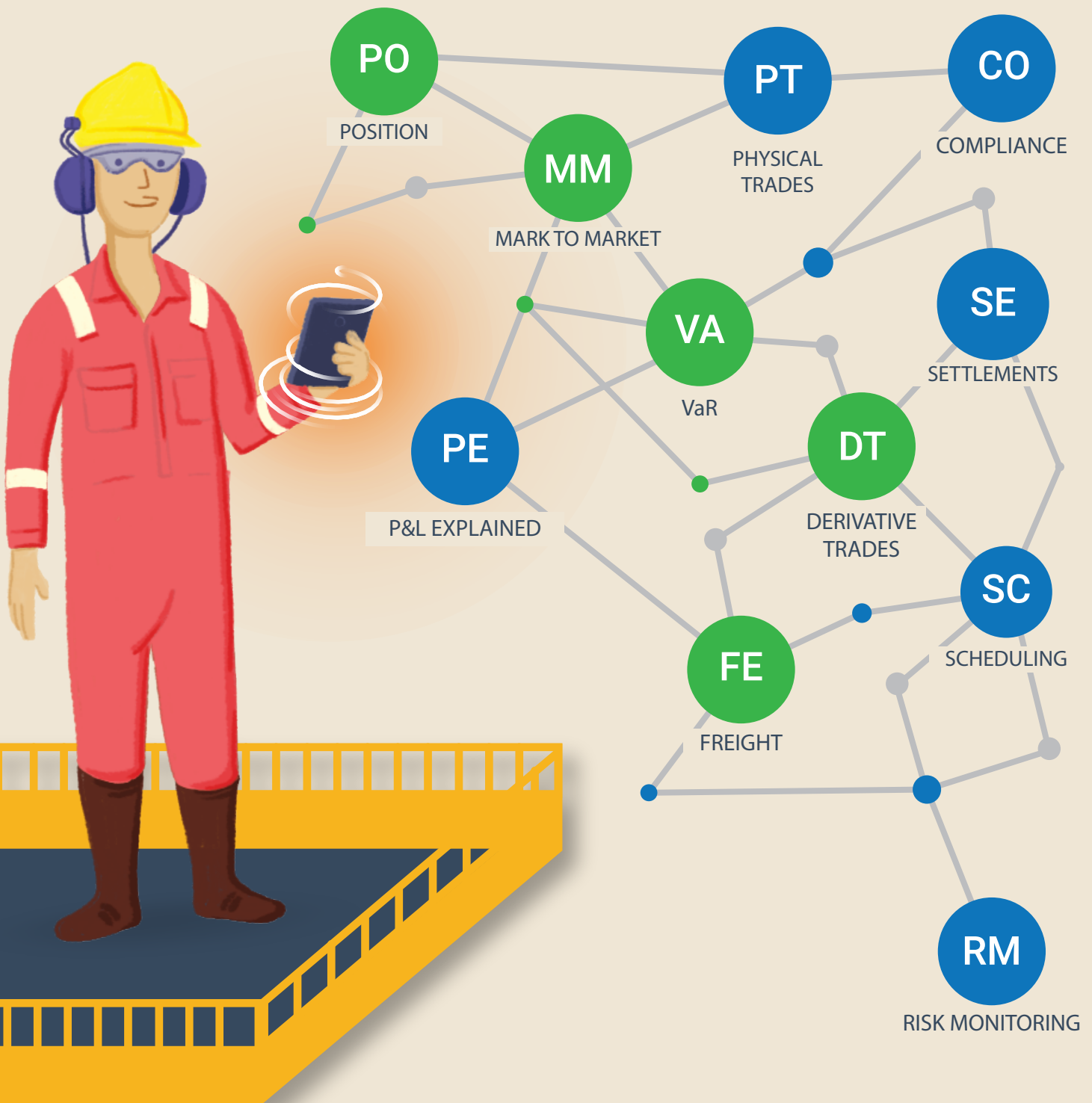


## Modern ETRM for Crude Oil and Refined Products

Mitigate risk, manage physical movements, and optimize decision-making in the ever-volatile crude and refined markets with Eka's CTRM Platform for Crude and Refined Oil



# Overview

The oil markets are undergoing rapid change. Global economies are slowing. Supply is abundant and prices are tanking. But history tells us that lows are frequently followed by all-time highs. The net effect is that the complexity and volatility of the crude and refined markets are here to stay and will increase in the coming years. It is important that marketers, refiners, and exploration and production (E&P) companies have real-time, advanced systems in place to mitigate risk, manage physical movements, and optimize decision-making.

