



OTDataMule
INDUSTRIAL OT/IT DATA PIPELINE

INDUSTRIAL DATA GATEWAY & PROTOCOL CONVERSION LAYER

Read industrial protocols.
Convert them into destination-ready
data flows. Deliver securely to
approved IT systems.



CONNECT



CONVERT



ROUTE



DELIVER



SECURE

BRIDGING OT TO IT. **SECURELY. RELIABLY. INTELLIGENTLY.**

THE PROBLEM

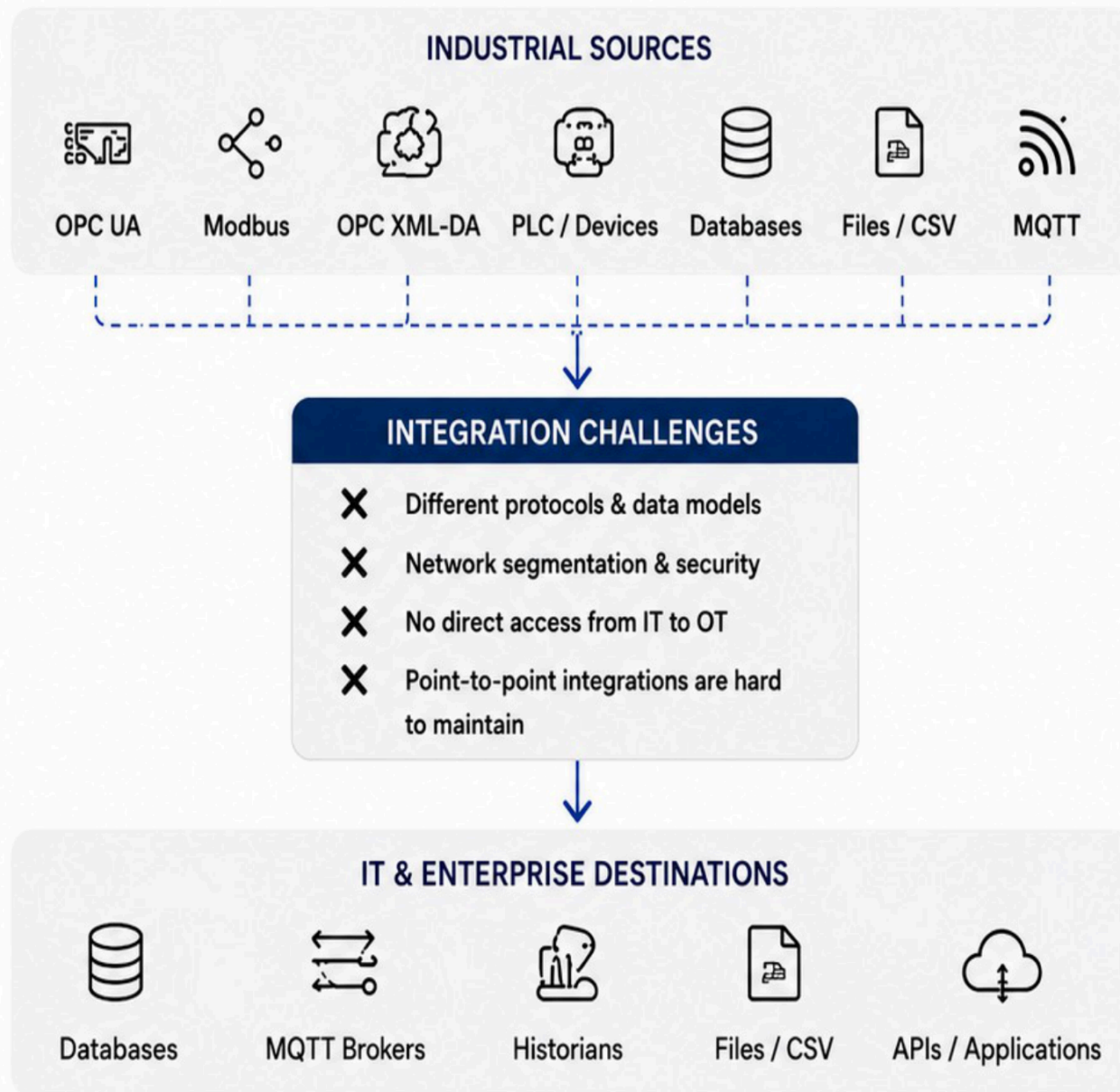
Industrial data is valuable. Moving it safely is hard.

