

Setup SIF Data Access Rights

Last Modified on 10/22/2022 10:08 am CDT

This article is designed for advanced technical users only and is relevant to districts using SIF communication for data exchange.

This article is part of an ordered [SIF Configuration](#) process and applies to both methods of configuration ([Horizontal](#) and [Vertical](#)).

Before beginning, please consider this setup step in relation to the ordered setup steps of the [SIF Configuration](#) process:

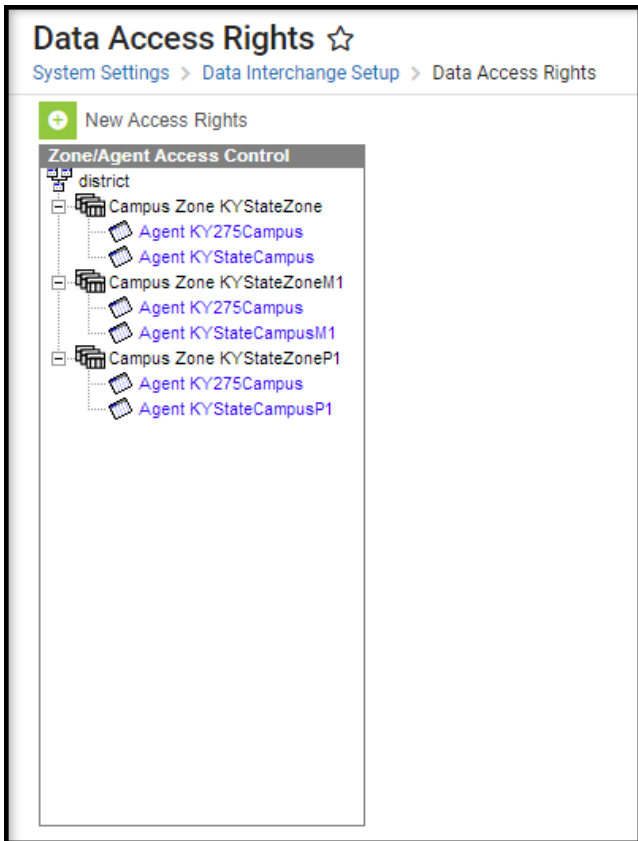
- [Setup School SIF Codes](#)
- [Setup SIF Grade Levels](#)
- [Setup SIF Zone](#)
- [Setup SIF Agent](#)
- [Setup SIF Data Access Rights](#)
- [Register Agent](#)
- [Request Data Sync](#)

PATH: [System Administration](#) > [Data Interchange](#) > [Data Access Rights](#)

Within each zone, specific data objects are defined for exchange. These exchange objects are set through the Access Control Log (ACL) editor.

This article includes the following topics:

- [Setting Up Data Access Rights](#)
- [Understanding SIF Data Access Rights](#)
 - [Data Exchange Actions](#)
 - [Data Exchange Actions](#)
- [Assigning SIF Agent Data Access Rights](#)
- [Assigning Campus Agent Data Access Rights](#)
- [Unauthorized SIF Agents](#)



Setting Up Data Access Rights

Assigning data access rights is a two-fold process. The data access rights of the SIF and Campus agents must both be configured. In general, the Campus and SIF agents in the SIF zone will have opposite access rights to the exchanged data objects.

For example, if the SIF agent wishes to receive data related to the *StudentAttendanceSummary* object, it will be set to **Req**(uest) changes and **Sub**(scribe) to updates from Campus related to this object. Contrarily, the Campus agent should be set to **Resp**(ond) to requests and **Prov**(ide) updates to the SIF agent related to the *StudentAttendanceSummary* object.

In addition, the Campus agent can be further configured to notify the SIF agent on specific types of updates to the *StudentAttendanceSummary* object; that is, **Add** (new record created), **Chng** (record updated) and/or **Del** (record removed) actions. For more information, please see the [Understanding SIF Data Access Rights](#) section.

The Campus agent should not be set to **Req**(uest) or **Sub**(scribe) to data object updates from the SIF agent (other than the Exception Objects); likewise, the SIF agent should not be set to **Prov**(ide) or **Resp**(ond) data object updates to Campus.

Understanding SIF Data Access Rights

The Campus ZIS maintains an Access Control List (ACL) that contains data access rights for each agent exchanging data in a zone. The data access rights specify how certain data objects may be

exchanged.

The access rights must be setup for both agents in the zone (i.e., access rights assigned for both the Campus agent and the SIF agent) before data exchange can occur. Access rights should also be set before the SIF agent registers and sends its provision messages.

