



SEMARC

Search Engine for Multi Agency
Reportable Conduct

Award Category: Cross-Boundary Collaboration

State: Texas

Agencies: Texas Department of Information Resources, Texas Health and Human Services Commission, Texas Department of Family and Protective Services, Texas Education Agency, and the Texas Justice Juvenile Department

Project Title: Connecting the Dots to Protect the Most Vulnerable: Search Engine for Multi Agency Reportable Conduct (SEMARC)

Project Beginning Date: May 2024

Project End Date: May 2025

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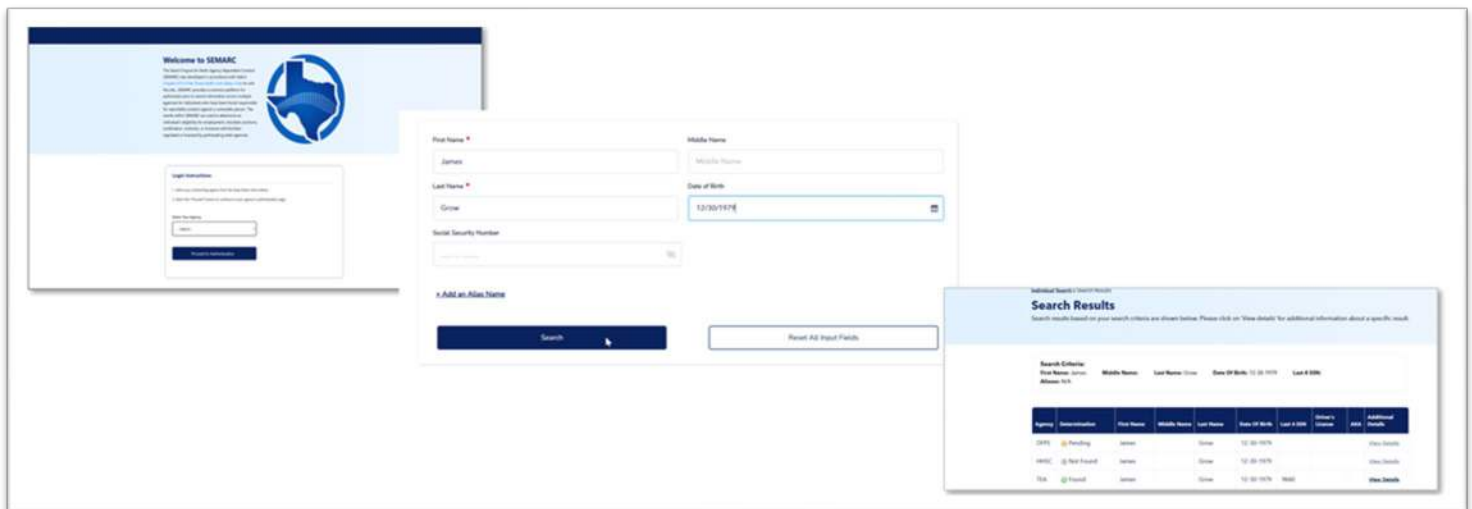
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EXECUTIVE SUMMARY

In 2023, the Texas Legislature passed Senate Bill 1849 to reduce the risk of harm to vulnerable populations in schools, child-care and juvenile justice facilities, and long-term care facilities by creating a search engine connecting state agency databases that include reportable misconduct. The Legislature directed the Texas Department of Information Resources (DIR) to develop a centralized technology platform that searches data registries within state agencies. This searchable platform contains the list of individuals who have been determined to have engaged in abuse, neglect, exploitation, or misconduct within school, long-term care, childcare, or juvenile justice settings. The additional agencies included in this initial effort include the Texas Health and Human Services Commission (HHSC), Texas Department of Family and Protective Services (DFPS), Texas Education Agency (TEA), and the Texas Justice Juvenile Department (TJJD).

