



Scapa[®] Test and Performance Platform

- Stress Testing
- Soak Testing
- Benchmarking
- Performance Optimization
- Migration Testing
- Diagnostic Testing
- Load Testing
- Scalability Testing
- Reliability Testing
- Bottleneck Identification
- Performance Comparison
- Right Sizing Systems
- Capacity Test
- Performance Testing
- Performance Tuning
- Maximizing User Densities
- Server Consolidation Testing
- Service Availability

Cisco : System Test Group



“Scapa TPP was also the only test tool in the market that allowed us to measure user experience on the simulated Thin Client.”

– system test group

Cisco

<http://www.Cisco.com>

Cisco Systems, Inc. is an American-based multinational corporation that designs and sells consumer electronics, networking, voice, and communications technology and services. Headquartered in San Jose, California, Cisco has more than 70,714 employees and annual revenue of US\$ 40.0 billion as of 2010.

NOTE: The information and quotes provided in this case study were created and agreed upon by the System Test Group within Cisco Systems Inc. as a collective. These were subsequently ratified by the manager of the Automation and Regression Enterprise Architecture and Systems Group and supplied to Scapa Technologies.

The Business Problem

User Densities, Scalability, Performance, Reliability and Network Characteristics

As a leading technology provider in an ever-changing environment, Cisco Systems Inc. understands that to safeguard its continued business success, it must ensure that the innovative products it develops pre-determine customers' requirements but also function in real, present-day, business and IT environments. To do this effectively, Cisco needs to:

- a) determine the scalability, performance, reliability and Virtual Desktop Infrastructure (VDI) user session densities of several application profiles deployed on each new iteration of its UCS (Unified Computing System) blade servers and
- b) perform Network Characterization studies during testing, to determine the impact of new or updated, internal Virtual eXperience Infrastructure (VXI) solution components on overall VXI User Experience at the desktop delivery end point.

Cisco conducted a thorough analysis of the testing tools market, knowing that the solution it was looking for had to be able to support the running of scripted user behavior using any application and any GUI Automation scripting language. A tall order for most tools, however, Cisco identified one solution that is able to solve their combined business and technology problem.

The Solution

Scapa TPP, the professionals' capacity planning tool of choice.

Scapa Technologies is an Independent Software Vendor with a unique and powerful testing tool: **Scapa Test and Performance Platform (TPP)**. Scapa TPP is the only test tool with the power, flexibility and feature list required for proper and accurate reliability, performance, capacity and scalability testing of Virtual Applications, Virtual Desktop Infrastructure (VDI), and Desktop Virtualization solutions from Microsoft®, Citrix®, VMware® and others. With a highly scalable engine technology, tests can be scaled to hundreds of thousands of users, using any automated GUI scripting tool of choice – such as WinTask, AutoIT, .Net™ etc.

Testing Solutions For:

- Citrix XenApp™
- Citrix XenDesktop®
- Microsoft Terminal Services®
- Microsoft Remote Desktop Services®
- VMware View™
- Other Solutions (enquire for details)

Why Cisco Selected Scapa TPP

Following a rigorous and competitive selection process, wherein Cisco's system test group evaluated all of the best-known and established tools in this space, Scapa TPP was selected because of Scapa Technologies' technology expertise, and due to the capabilities and flexibility of Scapa TPP. Scapa TPP was the only tool able to solve the business problem to Cisco's satisfaction.

Highly Scalable Architecture

Scapa is built with a Highly Scalable Architecture for testing XenApp, XenDesktop, VMware View and Microsoft TS and RDS.

The Scapa TPP user interface is built in Java, with a highly scalable and optimized multithreaded engine technology built in C. This enables Scapa TPP to be virtually CPU insignificant on both the client and server sides, enabling tests to scale to hundreds of thousands of users.

"With its scalable architecture, we were able to launch 2000+ VXi [VDI] sessions using multiple [32bit] Load Injector virtual machines each hosting 40-50 Citrix XenDesktop 4 and 5, VMWare View RDP and PCoIP VDI sessions. We were also able to measure User Experience for applications such as Microsoft Office Apps, Internet Explorer, Adobe® Acrobat® and (customer's own) Apps." – system test group

Note: Up to 100 users on a physical 32bit load injector, and more than 100 on a physical or virtual 64bit load injector

A Complete Measure of End-User Experience

Performance and scalability characteristics are taken from the end user experience, in addition to the server side experience. Server side metrics and end user experience metrics are correlated within Scapa TPP to expose the performance and scalability of your system.

