



## CASE STUDY

# From Paper to Electronic Processing:

## Supporting USCIS and the State Department's Mission to Deliver for Americans



### Background

— Previously, USCIS immigrant petitions were filed manually and, after approval, the paper files were transported to the Department of State (DOS), National Visa Center in New Hampshire. USCIS incurred significant logistic, preparation and transportation costs with this laborious process. Additionally, the inefficient procedures created delays in getting the approved petitions from USCIS to DOS. Once the paper files arrived at the State Department, data from the approved I-130s had to be manually entered into the DOS system. This cumbersome operation delayed the beneficiary's opportunity to file their DS-260, Immigrant Visa Electronic Application.



## The Challenge

— For years the U.S. Citizen and Immigration Services (USCIS) and the Department of State (DOS) sought a streamlined process for the I-130 data sharing. USCIS immigrant petitions were strictly paper based and transferred to the DOS manually, which created weeks or even months of delays for most family-based I-130 petitions. The paper-based system was cumbersome to staff and a burden on families whose lives could be put on hold while they awaited adjudication. The slow and costly process also had an unnecessary impact on the environment because DOS received thousands of paper files related to I-130 petitions from USCIS. USCIS needed a new interface to efficiently send verified information for I-130 petitions from the Electronic Immigration System (ELIS) to DOS to meet the increasing demands of American Citizens for the efficient adjudication of their immigrant petitions for their family. Additionally, DOS needed assistance to build their interface to process the digitized records from ELIS into their systems.



## The Solution

— ArdentMC's Agile Architecture and Design Services and our key insights gleaned from engagement with USCIS and DOS made this project successful. Additionally, ArdentMC utilized leading-edge technologies such as cloud, containerization, CI/CD, and DevOps methodologies. We understood the technology stack available at USCIS ELIS for the solution. We analyzed and developed modernized solutions to replace the inefficient and cumbersome business process of the I-130 petition case life cycle at USCIS and the Immigrant Visa process at the State Department by modernizing platforms. ArdentMC took into consideration the limitations of the State Department's Development teams and methodology. Finally, for optimum compatibility and flexibility for future use, the team chose to produce a REST service that could be used elsewhere at USCIS and State.

Modernized Data Information Sharing  
Process Cut Transfer of Information from

**53 DAYS to 1 HOUR**



## The Outcome

— In 2019, USCIS introduced the electronic I-130, which allows for direct online filing and digital upload of documents by U.S. petitioners. USCIS also began to process all newly-filed I-130 family-based immigrant petitions on its modernized ELIS platform more securely.

The average time it took to transfer an approved USCIS I-130 case to State's National Visa Center was 53 calendar days. Today, using the ELIS interface, the approved I-130s data is systematically sent to State's PreImmigrant Visa Overseas Technology (PiVot) system immediately after the approval and takes less than one hour, due to ArdentMC's work to modernize USCIS and DOS platforms and processes.

American citizens and Legal Permanent Residents who file the I-130 on behalf of their family members, now wait less time for their petitions to be more securely verified and transferred from USCIS to DOS using the state of the art ELIS Digital Platform. Additionally, there is significant savings to the U.S. taxpayer through the decreased cost in preparation, storage, and transportation of sending each paper file from USCIS to the State Department and there is significant labor cost savings by eliminating the need to manually data enter I-130 data into State's system. Finally, the new process decreases the impact on the environment by eliminating the use of paper.

## Tools used to achieve these outcomes:



### AWS Technologies

 Amazon Aurora	 Amazon RDS	 AWS Database Migration Service	 Amazon EC2 for Microsoft Windows	 AWS Server Migration Service	 Amazon CloudFront	 Amazon Direct Connect	 Amazon Lambda
 Amazon API Gateway	 Amazon DynamoDB	 Amazon EMR	 Amazon Kinesis	 Amazon Redshift	 Amazon Quicksight	 AWS CloudFormation	 AWS Service Catalog
 AWS Config	 AWS Systems Manager	 Amazon Connect	 AWS Web Application Firewall	 AWS GovCloud	 AWS IoT Core	 AWS IoT Analytics	 AWS IoT Greengrass



### Agile Stacks

 Adobe Livecycle	 AdoptOpenJDK OpenJDK; OpenJRE	 AngularJS	 Apache ActiveMQ; HTTP Server; Tomcat; Kafka	 Apache Software Foundation Tomcat Native
 Atlassian Confluence; Jira	 CapitalOne Hygieia	 Cloudbees Jenkins	 Docker	 Eclipse
 GitHub	 Google Apigee	 Gradle	 HashiCorp Terraform	 HP WebInspect
 Jboss Hibernate	 Jenkins	 Microsoft SQL Server; Windows Server 2008 R2 Enterprise	 Open Hibernate Core for Java	 Oracle JDBC Drivers; Solaris 10; SQL Developer
 OSS GNU Ansible	 Splunk	 SpringSource SpringBoot; Spring Framework	 Tableau	 Twistlock



## About Ardent

— Virginia-based Digital Transformation, Location Intelligence, and Data Analytics firm, Ardent Management Consulting (Ardent) is a certified HUBZone Small Business, CMMI-Dev Level 3, v2.0, and ISO 9001:2015; ISO 27001:2013; ISO 20000-1:2018 with offices in Arlington, VA and Tulsa, OK. Ardent brings a significant history of innovative and “at the speed of the mission” proven best practices in geospatial analytics, cloud services and modernization, and software development. Ardent is the “All In” trusted provider to many government agencies, DHS mission components, state and local projects, and the commercial and non-profit sectors. For more information, visit [www.ardentmc.com](http://www.ardentmc.com).