

# Build Automation Streamline Cloud Native CI/CD with ionir

## Benefits

- Speed horizontal scaling by jumpstarting the worker node build process
- Recover instantly from test errors or failed configuration changes
- Save time and resources when operating across multiple Kubernetes clusters, multiple clouds, and hybrid deployments
- Reduce costs for CI/CD by up to 50% compared to legacy storage solutions

Kubernetes is now the industry standard for container management and orchestration. Containers are a perfect match for CI/CD in both build and test environments, since they can be quickly initiated, versioned, and rapidly shutdown. It has become common to use Kubernetes with compatible Continuous Integration (CI) processes and tools. One of these tools is Jenkins.

Customers face numerous challenges distributing the load across multiple worker nodes in a Jenkins environment. In a standard Jenkins workflow, each worker node creates its own environment from scratch. This approach, which requires a full repository copy and a complete build, slows horizontal scaling and increases build/test time.

Also, if a worker node does not start from a clean state, tests are more likely to fail, further increasing overall test time. When Jenkins spans multiple clouds, the above issues increase exponentially.

Running ionir as the Jenkins data platform allows more rapid and efficient scaling of CI/CD pipelines across multiple clouds and data centers. Rather than each node pulling resources and creating its own environment, ionir allows operators to instantly clone 'golden images' to jump start the build process and speed horizontal scaling. ionir's persistent, resilient, and highperformance storage cuts run times for builds and tests in both monolithic and scaled Jenkins environments.

In environments with multiple worker nodes, and when operating across clouds, ionir's instant point-in-time clones and rapid data movement simplify workflows, speed on-demand scaling, and increase testing reliability. Benefits include lower OPEX, up to a 50% reduction in CI/CD infrastructure, and faster time to delivery for applications.

ionir's Kubernetes native storage platform is ideal for containerized Jenkins implementations. Data agility, including the ability to move any size volume to any location in 40 seconds, and the ability to instantly restore 1-second RPOs significantly accelerates workflows that require data to be preserved and copied.