

## Planning Center Online (PCO) Sync – Version 2.1

### Introduction

Planning Center Online (PCO) is a service that helps to manage teams of volunteer and especially the scheduling of those volunteers for specific weekend services. These volunteers are already in Rock so why should you have to re-enter all their information in PCO? What if your volunteers update their information in PCO, but not in Rock. The PCO Sync solves these problems for you, and it can sync any number of PCO accounts with Rock.

#### Who Is Synced

First, it's important to understand that the PCO Sync Plugin expects Rock to be the master list of people. If you add a new person directly to PCO, that person will not get added to Rock. New people should be added first to Rock and the sync will then add them to PCO. Now you obviously don't want to add everyone in Rock to PCO, so the sync will determine the list of people in one of a few ways.

1. A new 'PCO Tags' person attribute can be updated on a person's profile to indicate which Tags they should have in PCO. In this case, anyone with one or more tags selected on this person attribute will get synced to PCO as a 'Scheduled Viewer' (unless they are granted further rights from #2 or #3).
2. PCO tags can also be associated to a specific group in Rock. In this case, members of the group will have the security role of 'Scheduled Viewer' unless the group is configured to have a higher security level or they are granted further rights from #3.
3. Groups can be configured to add people to PCO with a specific security level (Scheduled Viewer, Viewer, Scheduler, Editor, Administrator).

When a person is first synced from Rock to PCO, the sync will look for a someone in PCO with the same first/nick name, last name, and email address. If it finds a match it will associate the Rock record with that existing PCO record. If it doesn't find a match, it will add a new person to PCO (and send that person the PCO welcome email).

*Note: You do have the option of running a one-time import of people from PCO into Rock (See the Importing PCO Records section below).*

#### What Data is Synced

Once a record is linked between Rock and PCO, any updates to that person in either system will be synced back to the other system. The following is a list of the information that is synced whenever the value is changed:

**First Name (Given Name in PCO), Nick Name (First Name in PCO), Middle Name, Last Name, Gender, Birthdate, Anniversary, Home Address, Home Phone, Work Phone, Mobile Phone, Email, Tags, Photos, and the PCO Serving Permission Level.**

Changes to these fields are synced both ways, unless it was the Photo and/or Permission Level. Photo and Permission Level are only synced one-way from Rock to PCO. If a photo is updated in PCO, or a person's permission level is changed in PCO, that information will not be synced back to Rock.

NOTE: if the sync is configured to only query Planning Center for updated records, the Tags will also only sync one-way from Rock to PCO (See *Setup* section below)

#### Permission Levels

The permission level for a person is determined by looking at the synced groups in Rock that they are an active member of. The group with the highest permission level will determine the permission level to set when syncing them to PCO. The possible values in order of least to highest are:

***Scheduled Viewer, Viewer, Scheduler, Editor, Administrator.***

If a person belongs to a Tag group that does not have an explicit permission level defined, or they are being synced due to one or more tags selected on their person attribute, their security level will default to 'Scheduled Viewer'.

By default, the PCO sync will never lower a person's permission level in PCO unless you enable the 'Allow Permission Downgrade' setting on the PCO Account Configuration (see *Setup* section below).

