OIT
YEAR IN
REVIEW
FISCAL YEAR
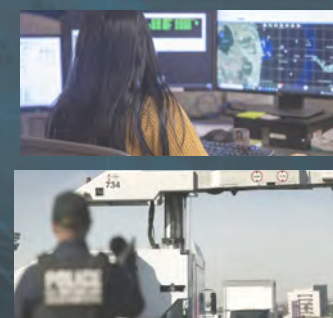## 2022

U.S. Customs and Border Protection

Protect the American people, safeguard our borders, and enhance the nation's economic prosperity.

OFFICE OF INFORMATION AND TECHNOLOGY (OIT)

Deliver secure, reliable IT services and capabilities anywhere, anytime at the speed of CBP's 24/7 mission.

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INTRODUCTION

MESSAGE FROM CBP CIO

At the end of another outstanding and remarkable year, I am pleased to present the OIT "Year in Review Report for Fiscal Year 2022" (FY 2022).

As the largest IT organization in the Department of Homeland Security (DHS), with a budget of $1.8 billion, CBP's Office of Information and Technology (OIT) plays a vital role in protecting the American people, safeguarding our borders, and enhancing the nation's economic prosperity. OIT's impact grows exponentially each year and with it, the workload and expectations placed on OIT's workforce and systems in support of enhanced operational capabilities for CBP.

This Year in Review (YIR) Report for Fiscal Year (FY) 2022 celebrates, commemorates, and captures the numerous achievements, accomplishments, innovations, and accolades received by the CBP OIT team from CBP, Department of Homeland Security (DHS), Other Government Agencies (OGA), Office of Management and Budget (OMB), International, and Industry stakeholders. The amazing ingenuity, resourcefulness, professionalism, fortitude, and resolve of the CBP OIT team mirrors the same commitment demonstrated daily by all agents, officers, and analysts on America's frontline in support of CBP's mission. The teamwork and trusted partnerships have advanced CBP mission goals and objectives to new levels of excellence. CBP OIT continues to make investments in people, infrastructure and applications while collaborating with partners to deliver secure and efficient IT solutions and services anywhere, anytime at the speed of CBP's 24/7 mission.

In FY 2022, OIT continued its focus on strategic transformation, building upon tactical excellence and improving governance and management of the enterprise with measured performance while expanding IT innovation. OIT utilized cutting-edge and innovative technologies to keep pace and lead the way to meet ever evolving and historical level mission needs and challenges. As illustrated below, OIT's strategic transformation is built upon tactical operations excellence and agile innovation.

I want to express my sincere thanks, and deepest gratitude to the entire OIT workforce as well as CBP and Enterprise Services (ES) leadership for their support of OIT. The hard work and dedication of this team of professionals is truly reflected in the accomplishments outlined in this report. CBP OIT looks forward to continuing to deliver secure and reliable capabilities and is committed to marching towards even greater levels of excellence together in FY 2023.

Sincerely,
Sanjeev (Sonny) Bhagowalia
Assistant Commissioner (AC),
Office of Information & Technology (OIT)
CBP Chief Information Officer (CIO)

KEY SIGNIFICANT EVENTS

OIT collaborated with the Office of Field Operations (OFO) and U.S. Citizenship and Immigration Services (USCIS) to deploy solutions supporting efforts to allow Ukrainian citizens to travel to the U.S. These efforts included solutions to vet applicants and provide advance travel authorization as well as support a new process allowing U.S. sponsors to submit I-134 Declaration of Financial Support forms to allow certain Ukrainian citizens and their immediate family members to apply for and receive an advance authorization to travel to the U.S., where they can seek parole for a period of up to two years.

Uniting for Ukraine (U4U)

OIT continued to support Operation Allies Welcome (OAW) through the development of several new solutions to process evacuees from Afghanistan. These included biometric and biographic collection, targeting and vetting, data stream consolidation and sharing with partner agencies, and subsequent validation of vetting results using photo comparison services.

Operation Allies Welcome (OAW)

In preparation for Super Bowl LVI, OIT collaborated with Air and Marine Operations (AMO), Office of Field Operations (OFO), and U.S. Border Patrol (USBP) to provide enhanced tactical communications, non-intrusive inspection (NII) relocation support, and onsite technical support before and during the event. This included relocating units from Miami and Baltimore to Inglewood, CA. Maintenance technicians were on site to provide support and ensure the units were operational.

Super Bowl LVI

In response to the largest ever surge of migrants (2.7M encounters in FY 2022) at the Southwest U.S. border, OIT is working to develop and deploy innovative technologies to strategically support frontline operations and personnel. These include the Unified Immigration Portal (UIP), Unified Processing (UPRO), Soft-Side Facilities (SSF) and Mobile En Route Processing (MERP) efforts which will allow agents and officers to seamlessly process migrants, work and share information with government agency partners and deploy technology when and where it is needed, regardless of location and terrain.

Southwest Border Migrant Surge

OIT continued to support CBP's response to the ongoing COVID-19 pandemic to include development efforts to track COVID-19 related exposures and testing requirements as well as provide building access and clearance for staff reintegrating to the office as pandemic related restrictions were eased in FY 2022.

COVID-19

. . . CBP: A DAY IN THE LIFE (FY 2022) . . .

- Processed 809,863 passengers and pedestrians
- 226,575 incoming privately owned vehicles
- $9.16 billion worth of imported products
- 107,692 entries of merchandise at our air, land, and sea ports of entry
- $301.83 million in duties, taxes, and other fees
- 2,538 pounds of drugs seized
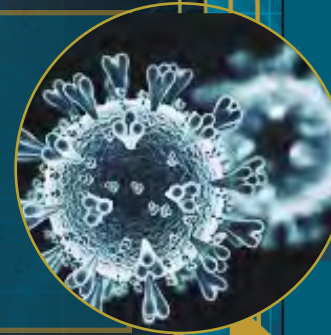
DHS CIO FY 2022 Priorities

- Compliance
- Diversity, Equity, and Inclusion (DE&I)
- Customer Experience (CX)
- Enterprise Infrastructure Solutions (EIS)
- Cybersecurity
- Technology Modernization Fund (TMF)

National Key Significant Events

- Uniting for Ukraine (U4U)
- Operation Allies Welcome (OAW)
- Super Bowl LVI
- Southwest Border Migrant Surge
- COVID-19

CBP OIT Support

CBP's IT landscape is expansive and provides 24/7 mission support across 1,744 locations nationally. OIT meets enterprise mission needs using capabilities and tools developed to modernize infrastructure, improve cybersecurity, and expand enterprise applications.
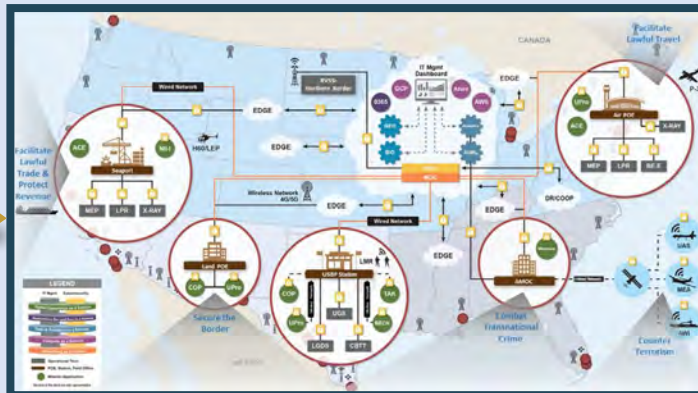
CBP OIT FY 2022 STRATEGIC FOCUS AREAS

- APPLY — Mission Applications
- MAKE — Mission Infrastructure
- PARTNER — Trusted Partnerships
- SECURE — Mission Cybersecurity
- STRATEGIZE — Enterprise IT Governance
- OPERATE — CIO Business Operations

Enterprise Architecture assists in optimizing the interdependencies among CBP's mission and business operations, and the underlying IT and IRM that support them.

The expansion and enhancement of dashboards continued in FY 2022 and was a priority project that further streamlined access to information, enhanced transparency, and improved delivery.

FUTURE VISION

In FY 2023, OIT will strive to deliver enterprise services and applications at the speed of mission. OIT will use the tools it's developed to keep modernizing, enhancing cybersecurity, increasing network connectivity, and support ongoing innovations to keep pace with evolving mission needs.

DHS CIO SUPPORT
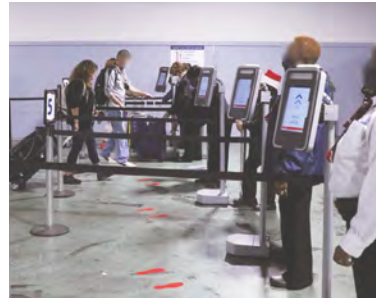
FY 2022 DHS CIO Focus Areas

1. Compliance

- Completed 134 Information Technology Acquisition Reviews (ITAR), with 109 approved at DHS
- Reviewed 93 acquisition-related documents from across CBP
- Processed 18 CBP system Authority to Operate (ATO) packages and three Ongoing Authorizations
- Participated in 30 acquisition and systems engineering lifecycle review events

2. Diversity, Equity, and Inclusion (DE&I)

- Launched a reinvigoration and expansion of OIT's Diversity, Equity, and Inclusion Program
- Hosted a National Black History Month panel discussion and an Asian American, Native Hawaiian and Pacific Islander Heritage Month speakers' event
- Celebrated 13 heritage, history, and diversity awareness months
- Engaged with staff through three sessions of the newly established DishIT forum for open discussion with leadership

3. Customer Experience (CX)

- Collaborated with other CBP offices to form a CBP Customer Experience Action Plan
- Developed a CBP Burden Reduction Initiative Strategy
- Identified expansion of the CBP One application and the Vessel Entrance and Clearance System (VECS) as CBP CX initiatives
- Leveraged agile methodology to ensure customer/user experience best practices are part of application development

4. Enterprise Infrastructure Solutions (EIS)

- Awarded three Fair Opportunity contracts under GSA's EIS contract vehicle
- Placed 99% of the orders for telecommunications services that must transition to EIS with the vendors
- Vendors have submitted 98% of the orders for transition and execution
- Completed 12,770 legacy service disconnects

5. Cybersecurity

- Developed an updated CBP enterprise-wide Cybersecurity Strategy for FY 2022-FY 2024
- Migrated 5,000 users to CBP's Zero Trust solution
- Blocked 38,088 Indicators of Compromise (IOCs) in FY 2022
- Applied almost 38.5 M patches across nearly 7,000 operating system instances, application servers, and databases in FY 2022

6. Technology Modernization Fund (TMF)

- Received an initial increment of $6.4M in TMF funds as part of the DHS Southwest Border Technology Integration project
- Completed the first DHS TMF funded and governed project, ACE Collections Releases 4-6 on schedule, within budget and without major issues
- Enhanced Unified Immigration Portal (UIP) capabilities for data sharing between DHS agencies with support of TMF funds
- Continued development of Unified Processing (UPRO) to standardize and streamline case processing and custody management with support of TMF funds

MISSION APPLICATIONS

Ensures the right IT capabilities and data availability to meet the speed of CBP's 24/7 mission.
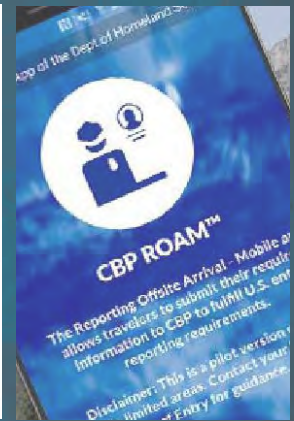
HIGHLIGHTS

Launched the Unified Processing (UPRO) effort which will create CBP's first ever, cross-component technology solution for responding to migrant crossing surges and other urgent CBP initiatives.

Deployed innovative solutions to facilitate faster traveler processing through implementations such as expanded biometrics use in vehicle travel lanes at ports of entry (POE), touchless travel experience in partnership with the Transportation Security Administration (TSA) and paperless Global Entry kiosks at airports.

Facilitated lawful trade through modernizations to the Automated Commercial Environment (ACE) application including deployment of the Truck Manifest application, ACE Portal, ACE Availability Dashboard and ACE Collections functionality.

MISSION APPLICATIONS

UNITING FOR UKRAINE (U4U)

OIT was tasked with developing an application to allow Ukrainian nationals to submit and receive advance authorization to travel to the U.S. OIT collaborated with Office of Field Operations (OFO) to develop and deploy the Advanced Traveler Information System (ATIS) which vets applicants to provide advance authorization to travel to the U.S. and seek parole. ATIS also integrated with the CBP One scheduling application to allow applicants arriving at a land port of entry (POE) to schedule traveler appointments.

On April 21, 2022, DHS announced the Uniting for Ukraine (U4U) effort, rolling out a new process allowing U.S sponsors to submit an I-134 Declaration of Financial Support to U.S. Citizenship and Immigration Services (USCIS). This effort allows certain Ukrainian citizens and their immediate family members to apply for and receive an advance authorization to travel to the U.S., where they can seek parole for a period of up to two years.

Using the Arrival and Departure Information System (ADIS), OIT established a new interface to transmit beneficiaries' biographic information from USCIS to CBP. CBP receives these applications, conducts vetting to determine whether the traveler is eligible for advance travel authorization and transmits the approval/denial notification to USCIS.

Beneficiaries are notified of their approval to travel to the U.S. through MyUSCIS. OIT also implemented enhancements to facilitate processing of Ukrainian travelers and blended families and determine a 'board/no-board' response to the airlines for travelers prior to boarding flights to the U.S. OIT created a dashboard containing information about Ukrainian nationals arriving to the U.S. through the USCIS I-134 sponsorship process as well as daily arrivals from Mexico and established a data share with USCIS to report post arrival information.

OIT implemented a new U4U hotlist to automate traveler vetting against law enforcement databases and allow for manual vetting by the National Targeting Center (NTC) when required. The U4U hotlist is also integrated with the National Vetting Center (NVC), to provide NTC with an indicator of classified vetting results. Various applications were also updated to display the U4U application data and give officers easy access to this information. ATIS provides air carriers the ability to validate an approved application and generate a noncitizen's boarding pass and provides CBP officers at POEs confirmation of a noncitizen's application status.
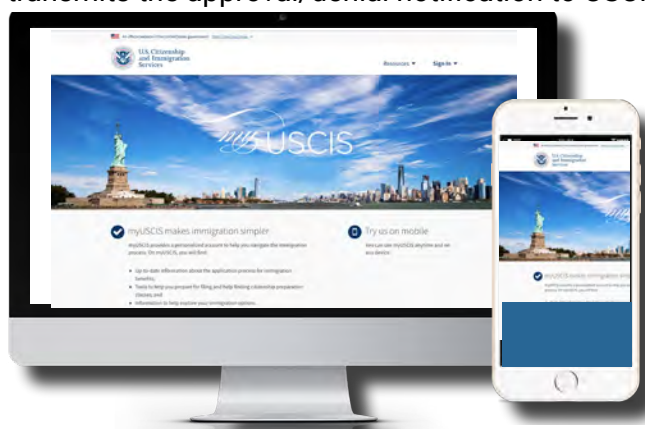
OPERATION ALLIES WELCOME (OAW)

OIT continued to be instrumental in supporting the ongoing Operation Allies Welcome (OAW) effort to process thousands of evacuees from Afghanistan. CBP worked domestically with airport authorities, air carriers, and various government agency partners to set up processing facilities and centers for evacuee arrivals. OIT developed several new solutions to process evacuees from Afghanistan. These included biometric and biographic collection, targeting and vetting, data stream consolidation and sharing with partner agencies, and subsequent validation of vetting results using photo comparison services.

OIT developed a new process to capture all CBP biometric and biographic enrollments from locations outside of the U.S., and subsequently merge with enrollments received from partner agencies. A new process was also developed to ingest vetting results received from partners and merge with those from the NTC into a central repository. Using the CBP enterprise facial matching technology, OIT was able to leverage photos from biometric enrollments to build a photo gallery of individuals who cleared the vetting process. CBP personnel were able to verify vetting results using facial matching technology and allow boarding of flights to the U.S.

OIT created a modular, interactive OAW dashboard to provide statistics on passengers arriving to the U.S. Dashboard statistics provide DHS and CBP management and officers in the field close to real time updates on Primary and Secondary processing of Afghanistan evacuees, unaccompanied minors, and U.S. citizens. OIT created numerous reports to provide enrollment and vetting status and provided critical support to help identify American citizens and Lawful Permanent Residents who were still in Afghanistan and needed to be evacuated.


As of today, OIT continues to provide 24/7 operational coverage, making numerous improvements to software programs and mobile applications, as well as creating interoperability between government agency partners. To date, over 86,000 evacuees have been processed, helping to deliver travelers to their destination/safe haven.

UNIFIED PROCESSING (UPRO)

The Unified Processing program (UPRO) is a joint effort between OIT, U.S. Border Patrol (USBP), and OFO to create CBP's first ever, cross-component technology solution for responding to migrant crossing surges and other urgent CBP initiatives. This program melds two existing critical solutions into one holistic tool for all CBP Officers and Agents by combining USBP and OFO capabilities in one application and providing flexibility with mobile and desktop options. UPRO will provide a common solution for performing secondary inspections, case processing, and detention management functions while also delivering processing efficiencies and improvements for agents and officers, using advanced technologies to increase situational awareness.

The first increment has been delivered and increased efficiencies have been achieved through deployment of the Mobile Intake application used by USBP agents when encountering migrants in the field. This mobile application uses facial comparison technology to identify matches with prior encounters, and functionality to scan and parse documents such as passports or driver's licenses without the need for manual data entry.
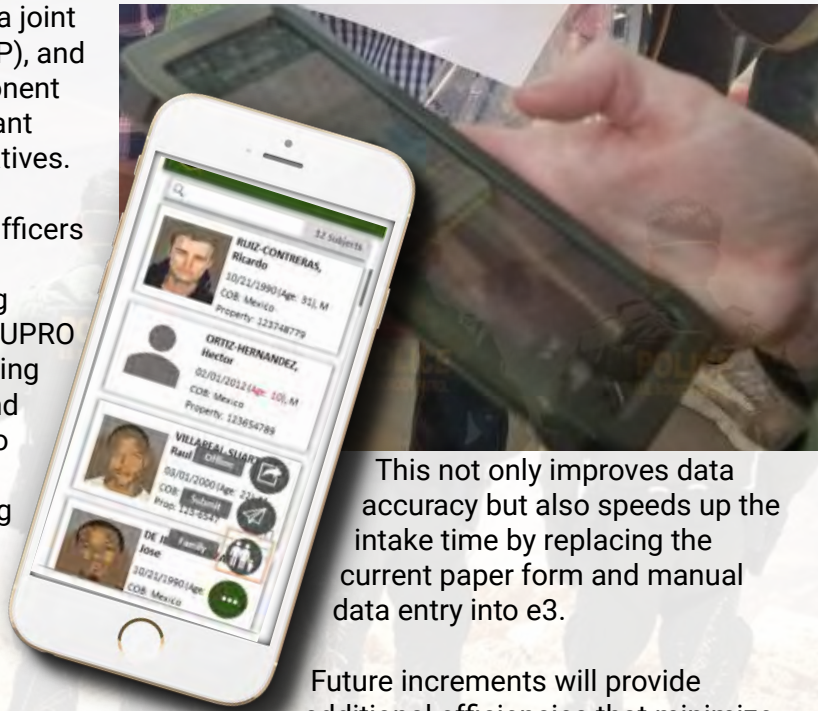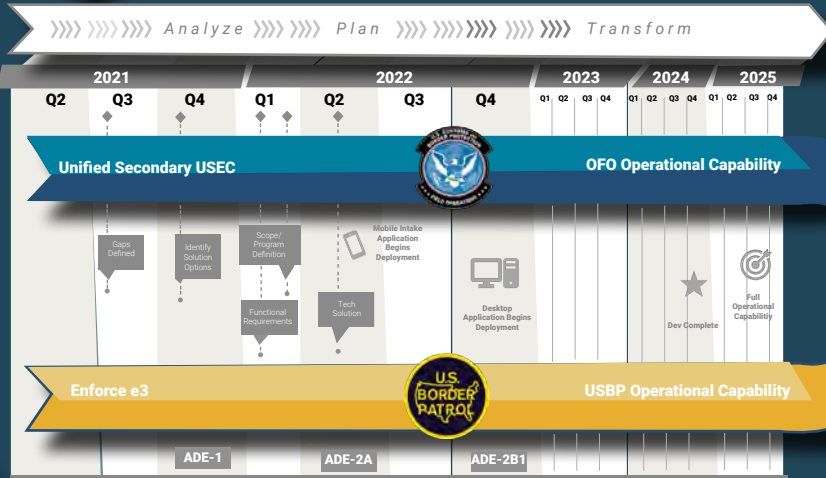
This not only improves data accuracy but also speeds up the intake time by replacing the current paper form and manual data entry into e3.

Future increments will provide additional efficiencies that minimize manual data entry and guide officers and agents through necessary processing steps. UPRO will also provide access to numerous data sources in one view, removing the need for officers and agents to log into separate systems to access this data. Ultimately, UPRO will deliver all existing system capabilities under a single highly available and scalable cloud-native application which accelerates intake and processing steps and creates a readily available surge force.

UNIFIED PROCESSING

UPRO
UNIFIED PROCESSING

Meld existing critical solutions into one holistic tool for all CBP Officers and Agents:
- Combines USBP and OFO capabilities in one application.
- Provides flexibility with mobile and desktop options.
- Creates CBP's first ever, cross-component technology solution for responding to migrant crossing surges and other urgent CBP initiatives.

Analyze 》》》 *Plan* 》》》 *Transform*

2021			2022				2023				2024				2025			
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Unified Secondary USEC — **OFO Operational Capability**

- Gaps Defined
- Identify Solution Options
- Scope/Program Definition
- Functional Requirements
- Tech Solution
- Mobile Intake Application Begins Deployment
- Desktop Application Begins Deployment
- Dev Complete
- Full Operational Capability

- Fortify Surge Force
- Improve Agent/Officer Safety
- Improve Processing Efficiency
- Host in Cloud Infrastructure

Enforce e3 — **USBP Operational Capability**

ADE-1 | ADE-2A | ADE-2B1

USEC - Common USEC Functions: Referrals, Subject and Vehicle Inspections, Subject Processing, and Custody Management Transformation results in USEC retirement.

e3 - Common e3 Functions: Subject Intake and Processing, Detentions, Prosecutions, and Biometrics. Transformation results in e3 retirement.

UNIFIED IMMIGRATION PORTAL (UIP)

The Unified Immigration Portal (UIP) is a technical solution that connects disparate data across multiple agencies with a role in the U.S. immigration system. This consolidated portal enables all users to have visibility into interagency operations and improve insights for better coordination. UIP currently has over 5,600 users across CBP, ICE, USCIS, and Health and Human Services (HHS) who leverage the platform's dashboards, services, and data integration capabilities to complete mission critical tasks. The platform has proved critical in addressing backlogs and reducing manual efforts for agents, officers and intake specialists as well as supporting leadership, including DHS senior executives and White House officials, by providing near-real time data for operational decision making.

In FY 2022, UIP completed its microservices architecture, began development on finalizing its end-state platform, including the data mesh backend solution, and continued to expand its userbase by delivering key capabilities for mission critical processes across its agency partners. Accomplishments included enhancements to existing capabilities to reduce back and forth communication between agencies and speed up placement for Unaccompanied Children (UCs), automated and digitized A-file sharing to streamline processing between agencies, and several new dashboards, visualizations, and microservices deployments that increased efficiencies in cross-agency coordination and visibility across components involved in the immigration ecosystem.

The Credible Fear Referrals Dashboard provides users with a more complete view of credible fear processing from ICE to USCIS custody by enabling users to view data and trends and accept or reject for credible fear interview. The Case Acceptance System (CAS) dashboard was divided into two distinct dashboards; the primary CAS dashboard is limited to subjects actively in CBP custody and the CAS Historical dashboard allows users to conduct analysis on historical data. The ICE Detentions dashboard provides users with key details of subjects detained in ICE facilities and trends of subject book-in and book-out numbers.

New services were deployed to allow agents to send A-file documents through UIP to USCIS' STACKS data repository to allow direct access to the information. Lag time between when custodial actions occur and when they are logged in the system of record for CBP Amenities, Property, and Identification (APIP) were eliminated allowing users to now log custodial actions such as meals, blankets, and welfare checks to BECN and e3 Detentions Module (e3dm) in real-time by scanning a subject's wristband as the action is performed. Deployments were completed to allow expedited processing of individuals and eliminated the need for multiple connections to agency systems by expanding the sharing of automated digital A-files between CBP, ICE and USCIS.

OIT continues to leverage advanced data networks to accelerate mission achievement while simultaneously enhancing the traveler experience and improving security at our nation's borders.

Simplified Arrival (SA)

In FY 2022, the expansion of Simplified Arrival (SA) was completed at all U.S. airports. The Mobile Passport Control (MPC) application was integrated into SA allowing CBP Officers to use one application to process both manifest and MPC travelers. This new integration was initially piloted at the Washington Dulles (IAD) and Baltimore Washington International (BWI) airports and has since been implemented at several airports nationwide.

OIT continues to implement biometrics-based projects that allow for faster traveler processing in place of manual detailed inspections of travel documents. Biometric scans also make documentation much harder to falsify and result in fewer data entry errors at ports of entry (POE). OIT is piloting the Land Border Integration (LBI) Facer service integration with SA in the vehicle traveler lanes at Anzalduas International Bridge POE. The LBI Facer Service processes frames/images from multiple video streams to detect faces and selects the frame with the highest data confidence. Faces detected in the primary frame are then sent to SA-Vehicle (SAVN), where a face match is obtained.

OIT implemented a software enhancement to include the Electronic System Travel Authorization (ESTA) status check when travelers are in the vehicle and pedestrian primary inspection process. Enhancements were added to SAVN and SA-Pedestrian (SA-PED) to check ESTA status for land travelers from Visa Waiver Program (VWP) countries. Travelers are referred to secondary if they do not have an approved ESTA or a valid visa at time of crossing.

OIT continued to support the largest southwest border surge in 21 years by implementing software improvements to SA. The Migrant Protection Program (MPP) processing was streamlined through improvements to SA-PED and was fully deployed to all southwest border sites as well as 24 northern border sites.
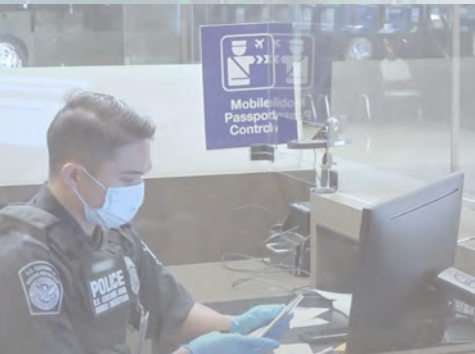
Travel Document Authentication Service (TDAS)

In FY 2022, the Travel Document Authentication Service (TDAS) was integrated with Primary applications to enhance border security by performing Passive Authentication on all e-Passports. TDAS addresses the recent influx of travelers with fraudulent e-Passports traveling to the U.S., and since June 2022, TDAS has processed approximately 3.5 million e-Passports and flagged ~50 as failures. In addition, TDAS has been integrated with ESTA for e-Passport validation and USEC for e-Passport number query. CBP One is in the process of integrating with TDAS, and OIT continues to work with CBP and DHS partners to provide guidance and support in detecting fraudulent e-Passports.
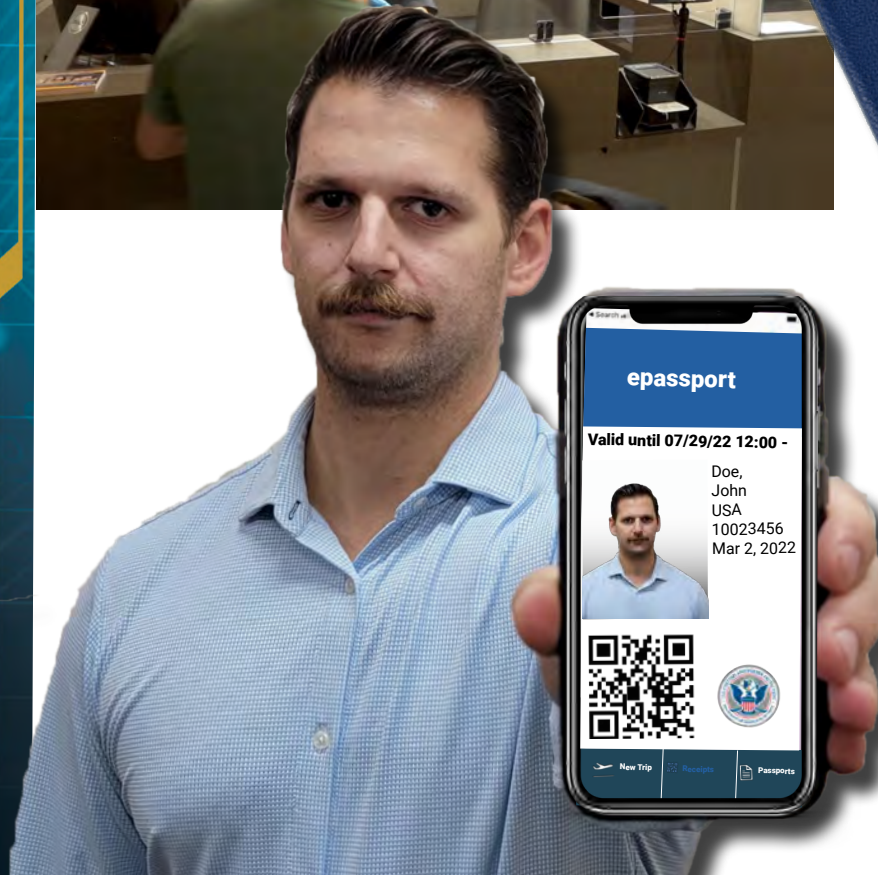
The SAVN system was updated to invoke TDAS to validate the authenticity of the certificates for travelers arriving by vehicles and presenting e-Passports. This updated functionality enhances border security by validating e-Passport certificates and detecting fraudulent ones. When the certificate of an e-Passport cannot be validated, travelers will be automatically referred to Secondary processing.

