



Blending the App and the Network: Hands-on Web Operations

Presented 9/21/2006

John Overton, Director of Hosting, ATG



Introducing ATG

- ❑ Founded in 1991, public in 1999
- ❑ Headquarters in Cambridge, MA with additional locations in North America (DC, San Francisco, Seattle, Chicago) and Europe
- ❑ 350+ Employees
- ❑ Largest and strongest company dedicated to customer-facing solutions
- ❑ 600+ active enterprise customers
- ❑ Acquired Primus Knowledge Solutions Q4 2004
- ❑ OnDemand program six years in production

Thousands of Possibilities |
GET YOURSWEEKLY AD
STORE LOCATOR
BEST BUY CREDIT CARDGIFT CARDS
WISH LISTORDER STATUS
MY ACCOUNT
CUSTOMER SERVICE CART
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CAMCORDERS ▾

COMPUTERS ▾

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APPLIANCES ▾PHONES &
COMMUNICATIONS ▾OFFICE
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GIFT IDEAS

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DESIGNER
INDEX

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FOR HER

SHOES &
HANDBAGS

JEWELRY &
ACCESSORIES

BEAUTY &
FRAGRANCE

MEN'S &
ELECTRONICS

KIDS'
WORLD

HOME &
ENTERTAINING

GIFT
IDEAS

SALE &
VALUES



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SPREE

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INCIRCLE

WEDDING REGISTRY

WISH LIST

STORE LOCATIONS AND EVENTS ▶

FOR FASHION AND SALE NEWS,

Enter e-mail address



atg.

The Coke Show

Menu



The Studio

Make stuff here..

The Stage

Watch stuff here.

Go to The Studio

Go to The Stage

welcome to the **Coke** side of life



Coca-Cola

mycoke DRINK CHOOSE LIVE mycokerewards Copa Coca-Cola


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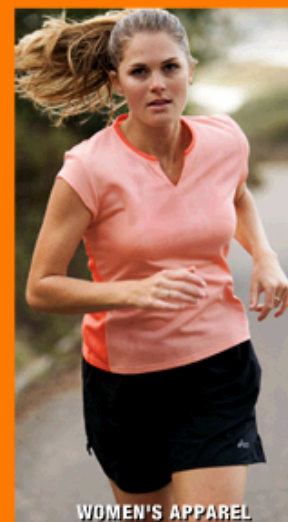
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Ask a Question:

Example: How do I access mMode on the Nokia 3650?

Browse Categories

[Account](#)

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[Phones and Devices](#)

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Top Questions

1. [What is my coverage area?](#)
2. [Where can I find information about international services?](#)
3. [How do I upgrade my wireless phone?](#)
4. [How much does it cost to upgrade to a new phone?](#)
5. [How can I report a lost or stolen phone?](#)
6. [How can I change my rate plan?](#)
7. [How can I purchase ringtones, graphics and games?](#)
8. [How do I update my account information?](#)

Support: Backup Exec for Windows Servers [Change Product](#)

[Ask a new question](#) | [Search Tips](#)

Search for an Answer

Ask a question:

Ex. How do I restore a master database from a previous backup?

Version:

All Versions

Platform:

All Platforms

Include:

TechNotes PDF's Downloads Newsgroups

Refine Your Search

- > [Publishing Status](#)
- > [Application](#)
- > [Equipment](#)
- > [Operating System](#)
- > [Remote Agent For Windows Servers](#)
- > [Agent For Exchange](#)
- > [Open File Option](#)
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What is ATG On Demand?

ATG On Demand is an alternate delivery model for mid-size to enterprise class of customers that wish to benefit from a single source for deployment, operation, management and hosting of their ATG applications to reduce cost, risk and achieve time-to-market goals. ATG On Demand is a complete managed application service tailored to your unique requirements while driving a lower TCO than traditional models.

