

CONTACT Cloud

Bringing CONTACT Elements to the Cloud

CIMdata Commentary

Key takeaways:

- *Historically information technology (IT) used to support the product lifecycle was implemented on-premise managed by industrial adopters.*
- *Based on CIMdata's research, industrial companies are increasingly choosing cloud-based solutions which simplify their IT landscape, reduce costs, and speed time to value.*
- *The CONTACT Cloud offering leverages proven technology and cloud infrastructure to deliver a scalable, configurable product innovation platform applicable to companies in a wide range of industries.*

Introduction

Over the last decade, cloud computing has come to dominate both our personal and professional lives. It brings all manner of commerce and media to our fingertips, powering the services that many now we take for granted. Many categories of enterprise software are now led by cloud-native solution providers, such as Salesforce's customer relationship management. Based on the results of recent CIMdata research, for many companies, the question has shifted from "why cloud?" to "why not cloud?" We are seeing that same trend in our consulting work with industrial companies around the world.

Companies in all industries are looking to the cloud for solutions to manage the product lifecycle from idea through life. Many PLM solution providers are working hard to bring the needed capabilities to the cloud. One such provider, CONTACT Software, is leveraging CONTACT Elements, their proven on-premise solution that has been offered in the cloud since 2021. Their cloud-based offering, CONTACT Cloud, is the subject of this commentary.¹

Cloud is the Future...and the Future is Now!

Historically, solutions to support the product lifecycle were deployed on-premise. Adopters were responsible for creating the necessary information technology infrastructure to support their implementations. This put industrial companies in the IT business, with large budgets and IT teams that were not their strength or in their strategic interests.

The use of cloud infrastructure clearly is the future. In fact, many companies are already there and seeing great benefits. Cloud-based solutions offer a range of benefits. Getting started with cloud-based offerings can be lightning fast, often with just a "swipe" of a credit card. This is a stark contrast with on-premise solutions which require lengthy installation and complex hardware configurations. As important, it is much easier and cheaper to scale up and down as needed in the cloud. Many companies like the cost certainty, and being able to move their IT-related expense from a capital expense (CAPEX) to an operating expense, which offers tax advantages. Recent CIMdata research shows dramatically more interest in and adoption of cloud-based offerings than just a few years ago. This is echoed by our industrial consulting clients, many of whom now have to justify why they are not choosing cloud-based offerings, exactly the opposite of the recent past.

¹ Research for this commentary was partially supported by CONTACT Software.

Another huge benefit is that cloud-based offerings greatly simplify the upgrade process. For most companies their total cost of ownership (TCO) curve has peaks when upgrades are planned. This is one reason that many companies operate on old versions of their solution, sometimes for decades, a result graphically depicted in CIMdata's annual State of PLM survey. With cloud, solution providers are rolling out new capabilities almost constantly and they can be consumed immediately in most cases. Historically, many solution providers only added new capabilities in their current version to get people to move, leaving many customers on the sidelines because they resisted migrating to new versions. The cloud eliminates that barrier while simultaneously reducing associated costs.

From almost their inception, data and process management solutions at the heart of industrial PLM implementation allowed their users to customize their solution to their specific needs. Often these customizations were the reason it was difficult to move to new versions. Today, based on their long experience on-premise, industrial companies expect to be able to tailor and customize their adopted offerings to their specific requirements. This can be a limitation of cloud offerings that often have all customers using much the same code. In addition, many cloud offerings are not as malleable as their on-premise predecessors. To address this long-time expectation, many independent software vendors (ISVs) are architecting their cloud-based offerings in ways that make tailoring and customization possible and convenient.

CONTACT Cloud from CONTACT Software addresses these and many other industrial requirements.

CONTACT Cloud: Proven Offering, Optimized for the Cloud

CONTACT Software is a leading independent provider of product lifecycle management (PLM) solutions with a strong history of supporting industrial clients in a range of industries, with a heavy focus on discrete manufacturing. Headquartered in Bremen, Germany, their long-time product CIM Database is delivered based on CONTACT Elements, a coherent suite of building blocks that can be configured to address major collaboration and business needs around the engineering of sophisticated products. Their solution is a great example of a product innovation platform concept promoted by CIMdata and other analyst firms since 2014. Most companies have a heterogeneous PLM environment that incorporates solutions from a wide range of ISVs. CONTACT Elements was architected and developed to adhere to many international and de facto standards, important to linking to multiple systems in those heterogeneous environments. Their reliance on these standards can also help make it easier to deploy. Based on our interactions with CONTACT and their customers, CIMdata believes CONTACT Elements is a proven product innovation platform with demonstrated success in a wide range of industries and use cases.

CONTACT Cloud, their cloud offering, builds on the strengths and experience with CONTACT Elements as shown in Figure 1. CONTACT Cloud is a preconfigured, ready to use PLM solution based on the platform. It is offered today on Amazon Web Services (AWS), the leading cloud hyperscaler. But CONTACT is exploring support for other hyperscalers like Microsoft Azure, Google, and other regional cloud providers. Their cloud offering uses standard cloud deployment tools and services, including Docker, Kubernetes, and Database Services for Oracle DB. CONTACT takes care of provisioning, monitoring, and securing the cloud instances and manages the relationship with the hyperscaler. This is important because an ISV like CONTACT Software will have more buying power than an individual company. CONTACT Cloud customers have no business or legal relationship with their hyperscaler. It is all handled by CONTACT. Their Instances are updated automatically or on a schedule defined by

customers. This greatly reduces the IT management burden on industrial companies, ceding resources that can support more strategic investments.

