

# Flushing with Pride!

Fluidmaster Eliminates JDE  
Monitoring and Performance  
Blind Spots!

*Remember to provide your session feedback in the app!*

**Session ID:**

Quest2020-109150

**Prepared by:**



**Melissa Penfield**

Global IT Director, Application Support

**Fluidmaster**

MPenfield@fluidmaster.com



**Beth Hunt**

CTO

**PumaSight**

beth.hunt@pumasight.com



# Introductions



Fluidmaster is the #1 toilet repair brand in the world.

Fluidmaster parts are found in more toilets than all other brands combined.

Melissa Penfield

Global IT Director, Applications Support  
[mpenfield@fluidmaster.com](mailto:mpenfield@fluidmaster.com)

HQ in San Juan Capistrano, CA

Founded in 1957

Serving 3 Customer Sets

OEM Toilet Manufacturers

Large National Home Improvement Retail

Plumbing Industry Wholesalers



# ABOUT US



- ✓ Enterprise Monitoring Specialists
- ✓ Multi-Vendor/Agnostic – Global Vendors and Open Source
- ✓ 20+ Years in Business – 100s of implementations
- ✓ CatEyes for JD Edwards born from Visibility Gap!

Beth Hunt

CTO

[beth.hunt@pumasight.com](mailto:beth.hunt@pumasight.com)

**ALL INCLUSIVE  
MANAGED SERVICES**

**24x7 NOC**

**EXPERT SERVICES**

**INTEGRATED  
SOLUTIONS**

**TECHNOLOGY**





# Audience Question

What are your most important JDE Monitoring goals or pain points?

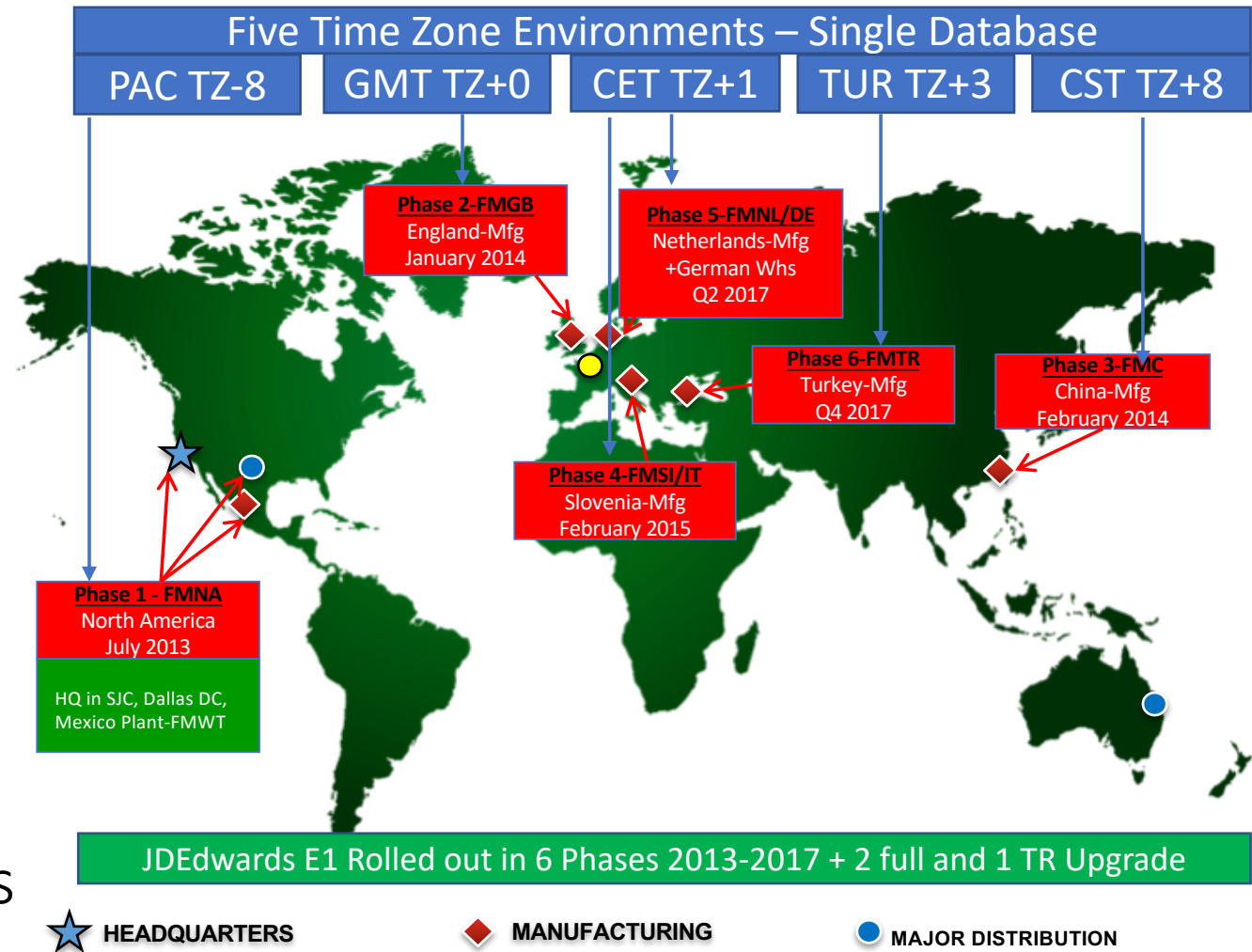
- JDE Performance & Database Blocking
- Production-Only Issues
- Optimization Opportunities / Growth
- Proactively solving unreported / hidden issues
- All of the Above
- Other – Enter in Q&A Box





# Fluidmaster Global Architecture

- EnterpriseOne 9.2update 3
- Tools Release: 9.2.2.6
- 5 Time Zones for E1
- 2 HTML Servers, LTM, SSO
- Private Cloud Data Center
- Single Instance database
  
- Remote Partner Support for CNC, DBA, Dev
- In-House IT Ops - 12
- In-House IT Apps – 7
- ~2,000 Employees, ~900 users





# Why CatEyes for Fluidmaster?

- Key projects in 2019 introduced “ERP” related change
  - JD Edwards Tools Upgrade and Code Current Project - April 2019
  - Production Hardware Upgrade – May 2019
  - Two sites (Dallas and the UK) implemented Third Party Barcoding Mobile Solutions – June 2019
  - Moved the Upgraded Hardware to new Data Center – July 2019
- Uptick in performance issues and database blocking incidents
  - DBAs said “the user caused the block”, blocking alerts have limited information
  - CNCs agreed with the DBAs, so did IT Operations – it’s squarely in IT Apps / Dev support domain
  - Developers/MOS couldn’t help unless we knew what program and use case caused it and it was repeatable
  - The Fluidmaster Apps Team were exhausted looking for the problem, but couldn’t “see” the transaction
  - **Strong feeling from the apps team they were going down rabbit holes, tracking symptoms, not root causes**

Users were frustrated with the disruption

Everyone was pointing at the E1 Applications Layer

Need a way to Prove it was or it wasn’t the E1 Upgrade

\*\*\*There was no smoking gun\*\*\*



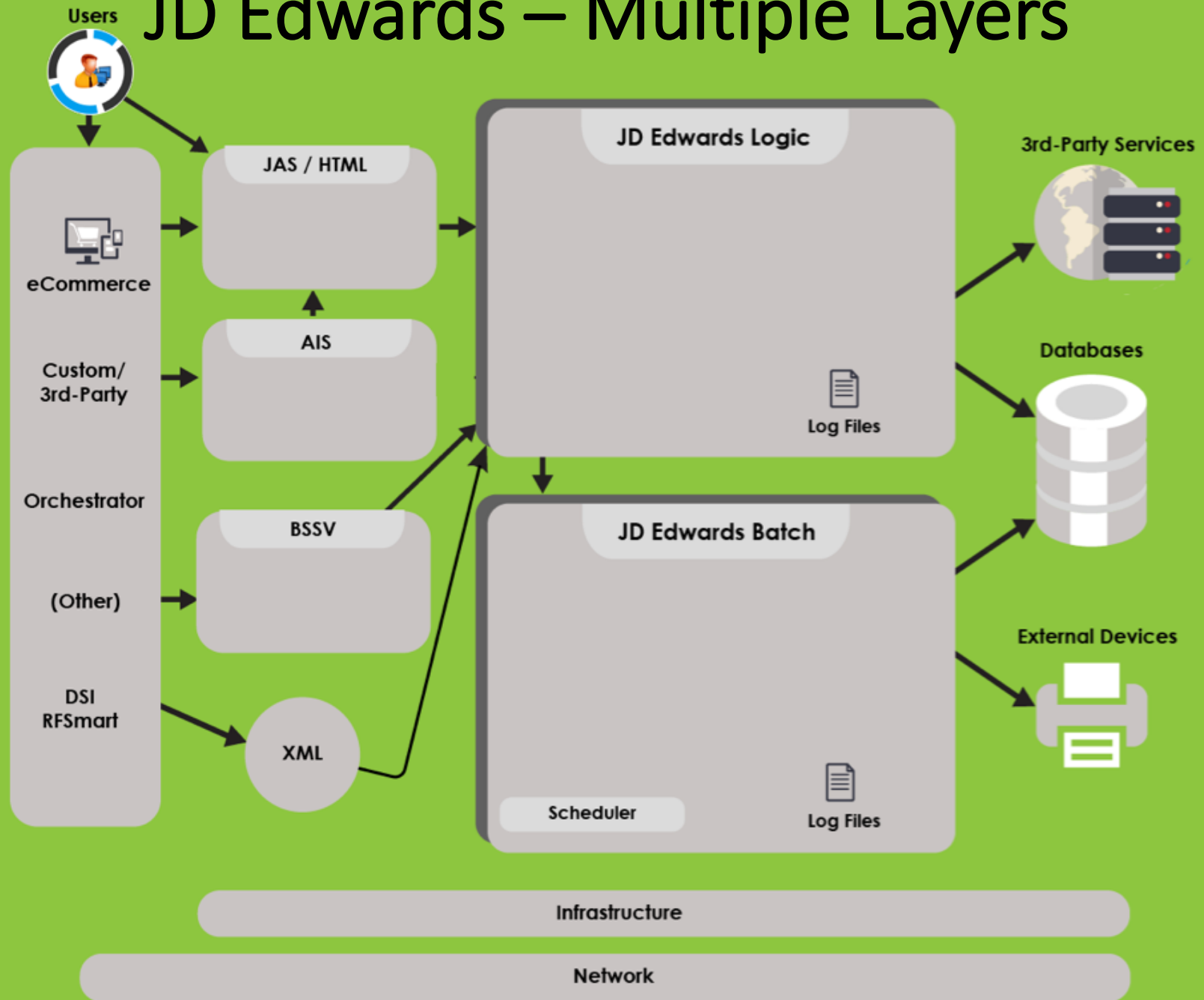
# JD Edwards Monitoring – Common Challenges



- ❑ JD Edwards infrastructure has many layers, any of which may impact performance, encounter a fault, or become a point of failure. Unique skillsets are required for these aspects of troubleshooting “the system”; database, disk, Weblogic, Tools, Code, 3<sup>rd</sup> party, CNC, etc.
  - ❑ Limited visibility to pinpoint cause of issues or opportunity for performance improvement.
  - ❑ Intermittent Production errors are difficult or impossible to capture or reproduce.
  - ❑ Difficult to Find the cause of ‘Production Only’ issues while avoiding Debug in Production
  - ❑ Countless hours spent tracking down the proverbial needle in a million haystacks
- ❑ Typical Alerts/Notifications usually don’t tell you “Why” but point to a clue but not the specific user, transaction, SQL. Ex: Db block, stuck threads, Zombies, High CPU, Lost connection...
- ❑ Averages and samplings aren’t enough. Many issues aren’t consistent. Why did *this* transaction fail this time and not the 1m other? Why for this user/app and not the others?

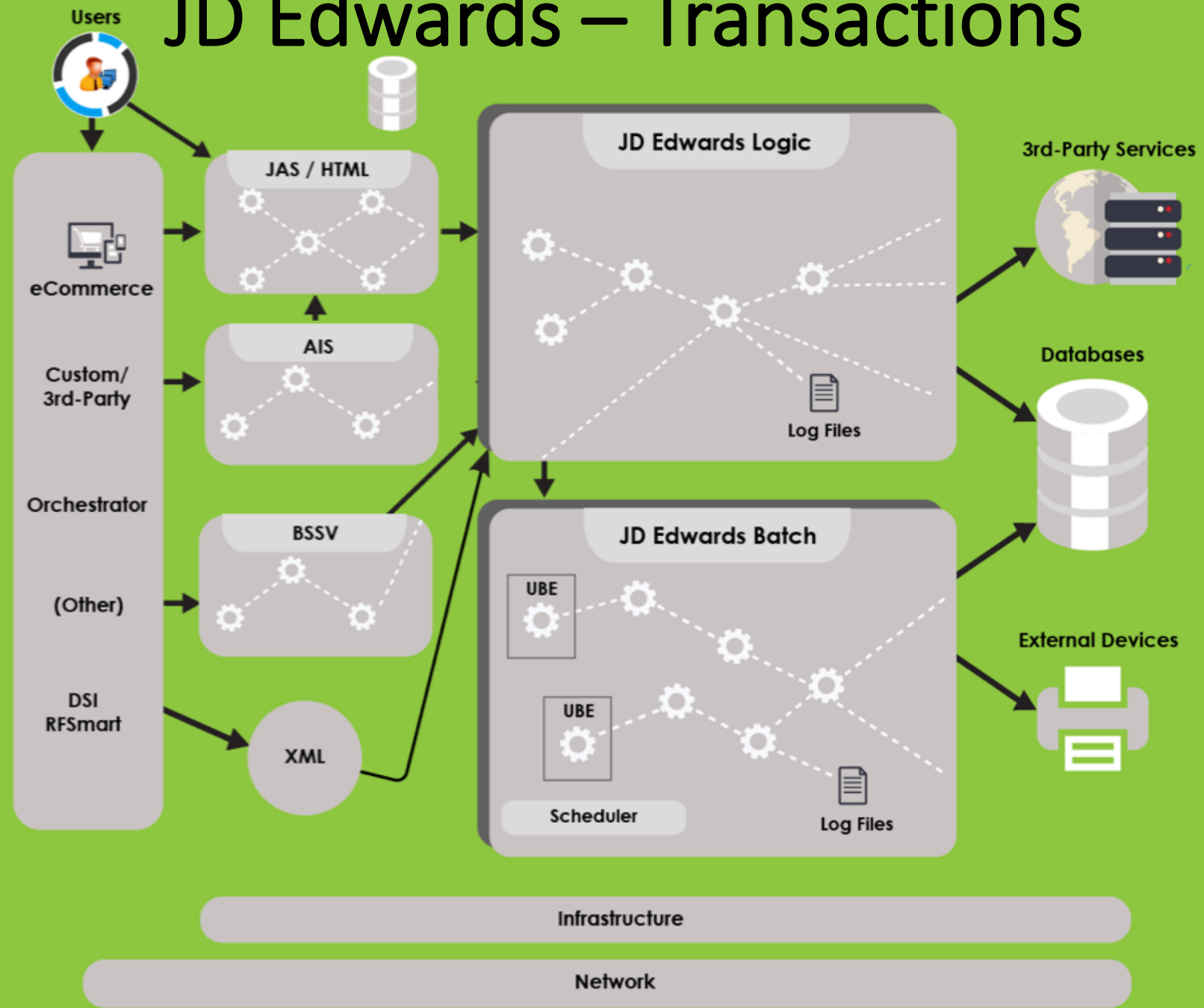
Thanks for the Alert - What About the Root Cause?

