



Highlights:

- Connects any source of usage data with any downstream application
 - Provides greater control over system configuration with an open design
 - Enables consolidation and replacement of multiple legacy data integration systems
 - Supports billing mediation, usage data management, policy control and service assurance
 - Scales to virtually any size with distributed execution
 - Runs on industry-leading computing and storage platforms from IBM
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DigitalRoute and IBM: optimizing data streams

A flexible, high-performance mediation solution that enables any-to-any data transfer with intelligent controls that help ensure efficiency and reliability across the network

Communication service providers (CSPs) are struggling to keep up with a huge and rapidly expanding amount of data. Virtually everything customers do — every call they make, every app they download, every change they request — generates data that is absolutely vital to the CSP's ability to optimize service, generate revenue and stay competitive. Yet very few CSPs have a reliable, unified solution for managing tens of billions of critical customer data records (CDRs).

CSPs must introduce new technologies and services continuously, along with new mediation platforms and custom point-to-point integrations. Adapting the entire IT infrastructure responsible for funneling usage data to downstream applications would be far too complex, time-consuming and expensive. Instead, CSPs simply introduce additional systems to address the problem at hand. The resulting patchwork of mediation-like solutions is expensive to maintain and difficult to scale. This makes it difficult for CSPs to manage the overflow of data, control costs, simplify operations and turn valuable data into profits and growth.

DigitalRoute® and IBM provide a more effective solution, one that combines the most flexible and capable mediation platform in the industry with best-of-breed computing and storage platforms. This powerful solution enables CSPs to replace legacy systems, reduce costs and transform raw data into powerful customer insight.

Solution Overview

What DigitalRoute brings to CSPs is MediationZone, a powerful and versatile product that seamlessly connects any source of usage data with any downstream application, ensuring that all of the systems in the provider's IT environment can communicate effectively.



Because it supports any combination of data exchange between any systems in both online (realtime) and offline (batch) modes, MediationZone enables CSPs to consolidate and replace multiple existing platforms for mediation and data integration. This makes the IT environment more streamlined and significantly reduces the time and cost required to maintain it. An optimized IT infrastructure also enables CSPs to react faster as the market changes, as well as provision and launch new services more quickly.

MediationZone ensures a higher degree of flexibility than competitive systems. Its modular, open-architecture design gives CSPs greater control over how the system is configured. In other words, CSPs can fine-tune the platform to address specific needs, adapt to new opportunities and technologies, and integrate new network components and applications — all in a more independent, self-sufficient and cost-efficient manner.

Right out of the box, however, MediationZone offers a broad set of standard capabilities. Processing functions include analysis, filtering, cloning, splitting, routing, normalization, correlation/aggregation, de-duplication, validation, enrichment and many more. It can integrate with equipment, systems and databases from a long list of leading vendors. The graphical workflow engine is highly intuitive, so MediationZone can be deployed quickly. All this enables CSPs to rapidly integrate access-level, core and other IT network elements with the large and growing list of business support systems (BSS) and operational support systems (OSS).

As a billing mediation system, MediationZone uses advanced data enrichment, consolidation and usage counting features to enable a significant reduction of downstream data while preserving the granularity of the information. For example, instead of sending 2,000 individual CDRs to the billing system every time a customer sends a text message, MediationZone tracks the total and sends a single CDR when the 2,000-message threshold is reached.

This intelligent approach extends to usage management as well, where MediationZone reduces the load on BSS and OSS applications by performing consolidation early in the processing chain. It ensures consistency of data across online and offline applications, and ensures the timely and correct tabulation of subscriber activities. This in turn enables a smooth transition toward a revenue management environment that is optimized for pricing service bundles, coupled with the availability of detailed realtime usage information.

MediationZone also supports advanced policy control, enabling CSPs to ensure fair usage and bandwidth allocation based on subscriber and service criteria. It extends the use of realtime policy decisions and end-user communication to all BSS and OSS processes that are connected to the customer experience. It supports dynamic creation of policy rules through simple configuration. This ultimately enables CSPs to use available network resources more efficiently, respond to changes more quickly and reduce costs with a unified policy control solution.

Service assurance is another area where MediationZone excels. Correlating data from all network segments, it reveals hidden service problems, proactively detects issues at the customer, network and session level, and helps eliminate the risk of service interruptions that can lead to higher churn rates.

To make sure CSPs can grow without limits, the MediationZone platform ensures virtually unlimited scalability by centralizing the control logic and distributing execution. This eliminates the risk of centralized architectures that are limited to the number of plug-in processors supported by the hardware. It also supports automatic, on-demand distribution of code and configuration to any number of collaborating networked servers, which reduces costs.

What IBM brings to the solution is the next-generation computing platforms and storage solutions that MediationZone runs on, so that CSPs can handle high volumes of data with very low latency. Specifically, IBM PureSystems™ provide a pre-integrated and optimized hardware/storage configuration that facilitates deployment according to predefined patterns to satisfy demanding requirements for scalability, availability and resiliency.

This creates an ideal situation for CSPs, which benefit from running one of the most capable, flexible and high-performing mediation platforms in the industry on an equally robust and reliable computing platform. Together, these components offer everything CSPs require to get rid of the current tangle of data integration and mediation systems and deploy a single solution that helps control the flow of customer data and leverage it to gain competitive advantage.

