

 **Manuscript**



 **DEV  
FACTORY**  
Company

## Virtual User Conference Q3'18



**Andy Tryba**

CEO, FogBugz  
Founder & CEO, Crossover  
Founder & CEO, RideAustin  
CEO, DNN Corp  
CEO, Engine Yard  
CEO, Kayako  
CEO, Bizness Apps  
CEO, My Alerts  
Founder & CEO, Think3



**Rahul Subramaniam**

CEO, DevFactory

**Joel, Anil & the  
Fog Creek Team!**

A blue fountain pen is shown in the process of writing the word "Thankyou" in a cursive script on a piece of light-colored paper. The pen's nib is positioned at the end of the word, and a thin line of ink is visible extending from the tip. The background is a soft, out-of-focus light beige color.

Thankyou

# Agenda

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**About the Acquisition & what does it mean for me?**

Why did we acquire FogBugz?

Future of FogBugz & DevFactory Products

Q&A and Summary



## Why Fog Creek sold Manuscript (FogBugz)

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“We love the vision that DevFactory has established to help developers spend even more time on creative tasks. And most importantly, the Manuscript community will benefit from DevFactory’s focus on customer success and increased investment in modernization of the product.”

- Anil Dash

# What does it mean for me?

## Massive Investment in the Product



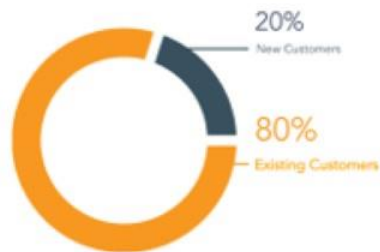
## Access to Pre-release DevFactory Products

DevSpaces

CodeRead

CodeCleanup

## Relentless Focus on Customer Success



# Agenda

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We built the factory so you don't have to.

DevFactory is focused on building great products and services for developers.

A number of tasks in the SDLC are non-creative and repeatable. It makes sense to run those operations centrally as AI-assisted assembly lines.

# Why we acquired FogBugz

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1. We love the customer base
2. We believe in Joel's original FogBugz vision & want to invest in the product
3. There is huge market opportunity since JIRA sold out



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**What do mean by 'JIRA sold-out'?**



## **Abandoned the core:** developers in small teams

(and instead focused on big company  
management overhead & chasing after  
non-developers adding complexity)

# Abandoned the core

Focus away from developers to big company management... Massive complexity

BUSINESS > DEALS

## Atlassian Buys OpsGenie to Expand in ServiceNow's Market

Atlassian is paying \$295 million to acquire OpsGenie, which alerts engineers to software and website outages, Bloomberg reported. The move gets Atlassian, known for its software-development coordination tools, into the market dominated by ServiceNow. Atlassian sees a big opportunity in the IT operations software market, expected to reach \$38 billion by 2022, according to Gartner.

Bloomberg | Sep 04, 2018

## Atlassian acquires Trello for \$425M

The screenshot shows a grid of partner logos and descriptions:

- Jira Software**: Plan, track, and release your team's software with the #1 software development tool used by high-tech.
- Jira Service Desk**: Give your customers an easy way to ask for help and your agents a fast way to respond to requests.
- Jira Ops**: Reduce incident management with capabilities to respond, analyze, and learn from every incident.
- Jira Core**: Merge the business expert-friendly modeling capabilities, self-organizing, agile teams and user experience.
- Confluence**: Accelerate time-to-market, reduce risk and increase the quality of your content with the leading knowledge base, content management, and document collaboration tool.
- Trello**: Collaborate and get more done. Make beautiful plans, track progress, and stay on top of tasks, projects, and team work.
- Bitbucket**: Collaborate on code with inline comments and pull requests. Manage and share your Git repositories to build and ship software as a team.
- Sourcetree**: Harness the full power of Git and Mercurial in a beautifully simple application.
- Bamboo**: Continuous integration, deployment, and release management.
- Fisheye**: Review, analyze, and track every line of code and commit.
- Crucible**: Give your team the tools to build better software.
- ATLASSIAN Access**: Help manage code quality, security, privacy, and control access to your Atlassian Cloud infrastructure.
- Crowd**: The single sign-on and identity management tool that's easy to use, administer, and integrate.
- Statuspage**: Publish updates. Help your users informed and plan the future of your service during downtime.

