

Deploy Vertex O Series at the Edge

Leverage the latest edge computing technology to calculate tax at local points but manage them centrally for rapid deployment, high availability, improved performance, and a streamlined tax technology landscape.

- ✓ Maximize offline resiliency for in-store checkout without sacrificing features or accuracy.
- Create high performance and highly scalable checkout for e-commerce operations.
- ✓ Create high availability backups to ensure uptime for tax processes.
- Leverage existing infrastructure across the organization to build creative solutions optimized for your IT organization.
- ✓ Integrate with existing container/ edge computing infrastructure.
- Centralize configuration and reporting for all local tax engines.
- Maximize control over security in remote locations.
- ✓ Install, monitor, and maintain multiple remote tax calculation clusters.

Move calculation closer to the points of transaction

Edge computing continues to evolve how systems work together, how transactions are processed, and how you manage your technology footprint. Vertex O Series continues to deliver cutting edge technology to maximize performance, reliability, scalability, and security of your tax calculation system.

Centrally manage clusters located anywhere on the globe

Vertex allows you to create tax engine "container images" that can be deployed anywhere in the world with a direct link to a central O Series control center. Tax is calculated in real time against the container image at the point of sale or in a localized data center utilizing modern edge computing technology. Transaction data is streamed to a central O Series deployment to enable reporting, analytics, compliance, and maintenance.

Maximize system performance, flexibility, and control

Vertex O Series Edge enables IT departments to:

- Customize different endpoints for specific business or regulatory needs.
- Manage the whole system with reduced effort and no custom development.
- Maximize performance while reducing resource requirements.

Tax calculation is no longer subject to network and latency issues. IT departments have more flexibility in implementation, deployment, and maintenance. Tax departments have a centralized view to local tax calculation configurations and performance.

Flexible, Reliable Tax Performance for Your Organization

Vertex O Series Edge opens up an entire new dimension of creative deployment models to fit your business needs for tax and IT. Below are just a few supported use cases:

Scale IT Operations

Streamlined deployments, self-updating clusters, and scaling — all centrally managed, efficient, and repeatable.

Right-Sizing

Scale up to meet peak load demands, and scale back down during lighter traffic to save costs.

Rapid Expansion

Deploy regional or local clusters in minutes with minimal effort and off-platform setup.

Business Continuity

Keep transactions processing with simplified failover and high-availability solutions.

Centralized Automation

Single management dashboard for high visibility of relevant information, fast responses to issues, and configurable automation for updates.

Financial Predictability

Minimize unexpected tax costs by using the same calculation at checkout and the back office.

Checkout Completion

Decrease cart abandonment with incredibly fast response times and resistance to disruption.

Why Choose Edge Deployment?

Vertex O Series Edge is a cloud-based system that allows you to configure and create container images of the O Series tax engine that run locally on premise or in the cloud to enable the benefits of Edge computing for tax calculation.

Improve Performance and Consistency

- Eliminate most (if not all) network latency in processing a transaction.
- Edge containers can be scaled based on demand.
- By running locally, Edge containers provide consistent, predictable performance.
- Eliminate tax-related friction points in the retail checkout experience.
- Multi-node clusters capable of supporting workloads of any size.
- Markedly reduce resource requirements needed to maintain performance levels.

Reduce Potential Points of Failure

- Minimize network connectivity and bandwidth issues affecting local, in-store retail settings.
- Maximize scalability and eliminate latency on websites, especially during peak traffic.
- Ensure a backup in case of tax system failure.

Improve Efficiency and Scalability

- Enables centralized system configuration and reporting with local tax calculation.
- Ability to customize containers for each line of business or any other way you organize your operations (E.g., deploy only the tax content needed for that location).
- Reduce maintenance with "EdgeLink" self-updating endpoints providing full visibility and management of edge cluster deployment and updates from a single, centralized control center either at the push of a button or with full automation.
- Visibility to and control over many localized tax engine clusters.
- Automated consolidation of transaction data for centralized reporting.
- Designed to work with most modern containerization software brands.

Improve Data Security

- Ability to keep your customers' Personal Identifiable Information (PII) data behind your firewall.
- Keep the host system and containers updated with the latest security patches.



Localized and Centralized

Clients can use O Series Edge to create a hub-and-spokes approach to tax calculation (Fig. 1).

- Clusters of tax engine containers are deployed near the transacting systems for high-performing tax determination.
- Tax is calculated in real time, and transactions and telemetry are streamed to a central tax system hub for reporting, analytics, compliance and maintenance.

Fig. 2

What is a Container?

O Series Edge enables the user to create tax system "container images" that can be deployed locally.

- A container image is a pre-packaged unit (Fig. 2) containing all the dependencies required
 to run the software (software, server, tax configuration, etc.). Each container image can be
 customized to a specific location's needs (i.e., only the tax content required for that location).
- Containers are used to set up many similar multi-component systems in different locations.

To learn more, contact a Vertex representative at 1-800-355-3500 or visit vertexinc.com.

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