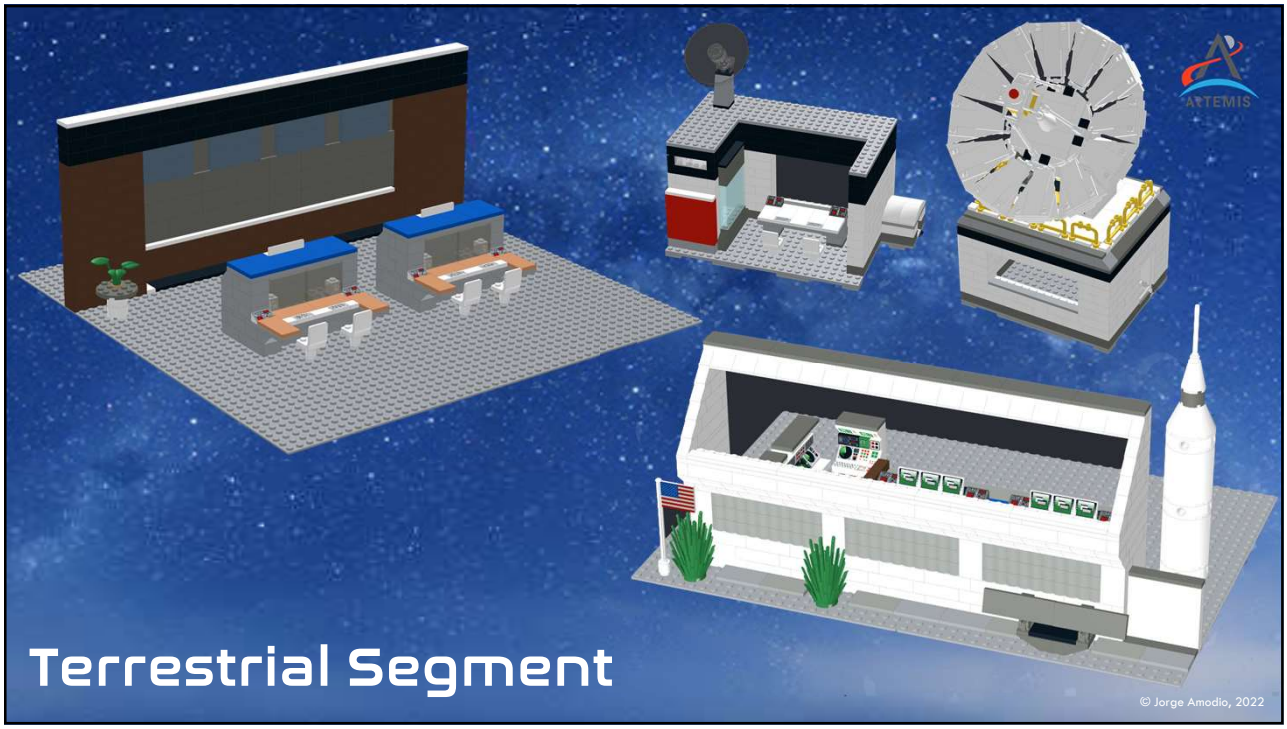
Inter Planetery Networking
DTN
R&D and Education
Laboratory Prototype

By Jorge Amodio
@jamodio

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Motivation Summer Camps – Moon Habitat Competition




ARTEMIS
Terrestrial Segment
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Space & Moon Segment
ARTEMIS
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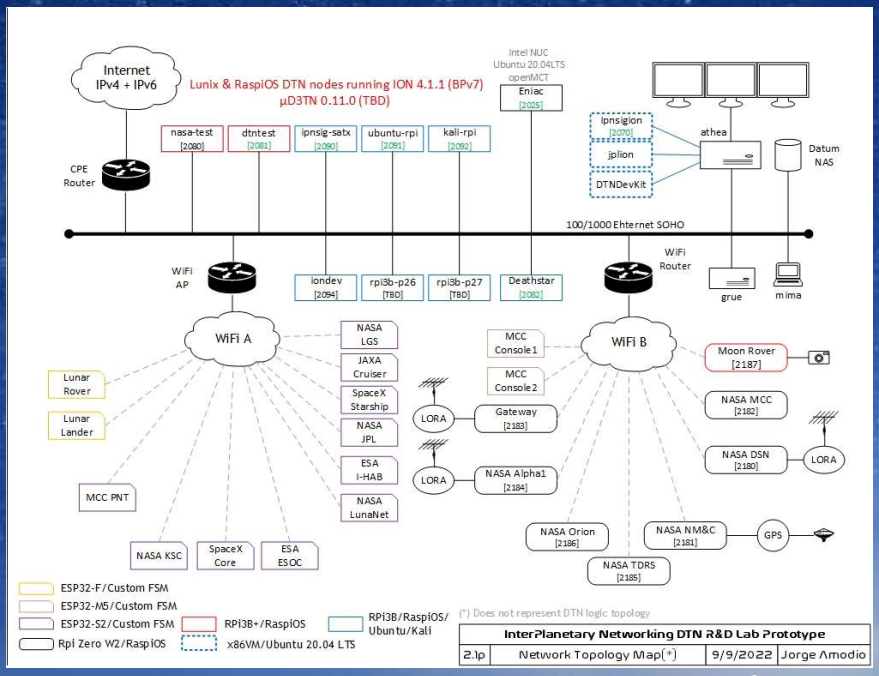
IPN DTN Lab