Trading and Risk Management in Modern Energy Markets Call For

## Digital Intelligence

Pre-built and powerful solutions for trading and risk management to produce the best insights. Automation of processes to free up time to focus on what's important.

## Faster Decision Making

An ETRM solution that accurately predicts conditions of markets and understands likely points of failure using historical data, market and customer trends.

## Flexible Solutions

Flexible and scalable trading solutions that scale up or down as per business requirements - no more large or wasted investments.

## Greater Visibility

Visibility into every part of the trading value chain for better optimization with real-time feeds and updates on events as they happen.

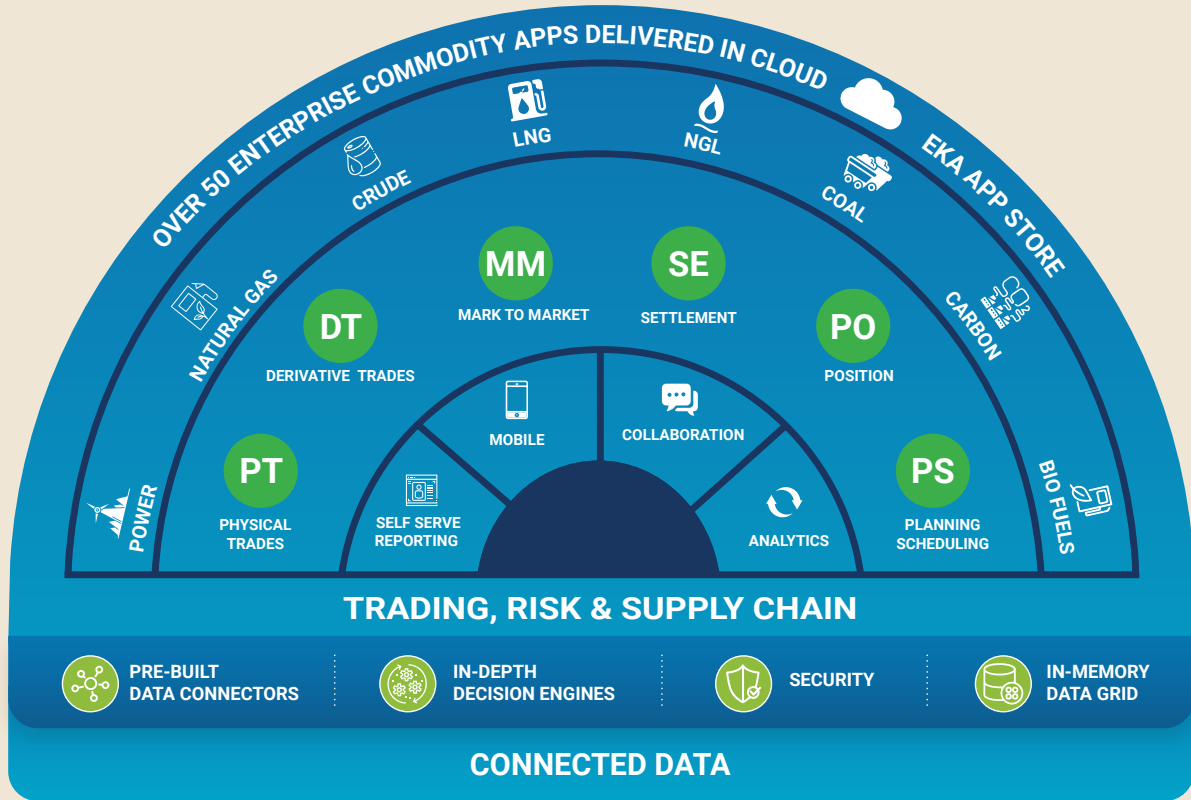


eka ▶

Eka's Digital ETRM Platform is the only solution built to serve businesses in Crude Oil and Refined commodities. Its modern architecture enables traders, risk managers, schedulers, and back office personnel to gain a real-time view of required information from original trade through to final destination.

# Why Eka ETRM for Crude Oil and Refined Products?

Driven by a new age architecture, Eka provides the only commodity platform with a complete suite of enterprise apps across the commodity value chain - from trading & risk, to supply chain operations and downstream.



**FASTER DECISION MAKING**  
 Move at the speed of markets by leveraging real-time insights across position, P&L and risk to spot opportunities, reduce risk and increase profits.

