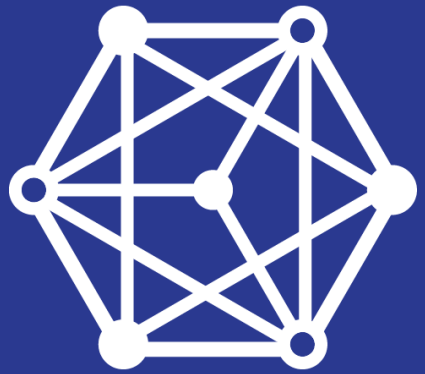


Connected Data Specifications (CDS)

LF Energy TAC Meeting annual update for:

- Registration Working Group (WG1)
- Customer Data Working Group (WG3)

Date: December 9, 2025
Presented by: Daniel Roesler (WG1 & WG3 Maintainer)

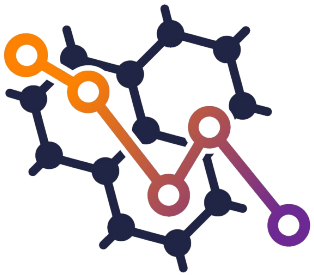
2025

In Review

LF ENERGY STANDARDS AND SPECIFICATIONS

LF ENERGY CDS

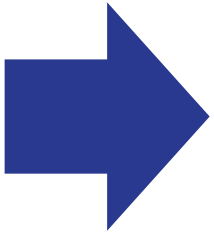
Name Change!

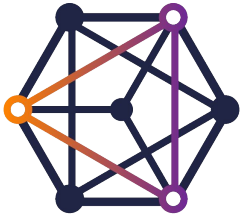


LF ENERGY

CARBON DATA SPECIFICATION

CONSORTIUM



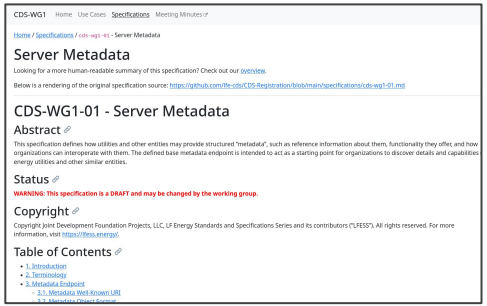


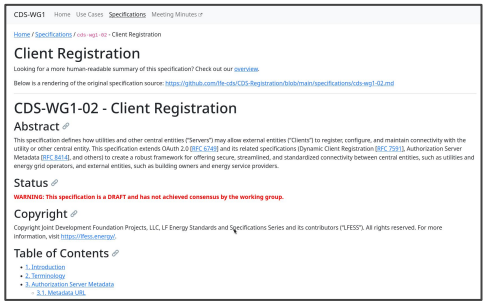
LF ENERGY

CDS

(Connected Data Specifications)

Registration (WG1) - Merged specifications





`CDS-WG1-01` "Server Metadata"

Specifies how utilities and other central entities can publish connectivity capabilities for customers and external orgs

https://cds-registration.lfenergy.org/specs/cds-wg1-01/

`CDS-WG1-02` "Client Registration"

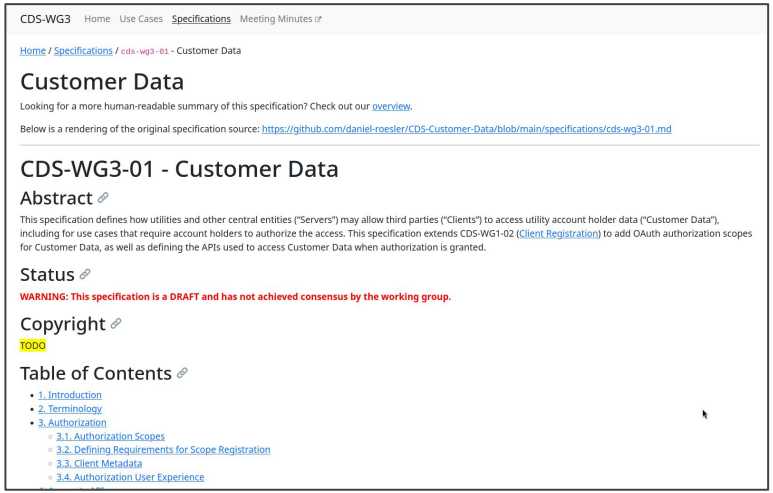
Specifies how customers and external orgs can register and connect with utilities and other central entities

