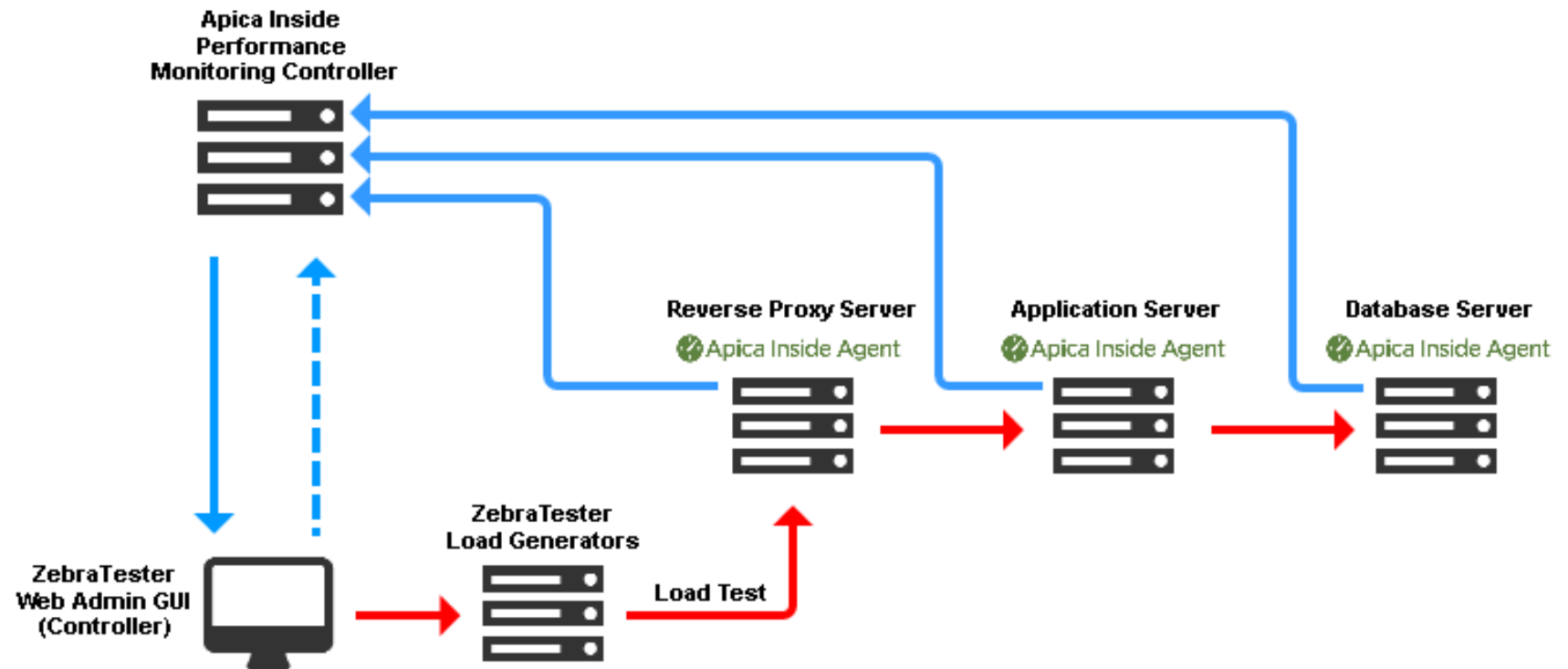


# Apica Inside Agent

Using Apica Inside Performance Monitoring Controller with Apica ZebraTester




**Apica Inside Agents** collect **real-time performance information from multiple in-house sources** such as Operating Systems (performance data), Network and Systems Management frameworks, SNMP, ARM APIs and the Application Management Modules themselves.

