Apache Flink is an open source platform for distributed stream and batch data processing.

Flink's core is a streaming dataflow engine (features.html) that provides data distribution, communication, and fault tolerance for distributed computations over data streams.
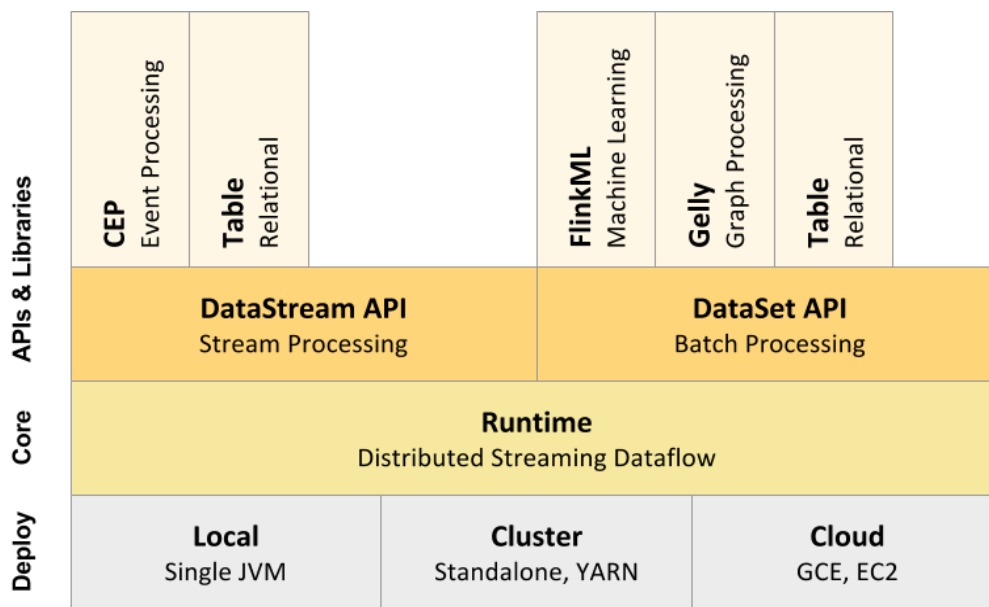
Flink includes **several APIs** for creating applications that use the Flink engine:

1. DataStream API (http://ci.apache.org/projects/flink/flink-docs-master/apis/streaming/index.html) for unbounded streams embedded in Java and Scala, and
2. DataSet API (http://ci.apache.org/projects/flink/flink-docs-master/apis/batch/index.html) for static data embedded in Java, Scala, and Python,
3. Table API (http://ci.apache.org/projects/flink/flink-docs-master/apis/batch/libs/table.html) with a SQL-like expression language embedded in Java and Scala.

Flink also bundles **libraries for domain-specific use cases**:

1. CEP (http://ci.apache.org/projects/flink/flink-docs-master/apis/streaming/libs/cep.html), a complex event processing library,
2. Machine Learning library (http://ci.apache.org/projects/flink/flink-docs-master/apis/batch/libs/ml/index.html), and
3. Gelly (http://ci.apache.org/projects/flink/flink-docs-master/apis/batch/libs/gelly.html), a graph processing API and library.

You can **integrate** Flink easily with other well-known open source systems both for data input and output (features.html#deployment-and-integration) as well as deployment (features.html#deployment-and-integration).

✈ Streaming First (features.html#streaming)

High throughput and low latency stream processing with exactly-once guarantees.

⚡ Batch on Streaming (features.html#batch-on-streaming)

Batch processing applications run efficiently as special cases of stream processing applications.

🔥 APIs, Libraries, and Ecosystem (features.html#apis-and-libs)

DataSet, DataStream, and more. Integrated with the Apache Big Data stack.

Check out the Features (/features.html) page to get a tour of all major Flink features.

Getting Started

Download the **latest stable release** and run Flink on your machine, cluster, or cloud:

Download Apache Flink 1.0 (downloads.html)

Apache Flink on **GitHub** (https://github.com/apache/flink)

The documentation contains a setup guide (http://ci.apache.org/projects/flink/flink-docs-master/setup/building.html) for all deployment options.

The programming guide (http://ci.apache.org/projects/flink/flink-docs-master/apis/programming_guide.html) contains all information to get you started with writing and testing your Flink programs.

See our list of third-party packages (/community.html#third-party-packages) for Flink.

Check out the documentation (http://ci.apache.org/projects/flink/flink-docs-master) for the next steps.

Latest blog posts

22 Apr 2016 » Flink 1.0.2 Released (/news/2016/04/22/release-1.0.2.html)

14 Apr 2016 » Flink Forward 2016 Call for Submissions Is Now Open (/news/2016/04/14/flink-forward-announce.html)

06 Apr 2016 » Introducing Complex Event Processing (CEP) with Apache Flink (/news/2016/04/06/cep-monitoring.html)

06 Apr 2016 » Flink 1.0.1 Released (/news/2016/04/06/release-1.0.1.html)

08 Mar 2016 » Announcing Apache Flink 1.0.0 (/news/2016/03/08/release-1.0.0.html)

Check out the blog (blog/) for all posts.

Community

You can post questions to the Flink community () on various channels. Pick the one, which suits you best:

- ✏ **User mailing list**. Subscribe to the mailing list by sending an empty email to user-subscribe@flink.apache.org. Once the subscription is confirmed, you can send questions to user@flink.apache.org.

- 🔍 **Stack Overflow**. Post your questions to Stack Overflow (http://stackoverflow.com/questions/ask/?tags=flink) and tag them with #flink (http://stackoverflow.com/questions/ask/?tags=flink).

- 💬 **IRC chat**. The IRC channel **#flink** at irc.freenode.org is dedicated to Apache Flink. Join the channel and chat with the Flink community.

Check out the community page (community.html) for all community-related information. If you want to contribute, make sure to have a look at the contribution guide (how-to-contribute.html).

Tweets by @ApacheFlink

Apache Flink @ApacheFlink

Apache Flink 1.0.2 has just been released: flink.apache.org/news/2016/04/2…

22 Apr

Apache Flink Retweeted

FlinkForward @FlinkForward

Our Call for Submissions has started! Submit your abstract & be part of Flink Forward 2016: flink-forward.org

14 Apr

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