INTEGRATION SETUP
SchoolMint – V1

ABSTRACT

This document is intended to assist with the configuration of a third-party vendor's Integration with Skyward's Qmlativ product from a district customer's perspective.

PURPOSE

For a third-party vendor's Integration to obtain access to Qmlativ's APIs, which allows the Integration to communicate with the Qmlativ environment, an **Integration Access** record must be created within Qmlativ. This record's information is then synchronized with Skyward's secure Partner Portal, granting the third-party vendor access to the necessary credentials for their Integration's communication.

DOCUMENT DESCRIPTION

Section 1: *Integration Access Setup*, includes the steps necessary for creating a basic Integration Access record necessary within Qmlativ for the third-party Integration to obtain credentials which allow access Qmlativ's APIs.
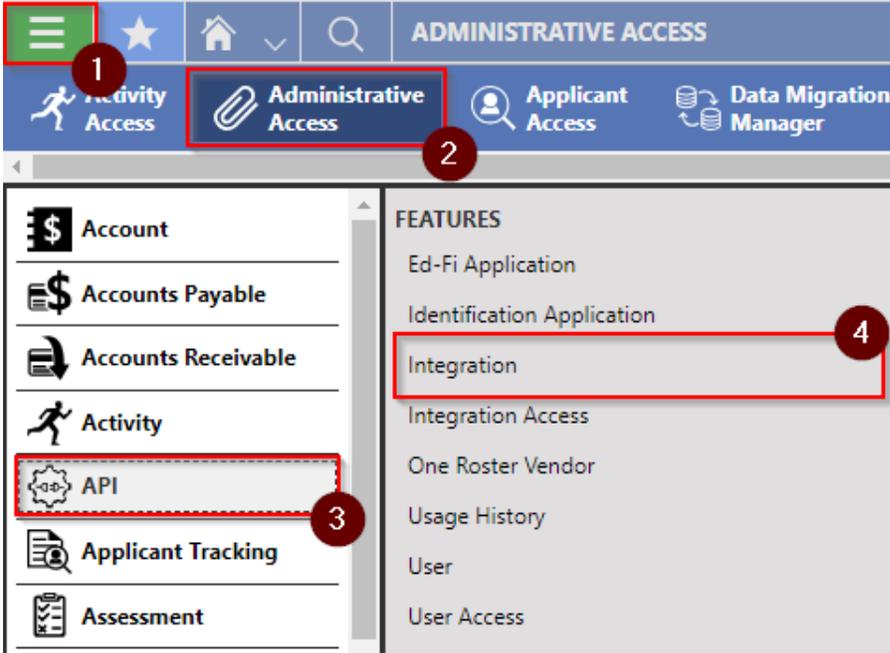
Section 2: *Vendor Integration Setup*, includes additional instructions from the third-party vendor regarding any additional configuration outside of Qmlativ.

## Contents

INTEGRATION ACCESS SETUP

NAVIGATING TO THE INTEGRATION LIST

Every Integration will have a record available within Qmlativ, which you can view by navigating to the **Integration List** screen. To locate this list of Integrations:

1. Open the Main menu within Qmlativ.
2. Select the **Administrative Access** portal.
3. Choose the **API** module.
4. Select the **Integration** feature.

EXPLANATION OF THE INTEGRATION LIST
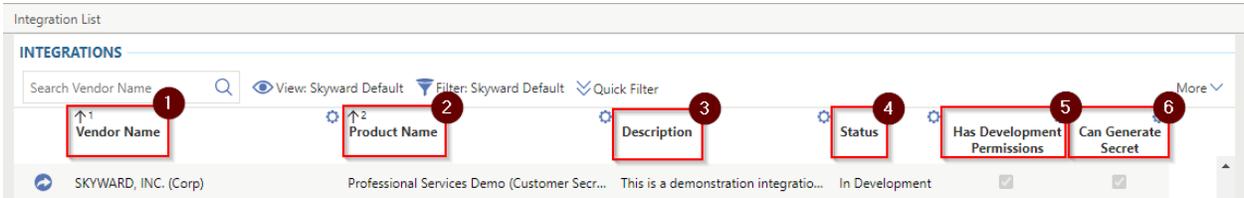
On the Integration List screen, you will see a list of Integrations. By default, these Integrations are sorted by the **Vendor Name** (1) and then by the **Product Name** (2), which should make the Integrations easy to locate within the list.

