

Data Ingestion and Reporting

CPSI, Ltd

- xDStore Overview
- Data Ingestion
- Reporting

Who is CPSI?

About Us and What We Do

Service

CPSI has been servicing education organizations exclusively since 1989 and writing software for the market since 1992.

Experience

We have extensive experience with teachers, administrators and state departments of education.

Commitment

Our proven software and support show our commitment to provide districts and schools with the tools they need to ensure student success.

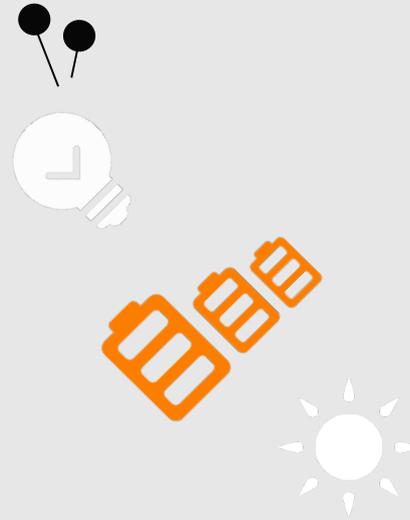
What is xDAdHoc

What will we be learning about today?

Real Time Reporting

Right now data at your fingertips.

xDAdHoc is a real time reporting tool. It enables users to run reports and create reports using real time data without the need to write code or have direct access to the databases.



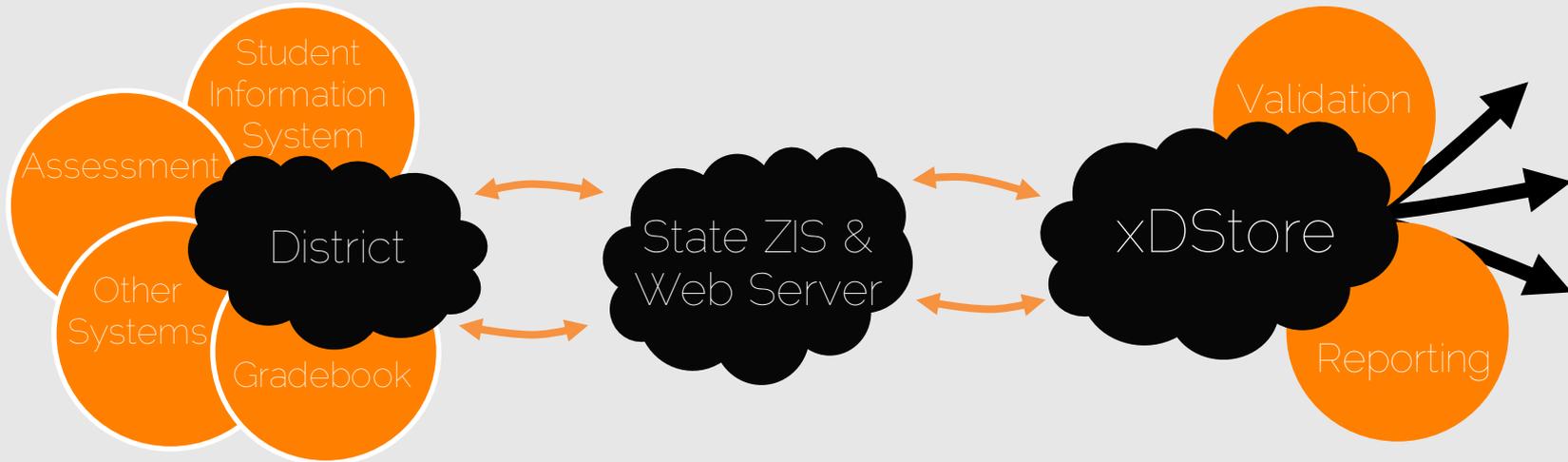
A Unique Solution

Different is good.

xDAdHoc is not like any other reporting solution you have most likely used in the past. All of the underlying layers work hard to provide a seamless end user experience that brings the power of real time data to life.

