aws marketplace

EMQX

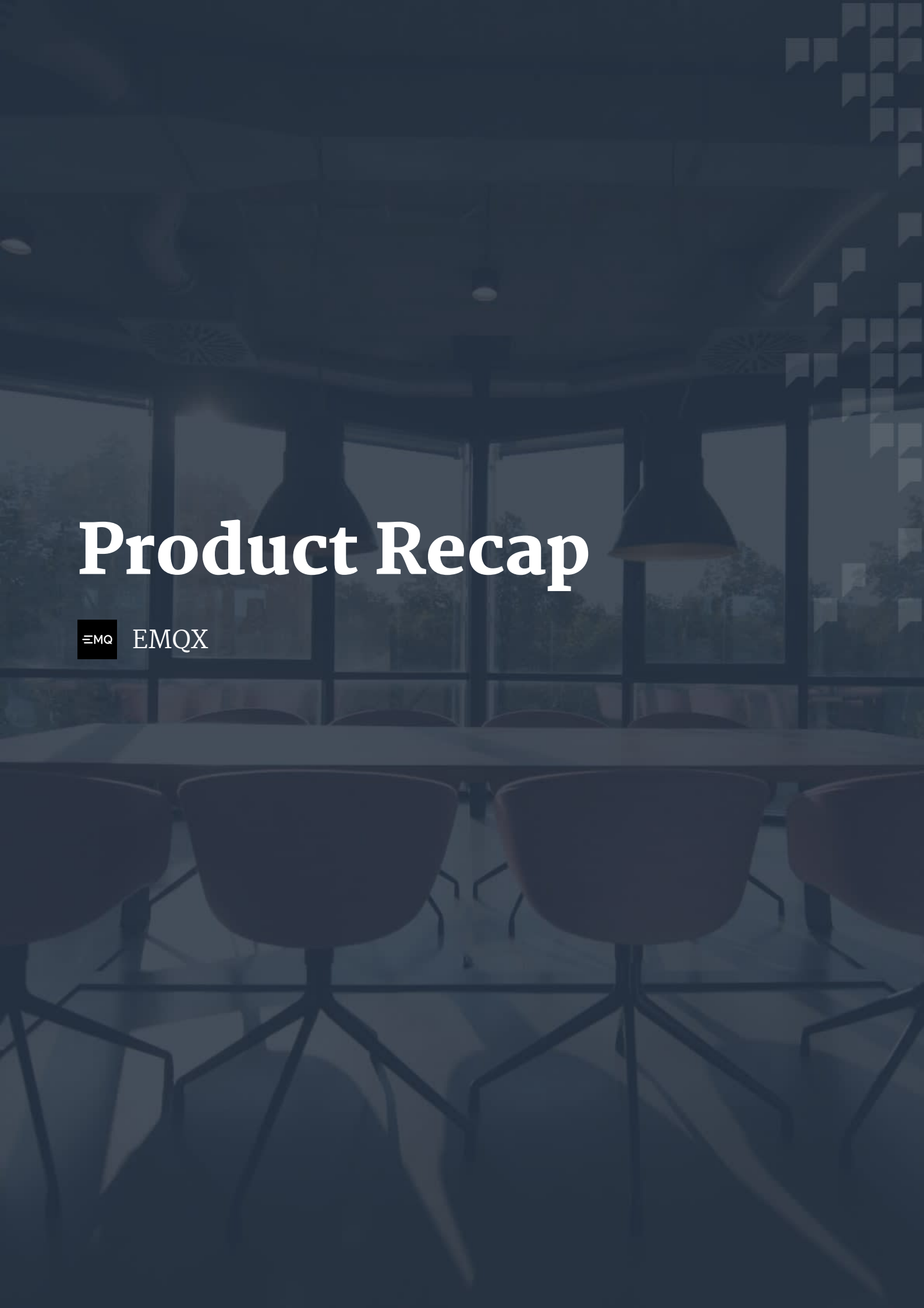
Reviews, tips, and advice from real users






Powered by PeerSpot

Contents



Product Recap

EMQX

EMQX Recap

EMQX is a scalable open-source MQTT broker designed to connect millions of IoT devices reliably. It is known for its high availability and robust performance, making it a go-to choice for enterprises seeking efficient data transmission across IoT ecosystems.