**MODERN ARCHITECTURE**  
 Benefit from a modern architecture that breaks legacy CTRM systems into modern, enterprise apps, enabling instant speed and scalability at the fraction of traditional CTRM cost.

**FASTER GO-LIVE**  
 Add any functionality in weeks, with plug-n-play enterprise apps seeded with open APIs and connectors that link previously isolated systems.

**MULTI COMMODITY**  
 Enterprise apps on a single platform built to serve asset classes you operate in - crude and refined products, natural gas, natural gas liquids, liquefied natural gas, power, coal, and renewables.

**MOBILE FIRST**  
 Built to support the way business users work today, Eka's apps come with a mobile first approach allowing users to work anywhere with information available to them 24/7.

**FASTER ADOPTION**  
 Adapt to any change with on demand, self-serve reporting, delivered in minutes with a cloud native CTRM and a user-friendly interface.

# One ETRM for your entire business - from trading and risk management to supply chain and logistics.

Eka's ETRM platform provides true depth of functionality that addresses the nuances of each asset class in crude and refined products. Eka's ETRM apps are built to fully support unique requirements of trading crude and refined products and include a comprehensive set of exchanges and instruments.

Since all Eka solutions are hosted on a single platform, businesses are able to benefit from reduced complexity and total cost of ownership.

Asset Class / App Modules	Crude Oil	Refined Products	Petrochemicals	NGL	chemicals	Noncryogenic Liquids
Physical Trades	✓	✓	✓	✓	✓	✓
Logistics & Inventory	✓	✓	✓	✓	✓	✓
Settlements	✓	✓	✓	✓	✓	✓
Derivatives	✓	✓	✓	✓	✓	✓
Position/MTM	✓	✓	✓	✓	✓	✓
Risk	✓	✓	✓	✓	✓	✓



Instant integrations. Connect any system, exchange, market feeds, etc. Instantly with open APIs and in-built connectors ready for integration. Connect enterprise system from Oracle, Net suite, Workday, Salesforce, etc. Import data from third-party systems from accounting packages and market data (live feeds) to ERP, CRM, SCM, treasury, procurement and inventory systems.

# Cloud & Security

Eka's solutions are cloud native, built from the ground up for today's cloud environment. Our platform and solutions empower users with security designed for how they work, without slowing them down, while protecting sensitive data in the cloud.

- ◆ Enterprise-grade security for your data
- ◆ Independently assessed for compliance to industry standard strict security guidelines, including SOC 2 Type I, GDPR
- ◆ Single sign-on (SSO) via industry standard authentication protocols
- ◆ Encryption of data in transit and at REST
- ◆ Integrated with best-in-class DLP, EMM and archival partners
- ◆ Cloud-platform led strategy



# Mobile

Mobile apps provide access to real-time data, allowing users to stay on top of volatile markets and make the most of opportunities as they arise. The mobile view is also designed to let users collaborate better and make critical trading decisions faster with real-time access to position, P&L and risk data.

- ◆ Stay connected 24/7 - Analyse data, consume alerts, share insights, and make decisions on-the-go
- ◆ Easy-to-use mobile app - Swipe to view reports, zoom in on insights, share screenshots on chat, and resolve issues on-the-go
- ◆ Robust cloud foundation – Enjoy consistent and current data views regardless of where you access the apps
- ◆ 100% security guaranteed – Remain confident about data security even if the device is lost with extensive authentication protocols applied to all data on cloud



We understand the specific and unique requirements of oil companies, including marketers, refiners, and exploration and production (E&P) companies. We know that efficiently managing volatile prices and logistics is critical to your success.

# Key Apps

PT

## Physical Trades

- ◆ Manage multi-location contracts, templates, contract confirmation, and more
- ◆ Quick capture of trade using defaulting and index-based techniques from user behaviour
- ◆ Generate multiple contract items as per delivery schedules spread across monthly and quarterly
- ◆ Special handling on Contract items – Delivery washouts, special settlement, allocations and fulfilments
- ◆ Plan and track all tasks efficiently with workflow and activity management
- ◆ Trade capture and management of physical contracts with various price types – flat, index and formula based
- ◆ Manage liquid products, multi-location contracts, templates, contract confirmation, and more
- ◆ Fast and easy manoeuvring to all operations linked to physical contracts and other apps

DM

## Derivatives Management

- ◆ Link derivative deals with trading strategies, books or physical deals
- ◆ Create, store and retrieve preferred trades; create trade templates for review and approve deal detail in pro-forma
- ◆ Capture and value trade in swaptions
- ◆ Trigger and monitor options exercise dates with positions

