Prescription Benefit Facilitator (PBF): Azure API Management and Scalable Infrastructure

ORGANIZATION

Our client is a family-owned and pharmacist-led prescription benefit facilitator focused on improving healthcare benefits. Their mission is to provide a clinically driven approach with top-quality service. By using a fully transparent, pass-through model, they help customers reduce unnecessary drug use, improve health outcomes, and save money.

For over a decade, they have changed what people expect from prescription benefit facilitators by eliminating the hidden practices common with traditional Pharmacy Benefit Managers (PBMs). Their transparent approach puts customers' needs first. They are dedicated to improving member health and safety while making processes smoother for customers and partners.

CHALLENGE

As part of their digital transformation journey, the client sought to implement a powerful Application Programming Interface (API) Management Solution. They needed a robust and scalable architecture to meet critical requirements, including gathering specifications, migrating legacy applications, designing the solution, and ensuring seamless implementation. Lacking in-house Azure expertise, they also required expert technical guidance and best practices for maintaining and optimizing the solution.

Recognizing XTIVIA's proven expertise as cloud strategists and API specialists, the client partnered with us to deliver a comprehensive, turn-key API Management Solution on the Azure platform. With XTIVIA's support, they were able to accelerate their transformation and achieve a future-ready, efficient, and secure API management system.

TECHNICAL SOLUTION

XTIVIA leveraged Microsoft Azure API Management to streamline and enhance key processes, such as pricing, mail orders, and delivery productivity, ensuring seamless operations for all stakeholders. The engagement was delivered within a focused three-week implementation phase, following a top-down approach to create a detailed implementation plan and roadmap. This included API implementation, Developer Portal customization, infrastructure setup, CI/CD automation, and thorough testing.
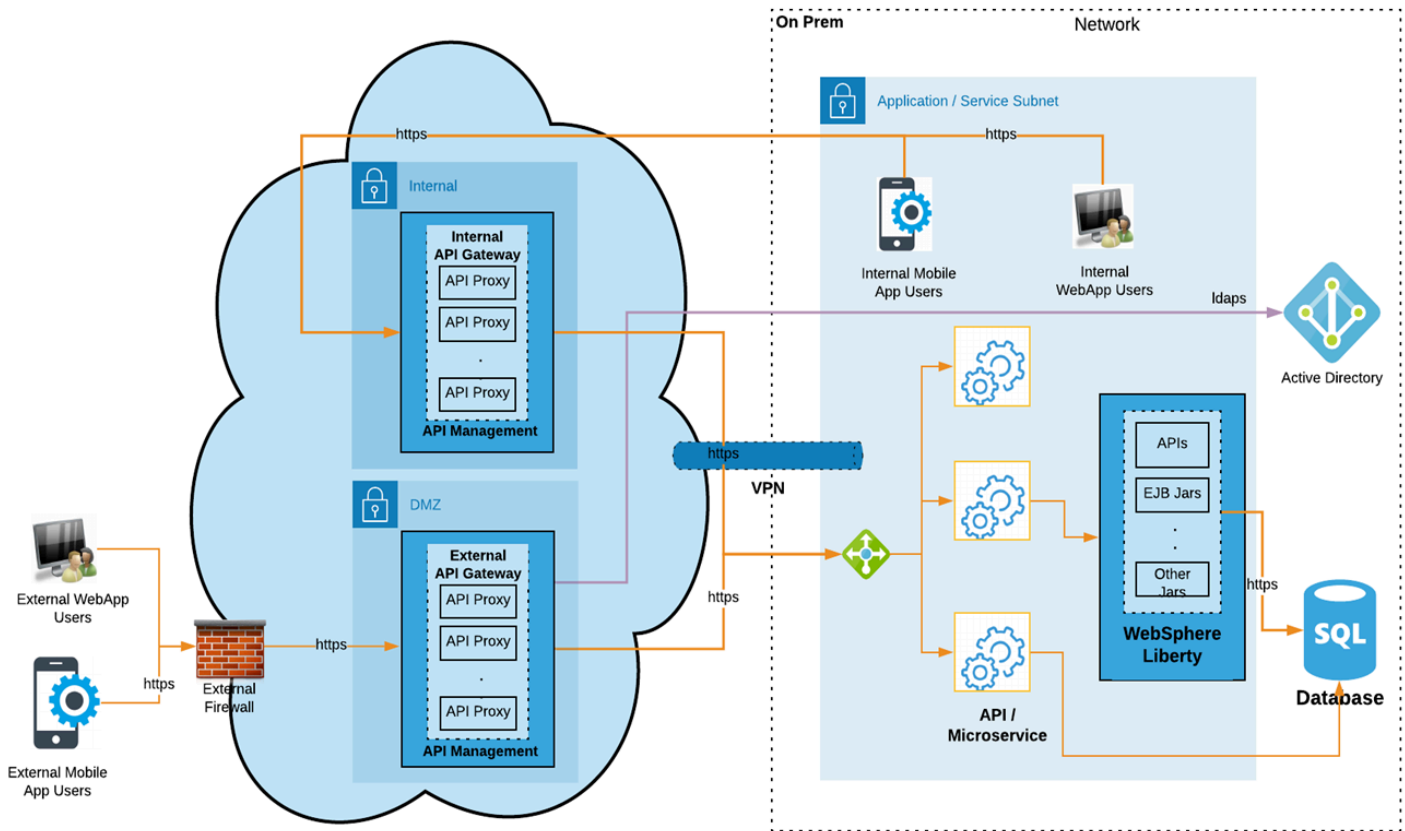
XTIVIA's Comprehensive Solution Highlights:
- API Environment Setup and Architecture:
    - Designed and deployed a secure, scalable API architecture tailored to business needs.
    - Implemented robust API security using OAuth2/OIDC for secure access and data protection.
- Networking and Connectivity:
    - Configured Azure Virtual Networks (VNets) using a hub-and-spoke architecture for efficient connectivity and resource isolation.
    - Set up VNet Peering between Azure Hub VNet and spoke VNets to enable low-latency, high-bandwidth communication.
    - Enabled Direct Connect between the Azure Hub VNet and on-premise networks, ensuring seamless hybrid connectivity.
- API Management and Security:
    - Exposed on-premise APIs securely using Azure API Management to enhance accessibility and productivity.
    - Integrated API Gateway with an external Web Application Firewall (WAF) to protect against threats.
    - Configured Azure Active Directory (AAD) for application permissions, token management, and secure API policies.