# JD Edwards – Multiple Layers

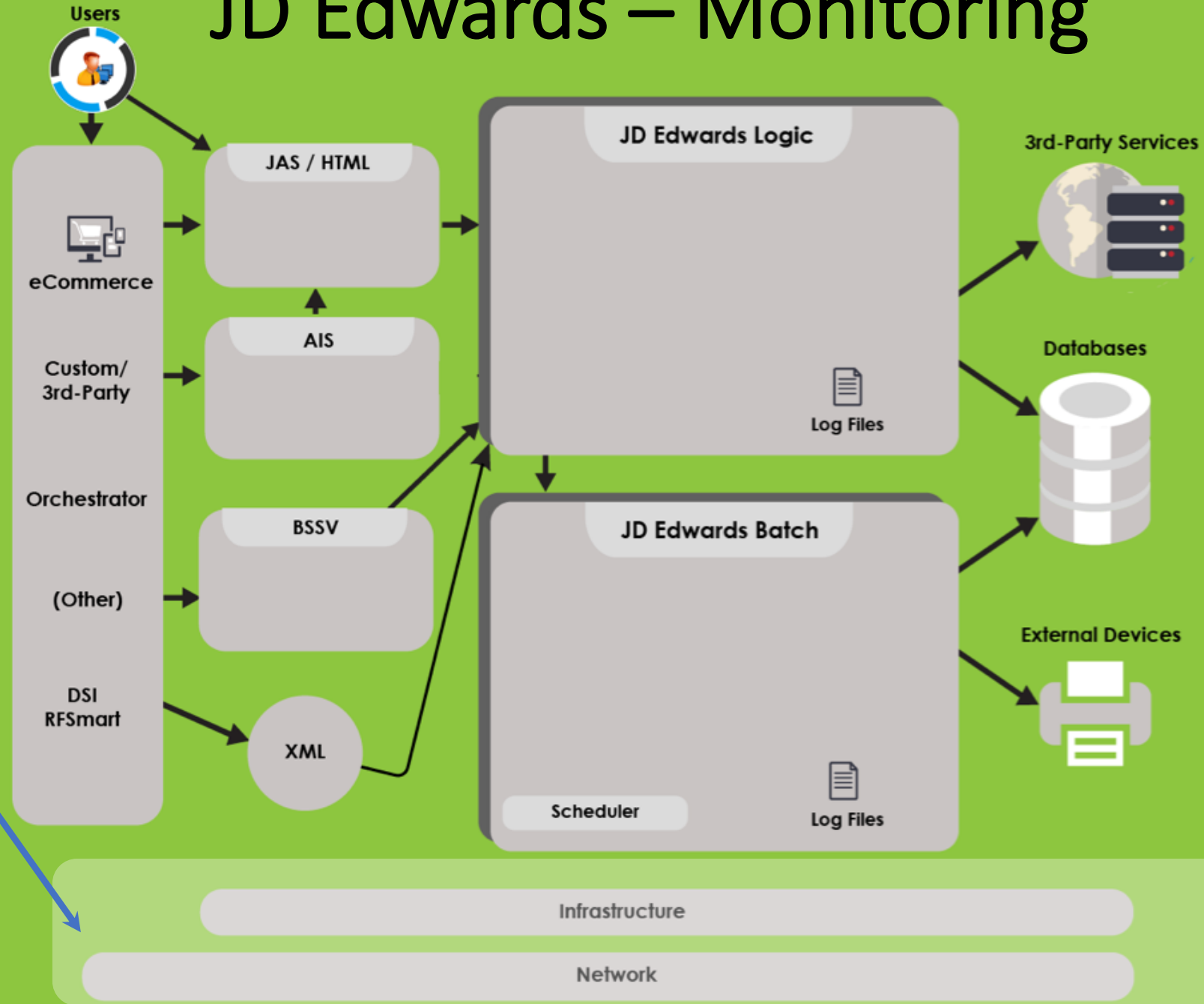




# JD Edwards – Transactions



# JD Edwards – Monitoring



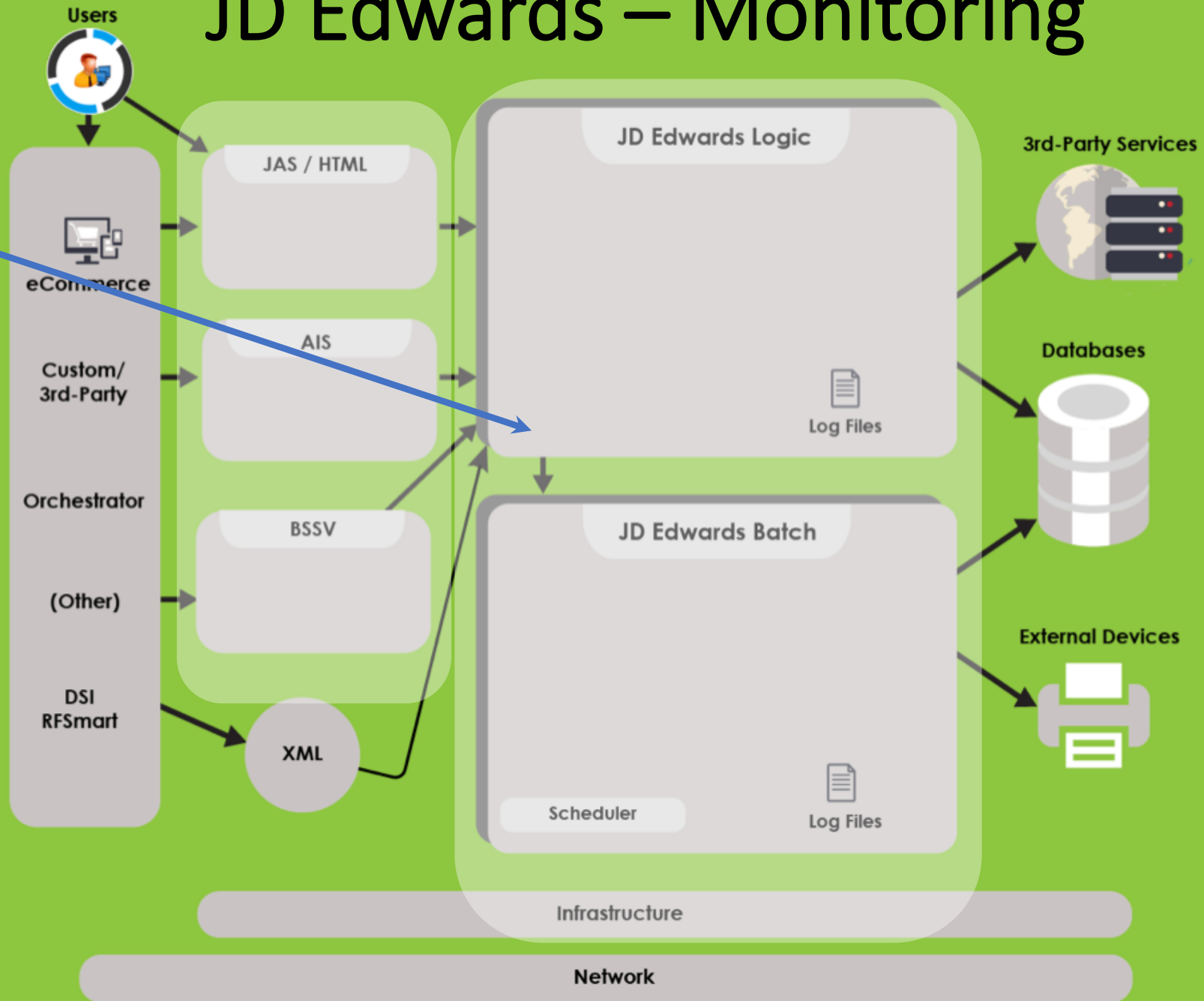
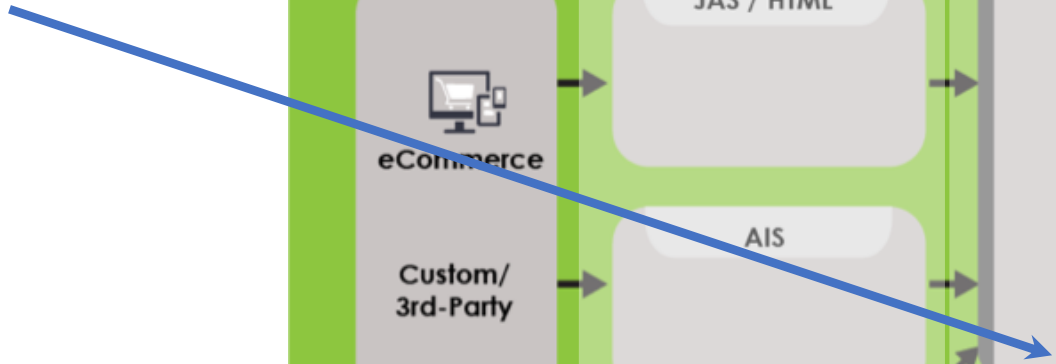
## Network & Infrastructure Monitoring

- On-Site or Cloud
- Internal or 3<sup>rd</sup>-Party



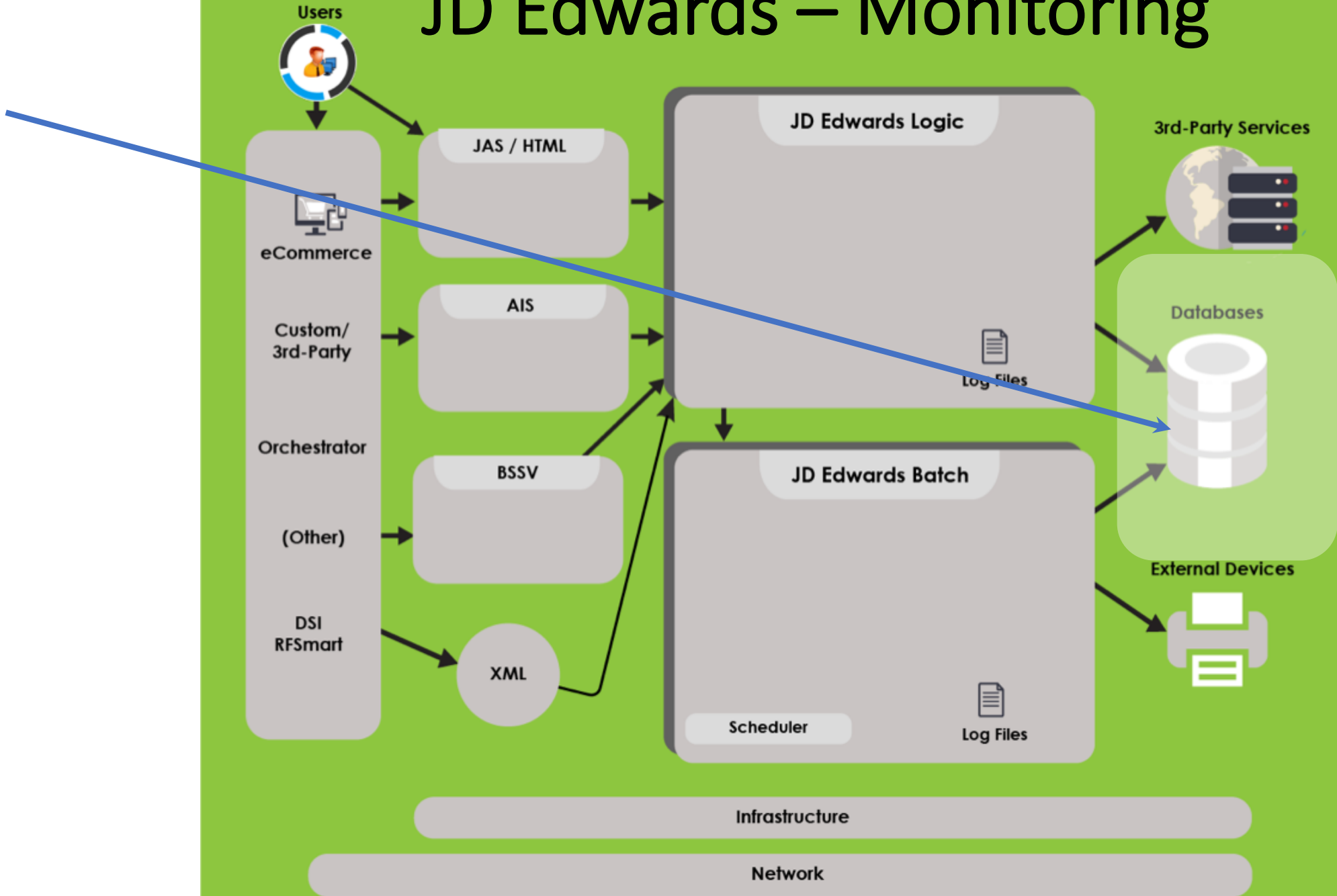
# JD Edwards – Monitoring

Server Manager



# JD Edwards – Monitoring

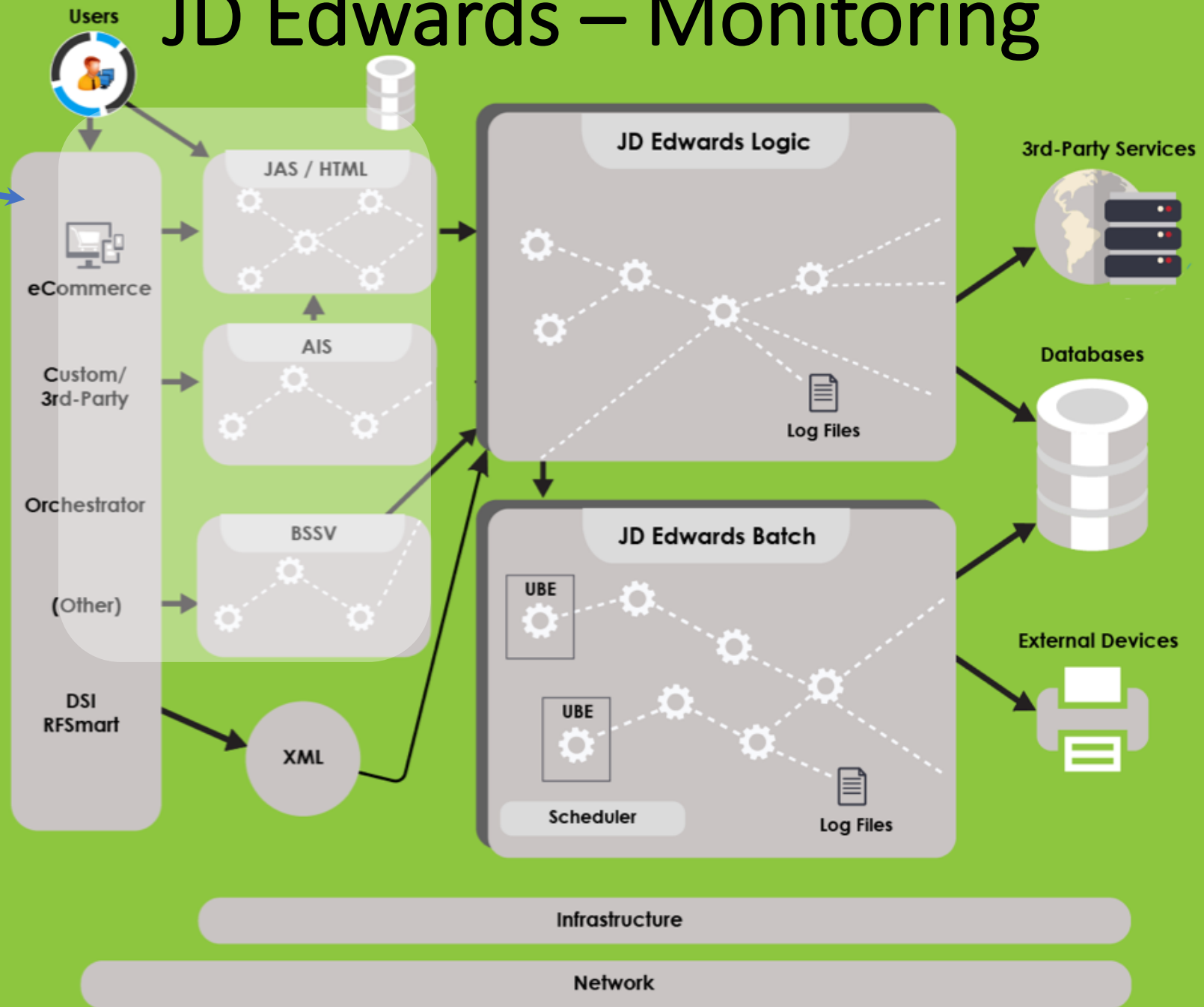
Database



# JD Edwards – Monitoring

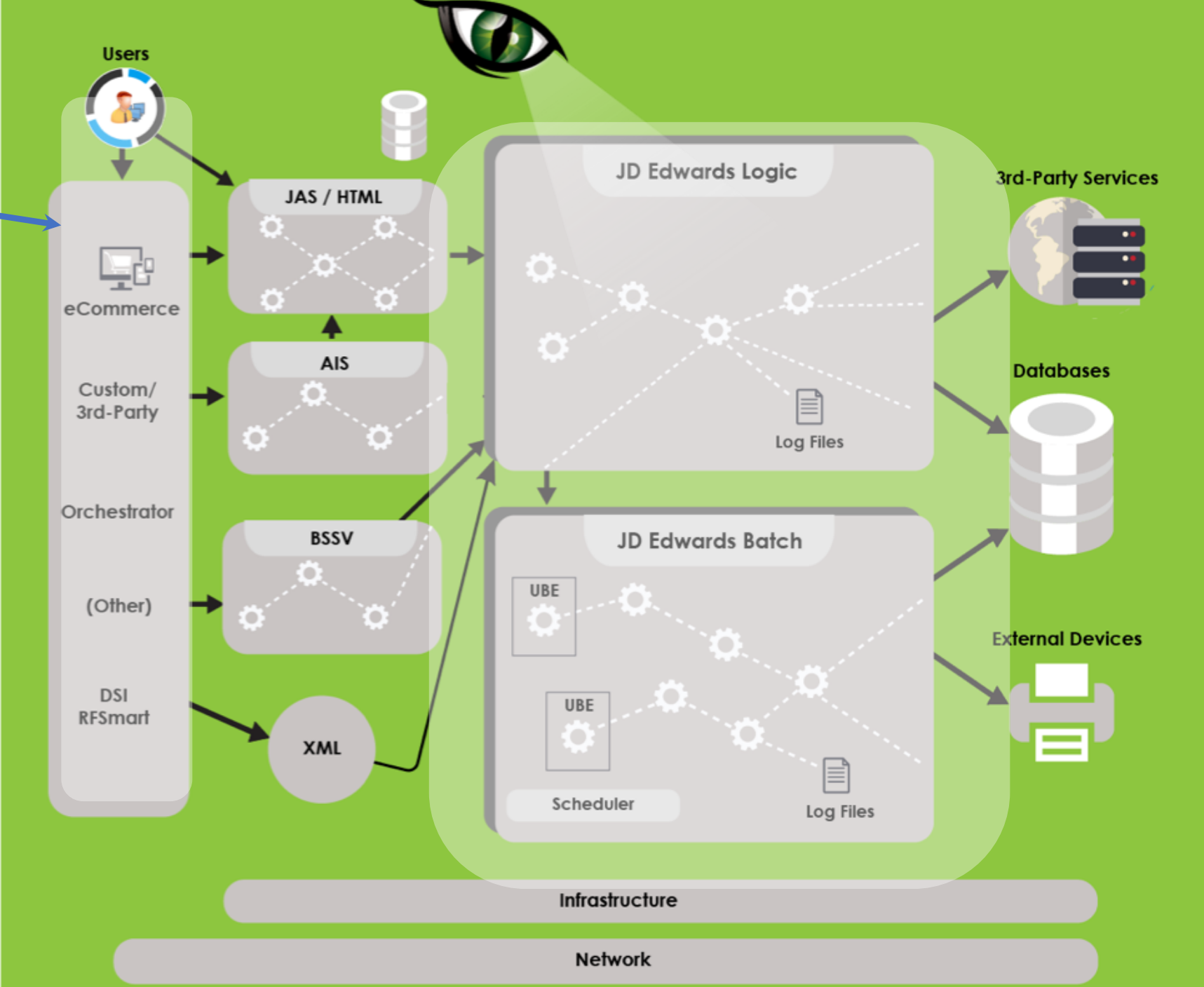
## APM

- Transactions while in JVMs
- Some 3rd-Party Apps



# CatEyes

- Transactions through JDE Logic and Batch
- Transaction User/Application
- End-2-End Data Details
- Full Database Queries, Logs and External Systems

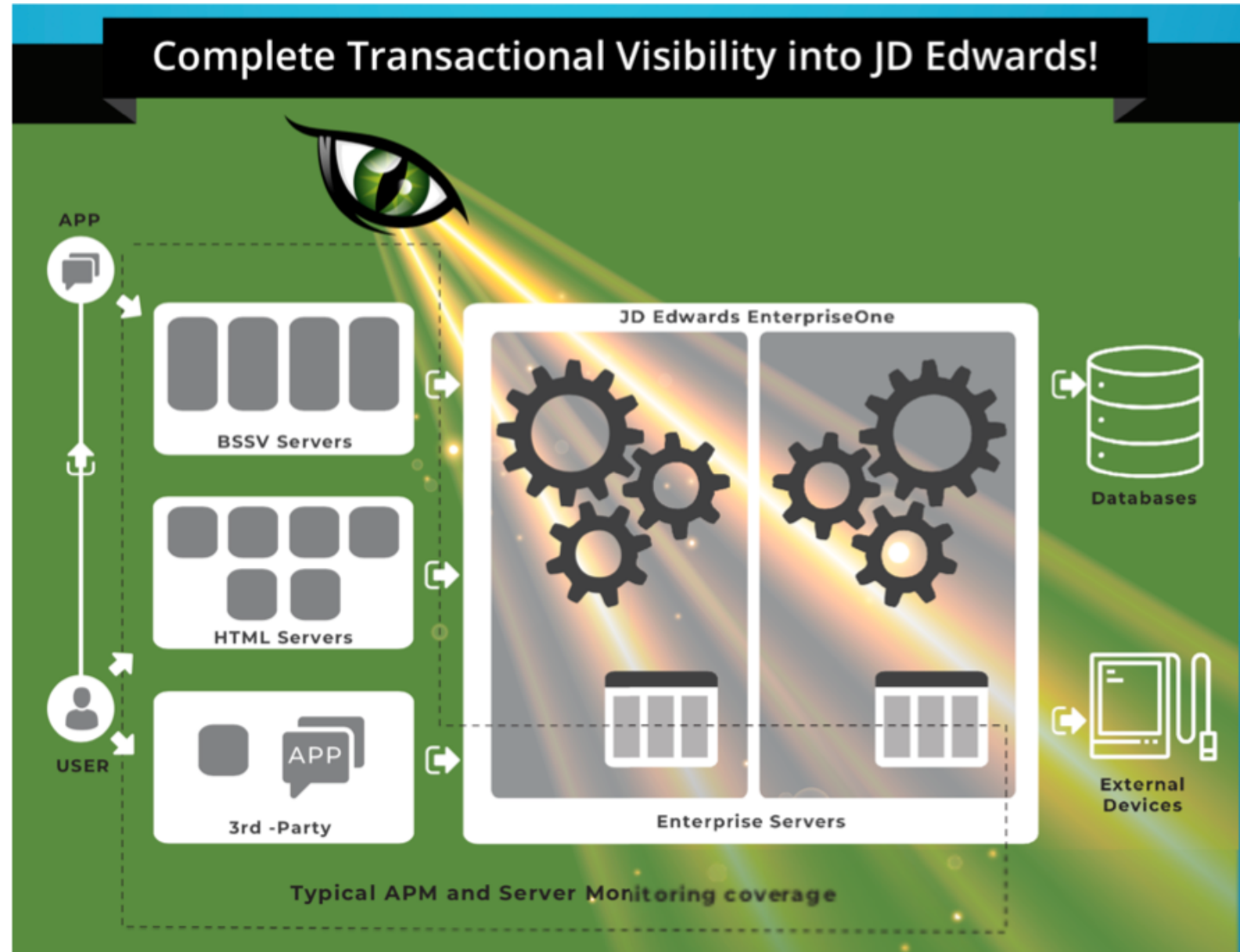


# CatEyes for JD Edwards – New Visibility



- ✓ Transaction Tracing and Deep-Dive Visibility through the Enterprise server.
- ✓ Requests from anywhere!
- ✓ 100% of E2E Transactions and Jobs – not sampling and averages.
- ✓ Run in Production – very low overhead
  - No Debug Logging
  - No Database polling
  - No JDE code changes
- ✓ Any JDE 9.1 or 9.2 + version!

