



Our Capabilities

PERFORMANCE TESTING

Performance requirements to be tested

High level view of test areas for a typical performance test at Nagarro



LOAD

Testing the systems behavior for expected business volumes by constantly and steadily increasing the load under the influence of high volume of transactions.



STRESS & ENDURANCE

To determine the system's robustness for futuristic business needs under maximum load conditions
To evaluate if the system can sustain continuous expected load for long durations.



MOBILE APP

Profile and test the performance of mobile applications for varied mobile operating systems and network speeds.



ENTERPRISE

Profile and test the performance of mobile applications for varied mobile operating systems and network speeds.



RESILIENCE & FAILOVER

To test the impact of a failure on end customer or business and the time it takes to recover.



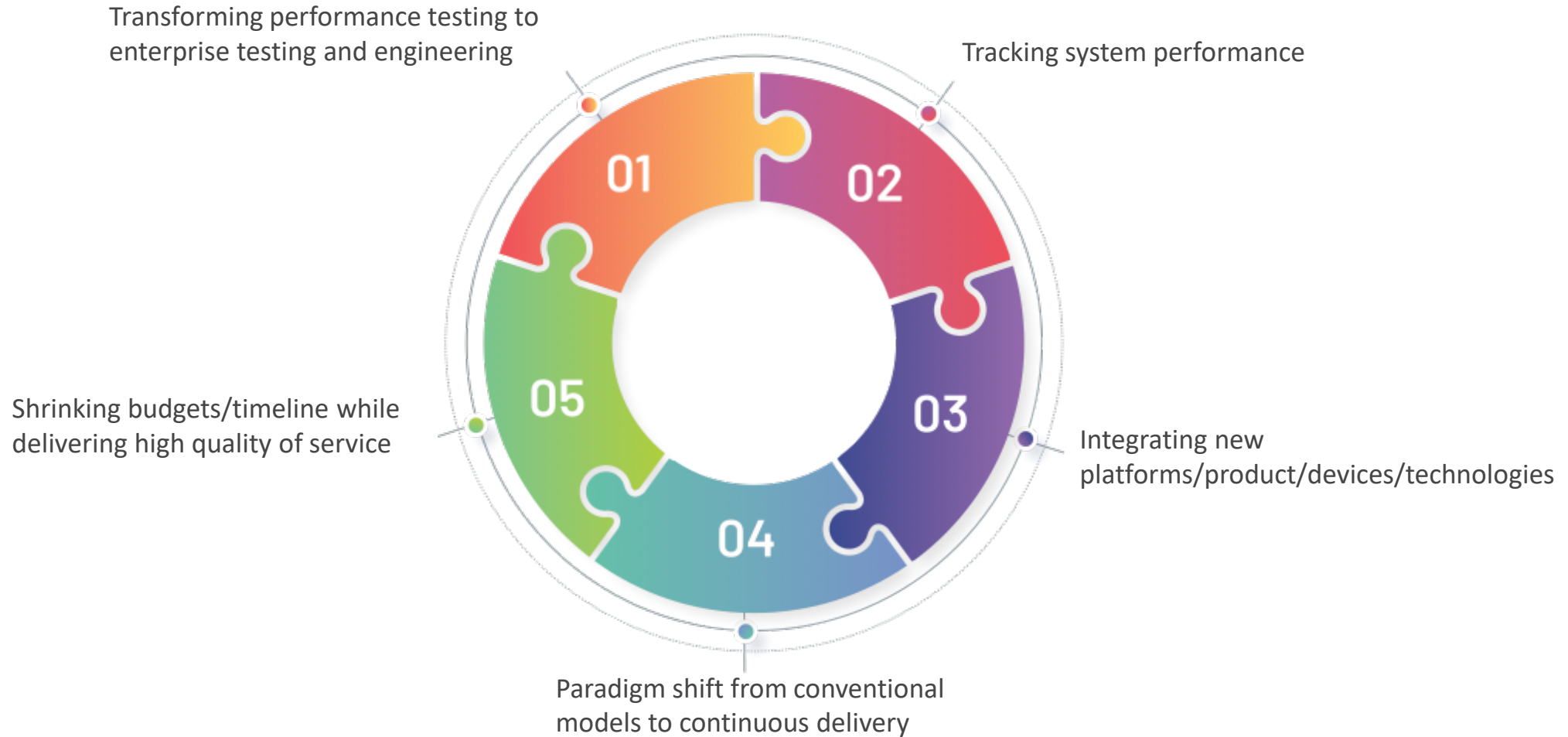
API

Application Programming Interface tests address the interaction between applications in the software ecosystem



What could go wrong?

