

Customer Data Sync - Integrator Guide

This guide is meant to walk integrators through the process of creating a shadow database of customer details. This is typically important when many customers' details are being displayed in the integrator's UI (not just the individual customer who is logged in), making it inefficient to repeatedly retrieve many customers' data from AA in real time. When implemented, the integrator should have their own database of *relevant* AA customer data (based on clients' needs) with the ability to refresh changed customers in a timely fashion (dependent on the integrator). All web services must have been provisioned (by ACGI) to follow this guide as the staff doing the provisioning will provide you with the credentials and absolute URLs to the web services.

Step-by-step guide

1. Call [3.4.1 - Customer Data Synch - Get Queue Customers XML Web Service](#). This web service returns a list of customers that had updates (to relevant data) since the last set of changed customers were purged. Save the max-queue-num for step 3.
2. For each customer returned in step 1, call [3.1.11 Get Customer Details Web Service - CENSSAWEBSVCLIB.GET_CUST_INFO_XML](#) and refresh the customer details in the shadow database with their current values. This web service has a bulk request mode to process the response in larger, but manageable chunks rather than one customer at a time.
3. Once that set of queue data has been processed successfully, call [3.4.2 - Customer API - Purge Queue Customers XML Web Service](#), passing the max-queue-num from the response in step 1. This clears the queue of all the records that were returned in step 1.
4. Go to step 1 and repeat the process.

Notes

- If you repeat the process frequently, most queue responses should be nearly empty.
- If membership data is being synced in the integration, then there will be spikes of data during renewal processing, which typically happens monthly or annually, and again when unpaid members are suspended and/or terminated.
- Part of the implementation process is having the client determine what type of data is relevant to the integrator's UI (e.g. subscriptions, memberships, relationships to other customers, employment). Most customer data is exposed in [3.1.11 Get Customer Details Web Service - CENSSAWEBSVCLIB.GET_CUST_INFO_XML](#) but occasionally other APIs may need to be provisioned. These decisions drive what data the integrator requests in step 2 and what types of changes force a customer into the queue.
- For testing purposes or data clean-up scenarios, a 4th API is available: [3.4.3 - Customer API - Force Enqueue Customers Web Service - cencustintegratesyncwebsvclib.force_enqueue_custs_xml](#). With this API, you can push every AA customer into the queue or just a single customer for testing.
- During implementation, a one-time process is run to populate the queue with all relevant customers. The "force enqueue" web service can be used for this, but typically the client only wants to sync a subset of records (such as just active members), which can only be done by ACGI currently. This distinction can make a huge difference in the number of customers needing to be synced.