ZebraTester™

Advanced Load Testing Tool and Cloud Platform

Whether Fortune 100 or the next big startup, Apica's best-in-class load testing and test automation platform helps companies ensure their web and mobile services runs with optimal performance.

Apica ZebraTester™ is an enterprise-level load and stress testing product suite trusted by many of the world's largest companies and organizations.

Apica ZebraTester™ enables to execute web load tests of almost unlimited strength and with a depth of result detail unparalleled in similar testing tools. The powerful GUI enables to create sophisticated custom load test scripts in an easy way, without requiring any programming knowledge. And all of the components are platform-agnostic and can run on Windows, Mac OS X, Linux, and on Solaris systems.

Apica ZebraTester™ can be used as an integrated component of the Apica LoadTest Portal, or alternatively used as a stand-alone solution running on your own infrastructure. Apica ZebraTester™ scripts can also uploaded to Apica's Synthetic 7x24 Monitoring Solution, named Apica Synthetic Monitoring.

Powerfull GUI

Apica ZebraTester ™ contains a unique powerful GUI which does not require you to learn any scripting language. In addition, no implementation of complicated regular expressions is required, even if you need to extract and assign user-specific dynamic session parameters, or to consider any other user-specific data such as authentication credentials. All of the rich product features are directly accessible with few mouse clicks from the high-performance, user-friendly graphical user interface. This eases and simplifies significantly the workflow to create realistic load tests.

- Automatic generation of custom load test scripts – based on your click by click GUI actions.
- Integrated wizards for extracting and assigning user-specific session parameters.
- Integrated support of input files containing user-specific data.
- Integrated support for user-specific execution control, response verifications and error actions.

Test Flexibility
Use Apica web servers (AWS), Apica's Cloud, or your own network.

Proactive Scaling
Cluster for scaling to nearly unlimited loads from 50+ wordwide locations.
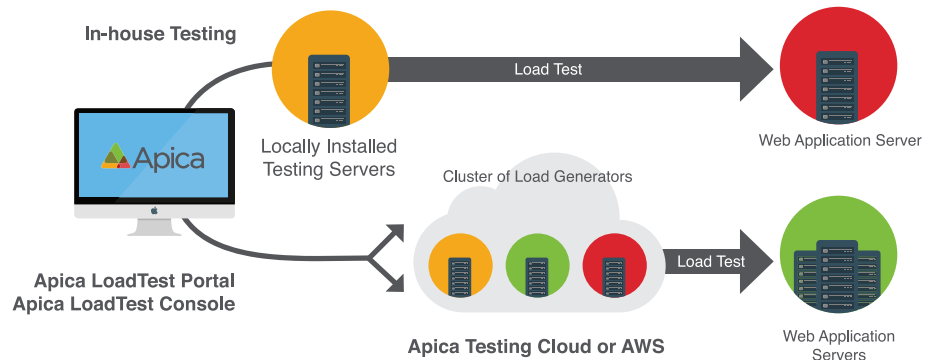
Flexible Payment Options
Monthly unlimited, Pay-as-you-go, or project pricing.

No Programming Required
Easily create your own test scripts.

Comprehensive Web
Standards Support HTTP/HTTPS, HTML, CGI, JSON data, and more.

In-house Testing
Locally Installed Testing Servers
Load Test
Web Application Server

**Apica LoadTest Portal
Apica LoadTest Console**

Cluster of Load Generators
Load Test
Apica Testing Cloud or AWS
Web Application Servers

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Web Standards Support
- HTTP and HTTPS
- CGI parameters
- HTML forms, HTML hyperlinks, HTML redirects
- J2EE URL Rewriting
- AJAX Technology
- JSON data
- XML and SOAP data
- WebDAV data
- Google protobuf data
- HTTP Protocol Extensions: Client-sided caching of network connections (keep-alive), support for compressed request and response data (gzip, deflate), automatic processing of session cookies, upload and download of files, support of outbound/cascaded HTTP(S) proxy server.
- SSL/TLS Protocol: SSL V3, TLS 1.0, TLS 1.1 and TLS 1.2. Configurable SSL/TLS session timeout. Support of "Server Name Indication" (SNI). Support of client certificates.
- Parallel execution of HTTP(S) requests similar to web browsers.
- Support of DNS TTL and DNS round robin.

False Positive Protection
Automatically compare current test response data to originally recorded responses using a unique heuristic algorithm.