The **Description** (3) column provides an explanation of the purpose of the Integration, and should help you, as the district, determine if the Integration will be useful for your district.

The **Status** (4) column shows the current state of the Integration, such as whether it is *Available* or if it has been *Discontinued*. A *Discontinued* Integration that appears for you is one that has either recently been discontinued from use or one that you have used in the past which is no longer available.

The **Has Development Permissions** (5) column provides an indication of whether the Integration is allowed to access your environment while it is in development by the vendor. In a Live environment, this should display as unchecked, however, in a Training environment, you may see this item checked if you are working with a vendor for development purposes.

The **Can Generate Secret** (6) column provides an indication as to whether you, as the district, are allowed to generate the secret that is used for the Integration's authentication. If this box is checked, the vendor has enabled the option and expects that you will provide the secret to them using a secure method so they may authenticate with Qmlativ (see the Vendor Integration Setup below). If this option is unchecked, the vendor has chosen to manage secret authentication themselves using Skyward's secure Partner Portal.

STARTING INTEGRATION ACCESS SETUP

From the Integration List screen, click the **Open** (1) button on the Integration for which you want to grant access, this will take you to the **Integration Details** screen.

On the Integration Details screen, select the **Integration Accesses** (1) tab, which will display a list of Integration Access records available for this Integration (*note that no records will display when you first view this screen*). Click the **Add Integration Access** (2) button to begin the **Add Integration Access** workflow**.**

ADD INTEGRATION ACCESS WORKFLOW

In the Add Integration Access Workflow, you will need to set the following fields on the Integration:

1. **Name (required)**: This is a "friendly" name that allows the district to easily identify the Integration Access and allow the district to differentiate it from another Integration Access for the same Integration. It is often useful to name this with the Integration's name plus the year or purpose of the access being granted, such as "{Integration} 2023" or "{Integration} Vendor Testing". *Note: this name does not affect the access credentials used to connect to the API(s).*

2. **Description (optional)**: This description allows you to provide more details on the purpose of the Integration Access if the Name field does not provide enough context.

3. **Integration (required)**: When starting the Add Integration Access Workflow from the Integration Details screen, the Integration will be automatically set to the Integration which was selected at the start of the workflow. When starting the workflow from other locations, such as the Integration Access List screen, this field will need to be filled in with the name of the Integration to which you are granting access.

4. **Key (required)**: This key functions as the Client Key or "username" by the third-party vendor when authenticating with Qmlativ's APIs. This value must be unique, and the third-party vendor may require that the value be configured to a specific value (see Vendor Integration Setup below).

5. **Authentication Type (required)**: The indicates the type(s) of authentication are available to the third-party vendor when authenticating with Qmlativ. Skyward recommends setting this option to "Any", as this will allow the vendor to access the Integration using their preferred authentication type, and it will not require any changes to be made if other authentication types are added or removed in the future.
   a. **NOTE**: "Basic" is currently offered as an option for the authentication type, but this option will be removed at the start of the 2024-25 school year and is not recommended.

6. **Is Active (required)**: Indicates whether the Integration Access is active.

7. **Effective Date (required)**: The date from which the Integration Access becomes available to the third-party vendor.

8. **Expiration Date (optional)**: The date after which the Integration Access is no longer available to the third-party vendor.

- *NOTE: an Integration Access is only truly active if the "Is Active" checkbox is checked and if the current date falls after the Effective Date and before the Expiration Date. If no Expiration Date is provided, then the Integration Access will not expire, and will remain active as long as the "Is Active" box is checked, and the current date is after the Effective Date.*

ADDITIONAL CONFIGURATION

Beyond the above settings on the Add Integration Access workflow, there may be additional configuration necessary depending on the APIs used by the third-party Integration. If any additional configuration is necessary, a **Configuration** section will appear below the Expiration Date.

ENROLLMENT CONFIGURATION

Description: the Enrollment API allows third-party Integrations to access Enrollment from the Entities specified in the configuration.

Click the arrow (1 or 2) next to the **Enrollment Configuration** selector, this will display a list of available Enrollment Configurations. Click the **Select** (3) button next to the appropriate configuration, if one is available, or click the **Add Enrollment Configuration** (4) button to add a new configuration.

