Achieving Gains in Velocity and Quality for Batch Application Delivery

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SEA

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Session MF

Agenda

- Introductions
- Why the Focus on Testing
- Considering Culture
- Practical Opportunities for Increased Velocity and Quality
- Reporting and Measurement

The Challenge Today

How Do I Increase Velocity AND Quality In Application Delivery?

Culture and Perceptions of : 

Agile Build

Fast is Good!

ITIL Deploy

Fast is Not as Good!

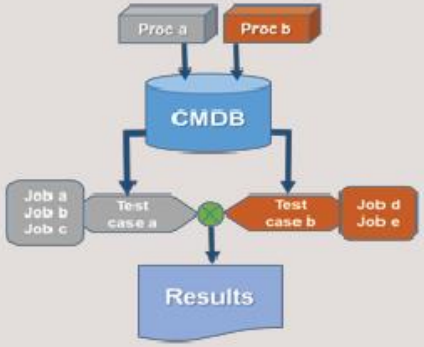
A DevOps Culture… What Might I Observe

1. Highest Priority Given to Investments Enabling Early Confidence in Predictive Run-Time Outcome
2. Reliable and Shared Sources for Maintenance, Testing and One Time Change Projects
3. Knowledge Management Incorporated Into Process Automation Strategies
4. Reliance on Metrics, Measurements and Trend Reporting

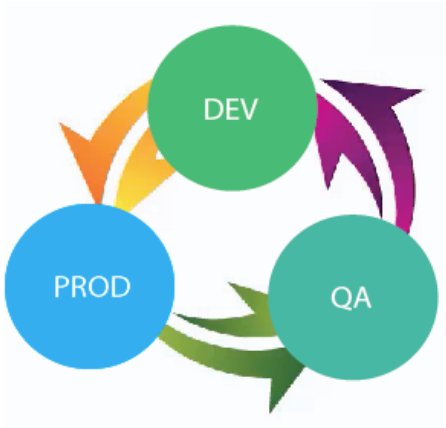
"Communication, Collaboration, Cooperation Executing with Speed and High Quality"

Considering Perspective

Predictive runtime testing
for build and run teams



The Opportunity for Metrics

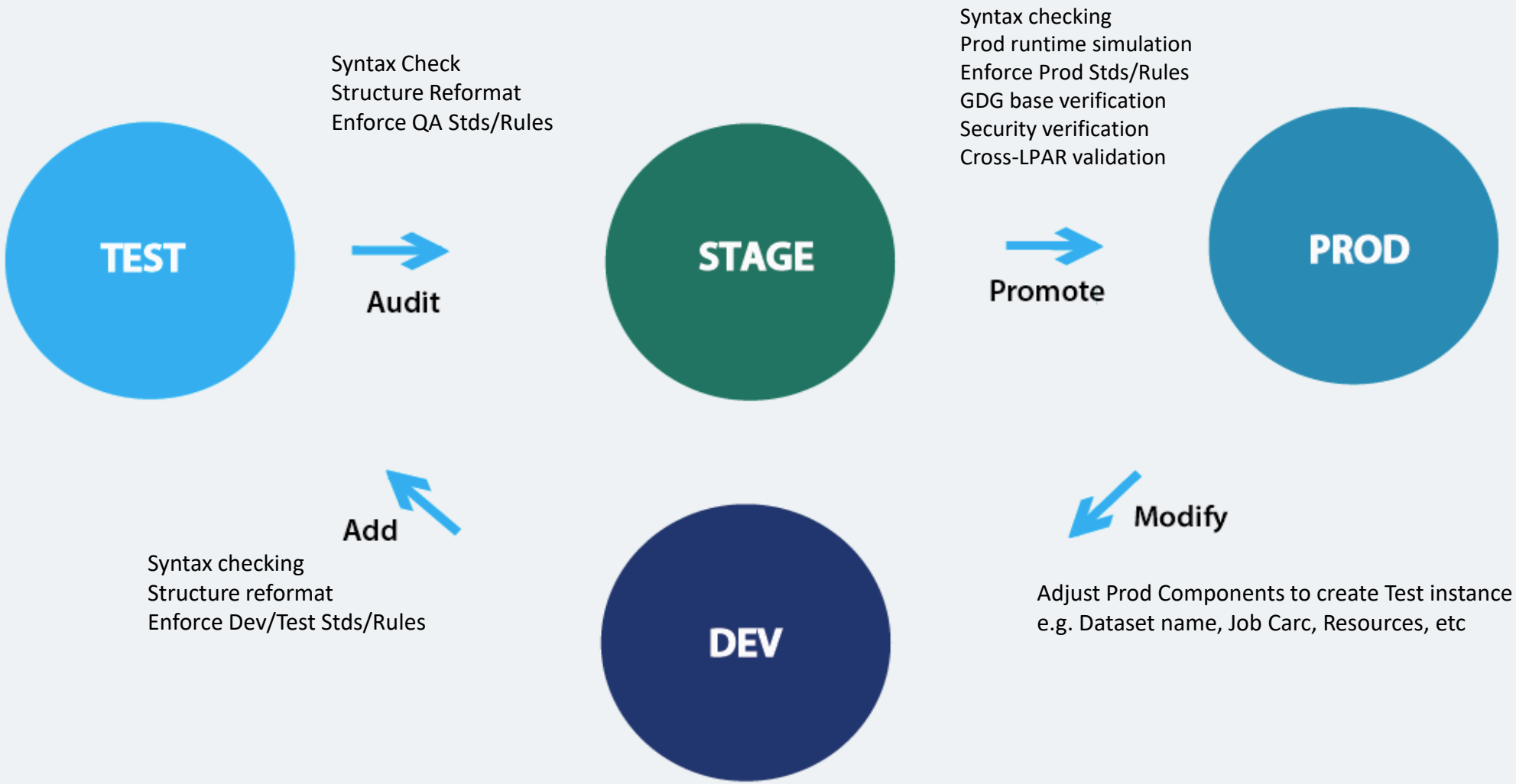


Reporting Metrics

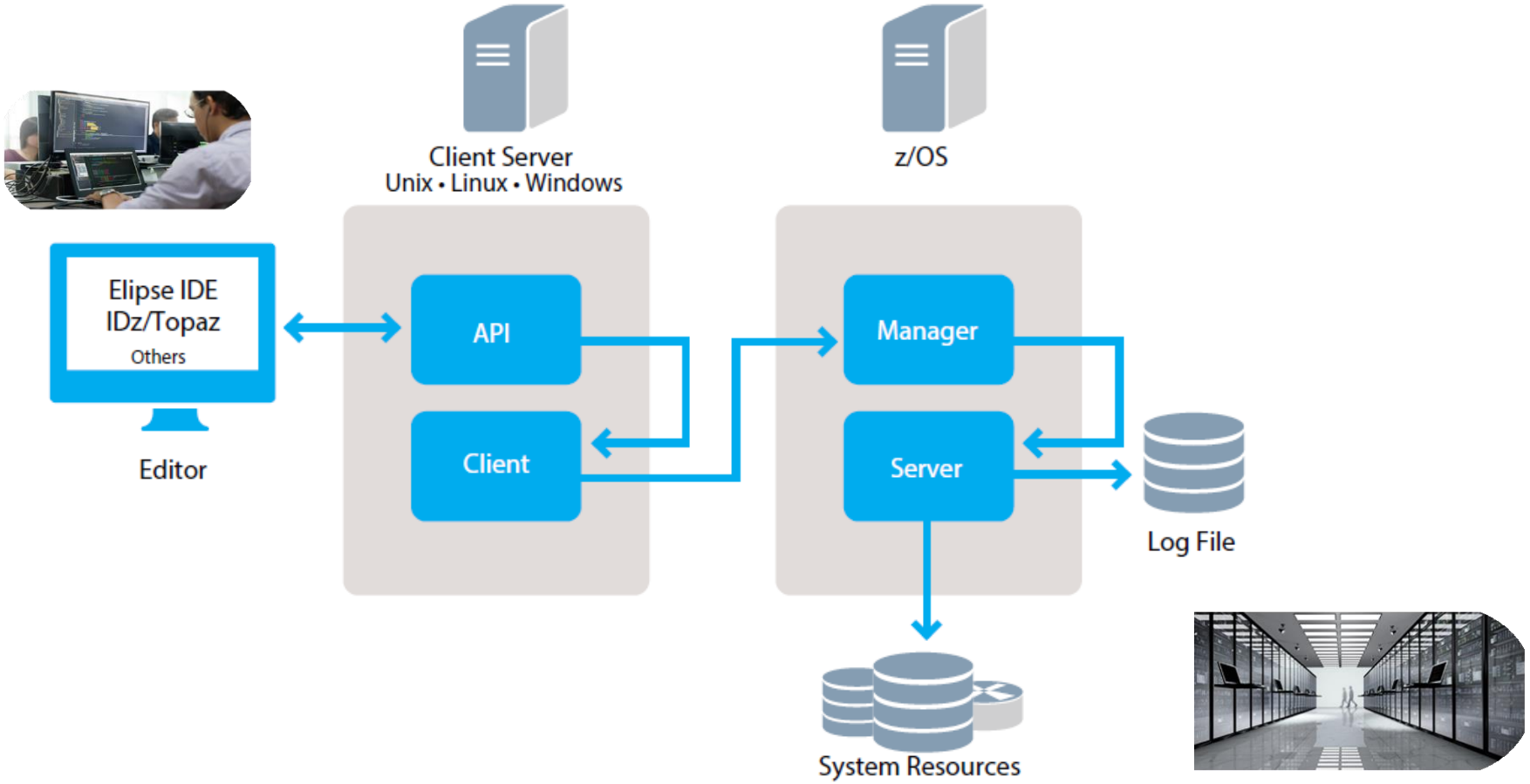
- Show me only "dataset not found" defetcs
- Show me only JCL naming standards Defects for my DEV environment

