5 Tips for Retooling Your Observability for Digital Banking and Insurance

catchpoint

Introduction

Today's financial services customers don't compare banks to other banks. They compare you to Amazon. To Apple. To TikTok. Fast, seamless, always available experiences—that's their baseline.

Meanwhile, banking has gone fully digital. The shift isn't coming — it's already here:

60% of millennials, **57%** of Gen Z, and **52%** of Gen X
primarily use mobile banking apps

81% of consumers prioritize ease of use online,
with identity theft ranked as a greater concern than financial loss

Traditional bank branches are closing
at a rate of **1,646** per year since 2018

But delivering reliable, high-performance digital services in this environment is a huge challenge.

Modern banking apps are distributed across clouds, powered by APIs, reliant on third-party services, and accessed from every type of device and network. Traditional Application Performance Monitoring (APM) tools, designed for custom software apps running on on-prem systems and 3-tier architectures, weren't built for this level of complexity — and they're no longer enough.

It's time for a strategic shift.

This guide outlines five key recommendations to help observability leaders and IT directors move beyond APM and embrace Internet Performance Monitoring (IPM). IPM puts user experience at the center and offers complete visibility across the modern Internet stack — not just your application, but the third parties, networks, and real-world conditions shaping the user experience.

Because in digital banking and insurance, performance isn't just technical. It's existential.

# 1. Start with experience scores

Focus on measuring what really matters — customer, employee, and system experience

Traditional APM focuses on infrastructure and code. But in today's banking and insurance landscape, the real measure of success is experience: how your apps, networks, and devices perform from the user's perspective.

That's why modern IT leaders are starting with a single, unified metric: the Digital Experience Score.

What Is the Digital Experience Score?

Built to reflect the full picture of system health, Catchpoint's Digital Experience Score brings together endpoint, network, and application data into one field-proven metric. It cuts through complexity to give you a fast, reliable signal of how your customers and employees are experiencing your services — and where things might be breaking down.
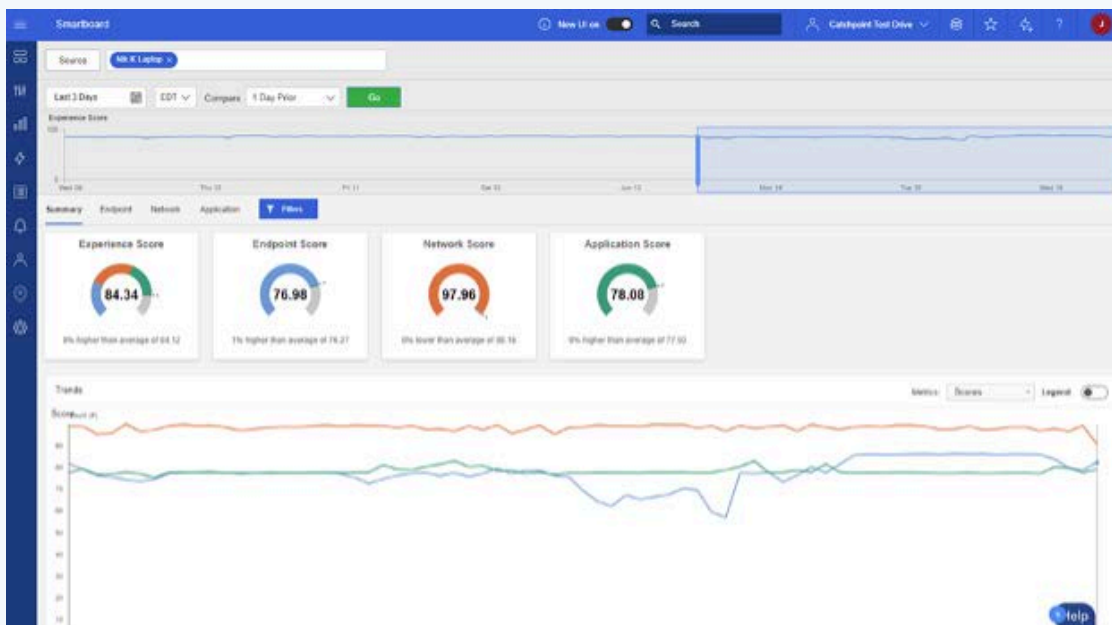
How the Score Is Calculated