### Exchange Derivatives & FX

- ◆ CME WTI Futures & Options
- ◆ CME RBOB Futures & Options
- ◆ CME Heating Oil Futures
- ◆ Fx Trades Capture & Valuation
- ◆ Physical Avg Fixing using Fx Rates
- ◆ Capture of Fx basis in Physical Contract
- ◆ Allocation of Open Physical contracts to Fx Trades
- ◆ Derivative Trade Blotter
- ◆ Invoicing OTC Derivatives
- ◆ ICE Gas Oil Low sulphur Futures
- ◆ ICE Brent Futures & Options
- ◆ Allocation of Derivatives to Physicals
- ◆ Creation of Internal Derivative Trade

### Exchanges

- ◆ Chicago Mercantile Exchange
- ◆ The Intercontinental Exchange

**PC**

## Pricing Curves Configurations

- ◆ Take advantage of dynamic pricing by defining charter rates upfront on a trade. Users have flexibility to link user defined Forward Freight Formula pricing, and index pricing to view real time exposure and Mark to Market calculation, in addition to managing event-based pricing
- ◆ Support fixed pricing, derivative plus premium, discount and basis, index, trigger pricing and formula-based pricing
- ◆ Support multiple quotational periods for contracts
- ◆ Easy rules editor supporting a whole gamut of complex formulae across multiple asset classes
- ◆ Add contract specific features based on delivery, shipment, bill of lading, look back pricing and more while pricing contracts
- ◆ Support various pricing features – MAMOS, MAMA, MBMOS, MBMOA and Lookback
- ◆ Price rules editor supports all kinds of premiums, discounts, conditional S curves, freight and other miscellaneous charges
- ◆ Apply event-based offsets and holiday rules on price curves
- ◆ Manage price escalation and de-escalation easily based on quality

**IM**

## Inventory Management

- ◆ Dynamic inventory allocation system managed via discrete and consolidated stocks, while facilitating blending and mixing of products at onsite or offsite locations
- ◆ Mass to volume quantity conversions available at each stage and captured in the system
- ◆ Adjust inventory anytime during a voyage and manage losses while the product is in transit and subsequent posting to P&L
- ◆ Estimates and accruals

**AC**

## Accounting

- ◆ Generate pre-payment, provisional and final invoices for various items through the entire life cycle of a physical trade
- ◆ Set invoice authorization and threshold limits
- ◆ Create service or non-service invoices, credit or debit notes and adjustment invoices
- ◆ Record unallocated cash flows generated from overpaid invoices
- ◆ Get both consolidated and individual view payments and receipts in sync with invoices submitted till date
- ◆ Robust system of invoice approvals, and easy third-party accounting integration for passing or posting GL entries
- ◆ Create proforma, provisional, final and pre-payment invoices, with flexibility to record invoices against ticket movements, title transfers, fixed prices
- ◆ Split invoice for managing supplies to multiple third parties involved through a voyage
- ◆ Flexible document management system

**LP**

## Logistics and Planning

- ◆ Plan bulk or container shipments while capturing end-to-end activities for cargo movement from inventory to vessel. This includes
  - ◆ Vessel charting
  - ◆ Cargo scheduling
  - ◆ Preloading (splitting BL quantity as an individual delivery to cater to multiple customers)
  - ◆ Loading, sales appropriation and discharging of a vessel
- ◆ Robust tracking and scheduling of goods via movement requests created at each stage of cargo movement
- ◆ Advance cargo planning using Cargo Nomination Application (CAN) and call offs process for multiple locations with multiple delivery schedules
- ◆ Capture time and voyage charter contracts and allocation of cost against each voyage
- ◆ Record cargo's physical internal and external movements, title transfers on or off waters with associated primary and secondary cost
- ◆ Manage multiple load and discharges during a single voyage, while blending and mixing products at onsite & offsite locations



PO

## Position, COGS & P&L

- ◆ Open and inventory position
- ◆ Mark to Market (Physical & Derivatives)
- ◆ Realized and unrealized P&L (Physical & Derivatives)
- ◆ FX Exposure
- ◆ Valuation /EOD/EOM of physicals & derivatives

RA

## Reporting

- ◆ Mark to Market and Position reporting
- ◆ Credit exposure reporting
- ◆ P&L and P&L Explained reporting
- ◆ Reconciliations
- ◆ Daily Mark to Market and P&L reports
- ◆ Inventory reporting
- ◆ Financial reporting
- ◆ Position reporting and Portfolio management

CP

## Contract Pricing

- ◆ Define formula price with multiple curves and different QP for each curve
- ◆ Support forward assessment curves in price formulae, support for first nearby, second nearby and specific months
- ◆ Automatic roll-off of pricing period using first nearby, second nearby and such
- ◆ P/D schedule, price escalator and de-escalators
- ◆ Trigger pricing, support for spot curves and events-based pricing
- ◆ Price differentials, floor and ceilings (S curves) other miscellaneous costs

# Summary

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Eka's ETRM Platform for Crude and Refined Products provides businesses a comprehensive solution to support front-to-back-office workflows, physical and financial deal capture, risk position reporting, logistics, settlement and accounting.