Arrival and Departure Information System

OIT worked with the Social Security Administration (SSA) to integrate travel data into business processes to identify potential overpayments. Through the Arrival and Departure Information System (ADIS), 192,228 queries returned results that assisted SSA with identifying material travel which resulted in overpayment of benefits. The integration of ADIS data into SSA's Foreign Travel Data (FTD) application has become a key initiative of the agency's improper payments mitigation strategy and based on SSA's current use of the ADIS data, FTD's return on investment (ROI) is an estimated 656.04%. SSA conducted eligibility reviews of both U.S. and non-U.S. citizens' Supplemental Security Income (SSI) benefits using the ADIS data and found:
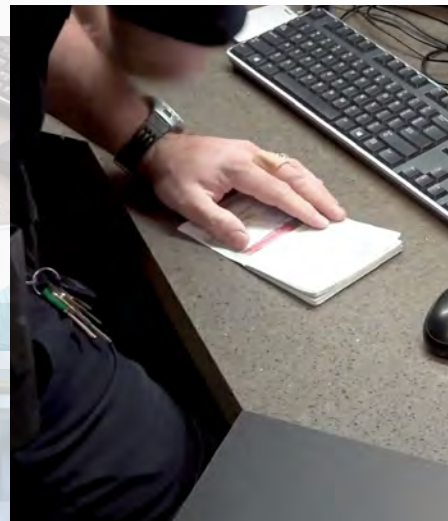
Average savings of non-U.S. citizen SSI - **$4,818 per case**

Average savings of U.S. citizen SSI - **$5,601 per case**

Over a five-year period, absence from the U.S. attributed to an average of **$115 million in overpayments**

Global Entry Enhancement

OIT has implemented several changes to benefit travelers and align with the Department of State's updated passport options by allowing users to select a gender value of "X" for Trusted Traveler Programs (TTP) and Global Enrollment Systems (GES). GES also allows officers to update the gender to "X" for existing applicants/members per their request.
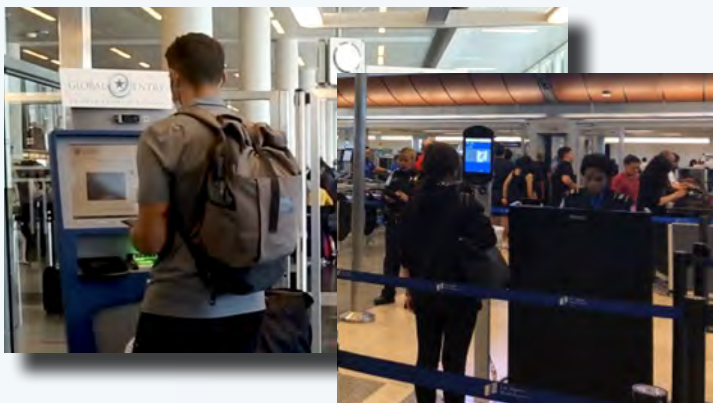
Paperless Global Entry (GE) Kiosks

In FY 2022, Global Entry (GE) kiosks were updated and converted to paperless operation. While seemingly simple, this conversion was a huge effort to eliminate CBP's dependency on printer maintenance, including resources required to replenish the paper at these kiosks. Paperless kiosk operations significantly reduce wait time for travelers, as the traveler no longer needs to wait for a paper receipt. The officers then locate the traveler's electronic receipt on a tablet or workstation. In addition to the cost savings of eliminating paper receipts, the kiosk is now fully contactless for both the traveler and the officer. This change enhances safety for all users while also improving the overall process.

CBP and Transportation Security Administration (TSA) Integrated Touchless Experience

CBP and TSA have partnered to implement facial comparison technology via the Traveler Verification Service (TVS) at TSA checkpoints. A multi-phase approach was laid out to test the viability of facial comparison at TSA check points, with an end goal of an integrated solution that the Travel Document Checkers (TDCs) could utilize at the TSA check point to provide a touchless curb to gate experience for travelers. In FY 2022, CBP deployed a dedicated instance of TVS that was integrated with TSA's SecureFlight system and allowed the TDCs to take a photo of travelers, match against the TVS gallery, and provide the identity and flight risk indicator back for adjudication by the TDC.

This new phase of the integration between CBP and TSA is currently deployed at two airports, Atlanta and Detroit, in partnership with Delta airlines. Currently the pilot is open to those pre-check travelers that opt-in via Delta's mobile application at the TSA checkpoint, bag-drop and boarding. To date, the latest phase of the integration has matched over 78,000 travelers with a greater than 90% match accuracy. Expansion to additional airports and airlines is planned over the coming months.
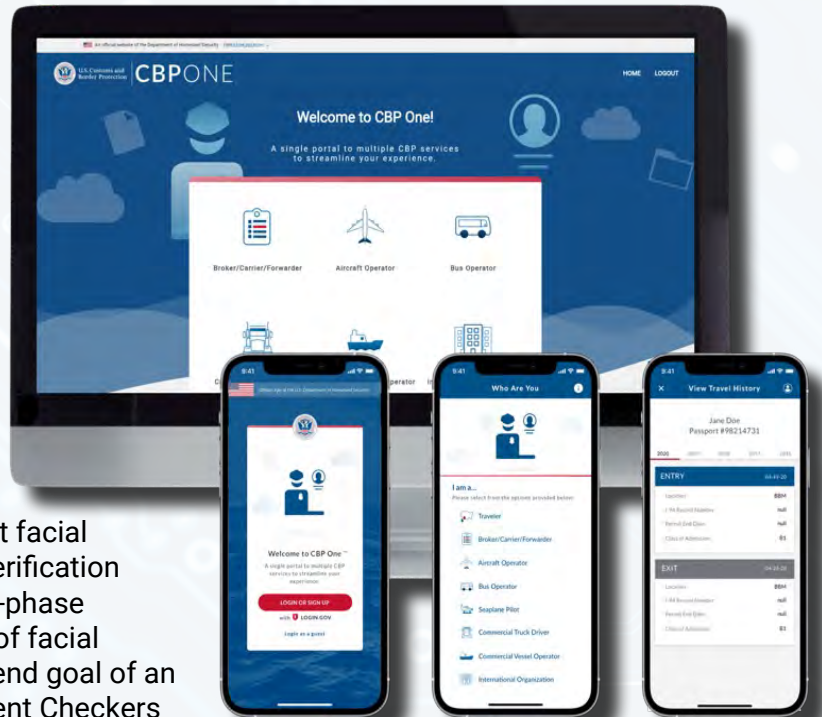
CBP One

The CBP One application serves as an intuitive single portal to a variety of CBP services. CBP One utilizes plug-in architecture to easily integrate new public facing applications which also allows for applications to share basic services such as login, document scanning, liveness (determining that user is a live person), and facial matching authentication. CBP One currently has several available features, with more scheduled to roll out over the next year. Current features include mobile access to the scheduling application, I-94 Entry, and workflows for submission of advance information. New features added in FY 2022 included enabling Ukrainian evacuees and asylum seekers to submit advanced info, air traveler inspection requests, International Organization (IO) boarder presentation scheduling, digitized bus operator manifest submissions and improved metrics reporting.

TRADE FACILITATION

Automated Commercial Environment (ACE) Truck Manifest Modernization (TMM)

In coordination with the Office of Trade (OT), OIT deployed the modernized truck manifest application for the CBP primary, secondary and exit gate lanes nationwide and as of October 3rd, CBP processed over 4.8 million trips in the TMM. This modernization enables reduced and streamlined processing times, significantly less login time for officers (seconds compared to minutes) and improved processing time for clearing a truck at primary. With this modernization, CBP can retire the costly legacy R4 truck manifest system, reduce maintenance costs and provide a more resilient and streamlined system functionality for trade users. This will also increase efficiencies in identifying Free and Secure Trade (FAST) and Customs Trade Partnership Against Terrorism (CTPAT) shipments and additional Instruments of International Traffic (IIT) bill types and provide streamlined viewing for advanced searches. In the period of time prior to the deployment of TMM (5/29/22-6/4/22), 37.93% of trucks were cleared in 30 seconds or less using the legacy truck manifest application. Immediately after deployment of TMM (6/5/22-6/11/22), OFO reported a nearly threefold increase, 99.94% of trucks clearing in 30 seconds or less.

OIT also implemented significant enhancements to support Non-Intrusive Inspection (NII) referrals and the ability to allow Unified Secondary (USEC) to create Primary Lookout Override (PLOR) for National Crime Information Center (NCIC) hits associated with referrals from Automated Commercial Environment (ACE) for Cargo Truck Manifest Modernization. These enhancements improve CBP's ability to effectively meet mission critical operational requirements by improving driver identification, increasing cargo throughput, increasing cargo scanning to target suspect loads for secondary inspection and modernizing ACE R4 through the development and nationwide deployment of the Truck Manifest Modernization (TMM) application.

METRICS

FY 2022 Automated Commercial Environment (ACE) Statistics:

Over $3.4T in Total Goods Value through ACE

Collected over $174B duties assessed through Trade Remedy Enforcement on Imported Products - Section 201, 232 and 301 Duty Assessment

Collected over $117.9B in Duties Fees, Taxes, Anti-Dumping Duty, and Countervailing Duty collected through ACE

Enabled over $2.4B in cost savings for CBP and Trade Stakeholders through streamlined processes of ACE capabilities

Over 372.4M commercial import cargo entries through ACE

Over 20.7M commercial cargo export shipments per year through Automated Export System (AES)

Modernized ACE Portal Application - Phase 1

Together with OT, CBP field users, partner government agencies (PGA's), and trade industry partners, OIT delivered a better, faster, and more reliable gateway to ACE by deploying the first of four phases of the modernized ACE Portal. The creation of a modernized platform has resulted in a seamless enhanced user experience for nearly 60K Trade, PGA and CBP users. With the launch of the modernized portal, CBP met a number of critical milestones to include bringing all ACE account data into a modern, easily accessible environment and increased ACE security through implementing multi-factor authentication (MFA) and PIV authentication for CBP users. Less visible but just as critical, CBP has set the foundation for the retirement of several costly and vulnerable legacy platforms for the next fiscal year.
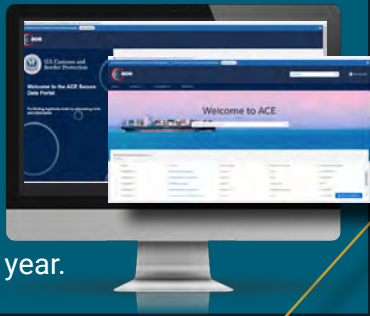
ACE Availability Dashboard

OIT established the public facing ACE Availability Dashboard to provide the trade (importers, filers and public) community a faster real time and expanded view of the ACE applications. The dashboard provides increased timely and accurate ACE application status data, system maintenance event scheduling and details, and historical system availability information.

When an application is degraded, the dashboard will provide an approximate 'delay time' (dwell time) which is the amount of time it will take to process or respond.

The dashboard provides the trade/public a way to see a history of events (a degradation, an unavailable app or maintenance) that occurred over the past 30 days. The dashboard also displays any scheduled maintenance for the identified applications to include the date and planned start and end times for that maintenance. In addition, the dashboard provides the users with a listing of and links to all Cargo System Messaging Service (CSMS) messages over the past week. Users can click on a CSMS message link and will be brought to the corresponding message.

Automated Targeting System (ATS) Cargo Targeting – Port-Radiation Inspection, Detection, & Evaluation (PRIDE) Mobile

OIT successfully completed the initial deployment of the Port-Radiation Inspection, Detection, & Evaluation (PRIDE) Mobile Application into the cloud hosted production environment. This new application is the mobile implementation of the existing PRIDE system. With this deployment, PRIDE field users will be able to utilize mobile devices, such as phones and tablets, to review and adjudicate Radiation Portal Monitor (RPM) alarms on conveyances and resolve PRIDE exams.
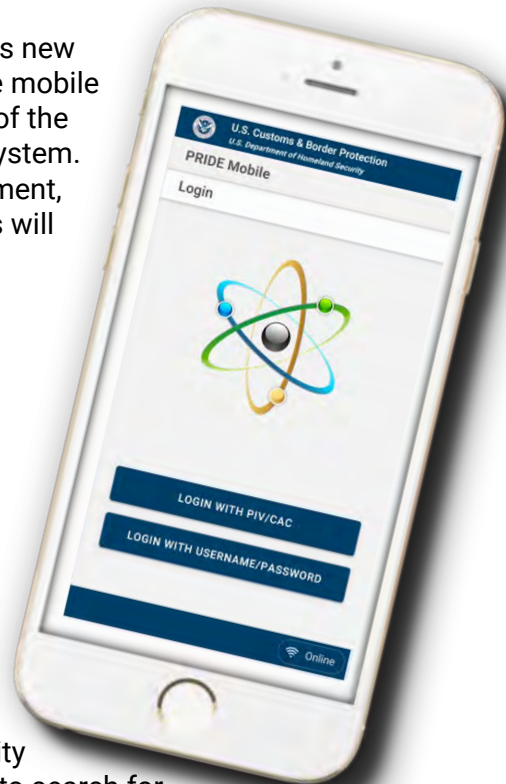
This deployment provides the ability for CBP Officers to search for RPM alarms and specify Radioisotope Identification Device (RIID) data and associate them to the PRIDE exams. In the event potential threats are detected or if scientific guidance is sought, the PRIDE Mobile App allows CBP Officers to enlist the help of Laboratories and Scientific Services (LSS) scientists to facilitate the analysis of the alarms and radioisotopes and provide guidance on how to handle such cases. Additionally, the LSS scientist can enter their findings and guidance via the PRIDE Mobile App using their phone or tablet to facilitate the resolution of the PRIDE exam.

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Validation Activities (VA) Modernization

In collaboration with OFO and OT, OIT delivered the Validation Activities (VA) Modernization. This effort established a new framework for CBP to conduct entry summary reviews within a single exam finding, modernizing what had previously been a disjointed user experience requiring users to operate across both Legacy ACE and ATS when performing an entry summary review. With this cohesive framework, ACE entry summary processing is seamlessly integrated with the Exam Findings application to bi-directionally exchange entry summary and exam finding status information to support a streamlined and more efficient business process for completing entry summary reviews. As part of this project, additional system processes were modernized from Legacy ACE into New ACE to support management of the entry summary control status, as well as sharing of entry summary information across multiple ACE consuming applications. These enhancements help to modernize capability within OIT's target architecture, further reducing OIT's footprint within the costly legacy ACE environment.

ATS CARGO TARGETING

ATS Entry Summary Findings

OIT successfully deployed the ATS Entry Summary Dashboard/Entry Summary Finding modernized ATS targeting/findings workflow, which subsequently marks the official retirement of the legacy workflow in the ACE Entry Summary application. Previously, Import/Entry Specialists worked primarily in the ACE Entry Summary application to conduct their day-to-day workload, utilizing team email inboxes to manage and complete their Validation Activity. The new ATS Entry Summary Dashboard provides a series of filters, sorting, and assignment/actions capability under a common framework CBP theme (look and feel).

The ATS Entry Summary Dashboard displays important data elements and targeting indicators, providing Import/Entry Specialists with the necessary information to make determinations if the line(s) should be reviewed and a finding should be recorded in the new ATS

Entry Summary Findings (ESF) module. The ATS Entry Summary Findings (ESF) module allows users to record Compliant and Discrepant Findings upon completing their targeting actions. OIT worked with stakeholders across CBP to complete this milestone achievement.

Vessel Entrance and Clearance System (VECS) Modernization

OIT supported a streamlined, automated workflow that reduces entrance and clearance time for a vessel by allowing Vessel Agents and Owner Operators to log into the ACE Portal and launch the Vessel Entrance and Clearance Systems (VECS). Vessel Masters/Vessel Agents/Vessel Operating Common Carriers can now submit data to CBP from VECS forms, housed within the ATS - Vessel Risk List (VRL).

CBP ACE Forms Modernization

In collaboration with OT, OIT deployed the new ACE Forms tool which will migrate the creation and management of three CBP forms from the Validation Activity (VA) tool in the ACE Secure Data Portal (ACE Portal) to the new ACE framework. This deployment provides an enhanced user experience by improving workflow and functionality, providing streamlined communication and collaboration when working with these forms, and supporting the Documents Required action. These enhancements include a more detailed screen view and layout, new import and export submissions, hotlist, added admin features, event process capturing, and advanced search features along with enhanced integration in ACE to allow users multiple points of access into the Forms workflow process.

ACE Section 232 and 301 Presidential Mandates

In coordination with OT, OIT continues to implement high priority and short turnaround enhanced capabilities in ACE to support Presidential mandated actions, and other U.S. Trade Representative actions. Some efforts include supporting reinstatements of 288 Harmonized Tariff Schedule (HTS) classifications, adjustments on imports of steel from Japan, and adjustments of steel and aluminum from the European Union (EU) and, assessed a 35% ad valorem rate of duty on articles originating in the Russian Federation.

Automated Commercial Environment (ACE) eCERT 2.0

In coordination with OT, CBP successfully deployed eCERT 2.0, a component of ACE that uses electronic data transmissions of information normally associated with a required export document. This allows countries to instantaneously process the certificate identification data, secure transmissions to protect certificate confidentially, protect against the introduction of fraudulent certificates, export country document monitoring, and improved compliance and enforcement.

Argentina, Australia, New Zealand and Uruguay are actively participating, with other countries in the pipeline to use the new application. The eCERT 2.0 capabilities will decrease the average time to process shipments from an average of two weeks to seconds by eliminating the need to email copies of export certificates.
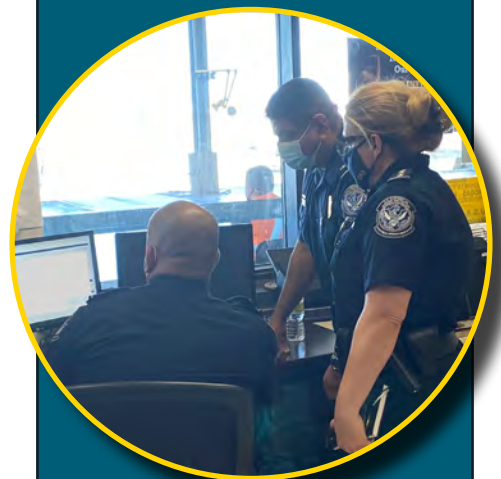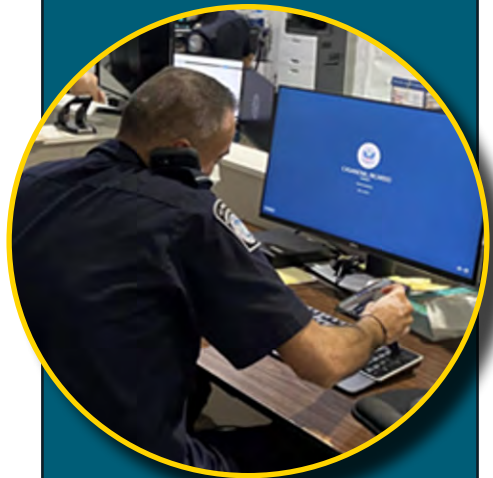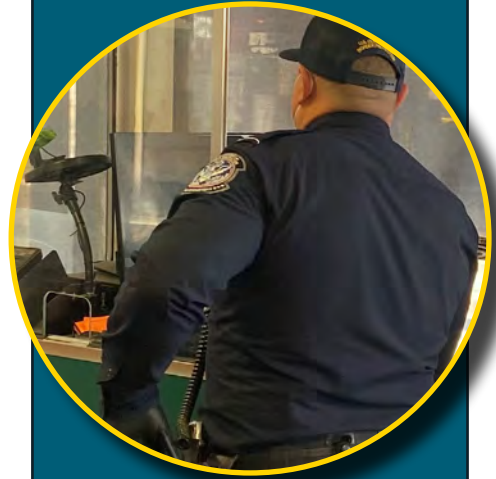
ACE Collections and Technology Modernization Fund:

TMF

OIT successfully deployed Collections Releases 4, 5 and 6, the first DHS funded and governed project by the General Services Administration (GSA) Technology Modernization Fund (TMF). This effort was completed within budget and without major issues.

04
RELEASE
BILLING

05
RELEASE
DEBT MANAGEMENT

REFUNDS
06
RELEASE

DEBT MANAGEMENT

Successfully converted Debt Management records into ACE:
- **106,447 bills** updated with debt management data
- **78,899 bills** updated for surety/bond debt management fields
- **79,925** sanctions converted
- **55** write-off schedules converted

Ran the Prevent Sanctions Batch:
- Successfully set prevent sanctions on **704 bills**

Release 4 - Billing:
Modernized bill management workflow, including the bill creation and vendor interface for bill print and distribution to the trade community. This gives the trade visibility into their unpaid (open) bills within ACE Reports for informational purposes and moves liquidation bills to ACE Collections which improves the accuracy of importer bills.

Release 5 - Debt Management:
Enhanced the Debt Management workflow, automated tracking of debt obligations and incorporates letter generation. This release also added interfaces with various ACE systems such as eBond, Protest module, Automated Surety Interface (ASI), and Business Warehouse (BW) to reduce the level of effort for managing debt.

Release 6 - Refunds:
Enhanced the Refunds management workflow and provided the ability to search, create, and certify/approve refunds. This release also contained funds certification to ensure the availability of funds. CBP and the Trade are expected to process a weekly volume of 8K - 9K refunds typically ranging between $150 Million and $200 Million.

Rapidly deployed the Collections Robotics Process Automation (RPA) Bot Picture-in-Picture (PIP) capability. This feature allows CBP users to do other work on their laptops (e.g., respond to emails, attend meetings etc.) while the BOT is running. This high priority feature reduces manual data entry and the time to complete the work, thereby improving efficiency and accuracy in processing the data.

Deployed the ACE Collections Release 6.0 RPA BOT which provides mass uploads using RPA technology and simplifies processing Continued Dumping and Subsidy Offset Act (CDSOA) case refunds. Users can generate a spreadsheet of refunds and utilize the RPA mass upload functionality to transfer those refunds into ACE Collections. The BOT will process an average weekly volume of 8–9K refunds ranging between $100M to $200M. The BOT converted approximately 13 million refund records from ACS to ACE, the largest ACE Collections data conversion to date. This BOT reduces manual data entry thereby improving efficiency and accuracy in processing the data.

Advanced Trade Analytics Platform (ATAP) - Forced Labor Case Management (FLCM) Application Modernization

CBP defines Forced Labor as all work or service which is exacted from any person under the menace of any penalty for nonperformance and for which the worker does not offer work or service voluntarily. Indentured labor is defined as work or service performed pursuant to a contract, the enforcement of which can be accomplished by process or penalties. This includes forced or indentured child labor.

CBP implements Section 307 of the Tariff Act of 1930 (19 U.S.C. 1307) through issuance of Withhold Release Orders (WRO) and findings to prevent merchandise produced in whole or in part in a foreign country using forced labor from being imported into the U.S. CBP is responsible for preventing the entry of products made with forced labor into the U.S. market by investigating and acting upon allegations of forced labor in supply chains.

In coordination with OT, the new Forced Labor Case Management (FLCM) application was deployed. This modernization streamlines and enables the intake of Forced Labor Allegations and the processing of Forced Labor Investigations. The application is used throughout the case lifecycle for managing important information, tracking deadlines, and storing and organizing documents for each case. The application also provides reports and dashboards used to analyze case data and assist with managing workload.

Indicators of Forced Labor

- Debt bondage
- Deception
- Abusive working & living conditions
- Intimidation and threats

UYGHUR FORCED LABOR PREVENTION ACT

U.S. CUSTOMS AND BORDER PROTECTION OPERATIONAL GUIDANCE FOR IMPORTERS
June 13, 2022
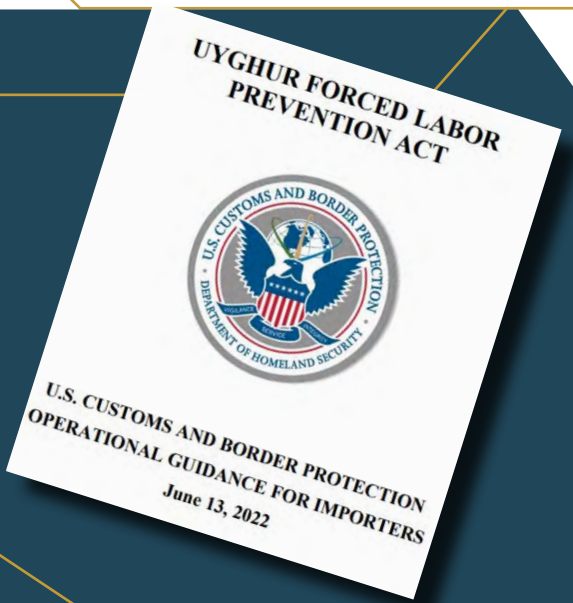
Presidential Mandated Uyghur Forced Labor Prevention Act (UFLPA) Support

OIT collaborated with CBP partners to support the Presidential Mandated and CBP Deputy Commissioner prioritized Uyghur Forced Labor Prevention Act (UFLPA) which establishes a rebuttable presumption that any good produced in whole or in part in the Xinjiang Uyghur Autonomous Region contains forced labor. OIT supported the DHS Forced Labor Enforcement Task Force (FLETF), UFLPA Entity List, a consolidated register of lists required to be developed and maintained. Through data analytics, these lists identify entities with possible forced labor involvement and supports the Strategy to Prevent the Importation of Goods Mined, Produced, or Manufactured with Forced Labor in the People's Republic of China.

MISSION APPLICATIONS

CBP FINANCIAL SYSTEMS AND PROCESSES

Systems, Applications and Products (SAP) Cloud Migration

As part of CBP's Datacenter Migration (DCM) program and in alignment with CBP's "Cloud First" mandate to migrate information technology (IT) systems to the cloud, OIT migrated CBP's financial system from the on-premises data center to a cloud hosted environment. The SAP application (SAP) is the financial system of record for CBP. It is a Commercial of the Shelf (COTS), fully integrated enterprise resource planning (ERP) system and the core application upon which the new cloud infrastructure is built with standardized processes with real time integration. This collaborative SAP cloud migration effort between the Office of Finance (OF) and OIT included migrating 131 servers, re-establishing 80+ connections, and validating 160+ interfaces. As part of the cloud migration, the SAP Business Warehouse migrated to an in-memory database. This migration will vastly improve reporting performance and eliminate CBP's risk of potential hardware failures.

The CBP Financial System cloud migration is a significant milestone achievement and provides cost savings through the reduction of building leases and eliminates the need to purchase physical devices. This migration also allows for faster modernization to newer technologies, an improved Disaster Recovery strategy, high availability for priority systems, and a minimization of CBP's footprint with the rightsizing of servers.
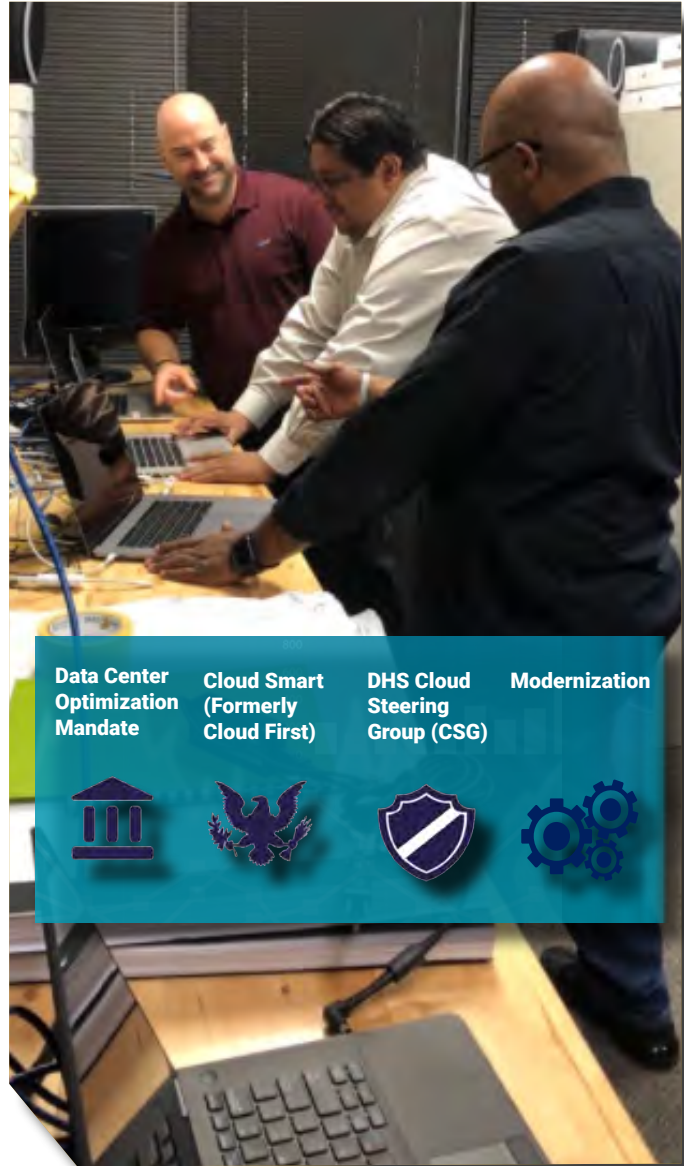
Data Center Optimization Mandate	Cloud Smart (Formerly Cloud First)	DHS Cloud Steering Group (CSG)	Modernization

1 SAP records over 2.7 million transactions per year including payroll, invoice payments, travel vouchers, fleet & travel card purchases

2 The SAP System IT environment is a large and complex ecosystem consisting of 11 SAP business modules, 6 environments/landscapes, built on 131 servers, supporting 160+ interfaces, and 8,000+ users

SAP in CBP

Financial Transactions

Historically and Continues

1.6M
PAYROLL TRANSACTIONS

78K
INVOICE PAYMENTS

189K
TRAVEL VOUCHERS PROCESSED

529K
FLEET CARD TRANSACTIONS

370K
TRAVEL CARD TRANSACTIONS

SAP SUPPORT

$24B Annual Budget to secure U.S. borders and facilitate trade and travel.

$1.3B Annual Fee Funding collected across 100+ different fees, supporting multiple stakeholders.

$94B Collected in duties, taxes and fees.

Point-of-Sale (POS) Modernization

The Point-of-Sale (POS) system is part of the Office of Finance's (OF) Revenue Modernization (RevMod) effort to modernize all legacy Electronic Collection Systems (ECS) used to facilitate collection of revenue at CBP's domestic and international ports of entry (POE). Through a series of function-specific menus, users can facilitate revenue collection (cash, check, debit, and credit card) including duties, taxes, fees, interest, fines, and penalties. The system's use of a global electronic payment service allows for the processing of smart chip debit and credit cards in addition to scanning magnetic strips.

The Point-of-Sale system utilizes a custom developed dashboard to complete deposits and transmit receipt details to CBP's Automated Commercial System (ACS). Improved enterprise reporting features include revenue by location reports, customized date ranges, high level views using different filters and the ability to download the reports. Daily deposit reports are sent to the U.S. Department of the Treasury.

The implementation of these new solutions is estimated to result in a significant decrease of time spent on revenue collection activities, up to 75% by CBP's uniformed personnel and up to 80% by non-uniformed personnel. Key accomplishments include a simplified user interface on 485 cash registers across 180 ports of entry (POE), new modern hardware, simplified and improved processes, strengthened access and security controls and less down time when issues arise.

METRICS

FY 2022: 56,711 shifts completed on the cash registers

FY 2022: 6,929 Deposit Sessions completed in EMS

FY 2022: $124.7 Million in collections

SEACATS

SEACATS (Formerly the Seized Asset and Case Tracking System) provides CBP with a single repository for enforcement actions related to the Treasury Forfeiture Fund (TFF). SEACATS captures seized property inventory and case processing information related to arrests, seized and forfeited property, fines, penalties, and liquidated damages. SEACATS is being systematically modularized for optimized cloud hosting as part of the effort to migrate the application onto CBP's cloud environment.

