DeepIQ Data Integrator Adds IP.21 Support

DEEPIQ

Introduction

DeepIQ Data Integrator is DeepIQ's managed data movement and pipeline operations layer. It standardizes how industrial time-series data is requested, validated, delivered to cloud targets, and monitored in production.

DeepIQ Data Integrator now supports AspenTech IP.21®, providing a managed end-to-end experience from IP.21 to optimized cloud data platforms. Teams can configure, validate, deploy, and monitor IP.21 pipelines from a single interface.

This capability addresses a common pain point in industrial data programs; moving IP.21 data to the cloud typically requires a stitched set of tools and handoffs across OT and IT.

The Current Challenge

Moving IP.21 data to the cloud often becomes a stitched pipeline across OT and IT, including:

- IP.21 extraction in the OT network zone
- An OT landing zone, plus tools to monitor and move data across boundaries
- Cloud ingestion pipelines and transformations into analytics-ready time-series tables
- Multiple monitoring systems, fragmented alerting, and custom exception handling
- Ongoing coordination between OT and IT teams to deploy changes and resolve failures

This patchwork slows onboarding, increases operational burden, and delays analytics outcomes.

End-to-End Setup in Under One Minute

DeepIQ Data Integrator simplifies pipeline creation into a consistent workflow:

1. Create and Validate data requests

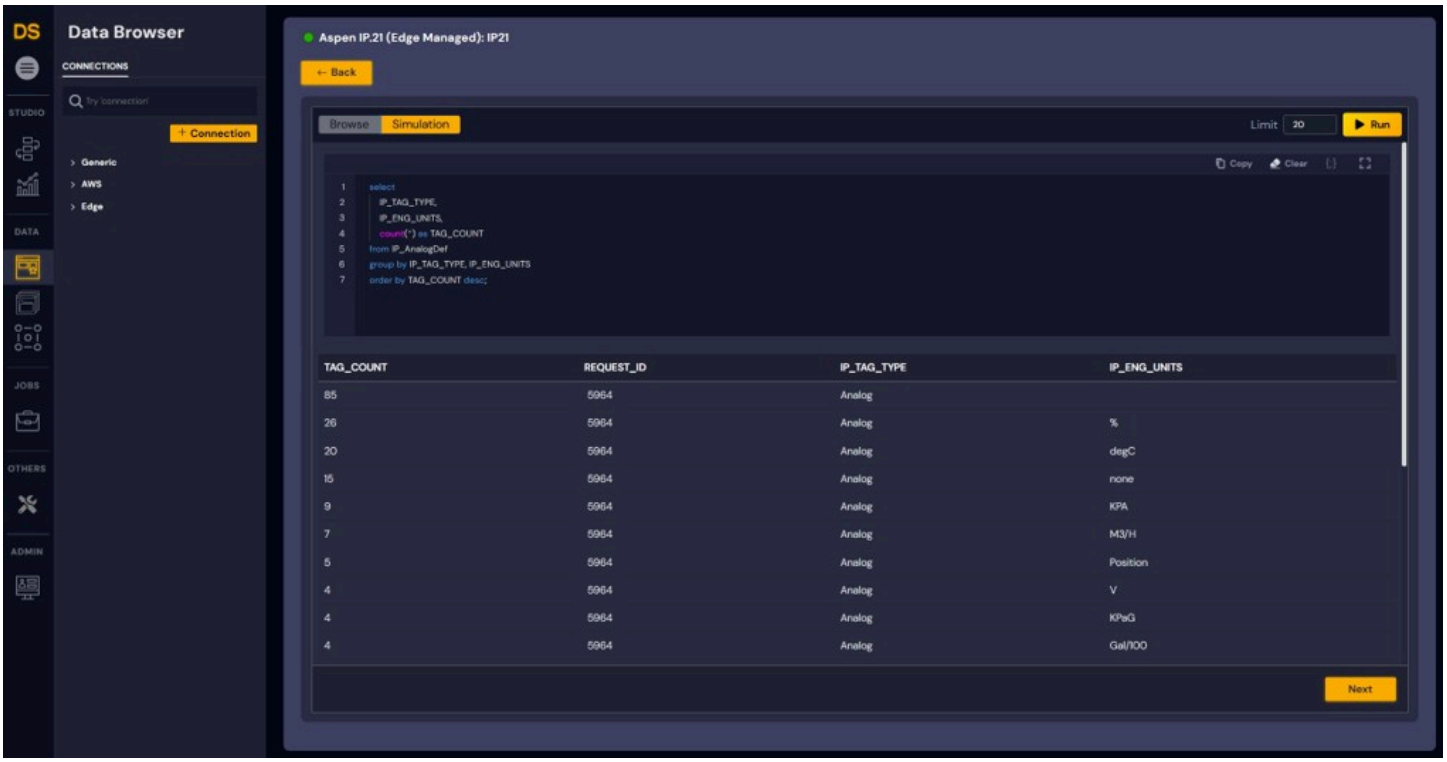

Figure 1: Data Integrator for IP21 in Simulation mode to validate requests and results

