Clay Tablet Translation

SDK for Java Programming Guide

Version 3.5

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Contents

1 Welcome to the Clay Tablet Technologies SDK for Java

The Clay Tablet Technologies Software Development Kit (SDK) for Java describes the Java technologies that Clay Tablet Technologies provides for developers to create a Connector to the Clay Tablet Translation Platform.

Note: The Clay Tablet Technologies Software Development Kit (SDK) is also available for .NET. For details, refer to the *Clay Tablet Translation SDK for .NET Programming Guide*.

1.1 Terminology

Amazon AWS	Amazon Web Services. A suite of web application products developed and sold by Amazon.com. Clay Tablet uses various AWS offerings in order to leverage their infrastructure and build rich, dynamic solutions for its customers, specifically, the Clay Tablet Platform. For details, see http://aws.amazon.com.
Amazon S3	Amazon Simple Storage Service. For details, see: http://aws.amazon.com/s3/. The Connector and the Clay Tablet Platform use Amazon S3 to provide temporary storage services for the content sent to and from translation.
Amazon SQS	Amazon Simple Queue Service. For details, see: http://aws.amazon.com/sqs/. The Connector uses Amazon SQS to provide Message Queue Services.
Asset	Any content or document being sent for translation, including metadata. Assets are created by the Connector.
Clay Tablet (CTT)	Clay Tablet Technologies, the corporate entity that publishes the Clay Tablet Translation Connector and the Clay Tablet Platform.
Clay Tablet Platform	The hosted (IaaS) connectivity platform that receives and routes content from content management systems (CMSs) to translation providers and back during implementation.
Connectors	Discrete binaries that are installed on the CMS or TMS side to provide connectivity to the CTT Platform. This SDK helps you code a Connector.
Google Guice	A lightweight dependency injection framework for Java 5 and higher. The Clay Tablet Platform Java API uses Google Guice to provide dependency injection. For more information, see: http://code.google.com/p/google-guice/.
IaaS	Infrastructure as a Service. The Clay Tablet Platform is an IaaS, because it is a hosted platform.
On-Premise Platform	A version of the Clay Tablet Platform that is hosted on the premises of the Clay Tablet client, instead of on AWS.
Producer	CMS, database, or another system that sends content or documents out for translation.
Provider	Translation system or technology that provides translation or translation management services. The delivery of assets to the provider may be via an FTP server or a TMS connector.

Support Asset	Supporting documents and their metadata. Support assets are not translated by the translation provider, but they provide helpful context for the translator.
TMS	Translation management system that the translation provider users.

1.2 What Is the Clay Tablet Translation Solution?

Clay Tablet is the easiest, most flexible way to integrate content management systems with translation providers and their translation software systems. Clay Tablet's open, flexible, scalable, hub-style architecture, supports the integration of any content management system with any translation system or technology.

In Clay Tablet:

- The hub of this solution is the *Clay Tablet Translation Platform*.

- The spokes of this solution are the *Connectors*. A Connector connects either between a content management system and the Platform, or between a translation provider and the Platform.

1.2.1 What Is the Clay Tablet Translation Platform?

Clay Tablet Platform is the hosted (IaaS) connectivity platform that receives and routes content from content management systems to translation providers and back. It is hosted on Amazon Web Services (AWS). The Clay Tablet Platform uses the following services on AWS:

- S3 (Amazon Simple Storage Service), which provides storage services for the content sent to and from translation.

- SQS (Amazon Simple Queue Service), which provides message queue services.

1.2.2 What Is a Connector?

A Connector is an application with an interface to the Clay Tablet Translation Platform. Depending on the type of Connector you build, it connects to either a content management system (CMS) or a translation provider or translation management system (TMS):

- If you build a Connector between a *CMS* and the Platform, this is a *Content* Connector, because the CMS produces the content for translation.

- If you build a Connector between a *TMS* and the Platform, this is a *Translation* Connector, because the TMS provides the translated content.

You use this SDK to build a Connector between your content management system or translation management system and the Clay Tablet Translation Platform.

1.2.3 How Does Clay Tablet Work?
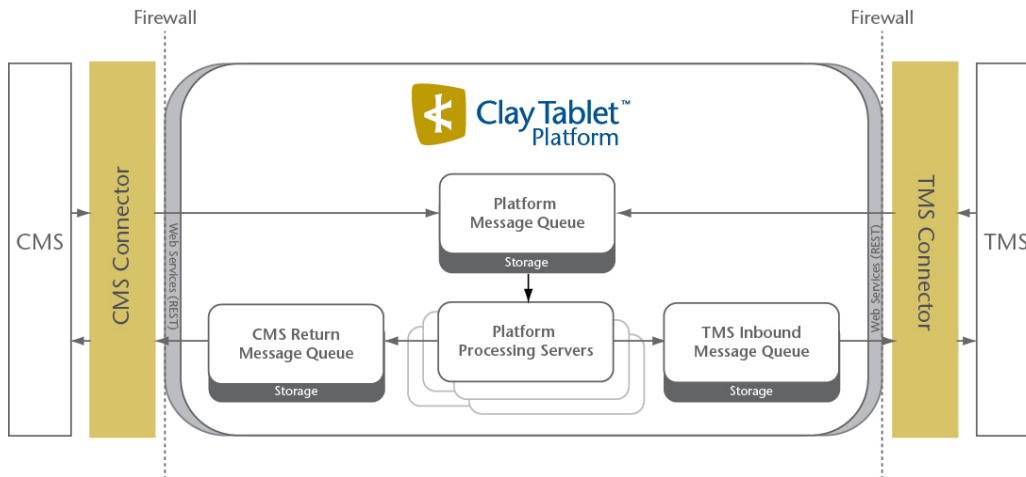
Clay Tablet works with existing infrastructure, technology, and code bases, which means faster implementations and preserving existing technology investments.

Note: This SDK contains information for coding connections to *both* Content Systems (content producers) *and* translation systems (translation providers). You probably will only be actually coding an interface for one side (content *or* translation), but this guide provides the information for both – so you can understand the functions of the other side as well.

You can ensure your Connector works with the latest Amazon AWS services using the libraries provided by Clay Tablet as part of this SDK package.

1.3 Using this Guide

Purpose of this guide

This guide describes everything you need to know to build a Connector to the Clay Tablet Platform, either from a CMS or a TMS.

It contains overview information and step-by-step, how-to procedures for creating a Connector to the Clay Tablet Translation Platform. It includes several code examples as well as some tips and best practices for using this development platform.

Who should use this guide

This guide is intended for developers at a CMS, TMS, or translation provider who want to build a Connector to the Clay Tablet Platform using Java.

Both content producers and translation providers use the SDK to build Connectors to the Clay Tablet Translation Platform.

How content producers use the SDK

Content producers use the SDK to build a *Content Connector*. This Connector sits between the Content Producer application, such as a CMS, and the Clay Tablet Translation Platform. It has the following functionality:

- sending content for translation

- sending metadata about translation jobs

- grouping assets into a group, in order to send multiple content items for translation as a single job

- retrieving updates about translation status

- retrieving translated content

How translation providers use the SDK

Translation providers use the SDK to build a *Translation Connector*. This Connector sits between the Translation Producer application, such as a TMS, and the Clay Tablet Translation Platform. It has the following functionality:

- receiving content for translation

- receiving metadata about translation jobs

- sending translation status updates

- sending translated content back to the content producer

What you should already know

This document assumes that:

- You are familiar with Java programming.

- Your company is a CMS or TMS publisher, or a translation provider.

How this guide is organized

This guide contains the following chapters:

Chapter	Description
"Welcome to the Clay Tablet Technologies SDK for Java" on page 8	A brief description of the Clay Tablet Translation solution and how it works, including an explanation of its components: the Clay Tablet Platform and Clay Tablet Translation Connectors. It also includes information about this guide and Clay Tablet Technologies Support contact information.

Chapter	Description
"Event Overview" on page 15	The Connector you build uses events, which are Java classes, to send content and other data to the Clay Tablet Platform and to retrieve content and other data from it. This chapter provides an overview of the events in the context of the objects that they use.
"Events that All Connectors Receive" on page 135	The classes (events) in this section are relevant when either a Content Producer or a Translation Provider builds a Connector.
"Events for Building a Content Connector" on page 33	The classes (events) in this section are relevant when a Content Producer builds a Connector.
"Events for Building a Translation Connector" on page 78	The classes (events) in this section are relevant when a Translation Provider builds a Connector.
"Events that All Connectors Receive" on page 135	The classes (events) in this section are relevant to building both a Content Connector and a Translation Connector.
"Job-Related Interfaces and Metadata-Related Classes" on page 139	These interfaces group content into jobs and provide job-related metadata.
"Testing Your Connector Using Clay Tablet Demo Files" on page 150	How to test the Connector you build.

Chapter	Description
"Appendix: High-Level Java Reference Information" on page 151	Reference information about the abstract classes, the Language and Account classes, interfaces, and return types used by the events described in this SDK.

How to find out more about Clay Tablet Translation

Sample code is included in the `samples` folder in the SDK package.

An SDK and guide are also available for .NET.

Documentation conventions

This guide uses the following conventions:

Convention	Description	Example
Bold	Names of objects, classes, methods, properties, events, and settings.	To handle a **StartAssetTask** event …
`Courier`	Sample code.	`AcceptAssetTask acceptAssetTask_ event = new AcceptAssetTask();`
Italics	Highlights terms to emphasize, variables, or document titles.	Rejects the translation to a single target language (an *asset task*).

Additional notes

Sample code in this guide is provided in Java.

1.4 Licensing Information

The contents of this SDK and all related materials, are licensed intellectual property of Clay Tablet Technologies. If you are unsure of the terms of usage related to these materials, please contact your Clay Tablet Account Manager.

To obtain a license, please contact Clay Tablet Sales:

Email @: sales@clay-tablet.com

Telephone: +1.416.363.0888 option "2"

1.5 How to Contact Clay Tablet Support

Support is available to licensed users only under the terms of their support contract. If you are in the process of evaluating this SDK for purchase and require assistance, please contact your Clay Tablet Account Manager.

To contact Clay Tablet Development Support:

Email @: dev.support@clay-tablet.com

1.6 Feedback and Comments

We are always interested in receiving feedback and suggestions regarding our products and supporting materials, such as this SDK. Please send us your comments or suggestions by e-mail to support@clay-tablet.com.

2 Event Overview

The Connector you build uses events, which are classes, to send content and other data to the Clay Tablet Platform and to retrieve content and other data from it. Each event controls one of the objects described below. Although the events that control these objects are not related in the hierarchy, looking at the events in the context of these objects is helpful in understanding how the entire system functions.

Object	Description	For Information about Events Using These Objects, See...
Asset	A content item for translation.	page 17
SupportAsset	A supporting document and its metadata. Support assets are not translated by the translation provider, but they provide helpful context for the translator.	page 18
AssetTask	Asset tasks are either assets (source content for translation) or target-specific translation tasks for translating a particular content item (asset). The task of translating a particular asset (content item) into a single language is a single asset task. Therefore suppose a content item will be translated into both French and German. The asset is the content item in the source language. There are three asset tasks: the original content item; the translation of the content item into French; and the translation of the content item into German.	page 19
AssetTaskQuote	A request for a quote when the Content Connector sends content for translation, or the quote itself.	page 22
AssetTaskState	The state of an asset task (translation task).	page 24
AssetTaskTranslation	An asset task that has been translated (translated content).	page 25
Project	A group of assets with the same Project ID. **Note:** You can also group assets as a job. For a comparison of jobs and projects, see "Grouping Assets for Translation" on page 33.	page 26

Object	Description	For Information about Events Using These Objects, See...
AssetTaskUpdate	The request for an update to previously translated content.	page 26
UpdatedAssetTask	Updated translated content.	page 28
Translation CorrectionAsset	The request to correct a translation, and later it is the actual corrected translation.	page 29
UpdateTMAsset	Translated content that the content producer sends to the translation provider so that it can update the translation memory (TM).	page 31
ProcessingError	Processing errors can occur when the Clay Tablet Platform is processing an event it receives.	page 32

2.1 Asset Events

The Content Connector creates *assets* (`Assets`), which are content or documents that it sends for translation. The Content Connector sends events about these assets to the Clay Tablet Platform, which then creates *asset tasks* (`AssetTasks`) to send to the Translation Connector. There is a separate asset task for each asset and target combination. For example, if an asset is being translated into two languages, it has two corresponding asset tasks. For more information on `AssetTask` events, see page 19.

The following diagram shows how these events work together in sequence:

Note: In the diagram above, events with dotted lines are not asset events, so they are not described in this section.

Event	Content Connector	Clay Tablet Platform	Description
CreateAsset	sends	receives	The Content Connector creates an asset to send for translation. This asset is content or a file.
CancelAsset	sends	receives	The Content Connector cancels an asset that it previously sent for translation. The Platform then launches events to notify the provider of the cancellation (CanceledAssetTask) and remove any files that have been uploaded for the asset.

2.2 SupportAsset Events

A support asset (`SupportAsset`) is a document that the content producer sends to the translation provider to provide helpful context for the translator. It is not translated by the translation provider.

The following diagram shows how SupportAsset events work together in sequence:

Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
CreateSupportAsset	sends	receives		The Content Connector launches this event to create a new support asset.
StartSupportAsset		creates	retrieves	The Clay Tablet Platform launches this event to send a new support asset to the Translation Connector.
CancelSupportAsset	sends	receives		The Content Connector launches this event to cancel a support asset it previously created.
CanceledSupportAsset		creates	retrieves	The Clay Tablet Platform launches this event to notify the Translation Connector that the support asset is canceled and to remove the file that was uploaded for the support asset.

2.3 AssetTask Events

The Clay Tablet Platform creates an *asset task* from assets it receives from the Content Connector. An asset task represents a work task that the translation provider performs for an asset.

Asset tasks are either assets (source content for translation) or target-specific translation task for translating a particular content item (asset). The task of translating a particular asset (content item) into a single language is a single asset task. Therefore suppose a content item will be translated into both French and German. The asset is the content item in the source language. There are three asset tasks: the original content item; the translation of the content item into French; and the translation of the content item into German.

The following diagram shows how AssetTask events work together in sequence:
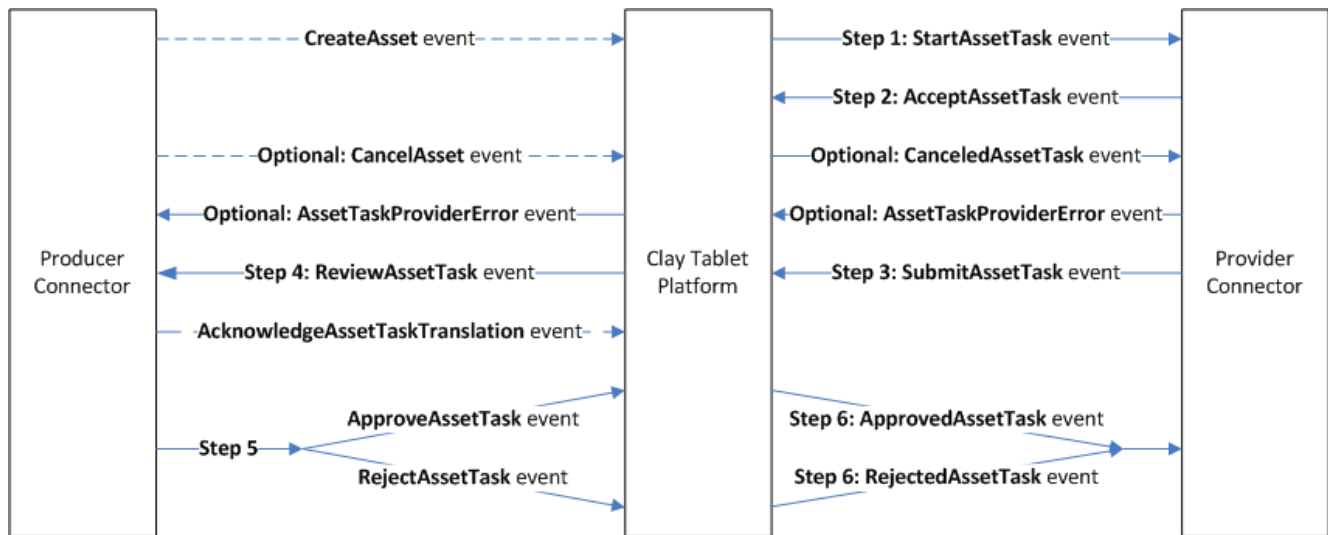
Note: For a full-page version of this image in landscape orientation, which is suitable for printing, see page 185.

Note: In the diagram above, events with dotted lines are not asset-task events, so they are not described in this section.

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	StartAssetTask		creates	retrieves	The Clay Tablet Platform notifies the Translation Connector of a translation task.

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
2	AcceptAssetTask		receives	sends	The Translation Connector notifies the Clay Tablet Platform that it accepts the translation task.
3	SubmitAssetTask		receives	sends	The Translation Connector notifies the Clay Tablet Platform that the translation provider has completed the translation task, and it sends it for review.
4	ReviewAssetTask	retrieves	creates		The Clay Tablet Platform notifies the Content Connector that the translation task is complete, and it sends it for review.
5	Approve AssetTask	sends	receives		The Content Connector launches this task to indicate that the content producer has reviewed the translation and approves it.
	RejectAssetTask	sends	receives		The Content Connector launches this task to indicate that the content producer has reviewed the translation and rejects it.

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
6	Approved AssetTask		creates	retrieves	The Clay Tablet Platform indicates to the Translation Connector that the content producer approves the translation.
	Rejected AssetTask		creates	retrieves	The Clay Tablet Platform indicates to the Translation Connector that the content producer rejects the translation.
optional	Canceled AssetTask		creates	retrieves	If the Content Connector informs the Platform that it canceled an asset task, the Platform informs the Translation Connector. It also cancels the related asset task (translation).
optional	AssetTask ProviderError	retrieves	▪ creates ▪ receives	sends	If the Translation Connector encounters a problem during translation (while processing the asset task), it informs the Platform, which then informs the Content Connector.

2.4 AssetTaskQuote Events

The Content Connector can request a quote when it sends content for translation. This is an *asset task quote*. The Clay Tablet Platform sends this request to the Translation Connector.

Note: Use these events only if the translation provider supports providing quotes.

