



Cloudwise Real User Management (RUM)





Scenario 1-Performance analytics for individual users experience identification and optimization

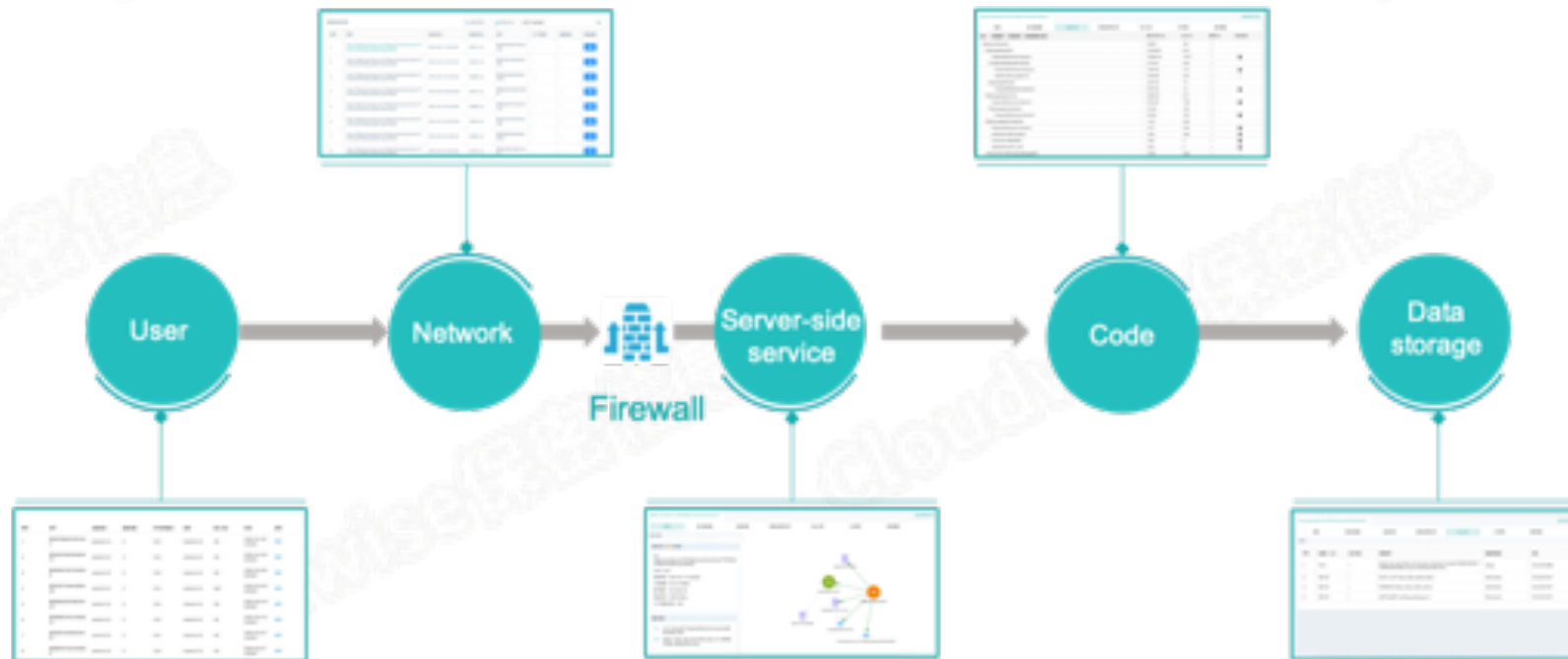
Cloudwise RUM is able to accurately find out the real users with poor performance experience through user accounts, and then solve the performance issues for specific users to improve the user experience.





Scenario 2-Transaction tracing from user end to server end for fast fault diagnosis and better SLA

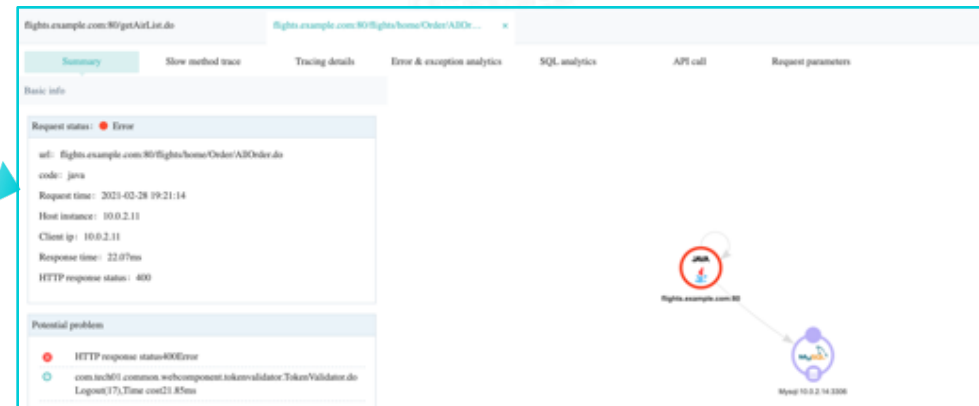
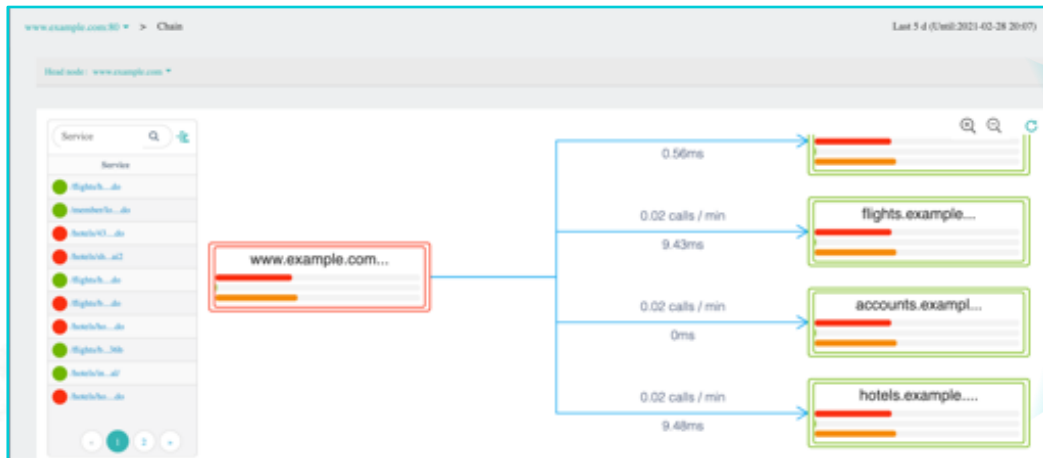
Cloudwise RUM tracks the overall execution process of an request, which starts from the front end of applications & browsers to the codes at the back end through the unique request ID. You can get insight into the performance of the complete transaction operation process, and analyze the impact of each link on application performance based on the snapshots of each request execution.





