

From Hackathon to Production in a Year

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Hackathon

48 hours

100+
participants

40+
projects



HACKATHON

JetBrains Hackathon 2017





winners'
cup

Do anything you want



See a need —
fill a need

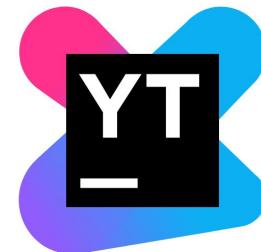
dotMemory
Unit



Toolbox
App



YouTrack
Mobile



Toolbox App



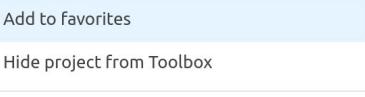
A control panel
for
your tools and projects

JetBrains Toolbox

Projects Tools

Search

FAVORITES

 jetbrains-toolbox ~/work/toolbox	12 minutes ago
 exposed ~/work/exposed	
 jsontest ~/work/js	 <ul style="list-style-type: none">Add to favoritesHide project from Toolbox
 qtSprinte ~/work/qt	 IntelliJ IDEA Community 2017.2.5
 ConsoleApplication ~/tmp/ConsoleApplication/ConsoleApplication.sln	 IntelliJ IDEA Ultimate 2017.3 EAP ✓
 Upsource ~/work/upsource	3 months ago
 jsonld-metadata ~/work/jsonld-metadata	4 months ago
 ganalytics ~/work/qt-google-analytics	9 months ago
 gradle-teamcity-gitversion-plugin ~/work/gradle-teamcity-gitversion-plugin	9 months ago
 chrome-open-tabs-in-bg	10 months ago

Team

Team

Core Developers

Windows

macOS

Linux

and

UI/UX designer

UI developer

IntelliJ developer

Ring UI

The screenshot displays the Ring UI interface. At the top left is a logo consisting of a blue and yellow abstract shape with the letters "HB". To its right are navigation links: "Users", "Groups", "Spaces", and "Services". On the far right are three icons: a plus sign inside a square, a vertical ellipsis, and a grid of nine squares. Next is a blue button labeled "Log in...". Below the header is a horizontal bar with four buttons: "Run...", "Button one", "Button two", and "Button three". Another button labeled "Another action" is positioned to the right. A date picker is shown, centered on "20 Sep 2014". The calendar grid shows months from August 2014 to December 2015. The date "20 Sep 2014" is highlighted with a blue border. To the right of the date picker is a section of text: "some text on top", "before Some text after", and "some text under loader". Below this is a section titled "Unchecked by default" with an unselected toggle switch. Below that is "Checked by default" with a selected toggle switch. At the bottom is "Disabled unchecked" with a disabled toggle switch.

Run... Button one Button two Button three Another action

20 Sep 2014

20 Sep 2014

Mo	Tu	We	Th	Fr	Sa	Su
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October

1	2	3	4	5		
6	7	8	9	10	11	12

Jan 2010
Feb 2011
Mar 2012
Apr 2013
May 2014
Jun 2015
Jul 2016
Aug 2017
Sep 2018
Oct 2019
Nov 2020
Dec 2021

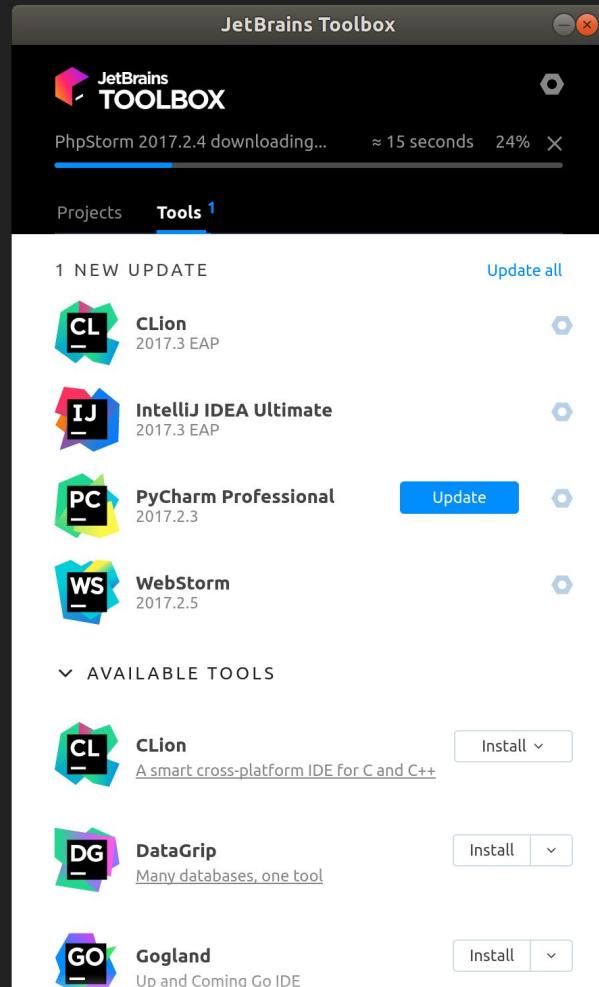
some text on top
before Some text after
some text under loader

Unchecked by default

Checked by default

Disabled unchecked

<https://jetbrains.org/ring-ui/>



20%

project

Design for compatibility

Backward compatibility

Forward compatibility

Security

Always keep security in mind

- **HTTPS** only
- Signed data source
- Checksums for downloads

Code review

Find bugs early

Share knowledge

Improve code quality

Consistent design

JOEL ON SOFTWARE

YOUR HOST



my own, highly irresponsible, sloppy test to rate the quality of a software team. The great part about it is that it takes about 3 minutes. With all the time you save, you can go to medical school.

