



Personnel Administration and Security Solution for Federal Agencies

On-boarding, Credentialing, and Investigations with Business Process Management Software

Government agencies face a daunting challenge when it comes to ensuring the security of their facilities and information technology systems. The distribution of essential user and investigation data across multiple system and agency boundaries turns security processing into a tangled web of islands of automation connected by email, paper, spreadsheets, and phone calls. The significant manual effort required to complete security processing in this fragmented, disconnected environment creates serious issues.

This paper examines those issues, and describes how the Appian Personnel Administration and Security Solution (PASS) creates a unified view of people and investigations in order to improve the efficiency and effectiveness of personnel security administration.

THE PERSONNEL ADMINISTRATION CHALLENGE

Government agencies face a daunting challenge when it comes to ensuring the security of their facilities and information technology systems. Agencies are not closed islands; fulfilling their mission requires integrating routine operations with employees of branches of government, contractors, and constituents. Rapid advances in security technology in areas like biometrics, encryption, and smart cards provide powerful new tools but have also led to a proliferation of new systems and software to integrate.

The distribution of essential user and investigation data across multiple system and agency boundaries turns security processing into a tangled web of islands of automation connected by email, paper, spreadsheets, and phone calls. Small staffs are easily overwhelmed by peak workloads, such as when large numbers of employees come up for reinvestigation at the same time, or a major new project requires credentialing large groups of employees.

The significant manual effort required to complete security related tasks in this fragmented, disconnected, and ad hoc environment results in a number of serious issues. The security process itself is compromised both by the distraction of searching for data in multiple systems and by data quality problems arising from out-of-sync updates across systems. Redundant data entry results in an inefficient use of staff time and increases the likelihood of errors. Fragmented systems increase the labor needed to generate management reports, requiring manual effort to aggregate, sort, and filter data from multiple sources.

Security offices and human resources departments operating in this environment are frequently unable to badge and credential new employees on day one. A new employee denied unescorted access to facilities and IT systems becomes a liability rather than a contributor. It makes for a demoralizing start to an otherwise promising new career, one that can even contribute to excessive staff turnover.

Security processes often require access to six or more systems to complete a task. A typical investigation from start to finish will require employee or contractor profile data, work locations, contact information, investigation information, and much more. Along the way, the process will often require interacting with a procurement system, a user directory, an email and calendaring server like Microsoft Exchange, a human resources system like PeopleSoft, an IT Service Request system like Remedy, a data warehouse, and external systems like the Office of Personnel Management (OPM) Personnel Investigations Processing System (PIPS), and, for civilian agencies, GSA's USAccess solution for issuing HSPD-12 compliant credentials.

Every agency or even installation may implement its own unique policies, procedures, and databases to the security process. The Department of Defense, for example, has its own unique processes for issuing its HSPD-12 credential, the Common Access Card (CAC) and its own unique systems, most importantly the Defense Enrollment Eligibility Reporting System, or DEERS. An effective security case management solution must easily integrate with all of these systems and be rapidly configured without coding for the unique demands of both the civilian and national security establishments.

Employee and contractor off-boarding is an equally important challenge that many agencies report not being able to perform efficiently. When the on-boarding and reinvestigation workload becomes excessive, off-boarding work is the first to be delayed. Many government human resource systems do not allow for the storage of contractor records. In these cases, contracting officers may have to personally initiate the off-

boarding process and validate completion themselves. These manual processes and inadequate integration with IT systems commonly result in a failure to revoke facility and system access for off-boarded contractors even six months or more after termination. This poses a potentially critical security threat since former staff may have motive and, when not properly off-boarded, opportunity to do harm.

PROCESS SOFTWARE CAN ADDRESS THIS CHALLENGE

The Appian Personnel Administration and Security Solution (PASS) is a software system that creates a unified view of people and investigations in order to improve the efficiency and effectiveness of personnel security administration. Personnel administration and security software integrates data and work previously fragmented across many different systems into a transparent and automated process. It provides role-based, personalized access to security professionals, personnel administrators, program managers, senior executives, candidates, employees, contractors, and more.

Appian PASS combines the essential processes and reporting dashboards for personnel administration with the power and flexibility of the underlying Appian Business Process Management (BPM) Suite. Appian provides a complete security administration solution for on-boarding, personnel maintenance, and off-boarding. The Appian Solution includes a web-based portal, dynamic security case management, and personalized, real-time reporting of workload and budget. Best of all, because the solution is built with Appian BPM, it is deployable in the cloud or on-premise, available natively on all leading mobile devices, and uses a familiar, social interface.