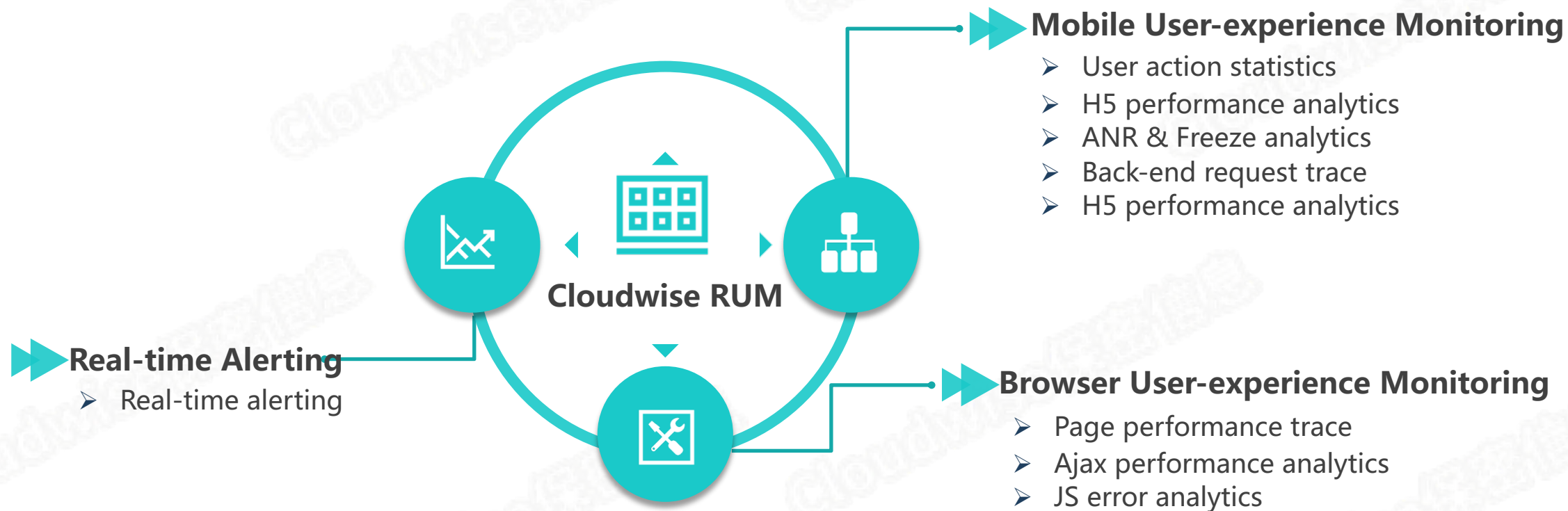
Scenario 3-Effective Biz & IT collaboration across teams based on the unified application platform

Cloudwise RUM provides key business transaction data, application service call chain performance and code-level details traceability from Business/Dev/Ops viewpoints based on the unified platform and accelerate the team collaboration effectiveness and efficiency.





