AGIIS Synchronization

Objective

The purpose of this document is to provide an understanding of the importance of entity synchronization between the Ag Industry Identification System (AGIIS) and subscribers of the system. We also want to equip subscribers with the information to develop an ongoing synchronization process and provide awareness of the tools available to assist them with this effort. By the conclusion of this document a company should be able develop a simple process that would cover the following key areas of synchronization with AGIIS:

- What data elements should be synchronized
- Have a defined process to follow as a guide
- An awareness of tools that can be used for ongoing maintenance
- Become informed of one method to stay synchronized with your trading partners

Even though the focus of this document is intended to address synchronization between one company and AGIIS in respect to entities; it is just as critical to eConnectivity to consider a plan for partner to partner synchronization. These plans maybe more customized to each trading partner depending on their view of business relationships.

Definition

Synchronization is the process of keeping data, in two or more electronic devices, up-to-date so each repository contains the identical information[1].

Background

The importance of synchronization is well documented regarding eConnectivity. During these economic times, companies are more focused on decreasing manual intervention and reducing costs. It is critical to ensure that entity information transferred from one trading partner to another has the same meaning. The bottom line is that deliveries and invoices need to be sent to the correct place, the first time.

The AGIIS Directory is a subscriber-driven directory. Members have identified it as the common repository of unique identifiers for the facilitation of e-Business in the Agricultural Industry. Subscribers want to refer to AGIIS as the “trusted source” of e-Business information. To ensure that AGIIS remains that trusted source, it is critical for subscribers to synchronize with AGIIS.

Data Quality

AgGateway recognizes that data quality and integrity are top priorities for organizations using AGIIS unique identifiers to facilitate eConnectivity. For that reason, there are many features that enforce the data quality standards throughout the system that are evident to users at the time of entry via the web user interface and at work “behind the scenes” during bulk/web service

[1] Definition from PCMAC.COM

processing. Data maintenance activities are conducted throughout the year to support and enforce these priorities. Some of those features and activities include the following:

- Address and name standardization
- Prevention of sub-standard data
- Performing regular annual maintenance (i.e. inactivating entities that do not exist in subscribers subsets and other activities)
- Duplicate Certification and training
- Conducting a comprehensive entity de-duplication process annually

To be a "trusted source" and get the best quality of data, all subscribers need to participate in the AGIIS process. This means; updating entity records in AGIIS, removing unused entity records from your AGIIS subsets, and applying changes to your internal data. This process is considered *Synchronization*.

If your organization does not apply the updates from AGIIS in a timely manner, the possibility of being out of sync with the AGIIS identifiers and other entity information used by your trading partners, is greatly increased. This broadens the risk for error in your eConnectivity implementations. Some of the processes, such as the annual de-duplication, will result in a number of entity records being inactivated. When inactivation occurs, it is critical for subscribers to do an initial data synchronization between their internal systems and their AGIIS subsets. One of the reasons for removing inactive entities from your internal system is that a Global Location Number (GLN) can be reassigned to another entity if inactive for four years. Another important reason for synchronizing with AGIIS is so that you and your trading partners are on the same page with each data element, sharing the same meaning when exchanged electronically.

Data Synchronization Process Recommendation

Each AGIIS Subscriber should develop a data synchronization process in order to maintain trusted data for use in conducting efficient e-Business. Not every process will be the same because every organization's needs, data considerations, and technical expertise will vary. See Appendix A for an example of a high level proces flow.

As you begin to think about the synchronization process, start *simple* and add to it as the need arises. It is important to have a process in place, which over time can be enhanced if needed. You do not want to get overwhelmed by the details, and potentially fall short of developing a sustainable process. As you expand your eConnectivity implementations, and add new trading partners, you will want to revisit the synchronization process.

