



Can you monitor your CA Gen applications in real-time?

## **APMConnect for CA Gen**

## **APMConnect for COBOL**

Customer outreach  
Hamburg, Germany  
Thursday 27<sup>th</sup> September.

# Who are Response Systems?



## Independent Software Vendor (ISV)

- Founded in 1996 in the UK, with over 150 customers globally
- A long-established CA Technologies product partner
- Acquired by Facet Consulting from Australia in 2007
- Offices in Australia and the United Kingdom

## Product offerings for z/OS application customers

- ***APMConnect for Cobol*** enables real-time APM on Cobol
- ***APMConnect for CA Gen*** enables real-time APM on CA Gen

## Product offerings for CA Gen customers

- *Access Gen, QA Console and Upgrade Console.*

# Overview



The **changing world** of Application Performance Monitoring

An overview of the APMConnect **solution architecture**

A look at key product **features**

**APMConnect demonstration**

A summary of solution **benefits.**





# **the changing world of APM**

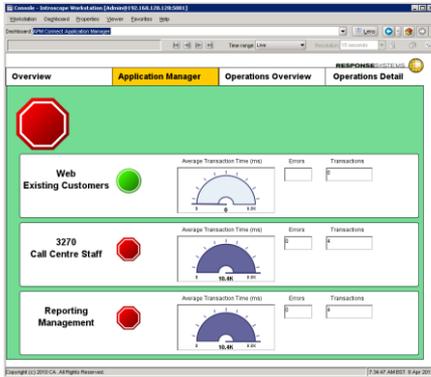


# The fundamental demands are unchanged



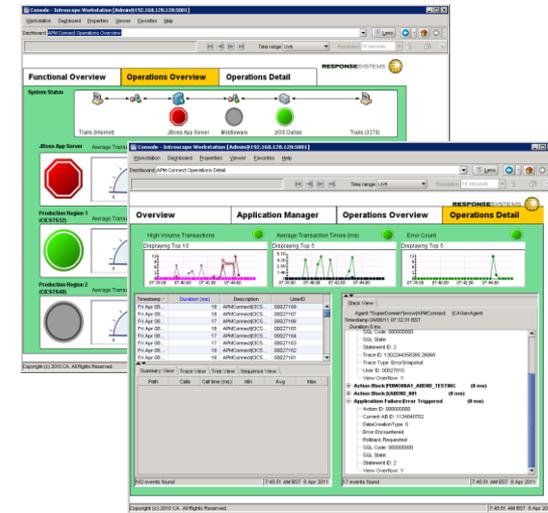
**Service Assurance – is everything ok?**

For ICT and Business owners – is the functionality I am responsible for being delivered?



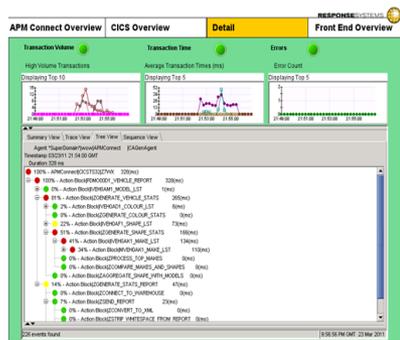
**Triage – where are my problems?**

Avoid the blame-game - quickly identify exactly where in the application stack the problems exist – so they can be remedied



**Performance – can I get more from my resources?**

Identifying hotspots and bottlenecks within large and complex applications can unlock significant cost savings



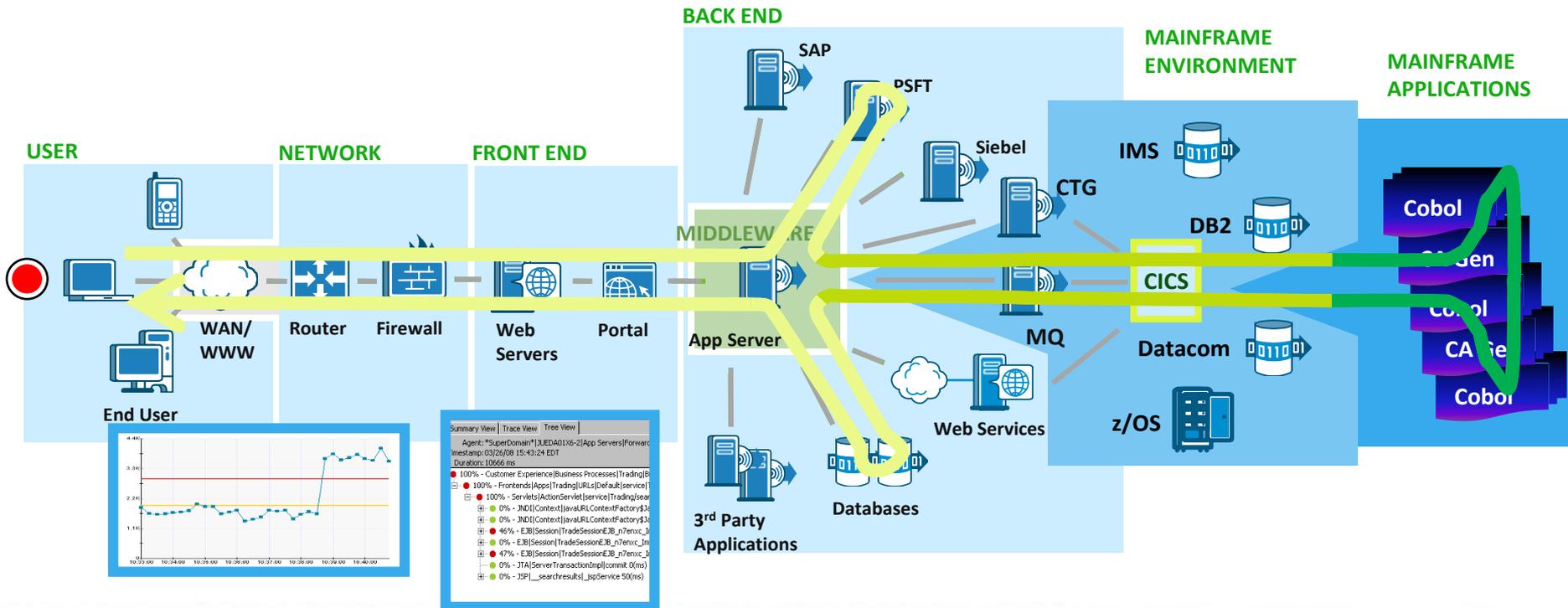
# APM demands driven by application complexity



Applications are becoming more complex

Identification of where problems lie is now much more difficult

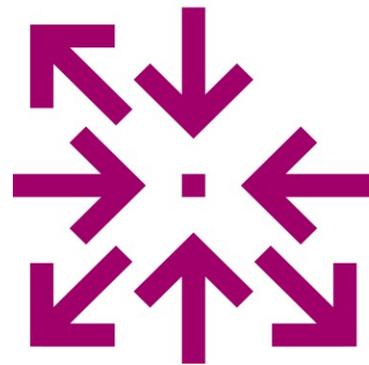
The ability to rapidly identify the where the problem is located is now critical to any remediation.



# Monitoring capability must match application complexity



“The gulf that has historically divided mainframe systems management and distributed systems management at most IT organizations is extremely problematic when it comes to maintaining the health of the kind of multi-tier applications widely in use today...



...by offering a practical way to bridge this gulf, tools that collect and assess information from multiple platforms can help IT organizations do a better job of ensuring optimized service levels for these multi-tier applications.”

