Administrative Office of the Courts
Job Description

Job Title:	AOC Enterprise Solution Architect	Grade:	IST10
Division:	Court Information Systems	**Revision Date:**	2026-10-8

The Administrative Office of the Courts (AOC) is an agency within the judicial branch of government that works to support the state courts on behalf of the Arkansas Supreme Court. The Court Information Systems Division (CIS) is responsible for providing technological support to the state's courts, making court information available to the public, and developing and implementing online, court-related services. CIS is a team-based organization using the Disciplined Agile framework. You may view our Statement of Core Values at

https://www.arcourts.gov/modernization/statement-core-values.

This position requires authorization to work in the US without employer supported work Visa.

POSITION SUMMARY:

The AOC Enterprise Solution Architect provides technical leadership across the Solution Architects of three CIS development teams and is accountable for keeping the software those teams produce consistent, maintainable, and aligned with enterprise standards. The Enterprise Solution Architect defines and maintains shared development patterns, reference architectures, and coding standards; guides the Solution Architects in applying them; and reviews team designs for conformance, integration, and testability. The position combines hands-on knowledge of application development, data engineering and SQL, and quality engineering (unit, integration, and end-to-end testing) with the ability to build consensus among technical peers. The court management program is a cloud-based system.

JOB DUTIES:

Architecture and pattern governance

- Coordinate with the Enterprise Architecture Owners and the Solution Architects of three development teams to establish and maintain common development patterns, reference architectures, and coding standards so that code is generally uniform across teams.
- Define, document, and publish approved patterns and reusable components for APIs, data access, authentication, logging, error handling, configuration, and cloud deployment.
- Chair or facilitate a recurring architecture review forum; review team designs and significant changes for conformance to standards, and identify, track, and resolve exceptions.
- Evaluate and recommend platforms, frameworks, libraries, and integration approaches; maintain the technology roadmap in partnership with the Platform Engineering team.
- Identify duplicated functionality and design drift between teams and drive convergence on shared solutions.
- Ensure solutions meet security, compliance, and data governance requirements in partnership with the IT Security Architect.
- Mentor Solution Architects and developers on design principles, patterns, and best practices.

Data engineering and database

- Coordinate with Data Engineers to establish standards for relational database design, naming, schema change management, and data access from application code.

- Review database designs, SQL, and migrations for correctness, performance, and maintainability; write, debug, and optimize SQL queries and stored logic as needed.
- Guide teams on data integration, data quality, and data movement patterns, working with the Data Engineers on the Platform Engineering team.

Quality engineering

- Define architectural expectations for testability, including unit testing, integration testing, and end-to-end testing, and promote test-driven development across teams.
- Work with the Quality Engineers and CI/CD Architect to ensure automated tests, including API tests, run as gates in the CI/CD pipeline.
- Participate in code reviews to evaluate code quality, adherence to patterns, and test coverage.

Delivery and collaboration

- Work on an Agile team that employs the Disciplined Agile methodology; participate in quarterly planning sessions and represent architecture concerns in planning.
- Work with the Enterprise Architecture Owners, build teams, product owners, Solution Owners, and stakeholders to understand requirements and acceptance criteria and translate them into consistent solution designs.
- Design, code, debug, and test application software and prototypes as needed to validate patterns and assist teams.
- Troubleshoot complex production and user-reported issues that cross team or component boundaries.
- Document architecture decisions, standards, and procedures; maintain architecture documentation.
- Stay current with industry trends and best practices in software architecture, data engineering, and quality engineering.
- Other duties as assigned.

QUALIFICATIONS:

Education

A Bachelor of Science degree in Computer Science or a related field.

Experience

Eight years of relevant experience, including at least five years in an application development or data engineering role and at least two years in a solution architect, technical lead, or similar role that set technical direction for multiple developers or teams.

KNOWLEDGE, SKILLS, ABILITIES:

- Ability to define, document, communicate, and enforce development patterns and standards across multiple teams, and to build consensus among technical peers.
- Knowledge of and experience developing with the C# programming language, .NET Core, and Entity Framework Core.
- Knowledge of React, Next JS, Material UI, JavaScript, CSS, and HTML.
- Ability to design and develop RESTful web APIs.
- Knowledge of data engineering concepts, including data modeling, ETL/ELT, and data quality.

- Knowledge of relational database systems such as PostgreSQL, and the integration of those databases into application software.
- Ability to create, debug, and optimize SQL queries, and understanding of basic database operations including indexing, transactions, backup and recovery, and schema migration.
- Knowledge of quality engineering processes, including unit testing, integration testing, and end-to-end testing.
- Ability to design and implement automated testing, including test-driven development, and knowledge of API testing tools such as Postman.
- Familiarity with continuous integration/continuous deployment (CI/CD) concepts and tools.
- Knowledge of and experience working with version control systems such as GitLab.
- Knowledge of and experience working with the Linux operating system and containers as a system platform.
- Knowledge of or experience developing solutions in the AWS cloud; knowledge of AWS services, including AWS Lambda.
- Knowledge of authentication and authorization concepts.
- Knowledge of application development in Linux and Windows server operating system environments.
- Strong analytical and problem-solving skills, including the ability to make sound decisions under uncertainty and weigh long-term implications of architectural choices.
- Strong interpersonal skills, with the ability to lead through influence.
- Excellent oral and written communication skills, including the ability to communicate effectively with court and non-court, legal and non-legal, technical, and non-technical persons.
- Ability to effectively multitask, work as part of a team, and work well under pressure and meet deadlines.
- Ability to learn new technologies and maintain technical currency.

PREFERRED:

- Experience with court, government, or other regulated public-sector systems.
- Architecture or cloud certification (for example AWS Solutions Architect).

Last Updated By:	Cecil Davis