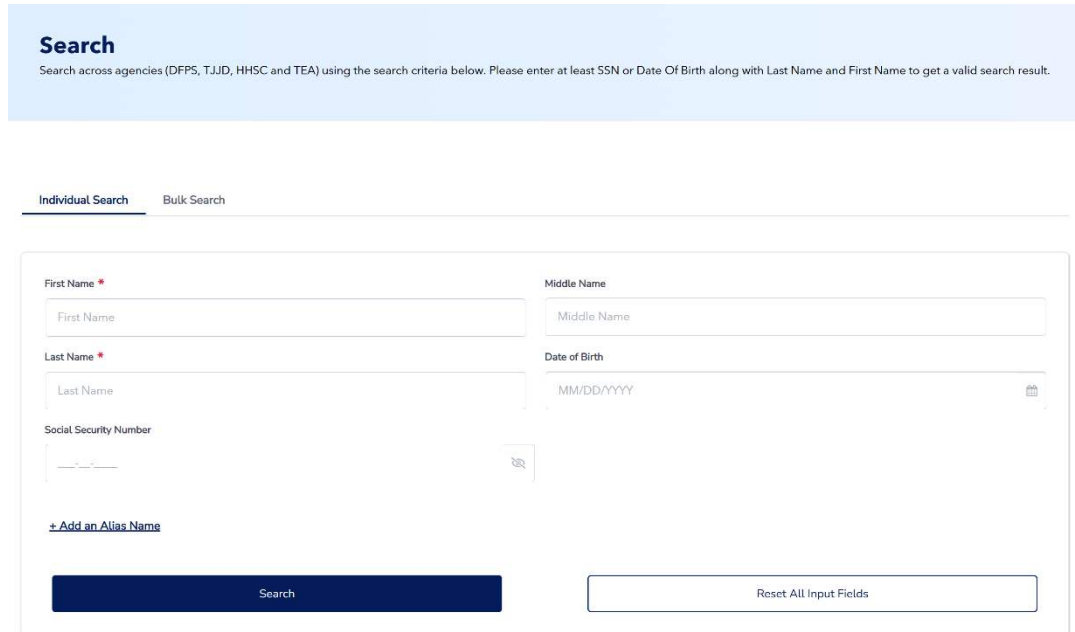
This platform, now known as the Search Engine Multi-Agency Reportable Conduct Portal (or SEMARC), provides results from multi-agency searches on individuals having reportable misconduct. The vision for SEMARC is to provide an enhanced search engine that allows multiple agencies to search for individuals on a single platform.

Launched in May 2025, SEMARC addresses the gap in information sharing across state agency platforms, ensuring that workers who committed reportable conduct within school, long-term care, childcare, or juvenile justice settings cannot gain employment in another setting. SEMARC is a monumental step for Texas to share findings of abuse and neglect and preemptively protect some of the most vulnerable populations in the state.



ISSUE

Although some data sharing agreements have been in place between Texas state agencies, there has been no centralized source of data to ensure that providers who serve vulnerable populations do not hire individuals with a demonstrated history of harming children or vulnerable adults. SEMARC was created to address the lack of integration and communication between various agency registries that track individuals who have been found responsible for reportable conduct against a vulnerable person. Each agency (DFPS, TJJJ, TEA and HHSC) maintains its own isolated registry, which makes it difficult to perform comprehensive background checks across multiple agencies. As part of this mission, DIR leveraged Technology Solution Services (TSS), part of its Shared Technology Services program, to conduct an assessment and create a resulting plan to develop a multi-agency search engine.



Before SEMARC, individual agency portal users could only search for their own agency registries for individuals with potential misconduct—with no access to the information across other agencies. Consequently, individuals with reported misconduct could still gain access to employment at other agencies. To address this challenge, SEMARC was developed to provide:

- A single accessible site for multiple agencies.
- An expanded user experience allowing users to access a single application from their own identity portals.
- A modern search portal with capabilities to perform individual and bulk searches and advanced searches using aliases and middle names.
- Search results that include reportable misconduct information from multiple agencies

WHAT TYPE OF DATA IS INCLUDED IN SEMARC?

SEMARC is designed to integrate with the following registries.