The first big question to be answered is, *What information should be synchronized?* Everyone agrees to synchronize identifiers. This is what subscribers use when exchanging electronic messages. The next item to consider is entity data elements. The entity data elements have been divided into the following categories;

Primary Entity Data Elements

- Industry Identifiers (GLN/EBID)

- Name (Company, DBA, Individual, Location Description)
- Address (Physical and/or Mailing)
- Entity status (In Business, Bought Out, Out of Business or Replaced)
- Record status (Active/Inactive)

Secondary Entity Data Elements

- Industry Flag(s)
- Classifications
- Latitude/Longitude
- SPLC
- Phone number

Primary Entity Data Elements define an entity such as the *Who* and the *Where* (name and address) and will be required in the AGIIS Synchronization process.

Secondary Entity Data Elements provide additional information and can be beneficial, but are not considered critical to successful synchronization.

Steps in the AGIIS Synchronization Process

The first step in the AGIIS Synchronization Process is for each subscriber to request a subset export file (GLN and EBID) from the AGIIS Directory. This can be requested from the AGIIS website by clicking on the *Files* menu and then *Schedule Extracts*.

The subset export file(s) will provide subscribers with entity information that exists in their AGIIS subset and their corresponding proprietary code.

In the second step, subscribers will compare the AGIIS subset data with their internal data.

- **Industry identifier** – Subscriber will perform an initial match to determine if an identifier exists in their internal database that is not present in their AGIIS subset or vice versa.
- **Primary Entity Data Elements** - Subscriber will perform a match to determine if any primary data elements in their AGIIS subset vary from their internal database.
- **Secondary Entity Data Elements** – Repeat the same exercise that was completed for the primary elements (these data elements are optional).

If subscribers do not have the appropriate tool in place to compare these data elements, it may be beneficial to use the services of an AgGateway Allied Provider.

The third step is for the subscribers to send the results of the data comparison to the AGIIS Directory. This information can be sent to AGIIS via website, bulk processes, or web services, depending on the volume of data being supplied.

The following AGIIS transactions can be used to synchronize the two systems (AGIIS and internal system):

- Add
- Update
- Add to Subset
- Delete from Subset
- Demographic Search
- Identifier Search

The subscriber will select the appropriate transaction based on the situation they encounter. For example, if a subscriber has 5 identifiers in their internal system and not in their AGIIS subset, they will use the *Identifier Search* transaction to provide back the demographics for the AGIIS Identifiers. They can then compare these demographics to their internal system. If primary data elements match, they can use the *Add to Subset* transaction to complete synchronization with AGIIS.

In the next step, the subscribers apply the results of the comparison to their internal systems. **Synchronization is not a one-time process**. It is important for subscriber's to keep their data synchronized with AGIIS as an ongoing activity. AGIIS provides GLN and EBID Entity Update Extracts (XML and CSV format) on a schedule selected by the subscriber (daily, weekly or monthly). The file contains *before* and *after* information on any additions or changes made to the subscriber's subset. Subscribers will review the changes reported in the file, and then apply them to their internal data. When subscribers get updated information for entities in their database from another source, they submit the updated information to AGIIS.

The final step is to develop a periodic synchronization process with each of your trading partners. This may be as simple as exchanging a file of identifier's and primary data elements so the identifiers you are exchanging electronically have the same meaning. AGIIS offers a feature, the *Trading Partner Entity Add Notification* that supports trading partner synchronization. This notification feature has been utilized by the *Crop Nutrient* segment for several years. The functionality allows subscribers to notify their trading partners in real-time, via EB-messaging, when an entity has been added to their subset.

Summarized Recommendation

- Synchronize with AGIIS
  - Industry identifiers (GLN/EBID)
  - Primary entity demographics
- Utilize Defined Synchronization Process
  - AGIIS Subset Export file
  - Compare AGIIS subset with internal data
  - Submit unmatched entities to AGIIS
  - Apply results internally
- Ongoing Maintenance
  - Apply AGIIS updates
  - Provide updates to AGIIS
- Synchronization between Trading Partners

- AGIIS Trading Partner Entity Add Notification

If you have questions regarding data synchronization or developing a synchronization process, please call Member Services at 866.251.8618 or email Member.Services@AgGateway.org.

Appendix A: