



Consulting Services

JobScheduler

Architecture Decision Template

Information for
Consulting Parties

- **Decision Making**
 - Architecture Decisions
- **Supported Platforms**
 - Platforms: JobScheduler Master / JobScheduler Agent
- **Passive Cluster**
 - Architecture 1: Primary JobScheduler
 - Architecture 1: Backup JobScheduler
- **Active Cluster**
 - Architecture 2: Active Cluster JobScheduler
 - Architecture 2: Active Cluster JobScheduler with failed instance
- **Master / Agent Cluster**
 - Architecture 3: Master/Agent Passive Cluster JobScheduler
 - Architecture 3: Master/Agent Active Cluster JobScheduler
- **Supervisor JobScheduler**
 - Architecture 4: Supervisor for Passive Cluster
 - Architecture 4: Supervisor for Active Cluster
 - Architecture 4: Supervisor for Master/Agent Cluster
 - Architecture 4: Supervisor for Unclustered JobScheduler

Architecture Decision Template

Passive
Cluster

- Primary & Backup JobScheduler
- Redundancy and automated fail-over

Active
Cluster

- Active Cluster JobScheduler
- Redundancy and load sharing

Master/
Agent
Cluster

- Master/Agent Cluster JobScheduler
- Redundancy, load sharing, load distribution

Supervisor
JobScheduler

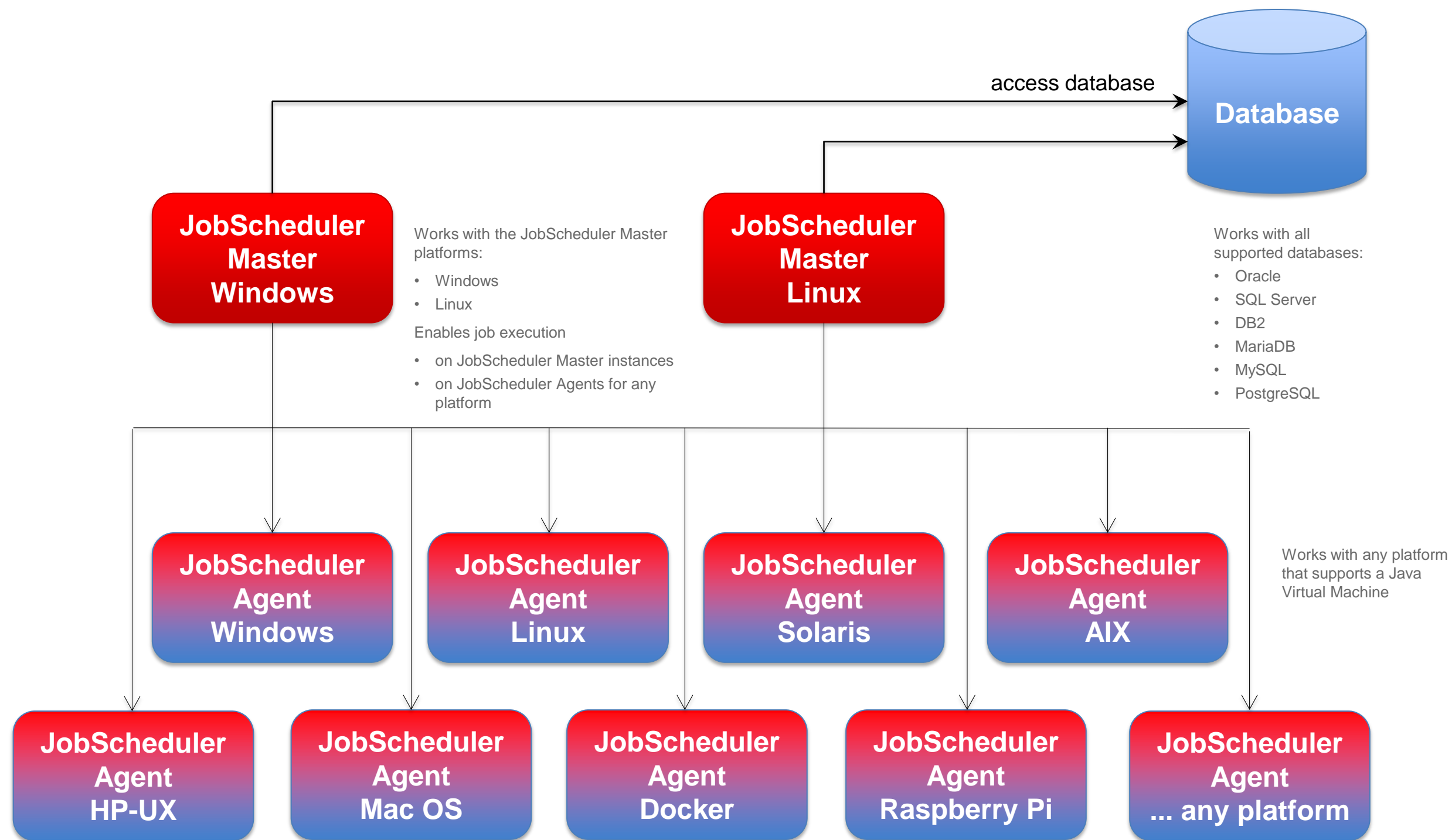
- Passive & Active Cluster Support,
- Master/Agent Cluster Support, Unclustered JobScheduler Support
- Central Configuration

Master/Agent Platforms

- JobScheduler Master uses a database that is located on any platform
- JobScheduler Master is available for Windows and Linux
- JobScheduler Agents are available for any platform that supports a Java Virtual Machine

Job Execution

- Jobs are executed locally on the JobScheduler Master.
- Jobs are executed on a remote JobScheduler Master instance
- Jobs are executed on any JobScheduler Agent.
- JobScheduler Agents enable remote file watching, i.e. they trigger job starts in the JobScheduler Master for incoming files