The Digital Experience Score combines three key components:
- Endpoint score – Measures device performance (e.g., CPU, memory) to identify hardware issues.
- Network score – Tracks network quality using metrics like packet loss and latency.
- Application score – Evaluates app performance based on load times, errors, and responsiveness.

Together, these scores offer a simple, unified view of what's impacting user experience, and where to focus your resources.

Immediate Benefits for IT and Business Leaders

Instead of digging through siloed dashboards or waiting for employee complaints, IT teams can use the experience score to:

- Get a real-time pulse on digital performance across devices, locations, and apps
- Identify whether issues stem from the endpoint, network, or SaaS provider
- Benchmark performance across time, regions, or business units
- Speed up root cause analysis and reduce mean time to resolution

> **"**
>
> The scoring system lets us focus on what really matters: how services are experienced from our employee's perspective — and how we can make that experience better.
>
> **Fortune 500 consumer goods enterprise**

[See how to calculate and use your Digital Experience Score](#)

2. Evolve from SLOs to XLOs

It's the classic disconnect: green dashboards tell IT everything is fine, while users tell a very different story.

Internal metrics vs. real-world experience

Many companies proudly hit their internal service level objectives. Meanwhile, their users are frustrated and abandoning the experience.

The problem? Most SLOs measure the health of systems, not the quality of the experience.

Traditional SLOs focus on infrastructure — server response times, status codes, and availability. But customers don't care about backend metrics. They care about outcomes. Can they log in? Make a payment? Book a flight? Without delays?

That's where Experience Level Objectives (XLOs) come in. They shift the focus from "Is the server up?" to "Is the experience fast and smooth enough for our users?"

What XLOs measure

Experience metrics like these create a fuller, more accurate picture of how users interact with your services:

- Wait time – How long it takes for the server to respond to a request
- Time to interactive – When a page becomes fully usable
- Largest Contentful Paint (LCP) – When the main content finishes loading
- First Contentful Paint (FCP) – When the first element appears
- Cumulative Layout Shift (CLS) – How much the layout jumps during load
- Response time – The total time to deliver a complete response

These are what users actually feel. And when you monitor from real user vantage points — not just cloud data centers — you see what they see: congestion, routing issues, and last-mile failures that SLOs miss.

Why XLOs matter to the business

- **Aligning with business outcomes**

XLOs help tie technical performance to real impact. Tracking how often your LCP exceeds 2.5 seconds, for example, gives visibility into bounce rates, conversions, and satisfaction — metrics both IT and business stakeholders care about.

