

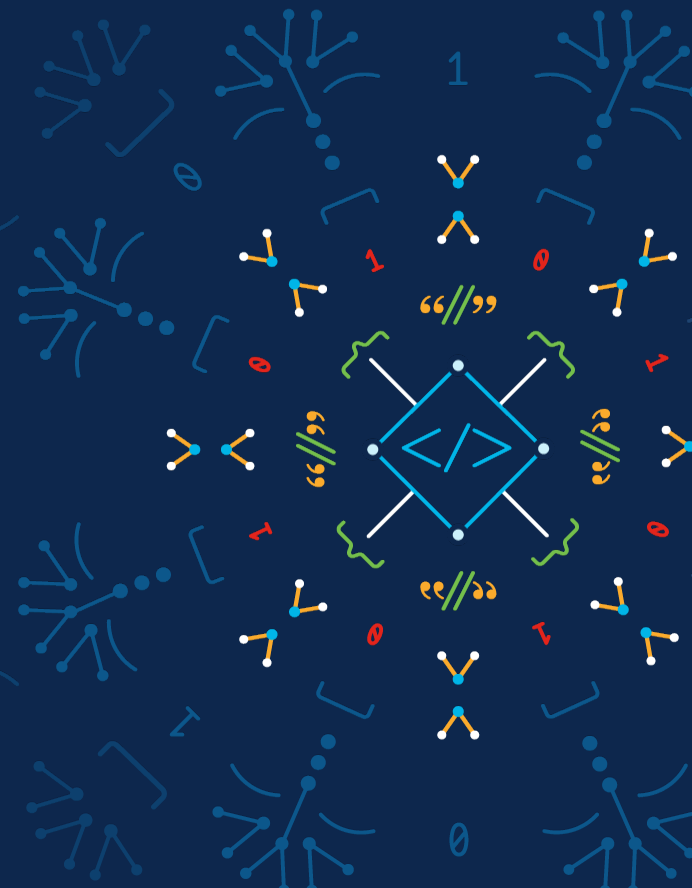
Testing Automation for a generic NSO service provisioning package

A general approach to internal testing

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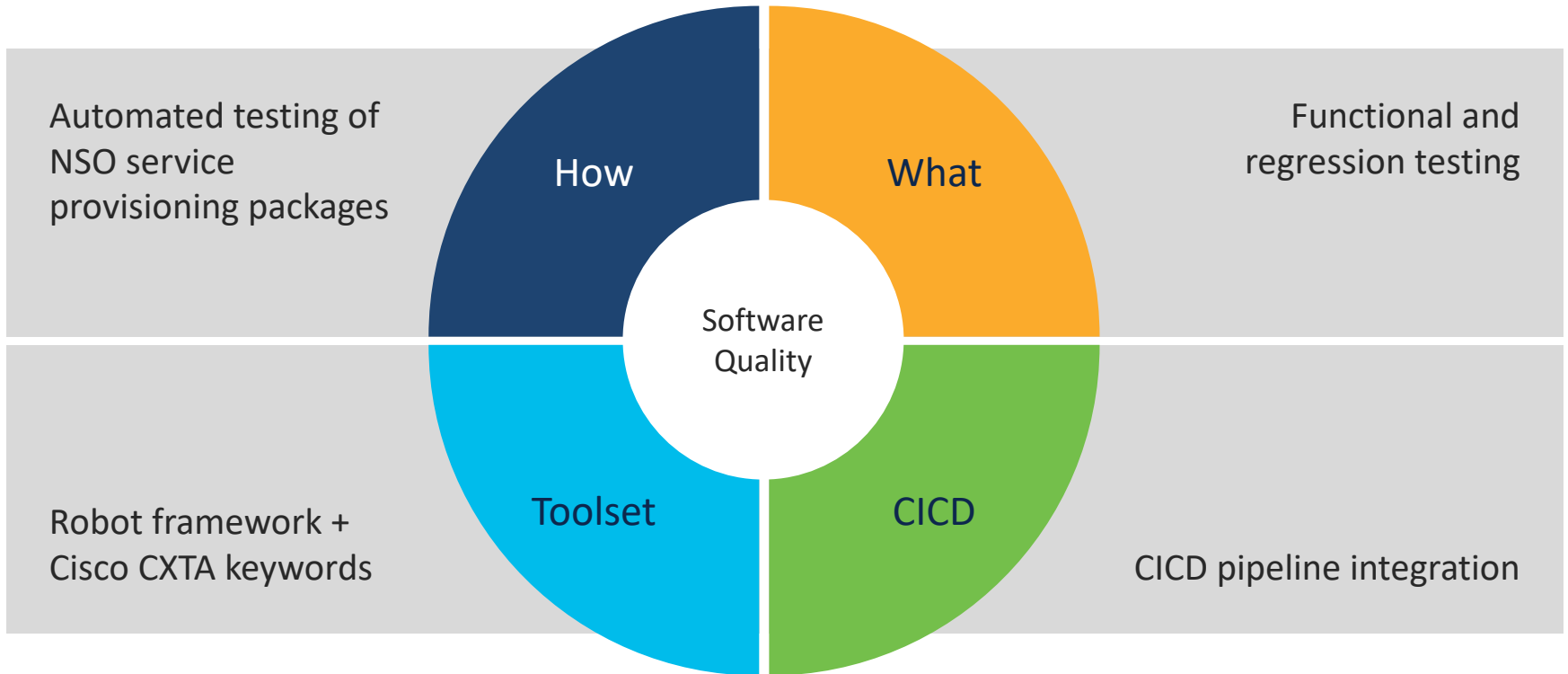
Agenda

- 1 Scenario
- 2 Why a General Approach?
- 3 What Approach?
- 4 Added Values
- 5 Conclusions

Scenario

The background of the slide is a dark blue color. It features a repeating pattern of faint, light blue geometric shapes and lines. These shapes include various polygons, circles, and lines, some of which are connected to form a network-like structure. The pattern is subtle and serves as a decorative backdrop for the text.

