Alteryx Server Architecture

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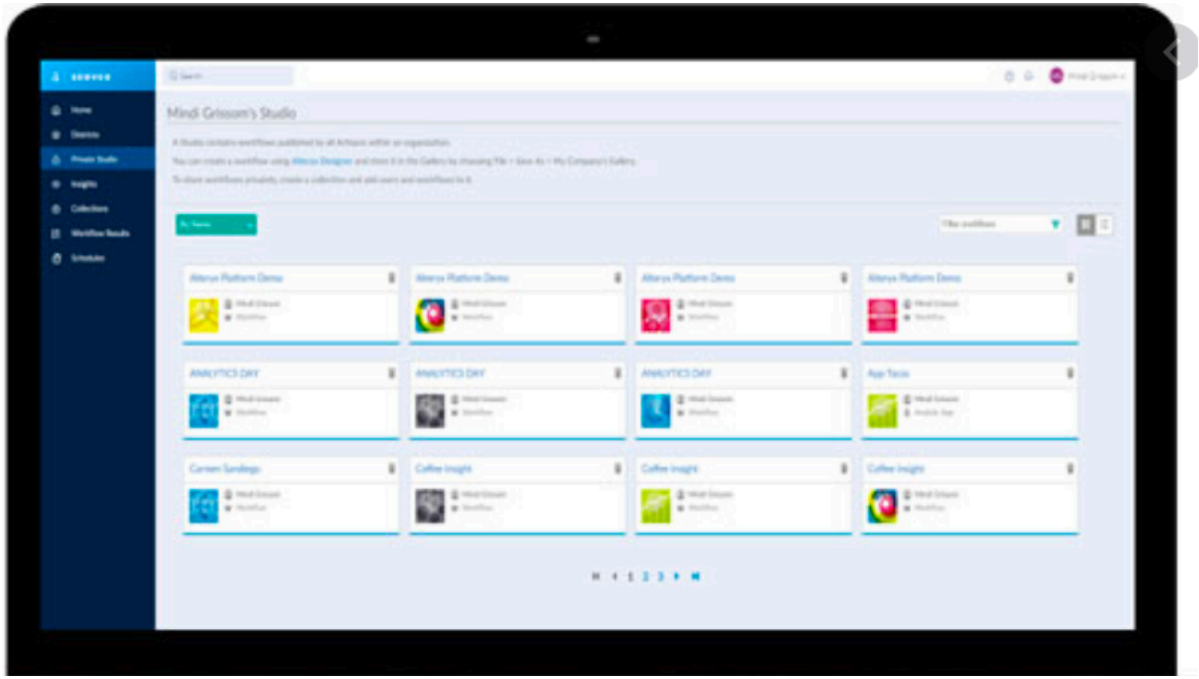
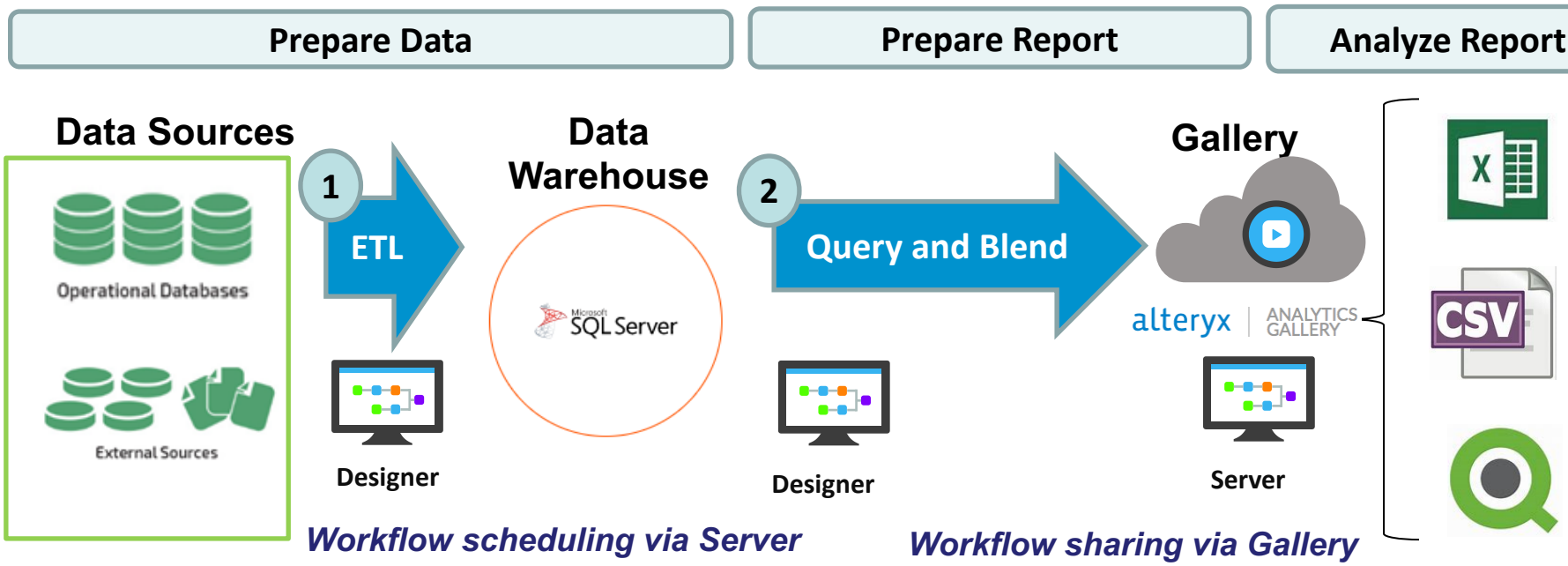
The Alteryx server