### 4 Features Fogbugz will never implement

- Strangling/Complex workflows
- Inhibiting Permission schemes
- Combined complexity of types, custom fields, Screens, workflows and permissions
- JQL - If you have to create a custom language to search through your issues, it's already too complex.

### Certification and Badges

Start by earning an Atlassian Certification. Once you're certified, you're eligible to earn Badges to validate your expanding skills footprint. Your relevant Certification(s) will be validated 18 months from the date you earn your Badge.

ROLE	CERTIFICATION	ATLASSIAN CERTIFIED BADGES	ATLASSIAN SKILLS BADGES
Project administrator, super users, Site administrators	Atlassian Certified in Jira Project Administration	Earn an Atlassian Certified Badge by passing an online proctored exam, which you can take from your home or office.	Add Atlassian Skills Badges by taking approved courses or webinars and passing an online assessment to validate your learning.
Scrum master, board admin, project lead	Atlassian Certified in Agile Development with Jira Software	Earn an Atlassian Certified Badge by passing an online proctored exam, which you can take from your home or office.	Add Atlassian Skills Badges by taking approved courses or webinars and passing an online assessment to validate your learning.
Site administrator	Atlassian Certified Site Administrator	Earn an Atlassian Certified Badge by passing an online proctored exam, which you can take from your home or office.	Add Atlassian Skills Badges by taking approved courses or webinars and passing an online assessment to validate your learning.
Site Service Desk administrator	Atlassian Certified Site Service Desk Administrator	Earn an Atlassian Certified Badge by passing an online proctored exam, which you can take from your home or office.	Add Atlassian Skills Badges by taking approved courses or webinars and passing an online assessment to validate your learning.
Confluence administrator	Atlassian Certified Confluence Administrator	Earn an Atlassian Certified Badge by passing an online proctored exam, which you can take from your home or office.	Add Atlassian Skills Badges by taking approved courses or webinars and passing an online assessment to validate your learning.
System administrator	Atlassian Certified System Administrator	Earn an Atlassian Certified Badge by passing an online proctored exam, which you can take from your home or office.	Add Atlassian Skills Badges by taking approved courses or webinars and passing an online assessment to validate your learning.



### ATLASSIAN

### JQL Cheat Sheet

A simple query in JQL (also known as a "filter") consists of a **Field**, followed by an operator, followed by one or more values or functions. For example:

```
project = Test
```

To perform a more complex query, you can find clauses together with keywords:

```
project = TEST AND assignee in (currentuser())
```

### The minimum set of considerations while creating a workflow in Jira

- **Status** – where the issue is (for example, "In Progress" or "Under Review")
- **Resolution** – why the issue is no longer in flight (for example, because it's completed)
- **Conditions** – control who can action a transition
- **Validators** – only allow transitions to occur when specific information is provided
- **Post Functions** – make additional changes to issues, alongside transitions (for example, removing a resolution when an issue is reopened)
- **Triggers** – automatically activating transitions when specific events take place. For example, moving an issue from "In Progress" to "Under Review" when code is submitted for review
- **Workflow properties** – setting certain properties for transitions. For example, only displaying resolutions that are relevant to the specific issue type
- **Workflow schemes** – determining the associations between a workflow and issue type