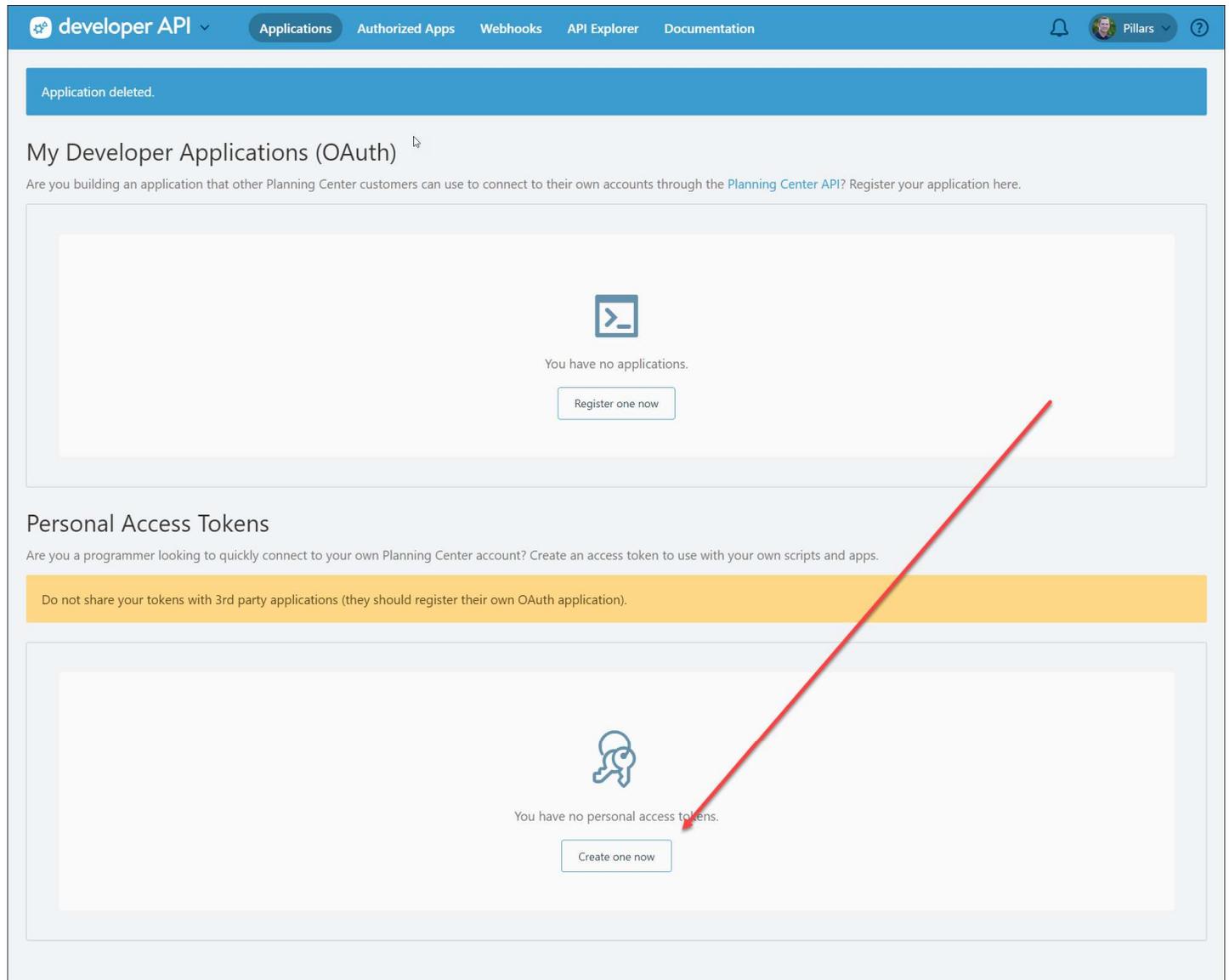
If a person does not have any PCO tags configured and they no longer belong to a synced group in Rock (and the 'Allow Permission Downgrade' setting is enabled), the permission level in PCO will be set to 'Archived,' which essentially removes them from the Services application in PCO.

# Setup

Now that you have an idea of how the sync works, let's get it configured. You'll first need to configure your PCO account(s) in Rock, and decide which groups and or tags that you want Rock to sync. Before doing that though, you need to get two bits of information from PCO.

## Personal Access Tokens

You'll need to create a Personal Access Token for your Planning Center Account. You do this from Planning Center Online. Visit <https://api.planningcenteronline.com/oauth/applications> to create a token.



The screenshot shows the 'developer API' interface. At the top, there are navigation tabs: 'Applications', 'Authorized Apps', 'Webhooks', 'API Explorer', and 'Documentation'. A blue notification bar at the top left says 'Application deleted.' Below this is the 'My Developer Applications (OAuth)' section, which includes a sub-header and a 'Register one now' button. The 'Personal Access Tokens' section follows, with a sub-header, a yellow warning bar stating 'Do not share your tokens with 3rd party applications (they should register their own OAuth application).', and a 'Create one now' button. A red arrow points from the 'Create one now' button in the 'Personal Access Tokens' section towards the top right of the page.

Under *Personal Access Tokens*, click the *Create one now* button.

When prompted for the description of this token, enter 'Rock RMS Integration'.

The screenshot shows the 'New Personal Access Token' form in the developer API interface. The form includes a description field, version selection dropdowns for Calendar, Check-Ins, Groups, Giving, People, and Services, and a reminder box. A red arrow points to the description field.

**New Personal Access Token**

This token is associated with **your account**. If there are ever breaking changes to the API, we'll send an email about it to your primary email: david@9embers.com. [Edit your profile](#).

