

Plugging In Compliance: Turning Trade Data into Action with APIs & Advanced Analytics



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Agenda

- **Why Trade Content APIs Matter**
- **How They Create Immediate Value**
- **Integration Across ERP, WMS, TMS, and BI**
- **Financial & Operational Impact**
- **Implementation Requirements**
- **Case Study**
- **Key Takeaways**
- **Q&A**





Global Trade Landscape 2026


Key Pressures:

 Tariff volatility

 Retaliatory trade measures

 Geopolitical disruptions

 Labor & transportation instability

 Regulatory complexity increasing worldwide



Financial
Pressures on
Global
Companies

Where volatility impacts the P&L:

Unpredictable landed costs

Frequent rework and exception handling

Demurrage & detention fees

Classification errors = overpayments

Margin variability at SKU level

The Traditional Trade Data Problem

Trade data locked inside
operational systems

Point integrations and file-
based exchanges

Limited reuse outside
compliance or logistics teams

Trade Data Has Become Enterprise Data



Impacts finance, procurement, risk, ESG, and strategy



Growing demand for analytics and forecasting



Executives expect trade data alongside financial data

Why Enterprises Need Real-Time Trade Intelligence

Leaders want:

Duty exposure visibility

Predictive landed cost models

Regulatory & documentation clarity

Faster responses to tariff changes

Scenario modeling for sourcing decisions

What are APIs?

“An API is like a digital courier — it delivers the exact data you need, exactly when your systems ask for it.”



Application Programming Interface (API)



A standardized way for two systems to talk to each other



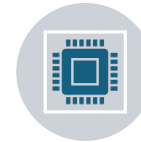
Allows software to request and exchange data automatically



Ensures information is consistent, real-time, and secure



Removes manual lookups, downloads, spreadsheets, or re-keying



Powers system-to-system workflows across ERP, WMS, TMS, BI, and GTM

Why Trade Content APIs Matter

Immediate Operational Value

- Real-time classification + duty data
- Automated validations reduce errors
- Eliminates spreadsheet workflows
- Faster clearance & fewer delays

Strategic Business Value

- Predictable landed costs
- Duty exposure insights for finance
- Standardized classification logic across the enterprise

Before & After API Automation

With API:

- Product entered once
- Instant classification + duty
- Auto-validation
- Data flows to ERP/WMS/TMS

Without API:

- Manual HS lookups
- Re-entry in multiple systems
- Multiple validation steps
- Slow, inconsistent workflow

How APIs Fit Into Your Systems

ERP: product master → classification + duty updates

WMS/TMS: real-time validations for shipping workflows

BI Platforms: exposure, forecasting, and analytics



Enterprise Visibility & Financial Intelligence



SKU- and
supplier-level
duty exposure



Forecasting &
landed cost
modeling



Alerts for tariff
changes &
regulatory risk



Connects to
Snowflake /
Databricks /
Palantir



Machine-
learning-ready,
standardized
data

What Can a Trade Content API deliver?



Classification logic (HS, HTS, Schedule B)



Duty & tariff data (MFN, FTA, surcharges)



Regulatory flags & restrictions



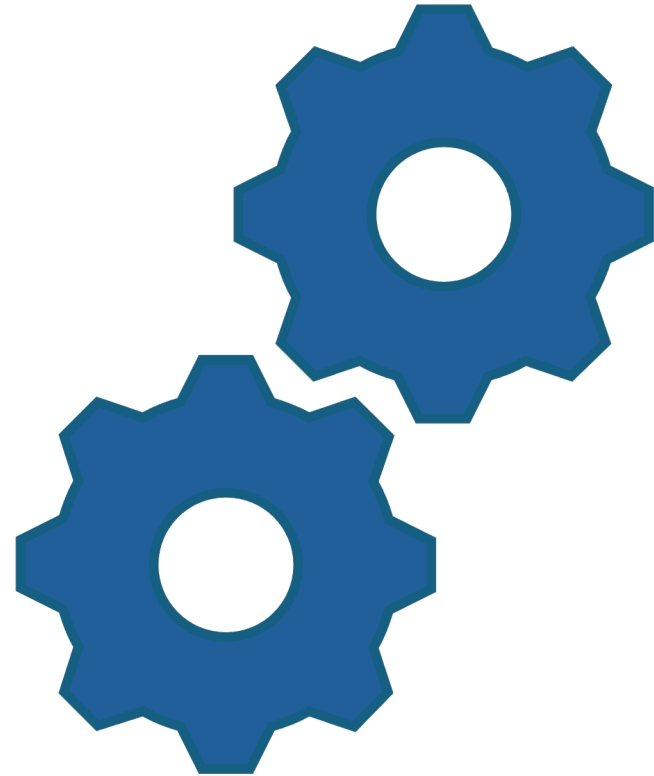
Rules of origin & documentation



Validation logic + continuous updates

Implementation Requirements

- **Works with your existing systems**
- (ERP, WMS, TMS, BI — no new platforms needed)
- **Provide clear product details**
- so, the API can return accurate classifications and duty data
- **Secure, standard connection**
the same type of setup your IT team already uses today
- **Light planning for new workflow**
- deciding when your systems should call the API



