Distribution One White Paper

API Uses in Wholesale Distribution
ERP Software APIs in Action

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Abstract
API expands distribution ERP functionality through the secure movement of data between applications. This White Paper explains what an API is and explores real-world uses of APIs in wholesale distribution including web services, warehouse integrations, and more.

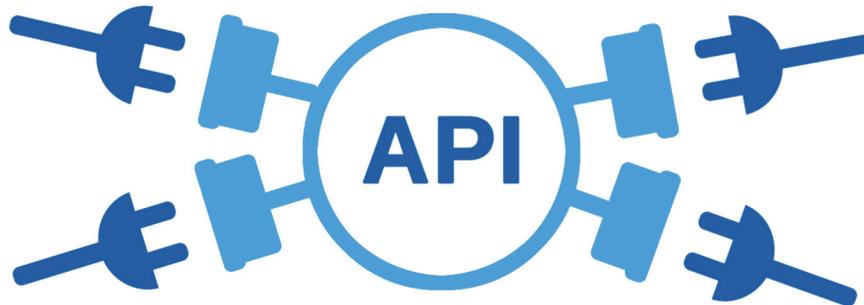# API Uses in Wholesale Distribution
ERP Software APIS in Action

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Executive Summary

API exists to expand the scope of business technologies, and distributor ERP software is no different. Before diving into real-world applications of API, it is necessary to understand what an API is.

What is API and What Does It Mean to Distributor ERP Software?

An API (Application Program Interface) defines the way software and external programs interact. In ERP (Enterprise Resource Planning) software, APIs are necessary for ensuring that the ERP application data is accessible to other programs.

To put it another way, an API is the middleman between an ERP application and a program requesting data. The API receives the request and returns the specific data so long as the request has the appropriate permissions. The API also controls what data can be requested and how it is received.

APIs are not a new invention. No matter what computing device is used, APIs make it possible to move information between programs. Moving data from Word to Excel, signing into apps and websites using a Google ID, storing a video game's progress to cloud servers… each of these is an example of an API at work. The reason APIs are so common is simple: an API allows a program's internal functions to share data without revealing all the source software's code which saves time and greatly reduces security risks.

APIs are utilized by a company's chosen third party vendors to provide expanded features using data contained within the ERP. Because APIs are invisible to users of ERP software, it's easy to overlook their broad range of process capabilities in daily distribution operations. Moreover, APIs are the workhorse behind third party software integrations for specific tasks and functionality not handled by the ERP.
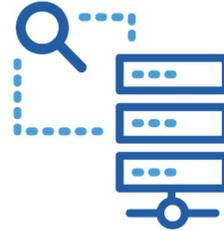
API Real-World Uses in ERP Software

As a way for distributors and wholesalers to extract additional value out of an ERP investment, APIs enable a remarkable range of supplementary uses. Some examples include:
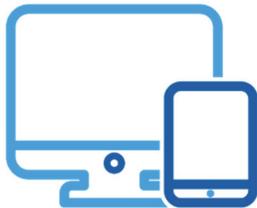

E-Commerce

Provides the interface for E-Commerce ordering and shipping. Pushes and pulls data based on customer requirements. Manages the order handling process into the ERP software and also creates customers and adds ship to addresses.

Dynamic Query Services

Queries the ERP software for resources to which an authenticated user has access. Commands include data read, create, update, and delete. These types of queries can be more efficient when requesting specific data (i.e. pricing).

Service Hub
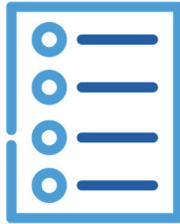
Provides connectivity between desktop and mobile applications and the ERP. Also manages licensing and user permissions.
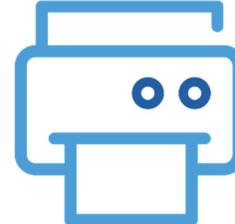

Server Authorization

Controls user access to ERP services via successful authentication

API Real-World Uses in ERP Software continued

Item Services

Retrieves calculated pricing for inventory items in the ERP. Additional functions include fetch price, batch price and restriction, unit of measure, availability, and quantity breaks.

Form Printing

Produces printed forms like invoices, order acknowledgements, picking and packing slips, etc. out of the ERP.

Image Services

Retrieves and assigns images to a table record in the ERP.

Dashboards

Controls dashboard visualizations for availability status.

Extended API Functionality

In addition to these uses, some distributors have opted to further extend their ERP software functionality via APIs:

- Vertical Lift integration: Displays availability. Created customer-built dashboard for the warehouse to show stats for users.
- Conveyor Belt integration: Bins assigned order numbers. The ERP tells conveyors to go to zones within the warehouse and conveyors push bins to a packing station.

API Questions to Consider

The scope of API functionality depends entirely on the experience and reliability of the chosen third party vendor. When considering a third party provider, ask questions about their API.

- How much does creating a custom API cost?
- Does the ERP vendor have any experience dealing with the company in question?
- Has the third party provider already built a successful API to access your type of ERP software for another company?
- Are they willing to provide references of other customers who use their API?

Getting answers to these questions from the outset will help to quickly pinpoint the ERP or third party vendor that is the best fit for specific API functionality needs.

Conclusion

APIs are an invisible yet crucial piece of software that keeps data flowing and business applications connected. By pulling back the curtain and investigating a range of API functionality, distributors and wholesalers gain a deeper understanding into internal ERP processes as well as the broader capabilities that exist. Armed with this knowledge, distributors know which questions to ask when researching which ERP software will deliver the features required to drive positive year over year results.

About Distribution One

Distribution One is an industry-leading developer of innovative customer-focused Enterprise Resource Planning (ERP) software designed specifically for the needs of wholesalers and distributors. Formed in 1996, Distribution One holds offices in Mount Laurel, New Jersey, and Irving, Texas, and operates a network of ERP specialists in eight states across the country. This team of skilled professionals thrives on providing solutions and live US-based support to customers across the United States, Canada, and into Europe.

Distribution One's comprehensive, interconnected ERP-ONE+ software delivers intuitive functionality that improves the entire business process from Order Entry, Financial Management, and Purchasing to Inventory & Warehouse Management, CRM, and Dashboard and Reporting activities. ERP-ONE+ also provides frequently requested features like Quality Control Tracking, Wireless Warehousing, VMI (Vendor Managed Inventory), Lot Control, and supplemental components like E-Commerce, Amazon connectivity, Credit Card Integrations, Mobile App suite, Shipping integrations, EDI (Electronic Data Interchange), API (Application Program Interface), and BI (Business Intelligence) dashboards.

Distribution One's 8000+ users operate in a variety of industries worldwide from fasteners, adhesives, industrial supply, food service, electrical, retail, hardware, and janitorial supply to name a few.