

Setting up Microsoft School Data Sync (SDS)

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Contributors 

Schools and School Districts can read SDS (School Data Sync) CSV files for importing identity data to Skooler. Skooler will accept the standard SDS files. But in order to get a complete set of data needed, Skooler provides a set of extended files with more details.

School Data Sync is a Microsoft product, and the official documentation of the CSV file format is here: <https://docs.microsoft.com/en-us/schooldatasync/school-data-sync-format-csv-files-for-sds>

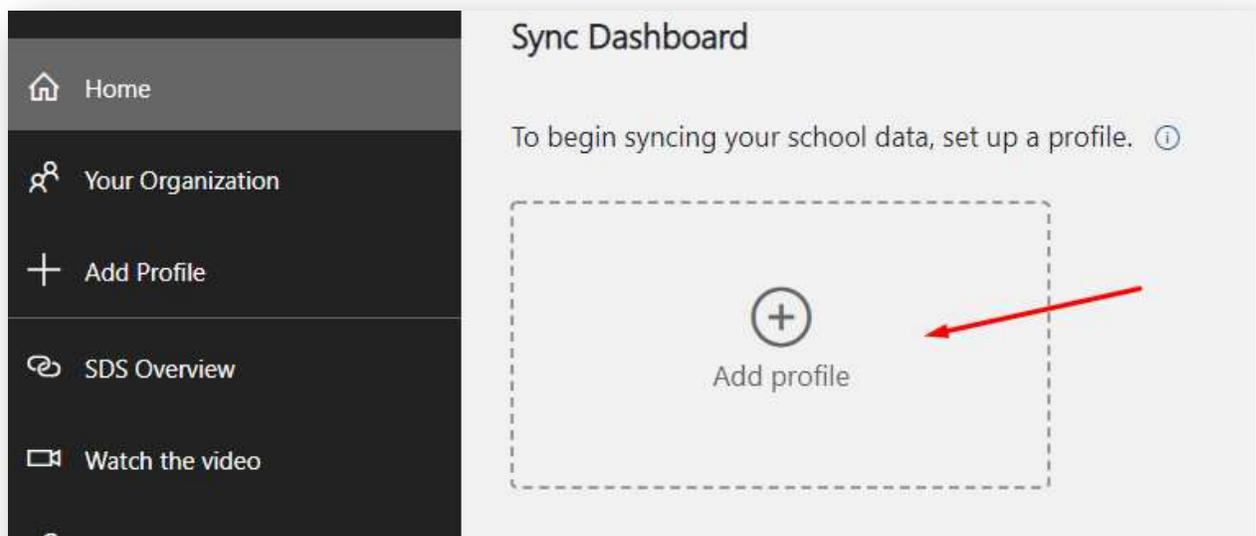
Please read for Microsoft's official information about the standard SDS file format.

Getting Started

You should be logged in to the [Office 365 Portal](#) with an admin user. Then go to the School Data Sync portal and sign in (if sign-in is necessary):

<https://sds.microsoft.com/>

You need to create a sync profile first. If you already have one, please check if you need to create a new one rather than creating a new.



When clicking the “Add profile” area, select the way to get SDS data into your Azure AD. You can select between uploading from CSV files and connecting to a set of APIs. Some SIS provides direct API implementation, check out the SIS you use.

See the full list of APIs here:

<https://docs.microsoft.com/en-us/schooldatasync/frequently-asked-questions#what-sismis-vendors-does-school-data-sync-support>

Sync Profile for New Data

We create a profile to use with **new** data. With this profile, only new elements are applied. There should also be a separate profile for **updating** data. More details on that can be found here:

<https://docs.microsoft.com/en-us/schooldatasync/how-many-sync-profiles-do-i-need-to-create-when-setting-up-school-data-sync#how-many-sync-profiles-do-i-need-to-create-when-setting-up-school-data-sync>

Enter a name for your profile

Default Sync Profile - Create

Choose your sync method

- Upload CSV files ✓
Upload CSV files created from your SIS.
- Connect via an API
Make a direct connection and sync your schools' data directly with your SIS

I call my profile “*Default Sync Profile – Create*”. The update profile will be called “*Default Sync Profile – Update*”.

In this example, we focus on getting data from the standard SDS CSV file format, because those may be used into Skooler as well.

Please choose the type of CSV files you are using

CSV files: SDS Format ✓
Upload CSV files that have been formatted for School Data Sync
[Learn more](#) [View sample files](#)

CSV files: Clever format
Upload CSV files in Clever format
[Learn more](#)

[Start](#)

When finished, press the “Start” button in the bottom of the page.