Description  
Describe the use case for this token...

Versions ⓘ  
*The Planning Center API supports versioning on a per application basis. Use this section to manage the default versions of all Planning Center Apps. [Read More](#)*

Calendar	Check-Ins
2021-07-20	2023-04-05
Groups	Giving
2023-07-10	2019-10-18
People	Services
2023-03-21 (beta)	2018-11-01

Reminder: Do not share this token with anyone, even if they're asking you to. It should only be used by scripts and applications that you yourself have created.

Cancel Submit

**IMPORTANT:** This plugin only uses Planning Center's "People" and "Services" APIs. Make sure your token is configured for the correct version of these two API's. If the version of this plugin that you are installing/configuring is "Version 2.2.6" or earlier, you should use the following API versions:

People: 2022-07-14  
Services: 2018-11-01

If you are installing "Version 2.3.0" or later, the release notes of the plugin will indicate which version of the API that it is compatible with.

You should now see an Application ID and Secret along with the API versions. You will need these values in the next step.



The screenshot shows the Planning Center Online interface. At the top, there is a navigation bar with a search icon, a user profile icon labeled 'Hello Alisha', and a breadcrumb trail: 'Home / Installed Plugins / Planning Center Online'. Below this, there are three main sections:

- Accounts:** A table with columns 'Name', 'Active Groups', 'Active Members', and 'Welcome Email'. It currently shows 'No Accounts Found' and has an 'Add' button at the bottom right.
- Group Types:** A table with columns 'Group Type', 'Active Groups', and 'Active Members'. It shows one entry: 'Serving Team' with 1 Active Group and 2 Active Members. Below the table are input fields for '50', '500', and '5,000', and a label '1 Group Type'. It also has an 'Add' button at the bottom right.
- Values:** A table with columns 'Value', 'Description', 'PCO Account', 'Tag Group', and 'Group'. It shows 'No Defined Values Found' and has an 'Add' button at the bottom right.

Click the Add button at bottom of the Accounts grid, and enter your Application ID and Secret that you got from PCO when generating the new personal access token.

The screenshot shows the 'Account Detail' page, specifically the 'Edit PCO Account' form. The breadcrumb trail is 'Home / Installed Plugins / Planning Center Online / Account Detail'. The form has the following fields:

- Name \***: A text input field containing 'Rock Solid PCO Account'.
- PCO Application Id \***: A text input field containing a long alphanumeric string.
- Allow Permission Downgrade**: A checkbox labeled 'Yes' which is checked.
- PCO Secret \***: A text input field containing a long alphanumeric string.
- Welcome Email**: A dropdown menu currently showing 'Planning Center Welcome E-Mail'.

At the bottom left of the form are 'Save' and 'Cancel' buttons. At the bottom of the page, there is a footer: 'Crafted by the Spark Development Network / License'.

Once you have entered the Application Id and Secret, select the Welcome Email from the list of email templates configured in your PCO account. Most of the time this will be the “Planning Center Welcome E-Mail”. Whatever email you select will be sent by PCO whenever a new person is added to PCO through the sync.

Make sure to also enter a descriptive name for the account. We recommended checking the ‘Allow Permission Downgrade’ option so that the permission level for people in PCO stays consistent with how you've configured their permissions in Rock. The sync will always increase a person’s permission level in PCO to the highest level they are allowed based on the group’s they

belong to in Rock. If the 'Allow Permission Downgrade' option is selected, the sync will also decrease permissions (or even archive people) based on the groups they belong to (or no longer belong to) in Rock. If you don't want permissions to be decreased (or people archived), you can unselect the 'Allow Permission Downgrade' option.

If you have multiple PCO accounts that you are going to sync with, follow the steps above for each account.

### Sync Job

A new 'PCO Sync' job was added by the plugin to do the actual syncing of each person's Rock and PCO demographic information. By default, it will run every two hours and will download every person's record from Planning Center to determine if any information has changed. If you'd like to change how often it runs, you can configure the job from *Admin Tools > System Settings > Jobs Administration* and selecting the PCO Sync job.

### Updates Only

In addition to changing the frequency of how often the job runs, you can also configure it to only query for records that were updated since the last time the job ran. This increases performance drastically, especially if you have a large number of people in Planning Center. The downside to using this option though is that any changes to tags made in Planning Center will not sync back to Rock because Planning Center does not consider that an update to the person record. To enable this option, edit the Job (*Admin Tools > System Settings > Job Administration > PCO Sync*), and set the Updates Only setting to "Yes".

