

# Setup a SIF Agent

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## Creating a SIF Agent | SIF Agent Fields

This article is designed for advanced technical users only and is relevant to districts using SIF 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

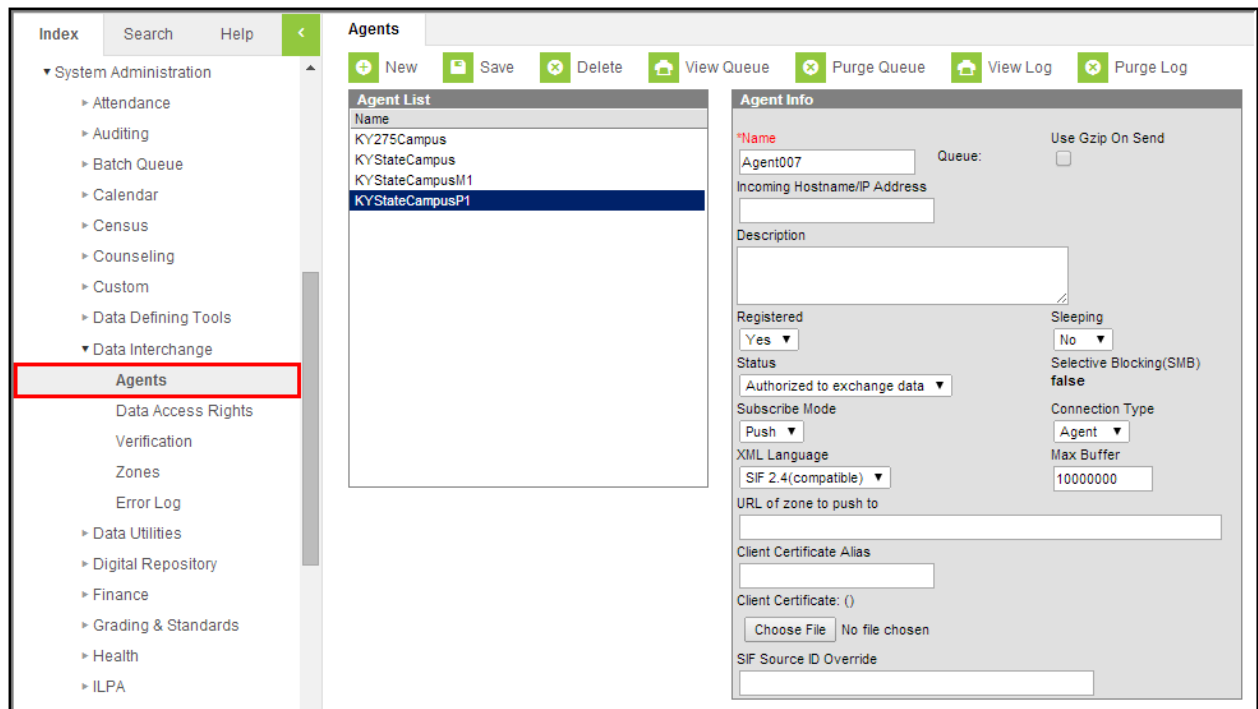
**PATH:** *System Administration > Data Interchange > Agents*

Any vehicles for sending/receiving data must be registered in the Campus application as [Agents](#), even external SIF applications.

## Creating a SIF Agent

To represent and exchange data on behalf of the non-Campus SIF application, a SIF emulation Agent must be manually created and configured through the Campus [Agents](#) tool. The SIF agent will exchange data with the Campus Agent within a SIF [Zone](#) (created in the [Setup SIF Zone](#) step of the [SIF Configuration](#) process).

In some instances of [Vertical Reporting](#), this step will not be necessary. When a SIF agent is set up in the external SIF application it can register with the Campus application using the Campus SIF Zone URL, and a registered and configured agent will appear on the Agents tool. If this scenario applies, continue SIF setup by proceeding to [Setup SIF Data Access Rights](#), or return to the SIF Configuration page.



### Creating a SIF Agent

To create a SIF Agent:

1. Navigate to the System Administration > Data Interchange > Agents tool.
2. Select the **New** icon from the action bar.
3. Enter a **Name** identifying the external application the SIF agent represents.

When the third-party application is a ZIS, the name of the emulated SIF agent in Campus should match that of the external ZIS agent being used for SIF data exchange.

4. Set the **Connection Type** to "Server."
5. (*Horizontal reporting only*) Enter the zone URL (copied from the URL for Communication field of the [Zones](#) tool) in the **URL of zone to push to/URL of zone to Pull from** field.
6. Click the **Save** button in the action bar to create the SIF Agent.

At this point, the SIF Agent is not yet registered/configured for use, but will appear in the Agent List editor. Agent settings should not be modified at this time as future steps in the [SIF Configuration](#) process will complete setup.

**To continue SIF setup, proceed to [Setup SIF Data Access Rights](#), or return to the [SIF Configuration](#) page.**

## SIF Agent Fields

The following table defines the fields available on the [Agent](#) screen:

Element	Description
Name	<p>Represents name of Agent. The format for naming Campus agents is: <b>&lt;state&gt;&lt;districtNumber&gt;&lt;agentName&gt; (E.g. MN062201Campus) ?</b></p> <p>For SIF agents, the name is flexible unless an Emulation agent requires a matching name for the ZIS environment in use.</p>
Use Gzip on Send	Applicable to SIF messaging, but rarely used. Default to unchecked unless the issue arises.
Incoming Hostname/IP Address	Applicable to SIF messaging, and used to indicate the IP address or domain where the third party or emulated agent resides. This will be a required field for emulated agents ( <b>Connection Type</b> = "Server").
Description	Agent details
Registered	<p>Indicates whether agent is registered.</p> <p><b>Yes</b> [true] <b>No</b> [false]</p>
Sleeping	<p>Indicates whether agent is sleeping</p> <p><b>Yes</b> [true] <b>No</b> [false]</p>
Status	<p><b>Authorized</b> [true] allows data exchange. <b>Unauthorized</b> [false] prevents data exchange.</p>
Selective Blocking (SMB)	<p>Selective Message Blocking (SMB) is a feature of SIF that allows an agent to halt the delivery of events so that the agent can request additional information about the object they just received.</p> <p><b>True</b> [SMB used] <b>False</b> [SMB not used]</p>
Subscribe Mode	<p>Mode in which data is exchanged for that agent:</p> <p><b>Push</b> [send] <b>Pull</b> [receive]</p>
Connection Type	<p>Determines the server mode:</p> <p><b>Agent</b> <b>Server</b> (Indicates Agent Emulation mode will be used. The Agent Emulation Control panel will display when this mode is selected).</p>

Element	Description
XML Language	Specified language of communication: <b>Campus</b> (Defaulted to Campus language for Campus agents) <b>SIF1.1</b> <b>SIF1.5r1</b> <b>SIF 2.0r1</b> <b>SIF 2.1</b> <b>SIF 2.2</b> <b>SIF 2.3</b> <b>SIF 2.4 (Compatible)</b>
Max Buffer	Max amount of data sent in a packet.
URL of Zone to Push To/ URL of Zone to Pull From	URL from/to which the zone pushes or pulls information, depending on the specified subscribe mode.
Client Certificate Alias	The alias of the client certificate associated with the agent. Part of using an SSL certificate to encrypt connections.
Client Certificate	The client certificate associated with the agent.  This field is no longer functional. Please ignore and do not use.