ATG OnDemand Solutions

- ▣ Commerce OnDemand (B2C & B2B)
- ▣ Customer Care OnDemand (B2C & B2B)
- ▣ Answers OnDemand (B2C & B2B)
- ▣ Email Response Management OnDemand (B2B)
- ▣ Click to Call OnDemand (B2C & B2B)

ATG OnDemand Clients

 **cingular**
raising the bar™

AARP
The power to make it better.™



:w s a™

Apptix™

SOURCEfire
Security for the real world.

 **symantec**™

 **AT&T** Wireless

1-800-flowers.com
The perfect gift is here.

NASD

The Coca-Cola Company

PayPal®



 **Washington Mutual, Inc.**®



PROGRESS
SOFTWARE



NEW YORK & COMPANY

ATERA™

Cobalt

MECO®

HealthTalk

Where do we fit in the Managed Services Market?



Pure Co-Location

- Rack
- Power
- Pipe

Managed Services

- Co-location
- O/S and DB Mgmt
- Full site monitoring
- App health

ASP/Web Native

- Pay per drink apps
- "Store fronts"
- No/limited app ownership
- Full service
- Prepackaged

Sole Source App Services

- Turnkey service
- Focused on specific apps
- Vendor/expert manages their app
- Best of Breed/High End/Highly Customized
- Perpetual license or SAAS

Fully Outsourced

- IT operations
- Logistics

MCI/Digex

RackSpace

DataPipe

AboveNet

Level III

Cable & Wireless

NaviSite

sevenspace

Saavis

Totality

Prosodie

Venda

Frye

Salesforce.com

RightNow

Oracle On-Demand

People Soft
Hosting

Siebel On-Demand

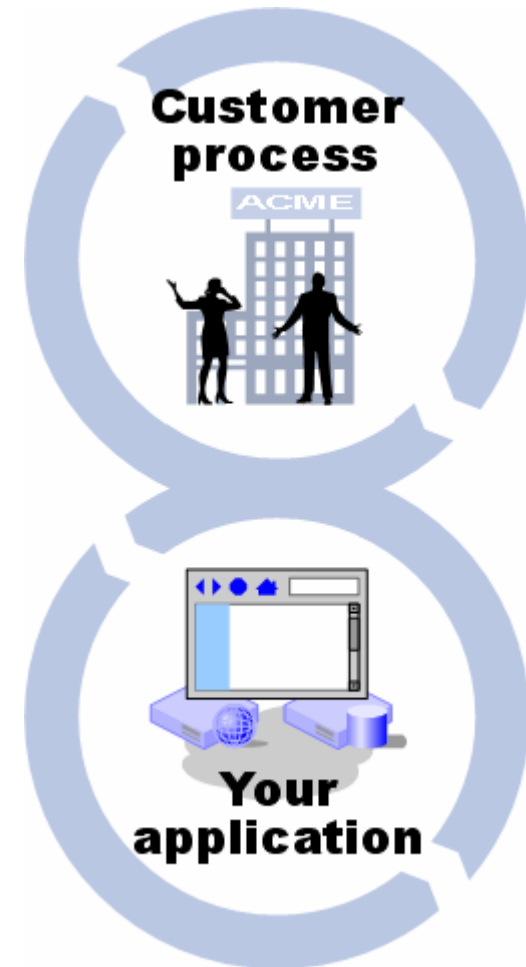
GSI

Digital River



Why Businesses Outsource to ATG

- Lower TCO
- Improved efficiency
- Highly specialized
- Not core to their business
- Faster time to benefit
- Lower risks
- Turnkey and customized
- Parity integration



ATG OnDemand by the Numbers

- ❑ 6+ years production uptime
- ❑ Site fees ranges \$5k/month to \$200k/month
- ❑ 300+ URLs under management
- ❑ +1000 CPUs (475+ Servers)
- ❑ 700 nodes/devices
- ❑ 150 Databases
- ❑ 3 Datacenter POPS (N.VA, CA, Belfast)
- ❑ 12 dedicated ATG employees

