Exploiting IT Log Analytics to Find and Fix Problems Before They Become Outages

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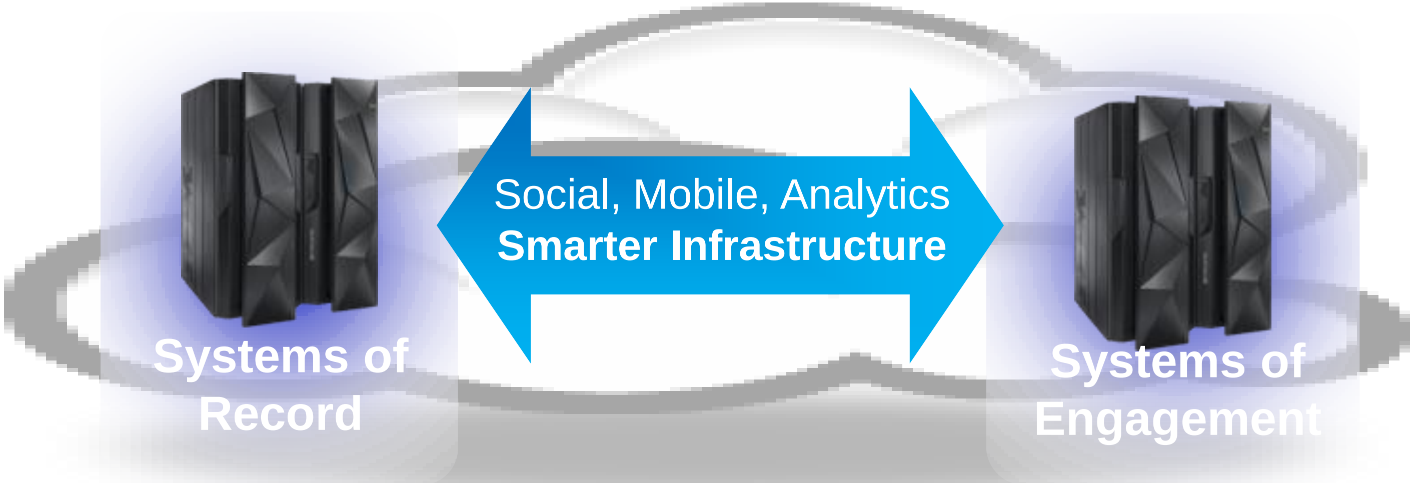
SHARE in Seattle 2015

Agenda

- Why IT Analytics
- Predict, Search, Optimize
- zAware
  - Capabilities
  - Interface
  - Integration with OMEGAMON
- SmartCloud Analytics – Log Analysis
  - Capabilities
  - Interface
  - Integration with OMEGAMON
  - Integration with Event Management
- Coming Soon … Join the Beta
- Reference Materials

Rapid growth of data from next generation technologies can be supported seamlessly on z Systems

System z scaling model and security to manage and optimize both



- Business Transactions
- Quality of Service
- Command & Control
- Facts and data “source of truth”
- z Systems

- Mobile and Social
- Dynamic
- Interactions and Collaboration
- Insight, trends, analytics

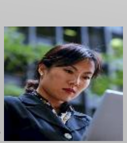
New Technologies like cloud and big data already challenging current Enterprise tools

- **Too long to isolate, diagnose problems in applications and infrastructure.**
  - Complex application workloads span multiple platforms
  - Increasing amounts of IT data:
    - Performance metrics, events, infrastructure logs, application logs, configuration files, traces
- **Existing IT tools inappropriate for management of Systems of Engagement**
  - 100x to 1000x explosion in data flooding existing tools.
  - New runtimes, programming languages needing complex instrumentation.
- **Reactive analytics misses critical information leading to outages**
  - Analyzing all information better for predicting problems.

Is managing IT today like sipping from a fire hose?

Analysis – The Problem

Find the right needle in one of many haystacks – QUICKLY!



404 ERROR

It’s SLOW!!

Centralized, Distributed, Cloud, Resilient Architectures Increase Data Volume

Everything is “green”

Where do I start??

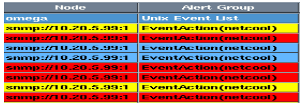
Logs, Traces,..

[10/9/12 5:51:38:295 GMT+05:30] 0000006a servlet E com.ibm.ws.webcontainer.servlet.ServletWrapper service SRVE0068E:

Core files

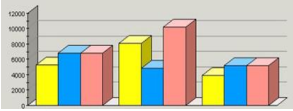
```
010001100011100001110
011000111110000110001
111111000110011100011
```

Events

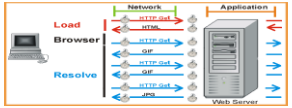


Node	Alert Group
omega	Unix Event List
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)
snmp://10.20.5.99:1	EventAction(netcool)

Metrics



Transactions



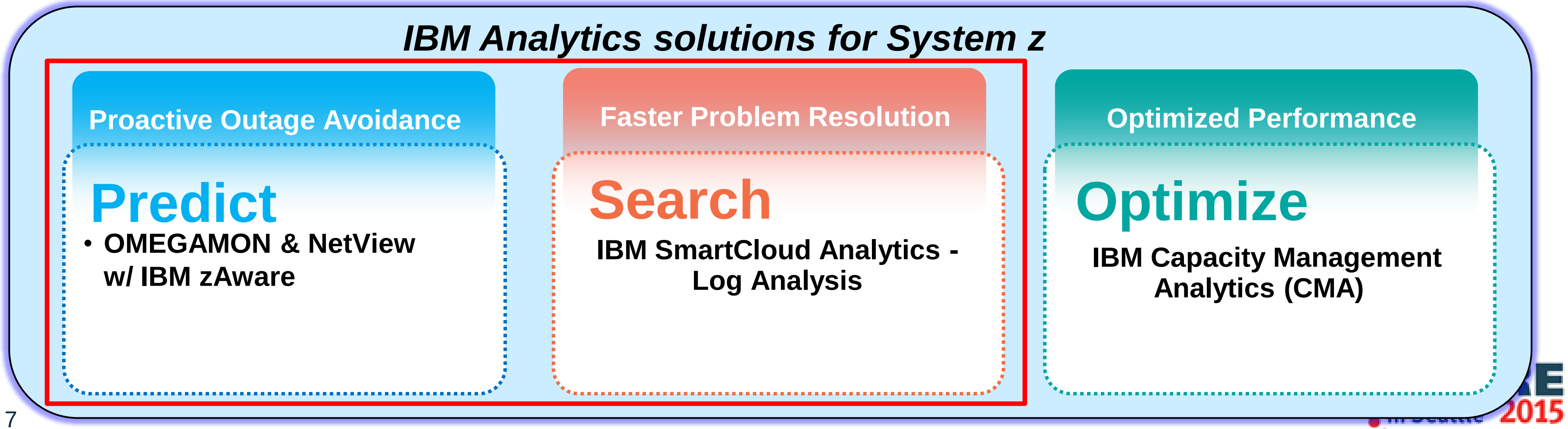
Config

IBM focused on managing end-to-end analytics for improved performance and workload management

Predict:
- Pro-Active Outage Avoidance
- Predict problems before they occur

Search:
- Quickly search large volumes of log data from a single search bar
- Perform log analysis while searching
- Correlate messages from multiple logs for end-to-end problem diagnosis

Optimize:
- Improve performance across IT Infrastructure



IBM Analytics solutions for System z

Proactive Outage Avoidance

Predict

- **OMEGAMON & NetView w/ IBM zAware**

Faster Problem Resolution

Search

IBM SmartCloud Analytics - Log Analysis

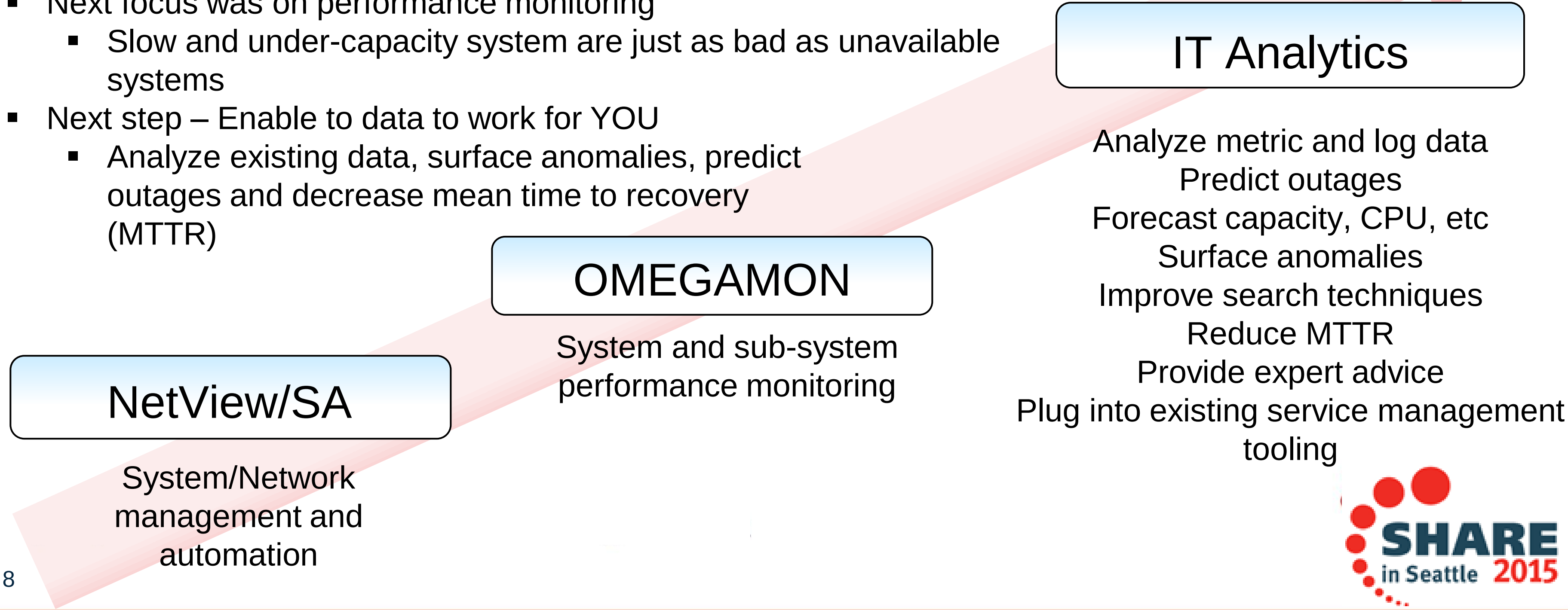
Optimized Performance

Optimize

IBM Capacity Management Analytics (CMA)