***Bill Malik, Research Director, Gartner***

# Business delivery is application focused



“While most IT operations teams still regard the management of infrastructure components (virtual and real servers, networks, and storage farms) as their core competency, they have increasingly come to understand that these elements deliver **value to the business only in the context of the applications they support...**



...Business decision makers have, in fact, been the most enthusiastic advocates of application-centric IT operations management.. ..to them, the most important and visible element that IT delivers with regard to **business process execution is the predictable and effective flow of application-based transactions.**“  
*Will Cappelli, Research VP, Gartner*

Source: Gartner Group, 2010  
Magic Quadrant for Application performance Monitoring  
Gartner RAS Core Research Note G00173116, Will Cappelli

# The evolution of enterprise APM



## Early monitoring software (APM 1.0)

- Platform centric – rather than cross-platform
- Infrastructure focused – rather than application focused
- Heavy footprint – see everything, but at a significant overhead
- Eg: BMC TriTune, Compuware STROBE, IBM Omegamon/Expediter

## APM2.0 overcame these to meet market demands

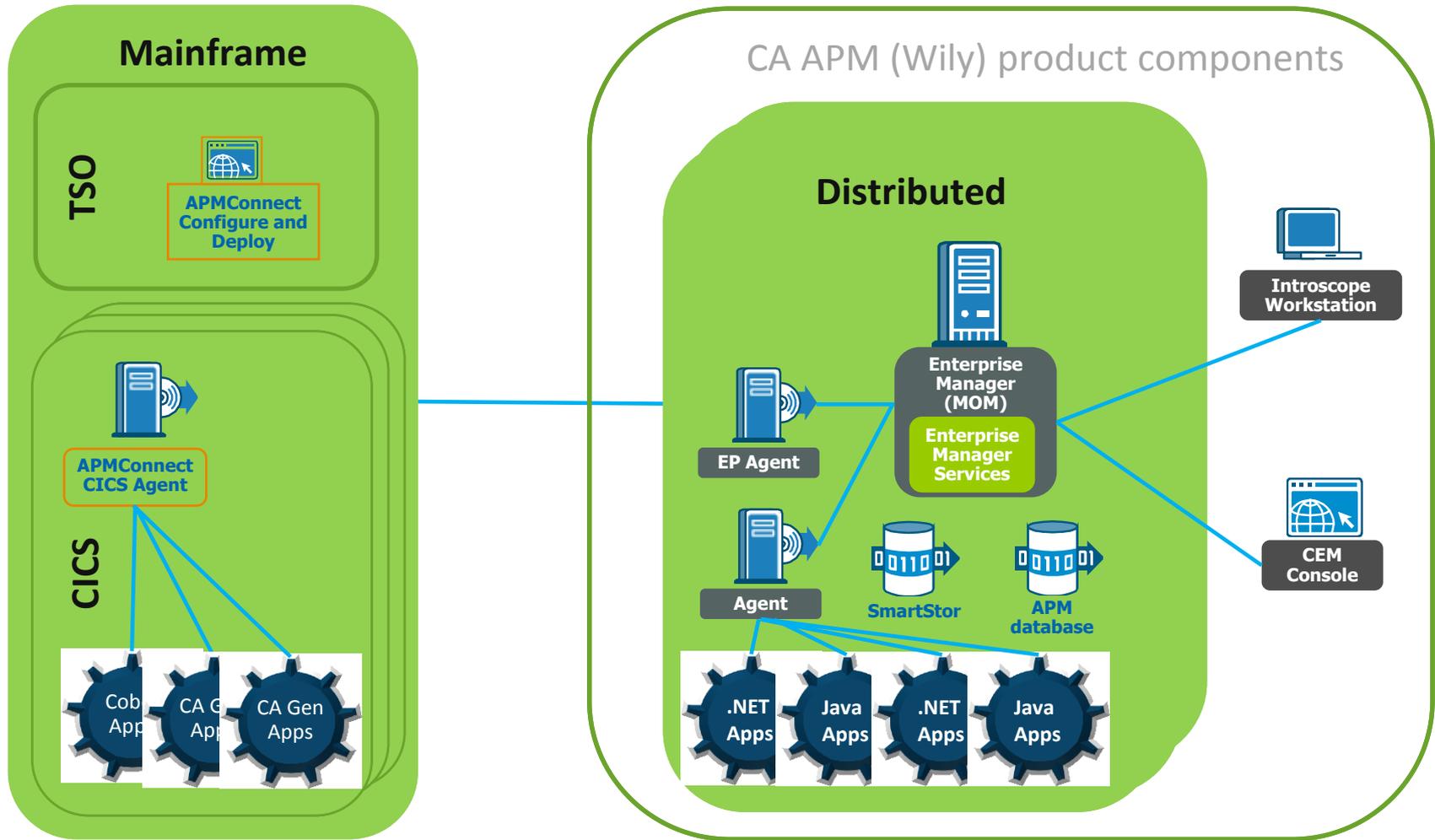
- **Wily** largely defined and then led this new market for APM2.0
- A single perspective over multiple application platforms
- APM that is Applications rather than infrastructure focused
- A footprint that enables always-on – providing proactive visibility
- **APMConnect is APM2.0 capability for mainframe applications.**