The Challenges

- ❑ ASP Model with Health and Performance SLAs
- ❑ Dedicated Tenancy Architecture
- ❑ Mission Critical Apps (eCommerce and Knowledge Base)
- ❑ Private Net and Public Net Hosted Solutions
- ❑ High Touch Services Model with Limited Staff Resources
- ❑ Provide Support Team Deep Diagnostics without Console Access
- ❑ Joint Application Development (JAD) Environments
- ❑ Load/Capacity Management
- ❑ Competition: On Premise and other ASPs

SLA/Contracts



Performance can impact:

- Lost revenue
 - Customer retention
 - SLA refunds
 - Brand erosion
- Increased costs
 - Increased call volume
 - Higher MTTR
 - Lower operational efficiency
 - Increased staffing

Uptime Defined

Definitions of **uptime** on the Web:

- The amount of time a web site is available. The industry benchmark at this point in time for availability is 99.99%.

www.hostqueue.com

- Refers to the amount of time within a specific period that a hosting provider's system is active or available for servicing site visitors. The most reliable hosts will guarantee 99.9% uptime.

www.100best-web-hosting.com

- If your website is considered "up", it is viewable over the Internet. Uptime refers to the percentage of time that it will be viewable.

www.internetsimplicity.net

- strangely enough, the opposite of downtime.

www.maintenanceresources.com

Five Nines – ATG Offers 99.5%-99.9%

availability %	downtime per year	downtime per month*	downtime per week
98%	7.30 days	14.4 hours	3.36 hours
99%	3.65 days	7.20 hours	1.68 hours
99.5%	1.83 days	3.60 hours	50.4 min
99.9%	8.76 hours	43.2 min	10.1 min
99.99%	52.6 min	4.32 min	1.01 min
99.999%	5.26 min	25.9 s	6.05 s
99.9999%	31.5 s	2.59 s	0.605 s

Uptime Guarantee – Two Types

Best Effort – aka “Awe Shucks”

Money Backed – aka “No Joke”

What is uptime to ATG?

Uptime Definition, Guarantee and Credits. After the production site launch date, ATG will guarantee the specified uptime for the sites.

Outages are of two types:

- Full outage is defined as: All components of the application are in a terminal failed state or site is not unavailable
- Partial outage is defined as: Any single component is in a failed state but other components are operating normally and does not impact a major workflow.

ATG Uptime Guarantee

Credits are for every hour or fraction of an hour of outages beyond the service level, based on a thirty-day month, a day's credit off the monthly recurring charge with a maximum credit of 50% of the pro-rated monthly fee.

Example for one site:

Site Fee = \$210,000 per month

Daly Fee = \$7,000 per day

Remedy = \$7,000 per hour outage

Uptime Record 100%



833 Years



300 Million Years

Keynote E-Commerce Performance Index

Rank By Response Time

Week of 05-22-2006

Rank	Target	Response Time (sec)	Rank Last Week
1	Walmart	7.31	2
2	Office Depot	7.33	1
3	Best Buy	8.62	4
	Index	10.64	

Rank By Success Rate

Rank	Target	Success Rate (%)	Rank Last Week
1	JCPenney	100.00	1
2	Eddie Bauer	99.91	5
3	Target	99.73	1
	Index	99.37	

Rank By Response Time

Week of 05-15-2006

Rank	Target	Response Time (sec)	Rank Last Week
1	Office Depot	7.26	9
2	Walmart	7.33	1
3	JCPenney	8.53	2
	Index	10.61	

Rank By Success Rate

Rank	Target	Success Rate (%)	Rank Last Week
1	JCPenney	99.82	3
1	Target	99.82	5
3	Office Depot	99.67	9
	Index	98.85	

Target was added to the index

Sears and Office Max were removed in this report due to insufficient data points.

Rank By Response Time

Week of 05-08-2006

Rank	Target	Response Time (sec)	Rank Last Week
1	Walmart	7.09	1
2	JCPenney	8.64	3
3	Best Buy	8.66	2
	Index	11.79	

Rank By Success Rate

Rank	Target	Success Rate (%)	Rank Last Week
1	Best Buy	99.91	6
2	Walmart	99.82	7
3	JCPenney	99.73	1
	Index	99.37	

What Can Go Wrong?

