User Guide | PUBLIC

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Commissions Data Loader (CDL)

THE BEST RUN

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2.1 What is Commissions Data Loader (CDL)?

Commissions Data Loader (CDL) is a vital component of SAP Commissions. CDL allows you to securely import and export critical business data to and from the Commissions application, enabling you to easily synchronize and share data within your organization for further processing.

Using CDL, you can import and export data pertaining to the business objects that are defined in Commissions. You can transfer data in bulk, to and from the following workspaces in Commissions:

- Orders and Transactions workspace for Results
- Participants, Positions, and Titles workspace for Organization
- Categories, Products, Customers, and Postal Codes workspace for Classification

Data is typically transferred in Flat File format and the preferred representation is UTF-8 encoding. An **Inbound** transfer involves exporting/uploading data to Commissions. An **Outbound** transfer involves extracting/importing data from Commissions.

> **i Note**
>
> It is recommended NOT to store any Personal Identifying Information (PII) in Sales Transactions Generic Attributes/Generic Numbers. If PII data is sent in transaction data, the PII attributes can be removed by specifying the retention period in Preferences > System Preference > Data Protection Policy.
>
> Make sure that transaction PII attributes are not used in Rules and Formulas because once these PII attributes are purged (after the specified retention date), reprocessing pipelines for prior periods might not yield accurate results.

CDL is accessible from the Apps menu on the top right in Commissions. See CDL Login and Access Permissions [page 14] for details.

Related Topics

- Inbound and Outbound Transfers [page 27]

- Perform an Inbound Transfer [page 38]
- Perform an Outbound Transfer [page 40]
- SAP T&Q Integration [page 5]

2.2 SAP Territory and Quota Integration

CDL supports integration with SAP Territory and Quota.

SAP Territory and Quota objects can be loaded into CDL in the same manner Commissions objects are loaded. Data can be exported to the following SAP Territory and Quota workspaces:

- Account
- Territory Account
- Geography
- Territory Geography
- Territory Product
- History (Transaction Summary)
- CRMOpportunities

To export SAP Territory and Quota data, you must perform an inbound transfer using the SAP Territory and Quota file type templates. The templates for SAP Territory and Quota file types are downloadable from CDL Templates [page 29].

For a successful inbound transfer, data must be filled out in a flat-file format using the provided templates and must comply with the required formatting, mapping, and naming conventions.

Related Articles

- CDL Configuration [page 15]
- Perform an Inbound Transfer [page 38]

2.3 Glossary

Commonly used terms in CDL are described below:

Term	Definition
Batch	Data about a group of similar business objects that is transferred and processed by CDL. All data is treated as a single unit. For example, all data related to Transactions is treated as a batch.
Commissions Stage Tables	Temporary data storage area in Commissions where data from CDL is placed during export. Data is validated in the staging area before transferring into the Commissions tables and executing the pipeline. See Commissions Administrator online help for more details.
CDL Job	Each file that is transferred in an inbound or outbound transfer.
Custom Inbound	Custom Inbound allows you to load ad-hoc data from a file to a temporary table, then invokes a HANA stored procedure to transfer data from the temp tables to Commissions stage tables, and finally imports data to the Commissions tables through Commissions stage data import.
CDL Secure Box	CDL Inbound and outbound folders which are accessible using SFTP. Exported files are dropped off in the inbound folder and imported files are available for pick up in the outbound folder.
Commissions Relational Import	Relational import provides the ability to validate Commissions UI objects such as transaction data, organization data, classification data, and so on for data transfer. These objects are often prerequisite data that must be in store when you run compensation processing jobs.
Data types	User-defined types of data, for example, credit types, earning groups, earning codes, event types, reason codes, and fixed value types). See Commissions Online Help for more details.
Flat file	Flat file allows you to specify data attributes, such as columns and data types table by table, and stores the data in plain text format.

Term	Definition
Pipeline	Pipeline is a compensation computation process initiated from the Pipeline workspace in the Job Queue view or from the command-line utility. The pipeline produces compensation and pay results for payees assigned to variable compensation plans.
Workspace	Designated area in Commissions where related compensation objects are grouped together so that a user can perform related tasks from the same place.

3 Setting Up and Using Commissions Data Loader

This section describes how to set up and use Commissions Data Loader.

Installation

- CDL Architecture and Data Transfer Process [page 9]
- SFTP Client [page 11]
- GPG Encryption [page 12]
- CDL Login and Access Permissions [page 14]

Configuration

- Global Settings [page 16]
- Inbound File Type Settings [page 18]
- Outbound File Type Settings [page 22]
- File Type Codes and Associated Staging Tables [page 24]
- CDL Templates [page 29]

Data Transfer

- Perform an Inbound Transfer [page 38]
- Perform an Outbound Transfer [page 40]
- Review File Transfer Details, Status, and Logs [page 42]
- Data Transfer Validations [page 48]
- Troubleshoot [page 47]

3.1 Installations and Setup

CDL works in conjunction with the following:

- SFTP Client [page 11]

- GPG Encryption [page 12]

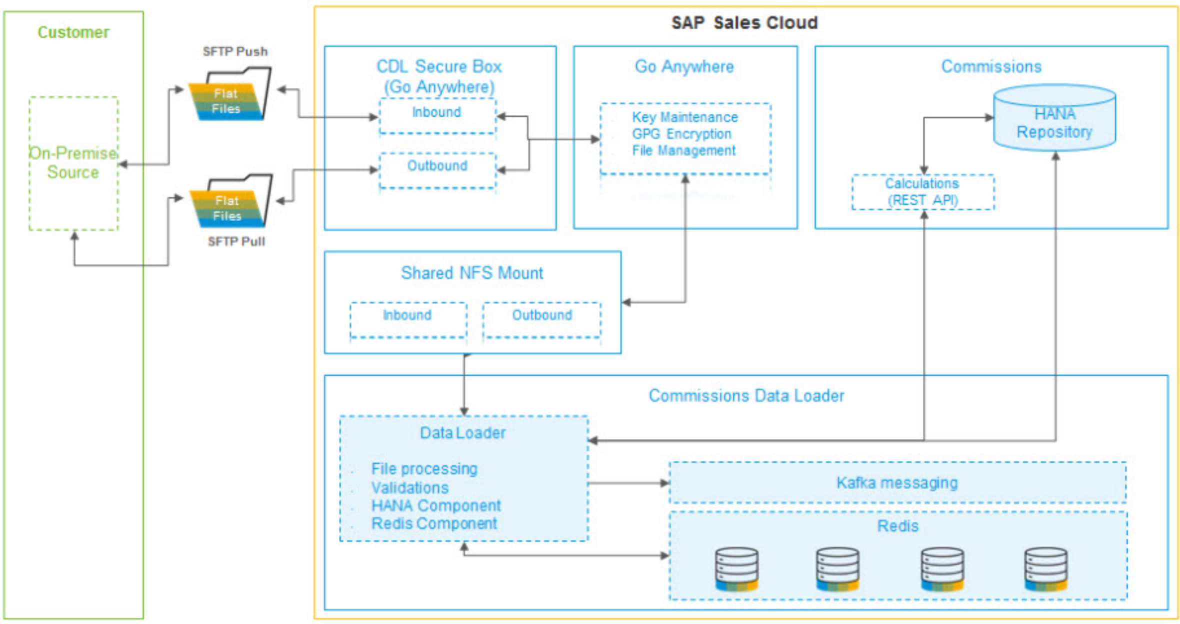
You must install and set up the SFTP Client and GPG Encryption component before you begin file transfers.

Related Topics

- Inbound and Outbound Transfers [page 27]
- Deployment/Code Migration [page 15]
- CDL Login and Access Permissions [page 14]
- Data Transfer Validations [page 48]

3.1.1 CDL Architecture and Data Transfer Process

The following figure illustrates the CDL architecture and describes the data transfer process.



The CDL data transfer infrastructure uses secure FTP (SFTP) protocols and related toolsets to optimize the security and maintenance of the file transfer accounts and processes. The SFTP server is configured to allow only secure FTP, exclusively from the customer's external IP. All Shell access or other protocols are blocked by the firewall policy.

In the case of inbound transfers, once the files are dropped off in the Inbound folder (CDL Secure Box) using SFTP, the File Management solution checks if the uploaded files are encrypted and encrypts the files if not encrypted. The File Management solution then performs various checks for template compliance and routes the files to the Inbound NFS Mount folder for pick up.

CDL creates a job for every file transfer, and in conjunction with Kafka, it processes and validates the data to check for data types, data formats, duplications, and so on. See Data Transfer Validations [page 48] for more information.

Once validations are complete, data is loaded into the corresponding staging tables in the HANA repository in Commissions and further into the Commissions database after various functional validations are performed through Relational Import. When the file transfer process is completed, CDL checks the status of the jobs and notifies the user who initiated the transfer, if the data has been successfully transferred. Details about the transfer, including time, event, status (success or failure) and error logs are refreshed and accessible through CDL during the entire process.

> **i Note**
>
> CDL creates a job for each file that is being transferred and runs the data transfer process for each file. In the case of paired files, CDL identifies the dependent files and processes the files once all the dependent files are dropped. Pipeline Import is triggered only for parent file types.

In outbound transfers, files are routed to the outbound NFS Mount folder and then dropped off into the outbound folder (CDL Secure Box). The extracted files can be downloaded from the customer's FTP site. Email notifications are sent out when the data transfer is complete.

BusinessObjects

BusinessObjects is a component of CDL which maintains user group data. CDL interacts with BO and Commissions to sync user groups in the BO repository when the following BO templates are dropped for data transfer:

- BOTRIG (Inbound transfer): Once the empty file is dropped, CDL identifies the BOTRIG file and communicates with Commissions (Participant Object), and obtains the user ID and label which has the group data, and syncs the details in BO.
- BOUPDATE (Inbound transfer): CDL connects to BO, associates or disassociates users to the group accordingly, and updates the BO repository. Data is picked up from the updated BO repository when reports are generated in Commissions.
- BOEXTRACT (Outbound transfer): CDL extracts user group data and populates the flat files.

For more details, refer Commissions and BusinessObjects User Group Association [page 51].

Related Topics

- SFTP Folders [page 13]
- Inbound and Outbound Transfers [page 27]
- CDL Login and Access Permissions [page 14]
- Data Transfer Validations [page 48]
- Glossary [page 6]

3.1.2 SFTP Client

Secure File Transfer Protocol (SFTP) allows you to securely transfer your data over the network.