## Atlassian Ticker: TEAM



**Moving 'up-market':**  
enterprise sell-up playbook

# Moving 'up-market' with enterprise sell-up playbook



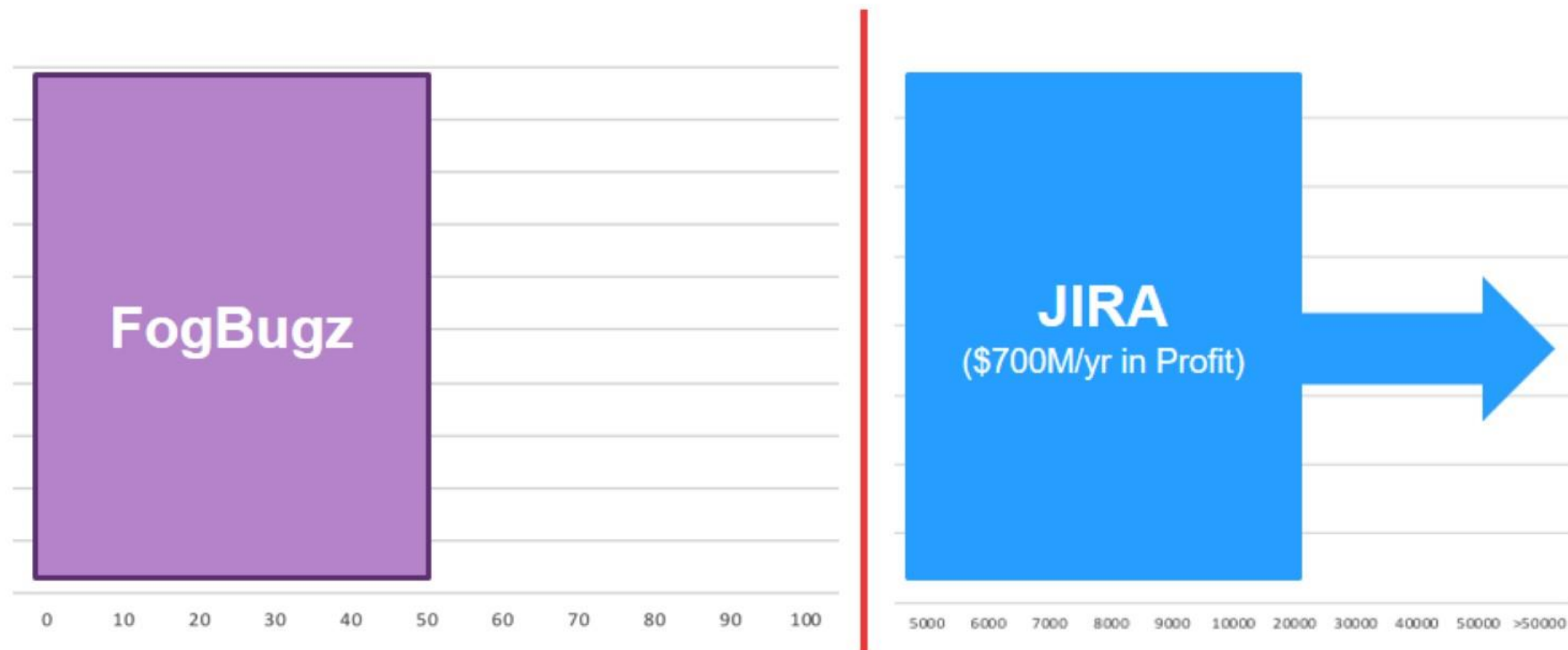
JIRA continues to add new 'high-end' price points

Users	Commercial Annual Price
More than 50,000 users	US \$450,000

Both Founders made close to \$3B



## Leaving an enormous market opportunity...



## Our strategy: Stay true to Joel's original vision...

Designed for developers – not for management bureaucracy

Designed for simplicity – not for soul-crushing complexity

Designed for speed – not 75 fields just for a simple bug submission

Designed for 2 pizza teams – not expensive dedicated admins

And to start – we're bringing  
back the name



# Agenda

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About the Acquisition & what does it mean for me?


Why did we acquire FogBugz?

