Expand Market Reach and Revenue Opportunities with The 128 Technology Flexible Service Edge: Extensible Platform Enables a Variety of High-Value Services

Overview – One Platform, Many Possibilities
The 128 Technology Flexible Service Edge helps service providers move up the value chain, extend market reach, and expand revenue opportunities. The versatile WAN service edge platform accelerates time-to-market for a wide range of differentiated enterprise and SMB offerings, helping service providers attract, retain, and monetize customers.

Redefining the WAN Service Edge
The 128 Technology Flexible Service Edge helps service providers streamline the introduction of high-margin, cloud-centric services for the digital era. The solution provides an extensible foundation for services innovation, helping you evolve your offerings and move up the value stack on your own timeline.

Start by deploying the solution as a smart Layer 3 Network Interface Device (NID) to help you manage your cloud connectivity or internet access services and establish an account presence. Unlike a traditional dumb demarcation device, the 128T L3 NID intelligently monitors, manages, and polices traffic at the WAN edge for ultimate visibility, efficiency, and control.

Business Benefits
- Extend market reach – offer a variety of SLA-backed, cloud-centric services
- Grow revenues – move up the value stack and increase upsell opportunities
- Increase margins – slash operations expenses; reduce bandwidth costs by 30-50%; increase head-end router densities 3X
- Improve time-to-market – introduce high-value services quickly and cost-effectively
- Accelerate revenues – turn up 100s of customer sites per day with no truck rolls

Operational Benefits
- Increase visibility – gather detailed application-level and session-level usage and performance statistics
- Improve troubleshooting and customer satisfaction – reduce MTTR with extensive remote diagnostics
- Boost service quality and end-user satisfaction – prioritize traffic based on application characteristics
- Improve performance and resiliency – intelligently route traffic based on policies and real-time conditions

Figure 1. Deploy the Flexible Service Edge as a 128T L3 NID, a 128T Managed Router or a 128T Session Smart Router

Around the world, companies of every size and industry are migrating applications and services to the cloud to accelerate the pace of business and streamlining operations. Take advantage of this massive market opportunity by rolling out a variety of high-value, cloud-centric services—efficiently and cost-effectively—at your own pace. Regardless of where you are on your service transformation journey, the 128 Technology solution can help you improve business performance and gain a competitive edge in today’s crowded marketplace.
Extend your investments by leveraging the platform as a managed router or Session Smart Router to deliver more advanced networking and security services including SD-WAN, IoT, and wireless access. The Flexible Service Edge is fully software-based, so you can expand functionality and roll out new services right over the network, with the click of a button, via a simple license update.

With the 128 Technology solution you can turn-up edge devices, provision services, and troubleshoot problems from a central network operations center (NOC), without on-premises intervention. The solution helps you avoid truck rolls, increase service velocity, and slash operations expenses.

Intelligent Layer 3 NID Provides Application-Level Insights

You can deploy the 128 Technology Flexible Service Edge as an intelligent Layer 3 Network Interface Device to enable or improve internet access, cloud connectivity, or VPN services. Unlike a Layer 2 NID, the 128 Technology solution supports any fixed or wireless access interface (internet, Carrier Ethernet, 4G/LTE etc.) for ultimate flexibility. The intelligent edge device provides detailed visibility into application-level usage and performance data, helping you monitor service quality, streamline diagnostics, and improve customer satisfaction. You can also upsell advanced analytics or AI services for supplemental revenues. Once deployed, the 128T L3 NID serves as a launch pad for future business opportunities.

Key advantages of the 128T L3 NID include:

- **Easy installation and setup** – avoid truck roll delays, hassles, and expenses, and turn up 100s of customer sites per day with zero-touch provisioning and plug-and-play deployment.

- **Multiservice demarcation** – standardize on a single WAN edge termination device for all fixed and wireless access services, including future 5G services.

- **Single pane-of-glass, centralized management** – monitor, configure, and administer edge devices and troubleshoot issues from a central NOC to contain operations expenses, accelerate problem resolution, and improve customer satisfaction.

