|  |
| --- |
| **DevOps Pipeline Work Experience** |
| NGC Virtual environment intended for DevOps Pipeline  GitLab, Docker Nexus, Jenkins --> Deployment Env  Git Local --> GitLab Remote -->  Docker Local --> Docker Hub --> Docker Hub Nexus  Dockerfile YAML  Jenkins  Jenkinsfile YAML |

|  |
| --- |
| **Image Container Options Comparison Amazon ECR**,   **Docker Hub**,   **GitHub Container Registry** |
| |  | **Amazon ECR** | **Docker Hub** | **GitHub Container Registry** | | --- | --- | --- | --- | | Public Repository | ❌ no | ✅ yes | ✅ yes | | Private Repository | ✅ yes | ✅ yes | ✅ yes | | Pricing  (Public Repository) |  | $0 | $0 | | Pricing  (Private Repository) | 💰  Storage: $0.10 per GB, Data Transfer: $0.09 per GB[1](https://cloudonaut.io/amazon-ecr-vs-docker-hub-vs-github-container-registry/#fn:1) | 💰💰💰  >= $7 per user/month[2](https://cloudonaut.io/amazon-ecr-vs-docker-hub-vs-github-container-registry/#fn:2) | 💰💰  Storage: $0.25 per per GB, Outgoing Data Transfer: $0.50 per GB[3](https://cloudonaut.io/amazon-ecr-vs-docker-hub-vs-github-container-registry/#fn:3) | | Authentication | AWS IAM | Password or Access Token | Personal Access Token (PAT) | | MFA for Image Push/Pull | ✅ yes | ❌ no | ❌ no | | SLA Availability | ✅ 99.9%[4](https://cloudonaut.io/amazon-ecr-vs-docker-hub-vs-github-container-registry/#fn:4) | ❌ n/a | ⚠️ n/a during beta | | General Available | ✅ yes | ✅ yes | ⚠️ beta | | Immutable Images | ✅ yes | ❌ no | ❌ no | | Image Scanning | ✅ yes | ✅ yes (paid plans only) | ❌ no | | Regions | Choose between one of 25 regions worldwide | ⚠️ unknown | ⚠️ unknown | | Rate Limits | Pull: 1,000 per second, Push: 10 per second[6](https://cloudonaut.io/amazon-ecr-vs-docker-hub-vs-github-container-registry/#fn:6) | Pull: 100/200 (Free Plan), unlimited (Paid Plan) | n/a | |
| **Amazon ECR** shines for container-based workloads running on AWS.  **Docker Hub** is still the best choice for distributing software publicly.  **GitHub Container Registry** extends the place where you store your source code with a container registry to store your build artifacts.  **GitHub Container Registry**  supports both: public and private repositories.  integrates well with GitHub Actions (CI/CD).  Accessing the container registry from GitHub Actions does not incur any data transfer charges.  Recommend using the GitHub Container Registry to distribute container images within a team of software developers or an organization.  if you are using GitHub Actions for CI/CD, the integration with GitHub Container Registry might be a pro argument as well. |