

Technical Specification

Monitoring API



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1 Introduction

The Monitoring API in Lifecare Exchange Services 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.

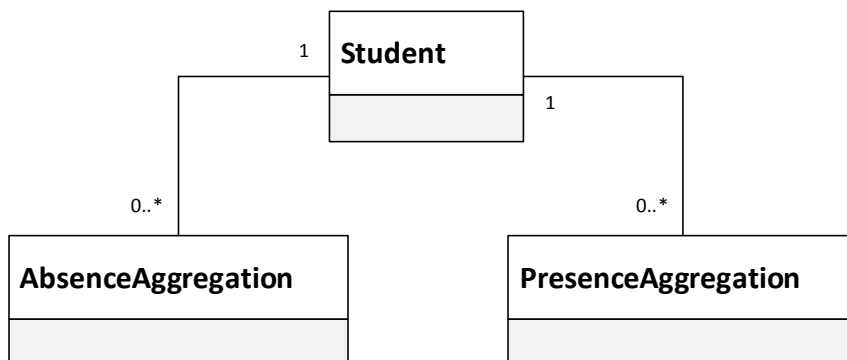
School type	Description	Code
Compulsory School	Primary school organization for younger students	GR
Compulsory School For Learning Disabilities	Organization for compulsory school for learning disabilities	S
Upper Secondary School	Upper secondary school organization 3-4 years education	GY
Upper Secondary 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 Student

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

3.3.2 AbsenceAggregation

Name	Description	Read-only
student	Student	No
hours	Total amount of hours of presence or absence	No
minutes	Total amount of minutes of presence or absence	No
start	The start date for the aggregation period	No
end	The end date for the aggregation period	No
code	Course code. Only used for SFI.	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

3.3.3 PresenceAggregation

Name	Description	Read-only
student	Student	No
hours	Total amount of hours of presence or absence	No
minutes	Total amount of minutes of presence or absence	No
start	The start date for the aggregation period	No
end	The end date for the aggregation period	No
code	Course code. Only used for SFI.	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 Export

The services below give aggregated absence for a student or aggregated absence created within a specified date interval. The output is XML information with aggregated absence.

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)

Parameters – Alternative 1:

Parameter	Mandatory	Description
Id	Yes	Student identity. The id can be GUID or PID for the student.

Parameters – Alternative 2:

Parameter	Mandatory	Description
StartDate	Yes	Start date in the format YYYY-MM-DD.
EndDate	Yes	End date in the format YYYY-MM-DD. The maximum allowed difference between start date and end date is one year.

Services:

Service	Description
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Service	Description
GetCompulsorySchoolAbsenceAggregation	Get aggregated absence for compulsory schools 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

4.1.2 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
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

Service	Description
	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 Export

The services below give aggregated presence for a student or aggregated presence created within a specified date interval. The output is XML information with aggregated presence.

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)

Parameters – Alternative 1:

Parameter	Mandatory	Description
Id	Yes	Student identity. The id can be GUID or PID for the student.

Parameters – Alternative 2:

Parameter	Mandatory	Description
StartDate	Yes	Start date in the format YYYY-MM-DD.
EndDate	Yes	End date in the format YYYY-MM-DD. The maximum allowed difference between start date and end date is one year.

Services:

Service	Description
GetCompulsorySchoolPresenceAggregation	Get aggregated presence for

Service	Description
	compulsory schools 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

4.2.2 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
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

Service	Description
	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	https://github.com/ExchangeServices/API

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