- Lots of moving parts
 - Client PCs
 - Browser versions
 - Proxy Servers
 - Firewalls
 - Client Networks
 - Internet
 - Dial-up
 - CDN and Application Networks
 - N-tiered Applications



Additionally

- End Users are distant and non-technical
- Applications deployed with minimal testing
- Lab tests do not reflect real world

Web App Monitoring - Top Ten Considerations

1. Site URL Health
2. Host URL Health
3. Average Page Display Time
4. Host Resources (CPU, RAM, Java, NIC)
5. ODBC Connection
6. Search App Health (Collection health)
7. User Sessions (logon, response time, failed requests)
8. Web Services (XML, M-Q, SOA)
9. Regional touch point connectivity (relative to user pops)
10. Bandwidth/Network

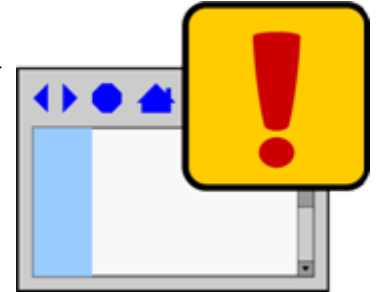
Traditional Performance Monitoring Tools

Monitor	Tool	Pro's	Con's
Synthetic Test	Keynote, Sitescope	Geo, Benchmarking, Alerting, Reporting, detects degradation	tests are pre-determined, agent based, misses the unknown, limited correlation, limited visibility to root cause, limited correlation for reporting, used by operations only
Web Analytics	WebTrends	Site usage metrics, easily consumed by ops and business, customer friendly	limited fault detection, limited RCA, limited SLA management
Device Monitoring	Syslog, HP Open View, MRTG, Sitescope, HP SIM, MOM	CPU, RAM, Network, Disk Space, Server Processes, detects degradation, preset thresholds	tests are pre-determined, misses the unknown, limited correlation, limited visibility to root cause, limited correlation for Reporting, used by operations only
Application Logging	ATG Event Logging, Jboss Server Logs, OS Logs	Depth of data, RCA, custom error traps	too much data in too many logs, requires app engineer, costly to maintain history, host by host view, used by operations and engineering only

Can You Satisfy all Business Units with Consistent Data?

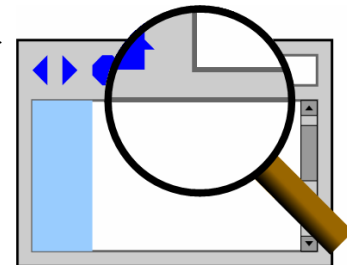
Operations/Support teams

- ***find and isolate problems instantly***
- ***capacity planning***
- ***scale subject matter expertise***



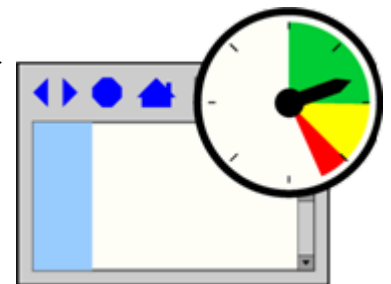
Engineers

- ***track changes & upgrades closely***
- ***improve MTTR***
- ***improve release rate and quality***



Business owners

- ***monitor customer quality of service***
- ***dispute faults outside of SLA***
- ***invoice off transaction counts***

