

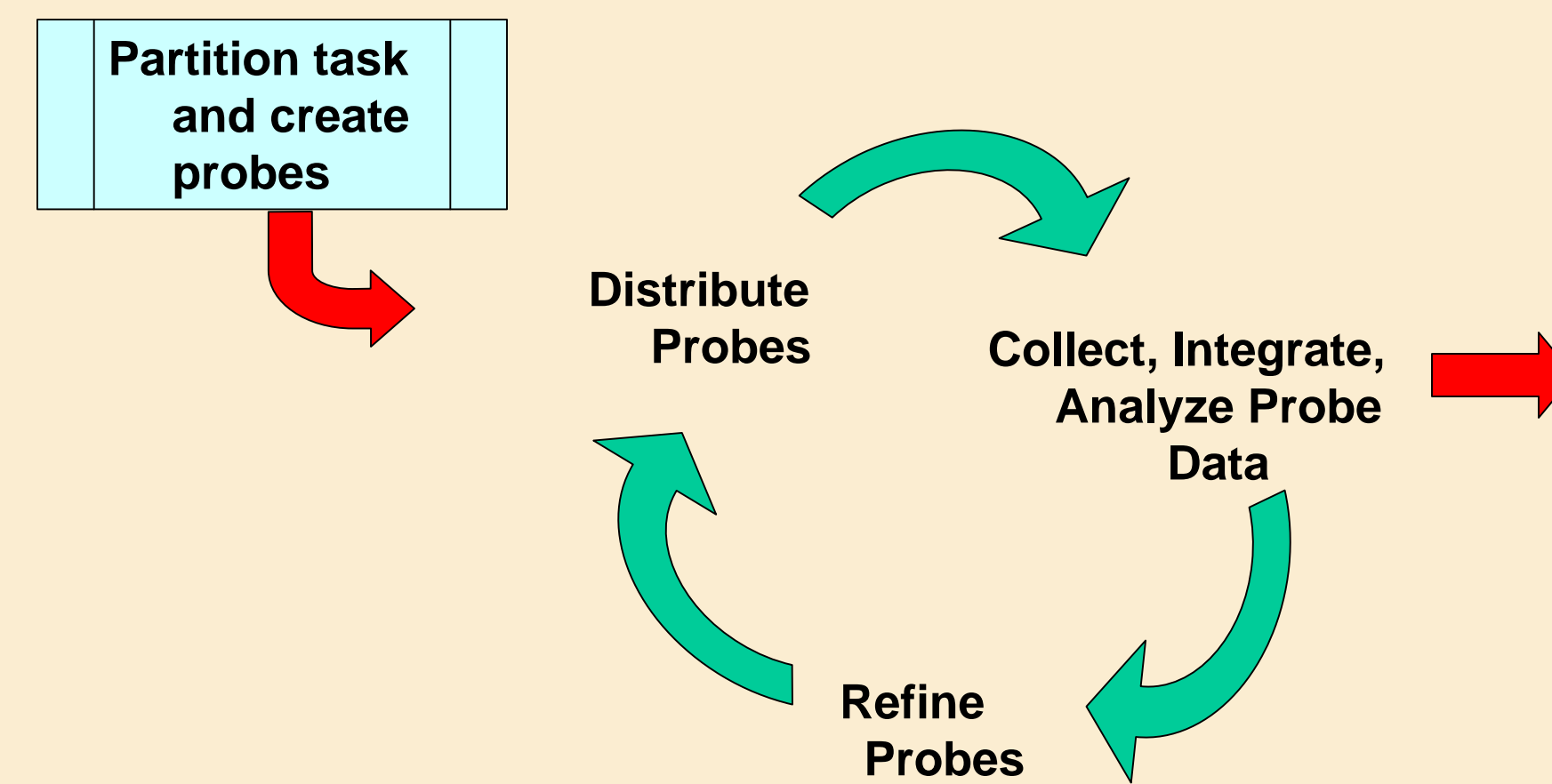


Goal:

