

NGI TrustChain

Utility-Preserving, Decentralized Anonymity of Mobility data
UtiP-DAM

Meeting #3 - 26.02.2024

Agenda

1- Software architecture (existing software vs. new)

3- Performance evaluation: Initial results

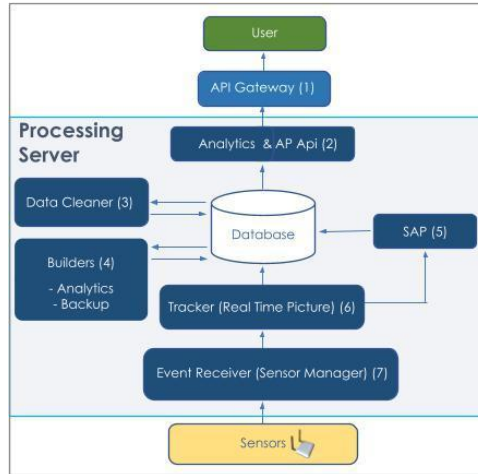
2- GUI presentation

4- Open issues (templates for deliverables, permission to open repository under GitHub)

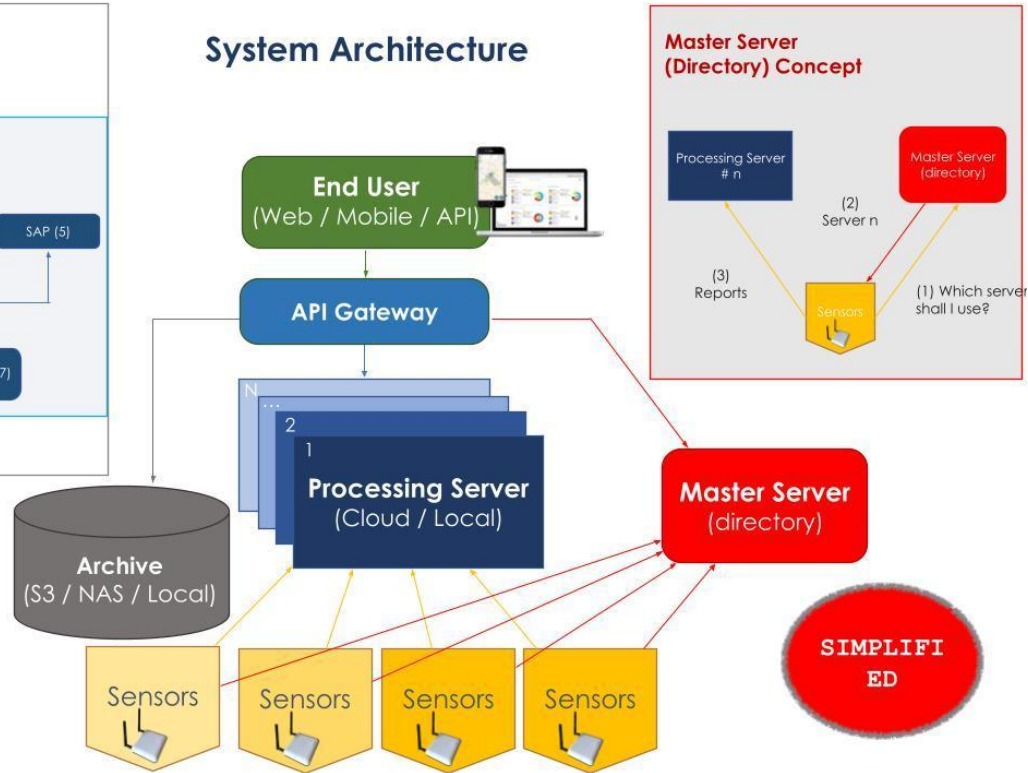
5- Review action items from meeting #2

6- Plan for the next two weeks

Software Architecture



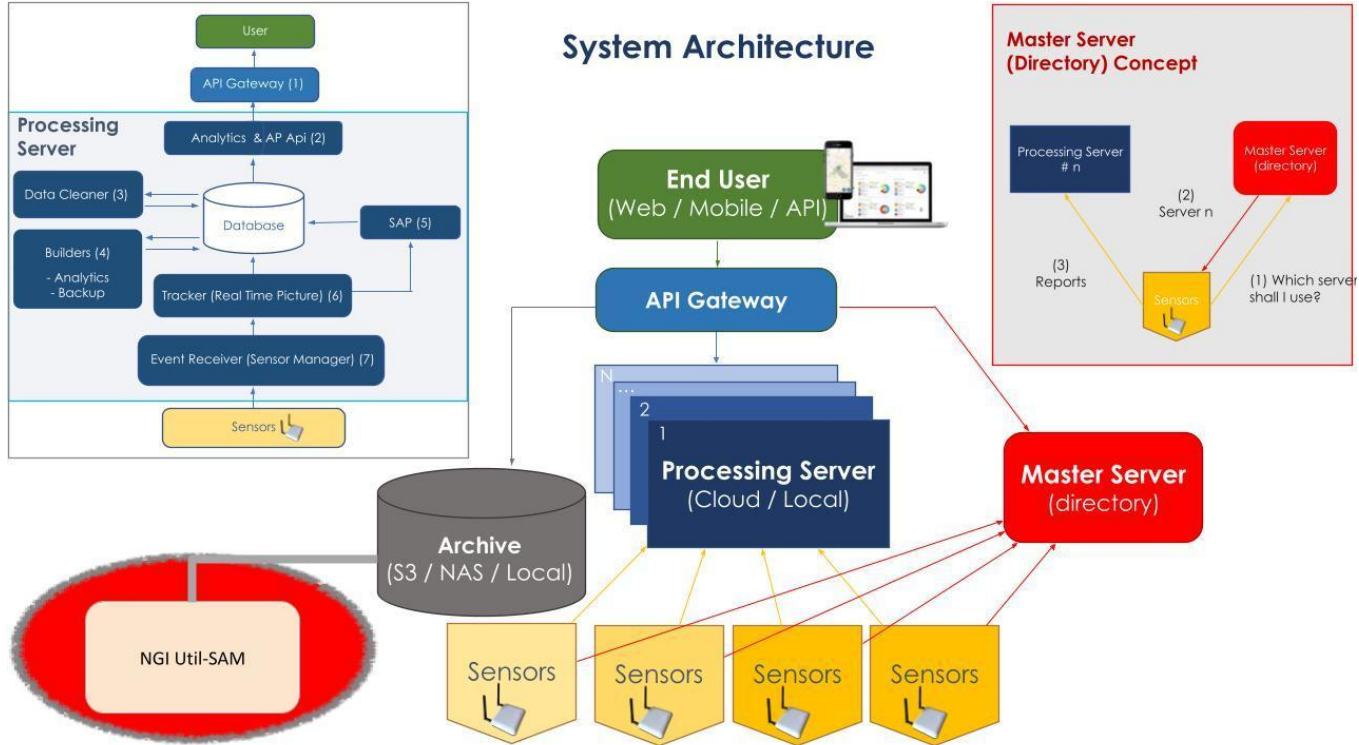
System Architecture



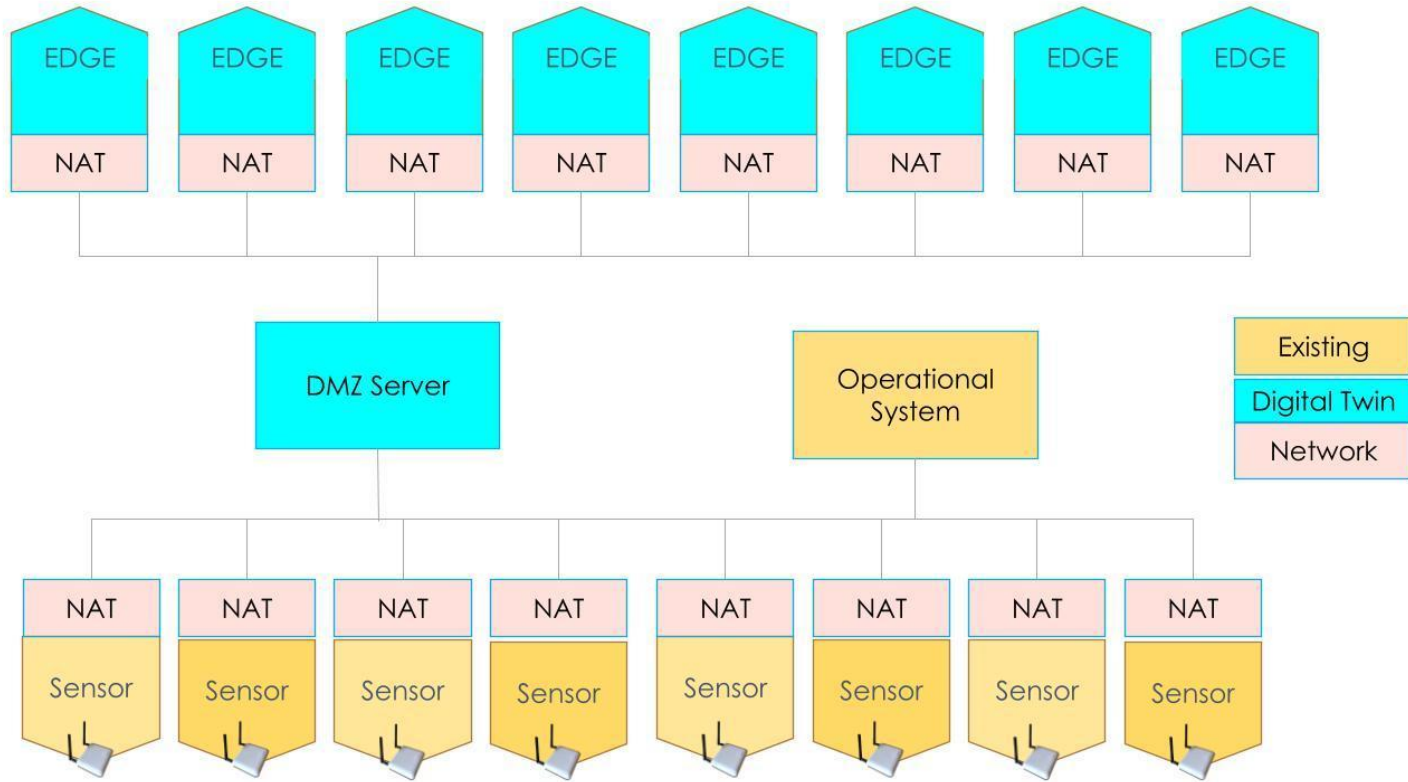
Sensors



Architecture with UtIP-DAM



Architecture - EDGE Sensors



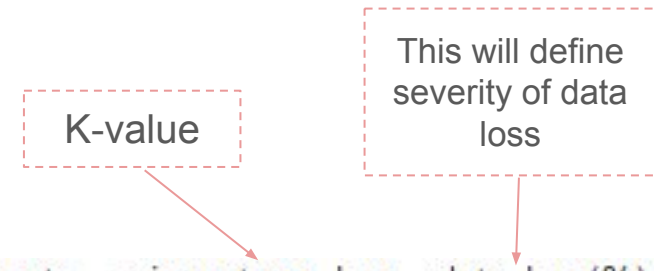
Results for Performance Analysis

List of data used for the analysis:

	site name	oldest date	newest date
1	Bangkok BTS	2022-03-30	2024-01-12
2	ROCK Cluj-Napoca	2022-07-15	2023-12-10
3	ROCK Bologna	2022-07-15	2023-11-16
