

# 6WIND: Solving the Critical Performance Challenges for Software Defined Networks

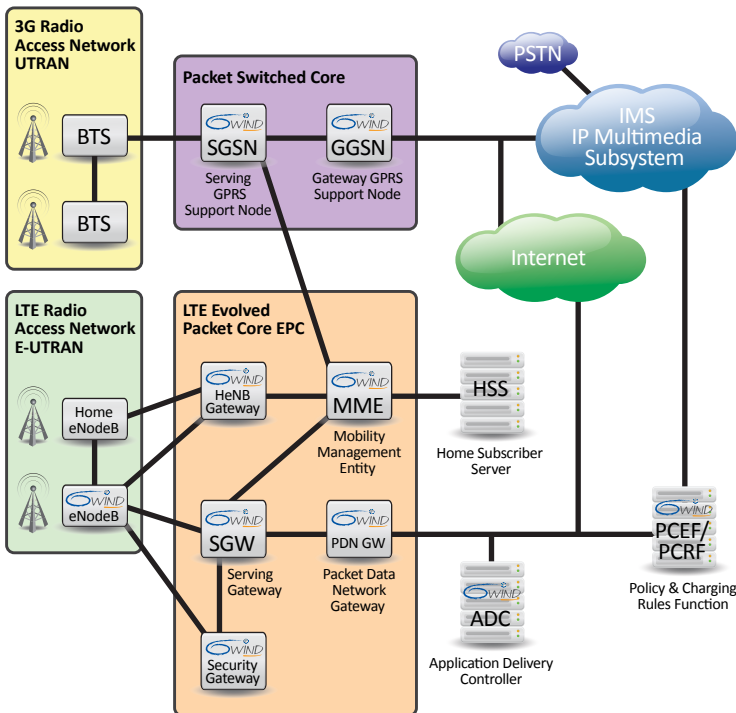


## Mobile Infrastructure



- ▶ 3G / 4G service providers need to maximize network capacity for mobile video and cloud-based services
- ▶ Low network latency is critical for rich media and online gaming
- ▶ Networks must be designed for scalability in anticipation of the next “killer app”
- ▶ Advanced services are key to subscriber retention
- ▶ 6WIND delivers software solutions optimized for 3G / 4G networks, already deployed worldwide

Mobile Internet traffic is growing exponentially and subscribers increasingly expect advanced services on mobile platforms. Service providers face unprecedented challenges to meet their customers’ expectations and limit churn, while also monetizing their networks to maximize overall ROI. At the same time, equipment manufacturers must sustain cost/performance improvements while delivering new network services. 6WIND provides a software solution optimized for these Software-Defined Networks, proven in LTE deployments worldwide.



### Service Provider Challenges

- ▶ Maximizing network bandwidth for mobile video traffic while minimizing network latency to ensure a real-time experience in rich media and online gaming.
- ▶ High scalability in anticipation of tomorrow’s “killer app”.
- ▶ Advanced Quality-of-Service (QoS) features for optimum monetization of network infrastructure.
- ▶ Innovative network services to retain and attract subscribers.

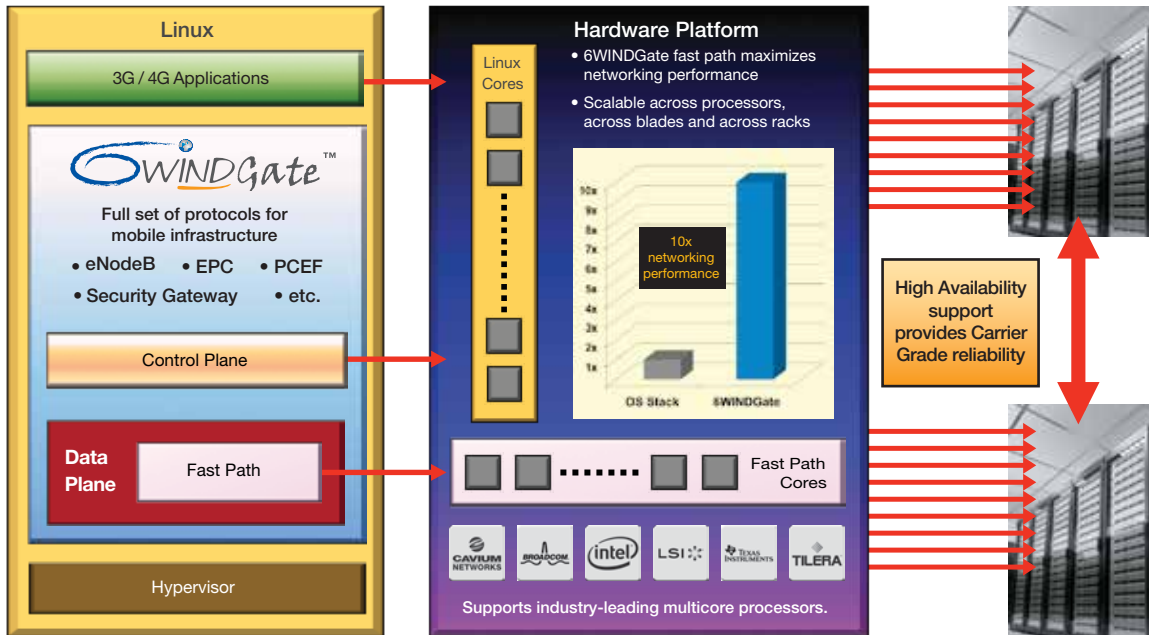
### Telecom Equipment Manufacturer (TEM) Challenges