➤ Proactively Solve and Optimize!



# Transaction Visibility = Problems Solved!



## ➤ Types of Problems Solved

- ✓ User Complaints → Drill into any real user transaction to pinpoint root cause.
- ✓ Intermittent Errors → No need to reproduce issues, full history available.
- ✓ Slow Performance → Pinpoint root cause or point of slow down, or eliminate the Application layer as the root cause, and proactively resolve.
- ✓ Trace-Back → Instant visibility to Who, What, When, Where an error or database query or block occurred, assess for the “Why”.

## ➤ Results & Benefits

- ✓ Significantly reduce time and cost to diagnose & total resolution time.
- ✓ Answers in minutes, not hours/days! (quickly get to who, what, when, where)
- ✓ No more War Room effort – only utilize the resources needed.
- ✓ Proactive User Experience Management & Business Growth



# Deep Insight - Simple Access!



➤ Demo throughout presentation

✓ Designed for Ease of Use  
- Simple tabs and navigation

✓ 100% of Real-Time User Transactions and Jobs

✓ Complete Drill-Down with Full Data

✓ Advanced Search –  
Functions, Applications, and Data Query Strings and Log Strings  
User, Pid, Environment, etc.  
*Search and Filter on Anything!*

✓ See all Database Queries and Logging –  
In Context

The screenshot displays the 'CatEyes for JD Edwards' web interface. The top navigation bar includes the CatEyes logo, the title 'CatEyes for JD Edwards', and a 'Location 2' dropdown. A left-hand navigation menu contains icons for 'User Transactions', 'Jobs', 'Server Stats', 'Log Errors', 'Database', 'Alert Setup', and 'Dashboards'. The main content area features an 'Advanced Search Q.' button and a 'Time Period' dropdown set to 'Yesterday'. Below this is a table of user transactions with columns for User ID, Environment, Application ID, PID, Business Functions, Start, Response Time, and Return Value. The table contains 15 rows of data, each with a 'Details' link next to the Business Functions column.

User ID	Environment	Application ID	PID	Business Functions	Start	Response Time	Return Value
USER3	JPS920	P0413V	2649	VoidDeleteManualPayment [Details]	2020-04-19 19:28:51.698292	353ms	0
USER3	JPS920	P04572	2649	RetrieveNextCheckFromBank [Details]	2020-04-19 19:32:01.669795	141ms	0
USER3	JPS920	P04115	2649	InitializePayeeControl [Details]	2020-04-19 19:29:13.535849	47ms	0
USER3	JPS920	DEFAULT	2649	IsColumnInAddressBook [Details]	2020-04-19 19:28:20.474020	32ms	0
USER3	JPS920	P0413M	2649	GetInteropProcOptions [Details]	2020-04-19 19:28:14.201603	23ms	0
USER3	JPS920	P0413V	2649	RetrieveAccountCurrencyCode [Details]	2020-04-19 19:28:47.131384	23ms	0
USER3	JPS920	P04572	2649	F00095ReserveObject [Details]	2020-04-19 19:32:01.845897	11ms	0
USER3	JPS920	P0413V	2649	BatchReviseOnTransactionCommit [Details]	2020-04-19 19:28:52.078501	9ms	0
USER3	JPS920	P04572	2649	APAutoPaymentsUpdateGLDate [Details]	2020-04-19 19:32:06.537045	8ms	0
USER3	JPS920	P0413V	2649	EditDate [Details]	2020-04-19 19:28:50.112579	7ms	0
USER3	JPS920	P04115	2649	ScrubAddressNumber [Details]	2020-04-19 19:29:21.855239	7ms	0
USER3	JPS920	P04115	2649	F0010TGetCompanyTagConstants [Details]	2020-04-19 19:29:56.661584	7ms	0

✓ **Instant Trace Back** from Database Queries and Logging to User and Application/UBE!

# Use Case – User Reported Performance

---



## ➤ User-Reported performance slowdown on Monday mornings

### Analysis and Diagnosis

- ✓ Sorted and filtered on users, time frame and response time to find the slow transactions and identify the beginning of the slowdown. Drilling in showed database queries on a few specific tables as the root cause.
- ✓ Reviewed transactions in order. Validated that the initial slow transactions resulted in slowdown of the next transactions trying to query the same tables. These were ‘victims’ versus the root cause. (Process of elimination)
- ✓ Compared those transactions to the same transactions at other times. This confirmed that the same transactions were faster at other times of the day/week.

### Action and Resolution

- ✓ Discovered that weekend indexing on those tables was not always finishing in time and modified process to resolve it.
- ✓ Determined those specific tables needed to be trimmed and added this maintenance.

# Use Case – User Reported Performance



## ➤ Intermittent User-Reported performance issues in 2 Time Zones

### Analysis and Diagnosis

- ✓ Confirmed and quantified issue by viewing response times per Environment/TZ. Identified the precise timing when the problem began and which transactions were the cause and which were 'victims'.
- ✓ Discovered that the exact start time of some slowdowns correlated with backend processing/backups.
- ✓ By drilling in, discovered the root cause of other slowdowns were specific tables accessed by version-specific Applications at the same time as UBEs heavily accessed the same tables.

### Action and Resolution

- ✓ Level loaded scheduled UBE timings to reduce load during the critical time.
- ✓ Created new procedure for scheduled job requests to maintain level loading.
- ✓ Reduced databrowser usage for those tables by identifying available reports and inquiries.

## ➤ *Demo!*

# User Transactions – All Interactive Requests



CatEyes for JD Edwards
Location 2

User Transactions
Advanced Search 
Time Period:

First Page | Previous | Next


	User ID	Environment	Application ID	PID	Business Functions	Start	Response Time	Return Value
+	USER3	JPS920	P0413V	2649	VoidDeleteManualPayment <a href="#">[Details]</a>	2020-04-19 19:28:51.698292	353ms	0
+	USER3	JPS920	P04572	2649	RetrieveNextCheckFromBank <a href="#">[Details]</a>	2020-04-19 19:32:01.669795	141ms	0
+	USER3	JPS920	P0411S	2649	InitializePayeeControl <a href="#">[Details]</a>	2020-04-19 19:29:13.535849	47ms	0
+	USER3	JPS920	DEFAULT	2649	IsColumnInAddressBook <a href="#">[Details]</a>	2020-04-19 19:28:20.474020	32ms	0
+	USER3	JPS920	P0413M	2649	GetInteropProcOptions <a href="#">[Details]</a>	2020-04-19 19:28:14.201603	23ms	0
+	USER3	JPS920	P0413V	2649	RetrieveAccountCurrencyCode <a href="#">[Details]</a>	2020-04-19 19:28:47.131384	23ms	0
+	USER3	JPS920	P04572	2649	F00095ReserveObject <a href="#">[Details]</a>	2020-04-19 19:32:01.845897	11ms	0
+	USER3	JPS920	P0413V	2649	BatchReviseOnTransactionCommit <a href="#">[Details]</a>	2020-04-19 19:28:52.078501	9ms	0
+	USER3	JPS920	P04572	2649	APAutoPaymentsUpdateGLDate <a href="#">[Details]</a>	2020-04-19 19:32:06.537045	8ms	0
+	USER3	JPS920	P0413V	2649	EditDate <a href="#">[Details]</a>	2020-04-19 19:28:50.112579	7ms	0
+	USER3	JPS920	P0411S	2649	ScrubAddressNumber <a href="#">[Details]</a>	2020-04-19 19:29:21.855239	7ms	0
+	USER3	JPS920	P0411S	2649	F0010TGetCompanyTagConstants <a href="#">[Details]</a>	2020-04-19 19:29:56.661584	7ms	0



- User Transactions
- Jobs
- Server Stats
- Log Errors
- Database
- Alert Setup
- Dashboards

# End 2 End & Drill Down




CatEyes for JD Edwards Location 2

Advanced Search 
Time Period:


First Page | Previous | Next

	User ID	Environment	Application ID	PID	Business Functions	Start	Response Time	Return Value	
+	USER3	JPS920	P0413V	2649	VoidDeleteManualPayment [Details]	2020-04-19 19:28:51.698292	353ms	0	
-	USER4	JDV920	P0413V	2545	VoidDeleteManualPayment [Details]	2020-04-19 18:52:13.427201	247ms	0	
					GetInteropProcOptions[Details]	2020-04-19 18:52:13.427603	0ms	0	
					SQL[Details]	2020-04-19 18:52:13.468583	1ms	1	
					SQL[Details]	2020-04-19 18:52:13.479932	4ms	1	
					RetrieveNextPaymentLineID[Details]	2020-04-19 18:52:13.485098	29ms	0	+
					SQL[Details]	2020-04-19 18:52:13.514809	0ms	1	
					SQL[Details]	2020-04-19 18:52:13.522660	3ms	1	
					DecimalTriggerGetByCurrency[Details]	2020-04-19 18:52:13.526150	7ms	0	+
					GetAccountCompany[Details]	2020-04-19 18:52:13.533468	10ms	0	+
					ReturnFYPN[Details]	2020-04-19 18:52:13.544441	10ms	0	+

- User Transactions
- Jobs !
- Server Stats
- Log Errors
- Database
- Alert Setup
- Dashboards

# Details and Data





**User Transactions**

- Jobs
- Server Stats
- Log Errors
- Database
- Alert Setup
- Dashboards

User ID	PID	Thread ID	Object Name	Response Time
JDE	2530	-316777664	<b>B0400067</b>	196ms

Function	Return Value	Start Time	Stop Time
VoidDeleteManualPayment	0	2019-08-16 23:45:28.333200	2019-08-16 23:45:28.529894

F0413 Update Manual Payment Record

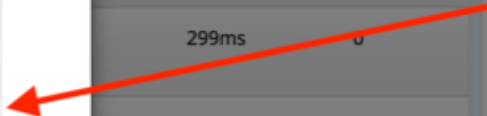
**Arguments**

BSFN_Name:	VoidDeleteManualPayment
GLRTID:	0
CallingApplicationName:	P0413V
CallingApplicationVersion:	ZJDE0001
Environment:	JPS920
CallingIP:	34.224.113.111
ReqNet:	52310
FunctionType:	901
<b>Data</b>	<b>-</b>
cPostStatusPayments	D
mnPaymentId	109
jdVoidDate	18/07/08

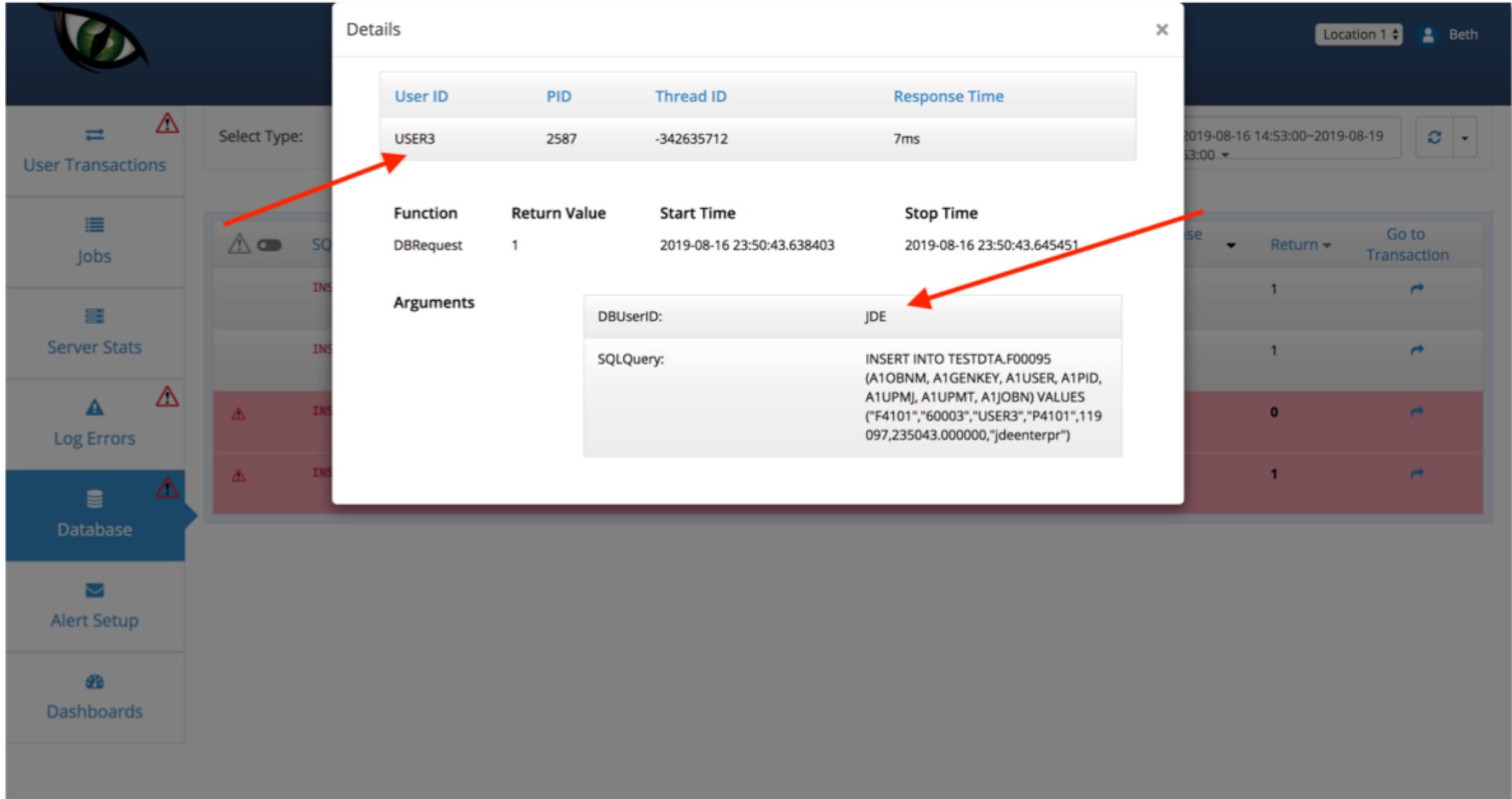
Location 1 Beth

Weeks ↻

Response Time	Return Value
560ms	0
299ms	0
196ms	0
112ms	0
85ms	0
80ms	0
79ms	0
77ms	2



# Database Requests – Details



**Details**

User ID	PID	Thread ID	Response Time
USER3	2587	-342635712	7ms

**Function**

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-08-16 23:50:43.638403	2019-08-16 23:50:43.645451

**Arguments**

DBUserID:	JDE
SQLQuery:	INSERT INTO TESTDTA.F00095 (A1OBNM, A1GENKEY, A1USER, A1PID, A1UPM], A1UPMT, A1JOBN) VALUES ("F4101", "60003", "USER3", "P4101", 119 097,235043.000000, "jdeenterpr")

# Jobs – List and Summary





## CatEyes for JD Edwards

Location 2 ▾

- ⇄ ⚠  
User Transactions
- ☰ ⚠  
Jobs
- ☰  
Server Stats
- ⚠ ⚠  
Log Errors
- 🗄 ⚠  
Database
- ✉  
Alert Setup
- 🗺  
Dashboards

Advanced Search Q


Time Period: Last 7 Days ▾
↻ ▾

First Page | Previous | Next

	Job	Report	Request Time	Finish Time	Response Time	State	Details
⚠	485984	R09420_XJDE0001	2020-04-19 18:26:10	2020-04-19 18:28:21	131446ms	D	<a href="#">[Details]</a>
⚠	485975	R09420_XJDE0003	2020-04-19 18:21:59	2020-04-19 18:22:18	19225ms	D	<a href="#">[Details]</a>
⚠	486018	R09420_XJDE0003	2020-04-19 18:36:49	2020-04-19 18:37:08	18556ms	D	<a href="#">[Details]</a>
+	486033	R04570_XJDE0001	2020-04-19 19:30:45	2020-04-19 19:30:56	10724ms	D	<a href="#">[Details]</a>
+	486038	R09801_ZJDE0003	2020-04-19 19:33:21	2020-04-19 19:33:30	9177ms	D	<a href="#">[Details]</a>
+	486028	R04570_XJDE0001	2020-04-19 18:54:05	2020-04-19 18:54:14	8639ms	D	<a href="#">[Details]</a>
+	486036	R04575_ZJDE0001	2020-04-19 19:32:30	2020-04-19 19:32:38	8301ms	D	<a href="#">[Details]</a>
+	486031	R04575_ZJDE0001	2020-04-19 18:55:44	2020-04-19 18:55:52	7989ms	D	<a href="#">[Details]</a>
+	486034	R04571_ZJDE0001	2020-04-19 19:32:08	2020-04-19 19:32:16	7776ms	D	<a href="#">[Details]</a>
+	486029	R04571_ZJDE0001	2020-04-19 18:55:09	2020-04-19 18:55:17	7751ms	D	<a href="#">[Details]</a>
+	485982	P00140_ZJDE0002	2020-04-19 18:25:14	2020-04-19 18:25:21	6361ms	D	<a href="#">[Details]</a>
+	485986	P00140_ZJDE0002	2020-04-19 18:27:07	2020-04-19 18:27:13	6342ms	D	<a href="#">[Details]</a>



# Jobs – Details



- User Transactions
- Jobs
- Server Stats
- Log Errors
- Database
- Alert Setup
- Dashboards

User ID	RunBatchPID	UBEKernelPID	JobID	Response Time
USER4	32572	2358	208743	134000ms

**Data**

Report:	R09420_XJDE0001
Queue:	QBATCH
QueueType:	UBE
Status:	D
JobType:	UBE
ScheduledDate:	2019-8-17
ScheduledTime:	09:24:05
Host:	jdeenterprise
OriginationHost:	ip-172-31-4-41.ec2.internal
Priority:	5
Environment:	JPS920
UBEKernelPID:	2358
LastUpdateDate:	2019-8-17
LastUpdateTime:	09:26:19