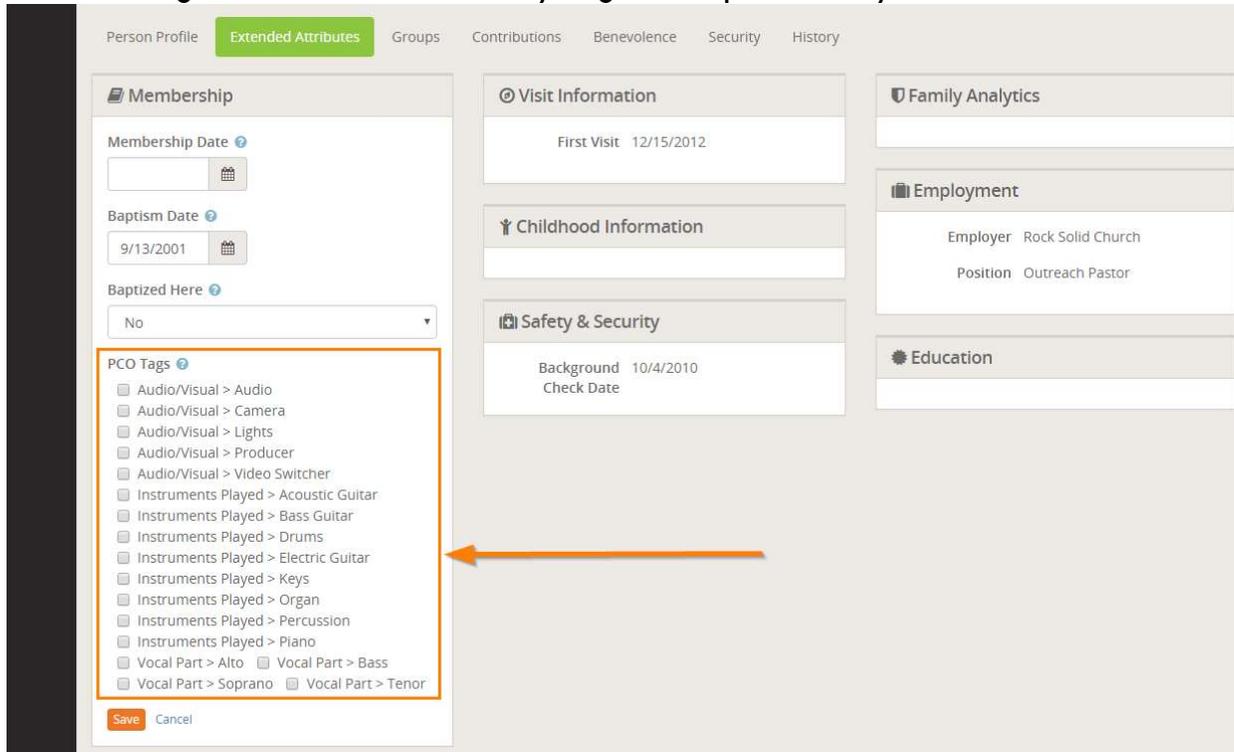
The screenshot shows the 'Edit Service Job' configuration page for the 'PCO Sync' job. The page is titled 'Scheduled Job Detail' and includes a breadcrumb trail: Home / System Settings / Jobs Administration / Scheduled Job Detail. The job is currently 'Active' and 'Yes' for the 'Updates Only' setting. The 'Cron Expression' is '0 0 0/2 1/1 \* ? \*' and the 'Cron Description' is 'Every 2 hours'. The 'Job Type' is 'rocks.pillars.PCOSyncJobs.SyncPeople'. The 'Updates Only' dropdown is highlighted with an orange box, and an orange arrow points to it from the right.

### Configure Tags and Groups for Syncing

Now that you have set up the PCO account(s) and configured the sync job, you can start updating how people in Rock should be synced to PCO.

## Update Tags

On the Person Profile Extended Attributes tab, update the "Membership" section. Here you will see a new Person attribute that lists each of your PCO Tags and allows you to select the tags that a person should have in PCO. If you select any tag, that person will then be synced to PCO with that tag. You can select as many tags for a person as you would like.