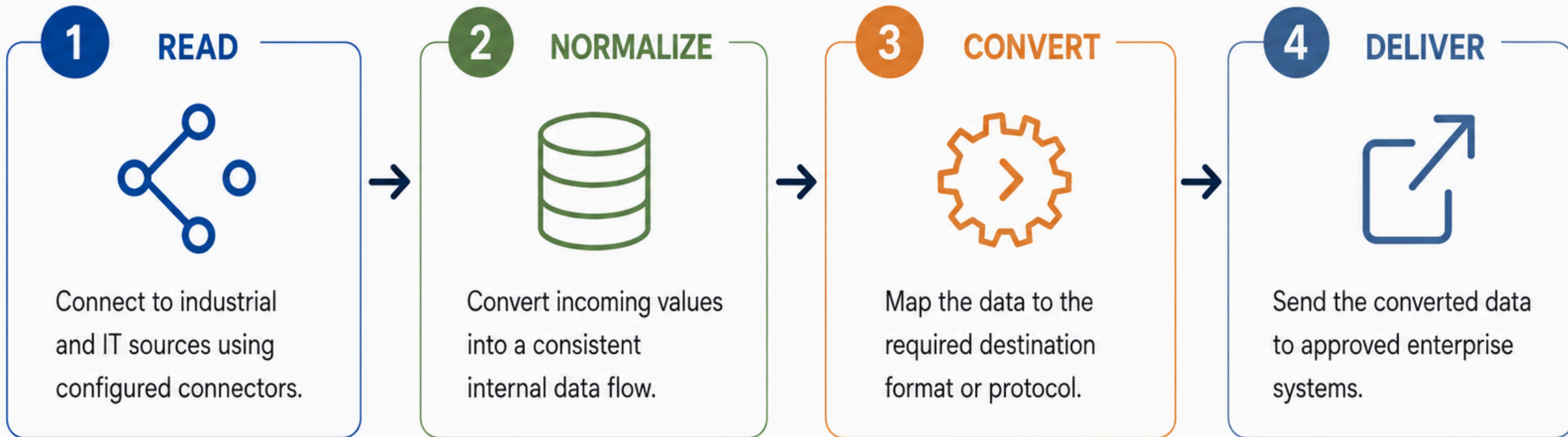
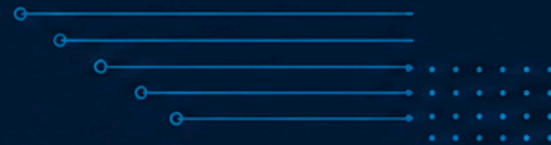
Production data is often locked inside machines, PLC-connected systems, SCADA servers, OPC servers, databases, files and local applications.

At the same time, IT and business systems need that data in different formats and protocols.

EVERY SYSTEM SPEAKS A DIFFERENT LANGUAGE.

Different protocols, network segmentation, and security requirements make OT-to-IT integration complex, risky and costly.