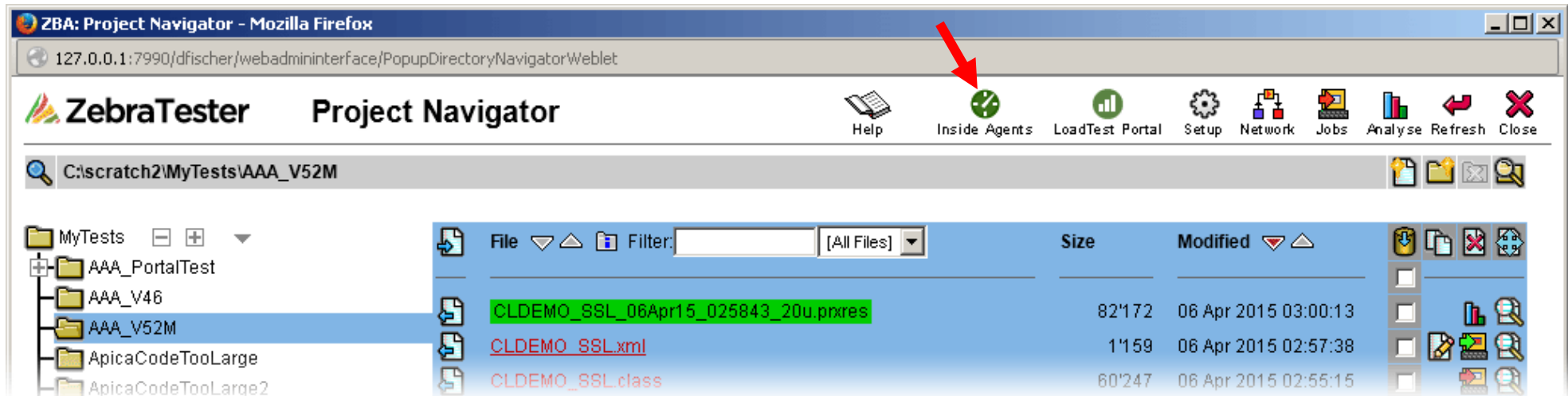
All the captured data are stored in the **Apica Inside Performance Monitoring Controller** and are presented as graphs in the **ZebraTester GUI**. For example:

- When the server CPU's are at 100% use.
- Which server consumes the most memory.
- Server hard drive write and read times.

The captured data, respectively the graphs of them, can be easily integrated into the **ZebraTester Load Test Results**.

Apica Inside Agents are installed by the Apica support team.  
Please contact: [support@apicasystem.com](mailto:support@apicasystem.com).

By clicking on the  icon in the **ZebraTester "Project Navigator"** menu, you can connect to an **Apica Inside Performance Monitoring Controller**, define "Monitoring Templates", and display Real-Time Measurements collected from multiple sources, such as Performance Data of Operating Systems.



**ZBA: Apica Inside Performance Monitoring Controller - Mozilla Firefox**

127.0.0.1:7990/dfischer/webadmininterface/ApicaMonitoringControllerConfigAccessWeblet

**ZebraTester**    **Apica Inside Performance Monitoring Controller - Network Access Configuration**    Help    Refresh    Close

**Enable Network Connection to Apica Inside Performance Monitoring Controller**

**Apica Inside Performance Monitoring Controller**

Controller Host	<input type="text" value="194.213.119.243"/>
Controller Port	<input type="text" value="26400"/>
Controller Protocol	<input type="text" value="Plain TCP"/>
Request Timeout (Seconds)	<input type="text" value="30"/>

**Use Outbound HTTP Proxy for accessing the Controller**

Proxy Host	<input type="text"/>
Proxy Port	<input type="text"/>
Proxy User Name	<input type="text"/>
Proxy Password	<input type="text"/>

**Apply Configuration >>> Continue**      Reset Form Fields to Default Value

ZBA: Apica Inside Performance Monitoring Controller - Mozilla Firefox  
127.0.0.1:7990/dfischer/webadmininterface/ApicaMonitoringControllerConfigAccessWeblet

### ZebraTester Apica Inside Performance Monitoring Controller - Select Measurement Data

Enable Network Connection to Apica Inside Performance Monitoring Controller Update