Add Enrollment Configuration
Enter Enrollment Configuration Details

💾 Save   🚫 Cancel

ENROLLMENT CONFIGURATION DETAILS

*Description [   ] **1**

*Entities [🔍] **2**

On the Add Enrollment Configuration workflow, you will need to fill in several fields:

1. **Description (required)**: this description will allow you to provide the context for the configuration.
2. **Entities (required)**: select the Entities to which the Integration Access should have access as part of this configuration.
   a. *NOTE: common practice is to create a single Integration Access for an Enrollment Configuration and on it select all Entities to which the Integration should be able to access rather than having a separate Integration Access with different configurations for each Entity. However, if you need more granular control of the access, such as having multiple instances of the Integration with different setups, which you may have in multi-district Qmlativ environments, then it would be appropriate to have multiple Integration Access records configured with different enrollment configurations.*

CUSTOM API CONFIGURATION

Description: the Custom API allows third-party Integrations to potentially access any field within Qmlativ. However, the fields to which they have access are limited based on review by Skyward.

To see a list of the fields to which an Integration has access, you can navigate to **Administration Access** > **API** > **Integration**, open the specific Integration from the list, then click on the **Integration APIs** tab. On the Integration APIs tab, select the **Custom** API from the list, and a list of **Integration Objects** and **Integration Fields** will be displayed in the lists below.

Custom API Entities [🔍] **1**
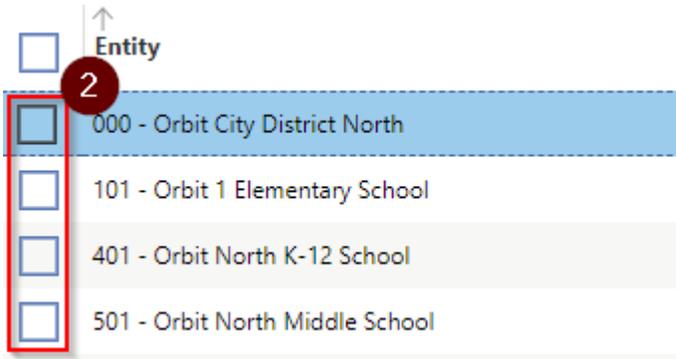
Click the magnifying glass (1) next to the **Custom API Entities** selector, this will display a list of available Entities. Check the boxes (2) next to the Entities that you want the Integration to access when using the Custom API.

NOTE: in a single-district configuration, it is common to select all Entities from the list, so that the Integration may access information from the entire district. However, there may be situations where limiting access to specific Entities may be required, such as for certain licenses (for instance, if a high school uses an Integration, but the elementary school does not).

In a multi-district configuration, it is common to create a separate Integration Access for each district that is utilizing the Integration, and then limiting the Integration Access to the entities within that specific district. This will allow more granular control on a district-by-district basis.

SAVING THE INTEGRATION ACCESS

After filling in the main section of the Add Integration Access workflow (1) and any additional configuration (2), click the **Save** button to complete the first step of the workflow.

*Completing the Add Integration Access Workflow*
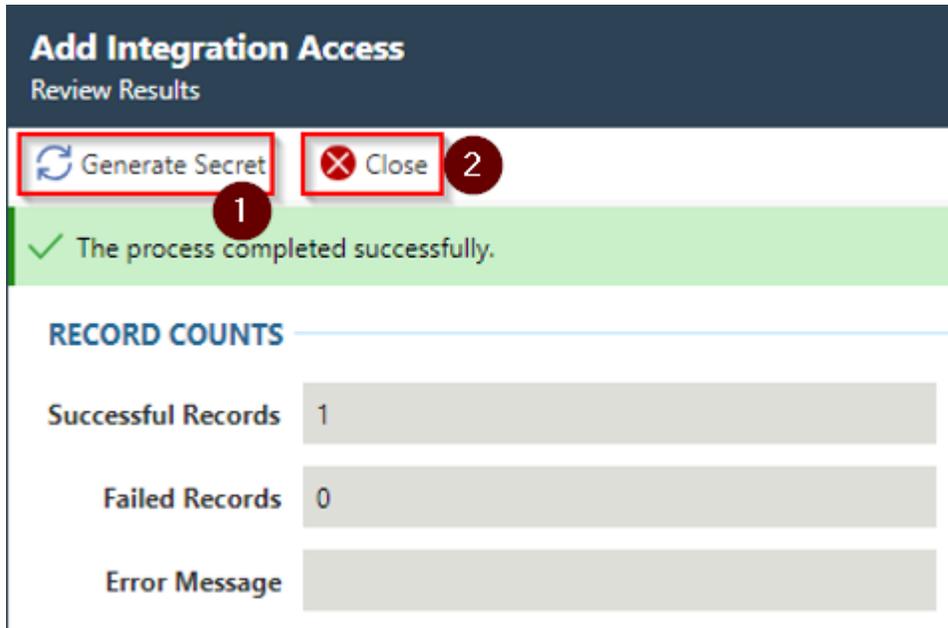
After saving the workflow, you will be presented with a window indicating that the process was completed successfully, which means the Integration Access record was created.