The screenshot shows the "Person Profile" page with the "Extended Attributes" tab selected. The "Membership" section is expanded, showing fields for "Membership Date", "Baptism Date", and "Baptized Here". Below these is a "PCO Tags" section with a list of tags and checkboxes. An orange arrow points to the "Instruments Played > Electric Guitar" tag. The "Save" button is highlighted in orange.

Section	Field	Value
Membership	Membership Date	
	Baptism Date	9/13/2001
	Baptized Here	No
Visit Information	First Visit	12/15/2012
	Childhood Information	
Family Analytics	Employer	Rock Solid Church
	Position	Outreach Pastor
Safety & Security	Background Check Date	10/4/2010
	Education	

**PCO Tags**

- Audio/Visual > Audio
- Audio/Visual > Camera
- Audio/Visual > Lights
- Audio/Visual > Producer
- Audio/Visual > Video Switcher
- Instruments Played > Acoustic Guitar
- Instruments Played > Bass Guitar
- Instruments Played > Drums
- Instruments Played > Electric Guitar
- Instruments Played > Keys
- Instruments Played > Organ
- Instruments Played > Percussion
- Instruments Played > Piano
- Vocal Part > Alto
- Vocal Part > Bass
- Vocal Part > Soprano
- Vocal Part > Tenor

**Save** Cancel

## Configure Tag Groups

If you would like one or more of the PCO tags to be synced based on membership in a Rock group rather than having to select that tag on each person's profile, you can configure that tag to sync with a group. The "Planning Center Online" page under *Admin Tools > Installed Plugins* includes a list of all your PCO tags.

Planning Center Online  
Home / Installed Plugins / Planning Center Online

### Accounts

Name	Active Groups	Active Members	Welcome Email
Demo PCO Account	0	0	Planning Center Welcome E-Mail

50 500 5,000 1 Account

### Group Types

Group Type	Active Groups	Active Members
Serving Team	1	2

50 500 5,000 1 Group Type

### Values

Value	Description	PCO Account	Tag Group	Group
Acoustic Guitar		Demo PCO Account	Instruments Played	
Bass Guitar		Demo PCO Account	Instruments Played	
Drums		Demo PCO Account	Instruments Played	

Click on the tag that you'd like to sync to a group, and select that group that it should sync with.

Defined Value Id: 683

Edit defined value for PCO Tags

Value \*  
Bass Guitar

Description

PCO Account  
Demo PCO Account

Tag Group  
Instruments Played

Group \*  
Bass Guitarists

Save Cancel

Value	Description	PCO Account	Tag Group	Group
Acoustic Guitar		Demo PCO Account	Instruments Played	
Bass Guitar		Demo PCO Account	Instruments Played	
Drums		Demo PCO Account	Instruments Played	

Any tag that is selected to sync with a group will appear with an asterisk on the person attribute.

**Membership**

Membership Date ?

Baptism Date ?  
9/13/2001

Baptized Here ?  
No

PCO Tags ?

- Audio/Visual > Audio
- Audio/Visual > Camera
- Audio/Visual > Light
- Audio/Visual > Producer
- Audio/Visual > Video Switcher
- Instruments Played > Acoustic Guitar
- \*Instruments Played > Bass Guitar
- Instruments Played > Drums
- Instruments Played > Electric Guitar
- Instruments Played > Keys
- Instruments Played > Organ
- Instruments Played > Percussion
- Instruments Played > Piano
- Vocal Part > Alto
- Vocal Part > Bass
- Vocal Part > Soprano
- Vocal Part > Tenor

Save Cancel

This is to indicate that syncing for that tag is controlled by membership in a group and the selection of those tags will be updated by the sync to reflect whether they are an active member of the associated group or not (manually selecting or unselecting any of those tags will not make a difference since the selection will be updated by the sync).

#### Configure Permission Groups

By default, when syncing by tag, people are added to PCO as a 'Scheduled Viewer' which is the lowest permission level in PCO. If you'd like certain people to have elevated permissions, or would like to sync people who may not need a tag in PCO, you can configure groups to sync by permission level. You do this by setting the PCO Account and PCO permission level on a group.

The screenshot shows the 'Group Viewer' interface for a group named 'PCO Scheduled Viewers'. The left sidebar contains a navigation menu with categories like 'General Groups', 'Global Connector Group', 'Section A', 'Section B', 'Serving Teams', and 'Ushers'. The 'PCO Scheduled Viewers' group is selected under 'Serving Teams'. The main content area shows the group's configuration details, including the name, description, and various attributes. The 'PCO Account' and 'PCO Permission Level' fields are highlighted with an orange border. The 'PCO Account' is set to 'Rock Solid PCO Account' and the 'PCO Permission Level' is set to 'Scheduled Viewer'. Other visible fields include 'Name' (PCO Scheduled Viewers), 'Active' (checked), 'Public' (checked), 'Description' (empty), 'General', 'Meeting Details', and 'Requires Background Check'.

