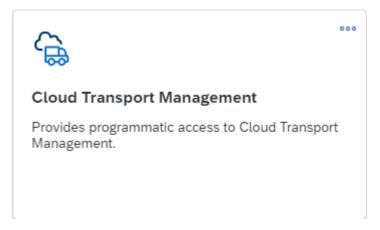
Prerequisites

You've configured an entitlement for the Cloud Transport Management application. For more information, see Configuring Entitlements to SAP Cloud Transport Management [page 16].

Procedure

To subscribe to SAP Cloud Transport Management, follow these steps:

Step	Action	More Infor- mation
1.	In the subaccount, choose Services Service Marketplace.	Subscribe to Multiten-
	The entitled subscriptions are shown.	ant Applica-
2.	Search for Cloud Transport Management.	tions Using
3.	On the Cloud Transport Management tile, choose ••• (Actions) and Create.	the Cockpit

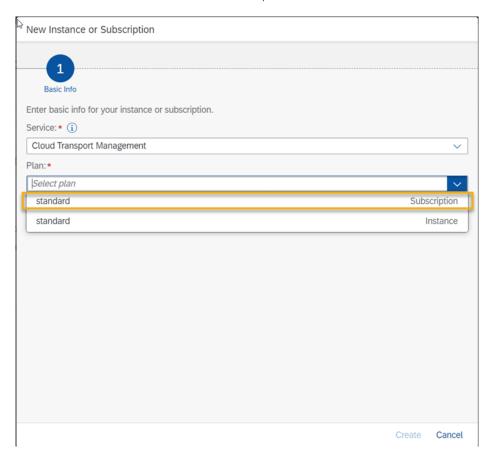


O Note

If you haven't selected an instance plan when configuring the entitlements, a different Cloud Transport Management tile with a different text is displayed.

4.

In the subsequent dialog, from the *Plan* dropdown box, select one of the available plans of type *Subscription* that are displayed depending on the entitlements that you previously added to the subaccount. In the screenshot, this is the *standard* plan. Afterwards, choose *Create*.



O Note

Make sure that you select a plan of type *Subscription*. Depending on your entitlement, this can be *standard* or *free*. After you've selected the plan, you no longer see *Subscription*. Only *standard* is displayed in the *Plan* field.

5. A dialog box shows that the subscription is in progress. Choose *View Subscription*.



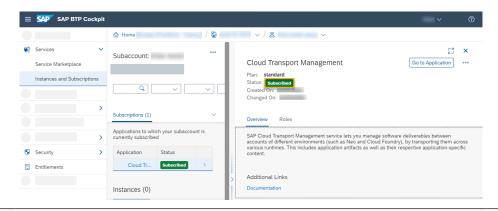
Your request to create a new subscription has been submitted.

You can check the current status of submission on the Service Instances page.

View Subscription

Close

6. The status *Subscribed* shows that the subscription is activated.



The *Go to Application* link allows you to start the user interface of SAP Cloud Transport Management. You can log on with your e-mail address and password as usual.

However, before you can use it, you'll need to set up role collections and assign roles and permissions to your user.

Note

You can always check your subscriptions under Services Instances and Subsriptions .

4.1.3 Setting Up Role Collections

To configure user access and permissions, set up role collections for the different roles available for SAP Cloud Transport Management.

After successful subscription, you need to configure user access to the application. You create different role collections for the different SAP Cloud Transport Management roles, and assign roles to the role collections based on the application templates. Afterwards, you assign the role collections to users or user groups.

For the LandscapeOperator and the Viewer roles, SAP Cloud Transport Management delivers the TMS_LandscapeOperator_RC and TMS_Viewer_RC role collections. You don't need to set up role collections for these two roles.

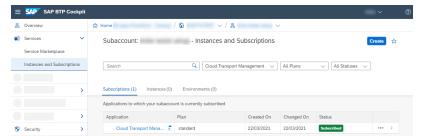
① Note

It's possible to create new role collections and add the roles to the new role collections directly after creating the collections, which would prevent you from having to switch between different views in SAP BTP cockpit. However, we recommend that you add the roles in the *Roles* tab of the subscription details. This is useful, because all template roles relevant for the service are displayed there.

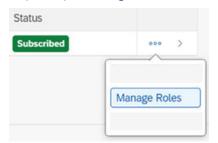
The following steps describe the recommended procedure.

1. You find the roles delivered for the service in the subscription details on the *Roles* tab.

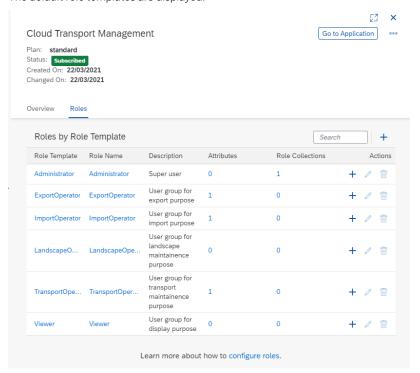
 To get there, in your subaccount, choose Services Instances and Subscriptions. For more information on the SAP Cloud Transport Management roles, see Security [page 116].



2. On the Subscriptions tab, in the Cloud Transport Management row, choose ••• (Actions) and Manage Roles.



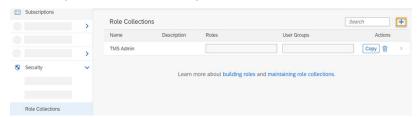
3. The default role templates are displayed.



2. Create different role collections for the required SAP Cloud Transport Management roles.

Maintain Role Collections

- 1. To create a new role collection, in your subaccount, choose Security Role Collections.
- 2. Choose + (Create New Role Collection).



3. Enter a name for the new role collection, and choose Create.



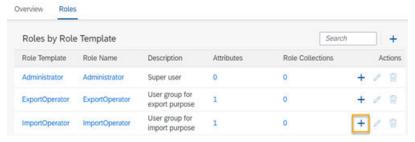
The new role collection is added to the list.



4. Repeat the previous steps to create different role collections for different SAP Cloud Transport Management roles.

For example, you can create a role collection for administration tasks that contains the *Administrator* role, and a role collection for developers with *ExportOperator* role.

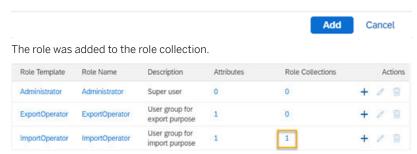
- 3. Assign the different SAP Cloud Transport Management roles to the role collections.
 - 1. In your subaccount, choose Services Instances and Subscriptions .
 - 2. On the Subscriptions tab, in the Cloud Transport Management row, choose ••• (Actions) and Manage Roles.
 - 3. Go to the Roles tab of the subscription details.
 - 4. In the row of the template role that you want to add to the role collection, choose + (Add).



5. Select the role collection to which you want to add the role, and choose Add.

Add to Role Collection





6. Repeat the previous steps for all role collections that you've created.

You can create additional roles and add them to role collections, for example, to restrict the authorizations to specific transport nodes only. For more information, see Security [page 116] under Node-Specific Attributes.

Step	Action	More Information
4.	After you've created the role collections and assigned roles to them, assign the role collections to users or user groups.	Assign Users to Role Collections
	 To do this, choose Security Role Collections. Select the required role collection. Choose Edit. In the Users tab, select your identity provider and enter the user data as required by your identity provider. 	

4.1.4 Creating a Service Instance and a Service Key

Follow these steps to enable the usage of SAP Cloud Transport Management service using programmatic access (using API Remote Call).

Create a service instance in the Cloud Foundry environment. You can then create a service key to communicate directly with the service instance.

① Note

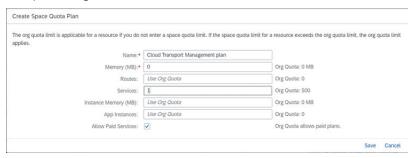
If you use the integration of SAP Cloud Transport Management in SAP Cloud ALM, proceed as described in the SAP Cloud Transport Management topic of the SAP Cloud ALM documentation.

Step	Action	More Information
1.	In the Cloud Foundry organization, create a space and assign the space roles to yo user.	ur Create Spaces
	 On the Overview page of your subaccount, in the Cloud Foundry org, you have Spaces table. Choose Create Space. 	а
	2. Choose a name and leave the default space roles selected.	
	3. Choose <i>Create</i> .	

2. Optional: If you want to limit the resource usage of your space, create a quota plan for the space.

Assign Quota Plans to Spaces

- 1. In your subaccount, choose Cloud Foundry Quota Plans New Plan .
- 2. Enter a name, and at least **1** service that you want to use for the SAP Cloud Transport Management instance. Choose *Save*.

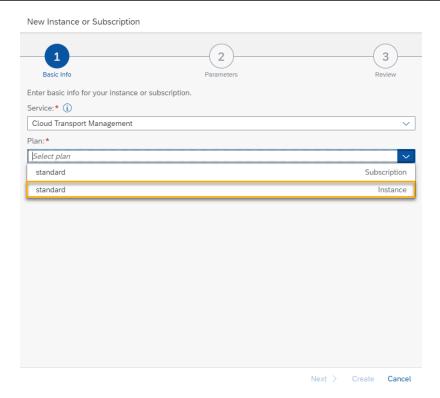


3. To assign the quota plan to your space, under *Plan Assignment*, choose the quota plan from the dropdown list of the created space.

- 3. In the space, create a service instance of SAP Cloud Transport Management.
- Creating Service Instances In Cloud Foundry
- In your subaccount, choose Services Instances and Subscriptions
 Choose Create.
- 3. In the wizard, select the following values:

Field	Value	
Service	Select Cloud Transport Management.	
1 	Select one of the available plans of type <i>Instance</i> that are displayed depending on the entitlements that you previously added to the subaccount. For more information, see Configuring Entitlements to SAP Cloud Transport Management [page 16].	
	① Note	
	Make sure that you select the plan of type <i>Instance</i> . After you've selected the plan, you no longer see <i>Instance</i> . Only <i>standard</i> is displayed in the <i>Plan</i> field.	

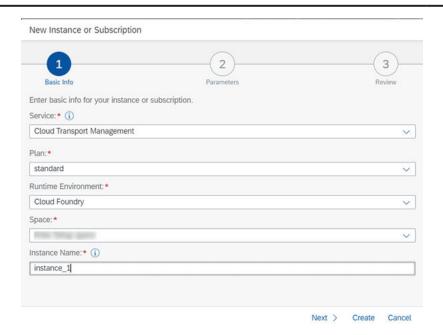
In the following screenshot, the *standard* plan of type *Instance* is selected.



4. The following fields are now available for input. Select or enter values for them.

Value
Select Cloud Foundry.
Select the space that you created previously (in Step 1).
Enter a name for the new service instance.

The following screenshot provides sample values.



- 5. Choose Create.
- 6. If you've added entitlements for multiple service instances, repeat the steps for the additional instances.

4. Create a service key based on the service instance for SAP Cloud Transport Management.

Creating Service Keys in Cloud Foundry

- 1. In your subaccount, choose Services Instances and Subscriptions .
- 2. On the *Instances* tab, in the row of the instance that you created, select the ••• (Actions) menu, and choose *Create Service Key*.
- 3. Enter a name for the service key, and choose *Create*. The service key has the following format:

O Note

The connection details are used later to configure destinations in your cloud subaccount to SAP Cloud Transport Management.

For more information about how to configure the destinations, see Create Destinations to SAP Cloud Transport Management Service [page 80].

You can now configure the landscape and use SAP Cloud Transport Management directly in other applications, such as SAP Cloud Integration. For more information, see Configuring the Landscape [page 54].

4.2 Set Up the Environment to Transport Content Archives that are available on a Local File System

Before you can transport content archives that are available on a local file system, cloud administrators perform the following setup steps.

① Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

① Note

Most of the steps described in the topics linked below can be done either using SAP BTP Cockpit or Cloud Foundry command line interface.

The topics describe the steps in SAP BTP Cockpit. For each step, they contain links to general documentation about the actions. There, you will also find information about how to perform the steps using the Cloud Foundry command line interface.

Configuring Entitlements to SAP Cloud Transport Management [page 34]

To define access of your subaccount to SAP Cloud Transport Management service, assign entitlements for the subaccount in which you want to use the service.

Subscribing to Cloud Transport Management [page 40]

To enable the usage of the user interface of SAP Cloud Transport Management service, subscribe to the Cloud Transport Management application.

Setting Up Role Collections [page 43]

To configure user access and permissions, set up role collections for the different roles available for SAP Cloud Transport Management.

4.2.1 Configuring Entitlements to SAP Cloud Transport Management

To define access of your subaccount to SAP Cloud Transport Management service, assign entitlements for the subaccount in which you want to use the service.

① Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

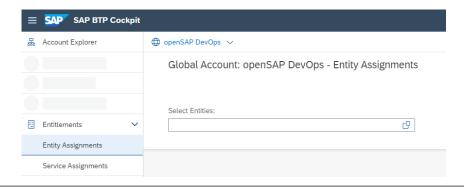
Note

If you use SAP Cloud Transport Management integrated in SAP Cloud ALM, proceed as described under Enabling SAP Cloud ALM API. Depending on the provisioning date of your SAP Cloud ALM tenant, different steps are required. It is possible that the entitlements are already configured.

Step	Action	More Information
1.	In your global account, choose an existing multi-environment subaccount, in which you want to use SAP Cloud Transport Management, or create a new one.	Create a Subaccount
2.	In your subaccount, create a Cloud Foundry org. 1. In the Cloud Foundry section, choose Enable Cloud Foundry. 2. Enter a name for your organization (org) and choose Create.	Managing Orgs

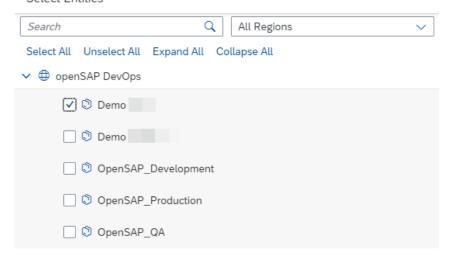
3. Assign entitlements to SAP Cloud Transport Management for your subaccount. To do this, in your global account or subaccount, choose Entitlements Entity Assignments.

Configure Entitlements and Quotas for Subaccounts



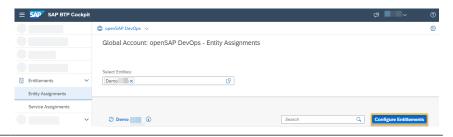
4. Enter your subaccount name in the search field, or select it from the list, and choose *Select*.

Select Entities



Select Cancel

5. Choose *Configure Entitlements* for the selected subaccount.

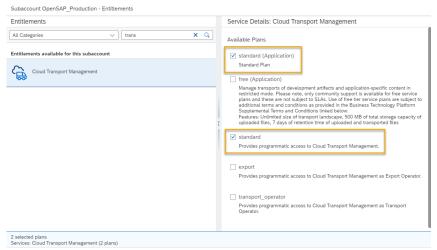


6. Choose Add Service Plans.



7. In the Entitlements section, search for Cloud Transport Management, and select it.

8. In the Service Details, the available service plans are displayed.



For more information about the instance plans with reduced authorizations available for SAP Cloud Transport Management, see the section Service Plans with Specific Authorizations in the topic Security [page 116].

Add 2 Service Plans Cancel

The displayed plans depend on what was previously assigned to your global account.

SAP Cloud Transport Management service offers the following plans:

Plan Name	Type of Plan	Use Case
standard (Application)	Application	Default plan to access the user interface of SAP Cloud Transport Management.
free (Application)	Application	Plan to access the user interface of SAP Cloud Transport Management with a reduced scope for testing purposes.
standard	Instance	Default plan to access SAP Cloud Transport Management using programmatic access.
export	Instance	Plan to access SAP Cloud Transport Management using programmatic access with reduced authorizations for export actions only. Use it to restrict access to SAP Cloud Transport Management, if

Plan Name	Type of Plan	Use Case
		enhanced security require- ments are required.
transport_operator	Instance	Plan to access SAP Cloud Transport Management using programmatic access with reduced authorizations for transport operator actions only. Use it to restrict access to SAP Cloud Transport Management, if enhanced security requirements are required.

Select the following plans:

- Transport of Content Archives that are available on Local File Systems scenario:
 For access to the user interface of SAP Cloud Transport Management, select an application plan, for example, standard (Application).
- Transport of Content Archives directly in another Application scenario:
 - 1. For access to the user interface of SAP Cloud Transport Management, select an application plan, for example, *standard (Application)*.
 - 2. For programmatic access to SAP Cloud Transport Management, select one of the instance plans, for example, *standard*.

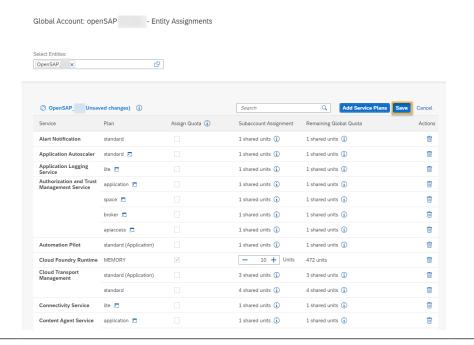
O Note

If you plan to create several service instances with different access rights, you can also assign more than one instance plan.

9. Choose Add <number > Service Plans.

Configure Entitlements and Quotas for Subaccounts

10. To save the entitlements, choose *Save*.



The service plans for SAP Cloud Transport Management are assigned to your subaccount.

4.2.2 Subscribing to Cloud Transport Management

To enable the usage of the user interface of SAP Cloud Transport Management service, subscribe to the Cloud Transport Management application.

① Note

If you are using this service as part of SAP Build Code, follow the SAP Build Code Initial Setup instructions instead.

① Note

This step isn't necessary if you use the integration of SAP Cloud Transport Management in SAP Cloud ALM. The subscription to SAP Cloud Transport Management is already configured in your SAP Cloud ALM subaccount. No extra setup is required. For more information, see SAP Cloud Transport Management Service in the SAP Cloud ALM documentation.