- **From reactive to proactive**

XLOs allow teams to track performance trends over time. Burn-down charts, for example, make it easy to spot issues before users feel them — and fix them while they're still small.
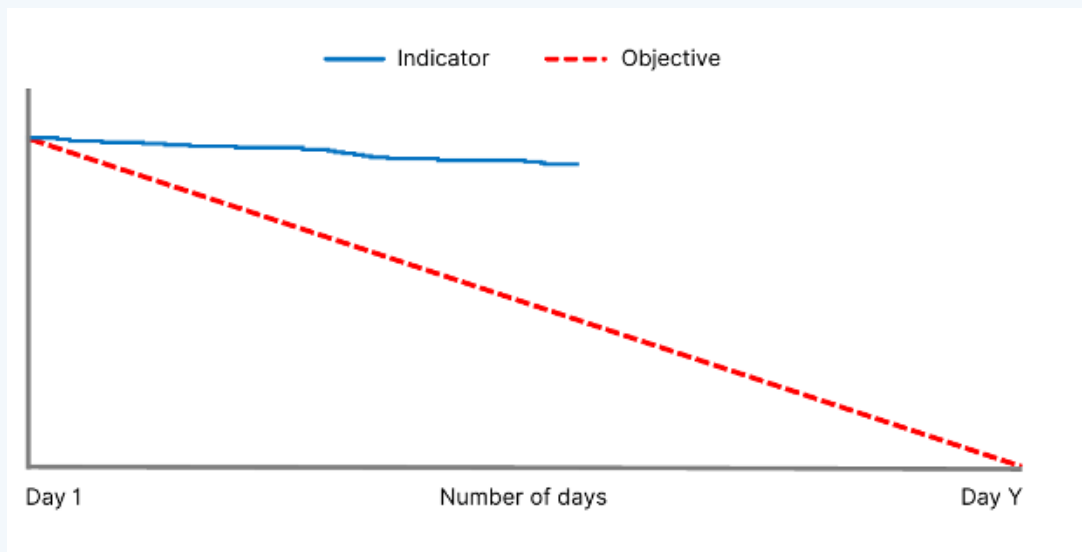
- **Breaking silos and driving maturity**

Because XLOs focus on shared outcomes, they help align teams across IT, product, and business. They also support digital maturity by moving organizations beyond uptime reporting and toward true experience optimization.

The bottom line? **Measure what matters.**
And what matters is what your users actually experience.

3. Implement enterprise-grade API monitoring

Monitoring APIs requires visibility into every step, from the user to the backend and beyond.

In a world where most applications and systems that are interconnected via APIs are geographically distributed, touching different clouds and traversing multiple points across the internet, simple proactive monitoring is no longer enough. A traditional approach to API monitoring will not only be insufficient, but it may also miss many important incidents and would not be helpful in identifying root cause.

What does API resilience look like?

To ensure your APIs support system-wide resilience, you need to measure four core elements:

- Reachability: Can client systems get to the API? – Is it reachable (DNS, ISP, etc)
- Availability: Is the API functional – does it do what it is supposed to do?
- Performance: Does the API respond within the expected time?
- Reliability: Can I trust the API will be working consistently over time?

Now apply that across every API your system depends on — because your system is only as resilient as its weakest link.

