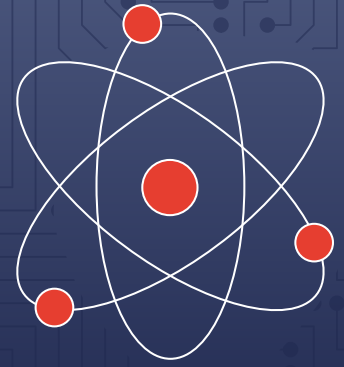


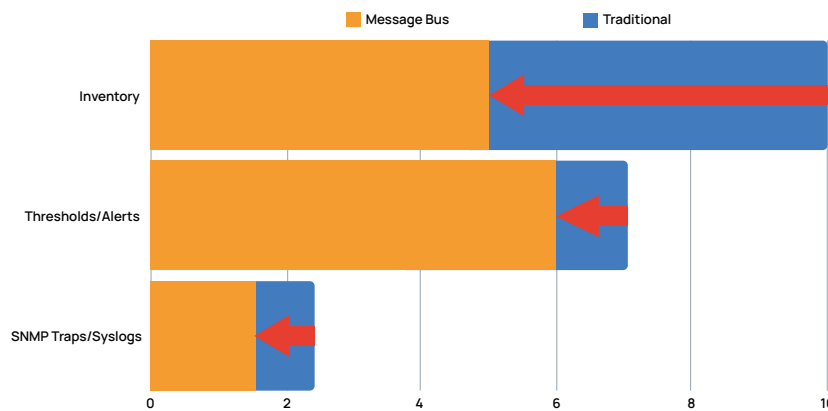
# FirstWave

## opHA - Message Bus 5.0

Enhanced Network Management with  
Real-time Event-Driven Communication



The role of network operators in large enterprises and Managed Service businesses is becoming increasingly complex. As distributed networks expand and evolve, the challenges of maintaining optimal performance, ensuring resilience, and swiftly resolving issues grow exponentially. FirstWave's groundbreaking opHA - Message Bus 5.0 software represents a significant leap ahead in network management technology. With real-time data transfer across geographically diverse, architecturally diverse and multi tenanted environments, opHA Message Bus acts as a central nervous system to your complex infrastructure.



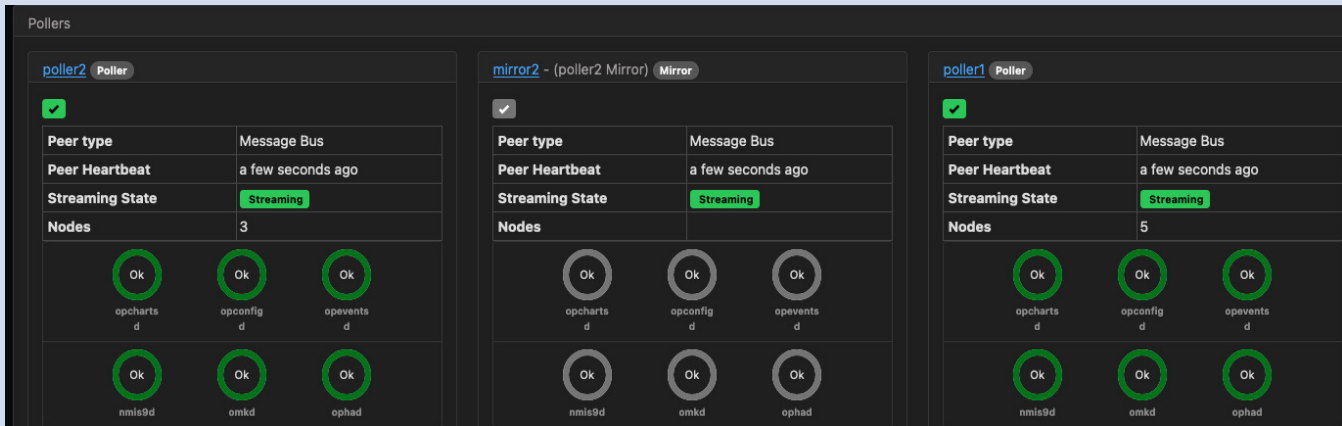
### Unparalleled Real-time Insights for Mission-Critical Networks

opHA Message Bus 5.0 goes beyond traditional network management tools by offering real-time, event-driven communication across your entire network ecosystem. By enhancing existing opHA capabilities, this innovative solution slashes data transfer times by up to 50%, providing MSPs and enterprise network operators with unparalleled precision and agility. The true power of Message Bus 5.0 becomes evident when integrated with FirstWave's event management, network configuration and network visualisation modules. This powerful combination enables near-instantaneous automated resolution of common network errors, often addressing issues before they can impact business operations.