Select the PCO account that you would like to sync members of this group to, and the permission level that you would like them to have in PCO (note: if a person in this group belongs to another group with a higher permission level, they will get synced to PCO with the higher level). For these fields to appear, the group's Group Type must be one of the Group Types added to the "Planning Center Online" page under *Admin Tools > Installed Plugins*. This contains a list of the Group Types that are configured to display these field (group attributes) as an option on their groups. The install automatically added the 'Serving Teams' group type, but you can add any other group types.

The screenshot shows the Planning Center Online interface. At the top, there is a navigation bar with a search icon, a user profile icon labeled 'Hello Alisha', and a search input field. Below the navigation bar, the breadcrumb trail reads 'Home / Installed Plugins / Planning Center Online'. The main content area is divided into three sections: 'Accounts', 'Group Types', and 'Values'. The 'Accounts' section contains a table with columns for Name, Active Groups, Active Members, and Welcome Email. The 'Group Types' section is highlighted with an orange border and an orange arrow pointing to it from the 'Accounts' section. The 'Values' section contains a table with columns for Value, Description, PCO Account, Tag Group, and Group. Each row in the 'Accounts' and 'Values' sections has a red 'X' delete button.

Name	Active Groups	Active Members	Welcome Email
Demo PCO Account	0	0	Planning Center Welcome E-Mail

Group Type	Active Groups	Active Members
Serving Team	3	2

Value	Description	PCO Account	Tag Group	Group
Acoustic Guitar		Demo PCO Account	Instruments Played	
Bass Guitar		Demo PCO Account	Instruments Played	Bass Guitarists
Drums		Demo PCO Account	Instruments Played	

### Deleting PCO Records

When people are removed from groups that are syncing with PCO, the sync will automatically archive that person in PCO. Because of this, you typically do not need to worry about deleting records in PCO. However, if for some reason you would like to delete PCO records (i.e. a duplicate record got created), you do have that option. From the person list on the Account Detail page, you can click the delete button on any row, or even select multiple rows and click the “Delete Selected” button at the bottom of the grid. Doing this will delete the synced record in PCO (from both the Services and People apps). Keep in mind that if this person is still active in one of the synced groups in Rock, the next time the sync job runs, the person will be added back to PCO.

## Monitoring Status

You can check the status of which groups/people are currently being synced from the Account Detail page. Navigate to *Admin Tools > Installed Plugins > Planning Center Online* and select the account you'd like to view.

The screenshot displays the 'Account Detail' page for 'Rock Solid PCO Account'. The breadcrumb trail is 'Home / Installed Plugins / Planning Center Online / Account Detail'. The account name is 'Rock Solid PCO Account'. Below this, there is a 'Welcome Email' section with the text 'Planning Center Welcome E-Mail'. A section titled 'Groups Syncing to this Account' lists three groups: 'Serving Teams > PCO Administrators' with 'Administrator' permissions, 'Serving Teams > PCO Scheduled Viewers' with 'Scheduled Viewer' permissions, and 'Serving Teams > PCO Viewers' with 'Viewer' permissions. There are 'Edit' and 'Delete' buttons for these groups, and an 'Import Users From PCO' button. Below this is a 'People' section with a table listing synced users.

<input type="checkbox"/>	Person	Current	PCO Id	Rock Permissions	PCO Permissions		
<input type="checkbox"/>	Ted Decker	✓	18595315	Viewer			
<input type="checkbox"/>	Alisha Marble	✓	18595540	Administrator			
<input type="checkbox"/>	Jenny Michaels	✓	18595541	Scheduled Viewer			
<input type="checkbox"/>	Jim Simmons	✓	18595318	Viewer			

At the bottom of the table, there are filters for '50', '500', and '5,000', and a count of '4 People'. There are also buttons for 'Refresh List From Groups' and 'Delete Selected', and icons for grid and list views.

The account details section lists all of the groups that are currently syncing to the selected PCO account and shows their permission level.