Solution Benefits

CSPs that choose the mediation solution from DigitalRoute and IBM can expect to realize a number of important benefits, including:

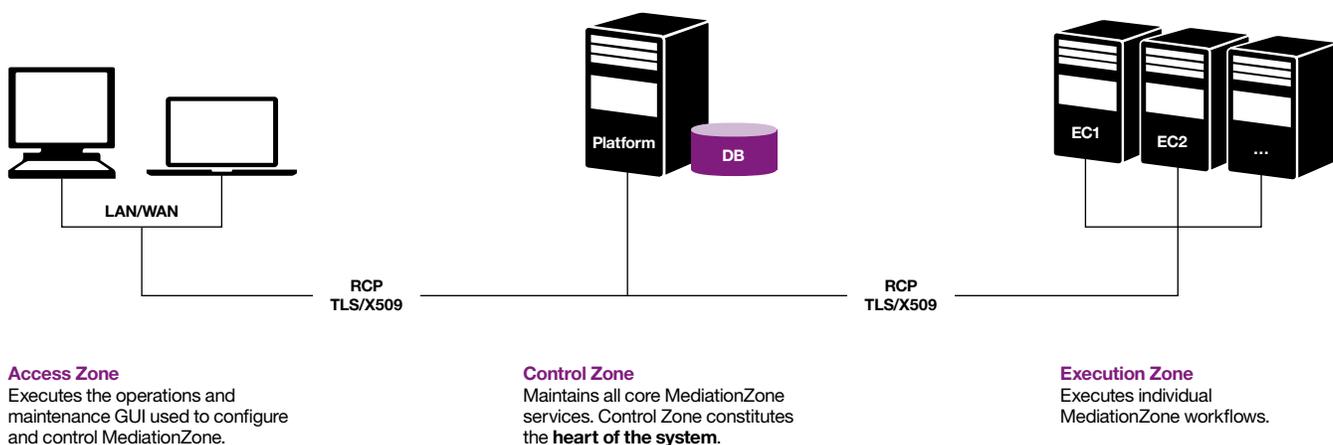
- **Optimized data streams** — MediationZone can apply an impressive list of capabilities to separate, manage and control the vast amounts of incoming data about subscribers and their usage. It ensures downstream applications receive only the data they need, with the frequency they require to maximize efficiency and reduce the risk of revenue loss.
- **Lower maintenance costs** — Because MediationZone features fewer points of integration and can handle any and all mediation scenarios, it enables CSPs to reduce the total number of systems needed to process incoming network data. With fewer systems to monitor, maintain and upgrade, total cost of ownership (TCO) is much lower.
- **Faster time to market** — New services cannot be launched unless the systems are in place and properly prepared to process the data they will generate. MediationZone offers exceptional flexibility and configurability, so that changes can be made quickly and easily with new offerings brought to market as soon as consumers demand them.

DigitalRoute and IBM: a closer look

The solution from DigitalRoute and IBM gives CSPs a dependable way to simultaneously address the growing complexity of the network and the critical importance of consumer data. The IBM components of the solution may include:

- **IBM PureSystems** — The innovative IBM PureSystems compute platform provides a pre-integrated and optimized hardware/storage configuration, which facilitates deployment according to predefined patterns to satisfy demanding requirements for scalability, availability and resiliency. This results in a much lower total cost of ownership and lower risk of configuration and operation errors.
- **IBM Storwize® V7000 Unified** — This virtualized storage system is designed to consolidate workloads into a single storage system for simplicity of management, reduced cost, highly scalable capacity, performance and high availability. It offers improved efficiency and flexibility through built-in solid state drive (SSD) optimization, thin provisioning and non-disruptive migration of data from existing storage. It can also virtualize and reuse existing disk systems, offering a greater potential return on investment.

DigitalRoute and IBM solution architecture



The mediation solution from DigitalRoute and IBM provides any-to-any capabilities that enable CSPs to manage large amounts of data, process it more efficiently and respond much more quickly to changing market needs.

DigitalRoute and IBM: powerful data management

DigitalRoute

DigitalRoute delivers a new approach to managing data, empowering organizations to liberate the value hidden in their usage information. DigitalRoute customers benefit from fewer integration points, reduced costs and flexible data management. Over 260 leading companies from around the globe are today actively using DigitalRoute technology to help meet their data management needs. A venture-backed, privately held company, DigitalRoute is headquartered in Stockholm, Sweden, with regional offices in Gothenburg, Atlanta and Kuala Lumpur.

IBM

IBM works with the top 1,000 CSPs worldwide, including all 20 of the largest global providers. IBM has created 10 Telecom Solutions Labs worldwide to meet the growing demands on the industry created by rapid adoption of smartphones, tablets and the mobile web. The IBM Service Provider Delivery Environment (SPDE) is an industry framework that provides the foundation for much of the software that runs the world's communications services. Built on best practices and patterns from client engagements with CSPs around the world, IBM SPDE helps deliver value-added services that launch smarter services, drive smarter operations and build smarter networks.

For more information

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To learn more about DigitalRoute, please visit:

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