**A: Select Measurements**

<input type="checkbox"/> sesthbx14beta	<input type="checkbox"/> CPU Usage	%
	<input type="checkbox"/> Disk Read	MB/s
	<input type="checkbox"/> Disk Write	MB/s
	<input type="checkbox"/> IO Wait	%
	<input type="checkbox"/> Load Avg (1 Min)	count
	<input type="checkbox"/> Load Avg (15 Min)	count
	<input type="checkbox"/> Load Avg (5 Min)	count
	<input type="checkbox"/> Memory: Available MBytes	MB
	<input type="checkbox"/> Network Receive (RX)	Mbit/s
	<input type="checkbox"/> Network Transmit (TX)	Mbit/s
	<input type="checkbox"/> Pages swapped into memory/sec	count
	<input type="checkbox"/> Pages swapped out of memory/sec	count
	<input type="checkbox"/> Physical Memory Used	MB

<input type="checkbox"/> sesthbx15beta	<input type="checkbox"/> CPU Usage	%
	<input type="checkbox"/> Disk Read	MB/s
	<input type="checkbox"/> Disk Write	MB/s
	<input type="checkbox"/> IO Wait	%
	<input type="checkbox"/> Load Avg (1 Min)	count
	<input type="checkbox"/> Load Avg (15 Min)	count
	<input type="checkbox"/> Load Avg (5 Min)	count
	<input type="checkbox"/> Memory: Available MBytes	MB
	<input type="checkbox"/> Network Receive (RX)	Mbit/s
	<input type="checkbox"/> Network Transmit (TX)	Mbit/s
	<input type="checkbox"/> Pages swapped into memory/sec	count
	<input type="checkbox"/> Pages swapped out of memory/sec	count
	<input type="checkbox"/> Physical Memory Used	MB

**B: Save Selection as Monitoring Template**

Filename: \*

Description:

\* required Enter a "simple" filename, with no path and no file extension. The file extension is always \*.xml. Example: "ServerSet\_01"

**C: List of All Monitoring Templates / Display Real-Time Measurements**

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Template_01	Application Server
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Once you have defined one or multiple "Monitoring Templates" you can select such a template when **Starting a Load Test**:

**Execute Load Test Job: CLDEMO\_SSL**

Load Test Input Parameter  save as template CLDEMO\_SSL.xml

Execute Test from Host: Strawberry 2

Number of Concurrent Users 3

Load Test Duration 5 min

Max. Loops per User unlimited

Startup Delay per User 200 Milliseconds

Max. Network Bandwidth per User unlimited Downlink unlimited Uplink

Request Timeout per URL 60 Seconds

Max. Error-Snapshots 20MB memory

Statistic Sampling Interval 15 Seconds

Additional Sampling Rate per Page Call 100%

Additional Sampling Rate per URL Call 100% Add --- recommended

Debug Options none - recommended


Additional Options SSL All

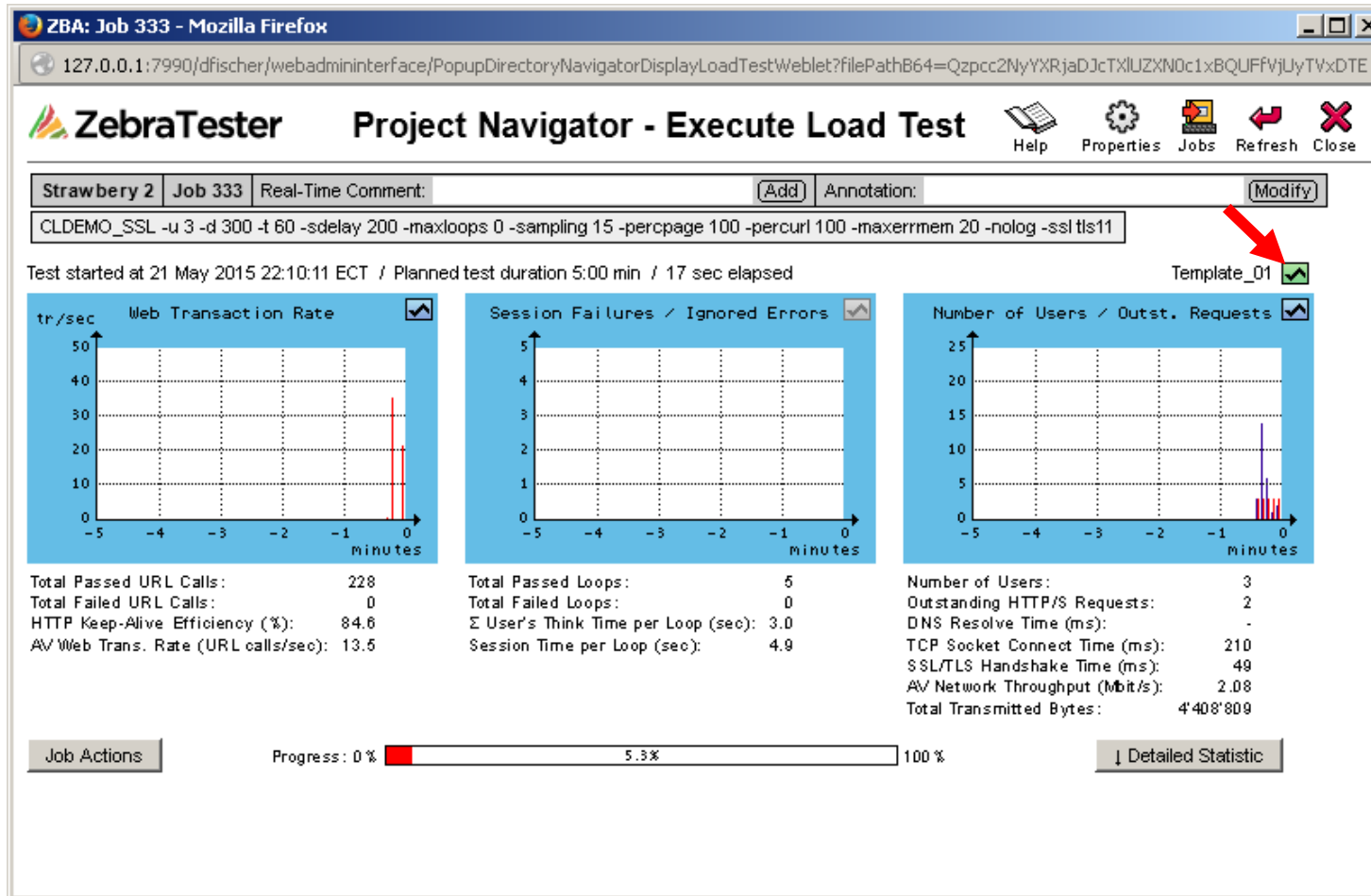
Monitoring Controller Template **Template\_01**

Annotation

>> Continue

\* recommended: will be displayed as hint in Project Navigator

During the **Load Test Execution** you can display the **Real-Time Measurements** by clicking on the  icon:



The screenshot shows the ZebraTester Project Navigator interface for a load test job named "Strawbery 2". The interface includes a toolbar with icons for Help, Properties, Jobs, Refresh, and Close. Below the toolbar, there is a "Real-Time Comment" field with an "Add" button and an "Annotation" field with a "Modify" button. A red arrow points to a green checkmark icon next to the "Template\_01" label, which is used to toggle real-time measurements.