Passive Cluster

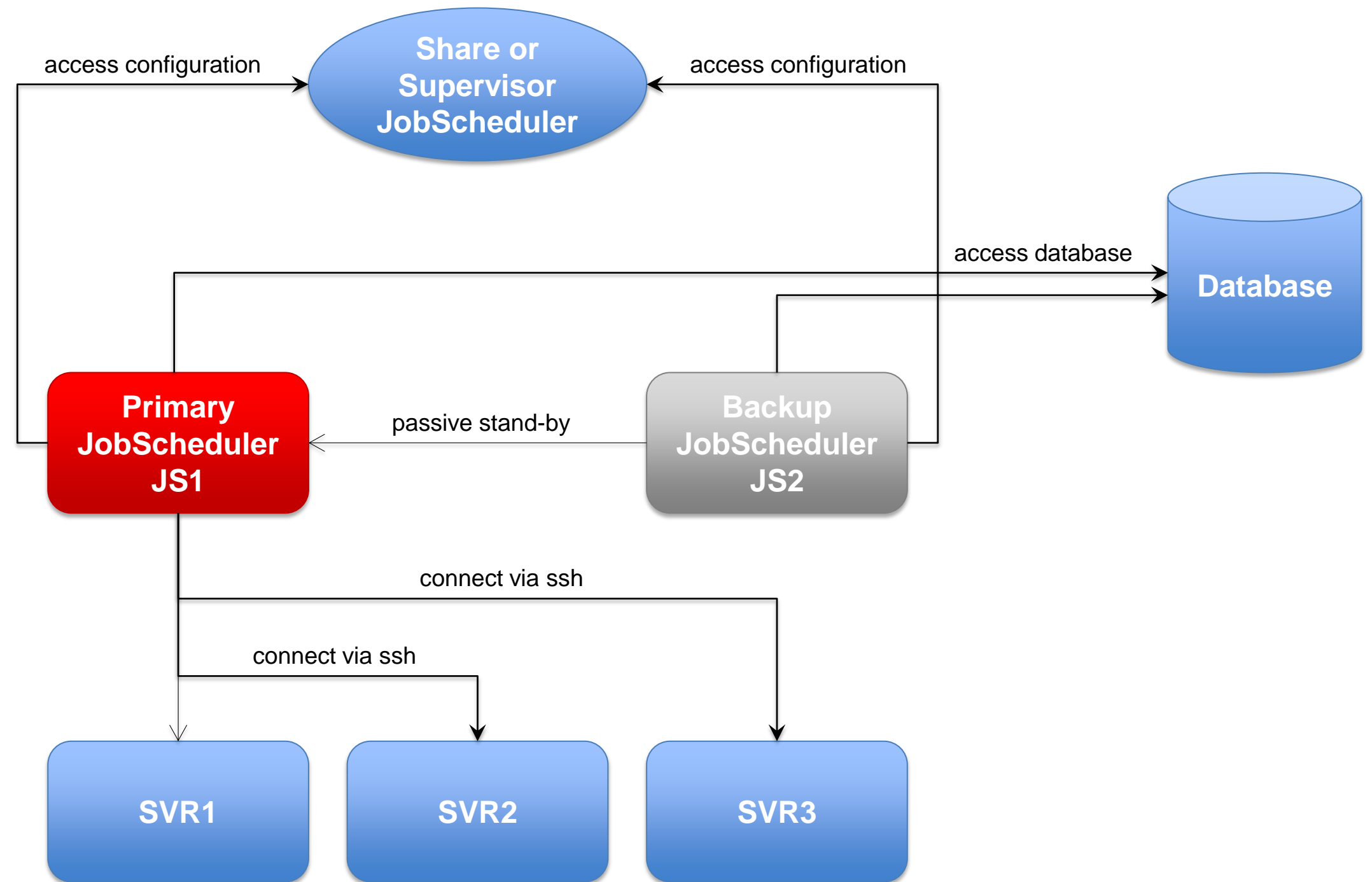
- Primary and Backup JobScheduler use the same database
- Primary JobScheduler is monitored by its failover instance
- Failover instance operates in stand-by mode
- All connections to servers use the SSH protocol

SSH Connections*JITL Jobs*

- Requires a JVM per task
- Memory resources

SSH Client

- No pre-/post-processing
- No substitution of parameters in script files
- Script files have to be provided on the target system



