

Global Purification of Internet Streams

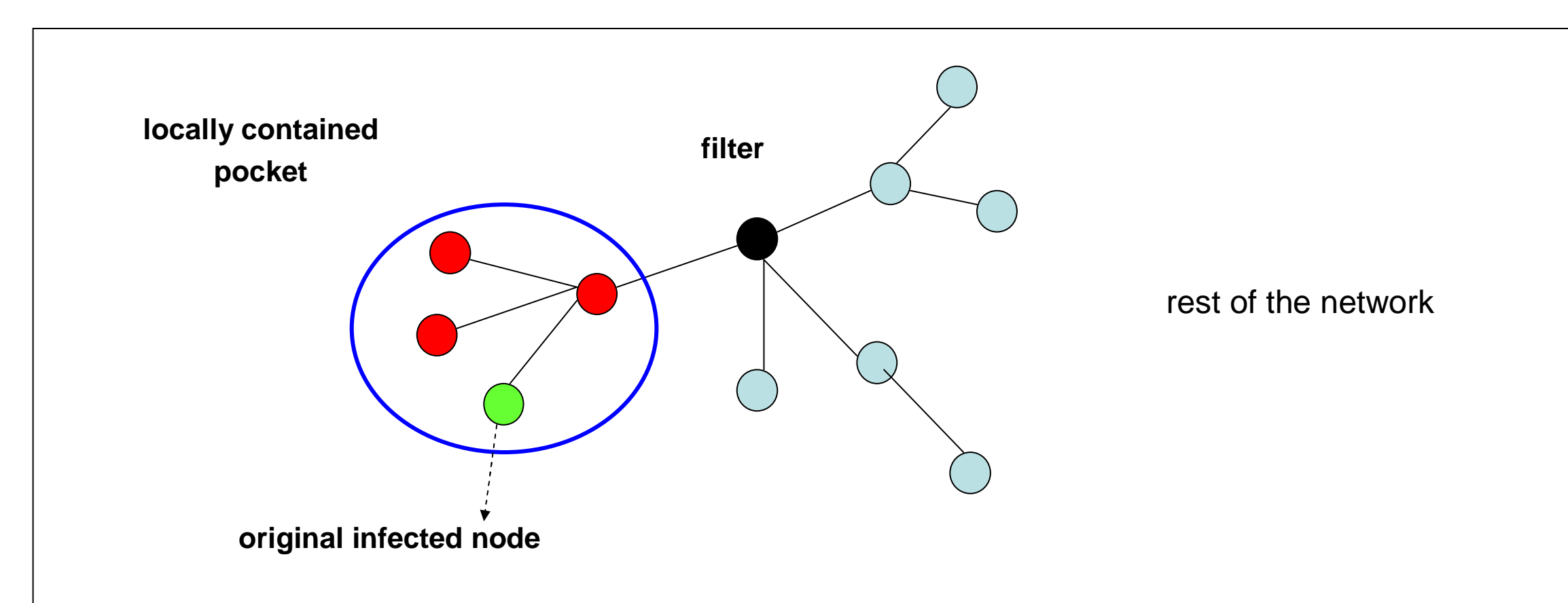
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Motivation