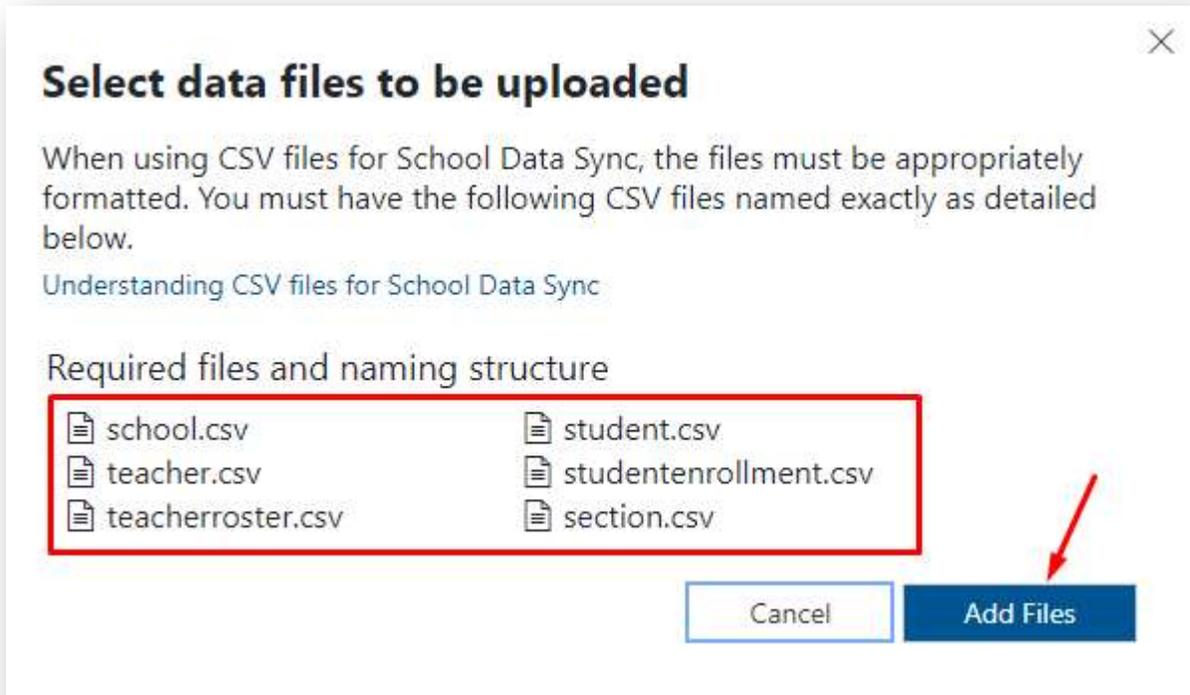
Uploading Files

Then I select the “New users” option because I want this profile to create new identities from the provided files.

Select new or existing users

- Existing users** - Selecting this option matches students and teachers in your source data with users already existing in Office 365 / Azure Active Directory, and adds more attributes to those users.
- New users** - Selecting this option creates a new teacher or student account in Office 365 / Azure Active Directory for each user specified by your source data.

Then I press the “Upload Files” button. A new dialog appears.

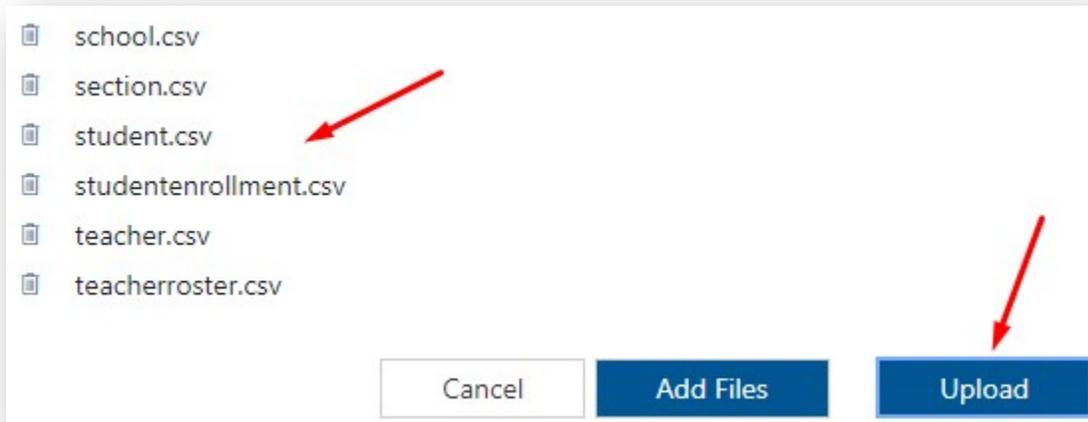


Notice that the naming standard for the CSV files must be as defined in the doc. That requirements also applies when importing to Skooler.