**Future of FogBugz & DevFactory Products**


Q&A and Summary





A grayscale photograph of a person sitting at a desk, looking down at a laptop. The person's hands are resting on their chin, suggesting a state of deep thought or concern. The desk is cluttered with a keyboard, a mouse, and a laptop. The overall mood is one of frustration or neglect.

We've heard from customers that they feel the FogBugz product has been neglected...

A man and a woman are looking at a large digital display in a modern office setting. The man is pointing at the screen, and the woman is looking at it. The background is blurred, showing other people in the office.

We are going to change that and  
will be investing heavily to  
modernize it

But it won't be easy



In full transparency...

FogBugz has amazing IP built in – but  
the product is 17 years old...

# 'Clone Spec' details (initial thoughts)

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1. Pull FogBugz out of Joel's basement into AWS
2. Dockerize platform
3. Reduce the LOC from 1.8M by 80%
4. Replace 'homegrown' components with best-in-class industry standards:
  - › SMTP handler - SES/SendGrid
  - › Finance - NetSuite
5. Standardization across cloud & onprem code base



**Please have patience with us – this will be hard & time consuming.**

**There will be problems & mistakes made (we apologize in advance).**

**But we believe the transition will be worth it.  
We will perform this in ‘full & open view’ – you get to watch us step by step (and screw-up by screw-up)**

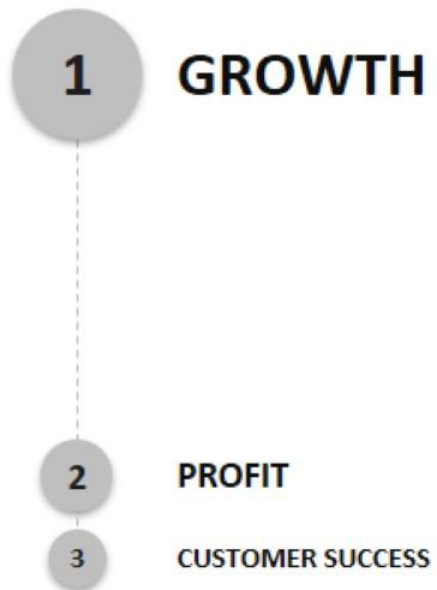
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Investing & modernize the product matters... But  
so does ensuring you have the support you need  
when you need it...

# Our operating focus

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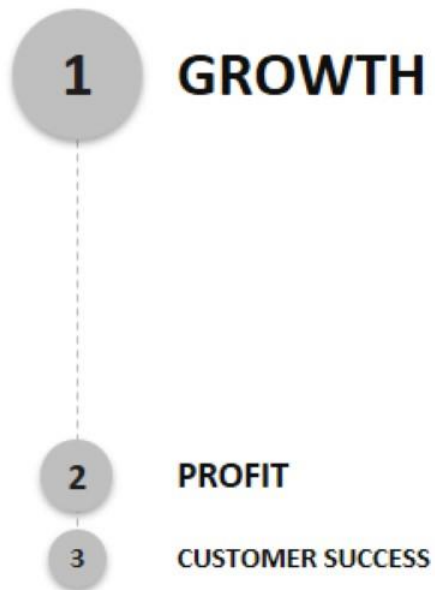
## The Typical Model