EMQX offers advanced features supporting complex IoT use cases and ensures seamless data flow with low latency. It supports a wide range of protocols and is suitable for industrial IoT, smart homes, and automotive sectors. Developers favor EMQX for its real-time analytics capabilities and flexible architecture that allows integration with diverse back-end systems. It enhances operational efficiencies by providing comprehensive monitoring and management capabilities.

What are the key features of EMQX?

- Scalability: Connect millions of devices simultaneously without compromising performance.
- Protocol Support: Offers support for MQTT, WebSocket, CoAP, and other protocols.
- Real-Time Analytics: Delivers insights with built-in data-processing functionalities.
- High Availability: Ensures continuous operation with clustering and failover mechanisms.
- Flexible Integration: Integrate effortlessly with cloud services and various databases.

What benefits or ROI should be expected with EMQX?

- Cost Efficiency: Lower operational costs by optimizing data flow management.
- Enhanced Reliability: Increased reliability in data collection and transmission.
- Performance Boost: Improved device response times and reduced latency.
- Robust Security: Strengthens data protection with encrypted communication channels.

EMQX contributes significantly in industries like transportation, where it facilitates real-time data exchange between connected vehicles. In manufacturing, it enhances monitoring and control of production lines, leading to increased productivity and reduced downtime. Smart city solutions leverage EMQX for efficient public service management, making it a versatile choice in diverse settings.

Valuable Features

Excerpts from real customer reviews on PeerSpot:

- "EMQX is a solid open-source project for making IoT devices connect anywhere in the world."

Akshya Akshya
Senior Software Engineer

- "The best features EMQX offers in my experience are that it can send messages for a large number of customers with a very high message-per-second rate while consuming low resources."

Kevin Pham
Java Technical Lead at a financial services firm with 501-1,000 employees

- "EMQX will boost your product sampling rate and transmission so that you can achieve a large amount of data without any loss while transmitting through the internet."

Verified user
Saa S Company

"The outcomes from using EMQX are very cost-saving for us because we previously used the MQTT Mosquitto broker, and when I compare Mosquitto with EMQX, EMQX is far better than Mosquitto and other protocols."

Tharun K

Software Engineer at Bahwan Cybertek

"EMQX has positively impacted my organization in many ways, particularly by making our main agenda of getting stock details and connecting users to our real-time protocol much easier."

Yuvaraj Manjunatha

Senior DevOps Engineer at Appreciate Wealth Private Limited

"EMQX remains live and matured, allowing us to scale it, and we continue using EMQX without requiring to switch to any other offerings as it still works best and is resilient."

Ketan Mehta

Staff Software Engineer at a tech vendor with 5,001-10,000 employees

"EMQX helped me complete my project perfectly because when I compared it to other platforms, EMQX truly fits my needs and my project, allowing me to explain my output more clearly to my lecturer, and ultimately I received a good grade, so it has been very helpful."

Muhammad Afin

Research Engineer at a consultancy with 11-50 employees

What users had to say about valuable features:

"EMQX is a solid open-source project for making IoT devices connect anywhere in the world. The main use case that stands out is the TCP connection, which plays a vital role inside the IoT device ecosystem. The pub/sub functionality and how publishers and subscribers interact with each other without disrupting the connection between devices and applications is outstanding. The best part of EMQX is that it provides unlimited authentications and authorizations. Different providers can be integrated between those authentications and authorizations. Authentication can be provided with the built-in database within an application. Authorization can be provided based on specific users who can perform specific actions on those devices, and those actions can be controlled inside the EMQX instance. EMQX is very versatile in those terms, and people can leverage those features mostly from the EMQX platform.."

Akshya Akshya

Senior Software Engineer

Read full review

"The best features EMQX offers in my experience include the EMQX configuration file, auth file, and HTTP file, which help us to get the relevant data, and EMQX is fantastic for dashboard creation, allowing us to fetch data for our mobile or web-based applications using multiple sources.

The dashboard specifically helped my team to understand how many clients got connected via our EMQX module connection, allowing us to track the health of the EMQX container, such as CPU usage and real-time connections, all tracked via the dashboard alongside multiple config files managing WSS connections.

EMQX has positively impacted my organization in many ways, particularly by making our main agenda of getting stock details and connecting users to our real-time protocol much easier.."