System Landscape with Alteryx Server



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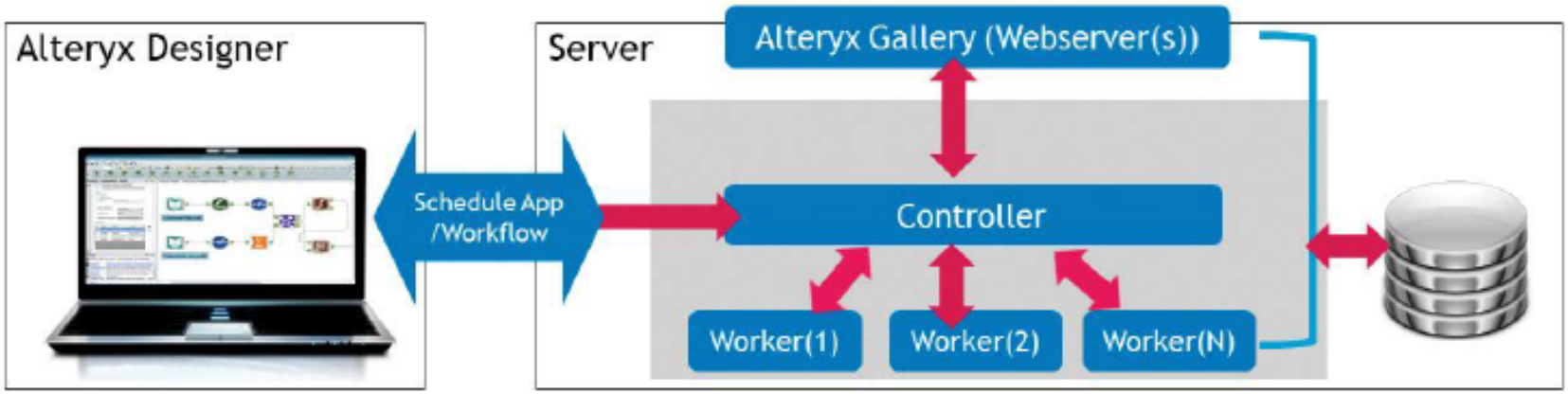
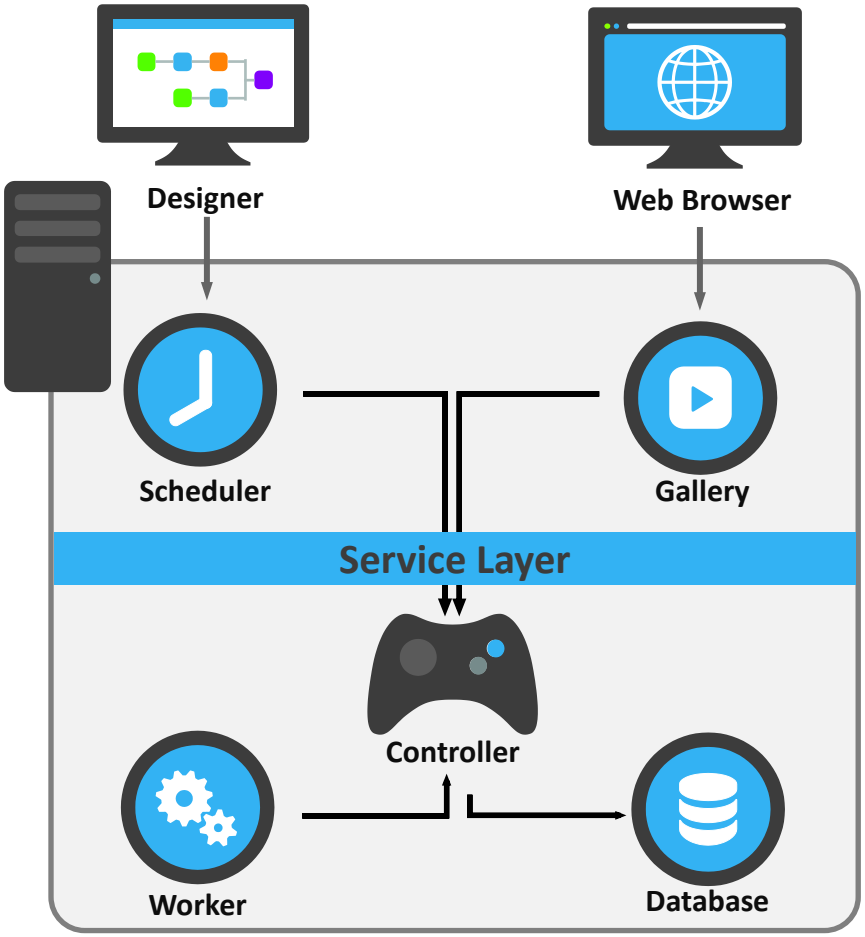


