DEPENDENCY
-TRACK V4.13
PROJECT
COLLECTIONS

M&M software



Ralf King
Head of Competence Center
"Cyber- & Software-Security"



Full range software partner-













~ 300 Employees 35+
Years experience in Software Development

Locations worldwide (2xGermany, China, India)





PROJECT ORGANIZATION BEFORE V4.7

= Chaos in Dependency-Track

What we have:

- » Many different customers
- » Many different projects per customer
- » Many different types of projects
 - Cloud deployments with multiple services and multiple environments (Prod/QA/Dev)
 - Versioned Software (Mobile Apps, Desktop clients, IoT Software, ...) with many different versions to track
- » Many different teams working on different projects

What Dependency-Track had:

- » A flat list of projects(= one single service/application version)
- » No structure
 - > What belongs together to one logical "project"?
 - > Which (cloud-)environment does it belong to?
- » Notifications configured per Dependency-Track project (or globally)
- » Policies configured per Dependency-Track project (or globally)



PROJECT ORGANIZATION FROM V4.7

= get some structure in Dependency-Track

Part 1 of our solution:

- » <u>UI support for Parent/Child-relations</u>
- » Child-project support in alert rules
- » Child-project support in policies

What we achieved:

- » We could structure e.g. per customer > project > environment
- » We could put all different project versions into one parent
- » Much better overview ©
- » We could configure single alerts & policies high in the structure, auto-applying them to all children ☺

What the drawbacks were:

- » Users were confused ⊗:
 - Clicking on a parent did result in displaying an "empty" looking project
 - Numbers in project list did show 0 issues for all parents
- » Users requested better overview/summary for higher-level entries (e.g. summary of issues of all 10 micro services in the PROD environment)



PROJECT ORGANIZATION WITH V4.13

= much better usability & overview in Dependency-Track

Part 2 of our solution:

- » Introduce isLatest version flag for projects (v4.12)
- » Introduction of Collection Projects (v4.13)

What does it do?

- » Define "structural/meta"-projects to be collections
- » Collections do not have own components/vulns/policy violations
- » Collections show contained children if opened
- » Collections can aggregate metrics from children
 - > All direct children
 - > All direct children with specific tag
 - > All direct children marked as latest
- » Collections can be nested.

What are example use cases?

- » All versions of 1 application into one collection, showing only the metrics of the latest dev-version to quickly see not addressed issues
- » Track & summarize metrics of multi-service cloud projects per environment (PROD/QA/DEV)
 - > Put environments into another collection, highlight e.g. latest DEV to see not yet addressed issues, or PROD to quickly see current prod impact.
- » Combine all above & summarize metrics of multiapplication projects (Mobile App + Desktop client + Web Frontend + Cloud Backend + IoT App)



WETURN VISIONS FOR A DIGITAL WORLD INTO REALITY



