



# SCHOOLS INTEROPERABILITY FRAMEWORK

## StudentLocator Object

Version 1.4  
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# 1 Introduction

This document provides additional information above and beyond what is available in the SIF Implementation Specification on StudentLocator, an object to facilitate the exchange of student IDs between LEAs and States. It may also be helpful in other settings where multiple persistent IDs are maintained for one individual and need synchronization.

This object became PersonLocator during a period of its history. PersonLocator was intended to serve both students and employees. This complicated the reuse of common elements, so it reverted to Studentlocator as of January 30, 2004.

## 1.1 Contributors

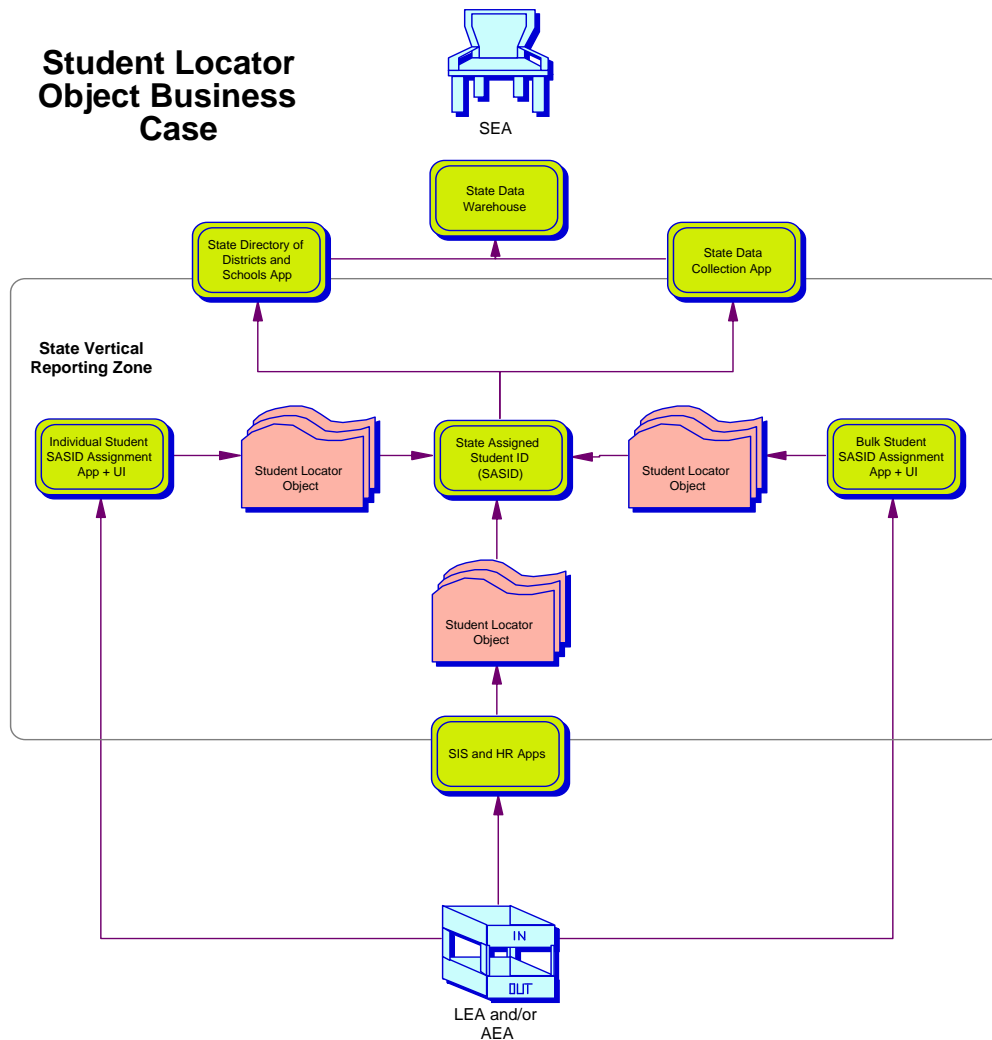
StudentLocator has been championed from its inception by Alex Jackl. It's housed in the SIF Vertical Reporting Task Force.