Test challenges in performance testing



We extensively improve the system

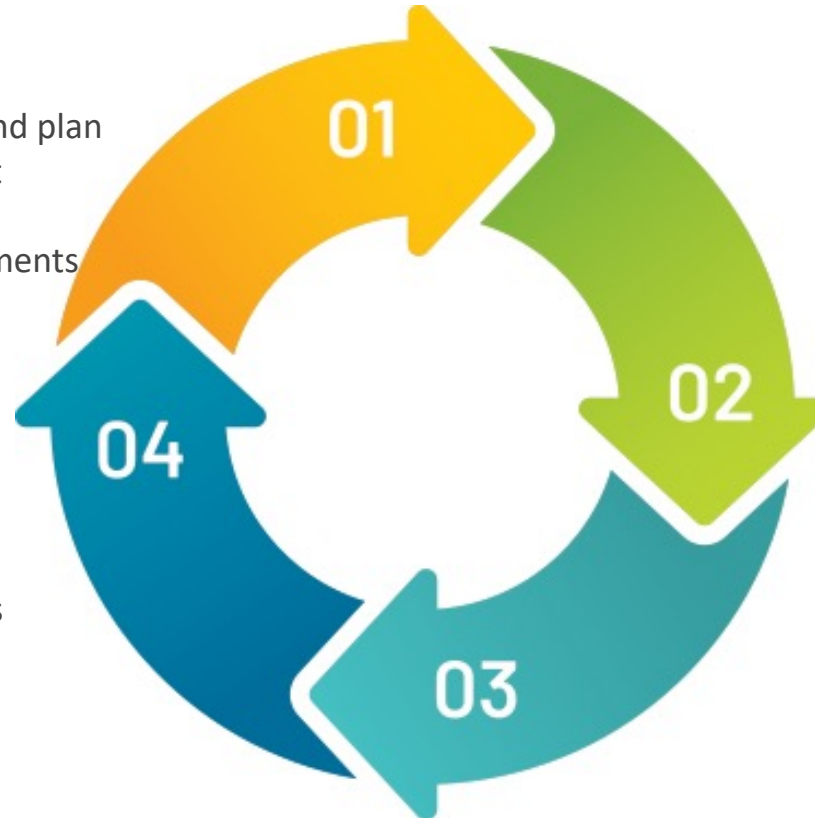
Offerings overview

Strategy and Plan

- Creating performance test strategy and plan
- Establishing performance testing best practices
- Setting-up performance test environments
- Setting-up test data

Execution and reporting

- Creating performance test scripts
- Executing performance testing scripts
- Generating reports
- Measuring server and client-side performance
- Integrating with deployment pipeline



Tool evaluation

- Analyzing and identifying best-fitting performance testing tools for client and server performance
- Defining performance counters

Performance engineering

- Analyzing performance reports and identifying the root cause of performance bottlenecks
- Continuous monitoring of server performance

