# **Agent Development Kit**

Source URL: https://google.github.io/adk-docs/

Google I/O'25 - ADK updates

Big news!

- Introducing <u>Java ADK v0.1.0</u>, extending agent capabilities to the Java ecosystem.
- Python ADK is officially v1.0.0 offering stability for production-ready agents.

Agent Development Kit Logo

## **Agent Development Kit**

## What is Agent Development Kit?

Agent Development Kit (ADK) is a flexible and modular framework for developing and deploying Al agents. While optimized for Gemini and the Google ecosystem, ADK is model-agnostic, deployment-agnostic, and is built for compatibility with other frameworks. ADK was designed to make agent development feel more like software development, to make it easier for developers to create, deploy, and orchestrate agentic architectures that range from simple tasks to complex workflows.

Get started:

PythonJava

pip install google-adk

pom.xml

```
<dependency>
    <groupId>com.google.adk</groupId>
    <artifactId>google-adk</artifactId>
```

```
<version>0.1.0</version>
</dependency>
```

#### build.gradle

```
dependencies {
   implementation 'com.google.adk:google-adk:0.1.0'
}
```

Quickstart Tutorials Sample Agents API Reference Contribute 💚



Watch "Introducing Agent Development Kit"!

Flexible Orchestration

Define workflows using workflow agents (Sequential, Parallel, Loop) for predictable pipelines, or leverage LLM-driven dynamic routing (LlmAgent transfer) for adaptive behavior.

**<u>Learn about agents</u>** \* Multi-Agent Architecture

Build modular and scalable applications by composing multiple specialized agents in a hierarchy. Enable complex coordination and delegation.

**Explore multi-agent systems** \* Rich Tool Ecosystem

Equip agents with diverse capabilities: use pre-built tools (Search, Code Exec), create custom functions, integrate 3rd-party libraries (LangChain, CrewAI), or even use other agents as tools.

**Browse tools** \* Deployment Ready

Containerize and deploy your agents anywhere – run locally, scale with Vertex Al Agent Engine, or integrate into custom infrastructure using Cloud Run or Docker.

#### **Deploy agents** \* Built-in Evaluation

Systematically assess agent performance by evaluating both the final response quality and the step-by-step execution trajectory against predefined test cases.

### **Evaluate agents** \* Building Safe and Secure Agents

Learn how to building powerful and trustworthy agents by implementing security and safety patterns and best practices into your agent's design.

### **Safety and Security**