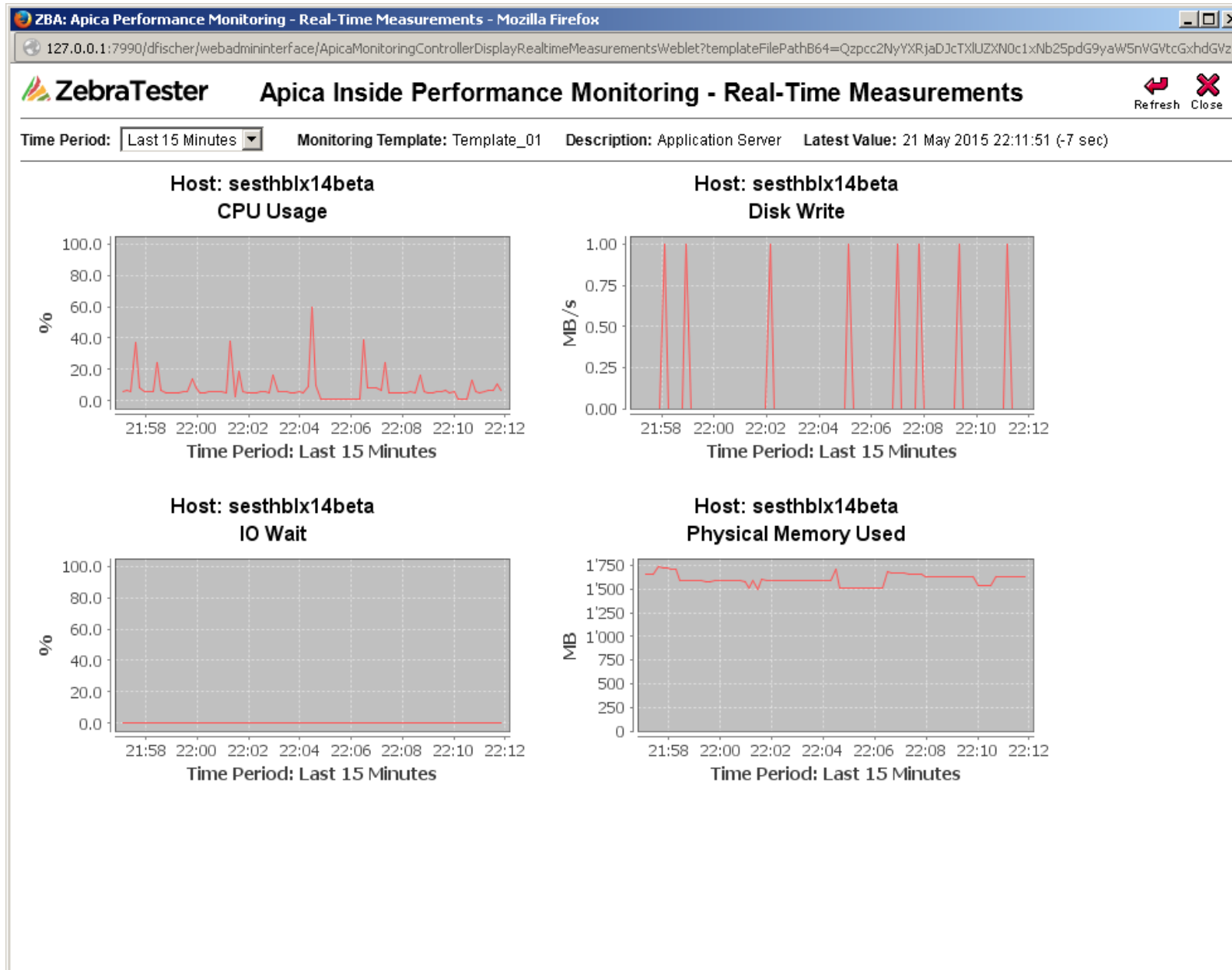
The main content area displays three real-time measurement graphs and a summary table. The graphs are:

- Web Transaction Rate:** Shows tr/sec on the y-axis (0 to 50) and minutes on the x-axis (-5 to 0). The graph shows a sharp increase in transaction rate starting around -1 minute, peaking at approximately 40 tr/sec.
- Session Failures / Ignored Errors:** Shows the number of failures on the y-axis (0 to 5) and minutes on the x-axis (-5 to 0). The graph shows a sharp increase in failures starting around -1 minute, peaking at approximately 4 failures.
- Number of Users / Outst. Requests:** Shows the number of users on the y-axis (0 to 25) and minutes on the x-axis (-5 to 0). The graph shows a sharp increase in users starting around -1 minute, peaking at approximately 15 users.

