



Taking control of your business with cloud choice

A guide to selecting the right cloud for Pega applications



Contents

- 3 **Intro**
- 4 **Supporting the right cloud for every customer need**
- 5 **Pega Cloud Services**
- 6 **Client-managed cloud**
- 8 **Cloud-native architecture**
- 9 **Cloud security and compliance**
- 10 **Conclusion**



ABOUT THE AUTHOR

Pete Brown

Director of Product Marketing, Cloud Services

Pete Brown is the director of product marketing for cloud services at Pegasystems, driving Pega's cloud choice strategy, including Pega Cloud® Services and client-managed cloud solutions. Before joining Pega, Pete led cloud product marketing efforts for a number of cloud-native start-ups, including both licensed and open source software companies.

Digital transformation is not about broad change. It's about the integration of public and private systems across on-premises and cloud infrastructure. Therefore, modern enterprises increasingly need a flexible and scalable platform designed to support and future-proof their ecosystems. Organizations are starting to understand that:

- Container-based architectures lead to widespread use of microservices.
- Long-term, multicloud strategies lead to microservices running on different clouds to support just one platform.

Pega's Cloud Choice Guarantee™ is our commitment to **accelerate, optimize, and deliver the value of cloud computing for the modern enterprise**, in the current technology landscape.

Supporting the right cloud for every customer need

Many enterprises still rely on outdated, pre-cloud business models. Luckily, however, large-scale digital transformation efforts have given way to a more regimented approach that prioritizes systems based on the level of migration effort and the security needs for impacted data.

Pega is deeply committed to meeting the diverse current and future client needs, and granting flexibility to evolve with those needs. We do this by:

- Enabling client migrations that don't impact existing licenses among validated infrastructure options
- Supporting a fully-managed cloud service and client-managed implementations on public, private, and hybrid cloud architectures
- Evaluating existing and future platforms demanded by the market

Pega supports:

- Pega Cloud® Services: Our fully managed cloud solution
- Public cloud: AWS, MS Azure, GCP
- Private cloud: VMware Enterprise PKS, OpenShift
- On-premises: Kubernetes environment



Pega Cloud Services

Deploy our fully-managed cloud

Pega Cloud Services is fully managed for the client. We are able to provision your environment in days – unlike on-premises or client-managed cloud architectures that can take months to build. [According to a Forrester's Total Economic Impact study, enterprises that adopt Pega Cloud experience 321% ROI in less than 12 months with a 75% cost savings.](#)







Pega Cloud delivers operational and security services with the tools you need to create a long-term regulatory compliance strategy.

Our cloud services are designed to meet global compliance and data privacy regulations like General Data Protection Regulation (GDPR) and Federal Risk and Authorization Management Program (FedRAMP).

Importantly, Pega's integration technologies are modern and scalable to continuously meet the performance needs of your business and fit into your enterprise architecture.

Why choose Pega Cloud?

- Fastest time to market
- Focus on a company's core business, not IT
- Quad/Graphics go from purchase to production in less than three months
- A cloud service platform architected by Pega and optimized for the Pega Platform™

	Pega Cloud	Client-managed cloud
About	<ul style="list-style-type: none">• Accelerates time-to-value with rapid provisioning to bring applications to market faster• The tools, technology, and procedures to ensure security, performance, and privacy• Architecture has been validated against the most rigorous global security and privacy regulations• Fault-tolerant architecture enables seamless	<ul style="list-style-type: none">• Pega's Cloud Choice Guarantee program delivers continuous certification on leading public and private cloud platforms• Commitment to evaluate new providers as the market demands• Operate your application on the public or private cloud of your choice• Migrate to Pega Cloud without penalty
Application		
Security operating system database monitoring		
Infrastructure		

Client-managed cloud

Take control of your cloud

For Pega clients with experience managing complex workloads in the cloud, Pega offers the flexibility to deploy your choice of certified infrastructure providers. This way, you can gain flexibility and control what you want and need – driving a center of excellence (COE) around cloud, DevOps, and Pega.

With client-managed cloud, you're in charge of designing, securing, networking, and monitoring your Pega environments – architecting them to your regulatory compliance demands.

To future-proof your technology, we recommend using modern cloud architecture with Kubernetes and Helm, and selecting your own infrastructure model – public or private cloud – or in an on premises Kubernetes environment behind the firewall. You can also employ autoscaling to manage load balance to improve performance and resource utilization. This frees your cloud engineers to focus on other, high-value activities.

Choose client-managed cloud when there are:

- Strict 100% SLA commitments, like applications for real-time human health and safety
- High-volume integrations with large datasets, with limited internet connectivity or latency concerns



An iceberg floating in the ocean, with the visible tip representing the customer-facing layers and the much larger submerged part representing the underlying infrastructure and security layers.