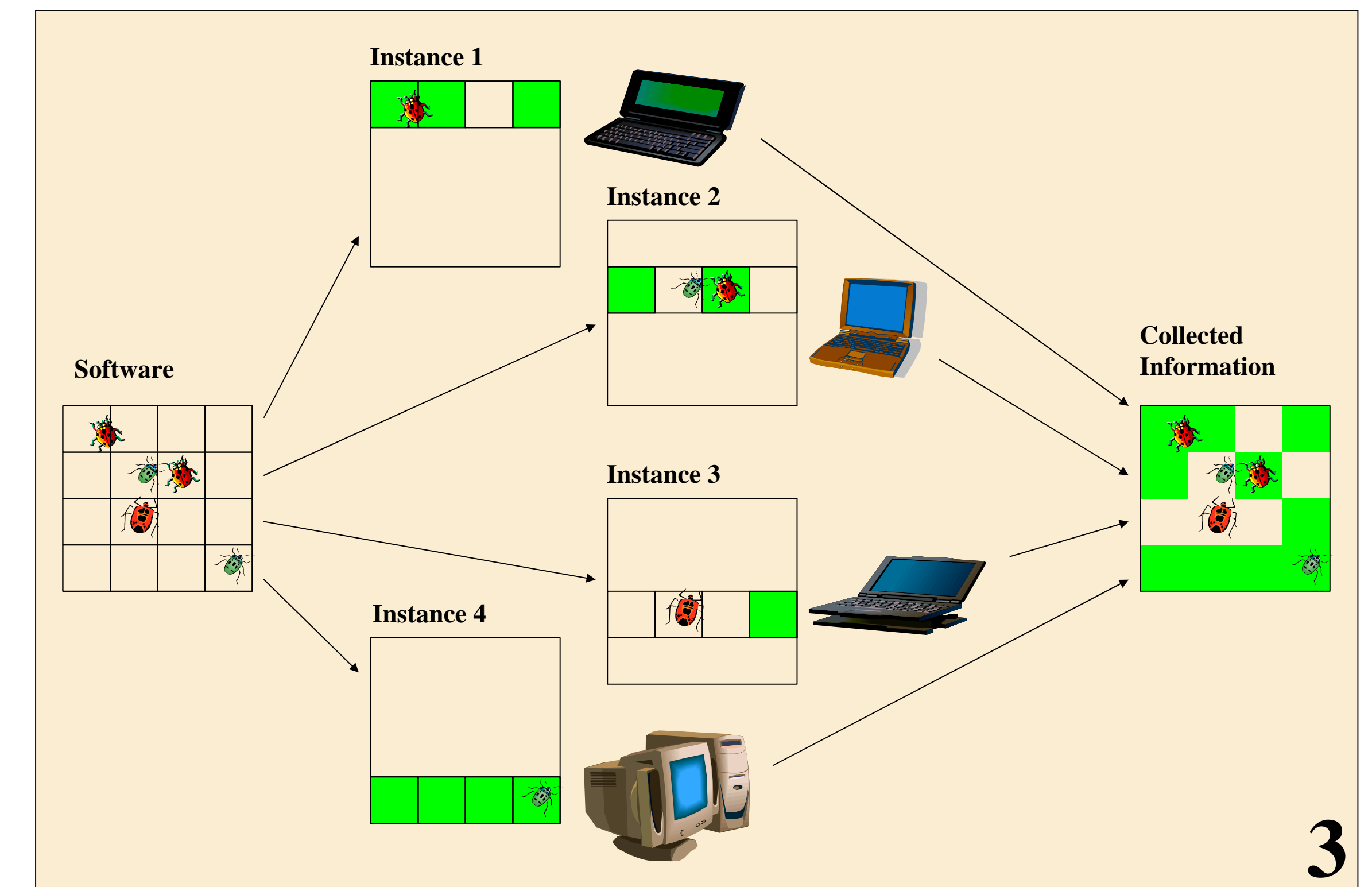
Continuous Monitoring
of Deployed Software
using
Lightweight, Configurable
Instrumentation

1

Solution: Software Tomography



2



3

Studied Monitoring Task:

Estimate branch coverage of
deployed instances using
Software Tomography

Questions:

- > How good is the estimate?
- > Can estimate be improved with low overhead?

