Increase profits by accepting the right shipments at the right time
The PROS O&D Cargo Short Term (ST) and Medium Term (MT) Solutions provide sophisticated network cargo revenue optimization and dynamic economic evaluation of every shipment. Moreover, the solutions provide recommendations for profit-maximizing allocations. The dynamic evaluation of bookings boosts revenue and supports sales and ad hoc pricing decisions. The PROS O&D Cargo Solutions manage global cargo business, freighter and air carrier belly capacity, containerized and bulk cargo, trucking networks, as well as alliance partners and blocked-space agreements.

Addressing revenue-critical challenges

Challenges
- How can a cargo carrier shift its focus from filling empty space to maximizing contribution?
- How can cargo and passenger revenue management systems share information to make optimal use of capacity?
- What’s the optimal overbooking risk to minimize capacity spoilage?
- How can a carrier validate assumptions about available capacity and customer tendering rates?

Solutions
- PROS O&D Cargo Solutions employ advanced demand forecasting and network optimization to determine the optimal shipment mix that balances costs, rates, capacity, and demand
- Sophisticated overbooking algorithms maximize belly capacity usage and minimize revenue spoilage
- High-performance real-time software architecture with proven scalability
- Analyst-friendly, configurable, web-based user interface

Results
- PROS O&D Cargo Solutions proven in production to generate revenue lift at world-leading carriers
- Optimal use of assets to satisfy customers and maximize profitability

Analytics, execution, and optimization

Analytics
- Identifies profitability of bookings and shipments by origin, destination, product, route, and customer
- Provides configurable dashboards with key performance indicators, underscoring areas of high-value opportunities
- Supports what-if analysis of multiple scenarios to analyze trade-offs as a result of changes in schedules, demand, rates, and customer value

Execution
- Provides sophisticated decision support for profitability evaluation and optimal overbooking
- Provides flexible user influences and overrides to manage hurdle rates, allocations, and shipment acceptance criteria
- Provides real-time price-availability and decision response for shipment requests
- Provides revenue-maximizing spot pricing guidelines for one-time deals
- Empowers users with the ability to enter exception rules to influence the economic evaluation for key customers, new markets, or special promotional strategies

Optimization
- Maximizes network revenue by optimizing the mix of allocation and ad-hoc demand
- Generates network-optimal hurdle rates that reflect real costs as well as opportunity costs
- Evaluates shipment requests based on real-time, dynamic pricing
- Predicts and continuously monitors materialization behavior to dynamically adjust the overbooking profile
**Module overview**

**Demand Forecasting and Capacity Forecasting**
The PROS O&D Cargo Demand Forecaster generates distinct O&D forecasts for bookings and cancellations at levels down to the specific commodity type, rate class, and customer. The system dynamically synchronizes with the latest schedule changes, passenger forecasts, and changes to allocations to determine available cargo capacity in real time.

**Network Generation**
The Network Generator holistically incorporates flight and truck schedules and operational rules such as max/min connection times to provide best-fit and alternative routes for all demand.

**Network Optimization and MT Position Translation**
The MT and ST Network Optimizers maximize net revenue by establishing the best possible balance between inventory supply and expected demand. The optimization process considers weight, density, rate, and cost to generate the optimal weight-and-volume allocations and hurdle rates. PROS industry-leading dynamic programming optimization considers every booking and cancellation as they occur throughout the day, providing the optimal hurdle rates for shipments in real-time. The Position Translator uses configurable mixing rules to convert cargo into positions.