# Library Composite

## Sample Library Composite Definition with Extensions

<Category displayName="Michigan Library" name="library">

    <Routes>

        <Route relativeRouteTemplate="/localEducationAgencies/{LocalEducationAgency.Id}/{compositeName}" />

        <Route relativeRouteTemplate="/schools/{School.Id}/{compositeName}" />

        <Route relativeRouteTemplate="/sections/{Section.Id}/{compositeName}" />

        <Route relativeRouteTemplate="/staffs/{Staff.Id}/{compositeName}" />

        <Route relativeRouteTemplate="/students/{Student.Id}/{compositeName}" />

    </Routes>

    <Composites>

        <Composite name="LibraryStudent">

            <Specification>

                <Parameter name="LocalEducationAgency.Id" filterPath="StudentSchoolAssociations->School->LocalEducationAgency.Id" />

                <Parameter name="School.Id" filterPath="StudentSchoolAssociations->School.Id" />

                <Parameter name="Section.Id" filterPath="StudentSectionAssociations->Section.Id" />

                <Parameter name="Staff.Id" filterPath="StudentSectionAssociations->Section->StaffSectionAssociations->Staff.Id" />

                <Parameter name="LocalEducationAgencyId" filterPath="StudentSchoolAssociations->School.LocalEducationAgencyReference.LocalEducationAgencyId" />

                <Parameter name="SchoolId" filterPath="StudentSchoolAssociations.SchoolReference.SchoolId" />

                <Parameter name="StaffUniqueId" filterPath="StudentSectionAssociations->Section->StaffSectionAssociations->Staff.StaffUniqueId" />

                <Parameter name="StudentUniqueId" filterPath="StudentUniqueId" />

            </Specification>

            <BaseResource name="Student">

                <Property name="StudentUniqueId" />

                <Property name="FirstName" />

                <Property name="MiddleName" />

                <Property name="LastSurname" />

                <Property name="SexType" />

                <Property name="BirthDate" />

                <Collection name="StudentOtherNames" displayName="otherNames">

                    <Property name="FirstName" />

                    <Property name="MiddleName" />

                    <Property name="LastSurname" />

                    <Property name="OtherNameType" />

                </Collection>

                <Collection name="StudentAddresses" displayName="addresses">

                    <Property name="AddressType" />

                    <Property name="StreetNumberName" />

                    <Property name="ApartmentRoomSuiteNumber" />

                    <Property name="BuildingSiteNumber" />

                    <Property name="City" />

                    <Property name="StateAbbreviationType" />

                    <Property name="PostalCode" />

                </Collection>

                <Collection name="StudentElectronicMails" displayName="electronicMails">

                    <Property name="PrimaryEmailAddressIndicator" />

                    <Property name="ElectronicMailType" />

                    <Property name="ElectronicMailAddress" />

                </Collection>

                <Collection name="StudentTelephones" displayName="telephones">

                    <Property name="TelephoneNumberType" />

                    <Property name="OrderOfPriority" />

                    <Property name="TelephoneNumber" />

                </Collection>

                <LinkedCollection name="StudentSchoolAssociations" displayName="schools">

                    <Property name="EntryGradeLevelDescriptor" />

                    <Property name="ExitWithdrawDate" />

                    <Property name="SchoolId" />

                    <ReferencedResource name="GraduationPlanReference" flatten="true">

                        <Property name="GraduationSchoolYear" />

                    </ReferencedResource>

                </LinkedCollection>

                <LinkedCollection name="StudentSectionAssociations" displayName="sections">

                    <Property name="HomeroomIndicator" />

                    <ReferencedResource name="SectionReference" flatten="true">

                        <Property name="SchoolId" />

                        <ReferencedResource name="ClassPeriodReference" flatten="true">

                            <Property name="ClassPeriodName" />

                        </ReferencedResource>

                        <ReferencedResource name="CourseOfferingReference" flatten="true">

                            <Property name="LocalCourseCode" />

                            <ReferencedResource name="SessionReference" flatten="true">

                                <Property name="TermDescriptor" />

                                <Property name="SchoolYear" />

                            </ReferencedResource>

                        </ReferencedResource>

                        <ReferencedResource name="LocationReference" flatten="true">

                            <Property name="ClassroomIdentificationCode" />

                        </ReferencedResource>

                        <Property name="UniqueSectionCode" />

                        <Property name="SequenceOfCourse" />

                    </ReferencedResource>

                </LinkedCollection>

                <LinkedCollection name="StudentLibraryServices" displayName="studentLibraryServices">