Clicking the **DISDataAccess** button manually adds a new dropdown field from which data objects may be selected. SIF data objects are available in the dropdown fields. The value in the parentheses following a SIF object name indicates the version in which the object was first made available.

The data rights are two-fold: they indicate the type of data exchange action (e.g., **Req(uest)**, **Resp(ond)**, **Sub(scribe)**, **Prov(ide)**) for each data object an agent will exchange. The **OK** checkbox next to the action indicates that the agent is allowed to perform that action. Both the action checkbox and the OK checkbox should be flagged, as appropriate, for data exchange objects.



Checkboxes will display a tool tip, when hovered upon, reminding the user of the implications associated with flagging each checkbox.

Data Exchange Actions

Req -- (Request) Agent will send periodic request messages to fetch queued data related to the selected object.

OK - (Request) Agent allowed to request messages for the selected object.

Sub -- (Subscribe) Agent can subscribe to all events (add, change, delete) related to the selected object as they occur.

OK - (Subscribe) Subscribe allowed for the selected object.

Res - (Respond) Agent can respond to requests for the selected object.

OK - (Respond) Respond allowed for the selected object.

Prov - (Provide) Agent can provide/publish changes for the selected object.

OK - (Provide) Provide allowed for the selected object.

Data Exchange Actions

Add - Agent can publish changes involving modification of existing records.

OK - (Add) Add publishing allowed for the selected object.

Chng - (Change) Agent can publish changes involving modification of existing records.
OK - (Change) Change publishing allowed for the selected object.

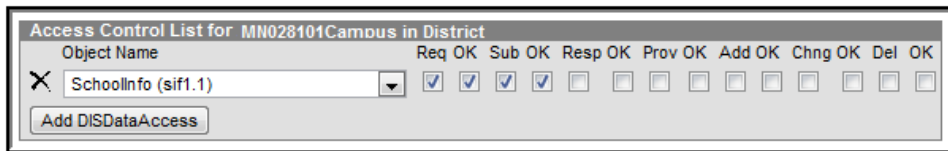
Del - (Delete) Agent can publish changes involving deletion of existing records.
OK - (Delete) Delete publishing allowed for the selected object.

Rights for the agents in the zone should be inverted; that is, if the SIF agent should request/subscribe to changes of a data object, then the Campus agents should respond/provide changes for that object.

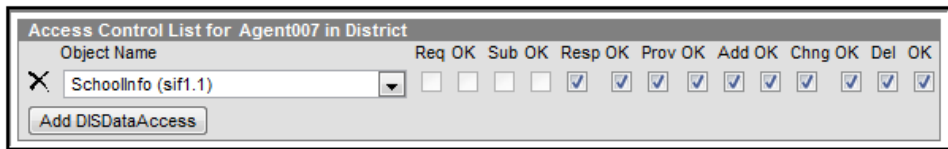
Example

If the Campus agent should provide Campus-based changes within the StudentPersonal object to the non-Campus system, AND should also subscribe to change events to pick up student stateIDs from the non-Campus system, the following setup would occur:

Campus Agent -- Sub, Resp, Prov, Add, Chng, Del and the corresponding **OK** checkboxes would be flagged.

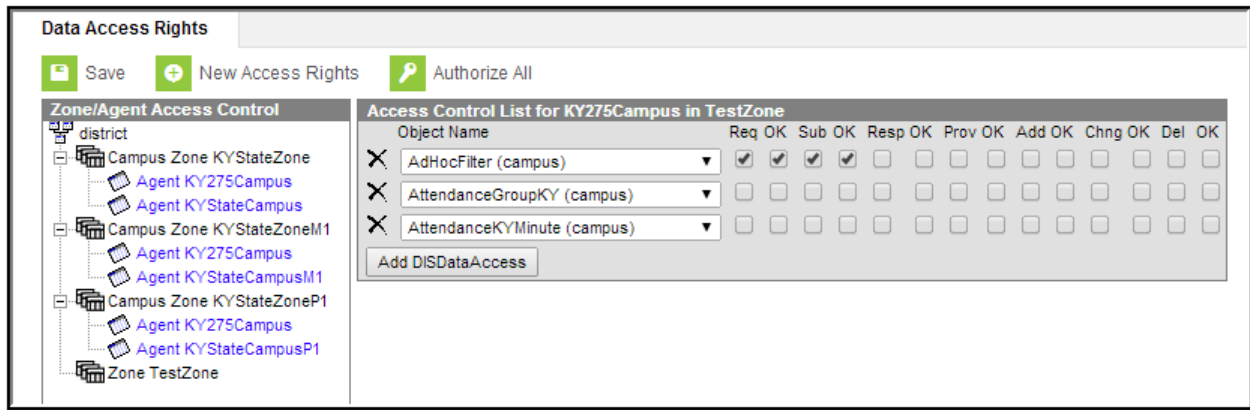


SIF Agent - Req, Sub, Add, Chng, Del and the corresponding **OK** rights would be flagged.