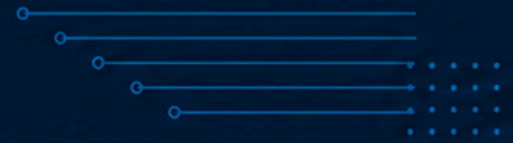


SOURCE EXAMPLES

- OPC UA
- OPC XML-DA
- Modbus TCP / Serial
- Databases / Historians
- CSV / Files
- HTTP Integrations

DESTINATION EXAMPLES

- PI System / OMF
- MQTT Broker
- SQL Server
- CSV Export
- HTTP / REST API
- UOP / Data Diode



OTDataMule acts as a protocol conversion and routing layer between industrial systems and enterprise data destinations.

Read one protocol. Convert it.
Deliver another format.

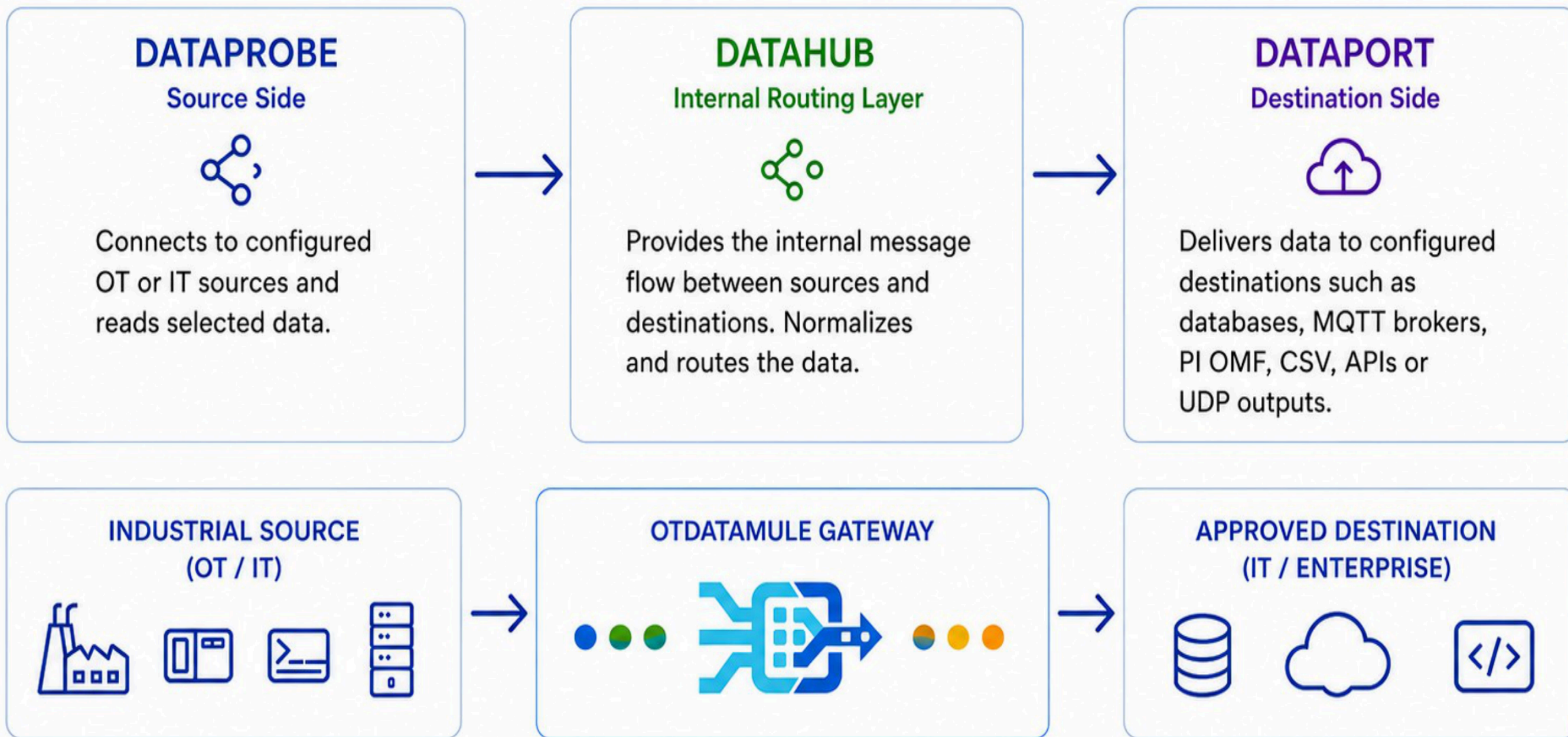
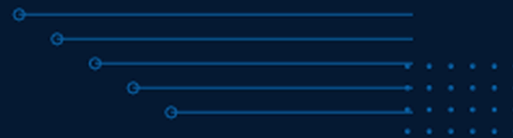
WHY THIS MATTERS

