

SIF NZ DATA MODEL – ATTENDANCE OVERVIEW - v0.2

Student Attendance and Absence is recorded at different levels of time granularity in different sectors of the New Zealand education system:

- Primary & Intermediate schools tend to record attendance on a per-half-day basis; taking the roll for each class immediately prior to and post the lunch break each day.
- Secondary schools tend to record attendance on a per-period basis; taking the roll for each timetable period throughout the school day.

Co-design between Ministry projects and schools has highlighted the need for the following deviations from the SIF AU data model for the SIF NZ data model in the attendance domain:

- The StudentDailyAttendance data object is only applicable to primary sector of schooling; and is therefore not included in the SIF NZ data model.
- The StudentPeriodAttendance data object is only applicable to the secondary sector of schooling; and is therefore not included in the SIF NZ data model.
- In lieu of explicit links to relevant TimetableCell, Session and ProviderCourse data objects, we have chosen to include attributes recording the Teacher, Room and Subject Area into the per-period portion of the StudentAttendanceTimeList data object.

1 Conceptual Data Model

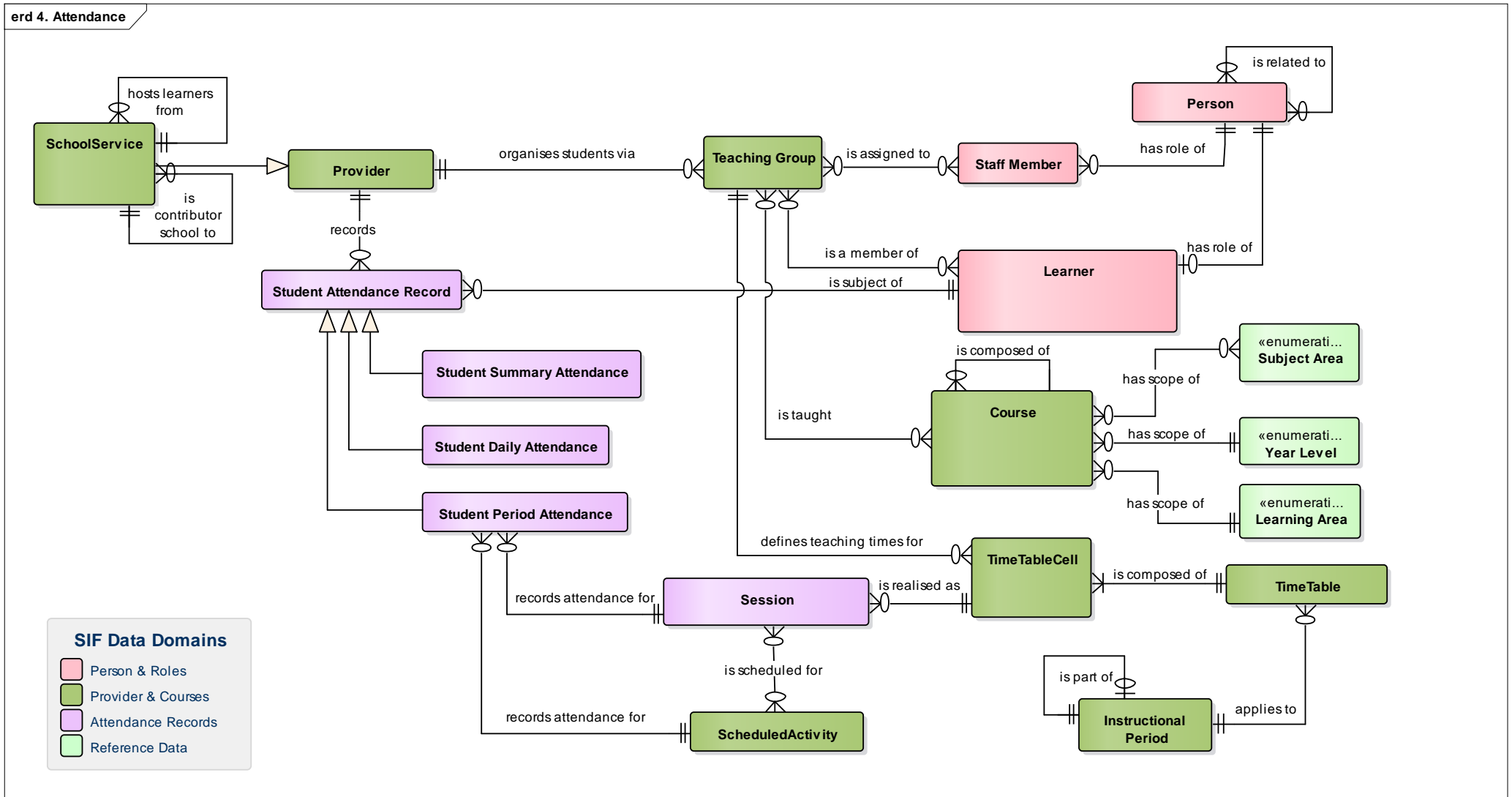


Figure 1: Attendance - Conceptual Model

1.1 Detailed Attendance Record Keeping

Student Attendance and Absence is recorded at different levels of time granularity in different sectors of the New Zealand education system:

- Primary & Intermediate schools tend to record attendance on a per-half-day basis; taking the roll for each class immediately prior to and post the lunch break each day.
- Secondary schools tend to record attendance on a per-period basis; taking the roll for each timetable period throughout the school day.

The StudentAttendanceTimeList data object from the SIF AU data model provides a hybrid data object that is applicable to both the Primary and Secondary sectors.

- Attendance records from Primary & Intermediate schools will contain a pair of attendance time records for each school day, corresponding to the two half-days the student was present or absent.
