



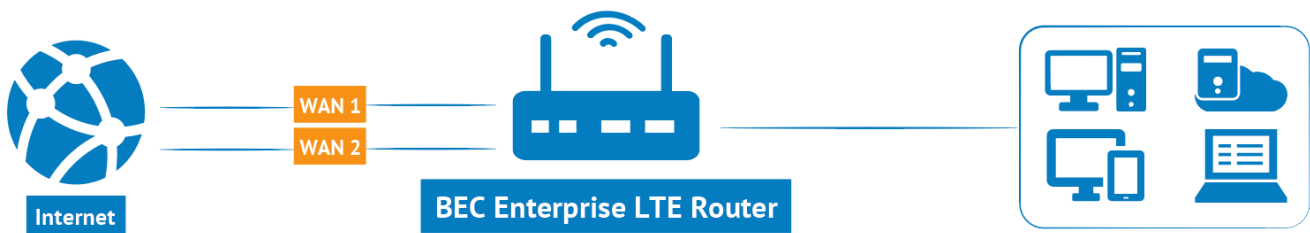
## BEC Protocol Defined - Service

**Intelligent Endpoint Based Protocol Specification and WAN  
Management for Business-Critical Applications and Services**

## What is Protocol Defined - Service?

Protocols are formal standards and policies comprised of rules, procedures and formats that define communication between two or more devices over a network. Network protocols govern the end-to-end processes of timely, secure and managed data or network communication. In communication networks, data flows between protocols, such as the transport protocol and network protocol, as it is forwarded from a source to a destination.

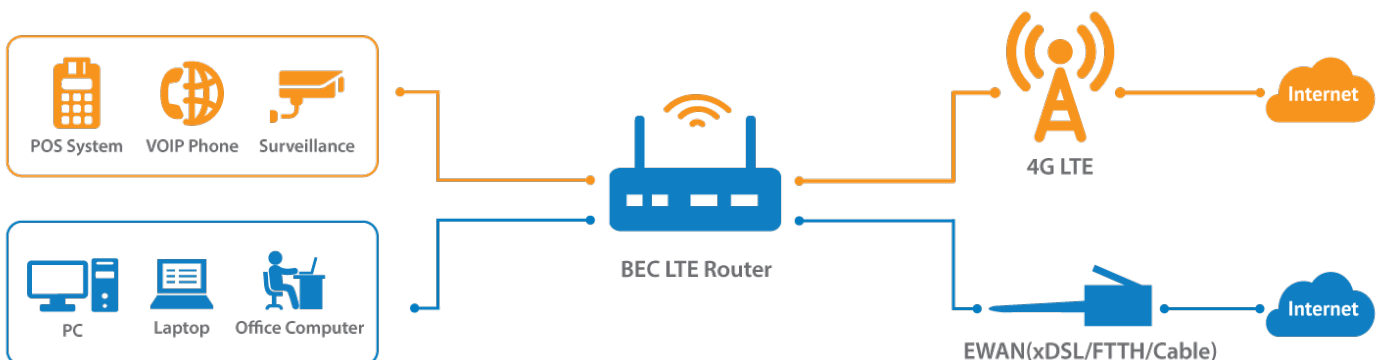
Protocol Defined-Service creates the channel used by the data as it moves from the original application through the network. Moreover, it enables users to specify the service used through a WAN interface. BEC Protocol Defined-Service uses Policies to determine how specific types of Internet traffic are routed, for example, traffic from a particular IP address granted access to only one WAN interface rather than using both WAN interfaces.



## Why Protocol Defined - Service?

BEC Protocol Defined-Services adds an additional layer of management to many applications such as load balancing and Business Continuity. True load balancing is difficult to achieve and requires complex routing protocols and algorithms. Protocol Defined-Services enables direct control to specify which applications and services utilizes a specific WAN interface.

When implementing Business Continuity, controlling cellular data usage is critical to managing cost. In a failover scenario only those applications or services critical to business operation should be allowed to access the network. All other traffic should be halted until the primary (wireline) connection is back online. BEC's Protocol Defined-Services enables this level of control.



## Benefit of Protocol defined - Service

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- **Segregation of traffic between links that are not of the same speed.** High volume traffic can be routed through the WAN interface connected to a high-speed link and low volume traffic can be routed through the WAN interface connected to the low speed link.
- **Continuity of source IP address for secure connections.** Some services, particularly HTTPS, will cease responding when a client's source IP address changes shortly after a session has been established.
- **Increased Scalability.** Protocol defined -service can let the traffic spread across multiple WAN interfaces and the increase in the traffic can be handled in a much easier manner.
- **Increased Flexibility.** IT administrators can enjoy great flexibility in handling traffic by using protocol defined-service.

## Summary

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BEC's Protocol Defined-Services delivers intelligent endpoint based protocol specification and WAN management for business-critical applications and services. The ability to define and segment traffic between WAN interfaces ensures priority over non-critical applications and services, ultimately providing a level of QoS (Quality of Service) for your network. Users have granular control to define policies by IP address, MAC address and pre-defined list of common application and services. Protocol Defined-Services is one of the key advantages of our multi WAN capable LTE platforms, strengthening our efforts to offer complete solutions that create value and business growth opportunities for our customers.

## Use Case - VoIP

VoIP, for communication purposes require the ability to properly distribute session initiations across an IP network. By using protocol defined-service, you can bound VoIP to WAN1 and the other applications bound to WAN2. The service will automatically route all outbound VoIP traffic from LAN through WAN1 port and all other traffic will be routed through WAN2 port. With an optimized VoIP traffic by using Protocol defined-service, businesses can protect against traffic jam or latency, which can ultimately lead to decreased performance, network downtime, or complete loss of VoIP functionality. Utilizing the method of Protocol Defined-Service, businesses can evenly distribute services requests across an IP network increasing the overall processing capabilities of servers supporting for the network. With VoIP protocol defined-service, this communication process is optimized, resulting in performance efficiency and increased business production. With this advantage, an effective protocol defined-service can enhance application execution and becomes a solution for businesses that require the ability to handle local or global network traffic.