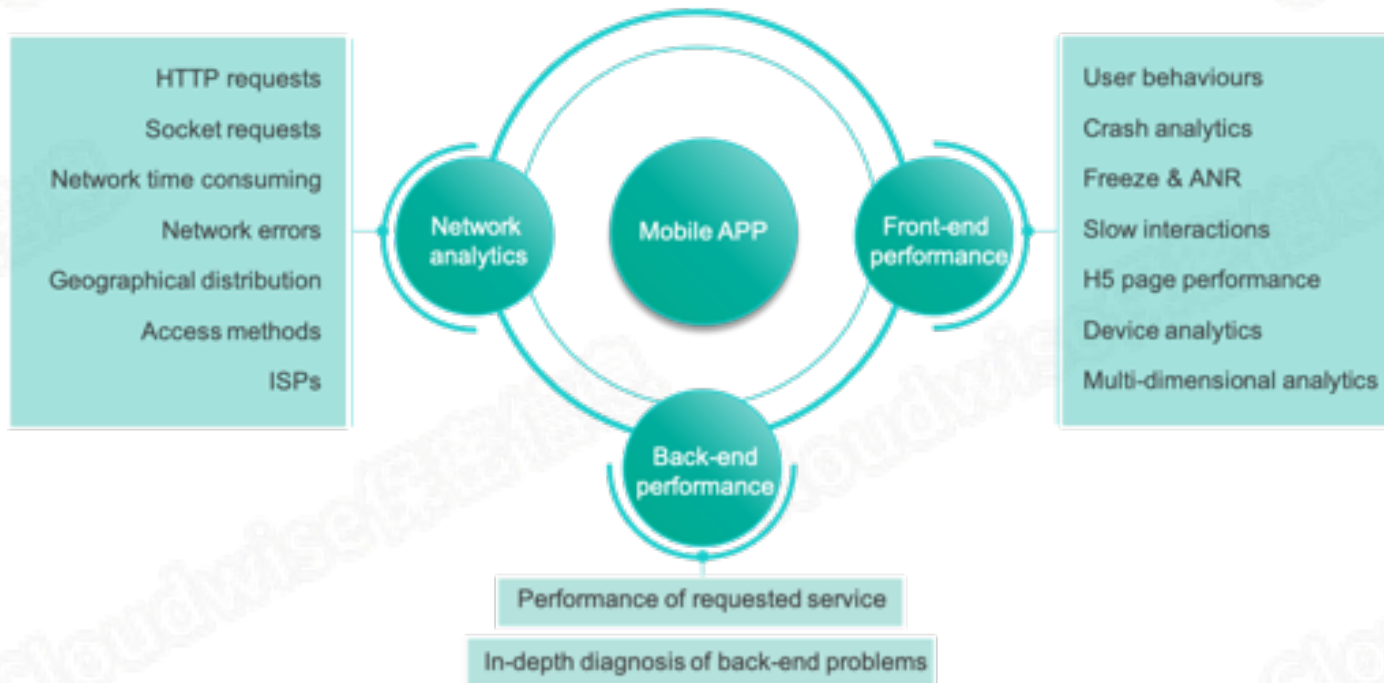
Core Capabilities





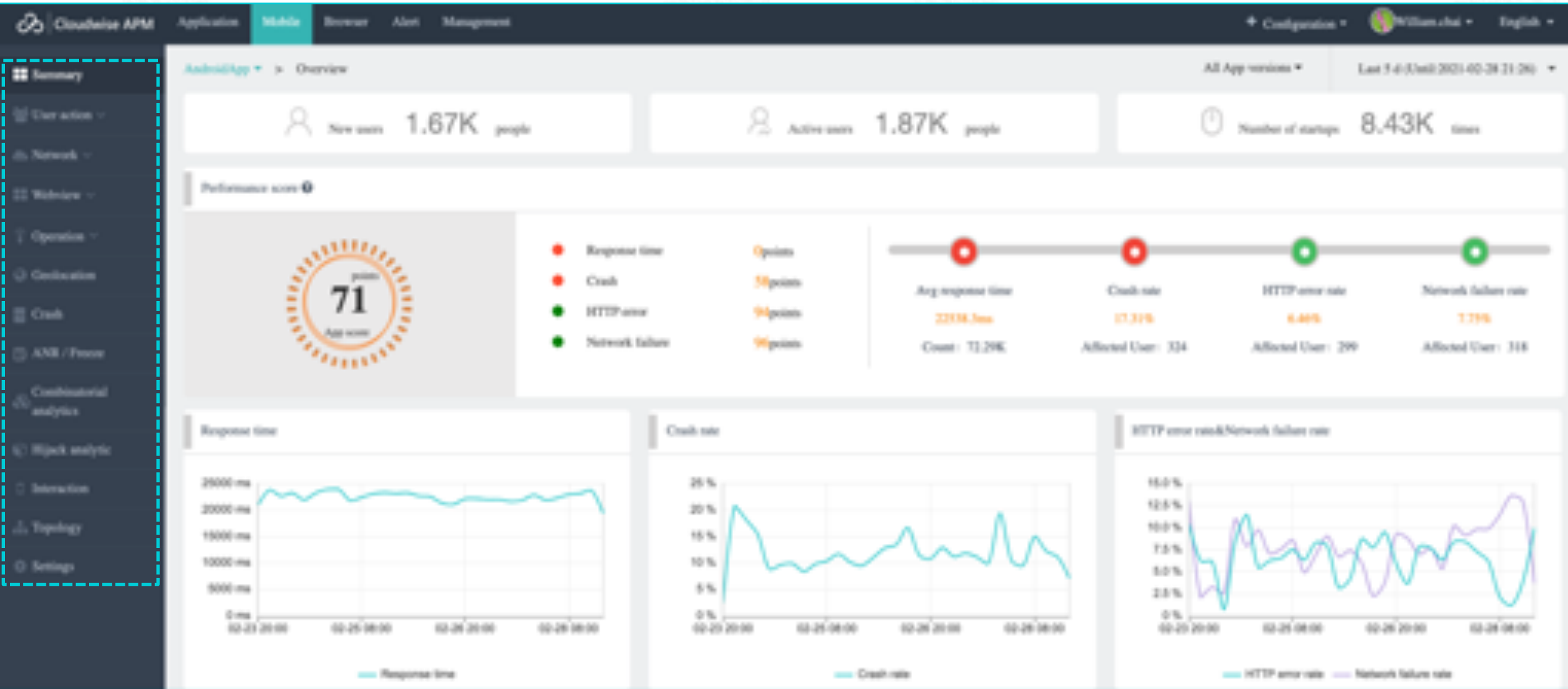
Mobile user experience monitoring

Cloudwise RUM realizes the real-time monitoring and analysis of mobile real-user experience, and helps IT operations personnel to actively grasp the problems occurring during application usage. Thus they can quickly determine the impact scope, and diagnose, reproduce, and solve the problems. User experience is no longer dependent on user feedback and complaints, but can be proactively managed and optimized with a more intuitive and efficient method.