The following diagram shows how AssetTaskQuote events work together in sequence:
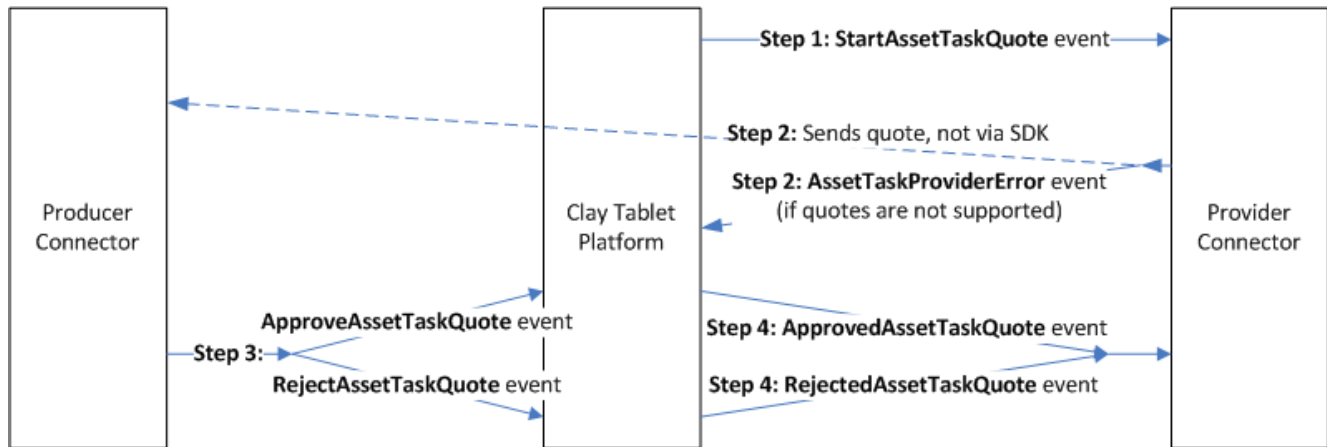
Note: In the diagram above, the step 2 with a dotted line is not an SDK event.

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	StartAssetTaskQuote		creates	retrieves	The Clay Tablet Platform sends a request for a quote to the Translation Connector, based on a request from the Content Connector.
2					The translation provider sends the quote to the content producer, outside this SDK.
	AssetTaskProviderError		receives	sends	If the translation provider does not provide quotes, it sends this event.

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
3	ApproveAssetTaskQuote	sends	receives		The Content Connector informs the Clay Tablet Platform that it accepts the quote.
	RejectAssetTaskQuote	sends	receives		The Content Connector informs the Clay Tablet Platform that it rejects the quote.
4	ApprovedAssetTaskQuote		creates	retrieves	The Clay Tablet Platform informs the Translation Connector that the content producer accepts the quote. The Platform instructs the Connector to start processing the asset task (start the translation work).
	RejectedAssetTaskQuote		creates	retrieves	The Clay Tablet Platform informs the Translation Connector that the content producer rejects the quote.

2.5 AssetTaskState Events

An AssetTaskState indicates the state of an asset task (translation task).

The following diagram shows how AssetTaskState events work together in sequence:

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	UpdateAssetTaskState		receives	sends	The Translation Connector sends this event to the Clay Tablet Platform to provide an update about the progress of the asset task (translation).
2	UpdatedAssetTaskState	retrieves	creates		The Clay Tablet Platform sends the update about the asset task (translation) to the Content Connector.

2.6 AssetTaskTranslation Events

An AssetTaskTranslation is an asset task that has been translated (translated content).

The following diagram shows how AssetTaskTranslation events work together in sequence:

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	Acknowledge AssetTaskTranslation	sends	receives		The Content Connector sends this event to the Clay Tablet Platform when it acknowledges receiving the translated content. **Note:** This is not the same as the Content Provider accepting the translation, which is the `ApproveAssetTask` event.
2	Acknowledged AssetTaskTranslation		creates	retrieves	The Clay Tablet Platform informs the Translation Connector that the Content Connector acknowledged receiving the translated content.

2.7 Project Events

A *project* is a set of assets that are submitted together for translation.

The following diagram shows how project events work together in sequence:

Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
SubmitProject	sends	▪ creates ▪ receives	retrieves	▪ The Content Connector launches this event when it submits a project for translation. ▪ The Clay Tablet Platform launches this event when it bundles together a set of assets to send for translation.
CancelProject	sends	receives		The Content Connector launches this event to cancel a project it previously submitted. This also launches events to notify the provider of the cancellation and remove any files that have been uploaded for the project.
CompletedProject	retrieves	creates		The Clay Tablet Platform launches this event after all the tasks for a project have been approved or cancelled, and it marks the project as completed.

2.8 AssetTaskUpdate Events

An `AssetTaskUpdate` is a request for an update to previously translated content.

The following diagram shows how AssetTaskUpdate events work together in sequence:

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	NeedAssetTaskUpdate	sends	receives		The Content Connector notifies the Clay Tablet Platform that there is updated content to translate.
2	StartNeedAssetTaskUpdate		creates	retrieves	The Clay Tablet Platform instructs the Translation Connector to translate the updated content.
3	AcceptNeedAssetTaskUpdate		receives	sends	The Translation Connector notifies the Clay Tablet Platform that it accepts updating the translation for the content it previously translated.

2.9 UpdatedAssetTask Events

An `UpdatedAssetTask` is updated translated content.

The following diagram shows how UpdatedAssetTask events work together in sequence:

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	SubmitUpdatedAssetTask		receives	sends	The Translation Connector sends the updated content to the Clay Tablet Platform.
2	ReviewUpdatedAssetTask	retrieves	creates		The Clay Tablet Platform sends the updated translated content to the Content Connector for review.
3	ReceivedUpdatedAssetTask	sends	receives		The Content Connector acknowledges that it has received the updated translated content for review.

2.10 TranslationCorrectionAsset Events

A *TranslationCorrectionAsset* is the request to correct a translation, and later it is the actual corrected translation.

The following diagram shows how TranslationCorrectionAsset events work together in sequence:
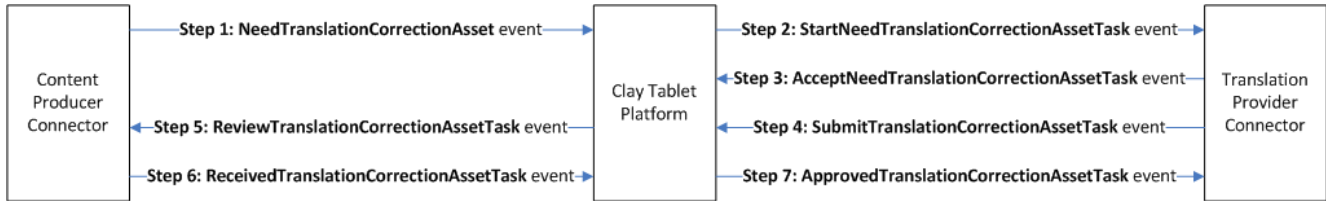
Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	NeedTranslation CorrectionAsset	sends	receives		The Content Connector informs the Clay Tablet Platform that translation correction is required.
2	StartNeedTranslation CorrectionAssetTask		creates	retrieves	The Clay Tablet Platform sends the Translation Connector the translation that requires correction.
3	AcceptNeedTranslation CorrectionAssetTask		receives	sends	The Translation Connector sends the Clay Tablet Platform its acceptance of the translation correction task.

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
4	SubmitTranslation CorrectionAssetTask		receives	sends	After the translation is corrected, the Translation Connector sends the Clay Tablet Platform the corrected translation for review.
5	ReviewTranslation CorrectionAssetTask	retrieves	creates		The Clay Tablet Platform sends the Content Connector the corrected translated content to review.
6	ReceivedTranslation CorrectionAssetTask	sends	receives		The Content Connector has reviewed and approved the translation correction.
7	ApprovedTranslation CorrectionAssetTask		creates	retrieves	The Clay Tablet Platform notifies the Translation Connector that the content provider has approved the corrected translation.

2.11 UpdateTMAsset Events

An `UpdateTMAsset` is translated content that the content producer sends to the translation provider so that it can update the translation memory (TM).

The following diagram shows how UpdateTMAsset events work together in sequence:

Step	Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
1	CreateUpdateTMAsset	sends	receives		The Content Connector sends the corrected translation content for updating the TM to the Clay Tablet Platform.
2	StartUpdateTMAsset		creates	retrieves	The Clay Tablet Platform sends the corrected translation content for updating the TM to the Translation Connector.
3	AcceptUpdateTMAsset		receives	sends	The Translation Connector accepts the corrected translation content for updating the TM.

2.12 ProcessingError Events

Processing errors can occur when the Clay Tablet Platform is processing an event that it receives.

The following diagram shows how ProcessingError events work together in sequence:

Event	Content Connector	Clay Tablet Platform	Translation Connector	Description
ProcessingError	retrieves	creates	retrieves	The Clay Tablet Platform sends this event to both the Content Connector and the Translation Connector when a processing error occurs.
AssetTaskProcessingError	retrieves	creates	retrieves	If the error occurs specifically to an asset task (translation), the Clay Tablet Platform sends additional information to both the Content Connector and the Translation Connector.

3 Events for Building a Content Connector

A content management system (CMS) or another content application implements a Clay Tablet *Content Connector* to:

- group multiple content items (*assets*) together, to send them to the translation provider as a single job or project. For details, see "Grouping Assets for Translation" on page 33 and "Grouping Assets into Jobs Using Job Metadata Interfaces" on page 34.

- send files for translation to the Clay Tablet Platform storage buckets and translation request messages to the Clay Tablet Platform, using events. For a list and descriptions of these events, see "Events a Content Connector Can Send" on page 35. For an example of using events to send content for translation, see "Code Sample: Sending Content for Translation " on page 60.

- retrieve translated content from the Clay Tablet Platform, using events. For details, see "Events a Content Connector Receives" on page 64. For examples of using events to retrieve translated content, see "Code Samples: Receiving Events" on page 73.

The Clay Tablet Platform uses Message Queues to provide asynchronous communications with external applications, such as a CMS. For information about asynchronous communications, see http://en.wikipedia.org/wiki/Asynchronous_communication.

Note about the XML format of assets sent for translation: The format in which you send content for translation is important. There is an industry standard called XLIFF, which we recommend you review and adhere to if possible for content sent for translation. For information about this standard, see: http://docs.oasis-open.org/xliff/xliff-core/xliff-core.html

3.1 Grouping Assets for Translation

A producer often groups multiple assets to submit them together to the translation provider. You can group assets as a *project*, a *job*, or both.

Grouping Assets as a Project

You can use the `SubmitProject` event to group multiple assets submitted to the translation provider into a single project. In the `CreateAsset` event, you use the `setProjectId` method to specify the Project ID for each asset. You can also associate supports assets with a project using the `CreateSupportAsset` event and the `setProjectId` method.

Grouping assets as a project has the following advantage:

- A project is open-ended, because it does not include a fixed number of assets. After submitting a project, you can use the `CreateAsset` event to add additional assets by specifying the same project ID.

Grouping assets as a project has the following disadvantages:

■ Since Clay Tablet's message-base architecture is asynchronous, the provider does not always receive the messages in the same order that the producer sends them. Even if the producer always sends the `SubmitProject` event after sending all the `CreateAsset` events for the project, the messages may not arrive in the same order. As the result, the translation provider cannot determine when it has received all the assets in the project.

■ There is very limited metadata associated with a project. The translation provider may find this metadata insufficient.

Grouping Assets as a Job

A job is identified by job ID. The number of assets in a job is specified by the asset task count.

The `IJobMetadata` interface specifies the job ID (`jobId`) and the asset task count (`AssetTaskCount`).

Grouping assets as a job has the following advantages:

■ Because the number of assets in a job is specified, the translation provider can determine when it receives all the assets in a job.

■ The producer can associate extensive metadata with the project, using additional interfaces.

Grouping assets as a job has the following disadvantage:

■ Because the number of assets in a job is specified, the provider can not add additional assets to the job later on.

Note: If a project contains exactly one job, the project ID can be the same as the job ID.

For detailed information on grouping content for translation as a job, see "Grouping Assets into Jobs Using Job Metadata Interfaces" on page 34.

3.2 Grouping Assets into Jobs Using Job Metadata Interfaces

For a comparison of grouping assets into projects or jobs, see "Grouping Assets for Translation" on page 33.

Reference	com.claytablet.model.event.metadata
Supported Versions	Version 3.2 and higher

Clay Tablet provides the following interfaces to support grouping assets into a job and to support a rich set of metadata about a job:

Interface	Description
IJobMetadata	Specifies the metadata for a job, including the job ID (`jobId`) and the asset task count (`AssetTaskCount`). It specifies an extensible set of additional translation-provider-specific metadata.

Interface	Description
IMetadataGroup	Specifies the metadata for a group of assets in a job.
IMetadata	Specifies the metadata for an asset in a job.
IAttribute	Specifies the names and values of metadata of assets in a job.

The `IMetadataGroup`, `IMetadata`, and `IAttribute` interfaces define a mechanism to extend standard set of job metadata with translation-provider-specific metadata.

The MetadataFactory class contains a group of static factory methods to create instances of job metadata-related interfaces. You use these factory methods instead of directly instantiating implementation classes of these interfaces.

3.2.1 Attaching Job Metadata to Assets

1. Use the factory methods from the MetadataFactory class to create the `IJobMetadata` interface, and the other interfaces, if required.

2. Set all the metadata fields.

3. In the `CreateAsset` and `CreateSupportAsset` classes, use the `setJobMetadata` method to attach the metadata to the assets and support assets for the job.

All assets and support assets with the same job metadata attached are part of the same job.

3.3 Events a Content Connector Can Send

Reference	com.claytablet.model.event.producer

A Content Connector can launch the following events:

Event	Description
AcknowledgeAssetTaskTranslation	Successfully receives translated content in a single target language (asset task).
ApproveAssetTask	Reviews and approves translated content in a single target language (asset task).

Event	Description
ApproveAssetTaskQuote	Reviews and approves a quote for translating content into a single target language (asset task). This typically enables the translation to start.
CancelAsset	Cancels content it previously sent for translation (an *asset*). This also launches events to notify the translation provider of the cancellation and removes any files that were uploaded for the translation request.
CancelProject	Cancels a translation project it previously submitted. This also launches events to notify the translation provider of the cancellation and removes any files that were uploaded for the project.
CancelSupportAsset	Cancels supporting content (*support asset*) it previously sent to the translation provider. This type of content is not translated. This event also launches events to notify the translation provider of the cancellation and removes the file that was uploaded for the support asset.
CreateAsset	Sends content for translation into one or more target languages. This content is an *asset*.
CreateSupportAsset	Sends supporting content (a *support asset*) to the translation provider to provide helpful context for the translator. This type of content is not translated.
CreateUpdateTMAsset	Sends corrected translated content back to the translation provider so that it can update the translation memory (TM).
NeedAssetTaskUpdate	Sends the translation provider updated content to translate. (An earlier version of the content was previously translated.)
NeedTranslationCorrectionAsset	Sends the translation provider a request to correct translated content.
ReceivedTranslationCorrectionAssetTask	Indicates that it has reviewed and approved the translation correction.
ReceivedUpdatedAssetTask	Indicates that it has received a translation update for review.

Event	Description
RejectAssetTask	Rejects the translation to a single target language (an *asset task*). (For example, the translation itself is incomplete or wrong.) This event may contain notes indicating the reason for rejection and a new file might have been uploaded for the asset task that a translation provider can review.
RejectAssetTaskQuote	Rejects a quote for translation to a single target language (an *asset task*). This typically cancels the translation to that target language.
SubmitProject	Submits a project for processing.

3.3.1 Acknowledging Receiving Translated Content (AcknowledgeAssetTaskTranslation)

Class	AcknowledgeAssetTaskTranslation
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	AcknowledgeAssetTaskTranslation ()
Supported Versions	Version 3.3 and higher

The Content Connector launches the AcknowledgeAssetTaskTranslation event when it successfully receives translated content in a single target language (asset task).

Note: This is different than the content provider accepting the translation, which is the ApproveAssetTask event, described on page 38.

For information about asset-task-translation events, see page 25.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
void	setAssetTaskId (java.lang.String assetTaskId)	

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	validate

3.3.2 Approving Translated Content (ApproveAssetTask)

Class	ApproveAssetTask
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	ApproveAssetTask ()
Supported Versions	All versions

The Content Connector launches the `ApproveAssetTask` event after it reviews and approves translated content in a single target language (asset task).

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getReviewNote ()	
boolean	isWithContent ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	

Return Type	Method and Parameters	Additional Information
void	setReviewNote (java.lang.String reviewNote)	
void	setWithContent (boolean withContent)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.3 Approving a Translation Quote (ApproveAssetTaskQuote)

Class	ApproveAssetTaskQuote
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	ApproveAssetTaskQuote ()
Supported Versions	Version 3.5 and higher

The Content Connector launches the `ApproveAssetTaskQuote` event after it reviews and approves a quote for translating content into a single target language (asset task). This typically enables the translation to start.

For information about asset-task-quote events, see page 22.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getApprovalNote ()	

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
void	setApprovalNote (java.lang.String approvalNote)	
void	setAssetTaskId (java.lang.String assetTaskId)	

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	validate

3.3.4 Canceling Content Sent for Translation (CancelAsset)

Class	CancelAsset
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IEvent
Constructor	CancelAsset ()
Supported Versions	All versions

The Content Connector launches the `CancelAsset` event to cancel content it previously sent for translation (an *asset*). This also launches events to notify the translation provider of the cancellation and removes any files that were uploaded for the translation request.

Note: Many translation technologies *do not* support canceling content sent for translation – so be aware that these features may not work in your particular implementation.

For information about asset events, see page 17.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.

Return Type	Method and Parameters	Additional Information
void	setAssetId (java.lang.String assetId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.5 Canceling a Project Sent for Translation (CancelProject)

Class	CancelProject
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent, IProjectAware
Constructor	CancelProject ()
Supported Versions	All versions

The Content Connector launches the `CancelProject` event to cancel a translation project it previously submitted. This also launches events to notify the translation provider of the cancellation and removes any files that were uploaded for the project.

Note: Many translation technologies *do not* support canceling a project – so be aware that these features may not work in your particular implementation.

For information about project events, see page 26.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getProjectId ()	Specified by `getProjectId` in the IProjectAware interface.

Return Type	Method and Parameters	Additional Information
	setProjectId (java.lang.String projectId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.6 Canceling Supporting Content Sent to the Translation Provider (CancelSupportAsset)

Class	CancelSupportAsset
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent
Constructor	CancelSupportAsset ()
Supported Versions	All versions

The Content Connector launches the `CancelSupportAsset` event to cancel supporting content (*support asset*) it previously sent to the translation provider, to provide helpful context for the translator. This type of content is not translated.

This event also launches events to notify the translation provider of the cancellation and removes the file that was uploaded for the support asset.

Note: Many translation technologies *do not* support canceling supporting content – so be aware that these features may not work in your particular implementation.

For information about support-asset events, see page 18.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getSupportAssetId ()	
void	setSupportAssetId (java.lang.StringsupportAssetId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.7 Sending Content for Translation (CreateAsset)

Class	CreateAsset
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IEvent, IProjectAware
Constructor	CreateAsset ()
Supported Versions	All versions

The Content Connector launches the `CreateAsset` event to send content for translation into one or more target languages. This content is an *asset*.

Best practice: Group related assets together as a project or a job so that the provider will process the translations together. For information on considerations on deciding whether to group assets as a project or a job, see "Grouping Assets for Translation" on page 33.

Note: If a project identifier is not assigned to an asset, the system bundles the assets and assigns a project IDs to them.