Yuvaraj Manjunatha
Senior DevOps Engineer at Appreciate Wealth Private Limited

Read full review

"EMQX UI is very best, allowing users to easily get used to it without digging through documentation. EMQX also scales well with easy configuration, enabling users to get their cluster created and get started quickly. The consumption from EMQX is very convenient, such as connecting your application to EMQX servers and all nodes, so that was also easy. Performance-wise it was very great; it also offers ACL, options such as message size limitation, blacklisting certain client IDs, and supports MQTT new protocol such as MQTT 2, which is also a good thing.

EMQX allowed us to scale our product very easily, enabling us to add multiple nodes as needed and perform regional deployments such as a standby EMQX cluster. Management was easy as we did not need 24/7 maintenance or support for that since everything was well documented on the EMQX website and the community support was great.."

Ketan Mehta
Staff Software Engineer at a tech vendor with 5,001-10,000 employees

Read full review

"The best features EMQX offers in my experience are that it can send messages for a large number of customers with a very high message-per-second rate while consuming low resources. When I use an EMQX cluster with three node cores with four CPUs and eight gigabytes of RAM, and three node replicas with eight CPUs and 16 gigabytes of RAM, I can send outgoing messages up to two million messages per second for all my customers who are online at that time.

EMQX has good performance and sends messages with low latency. When I send a message, the latency is less than 100 milliseconds, which is very improved message latency.

When I changed from a trading bot using WebSocket to EMQX, I was able to cut down costs by half of the resources from before. My service has durability and scalability that is very easy to achieve.."

Kevin Pham
Java Technical Lead at a financial services firm with 501-1,000 employees

Read full review

"The best features of EMQX for me are that it is user-friendly, with a UI and dashboard that are easy to understand, allowing people to comprehend it quickly and finish their projects efficiently. There are many tutorials on YouTube and Google about EMQX that are clear and easy to understand, making it superior compared to other platforms.

EMQX has positively impacted my project because I received a good grade, which has been truly impactful for me, and it helped my project finish perfectly.

EMQX helped me complete my project perfectly because when I compared it to other platforms, EMQX truly fits my needs and my project, allowing me to explain my output more clearly to my lecturer, and ultimately I received a good grade, so it has been very helpful.

I am grateful because EMQX allows users to add not just one device but many devices, and it is a really compatible broker where I can implement my IoT device using EMQX perfectly with no delays.."

Muhammad Afin
Research Engineer at a consultancy with 11-50 employees

Read full review

"The best feature for EMQX is that it supports many additional features. For example, if you do not want to own a server, you can directly purchase serverless. If you are using another broker and have deployed that broker onto a server, when the user count of your product increases, you would need to own another server, which will cost more. However, with EMQX, you can boost your subscriber count in the EMQX portal to fit more users into your product. That is nearly scalability in AWS in cloud terms, which I appreciate in EMQX.

"When I started using the free feature, it supported 250 clients, but they have since reduced it to a significant degree. I do not know the exact number because I have moved to serverless. The free feature is beneficial to startups, so if you are doing a college project or a prototype, the free EMQX is very effective. You can use any server, whether it is Windows, Linux, or anything else, and it will be supported. That is a positive aspect, and it is supported in the free feature as well.."

Verified user
Saa S Company

Read full review

Other Solutions Considered

"I cannot remember clearly if I used a different solution before EMQX, but I did use other solutions that did not satisfy me enough, so when I tried EMQX, I was satisfied and I continue to use it.."

Muhammad Afin
Research Engineer at a consultancy with 11-50 employees

Read full review

"Before choosing EMQX, I evaluated other options and tried other software or platforms that did not satisfy me and did not suit my project, and when I tried EMQX, it suited my needs perfectly, so I chose to use it.."

Muhammad Afin
Research Engineer at a consultancy with 11-50 employees

Read full review

"Before choosing EMQX, I evaluated other options such as Mosquitto and other MQTT protocol solutions, but I do not remember all the tech stacks I researched, as it was a long time ago.."

Kevin Pham
Java Technical Lead at a financial services firm with 501-1,000 employees

Read full review

"I previously used a different solution before EMQX.

Before EMQX, I used WebSocket. When I changed to EMQX, I found that EMQX is very good for my needs.."

