Choosing the Right Mendix Deployment Model for Your Business

Clyde Waal / Cloud Architect / Mendix
Mendix Apps Can be Deployed “Anywhere”
aPaaS Deployment Options

aPaaS (Public Cloud)

MENDIX

WORLD

MX

IBM

SAP
Virtual Private Cloud Deployment Options
Traditional On-Premise Deployment Options

- Linux Server
- Windows Server

Traditional On-Premise Servers
Services needed to run Mendix

Diagram showing the relationships between different components and services required to run Mendix, including Developer Portal, Team Server, Mendix Studio Pro, Mendix Studio, App Store, and User Stories.
Services needed to run Mendix
Services needed to run Mendix

- Runtime
- Cloud Foundry
- Build Package
- Model Package
- Package Repository
- Deployment
- Build Server
- Cloud
- Feedback
- User Stories
- Developer Portal
- Team Server
- Models
- Status, Links
- Apps
- Users
- Apps & Modules
- App Store
- Package References
- Development
- Mendix Studio Pro
- Mendix Studio
Moving Away from Mendix Cloud Increases Operational Burden...

**aPaaS**
- Mendix Cloud
- SAP Cloud
- IBM Cloud

**Virtual Private Cloud**
- Managed Kubernetes (AKS/EKS/GKE/OpenShift Dedicated)
- Cloud Foundry

**On-Premise**
- Traditional Linux/Windows Servers
- Kubernetes
- Cloud Foundry
...but Provides Capabilities that May be Crucial to Larger Enterprises

- Legacy (non HTTP-Based) Service Integration
- Leverage Existing Compliancy Arrangements
# Legacy (non HTTP-based) Service Integration

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<th>aPaas</th>
<th>VPC</th>
<th>On-Premise</th>
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<tbody>
<tr>
<td>Public HTTP-based</td>
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<td>Public Non-HTTP based</td>
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<tr>
<td>Private HTTP-based</td>
<td>• SAP Cloud Connector</td>
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<td>• Reverse Proxy</td>
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<td></td>
<td>• API Gateway</td>
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<td>Private Non-HTTP based</td>
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Leverage Existing Compliancy Arrangements

Skip internal approval procedures for Cloud usage

Leverage existing technical measures for secure Cloud usage

…and shorten time-to-value!
Integrate w/ legacy (non-HTTP based) services?

- **NO**
  - **aPaaS**: Mendix Cloud
  - **aPaaS**: SAP Cloud
  - **aPaaS**: IBM Cloud

- **YES**
  - Less Than 3 apps?
    - **NO**
    - **YES**
      - > 10 Apps and CF Available?
        - **NO**
        - **YES**
          - **VPC**: Cloud Foundry
            - **On-Premise**: Cloud Foundry
          - **VPC**: Managed Kubernetes
            - **On-Premise**: Kubernetes

This decision tree excludes Compliancy considerations.
# Mendix Enterprise Deployment Trends

<table>
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<tr>
<th>Mendix Cloud</th>
<th>SAP &amp; IBM Cloud</th>
<th>Virtual Private Cloud</th>
<th>Traditional On-Premise</th>
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<td>• Fast majority of Mendix (enterprise) customers deploy in Mendix Cloud.</td>
<td>• Significant portion of Mendix customers on the SAP cloud are existing SAP customers. Often have the desire to use SAP Cloud Connector to access SAP services.</td>
<td>• Majority of VPC customers run on Azure Kubernetes Service. DIY Kubernetes (on AWS) and AWS EKS are runner-ups. Often managed by third-party service provider.</td>
<td>• Majority of on-premise customers run traditional servers, followed by Cloud Foundry.</td>
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<td>• Legacy integration typically using HTTP reverse proxies and API gateways.</td>
<td>• CI/CD integration using Mendix Build &amp; Deploy APIs, typically using Jenkins.</td>
<td>• Azure DevOps most adopted CI/CD solution. Followed by Jenkins and Gitlab CI.</td>
<td>• Recently rise in early adopters of Docker Swarm &amp; Kubernetes (namely Red Hat OpenShift) on-premise. Often managed by third-party service provider.</td>
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<td>• CI/CD integration using Mendix Build &amp; Deploy APIs, typically using Jenkins.</td>
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<td>• Collaboration between teams responsible for Mendix and Operations crucial for success.</td>
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Key Take-Aways

‣ aPaaS deployment models (Mendix Cloud, SAP Cloud, IBM Cloud) provide great out-of-the-box value sufficient for the vast majority of apps.

‣ Moving away from aPaaS comes with operational burden. Specific capabilities may make a move to VPC or on-premise desirable for (larger) enterprises.

‣ Upcoming Mendix Native Kubernetes integration will soften the operational burden and time-to-value disadvantages of VPC and on-premise deployment options.

Mendix Expert Services is available to assist you on this topic with:

• Tailored advice on choosing deployment options in your specific situation.
• Organizational support in helping your Ops & Mendix teams understand each other.
• Technical support in setting up Mendix using the various deployment options and achieving secure integration with legacy on-premises services.