




# 1.0 Release

The Flink community intends to release Flink 1.0 after the 0.10 release. The following page lists features we want to include into the release.

Status:

Status	Task/Feature
prepared	Tools that compare public API classes / method signatures across releases to ensure compatibility
in discussion	Annotations that define which classes are public API
in discussion	DataSet API review
resolved	Project maven modules restructure
resolved	Persistent checkpoints
unresolved	<p>There are 18 unresolved "blocker" issues.</p> <div> <a href="#">FLINK-3220</a> - Flink does not start on Hortonworks Sandbox 2.3.2 due to missing class <span>RESOLVED</span></div> <div> <a href="#">FLINK-3178</a> - Make Closing Behavior of Window Operators Configurable <span>CLOSED</span></div> <div> <a href="#">FLINK-3209</a> - Remove Unused ProcessingTime, EventTime and AbstractTime <span>CLOSED</span></div>

## Critical features / mechanisms

### APIs

- Annotations that define which classes are public API
- Annotations that define which classes are public experimental / beta (may change)
- Tools that compare public API classes / method signatures across releases to ensure compatibility
- FLINK-1045: Remove Combinable Annotation
  - Currently under discussion
  - Alternatively change CombineFunction interface of RichGroupReduceFunction
- FLINK-3198: Rename Grouping.getDataSet() method
- FLINK-1903: Remove removal of duplicate expression keys
- FLINK-3233: Add support for partitioning of atomic types (can be done together with FLINK-1666)
- FLINK-3234: Add support for partition sorting with key selectors
- Review the DataSet API
  - There are some inconsistencies wrt key definitions and data types that should be resolved.

### Project Structure

- Restructure projects as decided on dev-ml
- Proper naming of Scala artifacts
- Introduce code style?

### Engine

- Persistent checkpoints (manually created) that allow going back in streams to prior backup points