Technical Specification

ABSENCE API

Table of Contents

1 Introduction

The Absence API provides services that make it possible to get absence and presence for students. The services in the Absence API are accessed via URIs.

This document describes following:

- Which absence and presence information that a user can get via the Absence API.

- How the absence and presence information is divided into entities and how these entities are structured.

1.1 Prerequisites

Before you can get access to the Absence API you must request a license key from Tieto. You should have basic knowledge on Swedish school system and W3C XML before you start using the API.

2 Supported school types

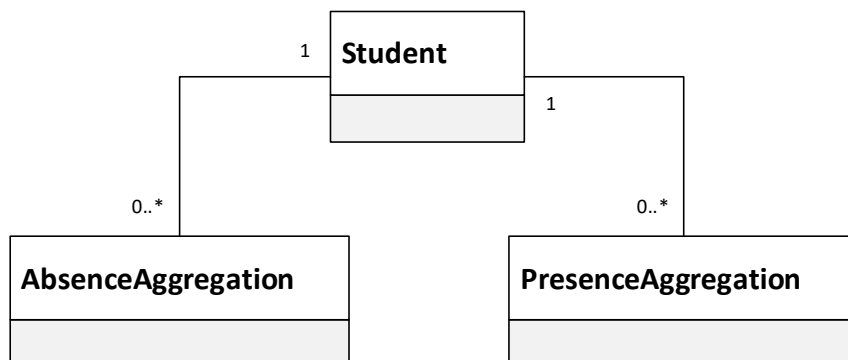The table below describes the supported types of school.

School type	Description	Code
Preschool class	Preschool class for children 6 years of age	FK
Compulsory School	Primary school organization for younger students	GR
Compulsory School For Learning Disabilities	Organization for compulsory school for learning disabilities	S
Upper Secondary School	Upper secondary school organization 3-4 years education	GY
Upper Secondary School For Learning Disabilities	Organization for upper secondary school for learning disabilities	GS
Swedish For Immigrants School	Organization for Swedish immigrants	SF
Adult School For Learning Disabilities	Organization for adult school for learning disabilities	SV
Municipal Adult School	Municipality school organization for adults	KV
Higher Vocational Education	Organizations for Higher Vocational Education	YH

3 Absence and presence

3.1 Description

This chapter describes absence and presence entities and their attributes.

3.2 Domain model

3.3 Entities

3.3.1 Properties

The delivery information of the absence and presence data that is used to manage the exchange of data between source and target system.

Name	Description
datetime	The date and time the XML information were generated. The format is as [YYYY-MM-DDTHH:MM:SS]
datasource	This is the source identifier of data source
comments	Input values for the service, in free text format.
schooltype	The schooltype of which the data is encompassing
timeframe	Time frame for the data

3.3.2 Absence

Name	Description	Read-only
personid	Unique identifier for student	Yes
minutes	Absence time in minutes	Yes
lessonminutes	Lesson time in minutes	Yes
start	Date and time of the lesson start	Yes
stop	Date and time of the lesson stop	Yes
courseorsubjectid	Course or subject code.	Yes

Name	Description		Read-only
lessonid	Lesson id		Yes
registeredby	Id of teacher that registered the absence		Yes
grouporclassid	Id of the group or class the student is a part of		Yes
comment	Free text comment by the teacher		Yes
schoolunitid	Id of the school unit the event is registered on		Yes
reason	Reason for an absence.		Yes
	Valid	Indicates that the absence is valid	
	Invalid	Indicates that the absence is invalid	
	LateArrival	Indicates that the student arrived late	
	Present	Indicates that the student was present	

3.3.3 Presence

Name	Description		Read-only
personid	Unique identifier for student		Yes
minutes	Presence time in minutes		Yes
lessonminutes	Lesson time in minutes		Yes
start	Date and time of the lesson start		Yes
stop	Date and time of the lesson stop		Yes
courseorsubjectid	Course or subject code.		Yes
lessonid	Lesson id		Yes
registeredby	Id of teacher that registered the presence		Yes
grouporclassid	Id of the group or class the student is a part of		Yes
comment	Free text comment by the teacher		Yes
schoolunitid	Id of the school unit the event is registered on		Yes
reason	Reason for an absence.		Yes
	Valid	Indicates that the absence is valid	
	Invalid	Indicates that the absence is invalid	
	LateArrival	Indicates that the student arrived late	
	Present	Indicates that the student was present	

3.3.4 AbsenceAggregation

Name	Description	Read-only
personid	Unique identifier for student	Yes
minutes	Total amount of minutes of absence	Yes

Name	Description	Read-only
offeredminutes	Total amount of scheduled lection time during the period	Yes
start	The start date for the aggregation period	Yes
stop	The end date for the aggregation period	Yes
courseorsubjectid	Course or subject code.	Yes
reason	Reason for an absence. *Valid* Indicates that the absence is valid *Invalid* Indicates that the absence is invalid *LateArrival* Indicates that the student arrived late *Present* Indicates that the student was present	Yes

3.3.5 PresenceAggregation

Name	Description	Read-only
personid	Unique identifier for student	Yes
minutes	Total amount of minutes of absence	Yes
offeredminutes	Total amount of scheduled lection time during the period	Yes
start	The start date for the aggregation period	Yes
stop	The end date for the aggregation period	Yes
courseorsubjectid	Course or subject code.	Yes
reason	Reason for an absence. *Valid* Indicates that the absence is valid *Invalid* Indicates that the absence is invalid *LateArrival* Indicates that the student arrived late *Present* Indicates that the student was present	Yes

4 Services

All network services are based on HTTP REST technology and organized in school types to match each school structure. Export is using the method HTTP GET.