Powerful Testing Platform
Real-time analysis, granular test measurements, automated test scheduling, and fully automated test generation.
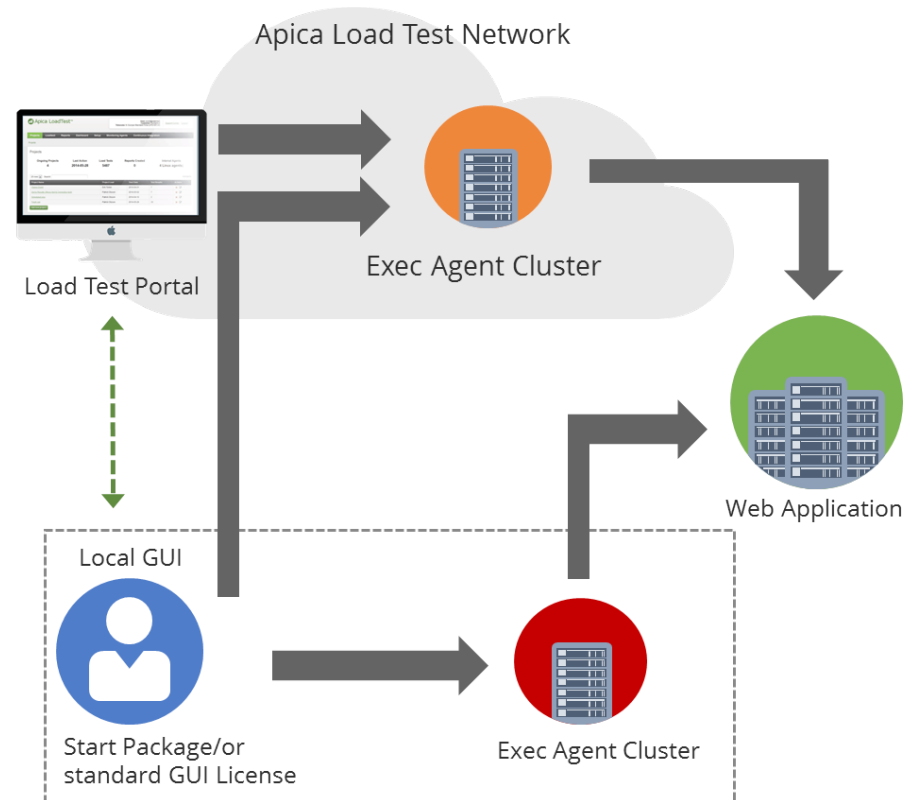
Custom Plugins
and full Java support.

Detailed Reporting
Intuitive reports, real-time data, and performance recommendations. Slow network connection reporting.

Test Execution
- Configurable DNS servers, DNS cache and DNS hosts file per executed load test.
- Configurable SSL/TLS settings per executed load test.
- Detailed real time statistics.
- See all error details in real time: Error analysis can actually be performed during a running load test.
- Manually modify variable values and flow control in real-time.
- Real-time comments.
- Suspend and resume load test execution.
- Manually increase and decrease the number of simulated users in real-time.
- Conditional execution of web pages / URLs.
- Simulate slow network connections.
- Integrated scheduler.
- Concurrent test execution: Run multiple load tests at one time on the same infrastructure.
- Integrated overload detection of load generators.
- Support of multiple TCP/IP addresses per load generator.
- Clustering of load generators.

Apica Load Test Network

Load Test Portal

Exec Agent Cluster

Web Application

Local GUI

Start Package/or standard GUI License

Exec Agent Cluster

In-Depht Test Measurements

- Sampling rates up to 100%. Can store complete data from every test.
- Measures in-depth values for each HTTP(S) request: DNS resolve time, TCP/IP connect time, SSL handshake time, request transmit time, time for first byte of response header, response header receive time, and response content receive time.
- Measures internal statistics inside DNS, TCP/IP, SSL and HTTP layers. For example: DNS resolve rate, abbreviated SSL handshake rate, HTTP Keep Alive efficiency, inner throughput diagram of each received HTTP response content.
- All measured errors contain a frozen snapshot of all of the current HTTP data such as request header, request content, response header and response content.
- All measured errors contain also layer specific context information such as outbound TCP/IP address and outbound TCP/IP port, the SSL session ID, and the layer specific execution step of the failed HTTP(S) request. For example: If an empty web page is returned, you will see clearly if this is caused by a network problem or caused by an overload of the stressed web server.
- Each measured error contain also a snapshot of the actual values of all user-specific variables and a snapshot-statistic about the activity of all other users at error time.
- The measurements can be complemented with additional statistics of Apica Inside Agents which are capable to collect real-time performance information from multiple in-house sources such as operating systems (OS performance data), databases, network and system management frameworks, SNMP, ARM APIs and application management modules.

Test Automation

Both, test creation (recording and post-processing of HTTP/S sessions) as well as the test execution can be automated.

- Test Creation: Can be automated by calling the REST-API of the proxy recorder and by triggering the execution of self-developed "recorder plug-ins".
- Test Execution: Can be automated by calling the "PrxJob" utility: Up to 86 different commands can be used in self-written shell or *.bat scripts to start and synchronize the execution of load tests.

Integrations

Apica Products
- Apica LoadTest Portal
- Apica Synthetic Monitoring

Third-Party Integrations
- AppDynamics
- Dynatrace
- NewRelic
- AWS
- Log4j
- AWS CodePipeline
- Jenkins
- TeamCity
- Rackspace
- RightScale

Cluster Technology
- Combine local, remote or cloud-based load generators to clusters.
- Almost infinitely scalable: More than 300 load generators can be combined to form a single cluster.
- Each load generator can be member of several clusters.
- Support of multiple locations and support of mixed operating systems.
- Splitting of user account credentials and X509 client certificates across cluster members.
- Easy to use and easy to operate.
- All measured data are merged into one single test result.

Reporting
- Generate PDF reports from test results which can be complemented with own comments.
- Support of creating own report templates containing also your corporate logo on the cover sheet.
- Up to 24 different diagrams and statistic-types available for reports.
- Results of different test runs can be compared to one another, allowing the efficiency of tuning measures to be verified, and to visualize the response time behavior and the stability of the stressed web application under different load conditions.

Load Test Plug-ins
- Create custom load test plug-ins to extend the functionality during load test execution.
- Wizard for plug-in creation. For example, the following functionalities can be realized during executing a load test by implementing custom load test plug-ins: Perform real-time calculations during the execution of a load test (e.g. in order to support a proprietary challenge-response authentication algorithm).
- Access external databases during the execution of a load test.
- Add additional, own measured data to the load test result, which are then be presented in the form of additional XY-diagrams in the GUI and in PDF reports.
- Create own, test specific error conditions.