Analytics is the next step in IBM value add for zEnterprise performance and availability management

- This journey started with NetView/SA
  - Too many messages
  - Need to filter, automate, generate events
- Next focus was on performance monitoring
  - Slow and under-capacity system are just as bad as unavailable systems
- Next step – Enable to data to work for YOU
  - Analyze existing data, surface anomalies, predict outages and decrease mean time to recovery (MTTR)



NetView/SA

System/Network management and automation

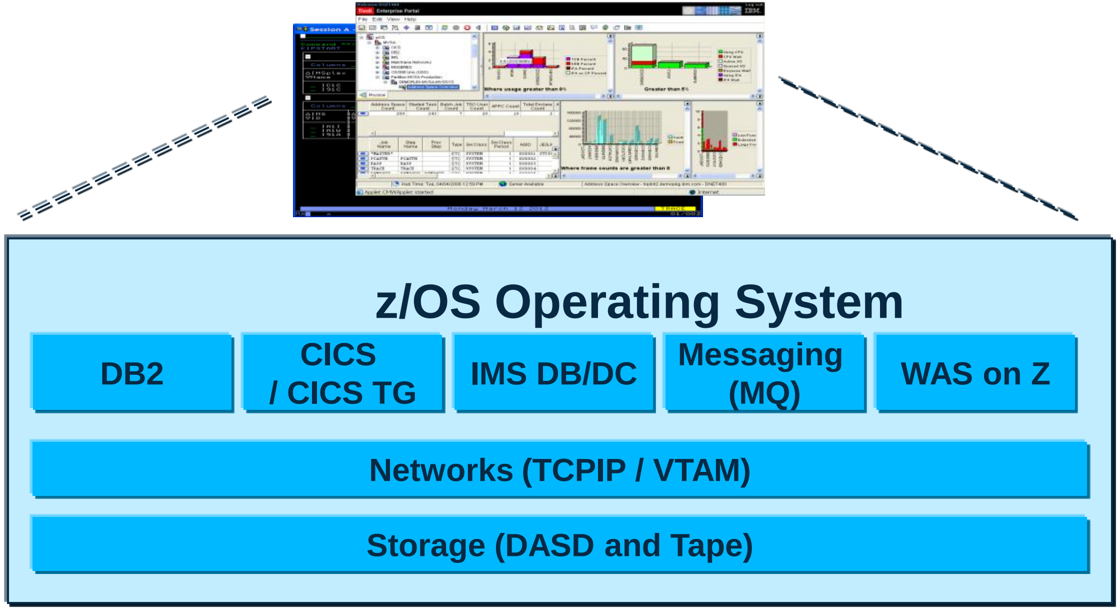
OMEGAMON

System and sub-system performance monitoring

IT Analytics

Analyze metric and log data
Predict outages
Forecast capacity, CPU, etc
Surface anomalies
Improve search techniques
Reduce MTTR
Provide expert advice
Plug into existing service management tooling

IBM OMEGAMON Performance Management Suite for z/OS



z/OS Operating System

DB2

CICS / CICS TG

IMS DB/DC

Messaging (MQ)

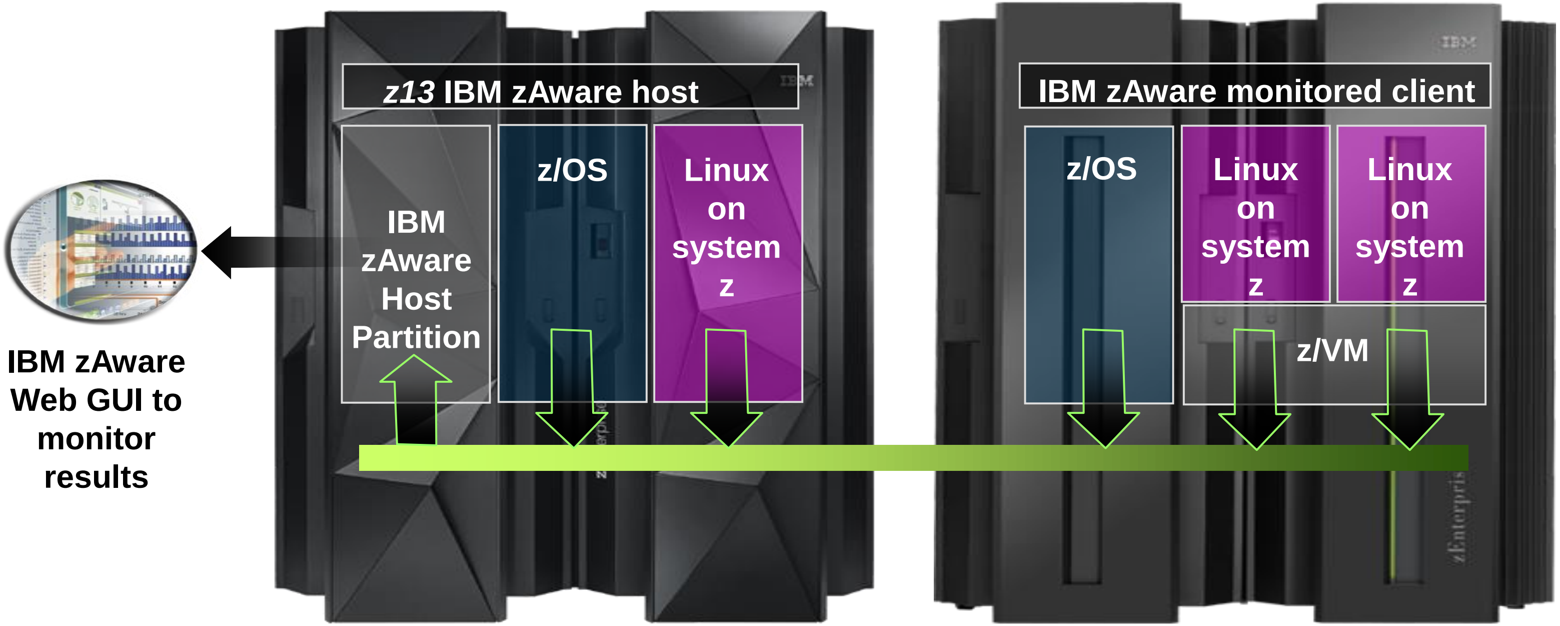
WAS on Z

Networks (TCPIP / VTAM)

Storage (DASD and Tape)

Tivoli OMEGAMON Performance Management Suite for z/OS provides an *integrated solution* with extensive capabilities to manage on-line and middleware sub-systems like CICS, DB2, IMS, WAS on z/OS and the z/OS Operating System, Networks and Storage which supports these capabilities

IBM zAware V2.0 - Analyze z/OS and Linux on z Systems



z13 IBM zAware host
IBM zAware Host Partition
z/OS
Linux on system z
IBM zAware monitored client
z/OS
Linux on system z
Linux on system z
z/VM
IBM zAware Web GUI to monitor results

- Identify unusual system behavior of z/OS and Linux images running on z Systems
- Proactively surface log message anomalies

What can zAware do for you? *Identify unusual behavior quickly*

Which z/OS image is having unusual message patterns?

- High score generated by unusual messages or message patterns
- GUI shows all systems or selected subsets

Which subsystem or component is abnormal?

- Examine high-scoring messages

When did the behavior start?

- Which messages are unusual?
- How often did the message occur?

