

# VIAVI

## TeraVM CloudShell Solution

### TeraVM Integration with QualiSystems CloudShell

#### Overview

Technology providers face stiff competition and increasing pressures to maximise return on investment. TeraVM integration with CloudShell enables technology providers and vendors to dramatically improve their test infrastructure and processes to bring virtualised solutions market faster.

Shifting to virtualised development and testing environments with virtual network functions and virtual test resources can provide measurable cost savings when compared to hardware-based labs.

However, without an effective orchestration and automation platform, manual environments can erode much of these cost savings due to long cycle times and poor resource utilisation.

The TeraVM application emulation and security validation solution with CloudShell enables users to share test resources and their environments, delivering a highly collaborative and integrated virtual test framework.

#### TeraVM Solution Pack

The TeraVM CloudShell solution pack includes all the components to allow automated deployment of TeraVM within CloudShell and TestShell. The solution pack includes capabilities for configuring and running TeraVM traffic to end devices from within an active CloudShell environment. The TeraVM Shell is the root building block component that provides integration between CloudShell and TeraVM.

#### Virtual Lab Orchestration

TeraVM within CloudShell provides a flexible test as a service platform for creating user-friendly virtual test labs.

CloudShell provides out of the box business logic that supports testing and DevOps processes enabling a culture of highly productive resource sharing.

Automated provisioning of test environments ensures maximum productivity, leading to shorter development and test cycles.

#### Solution Benefits

- Increase test efficiency and ROI with improved resource sharing and reduced cycle times
- Empower teams to establish test automation best practices, maximising resources.
- Create self-service, cloud based access to testing processes, technology demonstrations, and proof of concepts.
- Deliver an agile and continuous development and test environment.
- Speed the time to value of data center build-outs and reference architectures.