Location 1 Beth

Weeks

State	Details
D	[Details]
D	[Details]
D	[Details]
D	[Details]
D	[Details]
D	[Details]



  

Time	Return
ns	1
ns	1
ns	1
ns	1
ns	1
ns	1

SQL [Details] 32572 2019-08-17 09:24:12.804436 2019-08-17 09:24:12.805047 134000ms

# Jobs – Summary and Drill Down




CatEyes for JD Edwards
Location 2 

⇌
⚠

Advanced Search

Time Period: Last 6 hours
↻

[First Page](#) | [Previous](#) | [Next](#)

<span style="color: red;">⚠</span> <input type="checkbox"/>	Job	Report	Request Time	Finish Time	Response Time	State	Details
+	485984	R09420_XJDE0001	2020-04-19 18:26:10	2020-04-19 18:28:21	131446ms	D	<a href="#">[Details]</a>
-	485975	R09420_XJDE0003	2020-04-19 18:21:59	2020-04-19 18:22:18	19225ms	D	<a href="#">[Details]</a>

« Previous - Page 1 of 965 pages, displaying 1-10 of 9644 results - Next »

<span style="color: red;">⚠</span> <input type="checkbox"/>	Run	PID	Start	Stop	Response Time	Return
	<a href="#">SQL [Details]</a>	12792	2020-04-19 18:22:18.519805	2020-04-19 18:22:18.524017	4ms	1
	<a href="#">SQL [Details]</a>	12792	2020-04-19 18:22:18.515885	2020-04-19 18:22:18.519677	3ms	1
	<a href="#">DecimalTriggerGetByCompany [Details]</a>	12792	2020-04-19 18:22:18.501385	2020-04-19 18:22:18.501488	0ms	0
	<a href="#">DecimalTriggerGetByMCU [Details]</a>	12792	2020-04-19 18:22:18.500490	2020-04-19 18:22:18.500744	0ms	0 <span style="float: right;">+</span>
	<a href="#">DecimalTriggerGetByAID [Details]</a>	12792	2020-04-19 18:22:18.499276	2020-04-19 18:22:18.500380	1ms	0 <span style="float: right;">+</span>
	<a href="#">SQL [Details]</a>	12792	2020-04-19 18:22:18.498128	2020-04-19 18:22:18.499154	1ms	1
	<a href="#">RetrieveCompanyBUType [Details]</a>	12792	2020-04-19 18:22:18.496529	2020-04-19 18:22:18.496635	0ms	0
	<a href="#">GetCostCenterDescriptionA7 [Details]</a>	12792	2020-04-19	2020-04-19	1ms	0 <span style="float: right;">+</span>

⇌ User Transactions ⚠

Jobs ⚠

☰ Server Stats

⚠ Log Errors ⚠

☰ Database ⚠

✉ Alert Setup

🗺 Dashboards

# Performance Overview – Last 6 hours



- User Transactions
- Jobs
- Server Stats
- Log Errors
- Database
- Alert Setup
- Dashboards

Advance Search  Time Period:

« « Page 1 of 26587 pages, displaying 1-30 of 797596 results » »

<input type="checkbox"/>	User ID	Environment	Application ID	PID	Business Function	Start	Response Time	Return Value
<input type="checkbox"/>	[REDACTED]	JPD92TZ2P	P4113	5488	F4113FSEndDoc <a href="#">[Details]</a>	2019-11-04 14:05:59.614015	110372ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ1P	P0911	3120	F0911FSEndDoc <a href="#">[Details]</a>	2019-11-04 12:06:08.447001	106672ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ8P	P4021	6736	LoadSupplyAndDemandData <a href="#">[Details]</a>	2019-11-04 15:01:25.571001	106160ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ2P	P4021	5292	LoadSupplyAndDemandData <a href="#">[Details]</a>	2019-11-04 14:05:56.422006	94314ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ1P	P31123	4216	F3112SuperBackflushEditDoc <a href="#">[Details]</a>	2019-11-04 13:36:04.436005	90297ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ0	RFSmart	3264	RFS_TxWOTracking <a href="#">[Details]</a>	2019-11-04 12:35:38.833000	77950ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ1P	P4617	6760	F4611SuggestionEndDoc <a href="#">[Details]</a>	2019-11-04 12:07:05.514007	77950ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ2P	P0411	1292	F0411FSEndDoc <a href="#">[Details]</a>	2019-11-04 10:01:23.693005	66432ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ1P	P4021	4100	LoadSupplyAndDemandData <a href="#">[Details]</a>	2019-11-04 13:35:16.204001	63830ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ2P	P0411	1292	F0911FSEndDoc <a href="#">[Details]</a>	2019-11-04 14:05:34.130035	55566ms	0
<input type="checkbox"/>	[REDACTED]	JPD92TZ1P	DConnector	8448	F4600ProcessLocationSelection <a href="#">[Details]</a>	2019-11-04 12:10:05.922005	48739ms	0

Problem was not Time Zone / Environment specific or Application specific  
Normalized Times = all Time Zone activity in correct order

# Performance Drill-Down to Root Causes



	UseF41021WFCacheFetch[Details]	2019-11-04 14:06:24.676011	0ms	2	
	RightJustifyUDCValue[Details]	2019-11-04 14:06:24.676013	0ms	0	
	CacheProcessUniqueF41021WF[Details]	2019-11-04 14:06:24.676015	0ms	0	
	SQL[Details]	2019-11-04 14:06:24.676017	0ms	1	
	SQL[Details]	2019-11-04 14:06:24.676019	0ms	1	
→	SQL[Details]	2019-11-04 14:06:24.676021	1452ms	1	
	MPMVerifyProjectSpecificItem[Details]	2019-11-04 14:06:26.129001	0ms	0	+
	CalculatePMPNInventory[Details]	2019-11-04 14:06:26.129005	0ms	0	+
	SQL[Details]	2019-11-04 14:06:26.129009	46ms	1	
→	InventoryCardexShell[Details]	2019-11-04 14:06:26.176001	70297ms	0	-
	GetAuditInfo[Details]	2019-11-04 14:06:26.176002	0ms	0	
	GetAuditInfo[Details]	2019-11-04 14:06:26.176004	0ms	0	
→	WriteCardexRecord[Details]	2019-11-04 14:06:26.176006	70297ms	0	-
	GetNextUniqueKeyID[Details]	2019-11-04 14:06:26.176007	62ms	0	+
	SQL[Details]	2019-11-04 14:06:26.239001	0ms	1	
	DecimalTriggerGetByMCU[Details]	2019-11-04 14:06:26.239003	0ms	0	+
→	SQL[Details]	2019-11-04 14:06:26.239007	70233ms	1	
	GetEnvironmentValue[Details]	2019-11-04 14:07:36.473001	0ms	0	
	B4100040_Plug_and_Play[Details]	2019-11-04 14:07:36.473003	0ms	0	+
	InventoryCardexShell[Details]	2019-11-04 14:07:36.473009	905ms	0	+

Drill Down found specific multiple SQL queries = root cause

# Performance Drill-Down -> SQL Details



Details

User ID	PID	Thread ID	Response Time
[REDACTED]	5488	7412	70233ms

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-11-04 14:06:26.239007	2019-11-04 14:07:36.473000

Arguments

DBUserID:	JDEDBA
SQLQuery:	<pre>INSERT INTO JDE_PRODUCTION.PRODDTA.F4111 (ILNLIN, ILITM, ILLITM, ILAITM, ILMCU, ILLOCN, ILLOTN, ILPLOT, ILSTUN, ILLDSQ, ILTRNO, ILFRTO, ILLMCX, ILLOTS, ILLOTP, ILLOTG, ILKIT, ILMMCU, ILDMCT, ILDMCS, ILKCO, ILDOC, ILDCT, ILSFX, ILJELN, ILCU, ILDGL, ILGLPT, ILDCTO, ILDOCO, ILKCOO, ILLNID, ILIPCD, ILTRDJ, ILTRUM, ILAN8, ILTREX, ILTREF, ILRCD, ILTRQT, ILUNCS, ILPAID, ILTERM, ILUKID, ILTDAY, ILUSER, ILPID, ILCRDJ, ILAIID, ILASID, ILMCUZ, ILOBJ, ILSBL, ILSUB, ILUOM2, ILCMOO, ILRE, ILSBLT, ILSQOR, ILVPEJ, ILHDGJ, ILSHAN, ILOPSQ, ILRFLN, ILTGN, ILLOTC, ILSVDT, ILLRCD, ILRLOT, ILLPNU, ILPMPN, ILPNS) VALUES (0.000000,67407.000000,"GR0644 ","8681282624737 "," 4801","OKG "," ","",0.000000,0.000000,0.000000,"T", ","",0.000000,"",0.000000,"", ","0.000000,"00480",304306.000000,"IB ","000",4.000000,0.000000,119308,"RM 01",",",0.000000," ",2500.000000,"X",119308," ",0.000000,"Location Add",",", ",0.000000,0.000000,0.000000,"ID5028</pre>

Details

User ID	PID	Thread ID	Response Time
[REDACTED]	5688	8204	17007ms

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-11-04 13:37:08.830001	2019-11-04 13:37:25.838000

Arguments

DBUserID:	JDEDBA
SQLQuery:	<pre>SELECT TO.WMDOCO, TO.WMDCTO, TO.WMSFXO, TO.WMTBM, TO.WMFORQ, TO.WMITC, TO.WMCOBY, TO.WMCOTY, TO.WMCPNT, TO.WMFRMP, TO.WMTHRP, TO.WMFRGD, TO.WMTHGD, TO.WMRKCO, TO.WMRORN, TO.WMRCTO, TO.WMRLLN, TO.WMOPSQ, TO.WMBSEQ, TO.WMRSCP, TO.WMSCRP, TO.WMREWP, TO.WMASIP, TO.WMCPYP, TO.WMSTPP, TO.WMLOVD, TO.WMCPIT, TO.WMCPIL, TO.WMCPA, TO.WMCMCU, TO.WMDSC1, TO.WMDSC2, TO.WMLOCN, TO.WMLOTN, TO.WMAN8, TO.WMLNTY, TO.WMSERN, TO.WMTRDJ, TO.WMDRQJ, TO.WMUORG, TO.WMTRQT, TO.WMSOEN, TO.WMSOEN, TO.WMCTS1, TO.WMQNTA, TO.WMUM, TO.WMEA, TO.WMRTG, TO.WMMTST, TO.WMDCT, TO.WMSHNO, TO.WMMCUC, TO.WMOMCU, TO.WMOBJ, TO.WMSUB, TO.WMCMRV, TO.WMSTRX, TO.WMPARS, TO.WMCOMM, TO.WMURCD, TO.WMURDT, TO.WMURAT, TO.WMURRF, TO.WMURAB, TO.WMUSER, TO.WMPID, TO.WMJOB, TO.WMUPMJ, TO.WMTDAY, TO.WMLUKID.</pre>

# Use Case – Database Blocks and Performance



## ➤ Database Blocks - Preceded by slowdown

### Analysis and Diagnosis

- ✓ Captured the queries, host PID, and timestamps from the blocking alert.
- ✓ Found the blocker and blockee queries in CatEyes and followed back to the specific transaction and application/user/BSFN that executed the queries. Verified blocks are a symptom.
- ✓ Reviewed transaction history & slowdowns leading up to blocks, including specific tables, queries, and errors prior to blocking event.
- ✓ Based on the above, Fluidmaster was able to rule out JDE applications as the root cause - allowing IT Operations to then focus on Database and Hardware.
- ✓ Correlated timing of the start of slowdowns leading to some blocks to hardware backup timing.

### Action and Resolution

- ✓ Reviewed and modified backend processing times to less busy user times.
- ✓ Audited settings at the web server, database and SAN level.

# Example Blocking Alert



## MS SQL Database Blocking

Instance Name: MSSQLSERVER  
Event Time: Nov 26 2019 12:50AM

currentdb	Nature	waittime	transaction name	Lock Mode	status	clientapp	hostname	loginname	inputbuf
master	Blocked	462564	UPDATE	X	suspended	EnterpriseOne	JDE92 [REDACTED]	JDEDBA	(@P1 nchar(12),@P2 nchar(20),@P3 float,@P4 float,@P5 float,@P6 nchar(5),@P7 nchar(2),@P8 float,@P9 float,@P10 float,@P11 nchar(2),@P12 float,@P13 float,@P14 nchar(15),@P15 datetime2,@P16 nchar(10),@P17 nchar(15),@P18 nchar(10),@P19 nchar(15),@P20 nchar(12),@P21 nchar(20)) UPDATE JDE_PRODUCTION.PRODDTA.F46L30 SET LCMCU=@P1,LCLOCN=@P2,LCUCUB=@P3,LCMAXLCV=@P4,LCRSLCV=@P5,LCLNCS=@P6,LCVUMD=@P7,LCULWEI=@P8,LCMAXW=@P9,LCRLWEI=@P10,LCUWUM=@P11,LCURAT=@P12,LCURAB=@P13,LCURRF=@P14,LCUTIME=@P15,LCPID=@P16,LCSVRNAME=@P17,LCUSER=@P18,LCMKEY=@P19 WHERE ( LCMCU = @P20 AND LCLOCN = @P21 )
	<u>BlockedBy</u>				suspended	EnterpriseOne	JDE92 [REDACTED]	JDEDBA	(@P1 nchar(12),@P2 nchar(20),@P3 float,@P4 float,@P5 float,@P6 nchar(5),@P7 nchar(2),@P8 float,@P9 float,@P10 float,@P11 nchar(2),@P12 float,@P13 float,@P14 nchar(15),@P15 datetime2,@P16 nchar(10),@P17 nchar(15),@P18 nchar(10),@P19 nchar(15),@P20 nchar(12),@P21 nchar(20)) UPDATE JDE_PRODUCTION.PRODDTA.F46L30 SET LCMCU=@P1,LCLOCN=@P2,LCUCUB=@P3,LCMAXLCV=@P4,LCRSLCV=@P5,LCLNCS=@P6,LCVUMD=@P7,LCULWEI=@P8,LCMAXW=@P9,LCRLWEI=@P10,LCUWUM=@P11,LCURAT=@P12,LCURAB=@P13,LCURRF=@P14,LCUTIME=@P15,LCPID=@P16,LCSVRNAME=@P17,LCUSER=@P18,LCMKEY=@P19 WHERE ( LCMCU = @P20 AND LCLOCN = @P21 )

### XMLData

```
<TextData><blocked-process-report monitorLoop="2111813"> <blocked-process> <process id="process8ed4465088" taskpriority="0" logused="0" waitresource="KEY: xx (732e788df4c0)" waittime="462564" ownerId="29611182770" transactionname="UPDATE" lasttranstarted="2019-11-26T00:41:34.347" XDES="0x71048d94e0" lockMode="X" schedulerid="3" kpid="6352" status="suspended" spid="723" sbid="0" ecid="0" priority="0" truncount="2" lastbatchstarted="2019-11-26T00:41:34.333" lastbatchcompleted="2019-11-26T00:41:34.333" lastattention="1900-01-01T00:00:00.333" clientapp="EnterpriseOne" hostname="JDE92 [REDACTED]" hostpid="12896" loginname="JDEDBA" isolationlevel="read committed (2)" ..... </blocked-process> <blocking-process> <process status="suspended" waitresource="KEYxx (732e788df4c0)" waittime="786896" spid="318" sbid="0" ecid="0" priority="0" truncount="2" lastbatchstarted="2019-11-26T00:36:09.980" lastbatchcompleted="2019-11-26T00:36:09.980" lastattention="1900-01-01T00:00:00.980" clientapp="EnterpriseOne" hostname="JDE92 [REDACTED]" hostpid="4136" loginname="JDEDBA" isolationlevel="read committed (2)" ..... </blocking-process> </blocked-process-report> </TextData>
```

## CatEyes for JD Edwards

Location 2

- [User Transactions](#)
- [Jobs](#)
- [Server Stats](#)
- [Log Errors](#)
- [Database](#)
- [Alert Setup](#)
- [Dashboards](#)

Advanced Search 
Select Type: Transactions
Time Period: Yesterday

[First Page](#) | [Previous](#) | [Next](#)

<input type="checkbox"/>	SQL Query	Timestamp	Response Time	Return	Go to Transaction
<input type="checkbox"/>	SELECT RPKCO, RPDO, RPDCT, RPSFX, RPSFXE, RPCO, RPPST, RPAG, RPAAP, RPADSC, RPADSA,...	2020-04-19 19:28:51.930624	12 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	INSERT INTO PS920DTA.F0414 (RNPYID, RNRC5, RNDCTM, RNKCO, RNDCT, RNDOC, RNSFX, RNSFX...	2020-04-19 19:28:52.029650	10 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	SELECT COUNT(*) FROM PS920.F98761PS920F1 WHERE ( RS0BNM = "R04570" AND RSVERS = "XJD...	2020-04-19 19:30:42.213843	7 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	UPDATE PS920DTA.F0411 SET RPKCO="61000",RPDO=3193.000000,RPDCT="PV",RPSFX="001",RPS...	2020-04-19 19:28:51.965634	6 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	SELECT * FROM PS920DTA.F0008 WHERE ( CDDTPN = "R" AND CDDFYJ = 117001 AND CDFQ = " "...	2020-04-19 19:28:50.113065	6 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	UPDATE PS920DTA.F0413 SET RMPYID=34.000000,RMDCTM="PN",RMDOCM=1.000000,RMPYE=4360.00...	2020-04-19 19:28:52.042139	5 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	SELECT * FROM PS920DTA.F0414 WHERE ( RNPYID = 34.000000 ) AND ( RNDCTM <> "PO" AND R...	2020-04-19 19:28:51.746720	5 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	SELECT * FROM PS920.F98743PS920F1 WHERE ( DTOBNM = "T0400297" )	2020-04-19 19:28:14.212928	5 ms	1	<a href="#">↗</a>
<input type="checkbox"/>	SELECT * FROM SY920.F93011 WHERE ( TCOBNM = "DEFAULT" ) ORDER BY TCOBNM ASC	2020-04-19 19:06:40.408516	5 ms	1	<a href="#">↗</a>



# Database SQLs - Search



Advanced Search for Database

SQL Query: INSERT

PID: Search for PID

User ID: Search for User ID

Timestamp: Search for Timestamp

SEARCH CANCEL

SELECT * FROM PS920DTA.F04257W2 WHERE ( KEPSSEL = 3.000000 AND KEGLBA = "00000108" ) ...	2020-04-19 19:32:06.537855	2 ms	1	
INSERT INTO PS920DTA.F00095 ( A10BNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN...	2020-04-19 19:32:01.853557	3 ms	1	
SELECT * FROM PS920DTA.F00095 WHERE ( A10BNM = "F0030" AND A1GENKEY = "1" )	2020-04-19 19:32:01.848802	4 ms	1	
SELECT * FROM PS920.F98740PS920F1 WHERE ( ELPRDTYP = 4 AND ELOBNM = "F00095" ) ORDER...	2020-04-19 19:32:01.846706	1 ms	1	
SELECT * FROM SY920.F95922 WHERE ( PRPRMSNTYP = "AB" AND PRUSER = "*PUBLIC" )	2020-04-19 19:32:01.783146	0 ms	1	