4	ROCK Bologna Palazzo D'Accursio	2022-07-15	2023-12-10
5	Bat Yam Mall	2023-03-22	2023-12-10
6	TongYeong Bus Stop	2023-04-24	ongoing

Results for Performance Analysis

Sample results from *Bat Yam Mall*:



times_from	times_to	unique_trace_counts	unique_trace_loss	data_loss(%)
03/22/23 12:00 AM	03/22/23 03:00 AM	576	0	0
03/22/23 03:00 AM	03/22/23 06:00 AM	1242	21	1.69
03/22/23 06:00 AM	03/22/23 09:00 AM	5803	24	0.41
03/22/23 09:00 AM	03/22/23 12:00 PM	36499	21	0.06
03/22/23 12:00 PM	03/22/23 03:00 PM	47463	17	0.04
03/22/23 03:00 PM	03/22/23 06:00 PM	50903	14	0.03
03/22/23 06:00 PM	03/22/23 09:00 PM	47171	9	0.02
03/22/23 09:00 PM	03/23/23 12:00 AM	14366	11	0.08
03/23/23 12:00 AM	03/23/23 03:00 AM	125	9	7.2
03/23/23 03:00 AM	03/23/23 06:00 AM	1567	24	1.53

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Meeting #2: Action items (1 of 2)

- | | | |
|---|--|---|
| 1 | State of the art - Add references | Done - can be found on GitHub |
| 2 | State of the art – change profile to linking, check for existing references on linking | Done |
| 3 | Software architecture – show the current system and where the new software will be adapted. | Done - presented during the meeting and on GitHub |
| 4 | Use case – create groups (user centric use cases, data extraction uses cases, performance analysis use cases | Done - can be found on GitHub |

Meeting #2: Action items (2 of 2)

- | | | |
|---|--|--|
| 5 | Show first results of the system performance | Done (during the call). This is part of D2 |
| 6 | EDGE Sensor - explain what do we plan to do | Done (full design will be available in the next weeks) |
| 7 | Dashboard show mockup | Done (during the call) |
| 8 | Upload documents on GitHub | Done |

Plan for the next two weeks

- 1 Top Level Software Design
- 2 Dashboard finalization of the design
- 3 Start to prepare D1 (if possible)
- 4 Continue if performance analysis

Questions & Answers