Passive Cluster

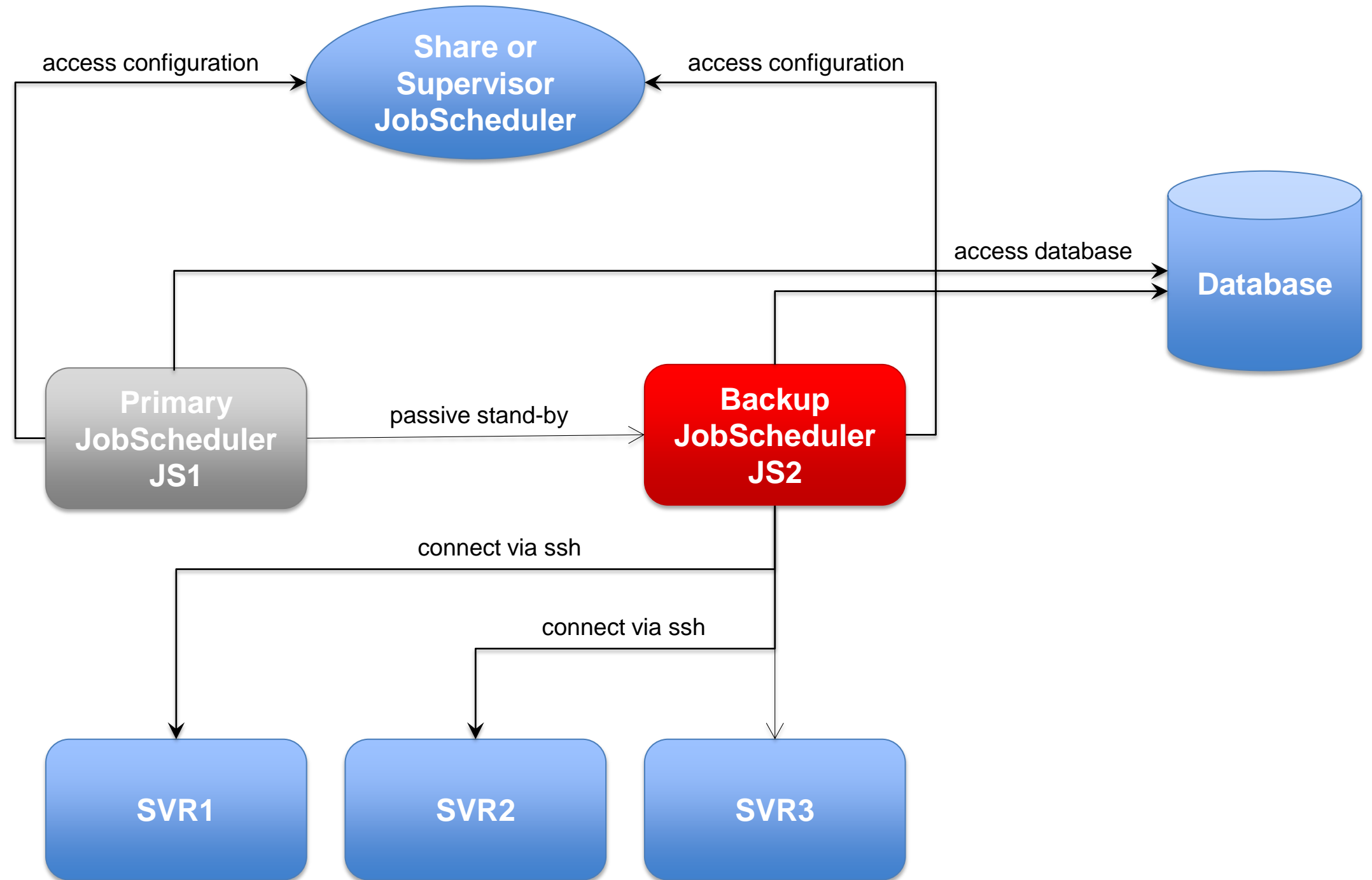
- Primary and Backup JobScheduler use the same database
- Backup JobScheduler is active after failure of Primary instance
- Primary instance operates in stand-by mode
- All connections to servers use the SSH protocol

SSH Connections*JITL Jobs*

- Requires a JVM per task
- Memory resources

SSH Client

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Active Cluster

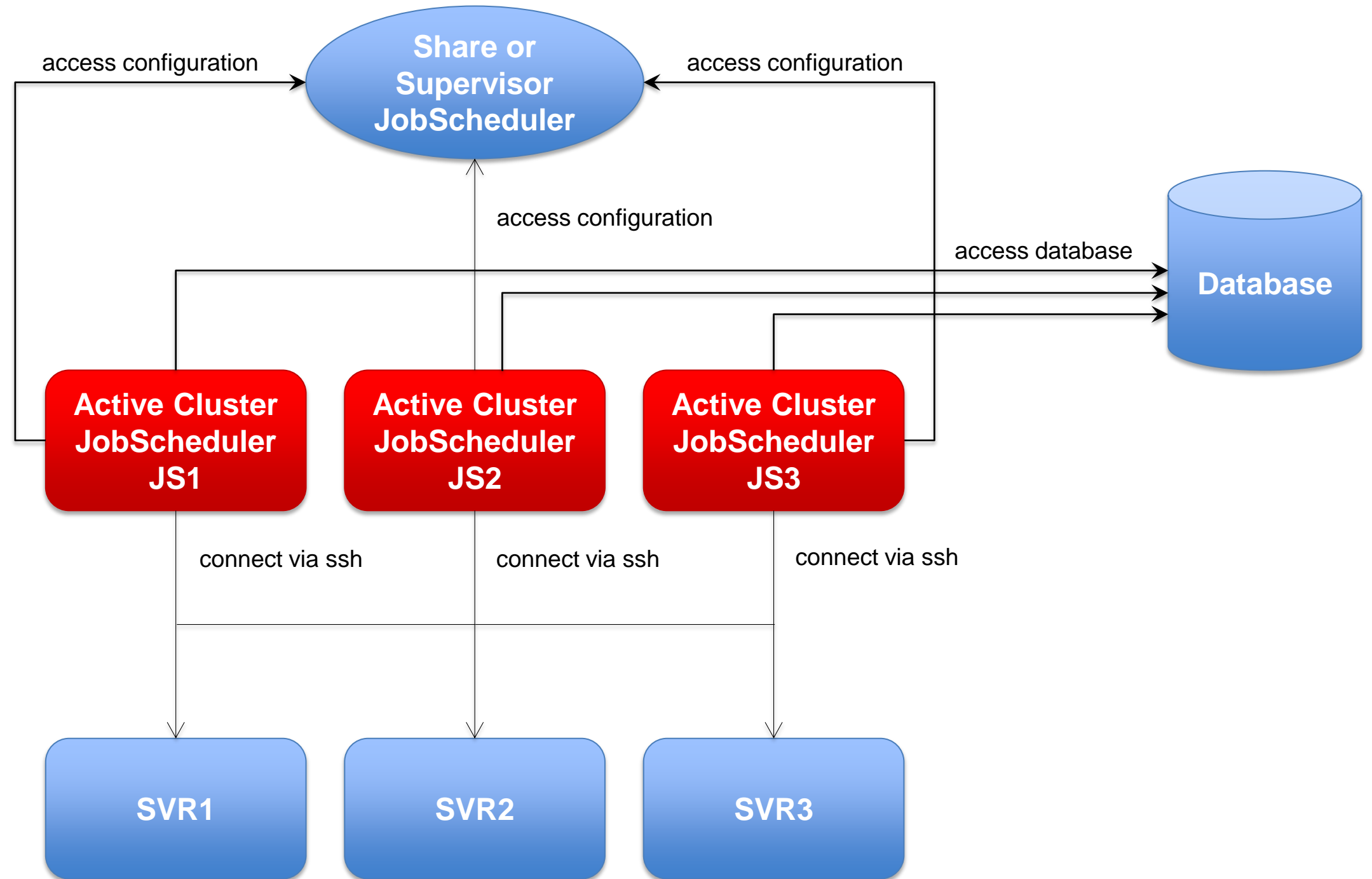
- Cluster JobSchedulers use the same database
- Cluster JobSchedulers share the workload of jobs
- All Instances operate in active mode
- All connections to servers use the ssh protocol