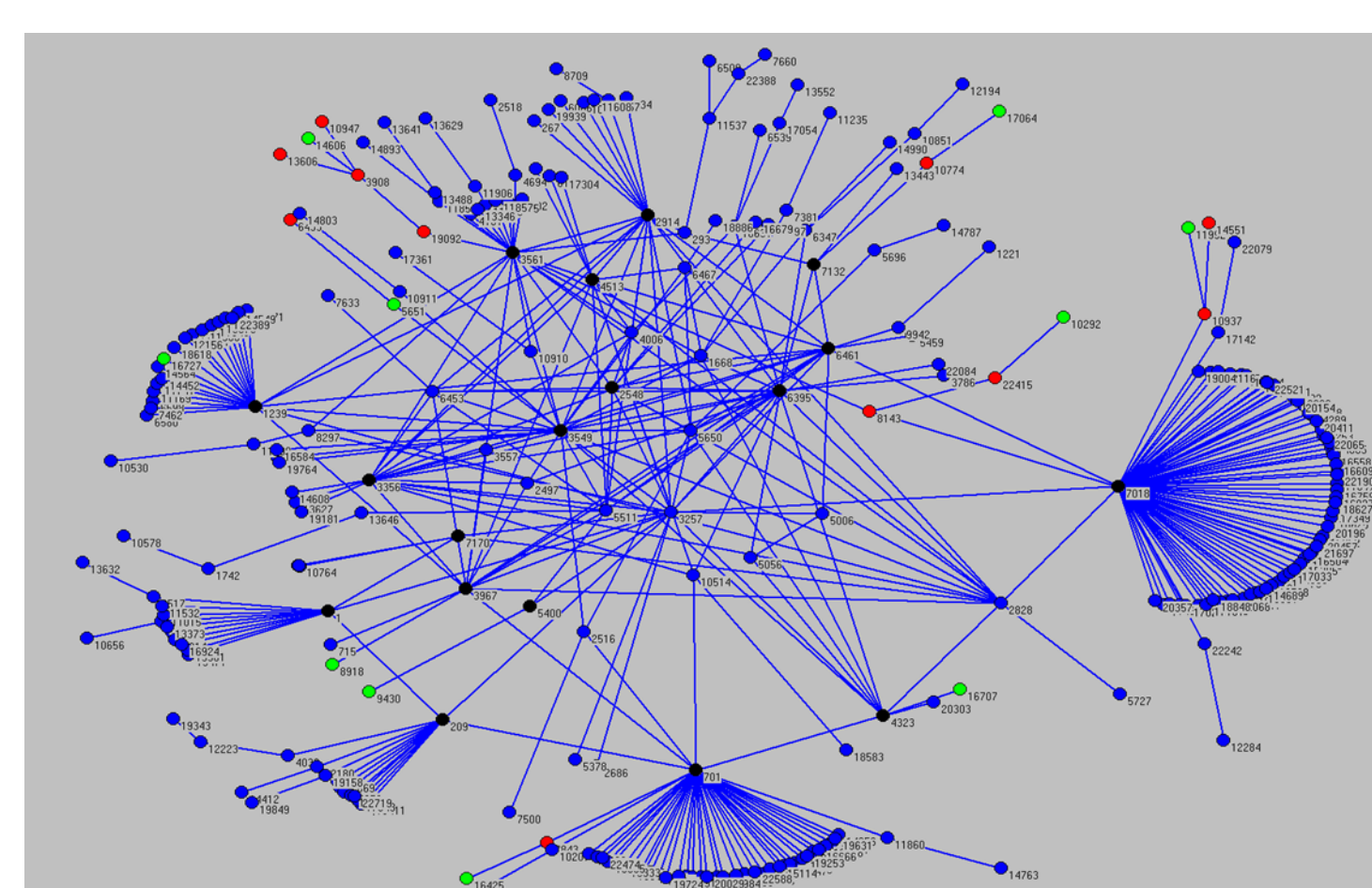
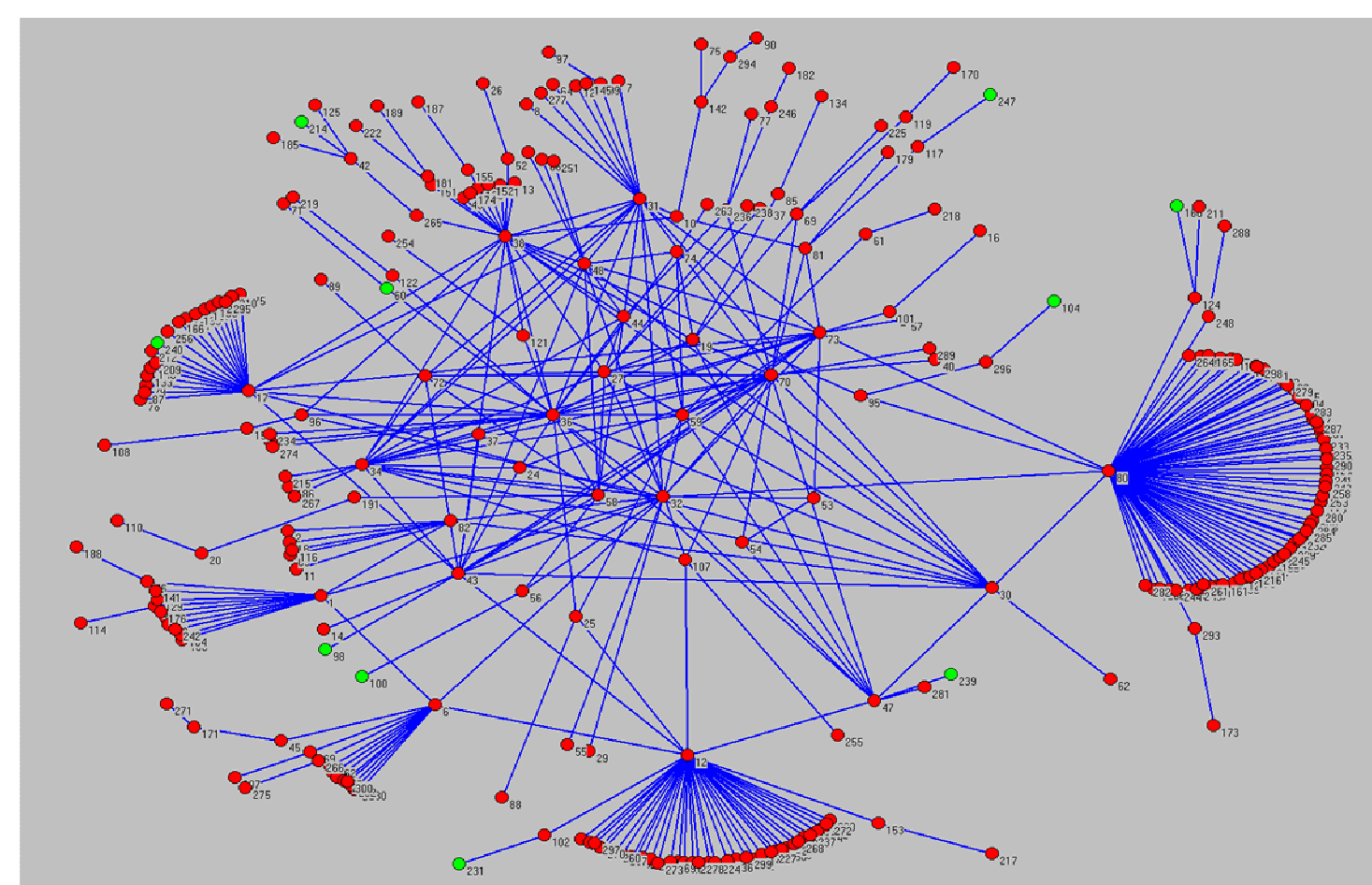
- Various malware on the Internet
 - Internet worms (Codedred, Blaster)
 - Mass mailing worms, spam, virus
 - Global vs. Local solution
- **Compromised computers can be used for malicious purposes**
 → **Billions of dollars damage**