Press the “Add Files” button to select the files to upload.

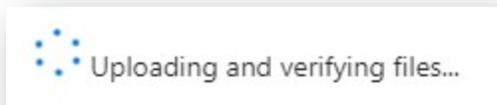
Name	Date modified	Type	Size
school.csv	28.02.2019 12:56	Microsoft Excel C...	
section.csv	30.01.2019 13:35	Microsoft Excel C...	
student.csv	28.02.2019 13:10	Microsoft Excel C...	
studentenrollment.csv	30.01.2019 13:36	Microsoft Excel C...	
teacher.csv	28.02.2019 13:09	Microsoft Excel C...	
teacherroster.csv	30.01.2019 13:36	Microsoft Excel C...	

A red box highlights the first six rows of the table.



Verify that all files are added, then click the “Upload” button. The files will now be verified. If they are not structurally and logically correct, you will get a list of errors that you must fix to continue.

You will see the following message, that could take some time.



When upload is done, press the “OK” button to continue.

School and Section Options

Now, define the options for schools and sections. These properties are just the properties available in the CSV files for schools and sections.

School Properties

Starting with the school properties, we use the default setup, as this is the same that will be very handy to display in Skooler. We are leaving out “School NCES_ID” and “Zone”, but you may select the properties of your preference.

▼ School Properties ✔ Select All ✕ Clear

<input checked="" type="checkbox"/> SIS ID	<input checked="" type="checkbox"/> Name	<input checked="" type="checkbox"/> School Number
<input checked="" type="checkbox"/> State ID	<input checked="" type="checkbox"/> Grade Low	<input checked="" type="checkbox"/> Grade High
<input checked="" type="checkbox"/> Principal SIS ID	<input checked="" type="checkbox"/> Principal Name	<input checked="" type="checkbox"/> Principal Secondary Email
<input checked="" type="checkbox"/> Address	<input checked="" type="checkbox"/> City	<input checked="" type="checkbox"/> State
<input checked="" type="checkbox"/> Country	<input checked="" type="checkbox"/> Zip	<input checked="" type="checkbox"/> Phone
<input type="checkbox"/> School NCES_ID	<input type="checkbox"/> Zone	

Section Properties

For sections (classes), I select more properties than the default. I only leave out “Course Description” as that is not very important for Skooler. As for schools, you may select the properties of your preference.

▼ Section Properties ✔ Select All ✕ Clear

<input checked="" type="checkbox"/> SIS ID	<input checked="" type="checkbox"/> School SIS ID	<input checked="" type="checkbox"/> Section Name
<input checked="" type="checkbox"/> Course SIS ID	<input checked="" type="checkbox"/> Course Name	<input checked="" type="checkbox"/> Course Number
<input checked="" type="checkbox"/> Course Subject	<input checked="" type="checkbox"/> Section Number	<input checked="" type="checkbox"/> Term SIS ID
<input checked="" type="checkbox"/> Term Name	<input checked="" type="checkbox"/> Term StartDate	<input checked="" type="checkbox"/> Term EndDate
<input type="checkbox"/> Course Description	<input checked="" type="checkbox"/> Periods	<input checked="" type="checkbox"/> Status

Other Options

You are able to automatically replace unsupported special characters (like \$ and / in names) from the files to avoid errors during sync. This is practical but may cause IDs and names to differ from the source. If that is a problem, turn this option off.

Another option is to only sync names the first time when the sections/classes are created. This allows teachers to change the names in Office 365.

You can also disable student access to the sections (in Office 365, Teams etc) to a later date. This is default off.

Last, we set a date when this profile should stop syncing data. We set the date to the end of the current (or upcoming) school year. Then press the “Next” button.

Teacher Options

Like for schools and sections, properties for teachers may also be set. You may set the default domain for teachers and the license to apply to the teacher used accounts in Azure AD.

The default properties are quite OK as default. We leave it as it is.

