JOHN DEERE OPERATIONS CENTER

![AgGateway logo]

AgGateway Case Studies
John Deere Creates ADAPT Plugin for Ease of Interoperability in Field Operations

Background
Deere & Company, based in Moline, Ill., is a global manufacturer of farm equipment and precision ag technology, providing agriculture solutions across the world.

Challenges
Different brands of farm equipment and software currently collect and consume data in a variety of proprietary file formats for field operations such as planting, crop protection and harvesting. While this is a natural consequence of how the industry has grown, it sometimes makes it hard for growers and their advisors to "connect the dots" and extract value from the data.

John Deere recently released a new display product family that required data tranlsation to become more broadly adopted. Moreover, customers expressed the need to use John Deere technology solutions with the software solutions of their choosing.

Solution
John Deere leveraged AgGateway's ADAPT framework to provide a common translation process to read data from its precision ag technology. AgGateway's ADAPT (Agricultural Data Application Programming Toolkit) is an open source solution available to the industry, which was created to enhance the use of precision ag technologies by enabling interoperability between different software and hardware applications. (See www.AdaptFramework.org or www.AgGateway.org).

AgIntegrated, a global partner in providing integration technologies and services, was quick to utilize the John Deere Plugin for ADAPT. It used the plugin to translate the manufacturer's proprietary data formats to the ADAPT framework, which worked with its existing suite of value-added software products.

"The ADAPT framework provided a forum and process for companies to collaborate on a single extendable data format that meets the needs for

Key Points

Customer Value
- Brand flexibility, custom solutions and improved partner relations

Efficiency
- Reduced cost of doing business with partners
- Data interoperability and common framework

Accuracy
- Common vocabulary and shared unit of measure

Meeting a Market Need
- More than 50 companies have licensed the John Deere ADAPT plugin in its first year available.

data interoperability," said Randy Kasparbauer, John Deere Software Engineering Manager. AgGateway is the steward of the ADAPT software assets, which are available to any interested party that is willing to accept the terms of the Open Source Software license agreement that the assets are provided under.
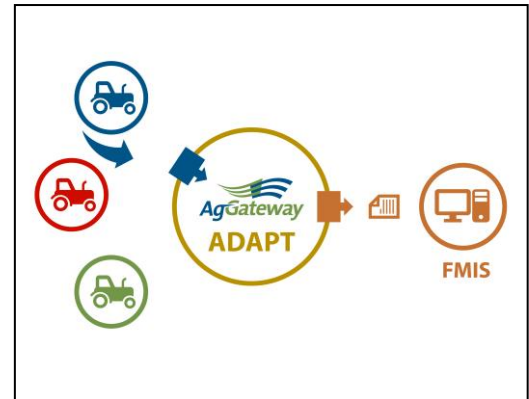
Results

John Deere created plugins to enable all of its existing displays to be compatible with AgGateway's ADAPT framework. This enables customers to use John Deere technology with the software applications they and their advisors need to make profitable and sustainable decisions.

Software companies could use the ADAPT framework as a common data model for precision ag data. The John Deere plugin for ADAPT allowed companies to translate the various forms of proprietary display data into a common data model for further analysis.

Over 50 companies, ranging from precision ag, to financing, to enterprise software, licensed the John Deere ADAPT plugin in the first year it was available.

"Leveraging the ADAPT framework and John Deere's plugin enabled us to efficiently 'speak John Deere's language' in terms of its newest data formats and rapidly meet our clients' data translation needs," said Mike Santostefano, VP of Business Development with AgIntegrated.

Future Plans

Deere continues to update its plugin with new versions of the ADAPT framework as new features are added to the display platform. AgGateway's ADAPT plugin framework makes it easy to upgrade to the latest version once the ADAPT framework has been implemented.

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