▶ To group related assets together for processing as a single project, use the `setProjectId` method to assign a project identifier, and use the `SubmitProject` event, described in "Submitting a Project for Translation (SubmitProject)" on page 58, to describe and submit the project.

▶ For detailed instructions on grouping related assets as a job, see "Grouping Assets into Jobs Using Job Metadata Interfaces" on page 34.

For information about asset events, see page 17.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAdditionalServicesRequest ()	
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
java.lang.String	getAssetNativeId ()	
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String[]	getTargetLanguageCodes ()	
boolean	isPendingQuote ()	Supported in versions 3.5 and higher of the SDK. See the note below for additional information.

Return Type	Method and Parameters	Additional Information
void	setAdditionalServicesRequest (java.lang.String additionalServicesRequest)	
void	setAssetId (java.lang.String assetId)	
void	setAssetNativeId (java.lang.String assetNativeId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setJobMetadata (IJobMetadata jobMetaData)	
void	setName (java.lang.String name)	
void	setPendingQuote (boolean pendingQuote)	Supported in versions 3.5 and higher of the SDK. See the note below for additional information.
void	setProjectId (java.lang.String projectId)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	

Return Type	Method and Parameters	Additional Information
void	setTargetLanguageCodes (java.lang.String [] targetLanguageCodes)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

Note: If the value of the `isPendingQuote` and `setPendingQuote` methods are `true`, the asset task is submitted to the translation to provide a quote, and not immediately for translation. After receiving the quote, the producer can use the `ApproveAssetTaskQuote` method to approve the quote, which instructs the provider to start the translation. Alternatively, the producer can use the `RejectAssetTaskQuote` method to reject the quote, which cancels the asset task. The default value of these methods is `false`.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.8 Sending Supporting Content to Translation (CreateSupportAsset)

Class	CreateSupportAsset
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IEvent, IProjectAware
Constructor	CreateSupportAsset ()
Supported Versions	All versions

The Content Connector launches the `CreateSupportAsset` event to send supporting content *support asset* to the translation provider to provide helpful context for the translator. This type of content is not translated.

For information about support-asset events, see page 18.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by `getProjectId` in the IProjectAware interface.
java.lang.String	getSupportAssetId ()	
java.lang.String	getSupportAssetNativeId ()	
java.lang.String	getTags ()	
void	setAssetId (java.lang.String assetId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	

Return Type	Method and Parameters	Additional Information
void	setJobMetadata (IJobMetadata jobMetaData)	
void	setName (java.lang.String name)	
void	setProjectId (java.lang.String projectId)	
void	setSupportAssetId (java.lang.String supportAssetId)	
void	setSupportAssetNativeId (java.lang.String supportAssetNativeId)	
void	setTags (java.lang.String tags)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.9 Sending Corrected Translated Content to Update the Translation Memory (CreateUpdateTMAsset)

Class	CreateUpdateTMAsset
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IEvent

Constructor	CreateUpdateTMAsset ()
Supported Versions	Version 3.0 and higher

The Content Connector launches the `CreateUpdateTMAsset` event when the content producer sends corrected translated content back to the translation provider so that it can update the translation memory (TM).

For information about update-TM-asset events, see page 31.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getRelatedAssetTaskId ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	

Return Type	Method and Parameters	Additional Information
void	setJobMetadata (IJobMetadata jobMetaData)	
void	setRelatedAssetTaskId (java.lang.String relatedAssetTaskId)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.10 Sending Content for a Translation Update (NeedAssetTaskUpdate)

Class	NeedAssetTaskUpdate
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	NeedAssetTaskUpdate ()
Supported Versions	Version 3.0 and higher

The Content Connector launches the `NeedAssetTaskUpdate` event when the content producer sends the translation provider updated content to translate. (An earlier version of the content was previously translated.)

For information about asset-task-update events, see page 26.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
void	setAssetTaskId (java.lang.String assetTaskId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.11 Sending Translated Content for Correction (NeedTranslationCorrectionAsset)

Class	NeedTranslationCorrectionAsset
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IEvent, IProjectAware
Constructor	NeedTranslationCorrectionAsset ()
Supported Versions	Version 3.0 and higher

The Content Connector launches the `NeedTranslationCorrectionAsset` event when the content producer asks the translation provider to correct translated content.

■ If a project identifier is assigned, then the asset is not processed until the project it belongs to is submitted.

■ If no project identifier is assigned, the system bundles the asset and assign a project to it.

Important: If there are known related assets that should be submitted at the same time, assign a project identifier to each asset.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
java.lang.String	getAssetNativeId ()	
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetNativeId (java.lang.String assetNativeId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	

Return Type	Method and Parameters	Additional Information
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setJobMetadata (IJobMetadata jobMetaData)	
void	setName (java.lang.String name)	
void	setProjectId (String projectId)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	
void	setTargetLanguageCodes (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.12 Acknowledging Receiving Translated Content for Correction (ReceivedTranslationCorrectionAssetTask)

Class	ReceivedTranslationCorrectionAssetTask

Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	ReceivedTranslationCorrectionAssetTask ()
Supported Versions	Version 3.0 and higher

The Content Connector launches the `ReceivedTranslationCorrectionAssetTask` event when the content producer has reviewed and approved the translation correction.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getReviewNote ()	
boolean	isWithContent ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setReviewNote (java.lang.String reviewNote)	
void	setWithContent (boolean withContent)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.13 Acknowledging Receiving Updated Translated Content for Review (ReceivedUpdatedAssetTask)

Class	ReceivedUpdatedAssetTask
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	ReceivedUpdatedAssetTask ()
Supported Versions	Version 3.0 and higher

The Content Connector launches the `ReceivedUpdatedAssetTask` event when the content producer receives a `ReviewUpdatedAssetTask` event, indicating that the translation update is ready for review.

For information about updated-asset-task events, see page 28.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
void	setAssetTaskId (java.lang.String assetTaskId)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.14 Rejecting Translated Content (RejectAssetTask)

Class	RejectAssetTask
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	RejectAssetTask ()
Supported Versions	All versions

The Content Connector launches the `RejectAssetTask` event when it rejects the translation to a single target language (an *asset task*). (For example, the translation itself is incomplete or wrong.) This event may contain notes indicating the reason for rejection and a new file might have been uploaded for the asset task that a translation provider can review.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getReviewNote ()	

Return Type	Method and Parameters	Additional Information
boolean	isWithContent ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setReviewNote (java.lang.String reviewNote)	
void	setWithContent (boolean withContent)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.3.15 Rejecting a Translation Quote (RejectAssetTaskQuote)

Class	RejectAssetTaskQuote
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	RejectAssetTaskQuote ()
Supported Versions	Version 3.5 and higher

The Content Connector launches the `RejectAssetTaskQuote` event when it rejects a quote for translation to a single target language (an *asset task*). This typically cancels the translation to that target language.

For information about asset-task-quote events, see page 22.

This class has the following methods:

Return Type	Method	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getRejectionNote ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setRejectionNote (java.lang.String rejectionNote)	

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	validate

3.3.16 Submitting a Project for Translation (SubmitProject)

Class	SubmitProject
Reference	com.claytablet.model.event.producer
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent, IProjectAware
Constructor	SubmitProject ()
Supported Versions	All versions

The Content Connector launches the `SubmitProject` event when it submits a project for processing.

Note: The Clay Tablet Platform can also launch this event bundles together a floating set of content (assets) for processing.

For information about project events, see page 26.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAdditionalServicesRequest ()	
java.util.Date	getDeadline ()	
java.lang.String	getDescription ()	
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getProjectNativeId ()	
java.lang.String	getTags ()	
void	setAdditionalServicesRequest (java.lang.String additionalServicesRequest)	
void	setDeadline (java.util.Date deadline)	
void	setDescription (java.lang.String description)	
void	setName (java.lang.String name)	
void	setProjectId (java.lang.String projectId)	
void	setProjectNativeId (java.lang.String projectNativeId)	
void	setTags (java.lang.String tags)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.4 Code Sample: Sending Content for Translation

The following code sample illustrates how to use the events described in this section to send content for translation.

Note: The following sample code is also included in the SDK package, in the \samples\src\main\java\com\claytablet\app\ProducerEventSenderSample.java file.

```java
public class ProducerEventSenderSample {

  private static final Log log = LogFactory
            .getLog(ProducerEventSenderSample.class);

    public static void main(String args[]) throws Exception
    {

      log.debug("Initialize dependencies.");
      // Set up the preferred Guice injector.
      Injector injector = Guice.createInjector(new DefaultSQSS3Module());

      // Retrieve the default producer sender instance via Guice.
      ProducerSender sender = injector.getInstance(ProducerSender.class);
```

```java
// Create a new project ID. We will assign this ID to all assets and
// support assets. This will group the assets and support assets together
// for service routing.
String projectId = IdGenerator.createId();


// Create an IJobMetadata interface to group all the assets into one job.
IJobMetadata  jobMetadata  =  JobMetadataFactory.newJobMetadata();


// One job per project.
jobMetadata.setJobId(projectId);
jobMetadata.setJobName("jobName");


// 4 assets, 2 target languages per asset, so there are 8 asset tasks.
jobMetadata.setAssetTaskCount(8);
jobMetadata.setProducerId("test-producerId");
jobMetadata.setPoReference("poReference");
jobMetadata.setDescription("description");
jobMetadata.setClient("ClayTablet");
jobMetadata.setCreator("foo");
jobMetadata.setCreatorContact("foo@clay-tablet.com");
jobMetadata.setStartDate("01/01/2011");
jobMetadata.setDueDate("01/01/2012");


// Create the first asset.
CreateAsset asset1 = new CreateAsset();
asset1.setProjectId(projectId);


// It is very useful to set a reference of your content to
// AssetNativeId, such as "contentGUID|languageID|versionID",
// and when the translation is completed, producer will get a
// ReviewAsstTask event, and ReviewAsstTask.getAssetNativeId() will
// return the reference Info.
asset1.setAssetNativeId("reference-to-asset1");
asset1.setName("First Asset");
asset1.setTags("first, asset");
asset1.setDescription("First Asset Description.");
asset1.setContentType(ContentType.Technical);
```

```java
asset1.setFileType(FileType.Text);
asset1.setFileExt("txt");
asset1.setSourceLanguageCode(Language.English_US);
String[] targetLanguageCodes = new String[2];
targetLanguageCodes[0] = Language.French;
targetLanguageCodes[1] = Language.Spanish;
asset1.setTargetLanguageCodes(targetLanguageCodes);
asset1.setAdditionalServicesRequest(
        "First Asset - Additional Services Request.");


// Attach job metadata.
asset1.setJobMetadata(jobMetadata);


// Send the event.
sender.sendEvent(asset1, "./files/source/asset1.txt");


// Create the second asset.
CreateAsset asset2 = new CreateAsset();
asset2.setProjectId(projectId);
asset2.setAssetNativeId("reference-to-asset2");
asset2.setName("Second Asset");
asset2.setTags("second, asset");
asset2.setDescription("Second Asset Description.");
asset2.setContentType(ContentType.Technical);
asset2.setFileType(FileType.PDF);
asset2.setFileExt("pdf");
asset2.setSourceLanguageCode(Language.English_US);
targetLanguageCodes = new String[2];
targetLanguageCodes[0] = Language.French;
targetLanguageCodes[1] = Language.Spanish;
asset2.setTargetLanguageCodes(targetLanguageCodes);
asset2.setAdditionalServicesRequest(
        "Second Asset - Additional Services Request.");


// Send the event.
sender.sendEvent(asset2, "./files/source/asset2.pdf");
```

```java
// Attach job metadata.
asset2.setJobMetadata(jobMetadata);


// Create the first support asset.
CreateSupportAsset supportAsset1 = new CreateSupportAsset();
supportAsset1.setProjectId(projectId);
supportAsset1.setSupportAssetNativeId("ref-supportAsset1");
supportAsset1.setName("First Support Asset");
supportAsset1.setTags("first, support, asset");
supportAsset1.setDescription("First Support Asset Description");
supportAsset1.setContentType(ContentType.Technical);
supportAsset1.setFileType(FileType.Text);
supportAsset1.setFileExt("txt");


// Attach job metadata.
supportAsset1.setJobMetadata(jobMetadata);


// Send the event.
sender.sendEvent(supportAsset1, "./files/source/supportAsset1.txt");


// Create the second support asset.
CreateSupportAsset supportAsset2 = new CreateSupportAsset();


// Assign it to an asset instead of to a project.
supportAsset2.setAssetId(asset2.getAssetId());
supportAsset2.setSupportAssetNativeId("ref-supportAsset2");
supportAsset2.setName("Second Support Asset");
supportAsset2.setTags("second, support, asset");
supportAsset2.setDescription("Second Support Asset Description");
supportAsset2.setContentType(ContentType.Technical);
supportAsset2.setFileType(FileType.Other);
supportAsset2.setFileExt("dat");


// Attach job metadata.
supportAsset2.setJobMetadata(jobMetadata);


// Send the event.
```

```
        sender.sendEvent(supportAsset2, "./files/source/supportAsset2.dat");


        // Submit the project.
        SubmitProject project = new SubmitProject();
        project.setProjectId(projectId);
        project.setProjectNativeId("project-submission-test");
        project.setName("Project Submission Test");
        project.setTags("project, submission, test");
        project.setDescription("Project Submission Test Description.");
        project.setAdditionalServicesRequest(
                "Project Submission Test - Additional Services Request.");


        // Send the event.
        sender.sendEvent(project);
    }
}
```

3.5 Events a Content Connector Receives

Reference	com.claytablet.model.event.platform

A Content Connector can receive the following events from the Clay Tablet Platform:

Event	Description
CompletedProject	Receives notification that the project is marked as completed, because all the project tasks were either approved or canceled.
ReviewAssetTask	Receives notification that translated content is ready for review.
ReviewTranslationCorrectionAssetTask	Receives notification that the translation correction is ready for review.
ReviewUpdatedAssetTask	Receives notification that the translation update is ready for review.

Event	Description
UpdatedAssetTaskState	Receives notification that the translation provider has updated the state and/or the estimated arrival time of translated content to a particular language (an *asset task*).

Note: A Content Connector also receives the `ProcessingError` and `AssetTaskProcessingError` events, described in "Events that All Connectors Receive" on page 135.

3.5.1 Receiving Notification of a Completed Project (CompletedProject)

Class	CompletedProject
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent, IProjectAware
Constructor	CompletedProject ()
Supported Versions	All versions

The Clay Tablet Platform launches the `CompletedProject` event and sends it to the Content Connector. It launches this event when it marks the project as completed, because all the project tasks were either approved or canceled.

Recommendation: After the Content Connector receives this event, it can call the CMS to flag the project or bundle as completed or ready for the next workflow step.

For information about project events, see page 26.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getProjectId ()	Specified by `getProjectId` in the IProjectAware interface.
java.lang.String	getProjectNativeId ()	
void	setProjectId (java.lang.String projectId)	

Return Type	Method and Parameters	Additional Information
void	setProjectNativeId (java.lang.String projectNativeId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.5.2 Receiving an Instruction to Review Translated Content (ReviewAssetTask)

Class	ReviewAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IAssetTaskAware, IEvent
Constructor	ReviewAssetTask ()
Supported Versions	All versions

The Clay Tablet Platform launches the ReviewAssetTask event and sends it to the Content Connector. It launches this event after a translation provider submits translated content back to the platform, indicating that it is ready for review.

A user of the Content Connector, such as a content editor, can then review the translation, often as a workflow step in the CMS. The user can then either approve or reject the translation.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetNativeId ()	
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetNativeId (java.lang.String assetNativeId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.5.3 Receiving an Instruction to Review Corrected Translated Content (ReviewTranslationCorrectionAssetTask)

Class	ReviewTranslationCorrectionAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IAssetTaskAware, IEvent
Constructor	ReviewTranslationCorrectionAssetTask ()
Supported Versions	Version 3.0 and higher

The Clay Tablet Platform launches the `ReviewTranslationCorrectionAssetTask` event and sends it to the Content Connector. It launches this event after the translation provider completes the translation correction, and the Translation Connector submits it using the `SubmitTranslationCorrectionAssetTask` event. The content producer can accept or reject this correction.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
java.lang.String	getAssetNativeId ()	
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetNativeId (java.lang.String assetNativeId)	
void	setAssetTaskId (java.lang.String assetTaskId)	

Return Type	Method and Parameters	Additional Information
void	setFileExt (java.lang.String fileExt)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by validate in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.5.4 Receiving an Instruction to Review Updated Translated Content (ReviewUpdatedAssetTask)

Class	ReviewUpdatedAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IAssetTaskAware, IEvent
Constructor	ReviewUpdatedAssetTask ()
Supported Versions	Version 3.0 and higher

The Clay Tablet Platform launches the ReviewUpdatedAssetTask event and sends it to the Content Connector. It launches this event when the translation provider submits an update of translated content back to the content producer for review. The content producer can then accept or reject this update.

For information about updated-asset-task events, see page 28.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
java.lang.String	getAssetNativeId ()	
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetNativeId (java.lang.String assetNativeId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString

| fromXml | getSourceAccountId | hashCode | setSourceAccountId | toXml |
| getCreateDate | getTargetAccountId | setCreateDate | setTargetAccountId | |

3.5.5 Receiving an Update about Translation Status (UpdatedAssetTaskState)

Class	UpdatedAssetTaskState
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	UpdatedAssetTaskState ()
Supported Versions	All versions

The Clay Tablet Platform launches the UpdatedAssetTaskState and sends it to the Content Connector. It launches this event when the translation provider has updated the state and/or the estimated arrival time of translated content to a particular language (an *asset task*).

For information about asset-task-state events, see page 24.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
java.lang.String	getAssetNativeId ()	
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
java.util.Date	getEta ()	
java.lang.String	getNativeState ()	
java.lang.String	getNotes ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
int	getTranslationPercentage ()	

Return Type	Method and Parameters	Additional Information
void	setAssetId (java.lang.String assetId)	
void	setAssetNativeId (java.lang.String assetNativeId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setEta (java.util.Date eta)	
void	setNativeState (java.lang.String nativeState)	
void	setNotes (java.lang.String notes)	
void	setProjectId (java.lang.String projectId)	
void	setTranslationPercentage (int translationPercentage)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

3.6 Code Samples: Receiving Events

This section contains the following examples of the Content Connector receiving events:

- "Code Sample: Handling Errors and Receiving Translated Files" on page 73

- "Code Sample: Enabling Google Guice to Inject the Correct Implementation Class" on page 75

- "Code Sample: Creating a Producer Processing Class" on page 76

Note: All sample code is also included in the `samples` folder in the SDK package.

3.6.1 Code Sample: Handling Errors and Receiving Translated Files

The following code sample illustrates how the Content Connector uses the events described in this section to handle errors and receive translated files.