If the Integration allows you to generate a secret, you will have a **Generate Secret** (1) button displayed at the top along with the **Close** (2) button. If you are not allowed to generate the secret, you will only see the **Close** button. Click the **Generate Secret** (1) button to generate a secret for this Integration Access.

NOTE: the Generate Secret button will generally only be available to you if the third-party vendor offers a form of self-setup for the Integration or if the Integration is being used from a physical device that requires setup at the district (such as a time tracking device). This option is entirely dependent upon the third-party vendor's Integration setup, and when available, should include instructions in the Vendor Integration Setup section below.

STARTING THE GENERATE SECRET WORKFLOW
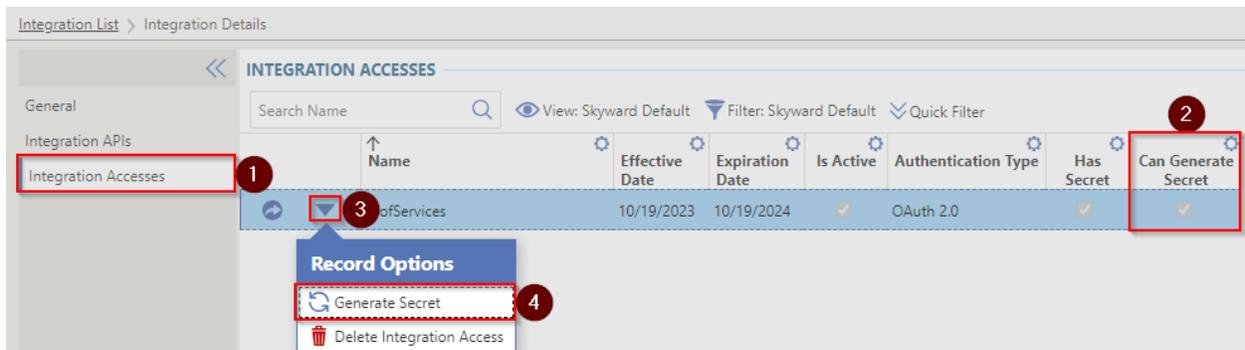
If you clicked the **Generate Secret** button above, you will automatically begin the **Generate Secret Workflow**. However, if you clicked the **Close** button instead, or you otherwise need to generate a new

secret for an Integration, you can navigate to the **Integration Accesses** tab (1) on the Integration Details screen, as explained above, and look at the **Can Generate Secret** column (2) to see if you are allowed to generate a secret. If you can generate a secret, you can click the down arrow on the row (3) and click the **Generate Secret** button to start the workflow, and you can continue the workflow as outlined in the Completing the Add Integration Access step above.

Completing the Workflow

After starting the Generate Secret Workflow, you will need to copy the **Secret** that is generated from the box on the screen. To make this easy, you can click the **Copy** (1) button. Once you have copied the information, you need to make sure the **I Have Copied This Data** (2) box has been checked (this will happen automatically when you click the Copy button), then click the **Run Process** (3) button to complete the process.

Providing the Generated Secret

If you had the option to generate the secret, this information must be provided to the third-party vendor. Please see the instructions below in the Vendor Integration Setup to determine how this information is to be provided to the third-party vendor.

VENDOR INTEGRATION SETUP

Skyward setting up Integration

This document will explain the steps for new customers to set up their environment to import and export student information on enrollment through the Sync Service tool.

Setting up the Skyward connection

First, click the Add Sync Connection Button, name the connection, and select Skyward type.

Create or manage sync connections to sync data between SchoolMint Enroll and other systems.

Add Sync Connection

Sync Connection

Configure a sync connection to import student or application data into SchoolMint Enroll, or to export registrations from SchoolMint Enroll.

