IDC MarketScape

IDC MarketScape: Worldwide Event Brokering Software 2024 Vendor Assessment

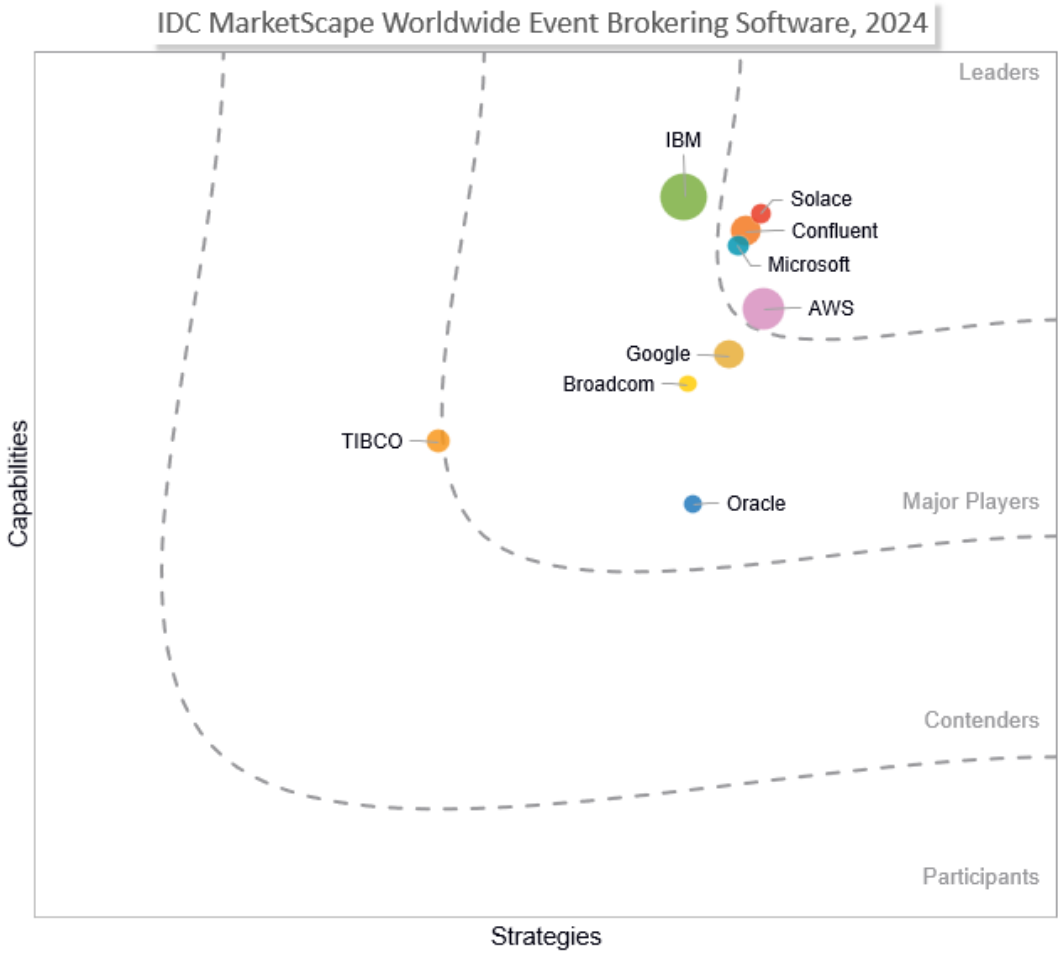
Shari Lava Andrew Gens

THIS IDC MARKETSCAPE EXCERPT FEATURES SOLACE

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Event Brokering Software Vendor Assessment



Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

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IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Event Brokering Software 2024 Vendor Assessment (Doc # US50301923e). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

This IDC study assesses the event brokering software market among select vendors through the IDC MarketScape model. This document discusses both quantitative and qualitative characteristics that position vendors for success in this important market. This IDC MarketScape covers both pure-play and platform vendors and is based on a comprehensive evaluation framework. It focuses primarily on emerging distributed data movement capabilities for operational scenarios but highlights additional legacy messaging capabilities, both separately and in conjunction with the broader connectivity automation and data movement toolset.

Event brokers are a key middleware capability in organizations seeking to move toward a more event-driven architecture (EDA) to enable real-time data flows. Ensuring applications have real-time data is a critical capability in everyday human decision-making and also in many emerging AI use cases. For example, technologies like retrieval-augmented generation rely on up-to-date data and provide real-time situational context to generative AI prompts, which are key to improving response accuracy and quality in the outputs created by large language models (LLMs).