Assigning SIF Agent Data Access Rights

The SIF Agent data access rights must be configured to specify which data object updates the third-party system will receive from Campus.



To configure the data access rights of the SIF agent:

1. Click on the SIF agent within the SIF zone.
2. Click the **Add DISDataAccess** button.
3. Select a SIF data object for which the SIF agent should be updated when changes occur in Campus.

These should be the same objects set for SIF agent when [Assigning Campus Agent Data Access Rights](#)).

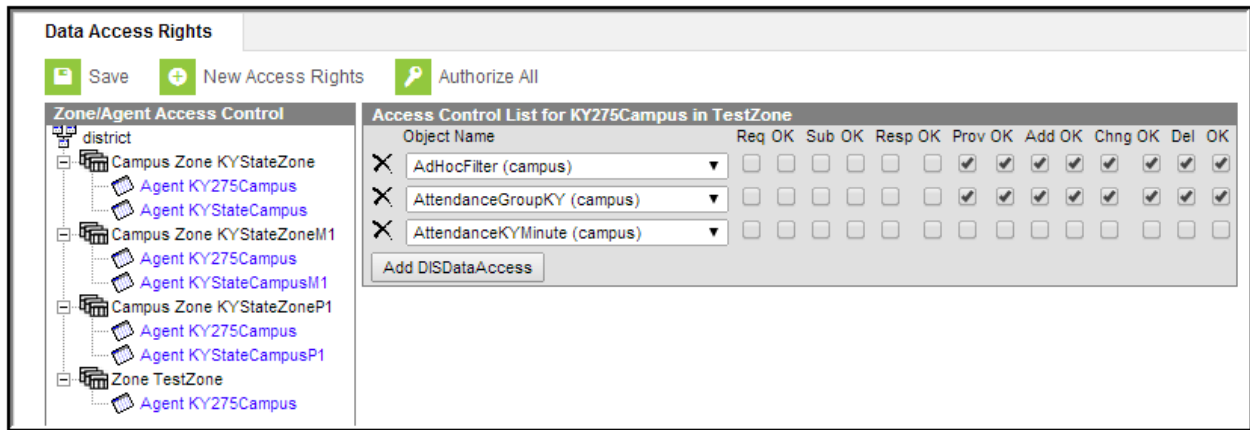
4. Check the **Req(uest)**, **Sub(scribe)** and corresponding **OK** boxes if the SIF agent should be notified of changes to this data object from Campus.

The Campus agent must be set to **Resp(ond)** and **Prov(ide)** changes about this data object to the SIF agent.

5. Click **Save** to record the SIF agent's access rights for this data object.
6. Repeat the previous steps 1-5 for each data object about which the SIF agent should be updated.

Assigning Campus Agent Data Access Rights

The Campus Agent data access rights must be configured to specify which data object updates the third-party system will receive from Campus.



To configure the data access rights of the Campus agent:

1. Click on the Campus agent within the SIF zone.
2. Click the **Add DISDataAccess** button.
3. Select a SIF data object about which the Campus agent should publish changes.

These should be the same objects set for SIF agent when [Assigning SIF Agent Data Access Rights](#)).

4. Check the **Res**(pond), **Prov**(ide) and corresponding **OK** box if Campus should publish changes about the data object to the SIF agent.

The SIF agent must be set to **Sub**(scribe) and **Req**(uest) changes about these data objects.

5. Click **Save** to record the Campus agent's access rights for this data object.
6. Repeat the previous steps 1-5 for each data object for which the Campus agent should relay changes to the SIF agent.

To continue SIF setup, proceed to [Register Agent](#), or return to the [SIF Configuration page](#).

Unauthorized SIF Agents

If the ACL/data access rights have not been configured for the SIF agent, Campus will still allow a *SIF_Register* message. If a *SIF_Register* message is received for SIF agent without a configured ACL, an agent record will be created, but the agent will not be authorized to exchange data (*i.e.*, the agent's **Status** field will display a value of "Unauthorized" on the Agent tool).

All other messages from the agent will be rejected until a user manually approves the agent by entering the necessary information, setting the data access control rights, and changing the agent's **Status** field value to "Authorized."