Note: The following sample code is also included in the SDK package, in the
`\samples\src\main\java\com\claytablet\service\event\impl\ProducerReceiverImpl.java`
file.

```
public class ProducerReceiverImpl implements ProducerReceiver
{

  @Inject
  public ProducerReceiverImpl(SourceAccountProvider sap,StorageClientService
              storageClientService) {
    this.sap = sap;
    this.storageClientService = storageClientService;
  }

  public void receiveEvent(CompletedProject event) {
    log.debug(event.getClass().getSimpleName() + " event received.");


    // Insert producer integration code here.
    // For example, mark the local project as completed in the CMS.
    // If an exception is thrown, the event will remains in the queue.
  }

  public void receiveEvent(ProcessingError event) {

    log.debug(event.getClass().getSimpleName() + " event received.");
```

```
   // Insert producer integration code here.
   // An error occurred. Examine and take appropriate action.

   log.error(event.getErrorMessage());

   // The event.getErrorDetails() string contains the original serialized
   // event that caused the error. It can be deserialized into its event object.
   // If an exception is thrown, the event remains in the queue.
 }

 public void receiveEvent(ReviewAssetTask event)
     throws StorageServiceException, EventServiceException {

   // If an exception is thrown, the event remains in the queue, for example,
   // the file cannot be retrieved from storage.

   log.debug(event.getClass().getSimpleName() + " event received.");

   // Initialize the storage client for the source account.
   initStorageClient();

   log.debug("Download the latest asset task revision for:
           "+ event.getAssetTaskId());

   // This code uses the default download path set in the account's source.xml.
   String downloadPath = storageClientService
   .downloadLatestAssetTaskVersion(
   event.getAssetTaskId(), null);

   log.debug("Downloaded an asset task version file to: " + downloadPath);

   // Insert producer integration code here, for example,
   // send the asset to the CMS and mark it for review.
   // If an exception is thrown, the event remains in the queue.
 }
```

```java
public void receiveEvent(UpdatedAssetTaskState event) {

    log.debug(event.getClass().getSimpleName() + " event received.");

    // Insert producer integration code here, for example,
    // update the translated asset state in the CMS.
    // If an exception is thrown, the event remains in the queue.
}

private void initStorageClient() {

    log.debug("Retrieve the source account from the provider.");
    Account sourceAccount = sap.get();
    log.debug("Initialize the storage client service.");
    storageClientService.setPublicKey(sourceAccount.getPublicKey());
    storageClientService.setPrivateKey(sourceAccount.getPrivateKey());
    storageClientService.setStorageBucket(sourceAccount.getStorageBucket());
}

}
```

3.6.2 Code Sample: Enabling Google Guice to Inject the Correct Implementation Class

The following code sample illustrates how to enable Google Guice to inject the correct implementation class.

Note: The following sample code is also included in the SDK package, in the \samples\src\main\java\com\claytablet\module\DefaultSQSS3Module.java file.

```java
public class DefaultSQSS3Module extends SQSS3Module {

    protected void configure() {

        super.configure();

    // Instruct Guice to use ProducerReceiverImpl as ProducerReceiver.
    bind(ProducerReceiver.class).to(ProducerReceiverImpl.class);

    // Instruct Guice to use ProducerEventListener as EventListener.
```

```
    // EventListener checks the Message Queue to see if any events are in the queue.
    // It calls ProducerReceiver (here, ProducerReceiverImpl) to handle the event.
    bind(EventListener.class).to(ProducerEventListener.class);
  }
}
```

3.6.3 Code Sample: Creating a Producer Processing Class

This class injects and calls the event listener service at a configurable interval.

Note: The following sample code is also included in the SDK package, in the \samples\src\main\java\com\claytablet\app\ProducerEventCron.java file.

```
public class ProducerEventCron {

private static final Log log = LogFactory.getLog(ProducerEventCron.class);

// The interval to sleep for, in seconds (300 = 5 minutes).
private static final int SLEEP_INTERVAL = 300;

// The maximum number of messages to retrieve and process per interval.
// Zero (0) indicates no limit (all messages available)
private static final int MAX_MESSAGES = 0;

public static void main(String args[]) throws Exception {

  log.debug("Initialize dependencies.");

  // Set up the preferred Guice injector
  Injector injector = Guice.createInjector(new DefaultSQSS3Module());

  // Load the listener
  EventListener listener = injector.getInstance(EventListener.class);

  log.debug("Start the endless loop.");
  while (true) {

    // Check for messages
```

```
        listener.checkMessages(MAX_MESSAGES);


        log.debug("sleeping for " + SLEEP_INTERVAL + " seconds.");
        Thread.sleep(SLEEP_INTERVAL * 1000);
        }
    }
}
```

4 Events for Building a Translation Connector

A translation management system (TMS) or machine translation (MT) service implements a Clay Tablet *Translation Connector* to:

■ receive translation requests and download files for translation from the Clay Tablet Platform, using events. For details, see "Events a Translation Connector Receives" on page 78. For an example of using events to receive requests and files for translation, see "Code Sample: Receiving Events" on page 108.

■ retrieve metadata about a translation job. For details, see "Retrieving Job Metadata" on page 114.

■ use event to send translated content to the Clay Tablet Platform, where it can be retrieved by the CMS. For details, see "Events a Translation Connector Can Send " on page 115. For examples of using events to send status updates and translated content, see "Code Samples: Sending Events" on page 127.

The Clay Tablet Platform uses Message Queues to provide asynchronous communications with external applications, such as a TMS or an MT service. For information about asynchronous communications, see http://en.wikipedia.org/wiki/Asynchronous_communication.

Note about the XML format of assets sent for translation: The format in which you send content for translation is important. There is an industry standard called XLIFF, which we recommend you review and adhere to if possible for content sent for translation. For information about this standard, see: http://docs.oasis-open.org/xliff/xliff-core/xliff-core.html

4.1 Events a Translation Connector Receives

Reference	com.claytablet.model.event.platform

A Translation Connector can receive the following events from the Clay Tablet Platform:

Event	Description
AcknowledgedAssetTaskTranslation	Receives notification that the content producer acknowledges that it has successfully received the translation delivered back to it.
ApprovedAssetTask	Receives notification that the Content Connector reviewed and approved content translated into a particular target language (an *asset task*).

Event	Description
ApprovedAssetTaskQuote	Receives notification that the Content Connector approves the quote it received to translate content into a particular target language. This event instructs the Translation Connector to start the specified translation task (an *asset task*).
ApprovedTranslationCorrectionAssetTask	Receives notification that the Content Connector approves the translation correction.
CanceledAssetTask	Receives notification that the Content Connector cancels a translation task (*asset task*).
CanceledSupportAsset	Receives notification that the Content Connector cancels supporting content (*support asset*) it sent to the content provider. This type of content is not translated.
RejectedAssetTask	Receives notification that the Content Connector rejects the translated content for a particular target language (*asset task*). This event may contain notes indicating the reason for the rejection.
RejectedAssetTaskQuote	Receives notification that the Content Connector rejects the quote for translating content into a particular target language (*asset task*). This event also cancels this translation.
StartAssetTask	Receives notification that the Content Connector has sent content for translation into a specified target language.
StartAssetTaskQuote	Receives notification that the Content Connector requests a quote for translating content it sends to the translation provider.
StartNeedAssetTaskUpdate	Receives notification that the Content Connector sends updated content to translate.
StartNeedTranslationCorrectionAssetTask	Receives notification that the Translation Connector requires a translation correction.

Event	Description
StartSupportAsset	Receives notification that the Translation Connector sends supporting content (a *support asset*) to the translation into provider. This type of content is not translated.
StartUpdateTMAsset	Receives notification that the Translation Connector sends corrected translated content to the translation provider. This event instructs the translation provider to update the translation memory with this corrected translated content.

Note: A Content Connector also receives the `ProcessingError` and `AssetTaskProcessingError` events, described in "Events that All Connectors Receive" on page 135.

4.1.1 Receiving Notification that the Producer Acknowledged the Translation (AcknowledgedAssetTaskTranslation)

Class	AcknowledgedAssetTaskTranslation
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.platform.AbsAssetTaskEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	AcknowledgedAssetTaskTranslation ()
Supported Versions	Version 3.3 and higher

The Clay Tablet Platform launches the `AcknowledgedAssetTaskTranslation` event and sends it to the Translation Connector. It launches this event when a content producer acknowledges that it has successfully received the translation delivered back to it.

Note: Receiving this event does not indicate that the content producer *approves* the translation. The Translation Connector may later receive either the `ApprovedAssetTask` or the `RejectedAssetTask` event, indicating whether the producer eventually approves the translation.

For information about asset-task-translation events, see page 25.

This class inherits the following methods from `com.claytablet.model.event.platform.AbsAssetTaskEvent`, its parent abstract class, which cannot be instantiated:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the [IAssetAware](#) interface.
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the [IAssetTaskAware](#) interface.
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by `getProjectId` in the [IProjectAware](#) interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setName (java.lang.String name)	
void	setProjectId (java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	

This class inherits the following methods from the [com.claytablet.model.event.AbsEvent](#) class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml

| getCreateDate | getTargetAccountId | setCreateDate | setTargetAccountId | validate |

4.1.2 Receiving Notification that the Producer Approved Translated Content (ApprovedAssetTask)

Class	ApprovedAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	ApprovedAssetTask ()
Supported Versions	All versions

The Clay Tablet Platform launches the ApprovedAssetTask event and sends it to the Translation Connector. It launches this event when the Content Connector reviewed and approved content translated into a particular target language (an *asset task*).

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getReviewNote ()	
boolean	isWithContent ()	
void	setAssetTaskId (String assetTaskId)	
void	setFileExt (String fileExt)	
void	setReviewNote (String reviewNote)	

Return Type	Method and Parameters	Additional Information
void	setWithContent (boolean withContent)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ( )	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.3 Receiving Notification that the Producer Approved Your Quote (ApprovedAssetTaskQuote)

Class	StartAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.platform.StartAssetTaskBase
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	ApprovedAssetTaskQuote ()
Supported Versions	Version 3.5 and higher

The Clay Tablet Platform launches the `StartAssetTask` event and sends it to the Translation Connector. It launches this event when the content producer approves the quote it received to translate content into a particular target language. This event instructs the Translation Connector to start the specified translation.

Note: If the Translation Connector does not support quoting, it should launch an AssetTaskProviderError event message to notify the content producer.

Tip: One of the asset task's properties is a project identifier, which associates related tasks. Use the `getProjectId` method, described below, to obtain a more complete context for the work to be performed.

For information about asset-task-quote events, see page 22.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getApprovalNote ()	
boolean	isPendingQuote ()	Specified by `isPendingQuote` in the StartAssetTaskBase class.
void	setApprovalNote (java.lang.String approvalNote)	

This class inherits the following methods from
`com.claytablet.model.event.platform.StartAssetTaskBase`, its parent abstract class, which
cannot be instantiated:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAdditionalServicesRequest ()	
java.lang.String	getAssetId ()	
java.lang.String	getAssetTaskId ()	
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.util.Date	getProjectDeadline ()	
java.lang.String	getProjectId ()	
java.lang.String	getProjectName ()	

Return Type	Method and Parameters	Additional Information
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String	getTargetLanguageCode ()	
void	setAdditionalServicesRequest (java.lang.String additionalServicesRequest)	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setName (java.lang.String name)	
void	setProjectDeadline (java.util.Date projectDeadline)	
void	setProjectId (java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	

Return Type	Method and Parameters	Additional Information
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.4 Receiving Notification that the Producer Approved the Corrected Translated Content (ApprovedTranslationCorrectionAssetTask)

Class	ApprovedTranslationCorrectionAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	ApprovedTranslationCorrectionAssetTask ()
Supported Versions	Version 3.0 and higher

The Clay Tablet Platform launches the `ApprovedTranslationCorrectionAssetTask` event and sends it to the Translation Connector. It launches this event after the content producer reviews and approves the translation correction, using the `ReceivedTranslationCorrectionAssetTask` event.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getReviewNote ()	
boolean	isWithContent ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setReviewNote (java.lang.String reviewNote)	
void	setWithContent (boolean withContent)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.5 Receiving Notification that Content for Translation Was Canceled (CanceledAssetTask)

Class	CanceledAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	CanceledAssetTask ()
Supported Versions	All versions

The Clay Tablet Platform launches the `CanceledAssetTask` event and sends it to the Translation Connector. It launches this event after the content producer cancels a translation task (*asset task*).

Note: Most translation management systems (TMS) *do not* support canceling tasks, and therefore few, if any, CMS Connectors send these events to the TMS. If your system *does* support this functionality, please contact Clay Tablet Support about implementing these features. For details, see "How to Contact Clay Tablet Support" on page 14.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
void	setAssetTaskId (java.lang.String assetTaskId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.6 Receiving Notification that Supporting Content Was Canceled (CanceledSupportAsset)

Class	CanceledSupportAsset
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent
Constructor	CanceledSupportAsset ()
Supported Versions	All versions

The Clay Tablet Platform launches the `CanceledSupportAsset` event and sends it to the Translation Connector. It launches this event after the content producer cancels supporting content (*support asset*) it sent to the content provider. This type of content is not translated.

Note: Most translation management systems (TMS) *do not* support canceling tasks, and therefore few, if any, CMS Connectors send these events to the TMS. If your system *does* support this functionality, please contact Clay Tablet Support about implementing these features. For details, see "How to Contact Clay Tablet Support" on page 14.

For information about support-asset events, see page 18.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getSupportAssetId ()	
void	setSupportAssetId (java.lang.String supportAssetId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ( )	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.7 Receiving Notification that the Producer Rejected Translated Content (RejectedAssetTask)

Class	RejectedAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	RejectedAssetTask ()
Supported Versions	All versions

The Clay Tablet Platform launches the RejectedAssetTask event and sends it to the Translation Connector. It launches this event after the content producer rejects the translated content for a particular target language (*asset task*). This event may contain notes indicating the reason for the rejection. The content producer may have uploaded a new file for this translation that the translation provider can review.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getReviewNote ()	
boolean	isWithContent ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	

Return Type	Method and Parameters	Additional Information
void	setReviewNote (java.lang.String reviewNote)	
void	setWithContent (boolean withContent)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ( )	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.8 Receiving Notification that the Producer Rejected Your Quote (RejectedAssetTaskQuote)

Class	RejectedAssetTaskQuote
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.platform.AbsAssetTaskEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	RejectedAssetTaskQuote ()
Supported Versions	Version 3.5 and higher

The Clay Tablet Platform launches the `RejectedAssetTaskQuote` event and sends it to the Translation Connector. It launches this event after the content producer rejects the quote for translating content into a particular target language (*asset task*). This event also cancels this translation.

Note: If the Translation Connector does not support quoting, it should launch an AssetTaskProviderError event message to notify the content producer.

For information about asset-task-quote events, see page 22.

This class has the following methods:

Return Type	Method
java.lang.String	getRejectionNote ()
java.lang.String	setRejectionNote ()

This class inherits the following methods from `class com.claytablet.model.event.platform.AbsAssetTaskEvent`, its parent abstract class, which cannot be instantiated:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by `getProjectId` in the IProjectAware interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setName (java.lang.String name)	
void	setProjectId (java.lang.String projectId)	

Return Type	Method and Parameters	Additional Information
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	validate

4.1.9 Receiving New Content to Translate (StartAssetTask)

Class	StartAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.platform.StartAssetTaskBase
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	StartAssetTask ()
Supported Versions	All versions

The Clay Tablet Platform launches the StartAssetTask event and sends it to the Translation Connector. It launches this event after the content producer sends content for translation into specified target languages. The translation into each target language is a separate *asset task*. This event instructs the Translation Connector to start the translation.

Tip: One of the asset task's properties is a project identifier, which associates related tasks. Use the getProjectId method, described below, to obtain a more complete context for the work to be performed.

For information about asset-task events, see page 19.

This class has the following method:

Return Type	Method	Additional Information
boolean	isPendingQuote ()	Specified by isPendingQuote in the StartAssetTaskBase class.

This class inherits the following methods from
`com.claytablet.model.event.platform.StartAssetTaskBase`, its parent abstract class, which cannot be instantiated:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAdditionalServicesRequest ()	
java.lang.String	getAssetId ()	
java.lang.String	getAssetTaskId ()	
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.util.Date	getProjectDeadline ()	
java.lang.String	getProjectId ()	Specified by `getProjectId` in the IProjectAware interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String	getTargetLanguageCode ()	
void	setAdditionalServicesRequest (java.lang.String additionalServicesRequest)	

Return Type	Method and Parameters	Additional Information
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setName (java.lang.String name)	
void	setProjectDeadline (java.util.Date projectDeadline)	
void	setProjectId (java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.10 Receiving a Request for a Translation Quote (StartAssetTaskQuote)

Class	StartAssetTaskQuote
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.platform.StartAssetTaskBase
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	StartAssetTaskQuote ()
Supported Versions	Version 3.5 and higher

The Clay Tablet Platform launches the `StartAssetTaskQuote` event and sends it to the Translation Connector. It launches this event after the content producer requests a quote for translating content it sends to the translation provider. This event instructs the Translation Connector to start the quote.

Note: If the Translation Connector does not support quoting, it should launch an AssetTaskProviderError event message to notify the content producer.

Tip: One of the asset task's properties is a project identifier, which associates related tasks. Use the `getProjectId` method, described below, to obtain a more complete context for the work to be performed.

For information about asset-task-quote events, see page 22.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
boolean	isPendingQuote ()	Specified by `isPendingQuote` in the StartAssetTaskBase class.

This class inherits the following methods from
`com.claytablet.model.event.platform.StartAssetTaskBase`, its parent abstract class, which
cannot be instantiated:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAdditionalServicesRequest ()	
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.util.Date	getProjectDeadline ()	
java.lang.String	getProjectId ()	Specified by `getProjectId` in the IProjectAware interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String	getTargetLanguageCode ()	

Return Type	Method and Parameters	Additional Information
void	setAdditionalServicesRequest (java.lang.String additionalServicesRequest)	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (String fileExt)	
void	setFileType (FileType fileType)	
void	setName (java.lang.String name)	
void	setProjectDeadline (java.util.Date projectDeadline)	
void	setProjectId (java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	

Return Type	Method and Parameters	Additional Information
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ( )	Validates the fields in this event. Specified by validate in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.11 Receiving Updated Content to Translate (StartNeedAssetTaskUpdate)

Class	StartNeedAssetTaskUpdate
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	StartNeedAssetTaskUpdate ()
Supported Versions	Version 3.0 and higher

The Clay Tablet Platform launches the StartNeedAssetTaskUpdate event and sends it to the Translation Connector when there is updated content for the translation provider to translate.

For information about asset-task-update events, see page 26.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.