Perform the following steps to set up your SFTP Client:

1. Download and install the SSH/SFTP Client. CDL works with any standard SSH/SFTP client application. The most commonly used free SSH/SFTP client for Windows is WinSCP. You can download and install WinSCP from https://winscp.net/eng/download.php. To illustrate a typical client setup process, WinSCP is used as an example in this documentation.
2. Generate a SSH Public/Private key pair in your SSH client. For example, in WinSCP client, PuTTYgen is used to generate the SSH2 key. We support setting **SSH 2 (RSA)** to **4096** bit.
3. Associate the key pair with your email address to help you identify the key later on. For example, in WinSCP client, you can specify your email address in Key Comment
4. Save the public and private key pair. Specify a file name for the public and private key and save the key files in the same location. We recommend that you save the key files in a location that you can easily find later.
5. Open the Public SSH2 key file using any text editor and copy the public key. Send support the public key by logging a ticket. Your ticket must also include information about the customer tenant id you will be connecting to. Our technical operations team will install your public key in the Secure Box and give you access to your SFTP Dropbox (via a support ticket). You will then receive details about the SFTP File Protocol, Hostname, Port, and Username from the technical operations team.
6. To perform file transfers, log in to your SFTP Dropbox using the credentials provided by the operations team. When connecting to SFTP, you must provide the private key for authentication. For example, in WinSCP, the private key is updated in *Advanced Settings* > *Manage* > *Edit option* > **Private Key File**.

The public key you send us will look something like this:

```
---- BEGIN SSH2 PUBLIC KEY ----

Comment: "username@ondemandcustomer.com"

ABCDEF3NzaC1yc2EAAAABJQAAAIEAjcaNa1aKHus3o2+8laFMbZEaFm8qCPBhLddD

lx4QzdoIooTGU/soG0OK2QLouy99Ef+KKYvMaQzWZJjaqPMh+sM4S3kwWlRXzv+p

gP7ZKcmClxYM56ec9bSu2gva+ViR8gke7eLaML+/A+ZAXdLcOU0iK8qSHsajMhzo

5s9unX8=

---- END SSH2 PUBLIC KEY ----
```

Related Topics

- Installation and Setup [page 8]
- Inbound and Outbound Transfers [page 27]
- CDL Login and Access Permissions [page 14]

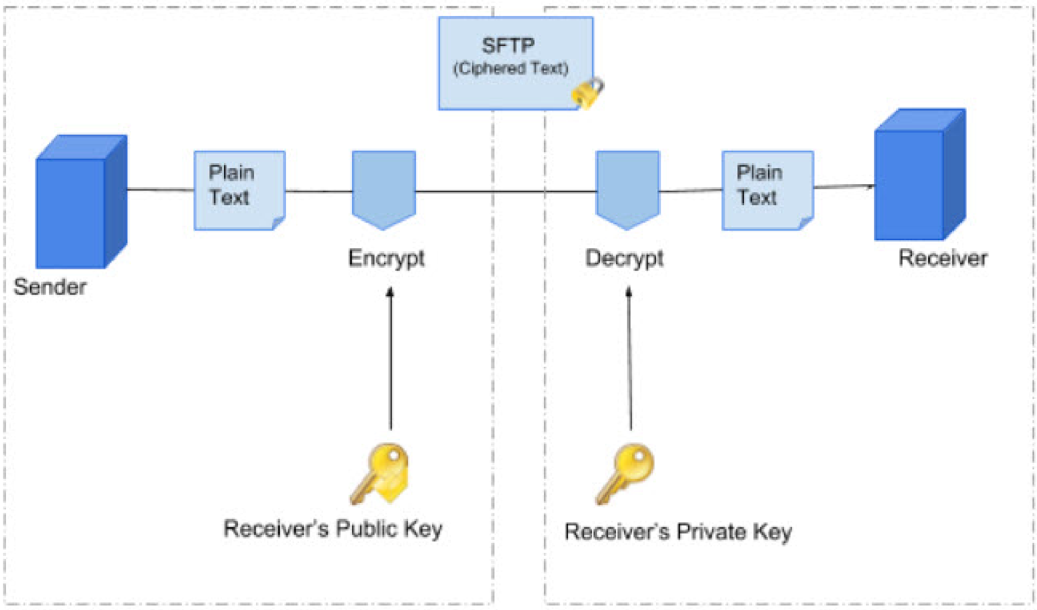
3.1.3 GPG Encryption

GNU Privacy Guard (GPG) is an encryption tool that secures your data by encrypting it so that only intended individuals can read it. As part of our security policy, we recommend that you encrypt the files before dropping the files in the inbound folder for export. However, if the files are not encrypted, CDL automatically encrypts the files through the File Management System, but you will not be able to view the encrypted files since the processing is done internally in CDL.

Perform the following steps to set up GPG encryption:

1. Download and install GPG on your computer.You can download the GPG tool from https://gnupg.org/download/. Refer to the documentation included with GPG for complete installation instructions.
2. Generate the GPG key pair and exchange the GPG keys.A GPG key pair is composed of a private key to which only you have access and a public key that you need to send us in a support ticket. The public key will be used to send encrypted files. To decrypt encrypted the files you receive from us, we will send you our public key which you can use to decrypt the encrypted files. Contact support for more details.

The following illustration describes how GPG encryption is leveraged.



See https://gnupg.org/documentation/guides.html? for more information about GPG Encryption.

Related Topics

- Installations and Setup [page 8]
- Inbound and Outbound Transfers [page 27]
- CDL Login and Access Permissions [page 14]

3.1.4 SFTP Folders

The SFTP dropbox contains the following folders:

- Inbound Folder [page 13]
- Outbound Folder [page 13]
- Archive Folder [page 13]
- Bad Files Folder [page 14]

Inbound Folder

The **Inbound** folder contains the files that you drop off for upload. CDL supports the following file types:

- Plain Files (`.txt`)
- Encrypted Files (`.gpg`)
- Zipped Plain Files (`.gzip`)
- Zipped Encrypted Files (`.gzip.gpg`)

Files are moved to the archive folder immediately after processing is complete.

Outbound Folder

The **Outbound** folder contains encrypted and zipped files that are dropped off for you to download. The files are suffixed with a `.gpg` extension. Optionally, you select to zip the files by enabling compression in the CDL UI.

Files remain in the folder for the agreed duration (retention period). Files are automatically deleted post retention period to comply with GDPR standards. As a best practice, delete the files after download is complete.

Archive Folder

The **Archive** folder contains files that are moved from the inbound folder after processing is complete. Files are moved to the archive folder immediately after processing. Files are moved even if data validation errors are detected and the transfer is not successful.

If plain files are dropped, CDL encrypts the files and archives the encrypted files after processing is complete.

Bad Files Folder

The **Bad Files** folder contains files that are rejected if an invalid character (special character) is present in the file. This folder also contains the files that are re-dropped for upload, while the same set of files that were previously uploaded are still being processed.

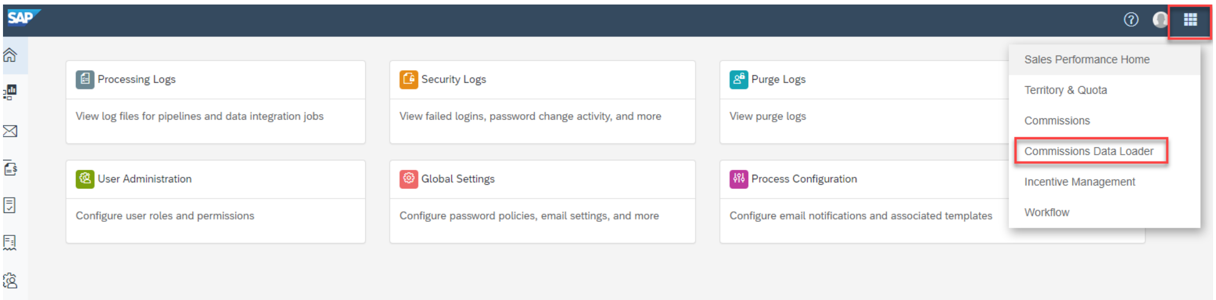
Related Topics

- Installations and Setup [page 8]
- Perform an Outbound Transfer [page 38]
- Perform an Inbound Transfer [page 38]

3.1.5 CDL Login and Access Permissions

You must have Administrator rights and appropriate permission settings in Commissions to access and use CDL. Log in to Commissions and select Commissions Data Loader from the top right menu to navigate to the CDL interface.

> **i Note**
>
> If you have questions about your login credentials and permission settings, contact your Commissions administrator.



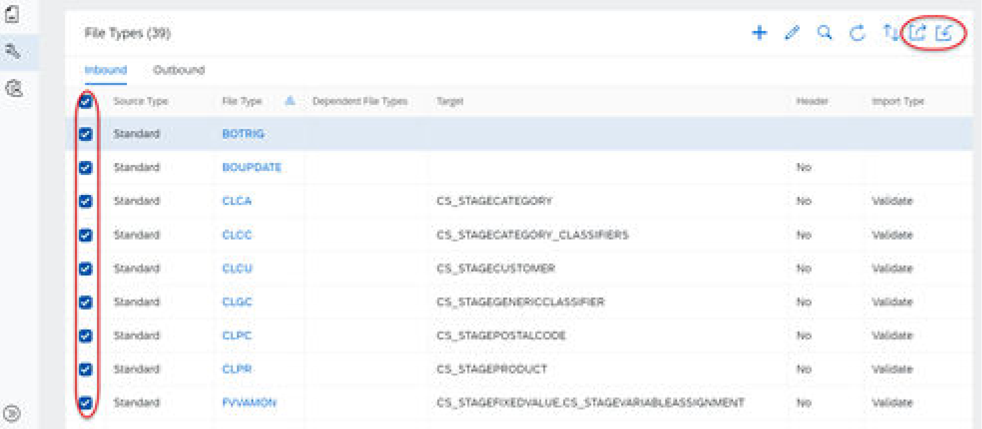
Related Topics

- SFTP Folders [page 13]
- Inbound and Outbound Transfers [page 27]
- CDL Login and Access Permissions [page 14]

3.1.6 Deployment/Code Migration

An option to facilitate deployment via import/export of data objects in XML is provided in CDL. The XML file contains *Global Settings* from CDL and *File Type Configurations* for selected File Types.

- To export data objects, select the*File Types* to export and then click the *Export* icon on the top right of the page.
- To import data objects, click the *Import* icon n on the top right of the page and select the XML file which contains the data objects.



During import, the system checks if the file types that are being imported already exist in the system and displays a list of the existing file types. You can choose to override (update) or retain the existing file types.

Related Topics

- Inbound and Outbound Transfers [page 27]
- CDL Login and Access Permissions [page 14]
- Data Transfer Validations [page 48]

3.2 CDL Configuration

The *Configuration* menu in CDL provides various options to fully customize the operational settings of the data loader. Configure the following settings to meet your specific business requirements:

- Global Settings [page 16]
- Inbound File Type Settings [page 18]
- Outbound File Type Settings [page 22]

Related Topics

- CDL Login and Access Permissions [page 14]
- Global Settings [page 16]
- Inbound File Type Settings [page 18]
- Outbound File Type Settings [page 22]
- File Type Codes and Staging Tables [page 24]

3.2.1 Global Settings

Global settings are default settings that apply to both inbound and outbound file transfers.

> **i Note**
>
> File type settings defined in Inbound File Type Settings [page 18] and Outbound File Type Settings [page 22] override the default Global settings.

To set the default global parameters:

1. Select *Commissions Data Loader* from the *Apps* menu on the top right.
2. Click *Configuration* > *Global Settings* on the left panel and set the following parameters.

Parameter	Description
Compression Mode	Specify if the files dropped off in the outbound folder after import must be compressed: • GZip: When this option is selected, the files dropped off in the outbound folder are compressed using GZip. The resulting compressed file generally has the suffix .gzip. • None: Files need not be compressed.
Timezone	Specify the default time zone. The timestamp on the Jobs page displays the specified timezone.
Charset	Character encoding attribute to be used in the file.
Delimiter	Specify the delimiter used to separate the data fields.
Retention Period for Errors (Days)	Specify the retention period in days for error logs. The error log files will be deleted after the specified period.
Retention Period for Jobs (Days)	Specify the retention period in days for jobs. Each file transfer is a job. All outbound jobs will be deleted after the specified period. Jobs from the Jobs page are also deleted post retention period.

Parameter	Description
Success Emails Recipient	Specify the email address to which all notifications about successful file transfers must be routed. You can enter multiple email addresses separated by comma.
Failure Emails Recipient	Specify the email address to which all notifications about failed file transfers must be routed. You can enter multiple email addresses separated by a comma.
Database Connection	Click *Test* to check the database connection.
Commissions Portal Connection	Click *Test* to check the connection to the Commissions tenant.
Business Object Connection	Click *Test* to check the Business Object connection.
Autorun	When *Auto-run* is set to *Yes*, CDL initiates and runs the entire file transfer process. When auto-run is set to *No*, CDL initiates the file transfer process when the files are dropped, but the process is paused after CDL creates a Job. Files are picked up, validated by the file management system, and then the file transfer process is paused until the job is run manually. To resume the file transfer process, you can execute the job manually from the *Jobs* **[page 42]**page. Error logs and notifications are generated after the job resumes.
Escape Delimiter	Specify if CSV files which have a delimiter as part of its data can be loaded. When this option is enabled, you can use double quotation marks for importing values which have a delimiter as part of the field/column (""). When data in any field contains a delimiter, CDL will upload it in a single field (or database table column). This option is disabled by default (is set to *No*).
Change Password	Click *Change Password* to update Commissions Portal password.

3. Save your settings.

> **i Note**
>
> Retention period is a GDPR standard. The retention period is the duration after which, the respective information and records will be deleted from our servers. You will not be able to retrieve the deleted data. Check with your organization about the preferred retention period.

Related Topics

- CDL Login and Access Permissions [page 14]
- Inbound File Type Settings [page 18]
- Outbound File Type Settings [page 22]
- Review File Transfer Details, Status, and Logs (Jobs) [page 42]
- File Type Codes and Staging Tables [page 24]

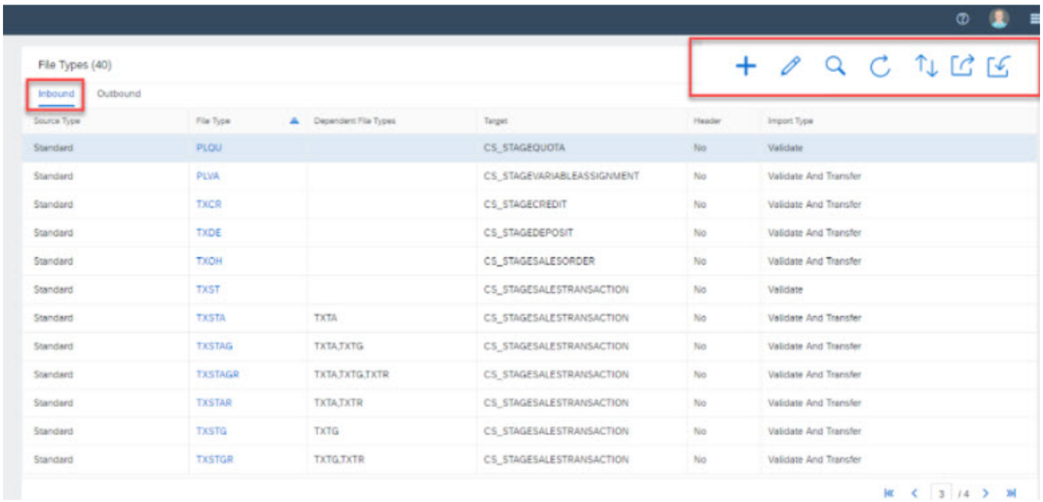
3.2.2 Inbound File Type Settings

An inbound file type defines the standard settings and metadata of the file that is exported. A file type must be configured for each template file that is exported, which means that, every template must have an associated file type. The name of the template must match the file type code and the content must be formatted according to the metadata standards defined in the settings. Unknown file types are not recognized by CDL and will not be processed.

> **Note**
>
> The Inbound File Type settings override the Global Settings [page 16].

To configure settings for inbound file types:

1. Click *Commissions Data Loader* on the top right menu.
2. Click *Configuration* > *File Type Setup* > *Inbound*. This page lists existing inbound file types, if any.



The following options are available on the top-right corner of the page:

- *Edit*: Edits the configuration details of an inbound file type. Select the file type and click the *Edit* icon.
- *Reset*: Resets the configuration to default settings. This option is only available for Standard File Types. When you reset configuration settings for an inbound file type, it impacts all new inbound transfers. The jobs that are already in progress continue to use the old configuration settings.

- *Delete*: Deletes an inbound file type. This option is available only for Custom File types. You cannot delete a file type when files that are being processed correspond to the file type. However, you can delete a file type when it is not used.
- *Refresh*: Refreshes the page.
- *Sort*: Sorts the column display.
- *Search*: Filters the records based on the search key.
- *Import/Export*: Enables code migration for deployment [page 15].
- *Create*: Enables you to configure a new inbound file type. Click the *Create* icon and enter the following details to create a new inbound file type:

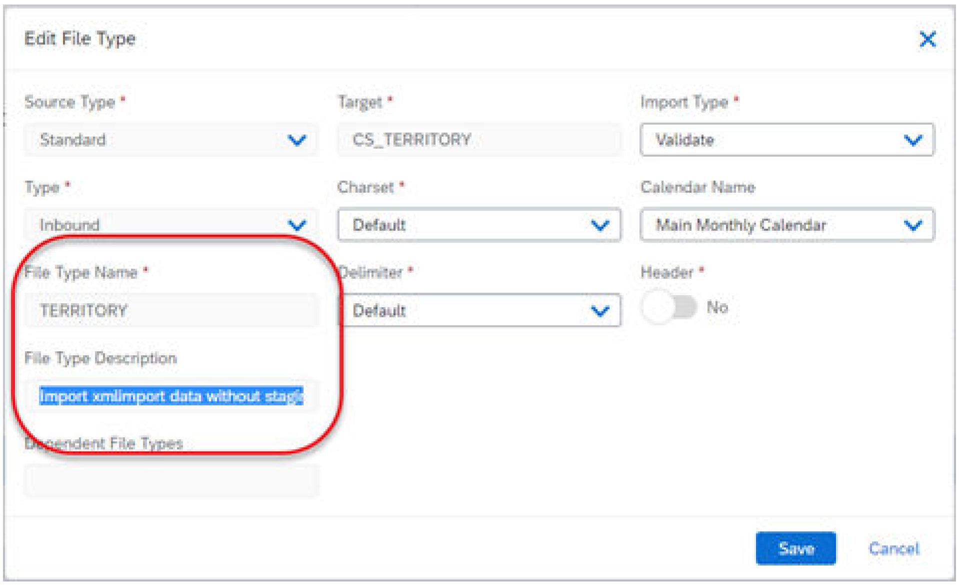
Parameter	Description
Source Type	Select the appropriate Source Type: • Custom: Implies that the file type is a Non-Standard File Type in Commissions. • Standard: Implies that the file type is a Standard File Type as defined in Commissions.
Type	Select inbound.
Type	This is the export file type. Every template must have an associated file type. The file type cannot be a duplicate.
File Type Name	Enter a name for the inbound file type. The name is a four-letter code that is used to identify the file type. See File Type Codes and Staging Tables for list of File Type Codes.
File Type Description	Enter a description of the file type.
Target	Specifies the staging table in Commissions where data will be exported. See File Type Codes and Staging Tables [page 24] for the list of staging tables.
Target Stored Procedure	This applies to custom inbounds and is used to allow a HANA procedure to be called after the data is loaded into the Hana custom table.
Import Type	Select the appropriate import type: • Validate: Validates data in the stage tables without transferring it to the Commissions core tables. • Validate and transfer: Validates data in the stage tables and then transfers valid records to Commissions core tables. • Validate and transfer if all valid: Validates data in stage tables and transfers the batch of records, only if none of the records are invalid. • None

Parameter	Description
Calendar Name	Select the required calendar from the list of calendars defined in Commissions. The default value is *Main Monthly Calendar*. This field is available for all file types, except BOTRIG, BOUPDATE, and BOEXTRACTTRIG.
Charset	Character encoding attribute. Default value is UTF-8.
Delimiter	Specify the delimiter used to separate the data fields.
Header	• Yes: Includes header. • No: Does not include header.
Proceed With Validation Errors	Set the *Proceed With Validation Errors* to allow the system to continue to work with data validated on the CDL side. If you do not set this option, the system will proceed after CDL validation only if all data is valid. For invalid data, the Job will finish with *Failure* status. This option is applicable to all file types except dependent file types.
Module	Specify the applicable Commissions workspace for the selected import type.

Importing Territory Data

Territory data can also be loaded into Commissions via CDL. When CDL detects a XML file for Territory in the Inbound folder, CDL imports the Territory data into the Commissions table, without using staging tables.

Territory data import is performed through Territory Standard File Type. The *File Type Name* and *File Type Description* for the *Territory Standard File Type* is defined in *Configuration* > *File Type Setting* > *Inbound File Type*.



> **i Note**
>
> A sample Territory XML file can be exported from Commissions using the XML loader to view the structure of the XML file for import.

Related Topics

- Perform an Inbound Transfer [page 38]
- Deployment/Code Migration [page 15]
- CDL Login and Access Permissions [page 14]
- Global Settings [page 16]
- Creating Dependent File Types (Custom File Types) [page 21]
- SAP T&Q Integration [page 5]

3.2.2.1 Create Dependent File Types

For custom file types, you can create dependent file types and execute the dependent file types based on the processing order specified in *Configuration* > *File Type Setting* > *Inbound File Type* > *Dependent File Type*.

When CDL is set up to process files automatically and *Jobs* for dependent files are created, CDL processes the parent file first and then the child files in the defined order. If CDL is set up to process Jobs manually, the *Execute* option for every file processes the file in the specified order. When creating dependent file types, custom and standard file types cannot be mixed.

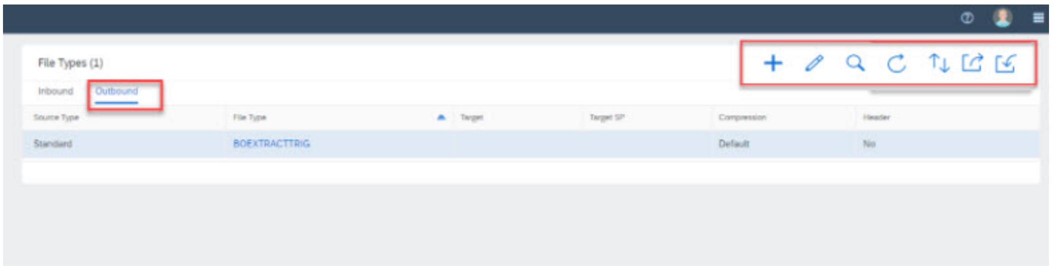
3.2.3 Outbound File Type Settings

An outbound file type defines the standard settings and metadata of the file that is imported. Data is extracted in flat file format and contains all columns used in the specific workspace. File type settings for every outbound file must be defined.

> **i Note**
>
> The Outbound File Type settings override the Global Settings [page 16].

To configure settings for inbound file types in CDL:

1. Click *Commissions Data Loader* on the top right menu.
2. Click *Configuration* > *File Type Setup* > *Outbound*. This page lists existing outbound file types if any.



The following options are available on the top-right corner of the page:

- **Edit**: Updates the configuration details of an outbound file type. Select a file type and click the **edit** icon.
- **Delete**: Deletes an inbound file type. This option is available only for Custom File Types. You can delete a file type only when it is not used.
- **Reset**: Resets configuration details to default settings. This option is only available for Standard File Types. When you reset configuration settings for an outbound file type, it impacts all new outbound transfers. The transfers that are already in progress continue to use the old configuration settings.
- **Refresh**: Refreshes the page.
- **Search**: Filters the records based on the search key.
- **Sort**: Sorts the column display.
- **Import/Export**: Enables code migration for deployment [page 15].
- **Create**: Enables you to configure a new outbound file type. Click the *Create* icon and enter the following details to create a new outbound file type:

Parameter	Description
Source Type	Select the appropriate Source Type: • Custom: Implies that the file type is a Non-Standard File Type in Commissions. • Standard: Implies that the file type is a Standard File Type as defined in Commissions.
Type	Select Outbound.

Parameter	Description
File Type Name	This is the import file type. Enter a name for the outbound file type. The name is a four letter code that is used to identify the file type. See File Type Codes and Associated Staging Tables [page 24]for list of staging tables.
File Type Description	Enter a description of the file type.
Output File Type	Name of the output file. For .GZIP compression in custom outbound jobs, the name of the Output File Type can be different than the *File Type Name*. You can define a name of your choice. .GZIP compression is facilitated even if the name of the *Output File Type* is different than the *File Type Name*.
Source	Specifies the source database table in Commissions from where data will be extracted.
Source Stored Procedure	Specify the HANA procedure to use to load data into Source table. Data will be extracted to the outbound file from this Source table.
Charset	Character encoding attribute. Default value is UTF-8.
Compression Mode	Specify if the files dropped off in the outbound folder after import must be compressed: • Gzip: When this option is selected, the files dropped off in the outbound folder are compressed using Gzip. The resulting compressed file generally has the suffix .gzip. • None: Files need not be compressed.
Delimiter	Specify the delimiter used to separate the data fields.
Header	Yes: Includes header. No: Does not include header.

Related Topics

- Perform an Outbound Transfer [page 40]
- CDL Login and Access Permissions [page 14]
- Global Settings [page 16]
- Inbound File Type Settings [page 18]

3.2.4 File Type Codes and Associated Staging Tables

The following table lists all the file type codes and the associated staging tables currently supported by CDL.

> **Note**
>
> To avoid performance issues, make sure to clean up data periodically from the stage tables and the dependent stage tables, especially if the volume is approaching a billion records. For more information, please contact the support team.

File Type Code	*Dependency File Type*	*Stage Tables*	*Dependent Stage Tables*
Commissions			
CLCA		CS_STAGECATEGORY	
CLCC		CS_STAGECATE-GORY_CLASSIFIERS	
TXCR		CS_STAGECREDIT	
CLCU		CS_STAGECUSTOMER	
TXDE		CS_STAGEDEPOSIT	
PLFV		CS_STAGEFIXEDVALUE	
FVVAMON		CS_STAGEFIXEDVALUE	
FVVAQTR		CS_STAGEVARIABLEAS-SIGNMENT	
OGPT		CS_STAGEPARTICIPANT	
OGPTX	OGGP	CS_STAGEPARTICIPANT	CS_GASTAGEPARTICIPANT
OGPO		CS_STAGEPOSITION	
OGPOX	OGGO	CS_STAGEPOSITION	CS_GASTAGEPOSITION
CLGC		CS_STAGEGENERICCLASSI-FIER	
PLMC		CS_STAGEMDLTCELL	
TXOH		CS_STAGESALESORDER	
OGPR		CS_STAGEPOSITIONRELA-TION	
CLPC		CS_STAGEPOSTALCODE	

File Type Code	*Dependency File Type*	*Stage Tables*	*Dependent Stage Tables*
CLPR		CS_STAGEPRODUCT	
PLQU		CS_STAGEQUOTA	
OGTI		CS_STAGETITLE	
TXST		CS_STAGESALESTRANSACTION	
TXSTA	TXTA	CS_STAGESALESTRANSACTION	CS_STAGETRANSACTIONASSIGN
TXSTAG	TXTA, TXTG	CS_STAGESALESTRANSACTION	CS_STAGETRANSACTIONASSIGN, CS_GASTAGESALESTRANSACTION
TXSTAGR	TXTA, TXTG, TXTR	CS_STAGESALESTRANSACTION	CS_STAGETRANSACTIONASSIGN, CS_GASTAGESALESTRANSACTION, CS_STAGERASALESTRANSACTION
TXSTAR	TXTA, TXTR	CS_STAGESALESTRANSACTION	CS_STAGETRANSACTIONASSIGN, CS_STAGERASALESTRANSACTION
TXSTG	TXTG	CS_STAGESALESTRANSACTION	CS_GASTAGESALESTRANSACTION
TXSTGR	TXTG, TXTR	CS_STAGESALESTRANSACTION	CS_GASTAGESALESTRANSACTION, CS_STAGERASALESTRANSACTION
TXSTR	TXTR	CS_STAGESALESTRANSACTION	CS_STAGERASALESTRANSACTION
PLVA		CS_STAGEVARIABLEASSIGNMENT	
PIPELINE		No link to DB table	
BOUPDATE		N/A. Syncs data to BO system, not Commissions	
BOTRIG		N/A. Syncs data to BO system, not Commissions	

File Type Code	Dependency File Type	Stage Tables	Dependent Stage Tables
BOEXTRACTTRIG		N/A. Syncs data to BO system, not Commissions	
TERRITORY		XML filetype. Does not import data into stage tables. Invokes a COMM API, which inserts data directly into CS_TERRITORY.	
Territory and Quota			
TQAC		CSQ_STAGEACCOUNT	
TQACX	TQGAC	CSQ_STAGEACCOUNT	CSQ_GASTAGEACCOUNT
TQGEO		CSQ_STAGEGEOGRAPHY	
TQGEOX	TQGGEO	CSQ_STAGEGEOGRAPHY	CSQ_GASTAGEGEOGRAPHY
TQTGEO		CSQ_STAGETERRITORY-GEOGRAPHY	
TQTGEOX	TQGTGEO	CSQ_STAGETERRITORY-GEOGRAPHY	CSQ_GASTAGETERRITORY-GEOGRAPHY
TQGEOVAL		CSQ_STAGEGEOGRAPHY-VALUE	
TQTAC		CSQ_STAGETERRITORYAC-COUNT	
TQTACX	TQGTAC	CSQ_STAGETERRITORYAC-COUNT	CSQ_GASTAGETERRITOR-YACCOUNT
TQTPR		CSQ_STAGETERRITORY-PRODUCT	
TQTPRX	TQGTPR	CSQ_STAGETERRITORY-PRODUCT	CSQ_GASTAGETERRITORY-PRODUCT
TQHIS		CSQ_STAGETXNSUMMARY	
TQCRMOP		CSQ_STAGECRMOPPORTU-NITIES	
TQTP		CSQ_STAGETERRITORY-PROGRAM	
TQTPX	TQGTP	CSQ_STAGETERRITORY-PROGRAM	CSQ_GASTAGETERRITORY-PROGRAM
TQTERR		CSQ_STAGETERRITORY	

File Type Code	*Dependency File Type*	*Stage Tables*	*Dependent Stage Tables*
TQTERRX	TQGTERR	CSQ_STAGETERRITORY	CSQ_GASTAGETERRITORY
TQTPOS		CSQ_STAGETERRITORYPO-SITION	
TQTPOSX	TQGTPOS	CSQ_STAGETERRITORYPO-SITION	CSQ_GASTAGETERRITORY-POSITION
TQTQUOTA		CSQ_STAGETERRITORY-QUOTA	
TQTRAP		CSQ_STAGERULEALIGN-MENTPROPERTY	

> **i Note**
>
> Generic Date Fields support only Dates. Time Stamp is truncated during import.

Related Topics

- CDL Login and Access Permissions [page 14]
- Global Settings [page 16]
- Inbound File Type Settings [page 18]
- Outbound File Type Settings [page 22]
- File Type Codes and Associated Staging Tables [page 24]

3.3 Inbound and Outbound Data Transfers

Quick Links

- Inbound Transfers [page 27]
- Outbound Transfers [page 28]

Inbound Transfers

An inbound transfer involves exporting data to Commissions. For a successful inbound transfer, data must be filled out in a flat file format using the provided Excel templates and must comply with the required formatting, mapping, and naming conventions. Once the templates are dropped off in the inbound folder of the SFTP Dropbox, CDL reads and loads the data into Commissions, moves the files to the archived folder, and sends success or failure notification emails accordingly.

i Note

Recommended file size for standard inbound jobs is 2GB. This applies to zip, plain, or encrypted file types.

Number of recommended records per file is 10 million rows. It is recommended to zip files in .gzip format for better speed when copying files with larger number of records.

As part of our security policy, it is recommended that you encrypt the files before dropping the files in the inbound folder for export. See GPG Encryption [page 12] for details.

CDL supports the following file types for Inbound transfer:

- Plain Files (`.txt`)
- Zipped Plain Files (`.gzip`)
- Encrypted Files (`.gpg`)
- Zipped encrypted files (`.zip.gpg`)

i Note

You can also upload a CSV, TXT or XML file from your local desktop. See for more details. [page 38]

Outbound Transfers

An outbound file transfer involves extracting data from Commissions. The extracted data is in a flat file format and is placed in the designated outbound folder of the SFTP Dropbox.

i Note

Recommended file size for standard outbound jobs is 2GB. This applies to zip, plain, or encrypted file types.

It is recommended to zip files in .gzip format for better speed when copying files with larger number of records.

