

# Technical Specification

## Monitoring API



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## 1 Introduction

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

This document describes following:

- Which absence and presence information that a user can get and set via the Monitoring 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 Monitoring 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.

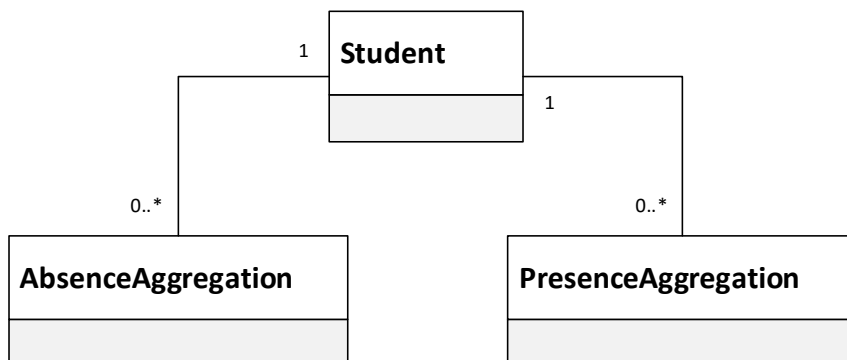
School type	Description	Code
Preschool class	Preschool class for children 6 years of age	FK
Compulsory School	Primary school organization for younger students	GR
Compulsory School For Learning Disabilities	Organization for compulsory school for learning disabilities	S
Upper Secondary School	Upper secondary 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 Student

Name	Description	Read-only
id	Student identity. The id can be GUID or PID for the student.	No
name	Student name	Yes

### 3.3.3 AbsenceAggregation

Name	Description	Read-only
student	Student	No
time	Total amount of minutes of absence	No
start	The start date for the aggregation period	No
end	The end date for the aggregation period	No
code	Course or subject code.	No
reason	Reason for an absence. <i>Valid</i> Indicates that the absence is valid <i>Invalid</i> Indicates that the absence is invalid	No

### 3.3.4 PresenceAggregation

Name	Description	Read-only
student	Student	No
time	Total amount of minutes of presence	No
timeoffered	Time offered in minutes	No
start	The start date for the aggregation period	No
end	The end date for the aggregation period	No
code	Course or subject code	No

## 4 Services

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

### 4.1 AbsenceAggregation

#### 4.1.1 Import

The services below update or add new aggregated absence. The services take no parameters.

Base path for services are: [https://\[host\]/WE.Education.Integration.Host/LES/Monitoring/V1/Monitoring.svc](https://[host]/WE.Education.Integration.Host/LES/Monitoring/V1/Monitoring.svc)

Services:

Service	Description
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Service	Description
UpdatePreSchoolClassAbsenceAggregation	Update or add new aggregated absence for preschool class student
UpdateCompulsorySchoolAbsenceAggregation	Update or add new aggregated absence for compulsory schools student
UpdateCompulsorySchoolForLearningDisabilitiesAbsenceAggregation	Update or add new aggregated absence for compulsory school with learning disabilities student
UpdateUpperSecondarySchoolAbsenceAggregation	Update or add new aggregated absence for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesAbsenceAggregation	Update or add new aggregated absence for upper secondary school with learning disabilities student
UpdateSwedishForImmigrantsSchoolAbsenceAggregation	Update or add new aggregated absence for Swedish for immigrants student
UpdateMunicipalAdultSchoolAbsenceAggregation	Update or add new aggregated absence for municipal adult school student
UpdateAdultSchoolForLearningDisabilitiesAbsenceAggregation	Update or add new aggregated absence for adult school with learning disabilities student
UpdateHigherVocationalEducationAbsenceAggregation	Update or add new aggregated absence for higher vocational education student

## 4.2 PresenceAggregation

### 4.2.1 Import

The services below update or add new aggregated presence. The services take no parameters.

Base path for services are: [https://\[host\]/WE.Education.Integration.Host/LES/Monitoring/V1/Monitoring.svc](https://[host]/WE.Education.Integration.Host/LES/Monitoring/V1/Monitoring.svc)

Services:

Service	Description
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Service	Description
UpdatePreSchoolClassPresenceAggregation	Update or add new aggregated presence for preschool class student
UpdateCompulsorySchoolPresenceAggregation	Update or add new aggregated presence for compulsory schools student
UpdateCompulsorySchoolForLearningDisabilitiesPresenceAggregation	Update or add new aggregated presence for compulsory school with learning disabilities student
UpdateUpperSecondarySchoolPresenceAggregation	Update or add new aggregated presence for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesPresenceAggregation	Update or add new aggregated presence for upper secondary school with learning disabilities student
UpdateSwedishForImmigrantsSchoolPresenceAggregation	Update or add new aggregated presence for Swedish for immigrants student
UpdateMunicipalAdultSchoolPresenceAggregation	Update or add new aggregated presence for municipal adult school student
UpdateAdultSchoolForLearningDisabilitiesPresenceAggregation	Update or add new aggregated presence for adult school with learning disabilities student
UpdateHigherVocationalEducationPresenceAggregation	Update or add new aggregated presence for higher vocational education student

## 5 Appendix

### 5.1 References

Name	Address
Monitoring API XML schemas and examples	<a href="https://github.com/ExchangeServices">https://github.com/ExchangeServices</a>

### 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