Return Type	Method and Parameters	Additional Information
java.lang.String	getFileExt ()	
FileType	getFileType ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setProjectId (java.lang.String projectId)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.12 Receiving Content to Correct a Translation (StartNeedTranslationCorrectionAssetTask)

Class	StartNeedTranslationCorrectionAssetTask
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	StartNeedTranslationCorrectionAssetTask ()
Supported Versions	Version 3.0 and higher

The Clay Tablet Platform launches the `StartNeedTranslationCorrectionAssetTask` event and sends it to the Translation Connector when a translation correction is required.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by `getAssetId` in the IAssetAware interface.
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
ContentType	getContentType ()	

Return Type	Method and Parameters	Additional Information
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.lang.String	getProjectId()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	

Return Type	Method and Parameters	Additional Information
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setName (java.lang.String name)	
void	setProjectDeadline (java.util.Date projectDeadline)	
void	setProjectId(java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals   getEventId   getXStream   setEventId   toString

| fromXml | getSourceAccountId | hashCode | setSourceAccountId | toXml |
| getCreateDate | getTargetAccountId | setCreateDate | setTargetAccountId | |

4.1.13 Receiving New Supporting Content (StartSupportAsset)

Class	StartSupportAsset
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetAware, IEvent, IProjectAware
Constructor	StartSupportAsset ()
Supported Versions	All versions

The Clay Tablet Platform launches the StartSupportAsset event and sends it to the Translation Connector. It launches this event after the content producer sends supporting content (a *support asset*) to the translation into provider. This type of content is not translated.

For information about support-asset events, see page 18.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getSupportAssetId ()	

Return Type	Method and Parameters	Additional Information
java.lang.String	getSupportAssetNativeId ()	
java.lang.String	getTags ()	
void	setAssetId (java.lang.String assetId)	
void	setContentType (ContentType contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setName (java.lang.String name)	
void	setProjectId (java.lang.String projectId)	
void	setSupportAssetId (java.lang.String supportAssetId)	
void	setSupportAssetNativeId (java.lang.String supportAssetNativeId)	
void	setTags (java.lang.String tags)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.1.14 Receiving Corrected Translated Content for Updating the Translation Memory (StartUpdateTMAsset)

Class	StartUpdateTMAsset
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent
Constructor	StartUpdateTMAsset ()
Supported Versions	Version 3.0 and higher

The Clay Tablet Platform launches the `StartUpdateTMAsset` event and sends it to the Translation Connector. It launches this event when the content producer sends corrected translated content to the translation provider. This event instructs the translation provider to update the translation memory with this corrected translated content.

For information about update-TM-asset events, see page 31.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	

Return Type	Method and Parameters	Additional Information
IJobMetadata	getJobMetadata ()	
java.lang.String	getRelatedAssetTaskId ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTargetLanguageCode ()	
java.lang.String	getUpdateTMAssetId ()	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType (FileType fileType)	
void	setRelatedAssetTaskId (java.lang.String relatedAssetTaskId)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
void	setUpdateTMAssetId (java.lang.String updateTMAssetId)	

Return Type	Method and Parameters	Additional Information
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate()	Validates the fields in this event. Specified by validate in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.2 Code Sample: Receiving Events

The following code sample illustrates how a Translation Connector receives events.

Note: The following sample code is also included in the `samples` folder in the SDK package.

```
public class ProviderReceiverImpl implements ProviderReceiver {
private final Log log = LogFactory.getLog(getClass());

// TMS connection configuration file.
private final ConnectionContext context;

// Mapping file to map Clay Tablet metadata to TMS metadata.
private ProviderAssetTaskTranslationMap assetTaskTranslationMap;

// Source account to check SQS message queue.
private final SourceAccountProvider sap;

private StorageClientService storageClientService;
private final ProviderSender sender;

/**
  *Constructor for dependency injection.
  *
  *@param context
```

```java
   *@param sap
   *@param assetTaskTranslationMap
   *@param storageClientService
   */
@Inject
   public ProviderReceiverImpl(final ConnectionContext context,
                    final SourceAccountProvider sap,
                    ProviderAssetTaskTranslationMap assetTaskTranslationMap,
                    StorageClientService storageClientService,
                    final ProviderSender sender) {

      this.context = context;
      this.sap = sap;
      this.assetTaskTranslationMap = assetTaskTranslationMap;
      this.sender = sender;
      this.storageClientService = storageClientService;
}


public void receiveEvent(ApprovedAssetTask event)
              throws StorageServiceException, EventServiceException {

   log.debug(event.getClass().getSimpleName() + " event received.");
   // Insert your code here to handle the ApprovedAssetTask event.


}


public void receiveEvent(CanceledAssetTask event) {

   log.debug(event.getClass().getSimpleName() + " event received.");

   try {

   // The information from JobMapping.
   ProviderJobMapping mapJob = null;

   // Find the providerFileId and other information from assetTaskMap.
   for (ProviderJobMapping mapping : assetTaskTranslationMap.ListJobs() ) {
```

```
      if (mapping.getAssetTaskId().equals(event.getAssetTaskId()))
        {
          //Found
          mapJob = mapping;
          break;
        }
    }

    // Call TMS to cancel the job.
    if ( mapJob != null  )
    {
          String tmsProjectId = mapJob.getTmsProjectGUID();
          String tmsDocumentId = mapJob.getTmsDocumentGUID();
          String tms_Url = mapJob.getServerUrl(); ;
          String tms_LoginName = mapJob.getLoginName() ;
          String tms_LoginPassword = mapJob.getLoginPassword();

          // Connect to the TMS to cancel the job.
          }
    } catch (Exception e) {
    log.error(e.getMessage());
    }

}

public void receiveEvent(CanceledSupportAsset event) {

  log.debug(event.getClass().getSimpleName() + " event received.");
  // Insert your code here to handle the CanceledSupportAsset event.

}

public void receiveEvent(ProcessingError event) {

  log.debug(event.getClass().getSimpleName() + " event received.");
  // Insert your code here to handle the ProcessingError event.
```

```
}


public void receiveEvent(RejectedAssetTask event)
              throws StorageServiceException, EventServiceException {

  log.debug(event.getClass().getSimpleName() + " event received.");
  // Insert your code here to handle the RejectedAssetTask event.


}


public void receiveEvent(StartAssetTask event)
              throws StorageServiceException, EventServiceException {

  log.debug(event.getClass().getSimpleName() + " event received.");

  // Initialize the storage client for the source account.
  initStorageClient();
  try
  {
    context.load();
  }
  catch (IOException e)
  {
    throw new EventServiceException(e.getMessage());
  }

  // Call the TMS to translate the AssetTask.
  try {

      Hashtable<String, String> connectionParms = context.getConnectionParms();
      String tms_Url = connectionParms.get("TMS_URL");
      String tms_LoginName = connectionParms.get("TMS_LoginName");;
      String tms_LoginPassword = connectionParms.get("TMS_LoginPassword");
      if (tms_Url != null && tms_LoginName != null && tms_LoginPassword != null  )
      {
        try
        {
```

```java
            log.debug("Download the latest asset task revision for:
                    " + event.getAssetTaskId());
        String downloadFilePath = storageClientService
                    .downloadLatestAssetTaskVersion(
                    event.getAssetTaskId(),
                    context.getTargetDirectory());

            log.debug("Downloaded an asset task version file to:
                    " + downloadFilePath);
        File file = new File(downloadFilePath) ;
        String tms_SoureLngLCID = null;
        String tms_TargetLngLCID = null;

        // You may need to convert Clay Tablet language codes to the
        // TMS language codes.
        // Check whether the same project exists.
        String tmsProjectGUID = assetTaskTranslationMap.
          SearchSameTmsProjectGUID(
            event.getProjectId()
        );
        if (tmsProjectGUID == null)
        {
          // Create a new TMS project.
          // Assign acrossProjectGUID to the TMS project ID.


        }
        log.debug("tmsProjectGUID: " + tmsProjectGUID);
        String tmpdocumentGUID = null;
        // Add a project document to the TMS.
        // Assign this to tmpdocumentGUID.

        // Save the information to ProviderJobMapping.
        ProviderJobMapping jobMapping = new ProviderJobMapping();
        jobMapping.setAssetTaskId(event.getAssetTaskId());
        jobMapping.setAssetId(event.getAssetId());
        jobMapping.setProjectId(event.getProjectId());
        jobMapping.setTmsDocumentGUID(tmpdocumentGUID);
```

```java
            jobMapping.setLocalFileGUID(IdGenerator.createId() );

            jobMapping.setTmsProjectGUID(tmsProjectGUID);

            jobMapping.setFileExt(event.getFileExt());

            jobMapping.setFileName( file.getName() );

            jobMapping.setLoginName( tms_LoginPassword );

            jobMapping.setLoginPassword( tms_LoginName );

            jobMapping.setServerUrl( tms_Url );

            jobMapping.setSourceCttLanguageCode( event.getSourceLanguageCode() );

            jobMapping.setSourceTmsLanguageCode( tms_SoureLngLCID );

            jobMapping.setTargetCttLanguageCode( event.getTargetLanguageCode());

            jobMapping.setTargetTmsLanguageCode( tms_TargetLngLCID );


            assetTaskTranslationMap.Add(jobMapping);


            // Send the AcceptAssetTask event out to notify
            // the Clay Tablet Platform.
            AcceptAssetTask acceptEvent = new AcceptAssetTask();

            acceptEvent.setAssetTaskId(event.getAssetTaskId() );

            acceptEvent.setAssetTaskNativeId( tmpdocumentGUID );

            acceptEvent.setEventId( IdGenerator.createId() );

            sender.sendEvent( acceptEvent );

            log.debug("Sent AcceptAssetTask event back");

        }
        catch (Exception exp) // should catch TMS exception here.
        {
            log.debug("Error: " + exp.getMessage());

            throw new EventServiceException(exp.getMessage());

        }
    }
    else
    {
        throw new EventServiceException("Can't find server
                config in ConnectionContext.xml file.");

    }
} catch (Exception e) {throw new EventServiceException(e.getMessage());

}
```

```
    }

    public void receiveEvent(StartSupportAsset event)
       throws StorageServiceException, EventServiceException {

       // Insert your code here to handle the StartSupportAsset event.

    }

    /**
      *Initializes the storage client with the source account values
      *(credentials and defaults).
      */
    private void initStorageClient() {

       log.debug("Retrieve the source account from the provider.");
       Account sourceAccount = sap.get();

       log.debug("Initialize the storage client service.");
       storageClientService.setPublicKey(sourceAccount.getPublicKey());
       storageClientService.setPrivateKey(sourceAccount.getPrivateKey());
       storageClientService.setStorageBucket(sourceAccount.getStorageBucket());
    }
}
```

4.3 Retrieving Job Metadata

Reference	com.claytablet.model.event.metadata
Supported Versions	Version 3.2 and higher

You retrieve job metadata so that you can identify all the content (*assets*) in a translation job.

1. In the following event messages that you receive, use the `getJobMetadata()` method to retrieve the IJobMetadata interface attached to these messages.

    Note: If there was no job metadata attached to the original messages sent by the content producer, the `getJobMetadata()` method returns null.

    ▦ StartAssetTask
    ▦ StartSupportAssetTask

- StartAssetTaskQuote
- ApprovedAssetTaskQuote
- StartNeedTranslationCorrectionAssetTask
- StartUpdateTMAsset

2. In the `IJobMetadata` interface, use the `getJobId()` method to determine which content (*assets*) and supporting content (*support assets*) belong to the same job.

3. In the `IJobMetadata` interface, use the `getAssetTaskCount()` method to determine whether you have received all required content (assets) for the job.

4.4 Events a Translation Connector Can Send

Reference	com.claytablet.model.event.provider

A Translation Connector can launch the following events:

Event	Description
AcceptAssetTask	Accepts translating the content into the specified target language.
AcceptNeedAssetTaskUpdate	Accepts updating the translation for the content it previously translated.
AcceptNeedTranslationCorrectionAssetTask	Accepts correcting the translated content it previously translated.
AcceptUpdateTMAsset	Accepts updating the translation memory with the updated content.
AssetTaskProviderError	Notifies the Clay Tablet Platform and the content producer about any issue encountered during translation.
SubmitAssetTask	Submits the translated content to the content producer for review.
SubmitTranslationCorrectionAssetTask	Submits the corrected translated content to the content producer for review.
SubmitUpdatedAssetTask	Submits the updated translated content to the content producer for review.

Event	Description
UpdateAssetTaskState	Sends an update about the state and/or the estimated arrival time of content translated to a particular language (an *asset task*) to the content producer.

4.4.1 Accepting a Translation Task (AcceptAssetTask)

Class	AcceptAssetTask
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	AcceptAssetTask()
Supported Versions	All versions

The Translation Connector launches the `AcceptAssetTask` event after receiving the StartAssetTask event from the Clay Tablet Platform, which is a request from the content producer to translate content into specified target languages. (Each target language represents a separate *asset task*.) The translation provider uses this event to notify the Clay Tablet Platform and the content producer that it accepts translating the content into the specified target language.

Note: This event includes the `getAssetTaskNativeId` method. The native ID field is the translation provider's identifier for the asset task.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getAssetTaskNativeId ()	
void	setAssetTaskId (java.lang.String assetTaskId)	

Return Type	Method and Parameters	Additional Information
void	setAssetTaskNativeId (java.lang.String assetTaskNativeId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.2 Accepting Updated Content to Translate (AcceptNeedAssetTaskUpdate)

Class	AcceptNeedAssetTaskUpdate
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	AcceptNeedAssetTaskUpdate ()
Supported Versions	Version 3.0 and higher

The Translation Connector launches the `AcceptNeedAssetTaskUpdate` event after receiving the StartNeedAssetTaskUpdate event from the Clay Tablet Platform, which is a request from the content producer to update the translation for the content it previously translated. The translation provider uses this event to notify the Clay Tablet Platform and the content producer that it accepts updating this translated content.

For information about asset-task-update events, see page 26.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.

Return Type	Method and Parameters	Additional Information
void	setAssetTaskId (java.lang.String assetTaskId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.3 Accepting Corrections to Translated Content (AcceptNeedTranslationCorrectionAssetTask)

Class	AcceptNeedTranslationCorrectionAssetTask
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	AcceptNeedTranslationCorrectionAssetTask ()
Supported Versions	Version 3.0 and higher

The Translation Connector launches the `AcceptNeedTranslationCorrectionAssetTask` event after receiving the StartNeedTranslationCorrectionAssetTask event from the Clay Tablet Platform, which is a request from the content producer to correct the translation for the content it previously translated. The translation provider uses this event to notify the Clay Tablet Platform and the content producer that it accepts correcting this translated content.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
java.lang.String	getAssetTaskNativeId ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setAssetTaskNativeId (java.lang.String assetTaskNativeId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by validate in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.4 Accepting Corrected Translated Content for Updating the Translation Memory (AcceptUpdateTMAsset)

Class	AcceptUpdateTMAsset
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent
Constructor	AcceptUpdateTMAsset ()
Supported Versions	Version 3.0 and higher

The Translation Connector launches the AcceptUpdateTMAsset event after receiving the StartUpdateTMAsset event from the Clay Tablet Platform, which is a request from the content producer to update the translation memory with the corrected translated content it provided. The translation provider uses

this event to notify the Clay Tablet Platform and the content producer that it accepts updating the translation memory with the updated content.

For information about update-TM-asset events, see page 31.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getRelatedAssetTaskId ()	
java.lang.String	getUpdateTMAssetId ()	
void	setRelatedAssetTaskId (java.lang.String relatedAssetTaskId)	
void	setUpdateTMAssetId (java.lang.String updateTMAssetId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by validate in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.5 Notifying the Producer of an Error (AssetTaskProviderError)

Class	AssetTaskProviderError
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent

Constructors	■ AssetTaskProviderError () ■ AssetTaskProviderError (java.lang.String assetTaskId, java.lang.String subject, java.lang.String errorMessage, java.lang.String errorDetails, boolean fatal)
Supported Versions	Version 3.3 and higher

When a translation provider runs into issues during translation (processing an asset task), it should send an `AssetTaskProviderError` event to notify the Platform and the content producer about the issue.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getErrorDetails ()	
java.lang.String	getErrorMessage ()	
java.lang.String	getSubject ()	See the note below for additional information.
boolean	isFatal ()	See the note below for additional information.
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setErrorDetails (java.lang.String errorDetails)	
void	setErrorMessage (java.lang.String errorMessage)	
void	setFatal (boolean fatal)	See the note below for additional information.
void	setSubject (java.lang.String subject)	See the note below for additional information.

Note about `isFatal` and `setFatal`: During a *fatal* error, the provider has permanently stopped processing the asset task, and human intervention is required to process the asset task. During a *non-fatal* error, the provider retries processing the same asset task: if the underlying reason for the error is resolved, the the provider can successfully process the asset task without intervention.

Note about `getSubject` and `setSubject`: Sometimes, when there is a transient error, the provider retries processing an asset task. This may cause the same processing error to occur repeatedly. The subject field enables the platform and producer to detect repetitive errors. If the provider sends two `AssetTaskProviderError` events for the same asset task with same subjects, without any other event in between, then the second is a repeat of the first.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	validate

4.4.6 Submitting Translated Content for Review (SubmitAssetTask)

Class	SubmitAssetTask
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	SubmitAssetTask ()
Supported Versions	All versions

The Translation Connector launches the `SubmitAssetTask` event after the translation provider completes the content translation to a particular target language (an *asset task*). It uses this event to submit the translated content to the content producer for review.

For information about asset-task events, see page 19.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
java.lang.String	getNativeState ()	
void	setAssetTaskId (java.lang.String assetTaskId)	

Return Type	Method and Parameters	Additional Information
void	setFileExt (java.lang.String fileExt)	
void	setNativeState (java.lang.String nativeState)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by validate in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.7 Submitting the Corrected Translation for Review (SubmitTranslationCorrectionAssetTask)

Class	SubmitTranslationCorrectionAssetTask
Reference	com.claytablet.model.event.provider
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	SubmitTranslationCorrectionAssetTask ()
Supported Versions	Version 3.0 and higher

The Translation Connector launches the SubmitTranslationCorrectionAssetTask event after the translation provider corrects the content translation. It uses this event to submit the corrected translated content to the content producer for review.

For information about translation-correction-asset events, see page 29.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the [IAssetTaskAware](#) interface.
java.lang.String	getFileExt ()	
java.lang.String	getNativeState ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
void	setNativeState (java.lang.String nativeState)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the [IEvent](#) interface.

This class inherits the following methods from the [com.claytablet.model.event.AbsEvent](#) class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.8 Submitting Updated Translated Content for Review (SubmitUpdatedAssetTask)

Class	SubmitUpdatedAssetTask
Reference	com.claytablet.model.event.provider
Extends	[com.claytablet.model.event.AbsEvent](#)
Implements	[IAssetTaskAware](#), [IEvent](#)

Constructor	SubmitUpdatedAssetTask ()
Supported Versions	Version 3.0 and higher

The Translation Connector launches the `SubmitUpdatedAssetTask` event after the translation provider updates the translated content. It uses this event to submit the updated translated content to the content producer for review.

For information about updated-asset-task events, see page 28.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.lang.String	getFileExt ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setFileExt (java.lang.String fileExt)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.4.9 Updating the Translation Status (UpdateAssetTaskState)

Class	UpdateAssetTaskState
Reference	com.claytablet.model.event.provider

Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IEvent
Constructor	UpdatedAssetTaskState ()
Supported Versions	All versions

The Translation Connector launches the `UpdateAssetTaskState` event to send an update about the state and/or the estimated arrival time of content translated to a particular language (an *asset task*) to the content producer.