Solution Highlights

Appian PASS includes dozens of pre-built processes and dashboards for personnel administration. These processes include:

- Recruiting and background investigation requests
- On-boarding tasks
- IT access requests
- Background investigations
- Adjudication processing
- Police report requests
- Smart ID HSPD-12 processing
- Special agreement checks (SAC)
- National Security Clearance issuance
- Lost credential replacement processing
- Off-boarding

Figure 1: On-boarding with Appian

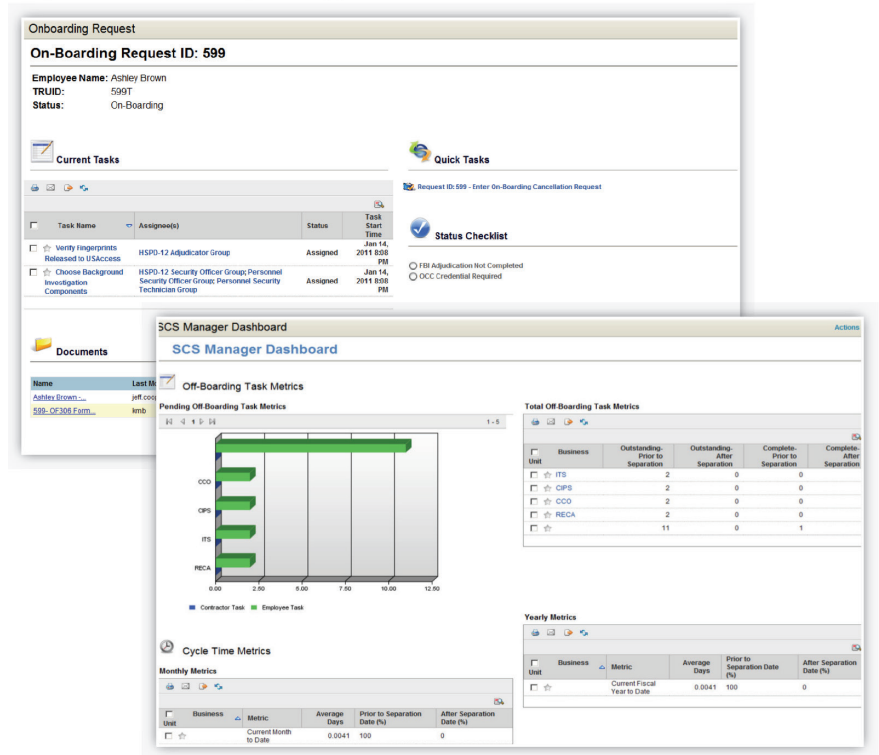


Figure 2: Personalized Dashboard with Real-Time Reports

Appian's comprehensive functionality enables the day one badging of new hires to improve utilization and efficiency. Streamlined personnel management ensures an increased focus on security-related work and effective implementation of security standards and practices. A unified security process enables better budgeting and fiscal management. Estimating and planning for investigation and reinvestigation costs can finally be done accurately and efficiently with Appian's data integration and built-in real-time reporting. Pre-built dashboards can be personalized for the unique reporting needs of each agency and executive.

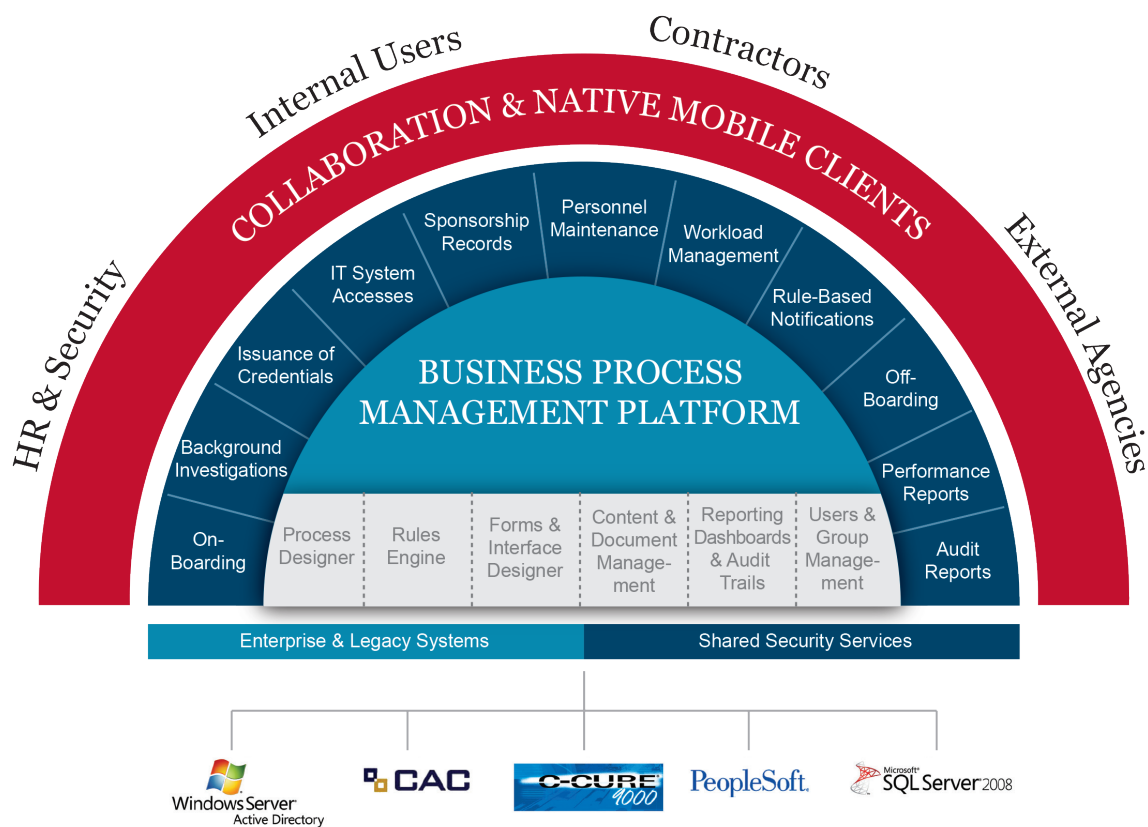
Appian takes the mystery out of tracking employee and contractor status, investigations, security cycle times, and cost data. Managing security costs across programs, projects, and departments is automated and reported — in real-time, with no manual effort. Appian includes 18 out-of-the-box reporting dashboards for status tracking, audit, budget, and more. These can be extended at any time with Appian's built-in analytics technology with no additional coding. All data entered into the system is available for real-time reporting purposes.

