



## AppDetect

*The Only Service that Pinpoints Application Problems in Production*

Your application is in production and it is performing poorly. You tested it before release and the performance was fine. But now your customers are unhappy and your team cannot find the cause.

*What do you do?*

### AppDetect

RTTS' *AppDetect* service quickly isolates poorly performing applications and breaks them down into application threads so that developers, network engineers and DBAs can understand exactly where the problem is located. *AppDetect* quickly reveals whether application performance can be improved with increased bandwidth or whether the application is performing poorly due to design flaws. *AppDetect* can determine whether the issue lies on the client-side of the application, the network, or one of the servers.

### How AppDetect Works

#### Profile the transactions

- We identify the problematic user transactions.

#### Capture the network trace

- We perform a network trace of the problematic transactions.

#### Pinpoint the problems

- RTTS' experts analyze the individual trace captures with cutting edge software to discover the application component(s) that accounts for the majority of the response time, long-running and inefficient application requests, network errors and inefficient use of the network architecture.

#### Solve the issues

- RTTS' experts provide a detailed report with observations and findings that will provide the application/network/database architects with the data needed to substantiate the findings and rectify the issues along with courses of action to optimize the application environment.

### Solve Your Issues Quickly

RTTS performs the *AppDetect* service in 3 business days. From profiling to capturing to pinpointing, analyzing and solving issues, RTTS will provide you with the cause of your performance/scalability issues quickly.



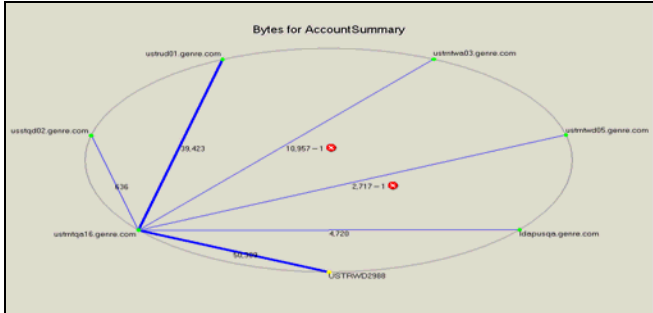
Name	Client	Server	Start Time	Duration
All threads (75 threads)	Multiple	Multiple	Multiple	Multiple
HTTP POST /AWDD/...	...	...	0.00000	0.01637
HTTP POST /AWDD/...	...	...	0.07515	14.36955
SQL select...	...	...	0.15337	17.32364
SYBASE 'select build...	...	...	0.23425	0.00542
SYBASE 'DBRPC sp_...	...	...	0.24657	0.00219
SYBASE 'DBRPC sp_...	...	...	0.25030	0.00598
SYBASE 'DBRPC sp_...	...	...	0.29640	0.00256
SYBASE 'DBRPC sp_...	...	...	0.30018	0.00186
SYBASE 'DBRPC sp_...	...	...	0.30371	0.00277
SYBASE 'DBRPC sp_...	...	...	0.33937	0.01651
SYBASE 'DBRPC sp_...	...	...	0.35622	0.00061
SYBASE 'DBRPC sp_...	...	...	0.35938	0.00164
SYBASE 'DBRPC sp_...	...	...	0.36093	0.00070
SYBASE 'DBRPC sp_...	...	...	0.38997	0.00212
SYBASE 'DBRPC sp_...	...	...	0.39451	0.00170
SYBASE 'DBRPC sp_...	...	...	0.39563	0.13188
TCP 2024->8080	...	...	0.40704	4.25153
HTTP POST /AWDD/...	...	...	0.44981	0.01529
HTTP POST /AWDD/...	...	...	1.11154	0.01409
HTTP POST /AWDD/...	...	...	1.65847	0.01564
SYBASE 'DBRPC sp_...	...	...	1.99953	0.00403
SYBASE 'DBRPC sp_...	...	...	2.00409	0.00076
SYBASE 'DBRPC sp_...	...	...	2.00992	0.00219
SYBASE 'DBRPC sp_...	...	...	2.00974	0.15372



## Analysis and the Tool

RTTS experts analyze trace files and technical diagrams to determine the cause of the performance issue.

### Conversation Map



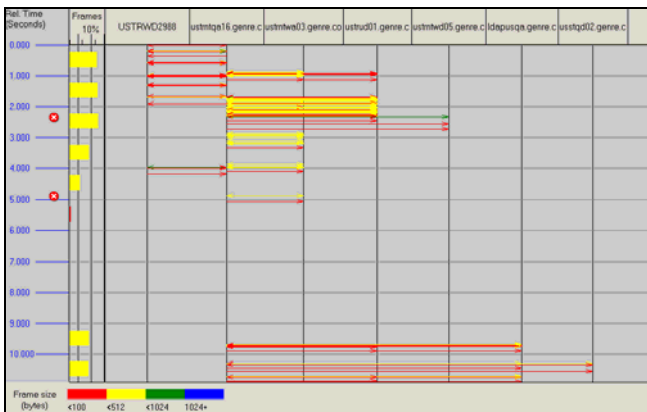
The Conversation Map shows the web/application server communicating with back-end servers in addition to the conversation with the web client.

