



DevOps for Defense

February 2019

Agile Bookends:
The Power of Refinement & Retrospective

JD Black

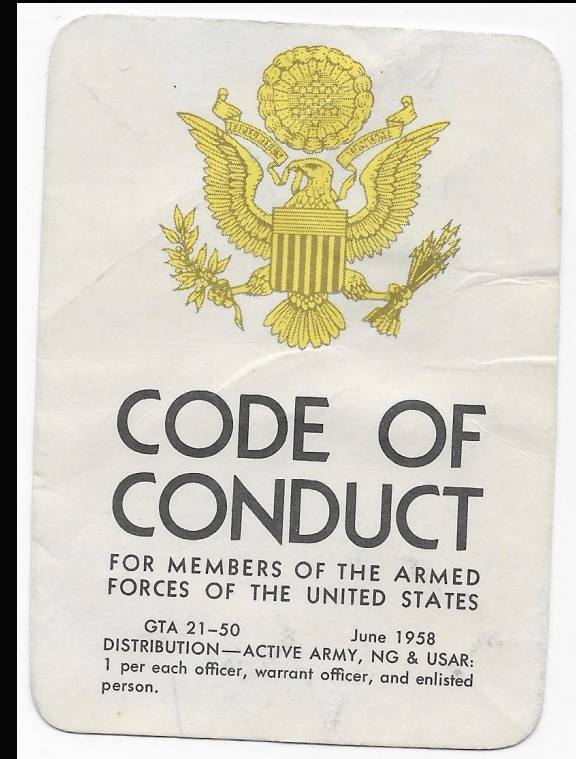
Sponsored by:



<https://www.meetup.com/DevOps-for-Defense/>
<https://github.com/jondavid-black/DevOpsForDefense>
devopsfordefense@gmail.com
<https://twitter.com/devops4defense>

DevOps for Defense Meetup: Code of Conduct

- UNCLASSIFIED ONLY!!!!
- Treat each other with respect and professionalism.
- Do not talk about private, sensitive, or proprietary work.
- Do talk about your experiences, needs, desires to improve work in our domain.
- Do share your thoughts.
- Do learn from others.
- Do respect & tip your bartenders!



Be Heard!

What would you like to do in future months?

Presentations:

- Write a topic on a card & add it to the table in the Presentation area.
- If you'd like to volunteer to present the topic, add "Volunteer: **[YOUR NAME]**".

Books:

- Write the title & author on a card & add it to the table in the Book Club area.

Activities:

- Write a short name & description of the activity on a card & add it to the table in the Activity area.



Please be an Active Part of our Meetup Success!

Announcement!

DevOpsDays Nashville 2019

Music City Center

May 9-10th, 2019



From startups to banking and publishing, Nashville is home to a very large and awesome tech community. We're proud to bring back DevOpsDays Nashville for the third year at the Music City Center in 2019! DevOpsDays Nashville will bring 325+ development, operations, security, and management professionals together to discuss the culture, processes, and tools to enable better organizations and innovative products.

Tickets are on sale now for \$179.50 USD.

PSA on Containers: Run...Save Yourselves!!!

Doomsday Docker security hole uncovered

A security vulnerability has been disclosed for a flaw in runc, Docker and Kubernetes' container runtime, which can be used to attack any host system running containers.



By Steven J. Vaughan-Nichols for Linux and Open Source | February 11, 2019 -- 18:53 GMT (10:53 PST) | Topic: [Security](#)

NIST

Information Technology Laboratory

NATIONAL VULNERABILITY DATABASE

VULNERABILITIES

CVE-2019-5736 Detail

MODIFIED

This vulnerability has been modified since it was last analyzed by the NVD. It is awaiting reanalysis which may result in further changes to the information provided.

QUICK INFO

CVE Dictionary Entry:

RunC Vulnerability Gives Attackers Root Access on Docker, Kubernetes Hosts

By [Sergiu Gatlan](#)

February 11, 2019 02:10 PM 0

Major Container Security Flaw Threatens Cascading Attacks

PSA on Containers: Or Keep Your SW Patching Up to Date!

The screenshot shows the Docker Docs website. The top navigation bar includes the Docker logo, a search bar, and links to Guides, Product manuals, Glossary, Reference, and Samples. The right side of the header shows the current version as Docker v18.09 (current).