# Our operating focus

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## The Typical Model



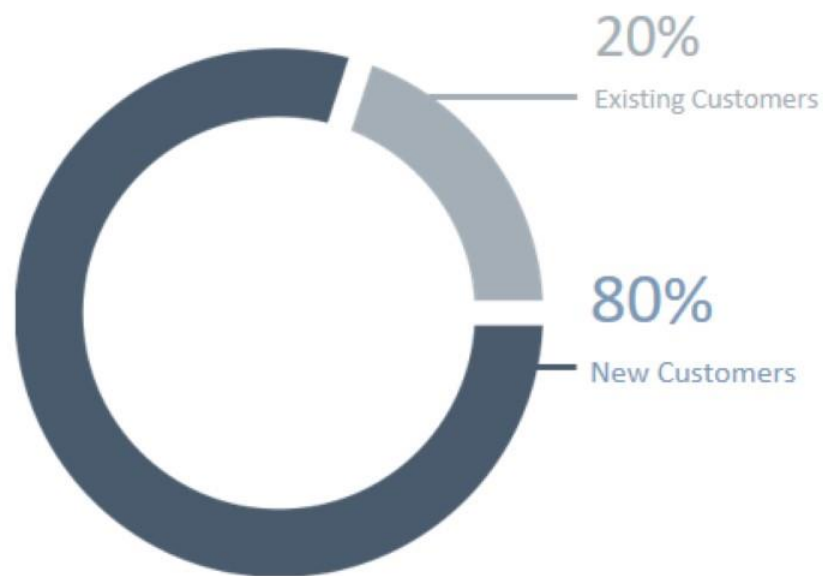
## The DevFactory Model



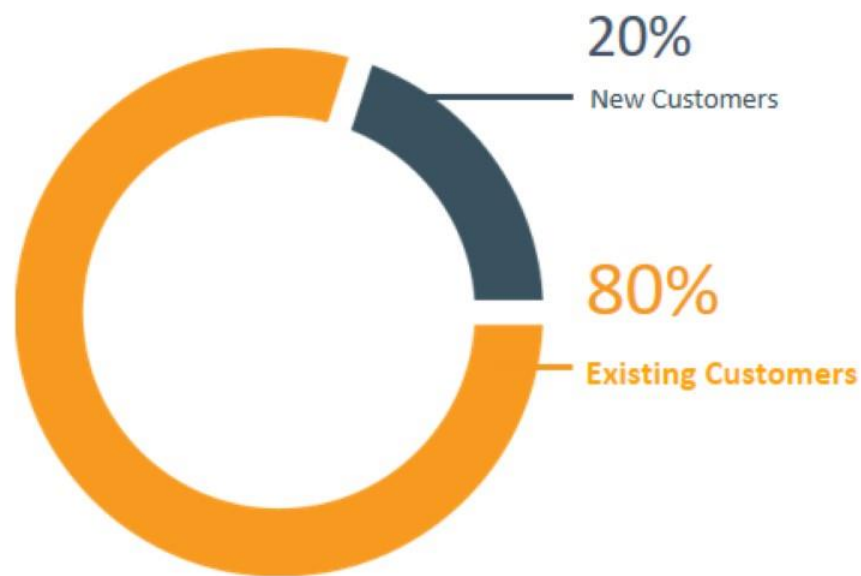


# Customer investment

## TYPICAL



## DevFactory



Our Mission:  
100%  
Customer  
Success



# Live Poll



Are you being successful  
with FogBugz?

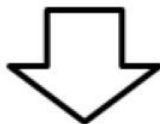
## Great support helps drive customer success

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1. Customer choice (3 support tiers)
2. World-class support talent (top 1% from across the globe)
3. Extended coverage (more reps, global coverage, and 24/7 support)

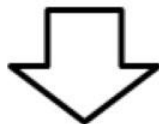
# We've created support programs to help...

**Standard**



5 email + 1 phone per month

**Gold**



10 email + 5 phone per month  
Quarterly Training for Dev Teams  
Workflow Development Assistance

**Platinum**



Unlimited email and phone support  
24x7 for sev 1  
40 hours of Migration Import Assistance  
Version Upgrade Service  
On-prem to Cloud Migration Service  
On-prem Update Assistance Test Environment  
Older Version Support  
Quarterly Training for Dev Teams  
Workflow Development Assistance