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Three Techniques:

SIMPLE: Single Branches
REF-RR: Replace Probes
REF-AG: Add Probes

Studies:

1. All sites use SPACE uniformly
2. Each site uses SPACE uniquely

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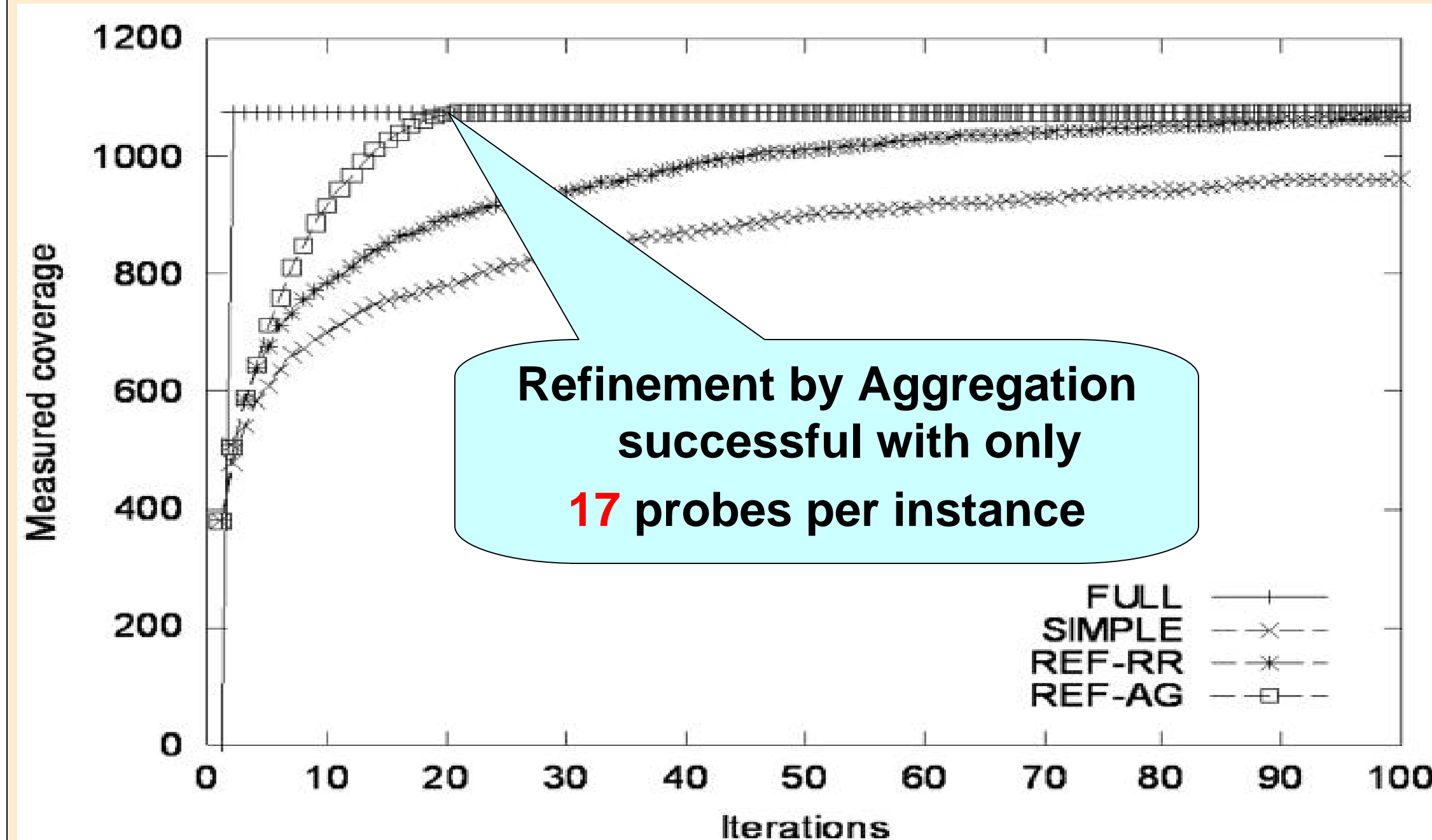
Evaluations:

Effectiveness w.r.t. base case
Efficiency w.r.t.

