**Difference Between Full Load and Delta Load**

| **Feature** | **Full Load** | **Delta Load** |
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| **Definition** | Transfers all data from the source to the target system. | Transfers only new or changed records since the last load. |
| **Processing Time** | Longer processing time due to transferring entire dataset. | Faster as only incremental changes are processed. |
| **Storage Impact** | Requires more storage space as the full dataset is loaded every time. | Requires less storage as only updated records are added. |
| **System Load** | High system resource consumption (CPU, memory, network). | Lower resource consumption compared to full load. |
| **Use Case** | Suitable for initial migrations, small datasets, or when complete refresh is needed. | Used in production ETL processes where only new/updated data is required. |
| **Failure Impact** | High impact if a failure occurs since the entire dataset must be reloaded. | Lower impact, as only the last batch needs to be reprocessed. |
| **Complexity** | Simple implementation without tracking changes. | Requires change data capture (CDC) or timestamp-based tracking. |
| **Example Scenario** | Migrating an entire database to a new system. | Daily updates in a data warehouse from a transactional system. |

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