Name *

Skyward Documentation

Select Connection Type *

Ad hoc CSV

Aeries

PowerSchool

SFTP

Skyward

Next, fill out all of the required fields and click Connect.

The page below will display if the credentials are correct and Sync Service has established a connection with the Skyward adapter.

Using the navigation on the left side, select either Import Student Mapping or Export Student Mapping.

Export Mapping

This feature exports Student Data from Enroll to Skyward.

Getting the Skyward Field Codes

There are some fields that we need to use the "match code" transformation to be able to export information to the Skyward API.

For example: GenderCode

On the upper right side of the Configure screen, you will see a dropdown arrow with the option "Download Skyward Field Codes". These codes are going to be used to map the fields that require a code-match.
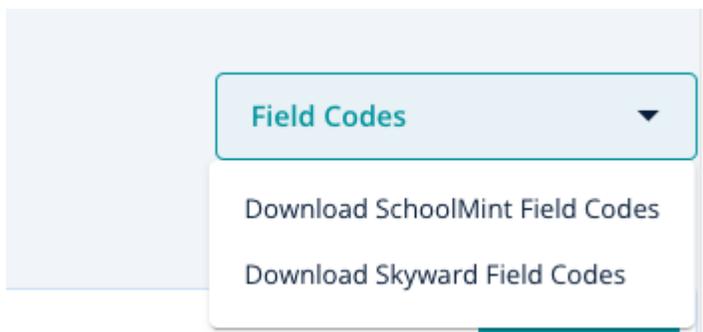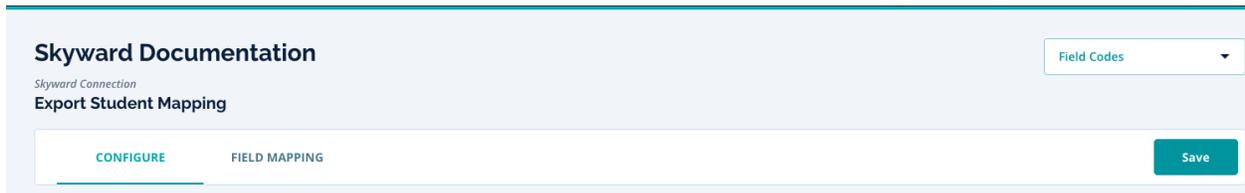
After clicking the option to download Skyward Fields codes you will download a CSV file that will be useful for creating Code Matches.

Setting up a Match Codes field
Example 1
On the following steps, we are going to set up the code matches for the example: Genders

Genders	Female	F	StudentApplication.GenderCode
Genders	Male	M	StudentApplication.GenderCode

For the field GenderCode, the Skyward API is expecting 2 different options: ("F" and "M") so we need to create a code match for the Gender field.

On the mapping view in the column Mapping Type, you will see 4 Mapping types.
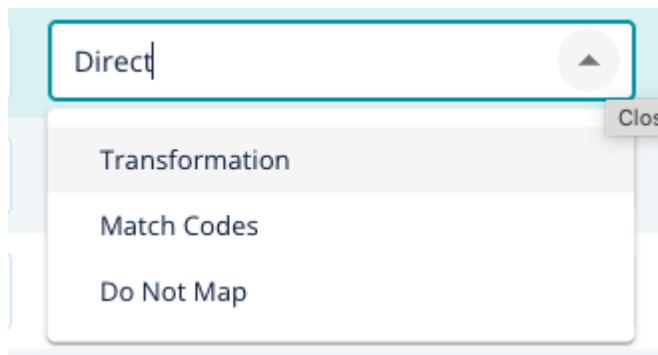
Select the Match Codes option, then in the column From SchoolMint Enroll Field you need to choose the field: students.gender
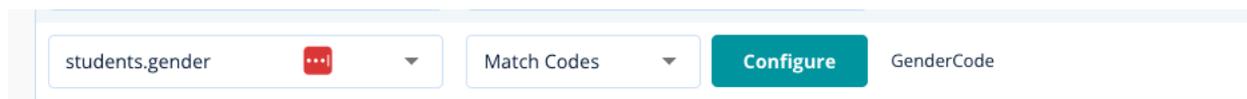
Next, click on the Configure Button. It will open a modal like the one below.

On the field Select Code Match Set *, click the option + Add Code Match Set to add the name for that code match. For example, we are going to add the value "Gender Code Example" seen below.

