

Data Communications Company (DCC) Adapter Application

**British Market Interface Application between
Retailers, DNO's and the DCC.**

British Smart Meter Implementation Program (SMIT)

The British government has mandated the implementation of a smart metering program to reduce costs and contribute to the transition to a low carbon emissions economy. This program includes about 53M gas and electric meters on 30M properties. It has been initiated with specifications created jointly between regulatory agencies, energy suppliers, energy distributors, device manufacturers, and the Data Communications Company.

Complex Integration Solution

The DCC specifications describe a complex integration solution. All end device messages are securely handled by the DCC using communications protocols defined in the DUIS specifications. DUIS specifies 115 request messages with up to 8 command variants per message to the DCC. The device response messages include hundreds of potential actions and error codes due to request message or device command execution failures. The result is that a common business operation such as Install and Commission for a new SMETS 2 meter at a customer's location requires a happy path workflow that sends 22 different messages to the DCC.

DCC Adapter Application Simplifies DCC Integration Compliance

The DCC Adapter Application is an EnergyIP platform application targeted for

use by United Kingdom electric and gas suppliers, and network operators. Its primary purpose is to simplify integration to utilities back office systems and hide the complexity of the messaging protocols from daily business operations.

Integration to the Utilities back office systems uses the well proven FlexSync and Activity Gateway integration points to simplify integration to EnergyIP.

Integration to the DCC supports the DUIS messaging services and alerts received from either the DCC or devices. Execution of requests to the DCC may be manual via the DCC Adapter Application UI, or automated via workflow execution commands from the FlexSync or Activity Gateway interfaces.

The DCC Adapter Application manages the complexity of the DCC compliant messaging with out of the box complex workflows. The included workflows can be used as provided, edited, or used as a pattern to customize business processes while maintaining DCC operations compliance.

Feature Summary

The DCC Adapter Application focuses on simplifying the integration requirements to the DCC while maintaining DCC operational compliance. The included workflows hide complexity of daily business operations while the user interface allows sending messages to end devices

remotely for manual operations when needed.

The DCC Adapter Application includes the following complex workflows:

- Change of Tenancy
- Installation and Commission
- Change of Supplier
- Device Prenotification
- Communications Hub Exchange
- On Demand Read
- Download and Activate Firmware

The DCC Adapter Application also includes:

- Searchable 360 degree view of devices, their attributes, parent and child devices and auditable transaction history.
- User Interface to manually execute DUIS messages and view the response.
- Ability to develop and execute Projects for bulk messaging. Projects may contain a fixed device list or a SQL statement to define included devices.
- Ability to manage and edit device configurations including tariffs, schedules, and prepay parameters at the meter.
- Integration adapters for the Omnetric and CGI Technical Orchestration Layers.



Advanced Device Management Application

Summary

The Siemens DCC Adapter Application is an EnergyIP platform application that helps UK Utilities integrate business operations with the DCC as part of the British Smart Meter Implementation Program (SMIT). Integration to the Utilities back office systems is accomplished using the EnergyIP well proven FlexSync and Activity Gateway interfaces.

Integration to the DCC is accomplished using included DUIS protocol compliant sample workflows. The sample workflows can be easily modified or used as a pattern to support a Utilities unique business processes. Product adapters provide warranted integrations to both CGI and Omnetrics Technical Operations Layers.

The DCC Adapter Applications 360 degree device view makes managing devices easy with the ability to execute individual remote commands to end devices. These remote commands help resolve maintenance use cases requiring manual intervention. The UI also shows an auditable historical record of all actions executed against each device.