Not surprisingly, organizations are increasing their investments in the messaging middleware market, a submarket. The broader messaging middleware market, which includes event brokers and legacy service bus tools, grew by 29% in 2022 and 2023, with organizations collectively investing $3.1 billion. More than two-thirds of these investments have been in cloud-deployed solutions as organizations move more applications and data processing to the cloud.

Real-time operational data movement is becoming critical to succeed as a digital business. However, as organizations integrate more systems and applications, traditional point-to-point messaging patterns are further complicating the already tangled web of data flows and are reaching a breaking point. For these reasons, traditional messaging middleware is not the focus on this assessment, unless support for publish-subscribe (pub/sub) patterns are also supported.

Another distinctive feature of this market is that there is rarely one golden vendor in the event broker space. Most organizations as they deepen their investments in event-driven architecture will potentially discover the need for multiple event brokers to achieve a cost/capability balance when assessing the needs of a particular use case. Therefore, it's important to understand some of the key differences between different broker types. Architecturally, there are essentially three types of brokers, all of which support different use cases in messaging:

- **Queue oriented:** In a queue-oriented broker, event producers most often send events to a consumer/consumer group-specific queue, such as order processing where it is critical that messages are delivered, processed once, not retained in the queue once processed, and must be processed in the order they were received. Some queue-oriented brokers also support multiprotocol client connectivity, meaning the broker can communicate with multiple types of consumers, including different versions of the same protocol, maximizing backward

compatibility. The trade-off of this backward compatibility is potential challenges with complexity and scalability. Event producers, which are often applications, must be able to use specific protocols and formats to communicate with the broker, limiting interoperability for some solutions, which will increase development costs. In addition, because queue-oriented brokers must maintain the state of each message and consumer, an influx of message volume could negatively impact broker performance.

- **Log oriented:** In a log-oriented broker, event producers append events to an immutable log, such as a topic or a queue. The messages from the log are not removed once processed but are retained until they reach a certain age (as configured when implemented) or when the log reaches a preconfigured size limit. When considering log-based event brokers, it is important to verify any limitations to log size and ensure that they meet the message volume requirements of the use case; some have indefinite log storage, but some do not. Log size can create additional costs and/or limitations of capabilities. Because messages are not removed, the onus of maintaining place in the sequence of events is often on each consumer to recover from outages or restarts when polling resumes. This allows different consumers to consume at different points in log. Also, log-oriented brokers often require partitioning to support scalability, but most do not support topic hierarchies well, if at all.
- **Subscription oriented:** In a subscription-oriented broker, event producers send events to an event bus or topic, similar to log-oriented brokers, but a key difference is that messages are removed once consumed by subscribers. Consumers subscribe to topics within the event broker. When messages arrive to the broker, it uses rules to filter the events that it will push to the consumer, ensuring messages are delivered at least once. If a consumer is unavailable to receive messages from the event broker, the broker will store the message until communication is reestablished with a given consumer. While this architecture ensures message delivery, it does not ensure that messages will be consumed in the same order they were received by the broker without workarounds.

Given these differences, it's important to thoroughly assess the message pattern requirements and trade-offs between scalability, message delivery, and retention to select the best broker for each use case.

In addition, another key architectural element of event brokers that buyers must consider for each use case is whether they require the broker to operate in a stateful or stateless fashion. Consider the following:

- **Stateful:** Brokers that are stateful maintain delivery status of messages, creating the foundation for capabilities such as guaranteed delivery, message ordering, and exactly once processing. The trade-off is that these capabilities increase architectural complexity and increase broker resource usage.
- **Stateless:** This is a more lightweight broker that does not maintain any message processing state information. While many are capable of basic message processing information, these cannot be relied on in the architectural pattern.

All three broker types can operate in stateful or stateless mode; however, not all products evaluated support both modes.

Event brokers and EDA are also another method for sharing data with business partners and ecosystems either instead of or in conjunction with B2B middleware and APIs. For additional information on event brokers, see *IDC TechBrief: Future of Industry Ecosystems — Event-Driven Architecture* (IDC #US45898720, June 2023).