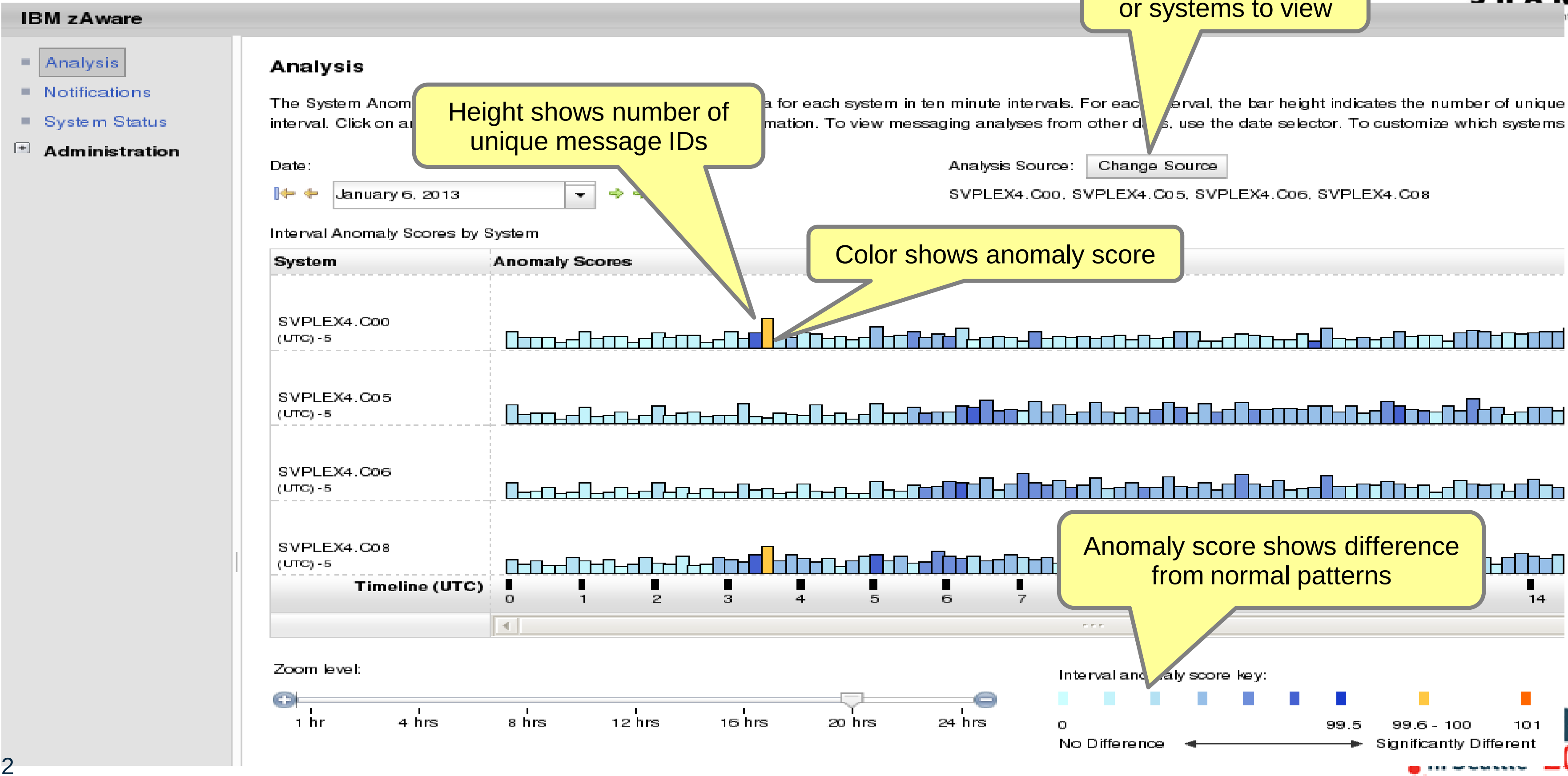
Were similar messages issued previously

- Easily examine prior intervals or dates

Is the unusual behavior after some maintenance or upgrade?

- Easily pinpoint changes caused by new software levels, configuration settings.

Analysis View



IBM zAware

- Analysis
- Notifications
- System Status
- Administration

Analysis

The System Anom a for each system in ten minute intervals. For eac erval, the bar height indicates the number of unique interval. Click on ar mation. To view messaging analyses from other d s, use the date selector. To customize which systems

Date: January 6, 2013

Analysis Source: Change Source

SVPLEX4.C00, SVPLEX4.C05, SVPLEX4.C06, SVPLEX4.C08

Interval Anomaly Scores by System

Select which sysplex or systems to view

Height shows number of unique message IDs

Color shows anomaly score

Anomaly score shows difference from normal patterns

Predictive Analysis integrating IBM zAware’s Anomaly Detection and Performance Monitoring

- Save money ensuring z/OS availability. Highlight potential system health problems which will improve service and reduce business risk.
- Transition to a Problem Management platform with integration to NetView and/or OMEGAMON

Predict

Event Management OMNIbus

Problem Determination NetView CANZLOG

Performance Monitoring OMEGAMON

IBM zAware

Surface Anomalies

“What’s different today?”

Search for and rapidly analyze unstructured data to assist in and accelerate problem identification, isolation and repair

SmartCloud Analytics – Log Analysis

Differentiating Capabilities

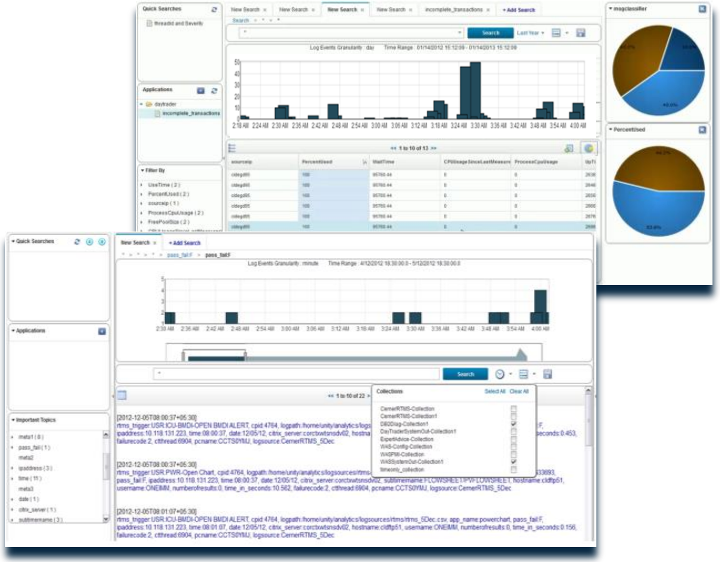
Locate **component error messages** from system, configuration, software and event logs **via rapid indexed search**

- Search logs and events across multiple platforms (distributed and mainframe), LPARs, CECs, applications, middleware, subsystems

Isolate issues and provide insights across various domains including WebSphere, DB2, CICS, IMS, MQ, OS, etc

Link support documentation and operations notes dynamically to log messages and events to resolve problems quickly

Visualize search results with analytic tools to rapidly **perform root cause analysis**



```
[2012-12-05T08:00:37+05:30]
rtms_trigger:USR:ICU-BMDI-OPEN BMDI ALERT, cpid:4764, logpath:/home/unity/analytics/logs
ipaddress:10.118.131.223, time:08:00:37, date:12/05/12, citrix_server:corctwtsnsdv02, hostna
failurecode:2, ctthread:6904, pcname:CCTS0YMJ, logsource:CernerRTMS_5Dec

[2012-12-05T08:00:37+05:30]
rtms_trigger:USR:PWR-Open Chart, cpid:4764, logpath:/home/unity/analytics/logsources/rtms
pass_fail:F, ipaddress:10.118.131.223, time:08:00:37, date:12/05/12, citrix_server:corctwtsnsdv02, subtimename:FLOWSHEET/PVFLOWSHEET, hostname:cldftp51,
username:ONEIMN, numberofresults:0, time_in_seconds:10.562, failurecode:2, ctthread:6904, pcname:CCTS0YMJ, logsource:CernerRTMS_5Dec

[2012-12-05T08:01:07+05:30]
rtms_trigger:USR:ICU-BMDI-OPEN BMDI ALERT, cpid:4764, logpath:/home/unity/analytics/logsources/rtms/rtms_5Dec.csv, app_name:powerchart, pass_fail:F,
ipaddress:10.118.131.223, time:08:01:07, date:12/05/12, citrix_server:corctwtsnsdv02, hostname:cldftp51, username:ONEIMM, numberofresults:0, time_in_seconds:0.156,
failurecode:2, ctthread:6904, pcname:CCTS0YMJ, logsource:CernerRTMS_5Dec
```

Search for and rapidly analyze unstructured data to assist in and accelerate problem identification, isolation and repair

SmartCloud Analytics – Log Analysis

£€ $¥ Delivering Business

Reduce mean time to repair by identifying and isolating service impacting issues quickly

Resolve problems more efficiently with faster access to all pertinent information

Reduce effort by consolidating, analyzing information in real-time

Improve service availability by leveraging expert knowledge of applications and infrastructure

Built on IBM's leading Big Data platform

IBM expertise built-in

Download and install in minutes for quick time-to-value

Customer Experiences

Large Insurance Company

- Experienced an application outage that resulted in the team working around the clock for 29 hours pouring through logs and traces to determine the root cause of the issue. After the issue was resolved, the logs were captured and sent to IBM lab for analysis using SCA-LA. Within minutes, the IBM team was able to see the scope of the issues, and find the relevant PTF to resolve the issue through the integrated expert advice.