Kevin Pham
Java Technical Lead at a financial services firm with 501-1,000 employees

Read full review

"When switching from VerneMQ, EMQX was the first solution looked into while conducting the POC. When it satisfied all use cases easily, there was no reason to look back, and it was implemented right away because there was no desire to waste time. EMQX provided value right away. No other solutions were used or considered.."

Akshya Akshya
Senior Software Engineer

Read full review

"The organization previously used other options such as VerneMQ or HiveMQ. When the switch to EMQX was made because it was so developer-friendly, there was no need to go back and re-implement VerneMQ. The organization moved on to EMQX and stayed there because it provides so much value to the product. There was no reason to look back, and that represents the return on investment. As a developer, if time is invested and a POC stays for the longer run, that is what return on investment means.

The previous solution was VerneMQ, and the switch was made because the implementation of authentication and authorization was not developer-friendly, and there was not much control over the schemas from a developer perspective. With EMQX, a schema is defined and everything is controlled by the organization's own IP. Whatever the use case is, it can be played around with, and security gateways can be implemented easily. With VerneMQ in place, that was not nearly as easy.."

Akshya Akshya
Senior Software Engineer

Read full review

Use Case

“My main use case for EMQX is for my project to be controlled by phones and devices using the internet with the MQTT communication protocol. I use EMQX to control and monitor my project with multiple devices because EMQX allows users to grant control across many devices..”

Muhammad Afin
Research Engineer at a consultancy with 11-50 employees

Read full review

“My main use case for EMQX is transporting messages via WebSocket and TCP for streaming data, specifically streaming prices on the trading board of VNDIRECT.

For chatbox messaging or data streaming, I use EMQX as a message broker. When a user sends a message, I use EMQX to send that message to people in my room. With the trading bot, I use EMQX for streaming messages. When I receive a message from Hanoi X and HoSE, I convert the message and send it to the customer who is using a trading bot to monitor price changes.

I use EMQX for my chat platform and message streaming for a trading bot..”

Kevin Pham
Java Technical Lead at a financial services firm with 501-1,000 employees

Read full review

"My main use case for EMQX is for the streaming part, as we are a fintech-based startup using EMQX to get stock price details from DriveWealth. We have an MQTT module where we use EMQX as a streaming module to stream the data.

EMQX fits into my workflow as we designed an MQTT module where it helps us to fetch the data from DriveWealth, which is a US-based entity, by using the endpoint where we can get the stream data, thus allowing multiple users to access the stock information.

In terms of my main use case with EMQX, we were using a Docker pulled image of EMQX for the admin panel to see how many clients are connected, how long they are connected, and we have an auth plugin, so all streamed data was able to be fetched with the dashboard.."

Yuvaraj Manjunatha
Senior DevOps Engineer at Appreciate Wealth Private Limited

Read full review

"EMQX remains live and matured, allowing us to scale it, and we continue using EMQX without requiring to switch to any other offerings as it still works best and is resilient.

EMQX was a completely new feature and the maintenance effort was not there previously, but we did not require any maintenance as far as I recall in the past three to four years, as we did not need anything to restart or connect or reconnect the cluster; it was working smoothly for months and even years. Regarding improvement in latency, latency was just some milliseconds for every message delivery, ensuring all messages were reliably delivered. User engagement was a great experience where users did not face any issues while interacting via EMQX, whether it involved comments, emojis, or anything else. We even built an admin panel for comment moderation, where we saw EMQX messages flowing to the system, meaning the dashboard was very smooth.."

Ketan Mehta
Staff Software Engineer at a tech vendor with 5,001-10,000 employees

Read full review

"I use EMQX for MQTT pub/sub use cases with devices connected through IoT. When communicating between different devices, EMQX provides the connection between them and delivers real-time updates.

Devices are deployed with MQTT TCP connections. Device credentials are created inside EMQX for each particular device, and those devices have those credentials with a specific client ID to communicate through the web app. The web app listens to a particular set topic which that particular device generates. That particular device sends data to that particular topic, and the application listens to that topic. In that case, they communicate with each other. When the application needs to provide some commands to the device, those commands are sent through command topics, and the devices listen to those. These communications happen in near real-time.