System Resilience = minimum resilience across all APIs in use

Application SLA 99.88% = API 1 SLA 99.999% x API 2 SLA 99.99% x API 3 SLA 99.9%

Consider: A system that has 100 APIs with five nines of availability must have five nines of availability from each API! If designed in a resilient way, it's possible to have individual API dependencies fail without impacting the overall system, but it has to be carefully designed and verified to be resilient.
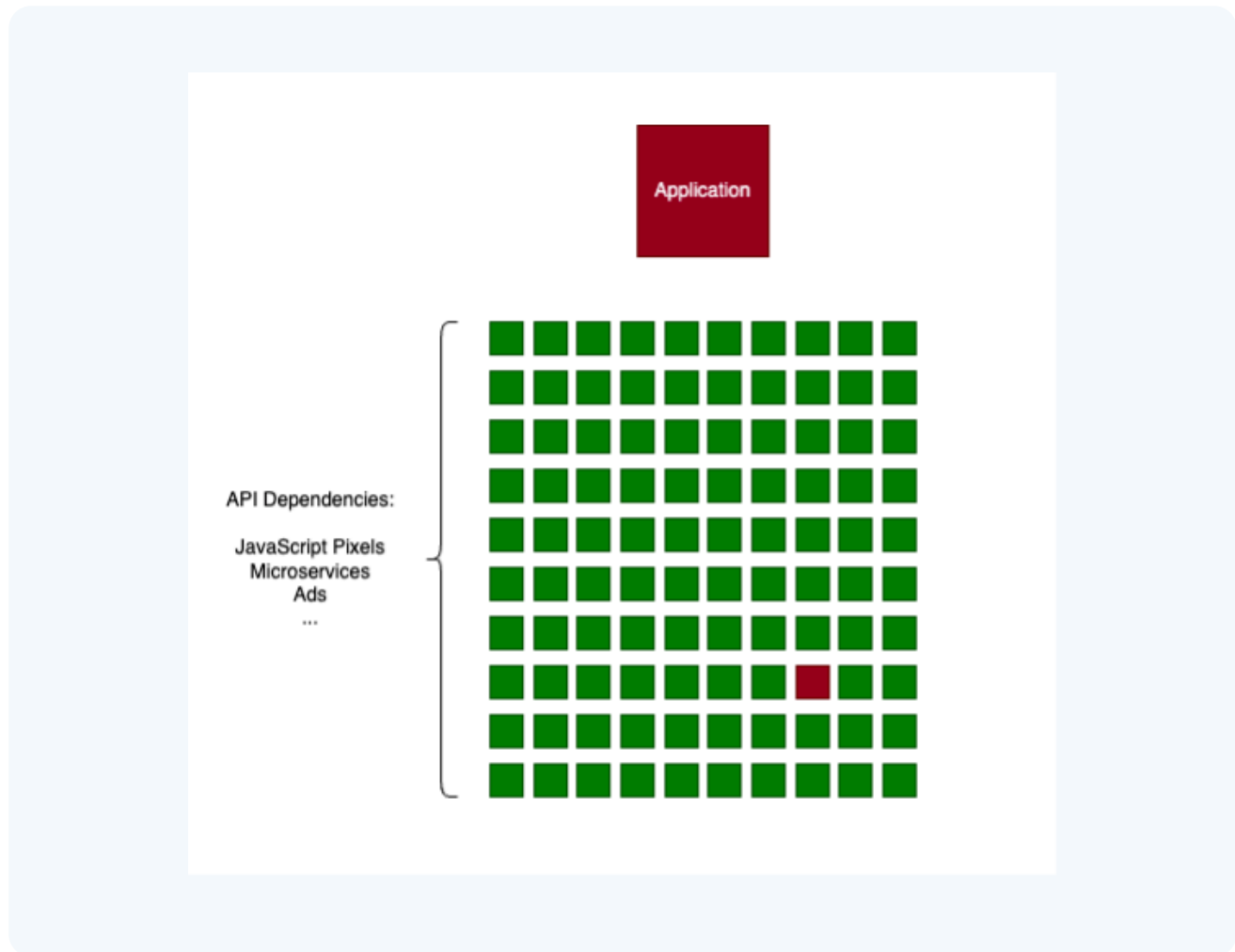
Figure 1: One misbehaving dependency can make your whole system fail

That's why monitoring must evolve — from simply checking uptime, to understanding how all parts of the system interact and affect each other.
Here's how traditional API monitoring compares with a modern, Internet-centric approach focused on resilience and experience:

Traditional vs modern API monitoring

Here's how traditional API monitoring compares with Internet Performance Monitoring strategies that support resilience and user experience.

Feature	Traditional API Monitoring	Modern API Monitoring (IPM)
Scope	Server-centric metrics	End-to-end user experience + infrastructure
Protocol Support	Limited to HTTP/S, REST	HTTP/3, QUIC, MQTT, custom protocols
Data Granularity	High-cardinality data available but often limited to service boundaries	High-cardinality traces with cross-system correlation (user IDs, sessions)
Root Cause Analysis	Limited to app/server layers	Full internet stack (DNS, SSL, routing, etc.)
Testing Perspective	Cloud datacenters	Last mile, backbone, cloud, wireless, and enterprise intelligent agents
Performance Context	API performance in the context of code	API performance in context of user experience
Alerting Methodology	Alert thresholds based on error rates	Experience scores and XLOs
Visualization	Code-centric dashboards	Visual representation of everything impacting a system

This broader approach enables IT and ops teams to see what's happening across the entire delivery chain — not just where their code lives, but where real users experience it.