- Are we using the process ?
- What is the ROI of our process?
- Are we trending in the right direction?

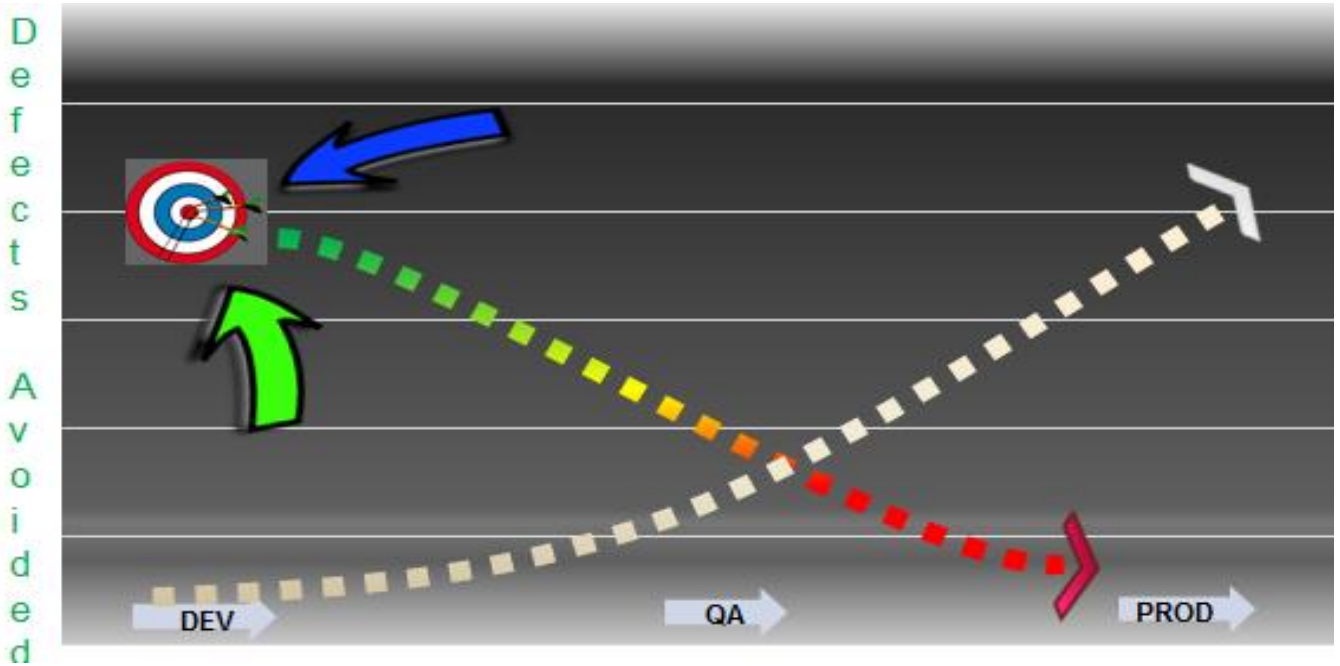
Highest Priority Given to Early Defect Elimination



Architecture Considerations

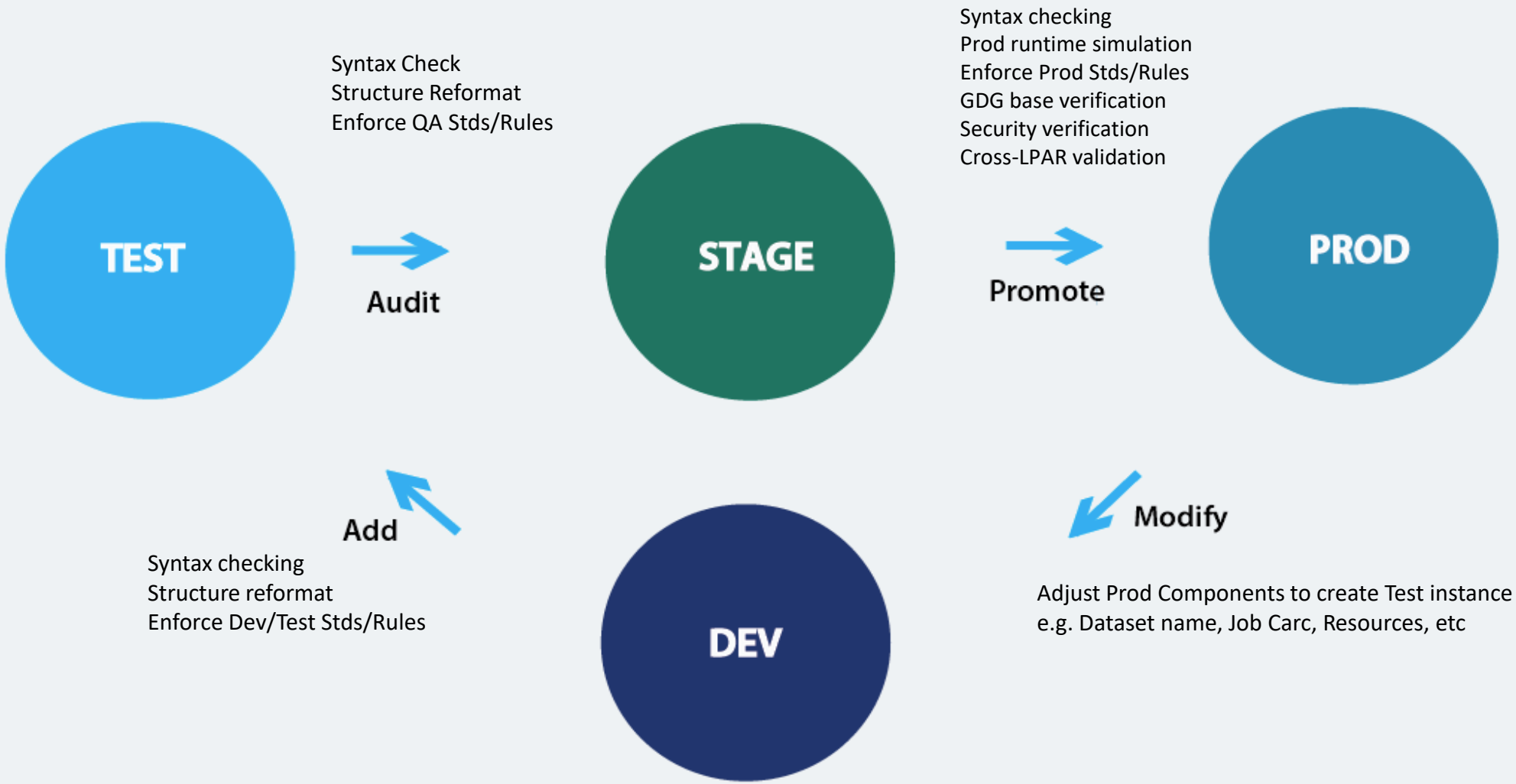


Investments to Enable Access for Early Defect Elimination



- Automate Testing
- Cross System Validation
- Check Dependencies and Generate Test Cases
- Automate Standards Compliance
- Manage Creation and Maintenance of Component Items