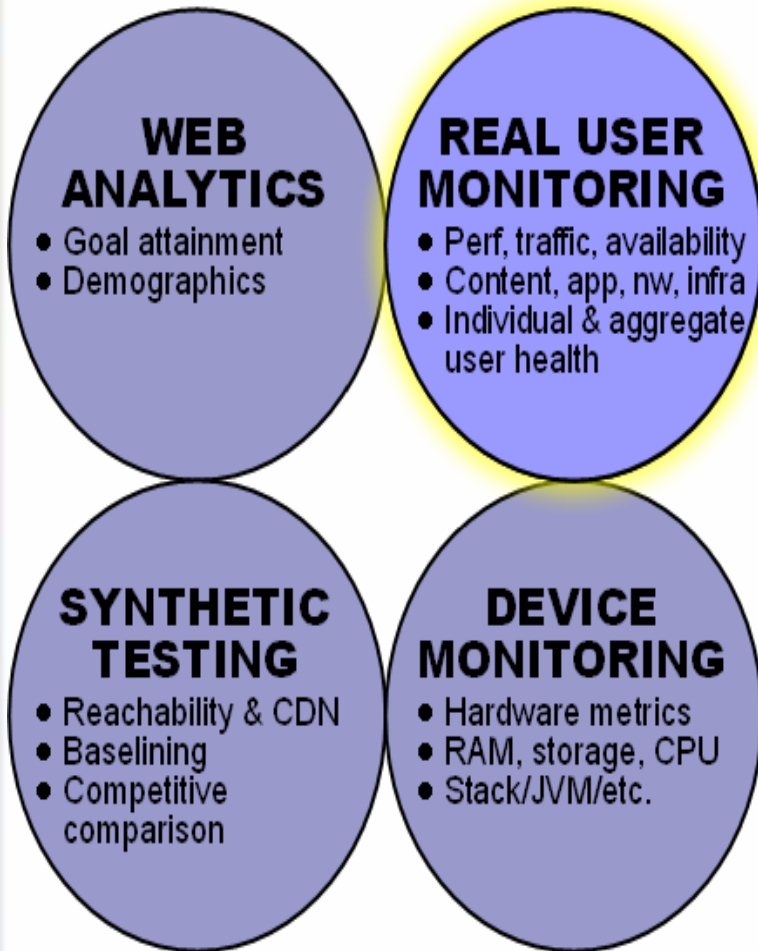


Real User Monitoring (RUM)

A new set of tools known as Real User Monitoring, or RUM has emerged. RUM measures the performance, availability, and traffic levels of an application by watching actual end-user transactions. This is in sharp contrast to earlier methods, since it shows what actually happened.

Real User Monitors work at the application level. They're fluent in http, and able to follow the language of the web. They can measure actual page load times, broken down into the elements of delay.

Coradiant True Sight - Real User Monitoring (RUM)



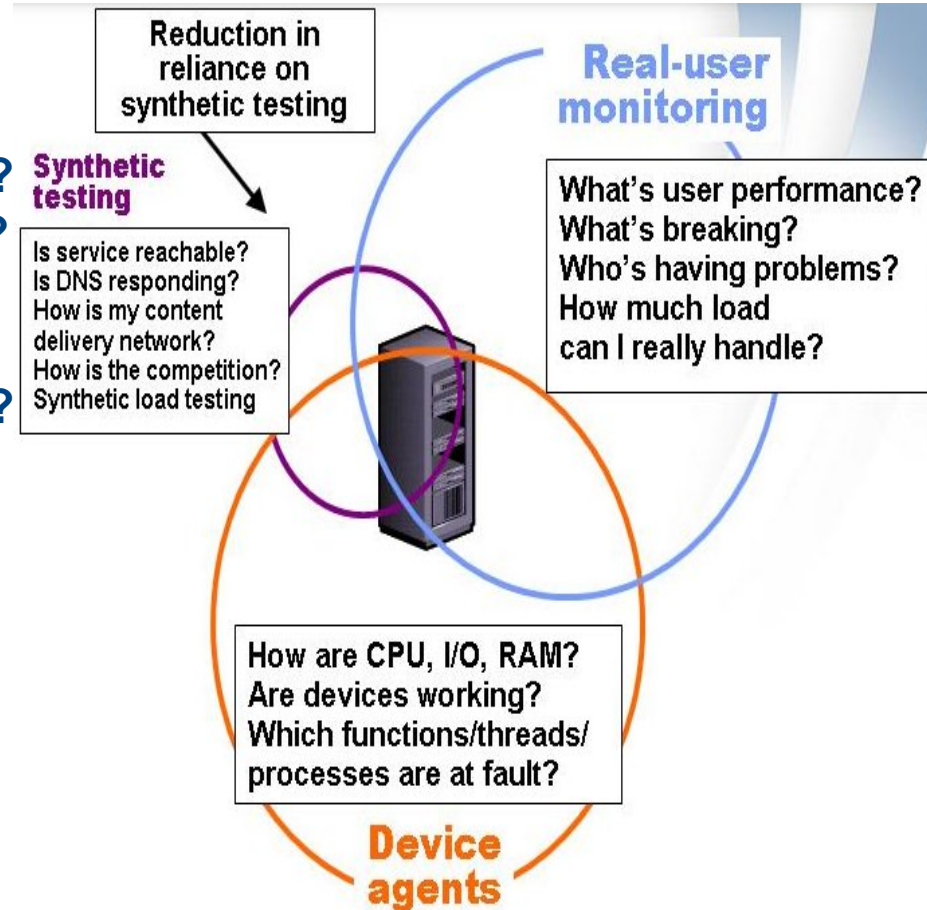
RUM is a cornerstone of web application monitoring