4. Leverage AI for full system health

Uncover the root cause faster and get a clear, real-time view of system health — across every layer and dependency

Artificial Intelligence (AI) is now revolutionizing how banks achieve full visibility and health across their systems.

AI-powered root cause analysis

AI-driven tools can automatically sift through massive volumes of telemetry, logs, and performance data to detect anomalies and pinpoint the root causes of incidents far faster than manual methods. Instead of engineers spending hours or days correlating disparate data sources, AI models analyze patterns, identify correlations, and surface the true source of disruptions in minutes. This not only reduces mean time to resolution (MTTR) but also minimizes the risk of human error and missed connections between symptoms and root causes.

### Continuous learning and proactive insights

AI models improve over time by learning from each incident, becoming increasingly accurate and effective at diagnosing problems. This continuous learning enables banks to resolve recurring issues more efficiently and prevent similar outages in the future. AI also excels at proactive monitoring, identifying subtle deviations from normal behavior before they escalate into major incidents-helping IT teams address problems before they impact customers or employees.

AI powered tools for a resilient Internet Stack

Catchpoint's platform uses AI to simplify the complexity of modern observability.

Two key tools bring this to life.

Internet Stack Map gives teams a visual, real-time view of every system, service, and dependency in the user experience chain. It highlights where issues are occurring and how they ripple across your digital ecosystem.
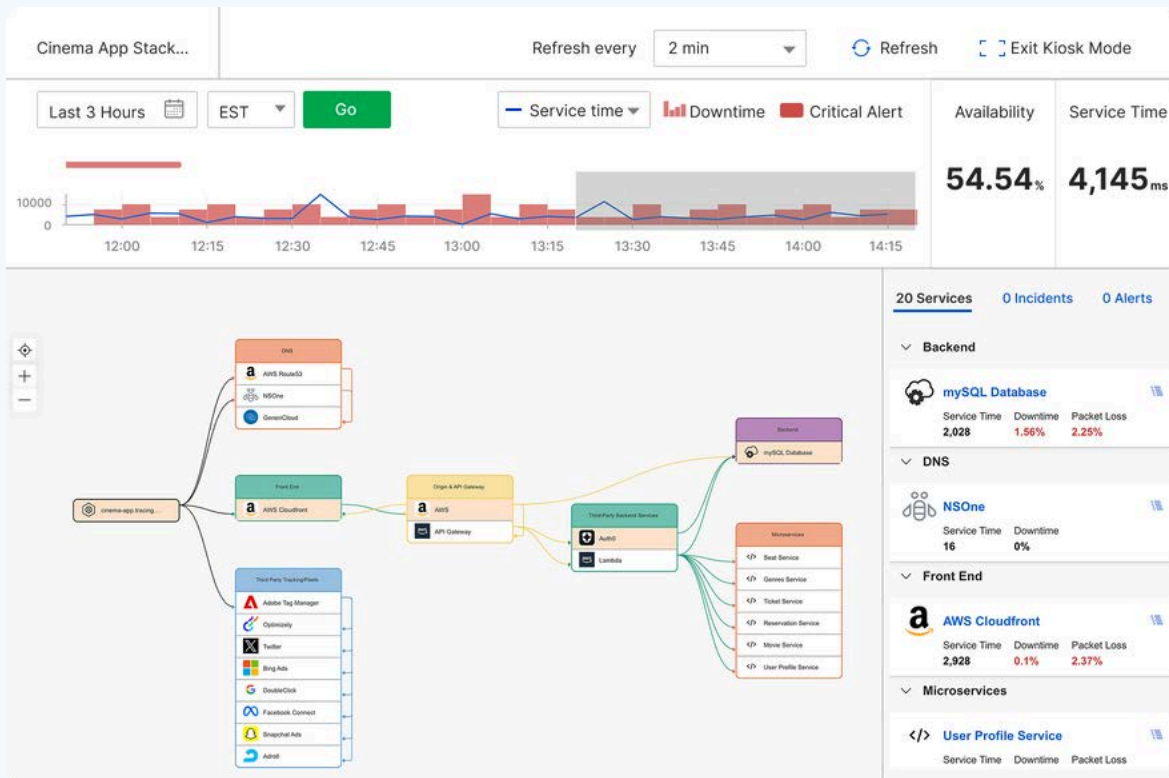
Internet Sonar uses data from the world's largest, independent active agent network to display an AI-powered, real-time, interactive status report of global outages.

