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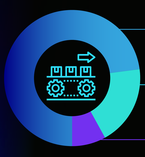
Day 0: Building the Foundations of Cloud-Native Development

Containers Take Center Stage in Modern Workloads



50.9% Report that 51–75% of workloads are already containerized

13.3% More than 75% containerized

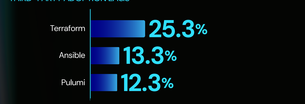
5.6% More than 75% containerized

Implication: Containerization is now mainstream, but most organizations still balance hybrid environments with legacy workloads.

Cloud Providers Dominate the Provisioning Game

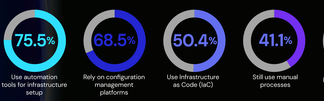
LEADING TOOLS

THIRD-PARTY ADOPTION LAGS



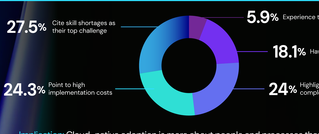
Implication: Organizations align provisioning with their main cloud provider, but cross-cloud interoperability is an open opportunity.

Automation Is Winning—But Manual Work Still Lingers



Implication: Strong automation momentum, but manual methods persist—slowing consistency, compliance, and speed.

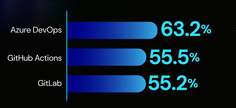
Talent and Complexity Are the Biggest Roadblocks



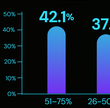
Implication: Cloud-native adoption is more about people and processes than just tools. Training, onboarding, and managed services remain critical success factors.

CI/CD Pipelines Mature, But Testing Gaps Remain

TOP TOOLS:



AUTOMATION LEVELS



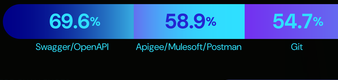
TESTING CADENCE:	54.7% Weekly	21.9% Daily	17.3% Monthly	6.1% Rarely

ROLLBACK READINESS:	74.7% automated	11.2% planning	14.1% lacking

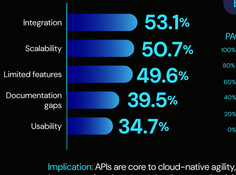
Implication: CI/CD adoption is widespread, but weekly testing and gaps in rollback automation leave teams vulnerable to failure risks.

APIs Fuel Agility, But Lifecycle Complexity Holds Teams Back

API MANAGEMENT PRACTICES:

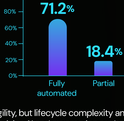


TOP CHALLENGES:



AI TOOLS EMBRACED VBY **89.6%**

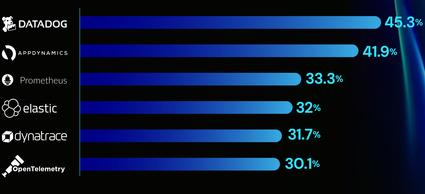
PACKAGE MANAGEMENT



Implication: APIs are core to cloud-native agility, but lifecycle complexity and poor documentation slow down developer productivity. AI and automation are becoming must-haves in developer toolchains.

Observability and AI Take Root in Day 0 Operations

OBSERVABILITY ADOPTION



AI USE IS WIDESPREAD:

REAL-TIME ISSUE DETECTION	84.5% already use	7.5% planning

PERFORMANCE OPTIMIZATION DURING DEPLOYMENT	80.5% already use	8.5% planning

TOP SECURITY HURDLES:

50.7% Inadequate tools	50.7% Budget	48.3% Compliance	41.1% Lack of expertise

VULNERABILITY SCANS:	50.9% Weekly	26.7% Daily	15.7% Monthly	6.7% Rarely

Implication: Observability is fragmented yet essential, with AI playing an increasingly significant role. Security of infrastructure remains a multidimensional challenge requiring both skilled teams and automated solutions.

Read the full Day 0 Research Report: Cloud-Native Build Strategies
Download the full eBook on our website

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