### Thread Analysis

Name	Client	Server	Start Time	Duration	Bytes
All threads (92 threads)					
Multiple:MMultiple:M			0.000000	10.86780	138300
HTTP-POST /AJWS/Display/reqServletJS1/FWV/	ustntqa16.gene.com	ustntqa16.gene.com	0.000000	0.01147	1478
HTTP-POST /AJWS/MenuScreen/JS1/FWV/	ustntqa16.gene.com	ustntqa16.gene.com	0.200003	0.88824	40856
HTTP-POST /AJWS/Display/reqServletJS1/FWV/	ustntqa16.gene.com	ustntqa16.gene.com	0.5735-4	0.01778	1478
SQL Miscellaneous connect	ustntqa16.gene.com	ustntqa16.gene.com	0.868661	4.20506	10957
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.91675	0.00121	153
SYBASE-DRHP-C.usp_gett_astKey	ustntqa16.gene.com	ustntqa16.gene.com	0.91906	0.00527	434
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.92464	0.00087	154
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.92485	0.00223	353
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.92911	0.20536	243
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.93483	0.00461	462
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.94483	0.00295	349
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.94486	0.00271	333
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	0.95025	0.18293	214
HTTP-POST /AJWS/Display/reqServletJS1/FWV/	ustntqa16.gene.com	ustntqa16.gene.com	1.29525	0.01294	1476
HTTP-GET /getAccountSummary/JS1/FWV/	ustntqa16.gene.com	ustntqa16.gene.com	1.68293	2.49841	5049
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.68845	0.00091	153
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.69183	0.00252	567
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.69672	0.00310	384
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.69983	0.00315	384
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.70579	0.00061	154
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.70598	0.00078	153
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.70707	0.00227	567
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.71128	0.00358	484
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.71627	0.00212	548
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.71999	0.00229	350
SYBASE-DRHP-C.sp_mda_	ustntqa16.gene.com	ustntqa16.gene.com	1.72373	0.17529	214

Thread analysis shows that a single HTTP based web client requests invokes many SQL requests between the application server and the database server.

### Bounce Diagram



The Bounce Diagram presents the packet flow between all tiers of the application as a function of relative time from the beginning of the task.

## Guidelines of Engagement

- ❑ RTTS will perform captures of 4 client conversations. A client conversation is the communication between the client-side PC and the next tier. (You may perform the capture if you wish. We can provide instructions for the use of a freeware tool for capturing traces).
- ❑ RTTS will provide an analytical report and a presentation of this report to all stakeholders.
- ❑ Additional conversations can be analyzed at a rate of \$1,000 per conversation if performed within 30 days of the original transaction.

## Cost-Effective Solution

The cost of an *AppDetect* engagement is \$9,950. For this price, we will provide an efficient solution without occupying valuable resources and ends the finger pointing between the network, database and application programmers.

For more information about this service, go to [www.rttsweb.com](http://www.rttsweb.com) or call (212) 240-9050 x17.

## Case Study:

### *Insurance firm sees value of AppDetect*

An insurance firm was having performance issues with a client-facing application. Management assigned 15 programmers to find the problem. After 8 days of work (and approximately \$90,000 in resources), the source of the performance issue remained unsolved.

RTTS was brought in through its *AppDetect* service and quickly realized that a 2MB download of an already cached file was constantly being performed, causing performance degradation.

The issue was identified during the 3-day *AppDetect* engagement and was quickly fixed.

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## About RTTS

RTTS is a professional services organization that specializes in the strategic planning and tactical implementation of quality software during pre-deployment and performing diagnostics, tuning and monitoring of architectures after deployment. Here's why they turn to us:

- We help our clients strategically plan their test efforts to provide the greatest coverage and mitigate risks.
- Our expert teams deploy our best practices methodology (TAP) that integrates with Six Sigma, CMM, RUP and all major system development lifecycle methodologies. Our management team is ready to lead the project and tactically implement a solution that provides full, end-to-end testing of all the components of your application and architecture.
- Our engineers possess expertise in complex web, client/server, and other heterogeneous architectures, all have many years of experience with automation tools implementing functional, performance, load, stress, volume, interoperability, component-based testing and other test types and all RTTS engineers are employees of the firm.
- Our project managers are experts in the field of test process and automated testing. They strategically plan the testing and provide technical support of the implementation of test automation.
- We support the major vendors in the test automation, application performance monitoring and diagnostics spaces.
- Our test lab (in New York City) is equipped to handle remote functional and performance testing of your application.
- Whether you have an internal application for 5 people or a web-based system that serves 100,000 customers, RTTS will develop with a plan and implement testing to suit your technical, business and budgetary needs without exhausting any of your human resources.

