Measurements: Mapping Manipulation in the Internet

Brian Trammell, ETH Zürich, WP1 Lead MAMI Plenary, Berlin, Thursday 14 July 2016



measurement

architecture

experimentation



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What We've Done since January: Tools and Measurements (tasks 1.1, 1.2)



- Measurement Tools (task 1.1)
 - Copycat, PathSpider
- Initial Measurement (task 1.2)
 - UDP/TCP treatment with Atlas [ETH] and Copycat [ULg]
 - Updates to ECN measurement and TCP Fast Open with PathSpider [ETH]
 - Tracebox measurement campaigns [ULg]
 - .observatory.mami-project.eu VMs maintained by [ETH]
 - NAT



What We've Done since January: Observatory (task 1.4)



- Data model nearing completion
- Software in github and running at ZHAW:
 - observatory-upload: manage raw data
 - pto-core: turn raw data into observations
 - pto-web: front-end (work in progress)
- Target: initial alpha-quality demo for October review in Barcelona





DoW: Who Does What?



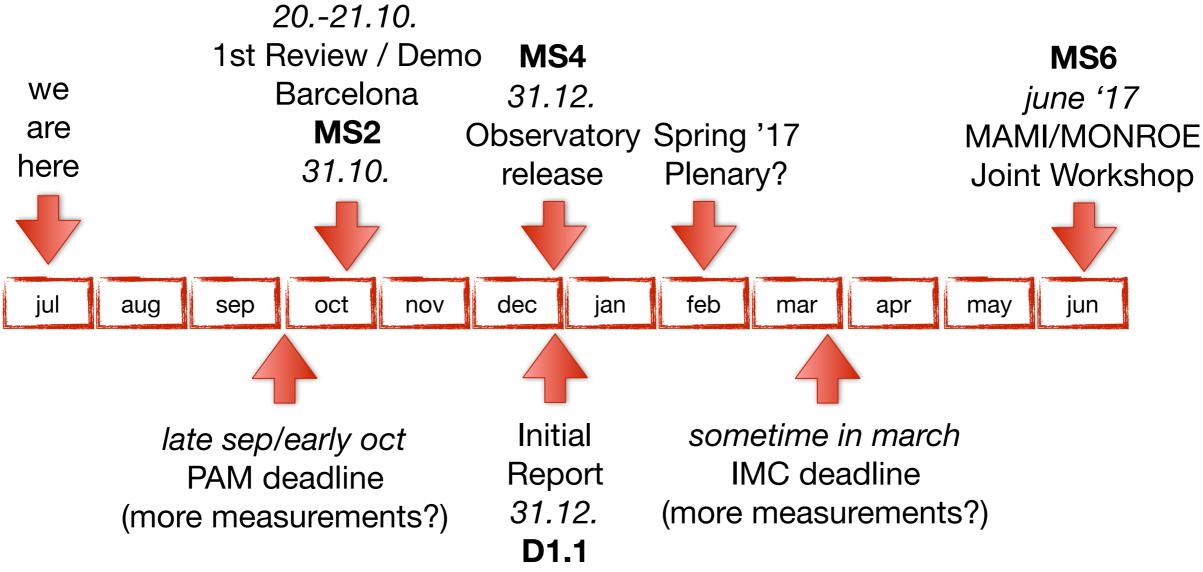
Partner	MM	Task 1.1 Methodology and Tools	Task 1.2 Initial Measurement	Task 1.3 Large-Scale Measurement	Task 1.4 Data Model and Observatory
ETH	20	pathspider (+mPlane SDK)	√	√ Edit D1.3 (2018)	√ Edit D1.2 (2017)
ULg	12	√ tracebox	✓ Edit D1.1 (Dec)		
UoA	15	✓	✓	✓	
ZHAW	8				✓
SRL	6	✓		✓	





What Gets Done When?







Upcoming plans



- Pathspider beta release (before ANRW, Saturday)
- More tests for PathSpider
 - Multipath TCP, SCTP?
 - IPv6 extension headers (DO, HBH)?
- PathSpider enhancements
 - bring mPlane support back!
- Moving from initial to large-scale measurements by end '16
- Observatory public release by end '16