Customer engagement & digital process automation projects

Orchestration

- Access control
- Performance tuning
- Stack configuration
- Package management
- Resource coordination
- Log management
- Task management
- High availability
- MFA and login control
- Routing
- Platform upgrades

Automation

- Deployment
- Backup
- Failover
- Configuration analysis
- Tuned cache
- Load balancing
- Vulnerability scanning
- Guardrails
- API and connectors
- Scaling

Operation

- Ops audit/Troubleshooting
- Platform code maintenance
- Ops monitoring & response
- Uptime monitoring
- Patching
- Disaster recovery
- Resource monitoring

Security

- Application monitoring
- Encryption In transit
- SSH
- Encryption at rest
- VPN configuration

- Whitelisting
- Penetration testing
- Antivirus/Malware configuration
- Firewall configuration
- Infrastructure monitoring

- Proactive database monitoring
- Backup/recovery
- Business continuity planning

Infrastructure

- Single tenant
- VPC

- Compute
- Storage

- Networking
- Kubernetes

Cloud-native architecture

Capitalize on everything cloud has to offer

The term “cloud-native” has often been used to describe companies that have only operated their software on [cloud architecture](#). However, as cloud technology has evolved, the concept of cloud-native now more accurately reflects cloud architectures designed to maximize the benefits of this model over a traditional data center. For example, virtualization of servers, containerization, and autoscaling all enable IT operations teams to reduce the amount of unused computer and storage capacity – ultimately resulting in cost savings.

Docker (the standard container technology), Kubernetes (the leading orchestration system), and containers (applications structured as a collection of self-contained services distributed across a network environment) allow us to capitalize on all cloud has to offer.

These technologies, when combined within platform architectures, increase efficiency and drive the next generation of cloud software to support seamless, omni-channel interaction and infinite scale. They also simplify patching, upgrading, and maintaining your cloud architecture – thus addressing the biggest root cause of security breach.

How Pega delivers cloud-native architecture:

- Pega Infinity™ is architected to support Kubernetes with packages managed by Helm.
- DevOps tools combined with Pega’s API integrations enable seamless adoption of DevOps best practices, whether you are new to DevOps or already have a COE in place.
- Adoption of Pega Infinity means no more application refactoring and migration. Regular upgrades allow you to get the latest from Pega.



Cloud security and compliance

Meet the evolving landscape of global data privacy regulation

Pega Cloud Services security and privacy features are built on a certified framework compliant with the most rigorous global security and privacy regulations. Our security approach ensures that compliance standards are not only maintained, but exceeded.

The Pega Cloud compliance team conducts regular audits and risk assessments of Pega Cloud Services to maintain adequate governance over the entire environment. At least once per year (or when significant changes are made to the networks), the compliance team conducts an information security risk assessment on current information security controls.

Not only do we have our own identity and access to control features, but we also provide you with centralized visibility. This enables authentication management of users and systems, and integration with leading identity and access management (IAM) solutions.

Forrester estimates that at least

80% of data breaches

have a connection to compromised privileged credentials, such as passwords, tokens, keys, and certificates.

The Forrester Wave™:

Privileged Identity Management, Q4 2018

by Andras Cser

November 14, 2018

Conclusion

Pega enables enterprises to reap the benefits of cloud-based deployment, while preserving the agility needed to retain a competitive edge in today's dynamic market conditions. Pega's Cloud Choice Guarantee program is our way to ensure you have a strategic partner with the flexibility to support your cloud strategy without lock-in.

Client-managed cloud – for clients who choose to manage their own operations – delivers a container-based distribution of Pega Infinity that uses modern cloud technologies, including Kubernetes and Helm. You configure your environments and control plane to meet your needs. You can operate with the confidence that Pega continuously validates our distribution against leading Kubernetes services.

Alternatively, Pega Cloud gets you up and running within days. You get reliable round-the-clock service that puts you in control of your cloud strategy. Operations run more smoothly because Pega Cloud is designed to deliver performance, scale, and security. You can be confident your data is secure because our services are certified by independent auditors across stringent global security and privacy standards.

Ultimately, Pega Cloud Services provides you with cutting-edge technology and industry-leading security. This delivers you the freedom to focus on building and configuring secure and compliant applications – so you can successfully drive your business.





About Pegasystems

We are Pegasystems, the leader in software for customer engagement and operational excellence. Our adaptive, cloud-architected software – built on the unified Pega Platform™ – empowers people to rapidly deploy and easily change applications to meet strategic business needs. Over our 35-year history, we've delivered award-winning capabilities in CRM and digital process automation (DPA), powered by advanced artificial intelligence and robotic automation, to help the world's leading brands achieve breakthrough business results.

For more information, please visit us at [pegasystems.com](https://www.pegasystems.com)