- **Intelligent instrumentation** – gain valuable insights into key usage and performance data (bandwidth utilization, latency, jitter, packet loss, etc.) on a per session, per segment basis using built-in tools or standards-based network management platforms and analytics solutions. Statistics are gathered and broken out per application. And each application is identified by name.
Managed Router Platform Strengthens Customer Relationships

You can use the Flexible Service Edge as a managed router to move up the value chain, strengthen customer relationships, and increase margins and revenues. The 128 Technology solution makes it easy to configure, monitor, and control routing services on behalf of your customers. You can improve business results by extending your value proposition, becoming a trusted partner, and helping your customers improve network performance and reliability, and free up technical resources.

Key advantages of the 128T Managed Router include:

- **Dynamic routing** – improve resiliency and balance performance by routing traffic across multiple WAN interfaces or service providers.
- **Comprehensive traffic engineering** – optimize service quality and end-user experiences with granular QoS controls and traffic shaping.
- **Secure access controls** – strengthen security and mitigate risk with stateful layer 4 network firewall functionality.

Session Smart Router Unleashes Services Innovation

You can use the Flexible Service Edge as a Session Smart Router to deliver contemporary services like managed SD-WAN, IoT, and other edge compute services that require application-centric routing functionality and advanced security capabilities. The 128T Session Smart Router intelligently routes traffic based on administratively defined policies and real-time network conditions, automatically selecting the right path for the right application at the right time for ultimate performance, resiliency, and service quality.
Key advantages of the 128T Session Smart Router include:

- **Strong security with Secure Vector Routing** – ensure strong data security without the overhead of traditional encryption protocols like IPsec. The 128T Session Smart Router supports per service, per session payload encryption, automatically detecting already-encrypted traffic flows to avoid double encryption.

- **Advanced session management and multipath routing** – optimize performance, resiliency and service quality with application and policy-based multipath routing. Avoid hair-pinning and latency by routing and policing traffic at the edge.

- **Global, service-centric control plane** – improve scalability and programmability with a universal, service-centric control plane. With the 128T Session Smart Router, you can easily scale policies across 1000s of customer sites. The Session Smart Service and Topology Exchange Protocol (STEP) enables a truly global view of service, tenancy, and policy information.

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**128 Technology Flexible Service Edge Delivers Cloud Agility, Scalability, and Economics**

The 128 Technology Flexible Service Edge takes software-defined networking to a new level, providing fast, agile, secure connectivity with unmatched economics and simplicity. Ideal for delivering a wide range of cloud-centric services, the 128 Technology solution intelligently manages and controls traffic at the WAN edge—close to the customer—for ultimate speed, efficiency, and scalability.

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Top 128 Technology Flexible Service Edge functions and benefits include:

- **Service-centric fabric** - 128 Technology offers the industry’s only software-defined, session-based fabric designed to recognize and maintain services and tenancy context across the entire extended network. Ideal for multi-cloud, 5G, and MEC use cases, the 128 Technology solution enables consistent policies and user experiences across networks, clouds, and locations.

- **Unmatched economics and choice** - the 128 Technology Flexible Service Edge solution is a pure software solution that runs on commercial off-the-shelf servers and popular hypervisors for ultimate choice, simplicity, and cost savings. The solution reduces access, interconnect, and transit expenses by minimizing protocol overhead and reducing WAN bandwidth consumption; reduces capital equipment expenses by consolidating and unifying CPE; and reduces operations expenses by simplifying installation, operations, administration, and maintenance functions.
• **High speed and scalability** – the 128 Technology solution optimizes performance and scalability by eliminating tunneling overhead, and prioritizing, controlling, and routing traffic at the edge to avoid backhaul latency. Zero-touch provisioning, centralized management, and global policies eliminate site visits and accelerate customer deployments.

• **Cloud-defined agility** – the 128 Technology Flexible Service Edge provides an adaptable, application-aware fabric that intelligently routes traffic based on policies and real-time network conditions for ultimate programmability and service agility.

• **Built-in zero-trust security** – the 128 Technology solution supports zero trust (deny by default) routing, AES256 payload encryption, per-packet authentication, and end-to-end hyper-segmentation to segregate customers and protect applications and infrastructure against data loss and malicious attacks.

**SUMMARY**

The 128 Technology Flexible Service Edge lets you launch a variety of high-value, cloud-centric services—quickly and cost-effectively. The solution serves as an extensible platform for innovation, allowing you to enable new functionality and deliver new services in an incremental, non-disruptive fashion with a simple software license update. The 128 Technology solution redefines the WAN Service Edge, helping you extend your value proposition, strengthen customer relationships, and restore margin and revenue growth in today’s hypercompetitive marketplace.

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