Lifecare Exchange Services
Monitoring API

Tieto Healthcare and Welfare AB
Education

tieto.com

Version 1.0
Public
2015-01-23

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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.
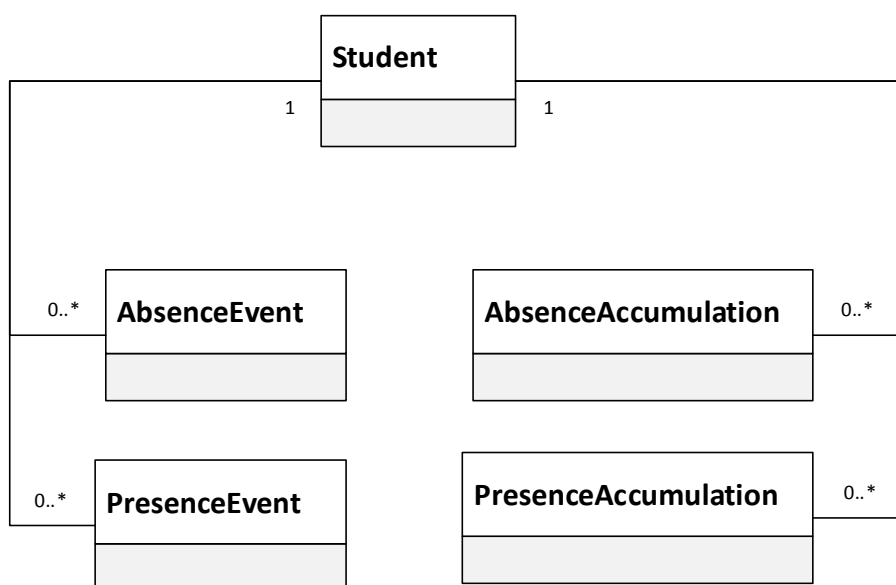
2 Supported unit domains

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	Secondary school organization 3-4 years education	GY
Upper Secondary School For Learning Disabilities	Organization for 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

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3 Absence and presence

3.1 Description

3.2 Domain model

3.3 Entities

The chapter lists all attributes for the absence and presence entities. It also gives a short description of each entity.

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 AbsenceEvent

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Name	Description	Read-only
start	Start time	No
end	End time	No
reason	Reason for an absence. *Valid* Indicates that the absence is valid *Invalid* Indicates that the absence is invalid	No

3.3.3 PresenceEvent

Name	Description	Read-only
start	Start time	No
end	End time	No

3.3.4 AbsenceAccumulation

Name	Description	Read-only
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 accumulation period	No
end	The end date for the accumulation period	No
code	Course code. Only used for SFI.	No
reason	Reason for an absence. *Valid* Indicates that the absence is valid *Invalid* Indicates that the absence is invalid	No

3.3.5 PresenceAccumulation

Name	Description	Read-only
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 accumulation period	No
end	The end date for the accumulation period	No
code	Course code. Only used for SFI.	No

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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 AbsenceEvents

4.1.1 Export

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

Base path for services are: https://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.
LicenseKey	Yes	License key

Parameters – Alternative 2:

Parameter	Mandatory	Description
StartDate	Yes	Start date
EndDate	Yes	End date
LicenseKey	Yes	License key

Services:

Service	Description
GetCompulsoryAbsenceEvents	Get absence events for compulsory schools student
GetCompulsorySchoolForLearningDisabilitiesAbsenceEvents	Get absence events for compulsory school with learning disabilities student
GetUpperSecondaryAbsenceEvents	Get absence events for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesAbsenceEvents	Get absence events for upper secondary school with learning disabilities student
GetSwedishForImmigrantsAbsenceEvents	Get absence events for Swedish for immigrants student
GetMunicipalAdultAbsenceEvents	Get absence events for municipal adult

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Service	Description
	school student
GetAdultSchoolForLearningDisabilitiesAbsenceEvents	Get absence events for adult school with learning disabilities student
GetHigherVocationalEducationAbsenceEvents	Get absence events for higher vocational education student

4.1.2 Import

The services below update or add new absence events.