The left sidebar contains a navigation menu with categories like Docker Enterprise Edition, Docker Compose, Docker Desktop for Mac, and Docker Desktop for Windows. The 'Release notes' link under Docker Enterprise Edition is highlighted.

The main content area displays the '18.09.2' release notes, dated 2019-02-11. The title is 'Security fixes for Docker Engine - Enterprise and Docker Engine - Community'. A bulleted list highlights important changes to the upgrade process. A link to a Docker blog post is provided for additional information.

Below this, the 'Known Issues' section is shown, dated 2019-01-09, with a heading 'IMPORTANT NOTES ABOUT THIS RELEASE'. It explains that in Docker versions prior to 18.09, containerd was managed by the Docker engine daemon, but in Docker Engine 18.09, it is managed by systemd. This change affects custom configurations for the `docker.service` that alter mount settings, such as `MountFlags=slave`, which can break interactions between the Docker Engine daemon and containerd.

The right sidebar contains links to 'Edit this page', 'Request docs changes', and 'Get support'. Below these is a 'On this page:' section with a list of release notes links, including 18.09.3, 18.09.2, 18.09.1, 18.09.0, and older versions.

18.09.2
2019-02-11

Security fixes for Docker Engine - Enterprise and Docker Engine - Community

- There are important changes to the upgrade process that, if not correctly followed, can have impact on the availability of applications running on the Swarm during upgrades. These constraints impact any upgrades coming from any version before 18.09 to version 18.09 or greater.

- Update `runc` to address a critical vulnerability that allows specially-crafted containers to gain administrative privileges on the host. [CVE-2019-5736](#)
- Ubuntu 14.04 customers using a 3.13 kernel will need to upgrade to a supported Ubuntu 4.x kernel

For additional information, [refer to the Docker blog post](#).

Known Issues
2019-01-09

IMPORTANT NOTES ABOUT THIS RELEASE

In Docker versions prior to 18.09, containerd was managed by the Docker engine daemon. In Docker Engine 18.09, containerd is managed by systemd. Since containerd is managed by systemd, any custom configuration to the `docker.service` systemd configuration which changes mount settings (for example, `MountFlags=slave`) breaks interactions between the Docker Engine daemon and containerd, and you will not be able to start containers.

Run the following command to get the current value of the `MountFlags` property for the `docker.service`:

[Edit this page](#)
[Request docs changes](#)
[Get support](#)

On this page:

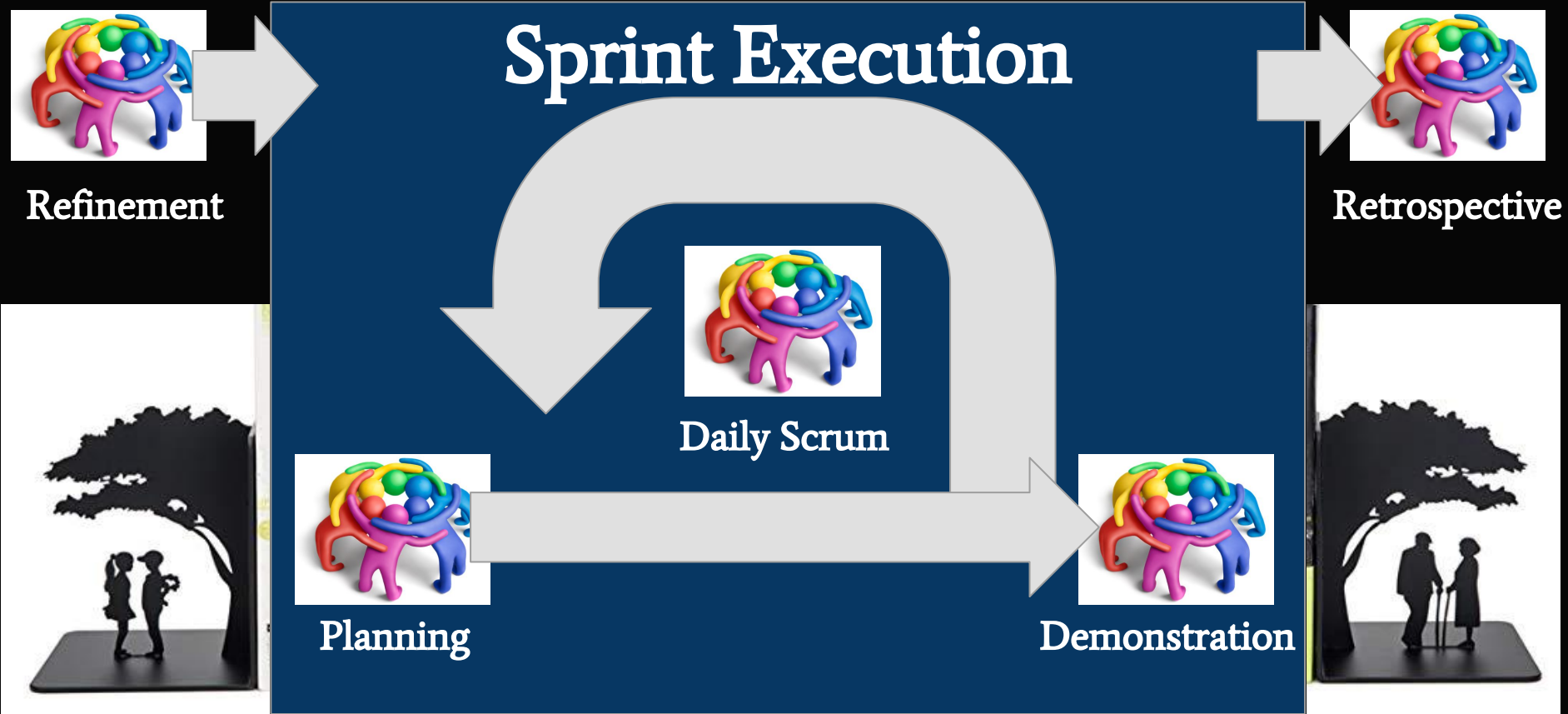
- [18.09.3](#)
- [18.09.2](#)
- [18.09.1](#)
- [18.09.0](#)
- [Older Docker Engine EE Release notes](#)
- [18.03.1-ee-7](#)
- [18.03.1-ee-7](#)
- [18.03.1-ee-6](#)
- [18.03.1-ee-5](#)
- [18.03.1-ee-4](#)
- [18.03.1-ee-3](#)
- [18.03.1-ee-2](#)
- [18.03.1-ee-1](#)
- [17.06.2-ee-20](#)
- [17.06.2-ee-19](#)

Agile Bookends



The Power of Refinement & Retrospective

Five Standard Agile Ceremonies



Agile / Scrum Core Concept - Start with a Backlog

JIRA Software

Teams in Space
Scrum: Teams in Space

Backlog

QUICK FILTERS: Product Recently updated Only my issues Server UI

VERSIONS

EPICS

All issues

SeeSpaceEZ Plus

Large Team Support

Space Travel Partners

Summer Saturn Sale

Afterburner Plus

Local Mars Office

Hyper-speed shuttles

New launch platforms

Delicious Space Nutrition

Spacetainment

Sprint 1 14 issues

Start: 10 Aug 2015 — Release: 9 Oct 2015

Sprint 2 6 issues

Start sprint

Backlog 49 issues

Create sprint

Issues:

- TIS-25 Engage Jupiter Express for outer solar system travel (SeeSpaceEZ Plus, 5)
- TIS-37 When requesting user details the service should return prior trip info (Large Team Support, 1)
- TIS-9 After 100,000 requests the SeeSpaceEZ server dies (Local Mars Office, 1)
- TIS-7 500 Error when requesting a reservation (Large Team Support, 1)
- TIS-10 Bad JSON data coming back from hotel API (Space Travel Partners, 5)
- TIS-18 Enable Speedy SpaceCraft as the preferred individual transit provider (Large Team Support, 1)

Backlog consists of work items (stories, bugs, etc.)

- Written by any Stakeholder
- Prioritized by the Product Owner
- Refined & Accepted by the Team

Story Writing - Basic Template

As a _____, I want _____ so that _____.

Acceptance Criteria

1. Must _____
2. Must _____
3. Must _____

Agile / Scrum Refinement Transforms Your Backlog



Original Story

Refinement



Refined Story

Good Refinement Is Key to Good Outcomes

- Refinement should be fun for the team
 - And may be a little uncomfortable for the product owner
- Team should be ruthless when evaluating stories.
 - Make sure the desired outcome is clearly stated (what not how)
 - Make sure value of doing the work is understood by all (the “so that”)
 - Drive out ambiguity in the written story (e.g. jargon)
 - Identify knowledge gaps and create activities to fill (continuous learning)
 - Make sure acceptance criteria are true/false and readily demonstrable
 - Eliminate opportunities for rock drills
 - Break down large activities into small achievable increments of work

Refinement May Completely Rewrite Stories on the Backlog...Good Outcome!

