

# PANAPI, Milestone 4

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# Outline

1. Project Status
2. Conclusion

## Milestone 4: "Technology Adoption Strategy"

### KPI Description

*Evaluation of path selection on the SCIONLab testbed*

### KPI Means of Verification

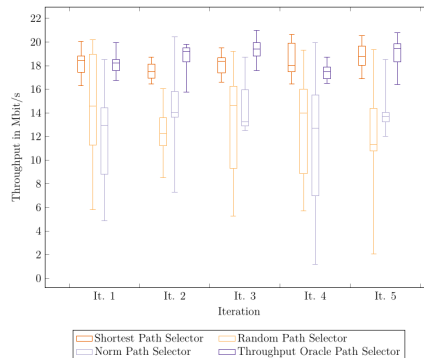
*Delivery of final report about the project including the evaluation results and a final presentation at an IETF meeting*

## Milestone 4: Promised Results

Evaluation of path selection on the SCIONLab testbed

- Completed<sup>1</sup> ✓

<sup>1</sup> It turns out that the overlay nature of SCIONLab results in quite volatile path properties with fluctuating RTTs and Bandwidth where PANAPI's benefits are marginal.



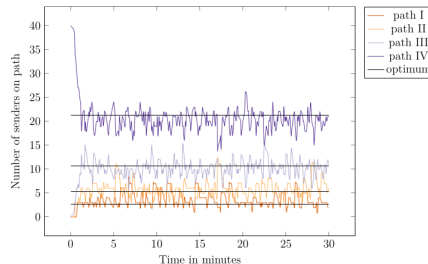
## Milestone 4: Improved Results

Re-Evaluation of path selection in a dedicated testbed

- Completed ✓
- Actual benefits now clearly visible ✓








Performance Improvements

- Caching layer for Scripting backend improves performance by an order of magnitude ✓



# Ongoing fruitful IETF Interaction

## Practical Feedback on Drafts

-  Discussion about property inheritance and scope
  - <https://github.com/ietf-tapswg/api-drafts/issues/1001>
-  Emphasize that different approaches to asynchronicity are equally valid
  - <https://github.com/ietf-tapswg/api-drafts/issues/1009>
-  Discussion about property types and states
  - <https://github.com/ietf-tapswg/api-drafts/issues/1012>
-  Choice of terms leads to confusing language
  - <https://github.com/ietf-tapswg/api-drafts/issues/1016>
-  Define Racing earlier to include Staggered/Failover scenarios
  - <https://github.com/ietf-tapswg/api-drafts/issues/1020>
-  Implementation Draft Review: Implied familiarity with Preference Levels
  - <https://github.com/ietf-tapswg/api-drafts/issues/1043>
-  Review of Implementing Interfaces to Transport Services
  - <https://github.com/ietf-tapswg/api-drafts/issues/1048>

## Conclusion & Further Roadmap

PANAPI within NGI Pointer is now completed but the work will continue

- Several Scripting Performance and API Improvements
- Incorporation of additional Path Information
- Support for active Path Property Probes
- Port more applications to PANAPI
- Final Presentation at IETF 115 (London, Nov 5-11, 2022)

# Questions?