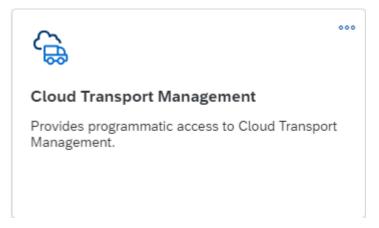
Prerequisites

You've configured an entitlement for the Cloud Transport Management application. For more information, see Configuring Entitlements to SAP Cloud Transport Management [page 16].

Procedure

To subscribe to SAP Cloud Transport Management, follow these steps:

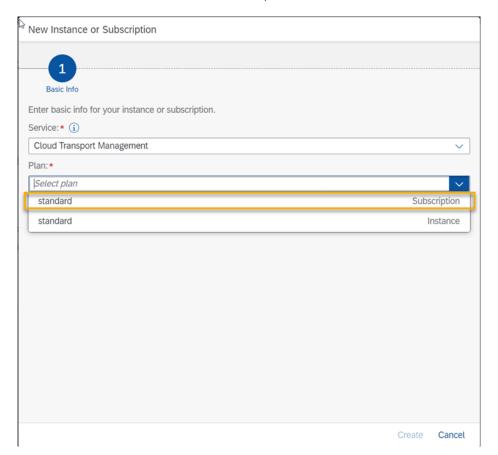
Step	Action	More Infor- mation
1.	In the subaccount, choose Services Service Marketplace.	Subscribe to Multiten-
	The entitled subscriptions are shown.	ant Applica-
2.	Search for Cloud Transport Management.	tions Using
3.	On the Cloud Transport Management tile, choose ••• (Actions) and Create.	the Cockpit



O Note

If you haven't selected an instance plan when configuring the entitlements, a different Cloud Transport Management tile with a different text is displayed.

4. In the subsequent dialog, from the *Plan* dropdown box, select one of the available plans of type *Subscription* that are displayed depending on the entitlements that you previously added to the subaccount. In the screenshot, this is the *standard* plan. Afterwards, choose *Create*.



O Note

Make sure that you select a plan of type *Subscription*. Depending on your entitlement, this can be *standard* or *free*. After you've selected the plan, you no longer see *Subscription*. Only *standard* is displayed in the *Plan* field.

5. A dialog box shows that the subscription is in progress. Choose *View Subscription*.



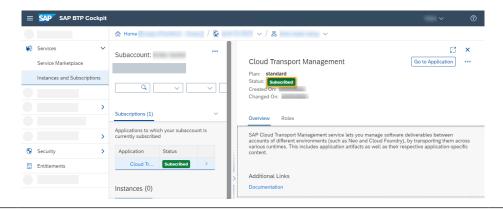
Your request to create a new subscription has been submitted.

You can check the current status of submission on the Service Instances page.

View Subscription

Close

6. The status *Subscribed* shows that the subscription is activated.



The *Go to Application* link allows you to start the user interface of SAP Cloud Transport Management. You can log on with your e-mail address and password as usual.

However, before you can use it, you'll need to set up role collections and assign roles and permissions to your user.

Note

You can always check your subscriptions under Services Instances and Subsriptions.

4.2.3 Setting Up Role Collections

To configure user access and permissions, set up role collections for the different roles available for SAP Cloud Transport Management.

After successful subscription, you need to configure user access to the application. You create different role collections for the different SAP Cloud Transport Management roles, and assign roles to the role collections based on the application templates. Afterwards, you assign the role collections to users or user groups.

For the *LandscapeOperator* and the *Viewer* roles, SAP Cloud Transport Management delivers the *TMS_LandscapeOperator_RC* and *TMS_Viewer_RC* role collections. You don't need to set up role collections for these two roles.

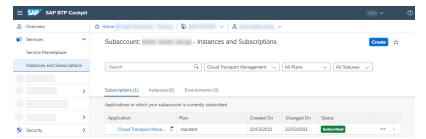
① Note

It's possible to create new role collections and add the roles to the new role collections directly after creating the collections, which would prevent you from having to switch between different views in SAP BTP cockpit. However, we recommend that you add the roles in the *Roles* tab of the subscription details. This is useful, because all template roles relevant for the service are displayed there.

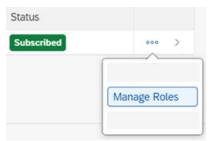
The following steps describe the recommended procedure.

1. You find the roles delivered for the service in the subscription details on the *Roles* tab.

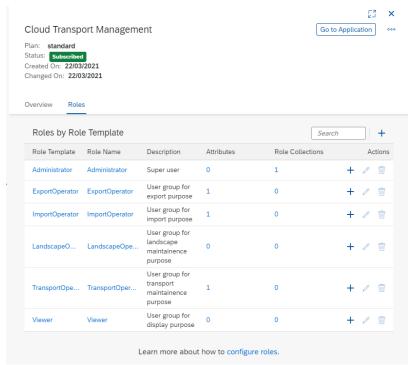
 To get there, in your subaccount, choose Services Instances and Subscriptions. For more information on the SAP Cloud Transport Management roles, see Security [page 116].



2. On the Subscriptions tab, in the Cloud Transport Management row, choose ••• (Actions) and Manage Roles.



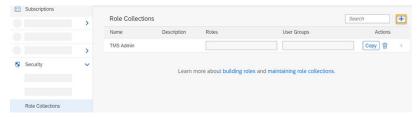
3. The default role templates are displayed.



2. Create different role collections for the required SAP Cloud Transport Management roles.

Maintain Role Collections

- 1. To create a new role collection, in your subaccount, choose Security Role Collections.
- 2. Choose + (Create New Role Collection).



3. Enter a name for the new role collection, and choose Create.



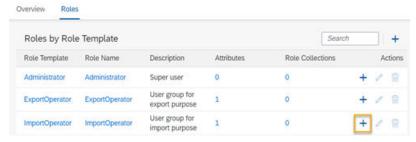
The new role collection is added to the list.



4. Repeat the previous steps to create different role collections for different SAP Cloud Transport Management roles.

For example, you can create a role collection for administration tasks that contains the *Administrator* role, and a role collection for developers with *ExportOperator* role.

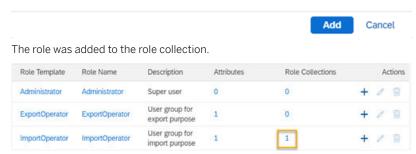
- 3. Assign the different SAP Cloud Transport Management roles to the role collections.
 - 1. In your subaccount, choose Services Instances and Subscriptions .
 - 2. On the Subscriptions tab, in the Cloud Transport Management row, choose ••• (Actions) and Manage Roles.
 - 3. Go to the Roles tab of the subscription details.
 - 4. In the row of the template role that you want to add to the role collection, choose + (Add).



5. Select the role collection to which you want to add the role, and choose Add.

Add to Role Collection





6. Repeat the previous steps for all role collections that you've created.

You can create additional roles and add them to role collections, for example, to restrict the authorizations to specific transport nodes only. For more information, see Security [page 116] under Node-Specific Attributes.

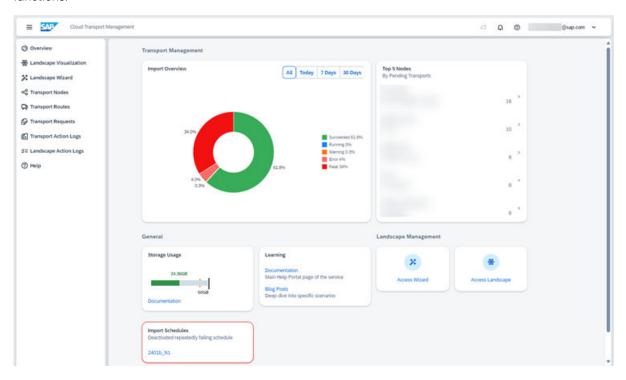
4. After you've created the role collections and assigned roles to them, assign the role collections to users or user groups.

Assign Users to Role Collections

- 1. To do this, choose Security Role Collections .
- 2. Select the required role collection.
- 3. Choose Edit.
- 4. In the *Users* tab, select your identity provider and enter the user data as required by your identity provider.

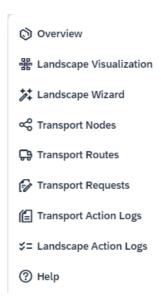
5 SAP Cloud Transport Management Home Screen

On the home screen, you have an overview of the most commonly used functions of SAP Cloud Transport Management service with direct access. Using the navigation pane on the left side, you have access to all functions.



Navigation Pane

Use the navigation pane to access all functions available in SAP Cloud Transport Management, such as configuring the landscape, executing, or monitoring transports.



Transport Management

On the *Transport Management* section on the home screen, you get an overview of imports and about the transport nodes with pending transports.

Import Overview

The pie chart gives an overview of the imports. You can select the time interval for which you want to display the chart, and you can directly navigate to the relevant *Transport Action Logs*.

Top n Nodes

The list contains transport nodes whose import queues have the highest number of transports in an importable state. These are transports in one of the following statuses: *Initial*, *Fatal*, or *Repeatable*. To navigate to the import queue of a specific transport node, click anywhere in the row.

For more information, see Create Transport Nodes [page 74].

Landscape Management

On the Landscape Management section on the home screen, you can navigate to the Transport Landscape Wizard or to the Landscape Visualization to configure your transport landscape.

Access Wizard

Access the *Transport Landscape Wizard* that allows you to easily configure simple transport landscapes. If you know the number of transport nodes of which your landscape will consist, you can configure the landscape using a template.

For more information, see Use the Transport Landscape Wizard [page 79].

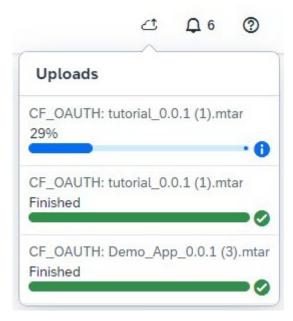
Title Bar

In the title bar, you can use the following functions:



Monitor Progress of File Upload Process

When you're uploading larger files, the icon (*Progress details on your current file uploads*) is available in the import queue of a transport node. It allows you to monitor the progress of a file upload process. The progress of all file uploads of your user in the current browser session is displayed.



For more information, see Add Files to Import Queues [page 91].

Application Messages

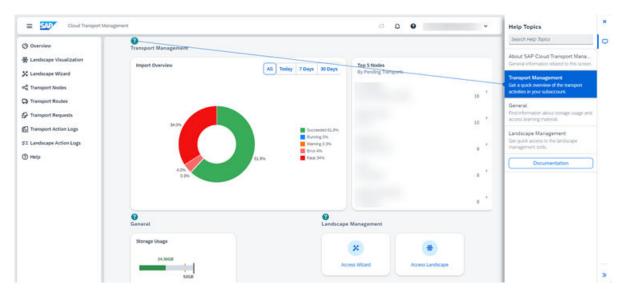
You can display all messages that SAP Cloud Transport Management issues during your logon session. To do this, click on



(Application Messages) button.

In-App Help

You can display in-app help by clicking on (*In-App Help*). An information bar appears on the right-hand side of the screen, and text elements in the bar are linked with elements on the screen. To get help on a screen element, click on the circle.



When in-app help is enabled, the question mark icon changes to



Logon Email Address

Clicking on your logon email address or the dropdown arrow on the top right provides the following options:

Option	Description		
My File Quota	Get more information about your file quota.		
	If you've configured SAP Alert Notification Service to send notifications for a transport node and you want to receive warning notifications when you've reached at least 85% the storage capacity in your space, you can select the <i>Enable Notifications</i> checkbox.		
	See also:		
	 Receive Notifications for SAP Cloud Transport Management Actions Using SAP Alert Notification Service [page 131] 		
	Background Information: Storage Capacity [page 114]		
About	Find out the current version of SAP Cloud Transport Management.		
Language	Switch the display language of the SAP Cloud Transport Management UI.		
	The SAP Cloud Transport Management UI is available in Chinese and English. By default, it's displayed in the default language of the web browser.		
Appearance	Change the default <i>Horizon</i> style theme of the UI to <i>Belize</i> , <i>Standard Light</i> , <i>Standard Dark</i> , or <i>High Contrast Black</i> .		
	r∕ My File Quota		
	About		
	♠ Language		
	Horizon (Default)		
	Belize (1) Logout		
	Standard Light		
	Standard Dark		
	High Contrast Black		

Access Landscape

Access the *Landscape Visualization* that allows you to easily configure transport landscapes in a visual display. For more information, see Using the Landscape Visualization [page 86].

General

This section contains information about the maximum storage capacity and the current storage usage, and links to useful learning material about SAP Cloud Transport Management.

Failed Import Schedules

If a scheduled import has failed with a fatal error at least three times in a row over a period of at least three weeks, the corresponding schedule is automatically deactivated, and the affected transport node is displayed. To reactivate the import scheduler, choose the import queue link.

For more information, see Schedule Imports [page 99].

6 Configuring the Landscape

Before you can use SAP Cloud Transport Management service to transport cloud applications or application content (such as SAP Cloud Integration content, for example) between different environments, you must configure your landscape for transports.

The configuration involves the following steps:

Configure the Landscape

- Create transport destinations to address deployment endpoints.
 - Create transport nodes to represent your landscape.
 - Create transport routes to connect the transport nodes.

Learn More

Create Transport Destinations

Create Transport Nodes

Create Transport Routes

For Scenario:

Transport of Content Archives Directly in another Application

4. Create a destination from your Cloud application development environment to SAP Cloud Transport Management service.

Create Destinations to SAP Cloud Transport Management

SAP Cloud Transport Management Scenarios [page 55]

You can use SAP Cloud Transport Management to transport content archives directly from within an application's source environment to a target environment. If there's no export integration of SAP Cloud Transport Management in the source environment, you can use the service to upload content archives from a local file system and import them in a target environment.

Create Transport Destinations [page 58]

In SAP Cloud Transport Management service, transport destinations are used to address the target end point of a deployment process.

Create Transport Nodes [page 74]

Create transport nodes as representations of the source and target end points of deployment processes in your landscape. Add configuration details as required.

Create Transport Routes [page 78]

In SAP Cloud Transport Management, transport routes are used to connect transport nodes.

Use the Transport Landscape Wizard [page 79]

You can use the Transport Landscape Wizard to configure the transport nodes and transport routes of simple transport landscapes.

Create Destinations to SAP Cloud Transport Management Service [page 80]

If you use SAP Cloud Transport Management service to start the transport directly in your application, a destination to SAP Cloud Transport Management service is required in the source (development) environment of your application.

6.1 SAP Cloud Transport Management Scenarios

You can use SAP Cloud Transport Management to transport content archives directly from within an application's source environment to a target environment. If there's no export integration of SAP Cloud Transport Management in the source environment, you can use the service to upload content archives from a local file system and import them in a target environment.

- Transport of Content Archives directly in another Application
 - In this scenario, another application whose content archives you want to transport, such as SAP Cloud Integration, is directly integrated with SAP Cloud Transport Management service. You can transport content archives directly from within the application's source environment to the target environments of the application. You can then use SAP Cloud Transport Management to import the content archives in the target environments.
- Transport of Content Archives that are available on Local File Systems

In this scenario, the content archives that you want to transport between different environments, are downloaded in the application of the source environment. They are then available on your local file system. You can use SAP Cloud Transport Management to upload the content archives to the import queue of the target environments and import them there.

Sample Configuration Scenario: Transport of Content Archives directly in another Application [page 55] The following sample configuration describes the scenario: Transport of content archives directly in another application.

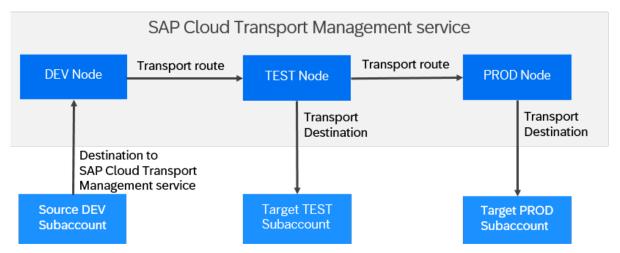
Sample Configuration Scenario: Transport of Content Archives that are available on Local File Systems [page 57]

The following sample configuration describes the scenario: Transport of Content Archives that are available on Local File Systems.

6.1.1 Sample Configuration Scenario: Transport of Content Archives directly in another Application

The following sample configuration describes the scenario: Transport of content archives directly in another application.

The content archives will be attached to transport requests directly in the application and will be transported along the configured transport routes.



Sample Configuration for Scenario: Transport of Content Archives directly in another Application

You have a cloud application, such as SAP Cloud Integration. You have different subaccounts, for example, a DEV subaccount, a TEST subaccount, and a PROD subaccount where your application runs. You want to transport content archives (.mtar files, for example) of this application from one subaccount to another. To perform the transport directly in the application, the following entities must be configured:

Entities to be configured	Where to configure?	More information
Transport destinations to the TEST and PROD environments	In the SAP BTP Cockpit of your subaccount in which you are subribed to SAP Cloud Transport Management	Create Transport Destinations [page 58]
Transport nodes for the DEV, TEST, and PROD environments, and transport routes between the nodes	In the SAP Cloud Transport Management service	 Create Transport Nodes [page 74] Create Transport Routes [page 78]
A destination from the DEV environment pointing to SAP Cloud Transport Management	In the DEV environment of the application	Create Destinations to SAP Cloud Transport Management Service [page 80]

When you select a content archive for transport, a transport request is created and the content archive is attached to the transport request. The transport request is placed into the import queue of the TEST node so that the content archive is available for import in the TEST environment. Depending on the scenario, the transport request is also available in the DEV node. When the import is started in the TEST node, the transport request is forwarded to the PROD node so that the content archive is available for import in the PROD environment.

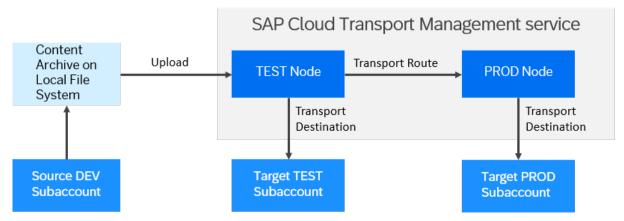
① Note

For more information about existing integrations with SAP Cloud Transport Management, see Integrating the Service [page 123].

6.1.2 Sample Configuration Scenario: Transport of Content Archives that are available on Local File Systems

The following sample configuration describes the scenario: Transport of Content Archives that are available on Local File Systems.