For information about asset-task-state events, see page 24.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetTaskId ()	Specified by `getAssetTaskId` in the IAssetTaskAware interface.
java.util.Date	getEta ()	
java.lang.String	getNativeState ()	
java.lang.String	getNotes ()	
int	getTranslationPercentage ()	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setEta (java.util.Date eta)	
void	setNativeState (java.lang.String nativeState)	
void	setNotes (java.lang.String notes)	

Return Type	Method and Parameters	Additional Information
void	setTranslationPercentage (int translationPercentage)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

4.5 Code Samples: Sending Events

This section contains the following examples of the Translation Connector sending events:

This allows a Translation Connector to get translation requests, download files that need translation, and send translated content back.

■ "Code Sample: Specifying Google Guice Injections" on page 127

■ "Code Sample: Coding a Class for Event Checking and Handling at a Specified Interval" on page 128

■ "Code Sample: Checking Status and Sending Status Updates, and Sending Translated Files for Review" on page 129

■ "Code Sample: Creating a Class to Check Translation Status" on page 132

Note: All sample code is also included in the `samples` folder in the SDK package.

4.5.1 Code Sample: Specifying Google Guice Injections

The following code sample illustrates how to specify Google Guice injections.

Note: The following sample code is also included in the `samples` folder in the SDK package.

```
public class DefaultSQSS3Module extends SQSS3Module {

  protected void configure() {
```

```
      super.configure();

      // Instruct Guice to use ProviderReceiverImpl as ProviderReceiver.
      Bind (ProviderReceiver.class).to(ProviderReceiverImpl.class);

      // Instruct Guice to use ProviderStatePollerImpl as ProviderStatePoller.
      Bind (ProviderStatePoller.class).to(ProviderStatePollerImpl.class);
   }
}
```

4.5.2 Code Sample: Coding a Class for Event Checking and Handling at a Specified Interval

The following code sample illustrates how to code a class for event checking and handling at a specified interval.

Note: The following sample code is also included in the `samples` folder in the SDK package.

```
public class ProviderReceiverCronSample {

   private static final Log log = LogFactory.getLog(
             ProviderReceiverCronSample.class);

   // The interval to sleep for, in seconds (300 = 5 minutes).
   private static final int SLEEP_INTERVAL = 5;

   // The maximum number of messages to retrieve and process per interval.
   // 0 indicates no limit (all messages available).
   private static final int MAX_MESSAGES = 0;

/**
   *@param args
   *@throws Exception
   */
public static void main(String args[]) throws Exception {

   log.debug("Initialize dependencies.");

   // Set up the preferred Guice injector.
```

```java
Injector injector = Guice.createInjector(new DefaultSQSS3Module());

// Load the listener.
EventListener listener = injector.getInstance(EventListener.class);

log.debug("Start the endless loop.");
while (true) {

   log.debug("Check for messages.");

   // When the listener receives a event from message, it calls ProviderReceiver.
   // (here, ProviderReceiverImpl) to handle the event.

   listener.checkMessages(MAX_MESSAGES);
   log.debug("sleeping for " + SLEEP_INTERVAL + " seconds.");
   Thread.sleep(SLEEP_INTERVAL * 1000);

   }
  }
}
```

4.5.3 Code Sample: Checking Status and Sending Status Updates, and Sending Translated Files for Review

The following code sample illustrates how to check translation status, send translation status updates, and send translated files for review after translation.

Note: The following sample code is also included in the `samples` folder in the SDK package.

```java
public class ProviderStatePollerImpl implements ProviderStatePoller
{

   private final Log log = LogFactory.getLog(getClass());
   // This is also injected into the stub. Use where appropriate.
   private final ConnectionContext context;
   // This is also injected into the stub. Use where appropriate.
   private ProviderAssetTaskTranslationMap assetTaskTranslationMap;
   private final ProviderSender sender;
```

```
/**
   *Constructor for dependency injection.
   *
   */
@Inject
public ProviderStatePollerImpl(final ConnectionContext context,
            ProviderAssetTaskTranslationMap assetTaskTranslationMap,
            final ProviderSender sender) {

   this.context = context;
   this.sender = sender;
   this.assetTaskTranslationMap = assetTaskTranslationMap;
}


/*
   *Implement the poll() method.
   *
   *@see com.claytablet.service.event.ProviderStatePoller#poll()
   */
public void poll() throws Exception {

   log.debug("Polling TMS for asset task state changes.");

   //Check all the translation jobs saved on ProviderJobMapping.
   for (ProviderJobMapping mapping : assetTaskTranslationMap.ListJobs()) {
   String sourceLanguageCode = mapping.getSourceCttLanguageCode();
   String targetLanguageCode = mapping.getTargetCttLanguageCode();
   String tmsSourceLCID = mapping.getSourceTmsLanguageCode();
   String tmsTargetLCID = mapping.getTargetTmsLanguageCode() ;
   String tmsProjectGUID = mapping.getTmsProjectGUID();
   String tmsDocumentGUID = mapping.getTmsDocumentGUID();
   String localFileGUID = mapping.getLocalFileGUID();
   String tms_Url = mapping.getServerUrl();
   String tms_LoginName = mapping.getLoginName() ;
   String tms_LoginPassword = mapping.getLoginPassword() ;
```

```java
if ( tmsDocumentGUID != null && tmsProjectGUID != null )
  {
     log.debug("Check document Status:" + tmsDocumentGUID);
     try
       {
       Boolean  translationFinished = false;
       // Your code to check the translation status
       // If the status is Translated, send the file back.
       if ( translationFinished )
       {

       // Specify the location for downloading this file, using the
       // downloadFilePath variable.
          String downloadFilePath = null;

       // Send out the event.
       SubmitAssetTask event = new SubmitAssetTask();
       event.setEventId( IdGenerator.createId() );

       // Enter information for the event.
       event.setAssetTaskId( mapping.getAssetTaskId() );
       event.setNativeState("Completed");
       event.setFileExt(downloadFilePath.substring(
                 downloadFilePath .lastIndexOf(".") + 1,
                 downloadFilePath.length())
                 );

       // Send out event with the translated file.
       sender.sendEvent(event, downloadFilePath );
       log.debug("Send out translated file: " + downloadFilePath);

       // Job is down, remove this job from mapping.
       assetTaskTranslationMap.Remove(mapping);

       // You may also add code to delete the job or
       // delete the project file from TMS, if needed.
       }
       else
```

```
        {
            // If the translation is not finished, check the translation status.
            // If the status changed, send an UpdateAssetTaskState event.
            // If the status is unchanged, it is unneccessary to send a status update
            // event.

            String lastStatus = mapping.getTmsTranslationStatus();
            // Retrieve the translation status from the TMS and save it in the
            // tmsCurrentStatus variable.
        String tmsCurrentStatus = null;
            if (tmsCurrentStatus != null && lastStatus != null )
            if (! tmsCurrentStatus.equals(lastStatus))
            {
                // If the status has changed, notify the Clay Tablet Platform.
                UpdateAssetTaskState event = new UpdateAssetTaskState();
                event.setAssetTaskId(mapping.getAssetTaskId());
                event.setEventId(IdGenerator.createId());
                event.setNativeState(tmsCurrentStatus);
                // event.setTranslationPercentage(50);
                sender.sendEvent(event);
                 }
            }
        }
        catch (Exception e)
        {
        // Insert code to deal with the exception.
        }
        }
    }
    }
}
```

4.5.4 Code Sample: Creating a Class to Check Translation Status

The following code sample illustrates how to create a class to check translation status.

Note: The following sample code is also included in the `samples` folder in the SDK package.

```
public class ProviderStatePollerCronSample {
```

```java
private static final Log log = LogFactory.getLog
            (ProviderStatePollerCronSample.class);


//the inteval to sleep for in seconds (300 = 5 minutes)
private static final int SLEEP_INTERVAL = 5;


//the maximum number of messages to retrieve and process per interval. 0
//indicates no limit (all messages available)
private static final int MAX_MESSAGES = 0;


/**
   *@param args
   *@throws Exception
   */
public static void main(String args[]) throws Exception {

    log.debug("Initialize dependencies.");


    //setup the preferred Guice injector for DI
    Injector injector = Guice.createInjector(new DefaultSQSS3Module());
    //load the poller
    ProviderStatePoller poller = injector
                .getInstance(ProviderStatePoller.class);


    log.debug("Start the endless loop.");
    while (true) {
       log.debug("Check for state changes.");
       poller.poll();

       log.debug("sleeping for " + SLEEP_INTERVAL + " seconds.");
       Thread.sleep(SLEEP_INTERVAL * 1000);


    }


  }
```

```
}
```

5 Events that All Connectors Receive

Both a Content Connector (for a content producer) and a Translation Connector (for a translation provider) can receive the following events (classes):

- ProcessingError

- AssetTaskProcessingError

5.1 Viewing a Processing Error (ProcessingError)

Class	ProcessingError
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IEvent
Constructors	■ ProcessingError () ■ ProcessingError (java.lang.String errorMessage, java.lang.String errorDetails)
Supported Versions	All versions

If an error occurs when the Clay Tablet Platform is processing an event that has been sent to it, the Clay Tablet Platform launches the `ProcessingError` event. It sends this event to both the Content Connector and the Translation Connector.

Tip for the Content Producer: Examine the processing error, because it usually indicates necessary action by the producer. For example, an error may occur if an asset was created, but the Platform could not process it because the file had not been uploaded.

For information about processing-error events, see page 32.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getErrorDetails ()	
java.lang.String	getErrorMessage ()	
void	setErrorDetails (java.lang.String errorDetails)	

Return Type	Method and Parameters	Additional Information
void	setErrorMessage (java.lang.String errorMessage)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

5.1.1 Viewing a Translation Processing Error (AssetTaskProcessingError)

Class	AssetTaskProcessingError
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.platform.ProcessingError
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Constructor	■ AssetTaskProcessingError () ■ AssetTaskProcessingError (IEvent event, java.lang.String subject, java.lang.String errorMessage, java.lang.String errorDetails)
Supported Versions	Version 3.3 and higher

The `AssetTaskProcessingError` event is a subclass of the `ProcessingError` event, and it extends this class. It describes an error that occurs specifically to an asset task, with additional information to identify the asset task involved, and information about whether additional intervention is required.

For information about processing-error events, see page 32.

This class has the following methods:

Return Type	Method and Paramaters	Additional Information
java.lang.String	getAssetId ()	

Return Type	Method and Paramaters	Additional Information
java.lang.String	getAssetTaskId ()	
java.lang.String	getProjectId ()	
int	getRepeat ()	*Repeat* indicates to the Content Connector whether the error is a repetition of a previous error, and how many times the error has been repeated. If the value is 0, the error is not a repeat. Generally the Clay Tablet Platform prevents sending repeat errors to the producer.
String	getSubject ()	Sometimes the Clay Tablet Platform or the Translation Connector can retry processing an asset task in case of transient error, which may resulting in the same processing error occurs repeatedly. The purpose of the subject field is to enable the Platform and the Content Connector to detect repetitive errors. If two `AssetTaskProcessingError` event messages for the same asset task with same subjects arrive, without any other event in between, then the second is a repeat of the first.
bool	isFatal ()	A *fatal* error means that the processing of the asset task has stopped (either at the Platform or at the Provider), and human intervention is required to process the asset task. A *non-fatal* error means that the Platform or Provider will retry processing the asset task: if the underlying reason for the error is resolved, the asset task can be processed successfully without intervention.
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	

Return Type	Method and Paramaters	Additional Information
void	setFatal (boolean fatal)	A *fatal* error means that the processing of the asset task has stopped (either at the Platform or at the Provider), and human intervention is required to process the asset task. A *non-fatal* error means that the Platform or Provider will retry processing the asset task: if the underlying reason for the error is resolved, the asset task can be processed successfully without intervention.
void	setProjectId (java.lang.String projectId)	
void	setRepeat (int repeat)	*Repeat* indicates to the Content Connector whether the error is a repetition of a previous error, and how many times the error has been repeated. If the value is 0, the error is not a repeat. Generally the Clay Tablet Platform prevents sending repeat errors to the producer.
void	setSubject (java.lang.String subject)	Sometimes the Clay Tablet Platform or the Translation Connector can retry processing an asset task in case of transient error, which may resulting in the same processing error occurs repeatedly. The purpose of the subject field is to enable the Platform and the Content Connector to detect repetitive errors. If two `AssetTaskProcessingError` event messages for the same asset task with same subjects arrive, without any other event in between, then the second is a repeat of the first.

This class inherits the following methods from the parent
`com.claytablet.model.event.platform.ProcessingError` class:

- getErrorDetails
- getErrorMessage
- setErrorDetails
- setErrorMessage
- validate

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

6 Job-Related Interfaces and Metadata-Related Classes

The following interfaces group content into jobs, and provide job-related metadata. For more information, see "Grouping Assets into Jobs Using Job Metadata Interfaces" on page 34.

Job-Related Interface	Description
IJobMetadata	Defines a basic set of common metadata for a job, as well as an extensible set of additional translation-provider-specific metadata.
IAttribute	Specifies the names and values of metadata of assets in a job. This extends the standard set of job metadata with translation-provider-specific metadata.
IMetadata	Specifies the metadata for an asset in a job. This extends the standard set of job metadata with translation-provider-specific metadata.
MetadataGroup	Specifies the metadata for a group of assets in a job.

The following classes provide metadata for jobs:

Metadata-Related Class	Description
Metadata	Captures additional information, which is useful when creating a custom integration from the producer to the provider.
JobMetadata	Contains methods for setting the metadata for a project.
MetadataFactory	Contains a group of static factory methods to create instances of job metadata-related interfaces. You use these factory methods instead of directly instantiating implementation classes of these interfaces.
MetadataException	Provides data about a metadata exception.

6.1 IJobMetadata Interface

Interface	IJobMetadata
Reference	com.claytablet.model.event.metadata

Known Implementing Classes	JobMetadata
Supported Versions	All versions

This interface defines a basic set of common metadata for a job, as well as an extensible set of additional translation-provider-specific metadata.

This interface has the following methods:

Return Type	Method and Parameters	Additional Information
IJobMetadata	addMetadataGroup (IMetadataGroup metadataGroup)	This method associates and retrieves additional translation-provider-specific metadata sets for a job.
java.util.List< IMetadataGroup >	getAdditionalMetadataGroups ()	This method associates and retrieves additional translation-provider-specific metadata sets for a job.
int	getAssetTaskCount ()	The Translation Connector uses a job's asset task count to determine whether it has received all the asset tasks in a job. Each target language for an asset is a separate asset task. For example, suppose a job contains three assets: two assets have three target languages, and one asset has four target languages. This job has ten asset tasks. Before you can send a `CreateAsset` message, you must calculate the total asset task count for the entire job. Support assets are not included in the asset task count.
java.lang.String	getClient ()	
java.lang.String	getCreator ()	
java.lang.String	getCreatorContact ()	
java.lang.String	getDescription ()	
java.lang.String	getDueDate ()	

Return Type	Method and Parameters	Additional Information
java.lang.String	getJobId ()	Each job must have a unique job ID (typically a GUID), which the Translation Connector uses to determine the job association of assets tasks. If you are sure that your project contains only one job, this ID can be the project ID. However, if your project can contain multiple jobs, it should be a different ID.
java.lang.String	getJobName ()	
<T extends IMetadataGroup > T	getMetadataGroup (T outputGroup)	This method associates and retrieves additional translation-provider-specific metadata sets for a job. For more information, see "IMetadataGroup Interface" on page 144.
java.lang.String	getPoReference ()	
java.lang.String	getProducerId ()	
java.lang.String	getStartDate ()	
IJobMetadata	setAssetTaskCount (int assetTaskCount)	The Translation Connector uses a job's asset task count to determine whether it has received all the asset tasks in a job. Each target language for an asset is a separate asset task. For example, suppose a job contains three assets: two assets have three target languages, and one asset has four target languages. This job has ten asset tasks.Before you can send a `CreateAsset` message, you must calculate the total asset task count for the entire job. Support assets are not included in the asset task count.
IJobMetadata	setClient (java.lang.String client)	
IJobMetadata	setCreator (java.lang.String creator)	

Return Type	Method and Parameters	Additional Information
IJobMetadata	setCreatorContact (java.lang.String creatorContact)	
IJobMetadata	setDescription (java.lang.String description)	
IJobMetadata	setDueDate (java.lang.String dueDate)	
IJobMetadata	setJobId (java.lang.String jobId)	Each job must have a unique job ID (typically a GUID), which the Translation Connector uses to determine the job association of assets tasks. If you are sure that your project contains only one job, this ID can be the project ID. However, if your project can contain multiple jobs, it should be a different ID.
IJobMetadata	setJobName (java.lang.String jobName)	
IJobMetadata	setPoReference (java.lang.String poReference)	
IJobMetadata	setProducerId (java.lang.String producerId)	
IJobMetadata	setStartDate (java.lang.String startDate)	
java.lang.String	toXml ()	

6.2 IAttribute Interface

Interface	IAttribute
Reference	com.claytablet.model.event.metadata

Known Implementing Class	Attr
Supported Versions	All versions.

The `IAttribute` interface specifies the names and values of metadata of assets in a job. This extends the standard set of job metadata with translation-provider-specific metadata.

This interface has the following methods:

Return Type	Method and Parameters
java.lang.String	getName ()
java.lang.String	getValue ()
void	setName (java.lang.String name)
void	setValue (java.lang.String value)

6.3 IMetadata Interface

Interface	IMetadata
Reference	com.claytablet.model.event.metadata
Known Subinterfaces	IMetadataGroup
Known Implementing Classes	BaseMetadataGroup, FreewayMetadataGroup, Metadata

The `IMetadata` interface specifies the metadata for an asset in a job. This extends the standard set of job metadata with translation-provider-specific metadata.

This interface has the following methods:

Return Type	Method and Parameters
void	addAttribute (IAttribute attribute)
void	addAttribute (java.lang.String attribute_name, java.lang.String attribute_value)
java.util.List<? extends IAttribute>	getAttributes ()
java.lang.String	getMetadataName ()

Return Type	Method and Parameters
java.lang.String	getMetadataValue ()
void	setMetadataName (java.lang.String metadata_name)
void	setMetadataValue (java.lang.String metadata_value)

6.4 IMetadataGroup Interface

Interface	IMetadataGroup
Reference	com.claytablet.model.event.metadata
Extends/Superinterfaces	IMetadata
Implementing Classes	BaseMetadataGroup, FreewayMetadataGroup

The IMetadataGroup interface specifies the metadata for a group of assets in a job.

Tip: Developers of the Translation Connector can create a new implementation of the IMetadataGroup interface that contains metadata specific to the translation provider.