Key Features:

- ◆ Captures all pricing and necessary cost components to accurately calculate settlement, including transportation, demurrage, product re-grades, logistics costs and differentials
- ◆ Delivers an aggregated, real-time weighted or volumetric and financial view of positions and risk in a single system
- ◆ Utilizes real-time reporting to optimize inventory management
- ◆ Advanced Physical Trade capture helps save valuable time and significantly improves efficiency in contract management
- ◆ Captures simple and complex pricing configurations along with premium or discount matrix for a trade

## Digital Commodity Management Platform

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Eka's modern commodity platform is designed for trading companies that need to flex, grow, and adapt to market forces. It is the only trade management platform that breaks that delivers GTM functionality in a collection of powerful apps that work across the commodity value chain, enabling faster, data-powered decisions.

Eka's platform offers end-to-end functionality and rapidly configures every workflow from contract negotiations to invoicing to shipments. It empowers trading companies to explore new growth avenues with its suite of domain rich, enterprise apps.

## Key Features

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- ◆ **Power of cloud & mobile:** Anytime, anywhere access
- ◆ **Extensible:** Add-on apps from the app store, to meet additional functional needs
- ◆ **Scalable:** Grows with the business
- ◆ **Mine data, share insights:** Use data for faster decision making. Share information with your team and stay up-to-date
- ◆ **External connectors:** Pre-built connectors. Bring all your data together - Salesforce, SAP, Oracle, spreadsheets
- ◆ **Self -service:** Create your own dashboards, data views, drill downs, ad-hoc reporting et al

# About EKA

Eka is a global leader in providing digital commodity management solutions driven by Cloud, Blockchain, Machine Learning and Analytics. The company's best-of-breed solutions serve the entire trading value chain across agriculture, energy, metals and mining and manufacturing markets. Eka is reimagining commodity management with a new age architecture that breaks monolithic CTRM and ETRM systems into bite sized chunks of powerful, enterprise grade apps, thereby enabling faster implementation, adoption and decision making. Eka's mobile-first, enterprise apps are embedded with commodity specific algorithms that empower businesses to stay on top of volatile markets by letting them scale at will, go live faster, and achieve better value for their investments.

Eka has offices across the Americas, Asia, Australia, and EMEA serving 100+ customers globally across multiple commodity segments.

To learn about how Eka can add value to your operations, email us at [info@ekaplus.com](mailto:info@ekaplus.com)

## Eka Software Global Offices

### USA

Eka Software Solutions, Inc  
101 Merritt 7, Suite 300  
Norwalk, Connecticut  
06851  
+1.203.810.4250

### India

Eka Software Solutions  
Embassy Tech Village SEZ,  
Phase II, Aster Building  
2A, East Tower, Outer  
Ring Road,  
Devarabeesanahalli,  
Bengaluru, 560103, India  
+91.8040819200

### Dubai

Eka MEA DMCC  
44th Floor, Mazzaya  
Business Avenue, BB2JLT,  
Dubai  
+971529157221

### UK

Eka Software Solutions Ltd  
Dorset House, Regent  
Park, Kingston Road,  
Leatherhead, Ashted,  
KT227PL, United Kingdom  
+44.1372824776

### Australia

Ek aCTRM Solutions Pt Ltd  
Level 5/185, Victoria  
Square, Adelaide - 5000,  
SA, Australia  
+618.8444.5900

### Canada

Eka Canada Inc  
715 5th Avenue SW, Suite  
610, Calgary, AB, T2P2X6  
Canada  
+1.403.237.7740

### Mauritius

Sybex Mauritius Limited  
C/O CIM Global Business,  
Les Cascades Building, 33  
Edith Cavell Street, Port  
Louis, Mauritius

### Singapore

Eka Software Solutions Pte Ltd  
17 Phillip Street, #05-01 Grand  
Building, Singapore, 048695  
+65.9069.1552