The content archive has been downloaded or exported from an application in the source DEV environment to a local file system. It is then added to the import queue of the TEST node in SAP Cloud Transport Management service so that it can be imported to the TEST environment.



Sample Configuration for Scenario: Transport of Content Archives that are available on Local File Systems

You have a cloud application, such as SAP Cloud Integration. For this application, you have different subaccounts, for example, a DEV subaccount, a TEST subaccount, and a PROD subaccount. You create a content archive (.mtar files, for example) in the DEV subaccount of the application and you want to transport it to the TEST and PROD subaccounts. You can choose to perform the transport not directly in the application, but to download or export the content archive in the application of the DEV subaccount to your local file system.

To transport the content archive that is available on the local file system, the following entities must be configured:

Entities to be configured	Where to configure?	More information
Transport destinations to the TEST and PROD environments	In the SAP BTP Cockpit of your subaccount in which you are subribed to SAP Cloud Transport Management	Create Transport Destinations [page 58]
Transport nodes for the TEST and PROD environments, and a transport route between the nodes	In the SAP Cloud Transport Management service	 Create Transport Nodes [page 74] Create Transport Routes [page 78]

In SAP Cloud Transport Management, in the import queue of the TEST node, you upload a content archive to an import queue using the *Add* function. The upload process creates a transport request and attaches the content archive to it so that it is available in the import queue of the TEST node for import in the TEST environment. When the import is started in the TEST node, the transport request is forwarded to the PROD node so that the content archive is available for import in the PROD environment.

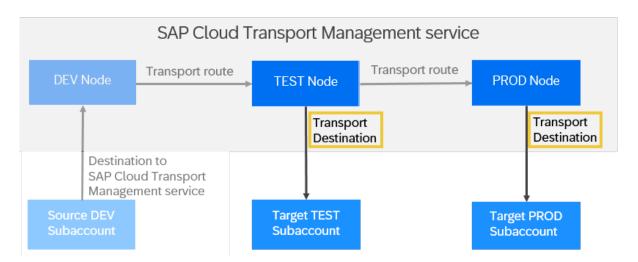
① Note

For more information about the transport of SAP Cloud Integration content using download, see Content Transport using MTAR Download in the SAP Cloud Integration documentation.

6.2 Create Transport Destinations

In SAP Cloud Transport Management service, transport destinations are used to address the target end point of a deployment process.

Context



Transport destinations contain the address of the **target** end point as well as an authentication type for access control, for example, the user credentials of the platform user that you want to use for the destination.

You create a transport destination in SAP BTP Cockpit of the subaccount in which you're subscribed to SAP Cloud Transport Management.

Note that SAP Cloud Transport Management only supports HTTPS destinations.

① Note

For general information about how to configure destinations, refer to the following documentation:

- SAP BTP, Cloud Foundry: Using the Destinations Editor in the Cockpit
- SAP BTP, Neo: Configure Destinations from the Cockpit

Creating Destinations for MTA Deployment on Cloud Foundry [page 59]

For MTA deployment on Cloud Foundry, you have different options to configure transport destinations to address the target endpoint of the deployment process.

Creating Destinations for Deployment of References of SAP BTP, ABAP Environment [page 68]

To address the target end point of the deployment process of references of SAP BTP, ABAP environment, create a destination to the target instance of SAP BTP, ABAP environment where you want to deploy your content references.

Creating Destinations for MTA Deployment on SAP BTP, Neo [page 70]

To address the target end point of MTA deployment on SAP BTP, Neo, specify the URL to the SAP Solution Lifecycle Management service as the deploy end point of the destination.

Creating Destinations for Deployment of Application Content Transported in an Application-Specific Format [page 71]

To address the target end point of application-specific content deployment, specify a destination using the details from the provider of the application content.

Creating Destinations for XSC DU Deployment [page 72]

Specify https://<host>/sap/hana/xs/lm/slp/slp.xsjs as the deploy end point of the destination.

6.2.1 Creating Destinations for MTA Deployment on Cloud Foundry

For MTA deployment on Cloud Foundry, you have different options to configure transport destinations to address the target endpoint of the deployment process.

Context

The following services can be used for deployment:

- SAP Cloud Deployment service
 Default option for MTA deployment on Cloud Foundry.
 If you want to use a custom identity provider for the platform user used for the deployment, use OAuth2Password authentication for the destination.
- SAP Content Agent service
 To transport content of API Management and SAP Cloud Integration together, use this option.

For more information about the option that is relevant for your use case, also see the application-specific documentation. You can find a list of known integrations and links to application-specific information under Integrating the Service [page 123].

Creating Destinations Using SAP Cloud Deployment Service with OAuth2Password Authentication [page 60]

To address the target end point of the deployment process of MTA Deployment on Cloud Foundry, you can create a destination to SAP Cloud Deployment service with *OAuth2Password* authentication.

Creating Destinations Using SAP Cloud Deployment Service with Basic Authentication [page 64]

To address the target end point of the deployment process of MTA Deployment on Cloud Foundry, you can create a destination to SAP Cloud Deployment service with classic *Basic* authentication.

Creating Destinations Using SAP Content Agent Service [page 67]

To address the target end point of the deployment process of MTA Deployment on Cloud Foundry, you can create a destination to SAP Content Agent service.

6.2.1.1 Creating Destinations Using SAP Cloud Deployment Service with OAuth2Password Authentication

To address the target end point of the deployment process of MTA Deployment on Cloud Foundry, you can create a destination to SAP Cloud Deployment service with *OAuth2Password* authentication.

Procedure

- 1. In SAP BTP Cockpit of your subaccount, choose Connectivity Destination New Destination
- 2. Enter the following values:

Destination Settings for MTA Deployment on Cloud Foundry with OAuth2Password Authentication

Field	Description	More Information
Name	Name of the destination	SAP BTP, Cloud Foundry:
Туре	HTTP	Using the Destinations Editor in the Cockpit
Description	The description of the destination is optional.	

Field Description More Information

URL Specify the URL to the SAP Cloud Deployment service as the deploy end point of the destination. To address the SAP Cloud Deployment service, you have the following options:

Using the names of your org and space
 https://deploy-service.cf.<domain>/slprot/
 <myorg>/<myspace>/slp

- <domain>: Domain of your target subaccount
 The domain is derived from the Cloud Foundry API endpoint that you can find in the SAP BTP Cockpit in the Overview of your subaccount.
- <myorg>/<myspace>: Names of your org and space

O Note

You must escape special characters in your org and space name (<myorg>/<myspace>) with a proper URL encoding. For example, replace space characters with %20, and commas with %2C.

Example

Sample URL for the Cloud Foundry API endpoint:
 api.cf.eu10-004.hana.ondemand.com, <myorg>:

TestOrg, and <myspace>: TestSpace:

https://deployservice.cf.eu10-004.hana.ondemand.com/ slprot/TestOrg/TestSpace/slp

Sample URL with URL encoding for <myorg>: Example
 Company Test Org and <myspace>: Example
 Company Test Space:

https://deployservice.cf.eu10-004.hana.ondemand.com/ slprot/Example%20Company%20Test%20Org/ Example%20Company%20Test%20Space/slp

Using the GUID of your space

https://deploy-service.cf.<domain>/slprot/<my-space-guid>/slp

- <domain>: Domain of your subaccount
 The domain is derived from the Cloud Foundry API endpoint that you can find in the SAP BTP Cockpit in the Overview of your subaccount.
- <my-space-guid>: GUID of your space
 To retrieve the GUID of your space, use the Cloud Foundry Command
 Line Interface (cf CLI). Log on to your org, and execute the following
 command: cf space <my-space-name> --guid.

More information about regions and API endpoints:

- Deploying Applications in Regions
- Regions and API Endpoints Available for the Cloud Foundry Environment.

More information about cf CLI:

 Working with the Cloud Foundry Command Line Interface Field Description More Information

Example

Sample URL for the Cloud Foundry API endpoint: api.cf.eu10-004.hana.ondemand.comand <my-space-guid>:977a24d6-2eaf-432d-a3e1-5294451551a3:

https://deployservice.cf.eu10-004.hana.ondemand.com/slprot/ 977a24d6-2eaf-432d-a3e1-5294451551a3/slp

Proxy Type Internet

OAuth Password Authentication

ion

Authenticat Select OAuth2Password Authentication.

This authentication is based on a user credential flow. At first, the Cloud Foundry User Account and Authentication (UAA) service is called with the name and the password of this user. The authentication service then returns a JSON Web Token (JWT) which is used to call the API of the SAP Cloud Deployment service.

O Note

This authentication type requires a *Client ID* with the value **cf**, and a *Token Service URL* defined, pointing to the Cloud Foundry User Account and Authentication service.

Using a Custom Identity Provider

You can use your corporate (custom) identity provider for the transport destination. To do this, the following prerequisites must be fulfilled:

- You've registered your custom identity provider with SAP as described in one of the following topics:
 - Feature Set B: Establish Trust and Federation of Custom Identity Providers for Platform Users [Feature Set B]
 - Feature Set A: Establish Trust and Federation of Custom Identity Providers for Platform Users in Multi-Environment Subaccounts [Feature Set A].
- You've enabled automated logon with your custom identity provider as described under Log On as a Technical User with a Custom Identity Provider

To use your custom identity provider for the transport destination, under *Additional Properties*, add the origin property. As the value of the property, enter the value of *origin* of your custom identity provider.

rieiu	Description	More information
User	Specify the user name (usually, an email address) of the user that is used for the deployment.	
	① Note	
	 The user used for the destination must be a valid user on Cloud Foundry environment and it must have the role SpaceDeveloper in the target space. The user must be a platform user so that the deployment works for all content types. For more information, see Platform Users. 	
	 The user used for the destination isn't subject to any Data Protection and Privacy requirements. 	
	We recommend that you use a technical user to avoid constraints typically associated with personal users, such as password rotation.	
Password	Specify the password of the user.	_
Client ID	Enter cf as the value.	_
Client Secret	Client Secret isn't required. This value can be left empty.	_
Token Service	Enter the URL to the Cloud Foundry UAA (CF UAA) authentication service in the following format:	Regions and API End- points Available for the
URL	https://login.cf. <domain></domain>	Cloud Foundry Environ- ment.
	The domain is derived from the Cloud Foundry API endpoint that you can find in the SAP BTP Cockpit in the <i>Overview</i> of your target subaccount. For the <i>Token Service URL</i> , replace api by login.	
	Second Property Second Prop	
	For the Cloud Foundry API endpoint: api.cf.eu10-004.hana.ondemand.com, the Token Service URL is: https://login.cf.eu10-004.hana.ondemand.com.	
Use default	This checkbox is selected by default.	
JDK truststore	If you leave the checkbox selected, the default JDK truststore with certificates	

3. Choose Save to save your changes.

provided by SAP are used.

△ Caution

Field

Description

If you use *Check Connection* to check your destination: The check doesn't provide correct results for destinations using OAuth2Password authentication. It's possible that the check displays an error, even though the destination was configured correctly. We recommend that you test the deployment using a test transport after completing all configuration steps.

If you want to change this, see Use Destination Certificates (Cockpit).

More Information

Next Steps

Create Transport Nodes [page 74]

6.2.1.2 Creating Destinations Using SAP Cloud Deployment Service with Basic Authentication

To address the target end point of the deployment process of MTA Deployment on Cloud Foundry, you can create a destination to SAP Cloud Deployment service with classic *Basic* authentication.

Procedure

- 1. In SAP BTP Cockpit of your subaccount, choose Connectivity Destination New Destination .
- 2. Enter the following values:

MTA Deployment on Cloud Foundry with Classic Basic Authentication

Field	Description	More Information
Name	Name of the destination	SAP BTP, Cloud Foundry:
Туре	НТТР	Using the Destinations Editor in the Cockpit
Description	The description of the destination is optional.	

Field Description More Information

Specify the URL to the SAP Cloud Deployment service as the deploy end point of the destination. To address the SAP Cloud Deployment service, you have the following options:

Using the names of your org and space
 https://deploy-service.cf.<domain>/slprot/

<myorg>/<myspace>/slp

- <domain>: Domain of your target subaccount
 The domain is derived from the Cloud Foundry API endpoint that you can find in the SAP BTP Cockpit in the Overview of your subaccount.
- <myorg>/<myspace>: Names of your org and space

Note

URL

You need to escape special characters in your org and space name (<myorg>/<myspace>) with a proper URL encoding. For example, replace space characters with %20, and commas with %2C.

More information about regions and API endpoints:

- Deploying Applications in Regions
- Regions and API Endpoints Available for the Cloud Foundry Environment.

More information about cf CLI:

 Working with the Cloud Foundry Command Line Interface

Example

 Sample URL for the Cloud Foundry API endpoint: api.cf.eu10-004.hana.ondemand.com, <myorg>:

TestOrg, and <myspace>: TestSpace:
https://deployservice.cf.eu10-004.hana.ondemand.com/
slprot/TestOrg/TestSpace/slp

Sample URL with URL encoding for <myorg>: Example
 Company Test Org and <myspace>: Example
 Company Test Space:

https://deployservice.cf.eu10-004.hana.ondemand.com/ slprot/Example%20Company%20Test%20Org/ Example%20Company%20Test%20Space/slp

Using the GUID of your space

https://deploy-service.cf.<domain>/slprot/<myspace-guid>/slp

- <domain>: Domain of your subaccount
 The domain is derived from the Cloud Foundry API endpoint that you can find in the SAP BTP Cockpit in the Overview of your subaccount.
- <my-space-guid>: GUID of your space
 To retrieve the GUID of your space, use the Cloud Foundry Command
 Line Interface (cf CLI). Log on to your org, and execute the following
 command: cf space <my-space-name> --guid.

Field Description More Information

Example

Sample URL for the Cloud Foundry API endpoint: api.cf.eu10-004.hana.ondemand.comand <my-space-guid>:977a24d6-2eaf-432d-a3e1-5294451551a3:

https://deploy-

service.cf.eu10-004.hana.ondemand.com/slprot/ 977a24d6-2eaf-432d-a3e1-5294451551a3/slp

Proxy Type Internet

Authenticat Select BasicAuthentication.

Client Authentication
Types for HTTP Destinations

User

Specify the user name (usually, an email address) of the user that is used for the deployment.

Note

- The user used for the destination must be a valid user on Cloud Foundry environment and it must have the role SpaceDeveloper in the target space.
- The user must be a platform user so that the deployment works for all content types. For more information, see Platform Users.
- The user used for the destination isn't subject to any Data Protection and Privacy requirements.
- We recommend that you use a technical user to avoid constraints typically associated with personal users, such as password rotation.

▲ Restriction

Basic Authentication only works with users provided by SAP ID. It does not work with custom IAS tenant users. If you want to use a custom identity provider for the platform user used for the deployment, you must use OAuth2Password authentication for the destination. For more information, see Creating Destinations Using SAP Cloud Deployment Service with OAuth2Password Authentication [page 60].

Password

Specify the password of the user.

- 3. Choose Save to save your changes.
- 4. **Optional:** Use *Check Connection* to check your destination. The expected result of a successful check is *Response: 200*.

① Note

A successful response indicates that the destination is reachable. It does not guarantee successful deployment. For more information, see Check the Availability of a Destination.

Next Steps

Create Transport Nodes [page 74]

6.2.1.3 Creating Destinations Using SAP Content Agent Service

To address the target end point of the deployment process of MTA Deployment on Cloud Foundry, you can create a destination to SAP Content Agent service.

Procedure

- 1. Create a service instance and a service key in every subaccount in which you want to use SAP Content Agent service for deployment.
 - For more information, see Create Instance and Create Service Key in the SAP Content Agent service documentation.
- 2. In the subaccount in which you're subscribed to SAP Cloud Transport Management, create a transport destination pointing to SAP Content Agent service.

For more information, see Create Target Node Destination in the SAP Content Agent service documentation.

Note

Depending on the content that you want to import, additional transport destinations are required pointing to the service providing the content.

For more information, see Configure Subaccount in the SAP Content Agent service documentation.

Next Steps

Create Transport Nodes [page 74]

6.2.2 Creating Destinations for Deployment of References of SAP BTP, ABAP Environment

To address the target end point of the deployment process of references of SAP BTP, ABAP environment, create a destination to the target instance of SAP BTP, ABAP environment where you want to deploy your content references.

Prerequisites

In the target instance of SAP BTP, ABAP environment, you've created an instance of the communication scenario SAP_COM_0510 using the *Communication Arrangements* app. For this, you've created a communication system with an inbound communication user that uses *User ID and Password* as the *Authentication Method*.

For more information, see the following topics in the documentation of SAP BTP, ABAP environment:

- How to Create a Communication Arrangement
- Test Integration (SAP_COM_0510)
- How to Create Communication Systems
- How to Create Communication Users

Context

You can use SAP Cloud Transport Management service to transport references to ABAP coding in Git repositories that was created in SAP BTP, ABAP environment.

Procedure

- 1. In SAP BTP Cockpit of your subaccount in which you are subscribed to SAP Cloud Transport Management, choose Connectivity Destination New Destination.
- 2. Enter the following values:

 ${\tt Destination \ Settings \ for \ Deployment \ of \ References \ of \ SAP \ BTP, \ ABAP \ environment}$

Field	Description	More Information
Name	Name of the destination	Using the Destinations
Туре	HTTP	Editor in the Cockpit
Description	The description is optional.	_

Field	Description	More Information
URL	Enter the service URL of the inbound service <i>Git Repository - Manage</i> from the communication arrangement created for the SAP_COM_0510 communication scenario. For more information, see the <i>Prerequisites</i> section.	
	<pre>\$ Example https://<service- instance="">.abap.eu10.hana.ondemand.com/sap/opu/ odata/sap/MANAGE_GIT_REPOSITORY</service-></pre>	
Proxy Type	Internet	_
Authenticat ion	BasicAuthentication	
User	Specify the name of the inbound communication user used for the SAP_COM_0510 communication arrangement. For more information, see the <i>Prerequisites</i> section.	-
Password	Specify the password of the inbound communication user used for the SAP_COM_0510 communication arrangement. For more information, see the <i>Prerequisites</i> section.	-
Use default JDK truststore	This checkbox is selected by default.	_
	If you leave the checkbox selected, the default JDK truststore with certificates provided by SAP are used.	
	If you want to change this, see Use Destination Certificates (Cockpit).	

