

Platform Infrastructure for Agile Software Estimation

Nicholas Wagner

May 12th, 2022

Institute for Defense Analyses

730 East Glebe Road • Alexandria, Virginia 22305

How do we balance the conflicting preferences of developers and their overseers?



Automation!



Developers want to develop, overseers want lots of data

The Software Acquisition Pathway changed reporting requirements for program management data

Freeing developers to spend more time coding and less time reporting \rightarrow Good!

But how can overseers collect and utilize the information they need without burdening developers?



Modern problems have modern solutions

Automation capabilities exist for popular COTS development tools like Jira, GitHub, GitLab, etc.

Parsers can be written for textual documentation

Machine learning can speed up forecasts



Why not provide these capabilities as enterprise solutions?



Build on past examples

Platform One

Air Force DevSecOps tooling as a service

Handles boilerplate security and infrastructure needs

Not designed for oversight

CADE

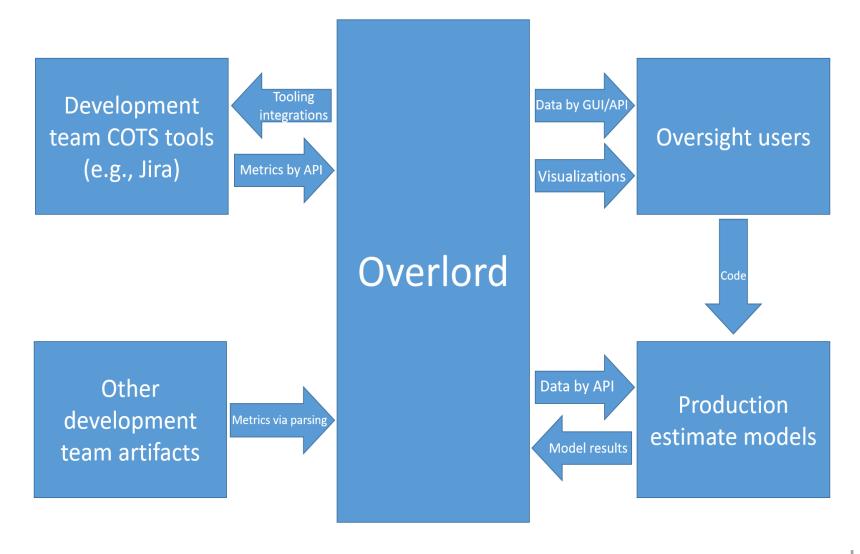
CAPE data repository for traditional software program reports

Provides search and visualization capabilities

Manual workflows



A new* potential platform: Overlord



<u>IDA</u>

Closing recommendations

OUSD(A&S) and CAPE should collaborate in building any new platform

Utilize talent within CAPE Analysis Data Tools Tiger Team

Follow Software Acquisition Pathway iterative development practices