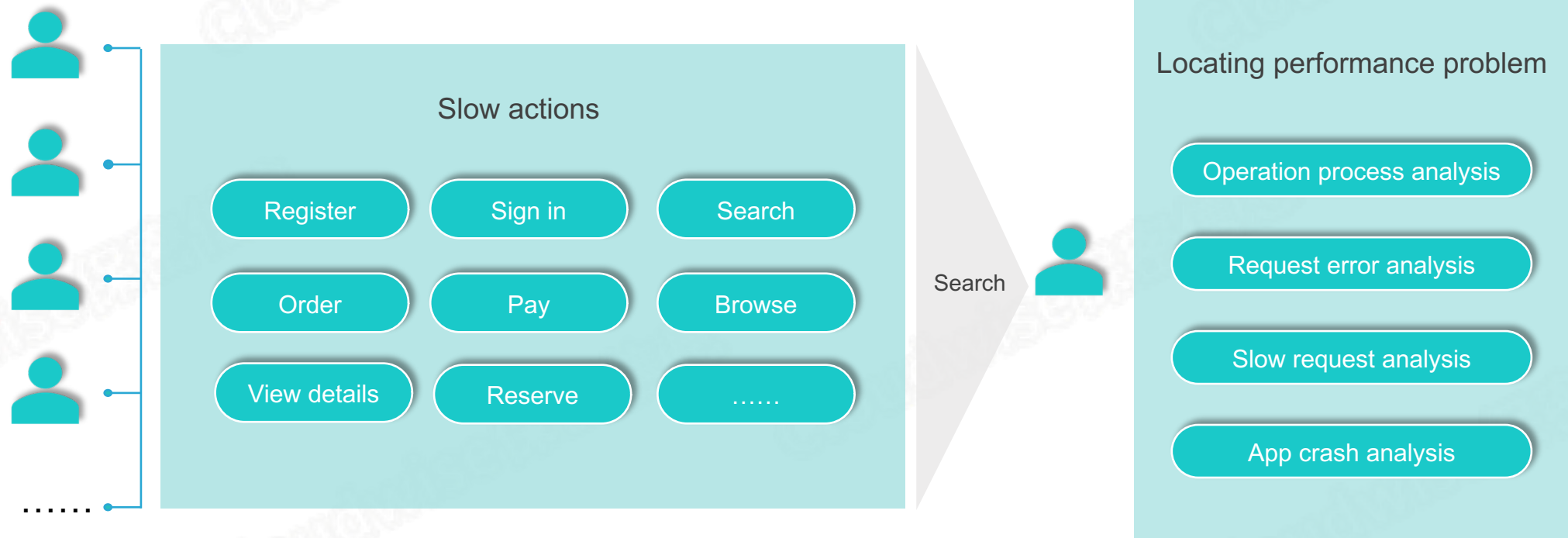
Mobile user experience monitoring overview





Mobile user experience monitoring – User action statistics

Mobile user experience monitoring supports the statistics of user actions (such as registration and login) to discover the users affected by slow actions. Hence it can help discover and analyze the problems of a mobile app, locate the performance bottle, and solve performance problems for a specific user.