- 3. Choose Save to save your changes.
- 4. Use Check Connection to check your destination.

Next Steps

Create Transport Nodes [page 74]

Related Information

More information about exporting references of SAP BTP, ABAP Environment: How to Export Using SAP Cloud Transport Management

Integration in Development and Change Management Processes and with Other Services [page 123]

6.2.3 Creating Destinations for MTA Deployment on SAP BTP, Neo

To address the target end point of MTA deployment on SAP BTP, Neo, specify the URL to the SAP Solution Lifecycle Management service as the deploy end point of the destination.

Procedure

- 1. In SAP BTP Cockpit of your subaccount, choose Connectivity Destination New Destination .
- 2. Enter the following values:

Destination Settings for MTA Deployment on Neo

Field	Description	More Information	
Name	Name of the destination	SAP BTP, Neo: Con-	
Туре	НТТР	figure Destinations	
Description	The description of the destination is optional.	from the CockpitCreate HTTP Destinations	
URL	Specify the URL to the SAP Solution Lifecycle Management service in the following format: https://slservice. <landscape-host>/slservice/slp/basic/<technical name="" neo="" of="" subaccount="" the="">/slp</technical></landscape-host>	Configuring the Access to the Solution Lifecycle Management Service	
	<pre>Example: https://slservice.eul.hana.ondemand.com/ slservice/slp/basic/a123c4567b/slp</pre>		
Proxy Type	Internet	 SAP BTP, Neo: Configure Destinations from the Cockpit Create HTTP Destinations 	
Authenticat ion	Select BasicAuthentication.	Client Authentication Types for HTTP Destina-	
User	Specify the name of the platform user that is used for the deployment.	tions	
	 Note The user must be a valid user on Neo environment and must have one of the roles as described under Operating Solutions. Note that the user used for the destination isn't subject to any Data Protection and Privacy requirements. 		

Field	Description	More Information
Password	Specify the password of the platform user.	

3. Choose Save to save your changes.

① Note

If you use *Check Connection* to check your destination, the connection test may give the wrong response (*Connection not ok*) even though the destination was correctly configured.

It only gives the correct results for Basic Authentication.

Next Steps

Create Transport Nodes [page 74]

6.2.4 Creating Destinations for Deployment of Application Content Transported in an Application-Specific Format

To address the target end point of application-specific content deployment, specify a destination using the details from the provider of the application content.

Procedure

- 1. In SAP BTP Cockpit of your subaccount, choose Connectivity Destination New Destination .
- 2. Enter the following values:

Destination Settings for Application Content Transported in an Application-Specific Format

Field	Description	More Information
Name	Name of the destination	 SAP BTP, Cloud Foundry: Using the Destinations Editor in the Cockpit SAP BTP, Neo: Configure Destinations from the Cockpit
Туре	НТТР	
Description	The description of the destination is optional.	
URL	The application specifies a URL to the deploy end point of the destination as well as the other details of the destination.	

Field	Description	More Information
Authenticat	Please use the authentication type required by the deploying application,	
ion	for example, OAuth2ClientCredentials authentication with a client creden-	
	tial flow. Here, you have to configure a destination with authentication	
	OAuth2ClientCredentials where the Client ID and the Client Secret are	
	needed that you get from the application or service instance created	
	in the target tenant. In addition, you have to specify the <i>Token Service</i>	
	URL , pointing to the authentication service used, for example https://	
	ts.authentication.sap.hana.ondemand.com, which is also pro-	
	vided by the application or service instance created in the target tenant.	

3. Choose Save to save your changes.

△ Caution

If you use *Check Connection* to check your destination: The check doesn't provide correct results for destinations using any authentication other than Basic authentication, for example OAuth2ClientCredentials authentication. It's possible that the check displays an error, even though the destination was configured correctly. It only gives the correct results for Basic authentication.

We recommend that you test the deployment using a test transport after completing all configuration steps.

Next Steps

Create Transport Nodes [page 74]

6.2.5 Creating Destinations for XSC DU Deployment

Specify https://<host>/sap/hana/xs/lm/slp/slp.xsjs as the deploy end point of the destination.

Procedure

- 1. In SAP BTP Cockpit of your subaccount, choose Connectivity Destinations New Destination .
- 2. Enter the following values:

Destination Settings for XSC DU Deployment

Field	Description	More Information
Name	Name of the destination	SAP BTP, Neo: Con-
Туре	HTTP	figure Destinations
Description	The description of the destination is optional.	from the CockpitCreate HTTP Desti-
URL	Specify the URL in the following format: https:// <host>/sap/hana/xs/lm/slp/slp.xsjs</host>	nations
	<pre>Example: https://demoabcd12345.hana.ondemand.com/sap/ hana/xs/lm/slp/slp.xsjs</pre>	
	You can find the host of the SAP HANA database in the URL, if you choose Administration Tools: SAP HANA Cockpit, or in the SAP HANA Web-based Development Workbench.	
Proxy Type	Internet	_
Authenticat ion	Select BasicAuthentication.	Client Authentication Types for HTTP Destina-
User	Specify the name of the platform user that is used for the deployment.	tions
	 Note Note that the user used for the destination isn't subject to any Data Protection and Privacy requirements. 	
Password	Specify the password of the platform user.	_

- 3. Choose Save to save your changes.
- 4. Use *Check Connection* to check your destination.

Next Steps

Create Transport Nodes [page 74]

6.3 Create Transport Nodes

Create transport nodes as representations of the source and target end points of deployment processes in your landscape. Add configuration details as required.

Prerequisites

- You have one of the roles *Administrator* or *LandscapeOperator* assigned to your user. For more information, see Security [page 116].
- You've configured transport destinations. For more information, see Create Transport Destinations [page 58].
- If you want to use SAP Alert Notification service to send notifications about import actions: You've configured the ALERT_NOTIFICATION_SERVICE destination in the subaccounts where you want to use the service.
- You are on one of the following screens in the SAP Cloud Transport Management UI:
 - On the Landscape Visualization screen, you've chosen + (Create a Node).
 - On the *Transport Landscape Wizard* screen, you create a transport node as part of the wizard.
 - On the *Transport Nodes* screen, you've chosen + (*Create a new node*).

Procedure

1. On the dialog, enter the necessary information or select the required options in the following fields:

Field	Description
Name	Enter a name of the node.
Description	Enter a description.
	① Note
	This field is optional.
All	To conclude the conclusion of Classics their words control their should be con-
Allow Upload to Node	To enable the upload of files to this node, select this checkbox.
Node	If you select the checkbox, files can be added to this node. This is required in the scenario where you want to transport archives that are available on local file systems.
	If external applications upload files using API remote calls, this checkbox must be selected. Otherwise, SAP Cloud Transport Management prevents the upload of files to this node.

Field

Description

Perform Notification

If the ALERT_NOTIFICATION_SERVICE destination is configured in the subaccount, this checkbox is available.

You can configure SAP Alert Notification service to issue notifications for specific events, for example, when an import on this node is started and when it's finished. For more information, see Receive Notifications for SAP Cloud Transport Management Actions Using SAP Alert Notification Service [page 131].

Forward Mode

By default, the forward mode is set to *Auto*. In this case, when the import of a transport request is started, the request is automatically forwarded to the target transport nodes according to the transport routes defined for the node where the import is started.

If you want to manually forward transport requests for this node, select *Manual*. In this case, a *Forward* button appears in the import queue of this node. You can choose which transports to forward later.

Note

The *Manual forwarding* function is available in an import queue, if the following prerequisites are fulfilled:

- The transport request that you want to forward is in one of the statuses *Succeeded*, *Skipped*, *Warning*, or *Error*.
- The archive that is part of the transport request to be forwarded hasn't been deleted.
 The default retention period depends on the service plan that you use for SAP Cloud
 Transport Management.

For more information, see Background Information: Storage Capacity [page 114].

For more information about the prerequisites, see the information about *Forwarding* in the Using the Import Queue [page 89] topic.

Controlled By SAP Solution Manager

For target nodes used with Change Request Management or Quality Gate Management of SAP Solution Manager, select this checkbox. As a result, there's no option to manually start imports into such a transport node. You can also use it for target nodes used with Cloud ALM.

Note

This option isn't available when using the Transport Landscape Wizard.

For more information about the integration of SAP Cloud Transport Management in SAP Solution Manager processes, see Integration in Development and Change Management Processes and with Other Services [page 123].

Virtual Node

If the transport node doesn't refer to a physical source or target end point of a deployment process, select *Virtual Node*.

In this case, the node can't have a content type or destination. No import happens. For more information, see About Transport Nodes [page 77].

Note

This option isn't available when using the *Transport Landscape Wizard*.

Field

Description

Content Type

If you create a transport node pointing to a **target** end point of a deployment process, select the *Content Type* that you want to import into this node from the dropdown box.

The following content types are available:

- Application Content
- Multitarget application (MTA)
- BTP ABAP
- XSC Delivery Unit

① Note

If you create a source node, you can leave the Content Type and Destination fields deselected.

Destination

If you create a transport node pointing to a **target** end point of a deployment process, select the *Destination* that you want to use for the import from the dropdown box.

If you need to create a new destination, use the *Go to Destination View* link to open the *Destinations* editor of your subaccount in SAP BTP Cockpit.

Deployment Strategy

For transport nodes with the content type *Multitarget Application* and the *Destination* pointing to Cloud Foundry environment, define a deployment strategy.

If you use the *default* strategy, the old version of the application is stopped before the deployment. After the import of the new version, the new version is started.

If you use the *blue-green* strategy, the application is updated without downtime as described in the SAP BTP documentation under Blue-Green Deployment Strategy.

Note

SAP Cloud Transport Management skips the testing phase of the blue-green deployment (using parameter --skip-testing-phase).

O Note

This option isn't available when using the Transport Landscape Wizard.

2. Choose OK.

Results

You've created a transport node.

- On the *Transport Nodes* screen, the node is added to the list.
- On the Landscape Visualization screen, the node is added to the canvas.

You have the following options:

- Edit a transport node.
 - On the *Transport Nodes* screen, select the radio button in front of the transport node name, and choose \mathscr{O} (*Edit*).

- On the Landscape Visualization screen, select a transport node and click on the \mathcal{O} (Edit Node) icon in the side menu, or on the \mathcal{O} (Edit) icon in the icon bar.
- Navigate to the import queue of a transport node:
 - On the *Transport Nodes* screen, click anywhere in the transport node row.
 - On the Landscape Visualization screen, select the node, and choose the ⋮≡ (Go to this node 's import queue) icon.

The selected configurations are displayed in the header area. Virtual nodes are highlighted using an info label.

- If the transport node is assigned to transport routes, you can display the assign transport routes:
 - On the *Transport Nodes* screen, click anywhere in the transport node row, and choose the *Transport Routes* tab.
 - On the Landscape Visualization screen, select the node, choose the ⋮≡ (Go to this node 's import queue) icon, and choose the Transport Routes tab.

You can check the details of all actions performed on nodes in the Landscape Action Logs [page 110].

Next Steps

Create Transport Routes [page 78]

6.3.1 About Transport Nodes

In SAP Cloud Transport Management service, transport nodes represent source or target end points of a deployment process - for example, a Cloud Foundry subaccount. Transports take place between transport nodes.

You create transport nodes as part of the configuration of your transport landscape.

For specific purposes, you can configure transport nodes as *virtual nodes* that don't refer to a physical source or target end point. Virtual nodes can serve specific purposes, for example they can be used as placeholders to support uneven landscapes in hybrid change management scenarios, or to collect transport requests and forward them to a set of connected nodes. Transport requests that are imported into virtual nodes result in a *Skipped* status.

A typical configuration of a source node includes allowing file uploads.

A typical configuration of a target node includes details about the deployment, such as the type of content to be transported, the name of the transport destination that addresses the *target* end point, or the deployment strategy. It can also include specifying that transports are controlled by SAP Solution Manager.

You can find the configuration details of a transport node in the following places:

- On the *Transport Nodes* screen: When you select a transport node, the details are displayed in the header area.
- On the *Landscape Visualization* screen: When you select a transport node, the details are displayed in a panel on the right side of the screen.

Related Information

Create Transport Nodes [page 74]
Using the Landscape Visualization [page 86]
Using the Import Queue [page 89]

6.4 Create Transport Routes

In SAP Cloud Transport Management, transport routes are used to connect transport nodes.

Prerequisites

- You have one of the roles *Administrator* or *LandscapeOperator* assigned to your user. For more information, see Security [page 116].
- You have configured transport nodes. For more information, see Create Transport Nodes [page 74].
- You are on one of the following screens in the SAP Cloud Transport Management UI:
 - On the Landscape Visualization screen, you have chosen \(\frac{\sqrt{Create a Route}}{\sqrt{note}}\), or you have chosen \(\frac{\sqrt{Create Route}}{\sqrt{note}}\) from the side menu of a selected transport node.
 - On the Transport Landscape Wizard screen, you create a transport route as part of the process.
 - On the *Transport Nodes* screen, you have chosen + (*Create a route*).

Context

You can use the same transport node as a source node for multiple transport routes. However, you can use the same transport node only once as a target node for a transport route.

Procedure

- 1. Enter a name for the transport route.
- 2. Optional: Enter a description.
- 3. Choose the source and the target nodes from the existing transport nodes.

Results

The transport route was created. You can edit transport nodes at a later point in time:

- On the *Transport Routes* screen, select the checkbox in front of the transport route name, and choose (Edit a route).
- On the Landscape Visualization screen, select a transport route and click on the \mathcal{O} (Edit) icon in the icon bar

You can check the details of all actions performed on transport routes in the Landscape Action Logs [page 110].

6.5 Use the Transport Landscape Wizard

You can use the Transport Landscape Wizard to configure the transport nodes and transport routes of simple transport landscapes.

Prerequisites

- You have one of the roles *Administrator* or *LandscapeOperator* assigned to your user. For more information, see Security [page 116].
- You have configured transport destinations. For more information, see Create Transport Destinations [page 58].
- You are on the Transport Landscape Wizard screen in the SAP Cloud Transport Management UI.

Procedure

- 1. Under Selection of Template, select the number of transport nodes of which your landscape will consist.
 - A transport node represents the source or the target end point of a deployment process for example, a source (DEV) and a target (PROD) space in a Cloud Foundry subaccount. If you have DEV and PRD account, you need a two-node landscape. If you have an additional TEST account, you need a three-node landscape. For more examples, see also SAP Cloud Transport Management Scenarios [page 55].
- 2. Choose Next.
- 3. For each transport node, enter the data as described under Create Transport Nodes [page 74].
- 4. **Optional:** Change the generated names of the transport routes so that you can later identify your transport routes, and enter descriptions.
 - For more information, see Create Transport Routes [page 78].
- 5. Choose Next.
 - The next screen shows the steps involved in the generation of the transport landscape.
- 6. Choose Summary.
 - On the *Summary* screen, you see a summary of the transport nodes and transport routes that you created. You can directly go to the nodes or transport routes that you created through the links provided in the *Summary*.

7. To close the wizard, choose Finish.

Results

You have configured transport nodes and transport routes for your transport landscape. If required, you can edit the individual entities.

6.6 Create Destinations to SAP Cloud Transport Management Service

If you use SAP Cloud Transport Management service to start the transport directly in your application, a destination to SAP Cloud Transport Management service is required in the source (development) environment of your application.

Prerequisites

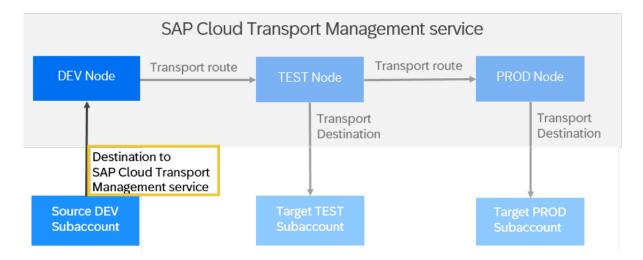
- You want to start the transport directly in your application.
- To create the destination to SAP Cloud Transport Management, you have the following information:
 - You know the fixed name of the destination.

 The destination has a fixed name, for example TransportManagementService for SAP Cloud Integration, or ctms_destination for SAP Build Work Zone, standard edition.
 - You know from which service key you retrieve the connection details.
 In general, you retrieve the required connection details from the service key of the SAP Cloud
 Transport Management instance that is used for the transport. For more information about how to create the service instance and a service key for SAP Cloud Transport Management, see Creating a Service Instance and a Service Key [page 28].

Context

Destinations contain the connection details for the remote communication of an application.

In the source environment of your application, create a destination to SAP Cloud Transport Management to address the export API of SAP Cloud Transport Management. This destination contains the connection details to SAP Cloud Transport Management service, such as the address of the SAP Cloud Transport Management instance that will be used for the transport as well as authentication details. You retrieve the connection details from the service key of the SAP Cloud Transport Management instance used for the transport.



→ Recommendation

We recommend that you refer to the documentation of your application for details about how to configure the destination to SAP Cloud Transport Management.

- For links to documentation of known integrations into SAP Cloud Transport Management, see Integration in Development and Change Management Processes and with Other Services [page 123].
- An overview of known content that is supported by SAP Cloud Transport Management is listed under Overview: Supported Content [page 9].

Procedure

• SAP BTP, Cloud Foundry Environment

The specific details for your application may depend on different criteria, such as the following:

- Is SAP Content Agent service used to export the content into .mtar files before handing them over to SAP Cloud Transport Management?
 For SAP Cloud Integration content, see Enabling Content Transport, Cloud Foundry Environment.
- Does your application use the transport capabilities of SAP Cloud Application Lifecycle Management (SAP Cloud ALM) in combination with SAP Cloud Transport Management?
 In this case, you retrieve the connection details from the service key of the SAP Cloud ALM API instance instead of the service key of the SAP Cloud Transport Management instance.

For more information, see the examples described in topic Sample Configurations of Destinations to SAP Cloud Transport Management [page 82].