Though EDA is still low maturity for many organizations outside of financial services and manufacturing, it is quickly growing. As more organizations continue to adopt EDA and event brokers to support them and maturity grows, IDC expects there to be more capability and feature parity among vendors.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

The vendor inclusion list for this document was designed to accurately depict the vendors that are most representative of any given event brokering software buyer's selection list. Vendors were then surveyed and further investigated to ensure that the offerings qualified with the table stakes capabilities and product strategies.

Critical to this research effort was for the vendor to meet the inclusion criteria. Any vendor participating in this IDC MarketScape had to meet the following criteria:

- Offers event broker capabilities as part of a sustainable business, whether offered standalone or as part of a larger technology portfolio (If part of a larger portfolio, the event brokering solution must be technology agnostic — there must be no requirement to have adopted a solution from that portfolio.)
- Supports real-time data flow operational use cases including queue-oriented, log-oriented, or subscription-oriented brokers
- Has at least $20 million in revenue for 2022, specifically from event brokering software/services offering, regardless of where it is deployed
- Operates in North America and at least two additional regions
- Goes to market horizontally across industries and across horizontal processes of an enterprise
- Deployed as software or services, not as a hardware appliance

ADVICE FOR TECHNOLOGY BUYERS

- **Know your message pattern:** Even though eventing is not new, this is a nascent market in the sense that widespread adoption is more feasible and necessary than it has been in the past. At this stage, many leading event brokers support specific use cases, and there is wide differentiation into the features, capabilities, and messaging patterns supported. Unlike other data connectivity tools, there is not always one event broker that is right for every use case, and it is common to rely on several for those that are more advanced in their EDA journey. Some vendors have multiple solutions to support queue-oriented, log-oriented, and subscription-oriented needs, and some vendors only support stateful or stateless and not both.
- **Understand that pricing varies significantly by use case requirements:** Broker type, message size, message volume, log retention, latency requirements, number of sources, and number of sinks are all use case details that can impact the cost of deploying event brokers. While many brokers offer a usage-based pricing model, how usage is measured as well as minimum thresholds can vary significantly. It is critically important to evaluate multiple vendors on pricing scenarios for each use case to ensure optimal ROI is achieved.
- **Invest in change management:** There is a lack of qualified and skilled workers with event broker and event-driven architecture experience, leaving organizations scrambling to modernize data flows with limited resources, limiting the ability to have more real-time data flowing where it is needed in the company. This is most pronounced with implementations,

where IT resources within the organization are expected to support a solution once the implementation is completed and the vendor's experts are no longer available at the same level of support. Utilize vendor resources and training to build technical skills, and leverage change champions to educate key stakeholders on the capabilities unlocked by EDA.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Solace

After a thorough evaluation of Solace's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide event brokering software.

Solace is an event broker and event management vendor through its PubSub+ platform. Founded in 2001, Solace began as a messaging service appliance developing over time into other arenas, building out more and more capabilities while transitioning to software and then SaaS offerings. Solace's PubSub+ platform, first generally available in 2008, aims to bring users a complete event-driven architecture management solution in the cloud, as an appliance, or as on-premises software.

Quick facts about Solace include:

- **Product name:** Solace PubSub+
- **Broker type:** Queue and subscription
- **Total number of employees:** 525
- **Globalization:** Available in all global regions
- **Industry focus:** Capital markets and retail banking, retail, and manufacturing
- **Deployment options:** Multitenant as a service in the cloud, single-tenant as a service in the public cloud, single-tenant as a service in a private cloud, and customer-managed on premises or other infrastructure
- **Pricing model:** Subscription, perpetual/annual, capacity-based PCU (PubSub+ capacity unit)
- **Partner ecosystem:** Global partner network

Solace's PubSub+ Event Broker aims to support users across all message exchange formats, making it highly accessible to potential users. In addition, Solace further seeks to enable a broad range of customers by including support for APIs and protocols as well as connectors for cloud services, integration, and streaming technologies such as Apache Kafka. In line with Solace's push for ease of customer use, Solace has made PubSub+ Event Broker accessible to both developer and non-developer personas with the use of no-code and low-code programming. Solace PubSub+ is designed to be a broad-based event broker with the ability to support many use cases. PubSub+ can be applied to use cases for real-time monitoring, application integration, distributed applications, IoT data ingestion, event-driven workflow automation, supply chain visibility, customer engagement, financial trading, and more. Solace prioritizes monitoring capabilities and offers users many options for monitoring and tracing out of the box, such as detailed logging and dead letters queue, offering many other capabilities via integrated platform capabilities and third-party add-ons.