Approach

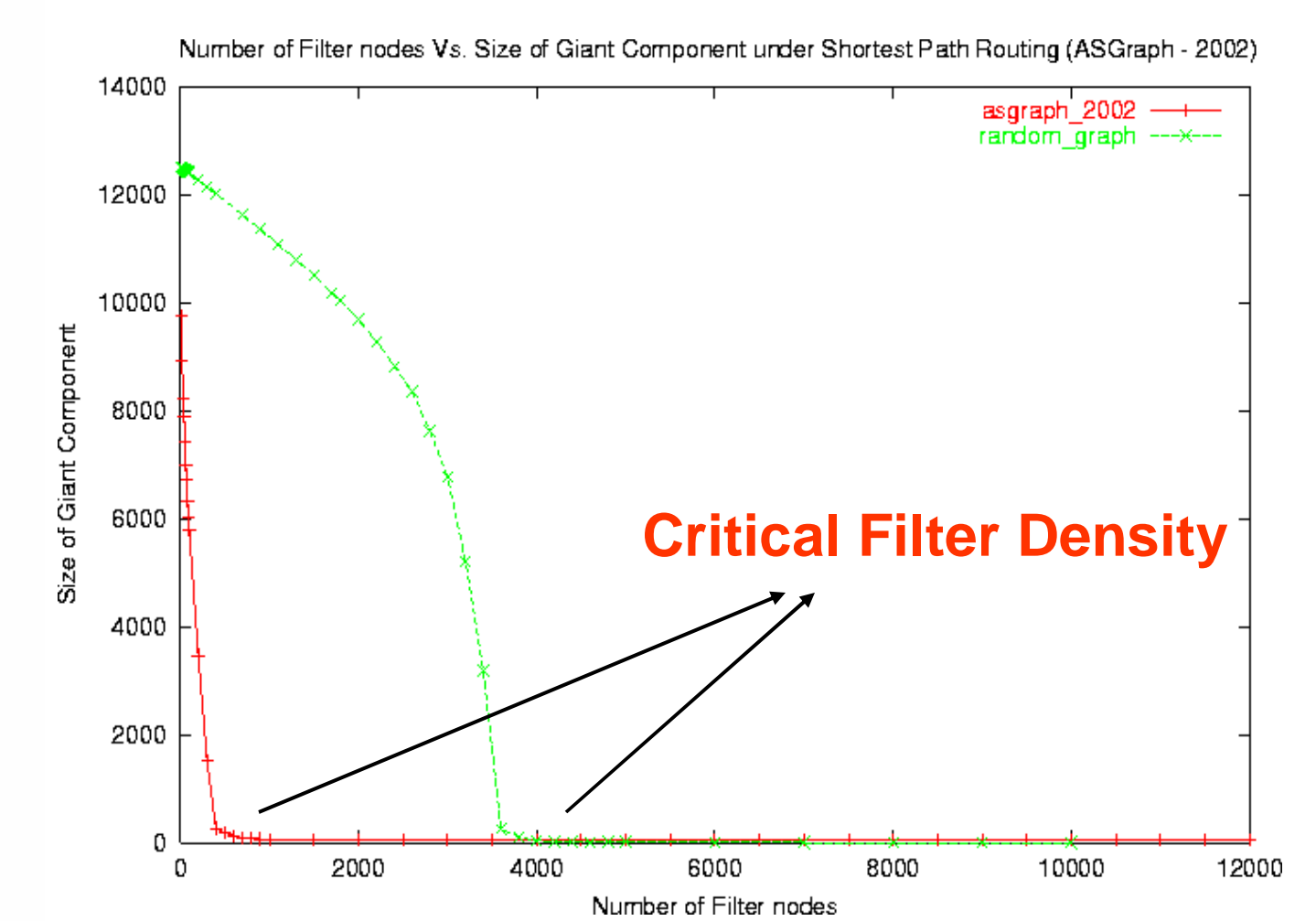
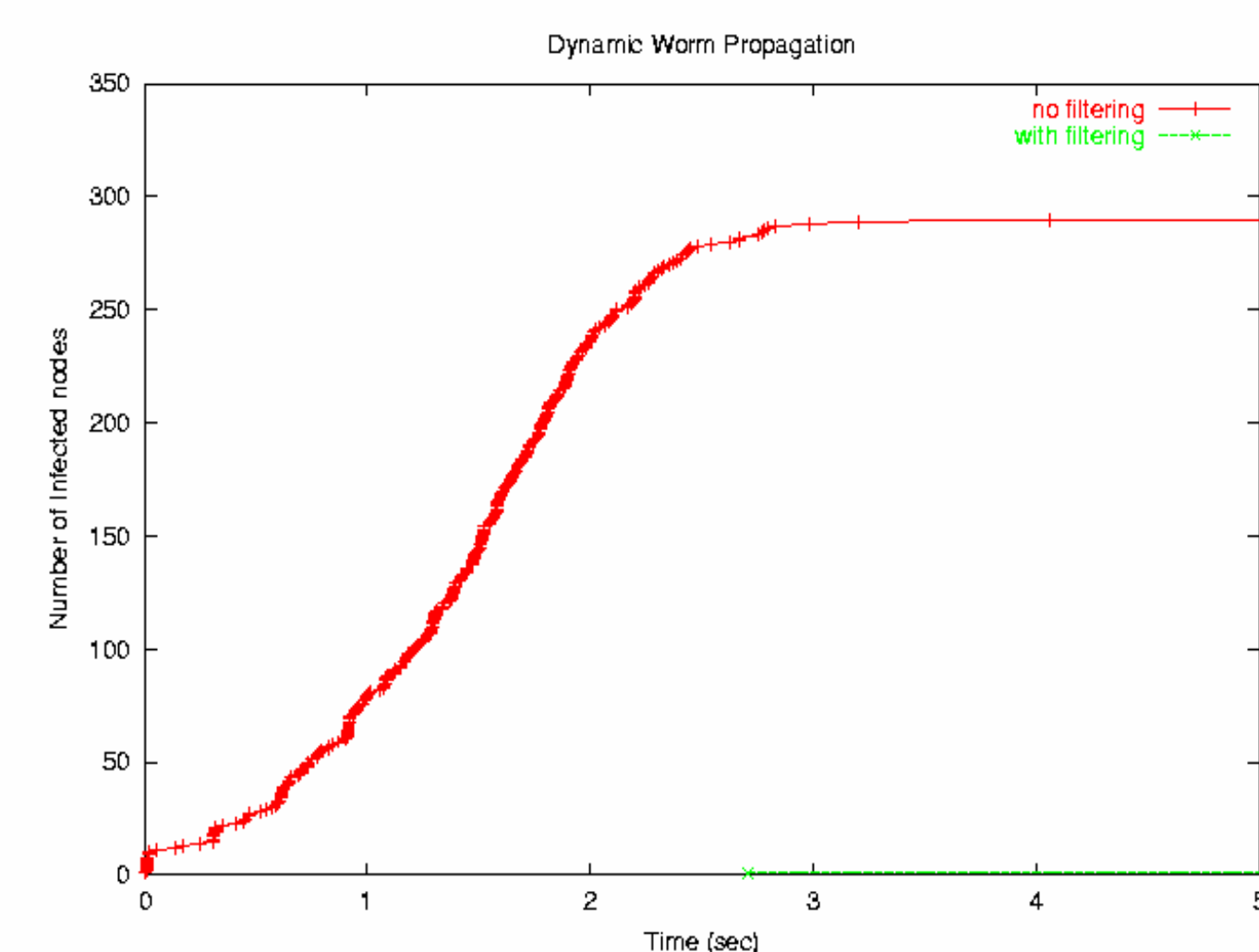
- Filtering at transit points
- Feasible: Partial deployment, Automation