<p>Texas Department of Family and Protective Services</p>	<p>Subset of Information Management Protecting Adults and Children in Texas (IMPACT) System - Includes information regarding sustained perpetrators of child abuse, neglect, or exploitation in a regulated or employment-based setting.</p>
<p>Texas Health and Human Services Commission</p>	<p>Employee Misconduct Registry (EMR) - Personnel who have committed acts of abuse, neglect, or exploitation against individuals in</p>

	long term care settings regulated by HHSC.
Texas Education Agency	Do Not Hire Registry (DNHR) - Individuals who are not eligible to be hired in a Texas public school based on findings of child abuse, solicitation of an improper relationship with a student, or the conviction of certain crimes involving minors.
Texas Juvenile Justice Department	Misconduct Registry - People who had certifications revoked or who have been found to be ineligible for certification based on findings of abuse, neglect, exploitation, or certain other misconduct.

HOW IT'S DIFFERENT

The new multi-agency portal SEMARC introduces enhanced capabilities that surpass those currently available across Texas agency portals. SEMARC serves as a centralized platform for authorized agency users to conduct comprehensive searches, aiding in the determination of eligibility for employment, volunteer positions, certification, contracts, or licensure with facilities regulated by these agencies.

Users can perform a range of searches, from small- to large-scale system-to-system searches, enabling agencies to directly call the SEMARC application programming interface (API) for search results. Additionally, users can view these results within the portal, consolidating information from all involved agencies.

Search results are organized by agency and determination status. This structured results format allows users to easily digest and interpret the returned information. Furthermore, SEMARC offers robust reporting capabilities, enabling users to view, download, and save reports as needed.

HOW IT'S UNIVERSAL

The rise in technology access and innovation requires state agencies to be responsive in quicker and more efficient manners to meet the demands of their constituents. This is a universal challenge and a priority for state agencies nationwide, and the project is in alignment with NASCIO CIO priorities of Legacy Modernization and Data Management. SEMARC's search portal exemplifies the implementation of a custom technology solution using the Amazon Web Services (AWS) Cloud Platform to enhance transparency and accountability within state agencies.

The SEMARC solution is designed to be versatile, enabling the exchange of diverse information between agencies via both real-time and bulk APIs. These new capabilities confirm that state agencies can deliver timely and accurate information, thereby improving their service to the public.

IMPLEMENTATION

THE ROADMAP

Under DIR's Shared Technology Services program, Texas state agencies (DFPS, HHSC, TEA, and TJJD) have partnered with the Technology Solution Services (TSS) team to develop a multi-agency search portal and incorporate new capabilities. Over the course of a year, the team has built a new portal following an agile development approach.

The TSS team has collaborated closely with DFPS, HHSC, TEA, and TJJD to design and finalize the user interface and prioritize features during sprint planning sessions. This iterative process ensured that the development aligned with each agency's requirements and expectations.

By the end of the project, SEMARC has a robust, user-friendly, multi-agency search portal that is scalable, incorporates the latest technological advancements, and enhances customer satisfaction.

