

Groovy 1.7.5 release and 1.8-beta-2 with new DSL capabilities and closure composition

The Groovy development team is happy to announce the joint **release of Groovy 1.7.5 and Groovy 1.8-beta-2**.

Both releases contain several bug fixes and minor improvements, but I'd particularly like to highlight two new features of Groovy 1.8-beta-2: **closure composition** and the **new extended DSL capabilities**. Make sure to have a look at the [new features from the previous beta of 1.8](#) too, if you haven't had a chance so far.

If you recall your math lessons, function composition may be a concept you're familiar with. And in turn, **closure composition** is about that: the ability to compose closures together to form a new closure which chains the call of those closures. Here's an example of composition in action:

```
def plus2 = { it + 2 }
def times3 = { it * 3 }

def composed1 = plus2 << times3
assert composed1(3) == 11
assert composed1(4) == plus2(times3(4))

def composed2 = times3 << plus2
assert composed2(3) == 15
assert composed2(5) == times3(plus2(5))

// reverse composition
assert composed1(3) == (times3 >> plus2)(3)
```

To see more examples of closure composition and reverse composition, please have a look at our [test case](#).

Groovy 1.8-beta-2 features the great work of our Google Summer of Code student, Lidia Donajczyk, who worked on an **extension of the command expression notation** (also known as GEP-3 / Extended Command Expressions). In a nutshell, **Groovy allows you to omit dots and parentheses for chained methods calls**, so that such calls look more **like natural language sentences**.

A few sentences this new DSL capability will allow you to write:

```
move left by 30.centimeters
sell 100.shares of MSFT
take 2.pills of chloroquinine in 6.hours
```

I've [blogged about extended command expressions](#) already, if you want to have some additional examples of sentences you can write, and you can have a look at the various [examples published on the Groovy Web Console](#) which also demonstrate how to construct such DSLs.

You can have a look at the JIRA release notes:

- [JIRA release notes for Groovy 1.7.5](#)
- [JIRA release notes for Groovy 1.8-beta-2](#)

You can download those Groovy versions from the [download area](#). And as usual, the artifacts will be sync'ed up with Maven's central repository.

Thanks a lot to everybody involved in those new releases.