Teacher Properties ✔ Select All ✕ Clear

<input checked="" type="checkbox"/> SIS ID	<input checked="" type="checkbox"/> School SIS ID	<input checked="" type="checkbox"/> First Name
<input checked="" type="checkbox"/> Last Name	<input checked="" type="checkbox"/> Username	<input checked="" type="checkbox"/> Password
<input checked="" type="checkbox"/> Teacher Number	<input checked="" type="checkbox"/> Status	<input checked="" type="checkbox"/> Secondary Email
<input checked="" type="checkbox"/> Title	<input type="checkbox"/> State ID	<input type="checkbox"/> Middle Name
<input type="checkbox"/> Qualification		

Click the “Next” button to continue.

Student Options

This is similar to the teacher properties. You may set the default domain for students and the license to apply to the student used accounts in Azure AD.

The default properties are quite OK as default, but we add the Graduation Year to help defining the grade level when importing this to Skooler.

▼ Student Properties ✔ Select All ✕ Clear

<input checked="" type="checkbox"/> SIS ID	<input checked="" type="checkbox"/> School SIS ID	<input checked="" type="checkbox"/> First Name
<input checked="" type="checkbox"/> Last Name	<input checked="" type="checkbox"/> Username	<input checked="" type="checkbox"/> Password
<input checked="" type="checkbox"/> Secondary Email	<input checked="" type="checkbox"/> Student Number	<input checked="" type="checkbox"/> Grade
<input checked="" type="checkbox"/> Status	<input type="checkbox"/> State ID	<input type="checkbox"/> Middle Name
<input type="checkbox"/> Birthdate	<input checked="" type="checkbox"/> Graduation Year	

Click the “Next” button to continue to the Review page that allows you to review your options and properties before creating the profile.

Click the “Create profile” button to continue. The creation may take some while. Wait a few minutes, then refresh the page by pressing the “F5” button on your keyboard or swiping your finger downwards on your device.

You may get errors reported back to you on the following page. The uploaded files are now validated towards the properties set for schools, sections, teachers and students. Not all properties checked must be set with values, but data like section Term details must be set if checked in the section properties.

If there are no changes, the sync will start, and you will see the teachers and students appearing as users in Azure AD.

Sync Profile for Updating Data

Now, we create another sync profile for handling the updating data. Details may change from time to time, so there is a separate profile for handling data that updates.

The first steps are similar to the first profile. I call the profile “*Default Sync Profile – Update*” and select the “Existing users” choice.

Select new or existing users

- Existing users** - Selecting this option matches students and teachers in your source data with users already existing in Office 365 / Azure Active Directory, and adds more attributes to those users.
- New users** - Selecting this option creates a new teacher or student account in Office 365 / Azure Active Directory for each user specified by your source data.

In this example, I check the same properties for schools and sections as the first profile. You may upload the same files, or you can continue to upload different files for the updating data. You won't need Passwords for changing students and teachers, and there might be more things you will not need in your sync.

Teacher Options

Like in the first profile, select the teacher properties you need. I use the same selections as far as it goes, because some properties are not able to change.

▼ Teacher Properties ✔ Select All × Clear

<input checked="" type="checkbox"/> SIS ID	<input checked="" type="checkbox"/> School SIS ID	<input checked="" type="checkbox"/> Teacher Number
<input checked="" type="checkbox"/> Status	<input checked="" type="checkbox"/> Secondary Email	<input checked="" type="checkbox"/> Username
<input checked="" type="checkbox"/> Title	<input type="checkbox"/> State ID	<input type="checkbox"/> Qualification

I also set change rule for usernames. I select that Username + Domain should be UserPrincipalName (UPN) for teachers.

Primary key (Source Directory) Primary key (Azure Active Directory)

Username → userPrincipalName

Domain (optional)

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Student Options

I do the same thing for students. Same properties as before and the same Username rule as for teachers.

▼ Student Properties [Select All](#) [Clear](#)

<input checked="" type="checkbox"/> SIS ID	<input checked="" type="checkbox"/> School SIS ID	<input checked="" type="checkbox"/> Secondary Email
<input checked="" type="checkbox"/> Student Number	<input checked="" type="checkbox"/> Grade	<input checked="" type="checkbox"/> Status
<input checked="" type="checkbox"/> Username	<input type="checkbox"/> State ID	<input type="checkbox"/> Birthdate
<input checked="" type="checkbox"/> Graduation Year		

Click the “Next” button to continue to the review page that allows you to review your profile before creating it.