# Database SQLs – Search and Filter



## CatEyes for JD Edwards

Location 2

Advanced Search

Select Type: Transactions

Time Period: Last 7 Days



INSERT

First Page | Previous | Next

SQL Query	Timestamp	Response Time	Return	Go to Transaction
INSERT INTO PS920DTA.F0101 (ABAN8, ABALKY, ABTAX, ABALPH, ABDC, ABMCU, ABSIC, ABLNGP...	2020-04-19 17:52:14.459883	30 ms	1	
INSERT INTO TESTDTA.F00095 (A10BNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN)...	2020-04-19 18:37:34.219130	11 ms	1	
INSERT INTO PS920DTA.F0414 (RNPYID, RNRC5, RNDCTM, RNKCO, RNDCT, RNDOC, RNSFX, RNSFX...	2020-04-19 19:28:52.029650	10 ms	1	
INSERT INTO TESTDTA.F0414 (RNPYID, RNRC5, RNDCTM, RNKCO, RNDCT, RNDOC, RNSFX, RNSFXE...	2020-04-19 18:52:13.651528	10 ms	1	
INSERT INTO TESTDTA.F00095 (A10BNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN)...	2020-04-19 18:24:26.674752	9 ms	1	
INSERT INTO PS920DTA.F00095 (A10BNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN)...	2020-04-19 18:24:16.640961	9 ms	1	
INSERT INTO PS920DTA.F00095 (A10BNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN)...	2020-04-19 18:38:00.002071	8 ms	1	
INSERT INTO PS920DTA.F0111 (WWAN8, WWIDLN, WWDSS5, WWMLNM, WWATTL, WWREM1, WWSLNM, W...	2020-04-19 17:52:14.493282	8 ms	1	
INSERT INTO TESTDTA.F00095 (A10BNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN)...	2020-04-19 18:28:56.376900	7 ms	1	

User Transactions

Jobs

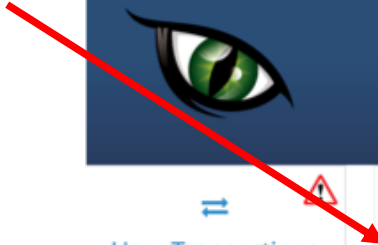
Server Stats

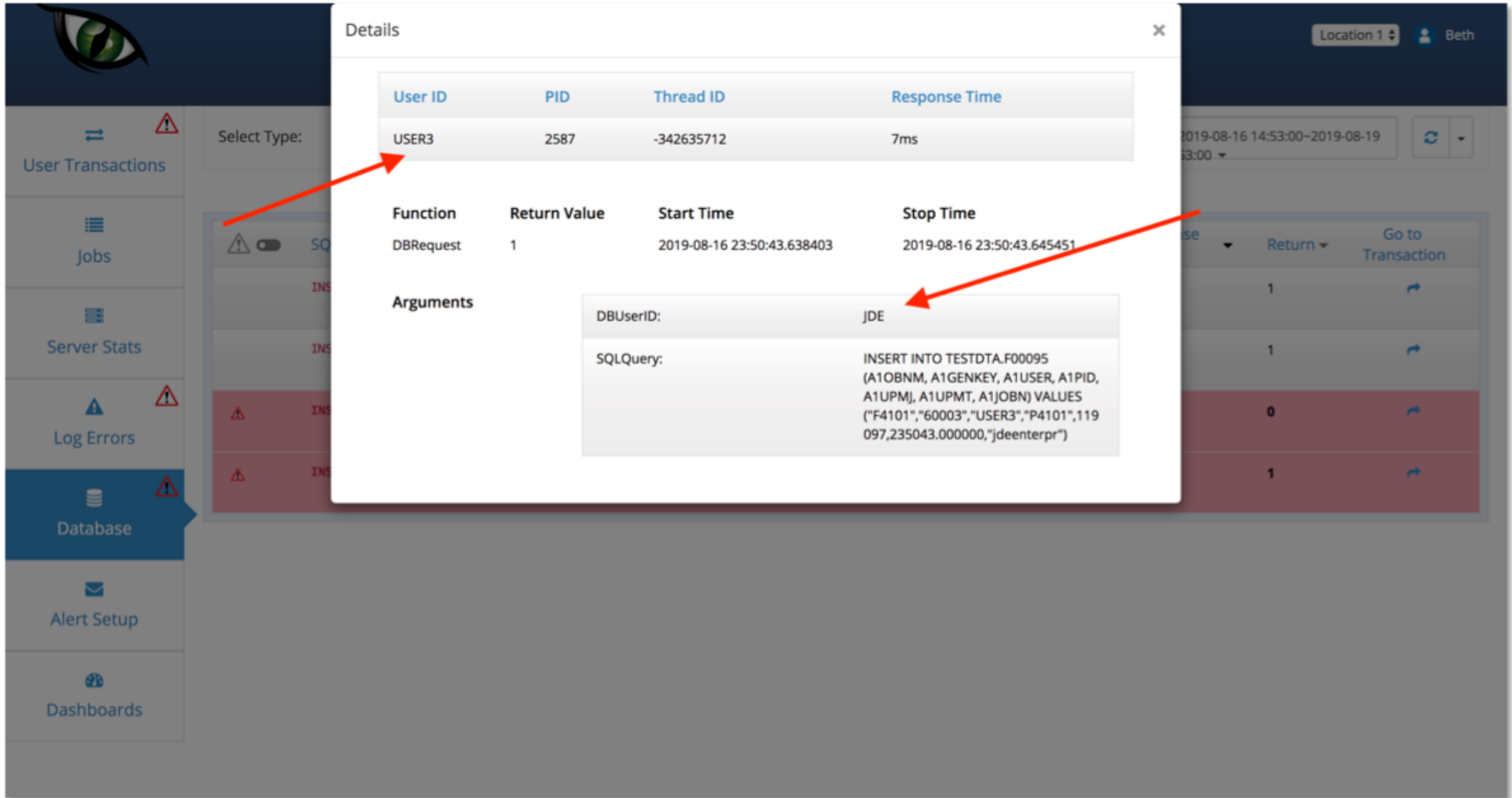
Log Errors

Database

Alert Setup

Dashboards





The screenshot shows a database monitoring interface with a 'Details' dialog box open. The dialog box contains the following information:

User ID	PID	Thread ID	Response Time
USER3	2587	-342635712	7ms

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-08-16 23:50:43.638403	2019-08-16 23:50:43.645451

**Arguments**

DBUserID:	JDE
SQLQuery:	INSERT INTO TESTDTA.F00095 (A1OBNM, A1GENKEY, A1USER, A1PID, A1UPMJ, A1UPMT, A1JOBN) VALUES ("F4101", "60003", "USER3", "P4101", 119097, 235043.000000, "jdeenterpr")

Two red arrows point from the 'Details' dialog box to the background application. One arrow points to the 'USER3' entry in the first table, and the other points to the 'DBUserID: JDE' entry in the 'Arguments' section.

# Database SQLs – Backtrace



✓ *Backtrace to the Transaction that executed the SQL!*



CatEyes for JD Edwards
Location 2 ▾

Advanced Search Q

Select Type: Transactions ▾

Time Period: Last 6 hours ▾

First Page | Previous | Next

SQL Query	Timestamp	Response Time	Return	Go to Transaction
DELETE FROM PS920DTA.F00095 WHERE ( A10BNM = "F4101" AND A1GENKEY = "721879" )	2020-04-19 18:26:13.727272	1008 ms	1	<a href="#">↶</a>
SELECT * FROM OL920.F9860 WHERE ( SIOBNM = "F9500001" )	2020-04-19 18:23:45.510864	1002 ms	1	<a href="#">↶</a>
SELECT * FROM TESTDTA.F4101 WHERE ( IMITM = 721844.000000 )	2020-04-19 18:38:28.154837	208 ms	1	<a href="#">↶</a>
SELECT PS920CTL.F0002.*, ROWID FROM PS920CTL.F0002 WHERE ( NNSY = "00" ) ORDER BY NN...	2020-04-19 18:24:50.697020	62 ms	1	<a href="#">↶</a>
SELECT PS920CTL.F0002.*, ROWID FROM PS920CTL.F0002 WHERE ( NNSY = "00" ) ORDER BY NN...	2020-04-19 18:25:10.629441	59 ms	1	<a href="#">↶</a>
SELECT PS920CTL.F0002.*, ROWID FROM PS920CTL.F0002 WHERE ( NNSY = "00" ) ORDER BY NN...	2020-04-19 18:25:14.561993	52 ms	1	<a href="#">↶</a>
SELECT TESTCTL.F0002.*, ROWID FROM TESTCTL.F0002 WHERE ( NNSY = "00" ) ORDER BY NNSY...	2020-04-19 18:25:00.067074	51 ms	1	<a href="#">↶</a>
SELECT PS920CTL.F0002.*, ROWID FROM PS920CTL.F0002 WHERE ( NNSY = "01" ) ORDER BY NN...	2020-04-19 17:52:14.341230	51 ms	1	<a href="#">↶</a>

User Transactions

Jobs

Server Stats

Log Errors

Database

Alert Setup

Dashboards

# Database SQLs – Backtrace

✓ *Backtrace to the Transaction that executed the SQL!*



The screenshot displays the CatEyes for JD Edwards interface. The top navigation bar includes the CatEyes logo, the title 'CatEyes for JD Edwards', and a 'Location 2' dropdown. Below the navigation bar is a sidebar with menu items: User Transactions, Jobs, Server Stats, Log Errors, Database, Alert Setup, and Dashboards. The main content area is divided into two sections. The top section, titled 'User Transactions', shows a table of transactions with columns for User ID, Environment, Application ID, PID, Business Functions, Start, Response Time, and Return Value. A red arrow points from a transaction in this table to the 'Database' section below. The 'Database' section shows a list of SQL queries with columns for the query text, timestamp, response time, and return value. A blue arrow points from the bottom right of the SQL list back to the 'Database' menu item in the sidebar.

User ID	Environment	Application ID	PID	Business Functions	Start	Response Time	Return Value
USER5	JPS920	P4101	2802	F4101RecordReservation [Details]	2020-04-19 18:26:13.724620	1011ms	0
				F00095RemoveReservation [Details]	2020-04-19 18:26:13.725145	1010ms	0
				SQL [Details]	2020-04-19 18:26:13.725284	1ms	1
				SQL [Details]	2020-04-19 18:26:13.727272	1008ms	1

SQL Query	Timestamp	Response Time	Return Value
DELETE FROM PS920DTA.F00095 WHERE ( A10BNM = "F4101")	2020-04-19 18:25:10.629441	59 ms	1
SELECT * FROM OL920.F00080 WHERE ( S10BNM = "P9500")	2020-04-19 18:25:14.561993	52 ms	1
SELECT * FROM TESTDTA.F4101 WHERE ( IM1TM = 72104)	2020-04-19 18:25:00.067074	51 ms	1
SELECT PS920CTL.F0002.*, ROWID FROM PS920CTL.F0002	2020-04-19 17:52:14.341230	51 ms	1

# Database SQLs – Backtrace



✓ *Backtrace to the Transaction that executed the SQL!*



CatEyes for JD Edwards
Location 2

Select Type: Transactions

Time Period: Last 6 hours

First Page | Previous | Next

SQL Query	Timestamp	Response Time	Return	Go to Transaction
INSERT INTO PS920DTA.F0101 (ABAN8, ABALKY, ABTAX, ABALPH, ABDC, ABMCU, ABSIC, ABLNGP...	2020-04-19 18:18:50.297450	3 ms	0	<a href="#">↗</a>
SELECT WWALPH FROM PS920DTA.F0111 WHERE ( WWAN8 = 9.000000 AND WWIDLN = 0.000000 ) O...	2020-04-19 17:46:11.729002	1 ms	1	<a href="#">↗</a>
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "DetermineToolsReleaseforABDP" )	2020-04-19 17:46:11.731295	0 ms	1	<a href="#">↗</a>
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "GetServicePackRelease" )	2020-04-19 17:46:11.739360	0 ms	1	<a href="#">↗</a>
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "SecureAddressBookTables" )	2020-04-19 17:46:11.784359	1 ms	1	<a href="#">↗</a>
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "GetABConstants" )	2020-04-19 17:46:11.792788	1 ms	1	<a href="#">↗</a>
SELECT * FROM SY920.F95922 WHERE ( PRPRMSNTYP = "AB" AND PRUSER = "JDE" )	2020-04-19 17:46:11.807783	7 ms	1	<a href="#">↗</a>
SELECT * FROM SY920.F95922 WHERE ( PRPRMSNTYP = "AB" AND PRUSER = "SYSADMIN" )	2020-04-19 17:46:11.815557	0 ms	1	<a href="#">↗</a>

User Transactions

Jobs

Server Stats

Log Errors

Database

Alert Setup

Dashboards

# Database SQLs – Backtrace



✓ *Backtrace to the Transaction that executed the SQL!*



CatEyes for JD E

Advanced Search Q

Select Type: Transactions

First Page

SQL Query

```

INSERT INTO PS920DTA.F0101 (ABANB, ABALKY, ABTAX, ABALPH, ABDC, AB
SELECT * FROM PS920.F98762PS920F1 WHERE ( WMANB = 9.000000 AND WMI
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "DetermineTools
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "GetServicePackRelease" )
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "SecureAddressBookTables" )
SELECT * FROM PS920.F98762PS920F1 WHERE ( BCFNMM = "GetABCConstants" )
SELECT * FROM SY920.F95922 WHERE ( PRPRMSNTYP = "AB" AND PRUSER = "JDE" )
SELECT * FROM SY920.F95922 WHERE ( PRPRMSNTYP = "AB" AND PRUSER = "SYSADMIN" )

```

17:46:11.731295

2020-04-19 17:46:11.739360 0 ms 1

2020-04-19 17:46:11.784359 1 ms 1

2020-04-19 17:46:11.792788 1 ms 1

2020-04-19 17:46:11.807783 7 ms 1

2020-04-19 17:46:11.815557 0 ms 1

CatEyes for JD Edwards

Location 2

Advanced Search Q

Filter is applied! To see all user transactions please [click here](#)

Time Period: Last 6 hours

First Page | Previous | Next

210|2444|2577

User ID	Environment	Application ID	PID	Business Functions	Start	Response Time	Return Value
USER1	JPS920	P01012	2444	AddressBookMasterMBF [Details]	2020-04-19 18:18:50.174569	143ms	2

First Page | Previous | Next

User Transactions

Jobs

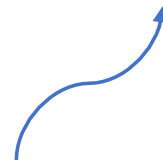
Server Stats

Log Errors

Database

Alert Setup

Dashboards



# Blocker Query – Full Detail

Details ✕

User ID	PID	Thread ID	Response Time
[REDACTED]	4136	2104	881706ms

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-11-26 09:36:09.856033	2019-11-26 09:50:51.563000

Arguments

DBUserID:	JDEDBA
SQLQuery:	UPDATE JDE_PRODUCTION.PRODDTA.F46L30 SET LCMCU=" 4701",LCLOCN="D ",LCUCUB=17421408.000000,LCMAXLC V=0.000000,LCRSLCV=77904.000000,L CLNCS="
	[REDACTED]
	LCMCU = " 4701" AND LCLOCN = "D " )

*“Go to Transaction” takes us to Blocker Transaction!*





# Start of Slowdown - Prior Query Full Detail

Details

User ID	PID	Thread ID	Response Time
[REDACTED]	4136	2104	83393ms

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-11-26 09:34:46.134003	2019-11-26 09:36:09.528000

Arguments







DBUserID:	JDEDBA
SQLQuery:	INSERT INTO JDE_PRODUCTION.PRODDTA.F42199 (SLKCOO, SLDOCO, SLDCTO, SLLNID, SLSFXO, SLMCU, SLCO, SLOKCO, SLOORN, SLOCTO, SLOGNO, SLRKCO, SLRORN, SLRCTO, SLRLLN, SLDMCT, SLDMCS, SLAN8, SLSHAN, SLPAB, SLDRQJ, SLTRDJ, SLPDDJ, SLADDJ, SLIVD, SLCNDJ, SLDGL, SLRS DJ, SLPEFJ, SLPPDJ, SLVR01, SLVR02, SLITM, SLLITM, SLAITM, SLLOCN, SLLOTN, SLFRGD, SLTHGD, SLFRMP, SLTHRP, SLEXDP, SLDSC1, SLDSC2, SLLNTY, SLNXTR, SLLTTR, SLEMCU, SLRLIT, SLKTLN, SLCPNT, SLRKIT, SLKTP, SLSRP1, SLSRP2, SLSRP3, SLSRP4, SLSRP5, SLPRP1, SLPRP2, SLPRP3, SLPRP4, SLPRP5, SLUOM, SLUORG, SLSOQS, SLSOBK, SLSOCN, SLSONE, SLUOPN, SLQTYT, SLQRLV, SLCOMM, SLOTQY, SLUPRC, SLAEXP, SLAOPN, SLPROV, SLTPC, SLAPUM, SLLPRC,

*"Go to Transaction" takes us to the Transaction!*



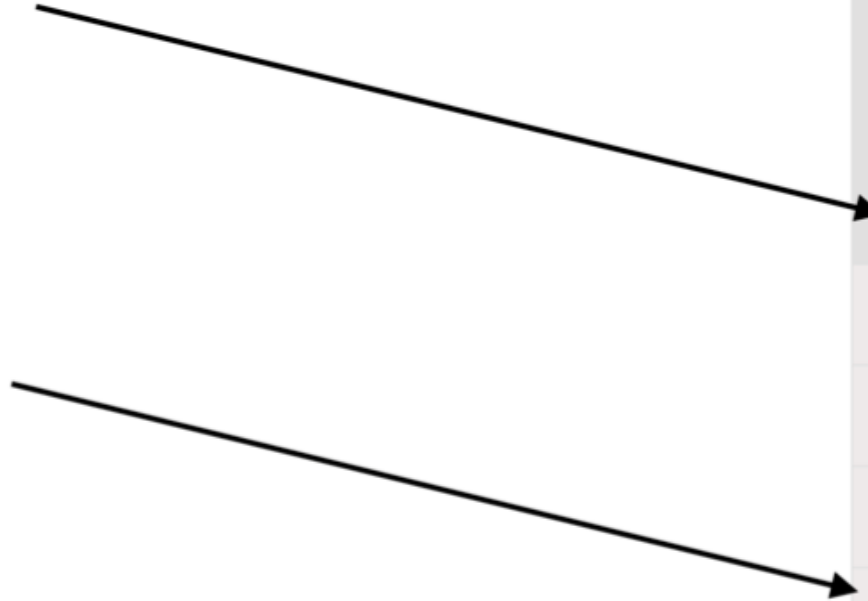
**\*\* Blocker Query was not the root cause. Slowdowns lead up to blocking event.**

# Blocker Transaction – Full Detail

 	User ID	Environment	Application ID	PID	Business Function	Start	Response Time	Return Value
		JPD92TZ1P	DConnector	4136	F4611SuggestionEndDoc <a href="#">[Details]</a>	2019-11-26 09:34:45.478004	966413ms	0
					<a href="#">GetAuditInfo[Details]</a>	2019-11-26 09:34:45.478005	0ms	0
					<a href="#">F4611SuggestionsCache[Details]</a>	2019-11-26 09:34:45.478007	0ms	0
					<a href="#">F4611VerifyAndGetSuggestion[Details]</a>	2019-11-26 09:34:45.478009	0ms	0 
					<a href="#">F4600RequestsCache[Details]</a>	2019-11-26 09:34:45.478013	0ms	0
					<a href="#">GetF46L001Records[Details]</a>	2019-11-26 09:34:45.478015	0ms	0
					<a href="#">WarehouseAdjustSalesOrderLine[Details]</a>	2019-11-26 09:34:45.478017	84097ms	0 
					<a href="#">SQL[Details]</a>	2019-11-26 09:34:45.478018	0ms	1
					<a href="#">DecimalsTriggerGetbyCOCRC[Details]</a>	2019-11-26 09:34:45.478020	0ms	0
					<a href="#">SQL[Details]</a>	2019-11-26	0ms	1