2. Choose a workflow type (streaming or batch)

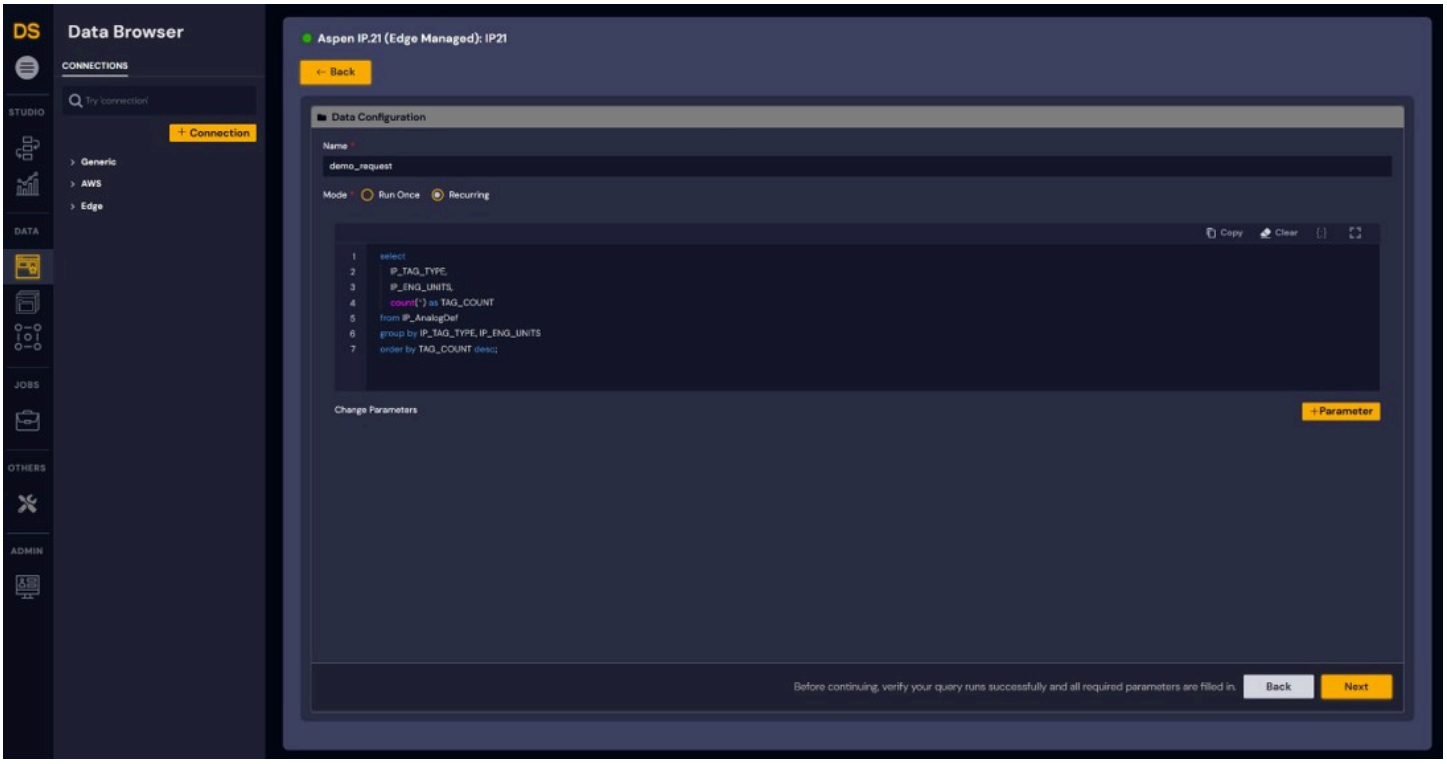

Figure 2: Request Type configuration

Run Once and Recurring modes (In Figure 2) enable users to schedule their edge data pipelines where needed with the flexibility of parameterizing their requests.

