BOXLANG programming language

BOXLANG is the modern, dynamically and loosely typed scripting language for the Java Virtual Machine (JVM) that supports Object-Oriented (OO) and functional Programming (FP) Constructs. It can be deployed on multiple platforms and all operating systems, web servers, Java application servers, AWS lambda, iOS, Android, web assembly, and more.

BOXLANG combines many features from different programming languages, including Java, ColdFusion, Python, Ruby, Go, and PHP, to provide developers with a modern, fluent, and expressive syntax. BOXLANG has been designed to be a highly modular and dynamic language that takes advantage of all the modern features of the JVM.

Key features:

Dynamic Language

BoxLang is dynamically typed, which means there´s no need to declare types. It can perform type inference, auto-casting, and promotions between different types. The language adjusts to its deployed runtime and can add, remove, or modify methods and properties at runtime, making it highly flexible and adaptable.

Multi-Runtime Development

BoxLang can be used to write adaptive code for any operating system, JVM, servlet container web server, cloud lambda functions, iOS, Android, or even the browser using our web assembly package. BoxLang is built on a versatile language core, making it deployable on almost any current or future platform.

Established Ecosystem

BoxLang has a well-established ecosystem. Every Java and ColdFusion/CFML library is compatible with BoxLang. It comes with CommandBox, which serves as its package manager, server manager, task manager, and REPL tool.

Java Interoperability

BoxLang offers 100% interoperability with Java. It can extend and implement Java objects, use annotations, declare classes, imports, and more. Thanks to InvokeDynamic and the BoxLang Dynamic Object core, everything in BoxLang is fully interoperable with Java.

Low Verbosity Syntax

It is highly functional, fluent, and human-readable. It is highly expressive and has low ceremony.

Event Driven Language

BoxLang comes with an internal event bus that can be used to enhance the language's capabilities or those of any application. It´s able to listen to almost every aspect of the language, parser, and even the runtime, or collaborate using the user own events.

Enterprise Caching

The system has internal caching capabilities, which can be customized with providers, object stores, listeners, and statistics.

IDE + Tools

It comes with various tools to assist developers in their work. It includes a Visual Studio Code extension for the language, providing features such as syntax highlighting, code debugging, code insight, code documentation, formatting, LSP integration, and more. Subscribers to the premium version receive additional tools, including enhanced debuggers, ColdFusion/CFML transformers.

Scheduling & Task Framework

It provides a centralized and portable way to define and manage scheduled tasks for user servers and applications.

Functional Programming

It enables users to explore functional concepts such as immutability and higher-order functions to write robust code. BoxLang promotes code that is easier to maintain and less error-prone, thanks to its support for functional programming principles.

Modular Extensibility

It's possible to add new built-in functions, template components, or modify existing functions on classes. This language also supports a Runtime Debugger, AOP aspects, and event listening within the language itself.

Multi Parsers: CFML & BoxLang

BoxLang supports a dual parser and transpiler for executing ColdFusion/CFML code natively. It is possible to run all ColdFusion applications within BoxLang natively. Additionally, it provides tooling that automatically transpiles ColdFusion code to BoxLang for Subscription users.

Professional Open Source

Professional open-source project based on the Apache 2 license. Core features and Community Support.

Serverless Development

Allows developers to write code in functions that trigger based on events and leave server management to the cloud provider.

Meta-Programming

Allows developers to modify the behavior of BoxLang classes and objects at runtime. It involves manipulating the way classes and objects respond to method calls, property access.

General Information

BOXLANG OPEN-SORCE

A professional open-source project based on the Apache 2 license. The BOXLANG open-source edition can be used to create and deploy commercial software without paying a single cent. We love and breathe open-source, but we also know that it comes with responsibilities.

