

## Parallel Processing in the GDMS Analysis Pipeline

General Dynamics Mission Systems (GDMS) employs a single server to process and analyze a variety of incoming data files. The server's ability to process these files in a timely and accurate manner is of critical importance. However, the server has been overwhelmed at times with the sheer number of files it receives, resulting in delays and skipped processing of files. It has also been plagued with reliability issues, and requires constant attention to remain operational. To address these shortcomings, GDMS is building a next generation system to process incoming files in a faster and more reliable manner. It uses multiple processing nodes to process multiple files simultaneously. Multiple redundancies are built-in to ensure reliability. "Smart" processing algorithms will result in faster processing of higher priority files. An alert system will notify staff of any issues; resulting in faster recovery times should an error occur.

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