- Developer Portal Customization:
  - Personalized Developer Portals for external users and employees, simplifying content management and API access.
  - Enabled social logins through a separate Azure AD B2C, supporting platforms like Facebook and Google.
  - Streamlined client application creation and developer portal identity management.
- CI/CD Automation:
  - Built Jenkins pipelines to automate deployments for Dev, Test, and Prod environments in API Management.
  - Automated Azure AD configurations, including roles, scopes, token setups, and API permissions, through CI/CD scripts.
- AI-Driven Features:
  - Integrated Azure Form Recognizer to process Health Insurance cards efficiently, leveraging AI to reduce manual efforts and improve accuracy.

By incorporating VNet Peering and designing a robust Azure API Management solution, XTIVIA delivered a secure, scalable, and future-ready infrastructure. This tailored solution empowered the client to modernize operations while ensuring connectivity, security, and efficiency across all processes.

BUSINESS RESULT

Through our client's visionary project, XTIVIA unlocked innovative ways to enhance information systems, driving productivity and fostering collaboration. Our experts designed and implemented a scalable, extensible Azure API Management Solution, complete with an API Gateway tailored to align with the client's API strategy while meeting evolving business demands.

Key Highlights of XTIVIA's Solution:
- **Comprehensive Azure Infrastructure Setup:** Designed a robust, scalable foundation to support current and future workloads.
- **Azure Active Directory (AAD) Configuration:** Enabled seamless integration with multiple tenants, ensuring secure and efficient user management across environments.
- **Environment-Specific API Management Instances:** Deployed distinct Azure API Management environments for Dev, QA, Staging, and Production, promoting streamlined workflows and continuous delivery.
- **Scalable and Resilient API Management:** Configured multi-region support with auto-scaling rules and thresholds, ensuring high availability and performance during peak demands.
- **API Deployment and Customization:** Added existing and sample APIs to various environments with ease. Designed configurable API policies and products to maximize flexibility and align with business requirements.
- **Customized Developer Portal:** Delivered a tailored, user-friendly Developer Portal to empower both internal teams and external partners.
- **Enhanced Branding and Security:** Configured custom domains to ensure consistent branding and secure communication.

- **Advanced Logging and Monitoring:** Implemented configurable logging and monitoring to enable real-time insights and proactive issue resolution.
- **CI/CD Automation for Seamless Delivery:** Streamlined deployment processes with Azure Resource Manager (ARM) templates, ensuring automated, efficient CI/CD pipelines across all environments.

Driving Business Growth and Future-Ready Solutions

XTIVIA's Azure API Management implementation equips the client with a cutting-edge platform designed to adapt and grow with their business. By aligning technology with strategy and scalability, we delivered a transformative solution that boosts productivity, enhances collaboration, and positions the client for success in a dynamic digital landscape.

KEYWORDS

Azure, Azure Active Directory, B2C, Infrastructure, Virtual Private Cloud, VNet, API Management, API, Microservices, Cloud, CICD, ARM, Networking

SOFTWARE

Azure Cloud, WebSphere, Jenkins

ABOUT XTIVIA

At XTIVIA, we've been providing IT solutions and consulting services for over 30 years with a wide range of services, including technology assessments, IT service and asset management, software development, data analytics, cloud migration, DevSecOps, ERP, and enterprise content management. Dedicated to each discipline, ensuring that our clients receive the best possible service. Through strategic acquisitions, we've acquired talented people who are experts in their industries, passionate about what they do, and committed to providing exceptional service to our clients. Whether you need to improve your IT infrastructure or implement new software solutions, XTIVIA is here to help you achieve your business goals. XTIVIA has offices in Colorado, New York, New Jersey, Texas, Virginia, and India. www.xtivia.com