3. Select a sink and configure target database and table

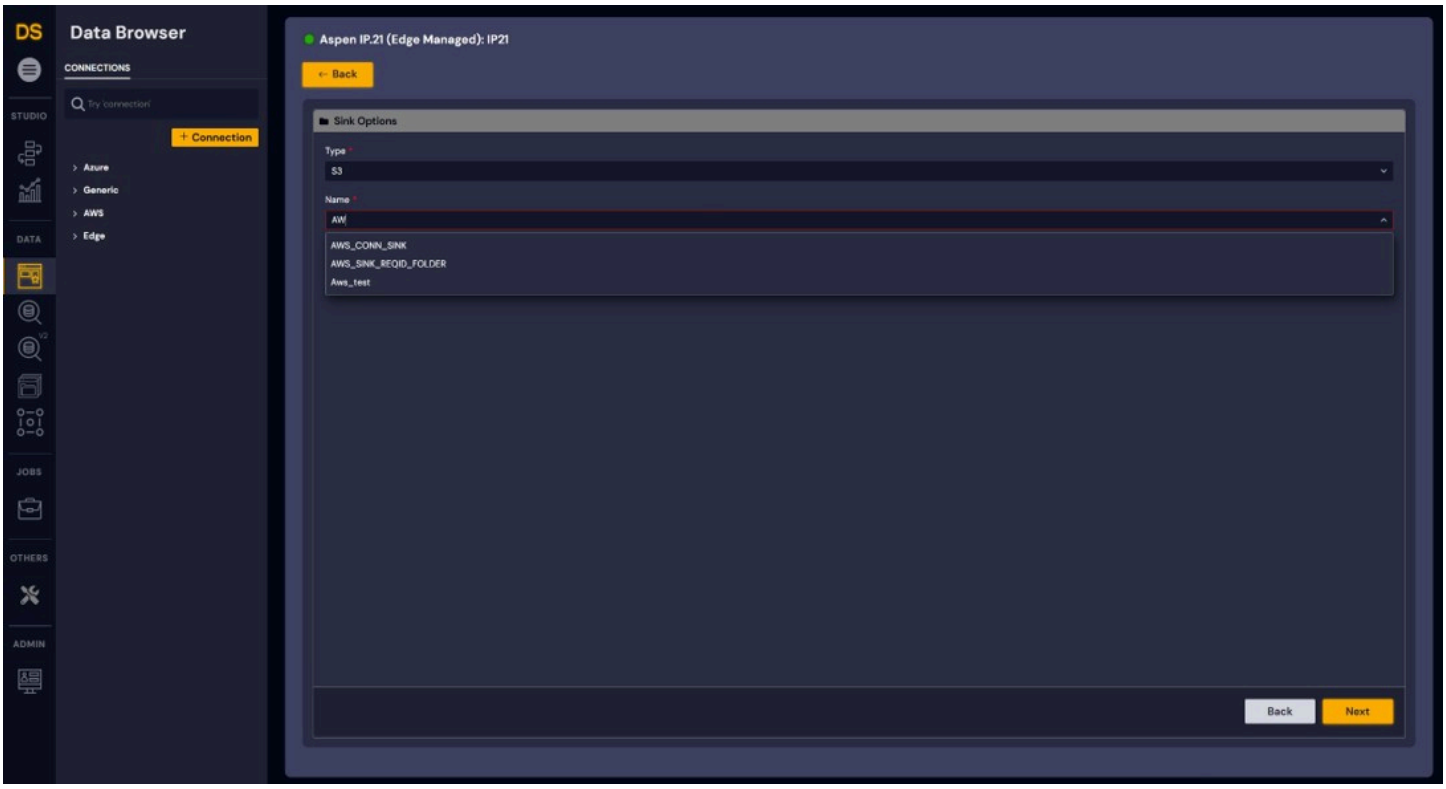

Figure 3: Sink Options - Staging Area selection

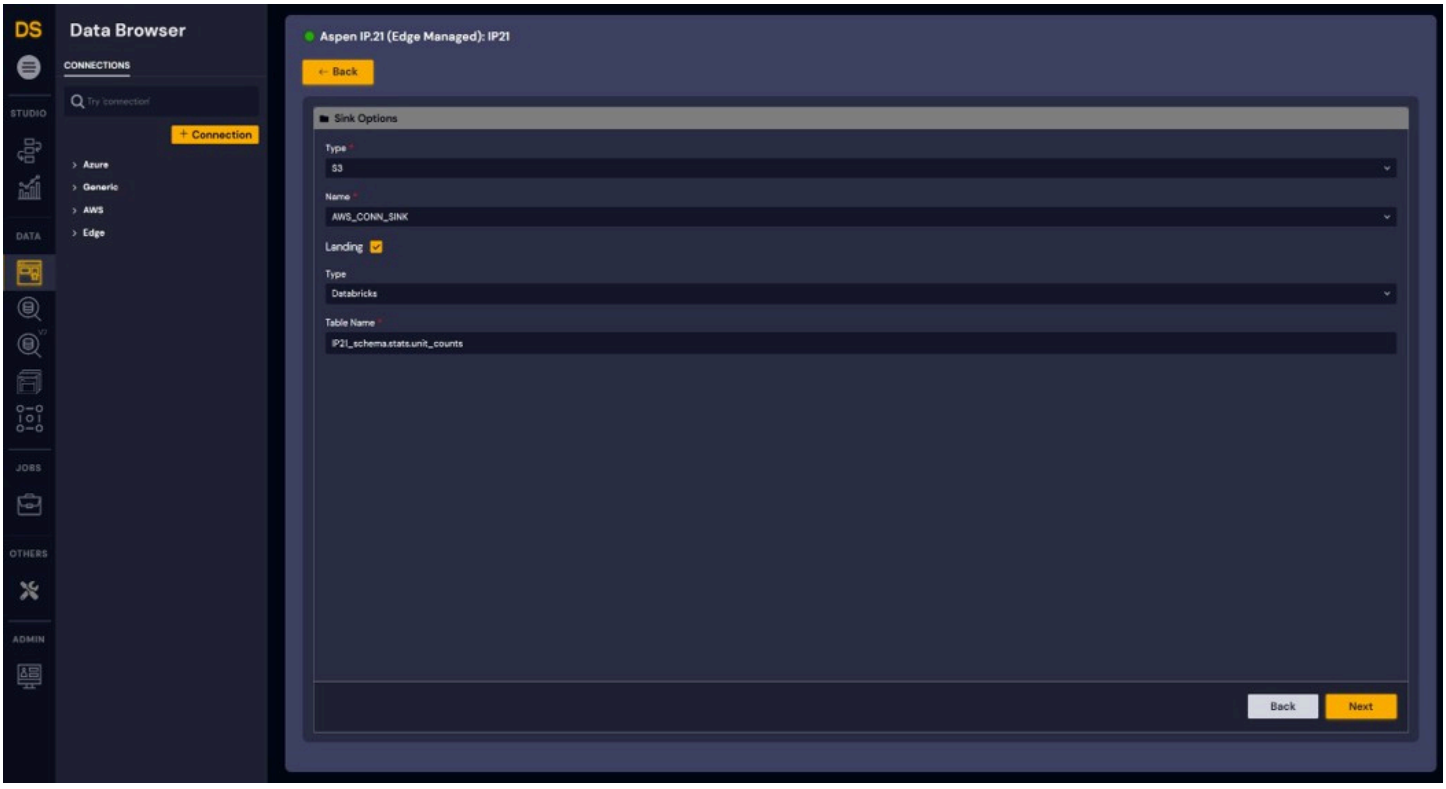

Figure 4: Sink Options - Landing Area selection

4. Deploy an end-to-end pipeline

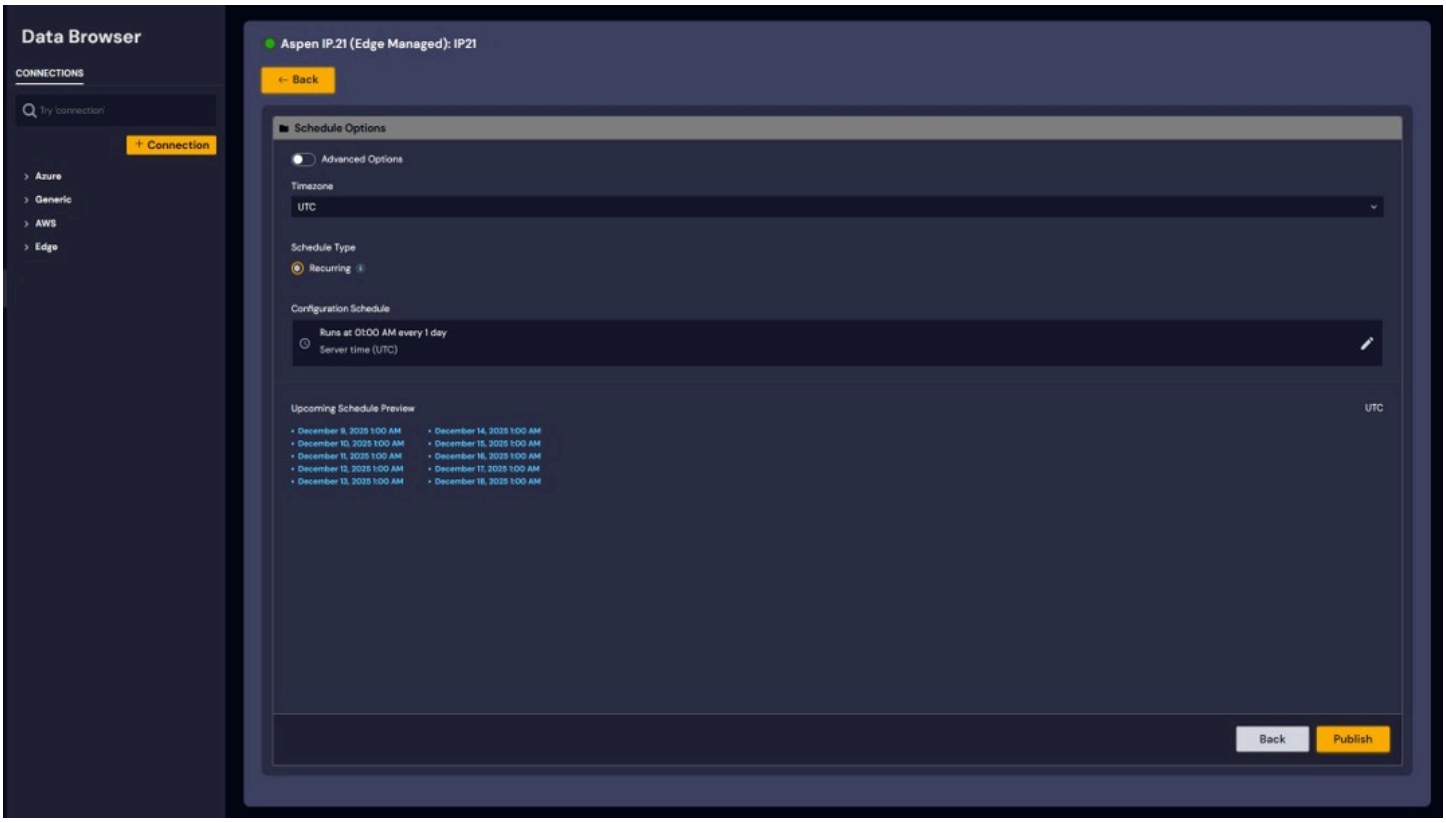

Figure 5: Scheduling Options for batch requests

Choose the Workflow That Matches Your Use Case

Streaming Workflows (Low Latency)

Use streaming workflows when you need near real-time data for operations, alerting, and fast analytics.

Supported streaming sinks:

- Amazon Kinesis
- Azure Event Hubs

Typical outcomes:

- Faster time-to-data for operational monitoring and real-time use cases
- Continuous delivery of IP.21 time-series data into downstream systems

Batch Workflows (Cost Efficient, High Throughput)