Highest Priority Given to Early Defect Elimination



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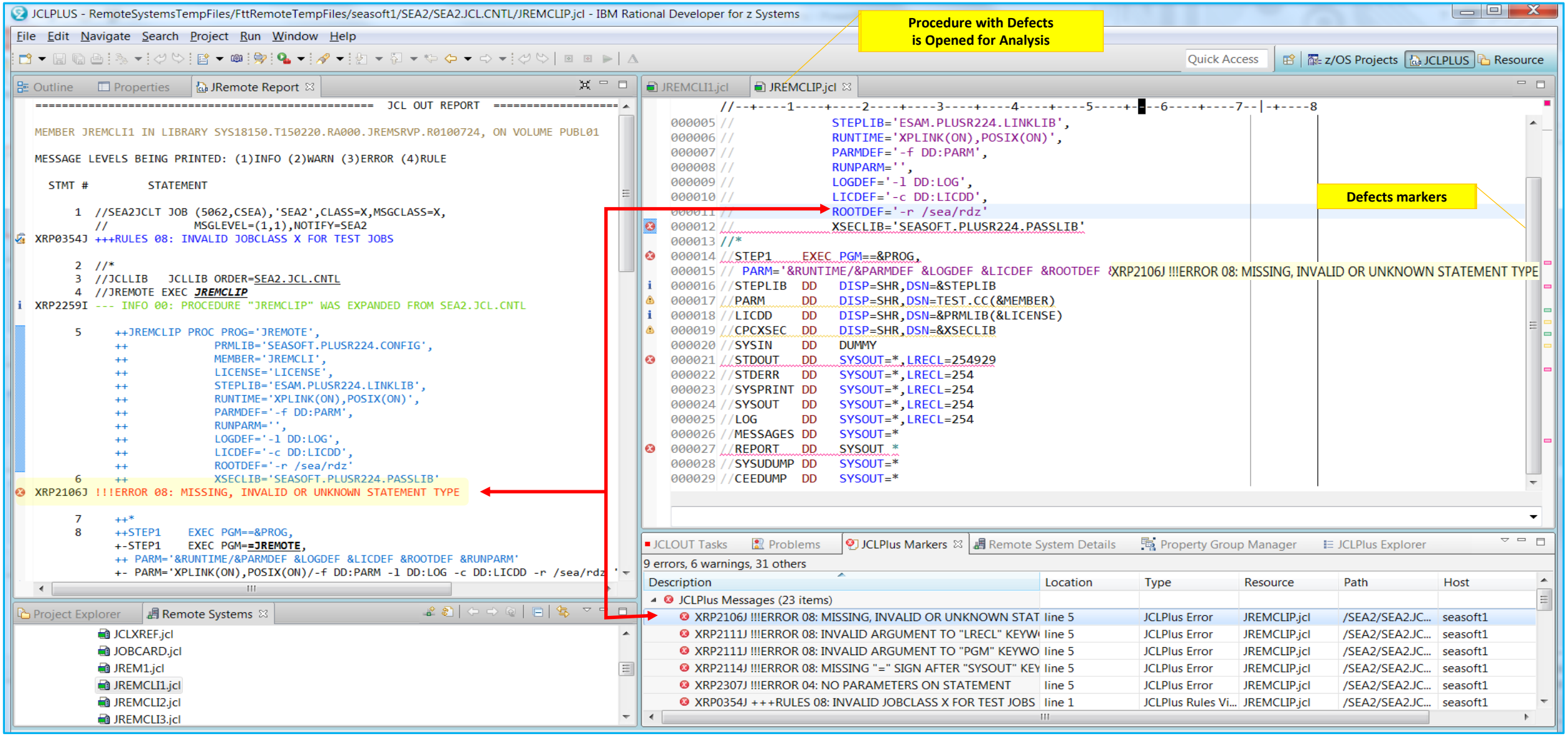

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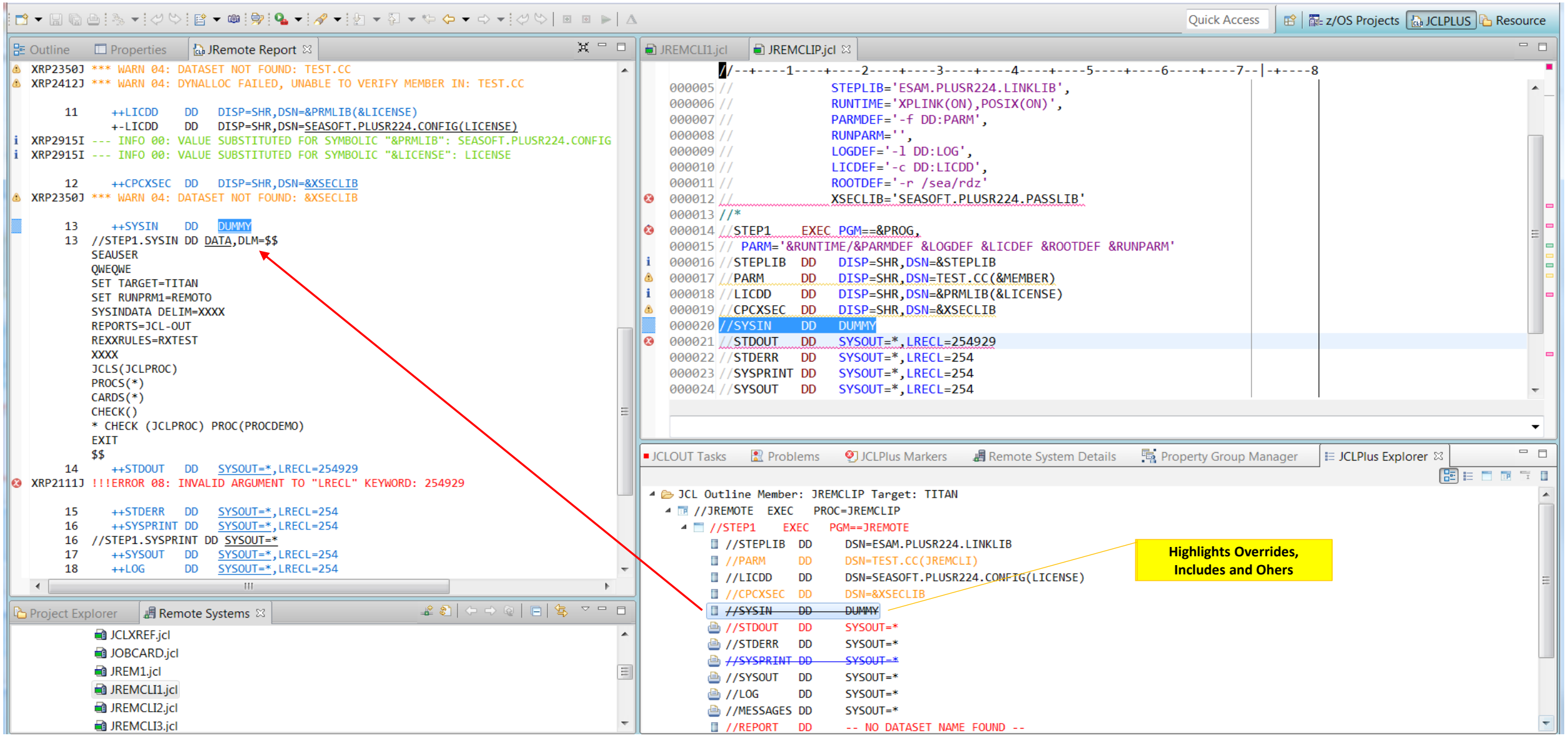