SAP BTP, Neo Environment

If your application runs in the SAP BTP, Neo environment, you define the destinations in the SAP Solution Lifecycle Management service.

For more information about how to configure destinations in SAP BTP, Neo, see Set Up Direct Uploads of MTA Archives Using the Transport Management Service.

For SAP Cloud Integration content, see also Content Transport Using Transport Management Service.

6.6.1 Sample Configurations of Destinations to SAP Cloud Transport Management

The following are sample configurations of destinations to SAP Cloud Transport Management to transport SAP Cloud Integration content.

These examples serve as illustrations to help you better understand how to configure destinations to SAP Cloud Transport Management.

The examples cover the following use cases:

Use Case 1: Transporting SAP Cloud Integration content in SAP BTP, Cloud Foundry environment using SAP Content Agent service to export integration content to .mtar files and handing them over to SAP Cloud Transport Management.

The destination contains the connection details to the SAP Cloud Transport Management instance to which SAP Content Agent service sends the exported SAP Cloud Integration content.

You retrieve the required connection details from the service key of the SAP Cloud Transport Management instance that is used for the transport.

Use Case 2: Using SAP Cloud ALM to orchestrate the transport of SAP Cloud Integration content in SAP BTP, Cloud Foundry environment using SAP Content Agent service to export integration content to .mtar files and handing them over to SAP Cloud Transport Management.

You retrieve the connection details from the service key of the SAP Cloud ALM API instance.

The SAP Cloud Transport Management instance doesn't run on the source environment, but on the SAP Cloud ALM API instance. Therefore, the destination contains the connection details of the SAP Cloud ALM API instance, calling the SAP Cloud Transport Management instance.

For other content types, you can use the samples and adapt them to your use case.

Field	Use Case 1: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service	Use Case 2: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service with SAP Cloud ALM Pass-Through	Description
Name	TransportManagementServ ice	TransportManagementServ ice	Fixed name of the transport destination to SAP Cloud Transport Management.
Туре	HTTP	HTTP	Destination type
Description	Description for your reference.	Description for your reference.	This field is optional.

Field	Use Case 1: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service	Use Case 2: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service with SAP Cloud ALM Pass-Through	Description
URL	Value of uri from the service key of your SAP Cloud Transport Management service instance.	Value of Api from the service key of your SAP Cloud ALM API instance. Append /imp-cdm- transport-management- api/v1 to the URL.	The URL is used to address the SAP Cloud Transport Management instance in the subaccount where it is required.
		<pre>% Example https:// eu10.alm.cloud.sap/a pi/imp-cdm- transport- management-api/v1</pre>	
		This is the URL to the SAP Cloud ALM service instance. To ensure that the destination addresses the correct SAP Cloud Transport Management instance used for transport, an append is made to the URL of the Cloud ALM API instance calling the SAP Cloud Transport Management instance. The append is used to address the SAP Cloud Transport Management instance in the SAP Cloud ALM subaccount.	
Proxy Type	Internet	Internet	
Authenticat ion	OAuth2ClientCredentials	OAuth2ClientCredentials	
Client ID	Value of clientid (uaa section) from the service key of your SAP Cloud Transport Management service instance.	Value of clientid (uaa section) from the service key of your SAP Cloud ALM API instance	The details in these fields are required for user authentication and authorization. The values of clientid and
Client Secret	Value of clientsecret (uaa section) from the service key of your SAP Cloud Transport Management service instance.	Value of clientsecret (uaa Section) from the service key of your SAP Cloud ALM API instance.	clientsecret in the uaa section basically represent the user used for the destination and the permissions of this user.

Field	Use Case 1: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service	Use Case 2: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service with SAP Cloud ALM Pass-Through	Description
Token Service URL Type	Dedicated	Dedicated	The URL in the uaa section addresses the authentication service of SAP BTP in the subaccount where SAP Cloud Transport
Token Service URL	Value of url (uaa section) from the service key of your SAP Cloud Transport Management service in- stance. Append oauth/token to the URL retrieved from the service key.	Value of url (uaa section) from the service key of your SAP Cloud ALM API instance. Append oauth/token to the URL retrieved from the service key.	Management is used. The <i>Token Service URL</i> value is primarily used for authentication in the user authentication and authorization process. It routes to the authentication service of SAP Business Technology Platform
			(SAP BTP). When the SAP BTP authentication service receives a request, it verifies the user and the subaccount information. If the verification succeeds, the service generates a token. This token is like a secret identifier that's used to authenticate subsequent requests from the client.
			Once a token is generated, subsequent requests or API calls can be made without the need for reauthentication. Overall, the <i>Token Service URL</i> value enables secure communication, ensuring that only authenticated requests are processed.
Token Service User	No inputs required	No inputs required	
Token Service Password	No inputs required	No inputs required	

Use Case 1: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service Use Case 2: Destination to SAP Cloud Transport Management for SAP Cloud Integration using SAP Content Agent service with SAP Cloud ALM Pass-Through

Description

Field

Additional Properties

- 1. Choose New Property.
- As the key, enter sourceSystemId (value is case-sensitive).
- 3. As the value, enter the name that you want to use as the source node of the transport route, for example, DEV_NODE.

 Reuse the value as the name of the source transport node
- 1. Choose New Property.
- As the key, enter sourceSystemId (value is case-sensitive).
- 3. As the value, enter the name that you want to use as the source node of the transport route, for example, DEV_NODE.

 Reuse the value as the name of the source transport node

More information

Creating a service key for SAP Cloud Transport Management instance and configuring the destination:

- SAP Cloud Integration documentation on SAP Help Portal: Enabling Content Transport, Cloud Foundry Environment
- SAP Content Agent service documentation on SAP Help Portal: Create TransportManagementService Destination

Creating a service key for SAP Cloud Transport Management instance and configuring the destination:

- Enabling SAP Cloud ALM API in Cloud Foundry → Create Service Key.
- SAP Cloud ALM documentation on SAP Help Portal: SAP Cloud Transport Management Service
- Blog post: Enabling Change & Deployment Management in SAP Cloud ALM for SAP Integration Suite – Cloud Integration

7 Using the Landscape Visualization

Use the Transport Landscape Visualization to configure the transport nodes and transport routes of your transport landscape, as well as display and edit the existing landscape.

Prerequisites

- You've configured transport destinations. For more information, see Create Transport Destinations [page 58].
- You've one of the roles *Administrator*, or *LandscapeOperator* assigned to your user. For more information, see Security [page 116].

Context

Use the Transport Landscape Visualization to perform the following tasks:

- Configure the transport nodes and transport routes of your transport landscape.
- Display and edit the existing transport landscape.
- Get an overview of the status of existing imports in the transport nodes.

Procedure

1. On the SAP Cloud Transport Management home screen, choose *** Landscape Visualization** from the navigation pane.

All transport nodes and transport routes that are known in SAP Cloud Transport Management service are displayed on the canvas. For all nodes, the import status is displayed. If the status is error or fatal, the node is marked in red. If an import ended with a warning, the node is marked in orange. Virtual transport nodes are represented by a dashed line.

2. On the icon bar, the following functions are available:

Option	Description
+ (Create a Node)	You can create a new transport node. A dialog box opens where you can enter all relevant information for the node.
	See Create Transport Nodes [page 74].
🌂 (Create a Route)	You can create a new transport route to connect transport nodes. A dialog box opens where you can enter all relevant information for the route.

Option	Description	
	See Create Transport Routes [page 78].	
(Edit)	This function is active if you've selected a edit the selected node or route.	transport node or route in the canvas. You can
ய் (Delete)	This function is active if you've selected a transport node or route in the canvas. You can delete the selected node or route.	
(See properties)	You can display and hide additional properties of a transport node or transport route, such as the description, content type, or destination.	
	The properties are displayed in a separate	e panel on the right side of the screen. Select a
	node or a route on the canvas to display it	ts properties.
	In the Properties panel, you have the following options for transport nodes:	
	Option	Description
	(Create a job schedule)	Opens the job scheduler that allows you to schedule import jobs at regular intervals. See Schedule Imports [page 99].
	Go to this node 's import queue	Opens the import queue of the selected transport node.
C (Refresh graph)	You can refresh the graph, for example, to display changes made to the transport landscape by other users.	
<u>↓</u> (Export Landscape)	You can export the landscape configuration to a $.zip$ file, for example, for backup purposes.	

<u>↑</u> (Import Landscape)

You can import a landscape configuration .zip file that you've previously exported, for example, because you want to replicate an existing landscape in another subaccount.

The following prerequisites apply to the import:

- You need Administrator or LandscapeOperator authorization.
- You can only import a complete landscape. Importing partial landscapes isn't supported.
- The landscape configuration to be imported contains only unique transport nodes and routes that don't yet exist in the current transport landscape.
- The file to be imported hasn't been modified manually and doesn't exceed 10 MB.
- The version of SAP Cloud Transport Management where the landscape configuration
 was exported from is the same as the version where you want to import the configuration. You can check that the version is identical by comparing the version you can find
 in the .zip file with the current version. You find the current version by selecting your
 logon email address in the title bar and choosing *About* from the dropdown menu.

O Note

If a prerequisite isn't fulfilled, you can't import the landscape configuration.

In the *Landscape Action Logs*, the number of imported transport nodes and routes are logged for the import action.

Option	Description	
	▲ Restriction You must export and import destinations separately. You must manually maintain credentials after importing a landscape.	
Q (Search)	Enter any character string in the <i>Search</i> field to display a dropdown list of all transport nodes and routes (called <i>Lines</i> here) that match this string. If you select a node or a route, it's highlighted in blue.	
⊞ (Legend)	You can display a legend of the colors used for the nodes and routes (called <i>Lines</i> in the legend) on the canvas. If you click on an entry in the legend, all relevant entities are highlighted in blue on the canvas.	
⊕ (Zoom In) ⊝ (Zoom Out)	You can use the functions to zoom to the required size of the transport nodes and routes displayed on the canvas.	
☐ (Zoom to Fit)	You can automatically fit all transport nodes to the canvas.	
[3] (Enter Full Screen)	If you have large transport landscapes, you can display the canvas in full-screen mode.	
	To exit full-screen mode, choose 🔀 (Exit Full Screen).	

3. For a selected node, you have the following options using the icons in the menu next to each node:

Option	Description
⅋ (Create Route)	You can create a new transport route to connect the selected transport node with a target node. A dialog box opens where you can enter all relevant information for the route. The selected node is preconfigured as source node.
	See Create Transport Routes [page 78].
≣ (Go to this node 's	You can open the import queue of the selected transport node.
import queue)	See Using the Import Queue [page 89].
(Edit Node)	You can edit the selected node.
	See Create Transport Nodes [page 74].
ய் (Delete Node)	You can delete the selected node.
	As an alternative, you can use your keyboard's Delete key.

4. You can edit or delete a selected route using the icons in the icon bar.

Related Information

Landscape Action Logs [page 110]

8 Using the Import Queue

In the import queue of a transport node, you can start the upload of a file or import processes.

Prerequisites for Using the Import Queue [page 89]

To use the import queue, open it and have the appropriate authorizations.

Search and Filter Options in an Import Queue [page 90]

You have different options to search for transport requests in an import queue and filter for specific criteria.

Options to Display Information about Transport Requests [page 91]

For each transport request displayed in the import queue, you can display additional information.

Add Files to Import Queues [page 91]

By adding a file to the import queue, you upload it to the import queue and create a transport request.

Import Transport Requests [page 93]

You can either import all transport requests in an import queue, or selected transport requests only.

Forward Transport Requests [page 95]

If the *Forward Mode* of a transport node is set to the value *Manual*, you can manually forward selected transport requests in this node to target transport nodes.

Reset Transport Requests [page 96]

To repeat the import of transport requests in status *Error* or *Succeeded*, you can reset the status of these transport requests.

Remove Transport Requests [page 97]

You can remove selected transport requests from an import queue.

Disable the Import [page 98]

To prevent imports from happening in a specific transport node, you can disable the import in the import queue of the transport node.

Schedule Imports [page 99]

To run imports of all transport requests in a transport node on a regular basis, you can schedule them to run at regular intervals.

Upload MTA Extension Descriptors [page 100]

If an extension descriptor file exists for a Multitarget Application (MTA) that you want to import, you can upload it in the import queue of the corresponding transport node of Cloud Foundry environment.

8.1 Prerequisites for Using the Import Queue

To use the import queue, open it and have the appropriate authorizations.

- Depending on the action that you want to perform in the import queue, you need different authorizations. For more information, see Security [page 116].
- You have opened the import queue of a transport node using one of the following options:

- On the SAP Cloud Transport Management home screen, choose of *Transport Nodes* from the navigation pane. On the *Transport Nodes* screen, select the transport node you want to access the import queue for.
- In the Landscape Visualization screen, choose ⋮ (Go to this node's import queue).

8.2 Search and Filter Options in an Import Queue

You have different options to search for transport requests in an import queue and filter for specific criteria.

- You can search for queue entries in the import queue using the Search field:
 - To search for a transport description, enter any character string.
 - To search for a transport request ID, enter the complete ID.
- You can filter queue entries according to the following criteria:

Filter Criterion	Description
Status	By default, queue entries with the statuses <i>Initial</i> , <i>Repeatable</i> , <i>Fatal</i> , and <i>Running</i> are displayed. You can select or deselect status values from the dropdown list.
	 Note All queue entries that have the status Succeeded or Error will automatically get the status Deleted after a default retention period, the next time when an import is started.
Preset Date Range	By default, the queue entries of the last 7 days are displayed. You can select different time intervals from the dropdown box. The timestamp of a queue entry refers to the time of the last status change of the queue entry.
Custom Date	You can select a date or a date range from the calendar by choosing (Open Picker) and clicking on the first and the last date of the date range. If you've selected a date range, the value of the preset date range is grayed out and no longer relevant. To clear the date range and return to the preset date range selection, delete the dates from the entry field.

You can reset all filter options to the default values by choosing Restore.

8.3 Options to Display Information about Transport Requests

For each transport request displayed in the import queue, you can display additional information.

In the import queue, the transport requests are displayed together with their ID (*Transport Request* column) description, owner, status, node in which they were added to the queue (*Entry Node* column), and timestamp. For each transport request, you have the following options:

Function	Description
Click anywhere in the row of the transport request.	You can go to the Transport Request viewer to view additional information, such as all transport nodes where the transport request is used, more information about the attached content, and the action log. For more information, see Display Details of Individual Transport Requests [page 106].
Ø (See this transport request's content information)	You can display the name of the attached file in a popover. For .mtar files, you can display additional information about the content of the file. ① Note You can display the same information on the <i>Content</i> tab in the Transport Request viewer. For more information, see Display Details of Individual Transport Requests [page 106].
(Display the logs for queue entry)	You can display the <i>Log of Transport Request <request id=""></request></i> . It displays the actions for the transport request in the current transport node.

8.4 Add Files to Import Queues

By adding a file to the import queue, you upload it to the import queue and create a transport request.

Prerequisites

- You have one of the roles *Administrator* or *ExportOperator* assigned to your role. For more information, see Security [page 116].
- You're using SAP Cloud Transport Management service in the scenario *Transport of Content Archives that are available on Local File Systems*. For this, you've selected the *Allow Upload to Node* checkbox for the transport node to which you want to add a file.
 - For more information about scenarios, see SAP Cloud Transport Management Scenarios [page 55].
- You want to upload one of the content types *Multitarget Application*, *XSC Delivery Unit*, or *Application Content*. The manual upload of content of type *BTP ABAP* to import queues is not supported. The *Add* button is not available.

• You are in the import queue of the transport node where you want to add files. For more information, see Prerequisites for Using the Import Queue [page 89].

Context

In an import queue of a transport node, you can add content archives that you want to import. If you do this, a transport request is created and it's added to the import queue of the transport node.

① Note

You only need to upload files if you transport content archives that are available on a local file system. If you transport content archives directly in an application, the application adds them to the import queue.

You can upload files up to a maximum size of 1 GB. For each subscription to the service, you can upload files with a total maximum size. You can check how much of your space quota is already in use on the home screen of the SAP Cloud Transport Management UI.

If you upload larger files and depending on your network connection, the upload process can take some time.

To monitor the progress of the upload process, you can choose (*Progress details on your current file uploads*). The progress of all file uploads of your user in the current browser session is displayed.

① Note

After an uploaded file was imported in all transport nodes along the configured transport routes, and the queue items aren't in one of the statuses *Initial*, *Repeatable*, or *Fatal*, SAP Cloud Transport Management automatically deletes the uploaded files after 30 days. The metadata of the transport request isn't deleted, only the file. The file is also automatically deleted if the transport request is deleted.

Like this, SAP Cloud Transport Management ensures that the total maximum size isn't easily reached.

Procedure

- 1. In the import queue, choose Add.
- 2. In the Upload a file dialog box, enter the following details:

Field	Description
Transport Description	Description of the file upload process
Content Type	If a transport destination is assigned to the transport node, the content type is preselected based on the content type specified in the destination. You can't change it. If no transport destination is assigned, you must select the content type that you want to upload from the dropdown list.

Field	Description
File	Select the file that you want to upload. For content type Multitarget application, you
	can upload $*$. \mathtt{mtar} files. For content type XSC Delivery Unit, you can upload $*$. \mathtt{tgz}
	files. For application-specific content types, you can upload .zip files.

3. To upload the file, choose OK.

A transport request with the uploaded file is added to the import queue.

You can now import it.

Next Steps

Import Transport Requests [page 93]

8.5 Import Transport Requests

You can either import all transport requests in an import queue, or selected transport requests only.

Prerequisites

- To execute an import of all transport requests in the import queue, you need the *ImportOperator* authorization. To execute an import of selected transport requests in the import queue, you need the *TransportOperator* authorization. For more information, see Security [page 116].
- You're in the import queue of the transport node where you want to execute imports. For more information, see Prerequisites for Using the Import Queue [page 89].

Context

In the import queue, you have the following options:

- Import all transport requests in the import queue
- Import selected transport requests of the import queue

All entries with the *Initial*, *Fatal*, and *Repeatable* statuses can be imported.

① Note

Transport nodes with content type *BTP ABAP* only support individual imports of transport requests. The *Import All* function isn't available in the import queue, and only one transport request of content type *BTP ABAP* can be selected to be imported.

