

Third, the chosen **data flow model** should **allow** applications to read, process, and write data streams incrementally rather than wholesale and sequentially so that **throughput** is **maximized**.

Last but not least, long-duration processing activities must not become a **performance bottleneck**.

A **PIPES AND FILTERS** architecture **decouples** different **data processing** steps so that they can evolve independently of one another and **support** an **incremental data processing** approach.

**Filters** with a concurrent DOMAIN OBJECT **implementation** **enable incremental and concurrent data processing**, *which increases the performance and throughput of a PIPES AND FILTERS arrangement.*

Such a configuration **can further increase** system **performance and throughput**, as some **filter** instances can start processing new data streams while others are processing previous data streams.

The integration of **pipes** decouples adjacent **filters** so that the filters can operate independently of one another, **which maximizes** their individual operational performance.

**Pipes** with a concurrent DOMAIN OBJECT **implementation** **enable incremental and concurrent data processing**, as do **concurrent filters**.