- Attendance records from Secondary schools may contain as many as 5 or 6 attendance time records for each school day, corresponding to the individual time table cells, sessions or scheduled activities for which the roll has been taken.

1.2 Attendance Summary Records

Detailed attendance records from the early childhood education (ECE) sector are collected by the Ministry's ELI system. Summary attendance data for specific learners can be made available to school SMS, via the StudentSummaryAttendance data object.

The SIF NZ data model makes it possible for a data collection system to collect detailed attendance records on per-half-day or per-period basis, using the StudentAttendanceTimeList data object, and to report attendance in aggregate on a per week, month, term or year basis using the StudentSummaryAttendance data object.

1.3 Attendance / Absence Codes

Each attendance record records whether the student was Present (and on time) to class, Present (with some condition), or Absent (with or without a valid reason).

Value	Label
A	Absent - Not in class
L	Late - in class
P	Present - in class
S	Sickbay - in class
D	Doctor/Dentist appointment
I	Internal school appointment
E	Explained absence
M	Medical absence
J	Justified explained absence
T	Truant
V	Non Supervised Study
N	School based activity
Q	School trip/camp
W	Work experience

Value	Label
R	Removed from class
X	Examination leave
G	Overseas holiday
O	Overseas during posting
K	Attending teen parent unit
AA	Attending alternative education
Y	Attending activity centre
F	Attending offsite course/class
H	Attending health camp/ regional health school
C	Attending justice court
U	Stood down or suspended

1.4 Attendance Record Status

In addition to the attendance/absence code above, each detailed attendance record has a code describing the status of the attendance.

Value	Label
01	Excused
02	Unexcused
99	Unknown
NA	Not Applicable

2 Logical Data Model

The concepts introduced in the conceptual models above are realised in the StudentAttendanceTimeList and StudentAttendanceSummary data objects.

