Cloud & Innovation

Operational Excellence

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Keylane

Agenda

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Thriving in the future landscape of Life & Pension
www.keylane.com

Keylane Cloud Strategy

Keylane Cloud Strategy

General remarks

⚡ Keylane continues to evolve its cloud strategy to meet the needs of our customers, and to ensure all platforms are delivered in a compatible manner.

⚡ This strategy is one of "choice":

— Customers may work with Keylane to choose between running in the Keyland private cloud, or in Microsoft Azure.

⚡ Products will be optimized to run in either cloud environment, giving customers a multi-cloud capability.

Keylane Cloud Strategy

General strategy

⚡ Platforms that are end-of-life will not be migrated to public cloud.

⚡ Active platforms:

— Platforms that are **already in MS Azure** will remain in MS Azure, Where needed, the Azure setup will be aligned with other Azure platforms.

— Platforms with a **contractual obligation** or significant customer expectation to shift to MS Azure will be transitioned accordingly.

— Platforms that are built **cloud-native** but are currently hosted on external private cloud environments will be migrated to MS Azure.

— Active platforms that need **optimization** should be optimized in a way that prepares them for future public cloud hosting.

Setting the Scene

Some definitions

⚡ **Private Cloud**

— Our well-known Keylane Cloud currently used in our private cloud SaaS offering.

⚡ **Public Cloud**

— Keylane tenant in Microsoft Azure. Here, we selected Microsoft Azure as Keylane's global provider of public cloud services. This enables us to increase our global presence through our Azure Keylane tenant.

⚡ **Hybrid Cloud**

— Hybrid-cloud means that we can run a single customer over two different clouds. For example, we could run part of a customer deployment in our private Keylane cloud and part in our Azure tenant. With AI becoming more and more integrated in Keylane services, hybrid will come into play as some AI features will be delivered by the AI supplier on public cloud.

⚡ **Multi Cloud**

— Multi-cloud means that we can deliver our SaaS service on different kinds of clouds. The codebase will be (ultimately) the same, but with different deployment targets.

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Keylane Cloud Strategy

Multi-Cloud

Keylane provides a **Multi-Cloud** strategy
depending on product line

⚡ **Main Take-away**
— Keyword is **choice**. When contracting a SaaS service at Keylane, the customer is offered a choice for either the Keylane Cloud or our Keylane Azure tenant when it comes to the infrastructure layer.
— Both choices deliver the job in a comparable manner **within our SLA.**

⚡ **Customer Perspective**
— Keylane provides Software as a Service over the internet -> For the customer this is already public cloud.

Multi-Cloud by Keylane

One Keylane cloud department

Move to **One** Keylane Cloud department managing
and controlling both cloud solutions

- ⚡ Customers often find the choice of the infrastructure layer of strategic importance.
- ⚡ Flexibility to move from one to another cloud (with customer consent) in case of geopolitical issues or other requirements change.
- ⚡ Allows for a consistent approach on security, compliance, etc.
- ⚡ To align supportive tooling and automation.
- ⚡ To support all platform evolutions.
- ⚡ To enable fast upscaling of capacity
- ⚡ To centralize all knowledge available instead of scattered over multiple departments.

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Cloud Strategy Per Product Line

Summary

Product line	Strategy	Hosting Platform
Plexus	Multi-Cloud strategy	Private Public
PDE	Public Cloud, move away from current hosting partner	Public
Benefits Plaza	Hosted on Private Cloud for the short term.	Private
Obex	Already hosted at MS-Azure.	Public
Lifetime	Hosted on Private Cloud for the short term.	Private
LeanApps Life	Hosted on Private Cloud for the short term.	Private
Maia	Private Cloud always	Private