Solace PubSub+ Event Portal is an offering for discovering, visualizing, and cataloging event streams, event-driven applications, APIs, schemas, and more. With Event Portal, developers and application architects can collaborate to design events and event-driven apps, discover and catalog events across a business, and visualize the process for ease of understanding. Event Portal can make it easier for users to keep documentation up to date and create new experimental models without disrupting applications downstream.

Strengths

- **Topic management:** Solace has highly robust "smart topic" management capabilities compared with many other vendors in this space. Solace comes with all core monitoring capabilities covered out of the box, such as detailed logging, notifications and alerts, message tracing. In addition, Solace goes beyond the normal monitoring capabilities, partnering with many popular data management and security tools for advanced monitoring.
- **Event mesh capability:** Solace PubSub+ includes strong event mesh capabilities to create a network of brokers intended to enable seamless access to data and events across highly distributed applications in hybrid cloud and multicloud deployments. When customers deploy event mesh alongside Solace's smart topic management and multiprotocol support, distributed applications can efficiently exchange real-time data without prior knowledge of connection specifics for either application.

Challenges

- **Channel and technology partner support:** Solace has a broad range of channel and technology partners currently with plans to continue to expand this program, but it is heavily focused in just a few regions currently. Potential customers considering Solace PubSub+ will likely need a direct support/service relationship with Solace at this time, as the range of potential partners is more limited.
- **Hyperscaler competition:** Solace, as an experienced vendor in event brokering, faces stiff competition from cloud hyperscaler event broker products. Cloud hyperscaler event broker offerings can be easier to procure and justify, especially if a potential customer solely focuses on a single application domain. Customers will need to evaluate if Solace's underlying event broker architecture is a good fit for them and weigh the benefits of hyperscaler capabilities versus the detriments like vendor lock-in and potentially less specialized capabilities. Solace continues to address hyperscaler competition by partnering with other API, iPaaS, and software solutions to extend the interoperability of its offering.

Consider Solace When

Consider Solace when an organization has more monitoring and security requirements than what is available in native Kafka with advanced event management capabilities and also needs cloud-agnostic deployment support, smart topic management, and messaging format-agnostic solutions. Organizations seeking high degrees of confidence in solution security, with the ability to choose between several best practices with broad support for business use cases accessible to a variety of non-developer personas should consider Solace.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable the vendor to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

Event stream processing software is the collection of software capabilities that continuously detect, transport, ingest, process, correlate, and analyze events. An event is a data or application change of state that may trigger data flows or process actions asynchronously. Event stream processing software is made up of five submarkets: messaging middleware, stream processing software, functions software, IoT applications platforms, and process mining and insights software.

Event brokers are a key component of modern event-driven architectures. Event brokers enable asynchronous event-driven communication between different applications, data stores, and analytics tools, serving as a central intermediary between publishers and subscribers. They are a critical component in building loosely coupled, scalable, and resilient systems, enabling real-time data flows.

LEARN MORE

Related Research

- *IDC PlanScape: Developing an EDA Strategy for the Future of Industry Ecosystems* (IDC #US51211323, September 2023)
- *Worldwide Event Stream Processing Software Market Shares, 2022: Real-Time Needs and Cloud Adoption Fuel Growth* (IDC #US51152623, September 2023)
- *Worldwide Event Stream Processing Software Forecast, 2023-2027* (IDC #US51157123, August 2023)
- *IDC TechBrief: Future of Industry Ecosystems — Event-Driven Architecture* (IDC #US45898720, June 2023)
- *IDC Market Glance: Connectivity Automation, 2Q23* (IDC #US50789123, June 2023)

Synopsis

This IDC study assesses the worldwide event brokering software market for 2024. It provides an in-depth analysis of the market, evaluating various vendors through the IDC MarketScape model. The document discusses both quantitative and qualitative characteristics that position vendors for success in this market. It also provides insights into the increasing investments in the messaging middleware market, the importance of real-time data in decision-making, and the different types of event brokers. The document concludes with advice for technology buyers and vendor summary profiles.

According to Shari Lava, research director, AI and Automation at IDC, "The world is moving to real time, and the data that powers everything, including AI, needs to be based on the best information available. Event brokers are a key middleware capability in organizations seeking to move toward a more event-driven architecture to enable real-time data flows."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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