AgGateway Case Studies
CF Connects Electronically with its Leased Facilities to Provide Real-Time, Accurate Orders

Background
CF Industries is one of the world’s largest producers of nitrogen. Headquartered in Deerfield, Ill., CF has nine manufacturing plants located in the U.S., Canada, and the United Kingdom. In order to serve its customers, CF has owned distribution sites and leased sites. The leased sites serve both coasts as well as Minnesota and Texas. To better streamline order management, CF began working with its leasing partners to integrate their shipping systems into the CF data management (ERP) system.

Challenges
CF wanted to implement seamless electronic exchange of orders and shipping information with its multiple leasing partners. As part of a major acquisition in 2010, CF took over nearly 30 leases, virtually all of them using a home-grown proprietary system. In the beginning, every bill of lading from the facilities would be mailed back to CF headquarters and then processed in CF’s proprietary system. This meant it could take weeks for CF to post shipped orders and invoice the customer. This also meant that reporting methods were always out of date and unreliable. Inventory numbers would be overstated and, obviously, shipments would be understated. This especially caused concern among the CF supply and sales groups as they could not make decisions about selling product or even where to send the product.

Several years ago, CF created its own shipping system that could be used by the leased sites. However, there was no integration with the leased sites, so the owners still had to enter the information into both their shipping system and the CF system, which would lead to data entry errors and no real-time reporting. Any shipments on weekends would not be reported until the next business day or sometimes the following day.

Solution
About five years ago, CF started reaching out to its leased facility partners to learn how they integrated with other tenants for digital data exchange. Through that process CF learned that most, if not all, of the facilities did not yet connect with any partners through their proprietary systems. As the first

Key Points
• Accuracy: Eliminated the need to double-enter shipment information.
• Customer Experience: Customers can see their shipped orders in real time, and CF can provide off-hour shipping based on the facility.
• Efficiency: A single entry point for shipping orders allows for both systems to always be in sync.
• Reporting: Real-time transmissions allow the business to make sales and supply decisions at the point of contact.
• Scalability: Order placement is reliable and can be adjusted based on the needs of the business and CF partners.
• Using industry standards allows CF to establish connections with a trading partner in just days — a process that used to take months.
to connect, CF turned to AgGateway standards as part of the solution. CF knew that it could use these industry standards to build its integrations, no matter the system. Through the use of the AgGateway Messaging Guidelines, CF worked with AgGateway and its leasing partners to implement electronic exchange of orders and shipping information.

The first integration, which had to be built, was successfully implemented five months after CF launched its integration plans. Shortly thereafter, CF learned through AgGateway that some of its partner facilities were using industry shipping systems. The formats being used met AgGateway’s standards review, which led to much quicker and easier implementations. CF had to develop a new XML schema to connect with one system, while another uses a flat file format. However, because these systems are being used by the industry, CF’s time to integrate was greatly reduced. Because of standardization, establishing connections with a trading partner – a process that used to take months, and then weeks – can now be completed in just days.

**Results**

Being integrated with these partners allows CF to:

- **Better meet the demand of its customers.** Orders can be created, placed and shipped at any time, including during non-working hours;
- **Decrease errors** when compared to manually shipped orders;
- **Report real-time inventory and shipment history.** CF teams can also view inventory in transit to various sites.

“Using EDI (electronic data interchange) transmissions with our leased facilities has given us the ability to ship 24/7 from key markets and offers us a competitive advantage,” said Sean Beinecke, CF Leased Facilities Manager.

**Future Plans**

CF’s strategic plan is to become more agile and look at other ways to partner with its leased facilities, whether through cloud technologies or encouraging other facilities to implement electronic standards.

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**About AgGateway**

AgGateway is a non-profit organization dedicated to the expanded use of information to maximize efficiency and productivity, promoting and enabling the industry’s transition to digital agriculture. [www.AgGateway.org](http://www.AgGateway.org)