Estimating Stories - Planning Poker

Story Points...

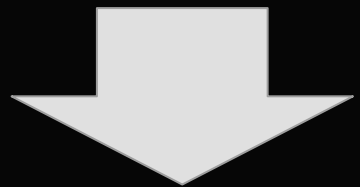
1. Should be a relative estimate to a baseline story the team fully understands.
2. Should be a unitless estimate that incorporates uncertainty, scale, and difficulty.
3. Should not be treated as time (e.g. hours, days, etc.)
 - a. Beware the CAM using your story points as a weapon - leads to sandbagging

When team members have significantly different estimates:

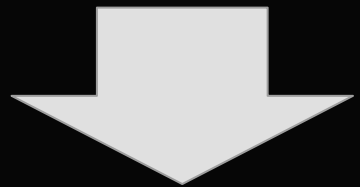
- Recognize this is likely due to remaining ambiguity or knowledge gaps
- Continue the discussion, focusing on high and low estimate team members
- Focus on assumptions that drive the estimates to ensure the team agrees
- May identify opportunities to pair team members to improve knowledge transfer

Purpose: Improve Communication & Uncover Remaining Ambiguity in Stories

Good Refinement



Easier Planning



Better Demonstrations



Make everyone look like a superhero!

Retrospectives



What if you could wave a magic wand
and make your next sprint better?

Retrospectives

What went well?

- Team strengths, positive outcomes, etc.

What didn't go well?

- Resist temptation to jump to solutions.

What will we improve next sprint?

- How do we make the good even better?
- How do we avoid repeating missteps?

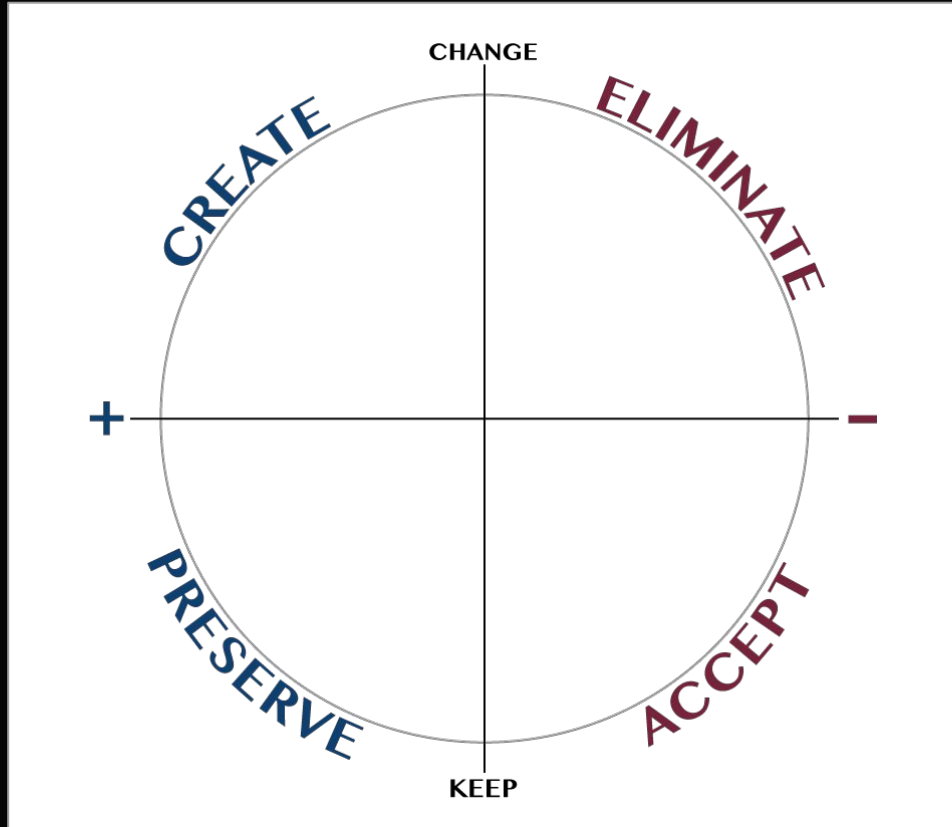
Prime Directive

"Regardless of what we discover, we understand and truly believe that everyone did the best job they could, given what they knew at the time, their skills and abilities, the resources available, and the situation at hand."