You will be notified by email when the outbound transfer is complete and the files are ready for pick up. The email contains details of the data transfer and an automatically generated summary of the contents. Extracted files can be picked from the outbound folder in the same SFTP Dropbox. Files are retained in the outbound folder for the duration specified in the retention period.

CDL supports the following file types for Outbound transfer:

- zipped encrypted files (`.zip.gpg`)

i Note

GNU zip is supported for file compression and decompression.

Related Topics

- Perform an Outbound Transfer [page 38]
- Perform an Inbound Transfer [page 38]
- Inbound File Transfer Specifications [page 36]
- Inbound File Type Settings [page 18]
- SFTP Folders [page 13]

3.3.1 CDL Templates

Various templates are provided to upload data to SAP Commissions and SAP Territory and Quota. Each template is specific to an inbound file type and relates to a business object in the respective applications.

All the templates are in .xls format and are available as a downloadable .zip file:

- SAP Commissions: Click **here** to download the templates.
- SAP Territory and Quota: Click **here** to download the templates. See the SAP Territory & Quota documentation for application-specific guidelines for CDL Templates.

> **Note**
>
> The columns in the excel template match the columns available in the SAP Commissions and SAP Territory and Quota workspaces. Ensure that the templates are filled out according to the specified guidelines.

The following table lists and describes all the available templates.

Template Name	File Type Code	Description
Commissions		
CDL_CLCA_Template	CLCA	This template captures information about Category. Use this to load category hierarchy.
CDL_CLCC_Template	CLCC	This template captures information about Category Classifier. Use this to load classifiers under a cate-gory.
CDL_TXCR_Template	TXCR	This template captures information about Credit. Use this to load manual credits.

Template Name	File Type Code	Description
CDL_CLCU_Template	CLCU	This template captures information about Customer. Use this to load customer reference data.
CDL_TXDE_Template	TXDE	This template captures information about Deposit. Use this to load manual deposits.
CDL_PLFV_Template	PLFV	This template captures information about Fixed Value. Use this to load fixed values.
CDL_OGPO_Template	OGPO	This template captures information about Position. Use this to load positions.
CDL_OGPOX_Template	OGPOX, OGGO	This template captures information about GA Position. Use this to load positions with extended attributes.
CDL_OGPT_Template	OGPT	This template captures information about Participant. Use this to load participants.
CDL_OGPTX_Template	OGPTX, OGGP	This template captures information about GA Participant. Use this to load participants with extended attributes.
CDL_CLGC_Template	CLGC	This template captures information about Generic Classifier. Use this to load generic classifiers.

Template Name	File Type Code	Description
CDL_TXOH_Template	TXOH	This template captures information about Order. Use this to load sales order.
CDL_OGPR_Template	OGPR	This template captures information about Position Relation. Use this to load position relation.
CDL_CLPC_Template	CLPC	This template captures information about Postal Code. Use this to load postal code.
CDL_CLPR_Template	CLPR	This template captures information about Product. Use this to load product.
CDL_OGTI _Template	OGTI	This template captures information about Title. Use this to load plan titles.
CDL_TXST_Template	TXST	This template captures information about Transaction. Use this to load transaction without any assignments.
CDL_TXSTAG_Template	TXSTAG, TXTA , TXTG	This template captures information about Transaction. Use this to load transactions with assignments and extended attributes.
CDL_TXSTAGR_Template	TXSTAGR, TXTA ,TXTG, TXTR	This template captures information about Transaction. Use this to load transactions with assignments, extended attributes, and reporting attributes.

Template Name	File Type Code	Description
CDL_TXSTAR_Template	TXSTAR, TXTA, TXTR	This template captures information about Transaction. Use this to load transactions with assignments and reporting attributes.
CDL_TXSTG_Template	TXSTG	This template captures information about Transaction. Use this to load transaction with extended attributes.
CDL_TXSTA_Template	TXSTA, TXTA	This template captures information about Transaction. Use this when to load transactions with assignments.
CDL_TXSTR_Template	TXSTR, TXTR	This template captures information about Transaction. Use this to load transactions with extended attributes and reporting attributes.
CDL_TXSTGR_Template	TXTG, TXTR	This template captures information about Transaction. Use this to load transactions with reporting attributes.
CDL_PLVA_Template	PLVA	This template captures information about Variable Assignment. Use this to load variable assignments.
CDL_PIPELINE_Template	PIPELINE	This template captures information about Calculation Runs. You can use this template to: • Run Pipelines and Calculations • Run the Data Extracts stage • Run Pipelines for multiple Calendars
CDL_PLQU_Template	PLQU	This template captures plan quota information. Use this to load plan quotas, which can be utilized in Commissons rules.

Template Name	File Type Code	Description
CDL_PLMC _Template	PLMC	This template captures cell values for the multidimensional lookup table. Use this to load lookup data.
CDL_FVVAMON_Template	FVVAMON	This template captures information about fixed values and variables. Use this to load fixed values variables assignments (monthly basis).
CDL_FVVAQTR_Template	FVVAQTR	This template captures information about fixed values and variables. Use this to load fixed values variables assignments (quarterly basis).
CDL_BOTRIG_Template	BOTRIG	Drop the empty file to sync data. User groups from CS_PARTICIPANT table are synced with SAP BO system. Groups are defined in one of the genericAttribute fields.
CDL_BOUPDATE_Template	BOUPDATE	This template contains add/delete operations, userid, and groupname. Use this to sync user groups with SAP BO system.
CDL_ BOEXTRACTTRIG_Template	BOEXTRACTTRIG	Drop the empty file to extract data. Data from the SAP BO system (i.e. all users associated with groups) is extracted and written to the file with the specified delimiter.
Territory and Quota		
CDL_TQAC_Template	TQAC	This template captures information about Accounts. Use this to load accounts.
CDL_TQACX_Template	TQACX, TQGAC	This template captures information about Accounts with generic attributes. Use this to load accounts with generic attributes.
CDL_TQGEO_Template	TQGEO	This template captures information about Geographies. Use this to load Geographies.

Template Name	File Type Code	Description
CDL_TQGEOX_Template	TQGEOX, TQGGEO	This template captures information about Geographies with generic attributes. Use this to load Geographies with generic attributes.
CDL_TQTAC_Template	TQTAC	This template captures information about TerritoryAccounts. Use this to load accounts for territory.
CDL_TQTACX_Template	TQTACX, TQGTAC	This template captures information about TerritoryAccounts with generic attributes. Use this to load accounts for territory with generic attributes.
CDL_TQTPR_Template	TQTPR	This template captures information about TerritoryProducts. Use this to load products for territory.
CDL_TQTPRX_Template	TQTPRX, TQGTPR	This template captures information about TerritoryProducts with generic attributes. Use this to load products for territory with generic attributes.
CDL_TQTGEO_Template	TQTGEO	This template captures information about TerritoryGeographies. Use this to load geographies for territory.
CDL_TQTGEOX_Template	TQTGEOX, TQGTGEO	This template captures information about TerritoryGeographies with generic attributes. Use this to load geographies for territory with generic attributes.
CDL_TQGEOVAL_Template	TQGEOVAL	This template captures information about Account attribute values. Use this to load Account attribute values defined in the Account Identification Rule of Geography.
CDL_TQHIS_Template	TQHIS	This template captures information about History (Transaction Summary). Use this to load history for territory.
CDL_TQCRMOP_Template	TQCRMOP	This template captures information about CRMOpportunities. Use this to load opportunities for territory.
CDL_TQTP_Template	TQTP	This template captures information about Territory Program. Use this to load Territory Program.

Template Name	File Type Code	Description
CDL_TQTPX_Template	TQTPX, TQGTP	This template captures information about Territory Program with generic attributes. Use this to load territory program with generic attributes.
CDL_TQTERR_Template	TQTERR	This template captures information about Territories. Use this to load Territories for the territory program.
CDL_TQTERRX_Template	TQTERRX, TQGTERR	This template captures information about Territories with generic attributes. Use this to load territories with generic attributes for the territory program.
CDL_TQTPOS_Template	TQTPOS	This template captures information about Territory Positions. Use this to load Positions for the territories.
CDL_TQTPOSX_Template	TQTPOSX, TQGTPOS	This template captures information about Territory Positions with generic attributes. Use this to load positions with generic attributes for the territories.
CDL_TQTQUOTA_Template	TQTQUOTA	This template captures information about Territory Quotas. Use this to load quotas for the territory.
CDL_TQTRAP_Template	TQTRAP	This template captures information about Alignment Properties for a Territory Rule. Use this template to assign alignment properties for a territory rule.
CDL_TQTRULE_Template	TQTRULE	This template captures information about Territory Rule. Use this template to assign a rule to the territory.

Related Topics

- File Type Codes and Associated Staging Tables [page 24]
- Inbound File Transfer Specifications [page 36]
- Inbound File Type Settings [page 18]
- Perform an Inbound Transfer [page 38]
- Review File Transfer Details, Status, and Logs [page 42]
- SFTP Folders [page 13]
- Commissions and BusinessObjects User Group Association [page 51]
- SAP T&Q Integration [page 5]

3.3.2 Inbound File Transfer Specifications

Follow these guidelines to prepare your data for an inbound transfer:

- Use the templates provided by our operations team to export data. See CDL Templates [page 29].
- Follow the guidelines to fill out data in the templates. Files must be formatted to meet the staging table specifications.
- Follow the formatting and mapping conventions defined in Inbound File Type Settings [page 18].
- Ensure the following naming convention is used for the file:

```
CCCC_TTTT_III_YYYYMMDD_SSSSSS_[OOOOOO].[file type].[compression].[gpg]
```

Value	Description
[CCCC]	[Required] four-character (alphanumeric) moniker to specify the CDL Customer.
[TTTT]	[Required] four-character (alphanumeric) Data File Type Code [page 24] for what type of data the file contains. This is to relate the data to which staging table the data will be populated into.
[III]	[Required] three-character (alphanumeric) identifier to specify which instance the file is to be loaded into. Must be one of the following three possible values: • TST = test instance • DEV = development instance • PRD = production instance
[YYYYMMDD]	[Required] Date (YYYY=Year MM=Month DD=Day) to be related to this batch of data (normally the date the file was generated).
[SSSSSS]	[Required] Sequence identifier or any file descriptor that makes the file unique when sending multiple batches of the same data file type on the same day. This will facilitate the ability to determine replacement versus erroneously duplicated files.
[OOOOOO]	[Optional] Any alpha string for customer use. Useful for describing the content specific to a customer (e.g. SAPORDERTXNS or HRFEED1)
[file type]	[Optional] File type suffix. Not critical for processing, but useful for Operations staff when handling the file. (Example: *.txt for text, or *.csv for comma-separated)
[compression]	[Required, if file is sent compressed] Compression type suffix. Expected to be “gz” for gnu-zipped format.