SSH Connections*JITL Jobs*

- Requires a JVM per task
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Active Cluster

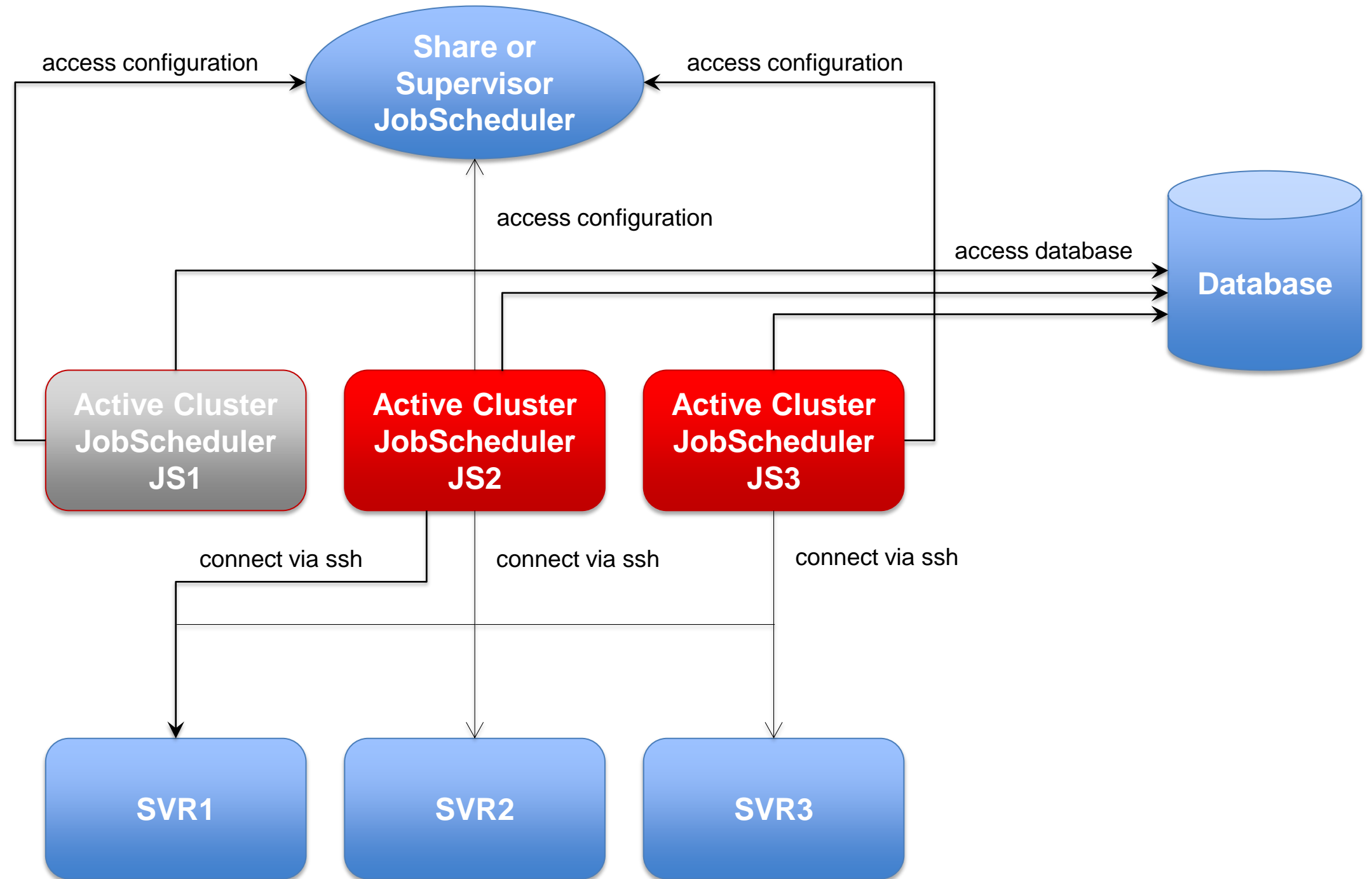
- Cluster JobSchedulers use the same database
- Cluster JobSchedulers share the workload of jobs
- All Instances operate in active mode
- All connections to servers use the ssh protocol

SSH Connections*JITL Jobs*

- Requires a JVM per task
- Memory resources

SSH Client

- No pre-/post-processing
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- Script files have to be provided on the target system