SEACATS STATISTICS

FY 2022

SEIZURE INCIDENTS	OFO ARRESTS
212K	13.1K
VALUE OF PROPERTY SEIZED	DRUGS SEIZED (EST.)
$5.9B	1.3M lbs
PENALTIES ASSESSED	CURRENCY SEIZED
$567M	$517M
LIQUIDATED DAMAGES	FIREARMS SEIZED
$2.9B	225K
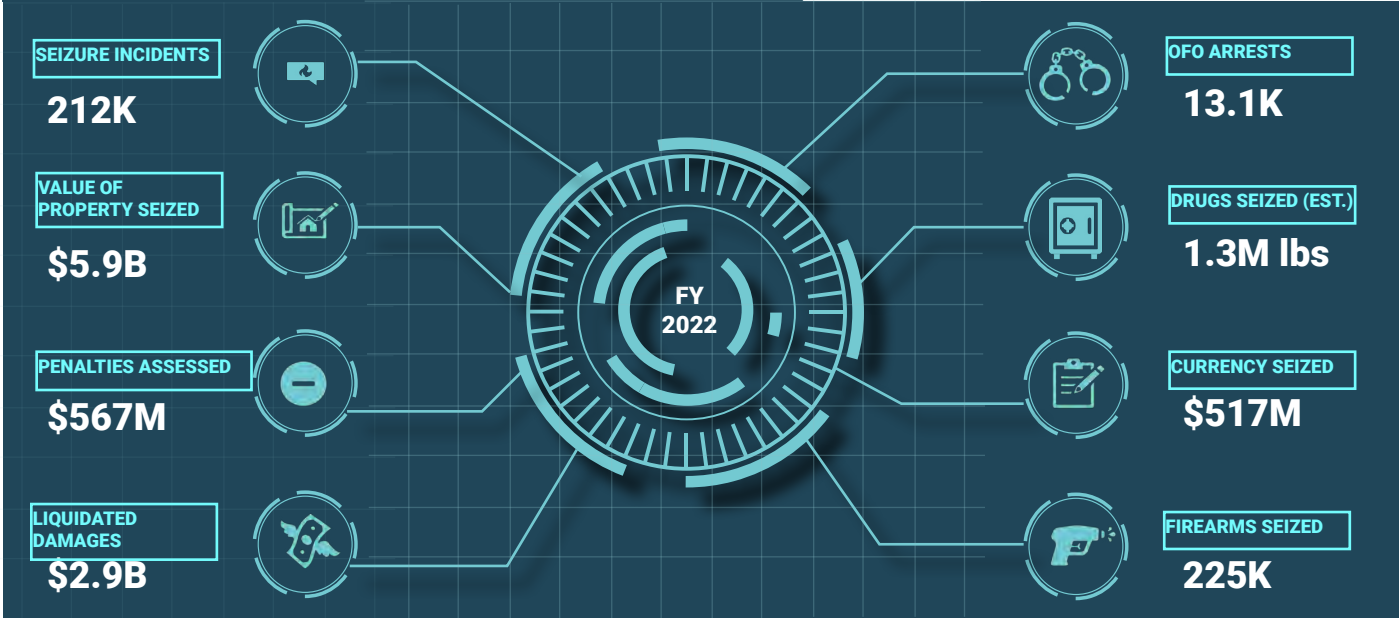
The Seized Property Vault Activity Automation (SPVAA) is an electronic version of the paper seized property logbooks used to track entry and exit to the various storage facilities across the country. Using a biometric verification service to log entry and exit from various rooms in a storage facility, the integration with SEACATS will capture real-time access records. The SPVAA pilot was initiated in late FY 2022 and the move towards paperless processing will save man hours per transaction and during annual audits.

MISSION APPLICATIONS SUPPORT

Tasking, Operations, and Management Information System (TOMIS) Modernization:

Over the past two years, OIT and Air and Marine Operations (AMO) have partnered to modernize the Tasking, Operations, and Management Information System (TOMIS). This collaborative effort was completed in 10 incremental phases over two years with full implementation of the modernized system and decommissioning of the legacy application in early FY 2022.

The modernized TOMIS application allows the team to manage the TOMIS database with autonomy and rapidly deploy code to production. Users benefit from the flexibility and elasticity of the modernized application via auto-scaling, a unique benefit of the cloud. When a particular module of the application experiences very heavy usage, the affected microservice will automatically add additional resources to address the need. Once the need has been addressed, the extra resources will self-reduce since they are no longer necessary.

AMO will also benefit from 24/7 TOMIS availability due to the reduced number of outages and through the use of microservices that enable independent modules in TOMIS to be down without impact to the entire application. Changes to the user interface enables developers to create common elements like buttons, pop-ups, and menus and re-use them after initial creation, substantially reducing coding time and increasing ease of maintainability.

sUAS Enhancement

The Small Unmanned Aerial Systems (sUAS) enhancement in TOMIS provides the ability to create and track sUAS missions as well as capture, record, and report enforcement activities. The new enhancement provides the ability to enter sUAS Operators, including non-AMO crew as visual observers, and track operational time. The team successfully migrated to a cloud-based user authentication product. This implementation provided full control of profile management for all TOMIS environments with a new and improved workflow for access and role requests within the target cloud infrastructure.

TOMIS/SMS Integration & TOMIS Mobility Safety Management System (SMS) Integration

The TOMIS team collaborated with AMOHQ and the Training Safety and Standards (TS&S) team to integrate the Safety Management System (SMS) portal with the TOMIS application. This integration will remove the need for users to access two separate systems in relation to Risk Assessments (RA) as the Clearance Authority (CA) can now directly access Risk Assessments (RA) through the TOMIS application. Additionally, data will be automatically carried over from the TOMIS mission and prepopulated onto the RA form in SMS, assisting in mitigating common data entry mistakes while incorporating quicker completion of each mission set's paperwork.

AMFAMS replaced the legacy Computerized Aircraft Reporting and Materiel Control (CARMAC) and four other related applications. OIT configured AMFAMS to meet AMO's need for a modern and expandable system to track the maintenance and logistics of its varied fleet of aircraft. Development and implementation occurred in two phases and was completed in August 2022.

Air and Marine Fleet Aircraft Management System (AMFAMS)

The Air and Marine Fleet Aircraft Management System (AMFAMS) is used by AMO to track the maintenance, logistics, purchasing, and readiness of approximately 218 helicopters and fixed-wing aircraft. AMFAMS provides over 1,000 AMO personnel across the country with critical business tools, including flight records, aircraft configuration tracking, mission readiness, inspection and maintenance schedules, parts inventory, financial accounting, purchase records, and reports.

Enterprise Geospatial Information Services (eGIS)

OIT supported CBP's Enterprise Geospatial Information Services (eGIS) Next Generation (NextGen) effort, retiring the legacy eGIS map after 10+ years of use. The new NextGen map viewer provides a modern look-and-feel, faster response times and allows all CBP employees and contractors to view CBP data in 3D. New map layers have been added and the team released a "drop-in" application that allows any OIT application team to easily install a map in their user interface while promoting a common look-and-feel.

Team Awareness Kit (TAK)

The Team Awareness Kit (TAK) team successfully migrated over 2 billion rows of historic device position data allowing TAK to now write directly to the new instance, in near-real time. This allows the TAK team to quickly respond to investigations and allows data scientists and analysts across CBP to access this valuable data. An update was released that allows agents in the field to create and edit Tracking, Sign-Cutting and Modeling (TSM) events from their mobile device as well as see other events in their vicinity equipping agents with better top-down situational awareness information.

Capability Gap Analysis Process (CGAP)

A new modernized Capability Gap Analysis Process (CGAP) application replaces an original collaboration between USBP and Johns Hopkins University Applied Physics Laboratory (JHU APL) to receive mission commander's intent, conduct capability gap analysis and make decisions about resources to be deployed at CBP locations. The new application provides enhanced functionality which includes the addition of a governance module, business intelligence in reporting, and scalability of the system, resulting in improved usability and timely decision making for USBP.

COVID-19 Related Deployments

The Workplace Incident Tracker (WIT) allows CBP components to track employees who report an exposure to COVID-19. In response to the January 2022 surge in COVID-19 case numbers, a change was deployed within 24 hours to remove a previous requirement, significantly reducing the reporting burden on CBP's frontline personnel. The Testing Action Group (TAG) Unvaccinated application was rapidly developed and implemented in a matter of days to consolidate information from multiple sources and identify unvaccinated employees who work in areas experiencing a high COVID-19 transmission rate. The list of high-risk employees is sent to CBP's testing provider so that testing can be administered in compliance with testing requirements and to ensure the health and safety of CBP employees.

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AI Center of Innovation (AI COI)

Artificial Intelligence (AI) is the ability for machines to solve problems and perform tasks that would normally require human intelligence and action. AI allows humans to do more critical thinking, while leveraging machines for more routine computational tasks. Over the last year, the AI COI team of data scientists and data engineers have worked closely with mission offices on pilot technologies, processes, and tools that support data enrichment, annotation, ecosystem, and AI solutions that could be scaled for the CBP enterprise.
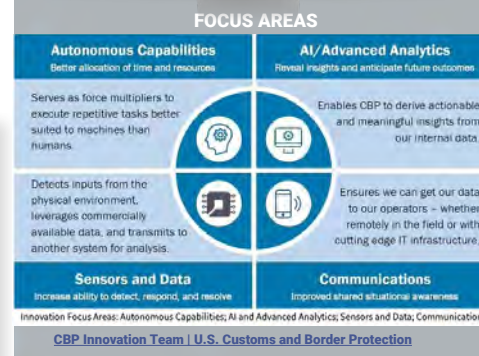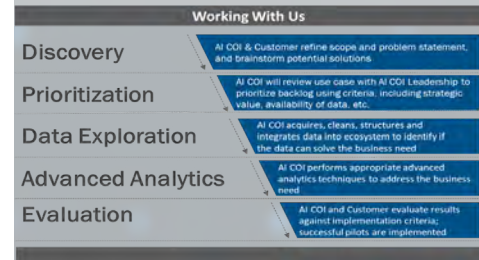
- Video and image redaction and segmentation builds object detection models to automatically identify frames where objects are detected, label the detected object, and perform redaction on the frame. This enables automated identification and redaction of sensitive information such as PII which significantly reduces the amount of manual search and review.

- People identification in streaming video deploys analytic models that automatically detect and track activities at and near a site. This enables real-time alerts to operators, increasing the effectiveness of existing surveillance platforms and decreasing cognitive load of personnel.

- Patterns in movement visualization-analytics leverages data to develop analytic output for further exploration, helping us to better understand movement activity and patterns, enabling visualization of these movement patterns, and integrating streaming data.

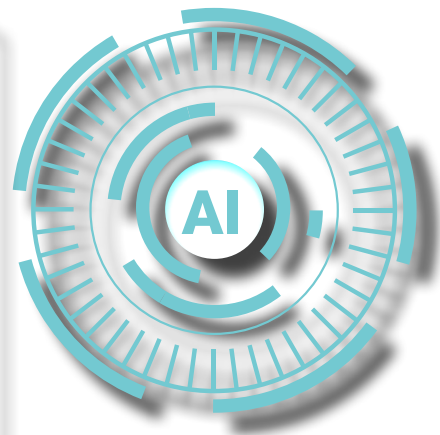- Optimized search engine for improved vetting is automatic ingestion of reporting data, which optimizes search enabling improved vetting and reduced vetting lag time, creating the ability to research and visualize connections as well as eliminate manual file transfers.

- Data annotation provides data with categories, labels, and other contextual elements so machines can read and act upon the information returning higher-quality results for search queries and analysis.

OIT coordinated with the CBP Innovation Team (INVNT) to manage 57 active projects with 12 projects started in FY 2022. Almost half of the funded projects in FY 2022 had a mission focus area in AI & Analytics and Autonomy. Eight projects were transferred to new program and business owners including:

- **Data Analytics Platform:** Machine learning and AI algorithms used for correlation, fusion, and analytics of multi-modal data
- **Counter Small Unmanned Aircraft Systems (CSUAS):** Capability designed to detect, track, and identify sUAS conducting illicit cross-border activity

Working With Us

Discovery	AI COI & Customer refine scope and problem statement, and brainstorm potential solutions
Prioritization	AI COI will review use case with AI COI Leadership to prioritize backlog using criteria, including strategic value, availability of data, etc.
Data Exploration	AI COI acquires, cleans, structures and integrates data into ecosystem to identify if the data can solve the business need
Advanced Analytics	AI COI performs appropriate advanced analytics techniques to address the business need
Evaluation	AI COI and Customer evaluate results against implementation criteria; successful pilots are implemented

FOCUS AREAS

CBP Innovation Team | U.S. Customs and Border Protection

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- **Autonomous Surveillance Towers - Maritime Variant:** Relocatable system that autonomously detects, identify, classifies, and tracks items of interest in the marine domain
- **Low Bandwidth Satellite Connectivity:** Global Satellite Hotspot for low-bandwidth data transmission in remote locations
- **Supply Chain Analytics Platform:** Collects and structures public supply chain data from various areas around the globe
- **Hybrid Communications:** A network used to create communications architectures that enables data sharing
- **Computer Vision Enhancements:** Advanced Analytics for Camera Streams and Alerting of Camera Operators when items of interest are detected
- **Tethered Small Unmanned Aircraft Systems (TSUAS),** Data/Radio Communications: Persistent data and voice communications with flexible deployment options providing tactical, mobile, and fixed applications

158 PROJECTS

Robotics Process Automation (RPA)

Robotic Process Automation is a low-code/no-code software that is transforming the way that industry and the federal government do their work. The technology can be used to create automations which execute repetitive, rule-based tasks typically performed by humans and manipulate data and applications just as a human would. Since Sept 2021, RPA has transformed over 60 processes across CBP, automating manually intensive procedures and saving CBP millions of dollars and tens of thousands human resource hours.

This success is made possible due to an ecosystem where the RPA Community of Practice is thriving and gaining momentum in CBP. Over 150 RPA CTO Tech Talks have built awareness around RPA and its value to CBP. The RPA Community of Practice governs the creation of bots and provides a free training platform to enable citizen developers to learn RPA at their pace at virtually no cost. Innovative processes such as crowdsourcing of RPA ideas and idea campaigns have helped develop a rich pipeline of automation use cases, empowering users to create and implement innovative time saving solutions. Measuring the cost avoidance and time savings as part of the engineering lifecycle helps ensure leadership buy-in and sustains the culture shift to automation first. Having an enterprise platform that is authorized to operate with Development, Test and Production environments reduces time to develop and time to deploy automations. Without a doubt, CBP is one of the leading federal agencies with respect to the value created to the organization and the government via RPA.
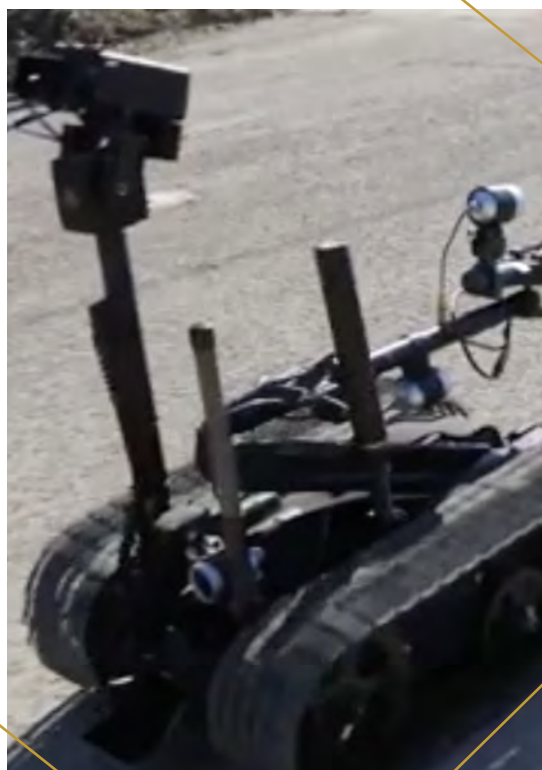
The Robotic Process Automation (RPA) Program has automated more than 57 workflows during FY 2022 providing benefits to the daily operations for ten CBP offices. Overall, a total of 157 workflows have been automated since program inception in FY 2020, saving thousands of hours of effort and creating efficiencies agency wide.

RPA releases during FY 2022:

Office	Number of (new) Automations		Office
Air and Marine Operations	**2**	**5**	Office of Finance
Office of Field Operations	**18**	**6**	Office of Privacy and Diversity
Office of Trade	**6**	**1**	Office of Facilities and Asset Management
Operations Support	**2**	**7**	Office of Human Resources Management
Office of Chief Counsel	**2**	**8**	Office of Information and Technology
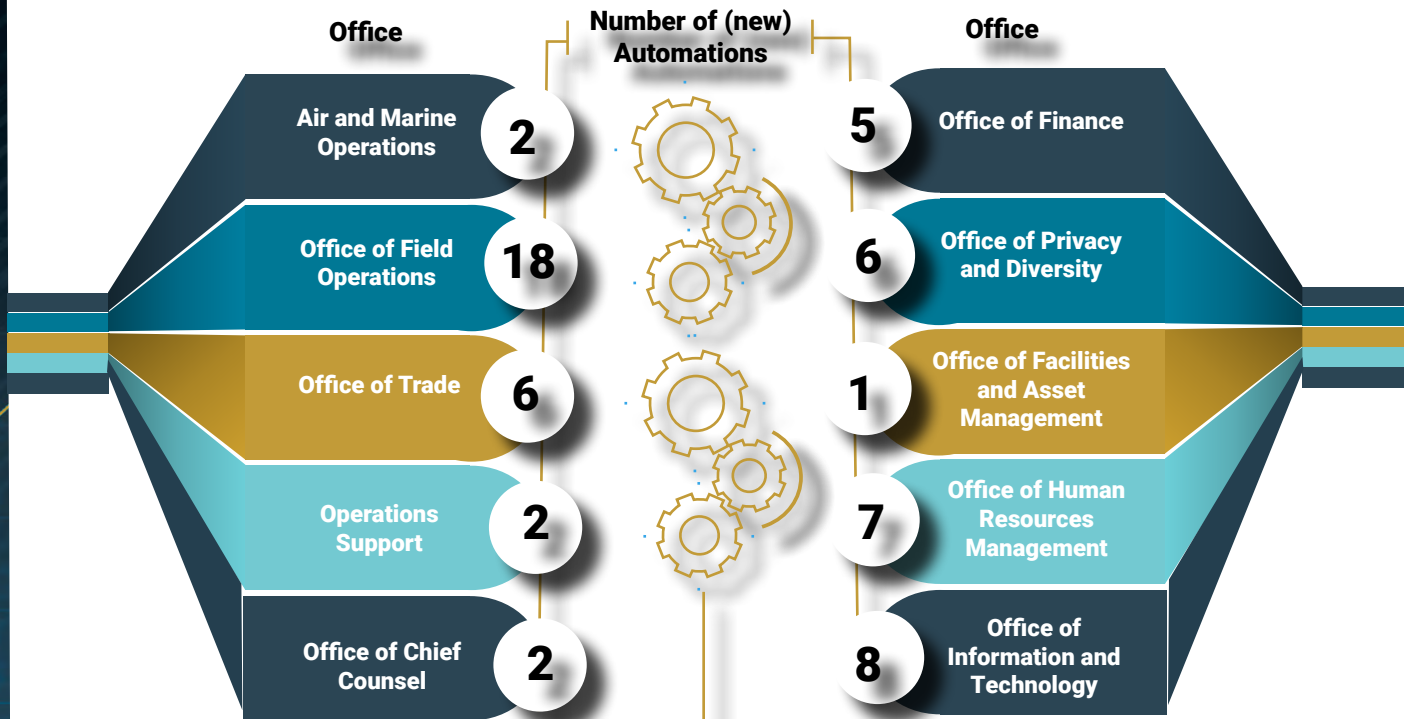
FOIA Bots: The Privacy and Diversity Office (PDO) and OIT partnered to create two bots designed to improve efficiencies when responding to Freedom of Information Act (FOIA) requests. The two delivered use cases resulted in bots that are effective in addressing a segment of current backlog requests. Joint efforts between these organizations continues to address additional use cases.

Translation Bot: Office of Field Operations (OFO)/ National Targeting Center (NTC) and OIT delivered a use case complementing the existing PODER Bots. Data scraped using the PODER bots is recorded in Spanish. The Translation Bot allows users to translate any excel workbook or CSV file into English. A user inputs the columns needing translation and then selects from a list of numerous languages to complete the translation process. Previous translations are saved to improve performance and efficiency on each run.

WHAT CAN RPA DO?

- Open email and attachments
- Log into web/enterprise applications
- Move files and folders
- Copy and paste
- Fill in forms
- Read and write databases

- Scrape data from the web
- Connect to system API
- Make calculations
- Extract structured data from documents
- Collect social media statistics
- Follow "if/when" decisions/rules

Mimic Humans Actions

RPA

- Quick to implement and seamless to scale
- Interact with Systems
- Consistent Execution
- Read and Write Data in Structured form

NEPTUNO Bots: A collaborative effort between Air and Marine Operations (AMO) and OIT produced bots to reduce time spent on data searches, vessel owner validation, and targeting analysis surrounding AMO investigations.
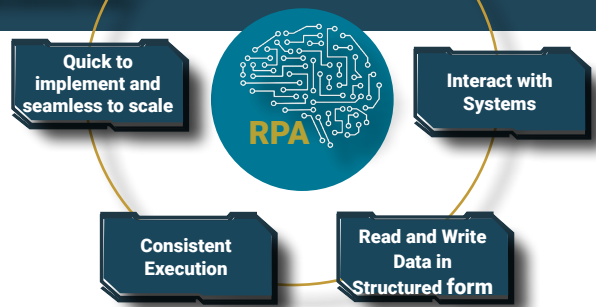
CBP.gov Software Update

CBP.gov is the official public-facing web site where users can find information about CBP's mission and services. The website provides background information on agency operations and offers transparent information on financial and government agency performance. It also offers information on border security, travel programs for citizens and visitors, and trade related activities such as the importing and exporting of goods. Another important function of the website is to serve as a recruitment tool for Human Resources Management (HRM) through the posting of career opportunities and employment information. CBP.gov includes over 30K pages of information and supports about 88.5 million annual page views.

The CBP.gov team migrated the site to a new software version, leveraging the DHS Web Content Management as a Service (WCMaaS) platform. In addition to the version upgrade, CBP.gov utilizes the DHS baseline code, incorporates the U.S. Web Design Standards (USWDS) and was designed from a mobile first perspective. The new CBP.gov site launched on 5/22/2022 without interruption to users. In addition to the software update, upgraded versions of site analytics and search were also incorporated.

CBPnet Software Update

CBPnet is the official intranet site and communicates official news and information to employees within CBP and DHS components. Each office within CBP is represented through their own features page, providing organization specific information.

The migration of CBPnet from the on-premises servers to the cloud was in support of OIT's modernization strategy to reduce cost and ensure maintainability of systems and applications. In late FY 2021, the team collaborated with OIT leadership and components to create a condensed migration schedule. Utilization of new technologies allowed the team to deliver this project six months ahead of schedule, in about 80 days. The team utilized scripts and servers to migrate content for each office, then configured permissions and templates to allow individual offices to create their homepages. Lastly, the team executed another set of scripts to migrate documents associated with each office. This collaborative approach significantly expedited the migration process and ensured stakeholder engagement during the migration. Cutover to the new site was completed in early FY 2022.

MISSION APPLICATIONS

MISSION INFRASTRUCTURE

*A modern, reliable IT infrastructure and 24/7 year-round support
services serve as the backbone for technology solutions that
deliver critical capabilities at the speed of mission.*
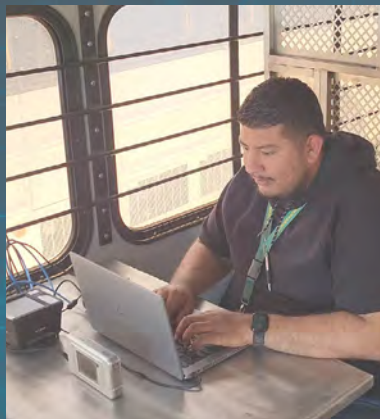
HIGHLIGHTS

Continued agency cloud migration efforts to include the migrations of 167 applications (61% of OIT's portfolio), 243 terabytes and 183M files of data, and local F:drives to cloud hosted environments.

Implemented 75 Mobile Wireless Integrated Network Devices (M-WIND) to provide rapid deployment of technology solutions during significant events, such as responses to surges of migrants at the Southwest Border.

Supported and maintained 165 Mobile Video Surveillance Systems (MVSS) across 16 USBP sectors; managed 25,000 mobile devices and 630,000 mobile applications; upgraded Centralized Area Video Surveillance Systems (CAVSS) at nine facilities to include 1,652 cameras, 294 microphones, 36 network video recorders and 23 workstations; implemented Incident Driven Video Recording Systems (IDVRS) at 41 sites.

MISSION INFRASTRUCTURE

ENTERPRISE CLOUD COMPUTING

OIT's cloud migration progress in FY 2022 exemplifies our commitment to continually enhancing the adaptability, scalability, and overall efficiency of cloud services for CBP through innovation and collaboration. OIT completed the first phase of the multi-cloud strategy, demonstrating capabilities for rapid deployment in alternative cloud service providers, which further ensures CBP's mission does not hinge on the reliance of a single threaded cloud service provider. OIT exceeded the FY 2022 migration goal of 55% by completing 61% of cloud migrations and has worked to create and implement dashboards providing transparent and real-time information to trusted partners and CBP leadership.

OIT focused on retiring aging IT infrastructure across the enterprise with the migration of data from existing field servers to cloud hosted drives. As of August 2022, this project is 100% complete, with 51,861 users' data successfully migrated, including 243TB of data and 183 million files. The migration has been nearly transparent to users as all migration errors were resolved without service impact and users are provided the added benefits of cloud file storage.

METRICS

Out of 271 total applications, to date 167 apps have been migrated which is 61% of the OIT Application Portfolio, which exceeded the FY 2022 goal of 55%.

In FY 2022, 43 total applications were migrated, 34 of those are High Value Asset (HVA) Investments.

54% of migrated applications were considered complex while 12% were considered simple.

Migrated 29 legacy ATS data sources including Border Crossings, PNR, ESTA, VISA, and Secondary Inspections to BDS data loaders and Elastic Search (more than 16 billion documents from Oracle Exadata to BDS HBase).

Achieved 100% Material Availability for critical systems by relying on cloud infrastructure, resulting in zero downtime/outages for officers and agents.

To raise awareness and keep users informed, OIT hosted Data Center and Cloud Migration (DCM) town halls. In May 2022, the "Cloud Focused: A Look Forward DCM Town Hall" event was attended by over 400 participants. The event featured guest speakers DHS Undersecretary Randolph "Tex" Alles and USBP Chief Raul Ortiz to speak as trusted partners and voice of the customer. On September 21, 2022, the "Cyber Security Vigilance and Operations in the Cloud DCM Town Hall" event was attended by over 300 participants. The event featured guest speakers CBP Deputy Commissioner Troy Miller and OFO Director Sidney Aki to speak as the voice of the leader and trusted partner. The event focused on cyber operations at CBP and the journey to the cloud.

Benefits of Migrating to Cloud Hosted Drives
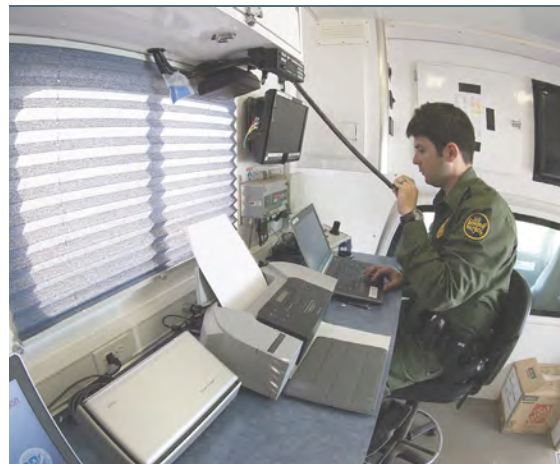
Reduces aging field servers maintained by employees

More secure and backed-up to the cloud

Users can continue to access files through file explorer with the additional option of using a portal

Reduces need for Field Support to transition users F:drives from site to site

Provides more storage. F:drives have shared/ limited storage; cloud hosted drives provide 5TB of personal file storage per user

Network Access Control (NAC) Project

OIT continues to deploy the Network Access Control (NAC) solution, a network security platform, onto CBP's infrastructure to provide usage monitoring, visibility, and restriction controls with a set of policies and rules. This solution enhances CBP's security posture in determining the devices and endpoints that can access the network and level of access needed. In FY 2022, a total of 704 NAC sites were deployed and 2,295 switches were implemented into NAC access management.

Network Architecture Center (NA Center)

OIT is improving network monitoring capabilities with deployment of three NA Center appliances capable of supporting 11,000 devices and 26,000 access points. NA Center is a powerful network controller and management dashboard that lets you take charge of your network, optimize your network investment, and lower your IT spending. The solution receives data in the form of streaming telemetry from every device (switch, router, access point, and wireless access controller) on the network, automating mundane tasks, manage device images, and define device policy profiles.

Network Switch Refresh at Field Sites

As part of the CBP network modernization, OIT continues to deploy new network switches to replace end-of-life/end-of-support (EOL/EOS) switches at CBP field sites, totaling 455 in FY 2022.

Trusted Internet Connection (TIC)

OIT successfully connected 680+ trade partners to a cloud-based platform, TIC 3.0. The TIC 3.0 migration directly addressed long term operational problems and delays experienced by trade partners and produced a significant service improvement for these users and the OIT enterprise. TIC 3.0 will allow CBP to take better advantage of cloud technology such as infrastructure-as-a-service, software-as-a-service, email-as-a-service, and platform-as-a-service by enabling cloud providers to patch applications seamlessly and transparently for users.

METRICS

Total FY 2022 NAC Implementations to date:

Provisioned **2,983** sites with **9,265** devices added

Switches: **2,836**

Wireless LAN Controllers: **45**

Access Points: **4,633**

Routers: **1,721**

MISSION INFRASTRUCTURE

INFRASTRUCTURE

CBP is reducing the aging field infrastructure while providing secure, resilient, and compliant file sharing services through collaboration tools. The reduction immediately impacts financial outcomes such as OIT's cost avoidance for imminent hardware failures and ongoing maintenance costs related to maintaining the functionality of older equipment.

Enterprise Infrastructure Solutions (EIS)

The General Services Administration (GSA) Enterprise Infrastructure Solutions (EIS) contract is the follow-on vehicle for previous government and local telecommunications services contracts. This project consolidates and transitions the DHS and CBP network services and solutions, which were previously acquired using multiple GSA and non-GSA contract vehicles and commercial sources. CBP successfully awarded its Fair Opportunities Contract consisting of three task orders. By the end of FY 2022, CBP submitted 24,671 (99%) of the data orders with selected vendors, and those vendors have placed 24,180 (98%) of orders within their systems. As a result of these CBP order submissions, vendors can expedite the process of transitioning telecommunication services. Overall, CBP's transition off the legacy contracts is 9.6% complete, with 13,017 disconnects completed and 122,729 remaining (in relation to transitioning from the legacy contracts to EIS).

Data Management

Working with a compressed and expedited schedule, OIT successfully completed the installation, configuration, and deployment of a highly visible data platform in support of the Data Ingestion and Integration (DII) component of the Advanced Trade Analytics Platform (ATAP) program. The completion of this phase of the project ensures streamlined processes for the Office of Trade (OT) to perform future analysis including Machine Learning (ML) and Artificial Intelligence (AI) tools, thereby enabling OT to accomplish its mission with precision, speed and reduced human errors.

OIT established best of breed monitoring analytics via data management and monitoring tools. The team completed development of the glass table Automated Commercial Environment (ACE) prototype which provides custom visualizations to increase CBP's ability to better detect problems, simplify investigations, triage issues, and accelerate resolutions. The methodical expansion and fine tuning of enterprise monitoring resulted in successfully onboarding 34 new applications into an enterprise platform.
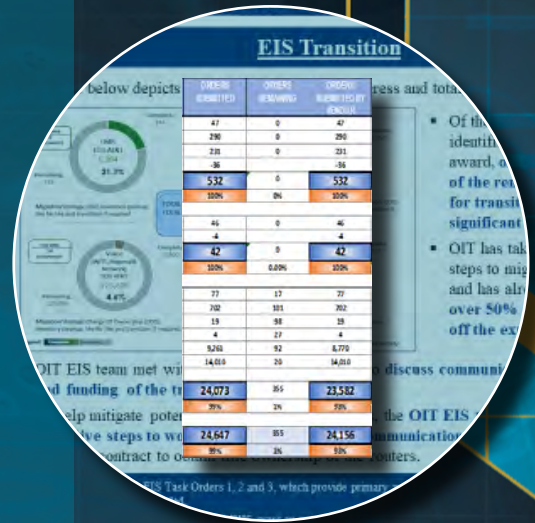
Within the enterprise platform, OIT championed evolution of processes to perform change management, including deployment of a risk assessment function and formalization of OIT's expedited change process within the enterprise platform. The expedited change process and risk assessment enhancements improved the speed of approval for changes considered minimal risk. Additionally, it affords teams the ability to quickly assess the risk so a greater emphasis can be placed on changes with elevated risks.

