

# Groovy 1.8.1 update and first beta for Groovy 1.9

Hi all,

The Groovy development team is happy to announce the joint **releases of Groovy 1.8.1 and 1.9-beta-1**.

Both releases feature the following improvements and new features:

- The **performance optimizations for primitive type calculations** are now covering all the primitive types
- The builtin JSON support adds:
  - a **streaming builder** (`StreamingJsonBuilder`) for when you want to stream your JSON payload directly to a writer (when you don't need to modify the data structure before outputting)
  - and the two builders adds a **simple serialization of POGOs/POJOs** (just pass the object as a value)
- The **groovysh shell supports tab-completion** for completing your variables and method names
- Plus the usual GDK refinements that you can find on the release notes below.

And the first beta of the upcoming 1.9 line is adding on top of that:

- Most of Java 7 Project Coin enhancements:
  - Use underscores in number literals: `1_000_000_000`
  - Binary literals: `0b01010101`
  - Catch multiple exceptions at once with multicatch: `catch (IOException | NullPointerException e)`

You can learn more about the tickets closed for these issues here:

- [Groovy 1.8.1 Jira release notes](#)
- [Groovy 1.9-beta-2 Jira release notes](#)

And of course, you can download Groovy 1.8.1 and Groovy 1.9-beta-1 in our [download area](#).

Keep on groovying!