Below the graphs is a summary table with the following data:

Total Passed URL Calls:	228	Total Passed Loops:	5	Number of Users:	3
Total Failed URL Calls:	0	Total Failed Loops:	0	Outstanding HTTP/S Requests:	2
HTTP Keep-Alive Efficiency (%):	84.6	Σ User's Think Time per Loop (sec):	3.0	DNS Resolve Time (ms):	-
AV Web Trans. Rate (URL calls/sec):	13.5	Session Time per Loop (sec):	4.9	TCP Socket Connect Time (ms):	210
				SSL/TLS Handshake Time (ms):	49
				AV Network Throughput (Mbit/s):	2.08
				Total Transmitted Bytes:	4'408'809

At the bottom of the interface, there is a "Job Actions" button, a progress bar showing "Progress: 0%" (with a red bar indicating 5.3% completion), and a "Detailed Statistic" button.





## After the **Load Test is completed** you can **examine the Performance Data** by clicking in the **Load Test Result Detail** menu on **Diagram: External Measured Data**:

**ZBA: Result Detail - Mozilla Firefox**

127.0.0.1:7990/dfischer/webadmininterface/PopupAnalyseLoadtestDetailsWeblet?action=dataCollectionSequence&key=e896905495145e23c413eab8649c3bae&dataCollectionIndex=3

**ZebraTester Load Test Result Detail - Statistics and Diagrams**

Load Test: CLDEMO\_SSL\_V52 Start Date: 21 May 2015 23:20:38 User: 3 Test Duration: 3:18 min Annotation: ---

Advanced Test Parameter		Measured Results: per Single User - per Loop		Overall Test Results		Test Result
Startup Delay per User:	200 ms	AV Session Time per Loop:	4.70 sec/loop	Web Transaction Rate:	24.7 URL calls/sec	<a href="#">prev</a>
Request Timeout per URL:	60 sec	AV Response Time per Page:	0.85 sec/page	Session Failure Rate:	0.00 %	Total Transmitted: 94 MB
Statistic Sampling Interval:	15 sec	Network Throughput per User:	167.9 kBytes/sec	Total Network Throughput:	4.00 MBit/sec	

- ▶ Test Scenario **Warning**
- ▶ Diagram: Response Time per Page
- ▶ Results per URL Call (Overview)
- ▶ Results per URL Call (Details)
- ▶ Diagram: Response Time Percentiles
- ▶ Diagram: Top Time-Consuming URLs
- ▶ Diagram: Concurrent Users
- ▶ Diagram: Session Time
- ▶ Diagram: Web Transaction Rate
- ▶ Diagram: Outstanding HTTP/S Requests
- ▶ Diagram: Completed Loops
- ▶ Diagram: TCP Socket Connect Time
- ▶ Diagram: Network Throughput
- ▶ Diagram: HTTP Keep-Alive Efficiency
- ▶ Diagram: SSL Cache Efficiency
- ▶ Diagram: Session Failures
- ▶ Diagram: Error Types
- ▶ Diagram: Number of Errors per Page
- ▶ Diagram: Number of Errors per URL
- ▶ **Diagram: External Measured Data**