Transitioned assignment, tracking, and reporting metrics for post incident actions from collaboration tool-based processes to use of the enterprise platform. Insight into EOC post incident actions assigned to technical teams is now readily available via a dashboard resulting in improved assessment of those actions and improved tracking of the various efforts taken by OIT to prevent, mitigate and/or improve OIT's response to future incidents. To date in FY 2022, the EOC has assigned 183 post incident actions for 117 incidents and closed 130 post incident actions related to 89 incidents.

CBP INVNT's portfolio outgrew its current method of tracking projects and required a robust end-to-end tracking capability. OIT responded with the completed development of the INVNT Portfolio Tracker application, uploaded all data, and deployed the application to production using the cloud pipeline. This solution reduces data duplication, eliminates manual processes used to collect data, and improves the quality of the data.

OIT is engaged to migrate all journaling data into a single application for discovery requests. To date, over one petabyte (PB) of all emails (going back to 2008) have been migrated into the new application. The team is currently working on the final migration of 500 terabytes (TB) of email data (85% complete). Once the migration has been completed, OIT will be able to search a single location for all litigation and Freedom of Information Act (FOIA) requests and implement and maintain CAPSTONE in one location.

Patching

Software and operating system patches are an important part of ensuring the security and functionality of CBP's technology framework. In FY 2022, OIT pushed a total of 35M patches to servers and desktops. Of these, 5.7M patches were applied across 7,000 operating system instances including application servers and databases. Approximately 29.3M patches were made available to 88,000 workstations which includes operating systems and third-party software patches. These patches are made available monthly by the desktop management group after testing and validation.

Software Clean-Up

OIT conducted reviews of vendor provided software and impacts to equipment and related costs. These reviews determined a potential $186 million financial impact prompting OIT to take actions to reduce costs. The team worked to implement an automated software removal process and provisioned elevated privileges to allow support staff to manually remove software as needed. Servers were identified and remediation efforts were taken, resulting in a reduction to three on-premise servers owned by CBP. OIT continued to educate users on options to migrate to platform development kits.

The centralized Application Interface (API) Management Platform (AMP) provides the capability to leverage the CBP Targeted Architecture and enables a fully scalable and containerized deployment of the new API AMP platform service allowing for full operational resiliency with minimal cost impacts to the organization. Implementation of the AMP capability provides a new enterprise service that empowers the mission and realize time savings with the replacement of a manual integration to an automated one. This automation prevents human error, allows for rapid 3rd-party API integration, increases security, repeatability, standardization, and acts as a jumping off point for rapid capability increases for future mission needs.

On July 8, 2022, CBP bid farewell to its long-time, reliable mainframe workhorses as the retired equipment was removed from the raised floor at NDC1. A cloud mainframe provider hosts the last remaining legacy mainframe application, ACS (Automated Cargo Systems) Collections, until its modernization completes in fall 2023. OIT was also able to scale down the Mainframe-as-a-Service contract from a four-processor to a two-processor equivalent, resulting in substantial cost savings.

Advanced Training Center (ATC) Modernization Efforts

OIT conducted a site visit and all-inclusive operational overview of the Office of Training and Development (OTD) Advanced Training Center (ATC) located in Harpers Ferry, WV. OIT met with ATC leadership to discuss opportunities for an efficient collaboration on identified deficiencies which also included a tour of the facilities. Along with learning about the academy technology footprint and current efforts and operations driven by technology associated with the ATC mission, OIT focused on technology concerns and identifying solutions to address them.

Some of the discussions revolved around OIT's approach to overcome the challenges of integrating multiple technology components into an enterprise with unified policies, procedures, and approaches to affect National security through operational technology modernization. The site engagement and operational exposure to various capabilities provided OIT with an extensive overview of the dynamic operational resources the ATC utilizes in support of the CBP mission. Opportunities were identified to establish innovative methods for future engagements between OIT and the OTD ATC as well as future collaborations with the other academies.

Enterprise Services Acting Executive Assistant Commissioner (EAC) Scudder committed $1M to this effort. With these funds, OIT can provide remediation for identified deficiencies within our area of responsibility and effective options for modernizing technology solutions available for the ATC. Through our collaborative efforts, we will continue to further develop technology solutions to produce information sharing platforms between OIT and OTD.

Mobile Wireless Integrated Network Device (M-WIND)

OIT introduced a new agency-wide network connectivity capability that provides an "interim solution" for rapid deployment during significant events. This solution enhances video, data stream, and communications by way of a device that aggregates multiple network services into a single network to make a "network of networks." To date, OIT has procured 75 devices to include 15TB of Data Plan ready for deployment to meet critical mission needs. The device is an approved capability on the Technical Reference Model (TRM), allowing for swift response on additional device purchases, and requests for deployments.

OIT Mobile Wireless Integrated Network Device (M-WIND) Collaboration with the USBP Mobile En-Route Processing (MERP)

In response to an expected surge in migrants at the southwest border, CBP worked to implement solutions that would address operational, administrative and deconfliction efforts to ensure no disruption to field operations. To ensure success, AC Bhagowalia directed all OIT Directorates to enhance southwest border operational support efforts by working closely with our trusted partners. OIT initiated efforts to procure additional Mobile Network Integrated Devices (M-WIND).

MISSION INFRASTRUCTURE

During collaboration efforts with USBP partners, it was determined that the OIT M-WINDs would provide a high impact of success on the USBP Mobile En-Route Processing (MERP) initiative. This operation intends to leverage and integrate emerging mobile technology, processing infrastructure, and evolving processing pathways while in transit. These mitigation efforts are designed to expedite the release, return, or transfer of custody of amenable noncitizens to maintain manageable holding capacity. The addition of technology falls under the force multiplier strategy to increase speed and manpower and may provide CBP with the ability to increase processing capabilities and document integrity, while decreasing time in custody.

The MERP initiative entails the immediate deployment of 12 retrofitted transportation buses that will be centrally located in San Angelo, TX. The proof of concept proved to be successful, and in July, USBP allocated funding to OIT to procure an additional 50 units. OIT developed and published a dashboard to track the M-WIND units from procurement to installation.

Soft-Sided Facilities (SSF)

OIT continued to support operational capabilities at CBP soft-sided facilities across the southwest border through the installation and maintenance of technology equipment and capabilities. This work included the successful planning, coordination, and installation of climate controlled soft-sided maintenance canopy facilities to include all necessary operational information technology equipment and infrastructure including workstations and printers; circuits and networks; communications and tactical equipment, multiple wi-fi connections for employees and guests; and satellite connections for use in remote areas. Some facilities were installed in locations where mobile surveillance maintenance was previously being performed by Field Technology Officers (FTOs) outdoors in inclement weather leading to unforeseen delays. Safety fall protection gantry cranes were installed at some locations, the first two cranes of this type within the Field Support Directorate (FSD). In addition to routine processing facilities, two detention area pods were installed for use separate than the routine processing of migrants.

OIT worked with ICE to deliver IT infrastructure and support for funded expansion work supporting ICE's Enforcement and Removal Operations (ERO) and Alternatives to Detention (ATD) efforts in Laredo, TX and Yuma, AZ. This work included extended support coverage as well as IT equipment and infrastructure required to meet operational needs. OIT fulfilled an ICE request for guest wi-fi in the processing areas at the Tucson SSF to aid in the activation of ATD phones, cell phones issued to single male and female migrants tying their A-number to the phone.

SSF total stats:

- 130 desktop workstations
- 76 laptops and 18 docking stations
- 12 monitors and 47 printers
- 90 Voice over Internet Protocol (VoIP) phones
- 50 processing stations (virtual, in person, property and medical)
- Two holding pod stations and five supervisory stations
- 60 e3 processing sets – fingerprint scanners, cameras, document scanners
- 20 indoor and outdoor wireless access points
- Four uninterruptible power supply (UPS) units
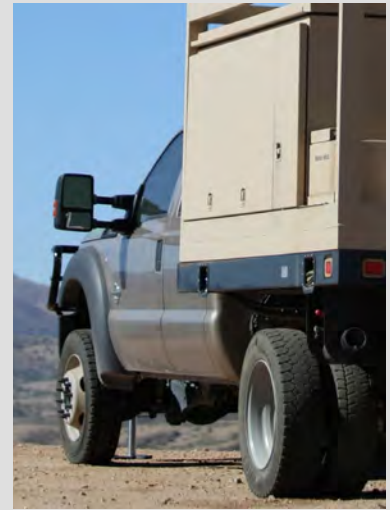
Mobile Video Surveillance Platforms Mobile Video Surveillance System (MVSS) Maintenance and Support

OIT worked to successfully transition all operational maintenance activities for the Mobile Video Surveillance System (MVSS) program from Contractor Maintenance Logistics Support (CMLS) to OIT government resource support. The MVSS program consists of 165 assets across 16 different U.S. Border Patrol (USBP) sectors.

The MVSS is a removable skid-based mobile surveillance platform mounted on a truck and utilized by CBP for tactical mission deployments. The MVSS enables CBP to efficiently monitor selected areas of coverage within an area of interest and is the preferred solution in certain urban, rural, and remote areas that are difficult to access and monitor with other systems. It is the replacement for the original MVSS, sometimes referred to as scope trucks, that were built by OIT over 15 years ago and are still being utilized by CBP in some sectors.

OIT currently provides all corrective and preventative maintenance on the MVSS system. Last year, OIT completed 496 work orders with an average shop time of only 16 hours per unit, well below the agreed upon 72-hour threshold. OIT's tireless work ethic and assistance on MVSS Engineering Change Proposals have contributed to the program's overall success and its ability to meet the Cost Wise Readiness requirement.

The Federal Aviation Administration (FAA), in coordination with OIT, provides comprehensive maintenance training for the MVSS program at the academy in Oklahoma City, Oklahoma. In addition, the MVSS program was recently added to OIT's Technology Service Desk for 24/7, year-round support from subject matter experts across the nation. The primary goal of the MVSS support desk is to keep the systems operational and deployed and ensure high program Availability of Operations.

Mobile Surveillance Capability (MSC) 24-Hour Support Line

The Mobile Surveillance Capability (MSC) 24-Hour Support line was transitioned from contracted support to federal OIT staff in FY 2018. The support line reported a 40% resolution rate in FY 2022. Issues not resolvable by the 24-Hour support line are referred to local maintenance staff to be addressed.

Total Maintenance Resolved

Same Day Resolution (%)

• A total of 697 unique calls were received: 275 of those calls were resolved by the support line team.

• Calls resolved by this team allowed trucks to remain operational in the field as they would have previously been brought in for maintenance, on average, about seven trucks per week.

• 78% were completed in less than 12 hours
• 11% completed between 12-72 hours.
• Mean Maintenance Time was 3.85 hours

Max Time To Repair (MAXTTR)

Mean Time To Repair (MTTR)
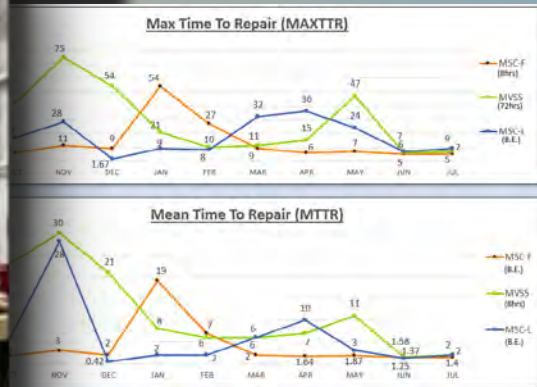
Mobile Surveillance Platform Maintenance

In FY 2022, 1,273 mobile asset maintenance work orders were resolved in Integrated Logistics Support System (ILSS), including: MSC-Forward Looking Infrared Cameras (FLIR), MSC-Lite, and MVSS systems.

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OIT Mobility Supports Mission Critical System Upgrade Servicing CBP Frontline Operators

OIT Mobility began an enterprise-wide upgrade of a mission critical mobile application used primarily by USBP for situational awareness and GPS-enabled tracking capabilities. The application displays friendly force locations, CBP sensors, and enables real-time information sharing among forces conducting both solo and joint operations. OIT collaborated with USBP, OFO and AMO operators to test and validate the core upgrade, as well as over 12 required plug-ins before deploying required scripts to the new system and plug-ins. As a result of OIT mobility efforts, capabilities are enhanced within the system associated with the mobile application, and plug-ins that provide geospatial awareness for CBP Law Enforcement Officers while engaged in operational activities.

Mobile Device Management

OIT Mobility currently manages and secures over 32,000 CBP-issued mobile devices, comprised of 183 different models, through the enterprise mobile device management system. OIT's Mobility team migrated over 6,000 CBP-issued and managed mobile devices to an enterprise mobile device enrollment and management platform with minimal user impact and no disruption to mission critical capabilities. The team optimized email traffic to/from cloud tools allowing for secured email authentication for all CBP-managed mobile devices. CBP Mobility also manages and deploys over 635,000 applications to CBP-issued mobile devices in addition to the over 70 internally hosted applications.

Autonomous Surveillance Towers (AST) Mobile Application

The OIT Mobility Team worked with USBP to develop, test, and deploy a customized mobile application designed for the mobile platform. This application integrates with the Autonomous Surveillance Tower (AST) sensors to detect the use of tunnels, ultra-light aircraft, drones and other evasive technologies along the 1,700 miles of rural Southwest border.

Cellular Over the Horizon Enforcement Network (COTHEN) HF Fixed Site Wireless Monitoring Equipment Upgrade

OIT procured wireless monitoring systems to upgrade aging equipment used to remotely monitor access, climate, and utility status at COTHEN Fixed Antenna Sites (FAS). The implementation of the new equipment eliminated expensive telephone lines and replaced outdated modems with wireless interfaces resulting in substantial cost savings of over $44,000 annually.

Satellite Connectivity

OIT continuously evaluates and implements new and emerging network and technology related products. In FY 2022, the team evaluated a new low-earth orbit satellite system that provides broadband access speeds with lower latency than typical satellites. CBP successfully used satellite connectivity to provide network access to various processing locations in support of Operation Allies Welcome (OAW). CBP also implemented a successful proof-of-concept for use of this technology at the Lynden, WA port of entry (POE). As a result, the CBP INVNT team is purchasing an additional 50 kits for OFO, to be used strategically and tactically to provide connectivity until upgrades are made to the terrestrial circuit. CBP is also evaluating its use as part of the Douglas Aspera project, which is a proof-of-concept effort to collect and gather sensor data and store that information in the cloud where it can be used for further analysis.

Centralized Area Video Surveillance Systems (CAVSS)

OIT completed CAVSS upgrades at nine facilities that included a total of 1,652 cameras, 294 microphones, 42 Network Video Recorders, and 25 Workstations. OIT completed installation of CAVSS for Phase 1 of the Otay Mesa Modernization Project which included six new Network Video Recorders (NVR) to provide the required 90-day recording storage. Archives of events can be created from the CAVSS workstations and provided to approved recipients requiring possible evidentiary information. Officers can view and manage cameras throughout the facility to improve operational control and situational awareness.

OIT completed CAVSS installation for the Wilmington Seaport Main Gate Reconfiguration for Remote Operations (RO) Radiation Portal Monitoring (RPM). The scope of work consisted of providing area surveillance for the new main gate relocation in support of the Cargo Facility Design Standards. Cameras were installed in each lane directly above the intercom to capture the interaction between the driver and officer and in the bypass lane, to completely capture the chain of custody between primary and secondary inspections. This installation will allow officers to process vehicles and capture video of the entire transaction from a central location.

Non-Intrusive Inspection (NII) Support Service Requests and Maintenance

- Service Requests for Office of Field Operations (OFO) NII equipment included relocations, decommissioning's, and upgrades
- Completed 74 service requests totaling $2,124,680
- Maintained an Operational Availability (Ao) of over 95% for Large Scale NII, Small Scale NII, and Radiation Detection Equipment.
- Large Scale NII: 1,980 repairs with an Ao of 95.1%
- Radiation Detection Equipment: 1,68 repairs with an Ao of 99.1%
- Small Scale NII: 533 repairs with an Ao of 98.5%

Remote Video Surveillance Systems (RVSS)

The Remote Video Surveillance System-Upgrade (RVSS-U) consists of cameras located on towers along the southern and northern borders. Camera feed traffic is sent to local systems at CBP facilities' Command and Control Center (C2 CENs). OIT ordered and implemented circuits to ensure that the camera feeds for six RVSS-U sites deployed along the southern border and five sites deployed along the northern border were sent back to C2 CENs to ensure operational awareness. OIT completed 2,390 repairs to USBP agent support equipment, legacy Remote Video Surveillance Systems (RVSS), unattended ground sensors, and game cameras.

Common Operating Picture (COP)

OIT, in close collaboration with USBP, is working to provide a Common Operating Picture (COP) solution that collects metadata from sensors, towers, and select devices along the southern border. This long-term initiative integrates not only Artificial Intelligence/Machine Learning (AI/ML) to process current functionality from USBP/Federal Aviation Administration (FAA) RVSS-U video analysis systems but also provides timely situational awareness and sensor management to agents and operators in select command-and-control centers (C2CEN).

Incident Driven Video Recording Systems (IDVRS)

USBP is working with OIT to implement nation-wide Incident-Driven Video Recording Systems (IDVRS), including body-worn cameras (BWC) and vehicle mounted cameras (VMC). This initiative is providing USBP body-worn cameras to document law enforcement incidents and enhance transparency of its law enforcement operations. IDVRS was fully implemented and operational at 39 sites since the beginning of FY 2022 and OIT continues to support this initiative.

Video Conferencing Support in Brownsville and Laredo, TX

In support of ongoing southwest border surges, OIT supported onsite installation of video room kits across Brownsville and Laredo, TX. Video room kit is a powerful collaboration solution that integrates with flat panel displays to bring more intelligence and usability to small and medium-sized meeting rooms. All systems are enabled with collaboration tools and accessible via the cloud for management and control. OIT completed 85 system implementations in FY 2022.

Land Mobile Radio Support

Portable Radio Refresh

OIT supported USBP on the upgrade of 5,213 existing end-of-life (EOL) portable radios. The team was responsible for processing, preparing, and shipping all work orders including 10,426 accessory kits accompanying the portable radios. As a result of the refresh, Land Mobile Radio (LMR) operability was enhanced, and communications were improved for agency employees.

Router/Switch Technology

OIT is working to support life cycle replacement of end-of-life routers and switches on the Land Mobile Radio (LMR) network. The team has updated 87 routers and five switches across the LMR network that were end of life/service. National Law Enforcement Communications Center (NLECC) has approximately 30 routers and five switches in reserve that can be used to support the network if supply chain issues continue.

## Public Safety Portable Radios

OIT received purchase orders totaling 1,557 radios, consisting of 996 portable radios and 561 mobile radios, as replacements for existing obsolete LMR equipment. OIT processed the goods receipts and entered assets into the appropriate systems within a two-week turnaround time with a YTD shipping total of 1,110 assets for this project.

INFORMATION TECHNOLOGY/OPERATION TECHNOLOGY

OIT works closely with our mission office partners to expand the integration of Operational Technology (OT) and Information Technology (IT). As the Internet of Things (IoT) becomes more mature, and everything goes online, the distinction between IT and OT will blur and eventually disappear. In the past, OT systems were often stand-alone, with proprietary software, interfaces, and data structures where sensors (cameras, radars, seismographs, X-ray machines, etc.) provided information directly to the operator on a local screen. OIT, through the Technical Reference Architecture (TRA), is establishing standards that will enable OT sensors to connect to the network and share their data across the entire CBP enterprise, as well as with other federal, state, local, and tribal law enforcement agencies. As we move into the future, isolated pockets of situational awareness, requiring manual and time-consuming correlation and integration, will be replaced with functionality that feeds sensors into a common operating picture so information can be accessed immediately. This integration will also allow for greater data analysis by agents and officers to identify patterns, trends, and anomalies faster and more accurately than before.

Examples of the integration of IT and OT include the Non-Intrusive Inspection – Integrated (NII-I) program, bringing together port of entry sensor data, such as X-Rays and Multi-Energy Portals, that can scan vehicles, cargo containers, railcars, and pedestrians without slowing them down. An automated Anomaly Detection Algorithm will assist the CBP Officers in identifying potential contraband and divert suspect vehicles for secondary screening. Another example is the Minotaur Mission Management System that integrates sensor data from multiple aircraft types into a single tactical picture over land, sea, and air. CBP aircraft using Minotaur include the Multirole Enforcement Aircraft (MEA), the DHC-8 Maritime Patrol Aircraft, the P-3 Orion, and the future Extended Border Foreign Operations Surveillance Program. Minotaur allows the aircraft to share its tactical picture with other aircraft and the Air and Marine Operations Center (AMOC), whether the sensor is radar, infrared, or electro-optical. A third example is the integration of CBP surveillance towers. Previously, there were several different types of surveillance towers, each using its own format and requiring specific training to operate. The towers fed their data directly to the local command station. The Common Operating Picture (COP) and Integrated Surveillance Towers (IST) programs will connect every tower to the CBP network, feeding video and trackfile information from the length of both the southern and norther borders into a unified vision of unauthorized movement.
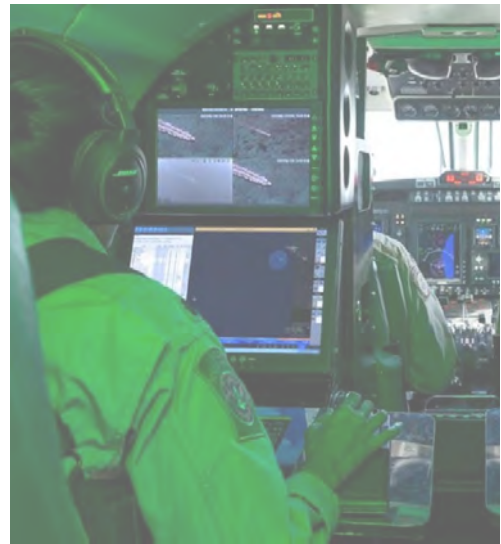
CBP relied heavily on Enterprise Collaboration Tools when large numbers of employees transitioned to working from home because of the COVID-19 pandemic. In FY 2022, CBP increased the use of enterprise collaboration tools by implementing 24 additional applications. To continue meeting changes at the speed of mission, the primary collaboration application has been updated with the following enhancements:

Increased meeting attendance capabilities from 250 to 1000 participants

Live transcriptions are available creating a more inclusive experience for participants who are deaf, hard-of-hearing, or have varying levels of language proficiency.

Meeting organizers and specified presenters can prevent meeting attendees from turning their camera on to share video during a meeting; and organizers can choose to lock their meetings to prevent unwanted join attempts.

CBP's adoption of collaboration tools continues to accelerate due to the successful migrations to cloud hosted platforms. Since October 2021, cloud hosted drive activity has increased 66.5%, rising to over 509 million files stored. Additionally, with the transition of CBPnet and CBP Collaboration sites to a cloud hosted platform, utilization has grown over 95%. OIT launched a custom app within the primary collaboration tool allowing users to access important enterprise applications and websites all in one place, without leaving collaboration tool interfaces.

Enterprise Email Efforts

OIT drastically changed the way CBP identifies and allows users to email Personally Identifiable Information (PII) to external recipients. After extensive testing and pilots, ESG implemented a Data Loss Prevention Policy that identified 16 different types of PII and Sensitive Personally Identifiable Information (SPII) and notified senders that they will need to encrypt content before sending to parties external to DHS. This implementation replaced third party software used to monitor data solely in email clients and expanded the use of the new technology to webmail and mobile email. If PII is detected in an unencrypted outgoing email, the software will prevent it from being sent outside of the network. Since implementation in June 2022, 214,500 unencrypted emails have been blocked.

MISSION INFRASTRUCTURE
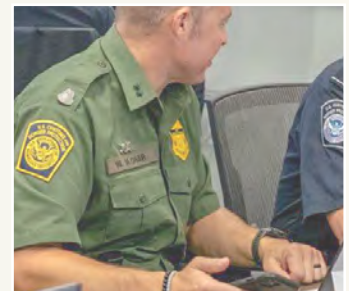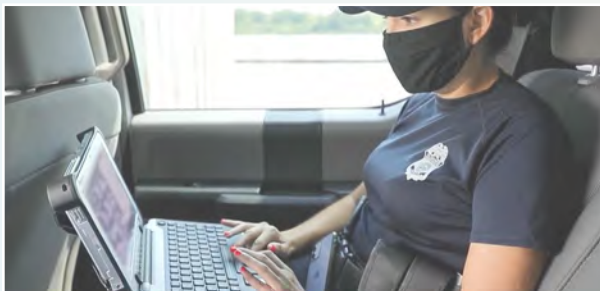
ENTERPRISE USER SUPPORT
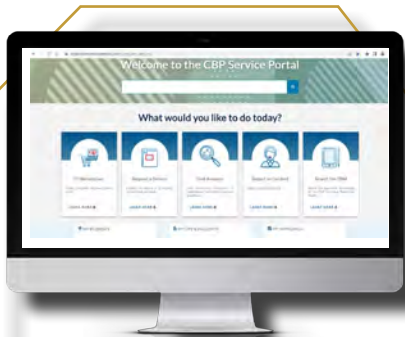
Technology Refresh

OIT targets replacing 20% of obsolete workstations annually. At the beginning of FY 2022, 58,938 workstations were manufacturer model year 2018 and older. As of 9/30/2022 OIT deployed 18,088 workstations which included replacing 11,864 model year 2018 or earlier, exceeding the 20% target. Please see chart below for breakdown of workstations deployed per component.
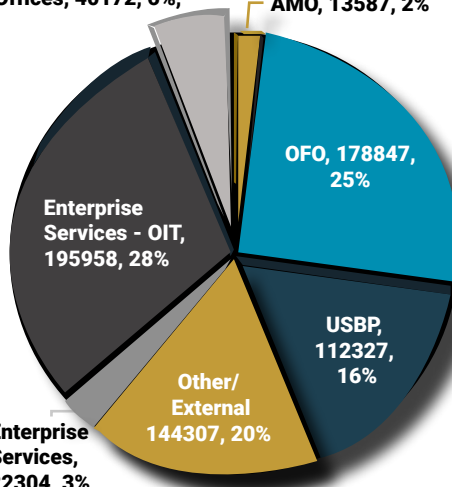
Service Requests

The Technology Service Help Desk supports all CBP enterprise users and tracks information using a ticketing platform. OIT completed 737,887 tickets in FY 2022. In addition to the number of service requests, OIT also tracks customer service satisfaction and in FY 2022, the overall satisfaction rating improved to 86.8% overall satisfaction, up from 81.8% in FY 2021. OIT improved the average resolution days to be 1.03 days faster from last year and a 1.52% same day resolution improvement while responding to 17% more tickets. On average, most tickets are resolved in the same day, followed by two-five days resolution time.

Component	Workstations Deployed (Desktop, Laptop, Tablet) FY 2022	Percentage of Workstations Deployed FY 2022	Workstations Deployed (Desktop, Laptop, Tablet) FY 2021	Percentage of Workstations Deployed FY 2021
OFO	6846	37.9%	7329	26.8%
USBP	5392	29.8%	6746	33.8%
OIT	1756	9.7%	1621	8.1%
HQ	1121	6.2%	1199	6.0%
OAM	594	3.3%	646	3.2%
OA	566	3.1%	611	3.2%
OTD	422	2.3%	510	2.6%
IA	464	2.6%	435	2.2%
Other	521	2.9%	384	1.9%
HRM	318	1.8%	353	1.8%
CSI	50	0.3%	46	0.2%
ATTACHE	38	0.2%	36	0.2%
Total	**18,088**		**19,916**	

Workstations Deployed by Region

Region	
NCR	3505
ETX	3418
NE	2492
NWC	2330
WST	2160
SE	2147
SW	1787
CDD INTL	251

Workstation Technical Refresh

Workstations Refreshed 2018 or Older	FY22	FY21
	11,864	10,471

Trusted Partners

OIT Closed FY 2022	OIT Closed FY 2021
737,887	678,401

Timeframe of OIT Resolved Incidents - FY 2022

- Same Day: 73.7%
- 2 Days: 5.7%
- 2-3 Days: 8.0%
- 5-7 Days: 3.7%
- 1-2 Weeks: 4.8%
- 2-4 Weeks: 2.5%
- 1-2 Months: 1.2%
- > 2 Months: 0.4%

SOURCE:
HQ: 37%
Field: 43%
Other/External: 20%

Pie chart:
- Other CBP Offices, 40172, 6%
- AMO, 13587, 2%
- OFO, 178847, 25%
- Enterprise Services - OIT, 195958, 28%
- USBP, 112327, 16%
- Other/External 144307, 20%
- Enterprise Services, 22304, 3%
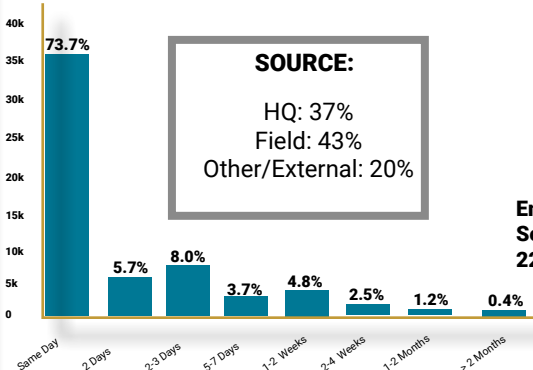
Communications Center Operations (COO)

The Communications Center Operations (CCO), also known as "C100", within OIT, is a law enforcement operational detachment that provides real-time communications support and enforcement analysis. CCO is a 24/7 operational support organization with the ability to coordinate and facilitate communications between CBP, ICE, and other federal, state, and local law enforcement entities.

CCO can coordinate situational communications on multiple platforms including radios, telephone, and the Emergency Notification System and is often one of the first organizations to learn of incoming threats. Despite COVID-19 related disruptions and a 20% reduction in staff in FY 2022, the C100 team handled over 1,229,216 law enforcement service requests from a user base comprised of approximately 63,000 authorized users (spanning 43 DHS, CBP, and Fee-for-Service organizations).
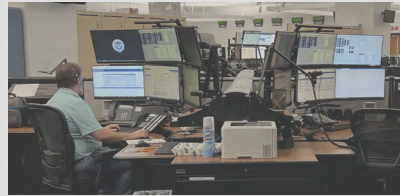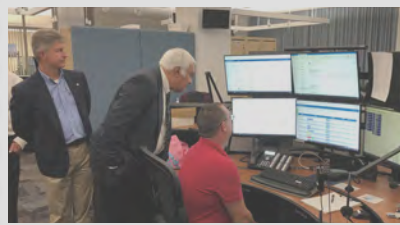
Support Requests stats:

Daily Average:	Weekly Average:	FY 2022 YTD Total:
3,377	**23,639**	**1,229,216**

Customer stats:

38K
Operations from the Office of Field Operations (OFO), U.S. Border Patrol (USBP), Air and Marine Operations (AMO) and the Office of Professional Responsibility (OPR).

20K
Immigration and Customs Enforcement (ICE) employees from the Office of Homeland Security Investigations and the Office of Enforcement and Removal.

3K
Federal operators from the 38 other government agencies reimburse CCO for the services via Fee-for-Services (FFS) agreements.

C100 Services:

Real-time law enforcement communications support, utilizing federal, state, and local databases and analytical tools.

Nightly radio monitoring and 24-hour coverage during dispatch resources shortages for Miami and New Orleans Sectors.

Patching AMO repeater-to-repeater, **cross-country flight communications** and sole **OFO national dispatching center.**

Entry of lost/stolen/missing federal government property into the FBI's National Crime Information Center (NCIC).