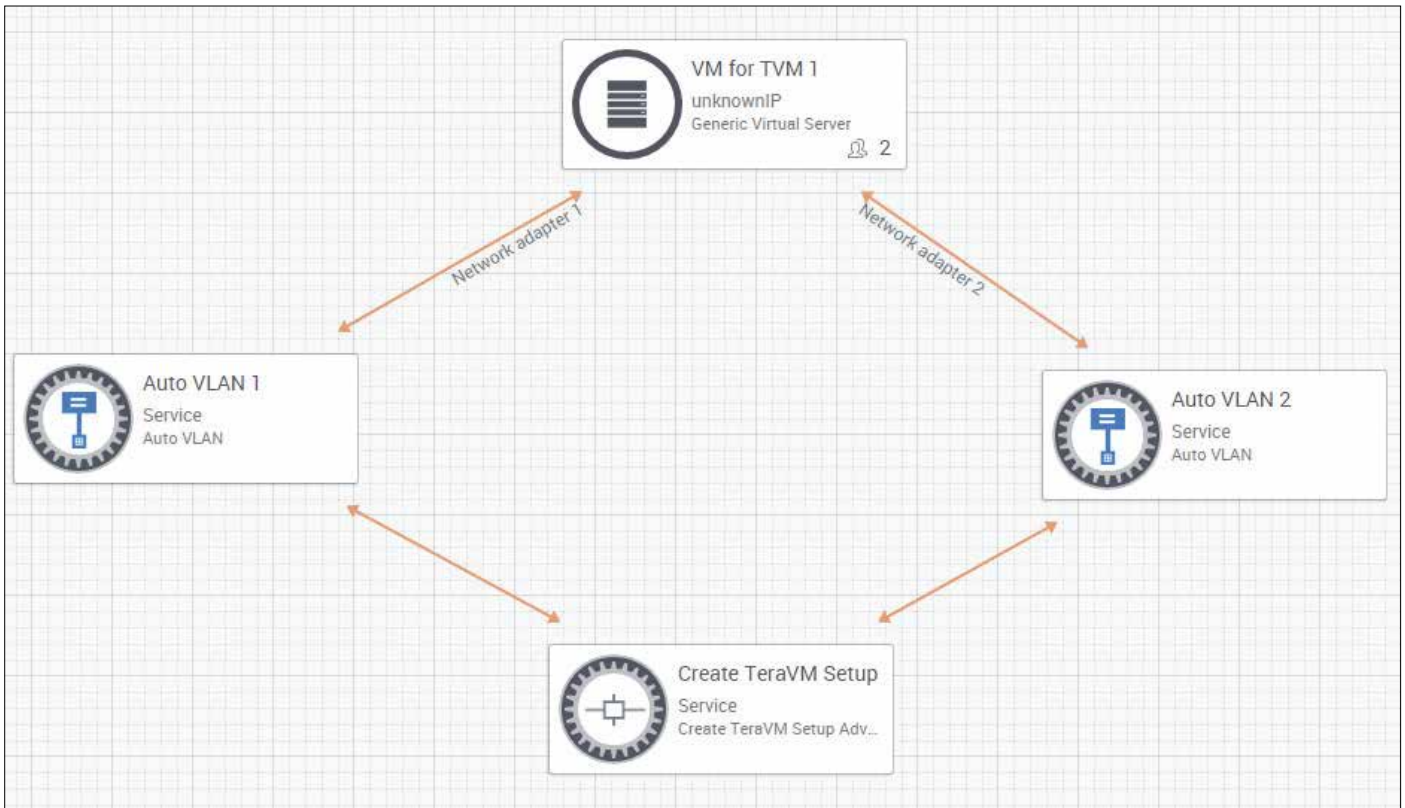


Figure 1. TeraVM with CloudShell test cycle

## Test Automation

Network, data center, and cloud test projects are often challenged due to the limitations of traditional script-based approaches.

TestShell's powerful automation features paired with TeraVM enables a breakthrough in testing efficiency and productivity. Combined it optimises virtual test resources, maximises automation reuse, and empowers nonprogrammers to drive the bulk of automation creation and execution.

With TestShell and TeraVM testing teams can deploy automation into their test processes, dramatically speeding test cycles and increasing coverage.

## Security Lab Orchestration

The TeraVM Cybersecurity Threat Analysis solution with CloudShell enables rapid time to value for complex network security testing environments, maximising investments in devices, software and personnel. CloudShell with TeraVM helps testing organisations improve their security resiliency to harden network defences.

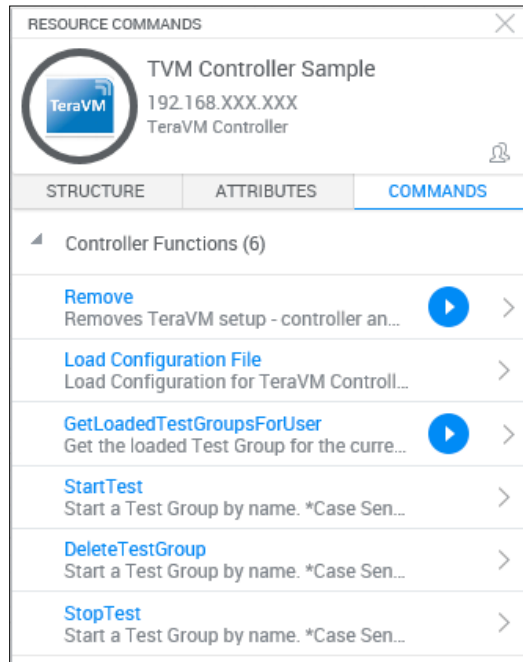


Figure 2. Controller functions

## Technical Specification

Capabilities	Description
Deploy/Remove TeraVM Controller	Automate deployment and removal of TeraVM controller as part of a CloudShell environment.
Deploy TeraVM Cards and Ports	Automate deployment and configuration of TeraVM cards and port resources. Supports TeraVM cards type 1 and 2.
Add TeraVM Cards and Ports	Enables users to add and configure TeraVM cards and ports within CloudShell
Load TeraVM Configuration File	Automate configuration of TeraVM with TeraVM configuration file as specified in CloudShell.
Start/Stop TeraVM Test	Allows TeraVM test to be launched or stopped from within CloudShell.
Delete TeraVM Test Group	Easily delete TeraVM Test Groups.
Remote access to TeraVM Controller	Direct remote access via SSH and/or Web directly from CloudShell environment.

\*Requires CloudShell 6.2.3 HF11 and above (Supports TMVA Version 11.3, 11.4 and 12.0)

QualiSystems CloudShell offers an integrated automation package for TeraVM, a fully virtualised application emulation and security validation solution. TeraVM provides comprehensive measurement and performance analysis on each and every applications flow with the ability to easily pinpoint and isolate problems flows.

CloudShell is the leading automation and orchestration platform for transforming labs and data centers into purpose-built self-service clouds. CloudShell is deployed by leading service providers, technology manufacturers, enterprise and government IT departments worldwide. TestShell is the test automation component of CloudShell that allows rapi development of object-based test automation processes.