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SOLUTION OVERVIEW

OpenText Shipment Monitor

Utilize IoT data to monitor the condition of goods or assets in transit

Augment shipment tracking with condition-based data

Leverage sensor data to report critical changes in temperature, humidity or shock

Deliver new service levels or offerings for customers beyond shipment tracking

Audit supply chain partners for cargo condition service levels

For some products, such as pharmaceuticals or high-tech equipment, controlling environmental conditions in transit is more important than its physical location. If a fragile product is exposed to rough treatment or harsh temperatures, it could be lost to spoilage. Organizations need to leverage the data from environmental sensors to react to shipment conditions and alert all stakeholders.

OpenText Shipment Monitor, an OpenText Connected Supply Chain solution, delivers condition-based monitoring to augment supply chain operations. Everything affecting goods in transit can be monitored in realtime, including temperature, humidity, location and product condition, so that immediate corrective action can be taken if an exception of aberrant conditions is reported. This provides much greater control in the shipment of perishable and high value goods with high levels of transparency and supply chain efficiency, while reducing the waste and damage of products in the supply chain.

### Augment shipment tracking with condition-based data

By adding IoT devices to cargo and assets, an organization can capture, manage and augment location-based services data to provide condition-specific visibility across the supply chain (see Figure 1).

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By 2023, at least **50% of large global companies** will use AI, advanced analytics and IoT in supply chain operations.¹

An international online retailer says monitoring shipments for impacts, tilts and temperature excursions helped it **reduce damage by 90%.**²
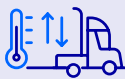
Studies have shown it is not uncommon for **temperature to vary by 30% or more** within a refrigerated trailer or container.³

Leverage sensor data to report critical changes in temperature, humidity or shock

By employing IoT sensors to provide realtime condition monitoring of perishable items, such as food, or sensitive items, such as electronics, producers can improve or extend a perishable's shelf life and reduce spoilage of a shipment.

Deliver new service levels or offerings for customers beyond shipment tracking

Track and trace provides a level of safety to help ensure shipments are secure and authentic. Shipment Monitor provides an additional service level that assures established environmental safeguards are effective and maintained.

Audit supply chain partners for cargo condition service levels

Spot inefficiency patterns and track waste and costly spoilage due to mishandling or out of scope environmental settings. Historical and realtime data can be used to measure partner and system performance.

Extending and enabling the digital supply chain

IoT data	OpenText IoT Platform	OpenText™ Business Network	Supply chain management
	Orchestration	OpenText™ Trading Grid™	Performance interface
	Messaging	Overlaying data	

Sensor data
Geolocation, temperature, shock, battery life,

Collect, orchestrate, message
Securely connect and orchestrate physical data with business rules; message to workflows and downstream application.

Extend B2B data
Extend visibility beyond existing B2B event data with realtime physical data. Overlay external data sources for

