Quarticle™

PRODUCT BRIEF

EventHub

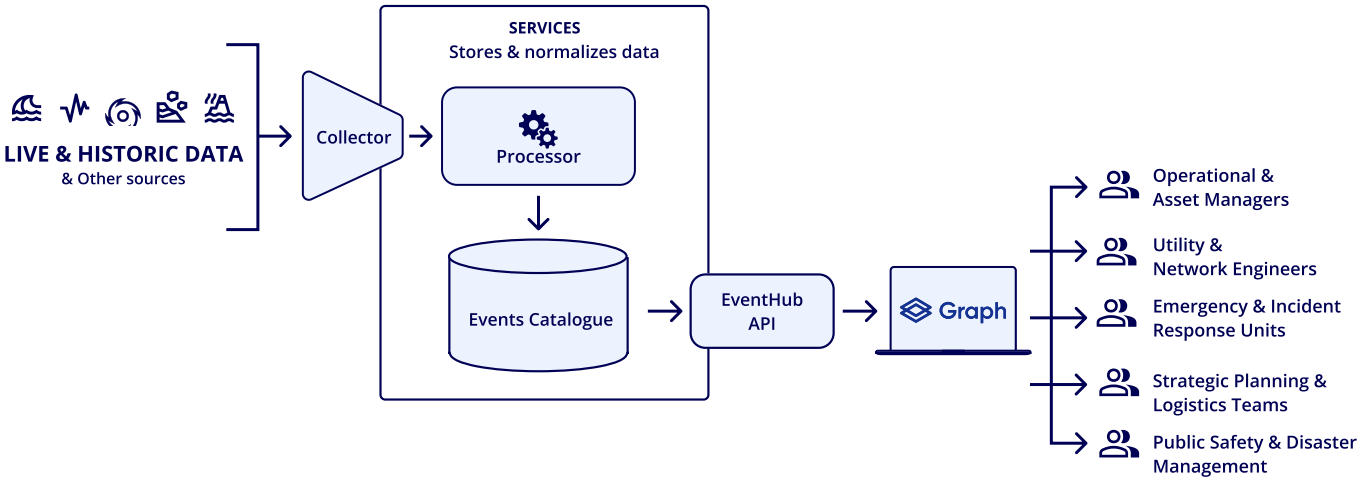
Real-Time Natural Event Intelligence

EventHub
Product Overview

EventHub is Quarticle's real-time data hub for capturing and analyzing natural and environmental events, delivering instant, spatially enriched insight into evolving risk. It ingests and standardizes live hazard data, manages event footprints, and maps their impact across your assets, enabling immediate visualization, exposure analysis, and response within the full context of your global operations.

Seamlessly integrated with the broader geointelligence ecosystem, EventHub transforms fragmented, fast-moving risk signals into actionable intelligence. From infrastructure protection to supply chain continuity and emergency response, it ensures every decision is informed by the most current, location-aware data available.

EventHub at a Glance



@ Quarticle GmbH All rights reserved

Key Features and Capabilities

Live Footprint Intersection

Overlay real-time and historical hazard footprints (e.g., floods, wildfires, earthquakes) with your asset and infrastructure data to instantly identify affected locations and assess impact.

Spatial Impact & Concentration Analysis

Run automated spatial analyses to detect affected areas, quantify exposure, and identify risk concentrations for faster impact estimation and response planning.

Response Prioritization

Prioritize inspections, maintenance, and field operations based on asset criticality, location, and hazard severity to reduce downtime and optimize resource allocation.

Standardized Event Model

Ingest and normalize diverse hazard data into a consistent geospatial event model, enabling comparable analysis across regions, sources, and risk types.

Historical Event Archive & Analytics

Access curated, versioned event datasets with full metadata and traceability to support retrospective analysis, scenario comparison, and long-term risk modeling.

Unified Visualization

Interact with live and historical event footprints directly within Graph, enabling intuitive exploration and real-time situational awareness.

@ Quarticle GmbH All rights reserved

API & System Integration

Deliver clean, standardized GeoJSON outputs via REST APIs, ensuring seamless integration with GIS platforms, analytics tools, and operational systems.