Automate Standards Compliance

- Code is easier to read and manage when formatted consistently and adhering to common naming conventions
- Reporting is more powerful and specific when naming standards are well deployed

```
EDIT       SEA5.JCLPLUS.CNTL(COMPILE) - 01.01            Columns 00001 00072
Command ===> _____________________________________________ Scroll ===> CSR
****** ********************************* Top of Data **********************************
000001 //SEA5CMPL JOB (5056,XXX),'.. D. BERG ..',CLASS=X,
000002 //      MSGCLASS=X,MSGLEVEL=(1,1),NOTIFY=SEA5
000003 /*JOBPARM L=50
000004 //* COBOL COPMPILE STEP
000005 //COMPILE  EXEC PGM=IKFCBL00,
000006 //        REGION=4096K,
000007 //    PARM='CLIST,OPT,SXR,NOLOAD,DEC,NOSEQ,NOADV,SIZE=800K'
000008 //STEPLIB DD  DSN=CSIOEM.SYS1.VSCOLIB,
000009 //     DISP=SHR
000010 //SYSUT1 DD  SPACE=(CYL,(5,5)),UNIT=SYSDA
000011 //SYSUT2   DD UNIT=SYSDA,
000012 //         SPACE=(CYL,(5,5))
000013 //SYSUT3  DD SPACE=(CYL,(5,5)),
000014 //            UNIT=SYSDA
000015 //SYSUT4 DD  UNIT=SYSDA,
000016 //          SPACE=(CYL,(5,5))
000017 //SYSPRINT DD  SYSOUT=*
000018 //SYSUDUMP DD SYSOUT=*
000019 //SYSIN  DD  DSN=SEA2.COBOL.SOURCE(TECHLIST),
000020 //           DISP=SHR
000021 //SYSPUNCH DD  DSN=SEA2.OBJ.CNTL(TECHLIST),
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000300 //            MSGCLASS=X,
000400 //            MSGLEVEL=(1,1),
000500 //            NOTIFY=SEA5
000600 /*JOBPARM L=50
000700 //*******************************************************************************
000800 //* COBOL COPMPILE STEP
000900 //*******************************************************************************
001000 //COMPILE  EXEC PGM=IKFCBL00,
001100 //            REGION=4096K,
001200 //            PARM='CLIST,OPT,SXR,NOLOAD,DEC,NOSEQ,NOADV,SIZE=800K'
001300 //STEPLIB  DD  DSN=CSIOEM.SYS1.VSCOLIB,
001400 //            DISP=SHR
001500 //SYSUT1   DD  SPACE=(CYL,(5,5)),
001600 //            UNIT=SYSDA
001700 //SYSUT2   DD  UNIT=SYSDA,
001800 //            SPACE=(CYL,(5,5))
001900 //SYSUT3   DD  SPACE=(CYL,(5,5)),
002000 //            UNIT=SYSDA
002100 //SYSUT4   DD  UNIT=SYSDA,
```
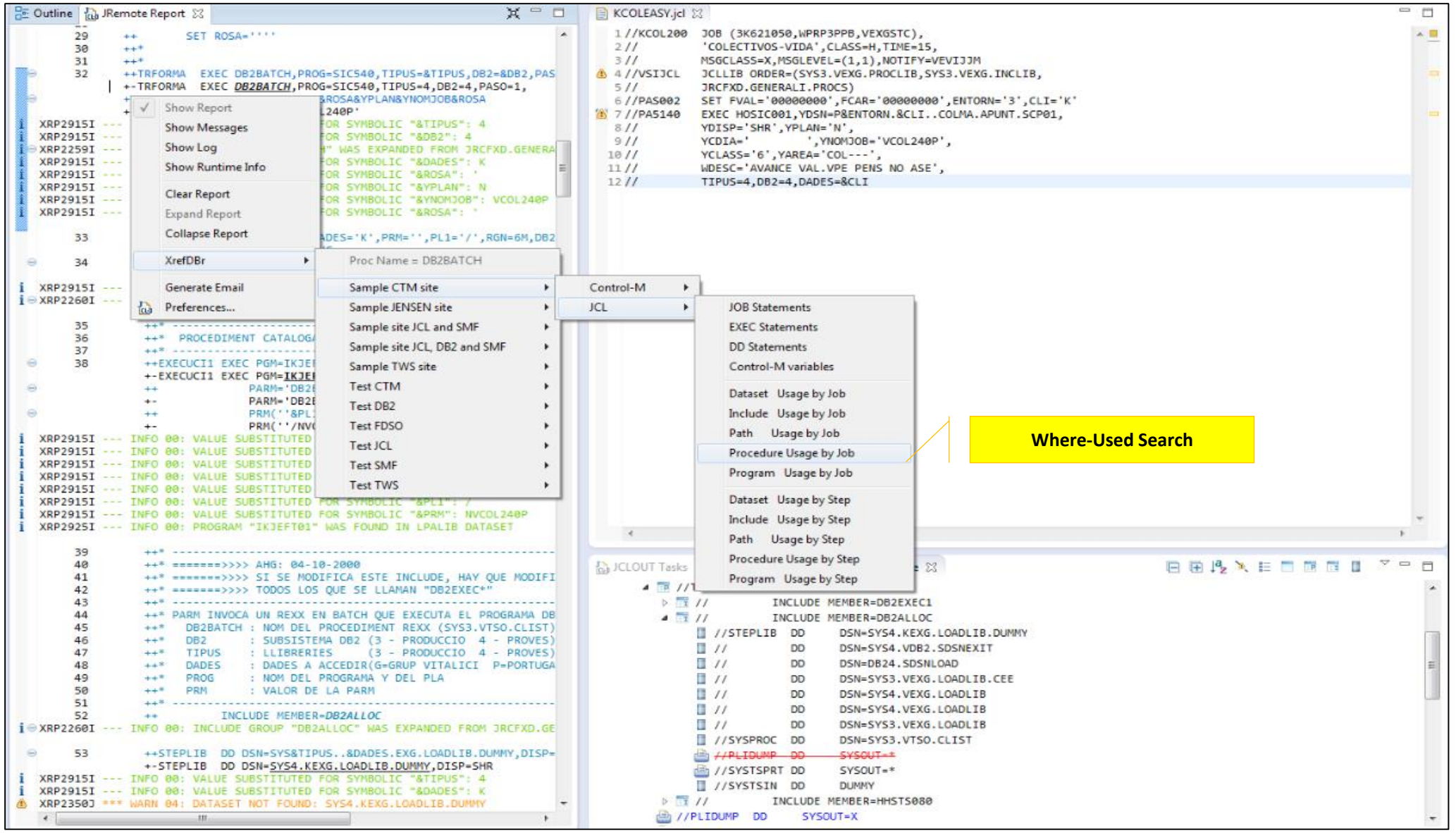
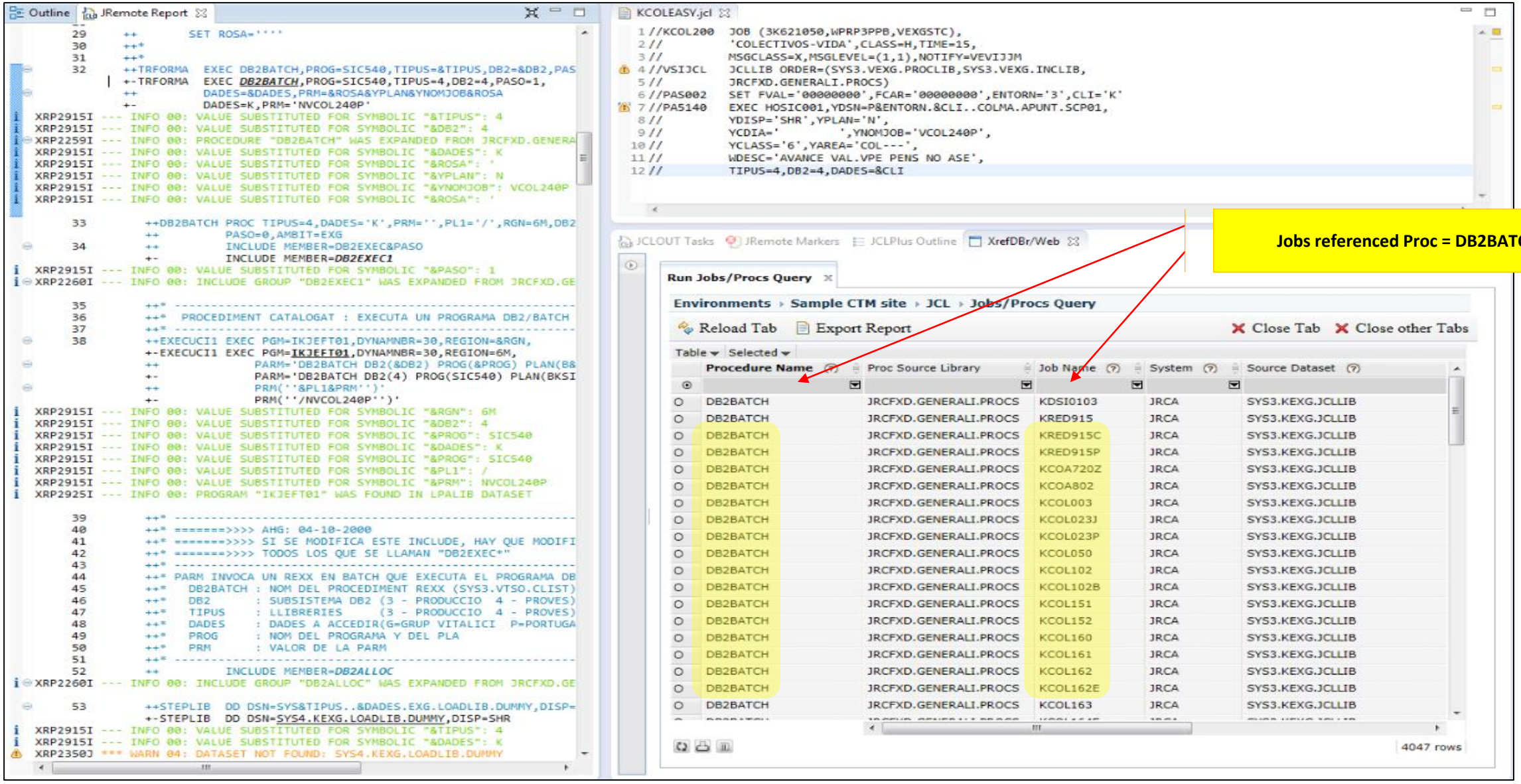
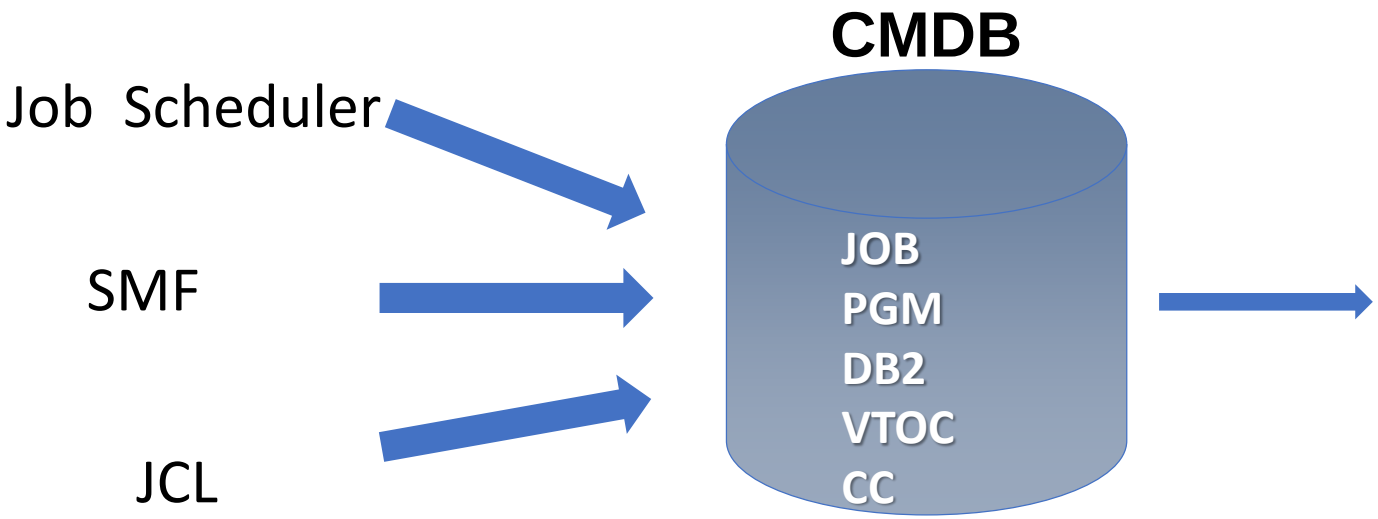