Procedure

- 1. To start the import, choose one of the following options:
 - Import All

If you want to import all requests, choose *Import All*.

All queue entries are imported in the sequence in which they're placed in the import queue.

△ Caution

The import also includes any importable queue entries that may currently not be visible because of selected filters.

• Import Selected

If you want to import selected transport requests, select the transport requests that you want to import, and choose *Import Selected*.

Only the selected transport requests are imported in the sequence in which they're placed in the import queue.

Note that the import of individual transport requests can lead to inconsistencies in the target runtime if dependent transport requests aren't imported. SAP Cloud Transport Management doesn't perform any dependency checks on the selected transport requests.

By default, the import is executed immediately.

When an import is started, and the *Forward Mode* of the transport node where the import was started is set to *Automatic* (default value), SAP Cloud Transport Management first forwards all transport requests to be imported to the target transport nodes. The forwarding is done according to the transport routes defined for the node where you started the import.

The forwarded transport requests are added to the end of the import queues of the target nodes. If the forwarded transport requests are already part of the import queue of the target node, they're moved to the end of this import queue. The status of a moved transport request changes as follows:

- Initial remains Initial.
- Deleted, Error, Fatal, Skipped, Succeeded, and Warning change to Repeatable.
- Repeatable remains Repeatable.
- 2. **Optional:** Schedule imports of all transport requests to be executed at regular intervals.

For more information, see Schedule Imports [page 99].

Results

If the transport node has a content type and a valid destination assigned, the transport requests are imported into the runtime of the transport node. If the import fails, the transport requests are still forwarded to the import queues of the target nodes.

① Note

If a transport request with a Multitarget Application archive (.mta) was imported in a subaccount of the Neo environment, the archive is afterward visible in the *Standard Solutions* category in the *Solutions* page in the SAP BTP cockpit of the subaccount. For more information on solutions, see Operating Solutions in the SAP BTP documentation.

If transport requests are imported in virtual nodes, the transport requests are forwarded to the import queues of the target nodes. In the virtual node, they get a *Skipped* status.

8.6 Forward Transport Requests

If the *Forward Mode* of a transport node is set to the value *Manual*, you can manually forward selected transport requests in this node to target transport nodes.

Prerequisites

- You have one of the roles *Administrator* or *TransportOperator* assigned to your role. For more information, see Security [page 116].
- You are in the import queue of the transport node where you want to forward transport requests. For more information, see Prerequisites for Using the Import Queue [page 89].
- The Forward Mode of the transport node is set to the value Manual.
- The archive that is attached to the transport request isn't deleted.

 Forwarding transport requests is only possible as long as the archive exists. The default retention period of archives depends on the service plan that you use for SAP Cloud Transport Management. For more information, see Background Information: Storage Capacity [page 114].

Context

You can manually forward transport requests in one of the statuses *Error*, *Skipped*, *Succeeded*, or *Warning*.

Procedure

In the import queue, select one or multiple transport requests that you want to forward.
 The transport requests are forwarded in the same order in which you selected them. Like this, you can influence the order in which the transport requests are placed in the target import queue.

① Note

You can only select one transport request with the content type BTP ABAP.

2. Choose Forward.

Results

The selected transport requests are added to the import queue of the target nodes.

The forwarded transport requests are added to the end of the import queues of the target transport nodes. If the forwarded transport requests are already part of the import queue of the target node, they're moved to the end of this import queue. The status of a moved transport request changes as follows:

- Initial remains Initial.
- Deleted, Error, Fatal, Skipped, Succeeded, and Warning change to Repeatable.
- Repeatable remains Repeatable.

8.7 Reset Transport Requests

To repeat the import of transport requests in status *Error* or *Succeeded*, you can reset the status of these transport requests.

Prerequisites

- You have one of the roles *Administrator* or *TransportOperator* assigned to your role. For more information, see Security [page 116].
- You are in the import queue of the transport node where you want to reset transport requests. For more information, see Prerequisites for Using the Import Queue [page 89].
- There are transport requests in the import queue in status Error, Skipped, or Succeeded.

Procedure

1. In the import queue, select the transport requests that you want to reset.

① Note

You can reset transport requests with the content type BTP ABAP only individually.

2. Choose Reset.

Results

The selected transport requests have the status *Repeatable*. You can repeat the import.

8.8 Remove Transport Requests

You can remove selected transport requests from an import queue.

Prerequisites

- You have one of the roles *Administrator* or *TransportOperator* assigned to your role. For more information, see Security [page 116].
- You are in the import queue of the transport node where you want to remove transport requests. For more information, see Prerequisites for Using the Import Queue [page 89].

Procedure

1. In the import queue, select the transport requests that you want to remove.

① Note

You can remove transport requests with the content type BTP ABAP only individually.

2. Choose Remove.

Results

The transport request is removed from the import queue. It gets the status *Deleted*.

When the transport request is removed from all related import queues, the automatic cleanup mechanism of SAP Cloud Transport Management deletes the physical file attached to the transport request. For more information, see Background Information: Storage Capacity [page 114].

① Note

To remove a transport request from all related import queues, you can use the *Delete* function in the transport requests overview. For more information, see *Delete Transport Requests* [page 107].

8.9 Disable the Import

To prevent imports from happening in a specific transport node, you can disable the import in the import queue of the transport node.

Prerequisites

- You have one of the roles *Administrator* or *TransportOperator* assigned to your role. For more information, see Security [page 116].
- You are in the import queue of the transport node where you want to disable the import. For more information, see Prerequisites for Using the Import Queue [page 89].

Procedure

- 1. In the import queue, choose *Disable Import*.
- 2. **Optional:** In the *Confirmation* dialog box, enter a reason for disabling the import.
- 3. Confirm that you want to disable the import.

Results

A disabled import has the following effects:

- No imports are executed in this node. This is also true for scheduled imports.
- Other actions can be executed in this node, such as adding files to the import queue.
- For nodes with *Manual Forward Mode* enabled, forwarding is allowed. It's, however, not possible to the change status of entries that can't be forwarded yet, because they aren't yet in a status that allows forwarding (*Succeeded, Warning*, or *Error*).
 - If automatic forwarding is enabled in the preceding node of the current node, transport requests are also still forwarded to the import queue of the current transport node.

- The header area displays an *Import Disabled* message. If you hover over the message, the reason is displayed.
- The action of disabling the import is logged in the Landscape Action Logs together with the reason, if a reason exists.
- The Disable Import button turns into an Enable Import button.

To re-enable the import, choose *Enable Import*.

8.10 Schedule Imports

To run imports of all transport requests in a transport node on a regular basis, you can schedule them to run at regular intervals.

Prerequisites

- To schedule imports, you need the *TransportOperator* authorization. For more information, see Security [page 116].
- You want to schedule imports for one of the content types *Multitarget Application*, *XSC Delivery Unit*, or *Application Content*. Scheduling imports for content of type *BTP ABAP* isn't supported.
- You are in one of the following places in SAP Cloud Transport Management:
 - In the import queue of a transport node. For more information, see Prerequisites for Using the Import Queue [page 89].
 - In the Properties panel of a transport node in the *Landscape Visualization*. For more information, see Using the Landscape Visualization [page 86].

Procedure

- 1. Choose (Import Scheduler).
- 2. In the dialog box, you can choose one of the import patterns Daily or Weekly:

Option	Description
Daily	Choose a time interval for the scheduled daily imports from the dropdown box (for example, <i>Every hour</i> , <i>Four times per day</i>).

Option	Description
Weekly	You have the following options:
	 Select a time interval for the scheduled weekly import from the dropdown box (for example, Every week, Every second week.
	• Select an Execution Time, that is the starting time, for the scheduled imports.
	 Select the days of the week on which the scheduled imports take place.

- 3. By default, the import schedule is inactive. To activate the schedule, select the Active checkbox.
- 4. Choose Create.

Results

If the schedule is active, the imports of all transport requests in the import queue of the transport node are scheduled with the specified options and will be run as specified.

If you start an import queue with scheduled imports, the header area displays an *IMPORT SCHEDULE DETECTED* button. You can click on this button to display more information about the job status and the next time the job is run.

① Note

If the job scheduler has many jobs to process, it's possible that the start time of the job is delayed.

If a scheduled import run failed with a fatal error at least three times in a row over a period of at least three weeks, the schedule is automatically deactivated. The affected transport node is displayed on the SAP Cloud Transport Management home screen in the *Import Schedules* section. If you still need the import schedule, resolve the issue, and reschedule the import.

8.11 Upload MTA Extension Descriptors

If an extension descriptor file exists for a Multitarget Application (MTA) that you want to import, you can upload it in the import queue of the corresponding transport node of Cloud Foundry environment.

Prerequisites

- To upload or delete MTA extension descriptors, you need the *TransportOperator* authorization. For more information, see Security [page 116].
- You are in the import queue of a Cloud Foundry transport node for the Content Type *Multi-Target Application*. For more information, see Prerequisites for Using the Import Queue [page 89].

Context

① Note

This function is supported for transports in Cloud Foundry environment only.

A Multitarget Application (MTA) extension descriptor is a file that contains data complementary to a deployment descriptor. It allows you to customize the MTA deployment for a specific transport node. The file has the extension .mtaext. You can upload it in the import queue of a transport node. The MTA extension descriptor is used at import time whenever a transport request that contains a matching MTA version is imported. The following conditions must be met so that an MTA extension descriptor matches an MTA version:

- The MTA ID is the same as specified using the extends: parameter in the MTA extension descriptor file.
- The version binding defined for the MTA extension descriptor in SAP Cloud Transport Management matches the version of the MTA that is imported.

You can upload an MTA extension descriptor in an import queue at any point in time before the import of the MTA, also before the MTA itself is added to the import queue. It is used at the time of the import.

MTA extension descriptors are not forwarded to any target nodes. Therefore, you must upload an MTA extension descriptor in all import queues where you import the related MTA.

For more information about how to define MTA extension descriptors, see Defining MTA Extension Descriptors.

Procedure

- 1. Choose **(** (Open MTA Extension Descriptors).
 - In the dialog box, you see a list of MTA IDs for which MTA extension descriptors were already uploaded in the current import queue, together with the version binding defined for them, and the description.
- 2. In the dialog box, you can upload a new extension descriptor. To do this, choose Add.
 - a. In the Add a new MTA Extension Descriptor dialog box, enter the following details:

Field	Description	
MTA Extension File	Click anywhere in the input field, or choose <i>Browse</i> to select the MTA extension descriptor that you want to upload in the import queue.	

Field Description

Version Binding You can define for which versions of the MTA you want to use the extension descriptor.

If you have uploaded an MTA extension descriptor, by default, this field contains an asterisk (*). This means that the MTA extension descriptor is valid for all versions of the MTA.

→ Recommendation

We recommend that you leave the asterisk unchanged.

If you want to define that the MTA extension descriptor is valid for a specific version of the MTA only, you can enter the version of the MTA for which the extension descriptor is valid, for example, 1.4.2.

O Note

You cannot use a combination of both options, for example 1.4.*.

However, you can have both an extension descriptor that is valid for all versions of an MTA, and extension descriptors for specific versions of the MTA. If both exist for a specific version, SAP Cloud Transport Management will use the specific extension descriptor at for the import.

Description

By default, the name of the uploaded MTA extension descriptor file is entered as the description. You can change it.

b. Choose Submit new descriptor.

The MTA extension descriptor that you uploaded is now available in the import queue. It is used when the transport request with the matching MTA version is imported.

3. In addition, in the MTA Extension Descriptors dialog window, you have the following options:

Task	How To
Show the content of an MTA extension descriptor file that was already added to the import queue.	Choose Q (Show file content).
Download an existing extension descriptor.	Choose <u>↓</u> (Download MTA Extension File).
Remove a selected extension descriptor from the import queue.	Select the extension descriptors that you want to remove, and choose <i>Remove</i> . The file will be removed.

Results

Uploading and deleting MTA extension descriptors are reflected as actions in the transport action logs. When an extension descriptor is used for an import of an MTA, the transport action logs also contain information about the extension descriptor used.

You can check whether an MTA extension descriptor exists for an existing MTA in the following places: in the import queue by choosing @ (See this transport request's content information). If an MTA extension descriptor

exists, the \mathbb{C} (An extension descriptor is available for the Multi-Target Application archive.) icon is displayed next to the name of the .mtar file. You can expand the tree to display the MTA ID.

9 Using the Transport Requests Overview

You can use the transport requests overview to display all transport requests in a tenant, to delete transport requests from all related transport nodes, and to display details of individual transport requests.

Prerequisites for Using the Transport Requests Overview [page 104]

To use the transport requests overview, you must open it and have the appropriate authorizations.

Display Overview Information about Transport Requests [page 105]

For each transport request, the transport requests overview displays some basic overview information.

Search and Filter Options in the Transport Requests Overview [page 105]

You have different options to search for transport requests in the transport requests overview and filter for specific criteria.

Display Details of Individual Transport Requests [page 106]

You can display comprehensive information about individual transport requests.

Delete Transport Requests [page 107]

You can delete transport requests from all import queues in your tenant.

Statuses of Transport Requests [page 108]

Transport requests can have different statuses in the import queue that are in turn aggregated into lifecycle statuses displayed in the transport requests overview.

9.1 Prerequisites for Using the Transport Requests Overview

To use the transport requests overview, you must open it and have the appropriate authorizations.

- The following authorizations are required depending on the action that you want to perform:
 - To display transport requests: You have the authorizations of the *Viewer* role.
 - To delete transport requests: You have at least the authorization of the *TransportOperator* role for all the nodes that exist in the subaccount or tenant.

For more information, see Security [page 116].

• You have opened the transport requests overview by choosing **Transport Requests* on the SAP Cloud Transport Management home screen.

9.2 Display Overview Information about Transport Requests

For each transport request, the transport requests overview displays some basic overview information.

A transport request contains transportable content. It is created when a file is added to a transport node. It can contain different content types (files or references). On the transport requests overview, the following information is displayed for each transport request:

- ID: ID of the transport request
- Description: Description that was entered when the transport request was created.
- Owner: User that created the transport request.
- Created At: Date and time when the transport request was created.
- Occupied Storage: Size of the file related to the transport request in megabytes (MB).
- Nodes: Transport nodes related to the transport request.

Note

This column is inactive by default. You can display it in the 🕸 (Settings).

If the *Nodes* column is displayed, the % (*Show related transport nodes*) icon allows you to display a list of all transport nodes related to the transport request. To go to the import queue of a transport node, select the node name.

• Status: Aggregated statuses of the transport request in all transport nodes of the transport landscape. By default, all transport requests in status *Active* are displayed. For more information, see Statuses of Transport Requests [page 108].

Clicking anywhere in a transport request row opens the transport request viewer. For more information, see Display Details of Individual Transport Requests [page 106].

9.3 Search and Filter Options in the Transport Requests Overview

You have different options to search for transport requests in the transport requests overview and filter for specific criteria.

- You can search for transport requests using the Search field:
 - To search for a transport description, or the owner of a transport request, enter any character string.
 - To search for the transport request ID, enter the complete ID.
- You can filter for *Owner*, *Creation Date*, or *Status* of the transport requests by selecting the relevant option from the dropdown boxes.

9.4 Display Details of Individual Transport Requests

You can display comprehensive information about individual transport requests.

Prerequisites

You are in one of the following places in SAP Cloud Transport Management:

- In the import queue of a transport node. For more information, see Prerequisites for Using the Import Queue [page 89].
- In the transport requests overview. For more information, see Using the Transport Requests Overview [page 104].

Procedure

1. Click anywhere in the row of the transport request whose details you want to display.

In the header section of the transport request viewer, general information about the transport request are displayed:

- Transport Request ID
- Transport Description
- Created by
- Created at
- 2. Open the different tabs to display the following information:
 - Tracking tab

This tab is opened by default.

On a canvas, the current state of the landscape related to the transport request is displayed. This includes all transport nodes that are related to the transport request, and the transport routes between the nodes. The statuses of the transport requests in the individual nodes are indicated by colors. Use the legend to find out about the statuses of the transport request in the displayed transport nodes.

The individual transport nodes contain more information, such as the Node ID, and the forward mode. Clicking on a node opens the import queue of the selected node.

Action Logs tab

This tab displays a list of all actions related to the transport request in the different transport nodes in reverse chronological order. For each action in each node, it contains information about the node, action type, user, status, and date. This applies also to deleted nodes. Clicking anywhere in an action line opens the detailed log of the transport action (*Log of Action:* <Transport Action>). For more information, see Transport Action Logs [page 111].

· Content tab

This tab contains more information about the content of the transport request. For .mtar files, the individual modules of the files contained in the transport request are displayed. The information

displayed corresponds to the information that you get when you choose **@** (See this transport request's content information) in the import queue.

The checksum is available for files. You can download or copy the checksum to verify that the file is genuine and error-free.

If an application has added object metadata about the content of the transport request, this object metadata is displayed here. For example, transport requests created for references of SAP BTP, ABAP environment contain metadata, such as the software component, commit ID, tag name, or branch name of the reference.

Related Information

Statuses of Transport Requests [page 108]
Using the Transport Requests Overview [page 104]

9.5 Delete Transport Requests

You can delete transport requests from all import gueues in your tenant.

Prerequisites

- You have at least the authorization of the *TransportOperator* role for all the nodes that exist in your tenant. For more information, see Security [page 116].
- You are in the transport requests overview. For more information, see Prerequisites for Using the Transport Requests Overview [page 104].
- There are transport requests that you want to delete centrally from all import queues in your tenant.

Context

This mass deletion function allows you to reduce your storage consumption for files that were uploaded to SAP Cloud Transport Management and that you no longer need. The physical deletion of files from your tenant is delayed and can take up to 24 hours. Marking transport requests for deletion will therefore not immediately reduce your tenant's storage quota consumption. For more information about the automatic cleanup mechanism of SAP Cloud Transport Management, see Background Information: Storage Capacity [page 114].

△ Caution

You cannot restore deleted transport requests.

Procedure

- 1. In the transport requests overview, select the transport requests that you want to delete.
- 2. On the subsequent dialog box, confirm your selection.

