Good, Better, Best, Mobile user’s experience

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Generation Y / Z, 90G plus is the major contributor of E-commerce
99%+ invest in DC, can not fix the Mobile user performance issue

80%~90% time were spent on front end
Digital experience monitoring (DEM) — Digital experience monitoring is an availability and performance monitoring discipline that supports the optimization of the operational experience and behavior of a digital agent, human or machine, as it interacts with enterprise applications and services. For the purposes of this evaluation, it includes real-user monitoring (RUM) and synthetic transaction monitoring (STM) for both web- and mobile-based end users.

Application discovery, tracing and diagnostics (ADTD) — Application discovery, tracing and diagnostics is a set of processes designed to understand the relationships between application servers, to map transactions across these nodes, and to enable the deep inspection of methods and other host resources. It combines three formerly separate dimensions (application topology discovery and visualization, user-defined transaction profiling, and application component deep-dive) under a common name. All three dimensions are primarily focused on problem remediation and are interlinked.

Application analytics (AA) — Application analytics enables the automated detection of the source (or root cause) of performance anomalies for HTTP/S transactions supported by Java and .NET application servers through machine learning, statistical inference and/or other methods.
How to find the performance issue and fix it quickly

- Bytecode injection
- End-to-end latency
- Execution correctness
- Quality appear
- Application availability

- Synthetic transactions
- Last mile point
- IDC point
- Load testing

- Components discovery
- User-grouped events
- Transaction
- Fine-grained monitoring
5 Step to improve the Mobile User’s Experience

1. Scoring
2. RUM/STM
3. Network
4. Application topology
5. Code review
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Tingyun App
H5/Webview
Tingyun Browser

Mobile App
STM-Probe

Browser
Tingyun Network

CDN
SaaS

Infra

Service

Browser
Tingyun
Network
Tingyun
Server

交互性能分析-IOS
页面加载分析-IOS
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Automation: from Viewer to Doer

Change the end-user routing base on real-time end-user experience and traffics, point each single customer to the “best service” pop site.

Best Service means:

1. Best current end-user experience
2. Best networking status and traffics
3. Best price 😊
Combine APM into current SRE/Ops

Widen: Taking care of Mobile user experience
Deepen: Get into application topology and Code execution
Auto: Automatic application routing base on real time customer experience

NG APM – improve Mobile user experience from Good to Better, Best
Good, Better, Best, Mobile user’s experience

Scoring
- Standardization
- Setup the KPI for end-user experience
- Comparison in same industry/region

End-End
- From end user to DB
- Transaction and user group event
- Application topology

Service
- 7x24 Monitor&Alert
- Onsite Service
- Load testing before event
- Expertise workshop, exchange platform

Good, Better, Best, Mobile user’s experience
- Combine the NG-APM with current SRE/Ops, protect IT investment
- Find the root cause of the performance issue, before customer complain, fix the issue before big lose
- SaaS + Service, lower the Capex&Opex, improve IT operation efficiency

End user experience, the beginning of SRE and also the destination of SRE
Thank you