Anticipating Target System Impact



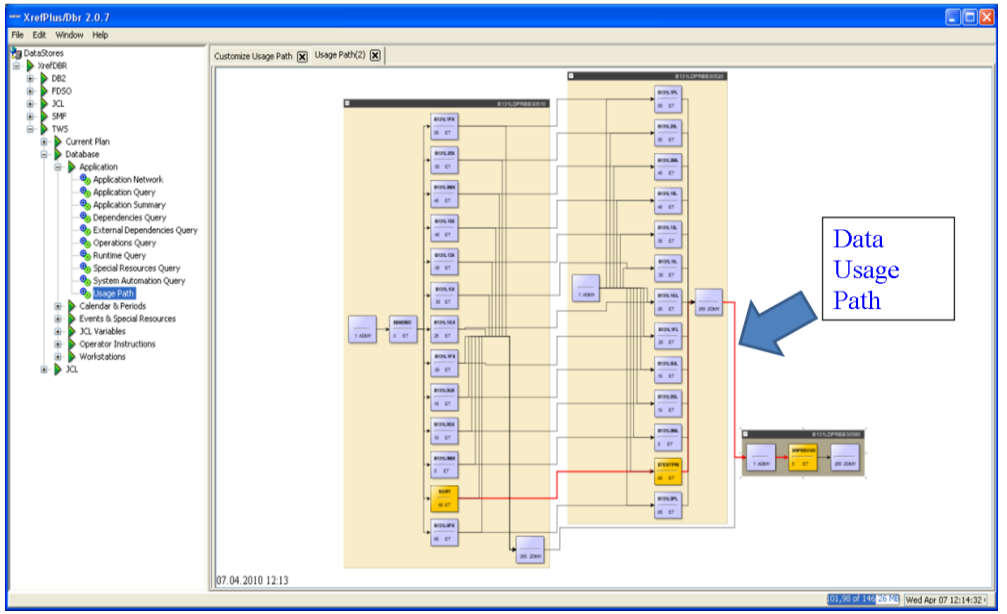
Anticipating Target System Impact



Knowledge Management Incorporated



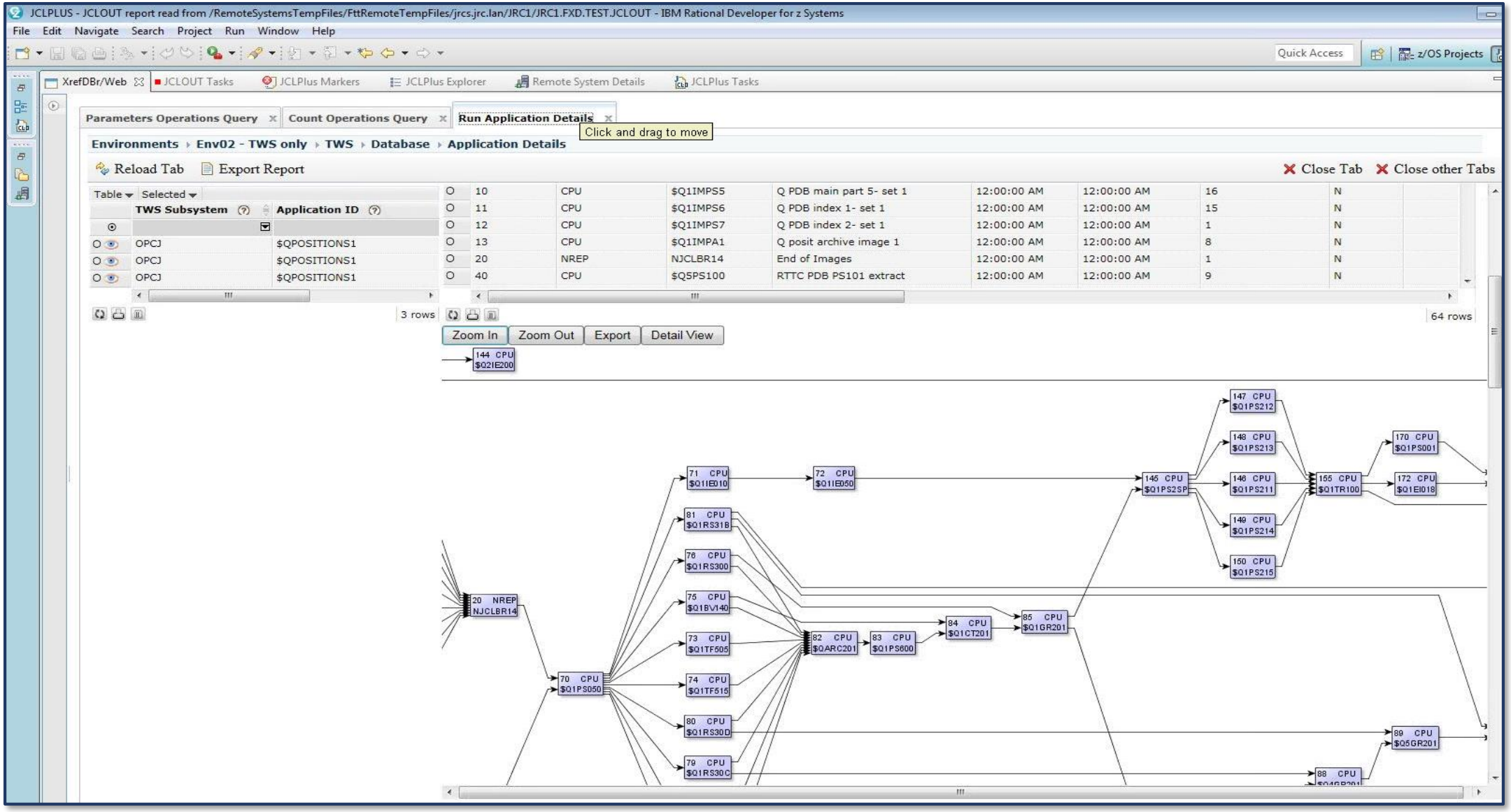
Accurate System Documentation
- Process Flow and Data Dependencies