Together, these tools instantly provide answers to the questions, "What is wrong with my application?" and "Is it me or something else?" The result is comprehensive visibility into real-time status.

> ❝
> Our investments in AI capabilities are designed to accelerate MTTR and reduce incident and maintenance costs. That way, our customers can allocate more of their resources to R&D rather than incident management."
>
> **Dritan Suljoti**
> Co-founder and CTO at Catchpoint

5. Ensure SaaS applications work for your team

Your team is still accountable for performance, even when the app is out of your hands.

SaaS is now the backbone of business operations — powering everything from finance and sales to customer service and IT. But while the apps may be managed by external vendors, performance issues still land on your help desk.

The challenge? You're responsible for delivering a great user experience across a network, application, and infrastructure stack you no longer fully control.

### Why traditional monitoring isn't enough

Legacy monitoring tools were designed for environments you owned — your devices, your network, your apps. But in the world of SaaS, those boundaries no longer exist. The Internet is your new corporate network. Your datacenter is someone else's cloud. And your employees are distributed across homes, offices, and remote locations.

When performance degrades, it's often due to something subtle — not a full outage, but a long load time, a lagging interface, or a slow VPN tunnel. And point solutions often fail to detect these "death by a thousand paper cuts" issues.

Modern SaaS observability: What to measure instead

To make SaaS work for your team, you need visibility across the full Internet Stack — from the user's device all the way to the application layer.
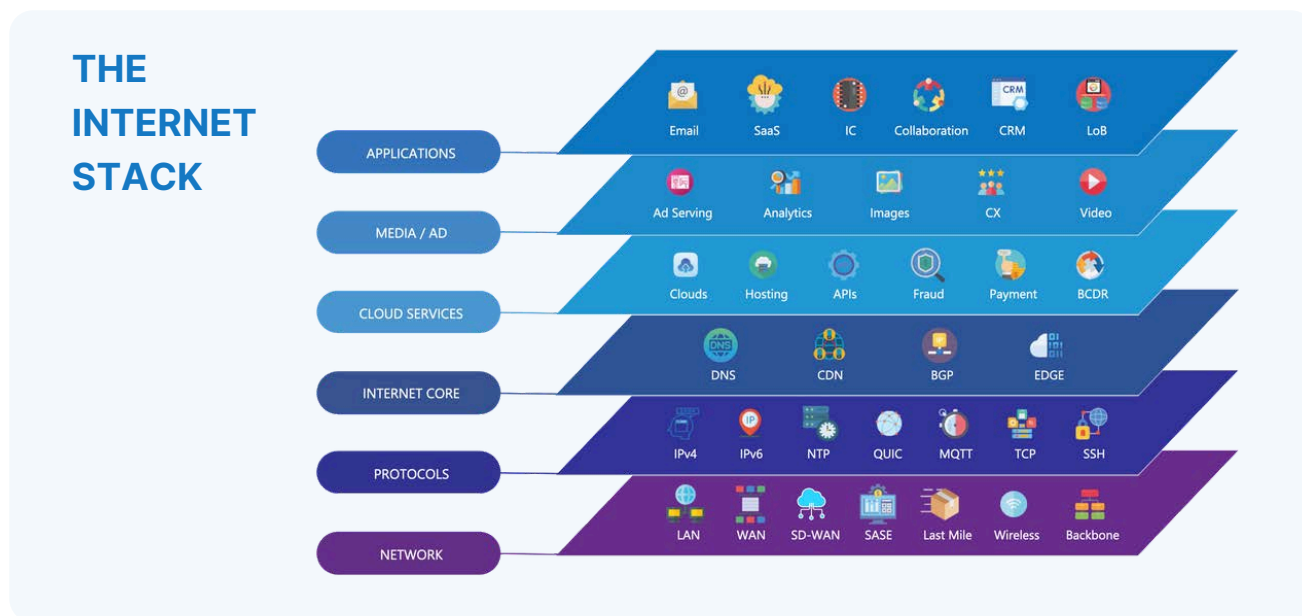
What it takes to keep your SaaS running smoothly