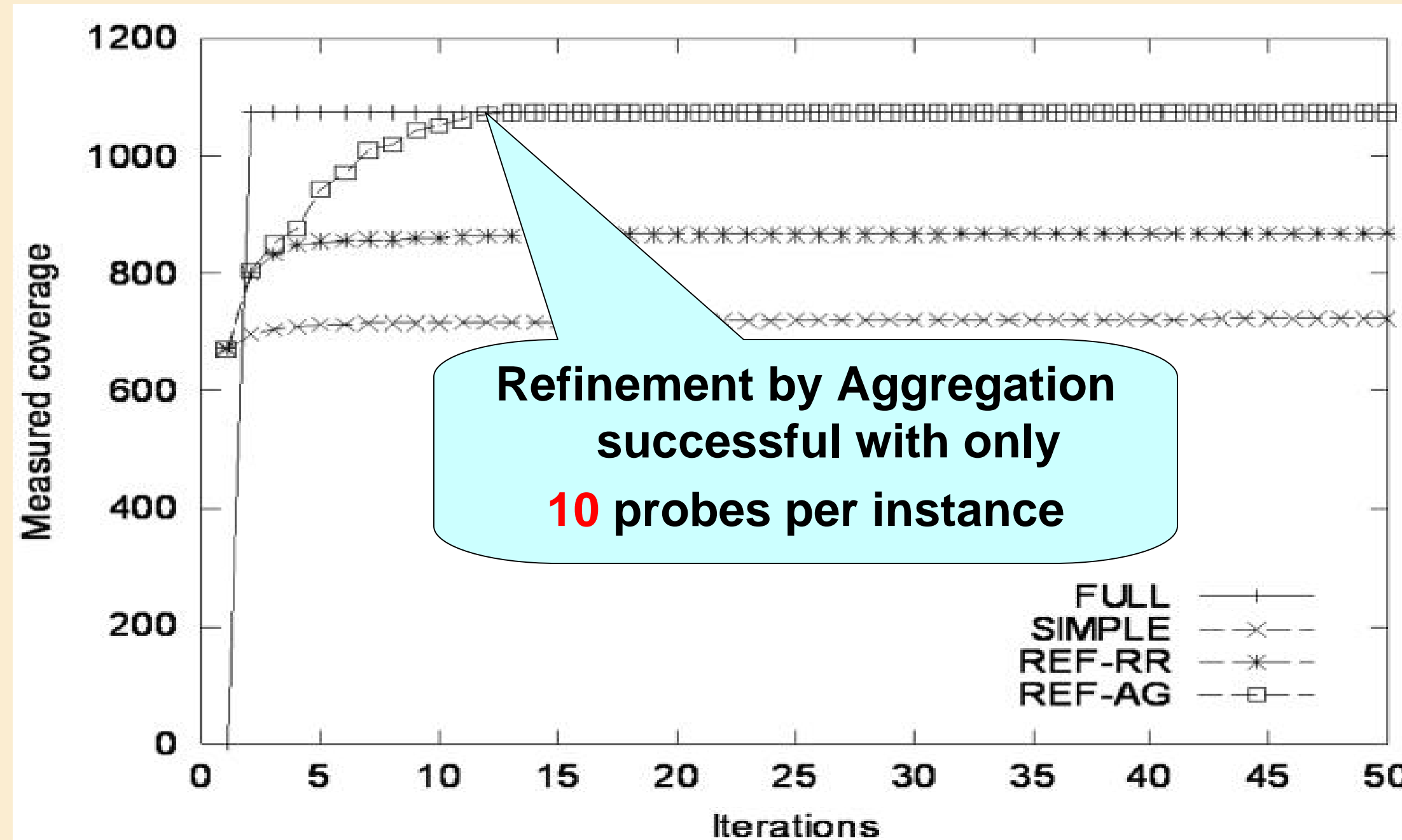
- # of probes per instance
- # of updates of probes

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Study 1



Study 2



Conclusion:

Software Tomography can
provide a good estimate of the
considered monitoring task.

Future Work:

Extend to other behaviors.

Advisors:

A. Orso and M. J. Harrold

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