- ✓ Fewer custom integrations
- ✓ Cleaner architecture
- ✓ Reusable data flows
- ✓ Better control

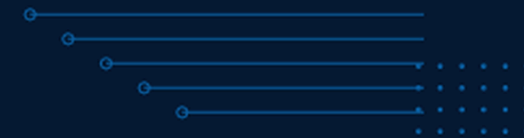
EXAMPLE CONVERSIONS

SOURCE	OTDataMule ROLE	DESTINATION
OPC UA	Read, normalize, convert	SQL / PostgreSQL
OPC UA	Read, normalize, publish	MQTT Broker
Modbus TCP	Read registers, normalize	Database / MQTT
OPC XML-DA	Read legacy OPC data	SQL / MQTT / PI OMF
CSV / Files	Parse, normalize, route	Database / API / CSV
SQL Source	Read selected data	MQTT / CSV / Database
MQTT Source	Normalize messages	Database / PI OMF / File

OTDataMule solves this by creating a controlled conversion and delivery layer.

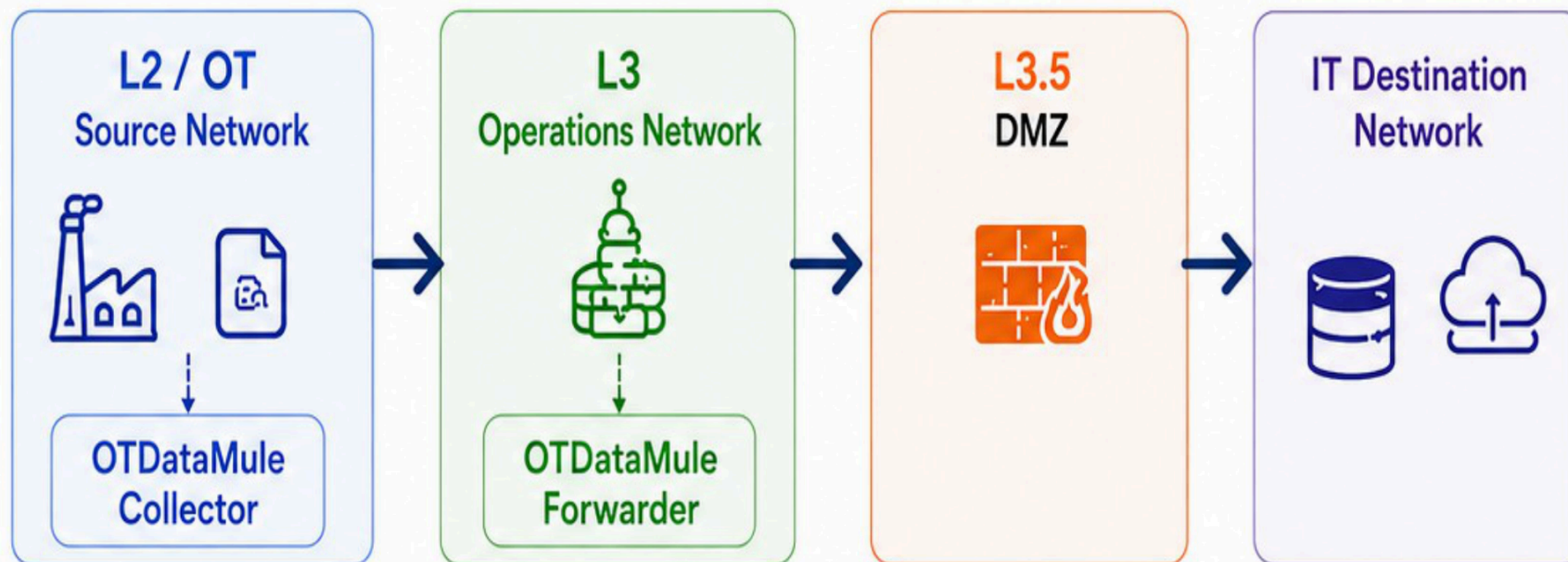