Webhooks provided by EMQX are also leveraged to fetch real-time connection details for the particular devices that are connected. EMQX provides functions to make real-time changes based on the events received from that webhook. The built-in monitoring from EMQX is also used for managing clients inside the EMQX dashboard.."

Akshya Akshya
Senior Software Engineer

Read full review

"We considered EMQX because we initially used the MQTT broker Mosquitto, which does not support the higher sampling rates that our product requires. Our product needs to transmit nearly 16 KB of data per second, which is substantial, but Mosquitto broker cannot support that capacity. We switched to EMQX so that it can open multiple channels to send the data simultaneously to achieve the sampling rate as effectively as possible.

"For example, I have an ADC connected to a microcontroller with eight sensors. The ADC takes raw data without any overhead of internet connectivity or HTTP calls, and the raw sampling rate of the ADC is nearly 128 samples per second. When transmitting the data, it suddenly drops to nearly ten samples per second, which represents huge data loss when considering medical, transportation, or any devices used by humans. We signed up for EMQX, and EMQX created simultaneous eight channels, increasing the rate from ten samples per second to nearly 80 samples per second. We initially used the free EMQX offering, which supported nearly 250 users, and then we moved to serverless, which is what we are currently using. Serverless supports nearly 16 channels, so 16 multiplied by 10 means we can achieve nearly 160 samples per second. That is the real-time scenario for which we have used EMQX.

"You can use EMQX when you want to get a major amount of data to the internet. When transmitting data via HTTP, there is a minimum delay of 200 milliseconds, which is significant for IoT products. For that reason, we are transitioning to MQTT, which stands for Message Queuing Telemetry Transport. When moving to MQTT, there are many constraints that we faced in free MQTT options such as Mosquitto broker. EMQX will boost your product sampling rate and transmission so that you can achieve a large amount of data without any loss while transmitting through the internet. If you are planning to build an AI product using an IoT device, each data point will count. With EMQX, you will get many data points per second and over time spans to boost your AI, and the AI will be trained faster compared to other brokers.."

Verified user
Saa S Company

Read full review

Customer Service and Support

"I have not used customer support for EMQX because I can understand it on my own by watching tutorials on YouTube, even if they are not from the official EMQX customer service, so I am satisfied with self-learning.."

Muhammad Afin
Research Engineer at a consultancy with 11-50 employees

Read full review

"The open-source version of EMQX is used, so there is no customer support to speak of. The documentation is exceptional and so developer-friendly that customer support is not needed. The documentation has been maintained very much with developers in mind.."

Akshya Akshya
Senior Software Engineer

Read full review

Other Advice

"My advice for others looking into using EMQX is that when someone I know wants to try to build an IoT project, I will recommend them to use the MQTT protocol communication, which can be integrated with EMQX. I have no additional thoughts about EMQX before we conclude; it is perfect. I would rate this review a ten out of ten.."

Muhammad Afin
Research Engineer at a consultancy with 11-50 employees

Read full review

"I think others looking into using EMQX can do a small POC to see from all aspects whether EMQX fits their requirements, not just the current one but future expansion as well, before deciding which one is better, as there might be other alternatives to evaluate as well. I have given this product a rating of eight.."

Ketan Mehta
Staff Software Engineer at a tech vendor with 5,001-10,000 employees

Read full review

"EMQX is a pretty good product, and I am satisfied with it.

My advice for others looking into using EMQX is that it provides a better and more efficient way of getting data streams and better visualization for your product, along with easy integration and go-to-market solutions. I would rate this product nine out of ten.."

Yuvaraj Manjunatha
Senior DevOps Engineer at Appreciate Wealth Private Limited

Read full review

"EMQX is a unified namespace architecture and is a lightweight solution compared to old database solutions such as MSSQL or PostgreSQL. EMQX is also a very fast communication protocol. MQTT is a very fast communication protocol.

"I appreciate EMQX as it is a very lightweight solution. This review has an overall rating of 8.."

Bedinur İzmirli
Industrial Digitalization Engineer

Read full review

"My advice to others looking into using EMQX is that if anyone wants to use it for their microservices, they can try it. EMQX is very good for new developers who want to use it.