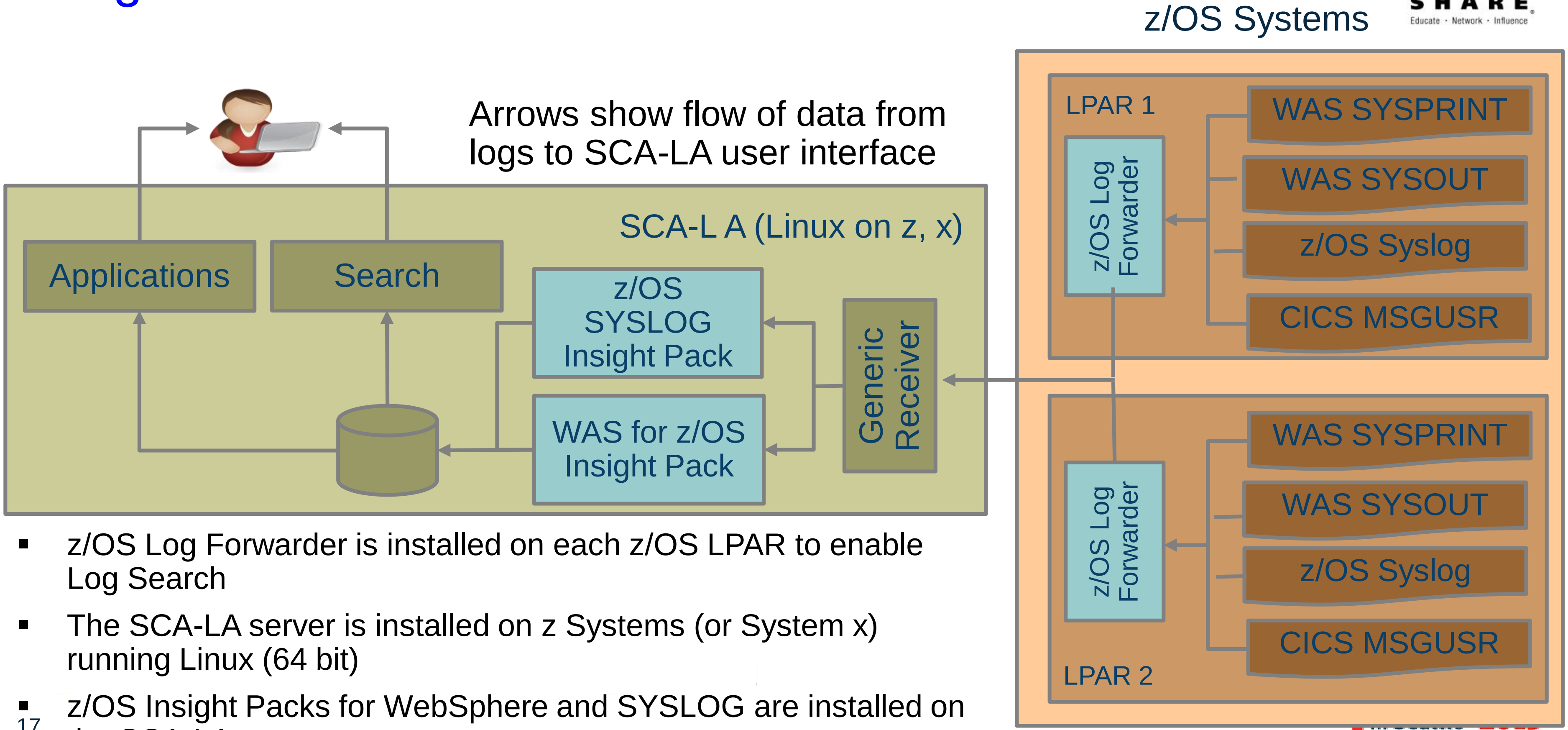
State Agency

- Were able to download, install, configure and use SCA-LA to search their logs in 2.5 hours.

Numerous Customers

- Errors lurking in logs that are never examined because they don’t necessarily cause SLA or performance problems. For example, SCA-LA found over 4,000 invalid login attempts in a three day period that had otherwise gone unnoticed.

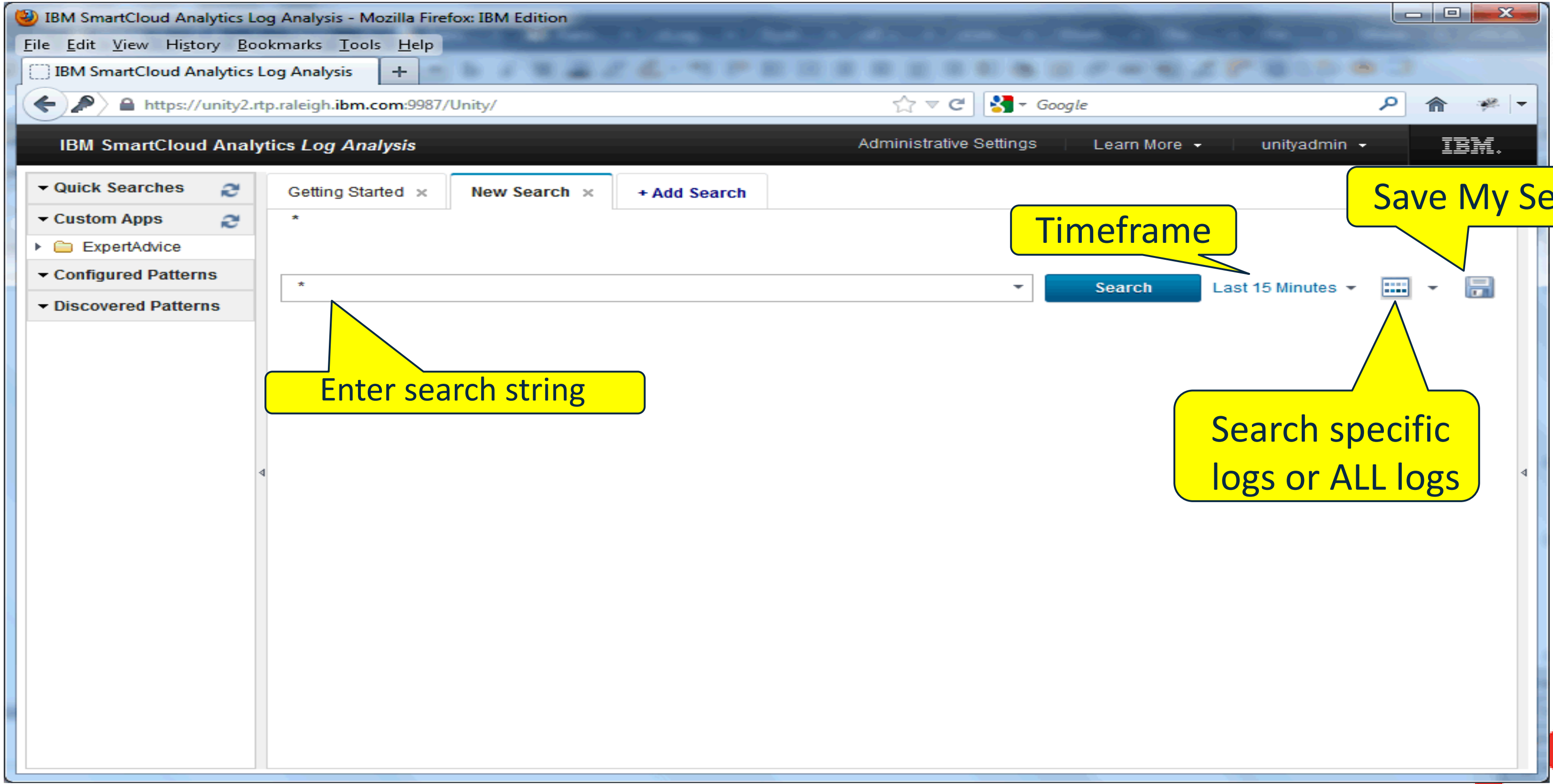
IBM SmartCloud Analytics – Log Analysis z/OS Insight Packs & SCA-LA Server



Arrows show flow of data from logs to SCA-LA user interface

- z/OS Log Forwarder is installed on each z/OS LPAR to enable Log Search
- The SCA-LA server is installed on z Systems (or System x) running Linux (64 bit)
- z/OS Insight Packs for WebSphere and SYSLOG are installed on the SCA-LA server

Simple Search Interface – Easy to Customize



IBM SmartCloud Analytics Log Analysis - Mozilla Firefox: IBM Edition
File Edit View History Bookmarks Tools Help
IBM SmartCloud Analytics Log Analysis
https://unity2.rtp.raleigh.ibm.com:9987/Unity/
Google
IBM SmartCloud Analytics Log Analysis
Administrative Settings
Learn More
unityadmin
IBM.
Quick Searches
Custom Apps
ExpertAdvice
Configured Patterns
Discovered Patterns
Getting Started
New Search
+ Add Search
*
Search
Last 15 Minutes