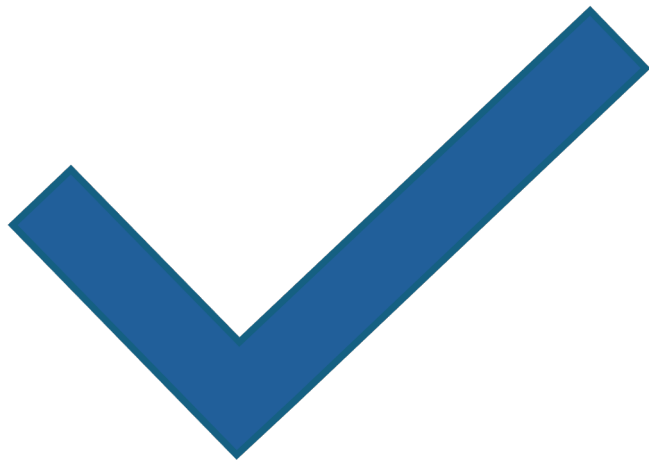
Security & Provider Requirements

Proven, mature technology provider
with a strong track record in compliance and data security

Modern security basics
(encrypted connections, access controls, activity logs)

Reliable, frequent regulatory updates
so, your data stays accurate

Strong support & dependable uptime
when you need help, someone is there



Best Practices

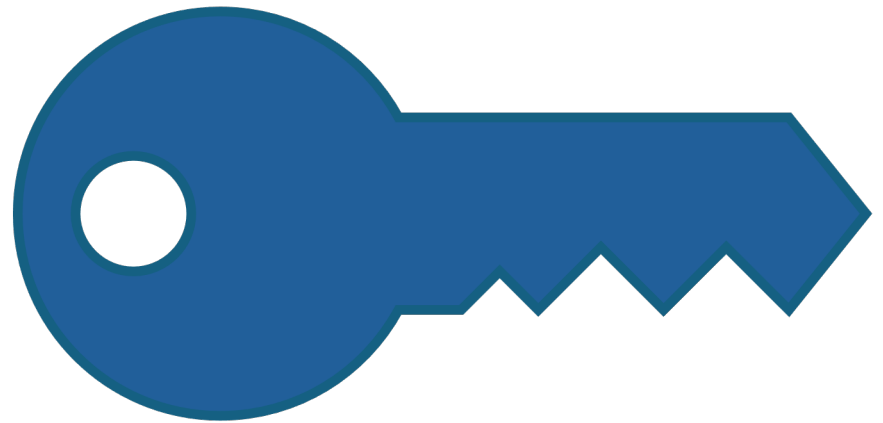
- Keep product info clean and clear
- Let the API run automatically
- Spot-check results from time to time
- Review any exceptions
- Keep improving as you go

Case Study – Global Manufacturer Cuts Duty Spend with API-Driven Trade Compliance

Client Profile:	A large, multinational electronics manufacturer operating 200+ production sites and managing a portfolio of 15,000+ SKUs across 40+ countries
Challenge:	The organization relied on manual classification workflows with inconsistent HS/HTS codes across regions, leading to: recurring duty overpayments, margin leakage from missed Free Trade Agreement opportunities, and periodic origin mis-determinations. The lack of a unified compliance process made it difficult for finance and supply chain teams to understand true landed costs.
Solution:	The company deployed a real-time Trade Content API to centralize: classification, duty rate determination, and origin logic. The API was integrated into the enterprise data lake and BI platform (e.g., Snowflake) to power live landed-cost modeling, supplier comparisons, and duty-exposure analytics.
Results:	68% reduction in classification exceptions within six months ≈ \$2.3 million in duty savings captured in year one 45% faster landed-cost forecasting cycle (10 days → 5 days) A single source of truth for compliance, finance, and supply chain team

Key Takeaways

- APIs shift global trade insight from manual → automated
- Real-time duty exposure unlocks financial intelligence
- Unified data across ERP/WMS/TMS/BI improves supply chain velocity and improves decision making
- Ongoing updates reduce risk and increase predictability



Descartes API Offerings

Global Trade Data (Commodity flows, trade lanes, etc)

Product classification (HS, HTS, Sched B)

Duty Calculation

Regulatory Controls, including denied party screening

ADD/CVD Screening

Conclusion

- Trade Content APIs turn compliance data into **financial and strategic intelligence**
- Real-time classification, duty & regulatory data unlock **predictability**
- Integration across systems drives **enterprise visibility & alignment**
- Organizations gain **reduced risk, lower costs & faster decisions**
- API-driven models are the modern standard for **2025 global trade operations**



Thank you!



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