Results

The selected transport requests are deleted in all import queues in your subaccount or tenant. The physical file of the transport request will be deleted wih the next run of the autmatic cleanup mechanism.

9.6 Statuses of Transport Requests

Transport requests can have different statuses in the import queue that are in turn aggregated into lifecycle statuses displayed in the transport requests overview.

In an import queue of a transport node, a transport request can have one of the following import statuses:

Status in Im- port Queue	Description
Deleted	The transport request was removed from the import queue of the transport node.
	For more information, see Remove Transport Requests [page 97].
Error	The import of the transport request failed due to an error.
Fatal	The import of the transport request failed due to a fatal error.
Initial	The transport request was added to the transport node, but an import wasn't yet started.
Repeatable	The transport request was earlier in an <i>Error</i> , <i>Skipped</i> , or <i>Succeeded</i> status and was manually reset - with the aim of restarting the import.
Running	The import of the transport request is currently running.
Succeeded	The import of the transport request in the transport node was successful.
Skipped	The import of the transport request in the transport node was intentionally skipped. The <i>Skipped</i> status is equivalent to a <i>Succeeded</i> status. It can occur in the following situations:
	For all imports into virtual nodes, since physical imports into virtual nodes aren't possible.
	• For imports of the content types <i>BTP ABAP</i> and <i>application content</i> in situations where the deploy target has skipped the content deployment of the transport request.
Warning	Warnings occurred during the import of the transport request in the transport node.

In the transport requests overview, the import statuses of a transport request in the related import queues are aggregated into the following lifecycle statuses:

Status in Transport Re- quests Over- view	Description
Active	In at least one import queue the import status of the transport request isn't Archived or Deleted.
Archived	In all import queues that the transport request was part of, it was deleted by the automatic cleanup run of SAP Cloud Transport Management. For more information, see Background Information: Storage Capacity [page 114].
Deleted	In all import queues that the transport request was part of, it has the status <i>Deleted</i> .

10 Landscape Action Logs

The landscape action logs display the history of all actions related to landscape configuration.

This includes actions such as create, edit, and delete transport nodes, transport routes, and scheduled import jobs.

The log displays a list of landscape actions sorted according to the time when the action was performed. The most recent action is at the top. For each action, it contains information about the user and, for each *Edit* action, it contains the data from the previous state (*Old value*) and the new state (*New value*). For *Create* or *Delete* actions, one of the states *Old value* or *New value* is always *None*. Import schedules are displayed using *cron* expressions.

You can filter the columns *Type*, *Action Type*, and *User* by entering any character string in the *Search* field. Note that you cannot use the *Search* field for text displayed in any of the other columns.

11 Transport Action Logs

The transport action logs display a history of all actions related to the transport.

Transport Action Logs

The following are transport actions:

- Import to Node
- File Upload
- Upload to Node
- Delete Queue Entry
- Repeat Queue Entry
- Export to Node
- Add Queue Entry
- Forward Queue Entry

The log displays a list of transport actions sorted according to the time when the action was performed. The most recent action is at the top. For each action, it contains information about the node, action type, user, status, and the end time. You can display detailed information about the individual actions by clicking in the respective line.

In the Transport Action Logs, you can do the following:

• Filter the data in the log columns *Node*, *Action Type*, *User*, *Status*, and *End Time* either by entering any character strings in the respective fields and choosing Enter, or choosing the relevant information from the dropdown boxes.

→ Tip

You can display transport action logs for a specific time period by using the date picker in the *End Time* filter. To select the desired time period, use the left mouse button. Keep the left mouse button pressed or select the start and end dates while holding down the Shift or CTRL key. If you prefer, you can type or edit the time period shown in the End Time filter input field.

- Navigate to a detailed *Log of Action* for a specific transport action by clicking anywhere in the row of the transport action.
- Refresh the status of transport actions that are currently in status *Running*, but which haven't been updated in a long time, by choosing *Refresh expired actions*.
- Download all transport actions to a .zip file by choosing $\underline{\downarrow}$ (Download all transport action logs). The .zip file always contains the logs of all transport actions that have occurred in your current subaccount, irrespective of the filters. It includes one .txt file for each transport action.

① Note

SAP Cloud Transport Management stores all logs of a subscription. The logs don't have a specific retention period and aren't deleted by the automatic cleanup mechanism used for transported files. As a result, the .zip file can contain a large number of individual .txt files.

• Refresh the status of import actions that are currently running by choosing *Refresh expired actions*. By default, SAP Cloud Transport Management refreshes the status of import actions that remain for too long in the *Running* status at regular intervals when you are in the import queue of the transport node. Here, you can manually trigger a refresh.

Log of Action: <Transport Action>

In the detailed view, you find a detailed log for a specific transport action.

In the Log of Action: <Transport Action>, you can do the following:

- Filter the messages by entering any character string in the Messages field. In addition, you can narrow down the results according to Transport Request, Transport Status, Content, and Message Severity by choosing the relevant criteria from the dropdown boxes.
- Download all messages of an action to a text file by choosing $\frac{1}{2}$ (Download transport logs).

① Note

The log of a transport request which is displayed when you choose the \mathbb{G} (Display the logs for queue entry) icon in the import queue, contains all transport actions for this transport request. You cannot download the transport log for a transport request.

12 Administration

Learn about administration tasks that you can perform for SAP Cloud Transport Management service.

Task	More Information
Regularly check the logs of the transport actions that take place in your subaccount.	Transport Action Logs [page 111]
Regularly check the landscape action log for unexpected changes to the landscape.	Landscape Action Logs [page 110]
Configure SAP Cloud Transport Management to send e-mail notifications for import actions.	Receive Notifications for SAP Cloud Transport Management Actions Using SAP Alert Notifica- tion Service [page 131]
Regularly check audit log data for unusual or suspicious network and system behavior.	Auditing and Logging Information [page 119]
If required by your company policies, you can export and download specific data in SAP Cloud Transport Management.	Configuring Backup [page 113]
Manage the storage space available in your subaccount.	Background Information: Storage Capacity [page 114]
Grant user roles available for SAP Cloud Transport Management according to the tasks the user need to perform.	Security [page 116]
Get support if things start to go wrong.	Monitoring and Troubleshooting [page 134]

More Information

For general information about administration and operation tasks in SAP BTP, such as management and configuration of global accounts and subaccounts, refer to the following SAP BTP documentation: Administration and Operations under Administration and Operations in the Cloud Foundry Environment.

12.1 Configuring Backup

You can use the download and export functions of SAP Cloud Transport Management service to back up data.

- Download MTA extension descriptors.
- Download transport-related logs.
- Export landscape configuration data.

For more information, see Customer Data Export [page 121].

12.2 Background Information: Storage Capacity

The storage capacity for files uploaded to SAP Cloud Transport Management service is limited for each subscription.

The total capacity as well as the retention time of files that were uploaded to the service depends on the service plan you have for the service. Each individual file that is uploaded to SAP Cloud Transport Management can have a maximum size of $1\,\mathrm{GB}$.

Details of Service Plans

Service Plan	Total Capacity	Size Limit of Individual Files	Retention Time
Standard	50 GB	1 GB	30 days
Free	2 GB	1GB	7 days

① Note

If SAP Cloud Transport Management is running on SAP BTP, partner-managed edition in the China (Shanghai) or Government Cloud (US) regions, the storage capacity is as follows.

Service Plan	Total Capacity	Size Limit of Individual Files	Retention Time
Standard	10 GB	0.4 GB	30 days

For more information about the service plans for SAP Cloud Transport Management, see SAP Discovery Center.

You can check how much of the storage capacity is already in use by selecting the dropdown arrow next to your user's email address, and choosing *My File Quota*, or in the *Storage Usage* section on the SAP Cloud Transport Management home screen.

To ensure that the maximum capacity isn't easily reached, the service has an automatic cleanup mechanism in place. The cleanup mechanism runs on a daily basis. All uploaded files in transport requests are automatically deleted after a specific retention time, depending on the service plan you have. Automatic deletion takes place, if the following criteria are met:

- In all import queues in the transport landscape, the transport requests are in one of the following statuses:
 - Deleted
 - Error
 - Skipped
 - Succeeded
 - Warning

① Note

If a file is still part of a transport request in one of the statuses *Fatal*, *Initial*, *Repeatable*, or *Running*, the physical files aren't deleted.

• The last action for this file was executed 30 days (*Standard* plan) / 7 days (*Free* plan) before the cleanup

① Note

This criterion doesn't apply to files in transport requests that have the status *Deleted* in all import queues. A transport request gets this status using the *Remove* button. This status allows an automatic deletion of files in such transport requests immediately when the cleanup mechanism detects them.

The metadata of the transport request isn't deleted, only the file. The file is also automatically deleted, if the corresponding transport request is deleted.

When you've reached at least 85% of the storage capacity in your space, and you're trying to upload a new file to SAP Cloud Transport Management, a warning message is displayed.

When you've reached the maximum storage capacity, no files can be uploaded to the service, and no quick solution is possible for the issue, because you can't manually delete files.

→ Recommendation

To avoid running out of space, we recommend that you implement the following measures:

- Configure SAP Alert Notification Service to send notifications when you've reached at least 85% of the storage capacity in your space. For more information, see Receive Notifications for SAP Cloud Transport Management Actions Using SAP Alert Notification Service [page 131].
- Regularly track the storage usage in your account. In addition, keep in mind the total storage capacity of your subscription whenever you upload files. To reduce the total file size, regularly clean up the import queues in your transport landscape. You can do this either by importing the transport requests containing the same file in all import queues of your transport landscape, or by removing outdated and obsolete transport requests from all import queues. Especially pay attention to transport requests in status *Fatal*, because the cleanup mechanism doesn't automatically delete them.

13 Security

This section describes the security aspects that are relevant for SAP Cloud Transport Management service.

SAP Cloud Transport Management Role Templates

SAP Cloud Transport Management service delivers the following role templates that you can use to create user roles to enable access to specific tasks.

Role Template	Description
Administrator	Contains the overall administration authorization for all SAP Cloud Transport Management tasks. The <i>Administrator</i> has all authorizations of the other roles, as well as additional authorizations. In the import queue, the <i>Administrator</i> can add files to the import queue, remove files from the import queue, and reset the status of queue entries. If the <i>Forward Mode</i> of a transport node is set to the value <i>Manual</i> , the <i>Administrator</i> can forward all or selected transport requests to the target import queue.
LandscapeOperator	Grants authorizations for transport landscape configuration tasks. This includes creating transport nodes and transport routes, as well as editing, and deleting them. It also includes displaying the landscape action logs.
TransportOperator	Grants authorizations for removing files from the import queue, resetting the status of queue entries, forwarding queue entries, uploading and deleting MTA extension descriptors, scheduling imports, and disabling/re-enabling the import in an import queue.
	This role also includes authorizations for import tasks (<i>ImportOperator</i>), plus starting the import of selected transport requests. However, it doesn't include authorizations for export tasks, such as adding files to import queues.
ImportOperator	Grants authorizations for import tasks. This includes starting the import of all transport requests in the import queue.
	This role doesn't include authorizations for importing selected transport requests, adding files to the import queue, removing files from the import queue, resetting the status of queue entries, and forwarding queue entries.
ExportOperator	Grants authorizations for export tasks. This includes adding files to import queues, and, if files are transported directly in the application, adding them to a transport request in the application.
Viewer	Grants display authorization in SAP Cloud Transport Management. This role doesn't include authorizations to perform any landscape configuration or import tasks.

For more information about how to use SAP BTP Cockpit to create roles and role collections to which you can assign these role templates, see Building Roles and Role Collections for Applications.

SAP Cloud Transport Management Role Collections

SAP Cloud Transport Management delivers the following role collections that you can assign to users.

Role Collection	Description
TMS_LandscapeOperator_RC	Role collection based on the LandscapeOperator role.
TMS_Viewer_RC	Role collection based on the <i>Viewer</i> role.

Transport Node-Specific Attributes

For the role templates *TransportOperator*, *ExportOperator*, and *ImportOperator*, attributes exist that allow you to restrict the corresponding authorizations to specific transport nodes only.

The following attributes exist for SAP Cloud Transport Management:

Role Template	Attribute Name
TransportOperator	TmsNodesTransportOperator
ImportOperator	TmsNodesImport
ExportOperator	TmsNodesExport

To do this, you create node-specific roles based on the role templates, and add the corresponding attributes to the roles. You enter the transport node names as values of the attributes. For each attribute, you can enter one or multiple transport node names. For these restricted roles with attributes, the corresponding tasks can be performed only in the transport nodes that were entered as attribute values.

Note

The *TmsNodesTransportOperator* attribute restricts the authorizations for the *TransportOperator* tasks only, but not for the *ImportOperator* tasks that also belong to this role. If you want to restrict the authorizations for the *ImportOperator* tasks as well, create another custom role using the *ImportOperator* template, and use the *TmsNodesImport* attribute to restrict the authorizations to specific transport nodes.

This allows you to have a user that is allowed to perform imports in all transport nodes, but perform *TransportOperator* tasks only in specific transport nodes.

Note

When adding attributes to roles, it isn't checked that the transport node names exist in your transport landscape. Equally, when you delete a transport node, you must manually update the corresponding role, if necessary.

If you don't add any attributes to a role, this allows unrestricted access to all nodes. If you assign both restricted and unrestricted roles to users, the restricted role takes effect.

For more information about how to use SAP BTP Cockpit to create roles with attributes, see Attributes.

Service Plans with Specific Authorizations

SAP Cloud Transport Management offers different service plans with specific authorizations when calling the Cloud Transport Management API:

Service Plan	Description	
standard Provides full access to the Cloud Transport Management API.		
	Use this service plan for the integration with Change Request Management of SAP Solution Manager.	
export	Allows file upload and node upload/export actions.	
	Use this service plan for the integration with SAP Solution Lifecycle Management service or CI/CD pipelines.	
transport_operator	Allows import, reset, forward, and delete actions.	

Malware

SAP Cloud Transport Management treats archives that it uploads, attaches, or transports as 'black box' content. This means, SAP Cloud Transport Management doesn't process or extract any archives. They're only temporarily persisted as BLOB (Binary Large Objects) in the database. Therefore, SAP Cloud Transport Management doesn't perform any malware scans, since it's the obligation of the target applications, services, or content runtimes which process the uploaded or referenced archive to perform malware scans. The only exception is the transport of an MTA archive. Here, SAP Cloud Transport Management reads the metadata of the MTA, and ensures that the MTA archive contains a malware-free MTA deployment descriptor file. However, the modules of the MTA itself aren't covered by the check since it's again the obligation of the corresponding applications, services, or content runtimes that are called with the module content to perform the malware scans.

Encryption

The uploaded archives and MTA extension descriptors aren't encrypted by the persistency layer used by SAP Cloud Transport Management even if the content upload was done via SSL/TLS. Keep this in mind, if the content that you want to transport contains sensitive data. The uploaded archives are only temporarily persisted. They are deleted after a fixed period of time after they were transported in the configured landscape.

Related Information

SAP BTP Security Recommendations

13.1 Auditing and Logging Information

Here you can find a list of the security events that are logged by SAP Cloud Transport Management service.

SAP Cloud Transport Management writes security-relevant events to the audit log. The service writes audit log messages of category *audit.security-events* in the following situations:

Security events written in audit logs

Event grouping	What events are logged	How to identify related log events	Additional information
General	SAP Cloud Transport Management runs a cleanup service at regular intervals to de- lete files in transport requests after a specific period of time. Cleanup service events are log- ged.	Cleanup service runs	For more information about the cleanup mechanism, see Background Information: Storage Capacity [page 114].
	When an SAP Cloud Transport Management API is used, it is possible that a service endpoint is called without sufficient author- ization. If the call fails, this event is logged.	Authorization check for the scope <scope-id> failed</scope-id>	For more information about using the APIs of the service, see Integration of SAP Cloud Transport Management Using APIs [page 129].
	When the subscription of SAP Cloud Transport Management is updated to a new plan, this event is logged.	 Subscription plan was updated to "<plan name="">" for tenant <tenant-id></tenant-id></plan> Update of subscription plan to "<plan name="">" failed for tenant <tenant-id></tenant-id></plan> 	For more information about the plans available for the service, see SAP Discovery Center.

Related Information

Audit Logging in the Cloud Foundry Environment Audit Logging in the Neo Environment

13.2 Data Protection and Privacy

For general information about data protection and privacy on SAP BTP, see the SAP BTP documentation under Data Protection and Privacy.

Some basic requirements that support data protection are often referred to as technical and organizational measures (TOM). The following topics are related to data protection and require appropriate TOMs:

- Access control: Authentication features as described in section Security [page 116].
- · Separation by purpose: Is subject to the organizational model implemented and must be applied as part of the authorization concept.

Personal Data processed by SAP Cloud Transport Management Service

SAP Cloud Transport Management service records all tenant changing processes, like landscape transports and landscape configurations. They're recorded together with the user who performs the action and the time when it was done. Doing so, the user is identified by its user ID, maintained in the configured identity provider, and used during login. Sensitive personal data isn't processed by the service.

SAP Cloud Transport Management stores file names, and displays them in the logs. In addition, the service transfers files to the connected deployment services. Do not use any personal data in names of files that are uploaded to the service. This is also true for MTA extension descriptors.

Personal Data Encapsulation

SAP Cloud Transport Management ensures that tenant-specific content is stored in a separate schema so that this data isn't visible in other tenants.

View Personal Data

User information is shown in the SAP Cloud Transport Management user interface and available using a REST API, when the corresponding landscape-related or transport-related entities are requested.

Deletion of Personal Data

The tenant-specific and user-specific persistency as done by SAP Cloud Transport Management is related to the lifecycle of the tenant subscribed to the service. The records are required to fulfill auditability requirements. The deletion of all data is performed as part of the unsubscription process.

Note

In order to keep the data for the legally required retention period, the corresponding tenant-based subscription to the SAP Cloud Transport Management SaaS application must be in place.

Related Information

For more information about data protection in SAP BTP, see Data Protection and Privacy in the SAP BTP documentation.