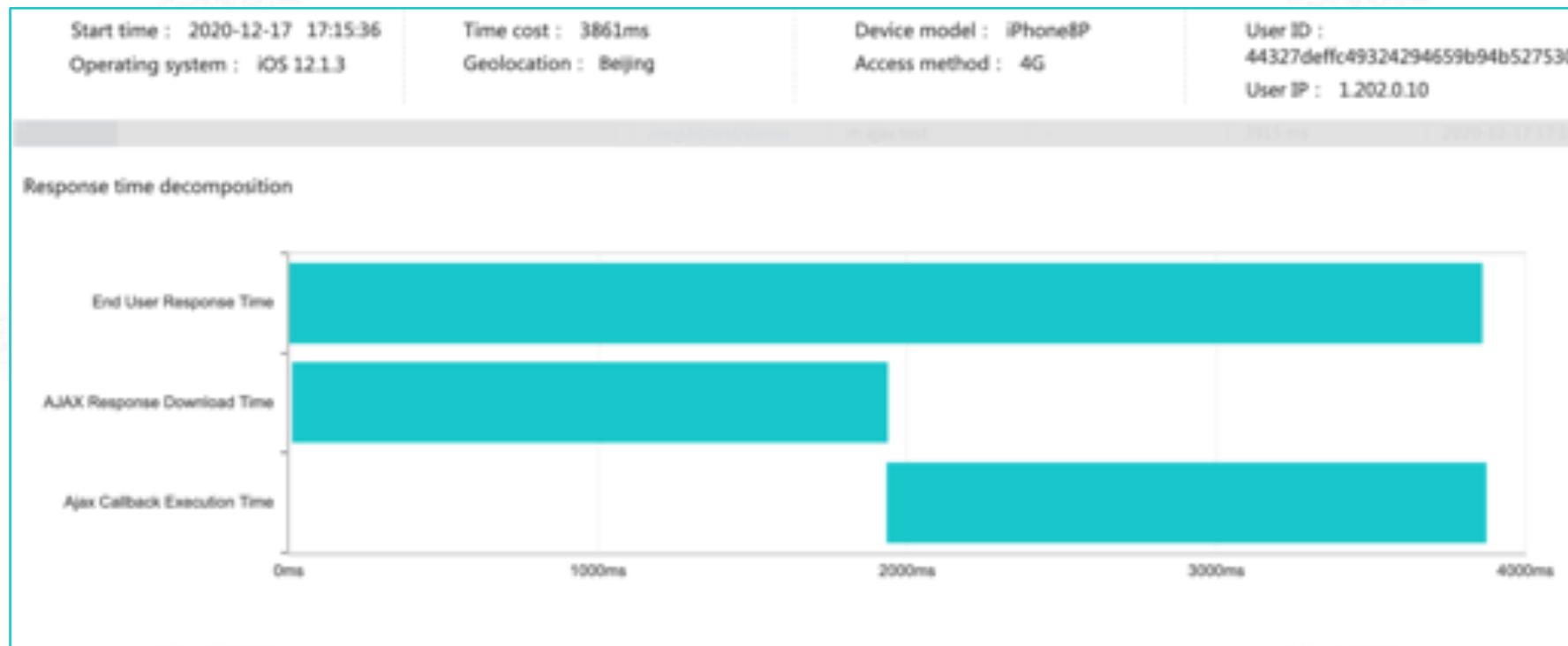


Massive users



Mobile user experience monitoring – H5 performance analytics

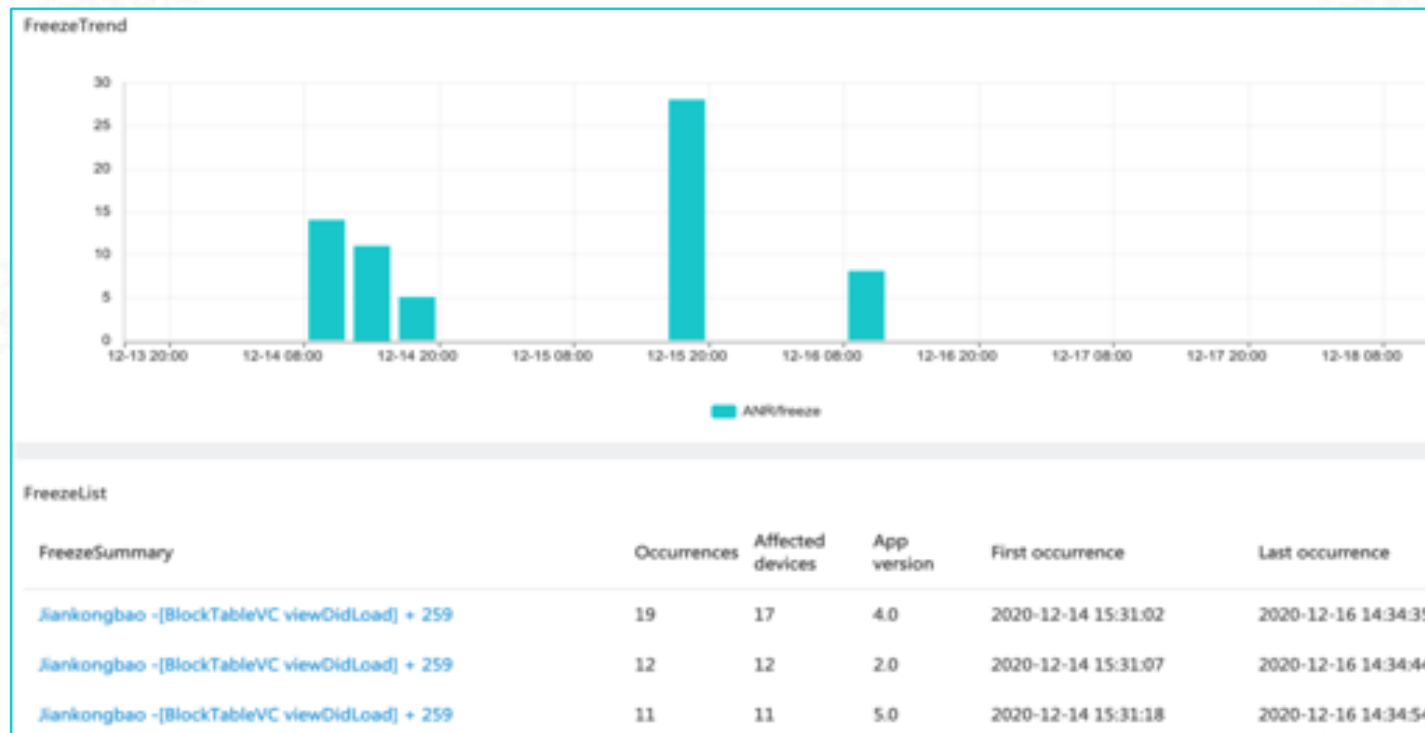
Mobile user experience monitoring helps analyze the performance of H5 pages from the dimensions of page loading and Ajax performance. It supports the data statistics on slow loading pages, JS errors, Ajax loading time and Ajax errors, and provides detailed time consumption data for slow loading pages and Ajax errors.





