

Professional Projects

Here is a summary of some of the professional projects I have worked on.

CIO Remote

Warehouse software for pick, pack, ship functionality. I personally implemented features such as:

- High volume automated label printing, including 4x6 EPL/ZPL thermal labels, as well as 4x8 and 8.5x11 combined pick and ship labels.
- Rate shopping between carriers at shipping time
- Dynamic shipping rate markup rules
- Label fee reconciliation due to post-shipment carrier fees
- Weight validation of packages to catch mis-picks
- Mobile device picking and scanning processes
- Wave picking to efficiently guide workers through warehouse to pick many orders at once into bins on a cart
- Serial and lot/batch scanning and tracking
- Mobile Receiving and Put-away
- End-of-day carrier manifesting
- Automated printing monitors to detect and resolve or alert on problem printers

The CIO Remote system was sunset in 2024 after company acquisition.

CIO Central

Internal product responsible for expanding legacy warehouse software functionality. I personally implemented features such as:

- Order routing/splitting to warehouses based on: geographic location (zone), inventory levels, shipping cost, time-in-transit, desired delivery date
- Customization platform for 3PL providers needing customized order routing logic

The CIO Central system was sunset in 2024 after company acquisition.

CartRover

ECommerce integration software connecting shopping carts and marketplaces with Order/Warehouse Management Systems to sync orders, shipments, inventory, and products. System was acquired by Extensiv and rebranded as Extensiv Integration Manager. My involvement included:

- Initial system design and product planning
- After initial build, scaling performance and reliability of system into a high volume, low touch system
- Integrating with many dozens of ecommerce systems (Shopping Carts, Marketplaces, EDI, Inventory Management Systems, Warehouse Management Systems, Shipping Systems)
- Integration framework and libraries to make integration build-out easy and standardized
- Alerting and automated retry logic and design
- Custom and performant job scheduler across many job servers
- Leading product and dev team as the system experienced explosive growth

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