MISSION TRUSTED PARTNERSHIPS

CBP OIT has successfully formulated and led implementation of a Trusted Partnership Initiative (TPI) across five fronts: CBP, DHS, other U.S. government agencies, international and Industry.
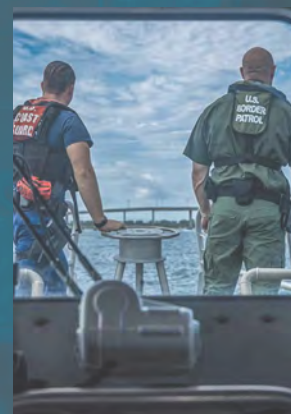
HIGHLIGHTS

Expanded and evolved the Tour of Modernizing Technology effort to incorporate the "Modernize, Apply, Sustain", or "CBP Gets 'MÁS' With OIT" theme, with visits to 11 field locations and sites.

Through a close partnership with U.S. Citizenship and Immigration Services (USCIS), supported the Uniting for Ukraine (U4U) effort to process Ukrainian refugees arriving in the United States.

Participated in CBP's first Trade Facilitation and Cargo Security Summit including panel discussions on the Automated Commercial Environment (ACE) and the AC Bhagowalia moderated panel on Cybersecurity.

MISSION TRUSTED PARTNERSHIPS

TRUSTED PARTNERSHIP INITIATIVE

OIT's Trusted Partnership Initiative (TPI) program strategically and tactically facilitates IT to operate at the speed of mission, by enabling teams to work across organizational lines seamlessly, digitally, reliably, and securely. During FY 2022, OIT continued to build and expand Trusted Partner relationships across five areas: Internal CBP, DHS HQ and components, International, Industry and Other Government Agency (OGA) Partnerships.

Through regular engagement, TPI meetings successfully increase partner/component driven conversations and lead to more efficient and data-driven decision-making to meet the current needs of a vast and wide-ranging mission, as well as facilitate discussions for possible future requirements and allow for delivery of scalable solutions. Partnerships with these five mission stakeholders at a global scale yielded top results by working "smarter and not just harder" through innovative technology, process, transparency, interagency coalitions, and accountability. TPI has developed into a highly valued program that showcases OIT's commitment to collaboration with trusted partners in support of CBP's mission.

ONE MISSION

INTERNAL CBP PARTNERSHIPS

The Trusted Partnership Initiative (TPI) program provides a strategic discussion-based forum in which OIT meets with internal and external stakeholders to discuss priority topics, increase transparency, consider areas for collaboration, and improve IT services across all CBP components. During FY 2022, TPI continued its success by conducting over 60 meetings with 20 internal CBP partners and identifying 110-plus action items. The TPI team led the charge on action item follow-through to solidify trusted partner confidence in OIT's service and stewardship of mission capabilities.

Key areas of partner collaboration have included strategic dashboards, enterprise collaboration tools, cybersecurity, and cloud migration efforts. OIT leadership expanded TPI's influence by visiting CBP field offices and other operational locations to share insights and information. Site visits provide valuable insight into daily operations and an opportunity to discuss areas for IT improvements, innovation, and collaboration in support of shared mission priorities.

Meetings in FY 2022 shifted from informative briefings to more strategic dialogues. These discussions encouraged partners' feedback on agenda topics and acknowledged priorities both before and during the meetings. Overall, the TPI leadership executed a new goal of ensuring offices understood OIT's support as well as the resources available to help partners meet their goals.

FY 2022 TRUSTED PARTNERSHIP INITIATIVE (TPI)

Purpose

Trusted Partnership Initiative (TPI) established a strategic discussion-based forum with internal and external stakeholders to discuss priority topics, provide unified/integrated information technology, increase transparency, consider areas for collaboration, and improve IT services across all CBP components.

BENEFITS

Strengthen Stakeholder Relationships - TPI meetings provide opportunities to strengthen stakeholder relationships with CBP & DHS counterparts and discuss opportunities to leverage IT resources/efforts.

Innovation - Collaboration with partners allows discussions on new technology and enterprise solutions to improve mission priorities.

Integration & Transparency - Increase IT initiatives/financial integration and transparency within CBP mission offices and enterprise support organizations.

Data-Driven Decision Making - Meet with IT Stakeholders to provide business intelligence insights and optimize resource allocation.

Structured Framework - OIT delivered an agile, scalable program framework of strategic transformation-built upon tactical excellence. A baseline program portfolio has been established for each stakeholder to maximize efficiency and transparency.

Governance - Establish CBP IT governance structure with mission offices to meet agency and DHS guidance.

STAKEHOLDERS

- U.S. GOVERNMENT
- INDUSTRY
- CBP
- DHS
- INTERNATIONAL
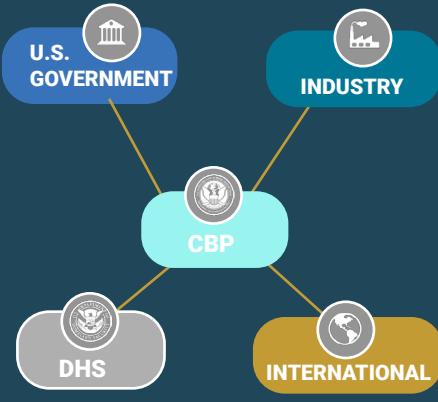
FY 2023 LOOK AHEAD

Initiative Updates - In FY 2023, TPI will feature a few changes including a spring conference, customer experience survey, and new meeting cadence.

CMGO Leadership - As of FY 2022 Q3/Q4, the TPI framework is being built under the leadership of the Chief Management and Governance Officer (CMGO) office.

Dashboard Development - The TPI team is working with the strategy & dashboard OIT teams to build and develop organizational dashboards in the interest of capturing key performance indicators.

FY 2022 AT A GLANCE

60+ TPI Meetings   **110+** Action Items Tracked   **50+** Stakeholders Involved   **20+** CBP Mission Offices

C2 VISIT TO ASHBURN

On June 28, 2022, OIT was pleased to host CBP Deputy Commissioner Troy Miller, Enterprise Services Acting Executive Assistant Commissioner Ryan Scudder, and members of their staff at the Ashburn facility. OIT provided briefings on some of its newest and most innovative programs, including Truck Manifest Modernization, Artificial Intelligence (AI), Robotic Process Automation (RPA) Cloud services, and Mobile En-Route Processing (MERP). The visit also included a cybersecurity brief on recent Russian and Chinese government cyber activity and hacktivism, along with a tour of OIT operations at Ashburn.

During the visit, Deputy Commissioner Miller noted that "Enterprise support has done very well" and emphasized that when developing or updating applications and systems, "Key is, same touch, same feel. Everyone gets used to a program and where everything is". Deputy Commissioner Miller also noted the importance of the metrics and data OIT tracks, saying "When we're talking money and appropriations, they're always asking for metrics".

Evolution of Tour of Modernizing Technology (TMT)

Beginning in spring 2021, and continuing to present day, OIT commenced the "Tour of Modernizing Technology" initiative. This effort kickstarted OIT's engagement with CBP mission offices to observe and experience field technology in action, hear first line operator concerns, and address opportunities to utilize automation tools to meet mission needs and objectives. Over the course of these field visits, a recurring theme has emerged – "Modernize, Apply, Sustain", or **"CBP Gets 'MÁS' With OIT".**

As CBP's reach and presence spans the country and the world, OIT senior leaders have made a point to visit a wide range of sites across many operational areas and functions including sectors, stations, ports of entry and scientific labs. These trips offered the opportunity for OIT leaders to continue learning about and identifying ways to support CBP's mission and partner with operators in the field.

OIT's Modernize – Apply – Sustain tours will continue into FY 2023 and beyond, with a focus on meeting the CBP mission through innovative solutions. Engagements through this effort will continue to provide return on investments of both time and resources as OIT works to build sustainable and productive partnerships agency wide.
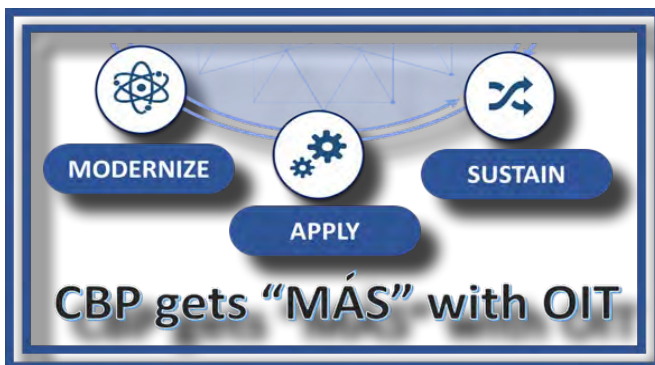
Engagement with DHS Office of Chief Information Officer (OCIO)

In February, the CBP Chief Information Officer (CIO) began holding regular monthly meetings with the DHS CIO to discuss DHS and CBP priorities, project statuses, concerns, and other areas of joint interest. The CBP CIO also participates in the DHS CIO Council, which meets once a month.

Uniting for Ukraine (U4U)

In the wake of the Russian invasion of Ukraine, OIT worked closely with U.S. Citizenship and Immigration Services (USCIS) and the Office of Field Operations (OFO) to develop a system and process for vetting Ukrainian refugees coming to the United States. The joint CBP/USCIS U4U I-134 Affidavit of Support form process went live in April 2022. USCIS collects information from a Ukrainian refugee's sponsor via the I-134. USCIS shares the refugee's biographic information with CBP for vetting, and CBP sends the approval/denial notification back to USCIS. The beneficiary is notified if they are approved to travel to the U.S. via MyUSCIS. OIT also established a data share with USCIS to report post arrival information with USCIS.

Transportation Security Administration (TSA) Biometrics

OIT worked with TSA to leverage CBP's biometric facial recognition services to enable biometric processing at some TSA locations. Biometric processing for TSA is currently deployed at Hartsfield-Jackson Atlanta International Airport (ATL) and Detroit Metropolitan Wayne County Airport (DTW), where facial recognition services are available for use at bag-drop, TSA checkpoints, and boarding for Delta Gold Members who opt-in to the Biometric process. CBP will continue to partner with TSA on potential expansions.

Electronic A-File

In support of Southwest Border efforts, OIT coordinated and collaborated with DHS headquarters, Immigration and Customs Enforcement (ICE), and USCIS to develop an Electronic A-File solution to more efficiently process migrants seeking to enter the U.S. Electronic A-Files enable e-signature and digitize the exchange of forms such as the Notice to Appear (NTA); digitize case acceptance, allowing DHS to process subjects more rapidly; and integrate with Unified Immigration Portal (UIP) for enhanced interagency processing; and establish electronic document management accessible through common interfaces.

MISSION TRUSTED PARTNERSHIPS
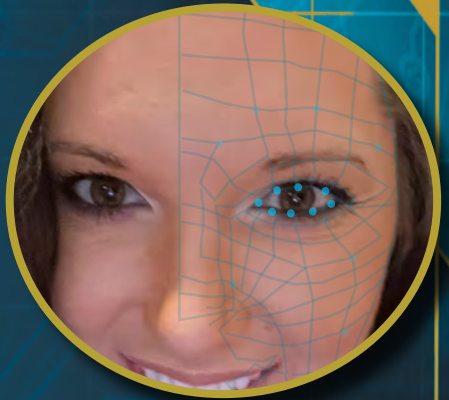
Southwest Border Technology Modernization Fund (Unified Immigration Portal and Unified Processing)

As part of the joint DHS Southwest Border (SWB) Technology Integration Technology Modernization Fund (TMF) project, CBP received funding for the Unified Immigration Portal (UIP) and Unified Processing (UPRO) initiatives. OIT coordinated with DHS Headquarters on administration of the TMF funds and collaborated with ICE and USCIS on development efforts.

The UIP capabilities being developed with this funding will provide additional data sharing services to improve agency coordination and reduce manual processes; improve accessibility to clean data and increase automation to enable interagency decision-making and reporting for department leadership; create additional dashboards and aggregate interagency data to provide near-real time insights for dynamic mission needs and enable forecasting for future resource allocation; strengthen UIP data governance procedures and advance modeling capabilities to enable scenario planning for complex immigration processes; and expand mobile capabilities and integrate additional data into UIP's application.

UPRO will standardize and streamline case processing and custody management workflows across USBP and OFO, making it easier for CBP Officers and Border Patrol Agents to support each other during surges and other emergencies. Through UPRO, CBP can improve flexibility and dynamic response to changing tactical situations along the border. UPRO advances the SWB Technology Integration effort to achieve end-to-end digital immigrant processing and helps automate immigration data and records.

More efficient workflows, improved data integrity, and the ability to identify threats earlier in the process will also increase the fidelity and timeliness of immigrant processing information that CBP shares with ICE and USCIS, enhancing tri-bureau collaboration.

Cybersecurity Program Support

OIT provided support for various DHS cybersecurity efforts throughout FY 2022. This included completion of five Authority to Operate (ATO) packages for reciprocal use by DHS HQ, Cybersecurity and Infrastructure Security Agency (CISA), and other components, thereby saving a significant amount of rework and time. OIT also provided cybersecurity Subject Matter Experts (SME) to assist with five DHS-led Advanced Technical Interview Content Review and Validation Workshops in support of the Cyber Talent Management System. Additionally, OIT supplied feedback, lessons learned, and best practices to the DHS Continuous Diagnostics & Mitigation (CDM) Program Management Office regarding cybersecurity tool implementations within CBP; provided significant input to the rewrite of DHS's Sensitive Systems Handbook; and participated in a panel discussion for the DHS HQ "National Cybersecurity Awareness Month" video.
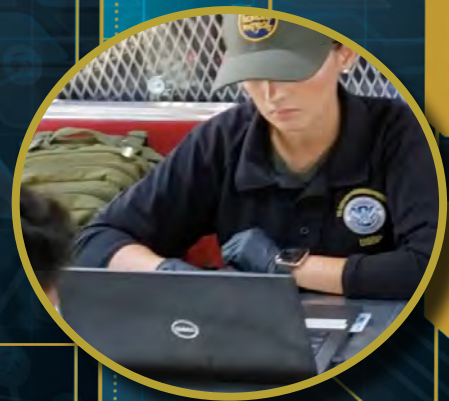
INTERNATIONAL PARTNERSHIPS

Border 5/Migration 5 (B5/M5) CIO Technology Forum

The Border 5/Migration 5 is a partnership between the Five Eye countries (Australia, Canada, New Zealand, United Kingdom, and United States) designed to enhance international cooperation and coordination between member states in the realm of border security. OIT CIO Sonny Bhagowalia serves as the U.S. delegation head to the B5/M5 Chief Information Officer (CIO) Tech Forum focused on technology related to border security and immigration.

In FY 2022, the CIO Tech Forum chair position transferred to the United Kingdom (UK) and took on a more informational approach by encouraging participants to exchange best practices to resolve technological problems and frameworks used to develop global solutions. Several deep dive sessions and sub-working group meetings enabled partner countries to dig deeper into technology topics of interest including approaches to innovation, automation, cloud modernization, customer self-service, and electronic systems for traveler authorization. CBP SMEs provided overviews on the agency's Robotic Process Automation (RPA) program, Cloud Modernization Effort (CME), Service Catalog via the new management platform, and the Electronic System for Traveler Authorization (ESTA) program.

Two working groups met regularly to discuss and share expertise in the fields of cybersecurity and contraband detection. The Cybersecurity Working Group met monthly to discuss pressing cybersecurity issues affecting the Five Eye border agencies and shared expertise on the Log4j and other zero-day vulnerabilities, designing government agency cybersecurity training, and frameworks for threat detection and mitigation. The UK CIO requested that the U.S. provide the B5 Heads with a cybersecurity briefing on behalf of the B5 CIO Tech Forum. CBP Chief Information Security Officer (CISO) Scott Davis provided a comprehensive overview of the cyber threat landscape currently facing the Five Eye countries with consideration to the global events that occurred over the course of the fiscal year. The presentation was well received, and the information exchanged proved vital to the development of New Zealand Customs' overall cyber strategy.

The Contraband Detection Working Group met quarterly to discuss technology issues related to contraband detection. In partnership with the OFO Non-Intrusive Inspection (NII) Program, OIT SMEs represented the U.S. at the group's meetings and provided expertise on topics such as networking contraband detection devices in the field, general improvements to non-intrusive inspection processes, and the usage of algorithms and machine learning to detect contraband.

AC Sonny Bhagowalia, XD Tom Mills, and CISO Scott Davis traveled to London as the U.S. delegation for in-person meetings with the B5/M5 CIO Tech Forum. The delegation met with CBP, Cybersecurity and Infrastructure Security Agency (CISA), DHS Science and Technology, and State Department staff at the U.S. Embassy in London to discuss collaboration and challenges that OIT can assist with. The delegation participated in the B5/M5 meetings to share best practices, lessons learned, challenges, and opportunities for collaboration in a variety of areas, including targeting, biometrics and traveler processing, digital identities and documentation, single window trade systems, detection technology, cloud migration, and cybersecurity. The meetings concluded with development of a joint roadmap for collaboration projects to achieve tangible outcomes benefiting the B5/M5 members.

Partnership with World Customs Organization (WCO)

Over the course of FY 2022, OIT partnered with the CBP Office of International Affairs (INA) to provide expertise on several technology-related proposals from the World Customs Organization (WCO). The WCO initiated an effort to develop a centralized data platform that constituent countries can utilize to validate datasets or gain new supply chain insights. Working together, OIT and INA provided a coordinated response to ensure that U.S. expertise is incorporated when considering requirements for the WCO's future data platform.

Cargo Systems Program Directorate (CSPD) Executive Director Tom Mills provided a brief on transformation in the maritime environment at the 2021 WCO Technology Conference. The presentation laid out some of the challenges facing the current transactional global trade data model and presented solutions that utilize new technologies and leverage the WCO work to standardize trade data.

CBP INA Assistant Commissioner (AC) Debbie Seguin hosted World Customs Organization (WCO) Secretary General Kunio Mikuriya at a roundtable discussion with senior CBP leaders. CBP leadership briefed Secretary General Mikuriya on many key agency trade and travel initiatives. AC Bhagowalia represented Enterprise Services and OIT in the leadership discussion, speaking on the topics of data analytics, cybersecurity, and the Automated Commercial Environment (ACE).

Working through INA, OIT provided an article on CBP's Artificial Intelligence (AI) and Machine Learning (ML) Center of Excellence (CoE) for inclusion in the WCO periodical publication, Report on Disruptive Technologies. The article provides a high-level overview of CBP's new enterprise approach to AI development and is intended to be an informative resource for partner countries standing up their own AI resources. The WCO Study Report on Disruptive Technologies was published in June 2022.

Partnership with Singapore

In partnership with OFO, Acting DAC Jay Alalasundaram and CTO Sunil Madhugiri traveled to Singapore to attend meetings and port tours. Subjects discussed included biometrics use in the border security and travel process, cloud migration and strategy, and other technology related topics.

OIT developed an enterprise global system providing trusted foreign partners in 48 countries the ability to analyze and evaluate traveler information as a means of combating transnational crime and other threats to their national security. Through a DHS led bilateral biometric/biographic information sharing effort, the U.S. extended the system to an additional 22 countries.

CBP Trade Facilitation and Cargo Security Summit

OIT leaders participated in CBP's first Trade Facilitation and Cargo Security Summit held in Anaheim, CA, July 18-20, 2022. The event, attended by over 3,000 participants, offered an opportunity to learn more about CBP's forward vision and priorities in a constantly changing trade environment.

The three-day event featured several sessions on trade specific areas of interest, including Forced Labor, E-Commerce, Cargo and Trade Innovation, Trade Compliance, Smuggling, and general sessions on Cybersecurity and Customs Capacity. OIT participated in panel discussions encompassing the Automated Commercial Environment (ACE) and Cybersecurity. XD Tom Mills participated in a panel discussion involving the phased approach of ACE 2.0. Priorities discussed were application program interfaces, Distributed Ledger Technology (DLT), on-going and future eCommerce Pilots and partnering with Trade stakeholders to transition to cloud modernization and establish parallel standards within their application functionality.

Additionally, CIO Bhagowalia facilitated the panel on Cybersecurity, at which both XD Scott Davis and XD Tom Mills contributed valuable insight on cybersecurity hygiene and posture as panelists. Discussion centered around CBP's current level of preparedness, and the steps the trade community can take to protect their companies from cyberattacks. Sharing cybersecurity information with our trade and industry partners is an important part of ensuring a secure, resilient, reliable, and viable supply chain while also harvesting a transparent partnership with trade stakeholders.

Trade Industry Partnerships

OIT contributed to The Trade Support Network (TSN), comprised of approximately 450 members that represent the entire breadth of the trade community, to provide recommendations and input on customs automation and modernization. OIT provided insight and input to the Customs Operations Advisory Committee (COAC) to further understand the areas of trade within CBP's authority to enhance economic security and enforce U.S. trade laws while facilitating trade. Through collaboration with the DHS Silicon Valley Innovation Program (SVIP), OIT promoted and invested in the deployment of innovative, sustainable trade practices by government and private industry partners. This program explores utilizing Distributed Ledger Technology (DLT) to address the challenges of interoperable digital entitlement attestations that support individual control and accountability of data release with initial focus on Cross-Border Steel and Oil Import Tracking and Supply Chain Traceability of Natural Gas Imports.

CBP Business Connection Portal

The CBP Business Connection Portal (BP) is a platform for technology vendors to share their company's public information on products and services that CBP leadership may want to explore to further CBP's mission. Incorporated technology vendors that have a presence, or a business partner located in the United States, regardless of size, structure, or ownership, are eligible to register on CBP Business Connection and request meetings. In FY 2022, 230+ companies registered with 149 companies actively using the portal and 112 meetings were requested with 40 meetings/ demos scheduled while others remain in progress or under review.

OTHER GOVERNMENT AGENCY PARTNERSHIPS

Other Government Agency Partnerships U.S. Air Force Installation and Mission Support Center (AFIMSC) Collaboration Project

Recognizing an opportunity to participate in meaningful intergovernmental collaboration, CBP's Office of Information and Technology (OIT) and the U.S. Air Force Installation and Mission Support Center (AFIMSC) established a series of ongoing discussions on the topics of Enterprise IT management and strategies. Both organizations bring interesting and unique insights to this IT management discussion. Some of the major topics being discussed are:

IT Strategy   Funding Strategies   Governance   Communications

Cybersecurity   Cloud Strategy   Dashboards   Technical Reference Architecture (TRA)

Besides the dynamic discussions, both CBP/OIT and AFIMSC shared numerous management and strategy documents from their distinctive perspectives, covering a myriad of subjects including enterprise IT requirements, Cloud Services, low-code/no-code solutions, and enhancing overall stakeholder communications.

This project was a great opportunity to participate in meaningful Intergovernmental collaboration and can serve as a model for building stronger future partnerships.

OIT continued to invest in partnerships while coordinating with the 47 Partner Government Agency (PGA's) and their information and technology business experts to ensure ACE operability and functionality can fully integrate with agencies such as Fish and Wildlife Service, Department of Commerce and U.S. Department of Agriculture (USDA). In support of the US-Mexico-Canada (USMCA) Trade Agreement, OIT deployed features in ACE meeting implementation deadlines. OIT supported the Association of Southeast Asian Nations (ASEAN) Presidential initiative by supporting the ASEAN "Single Window" to foster the global development of interoperable "Single Window" systems to facilitate lawful trade across the Pacific and adopt international best practices in customs technology.

TRADE PARTNERS — U.S. CUSTOMS AND BORDER PROTECTION — PARTNER GOVERNMENT AGENCIES (PGA)

Unified Immigration Portal (UIP) and Health and Human Services (HHS)

UIP enhanced its partnership with the Department of Health and Human Services (HHS) by engaging with stakeholders across HHS to improve the application by developing services, dashboards and visualizations to best address critical HHS mission needs. To respond to a White House requested proof of concept, UIP worked with HHS stakeholders to develop a "Super User" role that provides select HHS users with greater access to subject-level data on non-parental sponsors facilitating rapid coordination between agencies.

UIP deployed integration of OFO's Unified Secondary (USEC) system with the Unaccompanied Child (UC) Referral and Placement Service to OFO users across five port locations along the Southwest Border. This allows OFO to automatically share UC referrals and placements with HHS via UIP, reducing the need for email exchanges between agencies. UIP also conducted a pilot with HHS users to identify requirements to develop a stronger understanding of a UC's relationship with others in the system and provide greater transparency into a child's movement between agencies enabling more informed care for UCs. Working with specialists in the field, UIP incorporated UC placement data in the UC Dashboards to minimize back and forth communication between CBP and HHS users when attempting to identify a UC's placement location.

MISSION CYBERSECURITY

OIT Cybersecurity is responsible for enhancing U.S. Customs and Border Protection's cybersecurity posture by proactively managing cyber risks.

HIGHLIGHTS

Implemented the FY 2022-FY 2024 Cybersecurity Strategy to evolve and improve CBP's security posture.

Established the Cyber Risk Management Program to identify, communicate, and mitigate cybersecurity risks and support the OIT priority to implement a Zero Trust architecture.

The Secure Operations Center closed 1,126 cases; triaged 26 classified, 153 phishing and 432 privacy incidents; blocked 38,088 Indicators of Compromise (IOC).

MISSION CYBERSECURITY

CYBERSECURITY

OIT celebrates the Annual Financial Statement Audit result of zero Notice of Findings and Recommendations (NFR).

Information Technology (IT) has been vital to the success of the CBP mission and the ability of CBP personnel to carry out that mission in a fast-changing environment. This has become even more evident over the course of the last few years as we have become more reliant on IT to support challenges related to the pandemic, migrant surges, and humanitarian missions. CBP has seen the number of cyber attempts grow from 40M per day to nearly 100M per day, a 150% increase over the last two years. The past few years have also seen a significant increase in cybercrime, with phishing scams and ransomware the most troubling and pervasive attacks. Due to the criticality of IT systems and the value of the data stored within, criminal organizations, nation states, and other cyber adversaries are increasingly targeting government systems and critical infrastructure in an attempt to intimidate, steal sensitive information, or disrupt operations.

Cybersecurity Strategy

To combat these types of attacks and other cyber vulnerabilities, CBP has made significant investments in and increases to its cybersecurity capabilities including personnel, tools, and processes. Building upon marked, measurable, and historic progress made against the FY 2018-FY 2020

cybersecurity goals, CBP implemented an updated enterprise-wide cybersecurity strategy for FY 2022-FY 2024 to evolve and improve our cybersecurity posture through the execution of four goals:

FOUR GOALS

1. **Defend mission operations by improving cyber hygiene through refined management of assets, access, and vulnerabilities.**

2. **Improve threat detection and response capabilities.**

3. **Shift CBP cyber protection from primarily perimeter-facing into a Zero Trust Architecture.**

4. **Involve all CBP federal and contract personnel in cybersecurity Governance, Risk Management, and Compliance (GRC).**

This strategy and its four principal goals will provide a unified framework to shape our ability to be more proactive, resilient, and responsive to cyber threats. It will align our efforts with Presidential Executive Orders and DHS goals. Ultimately, it will improve the protection and security of CBP's IT systems and information which are vital to the United States' interests and beyond.

CYBER RISK MANAGEMENT

In response to the 2021 Solarwinds Supply-Chain attacks and the growing number of cyber offensive campaigns, the White House and Office of Management and Budget (OMB) released guidance and orders directing U.S. government agencies to increase cybersecurity defenses and implement zero trust policies. Although OIT had already been moving toward Zero Trust (ZT) principles, this guidance defined the federal compliance requirements that the agency must meet to further secure the nation. OIT leadership identified the requirement to understand the risks involved with the CBP cyber environment to properly implement the required Zero Trust Architecture (ZTA). As a result, in early 2022 OIT established the Cyber Risk Management Program.

Cyber Risk Management (CRM) is responsible for the identification, communication, and distribution of cybersecurity risks and actionable mitigations or remediations at the tactical and strategic levels within the CBP information technology environment. OIT has onboarded personnel to lead the efforts and develop CRM to support ZTA and enable the identification of cyber risks to make informed risk-based decisions. CRM has developed an initial foundation and has established a framework in alignment with the National Institute of Standards and Technology (NIST) principles of identify, protect, detect, respond, and recover. In addition to establishing an initial framework for CRM, the personnel have integrated with an ongoing DHS HQ led project to identify enterprise cyber risks.
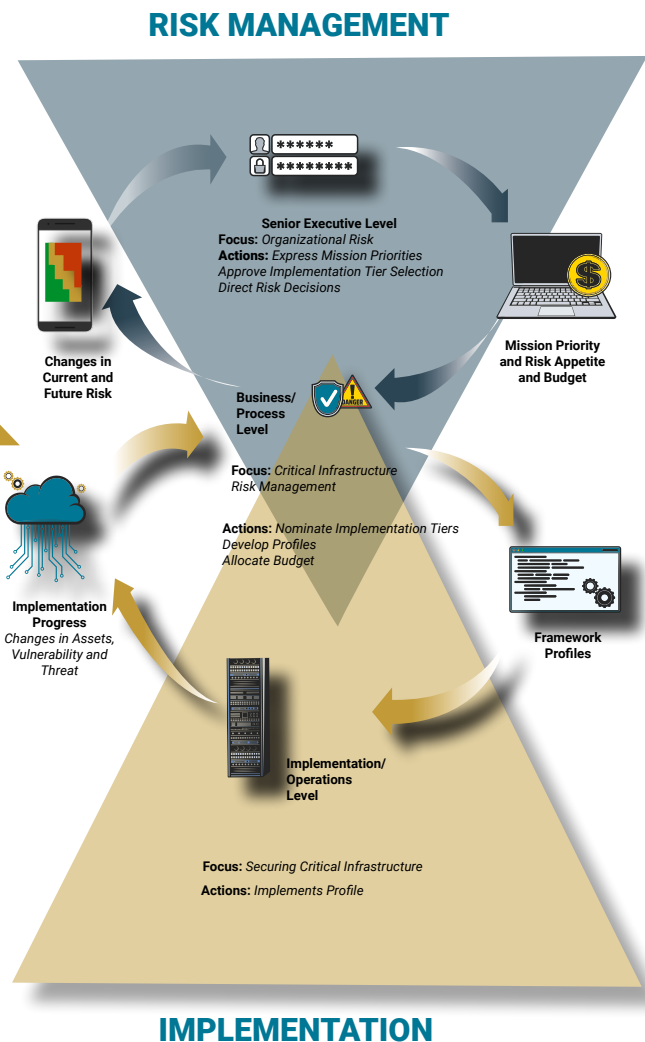
Risk Management Diagram: NIST CSF Notional Information and Decision Flows within an Organization

At the tactical level, CRM is working toward establishing automated executive reporting to provide a semi real-time dashboard showing systems at risk, based on information system vulnerabilities and threat actors seeking to exploit those vulnerabilities. At the strategic level, CRM has been engaged with developing cyber briefings and a risk register solution to track and prioritize risks. CRM is continuing to support the ZTA efforts through the identification of the current cyber risk and is driving toward a more secure CBP.

Zero Trust Program

On January 26, 2022, the Executive Office of the President, OMB released a memorandum to the heads of all federal agencies and departments with the specific goal of outlining a set of high-level requirements to move the federal government towards Zero Trust cybersecurity principles. This memorandum provides a Federal Zero Trust Architecture (ZTA) strategy, requiring agencies to meet specific cybersecurity standards and objectives by the end of FY 2024. The intent of ZTA methodology is to strengthen the U.S. Government's defenses against increasingly sophisticated and persistent threat campaigns, which target technology infrastructure and threaten public safety and privacy, damaging the American economy and weakening trust in government.

