

FlightPath provides you with live statistics updating every 5 seconds, allowing you to move forwards and backwards through the logs created in 10 or 60 second intervals. This view allows you and the BitFire NOC to inspect exactly where in the pipeline a transmission issue might occur.

To view FlightPath for your booking, hover over and click on the status dot next to your Booking ID. To view FlightPath for an individual feed, click the **graph icon** on the feed itself. You then can view the full route your video takes through the BitFire Transport Network. You'll see each transport element involved in the feed, including encoders, internal hops, and the destination output.

Elements of BitFire Transport

A BitFire transport stream is made up of multiple elements that can be monitored from source to destination. These include:

- **SDI Ingest**
 - Provides statistics regarding the video signal entering a BitFire server at the source server.
- **MPEG-TS Encoder**
 - Provides statistics regarding the video encoding pipeline as media is converted into a transport stream.
- **BitFire Network Transport**
 - Provides statistics regarding the status and stability of the transport stream while in-flight to the destination server.

- **BitFire Network Receive**

- Provides statistics regarding the status and stability of the transport stream as it arrives at the destination server.

- **MPEG-TS Decoder**

- Provides statistics regarding the video decoding pipeline as packets are converted from a transport stream to video.

- **SDI Output**

- Provides statistics regarding the video signal arriving at a BitFire server at the destination server.

Stats Within Each Element

Click on any element in the Flight Path to view real-time statistics. These statistics include:

- **REQ:** Requested recovery packets. These are retransmitted packets BitFire identified as missing and delivered from the source within your configured latency.
- **FEC:** Forward Error Correction packets. These are proactively sent as redundancy in case of loss.
- **Drops:** Packets that were lost and unrecoverable.
- **Bitrate:** Total feed bitrate. Slight increases from your configured rate will occur due to audio padding.
- **PPS:** Packets per second.
- **Latency:** The configured transport latency for this feed.

- **Flight Time:** The amount of time packets take to arrive from source to destination. Packets wait at the destination until the latency timer expires.
- **SRC Margin:** Any time leftover after packets arrive at their destination. This indicates how much time BitFire has to attempt to recover any dropped packets.
- **SRC Late / Late Margin:** Shows how many source packets arrived late and how much time was left when they were recovered. **For example**, if your latency is 300 ms and your SRC Late Margin is 250 ms, the packet was recovered with 50 ms to spare.
- **REQ RX / REQ Margin / REQ Late / REQ Efficacy:** Similar recovery metrics for requested packets that were retransmitted from source.

You can navigate through time by using the arrow buttons or selecting a specific timestamp to inspect historical data and pinpoint network issues.