# Support Details

	Standard	Gold	Platinum
<b>Customer Success</b>			
Participation in Customer Success Program	✓	✓	✓
Quarterly Virtual User Group Conferences	✓	✓	✓
<b>Product Development</b>			
Access to Patch and Update Client Product Releases	✓	✓	✓
Feature Request Priority Weighting	1x	2x	4x
<b>Customer Support</b>			
Phone Support during Business Hours	✓	✓	✓
Support Chat Capability during Business Hours	✓	✓	✓
Web-Based Reactive Ticketing + Phone (Month)	5 + 1	10 + 5	Unlimited
Web-Based Proactive Ticketing		Unlimited	Unlimited
Case Priority Weighting for Non-Critical Issues	1x	2x	4x
Support Availability (Hours x Days/Week)	6x8 EST	6x8 EST	24x7 for sev1
Version Support	8.20	8.19, 8.20	8.8, 8.19, 8.20
Platinum Experience Manager Reviews			✓
<b>Product Experience</b>			
Quarterly Training for Dev Teams		✓	✓
Workflow Development Assistance		✓	✓
40 hours of Migration Import Assistance			✓
Version Upgrade Service			✓
On-prem to Cloud Migration Service			✓
On-prem Update Assistance Test Environment			✓

# New Platinum Support

## Included:

- 40 hours of Migration Import Assistance
- Version Upgrade Service
- On-prem to Cloud Migration Service
- On-prem Update Assistance Test Environment
- Older Version Support
- Quarterly Training for Dev Teams
- Workflow Development Assistance

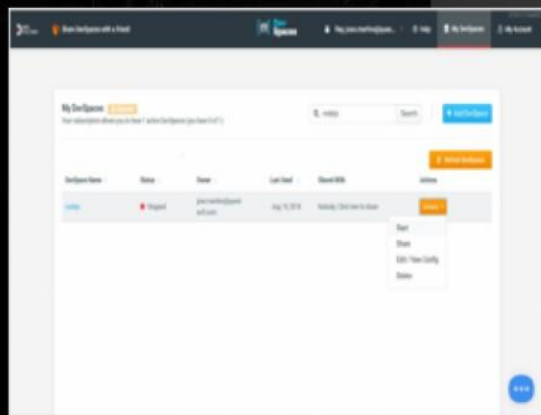
# Live Poll



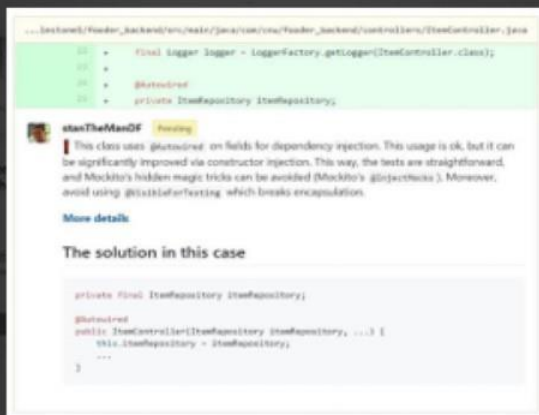
Which of the support  
model offerings are  
you most interested  
in?



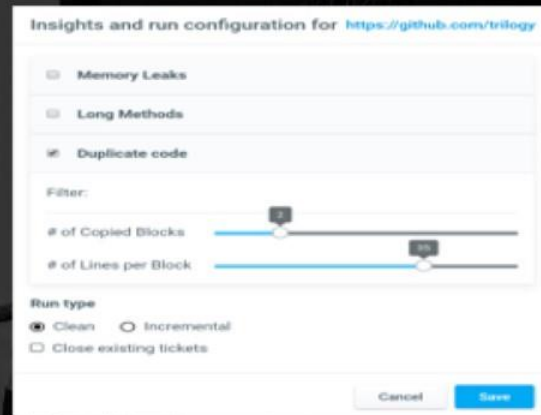
# Access to pre-release DevFactory products



DevSpaces



CodeRead



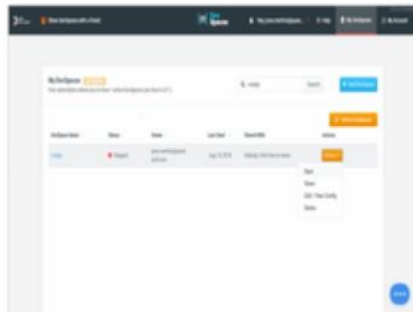
CodeCleanup

# The problem with dev environments today



- Container technology and Docker are the next big enablers for Software.
- Dockerization of apps is hard and everyone starts with their production environment
- Disconnect between the Dev and the production environments persist.