Mobile user experience monitoring – ANR & Freeze analytics

Mobile user experience monitoring supports capturing Android ANR (Application Not Response) and IOS freeze information. Through in-depth trace of related threads and analysis of the .trace files, Cloudwise RUM helps troubleshoot the ANR/Freeze problems, and improve app performance, thus optimizing the end-user experience.

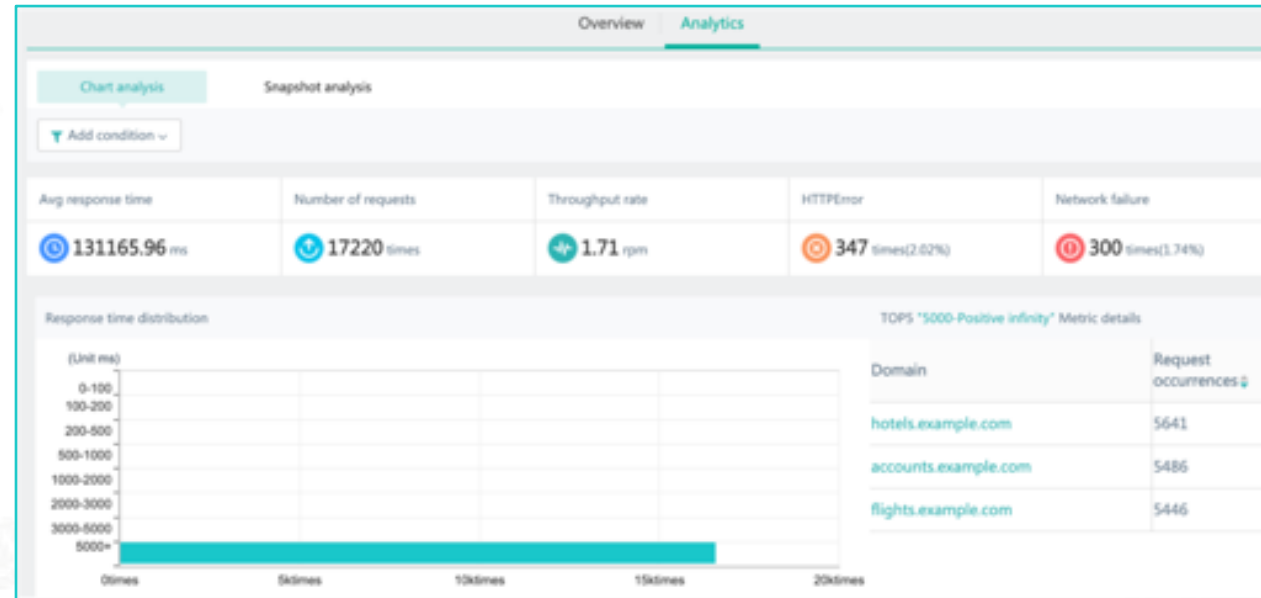




Mobile user experience monitoring – Back-end request trace

Mobile user experience monitoring supports the performance analysis of HTTP requests and Socket requests.

- For HTTP request analysis, Cloudwise RUM provides the statistics data on the response time, errors, and network failures from multiple dimensions, such as geolocation, ISPs, and networks.
- For Socket request analysis, Cloudwise RUM provides the information of slow-response hosts and other problematic hosts. You can view the details of a single connection through a host IP address.





Mobile user experience monitoring – End-to-end Request snapshot trace

Mobile user experience monitoring locates problematic HTTP requests, and helps analyze their response time, throughput rate, HTTP error rate, network failure rate, as well as the trends of these metric data. Thus you can further understand the details of the problems. To analyze problem causes in depth, Cloudwise RUM records request snapshots to trace each occurrence of a request and analyze back-end stacks data, so that you can trace problems from the front end to the back end.



Action list

No.	Action	Controller	Response time (ms)	Throughput (req/s)	HTTP error rate (%)	Network failure rate (%)	Stack trace
3	Login	.JKBLoginVC	1380.43 ms	2000 ms	39	14	2
4	Order	.JKBOrderController	1099.99 ms	2000 ms	56	11	1
5	Pay	.JKBOrderController	900.9 ms	2000 ms	75	11	1

Request analysis

Network request snapshot

No.	Request	Occurrence (s)	Response time (s)	User	UserID	HTTP error	Network failure	Stack trace
1	http://hotel.example.com/hotel/shanghai2	2020-12-21 11:10:55	29988 ms	Anonymous188026412058112	-	200	-	View
2	http://hotel.example.com/hotel/home/Order/40Order.do	2020-12-21 11:10:46	29988 ms	Anonymous961206600849437	-	200	-	View
3	http://hotel.example.com/hotel/home/Order/40Order.do	2020-12-21 11:10:47	29988 ms	Anonymous188026412058112	-	200	-	View

Code-level trace

Summary Slow method trace Tracing details Error & exception SQL analytics API call Request parameters

Expand all Collapse all Locate the slowest element

Map legend: ■ Proportion of overall time ■ Proportion of self-consuming time

Stack	Method	Time cost
com.alibaba.dubbo.rpc.protocol.dubbo.DubboInvoker.doInvoke(74)		0ms
com.taobao.tddl.common.webcomponent.tokenvalidator.TokenValidator.doLogout(17)		225.98ms
org.apache.catalina.core.StandardEngineValue.invoke(74)		322.83ms
org.apache.catalina.core.StandardEngineValue.invoke(74)		322.83ms



Mobile user experience monitoring – Code-level crash trace

Cloudwise RUM provides overall statistical data of mobile app crashes, code stacks, and relevant user actions, to help trace the stacks, processes, and more information related to a crash, so as to quickly troubleshoot and solve the crash problems. Cloudwise RUM supports decoding the information of Java crashes and native crashes.