- ▶ On-going cost-performance improvements in network equipment.
- ▶ Accelerated development schedules for new product categories.
- ▶ Maximum reuse of legacy proprietary software in new equipment.
- ▶ Full leverage of application software across complete product portfolio.

### Subsystem Provider Challenges

- ▶ Maximum networking performance at the system level.
- ▶ Support for value-added differentiation through software.
- ▶ Early adoption of new processor platforms with compelling features and increased performance.
- ▶ High-confidence schedules for hardware availability despite risks associated with leading-edge devices.

# 6WINDGate™ for Mobile Infrastructure



## Accelerating Time-to-Market

The 6WINDGate Mobile Edition software includes a comprehensive set of optimized networking protocols for 3G / 4G networking equipment. Complete solutions are available for 3G / 4G elements that require high-performance packet processing, including:

- ▶ eNodeB
- ▶ Home eNodeB Gateway
- ▶ Security Gateway
- ▶ EPC (Serving Gateway, Packet Gateway, MME)
- ▶ PCEF

## Architecture Flexibility

6WINDGate is available for a range of industry-leading multicore processors, with full support for performance-oriented features such as on-chip security accelerators.

## Scalability

6WINDGate is fully scalable across processors, across blades and across racks, with no changes required at the application software level. This enables seamless expansion of subscriber capacity and network services, enabling service providers to respond aggressively to growth opportunities and new applications.

## System-Level Performance

Performing the most frequently used networking functions on dedicated processor cores, 6WINDGate avoids the performance penalties imposed by OS latencies and overheads. Typically, this innovative fast path architecture improves the performance of 3G / 4G networking functions by 10x, compared to OS-based implementations.

## Software Compatibility

6WINDGate provides full compatibility with standard application-level Linux APIs. Proprietary application software already developed for other platforms can be deployed to run on 6WINDGate without the need for time-consuming rewrites or re-validation.

## Virtualization

6WINDGate supports both open-source and proprietary hypervisors used in 3G / 4G networking equipment, with no performance penalty compared to non-virtualized configurations. Service providers can efficiently provision their network resources and adjust that provisioning dynamically in line with changing traffic patterns or application requirements.

## HIGH AVAILABILITY

6WINDGate provides full support for High Availability (HA) frameworks, in order to ensure zero-downtime reliability through industry-standard failover modes.

## SOLUTION PARTNERS

6WIND partners with industry-leading companies worldwide to provide software (security, DPI, control plane), operating systems, hypervisors, board-level products and system-level products which complement the 6WINDGate solution.

## TECHNICAL SUPPORT

6WIND delivers comprehensive, global services and support. Our expert team is available for custom software design and optimization.

For more information on any of our products, services or partners please visit

[www.6wind.com](http://www.6wind.com) or call +1 (650) 968-8768.

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## 6WINDGate: Proven Benefits for Mobile Infrastructure

The 6WINDGate packet processing software is the ideal solution for software-defined networks and has already been deployed in multiple LTE networks worldwide. 6WINDGate enables service providers, telecom equipment manufacturers and subsystem suppliers to address the critical business challenges that they face in delivering best-in-class products and services while achieving profitable business growth.