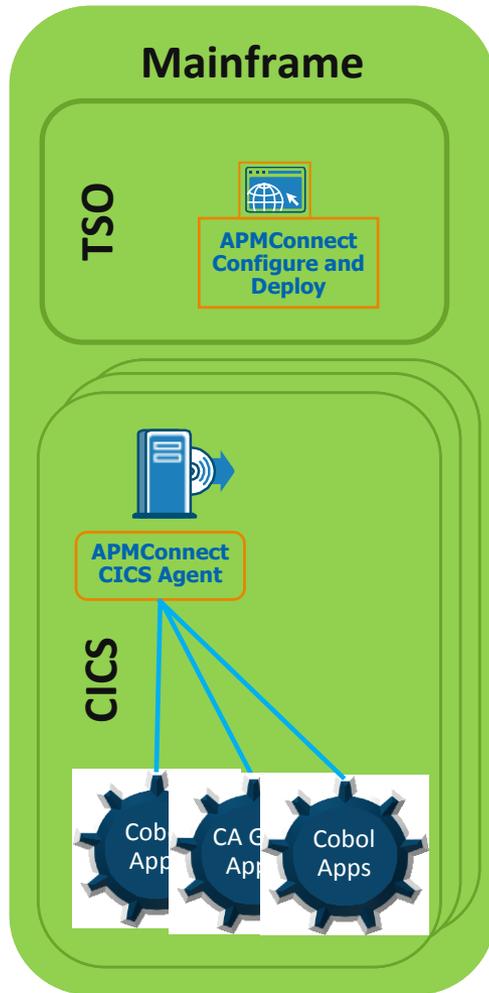
**so how does APMConnect work?**



# APMConnect solution architecture



# APMConnect solution architecture



## APMConnect Configure and Deploy

- Rapid deployment to CICS regions
- Manage Transaction Trace filtering
- Monitors APMConnect CICS Agents

## APMConnect CICS Agent

- Integrates with any CA Gen transactions
- Configured to dynamically filter by
  - transaction code
  - execution duration thresholds
  - transaction failure thresholds
- Sends data across to CA APM (Wily).