In the Map Schoolmint Enroll Value, add the values that were downloaded before on the CSV.

Mapped Value: GenderCode

New Code Match Name *

Gender Code Example   ✕

Map SchoolMint Enroll Value   **To Skyward Value**

Enter exact text to match *   e.g "CODE01"

Female   F   🗑

+

On the field "Map SchoolMint Enroll Value", add the value stored in Enroll and on the Field "To Skyward Value", add the value to be sent to Skyward API.

Use the + button to add more code matches as needed. Once all the code matches for gender have been added, click "Save Match Set".

Then click the Save button on the mapping view, located on the right side of the button "Send Record".

(if you don't click the Save mapping button you can lose your data after refreshing the page).

Skyward Documentation

Field Codes ▼

Skyward Connection
Export Student Mapping

CONFIGURE   FIELD MAPPING   ⓘ Send Record   Save

Code Matching

×

Mapped Value: GenderCode

New Code Match Name *

Gender Code Example ✕

Map SchoolMint Enroll Value   **To Skyward Value**

Enter exact text to match *

Female

e.g "CODE01"

F

🗑

Enter exact text to match *

Male

e.g "CODE01"

M

🗑

+

☐ **Do you want to use a default value for empty SM fields?**

Default Value

Note: leave blank if you wish to send a blank value

Cancel   **Save Match Set**

Example 2

In this example we are going to set up another Match Codes field: PhoneType. This field is used to send the phone type on a student contact. As in the previous example, Skyward expects a different code than the one stored on the Enroll side so it needs a conversion.

PhoneTypes	Home Phone	1	GuardianApplication.PhoneTypeIDPrimary
PhoneTypes	Work Phone	2	GuardianApplication.PhoneTypeIDPrimary
PhoneTypes	Cellular Phone	3	GuardianApplication.PhoneTypeIDPrimary

When mapping the phone type this is what Skyward expects from the Sync Service. If we try to sync as a direct field we'll run into an error.
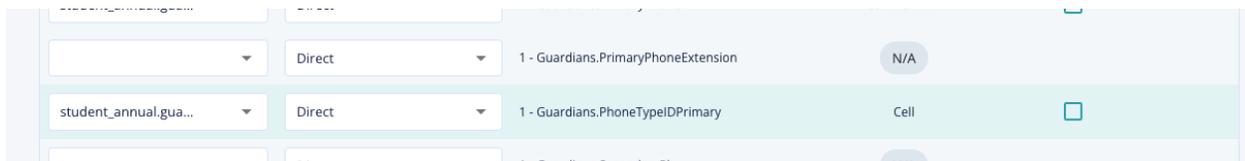
Important note: Notice that the direct value stored in Enroll is: Cell, instead of the value on the csv file: Cellular Phone. Note: this is not an error, Cellular Phone is a value given by Skyward as a reference of what value it is expecting.

Select the field: student_annual.guardian1_phone_type then select "Match Codes" and click Configure.

A modal will appear where you will use the Select Code Match Set dropdown to select + to Add Code Match Set to create a new one. This same dropdown now acts as an input so write down the name of the Code Match Set.

Code Matching ✕

Mapped Value: 1 - Guardians.PhoneTypeIDPrimary

Select Code Match Set * ▾

Map SchoolMint Enroll Value   **To Skyward Value**

Enter exact text to match *   e.g "CODE01"   🗑

+

☐ **Do you want to use a default value for empty SM fields?**

Default Value

Note: leave blank if you wish to send a blank value

Cancel   **Save Match Set**

Code Matching ✕

Mapped Value: 1 - Guardians.PhoneTypeIDPrimary

Select Code Match Set *
| ▲ |

+ Add Code Match Set

Code Matches - Grade

To Skyward Value

Enter exact text to match *   e.g "CODE01"   🗑

Code Matching

Mapped Value: 1 - Guardians.PhoneTypeIDPrimary

New Code Match Name *

Phone Types

Map SchoolMint Enroll Value

To Skyward Value

Now, in the field: *Enter exact text to match *** write the value coming from Enroll. In the field *"CODE01"* write the value you want to send to Skyward. Complete the Code Matching by adding as many as you need.