# 2 Business Case

The *No Child Left Behind* Act compels States to track the progress of students across time and geographic dimensions. This requirement to recognize identity and associate progress with a child that transfers from one school district to another is driving States to deploy State ID infrastructures. The norm is for States and school districts to exchange ID information through out-of-band, cumbersome processes.

StudentLocator thrusts SIF into this critical space, offering SIF's trademark unattended synchronization to a problem space struggling with labor intensive processes. StudentLocator captures the basic data needs of most States, while leveraging the planned SIF 1.5 Infrastructure extensibility to accommodate any State-specific requirement.

StudentLocator incorporates information that is available in other objects. Besides simplifying the process, a separate object is essential to protect the student's privacy. Objects like StudentPersonal and StudentContact include information that in some States is considered private and to be used only within the LEA. StudentLocator provides a safe medium through which to exchange information across the LEA boundary, while keeping other objects ensconced within the LEA's zone.



### 3 StudentLocator Object

#### 3.1 Relation to Other Objects

StudentLocator contains information normally associated with objects such as EmployeePersonal, StudentSchoolEnrollment, and others. It cannot, however, depend on these objects because State (or other remote) systems cannot be assumed to have awareness of these objects. Therefore, there is only one RefId in the object (to StudentPersonal) and it is optional.

#### 3.2 Choreography

Choreography considerations are critical to Vertical Reporting objects. StudentLocator is no exception.

StudentLocator is a request/response object. Events are not reported. The object itself does not have meaning or persistence outside an inquiry and its response. Thus StudentLocator does not have a RefId. The information gleaned through a

StudentLocator Object

StudentLocator transaction will normally persist in StudentPersonal. This object should report events as a result of StudentLocator transactions.

The object addresses a base assignment choreography and an optional resolution choreography for instances when a definite match isn't possible. The latter is optional because the intricacies and distinctness of State processes for resolving ambiguities will complicate vendor agent support.

### **3.2.1 Query Alternatives**

As of SIF 1.5, the query syntax used with SIF\_Request doesn't clearly associate an attribute value with an element value. StudentLocator relies on repeatable elements qualified by attributes to retain flexibility. Until the SIF query syntax issue is addressed in the SIF Specification, StudentLocator implementations must address this issue by mutual agreement between district and State agent developers.

## 4 Use Cases

### 4.1 Use Case: Request/Reply

<b>USE CASE for State Assigned ID</b>	Title: Request Assignment and Release of State Assigned ID. SIF Object: StudentLocator Use Case Number: StudentLocator-R/R History: 10/10/2003 – StudentLocator v0.3 use cases 1/20/2004 – Reformatted and added scenarios 1/30/2004 - Reverted to StudentLocator
<b>Use Case Type (Mandatory or Optional)</b>	Mandatory
<b>SIF Versions and References</b>	SIF Implementation Specification 1.5 Draft StudentLocator Proposal (1/30/2004)
<b>Summary</b>	Communicate with the State to request or release State Assigned IDs.
<b>Actors</b>	Primary: Requesting Agent Secondary: Provider Agent (State)
<b>Preconditions</b>	1. The requesting agent is registered in the SIF zone and authorized to request StudentLocator. 2. The provider agent (State) is registered in the SIF zone and authorized to publish StudentLocator.
<b>Post Conditions</b>	The LEA and State systems are synchronized re. the identity and current binding (enrollment) of the student.
<b>SIF Mandatory Objects</b>	None.
<b>SIF Optional Objects</b>	StudentPersonal.
<b>Open Issues</b>	