# APMConnect solution architecture

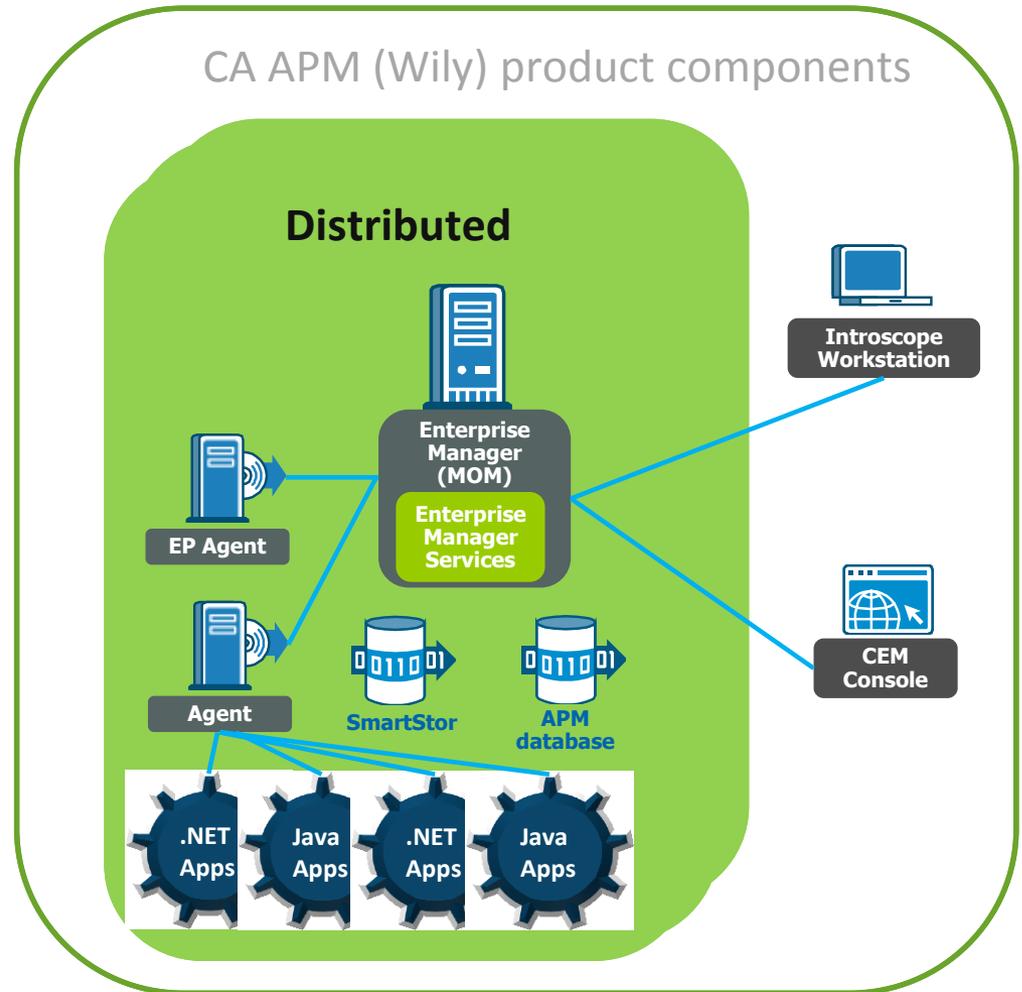


## CA APM (Wily)

- Out of the box
- Known and proven
- APMConnect plugs in through EP Agent
- Seamless and instant

## Introscope & CEM

- All the powerful features of world-class APM
- Now with the same deep dive for CA Gen apps.





# key product features



# See inside executing applications



The screenshot shows the 'Transaction Trace Viewer' interface. At the top is a table with columns: Type, Domain, Host, Process, Agent, Timestamp, Duration(ms), Description, and UserID. Below the table is a 'Summary View' section with tabs for 'Trace View' and 'Tree View'. The 'Tree View' is active, showing a hierarchical tree of actions with colored circles indicating their status and percentage of completion. The tree includes various action blocks such as 'Action Block|DLB0\_GET\_DRIVER\_LICENCE\_RCPT\_SVR', 'Action Block|DL\_V\_GET\_DRIVER\_LICENCE\_RCPT', and 'Action Block|CLIC1071\_TL\_LSTNXT\_SC\_ID'. The bottom of the window shows 'Traced 8 transactions: exceeding 5000 milliseconds' and 'Active Tracing ends in 0.00:25'.

Use the Tree View to..

..traffic lights for execution highlights

..and the elapsed time in ms

..see the call stack exploded

..instant visibility to where time is spent.