Global Protection

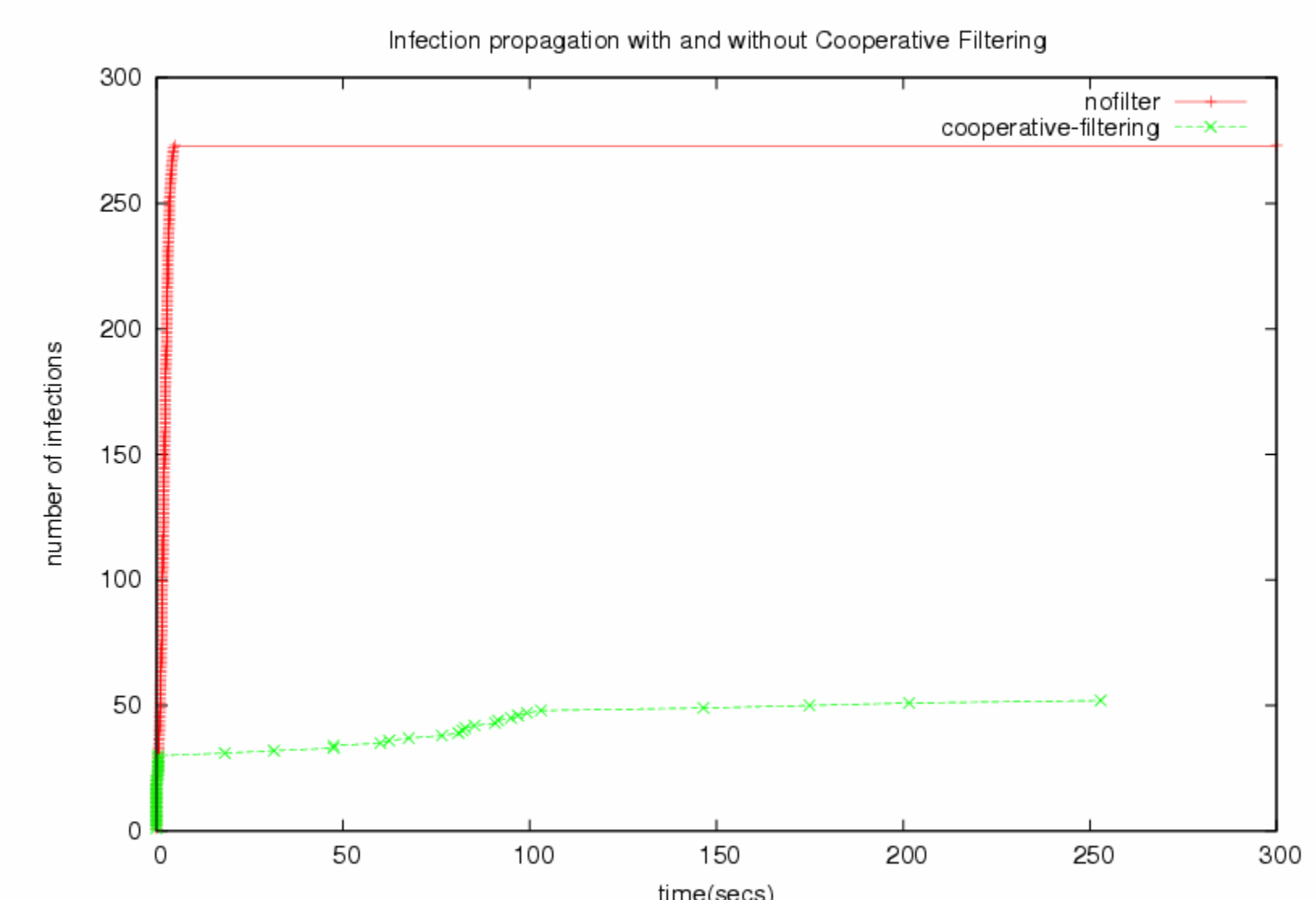
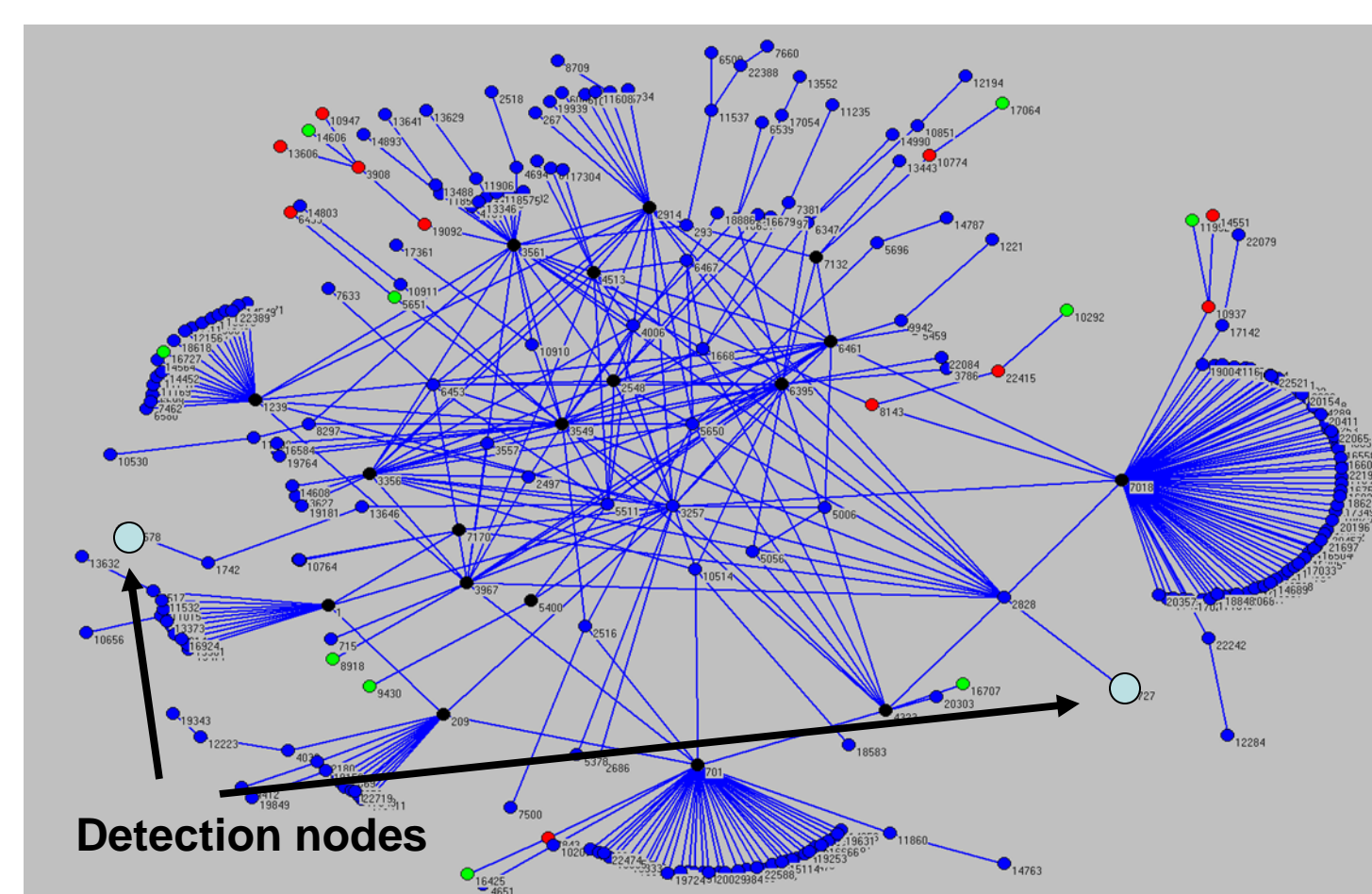


Filter Placement



Cooperative Filtering

- Defense against zero-day attack
- Detection and Filter nodes cooperate



Simulation and Implementation

- DaSSFNet simulator
 - Simulating 16900+ nodes
- Implementation of worm filtering device
 - Currently supporting 1 Gbs

Other Sponsors