This interface has the following methods:

Return Type	Method and Parameters
void	addAttributeToGroup (IAttribute attribute)
void	addMetadataToGroup (IMetadata metadata)
java.util.List<? extends IMetadata>	getAdditionalMetadataList ()
java.util.List<? extends IAttribute>	getGroupAttributes ()
java.lang.String	getGroupName ()
boolean	isTransferableFrom (IMetadataGroup group)
void	setGroupName (java.lang.String groupName)
void	transferFrom (IMetadataGroup sourceGroup)

6.5 Metadata Class

Class	Metadata
Reference	com.claytablet.model.event.metadata.impl.Metadata
Implements	IMetadata
Direct Known Subclass	BaseMetadataGroup
Constructor	■ Metadata () ■ Metadata (IMetadata metadata)
Supported Versions	All versions

This class is useful when creating a custom integration from the producer to the provider, where you want to capture additional information.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
void	addAttribute (IAttribute attribute)	Specified by addAttribute in the IMetadata interface.
void	addAttribute (java.lang.String attribute_name, java.lang.String attribute_value)	Specified by addAttribute in the IMetadata interface.
static Metadata	from (IMetadata metadata)	
java.util.List<Attr>	getAttributes ()	Specified by getAttributes in the IMetadata interface.
java.lang.String	getMetadataName ()	Specified by getMetadataName in the IMetadata interface.
java.lang.String	getMetadataValue ()	Specified by getMetadataValue in the IMetadata interface.
void	setAttributes (java.util.List<Attr> attributes)	
void	setMetadataName (java.lang.String metadata_name)	Specified by setMetadataName in the IMetadata interface.
void	setMetadataValue (java.lang.String metadata_value)	Specified by setMetadataValue in the IMetadata interface.

6.6 JobMetadata Class

Class	JobMetadata
Reference	com.claytablet.model.event.metadata.impl.JobMetadata
Implements	IJobMetadata
Constructor	JobMetadata ()
Supported Versions	All versions

This class contains methods for setting the metadata for a project.

It has the following methods:

Return Type	Method and Parameters	Additional Information
IJobMetadata	addMetadataGroup (IMetadataGroup metadataGroup)	Specified by addMetadataGroup in the IJobMetadata interface.
static JobMetadata	FromXML (java.lang.String xmlString)	throws MetadataException
java.util.List< IMetadataGroup >	getAdditionalMetadataGroups ()	Specified by getAdditionalMetadataGroups in the IJobMetadata interface.
int	getAssetTaskCount ()	Specified by getAssetTaskCount in the IJobMetadata interface.
java.lang.String	getClient ()	Specified by getClient in the IJobMetadata interface.
java.lang.String	getCreator ()	
java.lang.String	getCreatorContact ()	Specified by getCreatorContact in the IJobMetadata interface.
java.lang.String	getDescription ()	Specified by getDescription in the IJobMetadata interface.
java.lang.String	getDueDate ()	Specified by getDueDate in the IJobMetadata interface.

Return Type	Method and Parameters	Additional Information
java.lang.String	getJobId ()	Specified by `getJobId` in the `IJobMetadata` interface.
java.lang.String	getJobName ()	Specified by `getJobName` in the `IJobMetadata` interface.
<T extends IMetadataGroup > T	getMetadataGroup (T outputGroup)	Specified by `getMetadataGroup` in the `IJobMetadata` interface.
java.lang.String	getPoReference ()	Specified by `getPoReference` in the `IJobMetadata` interface.
java.lang.String	getProducerId ()	Specified by `getProducerId` in the `IJobMetadata` interface.
java.lang.String	getStartDate ()	Specified by `getStartDate` in the `IJobMetadata` interface.
static java.lang.String	removeControlChars (java.lang.String passString)	
void	setAdditionalMetadataGroups (java.util.List<IMetadataGroup> additionalMetadataGroupList)	Specified by `setAdditionalMetadataGroups` in the `IJobMetadata` interface.
JobMetadata	setAssetTaskCount (int assetTaskCount)	Specified by `setAssetTaskCount` in the `IJobMetadata` interface.
JobMetadata	setClient (java.lang.String client)	Specified by `setClient` in the `IJobMetadata` interface.
JobMetadata	setCreator (java.lang.String creator)	
JobMetadata	setCreatorContact (java.lang.String creatorContact)	Specified by `setCreatorContact` in the `IJobMetadata` interface.

Return Type	Method and Parameters	Additional Information
IJobMetadata	setDescription (java.lang.String description)	Specified by `setDescription` in the `IJobMetadata` interface.
IJobMetadata	setDueDate (java.lang.String dueDate)	Specified by `setDueDate` in the `IJobMetadata` interface.
IJobMetadata	setJobId (java.lang.String jobId)	Specified by `setJobId` in the `IJobMetadata` interface.
IJobMetadata	setJobName (java.lang.String jobName)	Specified by `setJobName` in the `IJobMetadata` interface.
IJobMetadata	setPoReference (java.lang.String poReference)	Specified by `setPoReference` in the `IJobMetadata` interface.
IJobMetadata	setProducerId (java.lang.String producerId)	Specified by `setProducerId` in the `IJobMetadata` interface.
JobMetadata	setStartDate (java.lang.String startDate)	Specified by `setStartDate` in the `IJobMetadata` interface.
java.lang.String	toXml ()	Specified by `toXml` in the `IJobMetadata` interface.
static java.lang.String	toXML (JobMetadata jobMetadata)	throws MetadataException

6.7 MetadataFactory Class

Class	MetadataFactory
Reference	com.claytablet.model.event.metadata
Extends	java.lang.Object
Constructor	MetadataFactory ()
Supported Versions	All versions

The `MetadataFactory` class contains a group of static factory methods to create instances of job metadata-related interfaces. You use these factory methods instead of directly instantiating implementation classes of these interfaces.

Return Type	Method and Parameters	Additional Information
static IJobMetadata	getJobMetadataFromXml (java.lang.String xml)	throws MetadataException
static IAttribute	newAttribute (java.lang.String name, java.lang.String value)	
static IJobMetadata	newJobMetadata ()	
static IMetadata	newMetadata ()	

6.8 MetadataException Class

Class	MetadataException
Reference	com.claytablet.model.event.metadata
Extends	java.lang.Exception
Constructors	■ MetadataException (java.lang.String message) ■ MetadataException (java.lang.String message, java.lang.String jobId, java.lang.String jobName, java.lang.String producerId) ■ MetadataException (java.lang.String message, java.lang.String jobId, java.lang.String jobName, java.lang.String producerId, java.lang.Throwable cause) ■ MetadataException (java.lang.String message, java.lang.Throwable cause)
Supported Versions	All versions

The `MetadataException` class provides data about a metadata exception. It has the following methods:

Return Type	Method and Parameters
java.lang.String	getJobId ()
java.lang.String	getJobName ()
java.lang.String	getProducerId ()

7 Testing Your Connector Using Clay Tablet Demo Files

After you use this SDK to build your Connector, you can use two Clay Tablet Technologies demo files to test it.

There is one demo file to test a Content Connector, and there is another demo file to test a Translation Connector. These files are part of the SDK for Java package. Both demo files are built with Eclipse.

1. Unzip the relevant package (`..\CTT Java-SDK\samples\.project`) to a local folder, and then import the project into Eclipse.

   Note: Currently a demo file is available only to test a Content Connector. If you want to test a Translation Connector, please contact Clay Tablet Support, as described below.

2. Contact Clay Tablet Technologies to create a test account so that you can run the demo projects. For details, see "How to Contact Clay Tablet Support" on page 14.

   Along with the test account, Clay Tablet Technologies also provides the `source.xml` and `target.xml` files.

3. Do one of the following:

   ▦ In your Eclipse project, copy these files into the **Accounts** folder under the main resource.

   ▦ In the file system, copy these files into the `/src/main/resources/accounts` folder.

You can now test how your Connector sends and receives files for translation.

8 Appendix: High-Level Java Reference Information

This chapter contains reference information about the following Java entities:

Java Entity	Description
"References" on page 151	Describes the sub-sections of the `com.claytablet.model.event` part of the SDK you use to build a Connector, including which types of events (classes) are in which sub-section.
"Abstract Classes" on page 152	Abstract classes that extend classes (events). The abstract classes cannot be instantiated.
"Language Class, Codes, and Static Methods" on page 159	The `Language` class includes the constants that represent the supported languages and language codes and the static methods for working with those language codes. The `LanguageCode` class includes methods for retrieving and setting new language identifiers and codes.
"Implemented Interfaces" on page 172	Interfaces that are implemented in the methods of many classes.
"Return Types" on page 181	Custom return types in this SDK.
■ "ConnectionContext Class" on page 182 ■ "StorageDirectoryProvider Interface" on page 184	A class and the related interface for retrieving and setting the connection context fields, such as the local directory paths.

8.1 References

You use the `com.claytablet.model.event` part of the SDK to build a Connector. This has the following subsections:

Reference	Description
com.claytablet.model.event.platform	This contains events (classes) that the Clay Tablet Platform sends.

Reference	Description
com.claytablet.model.event.producer	This contains events (classes) that the Content Connector (Producer) sends.
com.claytablet.model.event.provider	This contains events (classes) that the Translation Connector (Provider) sends.
com.claytablet.model.event.metadata	This contains interfaces and static factory methods for grouping multiple assets as a single job, and for providing metadata about jobs.

8.2 Abstract Classes

Classes (events) in the SDK reference the following abstract classes, which cannot be instantiated:

Abstract Class	Description
AbsEvent	The abstract class that extends classes that are events.
AbsAssetTaskEvent	The abstract class that extends the `AcknowledgedAssetTaskTranslation` and `RejectedAssetTaskQuote` events.
StartAssetTaskBase	The abstract class that extends the `ApprovedAssetTaskQuote`, `StartAssetTask`, and `StartAssetTaskQuote` events.

8.2.1 AbsEvent Class

Class	AbsEvent
Reference	com.claytablet.model.event
Extends	java.lang.Object
Implements	IEvent
Direct Known Subclasses	See the next section.
Constructor	AbsEvent ()
Supported Versions	All versions

Important: This is an abstract class, which cannot be instantiated.

This abstract class extends classes that are events.

8.2.1.1 AbsEvent Subclasses

The AbsEvent class has the following direct known subclasses:

- AbsAssetTaskEvent
- AcceptAssetTask
- AcceptNeedAssetTaskUpdate
- AcceptNeedTranslationCorrectionAssetTask
- AcceptUpdateTMAsset
- AcknowledgeAssetTaskTranslation
- ApproveAssetTask
- ApproveAssetTaskQuote
- ApprovedAssetTask
- ApprovedTranslationCorrectionAssetTask
- AssetTaskProviderError
- CancelAsset
- CanceledAssetTask
- CanceledSupportAsset
- CancelProject
- CancelSupportAsset
- CompletedProject
- CreateAsset
- CreateSupportAsset
- CreateUpdateTMAsset
- NeedAssetTaskUpdate
- NeedTranslationCorrectionAsset
- ProcessingError
- ReceivedTranslationCorrectionAssetTask
- ReceivedUpdatedAssetTask
- RejectAssetTask
- RejectAssetTaskQuote
- RejectedAssetTask
- ReviewAssetTask
- ReviewTranslationCorrectionAssetTask
- ReviewUpdatedAssetTask
- StartAssetTaskBase
- StartNeedAssetTaskUpdate
- StartNeedTranslationCorrectionAssetTask
- StartSupportAsset
- StartUpdateTMAsset
- SubmitAssetTask
- SubmitProject
- SubmitTranslationCorrectionAssetTask
- SubmitUpdatedAssetTask
- UpdateAssetTaskState
- UpdatedAssetTaskState

8.2.1.2 AbsEvent Methods

The AbsEvent class has the following methods:

Return Type	Method and Parameters	Additional Information
boolean	equals (java.lang.Object o)	
static AbsEvent	fromXml (java.lang.String event)	Deserializes an event object from XML. Returns the deserialized event object. The event parameter is the XML string representation of the object.
java.util.Date	getCreateDate ()	Specified by getCreateDate in the IEvent interface.
java.lang.String	getEventId ()	Specified by getEventId in the IEvent interface.
java.lang.String	getSourceAccountId ()	Specified by getSourceAccountId in the IEvent interface.
java.lang.String	getTargetAccountId ()	Specified by getTargetAccountId in the IEvent interface.
static com.thoughtworks.xstream.XStream	getXStream ()	Retrieves the XStream instance to use for serializing and deserializing objects to and from XML.
int	hashCode ()	
void	setCreateDate (java.util.Date createDate)	Specified by setCreateDate in the IEvent interface.
void	setEventId (java.lang.String eventId)	Specified by setEventId in the IEvent interface.

Return Type	Method and Parameters	Additional Information
void	setSourceAccountId (java.lang.String sourceAccountId)	Specified by `setSourceAccountId` in the IEvent interface.
void	setTargetAccountId (java.lang.String targetAccountId)	Specified by `setTargetAccountId` in the IEvent interface.
java.lang.String	toString ()	
java.lang.String	toXml (AbsEvent event)	Serializes an event object to XML. It returns the XML string representation of the object. The `event` parameter is the XML string representation of the object.
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

8.2.2 AbsAssetTaskEvent Class

Class	AbsAssetTaskEvent
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Direct Known Subclasses	AcknowledgedAssetTaskTranslation, RejectedAssetTaskQuote
Constructor	AbsAssetTaskEvent ()
Supported Versions	All versions

Important: This is an abstract class, which cannot be instantiated.

This abstract class extends the AcknowledgedAssetTaskTranslation and RejectedAssetTaskQuote events.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
java.lang.String	getName ()	
java.lang.String	getProjectId ()	Specified by getProjectId in the IProjectAware interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTargetLanguageCode ()	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setName (java.lang.String name)	
void	setProjectId (java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml

| getCreateDate | getTargetAccountId | setCreateDate | setTargetAccountId | validate |

8.2.3 StartAssetTaskBase Class

Class	StartAssetTaskBase
Reference	com.claytablet.model.event.platform
Extends	com.claytablet.model.event.AbsEvent
Implements	IAssetTaskAware, IAssetAware, IEvent, IProjectAware
Direct Known Subclasses	ApprovedAssetTaskQuote, StartAssetTask, StartAssetTaskQuote
Constructor	StartAssetTaskBase ()
Supported Versions	All versions

Important: This is an abstract class, which cannot be instantiated.

This abstract class extends the ApprovedAssetTaskQuote, StartAssetTask, and StartAssetTaskQuote events.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.lang.String	getAdditionalServicesRequest ()	
java.lang.String	getAssetId ()	Specified by getAssetId in the IAssetAware interface.
java.lang.String	getAssetTaskId ()	Specified by getAssetTaskId in the IAssetTaskAware interface.
ContentType	getContentType ()	
java.lang.String	getDescription ()	
java.lang.String	getFileExt ()	
FileType	getFileType ()	
IJobMetadata	getJobMetadata ()	
java.lang.String	getName ()	

Return Type	Method and Parameters	Additional Information
java.util.Date	getProjectDeadline ()	
java.lang.String	getProjectId ()	Specified by `getProjectId` in the [IProjectAware](#) interface.
java.lang.String	getProjectName ()	
java.lang.String	getSourceLanguageCode ()	
java.lang.String	getTags ()	
java.lang.String	getTargetLanguageCode ()	
abstract boolean	isPendingQuote ()	
void	setAdditionalServicesRequest (java.lang.String additionalServicesRequest)	
void	setAssetId (java.lang.String assetId)	
void	setAssetTaskId (java.lang.String assetTaskId)	
void	setContentType ([ContentType](#) contentType)	
void	setDescription (java.lang.String description)	
void	setFileExt (java.lang.String fileExt)	
void	setFileType ([FileType](#) fileType)	
void	setName (java.lang.String name)	

Return Type	Method and Parameters	Additional Information
void	setProjectDeadline (java.util.Date projectDeadline)	
void	setProjectId (java.lang.String projectId)	
void	setProjectName (java.lang.String projectName)	
void	setSourceLanguageCode (java.lang.String sourceLanguageCode)	
void	setTags (java.lang.String tags)	
void	setTargetLanguageCode (java.lang.String targetLanguageCode)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event. Specified by `validate` in the IEvent interface.

This class inherits the following methods from the com.claytablet.model.event.AbsEvent class:

equals	getEventId	getXStream	setEventId	toString
fromXml	getSourceAccountId	hashCode	setSourceAccountId	toXml
getCreateDate	getTargetAccountId	setCreateDate	setTargetAccountId	

8.3 Language Class, Codes, and Static Methods

Class	Language
Reference	com.claytablet.model
Extends	java.lang.Object

Constructor	Language ()
Supported Versions	All versions

The `Language` class includes the constants that represent the supported languages and language codes, described in "Language Class Codes" below. It also contains static methods for working with the language codes, which are described in .