For MSPs and large enterprises, this means a paradigm shift in network management. With Message Bus 5.0, you're not just monitoring your network; you're anticipating and resolving issues in real-time. This proactive approach minimizes downtime, enhances service quality, and significantly reduces Mean Time To Resolution (MTTR). In many cases, network operators can identify and rectify problems before end-users or business units even become aware of a potential interruption, setting a new standard for service excellence and operational efficiency.

## Benefits:

- Unparalleled Network Visibility: Gain instant insights into your network with immediate event updates, empowering proactive issue resolution.
- Enhanced Network Resilience: Minimize downtime and ensure uninterrupted service delivery with automated failover mechanisms and resilient event transfer.
- Streamlined Network Management: Reduce manual intervention and optimize network management tasks with automated event processing and centralized data management.
- Scalable and Flexible Architecture: Easily adapt to evolving network needs with a scalable architecture designed for large, distributed environments.



## Key Features:

- Multi-Server Architecture: Distribute the server load to multiple pollers for efficient data collection and processing.
- Geographical Distribution: Secure data and optimize performance with pollers deployed across various locations.
- Multi-Tenancy: Easily manage multiple tenants with a single, configurable interface.
- Built-in Flexibility: Adapt to different network infrastructures with flexible configuration options.
- Provisioning Management: Simplify platform provisioning with push changes and new poller deployment at the click of a button.
- System Redundancy: Decouple system components for enhanced availability, allowing peers and the primary server to operate independently.
- Fault Tolerance: Ensure data integrity with message replication across three nodes, tolerating single-node failures.
- Real-time Event Management: Enhance MTTR with immediate event notifications from pollers to the primary server.

## Seamless Integration with the FirstWave Network Management Product Suite

Message Bus 5.0 is designed to work seamlessly with other FirstWave products, enhancing your network management capabilities:

### Integration with opEvents

Message Bus 5.0 supercharges opEvents' real-time event logging and monitoring capabilities. By leveraging the high-speed, event-driven communication of Message Bus, opEvents can process and correlate network events with unprecedented speed and accuracy. This integration enables:

- Near-instantaneous event detection and notification
- Enhanced event correlation for faster root cause analysis
- Improved scalability for handling large volumes of events across distributed networks
- Real-time updates to event status and resolution progress

### Synergy with opCharts

The real-time capabilities of Message Bus 5.0 elevate opCharts' network visualization to new heights. This powerful combination provides:

- Live, dynamic updates to network topology and status
- Real-time performance metrics displayed on intuitive dashboards
- Instant visibility of network changes and their impact on overall health
- Seamless integration of event data into visual representations for quick troubleshooting

By harnessing the power of Message Bus 5.0 alongside opEvents and opCharts, organizations can achieve a truly real-time, comprehensive view of their network health and performance, enabling proactive management and rapid response to any network issues.

## Technical Requirements:

Server Specifications	CPU	Minimum of 4vCPU, 8GB RAM recommended
	RAM	4GB Minimum, 8GB recommended
	Storage	SSD storage for optimal performance
Storage Requirements	Database	Unrestricted read/write access for optimal performance
	File Storage	Consider NAS for additional storage capacity
Network Connectivity	Bandwidth	Reliable network connection between pollers and the primary server
	Latency	Secure communication channels for data transfer

## About Firstwave:

At FirstWave, our passion is to create intelligent software that our service provider partners and customers love. With software used globally by over 150,000 organizations including household names like Microsoft and NASA, we aim to be at the front of the wave of transformational change in the IT Operations and Cybersecurity world.