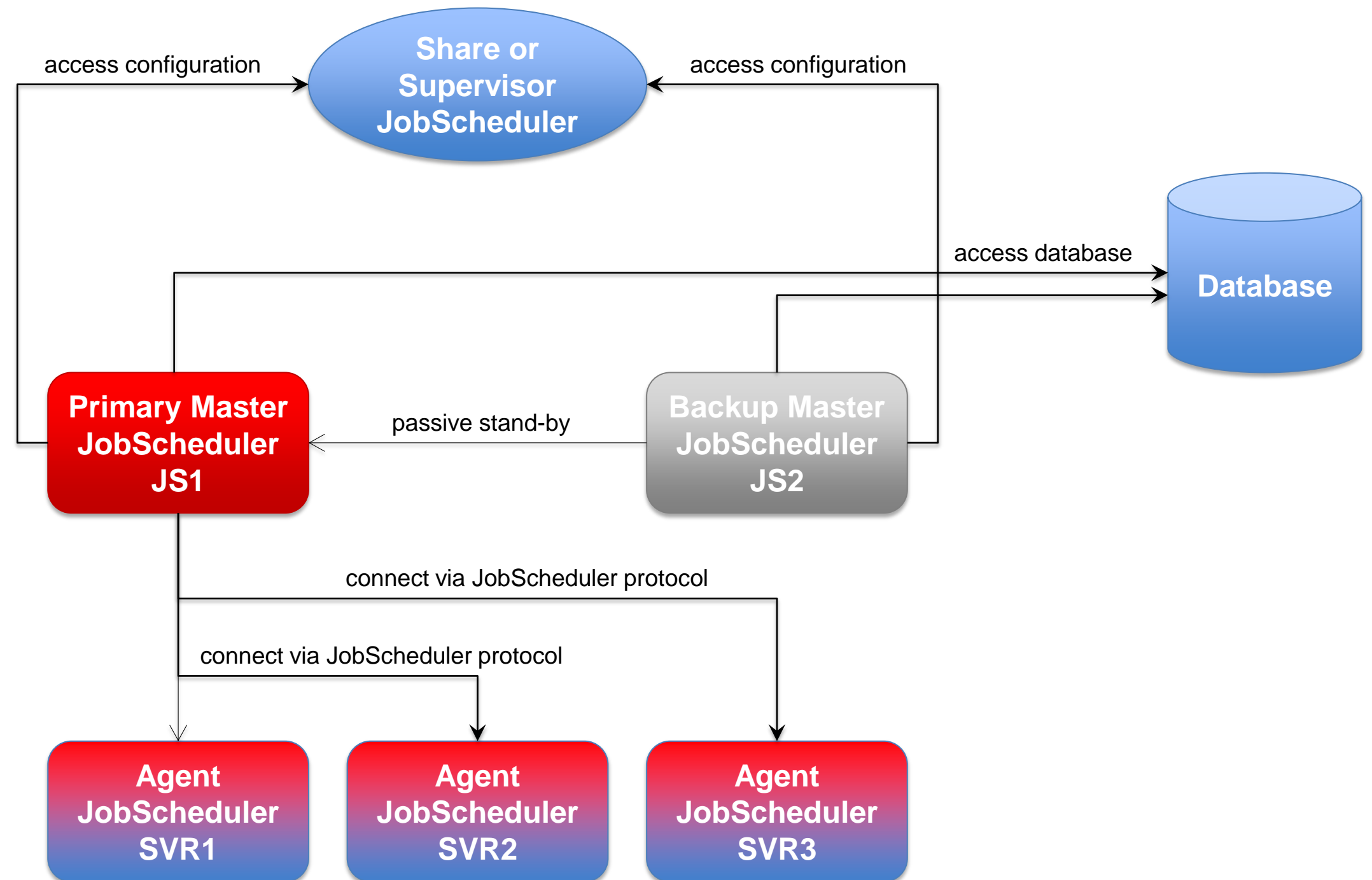


Master/Agent Passive Cluster

- Primary and Backup JobScheduler use the same database
- Primary JobScheduler is monitored by its Backup instance
- Backup instance operates in stand-by mode
- All Cluster instances use Agents to execute jobs on remote servers
- Connections to servers use the internal protocol

Job Execution

- Jobs are executed locally per JobScheduler Agent.
- No central resources required for job execution
- Pre-/post-processing
- Use of JITL Jobs or script files with parameter substitution