# Blocker Transaction – Full Detail - Drill-In



ProcessOrderLine[Details]	2019-11-26 09:34:45.509019	0ms	0	+
VerifyandGetSalesDetail[Details]	2019-11-26 09:34:45.509031	0ms	0	+
WriteSalesHistoryOrLedger[Details]	2019-11-26 09:34:45.509037	84034ms	0	-
GetAuditInfo[Details]	2019-11-26 09:34:45.509038	0ms	0	
SQL[Details]	2019-11-26 09:34:45.525000	609ms	1	
DecimalsTriggerGetbyCOCRCD[Details]	2019-11-26 09:34:46.134001	0ms	0	
SQL[Details]	2019-11-26 09:34:46.134003	83393ms	1	
FreePtrToDataStructure[Details]	2019-11-26 09:36:09.544001	0ms	0	
ChangeF4211SODetail[Details]	2019-11-26 09:36:09.544005	31ms	0	+
SQL[Details]	2019-11-26 09:36:09.575019	0ms	1	
SQL[Details]	2019-11-26 09:36:09.575021	0ms	1	
ConfirmationCommitments[Details]	2019-11-26	265ms	0	+

# Blockee Query – Full Details

Details ✕

User ID	PID	Thread ID	Response Time
[REDACTED]	12896	10596	557393ms

Function	Return Value	Start Time	Stop Time
DBRequest	1	2019-11-26 09:41:34.184006	2019-11-26 09:50:51.578000

Arguments


DBUserID:	JDEDBA
SQLQuery:	UPDATE JDE_PRODUCTION.PRODDTA.F46L30 SET LCMCU=" 4701",LCLOCN="D ",LCUCUB=17419536.000000,LCMAXLC V=0.000000,LCRSLCV=77472.000000,L CLNCS=" [REDACTED] LCMCU = " 4701" AND LCLOCN = "D " )

*“Go to Transaction” takes us to Blockee Transaction!*



# Blockee Transaction – Full Details





## CatEyes for JD Edwards

Location 2

Advance Search Q

Filter is applied! To see all user transactions please [click here](#) × Period: Last 6 hours

First Page | Previous | Next

176389 | 12896 | 10596

User ID	Environment	Application ID	PID	Business Function	Start	Response Time	Return Value
[Redacted]	JPD92TZ1P	DConnector	12896	F4611SuggestionEndDoc [Details]	2019-11-26 09:41:34.137004	558378ms	0
				GetAuditInfo[Details]	2019-11-26 09:41:34.137005	0ms	0
				F4611SuggestionsCache[Details]	2019-11-26 09:41:34.137007	0ms	0
				F4611VerifyAndGetSuggestion[Details]	2019-11-26 09:41:34.137009	0ms	0 +
				F4600RequestsCache[Details]	2019-11-26 09:41:34.137013	0ms	0
				GetF46L001Records[Details]	2019-11-26 09:41:34.137015	0ms	0
				F4611OverrideSuggestion[Details]	2019-11-26 09:41:34.137017	557833ms	0 +
				F4611SuggestionsCache[Details]	2019-11-26 09:50:51.970033	0ms	0
				FreePtrToDataStructure[Details]	2019-11-26 09:50:51.970035	0ms	0

User Transactions

Jobs

Server Stats

Log Errors

Database

Alert Setup

Dashboards

# Blockee Transaction – Full Detail - Drill-In



→	LPDecommit[Details]	2019-11-26 09:41:34.152003	557661ms	0	-
	F4600VerifyAndGetRequest[Details]	2019-11-26 09:41:34.152004	0ms	0	
	F4611VerifyAndGetSuggestion[Details]	2019-11-26 09:41:34.152006	0ms	0	
	LPHelperDecommitQuantity[Details]	2019-11-26 09:41:34.152008	15ms	0	+
→	ReservedVolumeWeightAdjustment[Details]	2019-11-26 09:41:34.168003	557645ms	0	-
	F46L30ReadLocationCapacity[Details]	2019-11-26 09:41:34.168004	0ms	0	+
	F46027CalculateAvailableCubes[Details]	2019-11-26 09:41:34.168008	15ms	0	+
→	F46L30UpdateLocationCapacity[Details]	2019-11-26 09:41:34.184003	557394ms	0	-
	GetAuditInfo[Details]	2019-11-26 09:41:34.184004	0ms	0	
→	SQL[Details]	2019-11-26 09:41:34.184006	557393ms	1	
	FindLicensePlatesForSuggestions[Details]	2019-11-26 09:50:51.813008	0ms	0	+
	CacheLicensePlateSuggestion[Details]	2019-11-26 09:50:51.813012	0ms	0	

➤ Demo!

# Use Case – Database Blocks and Performance

---



## ➤ Database Blocks – Related to Program Issue

### Analysis and Diagnosis

- ✓ Captured the queries, host PID, and timestamps from the blocking alert.
- ✓ Found the blocker and blockee queries in CatEyes and traced back to the specific transaction and application/user/BSFN that executed the queries.
- ✓ Found that a specific database query in a specific 3<sup>rd</sup>-party application request was the blocker in multiple cases and had errors within the request.

### Action and Resolution

- ✓ Provide transaction and error detail to 3<sup>rd</sup>-party support for resolution.

# Use Case – Log Errors



## ➤ Log Error Analysis

### Analysis and Diagnosis - Reactive

- ✓ Response to reported incidents.
- ✓ Drilled-down into problem transactions to see exact context and activity causing the log entry and potential earlier errors or problems.

### Analysis and Diagnosis – Proactive Housecleaning

- ✓ Reviewed and analyzed the history of consolidated Log Errors.
- ✓ Follow to application, user, BSFN, and object which wrote it to identify hidden issues and opportunities for development optimization or Oracle bug fixes.

### Action and Resolution

- ✓ Reactive: Provide full details and context to appropriate team for analysis and resolution.
- ✓ Proactive: Developer Team reviewed/updated code where appropriate and submitted tickets to Oracle where appropriate with full supporting details.

## ➤ *Demo!*



# Log Errors – Search



The screenshot displays a web application interface for monitoring log errors. A modal dialog titled "Advanced Search for Log Errors" is open in the foreground, allowing users to filter logs by string, category, or user ID. The background shows a table of log entries with columns for log file, timestamp, error message, and user.

**Advanced Search for Log Errors**

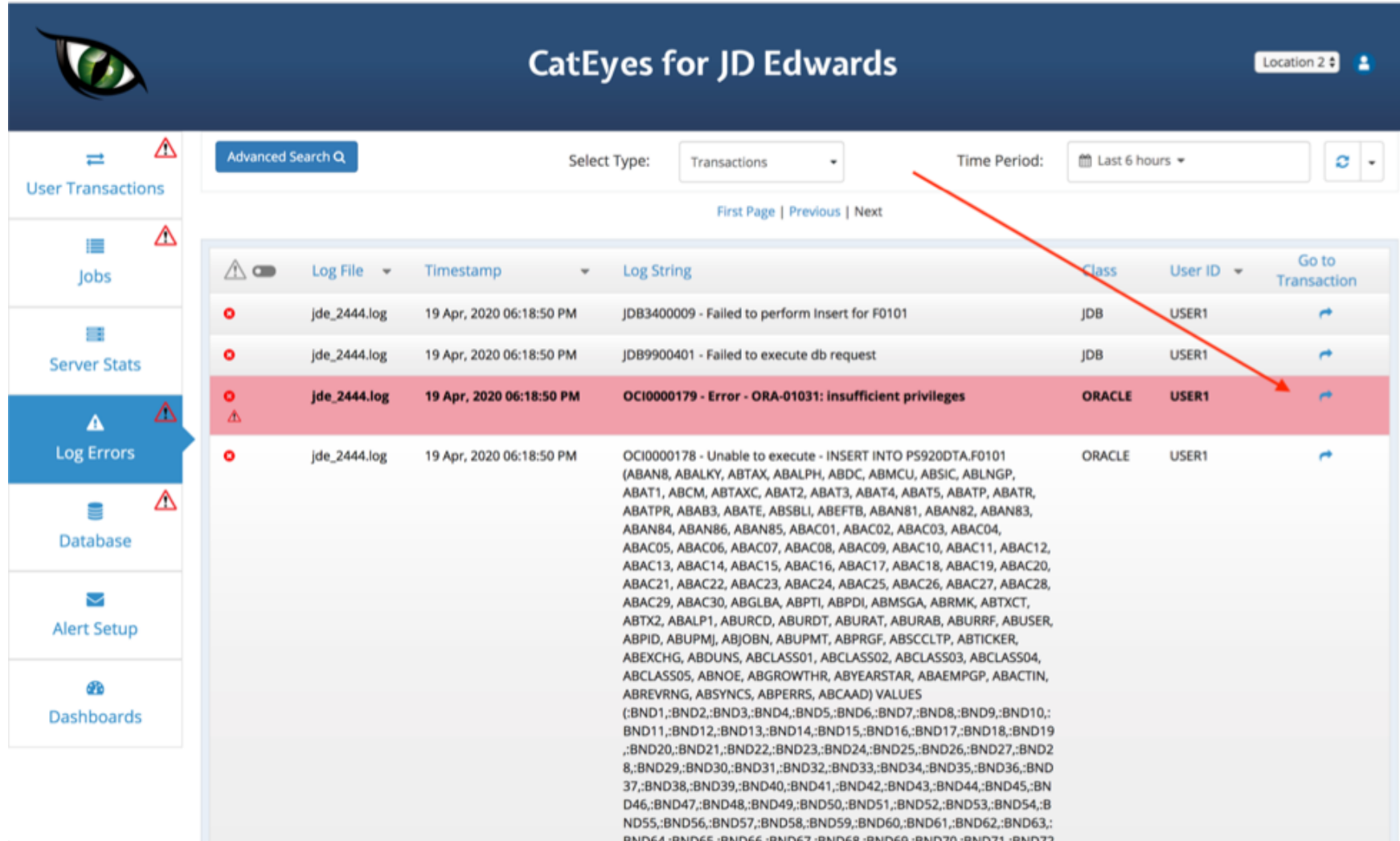
- Log String:
- Log Category:
- User ID:

Buttons: **SEARCH** (green), **CANCEL** (white)

Log File	Timestamp	Error Message	User	Action
jde_2444.log	19 Apr, 2020 06:18:27 PM	OCI0000340 - Error - ORA-00942: table or view does not exist	ORACLE	<a href="#">Go to Transaction</a>
jde_2444.log	19 Apr, 2020 06:18:27 PM	JDB9900155 - Failed to get non - zero AB Number.	JDB	<a href="#">Go to Transaction</a>
jde_2444.log	19 Apr, 2020 06:18:27 PM	JDB9900808 - Failed to get Address number for user USER1	JDB	<a href="#">Go to Transaction</a>
jde_2444.log	19 Apr, 2020 06:18:27 PM	JDB9900810 - Failed to populate address book number and user full name for user USER1	JDB	<a href="#">Go to Transaction</a>
jde_2444.log	19 Apr, 2020 06:18:50 PM	OCI0000178 - Unable to execute - INSERT INTO PS920DTA.F0101 (ABAN8, ABALKY, ABTAX, ABALPH, ABDC, ABMCU, ABSIC, ABLNGP, ABAT1, ABCM, ABTAXC, ABAT2, ABAT3, ABAT4, ABAT5, ABATP, ABATR, ABATPR, ABAB3, ABATE, ABSBLI, ABEFTB, ABAN81, ABAN82, ABAN83, ABAN84, ABAN86, ABAN85, ABAC01, ABAC02, ABAC03, ABAC04, ABAC05, ABAC06, ABAC07, ABAC08, ABAC09, ABAC10, ABAC11, ABAC12, ABAC13, ABAC14, ABAC15, ABAC16, ABAC17, ABAC18, ABAC19, ABAC20, ABAC21, ABAC22, ABAC23, ABAC24, ABAC25, ABAC26, ABAC27, ABAC28, ABAC29, ABAC30, ABGLBA, ABPTI, ABPDI, ABMSGA, ABRMK, ABTXCT,	ORACLE	<a href="#">Go to Transaction</a>

# Log Errors – Backtrace!

✓ *Backtrace from the Log Errors instantly back to Transactions!*



The screenshot displays the CatEyes for JD Edwards interface. The top navigation bar includes the CatEyes logo, the title "CatEyes for JD Edwards", and a "Location 2" dropdown. The left sidebar contains navigation options: User Transactions, Jobs, Server Stats, Log Errors (highlighted in blue), Database, Alert Setup, and Dashboards. The main content area features an "Advanced Search Q" bar, a "Select Type:" dropdown set to "Transactions", and a "Time Period:" dropdown set to "Last 6 hours". Below the search bar are navigation links: "First Page | Previous | Next".

The central table displays log entries with columns: Log File, Timestamp, Log String, Class, User ID, and Go to Transaction. The third row is highlighted in red and contains the error message: "OCI0000179 - Error - ORA-01031: insufficient privileges". A red arrow points from the "Go to Transaction" link in this row to the "Transactions" dropdown in the search bar above.

Log File	Timestamp	Log String	Class	User ID	Go to Transaction
jde_2444.log	19 Apr, 2020 06:18:50 PM	JDB3400009 - Failed to perform insert for F0101	JDB	USER1	<a href="#">↗</a>
jde_2444.log	19 Apr, 2020 06:18:50 PM	JDB9900401 - Failed to execute db request	JDB	USER1	<a href="#">↗</a>
jde_2444.log	19 Apr, 2020 06:18:50 PM	<b>OCI0000179 - Error - ORA-01031: insufficient privileges</b>	<b>ORACLE</b>	<b>USER1</b>	<a href="#">↗</a>
jde_2444.log	19 Apr, 2020 06:18:50 PM	OCI0000178 - Unable to execute - INSERT INTO PS920DTA.F0101 (ABAN8, ABALKY, ABTAX, ABALPH, ABDC, ABMCU, ABSIC, ABLNGP, ABAT1, ABCM, ABTAXC, ABAT2, ABAT3, ABAT4, ABAT5, ABATP, ABATR, ABATPR, ABAB3, ABATE, ABSBLI, ABEFTB, ABAN81, ABAN82, ABAN83, ABAN84, ABAN86, ABAN85, ABAC01, ABAC02, ABAC03, ABAC04, ABAC05, ABAC06, ABAC07, ABAC08, ABAC09, ABAC10, ABAC11, ABAC12, ABAC13, ABAC14, ABAC15, ABAC16, ABAC17, ABAC18, ABAC19, ABAC20, ABAC21, ABAC22, ABAC23, ABAC24, ABAC25, ABAC26, ABAC27, ABAC28, ABAC29, ABAC30, ABGLBA, ABPTI, ABPDI, ABMSG, ABRMK, ABTXCT, ABTX2, ABALP1, ABURCD, ABURDT, ABURAT, ABURAB, ABURRF, ABUSER, ABPID, ABUPMJ, ABJOB, ABUPMT, ABPRGF, ABSCCLTP, ABTICKER, ABEXCHG, ABDUNS, ABCLASS01, ABCLASS02, ABCLASS03, ABCLASS04, ABCLASS05, ABNOE, ABGROWTHR, ABYEARSTAR, ABAEMPGP, ABACTIN, ABREVRNG, ABSYNCS, ABPERRS, ABCAAD) VALUES (:BND1,:BND2,:BND3,:BND4,:BND5,:BND6,:BND7,:BND8,:BND9,:BND10,:BND11,:BND12,:BND13,:BND14,:BND15,:BND16,:BND17,:BND18,:BND19,:BND20,:BND21,:BND22,:BND23,:BND24,:BND25,:BND26,:BND27,:BND28,:BND29,:BND30,:BND31,:BND32,:BND33,:BND34,:BND35,:BND36,:BND37,:BND38,:BND39,:BND40,:BND41,:BND42,:BND43,:BND44,:BND45,:BND46,:BND47,:BND48,:BND49,:BND50,:BND51,:BND52,:BND53,:BND54,:BND55,:BND56,:BND57,:BND58,:BND59,:BND60,:BND61,:BND62,:BND63,:BND64,:BND65,:BND66,:BND67,:BND68,:BND69,:BND70,:BND71,:BND72)	ORACLE	USER1	<a href="#">↗</a>

# Log Errors – Backtrace!

✓ Backtrace from the Log Errors instantly back to Transactions!



CatEyes for JD Edw

Advanced Search Q

Select Type: Transactions

Log Errors

Log File	Timestamp	Log String
jde_2444.log	19 Apr, 2020 06:18:50 PM	JDB3400009 - Failed to perform Inse
jde_2444.log	19 Apr, 2020 06:18:50 PM	JDB9900401 - Failed to execute db r
jde_2444.log	19 Apr, 2020 06:18:50 PM	OCI0000179 - Error - ORA-01031: in
jde_2444.log	19 Apr, 2020 06:18:50 PM	OCI0000178 - Unable to execute - IN (ABAN8, ABALKY, ABTAX, ABALPH, AL... ABAT1, ABCM, ABTAX, ABAT2, ABAT3, ABAT4, ABAT5, ABATP, ABATR, ABATPR, ABAB3, ABATE, ABSBLI, ABEFTB, ABAN81, ABAN82, ABAN83, ABAN84, ABAN86, ABAN85, ABAC01, ABAC02, ABAC03, ABAC04, ABAC05, ABAC06, ABAC07, ABAC08, ABAC09, ABAC10, ABAC11, ABAC12, ABAC13, ABAC14, ABAC15, ABAC16, ABAC17, ABAC18, ABAC19, ABAC20, ABAC21, ABAC22, ABAC23, ABAC24, ABAC25, ABAC26, ABAC27, ABAC28, ABAC29, ABAC30, ABGLBA, ABPTI, ABPDI, ABMSG, ABRMK, ABTXCT, ABTX2, ABALP1, ABURCD, ABURDT, ABURAT, ABURAB, ABURRF, ABUSER, ABPID, ABUPMJ, ABJOB, ABUPMT, ABPRGF, ABSCCLTP, ABTICKER, ABEXCHG, ABDUNS, ABCLASS01, ABCLASS02, ABCLASS03, ABCLASS04, ABCLASS05, ABNOE, ABGROWTHR, ABYEARSTAR, ABAEMPGP, ABACTIN, ABREVRNG, ABSYNCS, ABPERRS, ABCAAD) VALUES (:BND1,:BND2,:BND3,:BND4,:BND5,:BND6,:BND7,:BND8,:BND9,:BND10: :BND11,:BND12,:BND13,:BND14,:BND15,:BND16,:BND17,:BND18,:BND19 ,:BND20,:BND21,:BND22,:BND23,:BND24,:BND25,:BND26,:BND27,:BND2 8,:BND29,:BND30,:BND31,:BND32,:BND33,:BND34,:BND35,:BND36,:BND 37,:BND38,:BND39,:BND40,:BND41,:BND42,:BND43,:BND44,:BND45,:BN D46,:BND47,:BND48,:BND49,:BND50,:BND51,:BND52,:BND53,:BND54,:B ND55,:BND56,:BND57,:BND58,:BND59,:BND60,:BND61,:BND62,:BND63: :BND64,:BND65,:BND66,:BND67,:BND68,:BND69,:BND70,:BND71,:BND72: :BND73,:BND74,:BND75,:BND76,:BND77,:BND78,:BND79,:BND80,:BND81: :BND82,:BND83,:BND84,:BND85,:BND86,:BND87,:BND88,:BND89,:BND90: :BND91,:BND92,:BND93,:BND94,:BND95,:BND96,:BND97,:BND98,:BND99: :BND100)

CatEyes for JD Edwards

Location 2

Advanced Search Q

Filter is applied! To see all user transactions please [click here](#)

Time Period: Last 6 hours

User Transactions

Jobs

Server Stats

Log Errors

Database

Alert Setup

Dashboards

210|2444|2577

User ID	Environment	Application ID	PID	Business Functions	Start	Response Time	Return Value
USER1	JPS920	P01012	2444	AddressBookMasterMBF [Details]	2020-04-19 18:18:50.174569	143ms	2



# Use Case – Custom Code Improvements



## ➤ Custom Code Analysis

### UBE Optimization

- ✓ CatEyes notified the Business Analyst of database inserts failing with duplicate key entry every time a specific localized UBE customization was launched.
- ✓ By stepping through each SQL action in CatEyes and comparing to the code, he found these inserts were unnecessarily being attempted by the code.

### Proactive Error Handling

- ✓ CatEyes alert identified a custom program that updates pricing had failed to insert/update records. Step by step code review in CatEyes revealed that error handling was missing in the custom code and missing pricing inserts would have gone unnoticed until a larger issue surfaced affecting the user.
- ✓ This understanding allowed Fluidmaster to proactively avoid the issues by modifying user procedures short term and planning to improve error handling in that code long term.

# Ongoing Performance Assurance & User Support

---



## Alerting and Proactive response

- ✓ Log Errors
- ✓ Failed Database Requests – Able to excluding alerting for specific tables as needed.
- ✓ Long-running Database Request, Business Functions, and UBEs
- ✓ Specific Log Errors suspected to to be important

## Alert Management

- ✓ Business Analyst receives alerts and uses CatEyes to investigate.
- ✓ Business Analyst fine tunes alerting as appropriate for Fluidmaster code/environment.
- ✓ See patterns and investigate relevant ones.

## Proactive Activity

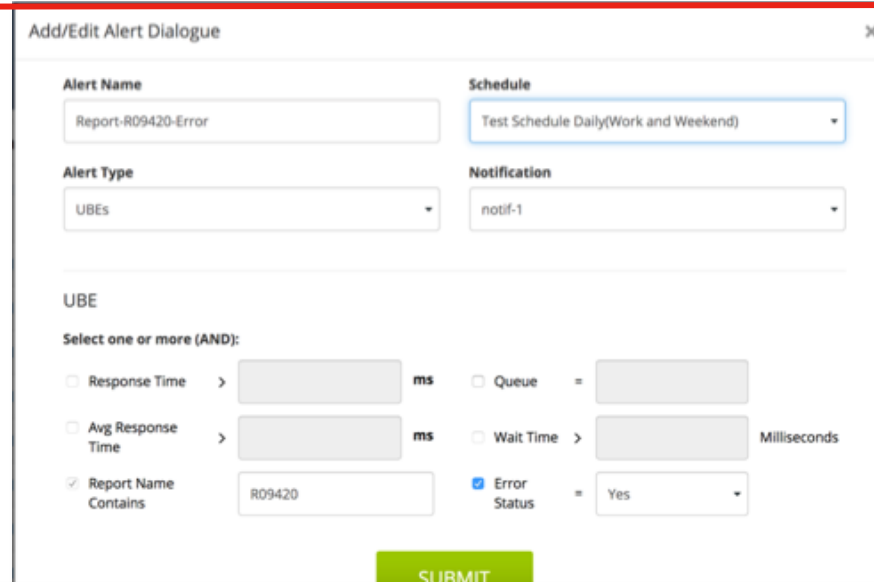
- ✓ Review history of Log Errors.
- ✓ Follow Log Errors and database requests to the application, user, BSFN, or UBE and analyze to identify hidden issues and opportunities for development optimization.
- ✓ Review performance and transactions and drill down/analyze as appropriate.

## Dashboards

- ✓ View custom dashboards for performance trending and analysis.

# Alerts and Notifications

- ✓ Alerts for BSFNS, Jobs, Database Queries, and Log Errors
- ✓ Custom Schedules
- ✓ Custom selection criteria for fine-tuned alerting!
- ✓ Notifications via Email or Integrated with your Ticketing system.



Add/Edit Alert Dialogue

Alert Name: Report-R09420-Error

Schedule: Test Schedule Daily(Work and Weekend)

Alert Type: UBEs

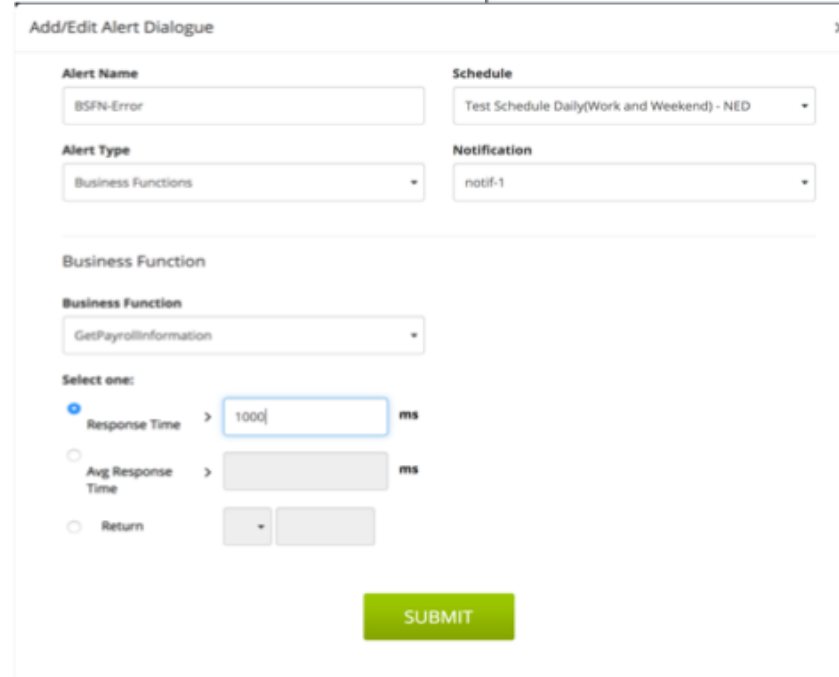
Notification: notif-1

UBE

Select one or more (AND):

- Response Time > [ ] ms
- Avg Response Time > [ ] ms
- Report Name Contains: R09420
- Queue = [ ]
- Wait Time > [ ] Milliseconds
- Error Status = Yes

SUBMIT



Add/Edit Alert Dialogue

Alert Name: BSFN-Error

Schedule: Test Schedule Daily(Work and Weekend) - NED

Alert Type: Business Functions

Notification: notif-1

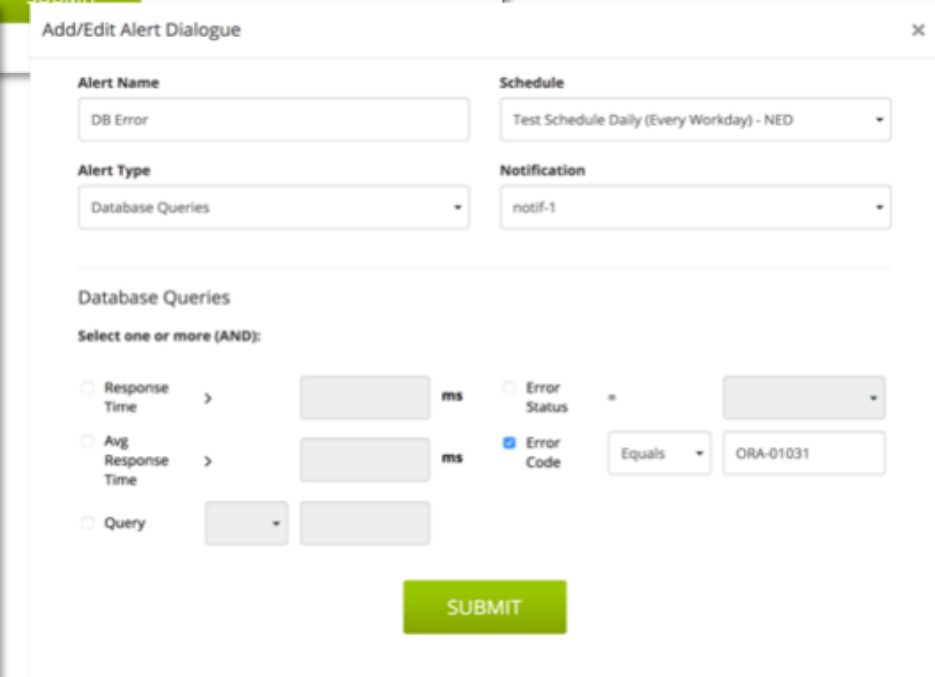
Business Function

Business Function: GetPayrollInformation

Select one:

- Response Time > 1000 ms
- Avg Response Time > [ ] ms
- Return

SUBMIT



Add/Edit Alert Dialogue

Alert Name: DB Error

Schedule: Test Schedule Daily (Every Workday) - NED

Alert Type: Database Queries

Notification: notif-1

Database Queries

Select one or more (AND):

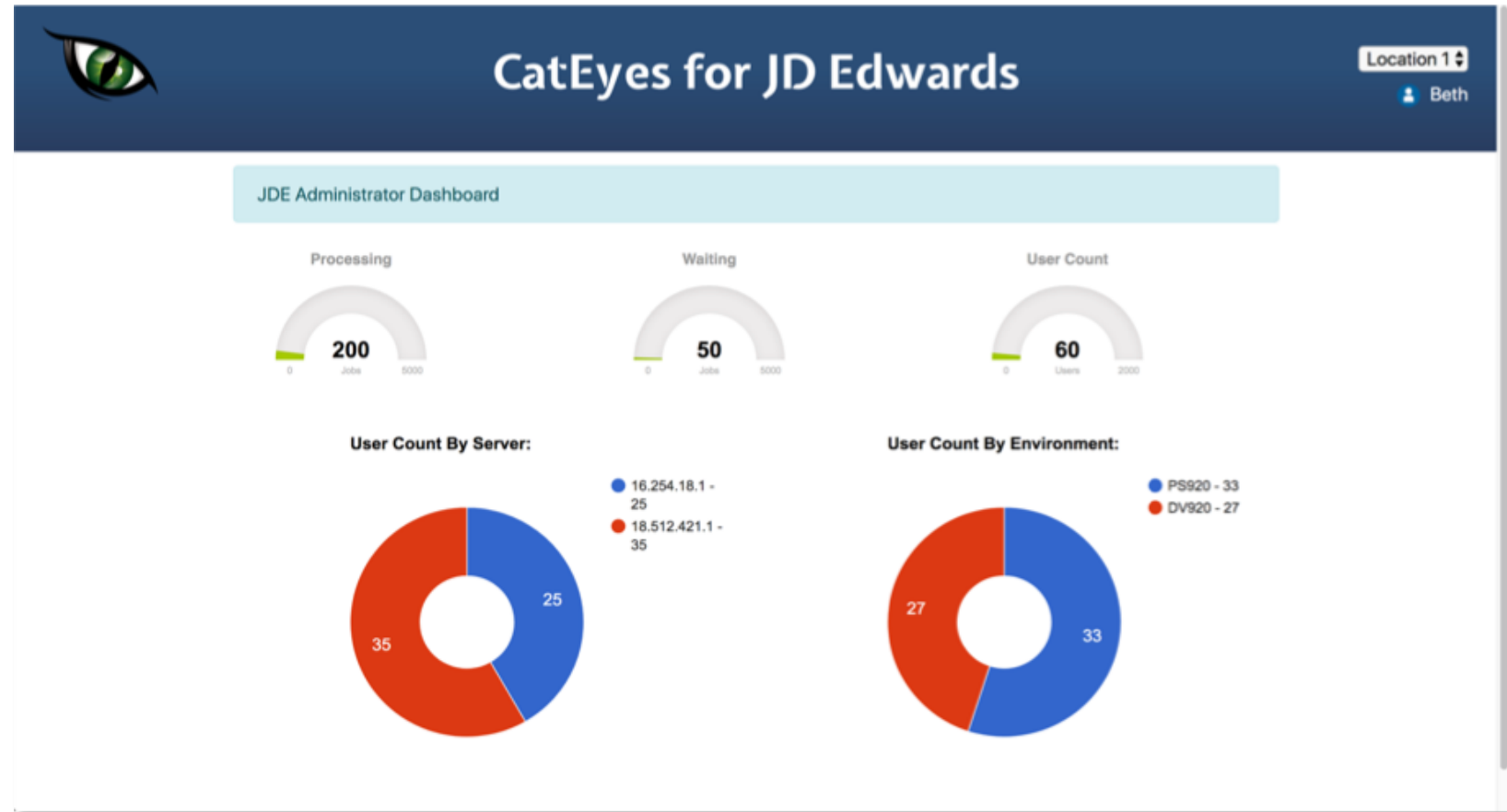
- Response Time > [ ] ms
- Avg Response Time > [ ] ms
- Query
- Error Status = [ ]
- Error Code: Equals ORA-01031

SUBMIT

# CatEyes for JD Edwards – Dashboards



- ✓ Complete Transaction Data available in PWH
  - Performance
  - Application/User Usage
- ✓ External Links can be emailed / included in 3<sup>rd</sup>-party console
- ✓ Alerts on Dashboard data.

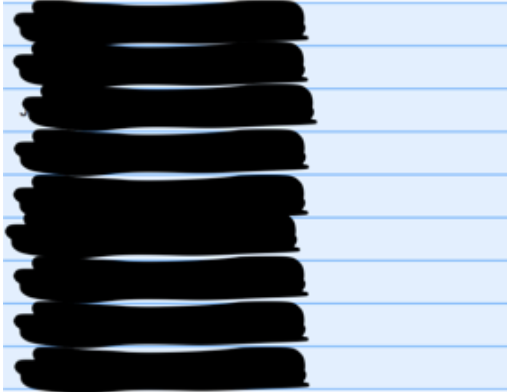


➤ *Live Dashboards!*

# Fluidmaster User Transaction Dashboard



Web Server Mapping



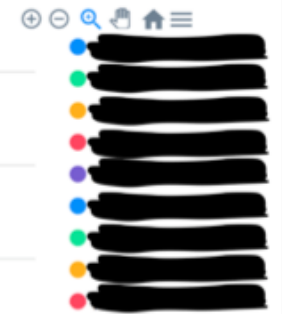
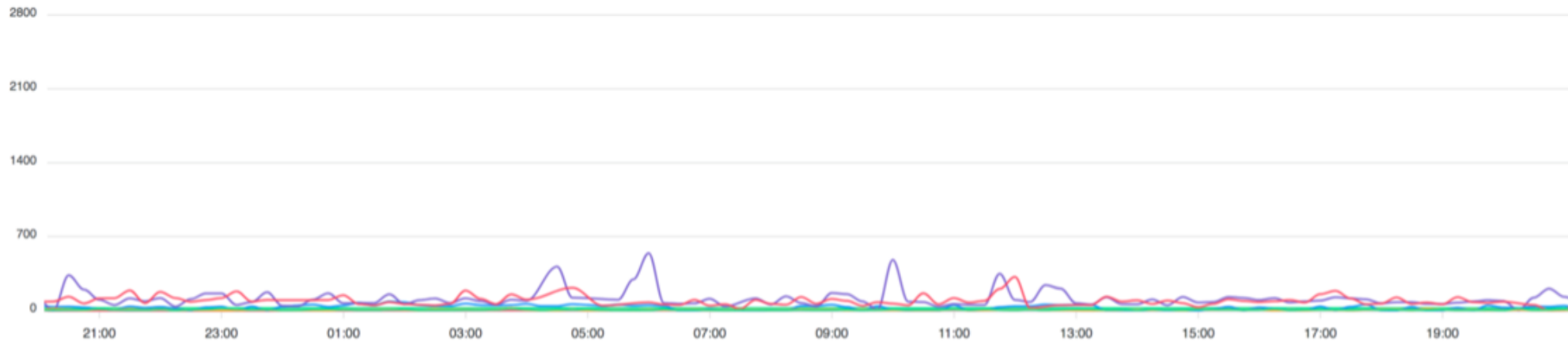
Active Users by Web Server:



Active Users by Environment:



Avg Response Time by Web Server (milliseconds)



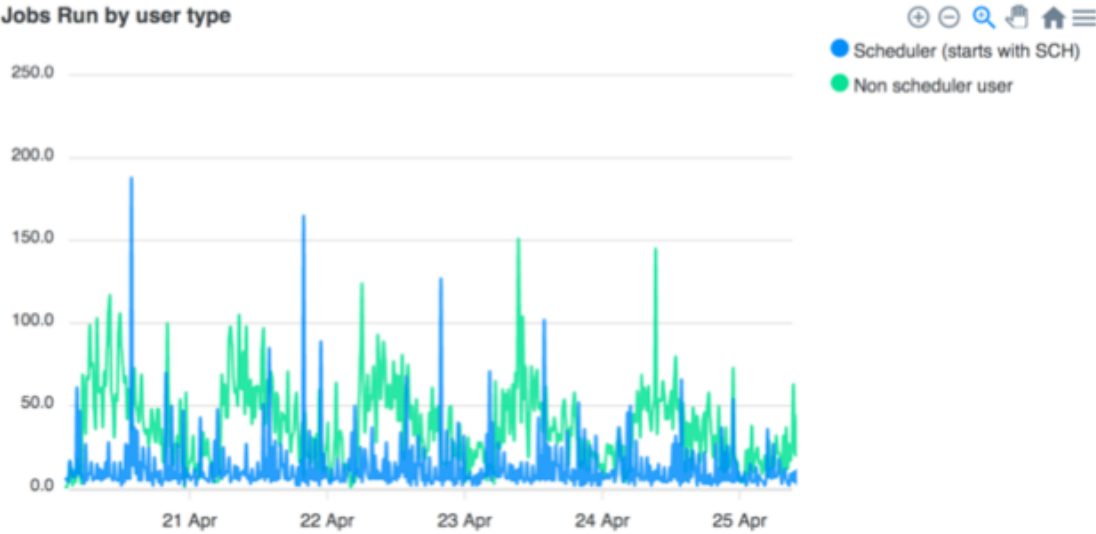


# Fluidmaster Jobs Dashboard

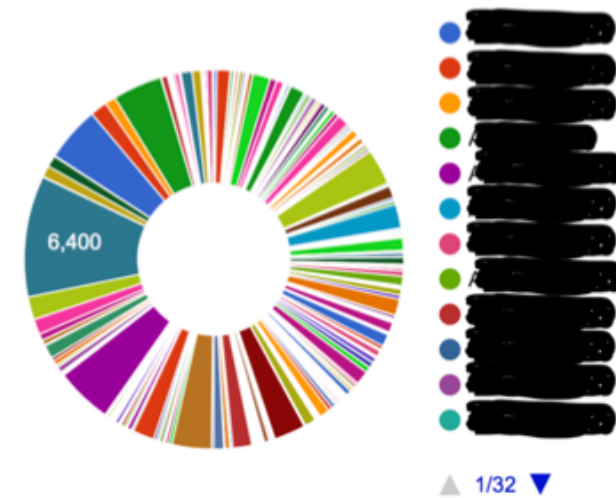


[REDACTED]	2635045	R31410_FMI0008	6939	MF-GM
[REDACTED]	2635062	R554701W_SCH00005	5603	EDIS
[REDACTED]	2635055	R5542530_FMI00006	5547	QBATCH
[REDACTED]	3156585	R553100B_FMSL0002	5318	LABELS
[REDACTED]	3156582	R553100B_FMSL0002	5275	LABELS
[REDACTED]	3156587	R554701W_SCH00004	5183	[REDACTED]