The Joel Test

1. Do you use source control?
2. Can you make a build in one step?
3. Do you make daily builds?
4. Do you have a bug database?
5. Do you fix bugs before writing new code?
6. Do you have an up-to-date schedule?
7. Do you have a spec?
8. Do programmers have quiet working conditions?
9. Do you use the best tools money can buy?
10. Do you have testers?
11. Do new candidates write code during their interview?
12. Do you do hallway usability testing?

Automate everything

Continuous Integration server **compiles** the app
and runs **tests** after each commit

Release is published with a **single click**

JetBrains Toolbox | JetBrains Desktop Applications Launcher

<Active branches> |

no hidden | ×

▶ <input checked="" type="checkbox"/> Installers (Stable)	Pending (100+)	Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Smoke		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build All	Pending (100+)	Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Test All	Pending (100+)	Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Feeds Acceptance Tests	Pending (100+)	Idle	Run ...	×
□ Upload Release	No builds to display	Pending (100+)	Idle	Run ...

▼ <input checked="" type="checkbox"/> Build	<Active branches>	no hidden	×	
▶ <input checked="" type="checkbox"/> Build Number		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build UI		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Chrome Extension		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Mac OS X		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Mac OS X Debug	Pending (100+)	Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Windows		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Windows Debug	Pending (100+)	Idle	Run ...	×
▶ <input checked="" type="checkbox"/> Build Linux AppImage		Idle	Run ...	×

▶ <input checked="" type="checkbox"/> Docker	Various Docker images used for building and testing Toolbox App	<Active branches>	5 successful	no hidden	×
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▼ <input checked="" type="checkbox"/> External Libraries	<Active branches>	no hidden	×	
▶ <input checked="" type="checkbox"/> OpenSSL (Linux)		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> OpenSSL (Mac OS)		Idle	Run ...	×

▼ <input checked="" type="checkbox"/> Feed	no hidden	×		
▶ <input checked="" type="checkbox"/> v1 Internal Feed		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> v1 Public Feed		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> v1 Publish Internal Feed		Idle	Run ...	×
▶ <input checked="" type="checkbox"/> v1 Publish Public Feed		Idle	Run ...	×

Cross-platform development

There are **lots** of platform specific things

Every feature must be tested on all supported operating systems

Eating your own dog food

Eating your own dog food,
also called **dogfooding**,
is a slang term used to reference a scenario in
which an organization uses its own product.
The idea is that if the organization truly
believes its own product to be superior, it
would use the product itself.

https://en.wikipedia.org/wiki/Eating_your_own_dog_food

Dogfooding

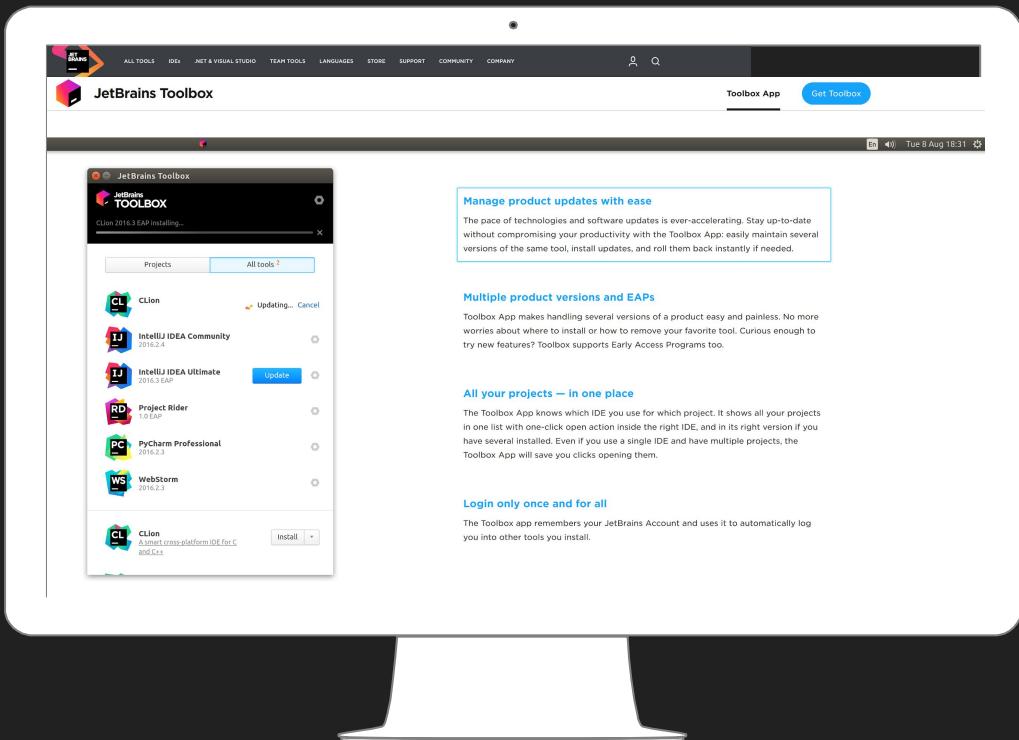
Learn your application

Get early feedback from colleagues

Toolbox App

Check it out at
jetbrains.com/toolbox/app

Follow @JBToolbox
for updates



Thank you!

Victor Kropp
@kropp

Questions?

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