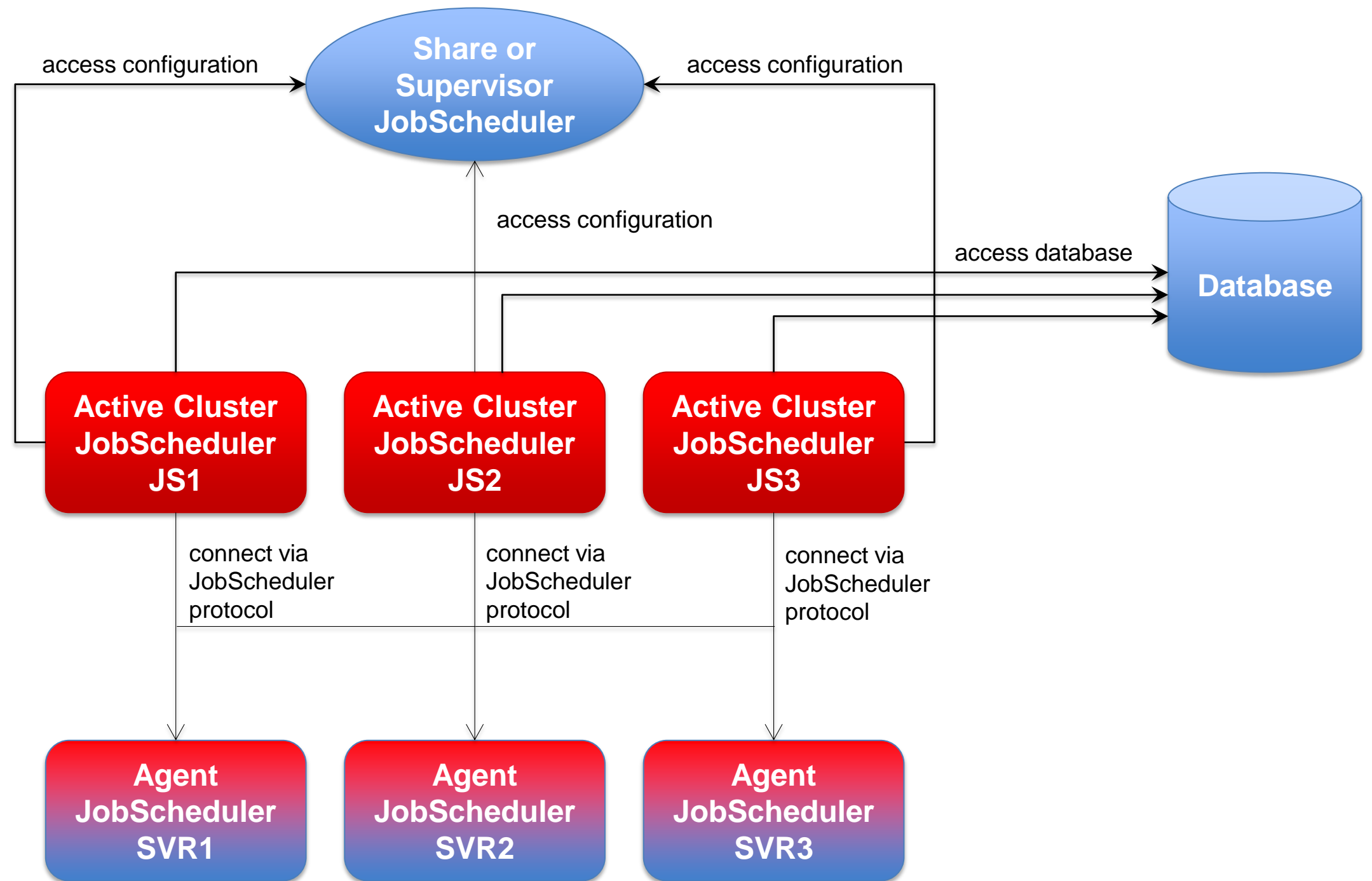


Master/Agent Active Cluster

- Cluster JobSchedulers use the same database
- Cluster JobSchedulers share the workload of jobs
- All Instances operate in active mode
- All Cluster instances use Agents to execute jobs on remote servers

Job Execution

- Jobs are executed locally per JobScheduler Agent.
- No central resources required for job execution
- Pre-/post-processing
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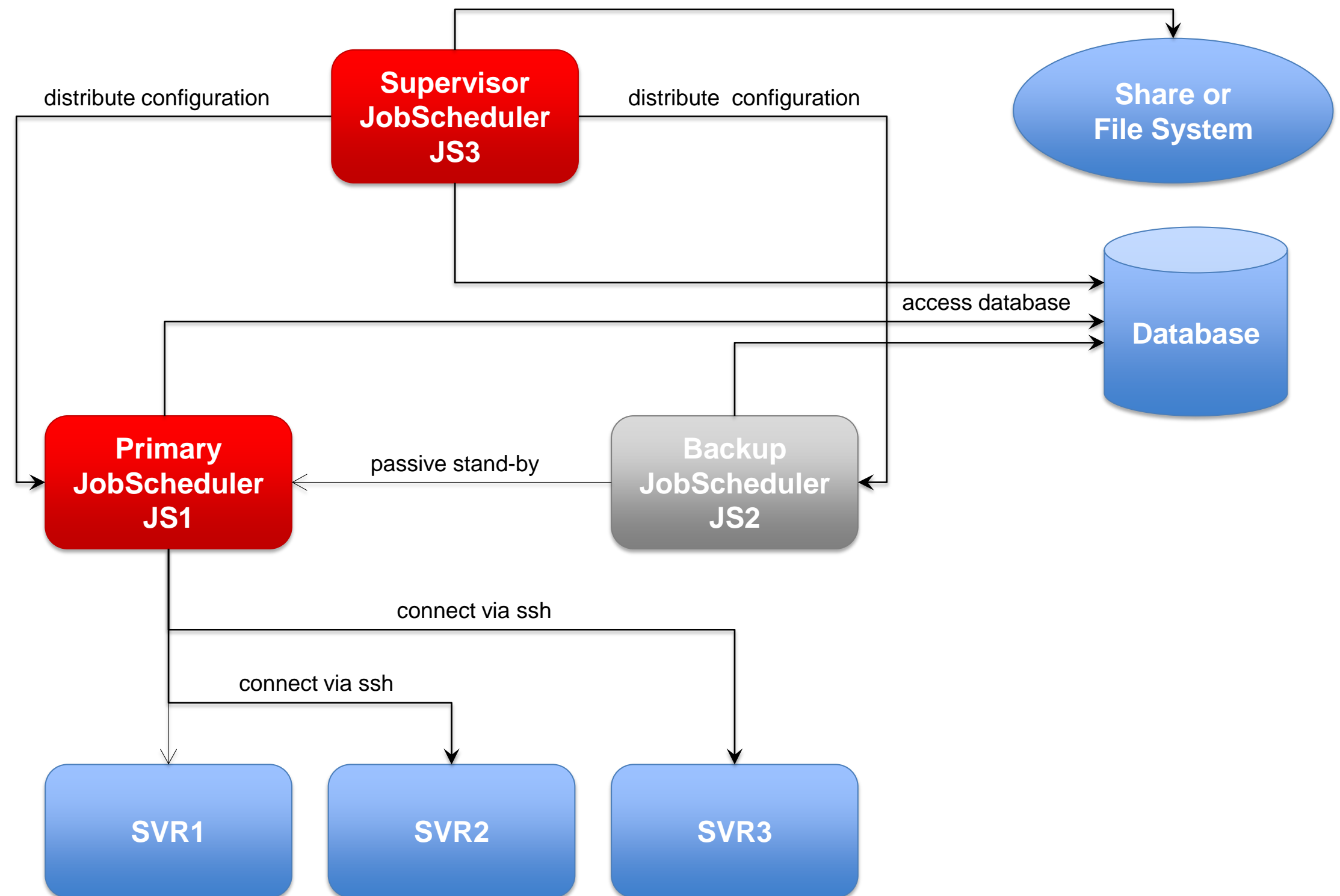


Passive Cluster

- Primary and Backup JobScheduler use the same database
- Primary JobScheduler is monitored by its Backup instance
- Backup instance operates in stand-by mode
- All connections to servers use the ssh protocol