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#UnlockTomorrow
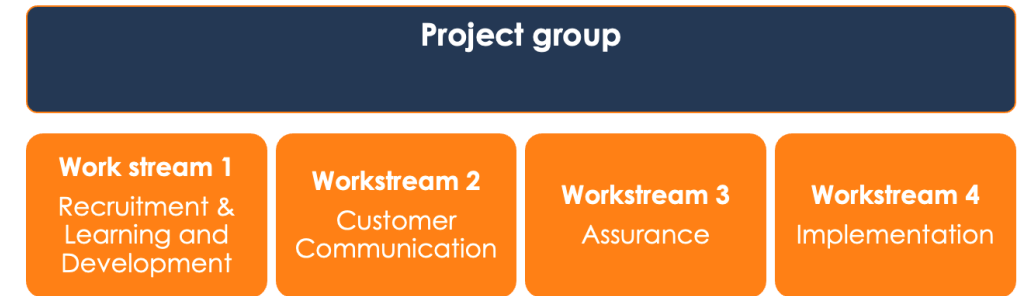www.keylane.com

Keylane Public Cloud

Status Update

Keylane Public Cloud (MS-Azure)

Status update - Assurance

- Implemented RBAC with MFA
- Implemented PIM (Privileged Identity Management)
  — Just-In-Time, time-bound, approval, audit etc.
- Implemented SIEM (Security Information and Event Management) to detect anomalies
- Internal SOC -> will move to 24/7 SOC executed by a third party
- Pentest on Infrastructure and running applications without any critical findings
- Currently performing a purple teaming exercise
- All environments complete infra as code (no manual activities)
- ISAE-3402 (type 1) assurance report

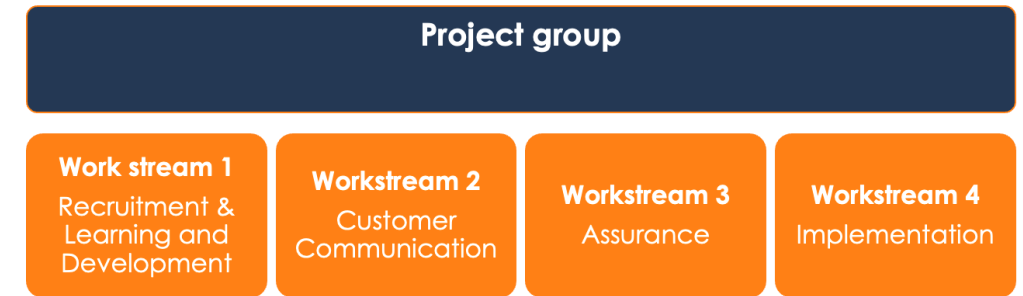| Project group			
Work stream 1 Recruitment & Learning and Development	**Workstream 2** Customer Communication	**Workstream 3** Assurance	**Workstream 4** Implementation

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Keylane Public Cloud (MS-Azure)

Status update - Implementation

Designed and Implemented the landing zones

⚡ Ensure compliance with security policies through:

— **Central Monitoring & Management**: Resource monitoring.

— **Central Network Hub**: Connectivity and secure external links.

— **Azure Policies & RBAC**: Applied hierarchically for consistency across workloads.

— **Workload Templates**: Predefined resources, policies, budgets, and access control.

⚡ Designed and implement Management Groups:

— **Foundation**: Centralized resources (networking, security).

— **Customer**: Solutions for various environments (Prod, Acc, Dev, Test).

— **Product**: AKS shared hosting for PDE.

⚡ Designed and implemented subscriptions

— Separate Azure subscriptions for different workloads (Keylane's products, environments) with differentiated security, governance, and access control.

⚡ Designed and implemented a Hub-Spoke Network Topology:

— Milestones:

— First PDE customers live in Q4-2025

— First Plexus Pre-production environment operation in 10-2025, live in Q2-2026

Project group			
Work stream 1 Recruitment & Learning and Development	**Workstream 2** Customer Communication	**Workstream 3** Assurance	**Workstream 4** Implementation

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Innovation in the Market

Some Insights

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Innovation in the Market

Why this matters now

"Innovation is essential for the evolution of insurance and will, when regulated and well supervised, be beneficial for policyholders, the sector, and for supervisors." – EIOPA[1]

- **Wtp**; NL pension transition to be completed by 1 Jan 2028.
  — Large-scale data migration, transparency, and new communication to participants.
- **UK**; Pensions Dashboards Programme connection deadline of 31 October 2026.
- **DORA**; applies from 17 Jan 2025, raising the bar on resilience.
- **Rest of EU**; same directives apply; local regulators also emphasize transparency, data quality, and resilience.