Scenario



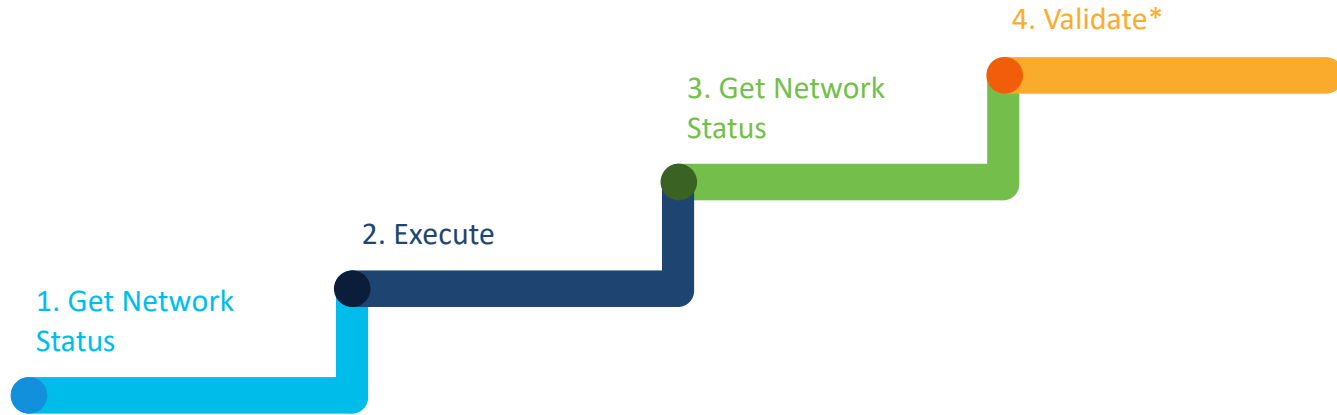
Why a General Approach?

Why a General Approach?



What Approach?

Common Robot Codebase



*Device Configuration Validation

Test Structure

Test

- Up to 2 steps and multiple prerequisites
- Can be rolled back

Step/Prerequisite

Validation at will

Validation

- Device configuration
- NSO CDB configuration

Positive/Negative

- Positive Test: expect success
- Negative Test: expect failure

Scaling

How

Test list per test suite, with tests parameters

URI/Input payload to NSO

Expected output

Scale

Multiple NSO packages, many test cases

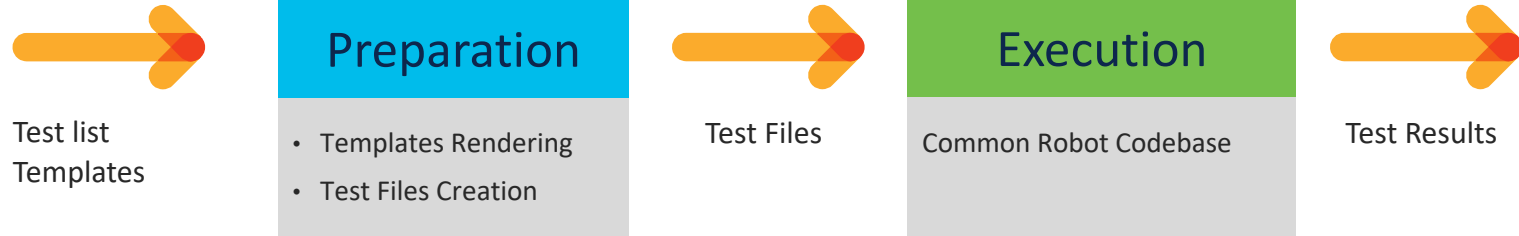
Templates Rendering

Variables values for templates rendering

Templates

For input and expected output

Test Process



Added Values

The background features a repeating pattern of faint, light blue mathematical symbols and diagrams. These include various geometric shapes like triangles and circles, as well as symbols such as the Greek letter pi (π), the infinity symbol (∞), and other mathematical notations. The symbols are scattered across the dark blue background, creating a subtle, technical aesthetic.

Added Values

Flexibility

- Validation
- Rollback
- Prerequisites

Code Reuse

- Same codebase for multiple NSO service provisioning packages
- Same codebase for multiple tests

Simplicity of Use

- No new Robot code needed to add new tests
- No Robot coding skills required to add new tests

Scale

- Many packages
- Many tests per test suite

Maintenance

- Advantages
- Drawbacks

Conclusions

The background features a repeating pattern of faint, light blue mathematical symbols and diagrams. These include various geometric shapes like circles, lines, and dots, as well as symbols such as the Greek letter pi (π), the infinity symbol (∞), and other mathematical notations. The symbols are scattered across the dark blue background, creating a subtle, technical aesthetic.

Conclusions

Tradeoff

Flexibility, code re-use,
simplicity, scaling

vs

Robot code complexity

Worth

Advantages > Drawbacks

Adopted

Testing NSO service provisioning
packages internally, also in CICD
pipeline



The bridge to possible