Crash path

← on RegisterController on SearchTableVC on ViewController on FlightOrderListVC →

Stack trace

Problematic threads All threads

- 0 Jiankongbao MyCppClass::throwAnException() + 66
- 1 Jiankongbao -[CRASHTableViewCell throwUncaughtCPPEException] + 28
- 2 Jiankongbao -[CRASHTableViewCell tableView didSelectRowAtIndexPath:] + 274
- 3 Jiankongbao __57+[CWSAObserver injectTableViewDidSelectedRowAtIndexPath:]_block_invoke.226 + 55
- 4 Jiankongbao +[CWSAObserver cwSniffWithoutDuplicationForObject selectors:sniffingBlock:originalImplementationBlock:] + 369
- 5 Jiankongbao __57+[CWSAObserver injectTableViewDidSelectedRowAtIndexPath:]_block_invoke_2 + 632



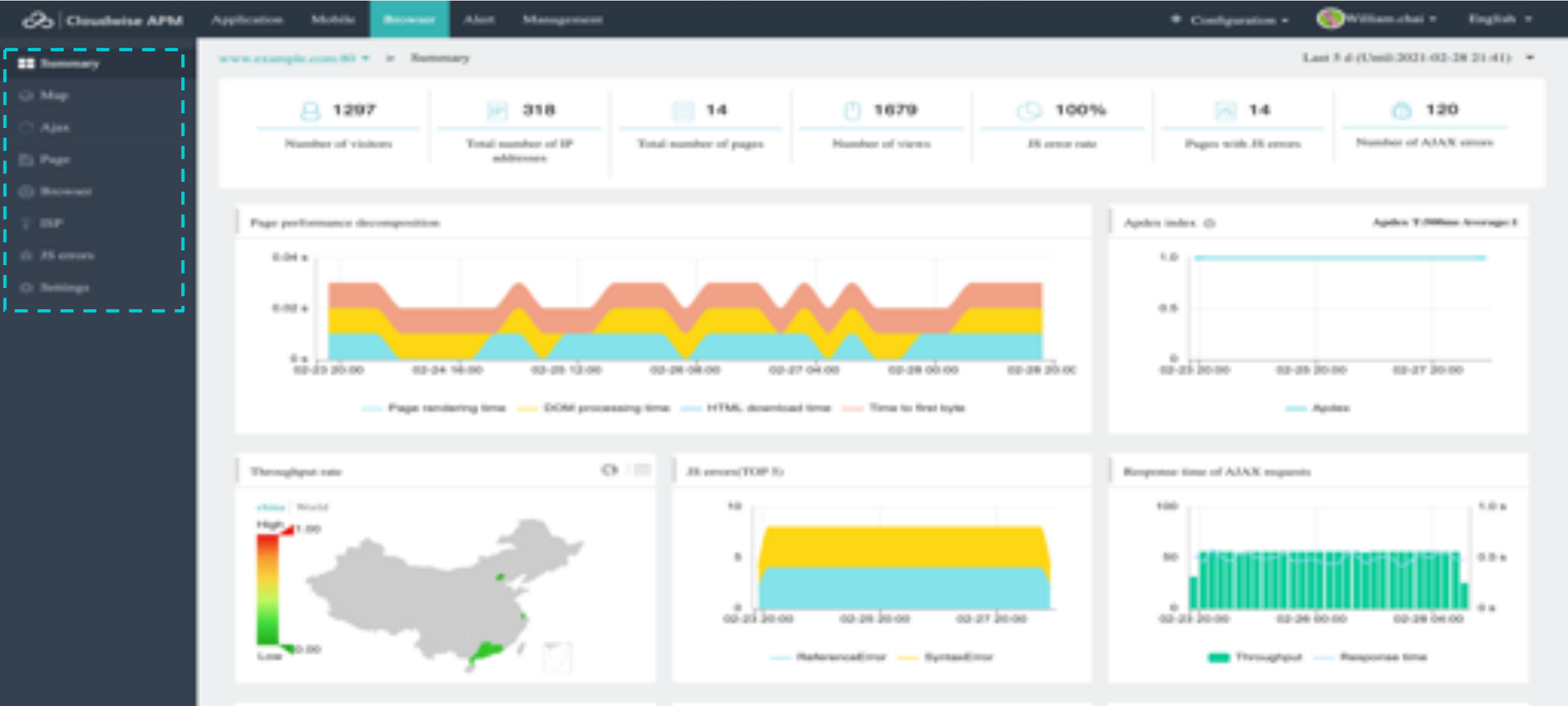
Browser user experience monitoring

Cloudwise RUM achieves the real-time monitoring and analysis of browser-side real-user experience by embedding JS. It deeply trace the page loading processes and Ajax interaction performance, and helps you grasp the application performance in different networks, different browsers, and different geolocation.





Browser user experience monitoring overview





Browser user experience monitoring – Page performance trace

Cloudwise RUM collects the detailed performance data of individual pages, and displays the data in details, such as user visit time, page response time, number of JS errors, number of AJAX errors and more performance metrics. Through the page performance tracing, you can track back-end codes, databases, and services to find out the causes of performance problems, thus realizing end-to-end monitoring and analysis.