One gateway. Many protocols. One consistent data flow.



Move selected data through approved paths across network zones.

Not about opening access.
About controlled data movement.

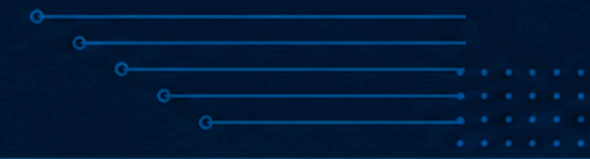


SECURITY CONTROLS

- ✓ Source allowlisting
- ✓ Protocol authentication
- ✓ TLS / certificate validation
- ✓ Least-privilege credentials
- ✓ Configured tag scope
- ✓ Local DataHub binding
- ✓ Outbound destination allowlisting
- ✓ Protected local storage



Security built-in. OT protected. Data moved safely.



LOCAL BUFFERING

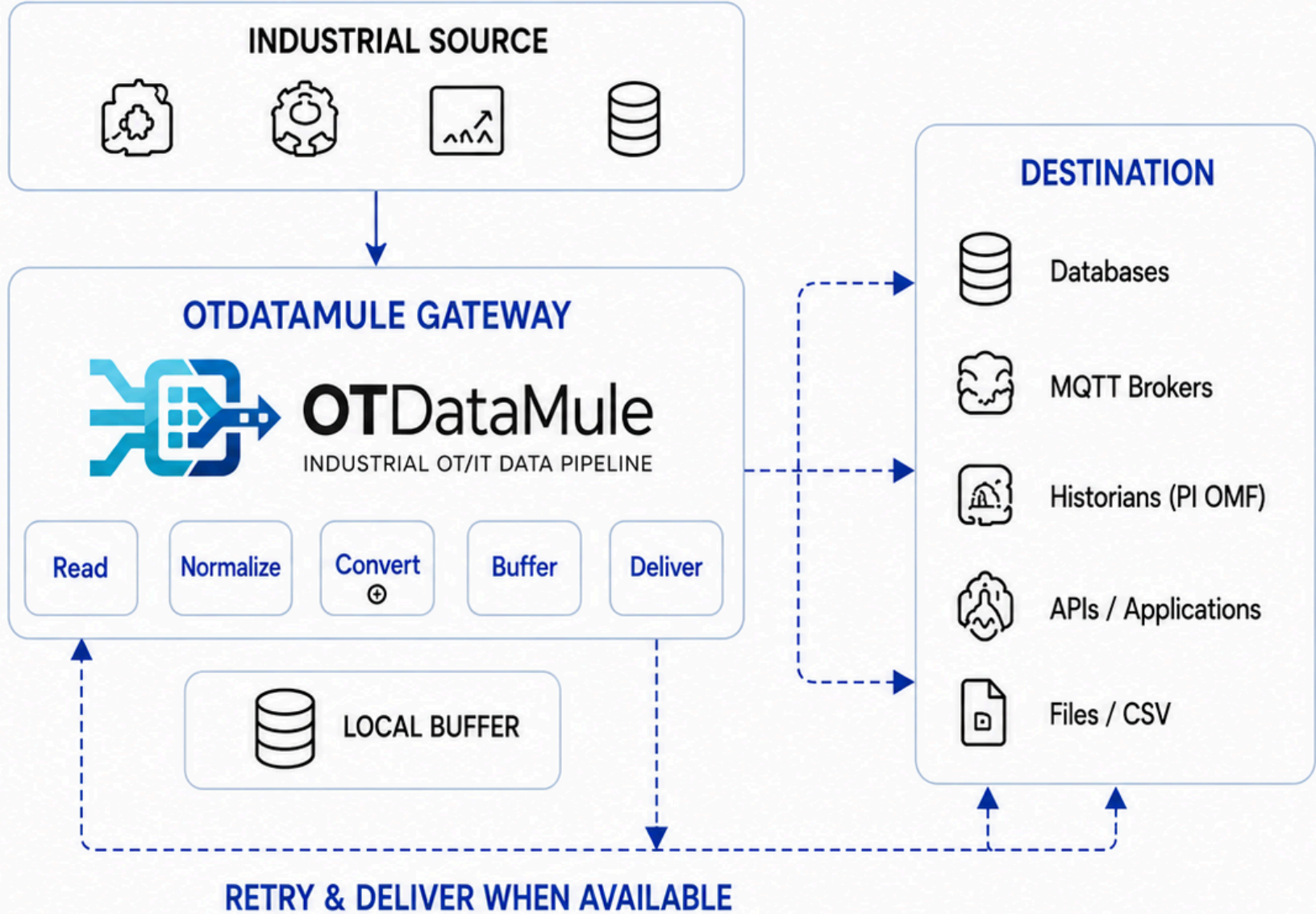
When outbound delivery fails, messages are persisted locally and retried later.