Base path for services are: https://host/les/monitoring/v1/monitoring.svc/

Services:

Service	Description
UpdateCompulsoryAbsenceEvents	Update or add new absence events for compulsory schools student
UpdateCompulsorySchoolForLearningDisabilitiesAbsenceEvents	Update or add new absence events for compulsory school with learning disabilities student
UpdateUpperSecondaryAbsenceEvents	Update or add new absence events for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesAbsenceEvents	Update or add new absence events for upper secondary school with learning disabilities student
UpdateSwedishForImmigrantsAbsenceEvents	Update or add new absence events for Swedish for immigrants student
UpdateMunicipalAdultAbsenceEvents	Update or add new absence events for municipal adult school student
UpdateAdultSchoolForLearningDisabilitiesAbsenceEvents	Update or add new absence events for adult school with learning

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Service	Description
	disabilities student
UpdateHigherVocationalEducationAbsenceEvents	Update or add new absence events for higher vocational education student

4.2 PresenceEvents

4.2.1 Export

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

Base path for services are: https://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.
LicenseKey	Yes	License key

Parameters – Alternative 2:

Parameter	Mandatory	Description
StartDate	Yes	Start date
EndDate	Yes	End date
LicenseKey	Yes	License key

Services:

Service	Description
GetCompulsoryPresenceEvents	Get presence events for compulsory schools student
GetCompulsorySchoolForLearningDisabilitiesPresenceEvents	Get presence events for compulsory school with learning disabilities student
GetUpperSecondaryPresenceEvents	Get presence events for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesPresenceEvents	Get presence events for upper secondary school with learning disabilities student
GetSwedishForImmigrantsPresenceEvents	Get presence events for Swedish for immigrants student

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Service	Description
GetMunicipalAdultPresenceEvents	Get presence events for municipal adult school student
GetAdultSchoolForLearningDisabilitiesPresenceEvents	Get presence events for adult school with learning disabilities student
GetHigherVocationalEducationPresenceEvents	Get presence events for higher vocational education student

4.2.2 Import

The services below update or add new presence events.

Base path for services are: https://host/les/monitoring/v1/monitoring.svc/

Services:

Service	Description
UpdateCompulsoryPresenceEvents	Update or add new presence events for compulsory schools student
UpdateCompulsorySchoolForLearningDisabilitiesPresenceEvents	Update or add new presence events for compulsory school with learning disabilities student
UpdateUpperSecondaryPresenceEvents	Update or add new presence events for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesPresenceEvents	Update or add new presence events for upper secondary school with learning disabilities student
UpdateSwedishForImmigrantsPresenceEvents	Update or add new presence events for Swedish for immigrants student
UpdateMunicipalAdultPresenceEvents	Update or add new presence events for municipal adult school student
UpdateAdultSchoolForLearningDisabilitiesPresenceEvents	Update or add new presence events for

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Service	Description
	adult school with learning disabilities student
UpdateHigherVocationalEducationPresenceEvents	Update or add new presence events for higher vocational education student

4.3 AbsenceAccumulation

4.3.1 Export

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

Base path for services are: https://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.
LicenseKey	Yes	License key

Parameters – Alternative 2:

Parameter	Mandatory	Description
StartDate	Yes	Start date
EndDate	Yes	End date
LicenseKey	Yes	License key

Services:

Service	Description
GetCompulsoryAbsenceAccumulation	Get accumulated absence for compulsory schools student
GetCompulsorySchoolForLearningDisabilitiesAbsenceAccumulation	Get accumulated absence for compulsory school with learning disabilities student
GetUpperSecondaryAbsenceAccumulation	Get accumulated absence for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesAbsenceAccumulation	Get accumulated absence for

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Service	Description
	upper secondary school with learning disabilities student
GetSwedishForImmigrantsAbsenceAccumulation	Get accumulated absence for Swedish for immigrants student
GetMunicipalAdultAbsenceAccumulation	Get accumulated absence for municipal adult school student
GetAdultSchoolForLearningDisabilitiesAbsenceAccumulation	Get accumulated absence for adult school with learning disabilities student
GetHigherVocationalEducationAbsenceAccumulation	Get accumulated absence for higher vocational education student

4.3.2 Import

The services below update or add new accumulated absence.

