GlobalTranz

GlobalTranz is a US based logistics technology innovator and freight management company. A market leader in innovative logistics technology with multiple solutions, GlobalTranz dynamizes freight management by optimizing efficiency of movement and matching shipper demand with carrier capacity in real-time.

GlobalTranz has 25000+ shippers shipping millions of packages across North America. The company recently won the ACE award for fast growth, demonstrating the continued success of its technology-driven freight brokerage solutions and services.

Customer Profile

Fiorano ESB coupled with Fiorano API Management streamline operations at GlobalTranz

“GlobalTranz decided on use of the Fiorano platform as a mechanism for alleviating the pain points of our convoluted legacy application structure. With the main area of focus being the consolidation of application integration points, the implementation of the Fiorano platform thus far has been truly valuable in terms of adding a consistent and manageable mechanism for handling these integrations. By migrating existing legacy integrations to the Fiorano platform we have seen instant improvements in monitoring capabilities, efficiency, and exception management. This includes FTP-driven use cases, REST Service use cases, and Database-driven use cases to name a few.”

Brett Garrick, Integration Specialist, GlobalTranz
**Business Problem**

Innovations in technology are changing business models across all verticals and creating new and advanced operational techniques. In the logistics industry, web-services and SOA are slowly replacing EDI, while APIs provide new levels of interoperability and reusability.

The business of LTL freight and shipping includes multiple interactions with third-party players like agents, shippers, customers and other stakeholders who play their respective roles in the entire process. These 3rd party agents use heterogenous software and message formats to communicate with GlobalTranz’s TMS (Transport Management Solution). Point-to-point integrations between TMS and third-party service providers were development intensive and had to follow the complete SDLC (software development lifecycle) before going live.

The IT team at GlobalTranz required a solution to accelerate interface and connector development. Developer productivity was hampered since much of their time was consumed in maintenance of programmed-from-scratch interfaces.

GlobalTranz was looking for a single platform to efficiently create, deploy and monitor these interfaces.

**Solution**

After evaluating different vendors for application integration, GlobalTranz chose Fiorano to provide the middleware for its Microservice-centric architecture. The Fiorano ESB, coupled with Fiorano API Management was used to consolidate heterogeneous application integration endpoints.

Fiorano consultants and solution architects assisted the IT team at GlobalTranz to create use-cases for integrating multiple applications. The team was productive within weeks and now manages over 90% of all development work, reducing the requirement for outside consultants.

The end goal for a majority of GlobalTranz use-cases is to create interface points with third-party services to connect back into their proprietary Transportation Management Solution (TMS) software without having to develop point to point solutions.
Fiorano Restful endpoints are used by 3rd party applications to asynchronously send data in multiple formats. Fiorano processes pick up data from multiple third party channels like FTP, Databases, Web services etc., transform and processes the data and finally send the data to GlobalTranz internal proprietary systems.

The Fiorano platform is used for implementing variety of business use cases related to shipment booking, tracking, customer credit information processing and more:

1. **Collections notes data synchronization between TMS and a third-party collection software**: Collections software notes are updated in a third-party FTP server on a daily push interval. Fiorano processes pull files securely from FTP, ingest the file into a flat file schema, process data and transform it to call internal REST services to store data at a customer level in TMS. This data is used by GTZ Sales users to pull customer accounts and view collections notes (positive balances etc.).

2. **Handling inbound shipment tracking data**: Shipment tracking data is provided by third party vendors. Data is posted to Fiorano Restful services asynchronously in XML and JSON formats. Fiorano processes update all the intermediate systems and make the shipment tracking data available in TMS.

3. **Integration with a third-party document imaging vendor**: GTZ works with a third-party document imaging vendor for accounts payable and accounts receivable. When users require a proof of delivery documents, the accounting team handles it through a third-party vendor. Fiorano event-processes handle automated document pushes to the vendor and synchronize these with GlobalTranz internal file stores.

4. **Handling claims**: Third party carriers send claims information through email. Automated Fiorano processes fetch emails related to shipment and damage claims, extract details using regular expressions and match these from a database. Upon finding a match, multiple Restful services are invoked to update information in the TMS.

**Solution Highlights**

Fiorano ESB provides the interoperability and acts a unified business backplane for GlobalTranz. Additionally, Fiorano API management brings along its own set of features such as:

**Security**: Security descriptors in the API layer provide GlobalTranz’s IT team with a fine-grained control over the access of an API by different end-users/user-groups.

**Metering**: For each API, a count is maintained of the number of times the API has been called, together with a list of which applications have made the calls. It is possible to set metering limits as well as charges on a per-call (or other) basis for all API calls.

**Monitoring**: This allows system administrators to track which APIs are using the most resources (CPU, memory etc.) and to graph the related information to identify hotspots and contention. Using this information, system administrators may decide, for instance, to split API call-load over multiple API Management servers (provided the underlying solution allows for this scaling-out process).

**Management**: A high level view of the overall implement of API Management across the enterprise, including a synopsis of the security, metering and monitoring processes running across multiple servers within and outside the enterprise firewall.

...Through use of the Fiorano platform for new integration development endeavors we have been able to speed up development time significantly through the expansive out of the box component library in combination with the ability to add custom code or components as needed. Development of new integrations under a consolidated platform has also resulted in a reduction in knowledge transfer needs from developer to developer. This has allowed us to further expand upon internal best practices and design methodology standards all driven around a single unified integration framework.

Brett Garrick,
Integration Specialist,
GlobalTranz
Result and Benefits

Mission-critical Integrations - GlobalTranz has met all the milestones set for their integration project timelines. After completing the Fiorano training, the IT team developed more than 40 critical integration flows within 2 months. Without Fiorano, such integrations would have taken 8-9 months for development.

Enhanced Flexibility - Fiorano API management allows the application layer at GlobalTranz to be more flexible. Instead of modifying the code at the backend, developers can now make changes in the API layer by applying policies. This enables the IT team to be more responsive to change requests.

Increased Security - Fiorano API Management is used as an entry point for all the services exposed by Globlatranz. It is used to add additional levels of security, to apply rules and monitoring and to assign API keys to identify and track consumers.

Standardized APIs - A unified platform for developing and maintaining integrations across the organization has not only reduced the need for inter and intra team knowledge transfer, but has also helped in creating standardized APIs. This standardization of APIs further helps third-party developers in deploying new applications.