

Cloud Automated Testing

Product Introduction

Product Documentation



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Product Introduction

Overview

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Cloud Automated Testing (CAT) utilizes globally deployed monitoring network nodes to automatically monitor the real user experience. It can regularly monitor the network quality, page performance, API monitoring, file transfer (upload/download), and audio/video experience and supports multidimensional analysis of performance metrics. Based on virtual performance data, it helps you respond to business quality problems promptly and guarantee stable business operations.

Features

Scenario-oriented monitoring

CAT supports network quality, webpage performance, API monitoring, file transfer (upload/download), and audio/video experience monitoring scenarios.

Network quality: Monitors the stability of the application network and route, DNS resolution accuracy, ICMP latency, and packet loss rate.

Webpage performance: Gets the webpage experience data by ISP, region, browser version, operating system, or device to comprehensively display the page performance.

File transfer (upload/download): Tests the speed of file upload/download to get the speed of application data transfer, which reflects the actual bandwidth fluctuations.

API monitoring: Monitors the API response performance and availability over the GET/POST protocol or port, so as to ensure the user experience and business availability.

Audio/video experience: Monitors video playback on streaming media websites and in applications and gets data such as the lag rate, lag duration, and time to first frame, helping you improve the video watch experience.

Multidimensional analysis

CAT allows you to analyze the performance results of test tasks in multiple dimensions such as region and ISP on maps or in varied types of trend charts and look into the details of a test sample.

Strengths

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Rich location resources

CAT's global monitoring network spreads across different regions (in and outside the Chinese mainland), ISPs (China Mobile, China Unicom, China Telecom, etc.), terminals (IDC, LastMile, and mobile), and network conditions (3G, 4G, and Wi-Fi).

PC testing nodes:

IDC testing nodes: Covers 100 IDCs in over 100 regions in the Chinese mainland and 150 IDCs in over 65 regions outside the Chinese mainland.

End user's PC testing nodes: Covers over 200 regions in the Chinese mainland, over 50 regions outside the Chinese mainland, and over 200 ISPs.

Mobile monitoring network: Covers over 100 regions in the Chinese mainland and 150 IDCs in over 65 regions outside the Chinese mainland. Over 7,500 real phones are accessed over 4G.

Non-intrusive monitoring

CAT leverages nationwide testing nodes to configure test tasks, get performance data during access, and display the data on the report platform, without your involvement. It perceives performance issues during user access in advance and supports comparative analysis for prompt tuning, better user experience, and stronger product competitiveness.

Data visualization

CAT can monitor performance metrics for network quality, webpage performance, API monitoring, file transfer (upload/download), and audio/video experience monitoring scenarios and display them in visual charts.

Use Cases

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Service quality optimization

CAT simulates global user access to services to get service quality metrics in various business scenarios (such as online video experience, ecommerce website performance, and API tests). Metrics are related to webpage performance, port latency, browser events, video lag, hijacking and tampering, and application errors.

Release verification

CAT verifies the availability and performance after system upgrade or new feature release. With the address of the tested business, it discovers experience issues in advance, such as failure to open the business site, time-consuming step, error rate, and slow running. In this way, issues are perceived before being reported by users, which delivers better user experience.

CDN quality assessment

CAT proactively tests the CDN service quality and provides detailed data, for example, CDN performance comparison and CDN service quality, which provides a basis for CDN service fine-tuning and user experience optimization.

Performance comparison

CAT tests the performance of product competitors to highlight its pros and cons in the industry, guiding the optimization and determining the optimization goal.

IPv6 monitoring

CAT compares the performance and network connectivity metrics before and after transition from IPv4 to IPv6 in different regions.