                    <Property name="SchoolId" />

                    <Property name="Barcode" />

                    <Property name="AccessLevelDescriptor" />

                    <Property name="CardExpirationDate" />

                    <Property name="IsAcceptableUsePolicyOnFile" />

                    <Property name="UserName" />

                    <Property name="Password" />

                    <Property name="UserDefined1" />

                    <Property name="UserDefined2" />

                    <Property name="UserDefined3" />

                    <Property name="UserDefined4" />

                    <Property name="UserDefined5" />

                    <Property name="Other1" />

                    <Property name="Other2" />

                    <Property name="Other3" />

                </LinkedCollection>

            </BaseResource>

        </Composite>

        <Composite name="Staff">

            <Specification>

                <Parameter name="LocalEducationAgency.Id" filterPath="StaffSchoolAssociations->School->LocalEducationAgency.Id" />

                <Parameter name="School.Id" filterPath="StaffSchoolAssociations->School.Id" />

                <Parameter name="Section.Id" filterPath="StaffSectionAssociations->Section.Id" />

                <Parameter name="Staff.Id" filterPath="StaffSectionAssociations->Section->StaffSectionAssociations->Staff.Id" />

                <Parameter name="LocalEducationAgencyId" filterPath="StaffSchoolAssociations->School.LocalEducationAgencyReference.LocalEducationAgencyId" />

                <Parameter name="SchoolId" filterPath="StaffSchoolAssociations.SchoolReference.SchoolId" />

                <Parameter name="StaffUniqueId" filterPath="StaffUniqueId" />

            </Specification>

            <BaseResource name="Staff">

                <Property name="StaffUniqueId" />

                <Property name="FirstName" />

                <Property name="MiddleName" />

                <Property name="LastSurname" />

                <Property name="SexType" />

                <Property name="BirthDate" />

                <Collection name="StaffOtherNames" displayName="otherNames">

                    <Property name="FirstName" />

                    <Property name="MiddleName" />

                    <Property name="LastSurname" />

                    <Property name="OtherNameType" />

                </Collection>

                <Collection name="StaffAddresses" displayName="addresses">

                    <Property name="AddressType" />

                    <Property name="StreetNumberName" />

                    <Property name="ApartmentRoomSuiteNumber" />

                    <Property name="BuildingSiteNumber" />

                    <Property name="City" />

                    <Property name="StateAbbreviationType" />

                    <Property name="PostalCode" />

                </Collection>

                <Collection name="StaffElectronicMails" displayName="electronicMails">

                    <Property name="PrimaryEmailAddressIndicator" />

                    <Property name="ElectronicMailType" />

                    <Property name="ElectronicMailAddress" />

                </Collection>

                <Collection name="StaffTelephones" displayName="telephones">

                    <Property name="TelephoneNumberType" />

                    <Property name="OrderOfPriority" />

                    <Property name="TelephoneNumber" />

                </Collection>

                <LinkedCollection name="StaffEducationOrganizationEmploymentAssociations" displayName="schools">

                    <Property name="EndDate" />

                    <Property name="EducationOrganizationId" />

                </LinkedCollection>

                <LinkedCollection name="StaffLibraryServices" displayName="staffLibraryServices">

                    <Property name="SchoolId" />

                    <Property name="Barcode" />

                    <Property name="AccessLevelDescriptor" />

                    <Property name="CardExpirationDate" />

                    <Property name="IsAcceptableUsePolicyOnFile" />

                    <Property name="UserName" />

                    <Property name="Password" />

                    <Property name="UserDefined1" />

                    <Property name="UserDefined2" />

                    <Property name="UserDefined3" />

                    <Property name="UserDefined4" />

                    <Property name="UserDefined5" />

                    <Property name="Other1" />

                    <Property name="Other2" />

                    <Property name="Other3" />

                </LinkedCollection>

            </BaseResource>

        </Composite>

    </Composites>

</Category>

## How the handle Updates

Updates are not supported for Library.  For loading and modifying the StudentLibraryService and StaffLibraryService, the generated API clients from the SDK can be used, or bulk loaded through XML.