Value	Description
[gpg]	[Required, if file is sent encrypted] Encryption type suffix. Expected to be “gpg” for GPG encrypted format file.
Example:	Data file **CCST_TXST_TST_20060629_01_EU-SAP1.txt.gz.gpg** This file name indicates the following: • [OCST] This file is for CDL Customer “CCST” • [TXST] Data file contains sales metrics transactions to be loaded into the CS_StageSalesTransaction staging table inside the TrueComp repository. • [TST] Data file contains testing data, to be loaded into the test instance. • [20060629] Data file was generated on 6/29/2006 • [01] Unique identifier used to distinguish multiple files generated that are otherwise identical, that is, the files can have same type of data, destined for the same instance, and generated on the same day. For example, this can be HHMM. • [EUSAP1] An example of how the 6-character optional string can be used to specify transactions generated from the EMEA SAP order fulfillment system. • [txt] Data file contains ASCII text data. • [gz] Data file has been gnu-zipped. • [gpg] Data file has been encrypted in GPG format.

> **i Note**
>
> The batchname for the following tables is mandatory when loading data:
>
> - CS_GASTAGESALESTRANSACTION
> - CS_STAGETRANSACTIONASSIGN
> - CS_STAGERASALESTRANSACTION
>
> You must ensure that the batchname is provided when loading data to avoid any interruptions in the data load process. The batchname should be synchronous, that means, you must use the same batchname across the parent and the dependent tables.

Related Articles

- Perform an Inbound Transfer [page 38]
- CDL Templates [page 29]

- File Type Codes and Associated Staging Tables [page 24]

3.3.3 Perform an Inbound Transfer

Pre-requisites

- The SFTP Client must be installed and set up properly.
- Inbound File Type Settings [page 18] must be defined.
- Templates and data must comply with the required standards. See Inbound File Transfer Specifications [page 36] for more details.

Performing a Standard Inbound Transfer

1. Download the required CDL template [page 29].
2. Create a flat file using the specifications defined in the template
3. Name the flat file using the specified naming convention for the file type that is dropped. See Inbound File Transfer Specifications [page 36] for more details.
4. Log in to your SFTP using the SFTP File Protocol, Hostname, Port, and Username credentials provided. Additionally, you may need to provide the private key for authentication purposes.
5. Drop the files in the inbound folder after you are connected to SFTP.

Once the files are placed in the inbound folder, the data transfer starts immediately. You can view the status of the file transfer and review the logs in the CDL interface.

> **i Note**
>
> If *Auto-run* is set to *off*, you must manually resume the file transfer process from the *Jobs* page.
>
> To manually resume a job, click execute in the *Jobs* page. See Global Settings [page 16]for more information.

Performing a Custom Inbound Transfer

1. Define the custom inbound file type.
2. Create a custom HANA table.
3. Create a custom HANA procedure with one IN parameter as shown below:
   Example: With IN Parameter

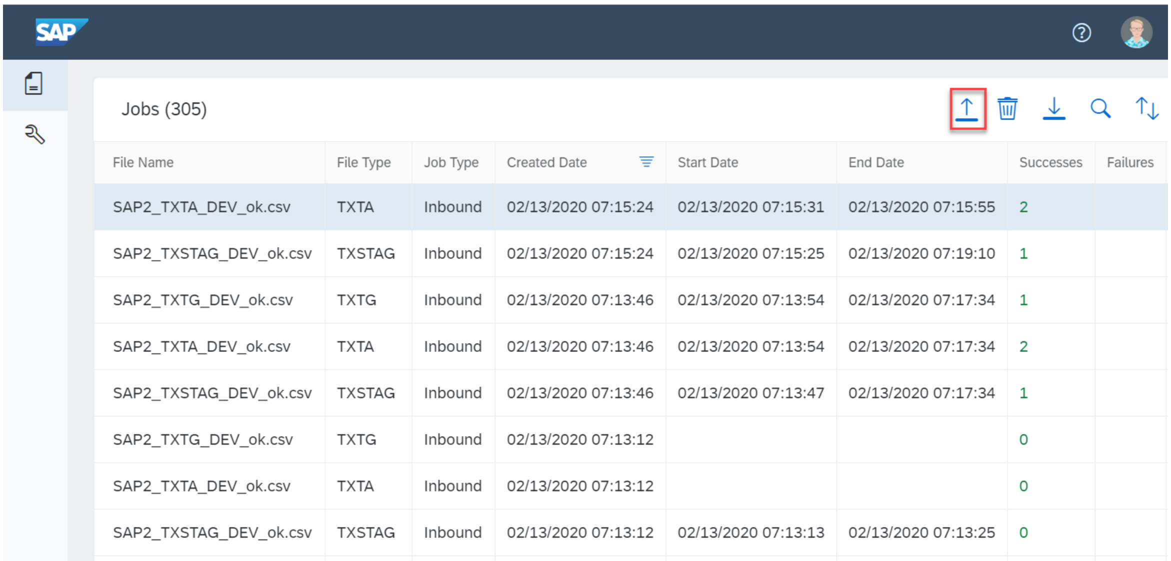
```
CREATE PROCEDURE TMP_STAGEPARTICIPANT(IN FILENAME varchar(120))
AS
BEGIN
....
END;
```

4. To run the inbound file type, drop a trigger file in the inbound folder of the SFTP Dropbox. The trigger file should have the same file type that is defined in inbound file type settings [page 18] for the custom inbound file type.

> **i Note**
>
> All custom inbounds require one IN parameter where CDL passes the filename. This can be utilized by the custom procedure as `batchname` if required.

Uploading a CSV, TXT, or XML File From Your Desktop

1. On the left panel, click *Jobs*.
2. On the *Jobs* page, click the *Upload* icon.



3. Select the file you want to upload. Make sure that the file name follows the format TENANTNAME_FILETYPE_FILENAME and contains only letters, numbers, and underscores. The files should not be encrypted or zipped.

Related Topics

- Inbound File Transfer Specifications [page 36]
- Inbound File Type Settings [page 18]
- CDL Templates [page 29]
- SFTP Folders [page 13]
- Review File Transfer Details, Status, and Logs [page 42]
- Troubleshoot [page 47]
- SAP T&Q Integration [page 5]

3.3.4 Perform an Outbound Transfer

Pre-requisites

Custom file type should be defined as per the Outbound File Type Settings [page 22].

Performing an Outbound Transfer

Perform the following steps to extract data from Commissions:

1. Define the corresponding outbound file type in Outbound File Type Settings [page 22].
2. Create a custom HANA table. This will be the source for the outbound data.
3. Create a custom HANA stored procedure and define the extraction logic within the custom stored procedure. This will populate the custom table. For the outbound process, you must have the stored procedure with the OUT parameter of type VARCHAR as the FIRST parameter. Example: Without Parameters
   ```
   CREATE PROCEDURE TMP_STAGEPARTICIPANT_NEWSP_NOINPARAMS (OUT FILENAME
   varchar(120))

   AS
   BEGIN
   ....
   END;
   ```
   Example: With Parameters
   ```
   CREATE PROCEDURE TMP_STAGEPARTICIPANT_NEWSP_WITHINPARAMS (OUT FILENAME
   varchar(120), IN batchName VARCHAR(255))
   AS
   BEGIN
   ....
   END;
   ```
4. To run the outbound file type, drop a trigger file in the inbound folder of the SFTP Dropbox. The trigger file should have the same file type that is defined in the outbound file type settings [page 22]. Optionally, you can pass parameters separated by a comma in the trigger file. All parameters are passed in the same order to the HANA stored procedure. The trigger file initiates the outbound extract job and upon completion, an outbound extract is generated in the outbound folder of the dropbox.

> **i Note**
>
> The OUT parameter is a mandatory parameter. It is used by CDL to create the file with the name specified in the OUT parameter. Ensure this field is populated when creating outbound extracts.

Related Topics

- CDL Templates [page 29]

- File Type Codes and Associated Staging Tables [page 24]
- SFTP Folders [page 13]
- Review File Transfer Details, Status, and Logs [page 42]
- Troubleshoot [page 47]

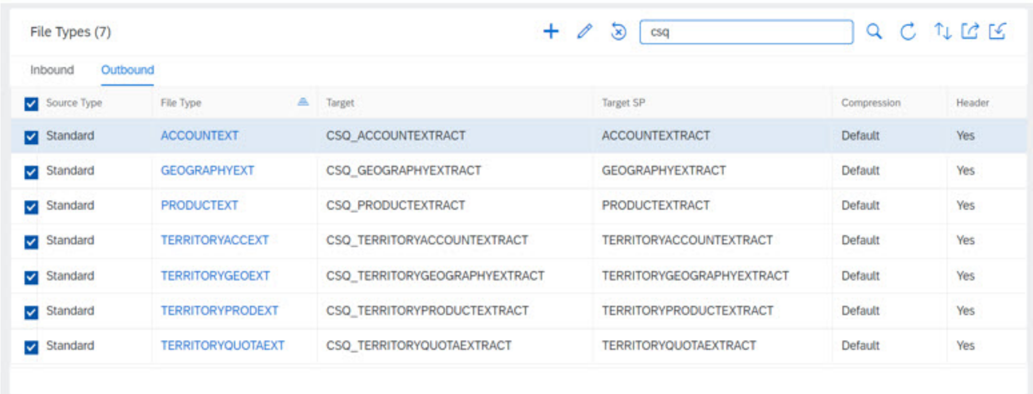
3.3.4.1 Download SAP Territory and Quota Object Data via CDL

Commissions users who also use the SAP Territory and Quota solution can now download Territory and Quota object data in bulk (up to 1 million records) from SAP Territory and Quota via CDL.

You can download data of the following SAP Territory and Quota objects via CDL:

- TerritoryAccount: The corresponding outbound file type is TERRITORYACCEXT
- TerritoryGeography: The corresponding outbound file type is TERRITORYGEOEXT
- TerritoryProduct: The corresponding outbound file type is TERRITORYPRODEXT
- TerritoryQuota: The corresponding outbound file type is TERRITORYQUOTAEXT
- Account: The corresponding outbound file type is ACCOUNTEXT
- Geography: The corresponding outbound file type is GEOGRAPHYEXT
- Product objects: The corresponding outbound file type is PRODUCTEXT

The *Outbound* tab in CDL displays all the standard outbound file types:



File Types (7)

Inbound | Outbound

Source Type	File Type	Target	Target SP	Compression	Header
Standard	ACCOUNTEXT	CSQ_ACCOUNTEXTRACT	ACCOUNTEXTRACT	Default	Yes
Standard	GEOGRAPHYEXT	CSQ_GEOGRAPHYEXTRACT	GEOGRAPHYEXTRACT	Default	Yes
Standard	PRODUCTEXT	CSQ_PRODUCTEXTRACT	PRODUCTEXTRACT	Default	Yes
Standard	TERRITORYACCEXT	CSQ_TERRITORYACCOUNTEXTRACT	TERRITORYACCOUNTEXTRACT	Default	Yes
Standard	TERRITORYGEOEXT	CSQ_TERRITORYGEOGRAPHYEXTRACT	TERRITORYGEOGRAPHYEXTRACT	Default	Yes
Standard	TERRITORYPRODEXT	CSQ_TERRITORYPRODUCTEXTRACT	TERRITORYPRODUCTEXTRACT	Default	Yes
Standard	TERRITORYQUOTAEXT	CSQ_TERRITORYQUOTAEXTRACT	TERRITORYQUOTAEXTRACT	Default	Yes

To download the object data from SAP Territory and Quota via CDL:

1. Download the sample input file templates (.txt files) from **here** and specify the standard attributes and custom attributes that need to be downloaded. Note that standard fields can't have spaces within the field name, because standard fields are read by their database field name.
   Example: Effective Start Date is a standard field. It must be populated without spaces as EffectiveStartDate.
2. Specify the column and filter criteria as defined in the input file. The input files contain examples of the required select clause and where clause based on standard attribute columns, custom attribute labels, and reference objects.