BOXLANG +

A subscription professional license for the language and its runtimes (web, android, web assembly, etc.). It gives world-class support, customizable SLAs (Service Level Agreements), custom patches, security notifications, enhanced features, modules, and more. It has a transparent and no-fuzz licensing model no matter which runtime is used or where is deployed.
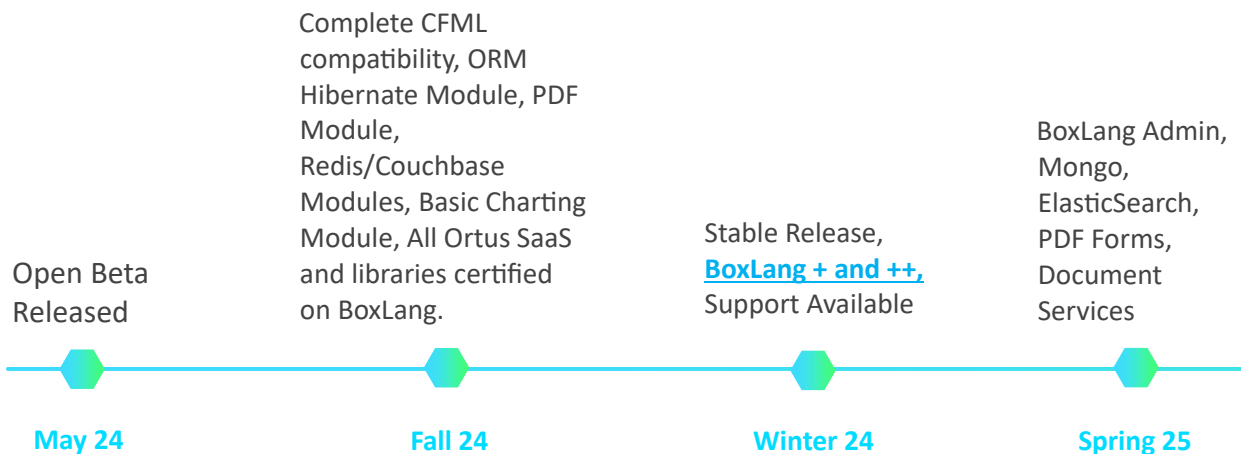
BOXLANG + +

Provides its customers with a range of services that guarantee superior Service Level Agreements (SLAs) and an exclusive Yearly Checkup. This entails a thorough analysis of product usage, installation, deployment, and other critical aspects by proficient language engineers and development team members via remote or on-site consultation, as well as a dedicated account manager and video call support.

Who is responsible for BOXLANG?

BOXLANG is the future of programming. Developed by Ortus Solutions, a company with over 18 years of experience in ColdFusion development, BOXLANG is the result of a team of 25+ experts who have been working tirelessly to create a language that will revolutionize the way we write code. But BOXLANG is more than just a language; it's an entire ecosystem, driven by a community of over 100 independent contributors who are passionate about making coding more efficient, more powerful, and more accessible to everyone. Join the BOXLANG community today and help us build a better future for programming!

BOXLANG® Roadmap

Complete CFML compatibility, ORM Hibernate Module, PDF Module, Redis/Couchbase Modules, Basic Charting Module, All Ortus SaaS and libraries certified on BoxLang.

BoxLang Admin, Mongo, ElasticSearch, PDF Forms, Document Services

Open Beta Released

Stable Release, **BoxLang + and ++,** Support Available

May 24   **Fall 24**   **Winter 24**   **Spring 25**

BOXLANG in Media

- https://sdtimes.com/softwaredev/boxlang-a-revolution-led-by-rebels-an-interview-with-luis-majano-ceo-of-ortus-solutions/

Ortus Solutions
A Software Revolution

Ortus Solutions was founded by Luis Majano in 2006 with the vision of empowering developers with great open-source tools and empowering clients with scalable and robust applications. We have a proven track record of successful web application development from small scale to mission critical applications, software architecture, website design, training and support services.

We know how difficult it is to do everything all by yourself therefore we are here to help you out. Our focus is to make your business more efficient. We are at our core, developers who know the value of time and money and we have seen firsthand how our products and services can help you save those two invaluable things.

Ortus Solutions offers comprehensive suite of products and services for empowering, building, running and managing ColdFusion applications and now BOXLANG applications too.

We're the team behind ColdBox, the de-facto enterprise ColdFusion MVC Framework, TestBox, a Testing and Behavior Driven Development (BDD) Framework, ContentBox Modular CMS, a highly modular and scalable Content Management System, CommandBox, the ColdFusion (CFML) CLI, package manager, etc., and many more.

At Ortus Solutions we have become ColdFusion leaders by changing the way we ALL develop. We create innovative open-source tools and software for empowering, building, running, and managing ColdFusion applications. Our Team of expert developers has over 16 years of experience in software-hardware architecture and OO design which provides our customers with world-class support, mentoring and custom development services.

Assets

Logos & Guidelines

BOXLANG:
https://www.boxlang.io/
Ortus Solutions:
https://www.ortussolutions.com/__media/Public%20Assets/ortus-branding-assets.zip