--Norm Kerth, Project Retrospectives: A Handbook for Team Review



Identify Opportunities to Improve Immediately



Use a “Wheel of Change” to help organize your thoughts and actions.

- Positive vs Negative
- Keep vs Change

Retrospectives...Require Follow Through!

**YOU ARE
WHAT YOU DO,
NOT WHAT YOU SAY
YOU WILL DO.**

-CG JUNG

MUSE UPON THIS:

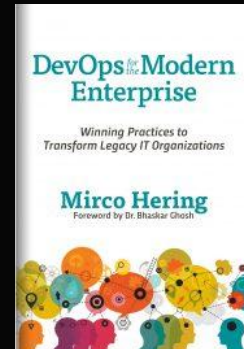
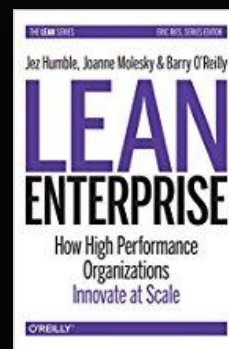
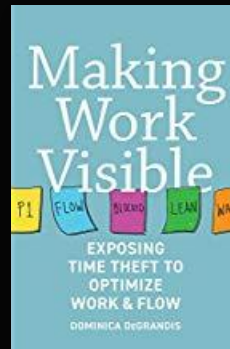
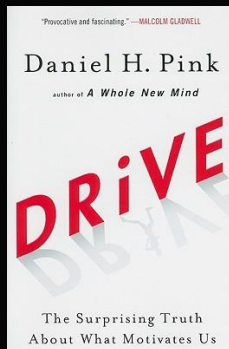
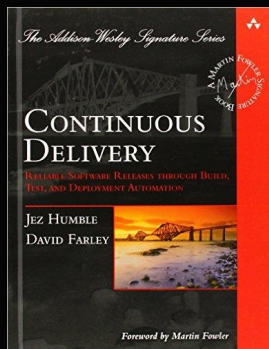
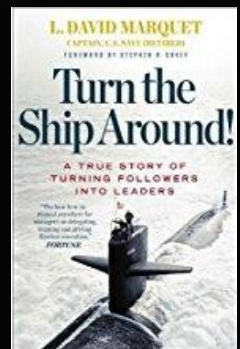
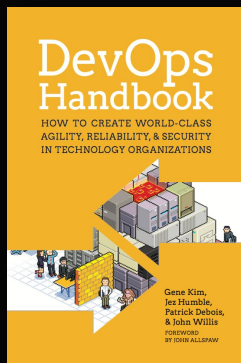
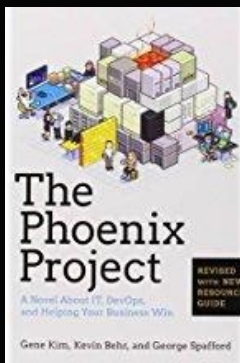
*Never underestimate
the power of one
small change.*

#MondayMorningMusing

MuseLaura.com

DevOps Resources

Books / Publications:



<https://www.meetup.com/DevOps-for-Defense/>
<https://github.com/jondavid-black/DevOpsForDefense>
devopsfordefense@gmail.com

Conference Presentations (YouTube):

- DevOps Enterprise Summit (DOES)
- IT Revolution
- Velocity
- GoTo



Group Exercises: Lean Coffee & Book Club

Book Club:

- Review & Discuss “Drive” Section 3
- Get your copy of “The Phoenix Project”

1. Each table has a facilitator.
2. The facilitator has a short introduction.
3. Everyone write down questions or topics for discussion on the subject. Place them in the middle of the table.
4. The group votes on each question or topic by placing a dot on the card. 3 votes per person.
5. Cards with most dots goes first. Set a timer for 5 minutes and discuss.
6. After 5 minutes, either vote (thumbs up/down) to keep going or move on to the next card.



Topics: “Improve Refinement in my Team”, and “Retro: Victories & Defeats”