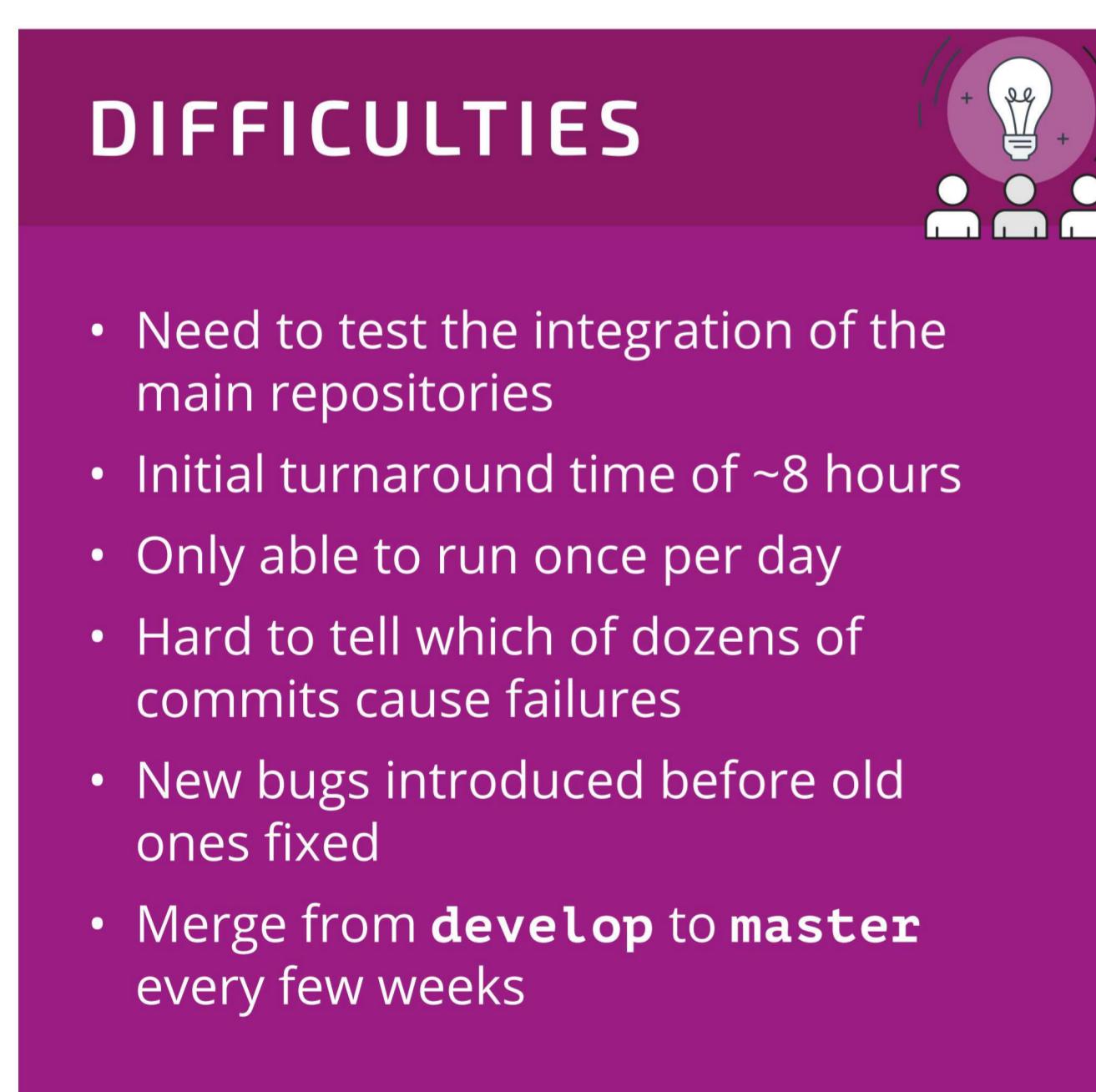


Faster Turnaround Improves Developer Productivity

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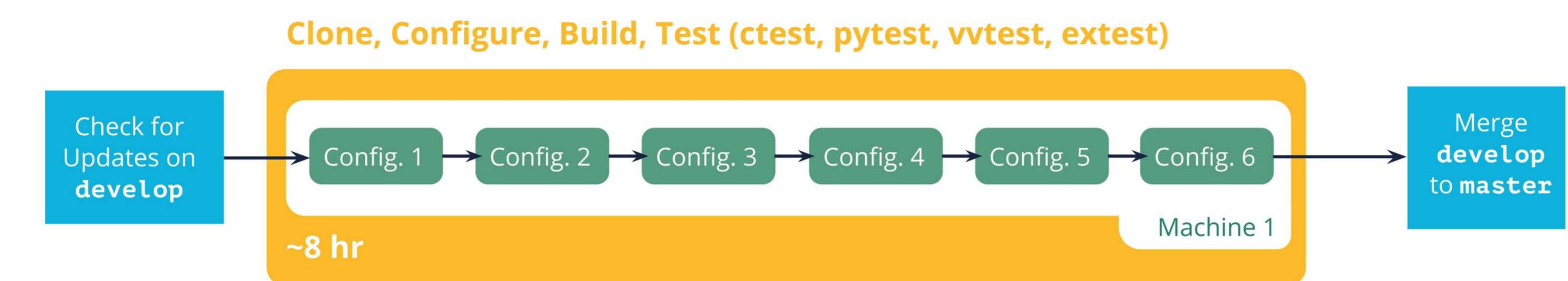
THE PROBLEM