As described in the Department of Defense Zero Trust Reference Architecture, "The foundational tenet of the Zero Trust Model is that no actor, system, network, or service operating outside or within the security perimeter is trusted. Instead, we must verify anything and everything attempting to establish access. It is a dramatic paradigm shift in philosophy of how we secure our infrastructure, networks, and data, from verify once at the perimeter to continual verification of each user, device, application, and transaction." OMB requires agencies to achieve specific Zero Trust security goals by the end of FY 2024. ZTA goals are organized leveraging Cybersecurity and Infrastructure Security Agency's (CISA) Foundation of Zero Trust displaying five complementary areas of effort (pillars): Identity, Devices, Networks, Applications and Workloads, and Data, with three foundational elements that run across these areas: Visibility and Analytics, Automation and Orchestration, and Governance.

Foundation of Zero Trust

Identity | Device | Network / Environment | Application Workload | Data

Visibility and Analytics

Automation and Orchestration

Governance
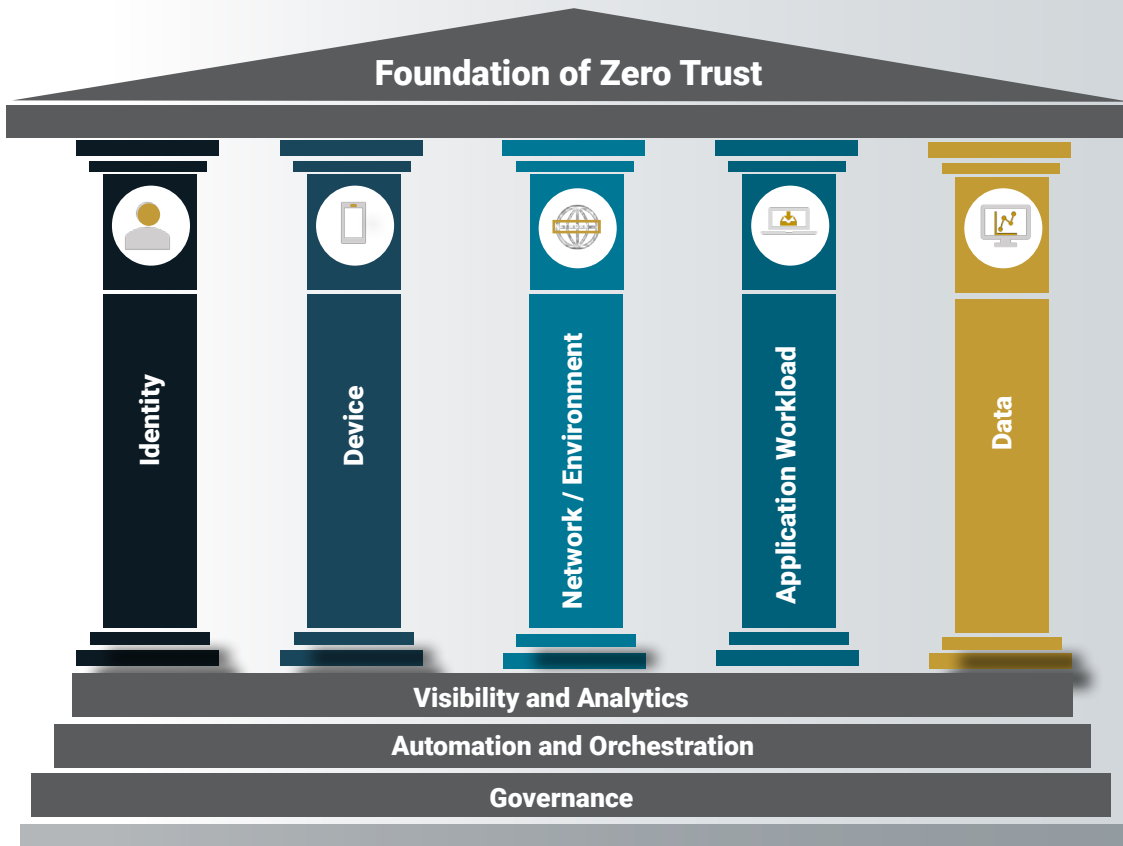
The strategic goals set forth in this memorandum align with CISA's five pillars:

STRATEGIC GOALS

1. Identity: CBP staff use enterprise-managed identities to access the applications they use in their work. Phishing-resistant multi-factor authentication protects those personnel from sophisticated online attacks.

2. Devices: CBP has a complete inventory of every device it operates and authorizes for Government use, and can prevent, detect, and respond to incidents on those devices.

3. Networks: CBP encrypts all Domain Name System (DNS) requests and Hypertext Transfer Protocol (HTTP) traffic within their environment and begins executing a plan to break down their perimeters into isolated environments.

4. Applications and Workloads: CBP treats all applications as internet-connected, routinely subjects their applications to rigorous testing, and welcomes external vulnerability reports.

5. Data: CBP system owners are on a transparent, shared path to deploy protections that make use of thorough data categorization. CBP system owners leverage cloud security services to monitor access to their sensitive data and implement enterprise-wide logging and information sharing.

ALIGN WITH CISA'S FIVE PILLARS

In February 2022, AC Bhagowalia identified the Zero Trust Initiative as a top OIT priority, assigning Cybersecurity Directorate (CSD) as the primary lead for its implementation. An in-depth analysis of requirements led to the development of CBP's initial Zero Trust Architecture Implementation Plan which included descriptions of current tactics, techniques, and procedures (TTPs), and established a high-level implementation plan to close initially identified capability gaps, as well as budgetary requirements. Working groups were established focusing on specific task requirements to analyze current capabilities and TTPs to determine CBP's current level of ZTA maturity in accordance with CISA Zero Trust Maturity Model, as well as developing next steps to enhance current capabilities and TTPs to meet or exceed objectives.
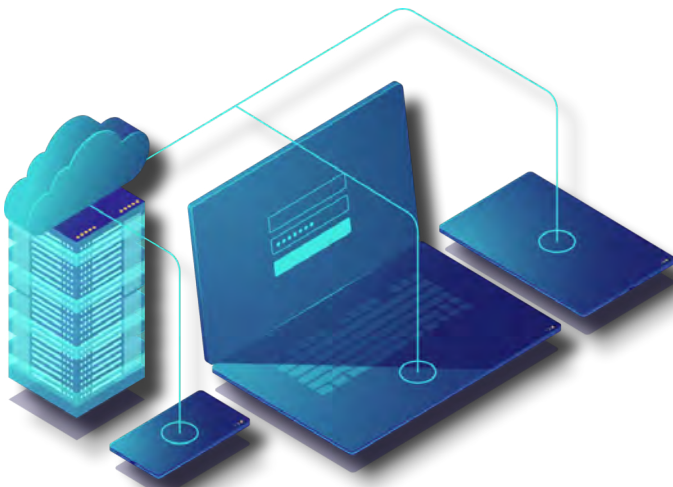
Additionally, OIT completed an independent Zero Trust Readiness Assessment of OIT's current Zero Trust posture with the input from multiple directorates and subject matter experts (SMEs). The independent Zero Trust Readiness Assessment provided OIT with an outside perspective and identified strengths, weakness, opportunities, and threats to help focus our Zero Trust implementation efforts going forward.

CISA ZERO TRUST MATURITY MODEL

|	TRADITIONAL	ADVANCED	OPTIMAL
Identity	Password or multifactor authentication (MFA) Limited Risk Assessment	Phishing resistant MFA Some identity federation with cloud and on-premises systems	Continuous validation Real time machine learning analysis
Visibility and Analytics Automation and Orchestration Governance			
Device	Limited Visibility into compliance Simple inventory	Compliance enforcement employed Data access depends on device posture on first access	Constant device security monitor and validation Data access depends on real time risk analytics
Visibility and Analytics Automation and Orchestration Governance			
Network/ Environment	Large macrosegmentation Minimal internal or external traffic encryption	Defined by ingress/egress micro-perimeters Basic analytics	Fully distributed ingress/ egress micro-perimeters Machine learning-based threat protection All traffic is encrypted
Visibility and Analytics Automation and Orchestration Governance			
Application & Workloads	Access based on local authorization Minimal integrational with workflow Some cloud accessibility	Access based on centralized authentication Basic integration into application workflow	Access is authorized continuously Strong integration into application workflow
Visibility and Analytics Automation and Orchestration Governance			
Data	Not well inventoried Static control Unencrypted	Least privileged controls Data stored in cloud or remote environments are encrypted at rest	Dynamic support All data is encrypted
Visibility and Analytics Automation and Orchestration Governance			

Through FY 2022, OIT focused on assessing OMB requirements, conducting initial gap analysis, and began to identify emerging technologies for potential enterprise solutions to close gaps, and meet or exceed the intent of the Zero Trust initiative, as well as completing multiple tasks that were assigned early suspense dates. The application and workload task completed in March 2022 required agency level consolidation and reporting of any non-.gov hostnames used by their internal accessible information systems to CISA and GSA. In May 2022, OIT was ahead of data requirements for initial automation of data categorization and security responses, ensuring encryption of data at rest in commercial cloud requirements, and comprehensive logging and information sharing capabilities. Having met these initial suspense requirements, enhancements are still required to ensure improved capabilities and TTPs are in place to support a higher level of Zero Trust maturity. OIT will continue to collaborate and move towards full Zero Trust Implementation by the end of FY 2024.

IDENTITY PROGRAM

In accordance with OMB provided guidance and policy directives for Identity, Credential, and Access Management (ICAM) programs within the federal government, the OIT Identity Management (IDM) team manages the ICAM framework and provides a single, centralized authentication and authorization service to control and secure logical access to applications and platforms within CBP.

The CBP ICAM solution provides a single, centralized authentication and access service to system owners to control logical access to their resources to strengthen security, reduce redundancy, and comply with the executive mandates.
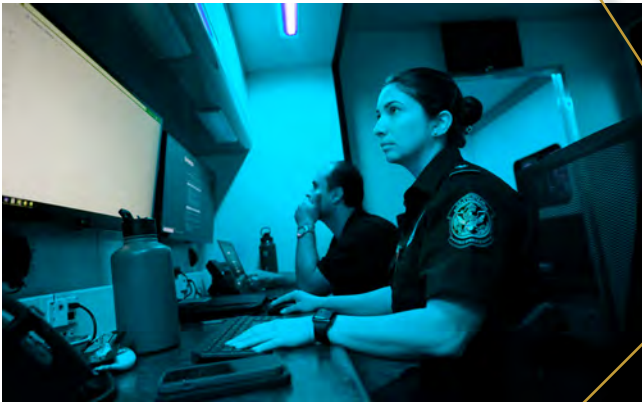
ICAM

The set of tools, policies, and systems that an agency uses to enable the *right individual* to access the *right resource*, at the *right time*, for the *right reason* in support of *federal business objectives*.

IDENTITY MANAGEMENT

How an agency collects, verifies, and manages attributes to establish and maintain enterprise identities for employees and contractors.

CREDENTIAL MANAGEMENT

How an agency issues, manages, and revokes credentials bound to enterprise identities.
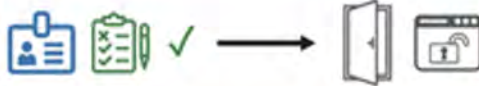
FEDERATION

The technology, policies, standards, and processes that allow an agency to accept digital identities, attributes, and credentials managed by other agencies.

ACCESS MANAGEMENT

How an agency authenticates enterprise identities and authorizes appropriate access to protected services.

GOVERNANCE

The set of practices and systems that guides ICAM functions, activities, and outcomes.

FY 2022 ACCOMPLISHMENTS

The integrated identity platform provides CBP with a comprehensive, automated IDM platform which satisfies all security requirements and automates manual processes while providing a reporting capability for auditing. The IDM team implemented an integrated platform which automates system security controls including provisioning and de-provisioning (user separations), segregation of duties, role re-certification, and 45/90 inactivity account disabling and removal.

The team designed a workflow solution which integrated platforms to allow automatic training and clearance compliance checks for privileged users and automated provisioning, all while preserving the ticketing application functions. The full automation of these integrated workflows has reduced account provisioning time and resources from weeks to minutes, with full audit trails and reporting capabilities.

Consolidating CBP's recertification of user accounts has enabled the agency to pass the financial systems audit for two consecutive years without an IT finding. This new solution completely automates the previous manual, spreadsheet-based process. The team has recertified six million roles for over 479,051 users in 134 CBP applications and platforms during FY 2022, ensuring the right people have access to the right resources.

As part of an overall cost savings initiative by the IDM team, millions in annual costs associated with legacy ICAM products was saved by reducing the customer count from 160 to two applications. The implementation of additional tools will reduce costs with the retirement of legacy solutions in FY 2022 Q3.

The identity management platform delivers on mission priorities by enabling user populations outside CBP to access internal CBP applications and collaborate on border enforcement and overseas activities. The team has integrated 797 applications and infrastructure URLs into the Enterprise Identity, Credential, and Access Management (ICAM) solution for authenticating both CBP and external user populations.

CYBERSECURITY OPERATIONS
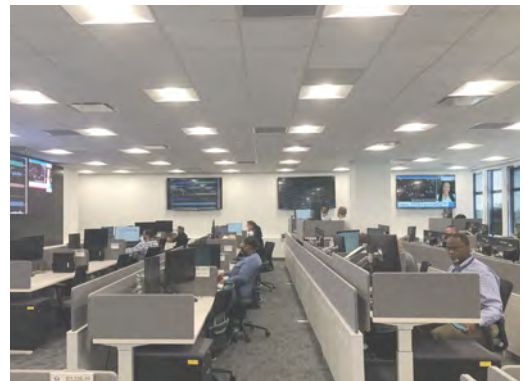
SOC STATS

Opened **1,772** incidents and closed **1,377 cases**

Triaged **29 classified, 194 phishing** and **697 privacy incidents**

Total Indicators of Compromise Blocked in FY 2022 – **64,303**

Ingested for blocking from SOD CTI Analyst1 reporting: **35,486**

IOCs ingested for blocking from all other sources: **2,602**

Security Operations

OIT has undertaken an effort to develop and integrate a Security Orchestration, Automation, and Response (SOAR) capability into the CBP Security Operations Center (SOC). This ongoing effort has already achieved success by automating time-intensive, manual processes and operational workflows and delivered powerful consolidated analytics and real-time dashboards to maximize our cyber detection and response resources.

The automation of tasks and workflows has saved an estimated 24,000 hours of work. The integration of the DHS Network Operations Security Center (NSOC) has created an autonomous real-time syncing of investigation data between CBP and the NSOC. This replaced the need for a separate DHS Enterprise Cybersecurity Operation Portal ticketing system and has resulted in approximately a 60% decrease in case management processes, resolution times, artifact collecting and report building.

The ticket response platform integration removed the need for SOC analysts to go into ticketing systems and provided a real-time view on all tickets, providing a significant time savings for information lookups, ticket creations, ticket reviews, and data transfers.

OIT partnered with several other organizations to provide support in a variety of ways. In coordination with the Privacy and Diversity Office (PDO), OIT developed and implemented Data Loss Prevention (DLP) capabilities to prevent the unauthorized disclosure of Personally Identifiable Information (PII) and sensitive information. In partnership with the Office of Intelligence (OI), OIT launched Domestic Violence Extremism (DVE) and Workplace Violence (WPV) monitoring for CBP. In support of the ongoing Operation Allies Welcome (OAW) effort, the team enhanced cyber monitoring on IT systems forward deployed to areas of operations and designed the interim processes and procedures for CBP employees performing foreign travel with OIT assets, reducing the overall security threat to the CBP network. OIT identified and processed 161,915 incidents related to PII, For Official Use Only (FOUO), Law Enforcement Sensitive (LES) and misuse matters. They further enhanced CBP's security posture by investigating and restricting access to 255 URL's, domains, and IP addresses of malicious content.

During the reporting period, SOC created four Open-Source Intelligence (OSINT) reports to support penetration testing activities. The unclassified report content was gathered through the lens of a cyber threat actor and provided an adversarial perspective to our systems. OSINT reports are created in three phases: collection, analysis/production, and coordination/dissemination.

THREE PHASES

1

During the collection phase, the CBP Cyber Threat Intelligence (CTI) team collects information about the assigned system to replicate an external cyber threat actor. All collection is performed using an unattributed Internet browser to mitigate additional risk.

2

Through analysis/production the CBP CTI team assesses the information for validity, relevance to an assessment, and priority based on exposure or component value. The team authors a draft OSINT report for submission to the CBP CTI Government Lead outlining details of the information and their findings.

3

In the final phase of coordination/dissemination, the CBP CTI Government Lead reviews the collected information, analytical assessments, and key findings identified in the OSINT report. Once complete, the report is disseminated to the VAT to inform follow-on penetration testing activities against the assigned system. These reports may also initiate action on behalf of multiple CSD elements to proactively harden systems and mitigate weaknesses.

OIT continues to update the methodology used to identify top five cyber threats to CBP. This methodology focuses on actor sophistication, capabilities, target sectors, intent, and recent activity. The process included building proactive procedures around gathered intelligence to enhance detection and prevention capabilities. SOC utilized correlation alert development, indicators of compromise (IOC) sharing, vulnerability management, and consistent high value asset (HVA) monitoring against adversary tactics. This intelligence is also employed to assess and prioritize gap analysis findings.

Security Engineering Services (SES):

The team worked to create several dashboards with the goal of enhancing access to data and providing real-time information capabilities to result in a more secure IT environment.

- **User Separations Dashboard Baseline** - Allows system POCs to track users that have separated from CBP. The dashboard also tracks the status of user accounts to ensure separated user accounts have been disabled/removed throughout CBP. This effort provided enhanced and needed visibility that was previously time consuming and tedious.

- **Information Security Continuous Monitoring (ISCM) Mobile Compliance Metrics Dashboard -** Allows for quick metrics and identification of mobile security vulnerabilities throughout the CBP enterprise. This effort provided enhanced visibility and increased the efficiency of analyzing this data to allow engineers and security staff to identify and react quickly to any security vulnerabilities or issues on our mobile devices.

- **Add-On Dashboard -** Ingests data allowing CBP to track newly added Known Exploitable Vulnerabilities added to CISA's catalog. This in turn allows engineers as well as the various security teams to have visibility upon release and begin remediation planning in a timelier manner.

- **Enterprise Known Exploitable Vulnerabilities Tracking Dashboard -** Allows CBP to track its overall compliance with CISAs Known Exploitable Vulnerabilities. This effort allows CBP to validate and analyze remediation efforts in near real-time and ensures accuracy in reporting to DHS and CISA.

In addition to the creation of the above dashboards, the team also worked to develop and implement a variety of tools and functionality contributing to an enhanced security posture for the agency. These included tools to provide visibility of the entire OIT enterprise with enhanced performance metrics, security tools for the mobile device environment, and functionality to address PII/SPII and other types of data for audit purposes.

Program Management Office (PMO):

OIT worked to create Standard Operating Procedures (SOPs), checklists and cross-functional workflows in support of a repeatable process developed to facilitate a seamless transition of implementing a system and/or application into development or production.

The team also worked on several contract related efforts to ensure contracted services are updated and align to new tasks in support of CBP's cybersecurity vision and direction including the focus on Zero Trust initiatives.

VAT METRICS

Averaging approximately 220 web vulnerability scans per month

Averaging approximately 160 database vulnerability scans per month

Averaging approximately 1,530 operating system (OS) and application scans per month

Completed 25 penetration tests to ensure a deeper understanding of vulnerabilities not detected in normal scanning activities.

Managed and enumerated 834 Known Exploited Vulnerabilities associated with BOD 22-01.

Completed seven Bug Bounty assessments on public facing systems and assets

The team worked to de-obligate over $600K funds from an existing contract and reprogram them for the procurement of new tools.

OIT worked to facilitate office reintegration efforts with the smooth transition of building access for 80+ contractor staff within a two-week period to enable contractors to support CBP Security Operations Center incidents at the new Ashburn facility. Additionally, working with the Office of Professional Responsibility (OPR) and OIT Security and contractors, the team expedited the Background Investigation (BI) process by submitting 42+ CBP BI packages. The streamlined process resulted in the contractor's ability to backfill positions quicker resulting in the highest staffing (97%) level achieved on the contract.

Vulnerability Assessment Team (VAT):

Through collaboration with all OIT teams and system owners, CBP achieved an all green FISMA scorecard for the very first time. This required the agency to meet all DHS metrics for Hardware Asset Management (HWAM), Software Asset Management (SWAM), Vulnerability Management (VM), Configuration Management (CM), Configuration Management High Value Assets (CM HVA), and Host Based Defense (HBD). The team also completed Enterprise reporting in response to the Log4jshell vulnerability and ensured all OIT staff and system owners had access to the data through regular updates and meetings. Safeguarding CBP's systems and assets from potential ransomware and malware remains a top priority and OIT will continue to ensure the security of our IT systems and infrastructure is protected from threats and bad actors.

To further secure CBP's networks, the team developed the Vulnerability Management Metrics to track vulnerabilities by vendors. This provided a deeper understanding of the true security posture of the agency allowing for easier identification of issues relating to vulnerability remediation.

Security Technology and Policy (STP)

To further support OIT's security efforts

- Processed 322 Trade Interconnection Service Agreements enabling secure connections with CBP's trade partners.

- Vetted 71 foreign nationals for CBP basic network access and verified 1,669 Other Government Agency (OGA) background requests for access to the Automated Targeting System (ATS) pilot.

- Provided Cybersecurity Awareness training to 74,000 users with assistance of an automated compliance workflow tied to CBP's enterprise identity management process.

Section 508 Compliance

OIT has 25 DHS Office Accessible Systems and Technology (OAST) Certified Trusted Testers tasked with reviewing and testing systems, applications, and communication media, including documents and videos, to ensure Section 508 compliance.

METRICS

Reviewed 145 Information Technology Acquisition Review for proper Section 508 language.

Tested 78 software applications, three mobile applications and seven synchronized multimedia videos.

Reviewed 62 documents and made them Section 508 compliant.

Issued 34 Compliance Determination Forms - **29-** Fully Compliant, **one** - Conditionally Approved, **four** Conditionally Approved – Remediation Required.

Issued **20** Section 508 exceptions.

Hosted **nine outreach events** covering topics related to Section 508 compliance.

Audits & Assessments:

Due to the ongoing COVID-19 pandemic, the OIT Audit Liaison Team (ALT) is successfully completing the FY 2022 Financial Statement Audit virtually. To date, OIT has responded to 573 audit requests for this audit. The ALT managed over 28 external audits with eight of those being Priority 1 Reviews reporting to the DHS Secretary.

OIT completed Phases I & II of the FY 2022 A-123 Audit Review of a vendor cloud environment that hosts most of CBP's financial and operational systems, resulting in no exceptions/audit findings. The A123 Financial report shows the environment has demonstrated that the protections and security of the financial applications and the information processed and stored are without fault/issues/needs of improvement by the independent A123 Audit Team. OIT Achieved a cumulative total 93% passing percentage rate for the A-123 Assessment Cycle to include two new high impact systems, one new support system, and one non-financial system. A total of 259 controls were tested for the fiscal year and exceeded the average DHS baseline passing percentage of 82%.

Security Test and Evaluation (ST&E)

OIT continued the application of a new risk process that incorporates cybersecurity risk ratings reports to supplement the third-party vendor assessment process and currently monitors 35 high risk vendors.

In support of CBP's IT systems ongoing security, successful User Phishing campaigns were conducted. These included two All General User campaigns incorporating 50% of all CBP personnel and one Privileged User campaign. The team also reviewed over 412 contract Statement of Works (SOWs) for high risk, to ensure that IT security compliance language for High-Risk companies (process/store/transmit CBP sensitive information), if applicable, is included in all new procurements and 3rd party vendors are monitored and adhere to the clauses.
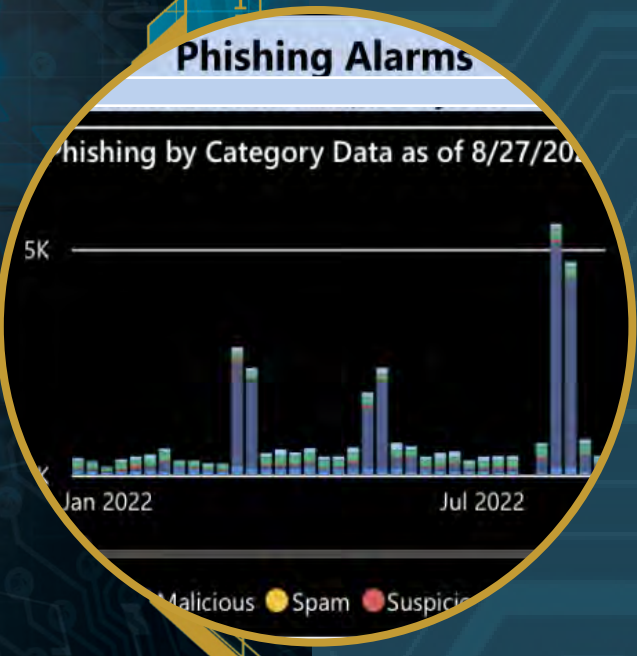
ENTERPRISE IT GOVERNANCE

Drives enterprise-wide efficiencies, CBP and DHS strategy, and statutory compliance.

HIGHLIGHTS

Enhanced governance of the Federal Information Technology Acquisition Reform Act (FITARA) with focus on safeguarding financial & physical resources, budget formulation & execution, IT Acquisition Review (ITAR) of IT spend, including robust staff management with a focus on building solutions and executing to OIT Values.

Expanded adoption of the CBP IT Executive Dashboard Suite, which includes 24 dashboards providing unprecedented transparency through real time availability metrics from OIT's Technology Service Desk, as well as Cloud, Network, Data Center, Cybersecurity and Privacy metrics.

Established the CBP Data Strategy which includes four goals to evolve CBP into a data-driven organization and created the Chief Data Officer role within the Chief Technology Officer (CTO) team.

ENTERPRISE IT GOVERNANCE

STRATEGY AND GOVERNANCE

OIT's Management and Governance Directorate (MGD) enables Mission Partners to achieve their priorities through holistic alignment of OIT's capabilities and business operations. MGD will provide structured business processes and policies, oversee capabilities to drive adaptable innovation, and improve delivery timeliness, quality and efficiency throughout OIT's lifecycle and service to Mission Partners.

Acquisition Support
Provide the tools and opportunities to OIT that will enable Contract Management, Acquisition Management, and Vendor Management, and fulfill the Advancing Equity in Federal Procurement Initiative.

Workforce Management
Support OIT by recruiting and retaining quality individuals and providing a well-maintained, safe and secure work environment; ensuring workforce wellness and training objectives are met.

Financial Management
Safeguards the financial and physical resources that enable OIT to meet the CBP Mission, administers CBP IT Acquisition Review Program, and coordinates with CBP stakeholders to update DHS' INVEST system to meet requirements of Clinger-Cohen and FITARA acts.

Trusted Partnership Initiative
The Trusted Partnership Initiative (TPI) strategically and tactically delivers IT to operate at the speed of mission, seamlessly, digitally, reliably, and securely.

Strategic Vision & Planning
Aligns the OIT strategy to the agency's vision, mission priorities, strategic objectives, and core values to provide a more holistic understanding of the role IT has on the organization.

Program Management
Support program development and capabilities that meet the customer needs, while achieving benefits from standardization and management processes and support policies and legislation.

Records & Information Management
Leads and supports creation and preservation of federal records that document CBP's decisions, actions, and business transactions. Effective records and information management is essential to CBP's effectiveness and to public trust of its actions and its integrity.

Diversity, Equity, Inclusion & Accessibility
Build an inclusive culture and work environment by raising employee awareness on the importance of diversity, and demonstrate OIT's commitment to an EEO workplace through multi-media messages and events.

FY 2022 PRIORITY INITIATIVES

Purpose

AC Bhagowalia established six Strategic Mission Focus Areas with 10 defined Priority Initiatives to drive strategic progress and mission impact across CBP. These Focus Areas and Priority Initiatives are operationalized by 38 Associated Projects that all aligned to DHS/CBP Priorities.

6 MISSION FOCUS AREAS — **10 INITIATIVES** — **5 KEY TAKE AWAYS**

Mission Focus Area	Initiatives
Mission Applications	1. Enterprise Software Applications 2. Software Delivery Frameworks
Mission Infrastructure	3. CBP Consolidated Enterprise Network 4. CBP Core Enterprise Cloud Computing 5. Improve IT Operations
Enterprise IT Governance	6. Core Enterprise Data Management (Phase 2) 7. IT Governance Framework and Tools
Mission Cybersecurity	8. Core Enterprise Cybersecurity Services
CIO Business Operations	9. Workforce Experience
Trusted Partnerships	10. Enhance Trusted Partnerships

Key Take Aways:
- **38** Strategic Projects
- **180+** Status Updates Provided
- **100+** Project Milestones Completed
- **50+** Stakeholders Involved
- **15+** CBP Offices Involved

OIT Integrated Strategic Planning & Management

The OIT Integrated Strategic Planning & Management Framework is a set of strategic planning and management processes and activities based on industry-standard methodologies, tailored specifically to OIT. It integrates industry best-practices with federal, department and agency processes and artifacts to achieve a streamlined and efficient IT strategic planning and management capability for CBP. The framework is periodically refined and adjusted to reflect changes in direction from the administration, department, agency, and office leadership and to ensure it is still in alignment with industry best practices. It is broken down into six Work Streams:

- Participate in CBP strategic planning activities
- Prepare IT plans in alignment with federal, DHS and CBP Strategies
- Align OIT organization with the strategies
- Execute OIT Strategy
- Monitor and learn
- Adapt to changing strategic drivers

> Every five years, OIT takes the time to do an in-depth analysis to validate and re-set IT goals, objectives, and priorities for the long term.

INTEGRATED STRATEGIC PLANNING & MANAGEMENT (ISPM) FRAMEWORK 2.0

Engage Trusted Partners: Strategy, Business Operations, Mission, Internal OIT Partners

• OIT Entry Point for Trusted Partners • Support Integration & Transparency • Support TP Data Driven Decision-Making • Represent OIT's interests TP planning activities

IT Strategies & Initiatives
- CBP IT Strategy in alignment with External Strategies
- Technology & Initiatives (Partnerships w/ DAC-SAS, DAC-ISS, CTO, & CISO)
- Coordinate Integration of Changing Drivers into IT Strategies & Initiative Plans

Ensure Alignment
- Alignments / OIT Dendritic
- Change Management Strategic & Plan
- Communications Liaison

Execute IT Strategies & Plans
- Change Initiatives Support
- Business Intelligence / Dashboards
- Coordinate Monthly IT Initiative Reviews, Quarterly Strategy Reviews, End-of-Year Reviews
- Evidence - based Decision Support
  - Priority Setting
  - Planning
  - Improvement
  - Assessing Effectiveness
  - Driving Innovation

Monitor and Learn
- Business Analytics
- Data Storytelling
- Evidence Building Analytics
  - Designing of Experiments
  - Exploratory Research & Studies
  - Evaluations

Adapt to Changing Drivers
- TP Insights & Technology Needs
- Emerging Strategies & Priorities
- Emerging Industry Trends
- Emerging PESTEL concerns
- User Acceptance & Customer Satisfaction
- Maintain IT Strategic Change Agenda

Engage Trusted Partners — Strategies & Plans — Ensure Alignment — Execute Strategies & Plans — Monitor & Learn — Manage & Adapt

Over the course of FY 2022, OIT performed strategy analysis using a variety of methods and reviewed the higher level federal, department and agency strategies to ensure OIT's strategy would be in alignment with their goals and objectives. Using these analyses and working with OIT senior leadership, the team facilitated a review of the OIT Mission and Vision Statements and the OIT Values to incorporate updates. Using the Mission, Vision and Values as a launching point, the team facilitated the identification and development of the OIT Goals, Objectives, Key Results, Metrics and Measures. These work products were then used as the basis for drafting the OIT Strategic Plan.

