Connecting with your clients to offer data exchange services in the new Portfolio Manager is a four-step process. In the first two steps, the user adds you as a “contact” (or connection) in his or her account and then you accept the connection. After the connection has been accepted, in the last two steps the user shares properties and/or meters with you, and you then accept each share. The connection and sharing steps, for both you and the user, are outlined below.

**Step 1: A User Adds a You as a Contact**
The user initiates the sharing process by adding you as a contact (or connection) in his or her account. This action is done as follows:

**Step 1a:** The user logs in to Portfolio Manager and clicks on the “contacts” link in the upper right-hand corner.
Step 1b: On the “My Contacts” page, the user clicks on the “Add Contact” button.

Step 1c: On the “Add Contact” page, the user searches for your organization by name, username or email address.
Step 1d: The user selects your organization from the search results and clicks on the “Connect” button.

Step 1e: After clicking the connect button, the user will be prompted to submit the account-level custom field values that you have configured previously via web services. If no account-level custom field values have been configured, the user will not receive a prompt. Upon completion, the user will see a dialog box confirming that the connection request has been sent.
**Step 2: You Accept the Connection**

**Step 2a:** Obtain a list of pending connection requests by running `GET /connect/account/pending/list`.

**Step 2b:** Accept the pending request by running `POST /connect/account/(accountId)`.

**Note:** You can also accept connections via the Portfolio Manager website by logging into your account and confirming any pending connections in your notifications box.

The user is notified that the connection request has been accepted via a message that will appear in the “Notifications” section of the main screen of Portfolio Manager the next time the user logs into Portfolio Manager.

**Step 3: The User Shares a Property and/or Meters with You**

**Step 3a:** The user logs into Portfolio Manager, clicks on the “Sharing” tab and clicks “Share a Property.”
**Step 3b:** On the “Share Your Properties” screen, the user selects the property(ies) that he or she wishes to share and selects your organization from the dropdown list in number two. The user then selects “Continue.”

**Step 3c:** The selected properties will now appear on a permissions selection screen. The user will be able to grant different levels of sharing access by clicking on the radial button for “Exchange Data.”
**Step 3:** A dialog box will appear that will allow the user to select a level of data exchange sharing from “None” to “Read Only” to “Full Access” for the property and its meters. If the user cannot send out meter share requests, it could be because a) your system does not support that specific meter type or b) there is an existing data exchange connection with full-access on that meter already. The user will also enter values for property-level and meter-level custom fields on this screen.

**Step 4:** You Accept the Property and Meter Shares

After the user has generated a property-level or meter-level sharing request, you must retrieve the request and then accept or reject it. A user may choose to share read or read/write access to a property, but not the corresponding meters. Alternatively, a user may choose to share read or read/write access to meters, but not read/write access to corresponding property. If a meter has been shared, but not the associated property, a read-only property share will be automatically created and accepted when you accept the meter share. If you accept a meter share, any pending property share associated with that meter will be automatically accepted. Acceptance of a property-level share does not cause corresponding meter share requests to be accepted. Meter-level sharing requests must be accepted separately.

**Step 4a:** Search for pending property share requests using `GET /share/property/pending/list`

**Step 4b:** Accept pending property share requests by running `POST /share/property/(propertyId)`

**Step 4c:** Search for pending meter share requests using `GET /share/meter/pending/list`

**Step 4d:** Accept pending meter share requests by running `POST /share/meter/(meterId)`
**Note:** You can disconnect from a user at any time using the [POST /disconnect/account/(accountId)](POST /disconnect/account/(accountId)) service. This service will also unshare any properties or meters shared with that user. You can also unshare from a property or meter at any time using [POST /unshare/property/(propertyId)](POST /unshare/property/(propertyId)) and [POST /unshare/meter/(meterId)](POST /unshare/meter/(meterId)).

**Step 5: Ongoing Share Management**

After you have successfully connected to a user and been granted data exchange permissions to share information at the property or meter level, any edits made by the user to sharing settings within that property will break all current shares at the property and automatically reissue sharing requests to reflect the new sharing arrangement at the property.

This start/stop sharing protocol will occur whenever a property or meter level share is altered by a customer in Portfolio Manager, including deauthorizing an individual meter or property, adding or deleting a meter on a property, or editing the level of access for a meter or property. Existing connections for property and all meters within the property will be reset, and will appear on your property and meter pending authorization lists.

To continue sharing, you will need to reaccept these meter or property shares.

As a best practice, EPA recommends that all data exchange providers check their pending deauthorizations and authorizations at the beginning of each session using Portfolio Manager’s web services.