Unisys

Client story

Driving cloud adoption in law enforcement
Crafting a bold blueprint: Revolutionizing a state agency's cloud migration strategy

Objectives:

- Migrate a mission-critical application from the agency's existing data center to Azure
- Facilitate digital government initiatives to continue to provide critical law enforcement systems and operations for emergency response agencies and citizens
- Position for modernization of mission-critical law enforcement information systems

Solutions:

- Provided long-term complete application life cycle management services
- Conducted assessment of the agency's existing data center infrastructure, applications and resources, building upon deep knowledge of client systems developed over the course of a long relationship
- Worked extensively with the agency to build and execute a migration plan leveraging Azure features best suited to client applications
- Deployed cloud solutions to migrate the agency's integrated solution hosted on virtual servers to Microsoft Azure
- Enabled ongoing incremental modernization to support the future of public safety with the cloud

Results and benefits:

In partnership with Unisys, the agency:

- Developed an effective cloud transformation strategy and successfully migrated applications to Microsoft Azure with minimal disruption
- Improved interoperability to facilitate rapid and efficient interaction among emergency response departments and provide immediate and coordinated assistance by converting unique message types to the latest National Information Exchange Model standard
- Designed for continued application availability and uptime, exceeding service level agreements

Embracing the cloud to transform law enforcement

Law enforcement agencies are adapting to a rapidly evolving landscape. As more police officers leave the field or retire, how can they tackle more sophisticated criminal activity, including cybercrime? For many agencies, the answer is cloud technology. From enhanced data accessibility and real-time collaboration to streamlined processes and scalable infrastructure, the cloud enables them to navigate budget constraints, workforce limitations and more.

A large state agency hoped to enhance law enforcement operations by using the cloud to optimize the information and communications solutions it depends on every day. The organization turned to Unisys to modernize mission-critical information systems and transform its systems into agile, scalable solutions for the cloud era. The agency relied on complex information systems supporting thousands of personnel and interfacing with numerous other agencies.

Why Unisys: Empowering transformation in the public sector

Unisys has monitored and supported the state agency's integrated solutions for over a decade. Working side by side with the agency's technical teams, Unisys developed custom software applications and continues to enhance these applications along with multiple commercial off-the-shelf products. The agency's integrated solution is mission-critical and supports connections with over 100 local agencies, other state agencies and several federal agencies. It handles more than 200 million messages annually and manages multi-terabyte databases. The Unisys team continually maintains and incrementally enhances the agency's primary state-wide software application, preparing the agency to move to the cloud.

Optimizing applications to drive cloud transformation

Unisys' experts, working closely with the agency's IT teams, meticulously assessed and strategically planned a comprehensive strategy for migrating the agency's applications to Microsoft Azure Cloud. Leveraging modern technologies and best practices, Unisys helped ensure a seamless transition while enhancing scalability, security and efficiency. Unisys applied Azure tools and technologies to improve automation, monitoring, alerting, scheduling backups, retention periods and server reboots. Security is enhanced in Azure, using encryption for server-to-server communication, enforcement of encryption by SQL servers and storage of TLS certificates, service account passwords and TDE encryption keys in Azure Key Vault.
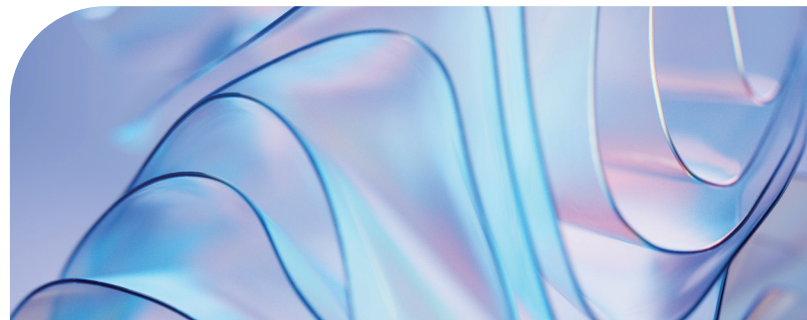
The Unisys team thoroughly assessed the agency's existing data center infrastructure, applications and support resources before migrating mission-critical law enforcement information systems. These included the message switch, computerized criminal history application system, hot files, law enforcement portal, integrated security components and supporting databases. This covers web, application and database tiers for a comprehensive upgrade to how the agency uses technology to fulfill its mission of protecting public safety.

In collaboration with the agency, Unisys provides complete application life cycle management support services, including ongoing incremental modernization, modifications, enhancements, patch management and defect management. It also manages system integration services for new technologies, data exchanges and policy compliance to support law enforcement applications essential to the state.

During the assessment phase, the agency consulted with Unisys and dove deep into its solutions. The Unisys team leveraged knowledge of the complex integrated solution developed over multiple prior and continuing engagements. The joint team assessed custom applications, off-the-shelf products, the numerous interfaces, the support protocols and the applications' history.

A lift-and-shift approach was chosen to minimize risk, ensure schedule compliance and position for continued future modernization. A phased migration plan was applied to migrate three major application groups separately in three distinct environments: development, test and production.

The agency's technical teams, in partnership with Unisys' experts, migrated the integrated solution, hosted on virtual servers per environment, to Azure. The engagement empowered the agency to make important decisions about its cloud deployment. These included provisioning, monitoring, availability, government cloud-specific security, encryption, interface software and Azure's unique tools and features. Unisys continued to assist the agency in migrating development, test, training and production environments along with multiple terabytes of data to Azure.

Enhancing efficiencies in law enforcement

Thanks to this transformative partnership, the state agency has improved interoperability by adopting the latest standards, enhanced application availability and optimized issue resolution. With ongoing support and maintenance, Unisys continues to empower the client with cutting-edge solutions that meet the evolving needs of law enforcement agencies.

Unisys collaborated closely with the client's technical team to thoroughly assess the existing infrastructure and applications, including custom-built, commercial off-the-shelf and original-equipment-manufacturer product software components. As a result, the state agency:

- Developed a comprehensive strategy for migrating applications to Azure with minimal disruption, followed by a successful migration without compromising security
- Established a repeatable process for future assessments and migrations, ensuring scalability and efficiency

- Rewrote major statewide software applications using modern .NET tools and techniques for Azure compatibility
- Resolved issues efficiently and implemented solution changes and feature requests, enabling continuous improvement

Unisys' collaborative approach enabled the agency to realize the tremendous benefits of the cloud. Now, the agency is adapting to evolving technology challenges and rapidly responding to emergencies as part of a more connected and secure future for public safety.

To explore how Unisys can help organizations realize the tremendous agility and cost savings of moving workloads to the cloud and secure digital assets while complying with regulatory requirements, visit us online or contact us today.

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