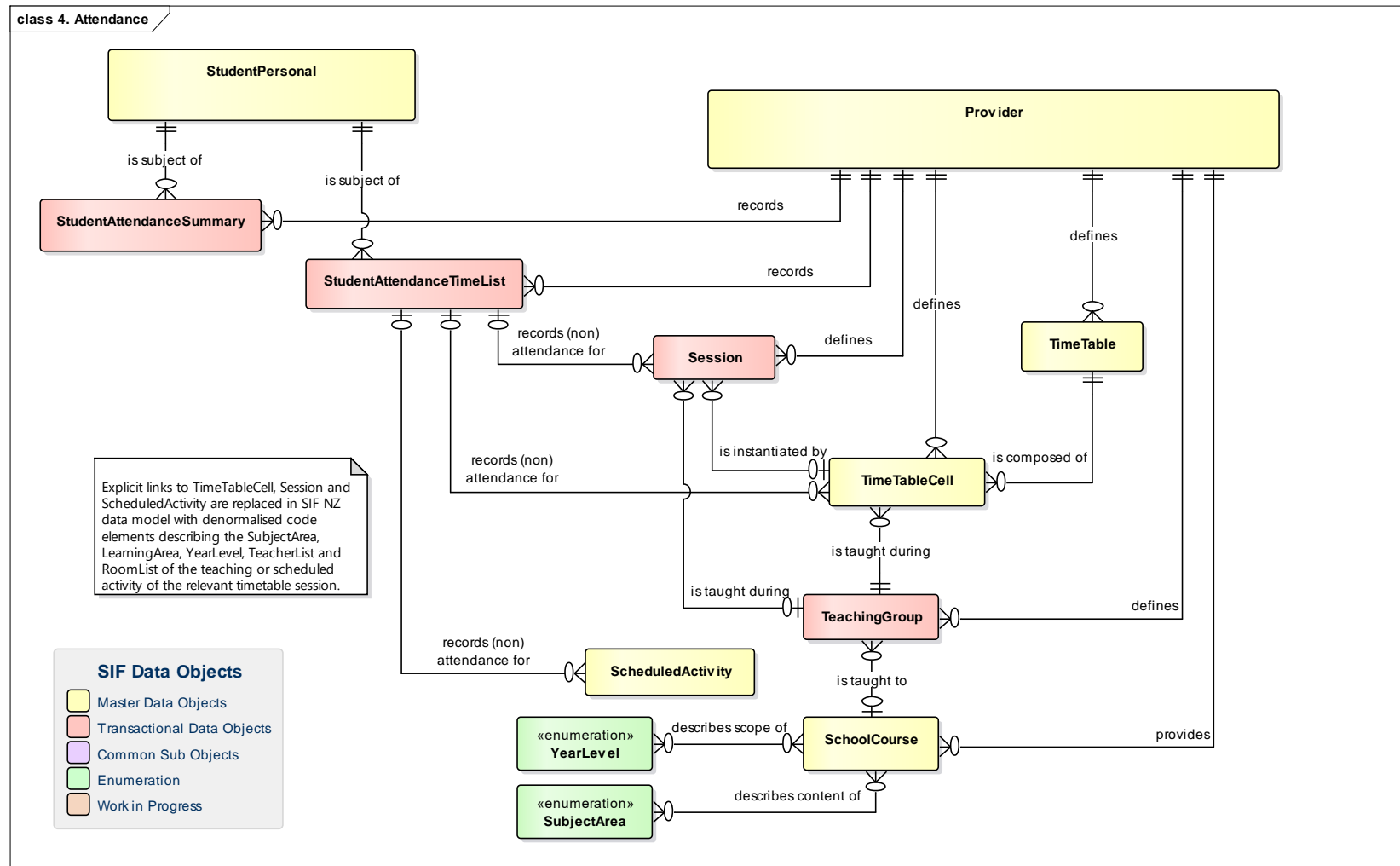


Figure 2: Student Attendance - Logical Model

3 StudentAttendanceTimeList Data Object

Individual Student Attendance records are kept using the StudentAttendanceTimeList data object (with API endpoints).