# DevSpaces - What is it?



- It 'shifts left' and brings Docker to your dev environment
- It is a system that hosts your dockerized dev environments in the cloud without the need to configure the environment on their local workstations.
- It enables easy sharing of the standardized development environment across your team.
- An agent installed on your workstation syncs your local code instantly with the remote container - You can therefore use your favourite IDE to code locally, but build and run the app on the remote container.
- Our factory will dockerize your dev environment for you.

# The problem with code reviews today

**Christ people. This is just sh\*t.**

The conflict I get is due to stupid new gcc header file crap. But what makes me upset is that the crap is for completely bogus reasons. This is the old code in net/ipv6/ipv6\_output.c:

```
mtu -= hlen + sizeof(struct frag_hdr);
```

and this is the new "improved" code that uses fancy stuff that wants magical built-in compiler support and has silly wrapper functions for when it doesn't exist:

```
if (overflow_usub(mtu, hlen + sizeof(struct frag_hdr), &mtu) || mtu <= 7)
    goto fail_toobig;
```

**and anybody who thinks that the above is**

- (a) legible
- (b) efficient (even with the magical compiler support)
- (c) particularly safe

**is just incompetent and out to lunch.**

**The above code is sh\*t, and it generates sh\*t code. It looks bad, and there's no reason for it.**

- Linus Torvalds

# Code Reviews

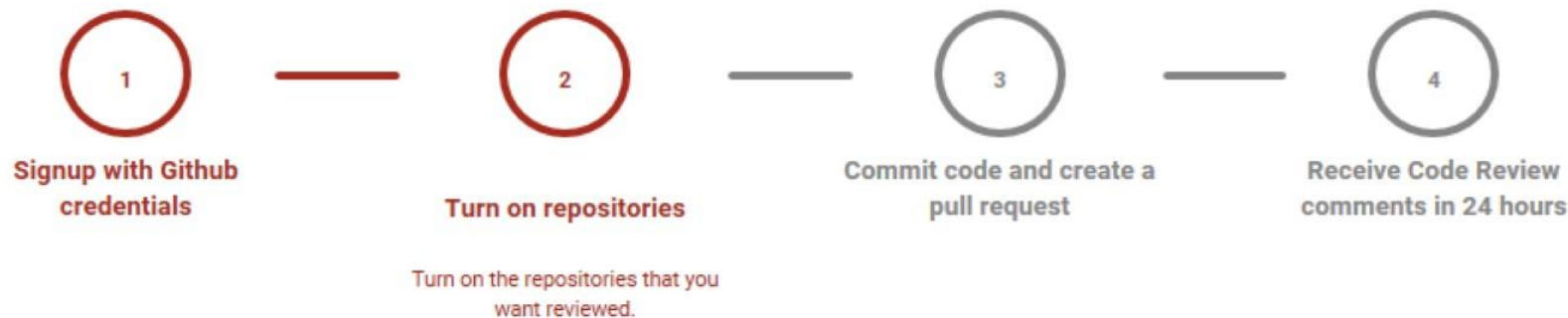


- Fact 1: Code reviews are a judgement of code
- Fact 2: In most teams, the senior most perform code reviews
- Fact 3: Over a period of time, reviews degrade into 2 categories:
  - They only validate trivial formatting and static analysis rules
  - They become extremely judgemental and caustic

Code reviews are great, but you should never do them internally because at best they ruin the HR dynamics of your team

# CodeRead - What is it?

- Don't do code reviews internally, we will do them for you - within 24 hours
- A dedicated team of senior architects review code
- AI assisted tool sets help identify the most important parts of the code that need attention
- Sentiment analysis gates and standardized review templates weed out judgement and turn reviews into learning/coaching experiences