Host: sesthblx14beta: Physical Memory Used

Host: sesthblx14beta: CPU Usage

Host: sesthblx14beta: Disk Write

Host: sesthblx14beta: IO Wait

Host: sesthblx14beta: Physical Memory Used

Host: sesthblx14beta  
Physical Memory Used

USER

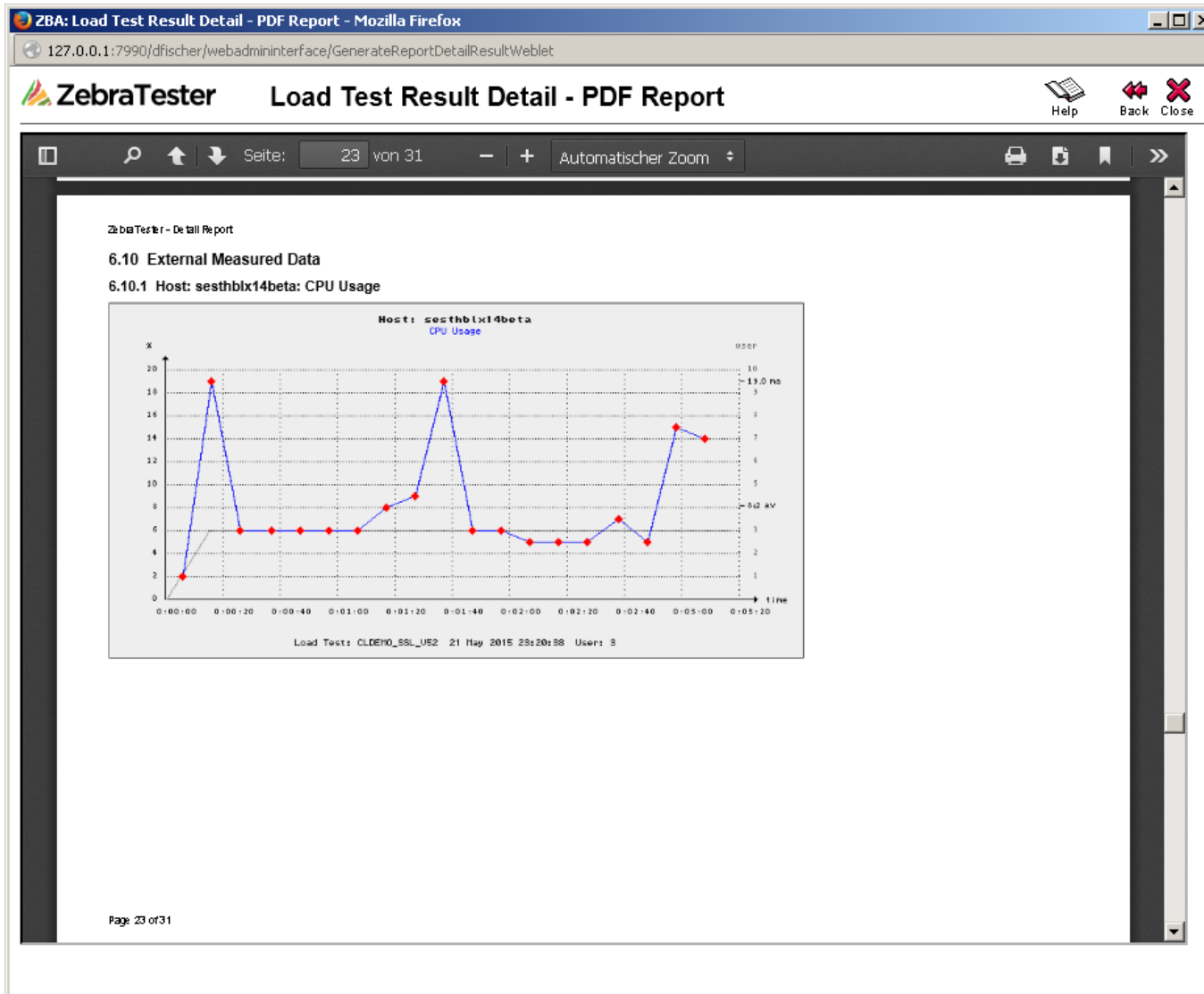
1723.0 MB


time

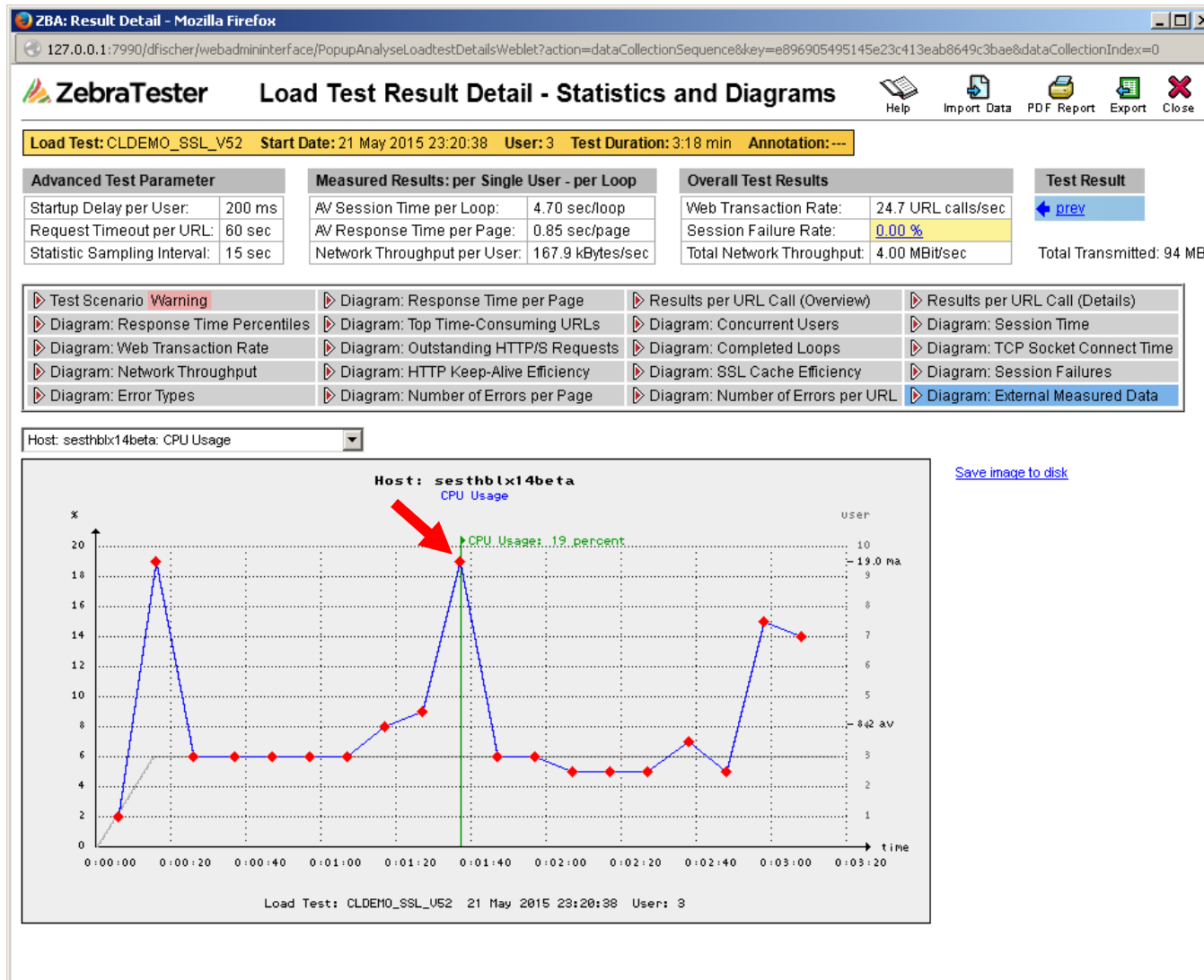
Load Test: CLDEMO\_SSL\_V52 21 May 2015 23:20:38 User: 3

[Save image to disk](#)

# The Performance Data collected from **Apica Inside Agents** are also integrated in the ZebraTester **PDF Report**.



**Hint:** You can **Tag the Event Time** of a specific measurement value by clicking inside the diagrams at the corresponding icon  of a value:



The Tagged Even Time and its description is then also shown in all (other) time diagrams:

