VERTEX®

Deploy Vertex O Series *at the Edge*

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

Edge deployment is ideal for these companies:

✓ Retailers with in-store operations who require highly available checkout solutions.

✓ Order-To-Cash and Procure-To-Pay operations requiring a highly scalable, low latency tax solution.

✓ Companies who want to deliver a frictionless customer checkout experience.

✓ Companies who want a backup system to ensure uptime for their cloud or on-premise tax engine.

✓ IT departments who have already adopted edge computing, or who want more advanced technology tools for more creative implementations.

✓ Companies with security concerns about sending data outside their firewall.

Move tax calculation to the point of transaction

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

Manage multiple endpoints with containers

Vertex allows you to create tax engine "container images" that can be deployed anywhere in the world with a direct sync to a central O Series hub. 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 main hub to enable reporting, analytics, compliance, and maintenance.

Maximize system performance, flexibility, and IT control

Vertex O Series Edge enables IT departments to:

- Manage a large system of localized endpoints using the systems you have in place.
- Customize different endpoints for specific business or regulatory needs.
- Manage the whole system with much less effort and no custom development.
- Maximize performance while reducing resource requirements.

Tax calculation is no longer subject to network connection and latency issues. Tax departments have centralized control with needed visibility to local tax performance. IT departments have more flexibility in implementation, deployment, and maintenance.

Flexible, Reliable Tax Performance for Omnichannel Retailers

Retailers selling across multiple channels have unique tax and IT needs in each of those channels. Vertex O Series Edge provides a reliable solution that avoids the common pitfalls and gives IT departments ultimate flexibility and control.

Retail Point-of-Sale

- Tax is calculated on premise (locally) so bandwidth and network connectivity are not an issue.
- Edge containers can run in parallel, even in a back-office server, so you can configure and scale stores independently.
- Personal Identifiable Information (PII) is not sent across the firewall for tax calculation, eliminating security issues.
- Tax system updates across all local deployments can be automated and pushed from a central location.
- Local data and telemetry are streamed to a central hub for reporting.

Retail e-Commerce

- Tax is calculated locally so downtime, bandwidth, latency are not an issue.
- Deploy multiple tax engines in parallel and scale up/down to ensure performance during peak traffic.
- Tax engines can be deployed in every data center where the e-commerce site is hosted.
- Local tax engine can operate as the primary tax engine or as a backup.
- Improved control over your technology infrastructure.

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 configured to scale based on demand.
- By running locally, Edge containers provide consistent, predictable performance.
- Eliminate tax-related friction points in the retail checkout experience.
- Multi-node configurations capable of supporting the largest workloads.
- Markedly reduce resource requirements needed to maintain performance levels.

Reduce Potential Points of Failure

- Minimize network connectivity and bandwidth issues in 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 business (i.e., deploy only the tax content needed for that location).
- Reduce cumbersome and resource-heavy maintenance of a wide network of local endpoints.
- Visibility to and control over many localized tax engine endpoints.
- Automated consolidation of transaction data for centralized reporting.
- Designed to work with most modern containerization software brands.

Improve Data Security

- Ability to keep all your Personal Identifiable Information (PII) data behind your firewall.
- No need for additional data security steps.

Fig. 1

Localized *and* Centralized

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

- A series of tax system "container images" that include everything needed to run the tax engine (software, server, tax configuration, etc.) are deployed locally on premise near the transaction systems.
- Tax is calculated in real time, and transactions and telemetry are streamed to a central tax system hub for reporting, analytics, compliance and maintenance.
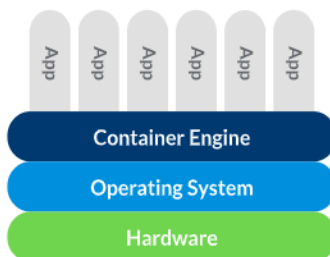

Fig. 2

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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