# The problem with technical debt today

*ERRR...*



*CAN'T STOP.  
TOO BUSY!!*



- Project managers are constantly conflicted on allocating precious resources to fixing technical debt Vs. working on features that add value to the product/customer.
- Technical Debt slows down the pace of development, so you can't ignore it either.
- The top 3 contributors that slow down the effective pace of development are:
  - Duplicate Code
  - Long Methods
  - Memory Leaks
- None of these issues require domain or product knowledge to fix



# CodeCleanup - The tech debt garbage collector

Insights and run configuration for <https://github.com/trilogy>

- Memory Leaks
- Long Methods
- Duplicate code

Filter:

# of Copied Blocks

# of Lines per Block

Run type

Clean  Incremental

Close existing tickets

- Code Cleanup is a garbage collection service for technical debt in your code base.
- Use 10% of your R&D budget to clean up your code in the background.
- Enables your team to use their domain and product knowledge to add value to the product.

# CodeCleanup on the FogBugz code today...

- **298 sources of Memory leaks** - impacts the stability and performance
- **191K lines of Duplicate code** - that implies that every time we fix an issue in one place, we have to be cognizant of also fixing the issue in all other instances of the duplication.
- **375 instances of Long methods** that average about 215 lines each - these methods contain important logic but are hard to understand & maintain because of their length and intertwined flows (cyclomatic complexity)

Insight Type	#Non-Test Issues	#Test Issues	#Total Issues
Long Method	375 (80875 LOC)	21 (5217 LOC)	396 (86092 LOC)
Dead Code	8 (14 LOC)	0 (0 LOC)	8 (14 LOC)
Memory Leak	298 (298 LOC)	184 (184 LOC)	482 (482 LOC)
Long Class	554 (387075 LOC)	46 (26712 LOC)	600 (413787 LOC)
CodeRead Severe Insight	10080 (10080 LOC)	1063 (1063 LOC)	11143 (11143 LOC)
Duplicate Code	555 (191340 LOC)	32 (3021 LOC)	587 (194361 LOC)

**Over the next few months, we will be working towards fixing these really important maintainability issues with the codebase.**

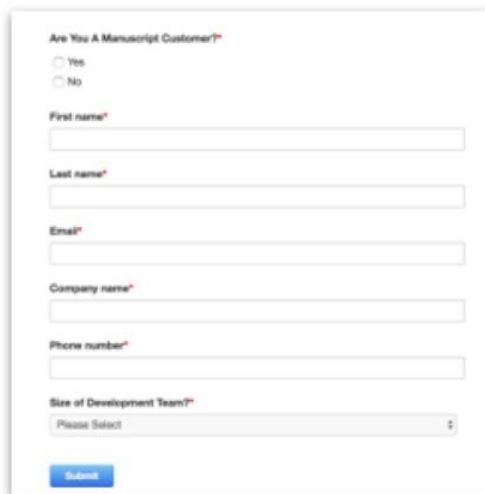
# Live Poll



Which of these  
DevFactory products  
are you most  
interested in?

## Interested in early access? Get in touch!

Manuscript's customers have exclusive early-bird access to DevSpaces, CodeRead, and CodeCleanup



Are You A Manuscript Customer?\*

Yes  
 No

First name\*

Last name\*

Email\*

Company name\*

Phone number\*

Size of Development Team?\*

Please Select ▾

Submit

# Agenda

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About the Acquisition & what does it mean for me?

Why did we acquire Manuscript?

Future of FogBugz & DevFactory Products

**Q&A and Summary**



An aerial photograph of a city, likely New York City, showing a dense urban landscape with numerous skyscrapers and a river. A semi-transparent network of white lines is overlaid on the image, connecting various points across the city. The text is centered in the upper half of the image.

We bought FogBugz to have happy customers for the next 20 years...

This plan will create the foundation for the next 10 years of innovation.

Q&A