Code Matching   ✕

Mapped Value: 1 - Guardians.PhoneTypeIDPrimary

Select Code Match Set *
Phone Types ▼

Map SchoolMint Enroll Value   To Skyward Value

Enter exact text to match *   e.g "CODE01"
Home   1   🗑

Enter exact text to match *   e.g "CODE01"
Work   2   🗑

Enter exact text to match *   e.g "CODE01"
Cell   3   🗑

+

☑ **Do you want to use a default value for empty SM fields?**

Default Value
1

Note: leave blank if you wish to send a blank value

Cancel   **Save Match Set**

Also available for Code Matching, you can assign a default value to be sent to Skyward in the event the Enroll field does not match any of the options.

To save the Match Code, click Save Match Set and the value will be changed before syncing the data.

Code Matches can be reused on other fields so if there is a need for another phone type Code Match you can select the Code Match Set that you just created.

Skyward fields that use a Match Codes field

Here are all (as of 3.26.24) of the fields that Skyward expects a different value than Enroll has stored. These values can be checked on the csv file downloaded on the section Getting the Skyward Field Codes.

Code Set Name	Skyward Field Name
Name Suffixes	NameSuffixID
Genders	GenderCode
Boolean Indicator	IsHispanic, IsAlaskan, IsAsian, IsBlack, IsHawaiian, IsWhite, IsSNAP, IsTANF, AllowPickup
Entities	EntityCode
SchoolYears	SchoolYearID
GradeLevels	GradeLevelIDApplyingTo, GradeLevelIDCurrent
Languages	LanguageIDNative, LanguageIDPrimary
EntryCodes	EntryCodeID
StudentTypes	StudentTypeID
Relationships	RelationshipID
EmailTypes	EmailTypeID
PhoneTypes	PhoneTypeIDPrimary, PhoneTypeIDSecondary, PhoneTypeIDTertiary