The People list will show all the people in Rock that have been synced to PCO along with the PCO Id that was added and/or associated to the person and their current permission level in both Rock and PCO. If for some reason you need to change the PCO id that a person is being synced to, you can click their row in the list to display a dialog that allows you to set their PCO Id.

**Edit Ted Decker**

PCO Id: 18595315

**Rock State**  
 first\_name: Theodore  
 nickname: Ted  
 last\_name: Decker  
 birthdate: 2002-02-10T00:00:00.0000000  
 permissions: Viewer  
 home-address-street: 11624 N 31st Dr  
 home-address-city: Phoenix  
 home-address-state: AZ  
 home-address-zip: 85029  
 home-phone: 6235553322  
 work-phone: 6235552222  
 mobile-phone: 6234512120  
 home-email: ted@rocksolidchurchdemo.com

**PCO State**  
 first\_name: Theodore  
 nickname: Ted  
 last\_name: Decker  
 birthdate: 2002-02-10T00:00:00.0000000  
 permissions: Viewer  
 home-address-street: 11624 N 31st Dr  
 home-address-city: Phoenix  
 home-address-state: AZ  
 home-address-zip: 85029  
 home-phone: 6235553322  
 work-phone: 6235552222  
 mobile-phone: 6234512120  
 home-email: ted@rocksolidchurchdemo.com

Save Cancel

Person	Current	PCO Id	Permissions	PCO Permissions
Ted Decker	✓	18595315	Viewer	Viewer
Alisha Marble	✓	18595540	Administrator	Administrator
Jenny Michaels	✓	18595541	Scheduled Viewer	Scheduled Viewer
Jim Simmons	✓	18595318	Viewer	Viewer

50 500 5,000 4 People

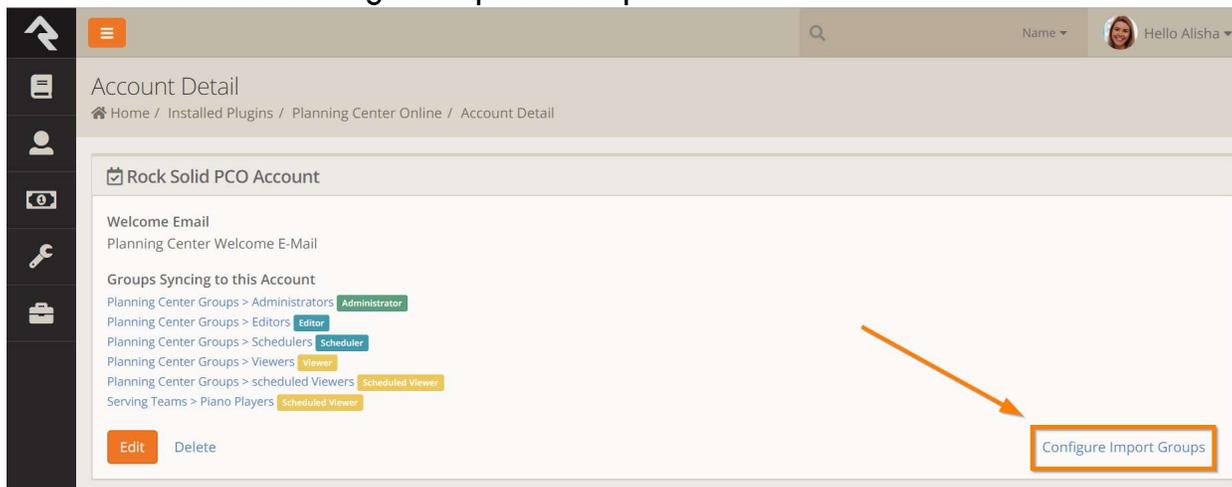
Refresh List From Groups Delete Selected

This dialog also displays the current demographic values that were saved by the sync job the last time it ran.