Supervisor JobScheduler

- Distribute configuration to Primary and Backup JobScheduler instances

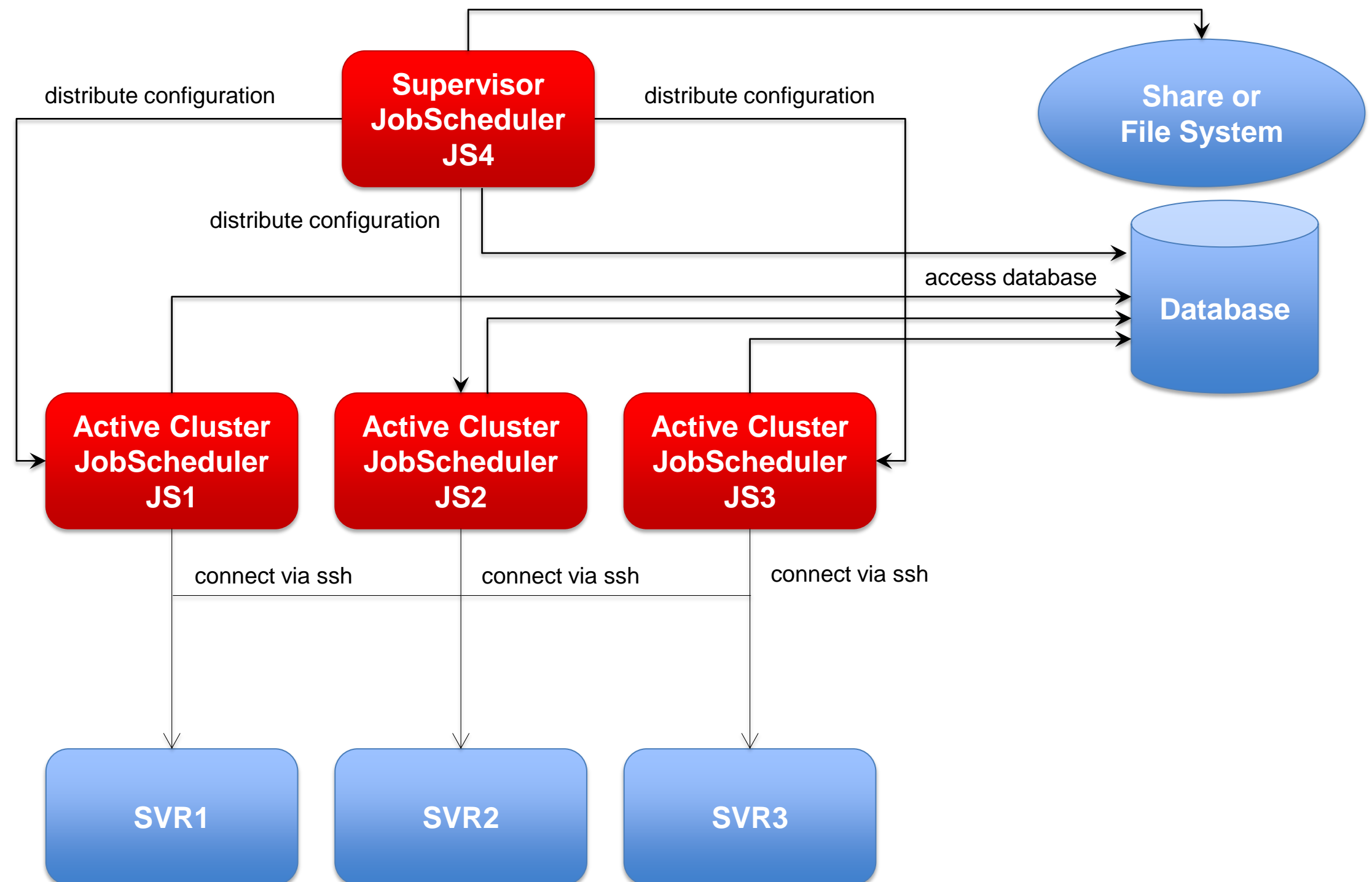


**Active Workload
JobScheduler Cluster**

- Cluster JobSchedulers use the same database
- Cluster JobSchedulers share the workload of jobs
- All Instances operate in active mode
- All connections to servers use the ssh protocol