Browser user experience monitoring – Ajax performance analytics

Cloudwise RUM supports analyzing the overall performance of Ajax requests, including response time, error types, sent data, and received data, as well as their trends. You can also analyze the performance of a single Ajax request in depth.





Browser user experience monitoring – JS error analytics

Cloudwise RUM supports the statistics on JS error types, number of errors, browsers with errors, and more performance data to help analyze the information of specific JS errors and locate the time, IP addresses, geolocation, browsers, and UA data with errors occurred. You can also find out problematic codes through stacks.

[Back to Summary page](#)

← 1/1 Similar error →

Web transactions	/schoolfyxc/student/allStudent.action				
Error type	ReferenceError				
Error message	Uncaught ReferenceError: Para not defined				
Occurrence time	2020-12-19 15:32:55	IP	10.0.23.52	Geolocation	regional.ben_dj_yu_wang unknown unknown
Browser	chrome	Version	87		
UA data	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/87.0.4280.88 Safari/537.36				
Stack	ReferenceError: Para not defined at watchInfo (http://10.0.1.25:8012/schoolfyxc/student/allStudent.action:145:17) at :1:1				



Real-time alerting

Cloudwise RUM can alert on the performance problems of mobile apps, browser-based apps, mini-programs, backends of applications, and servers. There are various alert methods, including SMS, voice calls, emails, and URL callbacks. You can specify the alerting thresholds of performance metrics, alerting rules, and severity levels through a template. The alert notifications will be sent to you timely, so that you can take measures as soon as possible to avoid impacting user experience.

Flexible alerting rules

Event-oriented alert model

Problem escalation & graded delivery

Multiple built-in templates

Various notification methods

End-to-end snapshots

Custom alert severity levels

Event processing mechanism

Third-party alert integration



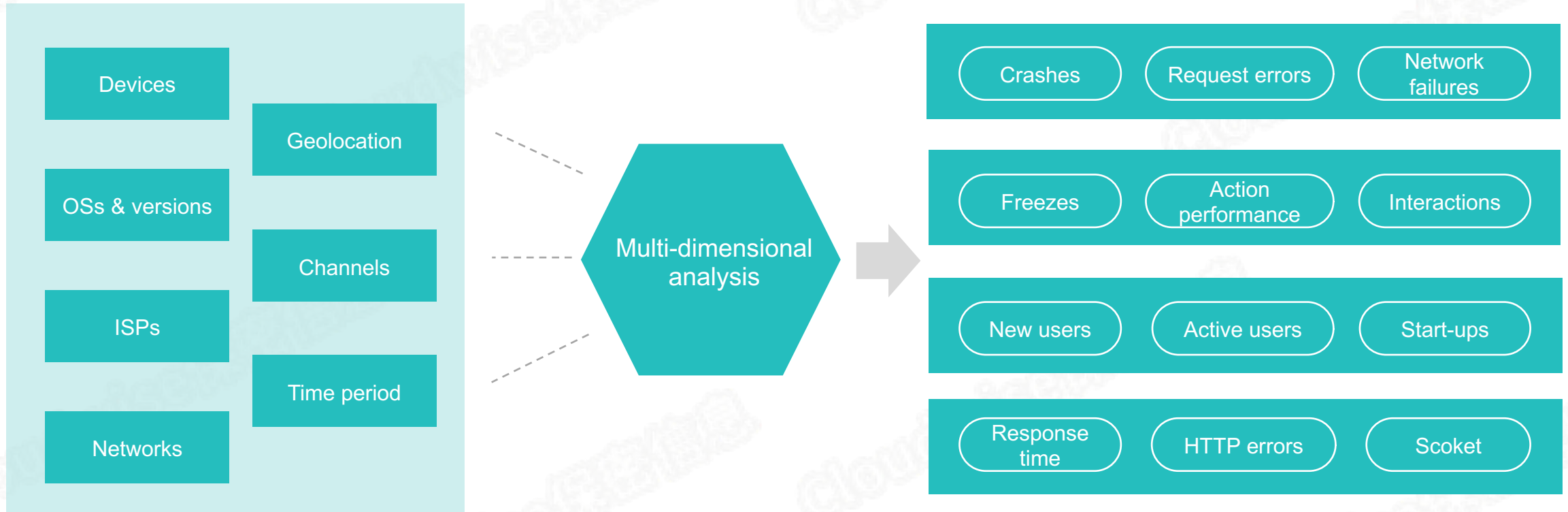
Highlights - Support various mainstream programming languages

Cloudwise RUM is able to manage the applications programmed with multiple mainstream languages such as Java, .NET, PHP, .NET Core, Node.js, Python, Golang, and Ruby.





Highlights - Multi-dimensional analysis(Mobile user experience monitoring)





Highlights - Multi-dimensional analysis(Browser user experience monitoring)

Cloudwise RUM supports analyzing browser-side user experience from the dimensions of geolocation, browsers, web pages and ISPs.

Geolocation

Analyze the user experience in a certain region in prefecture-level cities, provinces, China, and the world.



Browser

Analyze the overall performance of the pages on PCs, in mobile apps, and in WeChat.



Webpage

Analyze the performance of a single page and individual request executions,



ISP

View the page performance and request performance in the networks of different ISPs.