Jobs Run by user type



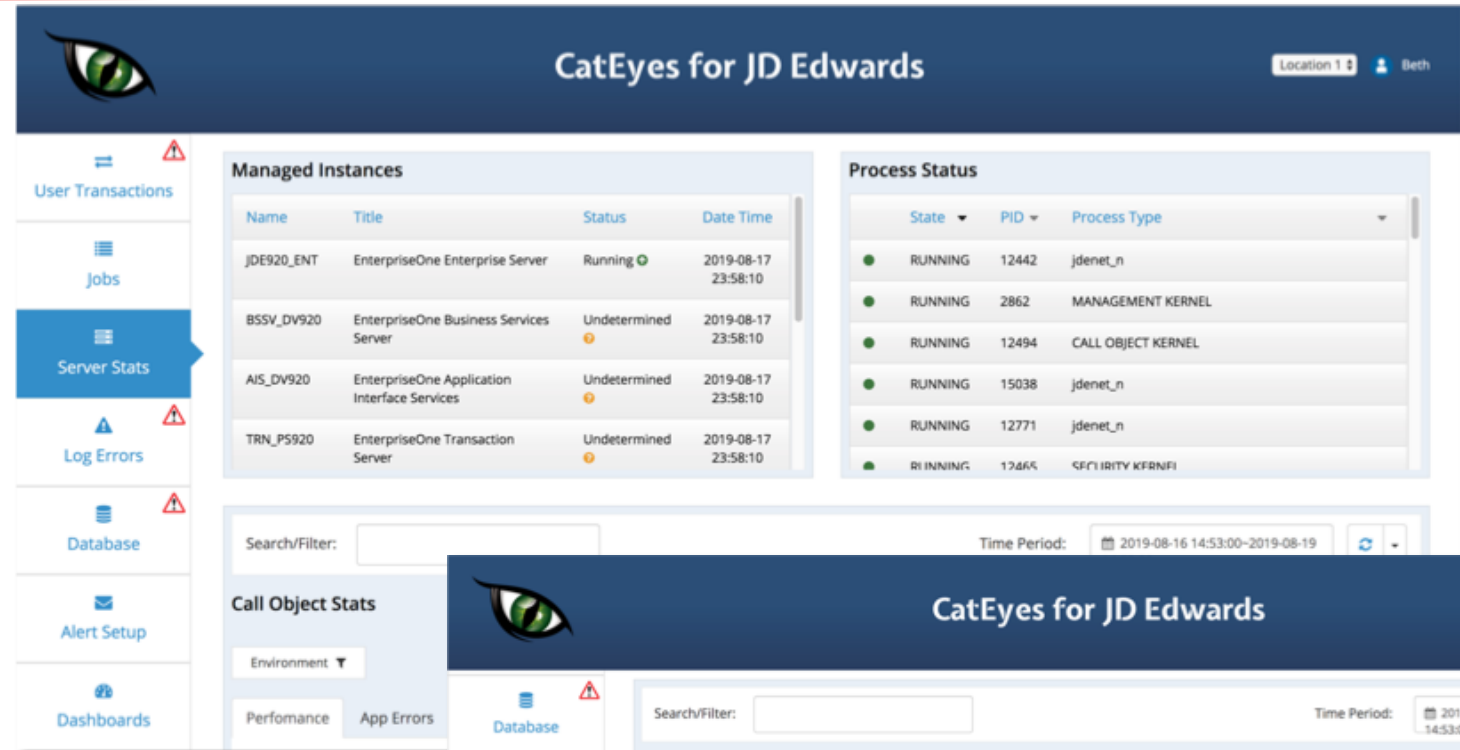
Number of Jobs per User per day



# Server Stats

Consolidated data from Server Manager!

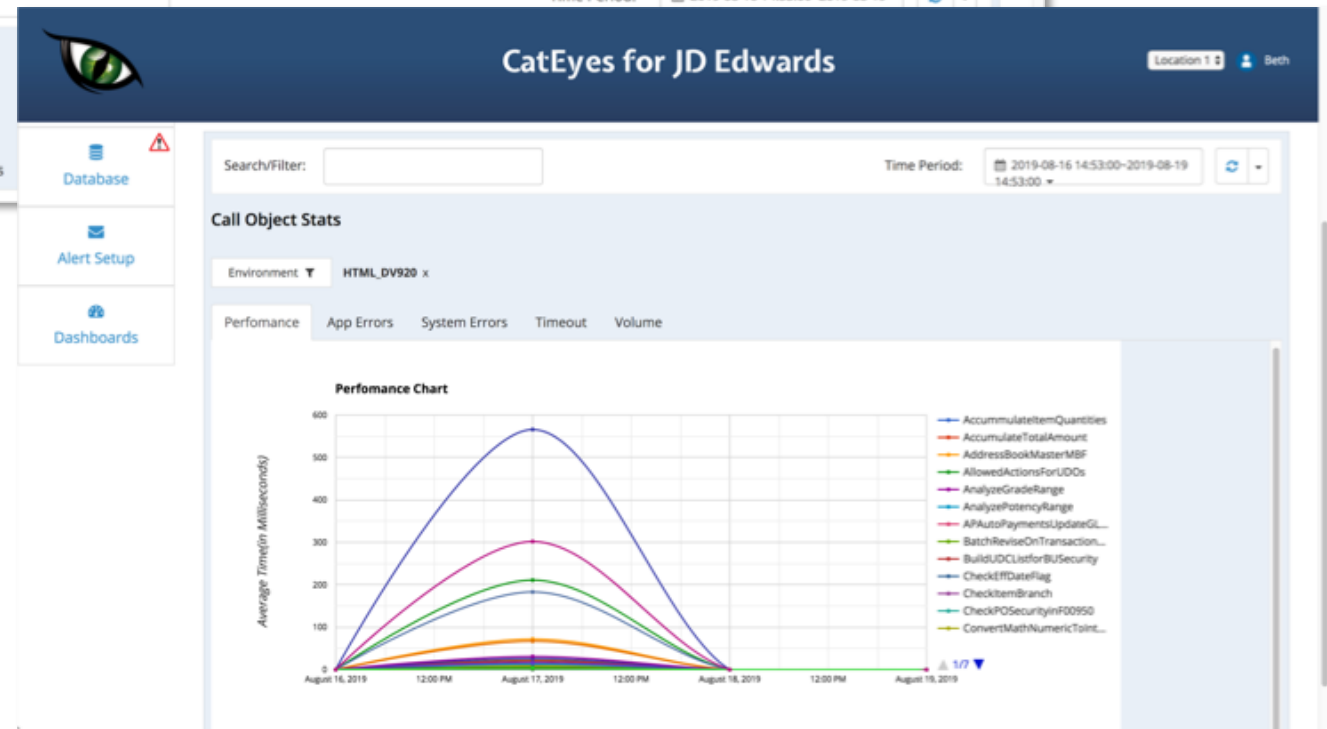
- ✓ Managed Instances – Status
- ✓ Process Status
- ✓ Call Object Stats
  - Filterable
  - History Graphs
- ✓ Any data from Server Manager can be added



The screenshot shows the 'CatEyes for JD Edwards' interface. The top navigation bar includes the CatEyes logo, the title 'CatEyes for JD Edwards', and user information 'Location 1' and 'Beth'. A left sidebar contains navigation options: User Transactions, Jobs, Server Stats (highlighted), Log Errors, Database, Alert Setup, and Dashboards. The main content area is divided into two panels: 'Managed Instances' and 'Process Status'. The 'Managed Instances' panel contains a table with columns for Name, Title, Status, and Date Time. The 'Process Status' panel contains a table with columns for State, PID, and Process Type. Below these panels is a 'Call Object Stats' section with a search filter and a time period selector.

Name	Title	Status	Date Time
JDE920_ENT	EnterpriseOne Enterprise Server	Running	2019-08-17 23:58:10
BSSV_DV920	EnterpriseOne Business Services Server	Undetermined	2019-08-17 23:58:10
AIS_DV920	EnterpriseOne Application Interface Services	Undetermined	2019-08-17 23:58:10
TRN_P5920	EnterpriseOne Transaction Server	Undetermined	2019-08-17 23:58:10

State	PID	Process Type
RUNNING	12442	jdenet_n
RUNNING	2862	MANAGEMENT KERNEL
RUNNING	12494	CALL OBJECT KERNEL
RUNNING	15038	jdenet_n
RUNNING	12771	jdenet_n
RUNNING	17665	CF1IRITY KFRNFI



The screenshot shows the 'CatEyes for JD Edwards' interface for 'Call Object Stats'. The top navigation bar includes the CatEyes logo, the title 'CatEyes for JD Edwards', and user information 'Location 1' and 'Beth'. A left sidebar contains navigation options: Database, Alert Setup, and Dashboards. The main content area is divided into two panels: 'Call Object Stats' and 'Performance Chart'. The 'Call Object Stats' panel has a search filter and a time period selector. The 'Performance Chart' panel shows a line graph with the y-axis labeled 'Average Time (in Milliseconds)' and the x-axis showing dates from August 16, 2019, to August 18, 2019. The chart displays several data series, with the highest peak reaching approximately 600 milliseconds.

Environment	Performance	App Errors	System Errors	Timeout	Volume
HTML_DV920 x	Performance Chart				

➤ *Show Live*



**Beth Hunt**  
CTO  
**PumaSight**

Beth.Hunt@pumasight.com  
+1 (720) 414-1495  
<https://www.pumasight.com>

**Melissa Penfield**  
Global IT Director  
**Fluidmaster**

MPenfield@fluidmaster.com  
<https://www.fluidmaster.com>



**Linked in**

# RFSmart - XML



**Details**

User ID	PID	Thread ID	Object Name	Response Time
[REDACTED]	10420	5624	N59RFPM2	562ms

**Function**      **Return Value**      **Start Time**      **Stop Time**

RFS\_TxSalesOrderPick      0      2020-01-03 11:06:46.273000      2020-01-03 11:06:46.835005

RFS Sales Order Pick

**Arguments**

BSFN_Name:	RFS_TxSalesOrderPick
CallingApplicationName:	RFSmart
CallingApplicationVersion:	
Environment:	PD92TZ8N
Data	-
mnOrderNumber	[REDACTED]
szOrderType	SE
szOrderCompany	[REDACTED]
mnLineNumber	2
szBranchPlant	1002
szLocation	L29

Location 2 ▾


Last 1 hour ▾


6.273000	562ms	0	
6.273001	0ms	0	
6.273003	0ms	0	
6.273005	0ms	0	
6.273007	0ms	0	+
6.273013	0ms	0	
6.273015	483ms	0	+
6.757015	63ms	0	+
6.820089	14ms	1	
6.835001	0ms	1	
6.835003	0ms	0	
6.712000	516ms	0	
3.206000	515ms	0	
0.469000	501ms	0	
6.261000	500ms	0	
1.465008	500ms	0	
4.636000	485ms	0	



# RFSmart - XML



















 **CatEyes for JD Edwards** Location 2  

 Dashboards

Advance Search 

Time Period:   

RFSmart 

		PD92TZ8N	RFSmart	10420	RFS_TxSalesOrderPick <a href="#">[Details]</a>	2020-01-03 11:06:46.273000	562ms	0	
					FormatBusinessUnit <a href="#">[Details]</a>	2020-01-03 11:06:46.273001	0ms	0	
					FormatLocation <a href="#">[Details]</a>	2020-01-03 11:06:46.273003	0ms	0	
					ValidateApplicationId <a href="#">[Details]</a>	2020-01-03 11:06:46.273005	0ms	0	
					F00095ReserveObject <a href="#">[Details]</a>	2020-01-03 11:06:46.273007	0ms	0	
					RetrieveShipConfirmPOValues <a href="#">[Details]</a>	2020-01-03 11:06:46.273013	0ms	0	
					RFS_TxPick2 <a href="#">[Details]</a>	2020-01-03 11:06:46.273015	483ms	0	
					RFS_TxPick2 <a href="#">[Details]</a>	2020-01-03 11:06:46.757015	63ms	0	
					SQL <a href="#">[Details]</a>	2020-01-03 11:06:46.820089	14ms	1	
					SQL <a href="#">[Details]</a>	2020-01-03 11:06:46.835001	0ms	1	
					SetNERReturnCode <a href="#">[Details]</a>	2020-01-03 11:06:46.835003	0ms	0	
		PD92TZ8N	RFSmart	7104	RFS_TxSalesOrderPick <a href="#">[Details]</a>	2020-01-03 11:22:16.712000	516ms	0	
		PD92TZ8N	RFSmart	7104	RFS_TxSalesOrderPick <a href="#">[Details]</a>	2020-01-03 11:17:53.206000	515ms	0	
		PD92TZ8N	RFSmart	7104	RFS_TxSalesOrderPick <a href="#">[Details]</a>	2020-01-03 12:02:30.469000	501ms	0	
		PD92TZ8N	RFSmart	10420	RFS_TxSalesOrderPick <a href="#">[Details]</a>	2020-01-03 11:07:26.261000	500ms	0	
		PD92TZ8N	RFSmart	7104	RFS_TxSalesOrderPick <a href="#">[Details]</a>	2020-01-03 11:56:31.465008	500ms	0	


# BSSV Web Services



 **CatEyes for JD Edwards** 





User Transactions

Advance Search Q

Time Period:  

DConnector x

- Jobs
- Server Stats
- Log Errors
- Database
- Alert Setup
- Dashboards

 	User ID	Environment	Application ID	PID	Business Function	Start	Response Time	Return Value
		JPD923	DConnector	5728	CommitSalesOrder [Details]	2020-01-03 13:57:13.816001	19831ms	0
					F4211EditDoc[Details]	2020-01-03 13:57:13.817000	194ms	0 +
					GetNextUniqueKeyID[Details]	2020-01-03 13:57:14.011001	35ms	0 +
					CacheProcessUniqueF41021WF[Details]	2020-01-03 13:57:14.047001	0ms	0
					F4211FSEndDoc[Details]	2020-01-03 13:57:14.048000	19570ms	0 +
					GetOrderAddress[Details]	2020-01-03 13:57:33.618001	2ms	0 +
					ProcessGenericTextOverrideAddr[Details]	2020-01-03 13:57:33.622000	21ms	0 +
					ProcessSalesCommissions[Details]	2020-01-03 13:57:33.643001	1ms	0 +
					ProcessSalesCommissions[Details]	2020-01-03 13:57:33.645001	1ms	0 +
					CacheProcessUniqueF41021WF[Details]	2020-01-03 13:57:33.647000	0ms	0
					CacheProcessUniqueF41021WF[Details]	2020-01-03 13:57:33.647002	0ms	0

# BSSV Web Services



The screenshot displays the BSSV Web Services interface. A 'Details' modal window is open, showing information for a specific transaction. The background shows a table of transactions with columns for Response Time and Return Value.

**Details Modal:**

User ID	PID	Thread ID	Object Name	Response Time
[REDACTED]	5728	6672	B4204200	19831ms

Function	Return Value	Start Time	Stop Time
CommitSalesOrder	0	2020-01-03 13:57:13.816001	2020-01-03 13:57:33.648000

Commit Sales Order Wrapper

**Arguments**

BSFN_Name:	CommitSalesOrder
GLRTID:	0
CallingApplicationName:	DConnector
CallingApplicationVersion:	
Environment:	JPD923
Data	-
mnCMJobNo	2443
mnSalesOrderNo	[REDACTED]
szCMComputerID	[REDACTED]
szOrderType	ST
szKeyCompany	[REDACTED]
szProgramID	J4200010

**Background Table:**

Response Time	Return Value
19831ms	0
194ms	0
35ms	0
0ms	0
19570ms	0
2ms	0
21ms	0
1ms	0
1ms	0
0ms	0
0ms	0

# DSI - XML



Advance Search  Time Period:

⊖	[Redacted]	PD923	[Redacted]	4608	dcLINKInterfaceLPNTransferIssues <a href="#">[Details]</a>	2020-01-03 12:56:10.666000	7613ms	0	
					PORetrievalLPNWorkbench <a href="#">[Details]</a>	2020-01-03 12:56:10.666001	0ms	0	
					PORetrievalInventoryTransfer <a href="#">[Details]</a>	2020-01-03 12:56:10.667001	0ms	0	
					FormatBusinessUnit <a href="#">[Details]</a>	2020-01-03 12:56:10.668001	0ms	0	
					dcLINKSetUser <a href="#">[Details]</a>	2020-01-03 12:56:10.668003	0ms	0	
					FormatLocation <a href="#">[Details]</a>	2020-01-03 12:56:10.668005	0ms	0	
					SQL <a href="#">[Details]</a>	2020-01-03 12:56:10.674000	6ms	1	
					TransferLicensePlates <a href="#">[Details]</a>	2020-01-03 12:56:10.680001	7596ms	0	+
+	[Redacted]	PD923	[Redacted]	16468	dcLINKInterfaceLPNTransferIssues <a href="#">[Details]</a>	2020-01-03 12:52:45.986000	7372ms	0	
+	[Redacted]	PD923	[Redacted]	2996	dcLINKOXPurchaseOrderReceipts <a href="#">[Details]</a>	2020-01-03 11:04:28.282000	7161ms	0	
+	[Redacted]	PD923	[Redacted]	5244	dcLINKInterfaceLPNTransferIssues <a href="#">[Details]</a>	2020-01-03 12:54:31.937000	6787ms	0	



# DSI - XML



The screenshot displays the CatEyes DSI interface. A 'Details' window is open, showing the following information:

User ID	PID	Thread ID	Object Name	Response Time
[REDACTED]	4608	13952	ND3N6L10	7613ms

Function	Return Value	Start Time	Stop Time
dcLINKInterfaceLPNTransferIssues	0	2020-01-03 12:56:10.666000	2020-01-03 12:56:18.279000

dcLINK Interface - LPN Workbench

**Arguments**

BSFN_Name:	dcLINKInterfaceLPNTransferIssues
GLRTID:	0
CallingApplicationName:	[REDACTED]
CallingApplicationVersion:	
Environment:	PD923
Data	-
cdcLINKActionCode_EV01	0
cActionCode_ACTION	T
jdDateUpdated_UPMJ	20200103
mnTimeUpdated_TDAY	125610
szUserId_USER	[REDACTED]
szWorkStationId_JOB	[REDACTED]

The background shows a dashboard with a search bar and a table of process data. The table has columns for response time and return value, with several rows showing 0ms and 0, and one row showing 6ms and 1.