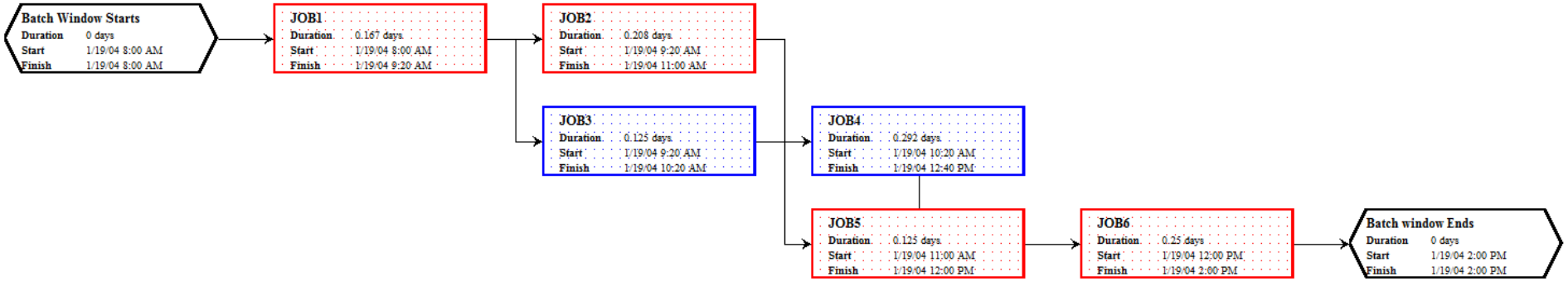
Quickly identify dependencies for testing
- Where-Used Datasets
- Where-Used Procs
- Where-Used Control Cards