#### 4.1.1 Use Case Scenario: Initial Assignment

<b>Scenario #1 for UseCase # StudentLocator-R/R</b>	Scenario Title: Initial assignment of State Assigned ID for a student. Scenario History: 1/20/04 Extracted from overall use case by Wil Colón 1/30/2004 - Reverted to StudentLocator
<b>Use Case Type (Mandatory or Optional)</b>	Mandatory

<b>SIF Versions and References</b>	SIF Implementation Specification 1.5 Draft StudentLocator Proposal (1/30/2004)
<b>Summary</b>	A student enrolls in a school district for the first time, entering school in the particular State for the first time. The SIS instructs its agent to issue a request for StudentLocator. The State agent registered in the same SIF zone as provider for StudentLocator compares the information in the request to the State database. Not finding a match, it returns to the SIS agent a new State Assigned ID.
<b>Actors</b>	Primary: Requesting Agent Secondary: Provider Agent (State)
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. The requesting agent is registered in the SIF zone and authorized to request StudentLocator.</li> <li>2. The provider agent (State) is registered in the SIF zone and authorized to publish StudentLocator.</li> </ol>
<b>Outcomes</b>	The SIS has a State Assigned ID, the State recognizes the student and stores the descriptive information in its database.
<b>Action Steps</b>	<ol style="list-style-type: none"> <li>1. This use case begins when the student registers in a school district upon moving from out of State, reaching school age, or leaving alternative education for the first time.</li> <li>2. The SIS recognizes the need for a State Assigned ID and instructs its agent to compile information collected about the student into a StudentLocator request.</li> <li>3. The SIS agent conveys the request to the zone and it is routed to the State agent, registered as StudentLocator provider.</li> <li>4. The State ID system compares the information in the request to its database of existing students. Since no match is found, the system allocates a new State Assigned ID for this student.</li> <li>5. The State agent conveys the response, with the State Assigned ID to the zone, where it is routed to the SIS agent.</li> <li>6. The State retains the information about the student for future transactions.</li> <li>7. The SIS updates the student record with the State Assigned ID.</li> <li>8. This use case ends.</li> </ol>
<b>Variations</b>	<ol style="list-style-type: none"> <li>1a. The student has registered in a district in the state in the past, but isn't aware of a State Assigned ID. The process continues as above.</li> <li>4b. The State system finds more than one student in its database that match the information in the request. It does not return a State Assigned ID, but rather qualifies the response as Ambiguous. The district and the State then work directly (outside SIF) to resolve this ambiguity.</li> </ol>
<b>Exceptions</b>	
<b>SIF System Services</b>	ZIS, Agents, SIS, State Assigned ID system.
<b>Open Issues</b>	

#### 4.1.2 Use Case Scenario: State Assigned ID Validation

<b>Scenario #2 for UseCase # StudentLocator-R/R</b>	Scenario Title: Validation of the State Assigned ID for a student. Scenario History: 1/20/04 Extracted from overall use case by Wil Colón. 1/30/2004 - Reverted to StudentLocator
<b>Use Case Type (Mandatory or Optional)</b>	Mandatory
<b>SIF Versions and References</b>	SIF Implementation Specification 1.5 Draft StudentLocator Proposal (1/30/2004)
<b>Summary</b>	A student enrolls in a school district for the first time, transferring from another school district in the State and with record of her/his State Assigned ID. The SIS validates the ID provided with the State. In the process, the State system updates its information about the student.
<b>Actors</b>	Primary: Requesting Agent Secondary: Provider Agent (State)
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. The requesting agent is registered in the SIF zone and authorized to request StudentLocator.</li> <li>2. The provider agent (State) is registered in the SIF zone and authorized to publish StudentLocator.</li> </ol>
<b>Outcomes</b>	The SIS has a validated State Assigned ID, the State updates the student's information in its database.
<b>Action Steps</b>	<ol style="list-style-type: none"> <li>1. This use case begins when the student transfers within the State and brings along a State Assigned ID.</li> <li>2. The SIS recognizes the need to validate this provisional State Assigned ID and instructs its agent to compile it along with other information collected about the student into a StudentLocator request.</li> <li>3. The SIS agent conveys the request to the zone and it is routed to the State agent, registered as StudentLocator provider.</li> <li>4. The State ID system compares the information in the request to its database of existing students. The provisional State Assigned ID is given some weight in the matching, but cannot be assumed correct.</li> <li>5. A unique match is found. This match may be different from the provisional State Assigned ID.</li> <li>6. The State agent conveys the response, with the State Assigned ID to the zone, where it is routed to the SIS agent.</li> <li>7. The State updates its information about the student for future transactions.</li> <li>8. The SIS updates the student record with the validated State Assigned ID.</li> <li>9. This use case ends.</li> </ol>



