

# AnthillPro: Automating the Pain out of Building and Deploying Software Applications

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# Introduction

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Anthill Pro Engineer and Consultant for Development Teams

Java, Maven, ANT, Eclipse, Development Best Practices

# Outline

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# Brief Timeline of the Emergence of the Engineering Disciplines

- **Civil Engineering:** Pyramids by 2500 BC
- **Mechanical Engineering:** over 2000 years old (ancient Greece and China)
- **Chemical Engineering:** 1800s
- **Electrical Engineering:** 1800s
- **Industrial Engineering:** late 1800s
- **Aerospace Engineering:** late 1800s

**Software Engineering: 1960s (50 years old)**

**Software Engineering is a relatively young discipline.**

# Recent Advances in Software and Emerging Technologies

- Search Engine 1990 (20 years old)
- Mosaic 1993 (17 years old) - I graduated college
- JAVA: 1995 (15 years old)
- Extreme Programming: 1999
- ANT: 2000 (10 years old)
- Agile Manifesto: 2001
- Maven 2002 (8 years old)
- Web 2.0/Ajax, Social Networking, Web Services/REST, Software Mashups
- VoIP, Google Technologies, iPhone, GPS for the masses
- Open Source
- CI Servers: Hudson and Cruise Control
- Starbucks on every corner

# Agile Gains Creds --> Becomes Commonplace

## *2009 Forrester Study*

*Forrester surveyed nearly 1,300 IT professionals and found that **35 percent** of respondents stated that agile most closely reflects their development process, with the number increasing to **46 percent** if the definition of agile is expanded to include practices such as rational unified process or spiral.*

[http://www.infoworld.com/d/developer-world/agile-software-development-now-mainstream-190?  
source=rss\\_infoworld\\_news](http://www.infoworld.com/d/developer-world/agile-software-development-now-mainstream-190?source=rss_infoworld_news)

# Steps Toward Software Dev Maturity

## Steps Toward Maturity with or without Agile

1. Setup Source Control
2. Use an IDE like Eclipse not Dream Weaver
3. Script your builds (Ant, Maven)
4. Build on a Build Server
5. Setup CI Server (Hudson, Cruise Control) - test case number one - Does it Build?; Define CI
6. Create first Test Cases for continuous regression testing
7. If adding Unit Tests seems a daunting task that keep you from getting started:
  1. add them for every Bug
  2. then for every class you touch

## Continuous Regression Testing

# Open Source CI:Hudson and CruiseControl

In the end, what you have is a good build of hopefully well tested code.

This is all great, but you could go so much farther

# What Hudson and Cruise Control Do Not Give You

- Repeatabe Deployment Automation to all of your Environments across your entire cluster of servers  
Question: 3AM Deployments? and Rollbacks?
- Binary artifact Repository
- Separation of Duties (financial industry: <http://www.wired.com/threatlevel/2010/04/atm-hack/>)
- Dashboard of build statuses including where they have been deployed.
- Customizable Life Cycle Models

# Additional Benefits of AnthillPro

- Build Once, Deploy multiple times
- Plug-in Model
- Multiple Scripting language support
- Full Workflow model complete with Pre-conditions and Post Conditions.
- **Traceability from Artifacts to Source**

# Demo of AnthillPro

# Additional Information

## Additional Info:

- <http://AnthillPro.com> by Urbancode
- <http://Anthillizer.com> Blog and User Forums by Eric Starr

## Other Players:

- Build Forge, Team City

## Resources for this presentation:

- [http://blogs.forrester.com/tech\\_product\\_management/2010/01/agile-adoption-study-now-published.html](http://blogs.forrester.com/tech_product_management/2010/01/agile-adoption-study-now-published.html)
- <http://www.cmcrossroads.com/tool-spotlight/6811-anthill-pro-spotlight-review>
- Wikipedia for the Engineering Discipline Beginnings

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