

Case Study

From Compliance to Competitive Advantage: How AquaFlow Strengthened Business Continuity with a Technology Escrow Solution

Disclaimer. This case study is based on actual events; however, the names and specific details have been altered to protect the privacy of the companies involved.

Overview

A mid-sized remote water metering technology company, **AquaFlow Technologies**, was required to participate in a **technical verification process** as part of its **software escrow agreement** with a major municipal water system. The beneficiary sought assurance that the escrowed source code, documentation, hardware designs, and related materials were complete, functional, and could be deployed in a replicated deployment of the application if needed. AquaFlow initially viewed this requirement as a compliance obligation, but through the process, they recognized the immense value of **PRAXIS Technology Escrow's Automated Escrow™ and Technical Verification methods** and subsequently engaged PRAXIS to test their own mission-critical internal software.

Challenge

AquaFlow Technologies had an **established reputation** for providing cutting-edge remote water metering solutions to municipal water systems. However, their contractual agreement with a major municipal water provider required them to place their software in escrow, along with technical verification, to ensure business continuity in the event of vendor failure.

Additionally, AquaFlow had intellectual property beyond software that was crucial to its business operations, including proprietary **hardware designs, firmware, and technical documentation**. They needed an escrow solution that provided **continuous depositing** of their evolving technologies while ensuring their materials remained complete and deployable.

The company's leadership initially saw the escrow process as a routine contractual obligation but grew concerned about the impact of verification findings on their relationship with the client. They also recognized that their own **business-critical internal software**—used for customer support, security compliance, and proprietary data analysis—had never undergone a structured **verification and validation process**.

Solution: Automated Escrow™ and Technical Verification

As part of the verification, PRAXIS conducted a **comprehensive review and testing** of AquaFlow's escrowed materials. This included **Automated Escrow™** for continuous depositing of source code, hardware schematics, firmware, and documentation, along with periodic technical verification to confirm completeness and functionality.

1. **Source Code Compilation & Build Verification**

- PRAXIS engineers successfully compiled the escrowed source code using the provided build instructions, identifying gaps in documentation that could prevent successful deployment.

2. **Dependency Analysis & Environment Replication**

- Testing revealed **undocumented third-party dependencies** that could have led to deployment failures for the beneficiary in a disaster recovery scenario.

3. **Functional & Usability Testing**

- PRAXIS simulated real-world use cases to confirm the application's core functions performed as expected. Some minor issues with API integrations were identified and resolved.

4. **Hardware & Firmware Verification**

- PRAXIS confirmed the integrity of **hardware designs, firmware, and deployment instructions**, ensuring AquaFlow's proprietary metering technology could be reconstructed if needed.

5. **Security & Compliance Checks**

- A preliminary security assessment flagged outdated dependencies that could have posed a cybersecurity risk if the escrowed materials were deployed without updates.

Unexpected Benefits: A New Business Need Identified

Throughout the verification process, AquaFlow's engineering leadership saw first-hand how PRAXIS's structured testing **uncovered vulnerabilities** and **documented critical gaps** in a way that was far more thorough than their internal processes.

More importantly, this experience led AquaFlow to realize that **they, too, were at risk as a technology beneficiary**. One of their **key technology vendors**—a single-person company that provided an embedded software component essential to AquaFlow's remote water metering system—had no structured **business continuity plan** in place.

Recognizing that an **escrow agreement with technical verification** would provide them the same level of security they were providing their municipal client, AquaFlow decided to require **PRAXIS Automated Escrow™ and technical verification** for their vendor's software. This ensured that AquaFlow could access, verify, and deploy the embedded software should the vendor become unavailable or cease operations.

PRAXIS applied its proven methods to evaluate this third-party software, identifying multiple **potential failure points**, including:

- Lack of **source code documentation**, which could hinder future development.
- **Unverified dependencies** that could cause compatibility issues if not properly maintained.
- Absence of a structured **build and deployment process**, which could lead to downtime if the vendor were no longer available to support the software.

By requiring their vendor to enroll in **Automated Escrow™ with verification**, AquaFlow not only mitigated risks within their own business but also ensured **long-term stability and continuity** for their customers.

Results and Impact

As a result of engaging PRAXIS for both the beneficiary-mandated escrow verification and their internal systems testing, AquaFlow Technologies achieved:

- **Stronger Compliance Posture:** Successfully passed the beneficiary's escrow verification, strengthening their client relationship.
- **Enhanced Business Continuity:** Identified and resolved gaps in internal software systems that could have led to downtime.
- **Improved Documentation & Deployment Readiness:** Ensured their business-critical applications and **hardware designs** were fully documented and could be redeployed seamlessly if necessary.
- **Continuous Escrow Protection:** Implemented **Automated Escrow™** to ensure **ongoing deposits of software, documentation, firmware, and hardware designs.**
- **Expanded Risk Mitigation:** Required their embedded software vendor to enroll in **Automated Escrow™ and technical verification**, protecting their supply chain.
- **Ongoing Partnership with PRAXIS:** AquaFlow has since implemented **annual technical verifications** with PRAXIS for both their escrowed software and internal business-critical applications.

Conclusion

AquaFlow Technologies entered the **escrow verification process** with PRAXIS as a contractual requirement but left with a **deeper appreciation** for the importance of structured technical validation and continuous escrow depositing. By extending PRAXIS's testing to their own mission-critical software and **requiring escrow protection from their key software vendor**, they mitigated **operational risks** and strengthened their **technology resilience**. This case highlights how PRAXIS's expertise not only ensures escrow compliance but also adds practical application value in securing and maintaining business-critical applications.

Why PRAXIS

PRAXIS Technology Escrow provides a **comprehensive Automated Escrow™ solution**, ensuring **continuous depositing of source code, documentation, hardware designs, and other intellectual property** while performing **rigorous technical verification** to guarantee business continuity. As **one of the few software escrow providers to be SOC2 compliant**, PRAXIS ensures the highest level of **data security and operational integrity**.

Additionally, PRAXIS offers **flexible escrow agreements** tailored to address the unique needs of businesses, ensuring that both software vendors and beneficiaries receive customized solutions that align with their risk mitigation strategies. Furthermore, **our senior-level Account Executives** bring unparalleled **industry expertise, strategic guidance, and efficiency**, adding **extra value and velocity** to the escrow process.

Protect your technology investment today—[Contact PRAXIS Technology Escrow](#) for a customized escrow and verification solution.

Thank You

PRAXIS Technology Escrow, LLC

Chris Smith

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