IoT as technology offers lots of opportunities, but the more we learn about it, the clearer it gets how complex IoT-related projects can be.

**IOT AND HYBRID ENVIRONMENTS**

One of the special characteristics of IoT platforms is that, depending on the implementation scenario, they should be operated rather locally than from the cloud. The reason is simple: It might take too much valuable time before an IoT device performs a correction action after it “reported” critical data changes to the central IoT platform.

In such cases, though, IoT-related integration projects will have to be of a hybrid nature, because the platform will still be required to exchange both critical and statistical data with company’s other applications, both local and cloud-based.

“Now we have one infrastructure for all integrations. This reduces time for our developers by up to 80%, and also for our customers. Now we can meet their integration requirements and deliver the projects considerably faster.”

Bharath K., CoFounder & Director at Apora
CONSOLIDATING MULTIPLE SYSTEMS OF RECORD

Another common challenge, particularly for companies in the Logistics & Transportation sector, is that they often have data streams from multiple IoT systems of record. Just think food transport and appliances for temperature regulation from different manufacturers.

However, an additional integration layer will be required to aggregate such data in order to analyze it or simply to understand to which appliance or which vehicle a sensor belongs to or in which area it is located.

“While IoT platforms can be delivered as software, in most cases it is consumed as PaaS. This makes iPaaS a natural choice for a stand-alone integration platform when you need to supplement the IoT platform’s integration capabilities.”

Gartner

HYBRID INTEGRATION PLATFORM AS A SERVICE

The elastic.io integration platform is by nature cloud-based, which means that it can be accessed from any place within your organization. You can stick to our own cloud environment or deploy an instance in the public cloud environments of your choice.

At the same time, the elastic.io platform can be easily connected to the existing on-premise software via its Secure Integration Bridge (SIB). In this scenario data is transferred from and to the cloud.

If required, an instance of the elastic.io platform can be deployed in a dedicated environment on-premises. Data stays on-premises as well, while management and monitoring are done from the cloud.

Save up-to 80% on development and maintenance costs of your integrations be that for Cloud, IoT or Mobile projects

elastic.io Hybrid Integration Platform helps reduce time-to-market of your integration projects from weeks to several hours

Plays well with the existing infrastructure enabling ad hoc integration use cases faster than before, at fraction of the cost

The rich library of predefined integration components makes it easy to switch to the elastic.io iPaaS as soon as the built-in integration capabilities of the initial IoT platform are exceeded
ELASTIC.IO OFFERING TO SOLVE IOT-RELATED ISSUES

The microservices-based nature of the elastic.io iPaaS ensures its high scalability and performance with low latency, which is crucial for dealing with parallel processing. It is ideal for the increasingly used event-driven application interaction in IoT projects.

Thanks to the Docker containers technology, each individual integration step can be scaled up and down independently and dynamically based on the queue publish or consume rates. This is an ideal fit for IoT projects with potentially large-volume data ingestion and consumption and data spikes.

The hybrid nature of the elastic.io integration platform as a service allows to seamlessly integrate IoT platforms with SaaS and on-premises applications and services.

80+ predefined integration components and the Node.js-based and Java-based SDKs for creating custom adaptors ensure that the elastic.io iPaaS can be used to quickly connect IoT platforms with each other and to other critical applications.

WHY ELASTIC.IO?

Can be deployed in the cloud, behind the firewall, or both
High scalability and performance with the latency under 10 milliseconds
Fits well with existing integration tools like ESB
For batch and real-time data
Visual mapping of business processes with both code and no-code integration user roles