4.1 Parameters and limits

All methods take 3 parameters that are mandatory

Name	Description	Required
Id	Unique identifier for student	Yes

Name	Description	Required
StartDate	The start date for the aggregation period	Yes
EndDate	The end date for the aggregation period	Yes

Absence and presence events are limited to a span of one year per call. Aggregated data is limited to a span of 5 years.

4.2 Absence

The services below export absence events.

Services:

Service	Description
GetPreSchoolClassAbsence	Get absence for preschool class student
GetCompulsorySchoolAbsence	Get absence for compulsory school student
GetCompulsorySchoolForLearningDisabilitiesAbsence	Get absence for compulsory school with learning disabilities student
GetUpperSecondarySchoolAbsence	Get absence for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesAbsence	Get absence for upper secondary school with learning disabilities student
GetSwedishForImmigrantsSchoolAbsence	Get absence for Swedish for immigrants student
GetMunicipalAdultSchoolAbsence	Get absence for municipal adult school student
GetAdultSchoolForLearningDisabilitiesAbsence	Get absence for adult school with learning disabilities student
GetHigherVocationalEducationAbsence	Get absence for higher vocational education student

4.3 Presence

The services below export presence events.

Services:

Service	Description
GetPreSchoolClassPresence	Get presence for preschool class student
GetCompulsorySchoolPresence	Get presence for compulsory school student
GetCompulsorySchoolForLearningDisabilitiesPresence	Get presence for compulsory school with learning disabilities student
GetUpperSecondarySchoolPresence	Get presence for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesPresence	Get presence for upper secondary school with learning disabilities student
GetSwedishForImmigrantsSchoolPresence	Get presence for Swedish for immigrants student
GetMunicipalAdultSchoolPresence	Get presence for municipal adult school student
GetAdultSchoolForLearningDisabilitiesPresence	Get presence for adult school with learning disabilities student
GetHigherVocationalEducationPresence	Get presence for higher vocational education student

4.4 AbsenceAggregation

The services below export aggregated absence.

Services:

Service	Description
GetPreSchoolClassAbsenceAggregation	Get aggregated absence for preschool class student
GetCompulsorySchoolAbsenceAggregation	Get aggregated absence for compulsory school student
GetCompulsorySchoolForLearningDisabilitiesAbsenceAggregation	Get aggregated absence for compulsory school with learning disabilities student
GetUpperSecondarySchoolAbsenceAggregation	Get aggregated absence for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesAbsenceAggregation	Get aggregated absence for upper secondary school with learning disabilities student

GetSwedishForImmigrantsSchoolAbsenceAggregation	Get aggregated absence for Swedish for immigrants student
GetMunicipalAdultSchoolAbsenceAggregation	Get aggregated absence for municipal adult school student
GetAdultSchoolForLearningDisabilitiesAbsenceAggregation	Get aggregated absence for adult school with learning disabilities student
GetHigherVocationalEducationAbsenceAggregation	Get aggregated absence for higher vocational education student

4.5
PresenceAggregation

The services exports aggregated presence.

Services:

Service	Description
GetPreSchoolClassPresenceAggregation	Get aggregated presence for preschool class student
GetCompulsorySchoolPresenceAggregation	Get aggregated presence for compulsory school student
GetCompulsorySchoolForLearningDisabilitiesPresenceAggregation	Get aggregated presence for compulsory school with learning disabilities student
GetUpperSecondarySchoolPresenceAggregation	Get aggregated presence for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesPresenceAggregation	Get aggregated presence for upper secondary school with learning disabilities student
GetSwedishForImmigrantsSchoolPresenceAggregation	Get aggregated presence for Swedish for immigrants student
GetMunicipalAdultSchoolPresenceAggregation	Get aggregated presence for municipal adult school student
GetAdultSchoolForLearningDisabilitiesPresenceAggregation	Get aggregated presence for adult school with learning disabilities student
GetHigherVocationalEducationPresenceAggregation	Get aggregated presence for higher vocational education student

5 Appendix

5.1 References

Name	Address
Monitoring API XML schemas and examples	https://github.com/ExchangeServices

5.2 Vocabulary

Word	Description
Child	Children below 6 year
Student	School student 6 year and older
PID	Personal identity, formatted [YYYYMMDD-NNNN]
GUID	Global unique identifier