https://cds-registration.lfenergy.org/specs/cds-wg1-02/

LF ENERGY STANDARDS AND SPECIFICATIONS

LF ENERGY CDS

Customer Data (WG3) - Specification merging soon

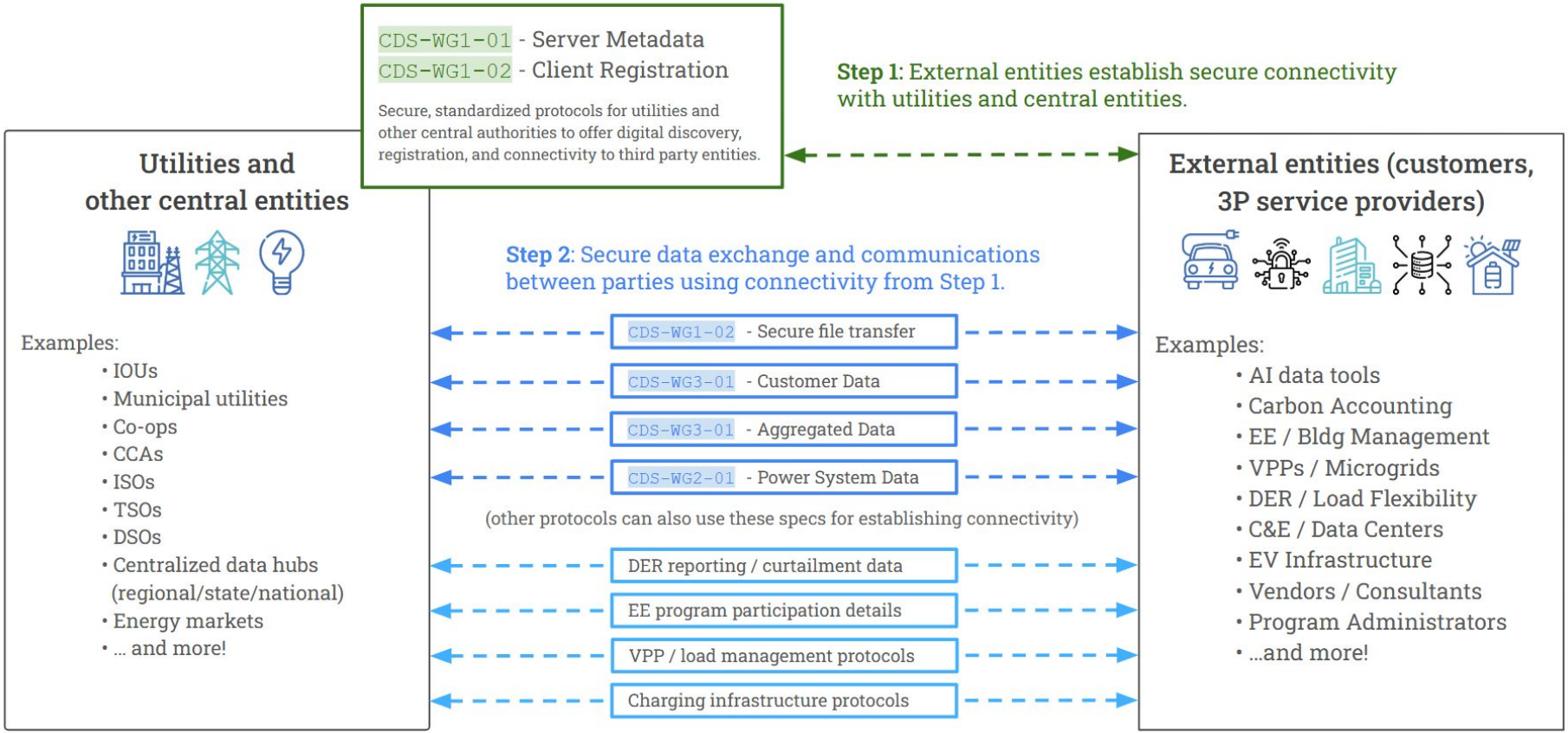


`CDS-WG3-01` "Customer Data"

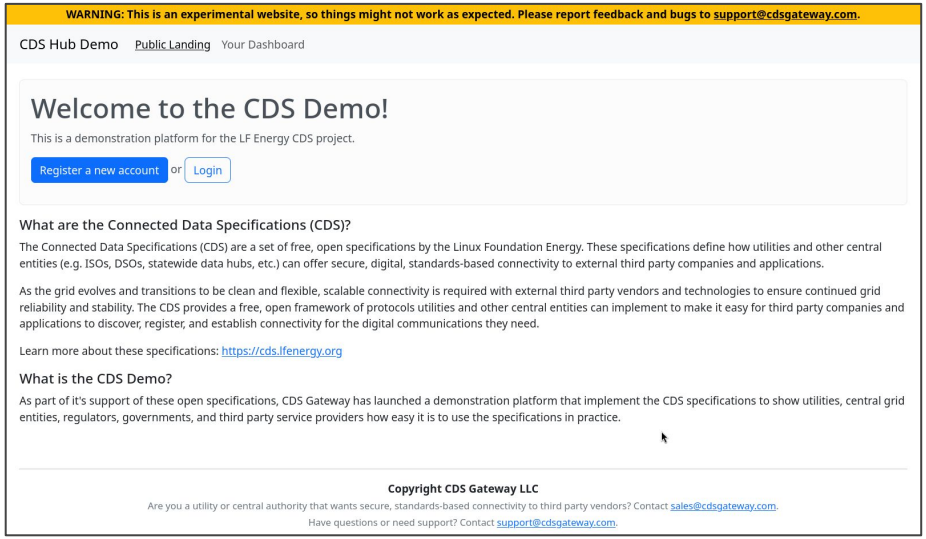
Specifies how utilities and other central entities can provide secure access to Customer Data (meter usage, bills, account details, etc.).

https://cds-customerdata.lfenergy.org/specs/cds-wg3-01/

LF Energy CDS - Architecture Diagram



CDS Demo!



demo.cdsgateway.com

LF ENERGY STANDARDS AND SPECIFICATIONS

LF ENERGY CDS

2026

Future Plans

Plans for 2026 (WG1 & WG3)

- **Finalize specifications and submit to ISO**
  - Achieve LFESS approval for WG1 & WG3 specs
  - Submit the specifications to ISO for formal standardization
- **Launch pilot deployments with multiple utilities**
  - Work with interested utilities and customers to test CDS deployments
  - Iterate specs and implementations based on feedback
- **Start working on open source test suite**
  - Can be used to test CDS deployments for compliance with the specs
  - Enables external testing orgs to support certifying CDS deployments

Thanks!

CDS main website: cds.lfenergy.org

WG1 website: cds-registration.lfenergy.org

WG3 website: cds-customerdata.lfenergy.org

(our mailing lists and meeting calendars are on each website)

My contact info: Daniel Roesler <daniel@danielroesler.com>