Unified Workflow Integration

Integrate with Qarta™ to extend analysis into portfolio-wide impact assessment and dynamic risk insights during unfolding events.

Audit-Ready Traceability

Maintain full visibility into historical data, including versioning and metadata, to support compliance, reporting, and audit requirements.

Enterprise-Grade Security

Ensure secure access with token-based authentication, full system logging, and controlled permissions designed for enterprise environments.

Reliable hazard data from trusted sources

EventHub integrates hazard data from authoritative public and institutional providers, including **Copernicus, ESA, NASA, USGS,** and **NOAA**, delivering consistent, high-quality coverage across regions and perils. With access to over 4,000 international and national events, it ensures reliable, standardized data for real-time monitoring and analysis.

International Event Coverage

Seismic Activity

Global cataloging and grading of event magnitude and impact (e.g., negligible, moderate, significant, severe, catastrophic loss) based on peak ground acceleration.

Flood Monitoring

Worldwide event footprint and depth metrics are monitored in real-time.

Wildfire Detection

Global tracking and grading of affected areas, including severity and partially burnt zones.

Atmospheric Phenomena

Global tracking of wind severity, speed, and international cyclone tracks.

National Weather Data Integration

Weather forecasts and observations

Real-time, high-frequency (every five minutes) updates on national weather conditions.

Active event monitoring

Timely weather event tracking and forecast delivery for rapid response and operational awareness.

@ Quarticle GmbH All rights reserved

Business Benefits

- **Support operational decision-making in real time**

  Access real-time, spatially enriched event intelligence to understand impact as it unfolds.

- **Gain precise visibility into asset exposure**

  Identify affected locations instantly through live and historical event footprints, enabling clear visibility into asset exposure and spatial impact.

- **Leverage standardized, analysis-ready data**

  Eliminate post-processing with clean, standardized GeoJSON outputs designed for immediate use in GIS, models, and dashboards.

- **Connect workflows across your ecosystem**

  Integrate seamlessly with Qarta™, Graph, Rapid, and your existing systems to enable consistent, end-to-end geospatial workflows.

- **Track events over time and improve resilience**

  Analyze how events evolve using historical and live data to refine models, strengthen planning, and support long-term risk strategies.

- **Support global-scale operations**

  Support everything from infrastructure monitoring to catastrophe response with a platform built for high performance and growing data volumes.

- **Enable AI-driven operations**

  Leverage structured, AI-ready data and MCP-enabled workflows to automate analysis and support consistent decision-making.

@ Quarticle GmbH All rights reserved

Who is This For?

Asset & Infrastructure Managers

Track real-time risks to your physical locations and minimize operational downtime after an event.

Operations & Field Response Units

Locate damaged infrastructure fast to coordinate repair teams and get early impact estimates.

Logistics & Supply Chain Analysts

Map delivery routes and warehouses against hazard-free zones to keep the supply chain moving.

Strategic Risk & Resilience Modelers

Use standardized event data to improve the accuracy of risk simulations and long-term planning.

Public Safety & Disaster Management

Get immediate, reliable geographic data to support rapid emergency response and resource allocation.

Utility & Network Engineers

Overlay live hazard zones onto your grid or network to identify at-risk sections and protect services.

@ Quarticle GmbH All rights reserved

Quarticle™

Quarticle is an innovative company founded to help organizations harness the power of geospatial information and drive informed decision-making for their businesses. We use cloud-native technology and are enterprise-ready, delivering geocontent in a fast, flexible, and secure way for the world's largest corporations. Businesses use our products and services to translate real-world geospatial information into actionable insights and reach their full geolocation potential.

Ready to turn real-time event data into actionable geospatial intelligence?

Reach out at **contact@quarticle.ch**

Company Information

Headquarters: Baden, Switzerland
Development Centers: Arad and Timișoara, Romania
Founded: 2018
Core Expertise: Cloud-native GeoServer-as-a-Service in any environment

contact@quarticle.ch

www.quarticle.ch

Brown Boveri Platz 3, 5400 Baden

CERTIFIED ISO COMPANY 27001:2022

CERTIFIED ISO COMPANY 9001:2015