Example: To download Account data, you must use the ACCOUNTEXT.txt file. Sample data in ACCOUNTEXT.txt is as follows:
accountId@Revenue@EFFECTIVESTARTDATE@Segmentation Group@ Segmentation Number@ Activation Date@Coverage Name,@Segmentation Group = "Global Sales" and @Segmentation Number = "10" and @Activation Date = "20211201"

> **i Note**
>
> The uploaded input file must contain Select and Where strings separated by the Delimiter (Comma).
>
> In the previous example:
>
> - The **SELECT** string is as follows: accountId@Revenue@EFFECTIVESTARTDATE@Segmentation Group@ Segmentation Number@ Activation Date@Coverage Name
> - @Segmentation Group = "Global Sales" and @Segmentation Number = "10" and @Activation Date = "20211201"
>   The WHERE string can be separated by logical operators such as AND, OR, etc.

> **i Note**
>
> Fields that you populate in the input file for outbound extract are **not case-sensitive**. For example, AccountID, accountid, and ACCOUNTID are all considered as same field.

3. Save the file with the following naming convention: *<tenantid>_<outboundname>_<optionalstring>.txt*. You must specify the tenant ID used by CDL, and must point to ACCOUNTEXT which is the outbound file type. The file name will then look as follows: **WXYZ_ ACCOUNTEXT_TQACC2022.txt.**
4. To download the account data, you must upload the file in *CDL* > *Jobs* > *Upload*.
5. CDL will then create the output file with the downloaded object data. The output file can be located at `apps/localfiles/TenantID/outbound`.

Refer to this spreadsheet for column-level guidance to the end user for all available SAP Territory and Quota outbound extracts.

Related Information

Perform an Outbound Transfer [page 40]

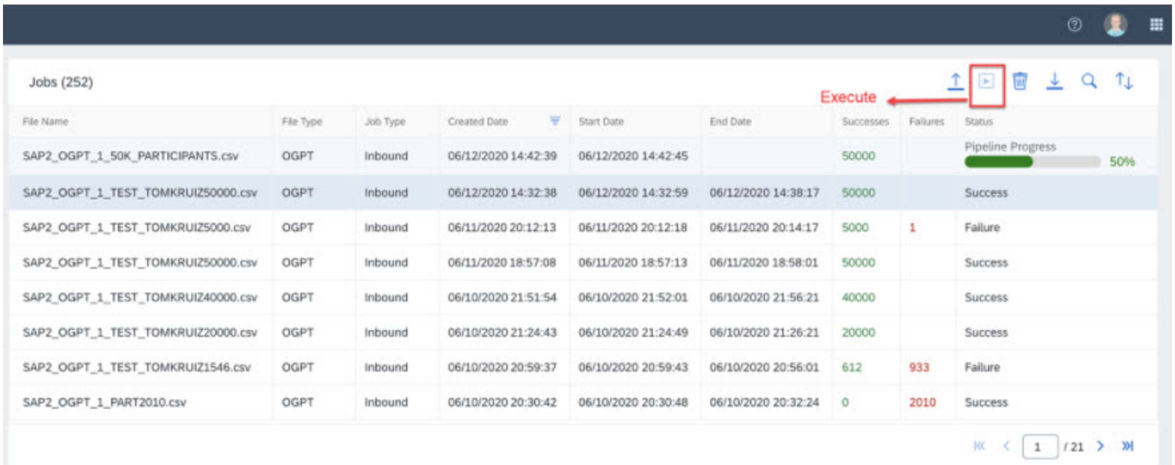
3.3.5 Review File Transfer Details, Status, and Logs (Jobs)

CDL creates a job for every file transfer. You can view the status of the jobs and review the logs on the *Jobs* page in CDL. The **Jobs** page lists all the jobs and provides real-time status of the data transfer.

When you log into Commissions Data Loader, the *Jobs* page is displayed by default. You can perform the following actions using the icons available in the top-right of the page:

- *Upload* a CSV, TXT or XML file from your Desktop [page 38]
- *Execute* a job
- *Delete* a job

- *Download* the Job details
- *Search* for specific records
- *Sort* and order the records



i Note

Click on the *Execute* icon to execute the job. This option is available when *Autorun* is set to *No* in *Global Settings*. The *Execute* icon is enabled when the job status is CREATED and is disabled after the job is executed.

The following table describes the details available on the *Jobs* page.

Column Name	Description
File Name	Displays the name of the transferred file.
File Type	Displays the four-letter file code associated with the file and indicates the type of file transferred. For example, TXT implies that the file is related to Transactions and contains Transaction Data.
Job Type	Displays the type of transfer. For exported files, Inbound is displayed. **i Note** Outbound files display a `.inprogress` extension when the outbound job is in progress. After the outbound job is complete, the extension is removed. The fully generated file will have the standard extension (.csv or .txt) once it is downloaded. (This does not apply to the BOEXTRACTTRIG file type.) For imported files, Outbound is displayed.

Column Name	Description
Created Date	Displays the date and time when the files were dropped off for transfer. For exported files, it displays the time and date when the files were dropped off in the inbound folder. For imported files, it displays the time and date when the files were dropped off in the outbound folder.
Start Date	Displays the date and time CDL initiated the data transfer process
End Date	Displays the data and time CDL ended the data transfer process.
Successes	Displays the number of records that were transferred successfully.
Failures	Displays the number of records that were not transferred successfully. Click on the link to download a .gzip file that contains the error logs.

Column Name	Description
Status	Displays the status of the job. Inbound Transfer Statuses: • CREATED: Job created successfully • WAITING_FOR_DEPENDENT: Job waiting for dependent files • QUEUED: Job queued for processing • INITIATED: Job processing started • INPROGRESS: Job processing in progress • PROCESSED: Job's load data to stage tables activity complete • PIPELINE TRIGGERED: Job pipeline is triggered • PIPELINE QUEUED: Job pipeline is queued • PIPELINE PROGRESS: Progress bar displays pipeline progress (0-100%) • SUCCESS: Job successfully executed • FAILURE: Job failed to execute Outbound Transfer Statuses: • CREATED: Job created successfully • QUEUED: Job queued for processing • INITIATED: Job processing started • INPROGRESS: Job processing in progress • PROCESSED: Job's extract to target table activity complete • SUCCESS: Job successfully executed • FAILURE: Job failed to execute Pipeline Transfer Statuses: • CREATED: Job created successfully • PIPELINE TRIGGERED: Job pipeline processing triggered • PIPELINE QUEUED: Job queued for pipeline processing • PIPELINE PROGRESS: Progress bar displays pipeline progress (0-100%) • SUCCESS: Job successfully executed • FAILURE: Job failed to execute

> **i Note**
>
> PIPELINE PROGRESS is visible only on the UI and is displayed instead of PIPELINE TRIGGERED. PIPELINE PROGRESS displays a progress bar (0-100%) to indicate the progress of the process. This helps you track the pipeline progress and indicates when the process is complete.

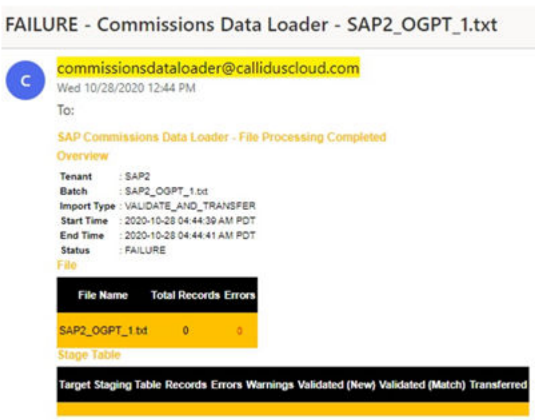
Related Articles

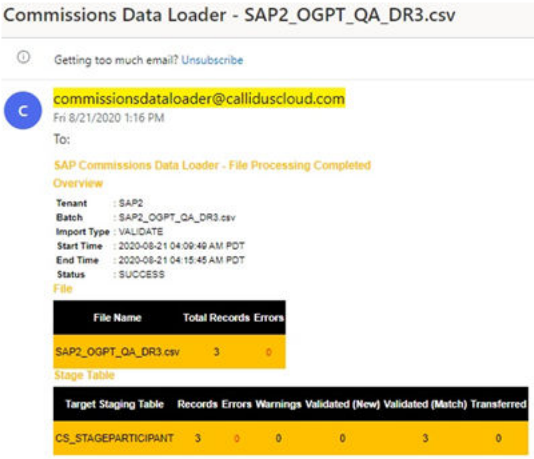
- Troubleshoot [page 47]
- Validations Performed During Data Transfer [page 48]
- File Type Codes and Associated Staging Tables [page 24]
- Inbound and Outbound Transfers [page 27]

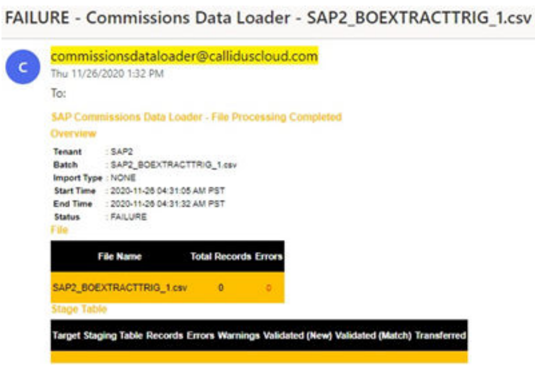
3.3.6 File Transfer Status Email Notifications

Users are notified about the status of the file transfer via email.

Job status notification emails include an error log if the job contains any failures. You will receive the error log as an attachment along with the notification email.

Notification Email	Description
	Indicates that the file transfer process is complete, but the transfer failed. Displays the tenant information, file name, start and end time of the file transfer process, and the status.

<table>
<tr><th>Notification Email</th><th>Description</th></tr>
<tr><td>
</td>
<td>Indicates that the file transfer process is complete and the file is transferred successfully.

Displays the tenant information, file name, import type, start and end time of the file transfer process, and the status.</td></tr>
<tr><td>
</td>
<td>Indicates that the file transfer is complete. The status indicates if the file was transferred successfully or not.

