Information Technology Department: A Retrospective
Pennsylvania’s Statewide Case Management Systems

The centralization of data and documents in statewide case management systems provides for sharing of court information across jurisdictions and court-related entities. The result is more consistent practices, the creation of programs and initiatives based on standardized data, and promotion of a uniform system of justice.

**Magisterial District Judge System (MDJS)** – a comprehensive statewide case management system that serves all Magisterial District Courts, including central and night courts and the Pittsburgh Municipal Court.

**Common Pleas Case Management System (CPCMS)** – provides case management, accounting and reporting functions to the criminal division of the Courts of Common Pleas, and to dependency and delinquency cases.

**Pennsylvania Appellate Court Case Management System (PACMS)** – a statewide case management system used by the three appellate courts – Supreme, Superior and Commonwealth.

Pennsylvania was the second state in the country to automate all appellate courts on a single statewide case management system.

Pennsylvania was the first state in the country to automate any level of court on a single statewide case management system.

**Court Applications**

**PAeDocket** – A free mobile app, supported on iOS and Android platforms that provides court case information.

- The **first-of-its-kind application for state courts nationwide**, allowing the public to search and view court case information on a mobile app.

**PAePay** – An application that allows the public to securely pay court fines, costs and restitution entirely online.

**PACFile** – A service that provides the option to file documents with the courts electronically on both new and existing cases.

- Integrated into the PACFile system, the **Electronic Records Management System (ERMS)** is the foundation of the document-management system implemented by the AOPC.

**Administrative Support Application Program (ASAP)** – provides payroll, human resources, procurement, accounting, and budgeting functions to AOPC, appellate court staff and certain Supreme Court boards and committees.
Court Websites

UJS Website – The Pennsylvania Judiciary’s website provides up-to-date information for the Unified Judicial System.

Web Portal – A component of the UJS website that provides public access to court information, and specialized web services to court users and the public.

Some of its applications and services include:
- Docket Sheets & Calendars
- Judicial Expenditures
- PAePay Bail and Secure Bail County Portal
- Attorney Registration
- Guardianship Tracking System (GTS)

Data Dashboards – provides the public with interactive views of caseload statistics and financial data from a combination of sources.

Online Bar Application (OBA) – a public-facing website through which Bar applications are submitted to the Pennsylvania Board of Law Examiners.

Bar Exam Applicant Registry (BEAR) – used by the Pennsylvania Board of Law Examiners to accept applications and track Bar applicants.

SharePoint Content Management – houses over 50 websites supporting UJS departments, teams and projects, providing users with the ability to store and collaborate on content and tasks.

Online Services – a website that interacts with the ASAP application to provide services to UJS employees, and perform other employment-related functions.

Data Exchange

The Data Hub/Public Access team puts in place data exchanges and file publications to support inter-agency electronic communication and public access requests for data from AOPC’s three statewide case management systems. They also provide data to AOPC’s justice partners through JNET.

In 2019, AOPC/IT staff processed 664 such requests. Analysts review each request and work to develop the datasets that will be provided to requesters from the public, the legislature, other government agencies and the media. A few of these services and subscribers include:
- Bail & Civil Judgments
- Crime Victim Claim Management Services
- Guardianship Tracking System Integration (GTS)
- PA Board of Probation and Parole
- Jury Bill Candidate List
- Warrant/Criminal History Reporting Interface

Cybersecurity Measures

AOPC/IT is continuously engaged in multiple efforts to ensure that all online court data and information is secure, a few of which include:
- Protection of judiciary network, applications and data by implementing and maintaining layers of security controls, processes and products.
- Regular vulnerability assessments and penetration tests.
- Maintenance of two separate data centers for redundancy.
AOPC IT DEPARTMENT FUNCTIONS

The primary function of AOPC/IT is to develop and maintain statewide case management systems for Pennsylvania’s Unified Judicial System (UJS), while providing other court-related applications and technology services and support to the UJS and its 60 judicial districts.