"Scapa TPP was also the only test tool in the market that allowed us to measure user experience on the simulated Thin Client." – system test group

By obtaining full user experience performance measurements Cisco can be confident that requested user densities, enhancements, features, configurations, network setup and attempts at performance improvement and maximizing user densities do not negatively affect performance experienced at the desktop and application delivery end point.

Why Cisco Selected Scapa TPP

Scapa Technologies has unparalleled experience in benchmarking, capacity validation, performance, reliability and scalability testing of Virtual Desktop Infrastructure (VDI), application and desktop virtualization solutions.

VDI User Session Density and Network Characteristics Discovery

Testing is essential in ironing out any unforeseen issues, in addition to developing an understanding of the maximal achievable user densities for each VDI solution. This allows valid promises regarding infrastructure and configurations for each solution to be discovered, ensuring that the end user experience is comparable to existing desktop delivery solutions.

“Scapa TPP was also used in determining VDI session densities of several application profiles deployed on (customer’s) UCS (Unified Computing System) blade servers. TPP was also instrumental in measuring baselines for our Network Characterization studies to determine the impact of internal VXI solution components on overall VXI User Experience.” – system test group

When it comes to test tool flexibility and the ability to run large performance, capacity and scalability tests, Scapa TPP is the professional’s choice within many business divisions of this organization. Scapa TPP is extensively used in multiple test areas of VXI (Virtual eXperience Infrastructure).

Any Workflow, Any GUI Automation Scripting Tool – Maximal Opportunities

The ability to define your workload model to suit any particular workflow and application mix and script in any GUI automation scripting tool.

Note: The GUI scripting tool must be of low footprint and have the ability to import 3rd party libraries.

“Scapa TPP was the only test tool we found that had the flexibility to script user behavior using any application and any GUI Automation scripting language (WinTask, AutoIT and .NET C#/UI Automation).” – system test group

Why Cisco Selected Scapa TPP

Unparalleled Customer Support from Scapa

Scapa Technologies takes pride in providing exceptional customer support to all of their customers. Scapa support services are delivered by consultants with proven field experience. Customers are assigned a dedicated consultant who will manage and answer support requests. Scapa does not outsource our support services to third parties. Scapa support services are supplied by consultants who have vast experience of Scapa TPP and unlike some other companies' support services, Scapa consultants have direct access to the Scapa developers, which enables Scapa to provide, what we like to think is the best support in this business.

"Throughout our test cycles, we got excellent customer support from Scapa Technologies. We had their lead senior customer support engineer provide local training on using the tool, extensive local consultancy to help us setup our test environment with Scapa, and specific training on writing scripts to automate users' behavior. We also had several collaborative troubleshooting sessions via Webex and GoToMeeting. Mr Derek Roberts from Scapa has been instrumental to our success as we were building our test environment and learning about the test tool." - system test group

Scapa : An Independent Software Vendor

In order to maintain the confidence of their customers, Cisco required a solution from an independent software vendor to validate their systems. Scapa TPP was selected after Cisco performed an in-depth analysis of the independent testing tools in the market.

Scapa Test and Performance Platform (TPP) is the ultimate solution for user defined workflow performance, reliability, capacity and scalability testing of Virtual Applications, Virtual Desktop Infrastructure (VDI), and Desktop Virtualization solutions from Microsoft®, Citrix®, VMware® and others.

Scapa Technologies (www.scapatech.com)

Scapa TPP is a best-of-breed performance testing tool for Virtual Desktop, Remote Desktop, Citrix® and BMC Software® Remedy® AR System®, with support for additional technologies (such as HTTP(s) protocols). All of the functionality is available in a single product (connectors purchased separately) and can be applied in combination.

Other Testing Solutions from Scapa: Scapa Test and Performance Platform has a unique level of integration with Remedy AR Server and ITSM™ architectures at the C API, Java API and the http mid-tier layer, and via other touchpoints - enquire for details.

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