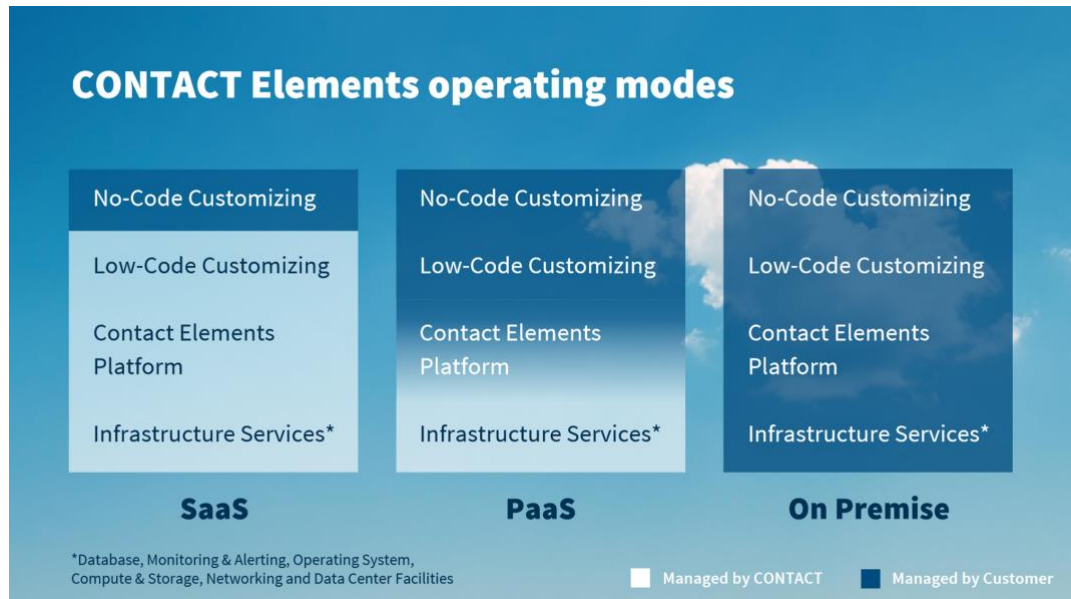


Figure 1—Bringing CONTACT Elements to the Cloud
(Courtesy of CONTACT Software)

The CONTACT Cloud Operation provides a range of managed services. These include 24/7 monitoring of core infrastructure to ensure security, integrity, and availability of customer data; encrypted communication (HTTPS); and OpenID Connect authentication via the CONTACT Cloud customer portal. Multi-factor authentication and support for virtual private networks (VPNs) are optional.

CONTACT Cloud is offered in both software-as-a-service (SaaS) and platform-as-a-service (PaaS) versions. The SaaS version offers significant capabilities:

- Project management, including dashboards, checklists and task boards
- Product data management (PDM), including item and parts management, bill of materials (BOM) management, variant management, workflow management and support for engineering changes
- Integrations for mechanical computer-aided design (MCAD), electronic computer-aided design (ECAD), Microsoft Office, including 3D visualization
- Document management
- Requirements management
- Quality management
- Classification management

Companies that want to maintain the ability to customize their implementation will require the PaaS or On Premise version as shown in Figure 1. The company offers CONTACT Cloud DevOps tools to help customize and implement solutions quickly. To better support cloud deployments CONTACT Cloud supports continuous integration (CI) and continuous deployment (CD) approaches to help automate updating cloud implementations.

Customers in need of customization beyond low code have the option to switch between cloud and on-premise implementations. A company can start with the cloud version and decide to change to on-premise. The reverse is also possible, making it easier for customers to meet the

changing IT deployment needs of their organization. CONTACT supports customers by either importing their data into the cloud instance, or by exporting it from the cloud to an on-premise instance.

CONTACT Cloud offers many of the benefits potential customers expect of cloud-based offerings discussed earlier in this commentary. CONTACT Cloud requires only a low initial investment, but can scale as a customer's needs grow. Standards and automation tools make for shorter ramp-up and faster processes. Customers get predictable costs and reduced IT costs for hardware, infrastructure, maintenance, and staff. While security concerns about the cloud might cause hesitation, in fact cloud implementations done right are much more secure than any on-premise installation. And, since it's cloud, the latest version and technology are always available. For those that want to customize, CONTACT Software helps ensure the application of DevOps best practices.

Today CONTACT Cloud is only available on AWS but the company plans to support other hyperscalers over time. CIMdata believes that CONTACT Software's containerized deployment approach is strong and can be replicated with other IaaS hyperscalers. This is important because many industrial companies plan a hybrid approach, with solutions on multiple clouds and likely including on-premise solutions in their IT landscape as well. CONTACT Software is well-positioned to support this trend.

Conclusion

Cloud computing is no longer a nice to have. It has become a corporate and technical necessity. Industrial companies want to support their entire IT landscape on the cloud, including their PLM implementation. Many ISVs are bringing their solutions to the cloud to meet these new requirements. Industrial companies are used to having it their way, customizing their solutions to meet their specific requirements. Cloud-based offerings do not always support the level of customization desired. CONTACT Cloud addresses that problem, containerizing their CONTACT Elements platform for the cloud so that it yields many known benefits of cloud deployment while allowing the customizations many customers demand. CIMdata has long known CONTACT Software and has always been impressed with the company, their technology, and by their customers' success. CONTACT Cloud is a worthy successor in their PLM lineage and CIMdata expects their customers to agree, working with CONTACT Software to move into their cloud-powered future.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design, deliver, and support innovative products and services by identifying and implementing appropriate digital initiatives. For nearly forty years, CIMdata has provided industrial organizations and providers of technologies and services with world-class knowledge, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) solutions and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit www.CIMdata.com or email info@CIMdata.com.