Contacts

To add a contact for the student, go to the Guardians or Emergency Contacts section and click on the add button.
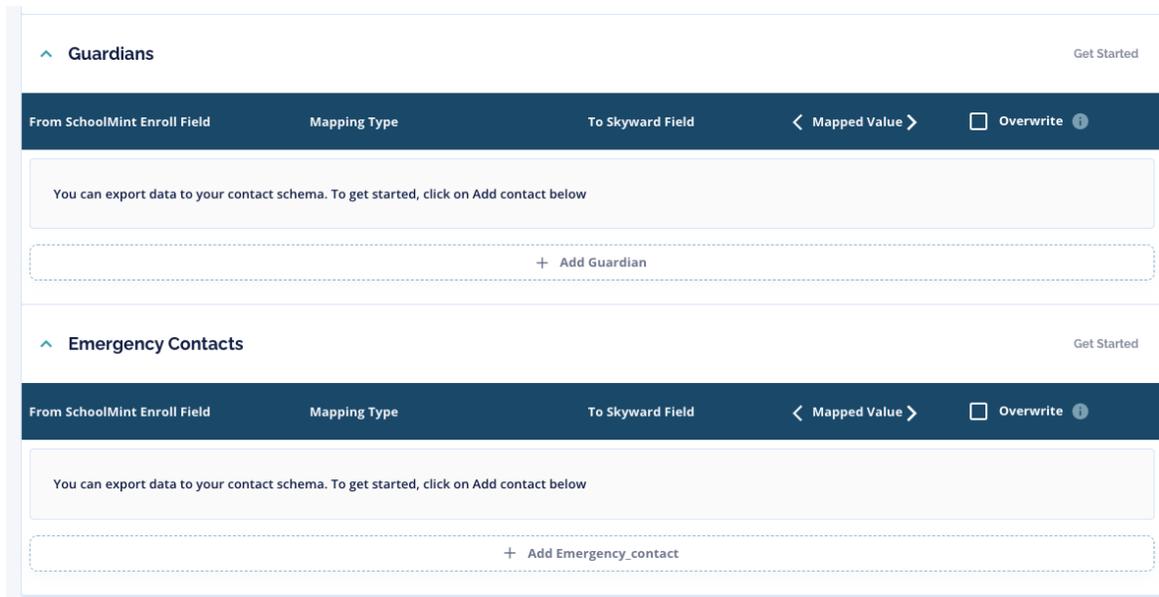
Once clicked you will see a mapping screen like this
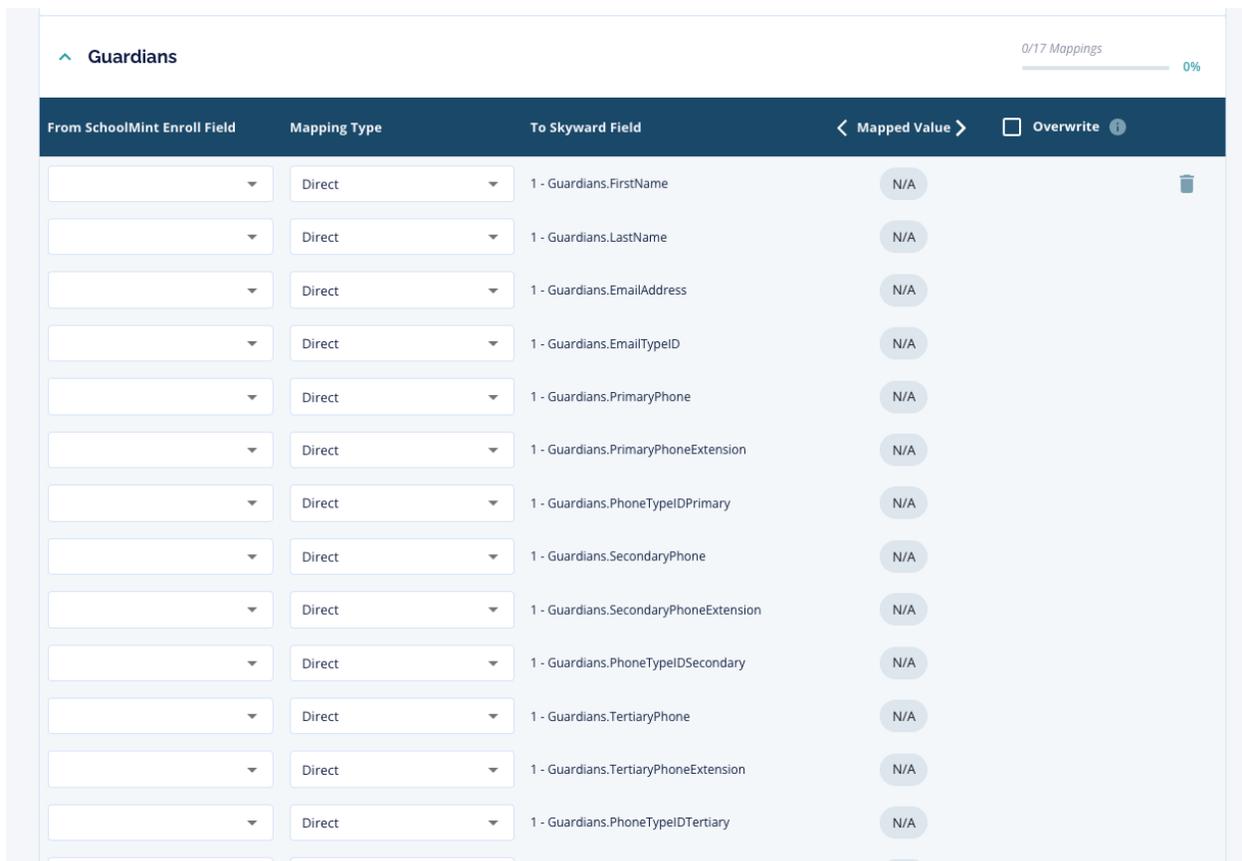
Fill in the mapping with its corresponding fields, note that you can delete or add more contacts if necessary.

Important note: For fields that need Match Codes, notice that this can be reused as many times as needed, for example a email or phone type code match can be used for email and phone of guardian 1 and 2, as well as emergency contacts just make sure that on the csv they are the same.

Texas Fields

When setting up a connection, if you select the option to create a state-specific mapping and choose Texas like the image below, you will have new fields specific for Texas state.

On the mapping screen you will see the Texas Fields section.

Another difference is that when getting the Skyward Fields Codes there will be new Texas related fields that need to be matched in order to sync exports.

Commonly used SchoolMint Enroll fields in the Texas field section:

SchoolMint Enroll Field	Skyward Field
student_annual.residence_type	StateHomelessStatusCodeTXID
students.unaccompanied_youth_status	StateUnaccompaniedYouthStatusCodeTXID
student_annual.military_status	StateMilitaryConnectedStudentCodeTXID
student_annual.student_foster_child_dropdown	StateFosterCareCodeTXID
students.student_state_id	StateAssignedAlternativeID