8.3.1 Language Class Codes

Type	Language Identifier	Language Code
String	Afrikaans	"af-ZA"
String	Albanian	"sq-AL"
String	Amharic	"am-ET"
String	Arabic_Algeria	"ar-DZ"
String	Arabic_Bahrain	"ar-BH"
String	Arabic_Egypt	"ar-EG"
String	Arabic_Iraq	"ar-IQ"
String	Arabic_Jordan	"ar-JO"
String	Arabic_Kuwait	"ar-KW"
String	Arabic_Lebanon	"ar-LB"
String	Arabic_Libya	"ar-LY"
String	Arabic_MiddleEast	"ar-XR"
String	Arabic_Morocco	"ar-MA"
String	Arabic_Oman	"ar-OM"

Type	Language Identifier	Language Code
String	Arabic_Qatar	"ar-QA"
String	Arabic_Saudi_Arabia	"ar-SA"
String	Arabic_Syria	"ar-SY"
String	Arabic_Tunisia	"ar-TM"
String	Arabic_UAE	"ar-AE"
String	Arabic_Yemen	"ar-YE"
String	Armenian	"hy-AM"
String	Assamese	"as-IN"
String	Basque	"eu-ES"
String	Belarusian	"be-BY"
String	Bengali_Bangladesh	"bn-BD"
String	Bengali_India	"bn-IN"
String	Bosnian_Bosnia_Herzegovina	"bs-BA"
String	Bulgarian	"bg-BG"
String	Burmese	"my-MM"
String	Catalan	"ca-ES"
String	Chinese_Hong_Kong	"zh-HK"
String	Chinese_Macao	"zh-MO"

Type	Language Identifier	Language Code
String	Chinese_PRC	"zh-CN"
String	Chinese_Singapore	"zh-SG"
String	Chinese_Taiwan	"zh-TW"
String	Croatian	"hr-HR"
String	Croatian_Bosnia_Herzegovina	"hr-BA"
String	Czech	"cs-CZ"
String	Danish	"da-DK"
String	Divehi	"dv-MV"
String	Dutch	"nl-NL"
String	Dutch_Belgium	"nl-BE"
String	English_Australia	"en-AU"
String	English_Belize	"en-BZ"
String	English_Canada	"en-CA"
String	English_HongKong	"en-HK"
String	English_India	"en-IN"
String	English_Indonesia	"en-ID"
String	English_Ireland	"en-IE"
String	English_Jamaica	"en-JM"

Type	Language Identifier	Language Code
String	English_Malaysia	"en-MY"
String	English_New_Zealand	"en-NZ"
String	English_Philippines	"en-PH"
String	English_Singapore	"en-SG"
String	English_South_Africa	"en-ZA"
String	English_Trinidad	"en-TT"
String	English_UK	"en-GB"
String	English_US	"en-US"
String	English_Zimbabwe	"en-ZW"
String	Estonian	"et-EE"
String	Faroese	"fo-FO"
String	Farsi	"fa-IR"
String	Filipino	"fil-PH"
String	Finnish	"fi-FI"
String	French	"fr-FR"
String	French_Belgium	"fr-BE"
String	French_Cameroon	"fr-CM"
String	French_Canada	"fr-CA"

Type	Language Identifier	Language Code
String	French_Cote_d_Ivoire	"fr-CI"
String	French_Democratic_Rep_Congo	"fr-CD"
String	French_Haiti	"fr-HT"
String	French_Luxembourg	"fr-LU"
String	French_Mali	"fr-ML"
String	French_Monaco	"fr-MC"
String	French_Morocco	"fr-MA"
String	French_Reunion	"fr-RE"
String	French_Senegal	"fr-SN"
String	French_Switzerland	"fr-CH"
String	Frisian_Netherlands	"fy-NK"
String	Fulfulde_Nigeria	"ff-NG"
String	FYRO_Macedonian	"mk-MK"
String	Gaelic_Ireland	"gd-IE"
String	Gaelic_Scotland	"gd-GB"
String	Gallegan	"gl-ES"
String	Georgian	"ka-GE"
String	German	"de-DE"

Type	Language Identifier	Language Code
String	German_Austria	"de-AT"
String	German_Liechtenstein	"de-LI"
String	German_Luxembourg	"de-LU"
String	German_Switzerland	"de-CH"
String	Greek	"el-GR"
String	Guarani	"gn-PY"
String	Gujarati	"gu-IN"
String	Hausa	"ha-NE"
String	Hawaiian	"haw-US"
String	Hebrew	"he-IL"
String	Hindi	"hi-IN"
String	Hungarian	"hu-HU"
String	Icelandic	"is-IS"
String	Igbo	"ig-NG"
String	Indonesian	"id-ID"
String	Inuktitut	"iu-CA"
String	Italian	"it-IT"
String	Italian_Switzerland	"it-CH"

Type	Language Identifier	Language Code
String	Japanese	"ja-JP"
String	Kannada	"kn-IN"
String	Kanuri	"kr-TD"
String	Kashmiri	"ks-IN"
String	Kazakh	"kk-KZ"
String	Khmer	"km-KH"
String	Konkani	"kok-IN"
String	Korean	"ko-KR"
String	Kyrgyz	"ky-KZ"
String	Lao	"lo-LA"
String	Latin	"la-XL"
String	Latvian	"lv-LV"
String	Lithuanian	"lt-LT"
String	Malay	"ms-MY"
String	Malay_Brunei_Darussalam	"ms-BN"
String	Malayalam	"ml-IN"
String	Maltese	"mt-MT"
String	Maori	"mi-NZ"

Type	Language Identifier	Language Code
String	Marathi	"mr-IN"
String	Mongolian	"mn-MN"
String	Nepali	"ne-NP"
String	Nepali_India	"ne-IN"
String	Norwegian	"nb-NO"
String	Norwegian_Nynorsk	"nn-NO"
String	Oriya	"or-IN"
String	Oromo	"om-ET"
String	Panjabi	"pa-PK"
String	Polish	"pl-PL"
String	Portuguese	"pt-PT"
String	Portuguese_Brazil	"pt-BR"
String	Punjabi_Pakistan	"pa-PK"
String	Pushto	"ps-AF"
String	Quechua_Ecuador	"qu-EC"
String	Quechua_Peru	"qu-PE"
String	Rhaeto_Romance	"rm-IT"
String	Romanian	"ro-RO"

Type	Language Identifier	Language Code
String	Romanian_Moldova	"ro-MD"
String	Russian	"ru-RU"
String	Russian_Moldava	"ru-MD"
String	Sami	"se-NO"
String	Sanskrit	"sa-IN"
String	Serbian_Cyrillic	"sr-RS"
String	Serbian_Latin	"sr-SP"
String	Sindhi_India	"sd-IN"
String	Sindhi_Pakistan	"sd-PK"
String	Sinhala	"si-LK"
String	Slovak	"sk-SK"
String	Slovenian	"sl-SI"
String	Somali	"so-ET"
String	Sorbian	"wen-DE"
String	Spanish	"es-ES"
String	Spanish_Argentina	"es-AR"
String	Spanish_Bolivia	"es-BO"
String	Spanish_Chile	"es-CL"

Type	Language Identifier	Language Code
String	Spanish_Colombia	"es-CO"
String	Spanish_Costa_Rica	"es-CR"
String	Spanish_Dominican_Republic	"es-DO"
String	Spanish_Ecuador	"es-EC"
String	Spanish_El_Salvador	"es-SV"
String	Spanish_Honduras	"es-HN"
String	Spanish_LatinAmerica	"es-XL"
String	Spanish_Mexico	"es-MX"
String	Spanish_Nicaragua	"es-NI"
String	Spanish_Panama	"es-PA"
String	Spanish_Paraguay	"es-PY"
String	Spanish_Peru	"es-PE"
String	Spanish_Puerto_Rico	"es-PR"
String	Spanish_Uruguay	"es-UY"
String	Spanish_US	"es-US"
String	Spanish_Venezuela	"es-VE"
String	Swahili	"sw-TZ"
String	Swedish	"sv-SE"

Type	Language Identifier	Language Code
String	Swedish_Finland	"sv-FI"
String	Syriac	"syr-SY"
String	Tajik	"tg-TJ"
String	Tamil	"ta-IN"
String	Tatar	"tt-RU"
String	Telugu	"te-IN"
String	Thai	"th-TH"
String	Tibetan	"bo-CN"
String	Tigrinya_Eritrea	"ti-ER"
String	Tigrinya_Ethiopia	"ti-ET"
String	Tsonga	"ts-ZA"
String	Tswana	"tn-BW"
String	Turkish	"tr-TR"
String	Turkmen	"tk-TM"
String	Uighur	"ug-CN"
String	Ukrainian	"uk-UA"
String	Urdu	"ur-PK"
String	Urdu_India	"ur-IN"

Type	Language Identifier	Language Code
String	Uzbek	"uz-UZ"
String	Venda	"ve-ZA"
String	Vietnamese	"vi-VN"
String	Welsh	"cy-GB"
String	Xhosa	"xh-ZA"
String	Yi	"ii-CN"
String	Yiddish	"yi-MD"
String	Yoruba	"yo-NG"
String	Zulu	"zu-ZA"

8.3.2 Language Class Static Methods

The `Language` class has the following static methods:

Return Type	Method and Parameters
java.util.List<LanguageCode>	getAddedLanguages ()
java.lang.String[]	getAllLanguages ()
java.lang.String	getFullName (java.lang.String languageName)
int	getLCIDByName (java.lang.String languageName)
java.lang.String	getNameByLCID (int LCID)

8.3.3 LanguageCode Class

Class	LanguageCode
Reference	com.claytablet.model
Extends	java.lang.Object
Constructor	LanguageCode ()
Supported Versions	All versions

The LanguageCode class can retrieve and set new language identifiers and codes.

Note: Current language identifiers and codes are constants in the Language class.

The LanguageCode class has the following static methods:

Return Type	Method and Parameters
java.lang.String	getCode ()
java.lang.String	getName ()
void	setCode (java.lang.String code)
void	setName (java.lang.String name)

8.4 Implemented Interfaces

The following interfaces are implemented in the methods of many classes:

Implemented Interface	Description
IEvent	Has methods for all classes that are events.
IAssetAware	Has a method that gets the ID of an asset (getAssetId).
IAssetTaskAware	Has a method that gets the ID of an asset task (getAssetTaskId).
IProjectAware	Has a method that gets the ID of a project (getProjectId).

8.4.1 IEvent Interface

Interface	IEvent
Reference	com.claytablet.model.event
Known Implementing Classes	See the next section.
Supported Versions	All versions

This interface defines a collection of method definitions and constant values that are implemented by all classes that are events.

8.4.1.1 IEvent Known Implementing Classes

The `IEvent` interface has the following known implementing classes:

- AbsAssetTaskEvent
- AbsEvent
- AcceptAssetTask
- AcceptNeedAssetTaskUpdate
- AcceptNeedTranslationCorrectionAssetTask
- AcceptUpdateTMAsset
- AcknowledgeAssetTaskTranslation
- AcknowledgedAssetTaskTranslation
- ApproveAssetTask
- ApproveAssetTaskQuote
- ApprovedAssetTask
- ApprovedAssetTaskQuote
- ApprovedTranslationCorrectionAssetTask
- AssetTaskProcessingError
- AssetTaskProviderError
- CancelAsset
- CanceledAssetTask
- CanceledSupportAsset
- CancelProject
- CancelSupportAsset
- CompletedProject
- CreateAsset
- CreateSupportAsset
- CreateUpdateTMAsset
- NeedAssetTaskUpdate
- NeedTranslationCorrectionAsset
- ProcessingError
- ReceivedTranslationCorrectionAssetTask
- ReceivedUpdatedAssetTask
- RejectAssetTask
- RejectAssetTaskQuote

- RejectedAssetTask
- RejectedAssetTaskQuote
- ReviewAssetTask
- ReviewTranslationCorrectionAssetTask
- ReviewUpdatedAssetTask
- StartAssetTask
- StartAssetTaskBase
- StartAssetTaskQuote
- StartNeedAssetTaskUpdate
- StartNeedTranslationCorrectionAssetTask
- StartSupportAsset
- StartUpdateTMAsset
- SubmitAssetTask
- SubmitProject
- SubmitTranslationCorrectionAssetTask
- SubmitUpdatedAssetTask
- UpdateAssetTaskState
- UpdatedAssetTaskState

8.4.1.2 IEvent Methods

The IEvent interface has the following methods:

Return Type	Method and Parameters	Additional Information
java.util.Date	getCreateDate ()	
java.lang.String	getEventId ()	
java.lang.String	getSourceAccountId ()	
java.lang.String	getTargetAccountId ()	
void	setCreateDate (java.util.Date createDate)	
void	setEventId (java.lang.String eventId)	
void	setSourceAccountId (java.lang.String sourceAccountId)	

Return Type	Method and Parameters	Additional Information
void	setTargetAccountId (java.lang.String targetAccountId)	
java.lang.String ■ If validation passes, this is null. ■ If validation does not pass, the message (String) provides the reason.	validate ()	Validates the fields in this event.

8.4.2 IAssetAware Interface

Interface	IAssetAware
Reference	com.claytablet.model.event
Known Implementing Classes	See the next section.
Supported Versions	All versions

This interface has a method that gets the ID of an asset (getAssetId).

8.4.2.1 IAssetAware Known Implementing Classes

The IAssetAware interface has the following known implementing classes:

- AbsAssetTaskEvent
- AcknowledgedAssetTaskTranslation
- ApprovedAssetTaskQuote
- AssetTaskProcessingError
- CancelAsset
- CreateAsset
- CreateSupportAsset
- CreateUpdateTMAsset
- NeedTranslationCorrectionAsset
- RejectedAssetTaskQuote
- ReviewAssetTask
- ReviewTranslationCorrectionAssetTask
- ReviewUpdatedAssetTask
- StartAssetTask
- StartAssetTaskBase
- StartAssetTaskQuote
- StartNeedAssetTaskUpdate
- StartNeedTranslationCorrectionAssetTask

- StartSupportAsset
- UpdatedAssetTaskState

8.4.2.2 IAssetAware Method

The IAssetAware interface has the following method:

Return Type	Method
java.lang.String	getAssetId ()

8.4.3 IAssetTaskAware Interface

Interface	IAssetTaskAware
Reference	com.claytablet.model.event
Known Implementing Classes	See the next section.
Supported Versions	All versions

This interface has a method that gets the ID of an asset task (`getAssetTaskId`).

8.4.3.1 IAssetTaskAware Known Implementing Classes

The IAssetTaskAware interface has the following known implementing classes:

- AbsAssetTaskEvent
- AcceptAssetTask
- AcceptNeedAssetTaskUpdate
- AcceptNeedTranslationCorrectionAssetTask
- AcknowledgeAssetTaskTranslation
- AcknowledgedAssetTaskTranslation
- ApproveAssetTask
- ApproveAssetTaskQuote
- ApprovedAssetTask
- ApprovedAssetTaskQuote
- ApprovedTranslationCorrectionAssetTask
- AssetTaskProcessingError
- AssetTaskProviderError
- CanceledAssetTask
- NeedAssetTaskUpdate
- ReceivedTranslationCorrectionAssetTask
- ReceivedUpdatedAssetTask
- RejectAssetTask

- RejectAssetTaskQuote
- RejectedAssetTask
- RejectedAssetTaskQuote
- ReviewAssetTask
- ReviewTranslationCorrectionAssetTask
- ReviewUpdatedAssetTask
- StartAssetTask
- StartAssetTaskBase
- StartAssetTaskQuote
- StartNeedAssetTaskUpdate
- StartNeedTranslationCorrectionAssetTask
- SubmitAssetTask
- SubmitTranslationCorrectionAssetTask
- SubmitUpdatedAssetTask
- UpdateAssetTaskState
- UpdatedAssetTaskState

8.4.3.2 IAssetTaskAware Method

The `IAssetTaskAware` interface has the following method:

Return Type	Method
java.lang.String	getAssetTaskId ()

8.4.4 IProjectAware Interface

Interface	IProjectAware
Reference	com.claytablet.model.event
Known Implementing Classes	See the next section.
Supported Versions	All versions

This interface has a method that gets the ID of a project (`getProjectId`).

8.4.4.1 IProjectAware Known Implementing Classes

The IProjectAware interface has the following known implementing classes:

- AbsAssetTaskEvent
- AcknowledgedAssetTaskTranslation
- ApprovedAssetTaskQuote
- AssetTaskProcessingError
- CancelProject

- CompletedProject
- CreateAsset
- CreateSupportAsset
- NeedTranslationCorrectionAsset
- RejectedAssetTaskQuote
- StartAssetTask
- StartAssetTaskBase
- StartAssetTaskQuote
- StartNeedAssetTaskUpdate
- StartNeedTranslationCorrectionAssetTask
- StartSupportAsset
- SubmitProject
- UpdatedAssetTaskState

8.4.4.2 IProjectAware Method

The `IProjectAware` interface has the following method:

Return Type	Method
java.lang.String	getProjectId ()

8.5 Account Class

Class	Account
Reference	com.claytablet.model.event.Account
Constructor	Account()
Supported Versions	All versions

This class holds account data. The public and private keys are stored as encrypted values. The getters and setters for the two keys automatically handle the encryption and decryption.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
boolean	equals (java.lang.Object other)	

Return Type	Method and Parameters	Additional Information
static Account	fromXml (java.lang.String xml)	Deserializes an account object from XML. Throws: `java.io.IOException`.
java.util.Date	getCreateDate ()	
java.lang.String	getEmail ()	
java.lang.String	getId ()	
java.lang.String	getPrivateKey ()	Returns the unencrypted private key.
java.lang.String	getProducerId ()	
java.lang.String	getProviderId ()	
java.lang.String	getPublicKey ()	Returns the unencrypted public key.
java.lang.String	getQueueEndpoint ()	
QueueType	getQueueType ()	
java.lang.String	getStorageBucket ()	
StorageType	getStorageType ()	
int	hashCode ()	
boolean	isActive ()	
void	setActive (boolean active)	

Return Type	Method and Parameters	Additional Information
void	setCreateDate (java.util.Date createDate)	
void	setEmail (java.lang.String email)	
void	setId (java.lang.String id)	
void	setPrivateKey (java.lang.String privateKey)	
void	setProducerId (java.lang.String producerId)	
void	setProviderId (java.lang.String providerId)	
void	setPublicKey (java.lang.String publicKey)	
void	setQueueEndpoint (java.lang.String queueEndpoint)	
void	setQueueType (QueueType queueType)	
void	setStorageBucket (java.lang.String storageBucket)	

Return Type	Method and Parameters	Additional Information
void	setStorageType ([StorageType](#) storageType)	
java.lang.String	toString ()	
static java.lang.String	toXml (Account account)	Serializes an account object to XML. Throws: `java.io.IOException`.
java.util.List<java.lang.String> ■ If validation passes, this is null. ■ If validation does not pass, the list returns messages (String) providing the reasons.	validate ()	Validates the required fields. Throws: `EventServiceException`.

8.6 Return Types

Reference	com.claytablet.model.enm

This SDK has the following custom return types:

■ ContentType
■ FileType
■ QueueType
■ StorageType

8.6.1 ContentType

The `ContentType` return type describes the type of content that can be submitted for translation. This return type can have the following values:

■ Marketing
■ Technical
■ Legal

8.6.2 FileType

The `FileType` return type describes the type of content file. This return type can have the following values:

- HTML
- Other
- PDF
- Text
- XML

8.6.3 QueueType

The `QueueType` return type describes the implementation of the queue service. This return type can have the following values:

- ActiveMQ
- CT_SQS
- JMS
- Mock
- SQS

8.6.4 StorageType

The `StorageType` return type describes the implementation of the storage device. This return type can have the following values:

- CT_S3
- FS
- FTP
- Mock
- S3

8.7 ConnectionContext Class

Class	ConnectionContext
Reference	com.claytablet.model
Extends	java.lang.Object
Implements	StorageDirectoryProvider
Constructor	ConnectionContext ()
Supported Versions	All versions

The `ConnectionContext` class holds the connection context fields, such as the local directory paths to use and a hash table of parameters for connecting to the system.

This class has the following methods:

Return Type	Method and Parameters	Additional Information
java.util.Hashtable<java.lang.String, java.lang.String>	getConnectionParms ()	
java.lang.String	getSourceDirectory ()	Specified by `getSourceDirectory` in the StorageDirectoryProvider interface.
java.lang.String	getTargetDirectory ()	Specified by `getTargetDirectory` in the StorageDirectoryProvider interface.
java.lang.String	getXmlDataDirectory ()	
void	load ()	Forcibly loads (deserializes) the connection context from an XML file.
void	save (java.lang.String path)	Saves (serializes) the connection context to an XML file.
void	setConnectionParms (java.util.Hashtable <java.lang.String,java.lang.String> connectionParms)	
void	setSourceDirectory (java.lang.String sourceDirectory)	
void	setTargetDirectory (java.lang.String targetDirectory)	
void	setXmlDataDirectory (java.lang.String xmlDataDirectory)	

8.8 StorageDirectoryProvider Interface

Interface	StorageDirectoryProvider
Reference	com.claytablet.model
Known Implementing Classes	ConnectionContext
Supported Versions	All versions

The StorageDirectoryProvider interface has methods for retrieving the source and target directories.

This interface has the following method:

Return Type	Method
java.lang.String	getSourceDirectory ()
java.lang.String	getTargetDirectory ()

8.9 AssetTask Event Diagram

This is a full-page version of the diagram in "AssetTask Events" on page 19:

Note: In the diagram above, events with dotted lines are not asset-task events, so they are not described in this section.

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