Appian PASS solves your most challenging integration tasks, eliminating the mistakes and delays inherent in manual processes. For example, Appian includes an out-of-the-box interface to user profile information for C*Cure, a common photo ID badge system. Appian provides profile data for the security badge generated by C*Cure, and retrieves the issued badge data after it is created. Appian PASS also utilizes GSA's USAccess system to locate valid SmartID Federal Agency Smart Credential Numbers (FASCN), and then appends them to the C*Cure user profile to complete the badging process.

OPM offers electronic agency delivery, an interface for transmitting results from completed background investigations directly to federal agencies. OPM creates a number of files packaged together called a distributed investigative file (DIF). The problem is, few agencies are equipped to receive DIF files electronically and agency systems are not equipped to parse or process them. The result is manual processing, rekeying, delays, and data quality issues. Appian PASS supports the on-boarding process by automatically importing DIF files, and can easily be configured to integrate this data into an agency's internal human resources systems. When bulk reinvestigations occur, especially in larger departments and agencies, the savings in time and resources become dramatic.

Appian PASS provides out-of-the-box forms for capturing the on-boarding requirements for a candidate. Different candidates and roles determine the unique processing requirements and workflow based on business rules. Multiple levels of clearance status are automatically assigned and tracked by the system for each employee, contractor, and activity.

Using business rules to schedule reminders and notifications of investigation deadlines or case management milestones instead of requiring manual updates can save even a small agency hundreds of hours per year. More importantly, business rule automation improves milestones, keeps administrative tasks on-track, and helps ensure that deadlines are met so that new employees can be effectively credentialed and authenticated on their first day of work. While every organization has them, these types of business rules change frequently and vary widely. Implementing a security case management system built with BPM ensures that this flexibility is built-in, enabling change without any coding or customization.



BUSINESS BENEFITS

With new employees and contractors, issuing or revoking a badge is just one part of the on-boarding and off-boarding process supported by Appian. By providing a solution that centralizes access to both contractor and government records, Appian PASS can automate or eliminate many of today's manual processes. Appian PASS can integrate user data with an external IT system to open trouble tickets and provide access request information for new employees and contractors. Appian can also deliver suitability decisions back to IT to facilitate fulfillment of system access requests, as well as deliver requests to revoke access to IT systems for off-boarding personnel. An out-of-the-box connection to Remedy, a common IT Service Request Management System, is included with Appian. Other systems can be easily integrated as well with Appian's library of out-of-the-box Smart Service Connectors.

Appian PASS facilitates follow-through and process completion with real-time progress reporting. Scheduled, monthly audit reports match contractor associations to task orders and contracting officer technical representatives. This enables the reconciliation of active vs. inactive contractors, providing continuous monitoring of the personnel granted secure access. The federal government's Office of the Comptroller of the Currency (OCC) selected Appian's PASS Solution to automate and improve on-boarding, off-boarding and security processing for all OCC employees and contractors. The OCC is the agency of the U.S.

Department of the Treasury that oversees the execution of laws relating to all national banks, and establishes rules and regulations governing the operations of those banks. Appian PASS replaces the OCC's collection of existing personnel security systems and centralizes contractor and employee data management. With Appian, the OCC can not only improve security, it can enhance its safeguards for personally identifiable information, improve reporting, eliminate redundant data entry, and document compliance for security and financial audits.

The return on investment from Appian PASS is substantial, quantifiable, and fast. Appian vastly improves the speed and efficiency of all security processing and maintenance activities, focuses staff on security-related tasks instead of paperwork, improves security by verifying off-boarding and access revocations, and provides a comprehensive view of security costs and progress across all agency and contractor activities and programs. Appian PASS is uniquely configurable for the requirements of both civilian agencies and the Department of the Defense. The result is better security and documented compliance with security standards for all federal agencies — at a greatly reduced cost.

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Appian provides a leading low-code software development platform that enables organizations to rapidly develop powerful and unique applications. The applications created on Appian's platform help companies drive digital transformation and competitive differentiation.

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