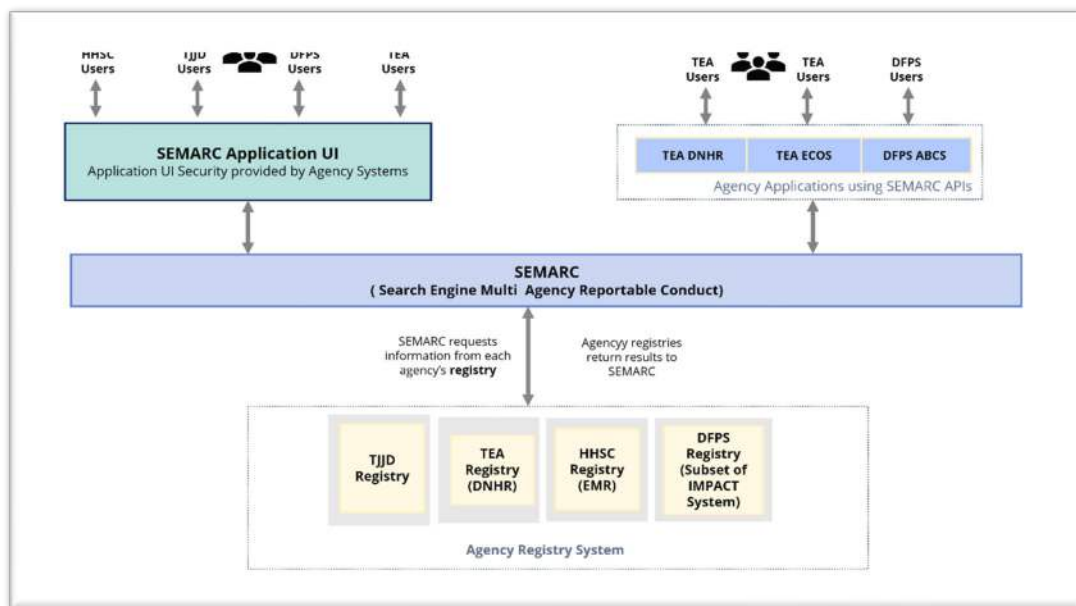
INVOLVED STAKEHOLDERS

The active participation of key stakeholders from all agencies was instrumental throughout the project, ensuring a comprehensive solution. Close collaboration between the TSS team and the state agency business and IT teams was essential in validating key items and features being developed. This collaborative approach validated that the diverse needs and requirements of each agency were addressed, resulting in a well-rounded and effective solution. The collaboration was also crucial in identifying areas for improvement and implementing key features related to search capabilities, navigation, and design. The insights gained from agency users helped refine the functionalities and user interface, making the platform more intuitive and user friendly.

SOLUTION

The TSS team optimized the user experience through enhanced search functionality, modern visual design, and an intuitive user interface. The modernization of the multi-agency search portal was achieved over a span of one year, focusing on three primary areas: modern and scalable architecture, interactive application solution, and robust security measures. The proposed solution involved developing SEMARC, which integrated the misconduct registries of DFPS, TJJJ, TEA, and HHSC. The solution includes:

- A single platform that enables searches across all participating agencies existing registries.
- Integration with existing agency user authentication and authorization systems using industry standard authentication protocols.
- Building registry APIs for data access from agency registries and providing a SEMARC API for agencies to retrieve consolidated search results.
- Creating a user-friendly and accessible interface that supports both individual and bulk searches.
- Implementing robust security measures (including encryption of data at rest and data in transit), rate limiting, and auditing, to confirm data protection and compliance.



Modern and Scalable Architecture: To provide an effective and efficient search experience, API integration was utilized to provide dynamic data searches. The backend, powered by Spring Boot (Java), verifies a scalable and secure application infrastructure. Lastly, a React-based framework was utilized—which accelerated UI development—offering a responsive and accessible user experience.

Interactive Application Solution: This customized application solution transformed search functionality. The multi-agency search feature enables users to conduct a single search across all agencies, delivering comprehensive results. The search results provide comprehensive data, including determination status, date of misconduct, and type of misconduct, offering valuable insights that assist agencies in making well-informed decisions.

Robust Security Measures: The SEMARC platform is designed and developed with a strong emphasis on security. Data at rest and in transit are protected using industry-standard encryption algorithms, ensuring robust data security. Access to SEMARC is safeguarded through a federated identity model, which integrates seamlessly with each agency's Identity Providers (IdPs) for user authentication and authorization. This integration employs industry-standard identity federation protocols, including Security Assertion Markup Language (SAML) and OpenID Connect (OIDC), to maintain secure and efficient access control. Furthermore, SEMARC's security is bolstered by leveraging DIR's Data Center Services network security standards and services. These include the use of web application firewalls, traditional firewalls, and network segmentation, all of which work together to enhance the overall network security and protect against potential threats.

HOW IS SEMARC USED?

Authorized users of SEMARC can access a common platform to conduct a search function encompassing data from four participating agencies. This integrated system provides a comprehensive view, enabling informed decisions regarding individuals under investigation. Each agency leverages the collective data to make more accurate assessments.