Save My Search

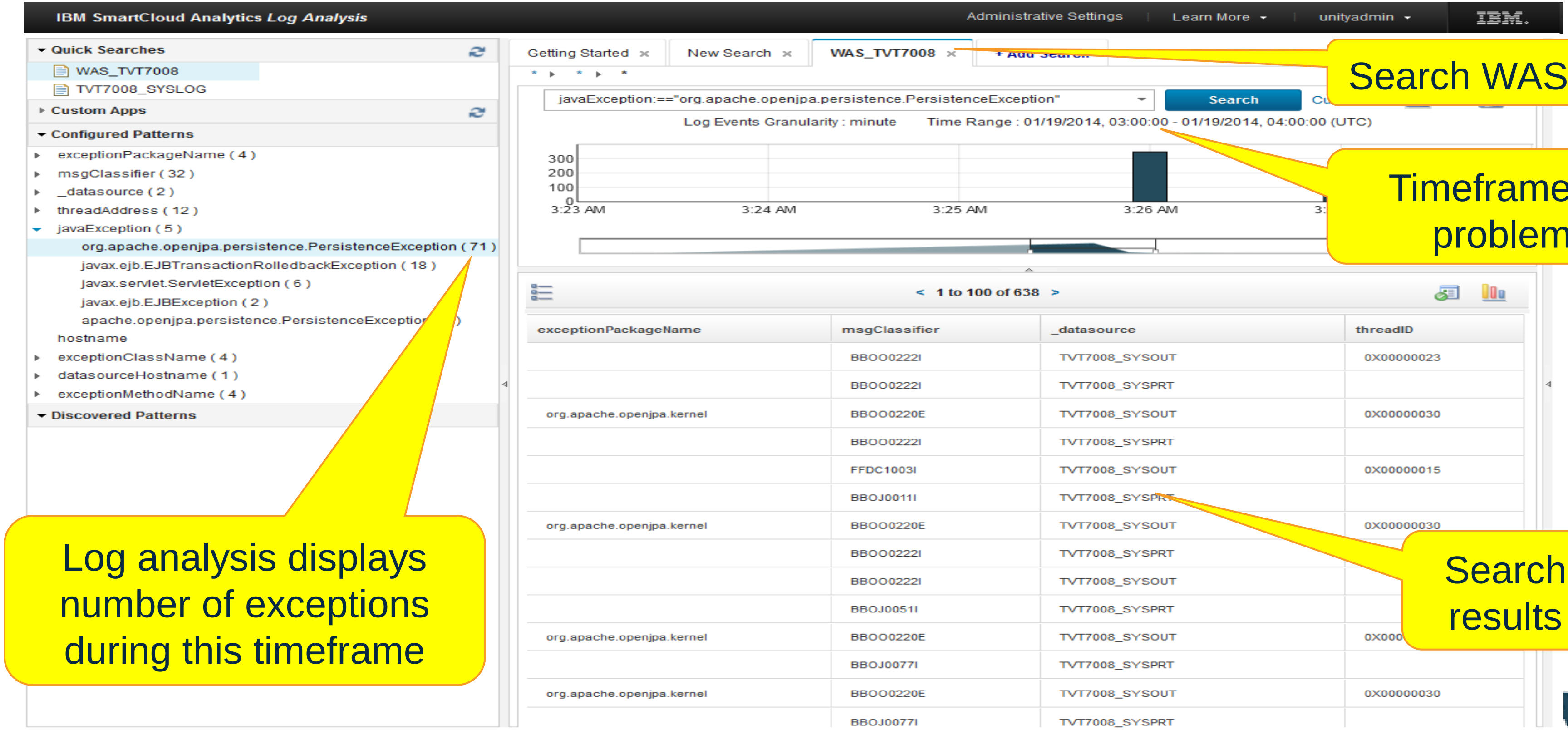
Timeframe

Enter search string

Search specific logs or ALL logs

WebSphere Application Server Search – java Exception pattern

Example of search capabilities plus insights



- Quick Searches
  - WAS_TVT7008
  - TVT7008_SYSLOG
- Custom Apps
- Configured Patterns
  - exceptionPackageName (4)
  - msgClassifier (32)
  - _datasource (2)
  - threadAddress (12)
  - javaException (5)
    - org.apache.openjpa.persistence.PersistenceException (71)
    - javax.ejb.EJBTransactionRolledbackException (18)
    - javax.servlet.ServletException (6)
    - javax.ejb.EJBException (2)
    - apache.openjpa.persistence.PersistenceExceptior)
  - hostname
  - exceptionClassName (4)
  - datasourceHostname (1)
  - exceptionMethodName (4)
- Discovered Patterns

javaException:=="org.apache.openjpa.persistence.PersistenceException"

Log Events Granularity : minute   Time Range : 01/19/2014, 03:00:00 - 01/19/2014, 04:00:00 (UTC)

< 1 to 100 of 638 >

exceptionPackageName	msgClassifier	_datasource	threadID
	BBOO0222I	TVT7008_SYSOUT	0X00000023
	BBOO0222I	TVT7008_SYSPRT	
org.apache.openjpa.kernel	BBOO0220E	TVT7008_SYSOUT	0X00000030
	BBOO0222I	TVT7008_SYSPRT	
	FFDC1003I	TVT7008_SYSOUT	0X00000015
	BBOJ0011I	TVT7008_SYSPRT	
org.apache.openjpa.kernel	BBOO0220E	TVT7008_SYSOUT	0X00000030
	BBOO0222I	TVT7008_SYSPRT	
	BBOO0222I	TVT7008_SYSOUT	
	BBOJ0051I	TVT7008_SYSPRT	
org.apache.openjpa.kernel	BBOO0220E	TVT7008_SYSOUT	0X000
	BBOJ0077I	TVT7008_SYSPRT	
org.apache.openjpa.kernel	BBOO0220E	TVT7008_SYSOUT	0X00000030
	BBOJ0077I	TVT7008_SYSPRT	

Search WAS log

Timeframe of problem

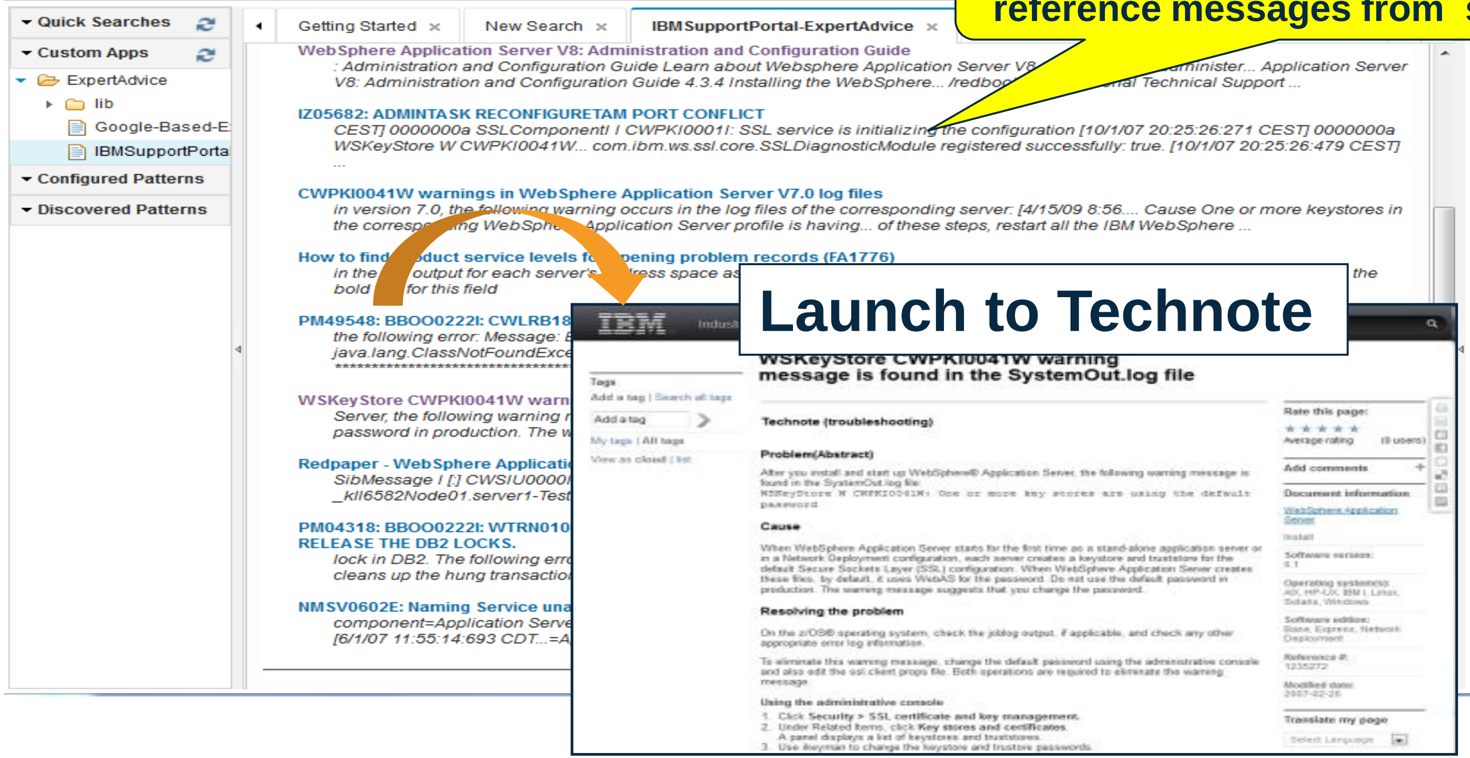
Log analysis displays number of exceptions during this timeframe

Search results

Quickly and easily access IBM Support Portal based Expert Advice from Log Analysis

Search for expert advice with the click of a button

All IBM support site documents that reference messages from search results



WebSphere Application Server V8: Administration and Configuration Guide
: Administration and Configuration Guide Learn about Websphere Application Server V8 ... Administer... Application Server V8: Administration and Configuration Guide 4.3.4 Installing the WebSphere... /redboo... nal Technical Support ...

IZ05682: ADMINTASK RECONFIGURETAM PORT CONFLICT
CEST] 0000000a SSLComponentI I CWPKI0001I: SSL service is initializing the configuration [10/1/07 20:25:26:271 CEST] 0000000a WSKeyStore W CWPKI0041W... com.ibm.ws.ssl.core.SSLDiagnosticModule registered successfully: true. [10/1/07 20:25:26:479 CEST] ...

CWPKI0041W warnings in WebSphere Application Server V7.0 log files
in version 7.0, the following warning occurs in the log files of the corresponding server: [4/15/09 8:56.... Cause One or more keystores in the correspo... ing WebSphe... Application Server profile is having... of these steps, restart all the IBM WebSphere ...

How to find ... oduct service levels fo... pening problem records (FA1776)
in the ... output for each server's ... ress space as ... the bold ... for this field

PM49548: BBOO0222I: CWLRB18
the following error: Message: E
java.lang.ClassNotFoundExce
****

WSKeyStore CWPKI0041W warn
Server, the following warning r
password in production. The w

Redpaper - WebSphere Applicati
SibMessage I [:] CWSIU0000I
_kll6582Node01.server1-Test

PM04318: BBOO0222I: WTRN010
RELEASE THE DB2 LOCKS.
lock in DB2. The following erro
cleans up the hung transactio

NMSV0602E: Naming Service una
component=Application Serve
[6/1/07 11:55:14:693 CDT...=A

Launch to Technote

WSKeyStore CWPKI0041W warning message is found in the SystemOut.log file

Technote (troubleshooting)

Problem(Abstract)

After you install and start up WebSphere® Application Server, the following warning message is found in the SystemOut.log file:

```
WSKeyStore W CWPKI0041W: One or more key stores are using the default password
```

Cause

When WebSphere Application Server starts for the first time as a stand-alone application server or in a Network Deployment configuration, each server creates a keystore and truststore for the default Secure Sockets Layer (SSL) configuration. When WebSphere Application Server creates these files, by default, it uses WebAS for the password. Do not use the default password in production. The warning message suggests that you change the password.