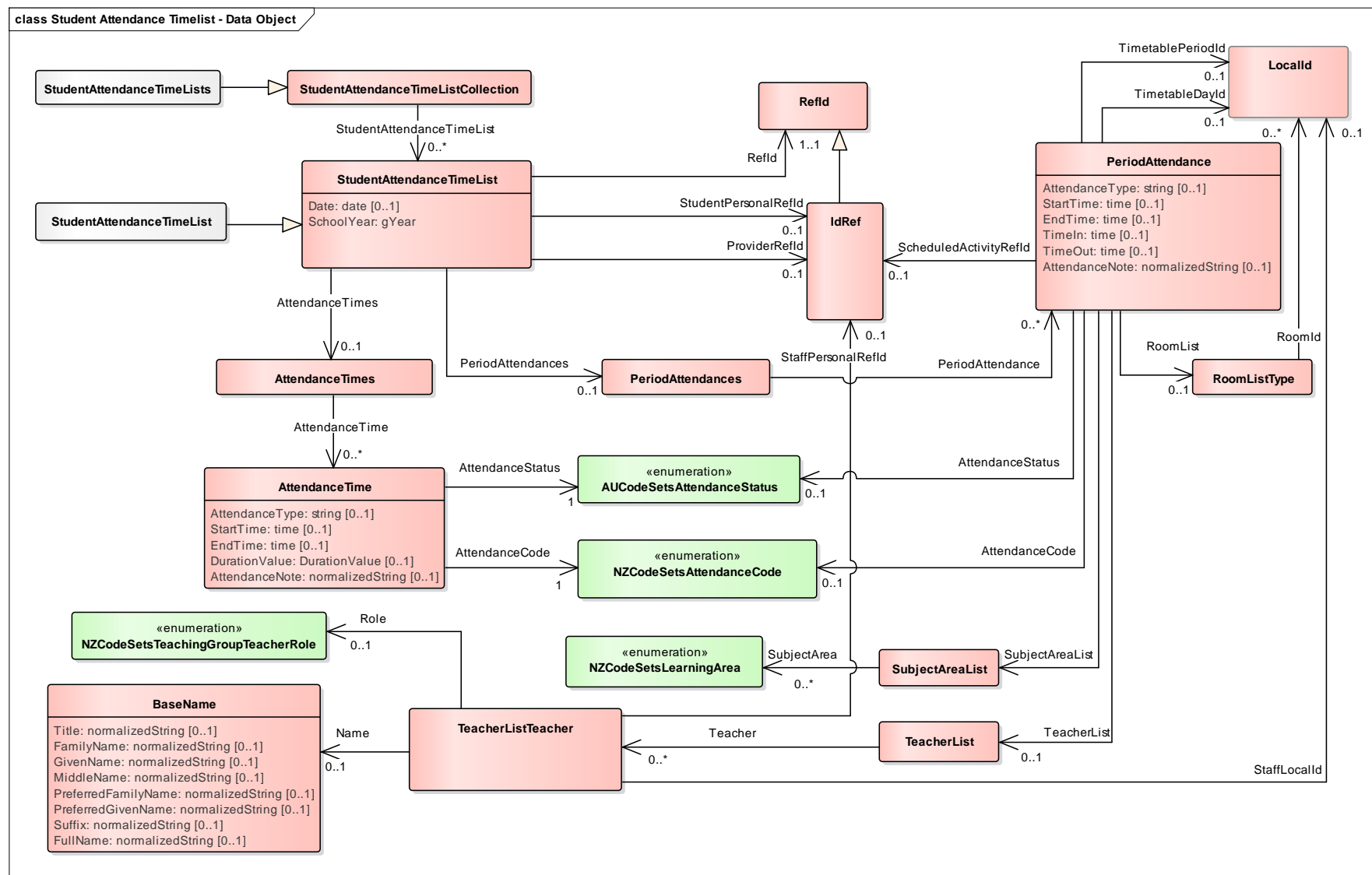


Figure 3: StudentAttendanceTimeList Data Object



Note: The SIF NZ data model does not currently include timetable cell and session data objects; actual transmission of school's timetable information is not seen as a requirement. This means that in lieu of explicit links to TimetableCell, Session and ScheduledActivity data objects being included in the PeriodAttendance section of the StudentAttendanceTimeList data object, relevant attributes from the timetable are included to help categorise (non) attendance records:

- SubjectAreaList
- TeacherList
- RoomList

4 StudentAttendanceSummary Data Object

Summary Student Attendance records are available using the StudentAttendanceSummary data object (with API endpoints).