(Sept 2022)

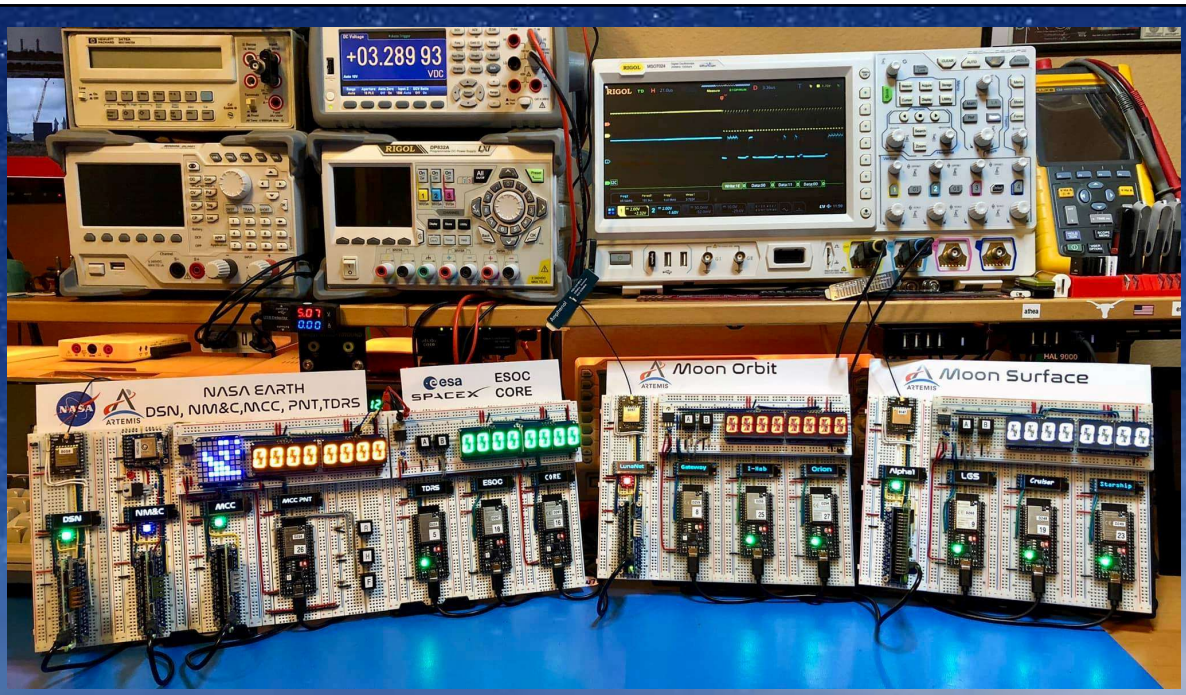
- Low Cost
- Easy to implement
- Scalable
- Fun
- ~35 local nodes
- 18 Raspberry Pi's
- 15 ESP32
- 1 VM on x86
- 1 Intel NUC
- 18 ION 4.1.1
- 1 OpenMCT
- core FS (TBD)
- 2 µ3DTN 0.11.0 (TBD)
- tinyML ? (TBD)

Experimenting

- LoRa Modems
- Cellular LTE M1
- SWARM microsat

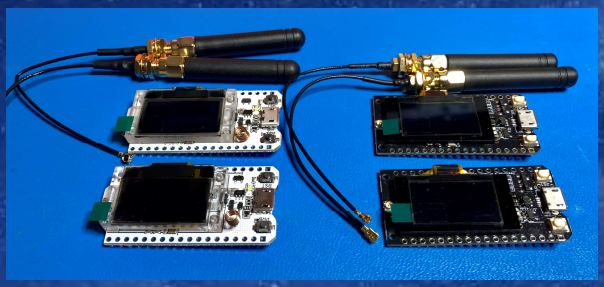


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LoRa + WiFi



SWARM 318 - Microsat



Various modems under testing or soon to be tested

LTE C M1



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THANK YOU !!

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