Ground Station

Report of Findings

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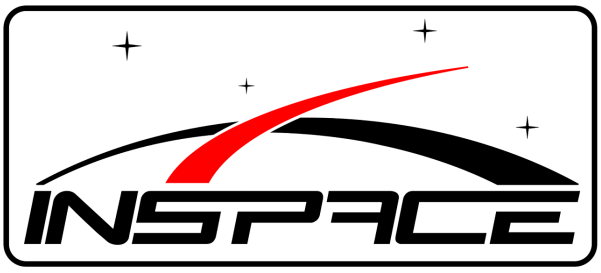

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1 Ground Station

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2 User Interface

The user interface is very cool. Its design is very human.

2.1 Dashboard

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2.2 Map

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2.3 UI-Backend Interaction

The user interface interacts with the backend system via a websocket. Because of the real-time nature of the data being displayed, a websocket prevents constant API polling and reduces latency between when the telemetry data is parsed and when it is displayed on the user interface.

2.3.1 Connection Handling

The UI will maintain connection with the backend system even with interruptions.

While disconnected, the UI continues to poll the backend system every second until a connection is established. If at any point this connection is severed, the UI will beging polling for a connection again.

The websocket connection allows multiple clients to be connected at once. This means that the rocketry team could choose to have multiple instance of the user interface running at once on different devices. This would allow a fully monitored ground station control team.

2.3.2 Receiving Data

2.3.3 Static Display

2.3.4 Websocket Commands

2.3.5 Mission Replays