

# SBP

→ STUDENT INFORMATION SYSTEMS BASELINE PROFILE

The SBP is a breakthrough agreement that defines the relationship between Students, Parents, Teachers, Schools and Classes in a digital machine readable format. It will facilitate the next generation of online services being linked securely into a school's systems – by reducing the complexity, cost for schools and increasing the ease for vendors.

The SBP is a 'profile' of the SIF Implementation Specification that takes the flexible, large SIF data model and reduces it into a single document, with a summary that can fit on one page.

SIF is an international standard used to link together education data systems. It provides interoperability rules and a data standard that enables diverse applications within the education sector to interact and share data efficiently, securely and cost effectively, regardless of the application and technology platform.

SIF simplifies interoperability by minimising the number of connections required between software applications. Interoperability refers to the capacity of information systems to exchange information efficiently, accurately and economically.

## → SBP GROUP INTRODUCTION

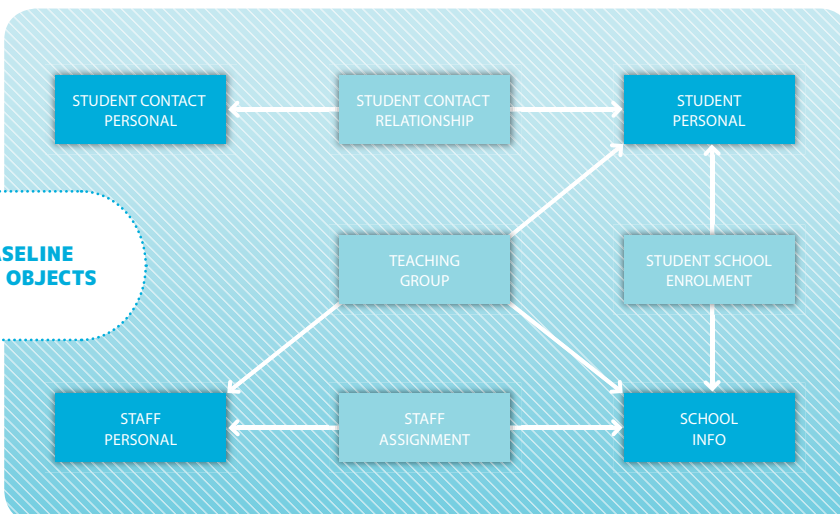
The SIF Association AU Student Information Systems (SIS) Baseline Profile has been designed through a collaborative effort between key SIS stakeholders, school software vendors and members of the SIF Community in Australia. This working group has sought to identify the information that would be common between different software and educational organisations and agree to exchange this 'baseline' information using the Systems Interoperability Framework data model and infrastructure transport.

The Digital Education Revolution envisages "technology enriched learning environments" for all young Australians. Putting the right information at the right time into the hands of learners, teachers, parents and policy makers is critical for its success.

Since 2007 Chief Information Officers from Australia's state and territory education systems, together with colleagues from the Catholic and Independent school sectors, supported by the Commonwealth Department of Education, Employment and Workplace Relations, have been building an open standard for interoperability between Australian schools to enable information to be used when and where it is needed. The work has centered on the use of the Systems Interoperability Framework (SIF) to facilitate the exchange of information.

This initiative, known as "Towards SIF AU", has developed a national specification - the SIF Implementation Specification (Australia) - and a business case identifying the costs and benefits of adopting SIF. A program of 12 pilot projects, undertaken through the National Schools Interoperability Program (NSIP), solving practical interoperability challenges has shown the clear benefits of working together and using SIF to solve common problems.

### SIS BASELINE PROFILE OBJECTS



The 'baseline'; designed as a school level view of the information and the associated behaviours has been created by the SBP Working Group through exploring different scenarios or use-cases. It is assumed that the SIS is configured as the 'system of authority' for these objects.

The range of scenarios the baseline covers will enable information from different applications to remain 'in-synch'. For example, when a student enrolls in a school, or changes their class or their home address the SBP defines the process of keeping applications updated in near real time.

## → WHY SIF?

SIF is the world's leading interoperability standard for K-12 education. SIF facilitates better management of and accessibility to data within an institution (horizontal reporting) as well as between institutions and other interested parties, such as government departments and agencies (vertical reporting).

SIF is secure. Data is captured, held and transmitted securely, not across open channels. Accurate data is available when and where required.

## → SIF IN PRACTICE

### **SIF INTEROPERABILITY REQUIRES:**

#### **Software applications —**

these are selected by educational organisations to manage information, administer school systems and deliver teaching and learning.

#### **SIF Agents —**

interface between the software applications and the Zone Integration Servers. The SIF Agent:

- Recognises the application's business logic and data structure, allowing data sharing between applications
- Receives and translates SIF messages and submits data changes to the ZIS

#### **SIF Data Objects —**

these are a set of common data definitions shared by applications detailed in the SIF specification's data model.

#### **Zone Integration Servers (ZIS) —**

these serve as the central communication point in a SIF Zone. The ZIS:

- Tracks all SIF Agents in the Zone
- Distributes all SIF messages
- Implements security rules
- Enforces what a SIF Agent can and cannot do within the Zone

The SIF Implementation Specification (Australia) is administered in Australia by the SIF Association Australian Management Board, and internationally certified by the SIF Association.

## → EASILY IMPLEMENTABLE OPEN SOURCE TOOL KIT LEADS TO COST SAVINGS

For the SBP to be applied, software needs to be written and added to applications. NSIP has created an Open Source package with all the materials required to implement the SBP, providing significant reduction in development time. It is located at <https://github.com/nsip/>

## → EXAMPLES OF USE

As education applications become increasingly sophisticated the SBP makes moving student and teacher and related class information into the cloud, simpler, consistent and cost effective, resulting in the provision of "the right information in the right place at the right time".

- Provision from a school admin system in to a cloud based Learning system
- Link class information into the network administration to give the information required for personalisation
- Enter information once and it's sent to all the systems in the school

It is expected that the Baseline will develop and continue to grow over time, however it will remain the base to be built upon, providing the reference point for others looking to start out in SIF.

If you would like to be involved mail [info-au@sifassociation.org](mailto:info-au@sifassociation.org)

## → ACKNOWLEDGEMENTS

The National Schools Interoperability Program and SIF Association AU acknowledges support provided by the Australian education authorities and the Online Curriculum Resources and Digital Architecture initiative, one of a suite of initiatives under the Australian Government's Digital Education Revolution (DER) provided by the Department of Education, Employment and Workplace Relations.

## → FIND OUT MORE

Find case studies, the SIF AU Pilot Program Report and other useful information on the SIF AU website: <http://au.sifassociation.org/>

Contact SIF AU by email: [info-au@sifassociation.org](mailto:info-au@sifassociation.org)

THE SBP IS AN END TO END RESOURCE, A COMBINATION OF BUSINESS RULES AND SCENARIOS. THE DATA MODEL AND OPEN SOURCE CODE MEANS YOU CAN JUST GET GOING WITH IMPLEMENTING IT IN YOUR SYSTEM.



### • SBP Group Participants