Measuring performance counters for faster and efficient analysis

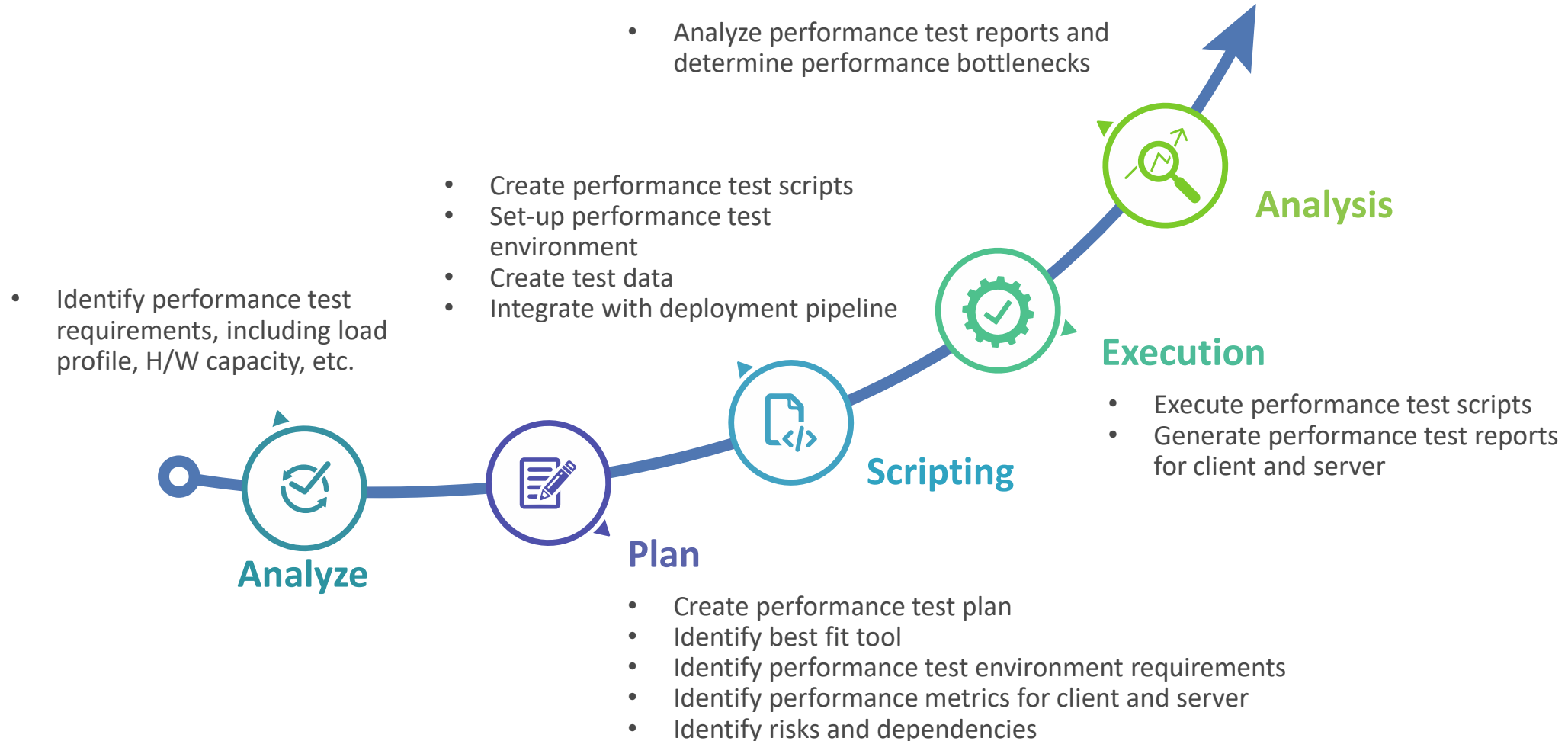
Performance KPIs

KPI	Comments
Throughput (per second)	Transactions per second
Response Times/Elapsed Times	Time taken to process a transaction
Types of Errors	Total for the different types of errors for a test
Error Count	Total errors for a test.
Transaction Count	Total transactions processed for the time period

KPI	Comments
CPU Usage	User% System% Idle% Wait% Logical CPU
Memory Usage	Used% Used in GB Memory available
Disk I/O	Disk Read KB/sec Disk Write KB/sec IO/sec
Network Activity	MB/sec Packets/sec Size of packets Bandwidth used

We do it differently at Nagarro

Our unique performance testing approach ensures every aspect of blockchain is tested



What differentiates us?

Key differentiators for performance testing



Consulting

- Allow corporate members to gain access to our consulting expertise
- Over 500 experts for performance testing

Implementation support

- Global CQE catering to multiple clients
- Flexible pool of resources to meet fluctuating demands
- Alliance with tool vendors with support for end-to-end performance testing and to provide a range of customized services

KPI standards

- Reporting framework for KPI's like test coverage, environment availability, capacity utilization, data set-up time, etc.

Testing services

- Length and breadth of skills in performance testing and engineering services
- Zero post-production application Performance issues
- Advanced monitoring solutions
- Incorporate industry best practices assist in maintaining industry standard
- Benefits-driven, integrated approach that delivers sustainable results to clients

We have experience in a wide range of tools

Commercial Tools	Open Source Tools
Load Testing tools	
<ul style="list-style-type: none">• Microsoft Visual Studio Test Professional 2010• NeoLoad• HP Load Runner 12.0• IBM Rational Performance Tester• RadView WebLOAD• SOSTA• Blazemeter	<ul style="list-style-type: none">• Apache JMeter• Load UI• Locust• Stress stimulus• Stat counter• Google analytics(page load testing)• JProfiler
Monitoring tools	
<ul style="list-style-type: none">• NewRelic• Dynatrace• AppDynamics• Akamai	<ul style="list-style-type: none">• Nagios• Grafana• Fiddler• Wireshark

We have done it before..

With 50+ well-qualified performance test engineers with global presence of expertise in a variety of tools such as:

- JMeter
- Load Runner
- Neo Load
- App Dynamics

In 50+ projects tested covering different flavors of performance testing such as:

- Stress testing
- Load testing
- Volume testing
- Endurance testing
- Capacity testing

With extensive experience in performance report analysis (performance engineering) to identify the performance bottlenecks for web, windows, APIs, and mobile based platforms.



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nagarro

THINKING
BREAKTHROUGHS