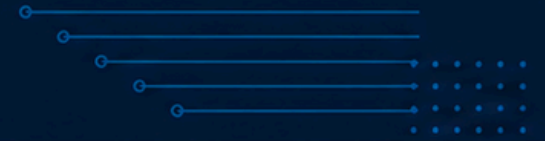
OPERATIONAL STATE

Local state, watermarks and buffering help manage runtime flow and delivery behavior.

BUSINESS VALUE

- ✓ More reliable delivery
- ✓ Reduced manual recovery
- ✓ Better operational confidence
- ✓ Fit for industrial reality

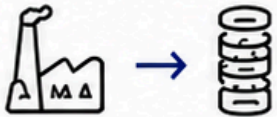




POC OPTIONS (EXAMPLES)

A

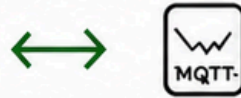
**OPC UA
TO DATABASE**



Goal: Make selected values available in a structured database.

B

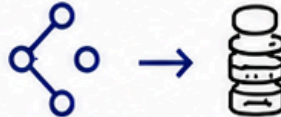
**OPC UA
TO MQTT**



Goal: Publish industrial values into approved MQTT topics.

C

**MODBUS
TO DATABASE /
MQTT**



Goal: Convert device data into reusable enterprise flows.

D

**SEGMENTED
OT-TO-IT FLOW**



Goal: Validate controlled data movement across network zones.

POC SUCCESS CRITERIA

- ✓ Secure connection established
- ✓ Selected data collected
- ✓ Data normalized internally
- ✓ Protocol / destination conversion validated
- ✓ Destination receives (correct data)
- ✓ Buffering & retry behavior tested
- ✓ Firewall rules documented
- ✓ Security assumptions reviewed
- ✓ Reusable OT-to-IT pattern confirmed



**TURN INDUSTRIAL PROTOCOLS INTO
CONTROLLED ENTERPRISE DATA FLOWS.**

READ. NORMALIZE. CONVERT. DELIVER.

**PLAN YOUR OT DATAMULE
PROOF OF CONCEPT.**

Start with one source, one destination and one high-value data flow.