13.3 Customer Data Export

Exporting transport-related action logs, MTA extension descriptors, and the current landscape configuration is possible at any time as part of the user interface of SAP Cloud Transport Management service. Additionally, it is possible to request a final customer data export as part of a decommissioning process.

→ Recommendation

The service does not alter the uploaded customer content in any way. The content is only persisted for the purpose of executing the deployment or import tasks as required. We recommend that you also store your content in a repository of your own, if required, since the service will remove it after fulfilling its deployment or import tasks.

Data Export as Part of the Built-In Feature Set

The SAP Cloud Transport Management user interface offers the following built-in download functions to enable data export:

Download Function	More Information
Download transport-related logs.	Transport Action Logs [page 111]
Download MTA extension descriptors.	Upload MTA Extension Descriptors [page 100]
Export landscape entities, such as transport nodes, routes and their properties.	Using the Landscape Visualization [page 86]

Data Export as Part of the Decommissioning Process

SAP Cloud Transport Management offers a service to extract and create a final export of customer data in the course of a decommissioning process, which will permanently delete all content. Such an export event must take place prior to the purging phase in the decommissioning process. It is important that you consider the Terms and Conditions and their stated timeline when to request such an export.

If required, open an incident using component BC-CP-LCM-TMS. Please use the following prefix in the incident subject: Customer Data Export Request.

14 Accessibility Features in SAP Cloud Transport Management

To optimize your experience of SAP Cloud Transport Management service, SAP Business Technology Platform (SAP BTP) provides features and settings that help you use the software efficiently.

① Note

SAP Cloud Transport Management runs on the SAP BTP cockpit. For this reason, accessibility features for SAP BTP cockpit also apply. See the accessibility documentation for SAP BTP cockpit on SAP Help Portal at Accessibility Features in SAP BTP Cockpit.

For more information on screen reader support and keyboard shortcuts, see Accessibility for End Users.

15 Integrating the Service

SAP Cloud Transport Management service is integrated in development and change management processes and with other services. You can also integrate the service in your processes using the APIs that are available on SAP Business Accelerator Hub.

15.1 Integration in Development and Change Management Processes and with Other Services

SAP Cloud Transport Management is used to transport content of other cloud services. For the following integrations, more information is available:

Service	More Information	
SAP Analytics Cloud	Documentation of the service:	
	SAP Analytics Cloud	
	Documentation of the integration with SAP Cloud Transport Management:	
	Transporting Your Content Through SAP Cloud Transport Management	
	Blog post:	
	 SAP Analytic Cloud Content Network Package Transport via BTP Transport Management service 	
SAP API Management	Documentation of the service:	
	SAP API Management	
	Documentation of the integration with SAP Cloud Transport Management:	
	Transport APIs and Its Related Artifacts	
	Blog Post:	
	 SAP Content Agent Service: Enhanced Transport experience for SAP API Management content in the Cloud Foundry environment 	
Configuration settings of	Documentation of the service:	
SAP Batch Release Hub for Life Sciences	SAP Batch Release Hub for Life Sciences	
Life deferrees	Documentation of the integration with SAP Cloud Transport Management:	
	Setting Up Transports	

Service	More Information
References of SAP BTP,	Documentation of the service:
ABAP environment	ABAP Environment
	Documentation of the integration with SAP Cloud Transport Management:
	 More information about configuration for export: How to Export Using SAP Cloud Transport Management Service
	 More information about configuration for import: Creating Destinations for Deployment of References of SAP BTP, ABAP Environment [page 68]
	Blog Post:
	Setting up SAP Cloud Transport Management for SAP BTP ABAP Environment
SAP Build Process Automa-	Documentation of the service:
tion	SAP Build Process Automation
	Documentation of the integration with SAP Cloud Transport Management:
	Promoting Projects
SAP Cell and Gene Therapy	Documentation of the service:
Orchestration	SAP Cell and Gene Therapy Orchestration
	Documentation of the integration with SAP Cloud Transport Management:
	Manage Transports
SAP Cloud for Real Estate	Documentation of the service:
	SAP Cloud for Real Estate
	Documentation of the integration with SAP Cloud Transport Management:
	SAP Cloud Transport Management Integration

Service

More Information

SAP Cloud Integration

In Neo, SAP Solution Lifecycle Management service for SAP BTP is used for the integration using Solution Export Wizard. In Cloud Foundry, SAP Content Agent service is used for export, and both SAP Cloud Deployment service and SAP Content Agent service can be used for import.

Documentation of the service:

SAP Cloud Integration

Documentation of the integration with SAP Cloud Transport Management:

Content Transport

Blog posts:

- TMS Transport SAP Cloud Integration (CI/CPI) Content with Transport Management Service (TMS) and Content Agent Service (CAS)
- Setup SAP BTP Cloud Transport Management Service (Cloud Foundry) for Cloud Platform Integration(CPI)
- SAP Cloud Integration Transport at Artifact Level
- Introducing SAP Content Agent service: Enhanced Transport Capabilities for SAP Cloud Integration Content
- Content Transport Using SAP Cloud Platform Transport Management Service in SAP CPI CF Environment
- Setting up SAP Cloud Platform Transport Management for SAP Cloud Platform Integra-
- Cloud Integration Using Transport Management Service for a Simple Transport Landscape

SAP Entitlement Management

Documentation of the service:

• SAP Entitlement Management

Documentation of the integration with SAP Cloud Transport Management:

Configuring Cloud Transport Management

SAP Excise Tax Management Documentation of the service:

SAP Excise Tax Management

Documentation of the integration with SAP Cloud Transport Management:

- Integrating SAP Cloud Transport Management with SAP Excise Tax Management
- Integration with SAP Cloud Management How to transport data in the Warehouses

Service	More Information
SAP Group Reporting Data Collection for SAP S/4HANA	Documentation of SAP Group Reporting Data Collection for SAP S/4HANA:
	SAP Group Reporting Data Collection
	Documentation of the integration with SAP Cloud Transport Management:
	SAP Cloud Transport Management Service Implementation
	Transport Forms and Folders Using SAP Cloud Transport Management
SAP Build Work Zone, standard edition	Documentation of the service:
	SAP Build Work Zone, standard edition
	Documentation of the integration with SAP Cloud Transport Management:
	Integrate SAP Cloud Transport Management Service
	Blog posts:
	Transport Fiori Launchpad sites on SAP BTP using SAP Cloud Transport Management
	service
SAP Build Work Zone, advanced edition	Documentation of the service:
	SAP Work Zone
	Documentation of the integration with SAP Cloud Transport Management:
	Transporting Content
	Transport of SAP Build Work Zone, advanced edition content uses the integration of SAP Build Work Zone, standard edition in SAP Build Work Zone, advanced edition.
SAP Mobile Services	Documentation of the service:
	SAP Mobile Services
	Documentation of the integration with SAP Cloud Transport Management (using SAP Content Agent service):
	Exporting and Importing Application Configurations
	SAP Content Agent Service Integration

Moreover, integrations of SAP Cloud Transport Management in other cloud services and in development and change management processes are available. For the following integration scenarios, more information is available:

Integration Scenario

More Information

Receiving transports comprising release candidates qualified by automated pipelines in SAP Continuous Integration and Delivery service Documentation of the service:

SAP Continuous Integration and Delivery

Documentation of the integration with SAP Cloud Transport Management:

• (Optional) Integrate SAP Cloud Transport Management into Your Pipeline

Blog posts:

- TMS SAP CI/CD Integration with Transport Management Service (TMS)
- How to integrate SAP Cloud Platform Transport Management into your CI/CD pipeline
- Integrating SAP Business Application Studio, SAP Continuous Integration and Delivery service, and SAP Cloud Transport Management:

Achieve Continuous Integration and Delivery using DevOps services in SAP Cloud Platform

Series of tutorial videos:

DevOps with SAP Business Technology Platform (BTP)

Integrating SAP Cloud Transport Management service in a pipeline using project "Piper"

Documentation in Project Piper:

Integrate SAP Cloud Transport Management Into Your CI/CD Pipeline

Blog post:

How to integrate SAP Cloud Platform Transport Management into your CI/CD pipeline

Using CTS+ and SAP Cloud Transport Management service in hybrid landscapes

Blog post:

 Interplay of SAP Cloud Platform Transport Management, CTS+ and ChaRM in hybrid landscapes

Integrating SAP Cloud Transport Management service with Change Request Management of SAP Solution Manager

Documentation of the integration with SAP Cloud Transport Management:

Change Control Management Using SAP Cloud Transport Management Service

Blog post:

 How to use the integration of SAP Cloud Platform Transport Management into SAP Solution Manager Change Request Management and Quality Gate Management

Integration Scenario

More Information

Integrating SAP Cloud Transport Management service with SAP Cloud ALM

Documentation of the integration with SAP Cloud Transport Management:

• SAP Cloud Transport Management Service

Blog posts:

- Integration between SAP Cloud ALM and Cloud Transport Management is now available
- Interplay of SAP Cloud ALM and SAP Cloud Transport Management Service
- Enabling Change & Deployment Management in SAP Cloud ALM for SAP Integration
 Suite Cloud Integration
- Transport MTAs from Solution Export Wizard on Neo with SAP Cloud ALM and Cloud Transport Management

Sending alerts and notifications for SAP Cloud Transport Management actions using the SAP Alert Notification service for SAP BTP Documentation of the service:

SAP Alert Notification for SAP BTP

Documentation of the integration with SAP Cloud Transport Management:

 Receive Notifications for SAP Cloud Transport Management Actions Using SAP Alert Notification Service [page 131]

Blog post:

 Receive a notification when your storage quota of SAP Cloud Transport Management passes 85%

Receiving transport requests of Cloud Foundry content assembled and exported using SAP Content Agent service

Documentation of the service:

SAP Content Agent Service

Documentation of the export integration with SAP Cloud Transport Management:

- Export Content Wizard
- Create TransportManagementService Destination
- For SAP Cloud Integration: Content Assembly for SAP Integration Suite Applications

Documentation of the import integration with SAP Cloud Transport Management:

- Import Content Wizard
- Create Target Node Destination

Blog posts:

- Introducing SAP Content Agent service: Enhanced Transport Capabilities for SAP Cloud Integration Content
- SAP Content Agent Service: Enhanced Transport experience for SAP API Management content in the Cloud Foundry environment

Integration Scenario

More Information

Receiving transport requests with Neo content gathered and exported using the Solution Export Wizard as part of SAP Solution Lifecycle Management service

Documentation of the integration with SAP Cloud Transport Management using Solution Export Wizard:

Exporting Solutions

① Note

For information about transporting in SAP BTP using the Enhanced Change and Transport System (CTS+), see:

How-To CTS+ Guides for SAP BTP on SAP Support Portal

- How To... Configure SAP Business Technology Platform, Neo Environment for CTS
- How To... Configure SAP Business Technology Platform, Cloud Foundry Environment for CTS

15.2 Integration of SAP Cloud Transport Management Using APIs

To propagate applications, or application-specific content using SAP Cloud Transport Management service in an integrated way, you can use the Cloud Transport Management API. Use the Cloud Transport Management Version Endpoint API to ensure that the version of this API is supported by SAP Cloud Transport Management service.

The Cloud Transport Management API offers operations for uploading a file to SAP Cloud Transport Management service and to perform the export on a specified transport node. If a physical file is transported, the *File Upload* is always the first operation, followed by *Node Export*, or *Node Upload*. It's also possible to perform a transport based on a reference, where a file upload isn't needed.

Use *Node Export*, if you want to enable the transport of content directly in your application. The previously uploaded file or a specified reference is attached to a new transport request that is added to the import queues of the follow-on transport nodes of the export node.

Use *Node Upload* in continuous integration scenarios, for example, where you have an external content or application archive (MTA, for example) that you want to upload in the first transport node of your transport landscape. You can also use it to upload content or applications to a specific subaccount or tenant that isn't part of your standard transport landscape, for example a training subaccount or tenant.

If you want to use the Cloud Transport Management API for export operations, perform the following steps:

- 1. Create a package that contains your content.
- 2. Call the File Upload operation of Cloud Transport Management API (only required for file-based transport).
- 3. Depending on your use case, call one of the following operations, and pass the ID of the uploaded file (or the reference, for reference-based transport):
 - Node Export

Node Upload

In addition, the Cloud Transport Management API offers operations for importing, forwarding, and resetting one or many specified transport requests as well as an operation for importing all transport requests of a node. Each of these operations produces a transport action that you can retrieve using the *Get transport action* operation. The *Get transport requests* operation is available for imports to get transport requests of a specified node.

Typically, an import is an asynchronous operation, which you should monitor by retrieving the import action while the action status is *running*. Use the *Get transport logs* operation to get the logs of a transport action, and the *Get transport request logs* operation to get transport request-specific logs.

For more information, see SAP Business Accelerator Hub using the following links:

- Cloud Transport Management API
- Cloud Transport Management Version Endpoint API

16 Receive Notifications for SAP Cloud Transport Management Actions Using SAP Alert Notification Service

You can configure SAP Cloud Transport Management service to send notifications for actions started in the service using SAP Alert Notification Service.

Prerequisites

- You have an active subscription for SAP Cloud Transport Management.
- Your global account and subaccount are entitled for SAP Alert Notification service.

Context

If there's a service instance of SAP Alert Notification service available in the Cloud Foundry subaccount in which you're using SAP Cloud Transport Management, configure the ALERT_NOTIFICATION_SERVICE destination, which refers to the service instance. This enables SAP Alert Notification service to send notifications for actions started in SAP Cloud Transport Management. In addition, you can create the subscription for receiving notifications in any channel that SAP Alert Notification service supports, by email, or Slack channel, for example.

① Note

It's sufficient to configure SAP Alert Notification service in one subaccount. However, you must configure the ALERT_NOTIFICATION_SERVICE destination in each subaccount subscribed to SAP Cloud Transport Management from which you want to receive notifications.

For more information about SAP Alert Notification service, see SAP Alert Notification Service for SAP BTP.

Procedure

 In the Cloud Foundry space of the subaccount in which you're using SAP Cloud Transport Management service, in SAP BTP Cockpit, navigate to the Service Instances page, and create a service instance for SAP Alert Notification service as described under Initial Setup in the SAP Alert Notification service documentation.

Under step 8. Obtain the credentials for the Alert Notification service, choose option b. Create a Service Key from the Service Key tab to make the service instance URL and credentials available to you for accessing the service using the SAP Cloud Transport Management service.

- 2. In SAP BTP Cockpit of the subaccount in which you're using SAP Cloud Transport Management, use the SAP Destination service to create a destination with the fixed name ALERT_NOTIFICATION_SERVICE.
 - a. Choose Connectivity Destinations New Destination .
 - b. Enter the following details:

Field	Input			
Name	Enter ALERT_NOTIFICATION_SERVICE.			
Туре	Choose HTTP.			
Description (optional)	You can enter a description for the destination.			
URL	Enter the value of the \it{url} attribute from the Service Key of the service instance created in step 1.			
Proxy Type	Choose Internet.			
Authentication	Choose OAuth2ClientCredentials.			
Client ID	Enter the value of the <i>client_id</i> attribute from the Service Key of the service instance created in step 1.			
Client Secret	Enter the value of the <i>client_secret</i> attribute from the Service Key of the service instance created in step 1.			
Token Service URL	Enter the value of the <i>oauth_url</i> attribute from the Service Key of the service instance created in step 1.			

3. To enable notifications for actions started in SAP Cloud Transport Management, select the *Perform Notification* checkbox when creating a transport node.

① Note

The checkbox is displayed only, if the destination to SAP Alert Notification service is configured.

See also: Create Transport Nodes [page 74]

Note

This step is not necessary when you only want to receive warning notifications about the storage quota in your subscription (*TmsStorageQuotaUsage*) event.

- 4. To enable storage quota notifications, in SAP Cloud Transport Management, select the *Enable Notification* checkbox under Your e-mail address My File Quota.
- 5. In SAP Alert Notification service, set up the way in which you want to receive notifications. For more information, see Managing Subscriptions in the SAP Alert Notification service documentation.

You can create subscriptions for the following events of SAP Cloud Transport Management:

- *TmsImportFinished*: Receive a notification when an import is finished. See: SAP Cloud Transport Management Import Finished
- *TmsImportStarted*: Receive a notification when an import is started. See: SAP Cloud Transport Management Import Started
- *TmsTransportRequestAdded*: Receive a notification when a transport request is added to an import queue.

See: SAP Cloud Transport Request Added

• *TmsNodeImportJobDeactivated*: Receive a notification when an import scheduler is disabled because too many imports have failed.

See: SAP Cloud Transport Node Import Job Deactivated

• TmsStorageQuotaUsage: Receive a notification when the storage quota in your SAP Cloud Transport Management subscription has increased over the warning threshold of 85% of the total storage capacity.

See: SAP Cloud Transport Storage Quota Usage

Example

If you select the notation element eventType and the operand Is Equal To, and you set the expected value to TmsImportStarted, you'll get notifications for every import that is started in your landscape.

You can set additional conditions by selecting the notation element tags. coption>.

For example, select the notation element tags. and complete the element by adding nodeId. Select the operand Is Equal To, and set the expected value to an existing node ID, for example: 123.

If you use this condition in addition to the condition set in the previous example, you'll get notifications for every import that is started in your landscape for the node with the nodeId = 123.

Related Information

Managing Conditions
SAP Cloud Transport Management Events

17 Monitoring and Troubleshooting

This section describes how you can get support if things start to go wrong.

Getting Support

If you encounter an issue with this service, we recommend that you follow the procedure below:

Check Platform Status

Check the availability of the platform at SAP Trust Center ...

For more information about selected platform incidents, see Root Cause Analyses.

Check Guided Answers

In the SAP Support Portal, check the Guided Answers section for SAP BTP. You can find solutions for general SAP BTP issues as well as for specific services there.

Contact SAP Support

You can report an incident or error through the SAP Support Portal. For more information, see Getting Support

Please use the following component for your incident:

iponent	Descri	ption
	ıponent	iponent Descri

BC-CP-LCM-TMS Transport Management for application content

When submitting the incident, we recommend including the following information:

- Region information (EU10, US10)
- · Subaccount technical name
- The URL of the page where the incident or error occurs
- The steps or clicks used to replicate the error
- Screenshots, or videos

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