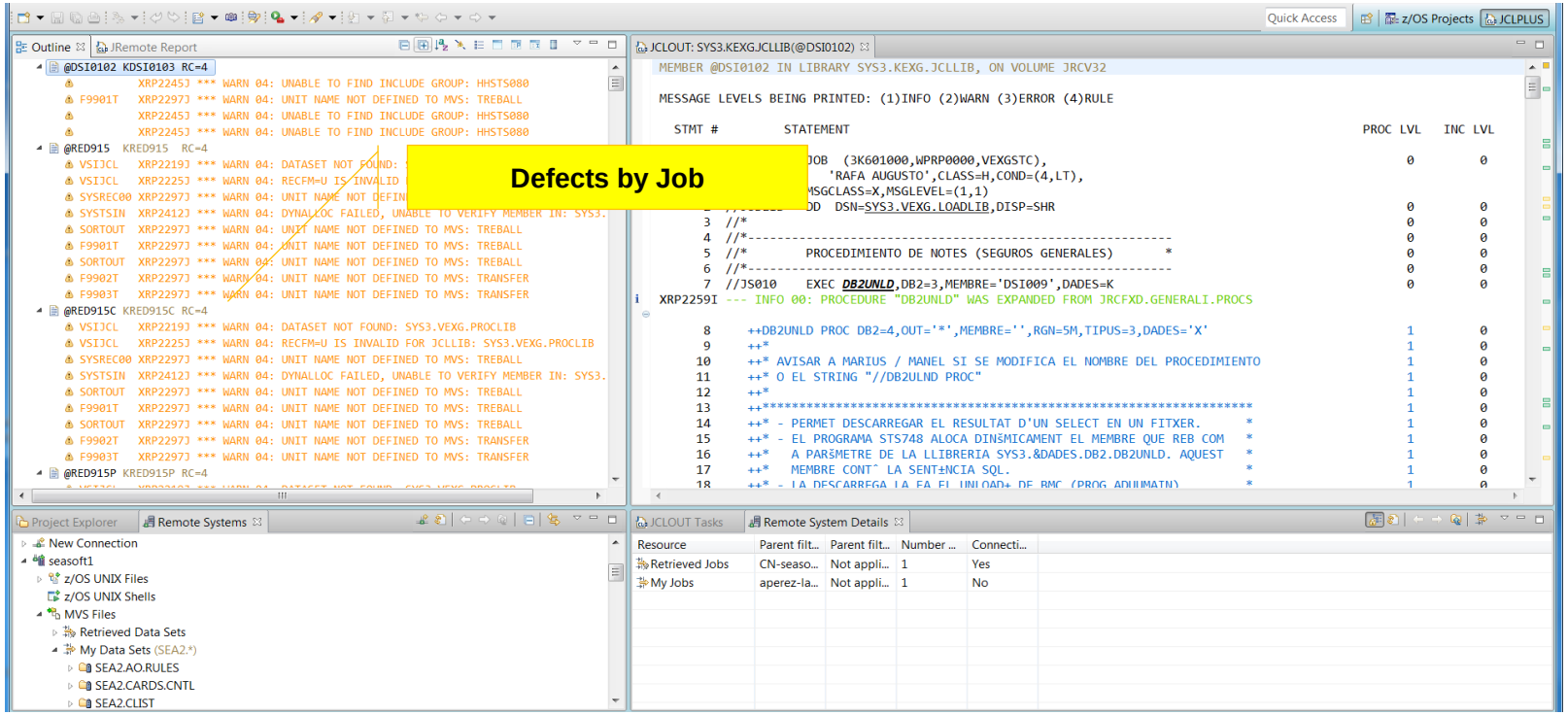
Obsolete components cleanup

Knowledge Management Incorporated



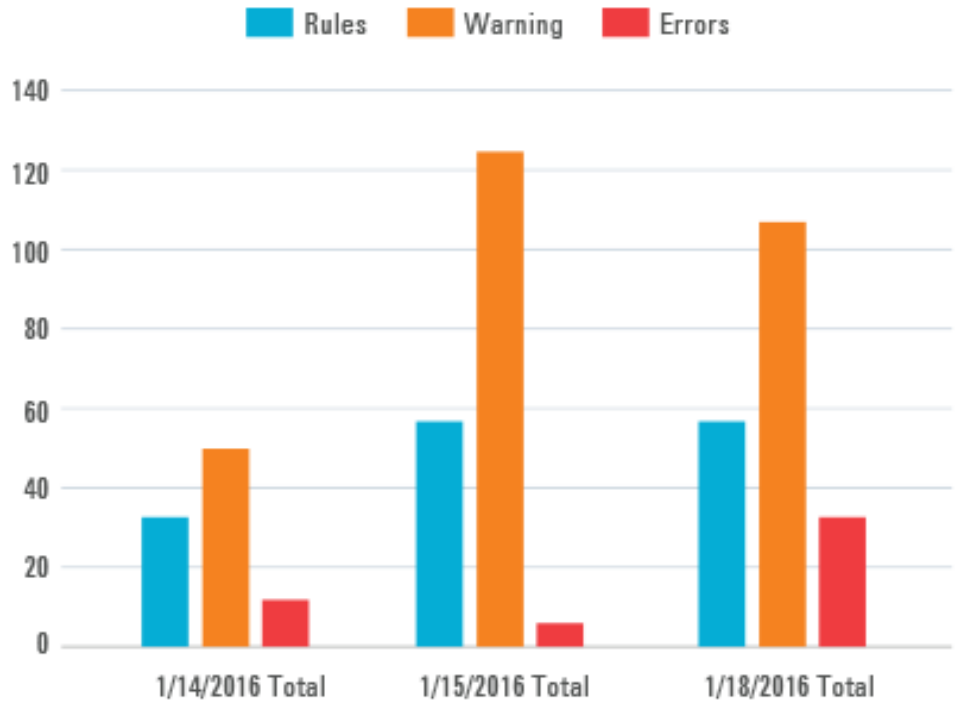
Knowledge Management Incorporated



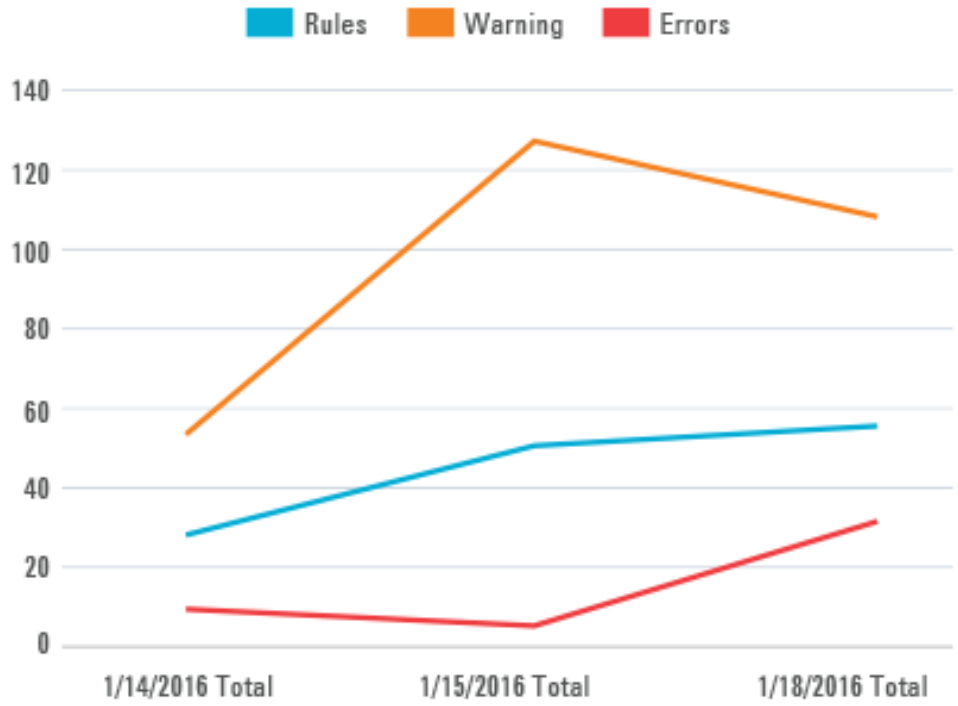


Reliance on Metrics

Graphical Representation



Trends Analysis



Indices

#Stmts/Job	60
#Defects/Job	10
#Stmts/Job w/Defects	6
#Critical-Defects/Job	3
#Standards-Defects/Job	8

Reliance on Metrics

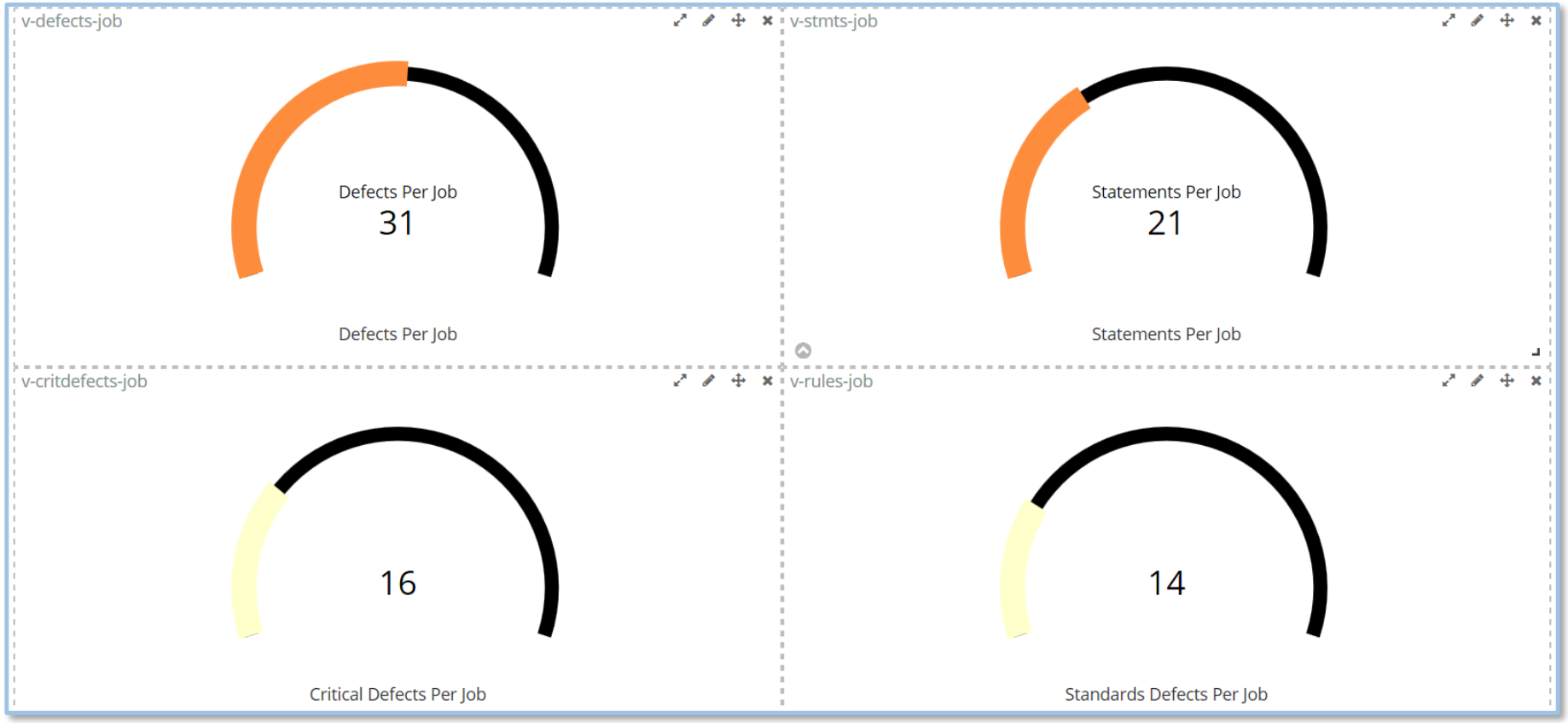
GUIDE SHARE EUROPE UK REGION

Global Data

Date	Mode	Testing Process	# Critical Defects	# Standards Defects	# Stmts Defects	# Jobs Tested	Records
October 19th 2018, 14:38:01.769	EDIT	SEAUSER	2	0	3	1	1
October 19th 2018, 14:38:01.776	BATCH	SEAUSERC	277	0	267	1	1
October 19th 2018, 14:38:01.778	BATCH	SEAUSERB	392	0	449	23	1
October 19th 2018, 14:38:01.780	EDIT	SEAUSER	2	0	3	1	1
October 19th 2018, 14:38:01.781	EDIT	SEAUSER	2	0	3	1	1
October 19th 2018, 14:38:01.782	EDIT	SEAUSER	0	17	13	1	1
October 19th 2018, 14:38:01.786	BATCH	SEAUSERB	275	414	389	7	1
October 19th 2018, 14:38:01.790	BATCH	SEAUSERB	275	414	389	7	1
October 19th 2018, 14:38:01.793	EDIT	SEAUSER	2	0	2	0	1
October 19th 2018, 14:38:01.801	EDIT	SEAUSER	2	8	6	1	1
October 19th 2018, 14:38:01.804	EDIT	SEAUSER	15	4	17	1	1
October 19th 2018, 14:38:01.806	BATCH	SEAUSERB	181	343	291	39	1
October 19th 2018, 14:38:01.808	EDIT	SEAUSER	2	12	7	1	1
			1,427	**1,212**	**1,839**	**84**	**13**

