FarmStack Architecture

FarmStack is an open-source protocol for the secure transfer of data across the food and agriculture sector. It is currently in design and development phase.

How Does it Work? Data providers and consumers run trusted connectors to exchange data without any third-party. Data providers set data pipelines and usage policies via FarmStack’s intuitive interface to codify which parties can access data, for what purpose and for what duration. FarmStack enforces gateway logic so data consumers only use the data they need for specified applications and automates data protection rules with end-to-end encryption. FarmStack will build on solutions offered by existing data exchange platforms like International Data Spaces Association (IDSA). Self-service applications & data sharing templates will help organizations use FarmStack without needing to write their own APIs or developing data sharing protocols from scratch.

Why P2P connectors & usage policies? Consultations with data owners revealed that, above all, organizations would like to maintain control of their own data; ensure data transmission is secure; and that data will be used only for the intended purpose.

Key Features
- **Peer-to-peer** data exchange
- **Automated data processing** rules, like anonymization
- **API service-level data protections**

Governance
FarmStack is governed by a technical working group made up of public, private, research and civil society organizations.

What Will FarmStack Enable?
- **Transfer data across a distributed architecture** across infrastructural, data, and application types.
- **Codify data policies to support use cases.** FarmStack’s usage policies provide data protection that meet requirements.
- **Enable ecosystem actors to assert ownership** of data and data sharing connectors by specifying consent, monetization, and right to be forgotten rules.

Website farmstack.digitalgreen.org/ Email farmstack@digitalgreen.org for a demo today!