

# Optimizing Test Lab Environments

## Overview

The Integration of CGS Smart Matrix with Quali's CloudShell allows QA teams to enhance their test environments with additional test generation ports and capacities, new and modern network interfaces, and remote configuration of test-bed scenarios without the need for complex cabling.

## Solution Description

The joint offering enables the automation of large scale test environments by enhancing capacities and streamlining test processes, resulting in superior QA, improved time to market and significant cost reduction in test equipment.

## Quali Automation

Quali's CloudShell software is the innovative Lab as a Service solution that brings the core benefits of the cloud – self-service, multi-tenancy, automation, and scalability – to your on-prem labs and pre-production data centers.

CloudShell turns your labs into self-service private clouds. Allow your end users to rapidly model and publish standardized blueprints for configuring lab infrastructure: physical equipment, connectivity, and virtual resources.

Publish those blueprints to a web-based catalog for easy, one-click, on-demand deployment as live lab environments.

CloudShell's intelligent automation and orchestration handles all the provisioning, including configuring equipment, loading firmware, deploying VMs, configuring tools, and automating network connectivity such as CGS Smart Matrix.

Scale to 1000s of users while ensuring granular access control, resource conflict resolution, resource sharing, and automated environment save & restore.

## CGS Smart Matrix Overview

**CGS SmartMatrix is a unique L1 technology that provides the following advantages:**

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Aggregate 10G to generate 25G/40G/100G traffic

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M x N Mapping

- 1 to N: Send the same traffic to multiple DUTs
  - N to 1: Send traffic from multiple links to a single tool
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Port/Filter Labelling

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Filter synthetic (TG) and real traffic to DUTs

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Media converter (SM/MM, SFP/QSFP/QSFP28)

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Simulate port failure without manual operation

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Monitor traffic between DUTs

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## Use Cases



DevTest and Performance certification

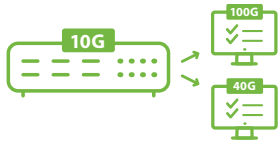


Innovation Labs



Demo Labs for EBC and Sales Enablement

## Benefits



Leverage 10G traffic generator to create 25G/40G/100G test ports



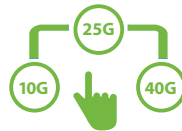
Filter synthetic (TG) and real traffic to DUTs



Monitor traffic between two DUTs



Optimize Lab Efficiency with advanced resource sharing, conflict management, policy based provisioning, and scheduling.



Add and manage tens of 10G/25G/40G/100G test ports at a fraction of the price



Eliminate Hoarding by ensuring users can save and restore even the most complex resource configurations at any time.



Consolidate Labs and Reduce Duplicate Infrastructure with 24/7 global access for local and remote users and full stack automation and full connectivity control.



Maximize Cost Savings by ensuring that lab resources are fully utilized, costly equipment can be shared, and minimal time is spent configuring lab resource



Reduce Cycle Times with powerful automation that eliminates the need for time consuming racking, stacking, patching, and provisioning resources