# Visibility across technology platforms



Historical Query Viewer - Introscope Workstation [Admin@SHOCONT284:5000]

Workstation Edit Trace Properties Help

Events Query

Query: |trg02\*

Go ? Time range: All

Type	Domain	Host	Process	Agent	Timestamp	Duration(ms)	Description	UserID
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	21/10/2011 10:46:09 AM	504	/tica-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	21/10/2011 11:34:24 AM	478	/tica-feb-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	21/10/2011 12:28:58 PM	153	/tica-feb-war/TCRG02CIServletManager	
E	*SuperDomain*	zzlnx040	WebSphere	mix-a	21/10/2011 12:28:59 PM	38795	JSP_trg02ci	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	24/10/2011 4:47:42 PM	6281	/tica-feb-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	25/10/2011 9:43:51 AM	51	/tica-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 11:21:02 AM	282	/tica-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 11:33:04 AM	329	/tica-feb-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 12:37:09 PM	3584	/tica-feb-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 12:51:35 PM	118	/tica-feb-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 12:52:59 PM	16	/tica-war/TCRG12CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 12:59:07 PM	1715	/tica-feb-war/TCRG02CIServletManager	
R	*SuperDomain*	zzlnx040	WebSphere	mix-a	27/10/2011 1:03:10 PM	6626	/tica-feb-war/TCRG02CIServletManager	

Summary View | Trace View | Tree View

Agent: \*SuperDomain\*|zzlnx040|WebSphere|mix-a

Timestamp: 10/24/11 16:47:42 GMT+10:00

Duration: 6281 ms

Zoom

(ms) 0 250 500 750 1000 1250 1500 1750 2000 2250 2500 2750 3000 3250 3500 3750 4000 4250 4500 4750 5000 5250 5500 5750 6000 6250

JSP\_trg02ci

APMConnect|VCICD1|RGK4

COBOL\_TIRDMGR

Action Block|RGK4\_GET\_TRAILER\_REG\_SUMM\_SVR

Action Block|RG\_V\_GET\_REG

Type: APMConnect

Name: RGK4

Path: APMConnect|VCICD1|RGK4

Performance

Duration: 4233 ms

Timestamp (relative): 0 ms

100% of total transaction time

Properties

GUID: 1365443417

User ID: RYWEATH

44 events found

28/10/2011 10:39:07 AM

Use the Trace View to see the visual layout..

..the platform running Java..

..and selecting this called service..

..provides the tx details and..

..calling 3 CA Gen mainframe services

..the end user.



# When things go wrong



Historical Query Viewer - Introscope Workstation [Admin@SHOCNT284:5000]

Workstation Edit Trace Properties Help

Events Query

Query: type:errorsnapshot

Type	Domain	Host	Process	Agent	Timestamp	Duration(ms)	Description
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	26/10/2011 4:19:56 PM	14267	APMConnect\VCICD1\RGK3
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 8:36:34 AM	287	APMConnect\VCICD1\JTL4
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 8:38:49 AM	62	APMConnect\VCICD1\JTL4
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 8:54:06 AM	91580	APMConnect\VCICD1\JTL4
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 3:44:35 PM	34065	APMConnect\VCICD1\DLB1
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 3:45:16 PM	6144	APMConnect\VCICD1\DLB1
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 3:46:02 PM	26439	APMConnect\VCICD1\DLB1
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 3:46:35 PM	85973	APMConnect\VCICD1\DLB1
E	"SuperDomain"	SHOCNT284	APMConnect	CAGenAgent	27/10/2011 3:48:12 PM	234866	APMConnect\VCICD1\DLB1
E	"SuperDomain"	zzhx040	WebSphere	mix-a	19/10/2011 10:48:31 AM		
E	"SuperDomain"	zzhx040	WebSphere	mix-a	19/10/2011 10:48:32 AM	11	Backends\stmngd1 ora-essda-dev1-1521 (Oracle DB)
E	"SuperDomain"	zzhx040	WebSphere	mix-a	19/10/2011 10:48:32 AM	13	Backends\stmngd1 ora-essda-dev1-1521 (Oracle DB)
E	"SuperDomain"	zzhx040	WebSphere	mix-a	19/10/2011 10:48:32 AM	11	Backends\stmngd1 ora-essda-dev1-1521 (Oracle DB)
E	"SuperDomain"	zzhx040	WebSphere	mix-a	19/10/2011 10:48:33 AM	13	Backends\stmngd1 ora-essda-dev1-1521 (Oracle DB)