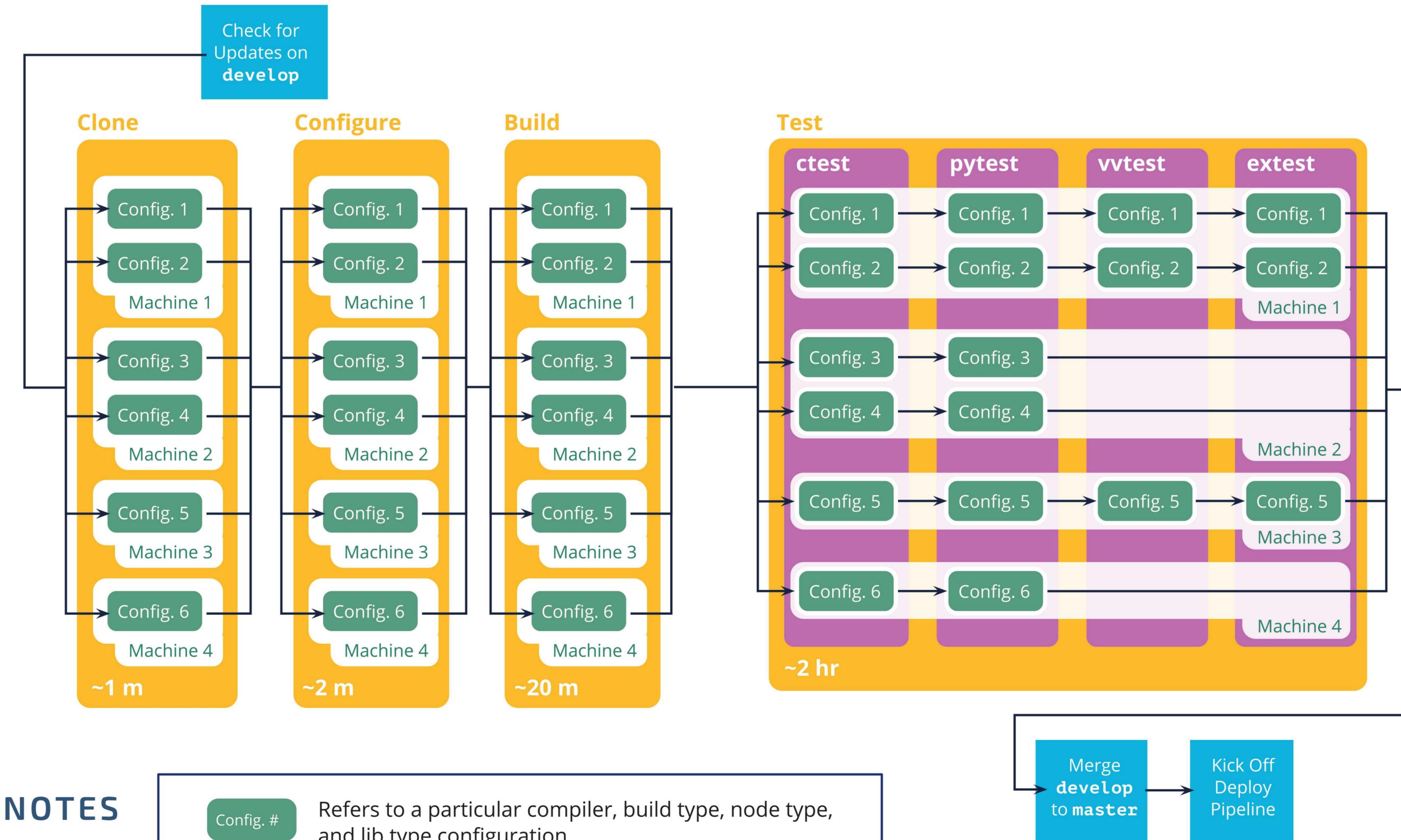
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THE SOLUTION

BEFORE



AFTER



NOTES

Config. # Refers to a particular compiler, build type, node type, and lib type configuration

vvtest Able to fail and notify team between **stages**

extest verification & validation testing

extest extended testing

IMPROVEMENT

MODULAR DESIGN

- All **Config. #** boxes controlled by Jenkins Pipeline script driving Python build script
- Improved maintainability/extensibility
- Easy to modify, swap out, or add new stages
- Fail as fast as possible
- Parallelize across machines

RESULTS

- Turnaround time decreased from ~8 hours to ~2
- Able to run 3x per day
- Fewer commits tested → easier to debug
- Bugs fixed as soon as they're introduced
- Merge from **develop** to **master** regularly
- Developers spend less time debugging, more time doing science
- DevOps spends less time babysitting, more time expanding the infrastructure feature set



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