Resolving the problem

On the z/OS® operating system, check the joblog output, if applicable, and check any other appropriate error log information.

To eliminate this warning message, change the default password using the administrative console and also edit the ssl.client.props file. Both operations are required to eliminate the warning message.

Using the administrative console

1. Click **Security > SSL certificate and key management.**
2. Under Related Items, click **Key stores and certificates.**
   A panel displays a list of keystores and truststores.
3. Use iKeyman to change the keystore and trustore passwords.

WebSphere Application Server

Install

Software version:
8.1

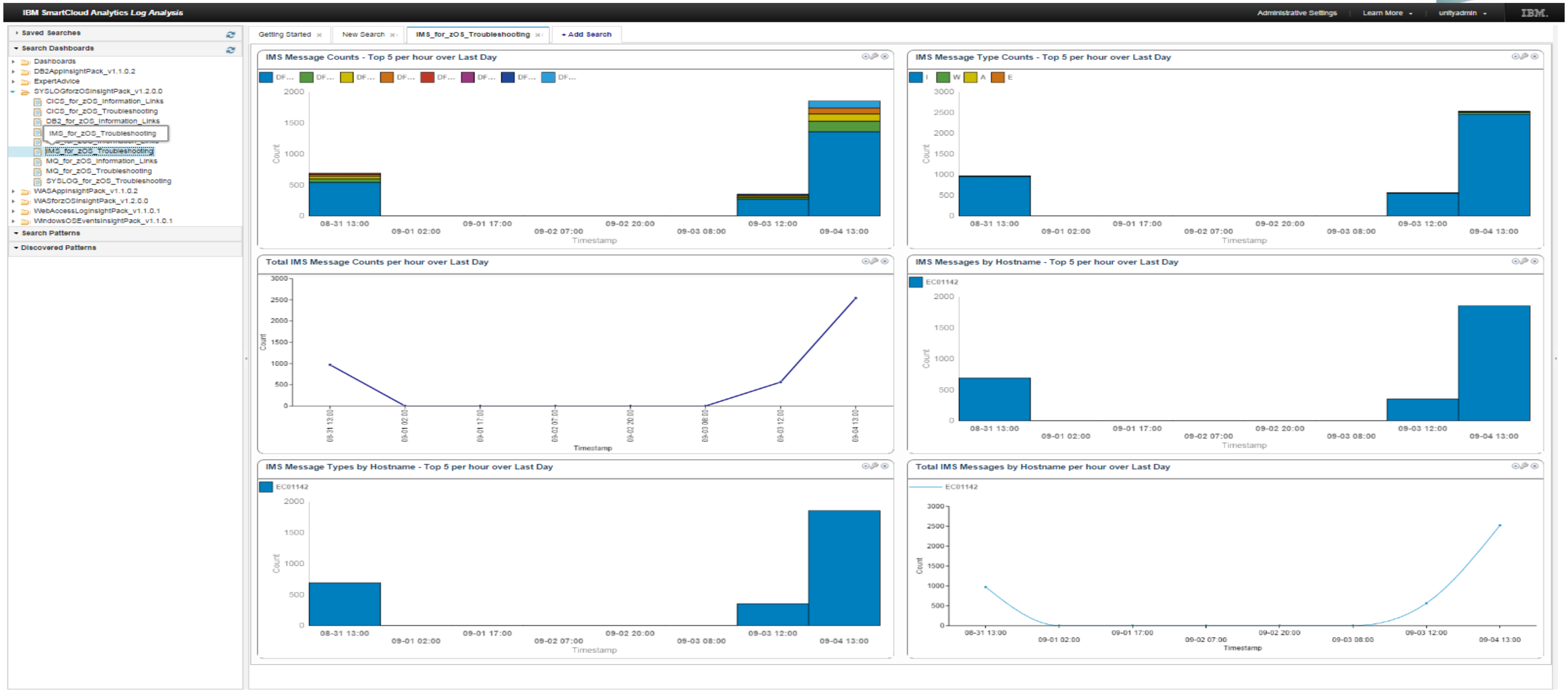
Operating system(s):
AIX, HP-UX, IBM i, Linux, Solaris, Windows

Software edition:
Base, Express, Network Deployment

Reference #:
1235272

Modified date:
2007-02-26

Sample dashboard – Out-of-the-Box or Build your Own!



IBM SmartCloud Analytics Log Analysis

Administrative Settings | Learn More | unityadmin | IBM.

- Saved Searches
- Search Dashboards
  - Dashboards
  - DB2AppInsightPack_v1.1.0.2
  - ExpertAdvice
  - SYSLOGforzOSInsightPack_v1.2.0.0
    - CICS_for_zOS_Information_Links
    - CICS_for_zOS_Troubleshooting
    - DB2_for_zOS_Information_Links
    - IMS_for_zOS_Troubleshooting
    - IMS_for_zOS_Troubleshooting
    - MQ_for_zOS_Information_Links
    - MQ_for_zOS_Troubleshooting
    - SYSLOG_for_zOS_Troubleshooting
  - WASAppInsightPack_v1.1.0.2
  - WASforzOSInsightPack_v1.2.0.0
  - WebAccessLogInsightPack_v1.1.0.1
  - WindowsOSEventsInsightPack_v1.1.0.1
- Search Patterns
- Discovered Patterns

Getting Started | New Search | IMS_for_zOS_Troubleshooting | + Add Search

IMS Message Counts - Top 5 per hour over Last Day

IMS Message Type Counts - Top 5 per hour over Last Day

Total IMS Message Counts per hour over Last Day

IMS Messages by Hostname - Top 5 per hour over Last Day

IMS Message Types by Hostname - Top 5 per hour over Last Day

Total IMS Messages by Hostname per hour over Last Day

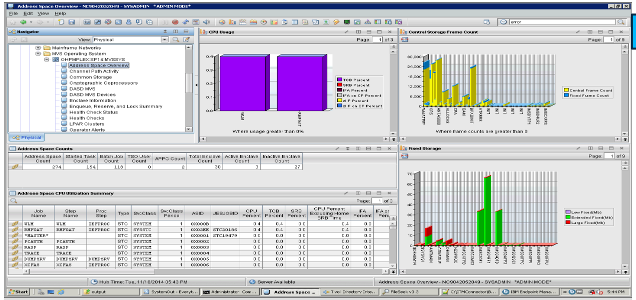
Integration with Performance Monitoring

OMEGAMON + SCA-LA – Launch in Context from TEP

The **One Two – Punch**: Combine two very powerful tools to ensure performance and high availability of your enterprise.

•**Perform log analysis in context of OMEGAMON workspaces** – This approach enables OMEGAMON users to perform in-context log analysis while doing problem determination

- From your OMEGAMON workspace, use the SCA-LA search bar to search logs (using LPAR or Sysplex as the default context)
- Easy to implement - Configure TEP to display the SCA-LA search bar



Address Space Counts

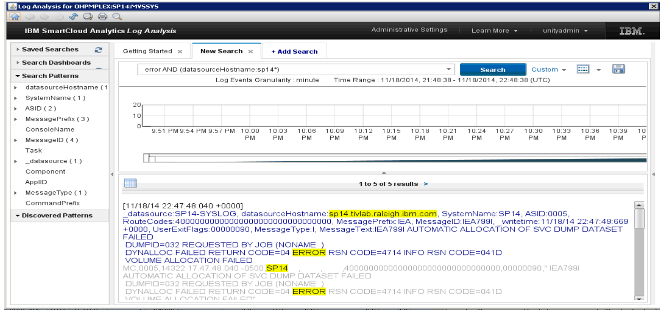
Address Space Count	Started Task Count	Batch Job Count	TSO User Count	APPC Count	Total Enclave Count	Active Enclave Count	Inactive Enclave Count
274	154	118	0	2	30	3	27

Address Space CPU Utilization Summary

Page: 1 of 3

Job Name	Step Name	Proc Step	Type	SvcClass	SvcClass Period	ASID	JESJOBID	CPU Percent	TCB Percent	SRB Percent	CPU Percent Excluding Home SRB Time	IFA Percent
WLM	WLM	IEFPROC	STC	SYSTEM	1	0X000B		0.4	0.4	0.0	0.4	0.0
RMFGAT	RMFGAT	IEFPROC	STC	SYSSTC	1	0X02EE	STC20186	0.4	0.4	0.0	0.4	0.0
MASTER			STC	SYSTEM	1	0X0001	STC19479	0.0	0.0	0.0	0.0	0.0
PCAUTH	PCAUTH		STC	SYSTEM	1	0X0002		0.0	0.0	0.0	0.0	0.0
RASP	RASP		STC	SYSTEM	1	0X0003		0.0	0.0	0.0	0.0	0.0
TRACE	TRACE		STC	SYSTEM	1	0X0004		0.0	0.0	0.0	0.0	0.0
DUMPSRV	DUMPSRV	DUMPSRV	STC	SYSTEM	1	0X0005		0.0	0.0	0.0	0.0	0.0
XCFAS	XCFAS	IEFPROC	STC	SYSTEM	1	0X0006		0.0	0.0	0.0	0.0	0.0

Launch SCA-LA from OMEGAMON performance monitoring workspaces to search logs in context



error AND (datasourceHostname:sp14*)