**Application Development**

All AOPC case management systems currently in place have been primarily developed, deployed and maintained by in-house staff.

The Application Development teams perform all aspects of the software development process:

- analysis
- coding
- testing
- training
- deployment
- maintenance

**Application Design**

With extensive experience in court operations, this team participates in the development of all new applications and features. Analysts regularly engage with users, development staff and management while providing day-to-day-support for each application.

**Network**

The AOPC/IT staff has designed and supports the UJS telecommunications network. This team is also responsible for procuring circuits, managing network security and configuring all network-related equipment.

The UJS network provides connectivity to all levels of courts in Pennsylvania.

**Operations Teams**

These teams are responsible for designing, maintaining and supporting the technology infrastructure used to deliver all AOPC/IT services and applications to judiciary personnel and the public.
Enterprise User Services

AOPC/IT staff directly support all Supreme Court jurists and staff, several boards and committees and all AOPC staff in the use of technology.

This team is responsible for designing, maintaining and supporting a wide variety of user services including installation, relocation and support services for computers and related equipment including video conferencing.

Network Operations Center (NOC) – provides 24/7 monitoring, support and notification for over 600 court locations, 2 data centers and all AOPC-provided services.

End User Support

The User Interface group is comprised of help desks, system trainers, and documentation writers who provide support and training to thousands of court users at all levels of courts including Supreme, Superior, Commonwealth, Common Pleas, and Magisterial District courts. Additionally, the teams provide help and support to the general public, court appointed guardians, and attorneys. The following statistics are based on calendar 2019.

Annual workshops were presented for court staff and similar presentations for district judges at continuing education and regional meetings.
• 742 magisterial district judge staff attended workshops at 29 locations throughout the Commonwealth.
• 650 magisterial district judges and perspectives attended presentation at the minor judiciary continuing education school.
• 25 county court auditors received system updates from the system trainers.

ERMS/PACFile training and support is offered to counties who implement Electronic Records Management Systems (ERMS), and PACFile, eFiling of documents in the common pleas and appellate courts.
• 20 counties received customized demonstrations, training, and support for criminal, delinquency, and dependency rollouts.
• 5 counties went live and received support on eFiling original record into the appellate courts.

Extensive training documentation including workbooks, training manuals, and videos designed by course and topic are used during training sessions.
• Documents, resources, context-sensitive help and bulletins are published and inventoried in each case management system.
• The UJS Web Portal used by public users, court assigned guardians, and attorneys have self-guided help, video tutorials, and many reference documents available for assistance.
Rules of Court and Legislative Impacts

From 2016 through 2019, AOPC/IT made numerous system updates to address changes to procedural rules of court from the Appellate, Criminal, Juvenile, Orphans’ and Minor Courts rules committees.

Each year, AOPC/IT reviews recommendations made by the Supreme Court’s procedural rules committees or boards; and pending legislation for impacts to the AOPC-supported systems. Implementing these items are considered mandates and the top priority for the department.

ACTS

These mandates required significant updates to the case management systems:
• Safe Harbor for Sexually Exploited Children (Act 130 of 2019)
• Overhaul of Truancy Statutes (Act 138 of 2016)
• Restitution Disbursement Schedule (Act 145 of 2018)
• DNA Expungement (Act 147 of 2018)
• Lottery Intercept (Act 40 and 44 of 2017)
• Order of Limited Access (Act 5 of 2016)
• Clean Slate (Act 56 of 2018)
• PFA/Firearm Relinquishment (Act 79 of 2018)
• Cameras in Work Zones (Act 86 of 2018)
• Child Protection (Act 92 of 2018)
• Tax Refund Intercept (Act 93 of 2016)
• Removal of License Suspension for Drug Convictions (Act 95 of 2018)

Recent Recognition

AOPC/IT staff have won awards and received accolades over the past decade and the department is seen as a leader in building technical solutions to automate and facilitate efficient court business processes.

