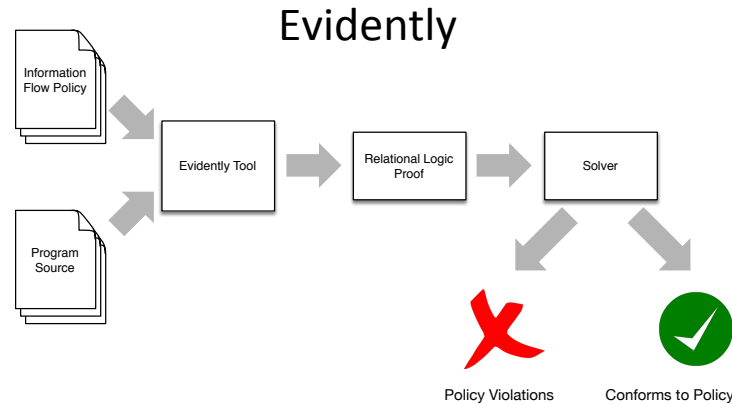


Flexible and Practical Information Flow Assurance for Mobile Apps



Challenges:

- Enable developers and analysts to specify fine grained information flow
- Automated tools to soundly prove/refute an app's conformance with policy

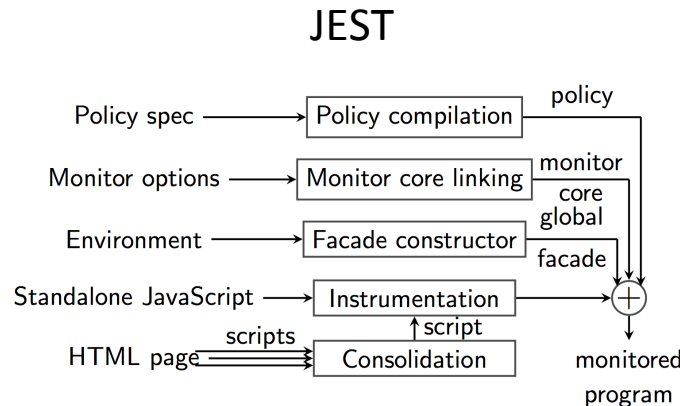


Scientific Impact:

- Common language for practical confidentiality and integrity requirements
- End-to-end semantics: adversary knowledge and influence
- Enforcement leveraging types, assertions, and relational verification

Solution:

- Evidently Policy Language augmenting Java Modeling Language (JML)
- JEST: Inlined Monitor for JavaScript Embedded in Apps



Broader Impact:

- High assurance app markets for military or businesses
- Enable use of mobile apps in mission critical situations