**Supervisor
JobScheduler**

- Distribute configuration to Cluster JobScheduler instances

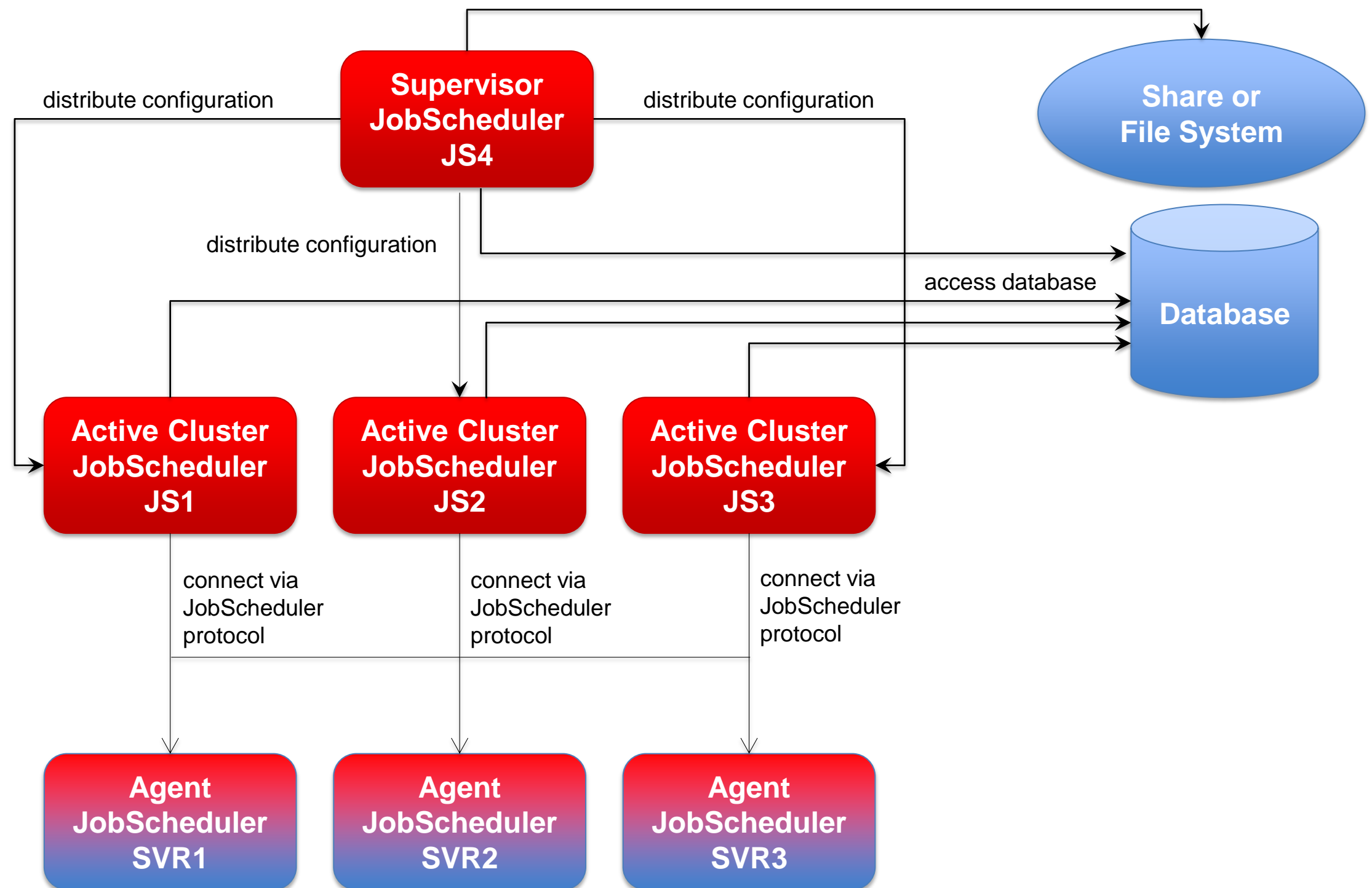


Master/Agent Active Cluster

- Cluster JobSchedulers use the same database
- Cluster JobSchedulers share the workload of jobs
- All Instances operate in active mode
- All Cluster instances use Agents to execute jobs on remote servers

Supervisor JobScheduler

- Distribute configuration to Cluster JobScheduler instances

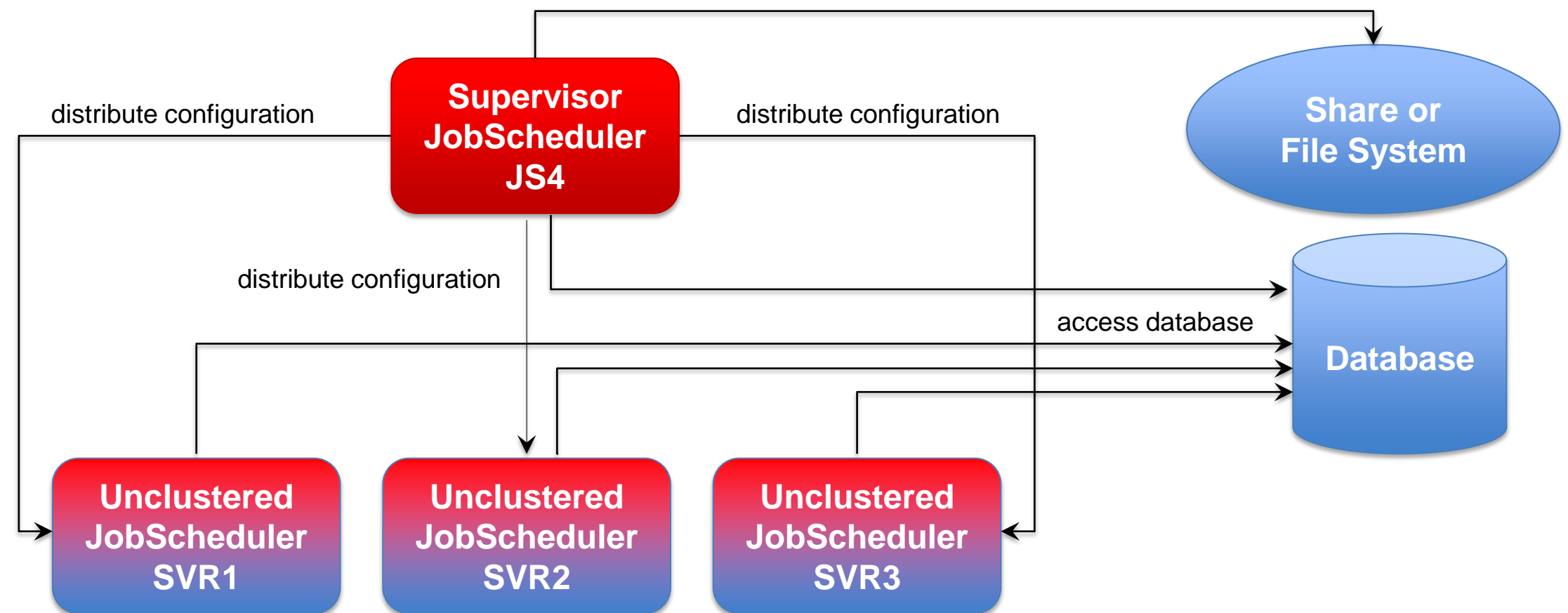


Unclustered JobSchedulers

- JobSchedulers use the same database
- JobSchedulers operate independently from each other
- All Instances operate in active mode

Supervisor JobScheduler

- Distribute configuration to JobScheduler instances





Questions?
Comments?
Feedback?

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