

CF-Next: Road Ahead

Roadmap for Adobe ColdFusion 2026

Adobe ColdFusion

CF for the AI-driven future - smarter, faster, and more secure.

ColdFusion Next is evolving into an AI-powered, cloud-native platform designed for modern business automation. With advances in developer productivity, security, and performance, it prepares enterprises for the future of intelligent app development.



CF AI Services

- Power your business with AI automation — for diverse AI applications across communication, content, data, and workflow automation.
- Built on an enterprise-grade framework with configurable LLMs, intelligent document processing, vector databases, and RAG pipelines.
- Advanced features like query transformations, guardrails, and real-time monitoring to keep your AI running safely and efficiently.



MCP Integration

- Bidirectional AI connectivity — enables ColdFusion applications to operate as both MCP clients and servers.
- Secure, auditable data exchange— built on Zero Trust principles for controlled and transparent information flow.
- Flexible integration with AI services — seamlessly connect to LLMs, vector databases, and other AI infrastructure components.



Performance Optimization

- Continuous Enhancements — ongoing feature benchmarking and iterative optimization to deliver overall superior runtime performance
- Optimized ColdFusion Core — a leaner core architecture ideal for microservices and cloud native environments
- Advanced Runtime enhancements — leveraging GraalVM along with optimizations such as Invoke Dynamic for faster runtime



Security Enhancements

- Enhanced Security Analyzer — upgraded to deliver deeper, more detailed audits with added command line support for automated vulnerability checks during deployments
- Security Posture and STIG Compliance — strengthened platform capabilities aligned with modern security principles and STIG certification standards
- Advanced Authentication — integration of Argon2 hashing for state-of-the-art password protection and support for passwordless authentication

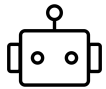


Language Enhancements

- Java Interoperability and Async Enhancements — improved Java integration by enabling CFML lambdas with Java APIs, eliminating the need for CFC wrappers. Enhanced async programming with CompletableFuture for scheduling and running parallel tasks.
- Expanded Language and Data Capabilities — introduction of new built-in functions for arrays, struct, strings, lists, sets, and files. Support for the Set data structure
- Performance and Developer Productivity — adoption of virtual threads to scale concurrency, support for multi-line literals, function chaining and additional syntax and metadata enhancements

CF AI Services and MCP Integration

A comprehensive, modular and flexible enterprise-grade framework for building AI-powered applications that connect large language models with data, tools, and workflows. It streamlines tasks like content generation, information retrieval, reasoning, and orchestration, enabling developers to create context-aware, multi-step AI systems efficiently.



LLM and Embedding Models

Fluent builders for chat, embedding, and memory models—enabling developers to configure, and extend AI services using both online (OpenAI, Gemini, Anthropic, Mistral) and offline (Ollama, in-process) models, with built-in support for secure API handling, asynchronous streaming, structured outputs and seamless integration of embedding models.



Document Processing

Unified way to parse, split, and transform documents usable both independently for testing or as part of the AI service ingestion pipeline. It operates in dual modes— returning CF-native types for easy inspection and debugging, or types optimized for AI workflows. It ensures that all documents are clean, structured, and chunked before they are processed by models or vectorized to store in vector databases.



Vector Databases

Native support for vector databases in ColdFusion, enabling applications that can perform semantic search, similarity matching, and vector operations and AI services to query files and documents efficiently. It provides seamless integration with embedding models as well.



Retrieval Augmented Generation (RAG)

Connects AI model to your documents and resources. It indexes and retrieves relevant text for user queries and asks from your files, feeding it into the model so answers and responses are retrieved from your actual data. Includes async processing, intelligent defaults, comprehensive error handling, guardrails for responses and built-in support for all text formats



MCP Client and Server

Enable ColdFusion apps to both use AI tools and models (as a client) and offer their own functions or data to AI systems (as a server), allowing seamless two-way integration with any MCP compliant AI workflow.