UADA Policy 940.1
Division Software:
Software Development Life Cycle (SDLC) Policy

Purpose

The purpose of the Systems Development Life Cycle (SDLC) Policy is to describe the requirements for developing and/or implementing new software and systems at the University of Arkansas System, Division of Agriculture (UADA) and to ensure that all development work is compliant as it relates to all regulatory, statutory, federal, and /or state guidelines.

Scope

This policy applies to all members of the UADA workforce that perform any type of software or systems development work under the guidance of UADA:

- Employees (including faculty and staff)
- Volunteers
- Students and residents
- Extra help workers
- Contingent workers

In the event a UADA Department or Unit chooses to seek an exemption for reasons such as the inability to meet specific points, tasks, or subtasks within the SDLC Policy or Standards, an SDLC Review Committee, comprised of representatives from across UADA as designated by the Chief Information Officer, will convene in order to assess the specific merits of the exemption request(s) while still adhering to the main principles behind the SDLC Policy and Standards.

Policy

UADA Information Technology (IT), is responsible for developing, maintaining, and participating in a Systems Development Life Cycle (SDLC) for UADA system development projects. All entities at UADA, engaged in systems or software development activities, must follow the UADA SDLC. This SDLC is detailed in the Systems Development Life Cycle (SDLC) (UADA) Standards document.

Additionally, the following apply:

- All software developed in-house that runs on production systems must be developed according to UADA SDLC Standards. At a minimum, a software development plan should address the areas of preliminary analysis or feasibility study; risk identification and mitigation; systems analysis; general design; detail design; accessibility standards; development; quality assurance and acceptance testing; implementation; and post-implementation maintenance and review. This methodology ensures that the software will be adequately documented and tested before it is used.
- All development work shall exhibit a separation between production, development, and test environments, and at a minimum have at least a defined separation between the development/test and production environments unless prohibited by licensing restrictions or an exception is made. These separation distinctions allow better management and security for the production systems while allowing greater flexibility in the pre-production environments.
- Where these separation distinctions in environments have been established, development, and quality assurance/test staff must not be permitted access to production systems unless absolutely required by their respective job duties/descriptions.

- All application/program access paths used in development or testing, other than the formal user access paths, must be deleted or disabled before the software is moved into production.
- Documentation must be kept and updated during all phases of development from the initiation phase through implementation and ongoing maintenance phases. Additionally, security considerations should be noted and addressed through all phases.
- All software and web applications that create, manage, use, or transmit high-risk information, as defined by 920.1 Data Lifecycle and Management Policy/Procedures, must be developed and maintained solely by UADA Information Technology. Other development work involving medium and low-risk information may be done outside of UADA IT provided the Software Development Life Cycle (SDLC) (UADA) Standards are followed.

EXCLUSIONS OR SPECIAL CIRCUMSTANCES

Exceptions to this policy and associated standards shall be allowed only if previously approved by the UADA SDLC Review Committee or appropriate Senior Associate Vice President, and such approval is documented and verified by the Chief Information Officer.

Accountability

The Chief Information Officer for UADA is charged with the responsibility to periodically review the policy and propose changes as needed.

Reference Documents

Software Development Life Cycle Standards (SDLC) (UADA)