

Verizon Split Data Routing (aka Dual APN)

Introduction



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What is Split Data Routing

Problem being Addressed:

As Business applications evolve from solely residing within a customer's corporate IT network to Cloud and Internet designations, customers with Private Network today are facing challenges in how to reduce or alleviate Internet data traffic within their IT corporate network to help reduce the costs they face in managing network capacity and security/firewall policies.

The Solution:

Split Data Routing provides the ability for a wireless device to have dual data sessions using a single wireless connection. The functionality is device driven where the APN Class 3 is assigned as VZWINTERNET and the APN Class 6 is assigned the Enterprise APN (e.g. the APN associated with the customer's Private Network). The device will route Internet designated data traffic using the Class 3 APN VZWINTERNET which will inform VZW data network to route to a Public Gateway for accessing the Internet; while data traffic categorized for the customer's Private Network will be assigned to the Class 6 APN so VZW data network will route the data traffic to the specific Private Network Gateway with the customer's connectivity to their network.

Who is Interested

Addressable Market:

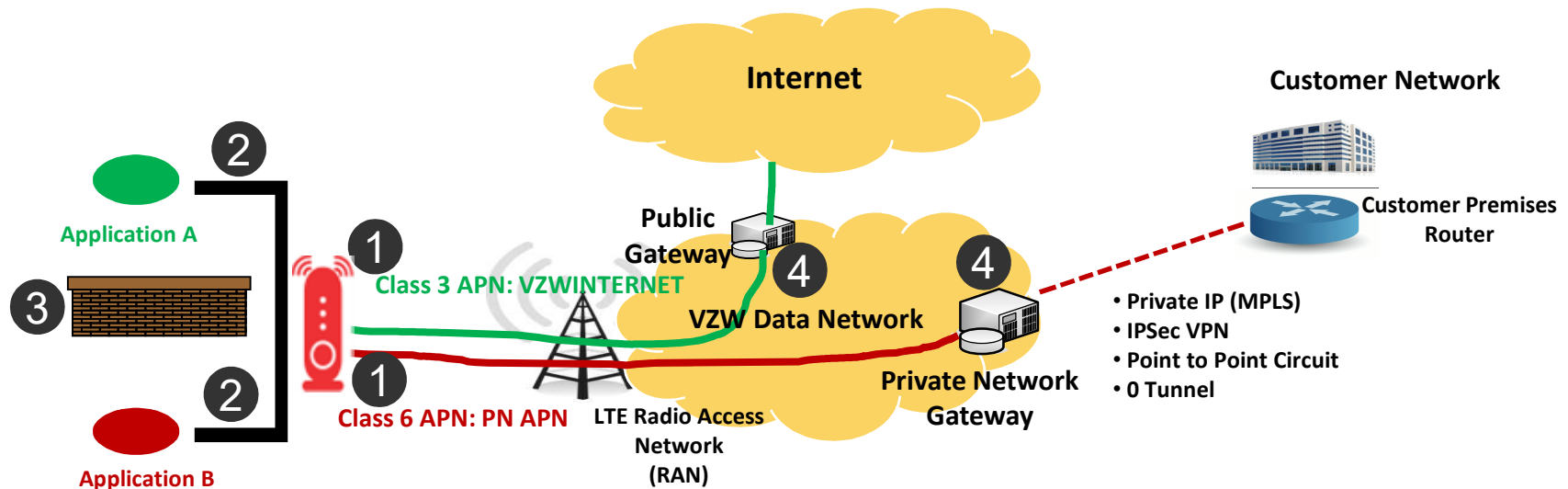
- Existing Private Network customers wanting split routing solution
- New customers wanting Private Network with split routing solutions

Verizon brings split routing capabilities for Enterprise and Government business solutions



How Split Data Routing Works

Prerequisite: SIM conditioned with Split Data Routing feature code is inserted within the device where the feature code informs network that the device will be using APN Classes 3 and 6 for data traffic.



- 1 Device establishes data connectivity with APN Class 3 and 6
- 2 Device routes data to the designated APN Class 3 or 6 Packet Data Network
- 3 Device Security must protect private data from Internet data
 - a) Preclude mixing data packets associated with the Internet and Private Network.
 - b) Do not allow Internet data to transverse Private Network and private data traffic from the Internet.
 - c) Do not allow any Internet threats (e.g. virus, malware...) from corrupting private data
- 4 Verizon will route Internet data to its Public gateway and private data to the Private Network gateway with the connection to the customer's network

Split Data Routing: use case examples



Fleet Services

Large transportation company requires fleet management services supported within their Private Network and have drivers access to Internet for traffic, weather,...

Business challenge: Company requires vehicle diagnostics to ensure that trucks remain operational while in the field and drivers have access to Internet based services that assist in pick-up & delivering goods to designation on time.

Proposal: Split data routing will allow truck operators to access Internet services in conjunction with vehicle reporting diagnostics to corporate network.



Retail Sales Experience

Large retailer requires point of sale and inventory information using their Private Network but wants to offer their customers access to specific Internet designations as part of in-store experience.

Business challenge: Company does not want to support the Internet data traffic from within their corporate network, only the private data would transverse their Private Network into the corporate network.

Proposal: Split data routing provides the secure access for private data to the corporate network services while allowing customers access to Internet sites supporting the in-store experience



Considerations and additional Information

If interested in pursuing Split Data Routing Feature, contact Open Development team at verizonwireless-opendevlopment@verizonwireless.com

The wireless device must have the ability to:

- ✓ Support multiple APNs per the VZW Device Requirements
- ✓ Route Internet designated data traffic using the Class 3 APN VZWINTERNET and data traffic categorized for the customer's Private Network (PN) using Class 6 APN
- ✓ Separate Internet and private data traffic to ensure Internet data only uses Class 3 APN and private data only uses Class 6 APN

For additional insight:

Split Data Routing Solution Brief

<https://solutionslab.vzw.com/document/split-data-routing-brief/>

Verizon Wireless Private Network

<https://www.verizonwireless.com/biz/security/wireless-private-network-vpn/>

<https://solutionslab.vzw.com/document/verizon-wireless-private-network-3/>

