

# EdgeFrontier<sup>®</sup> Product Guide

A Complete Middleware Platform for  
Intelligent Convergence of Devices,  
Systems, and Networks



October, 2011

## EdgeFrontier<sup>®</sup> Overview

EdgeFrontier middleware enables rapid creation of open, interoperable solutions featuring distributed processing, control, and automation throughout the network infrastructure. It is remotely configurable middleware that resides on servers and other computing systems, providing a complete platform for intelligent convergence solutions.

EdgeFrontier supports integration and normalization of data, events, and control functions from diverse devices, systems, and networks, regardless of manufacturer or communications protocol, including sensors, wireless sensor networks, radio-frequency identification (RFID) systems, video devices and systems, access control systems, metering and measurement devices, actuators, databases and file repositories, and others. In addition, the software provides structures for event processing and configuration of event or policy-based actions through a policy engine.

The product includes an EdgeFrontier Engine™ application, which provides the field-level power for the software, and an EdgeFrontier Client™ application, which enables enterprises and integrators to configure the EdgeFrontier Engine application remotely. With the installation of EdgeFrontier Engine on servers or other computing platforms, and EdgeFrontier Client on remote workstations and PCs, users have a complete, remotely configurable middleware platform for intelligent convergence solutions.

EdgeFrontier Engine can be implemented on network devices, including servers and other computing systems, which are capable of supporting the Microsoft .NET Framework (versions 3.5 and higher) or the Mono framework. The software acts as an edge application server and can be configured as an edge enterprise service bus, providing an abstraction layer to support processing and distribution of data, events, and control commands without writing code.

EdgeFrontier can distribute data to and exercise control over multiple network devices and applications via various communication protocols within wired and wireless deployments – including Wi-Fi, Wi-Fi mesh, WiMax, ZigBee, and others. In addition, third-party processing software and algorithms or user-produced code can be implemented easily to further extend the capabilities of EdgeFrontier as a middleware platform technology for convergence.

With these capabilities, EdgeFrontier is an ideal product for enterprises and integrators that require a remotely configurable convergence platform and wish to utilize the existing network infrastructure. EdgeFrontier is the right choice for a drop-in software solution to support convergence of devices, systems, and networks.

Specifically, EdgeFrontier can:

- Enable connectivity between diverse devices, systems, and networks through communication methods (including TCP/IP, UDP, serial, HTTP, SNMP, WMI, message queue, and web services); support the reading and writing of files and databases; and enable connectivity to systems via third-party and custom application programming interfaces (APIs)
- Serve as a mediator between diverse systems, devices, and networks, including support for protocol/format encoding/decoding and data transformation
- Provide real-time, edge-of-network event processing, including data filtering, correlation, anomaly detection, and notification/alert generation
- Provide a policy engine for configuration of event or policy-based actions
- Enable distributed processing and event or policy-based actions to be automated throughout the network infrastructure

- Provide an extensible application server for core and edge-of-network computing systems, including routers, servers, gateways, and other computing platforms
- Provide sophisticated network and system management capabilities
- Distribute data as network data, data files (e.g., text, Excel, XML, binary, etc.) and for databases (e.g., Microsoft SQL Server, Oracle, MySQL, etc.) for use with enterprise systems and interface platforms
- Extend the IP network and IT infrastructure to remote devices, systems, and networks

## Benefits

Benefits of EdgeFrontier middleware include:

- Enabling integration and utilization of diverse device, system and network data, events, and control functions
- Enabling convergence of data within enterprise IT infrastructures and IP networks to enhance analysis and response
- Maximizing existing client technology assets and leveraging future investments by enabling the building and management of open, scalable solutions
- Increasing value of data through system and network-driven access, processing, and correlations
- Reducing total cost of ownership of devices, systems, and networks
- Increasing return on investment for devices, systems, and networks

Intergraph is a wholly owned subsidiary of Hexagon AB (Nordic exchange: HEXA B) and (Swiss exchange: HEXN). For more information, visit [www.intergraph.com](http://www.intergraph.com) and [www.hexagon.se](http://www.hexagon.se)

Intergraph and the Intergraph logo are registered trademarks of Intergraph Corporation or its subsidiaries in the United States and in other countries. Microsoft is a registered trademark of Microsoft Corporation. Other brands and product names are trademarks of their respective owners. ©2011 Intergraph Corporation. All Rights Reserved. 10/11 SGI-US-0044A-ENG