

**UNITED STATES  
PATENT AND TRADEMARK OFFICE**



# Artificial intelligence (AI)/IT updates

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# Resilience and cloud

## Resilience / Data Center: FY21 milestone achievements!

- **Boyers Data Center migration to Manassas Data Center** Completed Successfully!
- **NOAA N-Wave implementation;** Increased Service Levels, Redundancy, Cost Savings.
- **Data Center migration assessment and Business Product migration roadmap** Successfully Completed
- **Video Surveillance & Physical Access Control system** setup in Manassas and integrated with Alexandria

## Resilience / Data Center: To FY22, and beyond!

- **Continue to Prepare Manassas Data Center for Alexandria Data Center Migration**
- **Start Phase 2 of Data Center Relocation** (Mid Jan 2022)
- **Migrate Alexandria Data Center to Manassas VA:** (Mid Jan 2022 - April 2023) - Move bundle methodology
- **Testing / Clean-up / Troubleshooting:** (Mid Jan 2022 - April 2023) - at end of each migration bundle to ensure Full Product Operability

## Cloud: FY21 milestone achievements!

- **Product migration:** USPTO Website, MYUSPTO, FPNG
- **New cloud product:** Patent Search AI (*Google*), PEDS featured with IFW data as alternative to Public PAIR
- **Cloud platforms:** Amazon Web Services (*AWS*), Google (*GCP*), and Azure all received Operational Status
- **Cloud intakes process:** Established a Business Centric assessment to assist products migrating to the cloud
- **Innovation:** Released Google RADLAB; paid service for teams in Google platform to experiment / innovate

## Cloud: To FY22, and beyond!

- **Products under Development:** Public Patent Search, Examiner Patent Search, Global Dossier, Event Bus (*EAI-HUB Replacement*); initial release ~mid 2022
- **Product Migration:** Conduct FY22 Cloud Assessments to position additional product migrations in FY23
- **Cloud Contracting:** Five Year Enterprise Cloud Modernization (*ECM*) support contract awarded to GDIT
- **Cloud Cost Management:** Analyze current cloud usage and create cost savings plan for FY22



# Cybersecurity

- **Last quarter**

- Completed deployment of Endpoint Detection and Response capability (EO 14208; OMB M-22-01)
- Integrated Security Orchestration & Automated Response (SOAR) and User Behavior Analytics (UBA) capabilities for improved monitoring and incident response
- Improved secure configuration benchmarks for IT assets
- Integrated cloud threat detection services into our Security Operations Center

- **Next quarter**

- Integrate supply chain risk assessments and updated cybersecurity requirements into acquisitions
- Improve cloud security monitoring and incident response
- Deploy Cloud Security Posture Management capabilities
- Begin integration of new/updated federal security and privacy controls (NIST SP 800-53 rev5)

# Filing in DOCX

- Overview of DOCX video available on the USPTO YouTube channel and on the DOCX landing page: [www.uspto.gov/patents/docx](http://www.uspto.gov/patents/docx)
- Upcoming DOCX filing training sessions:
  - November 23, 2021 (1:00 PM ET – 2:00 PM ET)
  - November 30, 2021 (2:00 PM ET – 3:00 PM ET)
  - December 9, 2021 (1:00 PM ET – 2:00 PM ET)
  - Watch for additional events at [www.uspto.gov/about-us/events/patents-docx-filing](http://www.uspto.gov/about-us/events/patents-docx-filing)
  - More than 14,000 users have been trained on filing in Patent Center
- Patent Center training mode
  - Data entered will not be saved or submitted to USPTO systems
  - Applications filed will not be associated with customer number



## Patents artificial intelligence tools

### Artificial Intelligence Search: FY21 milestone achievements!

- Identified AI functionality from prototype for full production deployment
- Tuned infrastructure for production level deployment
- Released “More Like This Document” to examiners transitioned to PE2E Search on October 15
- Retrieves most similar documents by user selection
- Includes US patents/pubs and patent documents from the 61 foreign countries loaded into Search

### Artificial Intelligence Search: To FY22, and beyond!

- Expand availability of PE2E Search with “More Like This Document” to full examining corps
- Identify and build additional AI functionality for full production deployment
- Include application data to support AI-based queries
- Continue assessment of AI search functionality to determine value for search and new opportunities

### Autoclass: FY21 milestone achievements!

- Evaluated AI auto-C\* models for of C\* symbol placement
- Integrated auto-C\* with existing business processes to monitor quality
- Implemented auto-C\* for a portion of new utility filings for operational efficiency in December 2020
- Monitored quality of auto-C\* to assess the readiness for expansion
- Updated AI models for full classification picture on utility applications for further assessment

### Autoclass: To FY22, and beyond!

- Assessment of updated auto-full classification models
- Exploration of pilot for auto-full classification
- Identification of impacts that implementation of auto-full classification will have on existing business processes
- Consideration of additional AI use cases for classification process
- Leveraging data streams on quality to assess business impacts and opportunities

# Questions and comments

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