Catchpoint IPM enables full visibility into SaaS performance — from the user's device to the application itself. Here's how we help you stay in control:

- **Monitor SaaS from everywhere**
  Test performance from offices, data centers, and remote locations — no blind spots, no agents required.

- **Find and fix issues faster**
  Pinpoint the root cause across devices, networks, and SaaS providers to cut resolution times.

- **Protect workforce productivity**
  Optimize response times and reduce slowdowns that frustrate employees and waste time.

- **Hold vendors accountable**
  Use objective, vendor-agnostic data to enforce SLAs and accelerate third-party fixes, from ISPs to SASE to ZTNA tools.

- **Plan for disruptions**
  Build contingency plans with real-time insights into performance across regions, networks, and environments.

SaaS might be outside your firewall — but the user experience is still your responsibility.

Where to go from here

This guide outlined five steps to help financial services organizations move beyond internal metrics and infrastructure monitoring, toward a more complete, resilient approach: Internet Performance Monitoring.

By shifting your focus to the end-user experience, integrating modern API observability, using AI for system health, evolving to experience-based objectives, and monitoring the full Internet Stack — including SaaS — you can deliver the fast, reliable, high-quality experiences your customers and teams expect.

But implementing this comprehensive approach can be daunting. That's where AppAssure comes in.

Get started faster with AppAssure

AppAssure is Catchpoint's turnkey solution designed to simplify and streamline the performance and resilience for your critical applications. It enables you to monitor critical services for one app, in one region, for a cost-effective fixed price.

Included in the base package

- Initial setup, onboarding, and support
- Visual, global display of outages and incidents
- Service dependency map for your app's Internet Stack
- Monitoring for critical user application journeys
- Monitoring for critical Internet Stack components, including DNS, SSL and CDN services
- Network performance insights and diagnostics
- Full dashboards, alerts, and reports
- AI-powered performance insights

To learn more about AppAssure and how it enables resilience and performance for Tier-1 applications visit www.catchpoint.com/appassure or contact us at hello@catchpoint.com to get started today.

Explore more resources

Build on what you've learned with these essential resources:

Explore Catchpoint's financial services solutions
See how Catchpoint helps banks, insurers, and fintechs deliver fast, reliable digital experiences.

Comply with the Digital Operational Resilience Act (DORA)
Understand what DORA means for your IT strategy and download a compliance checklist to assess your readiness.

Optimize your observability spend
Learn how to reduce monitoring costs without sacrificing visibility or performance.

GAIN Capital case study
Discover how GAIN Capital achieved zero false positives and improved trading resilience.

CardConnect case study
See how CardConnect ensured performance and security across its payment platform.

About Catchpoint

Trusted by the world's leading brands who understand in the digital age performance is paramount, Catchpoint is dedicated to monitoring what matters from where it matters to catch issues across the Internet Stack before they impact business.

The Catchpoint Platform offers a comprehensive suite of Internet Performance Monitoring capabilities, including Internet Synthetics, RUM, BGP, Tracing, performance optimization, and advanced analytics, all supported by high-fidelity data and flexible visualizations. Leveraging thousands of global vantage points inside the critical systems that make the Internet work, Catchpoint provides unparalleled visibility into what affects customer experiences, workforce efficiency, network performance, websites, applications, and APIs.

Today's digital world requires resilience and exceptional performance, which is why *The Internet Relies on Catchpoint*.

Learn more at: www.catchpoint.com

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