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An Analysis of Fedora Security Profile

Security Metrics-Driven Evaluation, Design, Development, & Deployment

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The Hybrid Approach
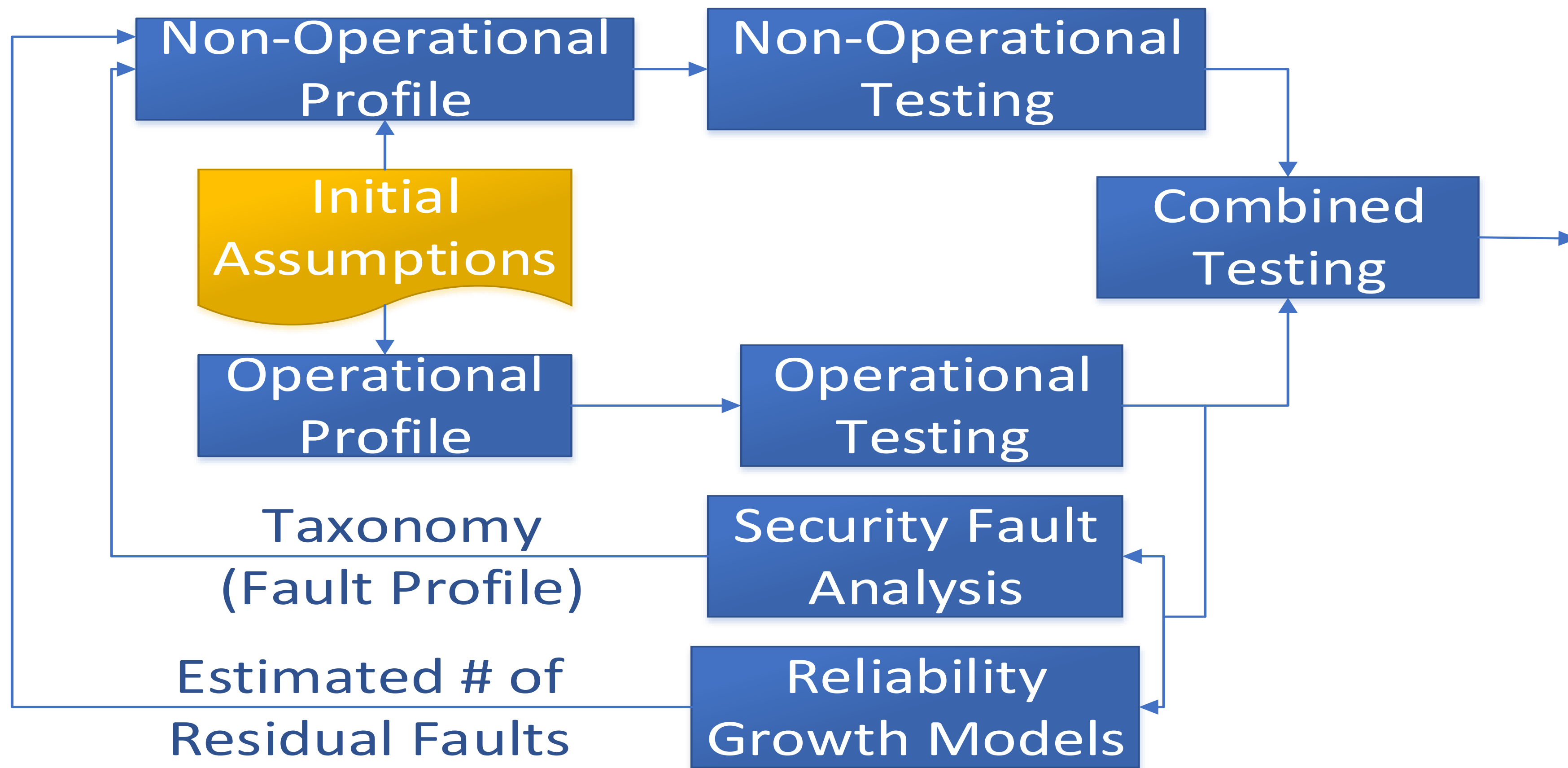
Example: Fedora 17 distribution
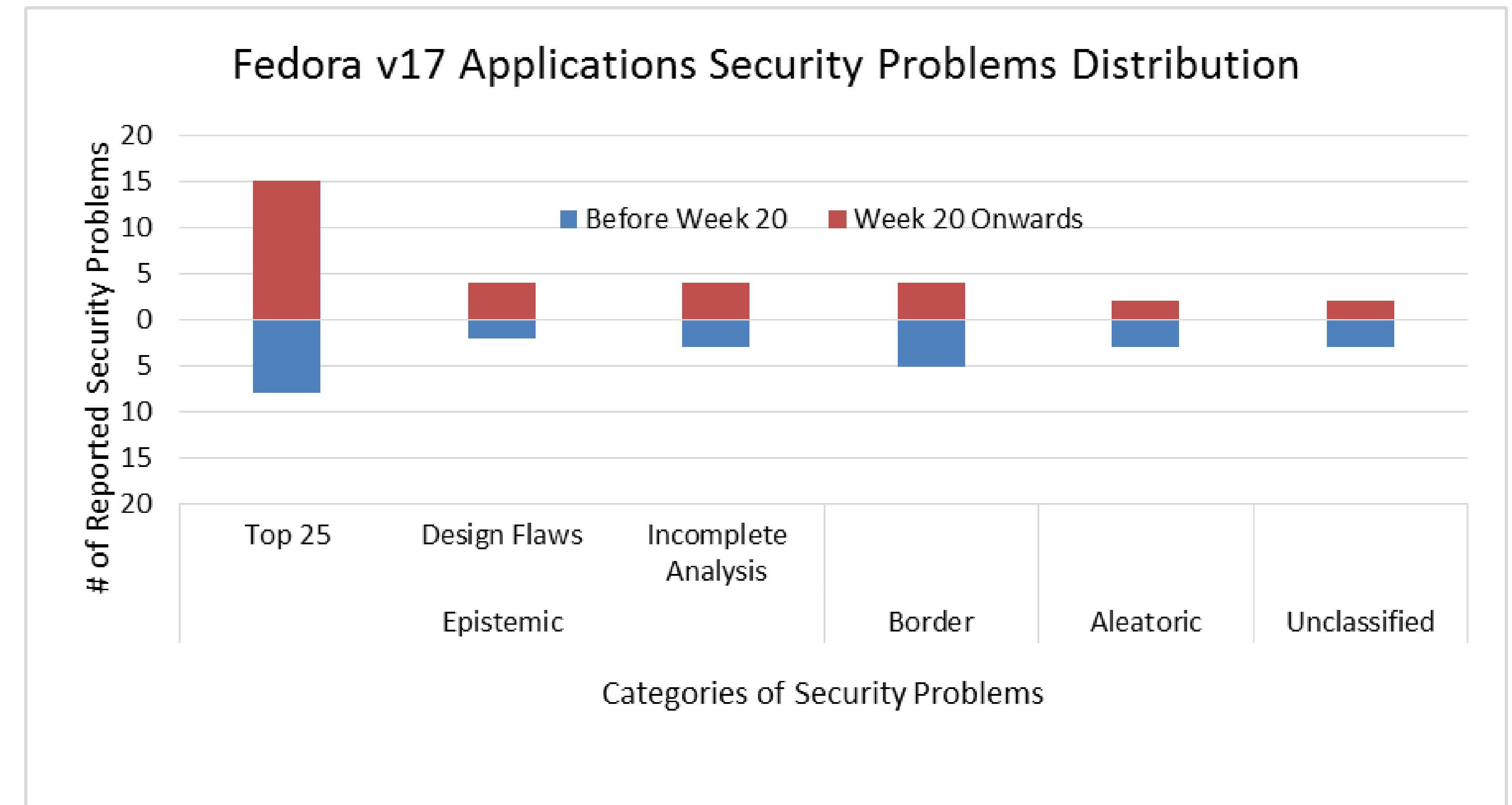
Technical Approach

- Security Fault Detection
  - Software processes
  - Non-operational testing profiles
- Security Vulnerability Taxonomy
  - Generally known
  - Collected in-process
- Taxonomy-Driven Processes & Test Case Design

Benefits & Deliverables

- Scientific(empirically grounded) vulnerability classification scheme incorporating both epistemic and aleatoric events to accelerate security fault identification and removal
- Leverage symmetry to guide
  - Estimation of residual vulnerabilities in an already released product
  - Testing of subsequent versions of a product

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