The Process of Real Time Data

How it works.



The Process

Basics of collecting your data

Your data is stored in many different core systems throughout your district and primarily in your Student Information System.

Using the vendor SIF agent or the CPSI toolset, your data is transmitted via web services.

This data is collected into an Operational Data Store, or ODS. The next step in the process is validation.

The xDValidator checks every record against a set of business rules for correctness.

Both validation errors as well as reports against clean data are then run via xDAdHoc in real time.

What is SIF

A brief overview.

SIF – Student Interoperability Framework

SIF, enables software applications to share data quickly, dynamically, and securely.

Zone Integration Server

A Zone Integration Server is a data router for integrating the data between applications. The xDZIS is the Zone Integration Server for many districts.

SIF Profile

A SIF profile is a specification of what vendors will need to provide to meet the requirements for data collection.

SIF Agent

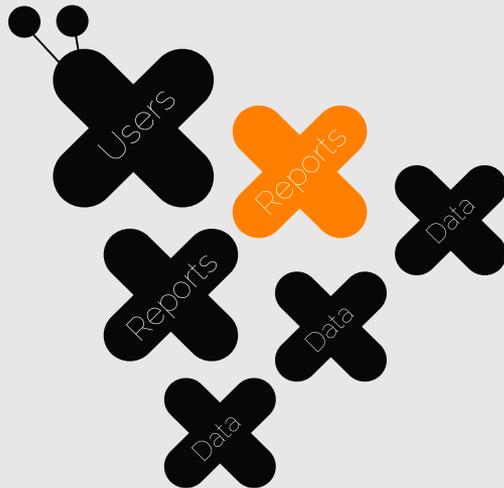
A SIF Agent is an extension of an application that can publish and/or receive messages from another SIF Agent.

Data Objects and Elements

Data objects are a set of information defined by the SIF specification. Data objects contain many data elements – the individual pieces of data being sent.

Data Reporting

Getting data out of the xDStore



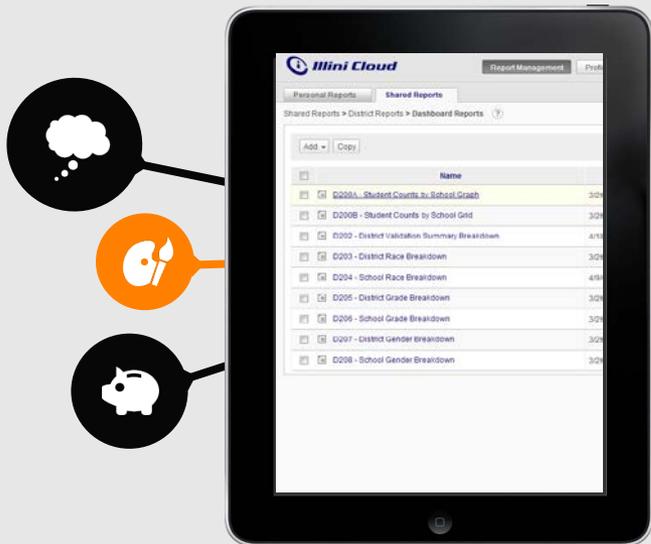
The process of collecting the data all of the way to error reporting is happening within minutes of being entered into source system.

What does this have to do with reporting?

This entire process adds up to the ability to show data in reports within minutes of being entered.

xDAdHoc is Different

What makes it so unique?



Real Time Report Generation

Reports are never generated until you click the button to display the report to the screen.

Easy to Use Report Creation

It is easy for users to create reports from the data they already have access to.

Data Filtering Based on the Data

Data is filtered and secured to the field level to ensure the safety of the data. The data filters are based on the data itself – so as enrollments and staffing change, the filters change automatically.

xDAdHoc is Secure

How only you can see your own data.



Integrated Authentication

xDAdHoc is integrated with the authentication systems put in place. This means users do not have to login multiple times.



