Apache NiFi has found wide adoption across industries due to its ability to manage complex data flows effectively. Consider a real-world industry of your choice, such as healthcare, finance, telecommunications, or manufacturing. How would you design a data flow management solution using Apache NiFi in this context? Consider factors like data ingestion from diverse sources, data transformation requirements, data routing, and monitoring needs. Discuss the challenges you might face and how you would address them using NiFi's features.