

What's New in D

Issue #1 by Jared Hanson

Hello, and welcome to the premiere issue of **What's New in D**, a community newsletter to keep you up to date with what's new in and around the D programming language. D is a systems programming language created by Walter Bright that strives for modern convenience, modelling power, and native efficiency. You can find out more on the [official Dlang website](#), and on [Github](#). Now, without further ado...

Announcements

[Dconf 2014](#) early bird ticket registration prices are over, but don't despair; you can still purchase tickets at the regular price of USD \$425. I won't be attending Dconf, which is extremely unfortunate as the speaker lineup is absolutely stellar. It doesn't get much better than attending talks by Andrei Alexandrescu, Scott Meyers, Walter Bright, and a whole list of other great speakers in three action-packed days.

Facebook has open-sourced [Warp](#), a C/C++ preprocessor written in D by none other than Walter Bright himself. There's a corresponding interview between Andrei Alexandrescu and Walter Bright which you can read [here](#).

There's been an absurd number of awesome D-related announcements lately, so here's the rest in a handy list:

- Vladimir Panteleev has [released](#) a new version of his excellent tool Digger.
- Alexander Bothe has [released](#) Mono-D 1.8.
- The LLVM-based D Compiler version 0.13.0-alpha-2 has been [released](#).
- Peter Plantinga has [revived](#) Delight, a Python-like syntax for D.
- Atíla Neves has [released](#) Cerealed 0.4.1, a D serialization library.
- Joseph Rushton Wakeling has completed the [first draft](#) of a class-based successor to [std.random](#).
- Adam Ruppe's **dtoh** tool is [currently undergoing](#) a formal review for inclusion in the D tools repository.
- Daniel Murphy has [open-sourced](#) **ylink**, a linker written in D.
- Nick Sabalausky has [claimed](#) a \$75 bounty for fixing [issue 3490](#). Congratulations Nick!
- Ben Boeckel is [porting](#) Gunroar by ABA Games from D1 to D2.
- GDC has recently [celebrated](#) its 10th birthday. Congratulations to all GDC committers!

Community Overview

It's been an amazing couple of weeks for D. From some great discussion on the newsgroup to a batch of exciting new pull requests, the tireless machine that is the D community motors ever onward.

Articles

There have been two excellent articles written. One by Atila Neves on [increasing performance with static polymorphism](#), and One by Vladimir Panteleev on the topic of [functional image processing in D](#) using ranges. Both are very well-written and informative, so make sure to check them out.

Newsgroup

There's been a lot of buzz in the past week around [changing](#) the behaviour of the comma operator to return void instead of the value of its last expression, thus making its use as an expression an error. The general consensus seems to be that it's an unintuitive and bug-prone holdover from C, but not everyone is happy about this change.

A lively discussion has developed around tightening up the [protocol](#) for using [one-pass ranges](#) (InputRanges). The discussion has mostly been around lazy initialization and the purity of the empty and front range primitives.

Newsgroup regular **deadalnix** has started a [thread](#) to discuss the consequences of implementing interfaces as fat pointers, which is what all the cool kids are doing nowadays. It's been derailed a bit by discussion about how to use structs as pseudo reference types, but there's a lot of good stuff here.

Andrei Alexandrescu has [challenged](#) the D community to write a "really really small front() for UTF8".

New Pull Requests

DMD

- [Add ddmd manually ported source and build system support](#) by yebblies
For those of you who don't know, Daniel Murphy aka yebblies has been doing some awesome work on a self-hosted D compiler **[for over a year now, and it seems that it's almost ready to go live]**. I'd personally like to thank Daniel for spearheading this project; it's a massive leap forward for D.

- [Deprecate support for the comma operator outside of for\(\) conditions and increments](#) by schuetzm

Phobos

- [Add Flags template](#) by lultimouomo
- [Generalized binaryReverseArgs for more args](#) by Biotronic

Druntime

- [step one of moving .dup to library](#) by WalterBright
- [make most GC functions nothrow](#) by rainers

New Commits to Master

DMD

- [\[REG2.064\] Issue 12497 - ICE on string mixin with non-string operand](#) by k-hara
- [Implement nogc framework \(warn about GC allocations\)](#) by jpf91

Phobos

- [Fix Issue 12494 - Regression \(2.064\): to!string\(enum\) returns incorrect value](#) by monarchdodra
- [std.getopt: Add character-separated elements support for arrays and associative arrays](#) by AndrejMitrovic

Druntime

- [Mark `clear` as `deprecated`](#) by JinShil
- [because calling toString\(\) in stdarg is slow, impure, can allocate memory and throw](#) by WalterBright

Miscellania

Adopt a Bug Report

Each issue, I'll dredge up a bug report from Bugzilla that hasn't had a fix submitted yet. If you're new to D and looking to contribute, this is a great way to start!

This issue's bug report is:

[Issue 9797 - to!int\(\) cannot convert hexadecimal numbers](#)

Adopt a Bounty

This is the same as Adopt a Bug Report, but for unclaimed bounties. Successfully fix the bounty issue and you'll walk away a richer person.

This issue's bounty is:

[-O causes very long execution time on foreach loop of large array of structs](#)

Music for Hackers

This issue was composed while listening to [Rooms of the House by La Dispute](#).

Have any articles, announcements or pull requests I missed? Have I attributed something to the wrong person? Have a particular bug report, bounty, or band you want me to feature in the next issue? You can contact me at Whats.New.in.D@gmail.com.