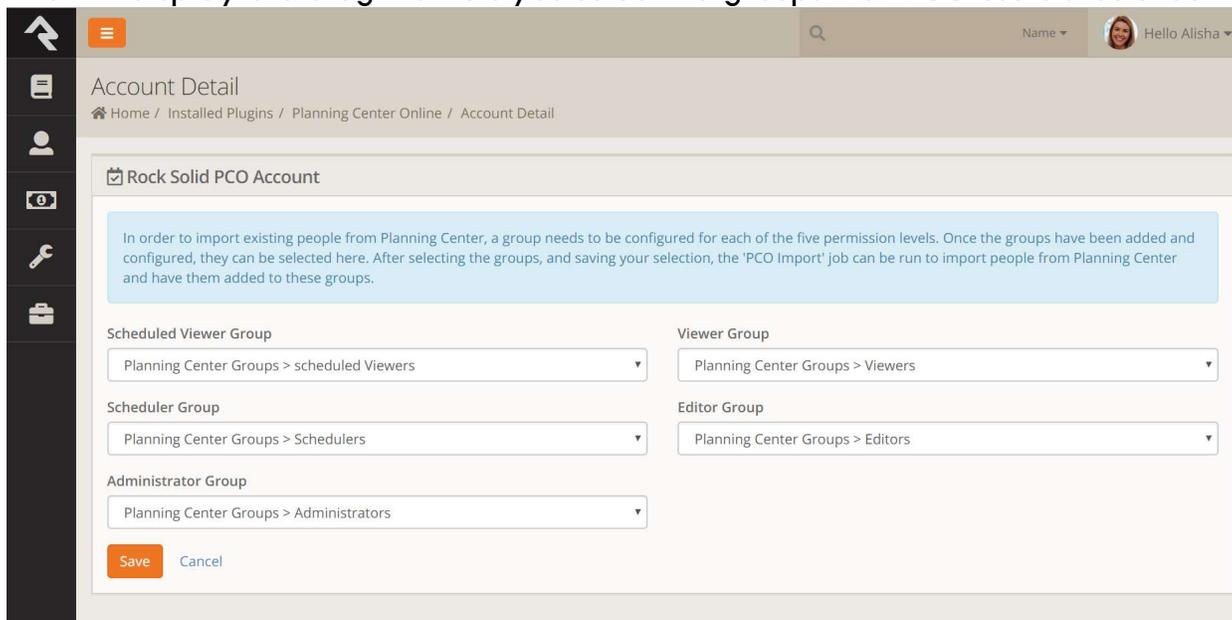
The list of people is updated by the sync job each time it runs, but if new people have been added to Rock groups since the last time the job run, you can click the 'Refresh List From Groups' button to get them added to this list.

## Importing PCO Records

The PCO Plugin also allows you to import existing people from PCO into Rock. This is helpful if you already have people in PCO before you installed and configured the Sync. To import them, you will first need to create and configure at least one group for each of the permission levels that you want to import. Once you have configured the groups, navigate to the *Admin Tools > Installed Plugins > Planning Center Online*, select the account you'd like to import records from, and then click the "Configure Import Groups" link.



This will display a dialog that lets you select the groups that PCO users should be imported to.



Once you have selected a group for each permission level that you would like to import, click Save. Now that you have configured the groups, you will need to use the "PCO Import" job to import the people from Planning Center to Rock.

### PCO Import Job

Now that you've configured the groups that people should be added to, you will need to run the PCO Import job for this account. From *Admin Tools > System Settings > Jobs Administration* click the PCO Import job to edit the settings for the job. Set the PCO Account setting to the correct

account and confirm the Default Connection status that should be used when the job adds people to Rock:

**Edit Service Job**

Name \*  Active  Yes

Description

Notification Status  Cron Expression

Notification Emails

Job Type  Cron Description

PCO Account  Last Status Message

Default Connection Status

Make sure NOT to turn on the “Active” flag. You don’t want this job to run automatically. After saving your settings, you can run the job manually by clicking the “play” button.

Location Services Verify	✓	<input type="button" value="▶"/>	<input type="button" value="✕"/>
Move Data from PageViews and Communication Activity to the new Interaction Tables	✓	<input type="button" value="▶"/>	<input type="button" value="✕"/>
PCO Import		<input type="button" value="▶"/>	<input type="button" value="✕"/>
PCO Sync	✓	<input type="button" value="▶"/>	<input type="button" value="✕"/>
Process BI Analytics	✓	<input type="button" value="▶"/>	<input type="button" value="✕"/>
Process Signature Documents	✓	<input type="button" value="▶"/>	<input type="button" value="✕"/>

The job will query PCO for all the people associated to the account. Then, for each person that has not already been configured to sync with PCO, will add them to the selected group based on their PCO permission level. For each person that it imports, it will try to find an existing Rock person with the same email, first name and last name. If it finds a matching person, it will sync to that person, otherwise it will add a new person to Rock.

As the job runs and imports people, it will also update the status to indicate how many people have been imported. If the job stops running for some reason, it can be restarted and will continue where it left off.