



Space Communication Management Tool



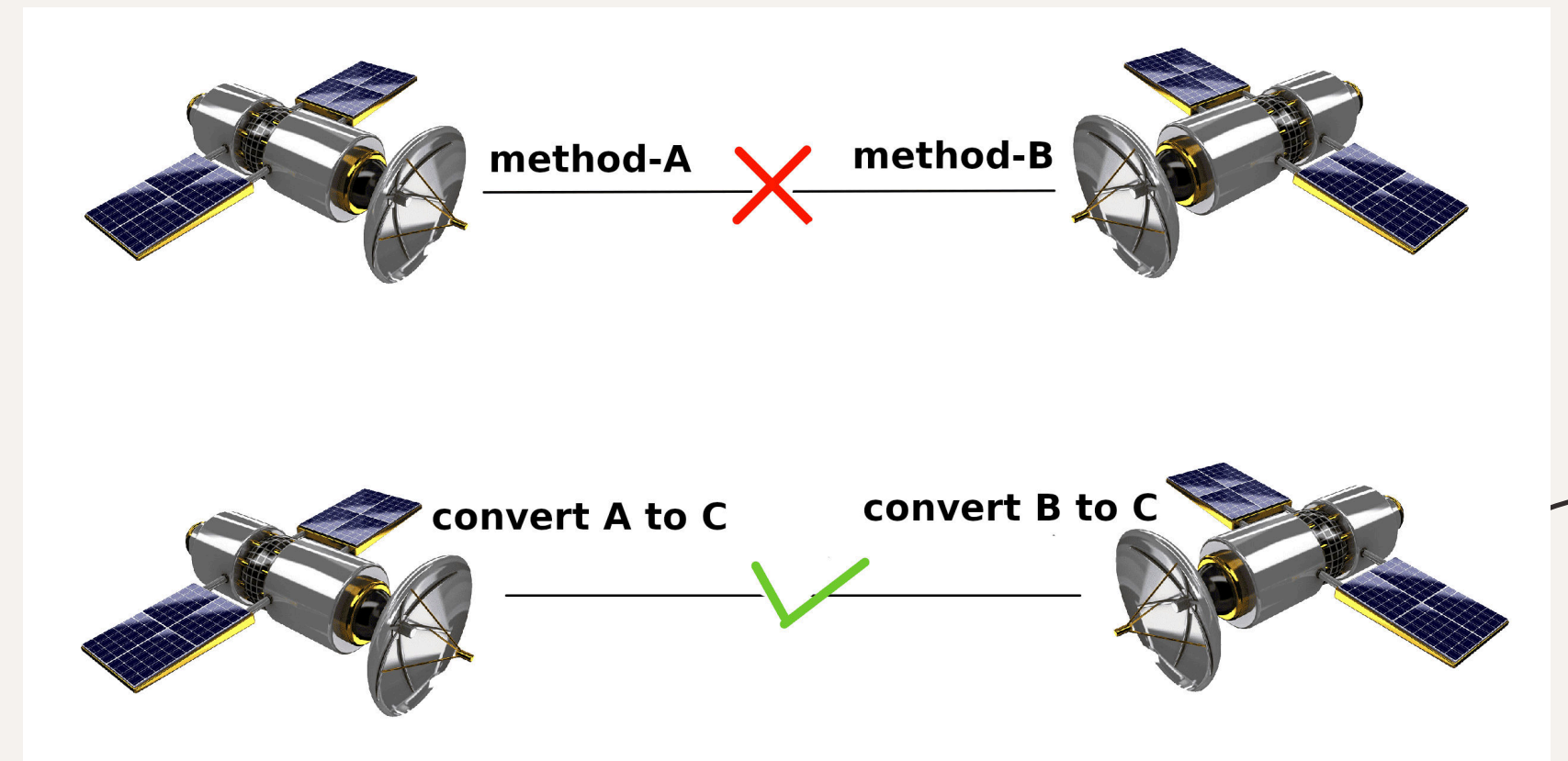
Introduction to Space Communication

Space communication is essential for successful **space missions**. This presentation will highlight why **converting** between different communication devices and checking for **compliance** is crucial to ensure **reliable and effective** communication systems.



The Need for Conversion

- There are two satellites using **different methods** and failing to communicate.
- Both satellite requires a **hardware** that **converts** their messages to same format.
- This method is **constly** since it requires hardware and needs have a **compatibility** with other satellite's converter.



Existing solutions

- Existing solutions have too many **different tools** to convert from one communication method to another.
- There is no single solution available that can be also used in **legacy system** for same **standardised communication**.



Single software solution for conversion and testing

- **Seamless Conversion:** Converts data between space communication protocols (e.g., CCSDS) for compatibility.
- **Automated Validation:** Checks data against standards to ensure it meets required specifications.
- **Error Reporting:** Provides detailed reports on conversion results and highlights issues for resolution.



How it works?

- **Single Binary File:** A compact executable file designed for installation on both legacy and new space systems.
- **Universal Protocol Conversion:** Converts data from various formats into a single standard format, ensuring compatibility across different communication systems.
- **Optimized for Low Resources:** Includes minimal conversion code and avoids external libraries, allowing it to run efficiently on devices with limited memory and processing power.
- **Versatile Deployment:** Suitable for installation on a wide range of devices, facilitating easy integration into existing space communication infrastructures.



Thanks!

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