Automated Filtering

The data a user has the ability to see is controlled by filters that integrate with the data in the xDStore. This means a user can only see their own school or district and nothing else.



Role Based

Security is privilege and role based. This means a users role controls the functions they can execute as well as the folders and reports they can view.



Field Level Security

For users who are allowed to create their own reports, what tables and fields a user may use can be controlled via security.



The Reports

How to use the error reporting system

How to Correct Data

Getting errors corrected is easy

Go back to the SIS or other source system and look up the students that have errors.

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Correct the data that was in error in the source system record.

Errors that have been corrected will disappear from the error report as they are corrected.

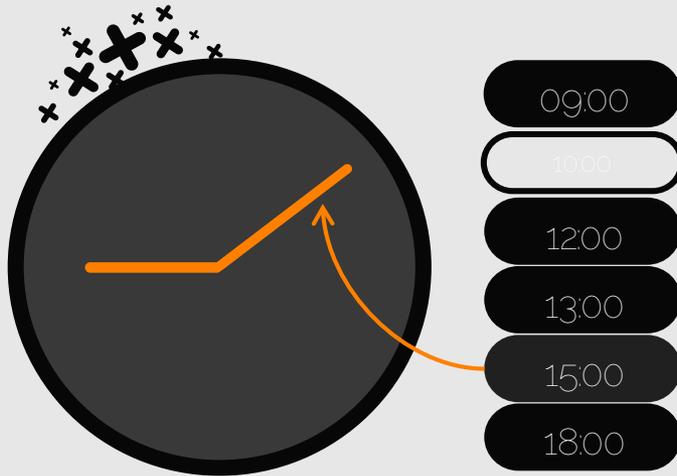
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The changes and corrections will be sent through the system once when the record is saved.

Benefits of Correcting Data

Correcting data at the source saves time and effort.



Correcting data at the source has many benefits. The data validation process will save the same time and effort in many applications of the data – including state level reporting.

Cleaning the data may initially be a time consuming process, but over time, the data will become cleaner and reduce errors within the district based on bad data.

Best Practices

Some helpful tips – Part One

Codes are important.

It is important that users enter correct codes for items that might need entered manually. Incorrect codes will often generate errors that will later have to be corrected. Entering codes correctly the first time saves time.

Enter data in the right places

Many student information systems give users the ability to enter data in the wrong places. Users should check that they are entering data in the right places. Hitting the tab key one too many times can lead to many errors on a single record.

Double check exit codes

It is important to mark the correct reason a student has left the district, such as when there is a “No Show”.

Don't just take defaults

During busy times, such as the beginning of the school year, data entry staff may often enter students using all “defaults”. Try to correct those errors as soon as possible.

Beware of drop down boxes

Try to be sure the correct codes are selected in drop down boxes. A small mistake in a drop down box can lead to major issues in the student data. For example, we have seen where “Gun in School” and “Excessive tardiness” are right below each other in a drop down. A simple scroll of the mouse wheel can follow a student for years if not corrected.

Best Practices

Some helpful tips – Part Two

Train your temporary staff

Some districts hire temporary staff for busy registration periods. Be sure to give them some time to train them on best practices and how data entry is validated in the district.

Try to rollover early

Try and schedule rollovers as early as possible. This will help to avoid the big rush that usually occurs in the weeks before school starts. This also give your district more time to correct errors before school starts.

Communicate with your data entry staff

Communication between the many different administrators and data staff entry personnel is key .

Techs need to check up on SIF agents

Be sure the SIF agent is up and running at all times. When there are changes to the system , such as an IP address change, let your vendors know as soon as possible. Other changes such as firewall changes. Operating system upgrades and patches, and database changes will also affect your SIF agents so please let your vendor know about any changes.

Back it up

Backup the configuration of your SIF agent and your SIF agent server to ease recovery. SIF agent configurations can often be complicated and take time to redo. In case of a system failure, a backup will speed recovery and get your district back up and running quickly.

The Benefits

Why Real Time Data Makes a Difference