EMQX is a very good solution for a system with high performance and large throughput messaging for clients using mobile or web applications. You can use the WebSocket feature of EMQX with SSL on port 8084. You can also use other features of EMQX such as webhooks. When I used authorization of EMQX, I faced

issues regarding high load performance in my service backend. Therefore, anyone wanting to use authorization of EMQX should use Redis Auth. We changed from webhooks to using Redis Auth, and we achieved better performance. EMQX is a good solution if one is using authorization. I give this review a rating of eight out of ten.."

Kevin Pham
Java Technical Lead at a financial services firm with 501-1,000 employees

Read full review

“For a backend written in MySQL or MongoDB, specific users and ACLs inside MongoDB or SQL can be leveraged to integrate with authentication and authorization without relying on any outer-world providers. The company's domain will control the authentication and authorization for these devices. Overall, the devices are maintained inside the system, not anywhere else. This provides leverage between different authentication and authorization providers.

The organization was able to manage 1,000 plus devices and 65 million concurrent device connections with EMQX. Different clients use these EMQX pub/sub relationships, and it helps greatly, providing the versatility and extensibility of this particular platform.

For those wanting to implement a workflow where devices are present or real-time actions are needed from some client residing on the other side of the network, it is important to first know the use case. When the use case is finalized, a POC on EMQX can be conducted, which is easy to do because the documentation provides great support. For developers implementing it, the authentication and authorization part should be prioritized because that is the most important part for making clients secure. If security is compromised there, then the whole point of making connections secure is lost. Keep a close lookout for the authentication and authorization part so that wherever clients or devices are placed, they are secure and securely managing their communication between networks.

Anyone wanting to implement EMQX in their workflow can rely on the tool because it provides features that every organization has, and the use cases it solves are immensely valuable. Going ahead and implementing these tools puts an organization ahead of the game from other players. This review rates EMQX an overall score of 8 out of 10..”

Akshya Akshya
Senior Software Engineer

Read full review

Top Industries

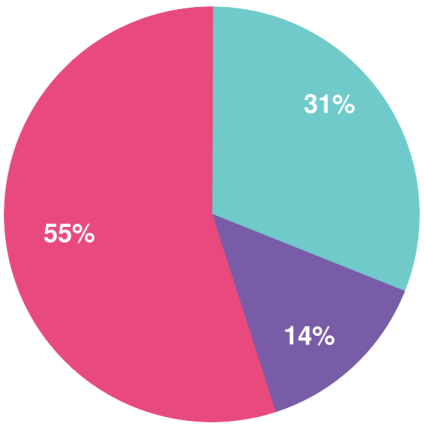
by visitors reading reviews

Legal Firm	17%
Media Company	14%
Manufacturing Company	11%
Financial Services Firm	8%

Company Size

by reviewers

by visitors reading reviews



Large Enterprise Midsize Enterprise Small Business

About this buyer's guide

Thanks for downloading this PeerSpot report.

The summaries, overviews and recaps in this report are all based on real user feedback and reviews collected by PeerSpot's team. Every reviewer on PeerSpot has been authenticated with our triple authentication process. This is done to ensure that every review provided is an unbiased review from a real user.

Get a custom version of this report... Personalized for you!

Please note that this is a generic report based on reviews and opinions from the collective PeerSpot community. We offer a customized report of solutions recommended for you based on:

- Your industry
- Company size
- Which solutions you're already considering

The customized report will include recommendations for you based on what other people like you are using and researching.

Answer a few questions in our short wizard to get your customized report.
Get your personalized report here

About PeerSpot

PeerSpot is the leading review site for cloud, AI, and business software. We created PeerSpot to provide a trusted platform to share information about software, applications, and services. Since 2012, over 22 million people have used PeerSpot to choose the right software for their business.

PeerSpot helps tech professionals by providing:

- A list of products recommended by real users
- In-depth reviews, including pros and cons
- Specific information to help you choose the best vendor for your needs

Use PeerSpot to:

- Read and post reviews of products
- Access over 30,000 buyer's guides and comparison reports
- Request or share information about functionality, quality, and pricing

Join PeerSpot to connect with peers to help you:

- Get immediate answers to questions
- Validate vendor claims
- Exchange tips for getting the best deals with vendor

Visit PeerSpot: www.peerspot.com

PeerSpot

244 5th Avenue, Suite R-230 • New York, NY 10001

reports@peerspot.com

+1 646.328.1944