<b>Variations</b>	<p>1a. Some States require updates as students are promoted from one grade to another. More frequent requests for StudentLocator with the current State Assigned ID and the updated information fulfill this requirement.</p> <p>5a. The State system finds more than one student in its database that match the information in the request. It does not return a State Assigned ID, but rather qualifies the response as Ambiguous. The district and the State then work directly (outside SIF) to resolve this ambiguity.</p>
<b>Exceptions</b>	
<b>SIF System Services</b>	ZIS, Agents, SIS, State Assigned ID system.
<b>Open Issues</b>	

#### 4.1.3 Use Case Scenario: State Assigned ID Release

<b>Scenario #3 for UseCase # StudentLocator-R/R</b>	<p>Scenario Title: Release the binding between the district and the student.</p> <p>Scenario History:  1/20/04 Extracted from overall use case by Wil Colón.  1/30/2004 - Reverted to StudentLocator</p>
<b>Use Case Type (Mandatory or Optional)</b>	Optional
<b>SIF Versions and References</b>	SIF Implementation Specification 1.5 Draft StudentLocator Proposal (1/30/2004)
<b>Summary</b>	Some States establish a binding, typically for funding purposes, between a student and a district. The State Assigned ID is the link that creates this binding. To support this scenario, the StudentLocator object uses the Release qualifier to "free" the student to be "claimed" by another district. The State Assigned ID from the SIS should generally be considered correct, as the district would be hard pressed to resolve ambiguities on a departing student.
<b>Actors</b>	Primary: Requesting Agent Secondary: Provider Agent (State)
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. The requesting agent is registered in the SIF zone and authorized to request StudentLocator.</li> <li>2. The provider agent (State) is registered in the SIF zone and authorized to publish StudentLocator.</li> </ol>
<b>Outcomes</b>	The State system recognizes that the student is no longer affiliated with the district.

<b>Action Steps</b>	<ol style="list-style-type: none"> <li>1. This use case begins when the student transfers out of the district.</li> <li>2. The SIS recognizes the need to release the State Assigned ID and instructs its agent to compile it along with other information collected about the student into a StudentLocator request qualified as Release.</li> <li>3. The SIS agent conveys the request to the zone and it is routed to the State agent, registered as StudentLocator provider.</li> <li>4. The State ID system compares the information in the request to its database of existing students. The State Assigned ID in the request is given much weight in this scenario, and may be assumed correct.</li> <li>5. A unique match is found. This match must not be different from the State Assigned ID in the request.</li> <li>6. The State agent conveys the response, qualified "Release," with the State Assigned ID to the zone, where it is routed to the SIS agent.</li> <li>7. The State updates its information about the student for future transactions.</li> <li>8. The SIS most likely will ignore the response.</li> <li>9. This use case ends.</li> </ol>
<b>Variations</b>	<ol style="list-style-type: none"> <li>5a. If the SIS agent provides descriptive information with a Release request, and if the State system chooses to corroborate it, a mismatch or ambiguous match may result. The process continues as above, but the State system should trigger an internal review to determine what caused this condition.</li> </ol>
<b>Exceptions</b>	
<b>SIF System Services</b>	ZIS, Agents, SIS, State Assigned ID system.
<b>Open Issues</b>	