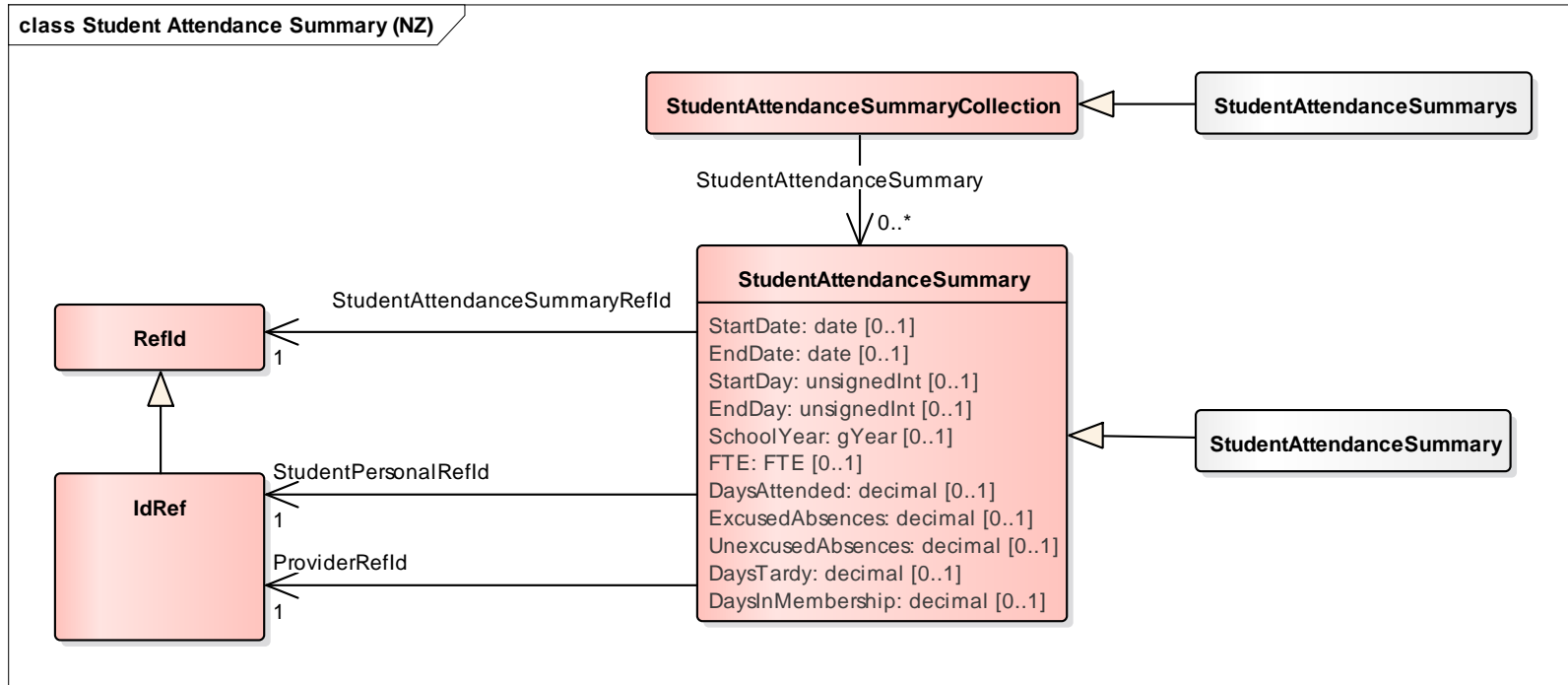


Figure 4: StudentAttendanceSummary Data Object

5 Document Control

5.1 Amendment History

Version No	Description of Change	Changed By	Date
0.1	Assembled from various working documents as part of SIF NZ Data Model v3.0.1 publication process.	Stuart McGrigor	31 Jul 2018
0.2	Timetable information delineates time dimension for TeachingGroup; and categorises period attendance records.	Stuart McGrigor	6 Sep 2018

5.2 Related Documents

Ref #	Document Title	Version	Link

5.3 Distribution List

Name	Role	Function

5.4 Document Details

Document ID	
Document Last Saved Date	30-Oct-2018
Link to MoE Filenet Folder	<u><i>SIF NZ Data Model - Background</i></u>