Stack View

Agent: "SuperDomain"[SHOCNT284\APMConnect\CAGenAgent]  
Timestamp: 10/27/11 15:48:12 GMT+10:00  
Duration: 234866 ms

Error at 15:48:12.732 (27 Oct 2011)

- APMConnect\VCICD1\DLB1 (0 ms)
  - DataCreationType: 0
  - Trace ID: 1319694730949:4740
  - Trace Type: ErrorSnapshot
  - User ID: WEBAPPD
- COBOL\TIRDMGR (0 ms)
- Action Block\DLB1\_GET\_DL\_RENEWAL\_FOR\_WEB\_SVR (1 ms)
- Action Block\DL\_L\_GET\_DL\_RENEWAL\_FOR\_WEB (2651 ms)
- Action Block\CTRL0310\_GET\_AVAIL\_DL\_RIWL\_TERMS (4460 ms)
- Action Block\CTRL0249\_DET\_SMRTCRD\_EXPIRY\_DATE (102935 ms)
- Action Block\CTRL1205\_SYSTEM\_PARAMETER\_GET (102935 ms)
- Action Block\ICBD1201\_SYSTEM\_PARAMETER\_GET\_S (102936 ms)
- Action Block\ICBD1201\_SYSTEM\_PARAMETER\_GET (102936 ms)
- Action Block\ICBD1021\_SYSTEM\_PARAMETER\_O (102937 ms)
- External Action Block\ICBD1131 (102938 ms)
- Action Block\CCBD1032\_MAPPER\_ERROR\_HANDLER (201815 ms)
  - Action ID: 000000000
  - Current AB ID: 975405999
  - DataCreationType: 0
  - Error Message: View Overflow (Statement #84)
  - SQL Code: 000000000
  - Statement ID: 84
  - View Overflow: Y

285 events found

28/10/2011 10:33:10 AM

Jump into the error snapshots

.. select the instance of interest

.. review the call stack that executed

.. and the action block & statement in error.



**let's have a look - demonstration**





**what makes APMConnect unique?**



# Market leading benefits and features



- ✓ **Pro-active mainframe application monitoring**  
Minimal footprint enables always-on monitoring
- ✓ **Performance analysis on consolidated transactions**  
Identify hotspots in your application to deliver cost savings
- ✓ **Sub-transactional visibility in real-time**  
See the execution path inside the transaction, as it occurs
- ✓ **End-to-end cross-platform transaction integration**  
Follow your business transaction across each technical platform
- ✓ **Non-intrusive to executing applications**  
No source code changes, no recompiles, relinks or rebinds needed.

# Additional features for APMConnect for CA Gen



## ✓ **Application monitoring in a CA Gen context**

Monitoring that gives developers information to instantly act on  
Precise error diagnostics for resolving failure incidents rapidly  
No other product provides this real-time CA Gen context

## ✓ **Cross-platform support for CA Gen deployment**

Drill down inside executing CA Gen mainframe transactions  
See inside executing CA Gen windows client transactions  
Integrate with Java and .NET proxy services across platforms.

# Thank you



## For further information

- [www.response-systems.com/solutions/apm](http://www.response-systems.com/solutions/apm)
- [performance@response-systems.com](mailto:performance@response-systems.com)

## To discuss a software trial in your environment

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