Manage performance
Manage supply chain performance via a role-based interface. Enable workflows and downstream
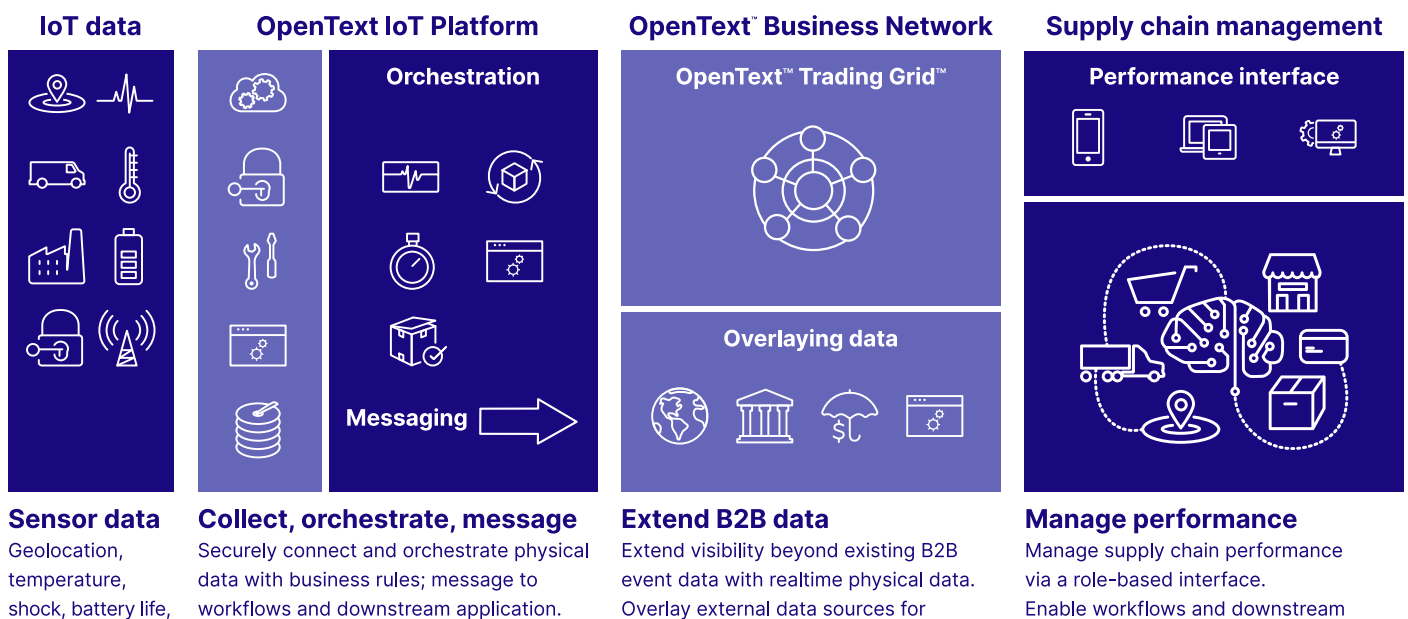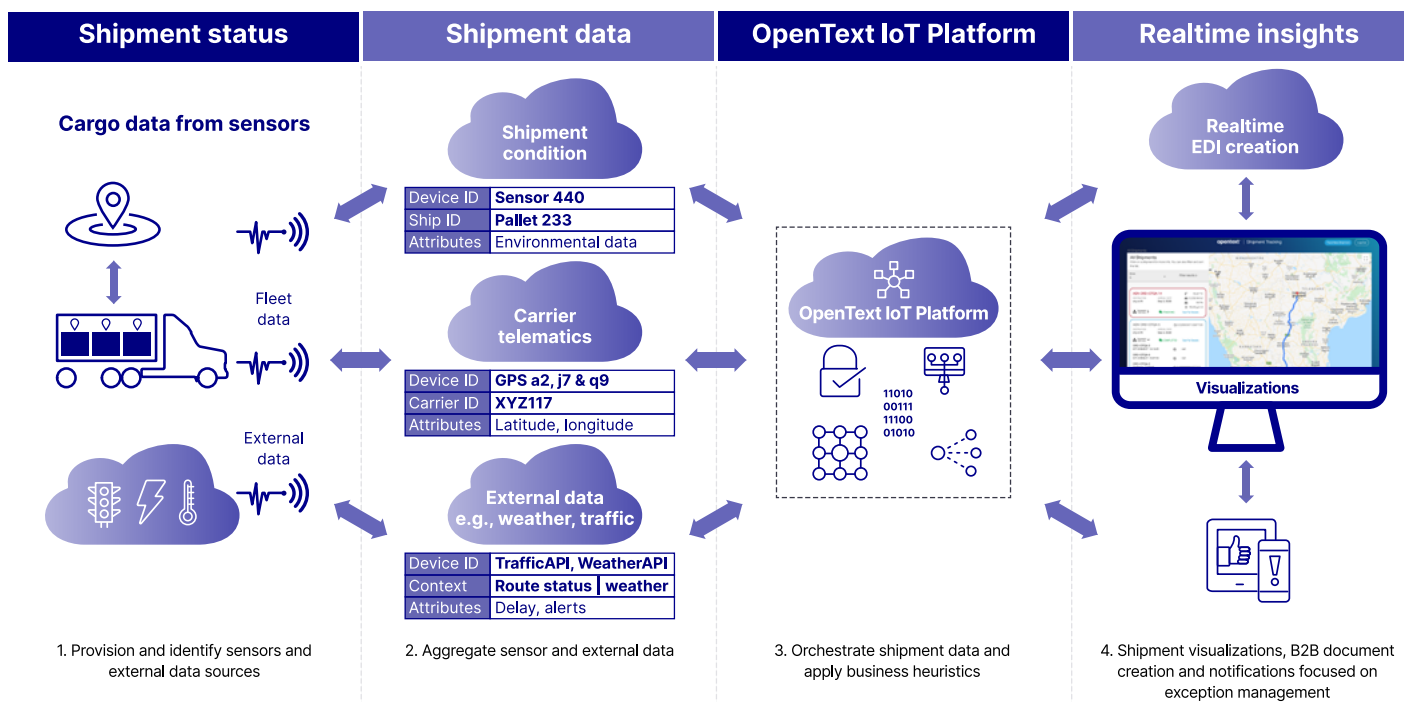
Figure 1: Extending and enabling the digital supply chain