- Without it:
 - No way to measure end user experience
 - No immediate detection of user errors
 - No problem reproduction
 - No view of what really happens in production
 - No consolidated cluster and host view

Coradiant True Sight: Real User Monitoring

Real User Monitoring answers these important questions:

- What do your users experience?
- Is the aggregate experience good?
- Are important users having trouble?
- Are my users achieving their goals?
- How are they using the app?
- Did the app perform properly?
- How did the infrastructure respond?
- Is something broken now?
- Where are the hidden problems?
- Has my change broken something?
- Why is response time up?
- Where is the problem?
- Are things changing over time?
- Did the user change something?



The Solution – TrueSight Anecdotes

- ❑ Pre-Launch QA – www.RoadRunnerSports.com
- ❑ JAD Code Review – www.TheCoca-ColaStore.com
- ❑ Pre-Sales POC – Shell
- ❑ Sustainment Fault Redirection - Progress
- ❑ Web Services Integration – New York and Co
- ❑ User adoption during POC evals – OD Service
- ❑ Professional Reports – Read to us assets

What is important to ATG?



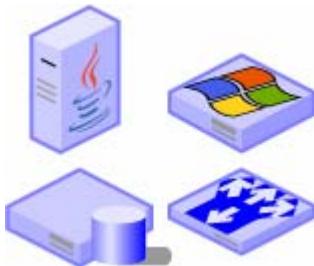
• User

- What level of service are users getting?
- Is it us or them?
- Who is the most at risk?
- What was performance like for customer X this term?



• Application

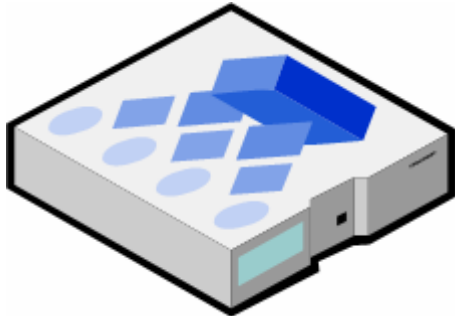
- What is worse off today, this month, this quarter?
- What changed today, this week, this month?
- How long has it been like that?



• Infrastructure

- How did the change affect my capacity?
- Which are my most problematic servers?
- What is load like this email campaign compared to last? Can I correlate that to peak usage to plan for holidays?

Next Gen Web Intelligence



- Coradiant Web.i Platform
 - Dramatically Extends True Sight capabilities
 - 25,000 watchpoints transforms TrueSight data into rich, business-relevant analytics
 - 15 months of data history
 - Cubed data model allows for multi-dimensional correlation
 - Drill anything
 - Multiple datacenter aggregation
- Report Center module
 - Enterprise-class Business Intelligence solution
 - Deep analysis of traffic, availability, and performance
 - At-a-glance dashboards and boardroom-ready reports
 - Easy to use, infinitely customizable

**Thank you for the
opportunity.**

Questions? & Open Discussion