Alteryx Server Technical Specifications

Machine Requirements	Recommended: 64-bit, 32-bit not supported	High Performance: 64-bit, 32-bit not supported
OS Requirements	Microsoft Windows Server 2008R2 or later	Microsoft Windows Server 2008R2 or later
Chip	Quad core (single chip)	Quad core (single chip)
Processor	2.5GHz or faster	2.5GHz or faster
RAM	16GB	32GB
Disk Size	1TB	1TB

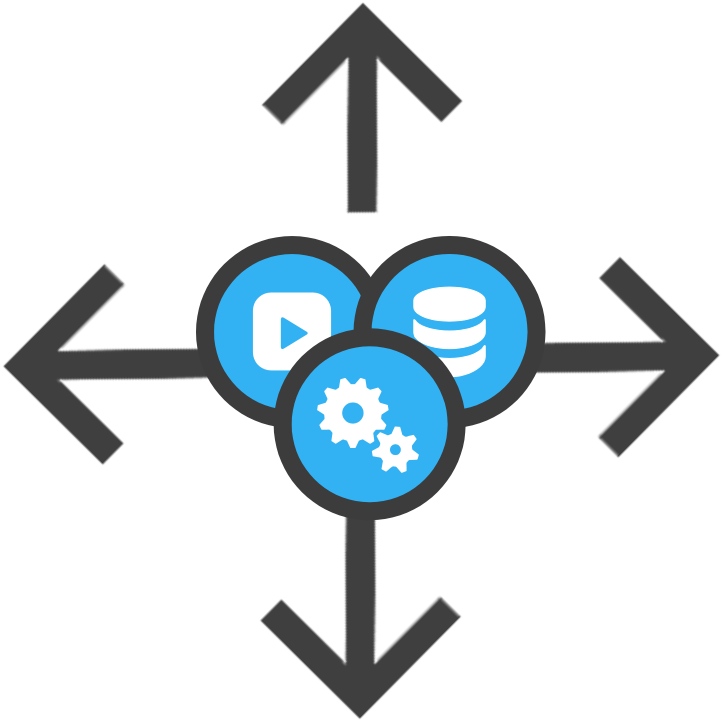
Single Machine Deployment of Server



- A typical deployment of Alteryx Server includes installing the Controller, Worker and Gallery web server components on a single server.
- There can only be 1 instance of the controller.
- Worker and Gallery web server components can be enabled on individual and multiple machines as the need of handle different workload increases.

Points of Scalability

- Three ways to scale the Alteryx Server
  - Adding worker capacity
  - Adding gallery capacity
  - Adding database capacity