<p>Texas Department of Family and Protective Services</p>	<p>DFPS provides a subset of Information Management Protecting Adults and Children in Texas (IMPACT) System providing information on sustained perpetrators of child abuse, neglect, or exploitation in a regulated or employment-based setting.</p>
<p>Texas Health and Human Services</p>	<p>Regulated long term care providers and the centralized background check unit utilizes SEMARC to:</p> <ul style="list-style-type: none"> • Obtain critical background check information from other state agencies. • Examine more of a subject's history to determine if they are a risk to the health and safety of children receiving services from HHSC regulated childcare operations, including serving as a foster or adoptive parent. • Obtain information from the Employee Misconduct Registry (EMR), which is managed by the Regulatory Enforcement Division and will be pulled into the search engine established by SB 1849. Long term care providers will be required to search SEMARC prior to hiring employees.
<p>Texas Education Agency</p>	<p>TEA and the State Board for Educator Certification use SEMARC as part of the existing background check process to determine a person's aptitude for teaching certification. If an applicant for employment at a school district or charter school is found in SEMARC, TEA will investigate to determine if the person should be denied certification or placed on the TEA Do Not Hire Registry (DNHR).</p>
<p>Texas Juvenile Justice Department</p>	<p>TJJD uses SEMARC to review applicants for employment, volunteering, and contracting with TJJD. TJJD requires the juvenile probation departments and facilities regulated by TJJD to use the search engine to review applicants for employment, volunteering, and contracting with the probation department or facility. TJJD provides information on people who had certifications revoked or who have been found ineligible for certification based on findings of abuse, neglect, exploitation, or certain other misconduct.</p>

IMPACT

IMPACT / KEY BENEFITS:

The implementation of SEMARC is anticipated to significantly enhance efficiency by providing a consolidated platform for multi-agency searches, thereby streamlining the background check process for approximately 1,000+ users. This improvement is expected to reduce the risk of hiring or licensing individuals with a history of misconduct while alleviating the workload in human resources departments. It will enhance security by ensuring secure access to sensitive data and will provide comprehensive information from multiple agencies, aiding in more informed decisions by the searching agency. The user experience has been significantly improved with a responsive, accessible interface, and the system will comply with legal mandates. Overall, SEMARC aims to create a more integrated, secure, and user-friendly system for conducting background checks across multiple Texas agencies.

The modern and scalable architecture, interactive application solution and advanced capabilities have led to the following benefits:

- ✓ Expanded accessibility for four agencies to access each other's data.
- ✓ Easily accessible information with transparency and trust between agencies.
- ✓ System-to-system integration allowing agencies to directly call the SEMARC API for results.
- ✓ The capability to adapt to future system needs (such as adding agencies) without major redevelopment.
- ✓ Customized reporting capabilities with exporting functionalities.

This project establishes a standardized template for agency-based search, which can be adopted by other agencies in the future.

HOW WE KNOW

The individual agency search portals limited users to reportable data solely within their respective agencies, without indicating if individuals were listed in other agency registries. The SEMARC Search portal transforms this process by offering a unified platform for inter-agency searches, significantly improving the user experience and visual interface. SEMARC provides:

- **Enhanced Safety and Protection:** Identify and protect vulnerable populations (children, disabled, elderly) by identifying individuals with histories of abuse, neglect, exploitation, or misconduct, preventing them from gaining employment or licensure in sensitive roles.
- **Improved Interagency Collaboration:** Facilitates efficient information sharing and coordination among the 4 state agencies, enhancing overall system effectiveness.
- **Confidentiality and Data Security:** Protects sensitive information from public disclosure, maintaining privacy and data integrity.
- **Preventive Measures:** Allows for periodic monitoring to be completed to prevent individuals with new reportable conduct from continuing in sensitive roles.

WHAT'S NEXT

SEMARC has been implemented in alignment with Senate Bill 1849's recommendations. The portal consolidates the search functionalities, is integrated with HHSC, DFPS, TJJJ, and TEA, and provides comprehensive information access. Future enhancements of the portal include:

- Enhancement based on user feedback.
- Scalable development to accommodate future technological advancements and capabilities.
- Full integration with all agency registries.
- Agencies to conduct training for agency staff.
- Potential expansion to other agencies (such as the Texas Comptroller of Public Accounts) to gain access to reportable conduct information.