Reliance on Metrics

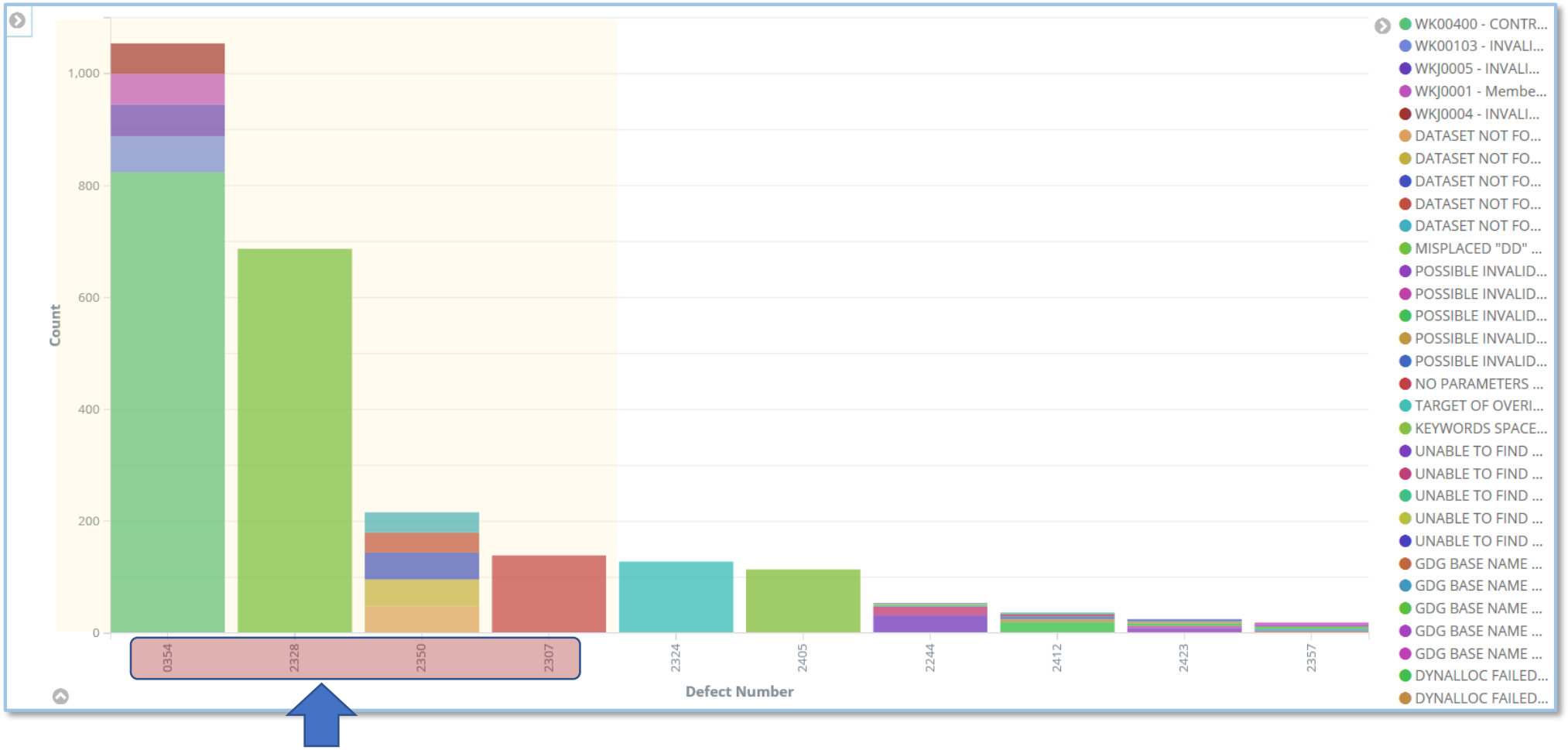
From the global data we can deduce the following Indices



- At a higher level these indices provide significant information for major release, application forecast, massive changes, scheduler setups and other events
- Detailed record offers more information to categorize defects' source, type and frequency

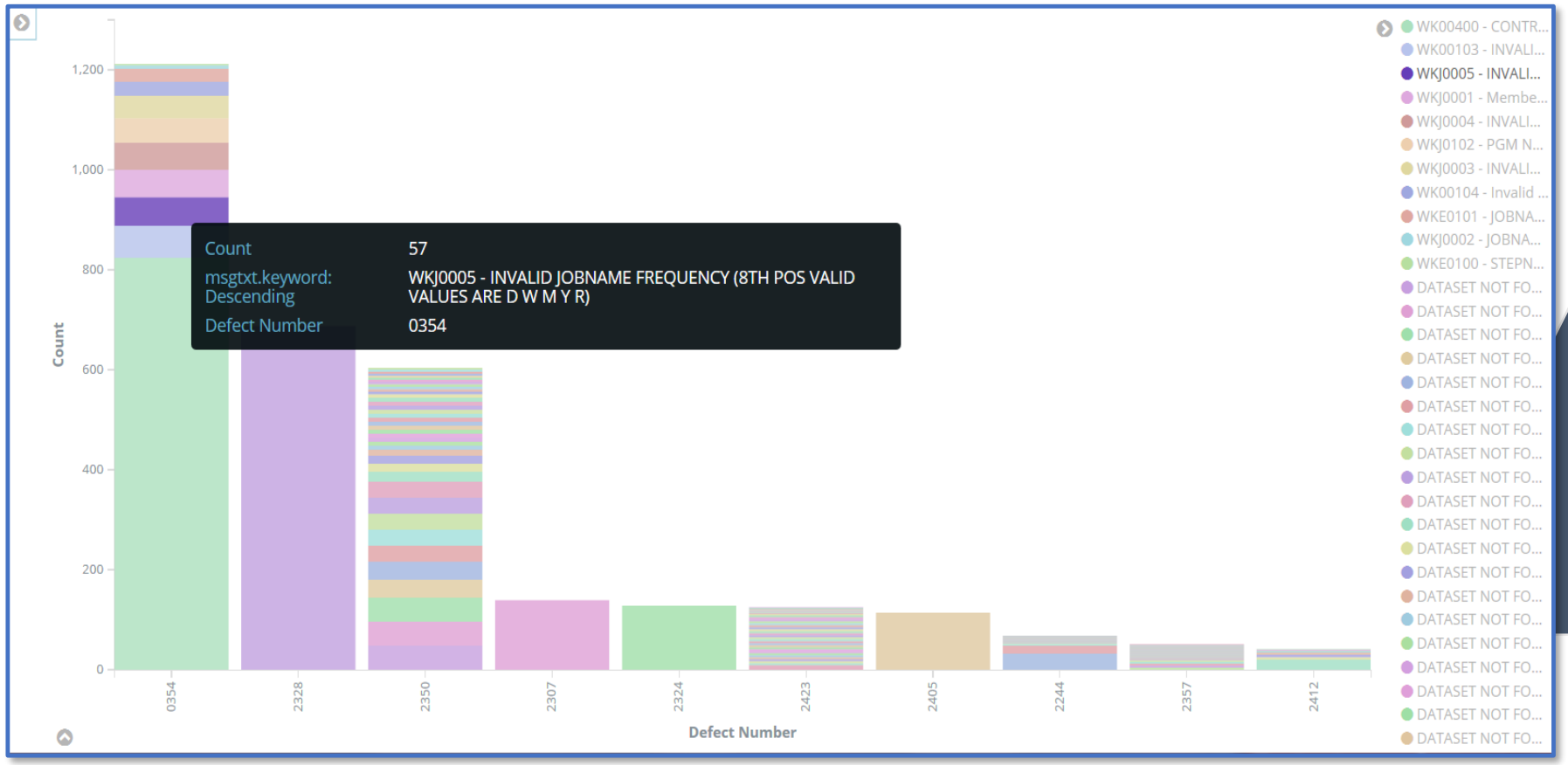
Reliance on Metrics

Defects by Type



Top 4 Defects for This Event

Reliance on Metrics



Defect **0354** is related to a Standards Enforcement Defect

This example of a release management shows a lack of company's standards knowledge when deploying an application

An action campaign can be easily implemented for developers (shift-Left)

What Types of Metrics are Interesting?

Why?

We want your feedback!

- Please submit your feedback online at ….
  - ➢http://conferences.gse.org.uk/2018/feedback/mf

- Paper feedback forms are also available from the Chair person

- This session is MF