Use batch workflows when you want scheduled loads, backfills, and efficient movement of larger data volumes.

Supported batch sinks:

- Amazon S3
- Azure ADLS Gen2
- Delta Lake
- Snowflake
- BigQuery
- Redshift

Typical outcomes:

- Reliable scheduled ingestion for reporting and analytics
- Easier historical loads and reprocessing when requirements change

Production Operations in One Place

DeepIQ Data Integrator provides a single operational surface for production pipelines:

- Monitor all IP.21 pipelines from one screen
- Receive alerts when failures occur
- Reduce manual exception handling and runbook sprawl
- Troubleshoot faster with end-to-end visibility

Why It Matters (Business Outcomes)

Faster onboarding

- Move from project-based, multi-tool pipeline setup to a repeatable configuration workflow

Lower operational burden

- Reduce failure points by eliminating tool sprawl
- Centralize monitoring and alerting for production pipelines

Less OT and IT coordination overhead

- Reduce ticket ping-pong and handoffs with a single operational pane
- Simplify troubleshooting by making the end-to-end flow visible in one place

More analytics output

- Onboard more assets, tags, and sites because setup is fast
- Deliver consistent time-series structures that reduce wrangling and accelerate insights

Summary

DeepIQ Data Integrator's new IP.21 support replaces stitched pipelines with a single-pane, end-to-end workflow that supports both streaming and batch patterns. Teams can deploy pipelines in under one minute, monitor them in one place, and deliver IP.21 time-series data to modern cloud destinations with less operational overhead.