[1] European Insurance and Occupational Pensions Authority

Innovation in the Market

Customer first experience

"Digital financial services can help modernise the
European economy across sectors and turn Europe
into a global digital player." – EU DG FISMA[1]

- **Self-service portals**; More focus on participant dashboards and calculators instead of annual (paper) statements.
- **Mobile & digital channels**; Real-time updates on contributions, benefits, and simulations across devices.
- **Efficiency push**; Vendors focus on delivering SaaS and modular systems to cut cost per participant.

[1] Directorate-General for Financial Stability, Financial Services and Capital Markets Union

Innovation in the Market

How the market is modernising

"The ongoing digitalisation of insurance and pension services streamlines processes, enhances consumer awareness, and facilitates greater product uptake and smoother interaction between consumers and providers." – EUOPA[1]

- ⚡ **Cloud-native & Modular platforms**; SaaS Policy admin with configurable layers.
- ⚡ **Hybrid / Multi-cloud**; EU funds looking to hybrid/multi-cloud for choice, resilience and flexibility.
- ⚡ **AI & automation**; Used in migrations (data quality, conversion), compliance checks, and participant communication.
- ⚡ **Real-time & event-driven**; Moving away from nightly batch runs, towards near real-time flows and API-first connectivity.

[1] European Insurance and Occupational Pensions Authority

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Innovation at Keylane

Evolving Plexus

Innovation at Keylane

What containerisation means in plain terms

Loose cargo

Containers

- ⚡ **Loose cargo = many separate pieces** like Plexus, JVM, Tomcat, libraries, configs; harder to combine, more room for mistakes.
- ⚡ **Containers = everything bundled together** in one standard package, handled the same everywhere.
- ⚡ **For Plexus:** Software is delivered as a single, consistent unit; easier, faster, and more reliable to deploy.

Innovation at Keylane

Container orchestration: how containers are managed

- **Think ports and cranes:** Orchestration (Kubernetes/AKS) is the system that loads, moves, and balances containers automatically.

- **Reliable operations:** Ensures containers start, stop, and recover without disruption.

- **Scalable by design:** Can handle peak loads (e.g. annual statements) by adding capacity automatically.

- **Secure and compliant:** Built-in controls for monitoring, logging, and recovery, aligned with DORA.

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Innovation at Keylane

Containerisation; why it matters for you

"Containerisation makes Plexus easier to upgrade, more reliable in operation, and better prepared for future innovation."

- ⚡ **Fewer surprises:** every update works the same in all environments, reducing risk of incidents during upgrades.
- ⚡ **Less downtime:** faster upgrades mean shorter maintenance windows and smoother operations.
- ⚡ **Future-ready platform:** containerisation standardises how Plexus runs, paving the way for real-time, event-driven capabilities.

Innovation at Keylane

Decoupling Plexus for faster, real-time change

⚡ **Today:** Changes in Plexus, like new employees, policy updates, quotes, often require updates throughout the system.

⚡ **Challenge:** Tight coupling slows development, and performance and scalability challenges appear.

⚡ **Shift:** Event-driven architecture with **Kafka** decouples these events, so teams can develop faster, and updates are shared instantly, reliably, and at scale.

"Less spaghetti, more structure: decoupled by design."

Innovation at Keylane

Apache Kafka: open-source distributed event streaming platform

"Apache Kafka makes Plexus communication
publish once, consume everywhere. Fast,
consistent, and compliant."

- ⚡ **Produce:** When something happens in Plexus (e.g. *an address has changed*), it produces an event and sends it into Kafka.
- ⚡ **Consume:** Plexus and other systems (like PDE, portals, partners) subscribe to that event topic and consume it the moment it arrives.
- ⚡ **One-to-many:** The same event can go to all systems that need it, no duplicate integrations.
- ⚡ **Reliable and auditable:** Events are logged, replayable, and traceable for compliance.

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Innovation at Keylane

Benefits for our customers

⚡ **Real-time** updates that flow through system(s).

⚡ Elastic **scalability** and resilience built into the platform.

⚡ **Future-proof integration** with PDE and other systems via shared event-driven architecture.

⚡ Easier **audit** trails that meet compliance needs (e.g. DORA)

"Faster change, lower risk, better service; powered by event-driven Plexus"

Q&A

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