Mission Applications

- Digital Experience
- Enterprise Data Management
- Application Development
- Scalability

Mission Infrastructure

- Consolidated Enterprise Network
- Core Enterprise Cloud Computing
- IT Operations

Trusted Partnerships

- Integration & Transparency
- Interagency Relationships
- Industry & International Partners

Cybersecurity

- Cyber Hygiene
- Threat Detection & Response
- Cyber Protection
- Cybersecurity Governance, Risk Management and Compliance

Enterprise IT Governance

- Governing Policies / Processes
- Governance Boards
- Compliance
- Communications, Education & Coordination

CIO Business Operations

- Strategy Management
- Cost & Budget Transparency
- Procurement/Acquisition
- OIT Workforce Experience
- Workforce Management

IT Governance

CBP's Information Technology (IT) Governance boards provide leadership direction and enable strategic IT decision-making in support of mission success across the enterprise. IT Governance boards follow the agency's governance guiding principles as adopted by the Deputies Leadership Council (DLC). In FY 2022, the IT governance boards continued to drive the impact of integrated enterprise-wide IT governance process to improve cross-function decision-making to support mission interoperability and decision-sharing across the enterprise.

IT Governance boards are prioritizing the following for OIT:

Impact on Operations:
Briefings will focus on the operational impact of decisions, including the impact of inaction.

Consistent Processes:
There shall be repeatable processes leading up to a governance meeting and following each meeting's conclusion to ensure all stakeholders are prepared for discussion.

Proper Sequencing: When possible, topics will be coordinated across the governance councils to allow subordinate councils to review and make recommendations first before sending higher-level decisions up the governance hierarchy.

Efficient and Effective Decision -Making: IT Governance councils facilitate cross-component dialogue, collaboration, and resolution of CBP-wide issues and challenges, and promote effective and efficient processes and support structures with overarching transparency, responsiveness, and accountability.

Clear Request and Messaging:
Each briefing or agenda item will state a clear decision request or articulate the value of the information provided in advance of the meeting.

To continue guiding the path forward, OIT established the CBP IT Governance Council (ITGC) to oversee CBP's entire enterprise Information Technology/Information Resource Management (IT/IRM) Portfolio of 73 investments, 179 systems, 245 projects, and 26 high-value assets. As OIT continues to move into the future of technology, the IT Governance framework will provide the guardrails for better availability, security, responsiveness, user experience, and agility. As CBP's enterprise-wide technology grows and expands impact, IT Governance will set the tone and pace for optimized efficiencies.

The ITGC will be a key governing body that helps align CBP OIT stakeholders with internal and external stakeholders. Led by OIT's CIO, the ITGC is designed to be a forum for CBP leaders to set priorities and provide governance for the CBP Information Technology/Information Resource Management (IT/IRM) enterprise. For insight into the IT Governance Overview, preview the operation structure below:

CBP INVESTMENT PORTFOLIO DASHBOARD v2.0

77 INVESTMENTS ☐ Display High Value Assets Only	252 Projects 223 Contracts	171 Systems 32 HVA Systems	$1,848.823 FY 2023 Total (SM)
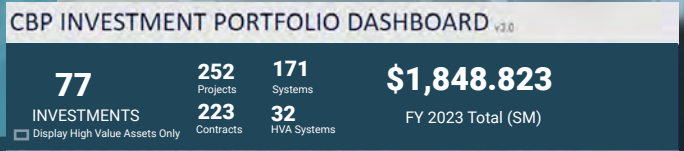
OVERVIEW OF CBP

Overview of CBP IT Governance Structure
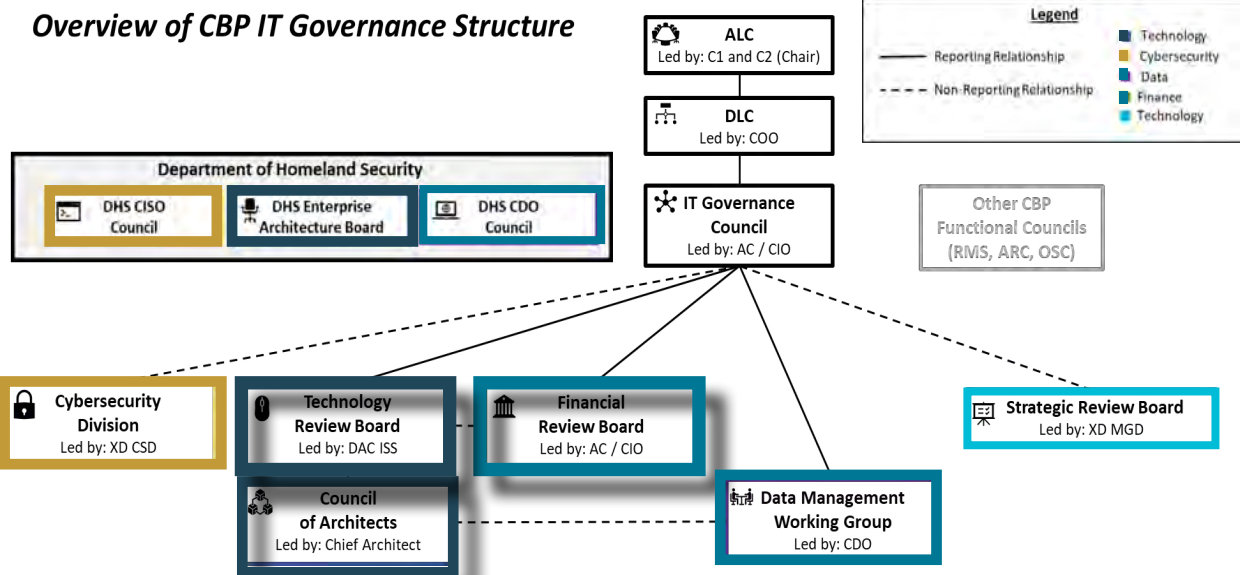
CBP has many governance boards and councils that oversee the actions and decisions the agency makes in nearly every aspect of the organization. Through the implementation of three new review boards, OIT will have representation at the CBP/DHS governance level in cybersecurity, strategy, and data management.
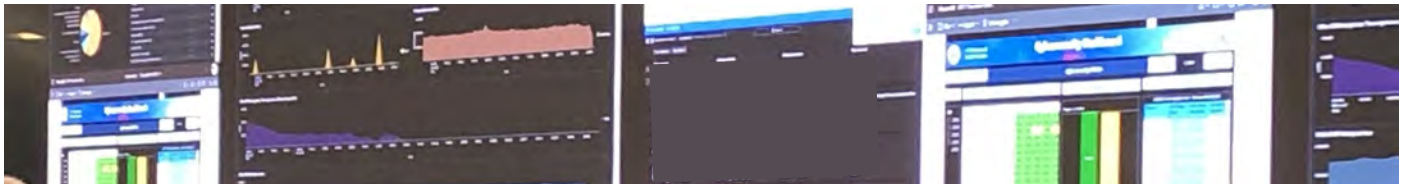
## CBP Records and Information Management (RIM)

CBP Records and Information Management (RIM) provides records management oversight, guidance, processes, and tools for the agency, supporting Federal Records Act implementation in all 30 CBP Component Offices.

Capstone Email Retention:

In FY 2022, CBP RIM collaborated with the eDiscovery team, PDO, OCC, and the A360 team within OIT to lead the CBP Capstone Implementation Project to adopt, design, and implement the National Archives and Records Administration, (NARA) Capstone method of email retention management in CBP's instance of Archive 360. CBP RIM is currently working with NARA to transfer 140,000+ permanent emails created from 2002-2006 to the National Archives. The Capstone process identifies high-level officials in an agency whose emails are to be sent to the National Archives 15 years after tenure end and kept permanently.

RIM Program Sustainment:

In addition to new and ongoing initiatives, CBP RIM sustained key program requirements in accordance with the Federal Records Act.
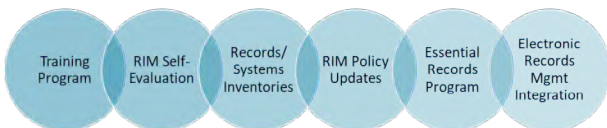
Retention Analysis Progress:

- Reviewed 188 Privacy Threshold Analyses for Records Management retention language
- Currently working 70 IT System reviews (47 complete, 191 out of 308 left)
- Obtained NARA approval for two of CBP Records Retention Schedules

Compliance:

In FY 2022 CBP maintained a low-risk score on NARA's Annual Records Management Self-Assessment for the second year in a row and was recognized for the first time as High Maturity on the Email Management portion of the Federal Electronic Records and Email Management Report.

NARA MATURITY MODEL SCORES

National Archives RM Self-Assessment
High Risk (0-59) to Low Risk (90-100)
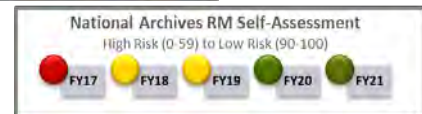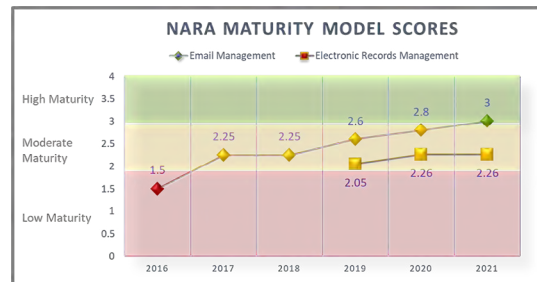
METRICS

Offsite Storage Transition: CBP RIM continues a two+ year effort to inventory and move temporary records from **15 NARA** and **100+ CBP locations** to a commercial storage provider which includes a potential scope of **111,000+ boxes.**

Completed three records transfers to the new provider directly from CBP.

Reassigned 700+ boxes to ICE custody from pre-2003 holdings.

Completed three moves from Federal Records Centers (FRC), a total **of 2,757 boxes.**

Federal Information Technology Acquisition Reform Act (FITARA)

The 2014 Federal Information Technology Acquisition Reform Act (FITARA) strengthened the role of agency CIOs and required greater accountability for the delivery of Information Technology (IT) capabilities across the Federal Government. FITARA was put in place to enhance CIO authority, improve transparency, identify cost savings, and consolidate data centers. On an annual basis, CIOs complete a component self-assessment to report progress in four primary IT categories: budget formulation, budget execution, IT Acquisition Review (ITAR), and organization and workforce. MGD oversees and manages the governance of the basic FITARA principles and the associated annual self-assessment activities.

Industry Day Support

OIT supported the U.S. Border Patrol's Program Management Office Directorate (PMOD) by hosting their small, disadvantaged business virtual industry day on April 26, 2022. The purpose of this event was to provide industry with insights into mission areas, acquisition programs, and current challenges. This event was attended by a total of 21 representatives from 18 different companies.

*Teamwork makes the dream work!*

85

Contract Support

The Enterprise Business Management Support Services (EBMSS) Blanket Purchase Agreement (BPA) is a CBP-wide, multiple award BPA enterprise solution established to support CBP's critical mission by providing Information and Technology (IT) business and mission support services across the agency. OIT is the sponsor of this dynamic vehicle that is set to provide mission support services for a myriad of IT activities. OIT's approach with this BPA allows contractors to implement blended solutions and the government to improve efficiencies in moving mission support requirements through the acquisition lifecycle, from planning through contract award.

The Enterprise Small Business (ESB) CBP-wide, multiple award Blanket Purchase Agreement (BPA) is an enterprise solution also established to support CBP's critical mission by providing Information and Technology (IT) business and mission support services across the agency. OIT is the sponsor of this vehicle that provides mission support services for a myriad of IT activities. OIT envisions this BPA to be awarded to approximately six BPA awardees using General Services Administration (GSA) Multiple Award Schedule (MAS) program, using the Information Technology Category, IT Services, IT professional services category.

The Request for Information (RFI) and the Virtual Industry (VID) were conducted in June 2021 and December 2021, respectively, and yielded positive results in determining strong competition among the small business community from across various socio-economic factors.

OIT's innovative approach allows contractors to implement blended solutions (i.e., to use other vendors with specialized skills in different labor categories to improve task order performance), facilitate conditions for prime contractors to form teaming agreements with other vendors to manage complex task orders, and allows the government improved efficiencies moving mission support requirements through the acquisition lifecycle, from planning to contract award.

This contract allows the continuation of services, currently provided by the Enterprise Program Management contract due to expire January 2023.
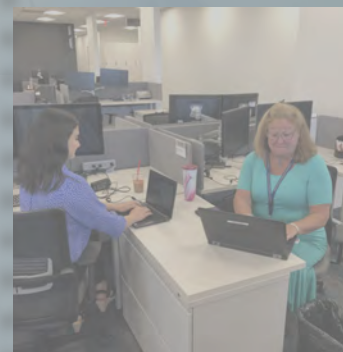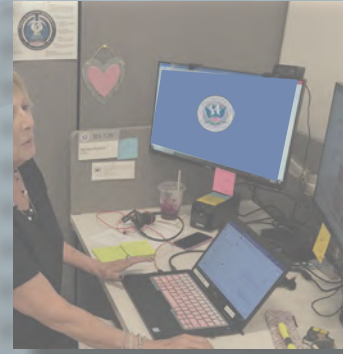
## Portfolio Acquisition Executive (PAE)

Codified the matrixed OIT Portfolio Acquisition Executive (PAE) support organization, Portfolio Management Organization (PfMO) which was established to improve OIT acquisition oversight in accordance with the CIO Federal Information Technology Acquisition Reform Act (FITARA) and fiduciary responsibilities. The organization supports seven programs and four investments across eight OIT organizations. Artifacts, including the PfMO Charter, RACI chart (Responsible, Accountable, Consulted and Informed), and the designation of the Deputy IT PAE, business process documents (i.e., Bi-monthly Quad Charts and the DHS Program Health Assessment process) are approved by the IT PAE Dr. Edward Mays or the Deputy IT PAE Mr. Lorenzo Jacobs. The PAE team performed a total of 10 Program Health Assessments (PHA), 67 Quad Chart reviews, 20 Cost Wise Readiness (CWR) reviews, six staffing plan reviews, and working with the Office of Acquisition (OA), two Investment Reviews for high profile efforts.


OIT ACQUISITION

Financial Management

- **Information Technology Acquisition Review (ITAR) -** In FY 2022 OIT processed 134 IT new acquisitions with life cycle cost estimate of more than $500K were approved by CBP CIO, and DHS OCIO. The combined life cycle estimate of these ITARs was $614,311,526.75.
- **OIT successfully executed 352 SDRs** valued at $164.2M with our trusted partners throughout CBP.
- **Procurement Requisitions** - OIT processed 564 procurement actions valued at $1.53B (all sources of funding – appropriated, fee, reimbursable, etc.)
- **Fund movements** – Given the incremental allocation of funding, FMD staff processed 14,089 movements of funding to align funding for necessary obligations.
- **OIT Vehicle Fleet** - Working with OFAM, OIT will be receiving 53 new vehicles to replace aging fleet.
- **Reimbursable Funding** – Processed 283 reimbursable funding requests valued at $16.652M, double the value of what was processed in FY18.
- **Annual Inventory** – OIT's annual inventory was successfully completed in June 2022. OIT had 83,120 items in FACTS and SAP to inventory. Of this, 80,350 were found, and 156 (less than a percent) were reported as missing.
- **Self-Inspection Reporting System (WebSIRs)** – During Cycle 2022, OIT managers in 13 offices conducted self-assessment worksheets performing, certifying, and/or approving the results of office self-inspections. OIT managers and supervisors completed 168 self-inspection worksheets and answered a total of 578 questions. In, completing the self-inspection there were 40 corrective actions identified, all of which were addressed before August 31, 2022.
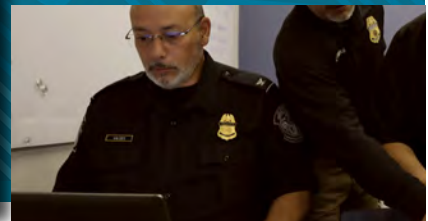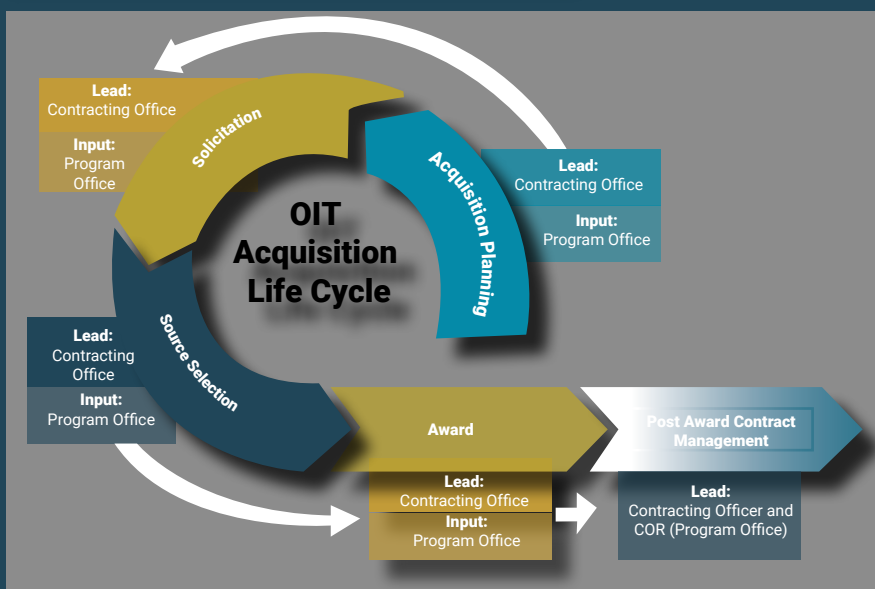
CBP has a vast wide-ranging mission and CBP OIT has a dedicated workforce that provides top-notch IT products and services at the speed of mission 24/7. Tactical operational excellence must be continually improved while smartly leading strategic transformation so that we work "smarter not just harder." We also must focus on the workforce.

OIT began executing a realignment in early 2022. The realignment occurred in two phases over the course of FY 2022 and provided a better span of control in management and leadership (balances the load for AC and DAC), better alignment of functions across an IT lifecycle to deliver faster, better, and more affordably and better positioning for IT/ IRM portfolio lifecycle management and governance.

OIT Reorganization Phase I:

Phase I of the realignment included placing core functions under two Deputy Assistant Commissioners (DACs), one focused on Software Applications and Services (SAS) and Mission Support, DAC-S, and the other to oversee Infrastructure and Support Services (ISS), DAC-ISS. Organizations remained intact and combined "as-is".
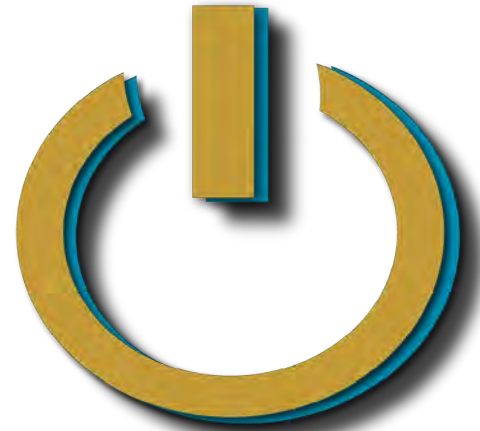
The DAC overseeing SAS works to increase agency-wide use of the core set of technology capabilities, such as targeting, collections, and enforcement/case management. The DAC overseeing ISS works to manage the rapid delivery of OIT capabilities through standardized, cloud-based infrastructure to serve trusted partners at the speed of the mission.

To further consolidate and streamline OIT services, two directorates were merged into one. Enterprise Networks and Technology Support Directorate (ENTSD) and the Enterprise Data Management and Engineering Directorate (EDMED) became a single directorate which is now called the Enterprise Infrastructure Operations Directorate (EIOD). Combining ENTSD and EDMED facilitated a cohesive and organized IT services within OIT while improving mission needs and enhancing the customer service experience.

The Chief Data Officer (CDO) position was created to help define CBP's data management strategy and further enable data-driven decision making within the agency. This position governs systems and data integration, promoting access to standardized and vetted data across systems to empower leadership with information needed to make mission decisions.

PHASE 2

Phase II of the reorganization built on the initial phase and included additional organizational structure changes. The software applications and services under DAC-S were solidified by narrowing the scope to include OIT's four software organizations. The enterprise network and infrastructure and field support organizations remained under DAC-ISS.

The Management and Governance Directorate (MGD) was established to strengthen OIT support functions and IT governance. The Chief Management and Governance Officer (CMGO) will drive cost savings and efficiencies in OIT and will improve IT governance internally to OIT as well as CBP.

This organizational change allows OIT to provide additional executive control over the full scope of infrastructure responsibilities and authorities while encouraging a unified approach to solutions that support the CBP mission at the enterprise level.

Office Of Information and Technology
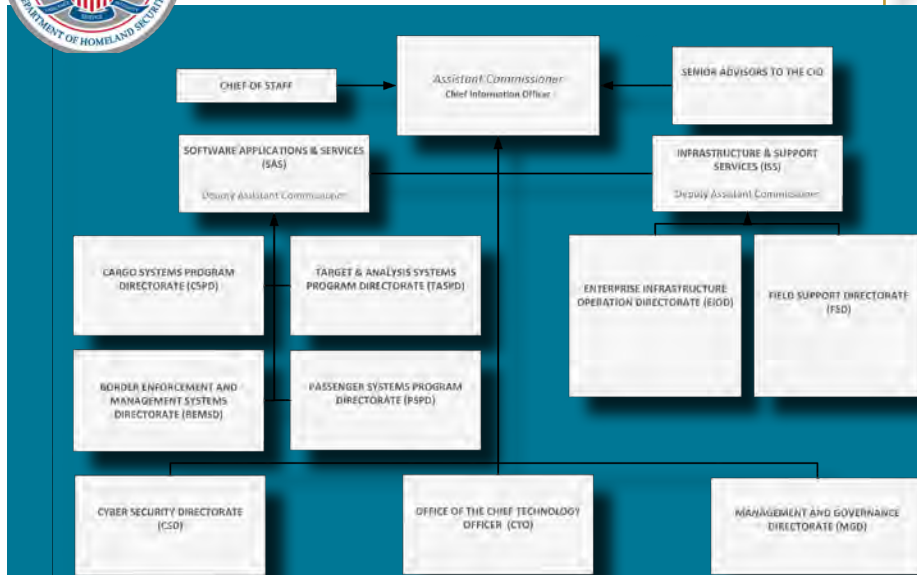
As OIT manages CBP's approximately **$1.8B** IT investment portfolio, which includes **73 investment programs, 220 contracts,** and **179 systems,** this structure will enable more efficient and focused oversight of the vast size, scope, and complexity of the CBP IT portfolio and responsibilities by providing additional executive leadership at the top levels of OIT.

Reintegration

The COVID-19 pandemic continued into FY 2022 and limited reintegration efforts across CBP Headquarters including OIT. As a law enforcement agency, most CBP employees continued to report to their duty locations without interruption. The pandemic enabled employers, including CBP, to rethink the workplace, and FY 2022 saw many new employee-friendly programs rolled out for telework eligible employees including local remote work, distant remote work, and alternate duty stations. OIT also provided space in the Ashburn facility to support the establishment of a processing center associated with migrant surges at the Southwest Border and reduced its footprint to provide space for an Office of Field Operations Preclearance Field Office. OIT also worked with headquarters components to begin planning efforts to house both an Office of Air and Marine component and an international task force within OIT-assigned space at the Ashburn facility.

The Ashburn facility was used largely in FY 2022 for collaboration events such as award celebrations, training classes, executive meetings, and conferences. The facility was utilized for the Eagle Horizon 2022 (Business Continuity Planning (BCP) Event Scenario) which was an exercise involving CBP's Emergency Relocation Group (ERG) for the DHS Mission Resilience Exercise. OIT hosted approximately 100 ERG members consisting of the CBP Commissioner, Deputy Commissioner, Chief Operating Officer, Executive Assistant Commissioners, and additional leadership identified by CBP offices with decision making authority necessary for the continued performance of essential functions during a continuity event. Other CBP components held Town Halls in the facility as well as other special events.
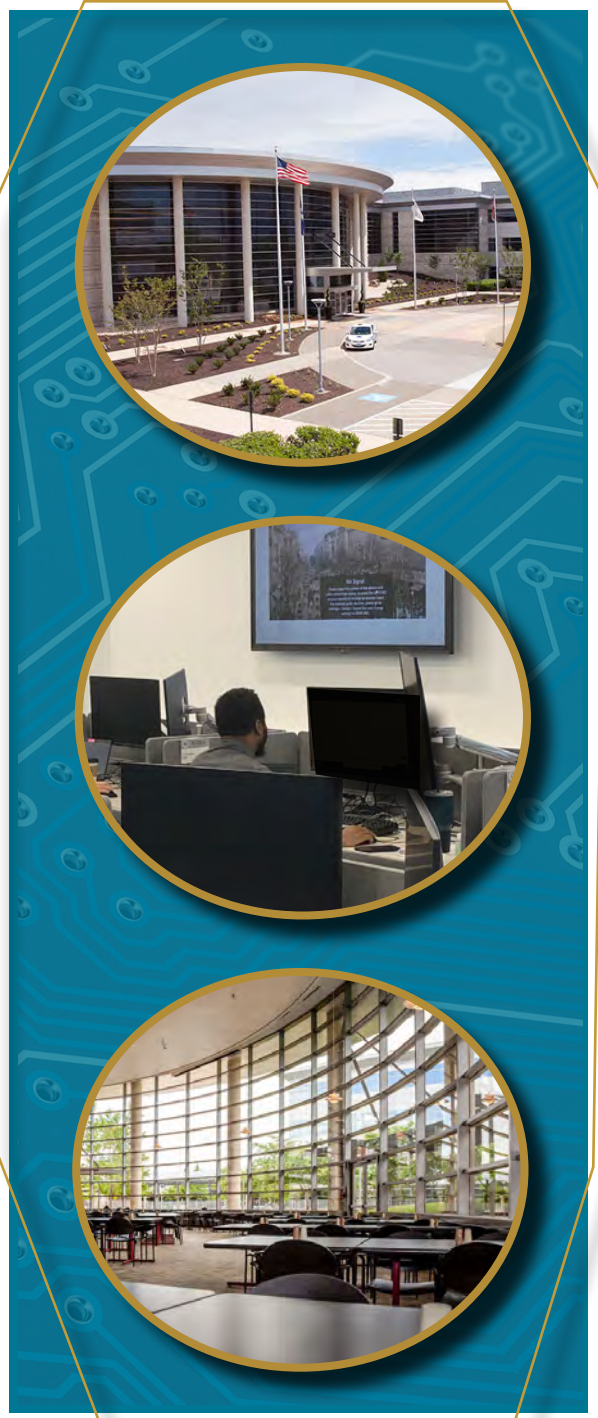
WORKFORCE HIRING

Hiring:

In FY 2021, OIT's authorized manpower hiring position (FTEs) target was reduced and recruitment operations were halted. Despite these restrictions, staffing mission critical positions remained a high priority for OIT leadership. During FY 2022, after careful consideration of mission priorities and a readjustment to the table of organization, OIT moved forward with a strategic recruitment plan that resulted in the following:

- **68 Job Opportunity Announcements (JOA)** were posted on USAJobs.

- **78 Tentative Select Letters (TSL) issued - External 23 Internal 55.**

> As a result of FY 2022 hiring efforts, the OIT government onboard personnel levels reached 95.5% with candidates in the pipeline and recruitment actions in progress for OIT's remaining vacancies. Currently, OIT is progressing to hire all remaining vacancies.

FY 2022 Gains and Losses

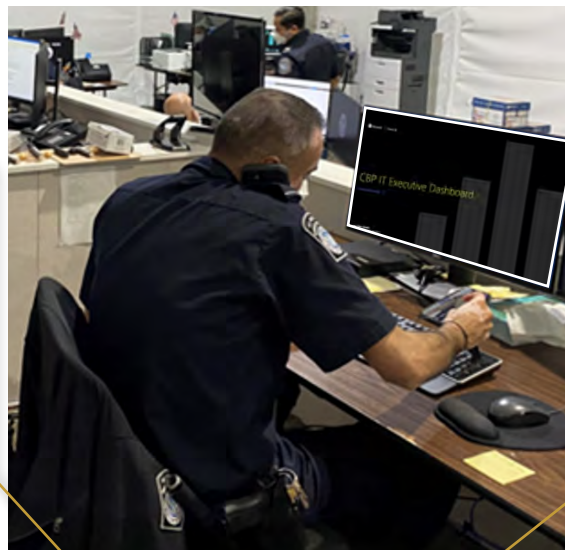|	Gains	Losses	Net Change
Grand Total	39	178	-139

Direct Hire Authority (DHA) Audit:

A 2020 annual audit of the Hiring Center's activities revealed an issue with the use of the government-wide Direct Hire Authority (DHA) for Information Security Positions. Specifically, to use this DHA, Infosec must be the sole parenthetical of the position. CBP Human Resources Management (HRM) identified around 300 impacted OIT employees, both bargaining unit (BU) and non-BU. The union has been notified and impacted employees have been contacted by National Treasury Employees Union (NTEU) and by HRM.

To provide support to impacted employees during this time, in FY 2022 OIT developed a communication strategy with HRM that includes union notification, employee and supervisor information sessions, mass email communication, and customer support through a group mailbox for individual questions. Leadership has assured impacted employees that they will remain on their current appointment with no changes to their employment while the administrative error is being corrected.


Educational Leadership Training Program

The OIT Training & Development Branch conducted announcements for both internal and external Educational Leadership Program (ELP) Training and Certification programs. Opportunities included the recurring OIT-ELP program through the Graduate School which offered eight OIT participants an opportunity to build their leadership capacity through a nine-month program. Topics were aligned to leadership competencies and included critical thinking, diversity and inclusion, and emotional intelligence. There were multiple external ELP opportunities introduced and four OIT participants were submitted. These competitive programs are beneficial to the participants and their careers.

ENTERPRISE IT GOVERNANCE

CBP IT EXECUTIVE DASHBOARD

In the spirit of the CBP Enterprise Services Strategic Objective to "enhance data-driven decision making" across the agency, the Office of Information and Technology (OIT) has developed the CBP IT Executive Dashboard. The CBP IT Executive Dashboard is an enterprise-wide single source of information for OIT and CBP leadership to manage and govern CBP's IT strategy and programs in alignment with mission operations.

The transparent-to-all consolidated management platform integrates a portfolio of dashboards across OIT programs to provide near-real-time data. Information is presented in strategic alignment with OIT's six strategic focus areas: Mission Applications, Mission Infrastructure, Trusted Partners, Cybersecurity, Enterprise IT Governance, and CIO Business Operations.