Powered by OpenText™ Business Network and the OpenText Internet of Things Platform, Shipment Monitor enables end-to-end shipment and asset condition monitoring in the extended supply chain. Beginning with an identity-centric approach to IoT, Shipment Monitor identifies the people, systems and things in a supply chain ecosystem. It gives pervasive, realtime environmental condition visibility into shipments and assets as they travel from the point of origin to final destination. If any disruptions or out of scope conditions occur, the B2B documents can be edited or refreshed to reflect the current state of the shipment or asset and the appropriate stakeholders alerted.

- Supply Chain Consulting Services
- IoT Consulting Services
- OpenText™ B2B Managed Services

Visualizing OpenText Shipment Monitor

Shipment status	Shipment data	OpenText IoT Platform	Realtime insights

Cargo data from sensors

Fleet data

External data

Shipment condition

Device ID	Sensor 440
Ship ID	Pallet 233
Attributes	Environmental data

Carrier telematics

Device ID	GPS a2, j7 & q9
Carrier ID	XYZ117
Attributes	Latitude, longitude

External data e.g., weather, traffic

Device ID	TrafficAPI, WeatherAPI	
Context	Route status	weather
Attributes	Delay, alerts	

OpenText IoT Platform

11010
00111
11100
01010

Realtime EDI creation

Visualizations

1. Provision and identify sensors and external data sources

2. Aggregate sensor and external data

3. Orchestrate shipment data and apply business heuristics

4. Shipment visualizations, B2B document creation and notifications focused on exception management

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Feature	Description
Secure Device Management	Enable zero-trust processes to scrutinize every person, system and device in the connected IoT ecosystem.
Ecosystem Integration	Turn data into actionable intelligence with device interoperability and IoT data integration between people, systems and things
Unified Messaging	Extend business applications through IoT data stream orchestration to translate, route and govern messaging between disparate and legacy technology
Actionable Insights	Augment IoT data streams and applications with realtime, interactive, highly scalable IoT data analytics for actionable visualizations, reports and dashboards

⇥ OpenText Industrial IoT Platform
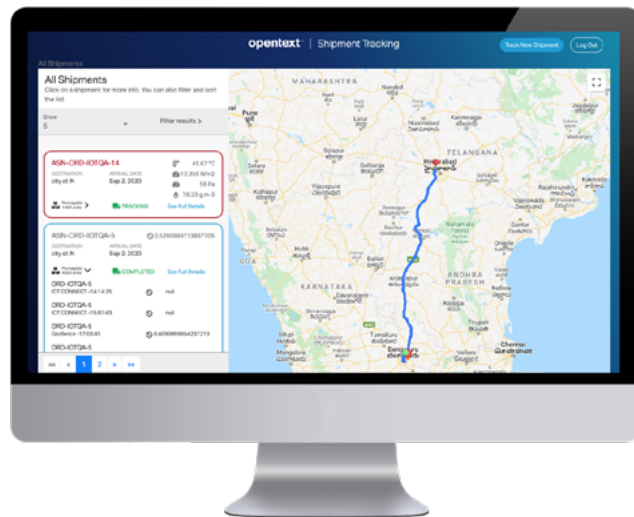
⇥ Secure Device Management

⇥ Ecosystem Integration

⇥ Unified Messaging

⇥ Actionable Insights

⇥ Connected IoT Supply Chain

⇥ Blog

Visualizing OpenText Shipment Monitor

Monitoring in process goods

- **Tracking and visualizing** the location and condition of high value shipments to prevent loss or damage.
- Support climate, light or shock sensitive cargo.
- Tracking high value raw minerals, hazardous materials and custom manufactured parts
- Track in process shipping containers across the supply chain to prevent spoilage or damage

About OpenText

OpenText, The Information Company, enables organizations to gain insight through market leading information management solutions, on-premises or in the cloud. For more information about OpenText (NASDAQ: OTEX, TSX: OTEX) visit: **opentext.com**.

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