Base path for services are: https://host/les/monitoring/v1/monitoring.svc/

Services:

Service	Description
UpdateCompulsoryAbsenceAccumulation	Update or add new accumulated absence for compulsory schools student
UpdateCompulsorySchoolForLearningDisabilitiesAbsenceAccumulation	Update or add new accumulated absence for compulsory school with learning disabilities student
UpdateUpperSecondaryAbsenceAccumulation	Update or add new accumulated absence for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesAbsenceAccumulation	Update or add new accumulated absence for upper secondary school with learning

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Service	Description
	disabilities student
UpdateSwedishForImmigrantsAbsenceAccumulation	Update or add new accumulated absence for Swedish for immigrants student
UpdateMunicipalAdultAbsenceAccumulation	Update or add new accumulated absence for municipal adult school student
UpdateAdultSchoolForLearningDisabilitiesAbsenceAccumulation	Update or add new accumulated absence for adult school with learning disabilities student
UpdateHigherVocationalEducationAbsenceAccumulation	Update or add new accumulated absence for higher vocational education student

4.4 PresenceAccumulation

4.4.1 Export

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

Base path for services are: https://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.
LicenseKey	Yes	License key

Parameters – Alternative 2:

Parameter	Mandatory	Description
StartDate	Yes	Start date

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Parameter	Mandatory	Description
EndDate	Yes	End date
LicenseKey	Yes	License key

Services:

Service	Description
GetCompulsoryPresenceAccumulation	Get accumulated presence for compulsory schools student
GetCompulsorySchoolForLearningDisabilitiesPresenceAccumulation	Get accumulated presence for compulsory school with learning disabilities student
GetUpperSecondaryPresenceAccumulation	Get accumulated presence for upper secondary school student
GetUpperSecondarySchoolForLearningDisabilitiesPresenceAccumulation	Get accumulated presence for upper secondary school with learning disabilities student
GetSwedishForImmigrantsPresenceAccumulation	Get accumulated presence for Swedish for immigrants student
GetMunicipalAdultPresenceAccumulation	Get accumulated presence for municipal adult school student
GetAdultSchoolForLearningDisabilitiesPresenceAccumulation	Get accumulated presence for adult school with learning disabilities student
GetHigherVocationalEducationPresenceAccumulation	Get accumulated presence for higher vocational education student

4.4.2 Import

The services below update or add new accumulated presence.

Base path for services are: https://host/les/monitoring/v1/monitoring.svc/

Services:

Service	Description
UpdateCompulsoryPresenceAccumulation	Update or add new accumulated presence for compulsory schools student
UpdateCompulsorySchoolForLearningDisabilitiesPresenceAccumulation	Update or add new accumulated presence for compulsory school with

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Service	Description
	learning disabilities student
UpdateUpperSecondaryPresenceAccumulation	Update or add new accumulated presence for upper secondary school student
UpdateUpperSecondarySchoolForLearningDisabilitiesPresenceAccumulation	Update or add new accumulated presence for upper secondary school with learning disabilities student
UpdateSwedishForImmigrantsPresenceAccumulation	Update or add new accumulated presence for Swedish for immigrants student
UpdateMunicipalAdultPresenceAccumulation	Update or add new accumulated presence for municipal adult school student
UpdateAdultSchoolForLearningDisabilitiesPresenceAccumulation	Update or add new accumulated presence for adult school with learning disabilities student
UpdateHigherVocationalEducationPresenceAccumulation	Update or add new accumulated 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