Received the annual National Association for Court Management (NACM) Cross-Boundary Partnerships Award for the Clean Slate initiative in 2020.

Received the annual NACM Court Process Innovation Award for the Language Access Data Collection system in 2020.

Received the annual National Association for Court Management (NACM) Cross-Boundary Partnerships Award for the Guardianship Tracking System in 2019.

Received the CITOC Emerging Technologies Award in the Court Technology category in 2019 for the PDF/A electronic document archival solution.

Awarded the Computerworld Honors Laureate in the Government area for the Case Study for CPCMS.
UJS Web Portal

- 74,000 attorneys register online annually.
- 25 million web page hits per day.
- 11 million docket sheets generated per month on the UJS web portal.
- 193,000 secure login UJS web portal users.

End User Support

- Over 100,000 calls recorded each year in our help desk system.
- The Network Operations Center managed over 60,000 tickets last year ranging from user-reported issues to tickets generated due to monitoring events.

- 83% business related questions/issues
- 10% meta data and data fixes system issues
- 4% enhancements and software changes
- 1% system issues

Court Applications

- Pennsylvania courts collected over $480 million in fees, fines, costs and restitution in 2019, including a record $145 million paid online through PAePay®, more than an 11% increase over the previous year.

- Over 15,000 e-filings through PACFile each month.

- More than 1.1 million traffic and criminal e-filings are completed every year through the Data Hub.

- 76 million case life cycle events sent annually to justice partners and state agencies.

- 1,000 interface feeds exist with more than 300 agencies or departments through the Data Hub. Each month, 90 data exchanges utilized by 635 state and local agencies are completed.

PAePay®

PACFile®

Pennsylvania Courts

Court Applications

Data Hub

Statewide System Statistics

Provide 24 X 7 network/status monitoring of 60,000 interfaces, across 3,400 devices, in 630 court locations statewide.

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STATEWIDE SYSTEM STATISTICS

Trainings

Averaging over 800 unique video conferences per year, as well as averaging over 900 WebEx online meetings/training sessions per year.

- 287 court administrators, judges and court staff attended basic training sessions.
- 362 court staff and judges participated in webinar sessions on 14 topics.
- 313 professional/lay guardians attended Guardianship Tracking System (GTS) training.

Case Management

Over 2.6 million cases are docketed annually.

- 27 million forms and reports are generated from the statewide case management systems annually.
- 41,000 interpreter encounters are recorded in our Language Access Data Collection (LADC) system annually.
- Over 3.5 million cases processed in our case management systems annually.

50 million electronic documents stored in ERMS.

14 billion rows of data stored for all systems.

22,000 users statewide for all case management systems.

Over 3.5 million cases processed in our case management systems annually.
1992 – Magisterial District Judge Case Management System (MDJS)

1999 – Appellate Courts Case Management System (PACMS)

2006 – Common Pleas Criminal Case Management System (CPCMS)

2001 – UJS Web Portal in 2001 (including online appellate docket sheets)

2004 – Data Hub that sends case life cycle messages from case management systems through the PA Justice Network to many justice partners

2007 – Adopted an enterprise approach for building statewide systems and services - enabling more efficient staff usage and reusability of already developed software objects.

2007 – Created the Public Access team to manage data requests

2010 – Dependency Module to the CPCMS

2010 – PAePay

2012 – Rolled out Electronic Documents and eFiling (PACFile) to the Appellate Courts

2013 – Implemented an online payment option in PAePay for bail cases

2015 – Developed and released the PAeDocket Mobile App

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2016 – Rolled out Electronic Documents and eFiling (PACFile) to Common Pleas Courts

2018 – Developed Language Access Data Collection (LADC) Dashboards

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2018 – Implemented changes to the UJS Public Access Policy to safeguard sensitive data

2018 – Completed and rolled out the Guardianship Tracking System (GTS)

2019 – Developed PDF/A electronic document archival solution

2019 – Launched Clean Slate automatic record-sealing process

1999 – Appellate Courts Case Management System (PACMS)