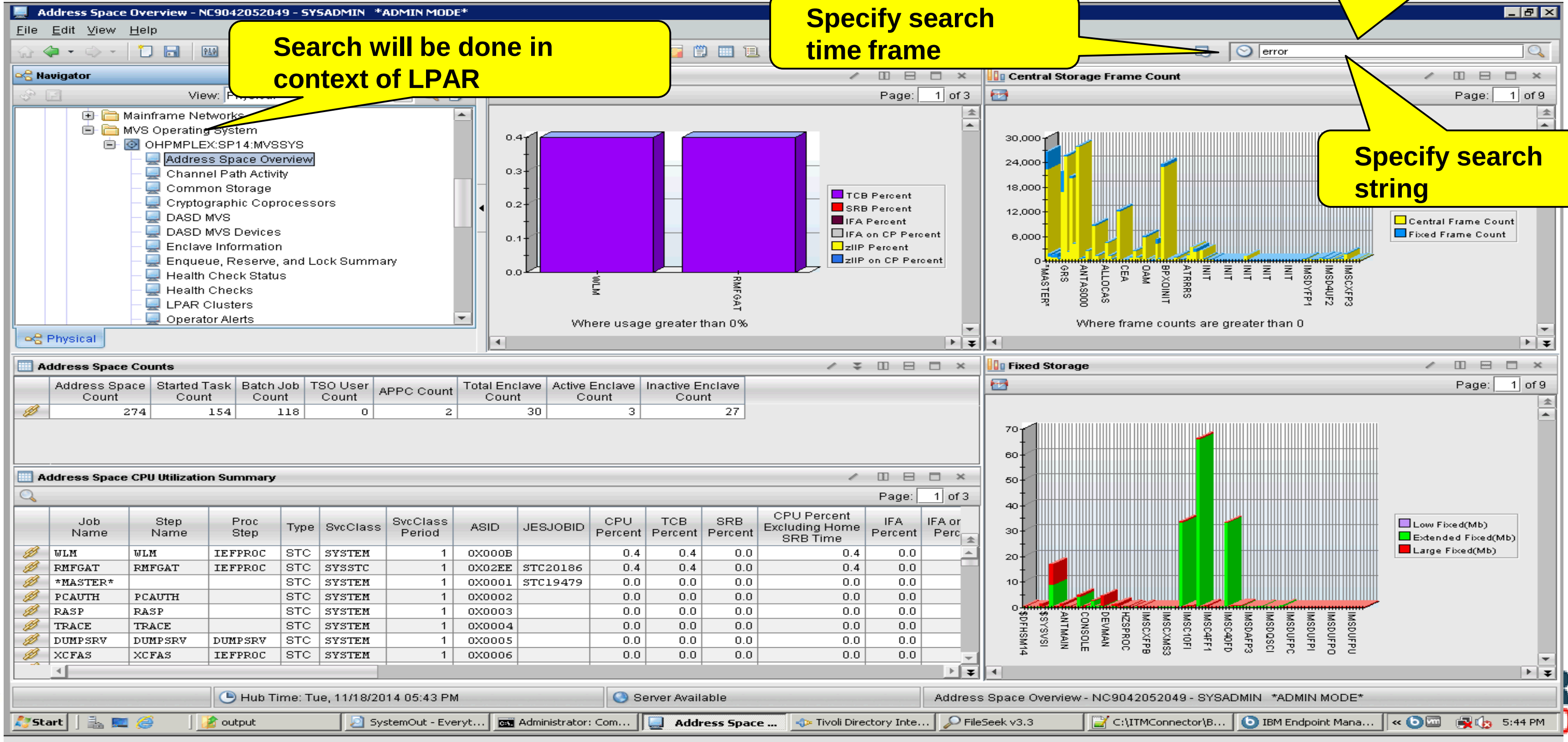
Log Events Granularity : minute Time Range : 11/18/2014, 21:48:38 - 11/18/2014, 22:48:38 (UTC)

1 to 5 of 5 results >

```
[11/18/14 22:47:48:040 +0000]
_datasource:SP14-SYSLOG, datasourceHostname:sp14.tivlab.raleigh.ibm.com, SystemName:SP14, ASID:0005,
RouteCodes:40000000000000000000000000000000, MessagePrefix:IEA, MessageID:IEA799I, _writetime:11/18/14 22:47:49:669
+0000, UserExitFlags:00000090, MessageType:I, MessageText:IEA799I AUTOMATIC ALLOCATION OF SVC DUMP DATASET
FAILED
 DUMPID=032 REQUESTED BY JOB (NONAME  )
 DYNALLOC FAILED RETURN CODE=04 ERROR RSN CODE=4714 INFO RSN CODE=041D
 VOLUME ALLOCATION FAILED
MC,0005,14322 17.47.48.040 -0500,SP14    ,        ,        ,40000000000000000000000000000000,00000090," IEA799I
AUTOMATIC ALLOCATION OF SVC DUMP DATASET FAILED
 DUMPID=032 REQUESTED BY JOB (NONAME  )
 DYNALLOC FAILED RETURN CODE=04 ERROR RSN CODE=4714 INFO RSN CODE=041D
 VOLUME ALLOCATION FAILED"
```

Launch SCA-LA (in context of LPAR) from OMEGAMON Workspace

LPAR Scenario - OMEGAMON user searches for the word ‘error’ in the LPAR’s logs



Address Space Counts

Address Space Count	Started Task Count	Batch Job Count	TSO User Count	APPC Count	Total Enclave Count	Active Enclave Count	Inactive Enclave Count
274	154	118	0	2	30	3	27

Address Space CPU Utilization Summary

Page: 1 of 3

Job Name	Step Name	Proc Step	Type	SvcClass	SvcClass Period	ASID	JESJOBID	CPU Percent	TCB Percent	SRB Percent	CPU Percent Excluding Home SRB Time	IFA Percent	IFA or Perc
WLM	WLM	IEFPROC	STC	SYSTEM	1	0X000B		0.4	0.4	0.0	0.4	0.0	
RMFGAT	RMFGAT	IEFPROC	STC	SYSSTC	1	0X02EE	STC20186	0.4	0.4	0.0	0.4	0.0	
MASTER			STC	SYSTEM	1	0X0001	STC19479	0.0	0.0	0.0	0.0	0.0	
PCAUTH	PCAUTH		STC	SYSTEM	1	0X0002		0.0	0.0	0.0	0.0	0.0	
RASP	RASP		STC	SYSTEM	1	0X0003		0.0	0.0	0.0	0.0	0.0	
TRACE	TRACE		STC	SYSTEM	1	0X0004		0.0	0.0	0.0	0.0	0.0	
DUMPSRV	DUMPSRV	DUMPSRV	STC	SYSTEM	1	0X0005		0.0	0.0	0.0	0.0	0.0	
XCFAS	XCFAS	IEFPROC	STC	SYSTEM	1	0X0006		0.0	0.0	0.0	0.0	0.0	

Hub Time: Tue, 11/18/2014 05:43 PM

Server Available

Address Space Overview - NC9042052049 - SYSADMIN *ADMIN MODE*

SCA-LA search bar now available in TEP

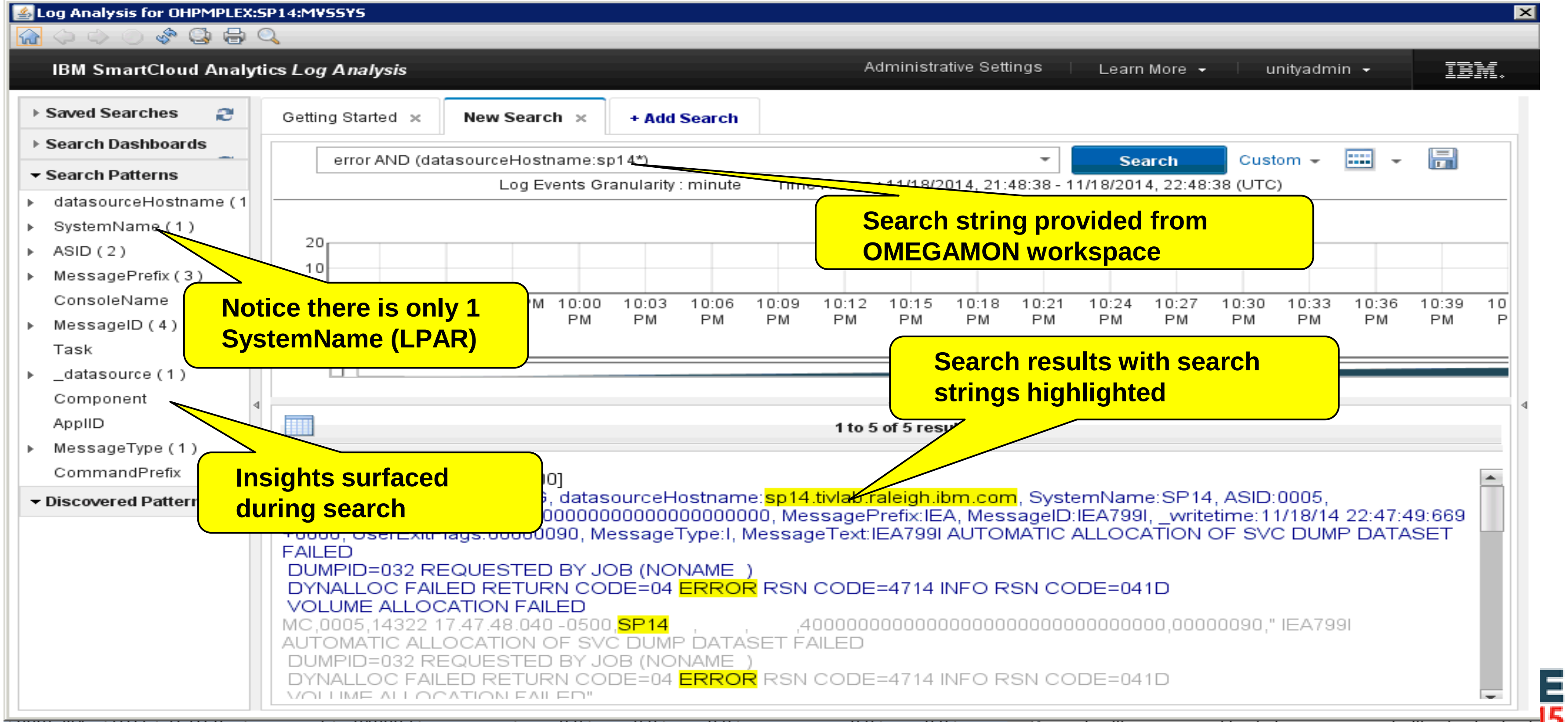
Search will be done in context of LPAR

Specify search time frame

Specify search string

Launch SCA-LA (in context of LPAR) from OMEGAMON Workspace ...