The dashboard provides CBP leadership with IT transparency to help facilitate informed decision making for rapid response and increase situational awareness to meet evolving mission priorities.
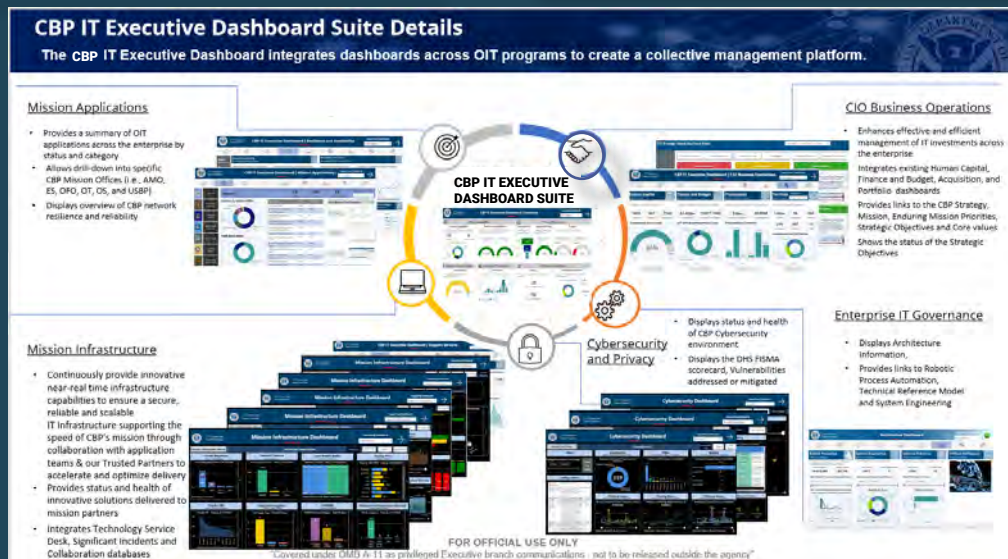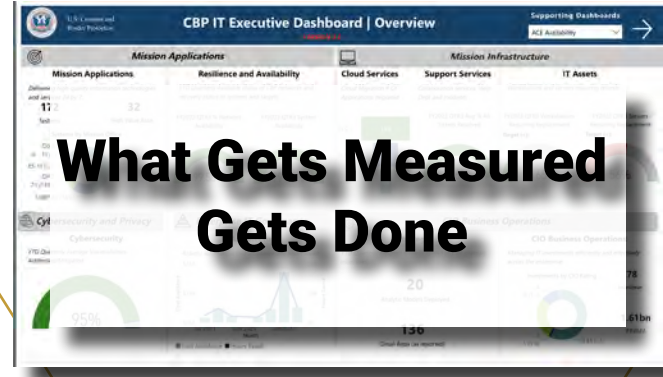
Dashboard and Strategy Adoption

In support of implementation of the CBP OIT 2023-2027 Strategy and to promote adoption of the CBP IT Executive Dashboard Suite across the organization, OIT matured the strategic communication plan to encourage use of the CBP IT Executive Dashboard for situational awareness, promote data-driven decision making, and manage OIT goals and objectives in alignment to the CBP mission. Building upon receipt of the Technology Business Management (TBM) Council award in FY 2021, OIT continued to implement the TBM IT management framework while maturing IT financial management capabilities to better understand and manage costs, communicate IT spending to customers, and find flexibility within OIT's budget to fund critical priorities such as cloud migration, network modernization, and technology refresh. OIT is invested in providing transparent information to CBP trusted partners through use of the CBP IT Executive Dashboard and continues to mature the CBP IT Executive Dashboard Suite. Currently 27 dashboards are available to view with the ability to drill down for more detailed information.

Updates include the creation of the Operations Dashboard which focuses on mission infrastructure. The CBP IT Executive Dashboard Suite has seen broad adoption across mission offices.

OIT's foremost goal is to provide easy access to data to support decision making, ensure timeliness, relevance, and accuracy of the data, and automate data driven decision making across the enterprise in alignment with CBP mission and strategy.

- Performance Measurement: Is our implemented approach making progress toward objectives and goals, on key measures and against set targets?

- Program Evaluation: Is our implemented approach causing the desired outcomes/impact? For whom? Under what conditions?

CBP IT EXECUTIVE DASHBOARD SUITE

Data Pipeline/Platform

In tandem with the development of the OIT Executive Dashboard Suite, work is ongoing to refine/develop the technical architecture on which these dashboards will run. The intent is to keep within the guidance/boundaries established by the CTO office but to focus on the administrative (strategic, business, and operational) rather than the mission data (generated during mission activities, intelligence data).

- Mature Analytics Strategy for the Dashboard Ecosystem using baseline platform tool for the pipeline and analytics platform.

- Chose a baseline tool as the platform that is best suited for current data needs and future growth strategy.

- Developed technical reference architecture for Executive dashboard suite.

- Began exploring options for integrating/automating strategic concepts.

Decision Support

The CBP IT Executive Dashboard is a key part of OIT's effort to support the Evidence Act which provides principles for establishing more robust decision support capabilities for Federal agencies. There are four key principles:

- Foundational Fact Finding: What can we understand about the problem, existing approaches, and the populations affected?

- Policy Analysis: What approach (from multiple alternatives) best addresses the problem given estimates of costs and effects?

27 DASHBOARDS

Technical Reference Architecture

The CBP Technical Reference Architecture (TRA) is a set of documents that provide guidance for Information Technology (IT) products and services that should be used to deliver solutions across the enterprise. The TRA helps to standardize technology choices so that the agency can reduce redundant procurement efforts, increase the pool of resources at CBP familiar with chosen technology, ensure consistency with CBP's IT framework, increase return on investments, and assist in delivering secure, scalable, and resilient capabilities.

As part of the OIT Enterprise Architecture effort, OIT is working on aligning the next version of the TRA to be organized by seven IT service areas: Networking, Compute, Data and Analytics, Applications Digital Experience, Cybersecurity, IT Management and Delivery. This effort will guide a more reliable and scalable application development process by leveraging OIT-provisioned IT services. Each of the TRA's seven IT Services will consist of the following sections: capabilities, technology/tools, reference architecture, policy/guidance, patterns, and evaluation criteria. Updates will be hosted on Common Collaboration Platforms for development and review, and when completed, published to the CTO website.
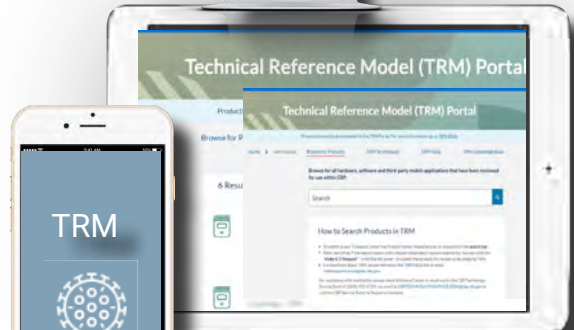
What is the TRA?

Represents industry best practices and/or tested IT solutions

Anticipates and answers common questions related to these specific technologies

Forward-looking view of the CBP Technical Landscape

Focused on technology enhancements and new Projects
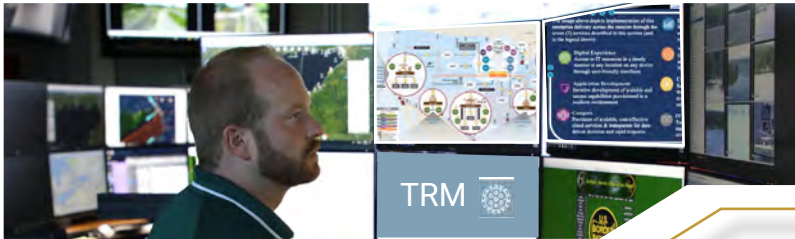
Proposed Enterprise IT Services

Enterprise Data Management
Intuitive data practices, methods, and technologies to ensure data is holistic, trustable, accessible, and interoperable.

Network
Establishment of a modern integrated network with 5G capability and edge-to-edge security.

Digital Experience
Access to IT resources in a timely manner at any location on any devices through user friendly interfaces.

Cybersecurity
Safeguarded information assets through secure development, simplified identity controls, mitigation of malicious activity.

Application Development
Iterative development of scalable and secure capabilities provisioned in a resilient environment.

IT Management and Delivery
Transparency of all IT operations, management, and costs for data-driven decision.

Compute
Provision of scalable and cost-effective cloud services and transparent operations for data-driven decision and rapid response.

In May 2022, a major milestone was achieved with the creation of CBP's Data Strategy. CBP Deputy Commissioner Troy Miller approved and signed the first ever CBP Data Strategy document which includes four goals to evolve CBP into a data-driven organization where data is trustable, interoperable, accessible, and holistic to enable informed decisions:

1. Enterprise Data Management – Transform data management processes to address evolving data requirements, interoperability, quality, and reporting.

2. Data Technology Optimization – Leverage emerging and appropriate technologies to provide scalable, flexible, and responsive data solutions to meet mission needs.

3. Enterprise Information Sharing Capability - Promote information sharing and related enterprise-wide capabilities to provide for discovery, access, trust, usability, and the analysis of data.

4. Sustainable Data Culture - Develop and empower a skilled workforce to use data responsibly and ethically to make informed decisions.

To support the implementation of this CBP Data Strategy, the Deputy Chief Data Officer established and chairs a Data Working Group, comprised of over 75 members from programs across CBP working to prioritize and execute key data-related projects. This working group meets monthly and is currently working on the final approval of its charter.

The Data Working Group is currently focused on the development of the Data Strategy Implementation Plan and a data governance framework for CBP. The Five-Year Implementation Plan will establish the milestones, tasks, timelines, and metrics that CBP will prioritize to achieve the four goals outlined in the Data Strategy.

Data governance will specify the decision and accountability framework to ensure appropriate behavior in the valuation, creation, storage, access, analysis, consumption, retention, and disposal of all information assets at CBP.

The Data Working Group has also been the focal point for CBP's response to the DHS Data Inventory Program. This DHS-wide initiative, in response to the OPEN Government Data Act, requires that all components inventory their data assets. This data inventory supports decisions on content published to Data.gov, the use of data as a strategic asset across the Department, and CBP's baseline understanding of what data exists within the agency. CBP has achieved the goal of 100% of mission essential datasets reported to DHS by June 30 and is currently building out the infrastructure and processes to support the continued discovery and reporting of additional datasets at CBP.

CIO BUSINESS OPERATIONS

Develops our workforce to grow and work together as a team and partners with the CBP community.

HIGHLIGHTS

Developed a portfolio of four Workforce Experience Initiatives complete with online resources for both employees and supervisors: Fostering Growth and Development, Recognizing OIT Values in Action, OIT Rotation Program, and Resilience Matters.

Identified and rolled out five updated OIT Values to help frame organizational work against a backdrop of shared values to achieve strategic goals as a mission driven organization: Mission Focus, Innovation, Collaboration, Diversity and People.

Focused on Employee Engagement through quarterly town hall meetings, small group Dish IT sessions with senior OIT leaders, employee recognition efforts, and Diversity, Equity, and Inclusion events.

OIT LOGO

OIT ran an Idea Hub campaign open to all employees and contractors who were invited to submit new OIT logos for consideration to replace OIT's legacy one. We received over 30 impressive design submissions from 10 OIT employees. After much deliberation and iteration, a winning design was selected, and the end result was a detail-rich logo full of symbolism and meaning.

The new logo reflects the core of OIT's values and commitment that drive us to deliver at the speed of mission and reflects the important work OIT does every day in support of CBP's mission.

GRADIENT COLOR INSIDE THE SEAL:
The inside of the seal is gold and fades to blue to symbolize OIT's support of the 24/7 mission.

GOLD BORDER:
The gold border represents OIT's frontline border operations.

POWER ON SYMBOL:
The power on symbol represents OIT's mission, "delivering secure and reliable IT services and capabilities at the speed of mission."

BINARY CODE:
The binary code represents OIT's foundation and commitment to delivering secure, reliable and innovative technology. The binary code is more apparent on the outside and fades as you get closer to the center, driving your eyes to the middle, which symbolizes OIT's main focus, the protection of U.S.

FIVE STARS ON LEFT:
CBP OIT has successfully formulated and led implementation of a Trusted Partnership Initiative (TPI) across five fronts: all CBP, DHS, other U.S. government agencies, Industry/Trade partners, and international agencies/partners/-countries. CBP's TPI program strategically and tactically facilitates IT to operate at the speed of mission, by enabling teams to work across organizational lines seamlessly, digitally, reliably and securely.

WINGS:
The eagle's wings form around the world to symbolize safeguarding lawful trade and travel.

EAGLES MOUTH:
The eagle has an open mouth to symbolize OIT's emphasis on strong and reliable communication.

FIVE STARS ON RIGHT:
These stars represent OIT's five values: mission focus, people, diversity, innovation, and collaboration.

SIX WHITE CIRCULAR CIRCUITS:
The white circular circuits represent OIT's strategic focus areas: mission applications, mission infrastructure, mission trusted partnerships, mission cybersecurity, enterprise IT governance, and CIO business operations.

SHIELD:
The shield represents security and CBP's commitment to protect and defend. The shield is inspired by the CBP badge.

RIBBON:
The ribbon which houses the OIT mission statement is placed at the forefront of the logo/seal, as OIT's mission is at the forefront of OIT.

IT:
The "IT" with the track marks and gold shapes represents OIT's new brand. "IT" will be incorporated into OIT's branded products as a recognizable part of OIT's brand.

THREE GOLD SHAPES:
These gold shapes represent how OIT always strives to push forward, always improving and innovating our technology. The two track shapes to the right represent our consistent support of the ever evolving mission.

In continued celebration of OIT's logo, the team created two new versions of challenge coins. Both coins feature the new OIT logo and the official CBP logo. A limited number of special gold coins were also created. The OIT Assistant Commissioner will have the authority to award people with these coins throughout the year ahead.

WORKFORCE EXPERIENCE

Workforce Experience Initiatives

OIT is committed to fostering a culture that encourages career growth and skill development for all OIT employees. The OIT Workforce Experience Team developed a portfolio of four Workforce Experience (WX) initiatives, complete with resources that address challenges employees may be facing. In addition to hosting information sessions and sharing messaging around the WX Initiatives, OIT provided resources for employee use throughout their careers with OIT.

Fostering Growth and Development

- Promotes frequent, productive, career-focused check-in conversations between OIT supervisors and supervisees to support career growth and development.
- Encourages employees to apply their strengths, take action to improve development areas, and own their career growth by planning for the future.

Recognizing OIT Values in Action

- Guidance on opportunities to recognize the contributions of peers and supervisees that exemplify OIT's values through formal awards and informal appreciation.
- Integrates OIT's shared values with informal recognition and formal awards to increase instances of values-based recognition and improve morale across OIT.

98
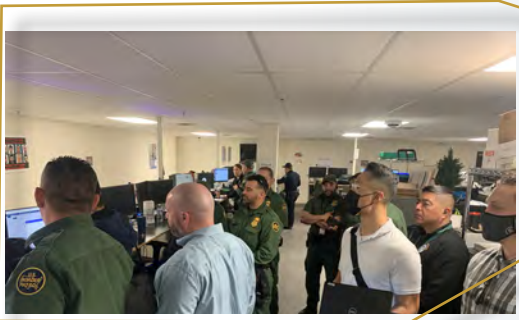
OIT Rotation Program

- Provides OIT employees with opportunities to gain new skillsets, improve awareness of the organization's diverse business areas, and increase productivity by temporarily filling another assignment or special project.
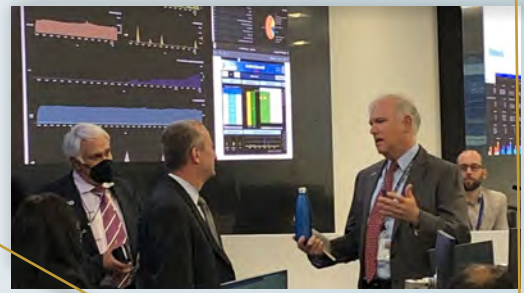

Resilience Matters

- Enables supervisors to lead resilient teams that can operate efficiently and effectively in the face of disruption to deliver mission-focused outcomes via an organizational resilience cohort-style training program.
- Provides resources to prioritize the individual well-being of team members while preserving mission delivery.

OIT VALUES

OIT identified and rolled out five updated "OIT Values" to help frame organizational work against a backdrop of shared values. These values helped achieve strategic goals as a mission driven organization and served as a reminder of the important work OIT does to support each other, improve operations, and create an environment that fosters innovation. OIT leadership worked towards a goal to foster a culture within OIT built around these shared values, and asked employees to take part by living out these values in daily work.

CBP OIT VALUES

Mission Focus
Act with purpose and unity to improve mission impact.

Innovation
Encourage innovative and resilient solutions for efficient and reliable delivery.

Collaboration
Faster collaboration and openness among directorates and mission partners.

Diversity
Respect and include a variety of people, cultures, and experiences to enhance products, services, and performance.

People
Invest in our people and maintain integrity in pursuing our values.

AND EXEMPLARY BEHAVIORS

99

Drawing the Audience

To recognize CBPnet, and to draw more viewers to our site, OIT has come up with a new signature for emails. OIT has come up with a fun gif, that pairs with IT's new branding, drawing the eye with animation. Once you click on the gif signature line in the email, it takes you to the OIT CBPnet site. "Check IT out!"
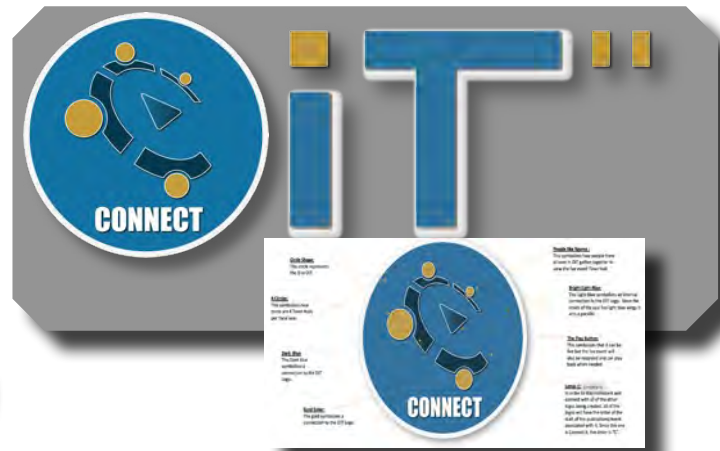
All of the publications/events/logos will have the signature "IT" brand connected with it, but will all be in an "O" (power symbol) that spells out "OIT"
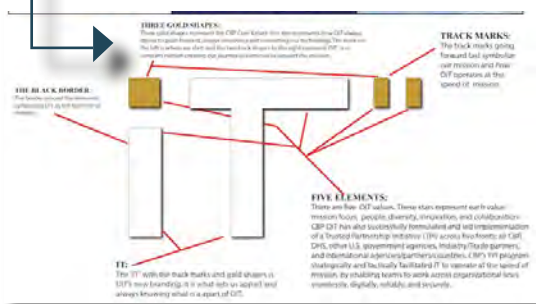
Employee Engagement

OIT leadership has prioritized regular engagement with employees through a variety of channels and events. Regular communication is important to ensure the workforce is fully informed. Information is shared through a monthly blog, mass communications, OIT's website, town halls and Dish IT sessions. Interesting and engaging videos and graphics are also created and used as communication tools.

Quarterly Town Hall meetings invite all OIT employees to gather and engage with OIT leadership to learn about various efforts occurring in OIT, celebrate awards and years of service, hear from guest speakers, and participate in a question-and-answer session. An average of 800 OIT employees attended each town hall to hear about topics such as: organizational priorities, cybersecurity, application development, cloud migration efforts, trusted partnerships, and workforce initiatives. This past year, OIT was honored to feature the following guest speakers during town hall events:

- DHS CIO Eric Hysen shared information about department efforts and priorities, cybersecurity, customer experience, and building a diverse and equitable workforce.

Each Town hall has its own theme:

OIT Quarterly Town Hall FY 2022 Q1
Theme: FY 2022 and The Road Ahead

OIT Quarterly Town Hall FY 2022 Q2
Theme: Building on the Past, Focusing on the Present, Positioning for the Future

OIT Quarterly Town Hall FY 2022 Q3
Theme: Better Together – Partnering for the Future

OIT Quarterly Town Hall FY 2022 Q4
Theme: It's All About You

- Enterprise Services Acting Executive Assistant Commissioner Ryan Scudder shared recognition and appreciation of OIT's work including efforts in the field, humanitarian efforts, cloud migration, application development, user support and workforce related efforts.
- Office of Field Operations (OFO) Deputy Executive Assistant Commissioner Diane Sabatino participated in a panel discussion about the trusted partnership between OIT and OFO to include many of the efforts that resulted from collaboration between these two organizations.
- U.S. Border Patrol (USBP) Deputy Chief Matthew Hudak shared his thanks and appreciation to the OIT workforce for the work they do to support USBP and CBP frontline operators and personnel.


Monthly Dish IT sessions provide OIT employees with opportunities to attend small group meetings with OIT senior leaders. Discussions are focused around the OIT values and meetings end with an open forum for discussion. These intimate gatherings allow OIT leaders to engage directly with employees they may not otherwise have an opportunity to interact with on a regular basis.

Employee Recognition

Employee recognition in the workplace has long been recognized as an important factor in employee satisfaction and a driver of better performance. This recognition can come from various sources including colleagues, supervisors, and leadership. The Recognizing OIT Values in Action Initiative was formed as part of OIT's effort to acknowledge the daily hard work, successes, and dedication to the mission exhibited by employees. OIT strives to create a positive culture and empower employees to frequently recognize all levels of colleagues for exemplifying OIT's values and contributions to CBP's mission. OIT conducted a baseline survey that was open to all OIT employees. The anonymous survey allowed employees to share their thoughts and feelings related to recognition.

Information from the survey was used to guide and shape the future of OIT's recognition efforts. OIT's web presence is being revamped to highlight the formal and informal recognition options available to employees. A centralized location for this information will ensure all staff know the OIT, CBP and DHS wide options and processes for each available level of recognition. OIT is rolling out a simplified "Kudos Korner" to allow for quick and easy recognition, ranging from quick shoutouts to notes of thanks from trusted partners. OIT wants to ensure these values are practiced daily, and employees feel recognized for their work.
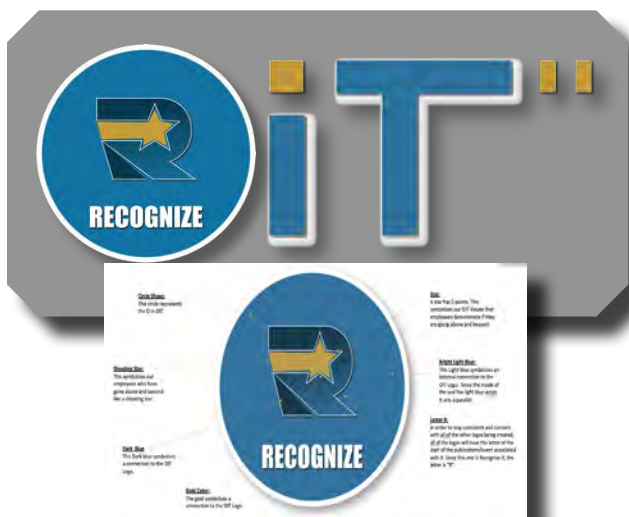
FedScoop 2022 Best Bosses in Federal IT and Golden Gov Awards

For the second consecutive year, AC Bhagowalia was recognized by FedScoop as one of the Best Bosses in Federal IT for 2022 and received the Golden Gov award. The Best Bosses in Federal IT award recognizes leaders in the Federal IT community who "demonstrate vision, inspiration, and leadership as they rally their teams to deliver innovative technology to serve our community and country". The Golden Gov award "recognizes visionary leaders who implement innovative ideas and inspire others to get on board".

AFFIRM Award for Leadership in Cloud Computing

- CIO Cloud and Innovation Team – DAC Ed M., CTO Sunil M., CISO Scott D., XD Chris W., Mark J., Kyle B. and Mustafa N.

2021 Homeland Security Today Awards:

- CBP won "Person of the Year"
- Individual Lifetime Achievement - John S.
- Individual MVP awards - Michael N., Mustafa N., Lachi P. and Jeff W.

FY 2022 CBP Enterprise Services Quarterly Employee Recognition Awards
- Q2 Team Award - Del Rio Support Team

(ES) Weekly Employee Recognition

16 OIT Employees were recognized by ES senior leadership for outstanding performance

CBP Commissioner Heroic Act Recognition

Trish G. was recognized by CBP Deputy Commissioner Miller for heroic acts when she responded to evacuation efforts during a fire at her mother's retirement community and assisted first responders and aided residents.

International Customs Day Awards

- National Targeting Center (NTC) International Fellowship Program Team: Christopher H. and Shelu P.
- Significant Expansion of the Foreign Electronic Cargo Data Exchange Program (FECDEP): Christopher H. and Shelu P.
- Electronic Certificate (eCERT) Program: Rodney G. and Mike G.
- Significant Support for Foreign Judicial Proceedings: Babette G. and Lonnie L.

YEARS OF SERVICE

YEARS	Count
5	61
10	116
15	72
20	50
25	19
30	32
35	11
40	3
45	0
50	1

365 OIT employees celebrated years of service milestones in FY 2022.
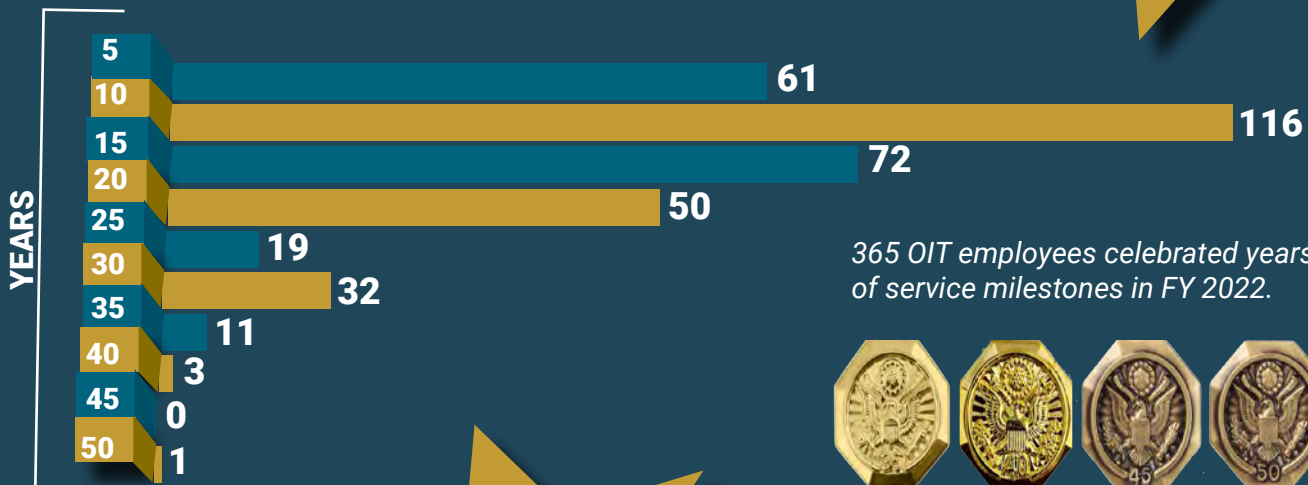
DHS Secretary's Awards

Secretary's Award for Innovation 2022 - The Secretary's Award for Innovation recognizes individuals or teams that employ a strategic and enterprise-wide approach to strengthening the DHS mission and its operations.

- Robotics Process Automation Tuna Bot Modernization - Malynda C., Manisha M, Ajay P.
- Robotics Process Automation (Bot Team) – Chris N.

2021 DHS Chief Procurement Officer Excellence Awards
- Procurement Support Professional of the Year - Jennifer Z. from ASD
- Partnership Award – Chris H., Chris N. from BEMSD

DHS CFO Award for Frontier Award for Innovation and Ingenuity

- The ACE Collections Team - Syed A., Hema B., Nancy D., Autumn M. and Paul N.

DHS Fiscal Year 2021 Acquisition Program Management Awards

- DHS Information Technology Professional of the Year 2021
- Individual Award – Wes G.

Operation Allies Welcome (OAW) Recognition Ceremony

Chief Information Officer

Washington, DC

Agenda

Welcome and Introductions
Eric Hysen, DHS Chief Information Officer

Group Photo

Introduce DHS Deputy Secretary
Eric Hysen, DHS Chief Information Officer

Significance of Operation Allies Welcome to DHS' Mission
Deputy Secretary Tien

Presentation of Operation Allies Welcome Coin to Recipients*
Eric Hysen, DHS Chief Information Officer

Closing Remarks
Eric Hysen, DHS Chief Information Officer

* Please refer to the last page of this program for a list of the recipients.

Along with AC Sonny B., Ed M., Jay A., Jim M., Adina P., Angela B., Han Y., Kendra R., Lauren C., Matthew K., Mohammad A., Molly M., Nael S., and Ved T. were recognized by DHS CIO Eric Hysen for efforts in support of Operation Allies Welcome (OAW). Recipients of the OAW Award were presented a special OAW coin at an event with CIO Hysen.

DIVERSITY, EQUITY, AND INCLUSION

Quarter 1

National Hispanic Heritage Month

National Disability Employment Awareness Month

European American Heritage Month

National Native American Heritage Month

Quarter 2

Martin Luther King Jr Day

National Black History Month

Irish American Heritage Month

National Women's History Month

Quarter 3

Arab American Heritage Month

Bring Your Child to Work Day

Jewish American Heritage Month

Asian American Native Hawaiian Pacific Islander Heritage Month

Lesbian, Gay, Bisexual, Transgender, Queer, Intersex+ (LGBTQI+) Pride Month

National Caribbean American Heritage Month

Juneteenth National Independence Day

Quarter 4

Family Heritage Month

Women's Equality Day

National Hispanic Heritage Month

Diversity, Equity, and Inclusion Events:

OIT's Diversity, Equity, and Inclusion Program is responsible for supporting our agency mission to build an organizational culture in which all individuals are valued and treated with dignity and respect through the implementation of programs and observances which are designed to enhance cross-cultural and cross-gender awareness and promote equal opportunity for all CBP employees.

OIT successfully promoted the values of 'Inclusion' through our DE&I activities this fiscal year while supporting the mission. In support of this effort, various events were held to promote in-depth inquiry and conversation about the various cultures within the OIT workforce. The DE&I program of activities aligned with one of OIT's primary values, diversity, creating a work environment where all employees felt respected for who they are, the experiences they bring to the organization, and their culture.

The activities helped strengthen the bonds of individuals in the workplace and recognize the accomplishments and roadblocks of those that are underrepresented while offering insights on how to be a champion of others. The theme of collaboration was embraced as talented people throughout the agency engaged in the planning and execution of innovative events.

Diversity

Equity

Inclusion

DE&I

At CBP, we honor our colleagues who have made the ultimate sacrifice. Whether in the field or in a support role back in an office, we remember them all.

They are comrades in arms, sentinels at the boundary to freedom, these men and women of CBP who have put national security above their own goals, interests, safety, even above their own survival. This page remembers their sacrifice – as well as the sacrifices of their families – and stands as a tribute to the legacies they leave behind.

CONCLUSION

U.S. Customs and
Border Protection

MOVING FORWARD

With FY 2022 behind us, OIT looks forward to FY 2023 and will continue to build on the past, focus on the present and position for the future. We will pursue innovation and transformation of IT services and solutions in support of CBP's mission.

Each year, our responsibility and role as CBP's IT provider continues to expand. In FY 2023, we are thinking bigger and better. The focus areas detailed in the OIT FY 2023-FY 2027 Strategy, include both innovation and the expansion of OIT core operational capabilities. OIT aims to be an intrinsic force to anticipating and meeting partner expectations and the critical support needs of CBP's important mission. We strive diligently to grow our impact for our workforce and our trusted partners. Our multi-year CBP IT Strategy will drive and guide us to increased impact and opportunity for innovation.

We are the forward-leaning IT organization that, alongside our mission partners, enables the nation's premier law enforcement agency to protect the American people and the national economy while safeguarding and managing the United States' air, land, and sea borders. In FY 2023 OIT will continue to proudly serve the nation. Always remember:

"Faster. Better. More Affordable. More Secure."

SECURE

OPERATE

APPLY

MAKE

STRATEGIZE

PARTNER

MISSION APPLICATIONS

CIO BUSINESS OPERATIONS

WE ARE ONE

MISSION INFRASTRUCTURE

ENTERPRISE IT GOVERNANCE

CYBERSECURITY

TRUSTED PARTNER

We COMMIT to the mission

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https://www.flickr.com/people/cbpphotos/
https://www.dvidshub.net/
CBP Publication #: 3022-1222

"This document was produced by the OIT Communications Team, with thanks to the many OIT personnel who contributed."

CONCLUSION

OIT

ALWAYS

⏻N
SECURE
INNOVATING

U.S. Customs and Border Protection

OIT delivers secure, reliable IT services and capabilities anywhere, anytime at the speed of CBP's 24/7 mission.

⏻iT