Displays the tenant information, file name, start time of the file transfer process, stored procedure, and the status (success or failure).</td></tr>
</table>

Related Articles

- Review File Transfer Details, Status, and Logs [page 42]
- Troubleshoot [page 47]
- Inbound and Outbound Transfers [page 27]

3.3.7 Troubleshoot

If a file transfer is unsuccessful due to a validation error, you can resolve the error and drop the file in the inbound folder again for reprocessing. You can either drop the entire file again or drop a smaller file with only the corrected records (delta) in the inbound folder.

To resolve a validation error and reload a file:

1. In the *Jobs* page, click on the number link under *Failure* and download the corresponding error logs.
2. Check the error description in the log file. The error description indicates the type of error and the related stage tables.

3. Log into Commissions and check the stage tables for validation issues.
4. Correct the error in the file and drop the entire file or part of the file in the inbound folder for reprocessing.

> **i Note**
>
> Files must be dropped into the inbound folder for reprocessing if errors occur during the first run. If you are unable to resolve the problem, contact Support for further assistance.

Related Articles

- Review File Transfer Details, Status, and Logs [page 42]
- Data Transfer Validations [page 48]
- File Type Codes and Associated Staging Tables [page 24]
- CDL Templates [page 29]

3.3.8 Data Transfer Validations

The following validations are performed by CDL during the data transfer process:

- All default field content and structure is validated, including data types, field length, NULL-values, and date validations in elements that require or do not allow certain values.

  > **i Note**
  >
  > Generic Date Fields support only Dates. Time Stamp is truncated during import.

- Validations to ensure data completion and sequence authenticity are performed.
- Checks are conducted to ensure that there is no missing data within a file and no missing batches of data within a batch.
- Checks to detect duplication are performed to prevent double-loading, that is, to avoid uploading the same file twice.
- Security validations including, encryption checks and script injection checks are performed.
- Additionally, validations are executed to ensure that the transferred data is ready to be inserted in the staging tables and then in the actual tables in Commissions. See Commissions Administrative Tasks documentation for more details.

Related Articles

- Troubleshoot [page 47]
- Review File Transfer Details, Status, and Logs [page 42]
- File Type Codes and Associated Staging Tables [page 24]

3.3.9 CDL APIs

OData REST APIs

The following OData REST APIs are available:

- `getJob: /odata.svc/getJob`

Retrieves job details for the given file name

- `executeJob: /odata.svc/executeJob`

Executes/initiates job processing

Prerequisite

You must fetch the access-token through the Portal SSO APIs and pass them as headers:

```
HEADER


Content-Type:application/json

tenant:AUT1

access-token:77a8fb97-6ac9-429f-80ba-0454cdcd44cc
```

GET JOB

URL	https://<CDL-HOST>/cdl/odata.svc/getJob(fileName='AUT1_PLQU_100_20190121164021.csv')
METHOD	GET
RESPONSE	{ "@odata.context": "$metadata#com.callidus.odixl.model.Job", "value": [{ "id": 10, "fileName": "AUT1_PLQU_100_20190121164021.csv", "fileType": "PLQU", "tenant": "AUT1", "status": "INPROGRESS", "startTimestamp": "2019-01-21T11:25:03.936+0000", "endTimestamp": "null", "totalRecords": "2", "successRecords": "1", "failedRecords": "1", "createdTimestamp": "2019-01-21T11:10:38.445+0000", "failureReason": "", "fileSize": "211", "userName": "" }] }

CURL COMMAND	curl -X GET \ https://<hostname>/cdl/odata.svc/getJob%28fileName=%27AUT1_PLQU_100_20190121164021.csv%27%29 \ -H 'Content-Type: application/json' \ -H 'access-token: 77a8fb97-6ac9-429f-80ba-0454cdcd44cc' \ -H 'tenant: AUT1'

EXECUTE JOB

URL	https://<CDL-HOST>/cdl/odata.svc/executeJob
METHOD	POST
REQUEST	{ "fileName": "AUT1_PLQU_100_20190121164021.csv" }
RESPONSE	{ "@odata.context": "$metadata#com.callidus.odixl.model.Job", "value": [{ "id": 10, "fileName": "AUT1_PLQU_100_20190121164021.csv", "fileType": "PLQU", "tenant": "AUT1", "status": "CREATED", "startTimestamp": "null", "endTimestamp": "null", "totalRecords": "0", "successRecords": "0", "failedRecords": "0", "createdTimestamp": "2019-01-21T11:10:38.445+0000", "failureReason": "", "fileSize": "211", "userName": "" }] }
CURL COMMAND	curl -X POST \ https://<hostname>/cdl/odata.svc/executeJob \ -H 'Content-Type: application/json' \ -H 'access-token: 77a8fb97-6ac9-429f-80ba-0454cdcd44cc' \ -H 'tenant: AUT1' \ -d '{ "fileName": "AUT1_PLQU_100_20190121164021.csv" }'

API Job Fields

API job fields and decription:

- "id": job Id
- "fileName": file name for the data provided/dropped in goAnyWhere
- "fileType": refers to template using for the data to process
- "tenant": tenant id
- "status": current status of the job. possible values(CREATED/WAITING_FOR_DEPENDENT/INPROGRESS/SUCCESS/FAILURE)
- "startTimestamp": job process start date,

- "endTimestamp": job finished date,
- "totalRecords": total records found in data file,
- "successRecords": total records successfully processed
- "failedRecords": total records failed in job process
- "createdTimestamp": job created date
- "failureReason": reason for job failure. refer error log for clear descriptions
- "fileSize": file size in bytes for the data provided/dropped in goAnyWhere
- "userName": job created by

Related Articles

- Perform an Inbound Transfer [page 38]
- Perform an Outbound Transfer [page 40]

3.3.10 Commissions and BusinessObjects User Group Association

Quick Links

- BO Reporting Groups [page 52]
- Custom BO Group Maintenance [page 52]

BusinessObjects (BO) is only used for user groups. When new employees join, or when employees move between departments, the users need to be assigned appropriate groups in the Commissions application, and then the users need to be synced up with the BO groups, since they are maintained separately in the BO repository.

The **Commissions Compensation Administrators** are responsible for managing users (participants/payees) and groups.

To sync user groups with BO groups, the Commissions Compensation Administrators must:

1. Add the user group name in a specified format in a participant custom field (GA).
2. Open a ticket with support to get access to the SFTP server, and then drop the files to SFTP. CDL picks up the files through an automated process which syncs the users in BO.
3. Run the pipeline to generate reports using the appropriate BO groups and reports. If the sync process is not completed prior to the report generation stage in the pipeline, the report will not be available for users in the Commissions *Reports* tab.

> **i Note**
>
> By default, all users belong to either the Participant User Group or Admin Group in BO.

BO Reporting Groups

A BusinessObject reporting group allows users (Participants > USERID) to be segregated into smaller chunks and makes sure only the relevant reports are published for the group of selected users. When a BO group is created, it is available as an option in Calculation. Select the required reports and the associated group to publish the reports for the users in the group.

> **i Note**
>
> BusinessObject groups are created by the support team. Contact support for more information.

Default BO Groups

The following BO groups are available by default:

- <TENANTID> Compensation Analytics User Group
- <TENANTID> Compensation Reports User Group

By default, the Portal Admin user is the member of the **Admin Group** and all the Participants are members of the **User Group**. The Monaco user who is assigned to **Admin Group** is automatically added to LDAP and assigned to a **User Group**. Open a ticket with support to get the user added to the **Admin Group** and specify that the user must be removed from the BO Payee groups.

Custom BO Groups

The default BO groups each contain a list of users (Participants > UserID) and when the group is selected, the reports are published for the selected group and also to the users under the group. At times, the default BO Group does not meet the requirements of the implementation, and custom BO Groups can be created. Custom BO Group allow dividing the user data further into smaller chunks and gives more flexibility on how the reports should be generated.

Custom BO Group Maintenance

Custom BO groups also contain users, like the default BO groups, however unlike the default BO groups, the users in custom BO groups should be added and removed explicitly as needed, which means when a New Participant enters the Monaco System or an existing Participant is updated, the Participant's UserID should be explicitly added to the appropriate custom BO group. Similarly, when a Participant leaves the system (due to Termination or other reasons), the Participant's UserID should be removed from the appropriate custom BO group. This ensures that the group contains only relevant and active Users and the reports are published efficiently.

Add/Remove Users using BOUPDATE Template

To add or remove users:

- Data of users and their BO groups (userId, groupName) must be supplied in a flat file with an “add” or “delete” operation (“add” user to group or “remove” user from group) and dropped in the Inbound folder.
- The content must be tab delimited with double quotes enclosing each data item.
- The BOUPDATE file naming convention must be followed. Example: <TENANTID>_BOUPDATE_PRD_YYYYMMDD.

Example:

“add” ”1234_<TENANTID>” “<TENANTID> Compensation Reports User Group - CLT Manager-PU1”

“delete” “1234_<TENANTID>” “<TENANTID> Compensation Reports User Group - CC Rep-PU1”

This operation can be automated in the inbound pre-processing and based on the incoming Participants; the above file can be created and dropped in the folder to maintain the users in the groups.

> **i Note**
>
> BO supports sequencing of the user data in the appropriate usergroups in BO. The size of the sequencing is defined in the property file.

Add/Remove Users using BOTRIG Template

1. In this method, a GENERICATTRIBUTE of the CS_PARTICIPANT table is selected to store the BO Group. This GA should then be enabled as follows in Monaco:
   1. Go to *Administration* > *Customization* > *Organization* > *Participants*.
   2. Check the Active box for one of the Generic Attribute and enter name "BO Group" under Custom Value and save the change.
   3. Log out and log in to verify GA is enabled in Participant.
2. Populate the above GA in the Participant table with the BO group using an update statement. This will require a ticket with support and a script to update the existing Participant records.
3. Change the inbound pre-processing to make sure it populates the correct BO Group for each Participant. If a Participant has multiple BO groups, then they should be separated by commas and stored in the GA field.
4. Drop a BOTRIG file with the correct file naming convention. Example: NTEL_ BOTRIG _PRD.txt. CDL picks the file type from the filename to trigger the sync process, which will automatically synchronize the BO groups and users based on the BO groups specified in the GA field of the Participant table. This file can be empty.

Generate Report using BOEXTRACT Template

This utility allows you to generate a report of the existing BO Groups in the system along with the associated users in each group. This report is useful to identify the current users in each of the groups.

Drop the trigger file in the inbound folder with the correct file naming convention. Example: <TENANTID>_BOEXTRACTTRIG_PRD. The content of the file should be empty. CDL picks the file type from the filename to trigger the extract process.

A file (Example: <TENANTID>_BOEXTRACT_PRD_MMDDYYYY.txt.) will be generated in about 10 minutes in the outbound folder. This file will contain all the BO groups and the associated Users. This report is useful to validate the current users in each of the BO groups.

> **i Note**
>
> This report is useful to validate the current users in each of the BO groups.

Related Articles

- CDL Architecture and Data Transfer Process [page 9]
- Perform an Inbound Transfer [page 38]
- Perform an Outbound Transfer [page 40]

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THE BEST RUN