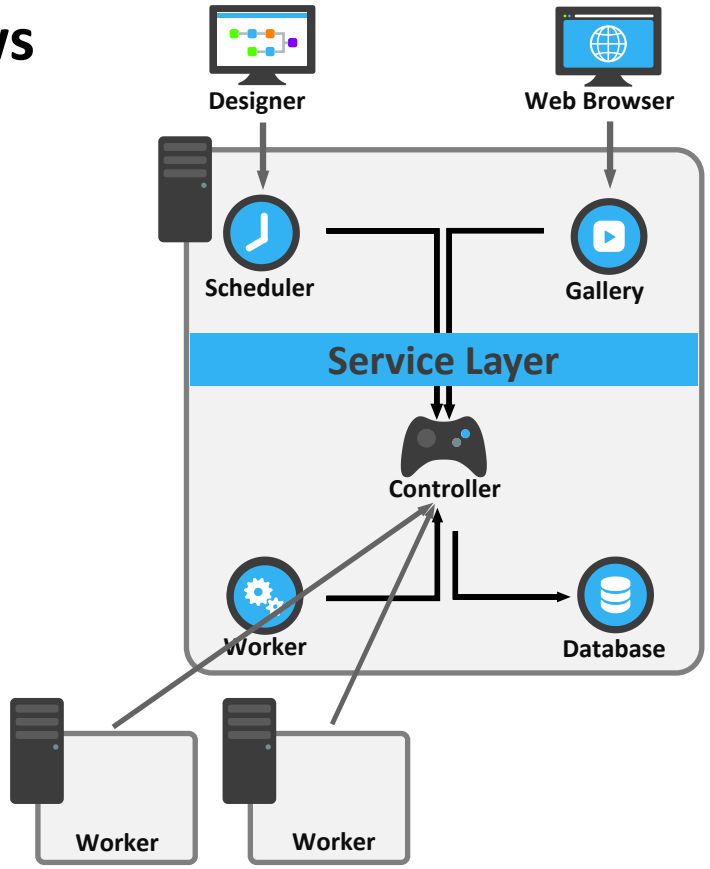
Server Scalability

The table below provides guidelines for determining when more hardware for Alteryx Server components may need to be added.

	Worker	Gallery	Database
Redundancy needed	✓	✓	✓
High availability needed	✓	✓	✓
Workflow execution time increases	✓		
Number of simultaneous users increases	✓	✓	
Number of backend jobs increases	✓		
Workflows sit in queue for long periods of time	✓		
Memory or CPU consumption is high on web nodes		✓	

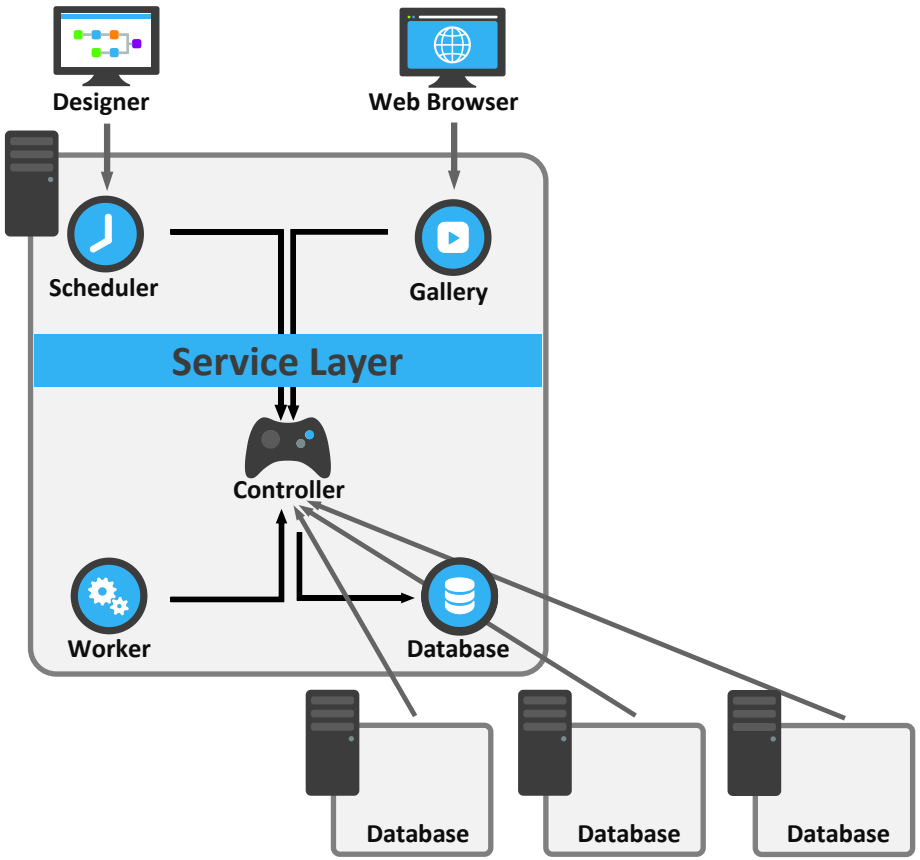
Scaling Out Workers

- **Add Worker node(s)**
- **Increases the number of workflows processed concurrently**



Scaling Out Persistence

- Add database node(s)
  - User-Managed MongoDB
- Improves reliability
  - Replica sets
  - Data redundancy
  - Disaster Recovery Plan
- Improves system performance
  - Sharing



Scaling Out Gallery

- Serving multiple web clients
- Gallery uses REST
  - Stateless protocol
  - No shared/persistence on server
- Increases Gallery responsiveness