Search results displayed in SCA-LA



```
error AND (datasourceHostname:sp14*)
```

```
0]
, datasourceHostname:sp14.tivlab.raleigh.ibm.com, SystemName:SP14, ASID:0005,
0000000000000000000000, MessagePrefix:IEA, MessageID:IEA799I, _writetime:11/18/14 22:47:49:669
+0000, UserExitFlags:00000090, MessageType:I, MessageText:IEA799I AUTOMATIC ALLOCATION OF SVC DUMP DATASET
FAILED
 DUMPID=032 REQUESTED BY JOB (NONAME  )
 DYNALLOC FAILED RETURN CODE=04 ERROR RSN CODE=4714 INFO RSN CODE=041D
 VOLUME ALLOCATION FAILED
MC,0005,14322 17.47.48.040 -0500,SP14      ,      ,      ,4000000000000000000000000000000,00000090," IEA799I
AUTOMATIC ALLOCATION OF SVC DUMP DATASET FAILED
 DUMPID=032 REQUESTED BY JOB (NONAME  )
 DYNALLOC FAILED RETURN CODE=04 ERROR RSN CODE=4714 INFO RSN CODE=041D
 VOLUME ALLOCATION FAILED"
```

Search string provided from OMEGAMON workspace

Notice there is only 1 SystemName (LPAR)

Search results with search strings highlighted

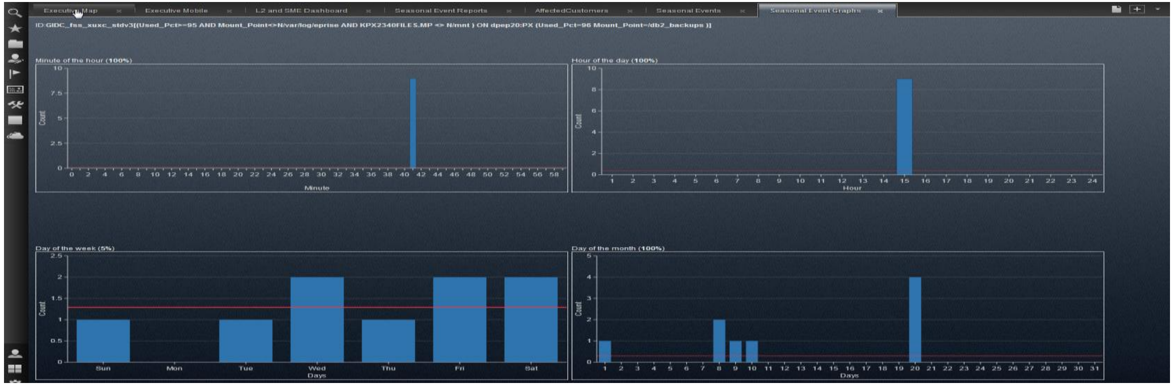
Insights surfaced during search

Integration with Event Management

Network Operations Insight + SCA-LA – Search and Analyze Events

Event Analytics – for Seasonal Event Identification (New)

Provides opportunities for event reduction thus improving operational efficiency.

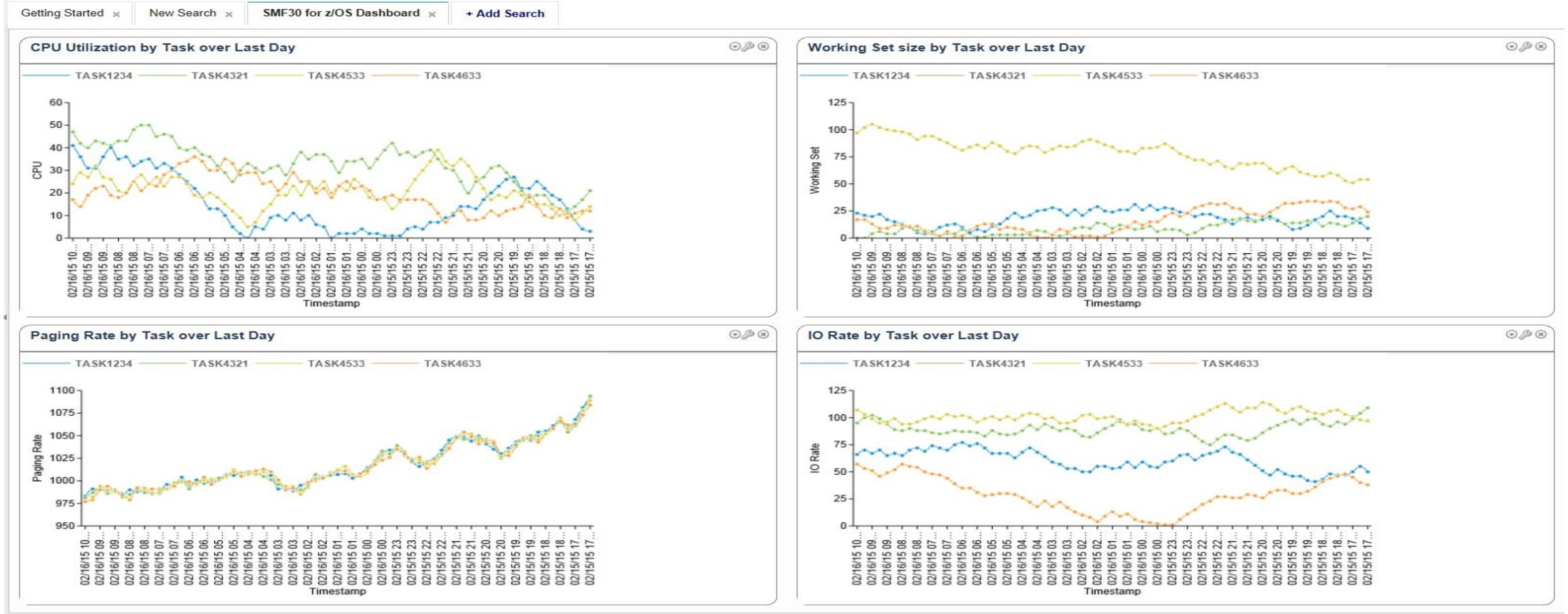

ID:GIDC_fss_xuxc_stdv3[(Used_Pct>=95 AND Mount_Point<>N/var/log/eprise AND KPX2340FILES.MP <> N/mnt) ON dpep20:PX (Used_Pct=96 Mount_Point=/db2_backups)]

- Easily identify ‘related’ Events that may be candidates for suppression
- Identify “difficult to spot” seasonal events that often result in regular periodic problems
- Leverage visualizations that help you quickly isolate more sever and significant problems.

Also, SCA-LA can generate notifications based on data (logs messages, data, etc)

In Beta Now

- Analyze your SMF data AND your log data for a complete view of the enterprise.



- Also, Search and provide network Insights with our new Network Insights Pack

zSCA-LA v.Next Early Access and Beta Program

The **IBM SmartCloud Analytics - Log Analysis for z/OS V.next Early Access and Beta Program** was announced on January 29, 2015.

In 2015, we will build on the strong foundation established over the past months by providing insights into additional domains, as well as by enhancing existing insights through integration of performance metrics.

We are looking for customers and business partners worldwide who would like to test the new capabilities and help shape the content of the release under development.

To see the full program announcement, and to learn how to sign up, please visit us in our developerWorks community at:

https://ibm.biz/BdEkZV

Additional SCA-LA Reference Material

- Analytics Overview Video
  - https://www.youtube.com/watch?v=OQJapWiQECs

- SCA-LA z/OS Insight Packs videos:
  - http://www.youtube.com/watch?v=2oDgX_Ydr18
  - There are several YouTube videos – search for ‘SmartCloud Analytics – Log Analysis’)

- SCA-LA z/OS Insight Pack Documentation
  - Knowledge Centers
    - SYSLOG: http://www.ibm.com/support/knowledgecenter/SS9M7K
    - IBM WAS: http://www.ibm.com/support/knowledgecenter/SS9MBD

- SCA-LA Product Documentation
  - Service Management Connect
    - http://www.ibm.com/developerworks/servicemanagement/ioa/log/index.html
  - Knowledge Center
    - http://www.ibm.com/support/knowledgecenter/SSPFMY

Send us your logs!

- Request a product demo using logs from your own test, development or production environments

- IBM will load your logs into a SCALA server, then demo the results back to you
  - A secure, dedicated drop box will be assigned to you
  - You will be sent detail upload instructions via email
  - Any file uploaded will be automatically moved to a dedicated SCALA environment within 24 hours
  - All log data will be purged from the SCALA environment within 48 hours after the demo event

To request your hosted demo, visit:
http://services-useast.skytap.com:18280/WebDemo/

Thank
You