A GENTLE INTRODUCTION TO DEVOPS - PROJECT MANAGER EDITION

AGILECON 2015 - WASHINGTON, DC
WHAT’S DEVOPS?
HOW’D WE GET HERE, AND WHAT DO I NEED TO KNOW?
MORE IMPORTANTLY:

WHY DO I CARE?
A QUICK STORY
THE REALLY BIG ONE
THE GREAT WAVE
GHOST FORESTS: WHAT DO THEY EVEN MEAN?
ANCIENT STUMP

BACK TO THE DAWN OF THE BRONZE AGE!

This root mass was one of many buried beneath the beaches along the Oregon Coast between Newport and Neskowin. It once supported a spruce tree, which was buried when the land suddenly dropped into the sea. It remained preserved beneath the sand for 4,100 years before surfacing and breaking free in 1998. Violent winter storms washed it into the mouth of Spencer Creek in 1999.
So I had to tell you that story in order to tell you this story.

The Internet Timeline:

- **1950**: Internet was created
- **1958**: United States created the advanced research projects agency known as ARPA in February 1958 to regain technological lead over the USSR.
- **1974**: Use of the term “Internet” to describe a single global TCP/IP network originated in December 1974.
- **1980**: ITP created 6 ways to get dial up and making websites.
- **1994**: By the late 1994 there were growth in the public interest in the previously academic, technical internet.
- **2007**: In a article in June 2007 the combined weight of all the electrons moved within the internet in a day is 0.2 millionths of an ounce.
- **2009**: Are more faster internet is created and the pro upgrade the old websites.
- **1976**: The X.25 packet switching standard was developed in the CCITT (now called ITU-T) around 1976.
- **1996 to 1997**: It was estimated that the internet grew by 100 percent per year, with a brief period of explosive growth.
- **2005**: The world summit on the information society, held in Tunis, established the internet governance forum to discuss internet related issues.
WHERE THIS ALL BEGAN
HTML WASN’T ENOUGH

elod beregszaszi
NOW WITH MORE DATABASES!

HTTP://CPS-VO.ORG/NODE/6743
VERSION CONTROL: I’M GLAD YOU HAVE IT
WHAT'S VERSION CONTROL ANYWAYS
STREAM MANAGEMENT
CONTINUOUS INTEGRATION
CONTINUOUS DELIVERY
CONTINUOUS DELIVERY

1. CODE DONE
   AUTO
2. UNIT TESTS
   AUTO
3. INTEGRATE
   AUTO
4. ACCEPTANCE TEST
   MANUAL
5. DEPLOY TO PRODUCTION

CONTINUOUS DEPLOYMENT

1. CODE DONE
   AUTO
2. UNIT TESTS
   AUTO
3. INTEGRATE
   AUTO
4. ACCEPTANCE TEST
   AUTO
5. DEPLOY TO PRODUCTION

YASSAL SUNDMAN
Continuous Delivery maturity matrix

HTTPS://CODESHIP.COM/CONTINUOUS-INTEGRATION-ESSENTIALS

<table>
<thead>
<tr>
<th>Novice</th>
<th>Beginner</th>
<th>Intermediary</th>
<th>Advanced</th>
<th>Expert</th>
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</thead>
<tbody>
<tr>
<td>Build</td>
<td></td>
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<tr>
<td>Verification before commit run in developer's Workspace</td>
<td>CI server builds on commit</td>
<td>No build scripts -only configurations</td>
<td>Distributed builds</td>
<td>Build from VM CI server orchestrate VMs</td>
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<tr>
<td>Common nightly build</td>
<td>Artifacts are managed</td>
<td>Dependencies are managed</td>
<td>Staged build sequence</td>
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<tr>
<td>Test + QA</td>
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<tr>
<td>Unit Test</td>
<td>Metrics on technical debt &amp; compliance</td>
<td>Peer-reviews</td>
<td>Test Data</td>
<td>Automated Acceptance Test</td>
</tr>
<tr>
<td>Code Coverage</td>
<td>Mock-up's &amp; proxies</td>
<td>Automated Functional Test</td>
<td>Test In target</td>
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<tr>
<td>SCM</td>
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<tr>
<td>“Early Branching”</td>
<td>“Late branching”</td>
<td>Pre-tested Commits</td>
<td>All commits are tied to tasks</td>
<td>Release notes &amp; traceability analysis are generated automatically</td>
</tr>
<tr>
<td>Branches used for releases</td>
<td>Branches used for work isolation</td>
<td>Integration branch is pristine</td>
<td>Individual history rewrites In DVCS</td>
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<tr>
<td>Merges are rare</td>
<td>Merges are common</td>
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<td>Build reports and statistics are shared with customer and public</td>
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<tr>
<td>Visibility</td>
<td></td>
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</tr>
<tr>
<td>Build status is notified to committer</td>
<td>Latest build status is available to all stakeholders</td>
<td>Trend reports</td>
<td>Monitors in work areas show real-time status</td>
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<td></td>
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<td>Build status can be subscribed to (pull vs push)</td>
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</table>
NEW TRICKY THINGS

OBLIGATORY CONTAINER SHIP DISASTER PHOTO
BUT WHAT ABOUT SECURITY!
WHAT DOES IT ALL MEAN
ALL THIS TO SAY:
TOOLING IS THE START.
OUR WORK MATTERS.
CULTURE IS THE OUTCOME
#HUGOPS
BE EXCELLENT TO EACH OTHER
THANK YOU

@AMYE