

IDKYCDT Session 4051
2018 Unite Conference
Monitoring COMS Applications

Curt Timmerman
First National Bank Alaska
Anchorage, Alaska
ctimmerman@FNBAAlaska.com

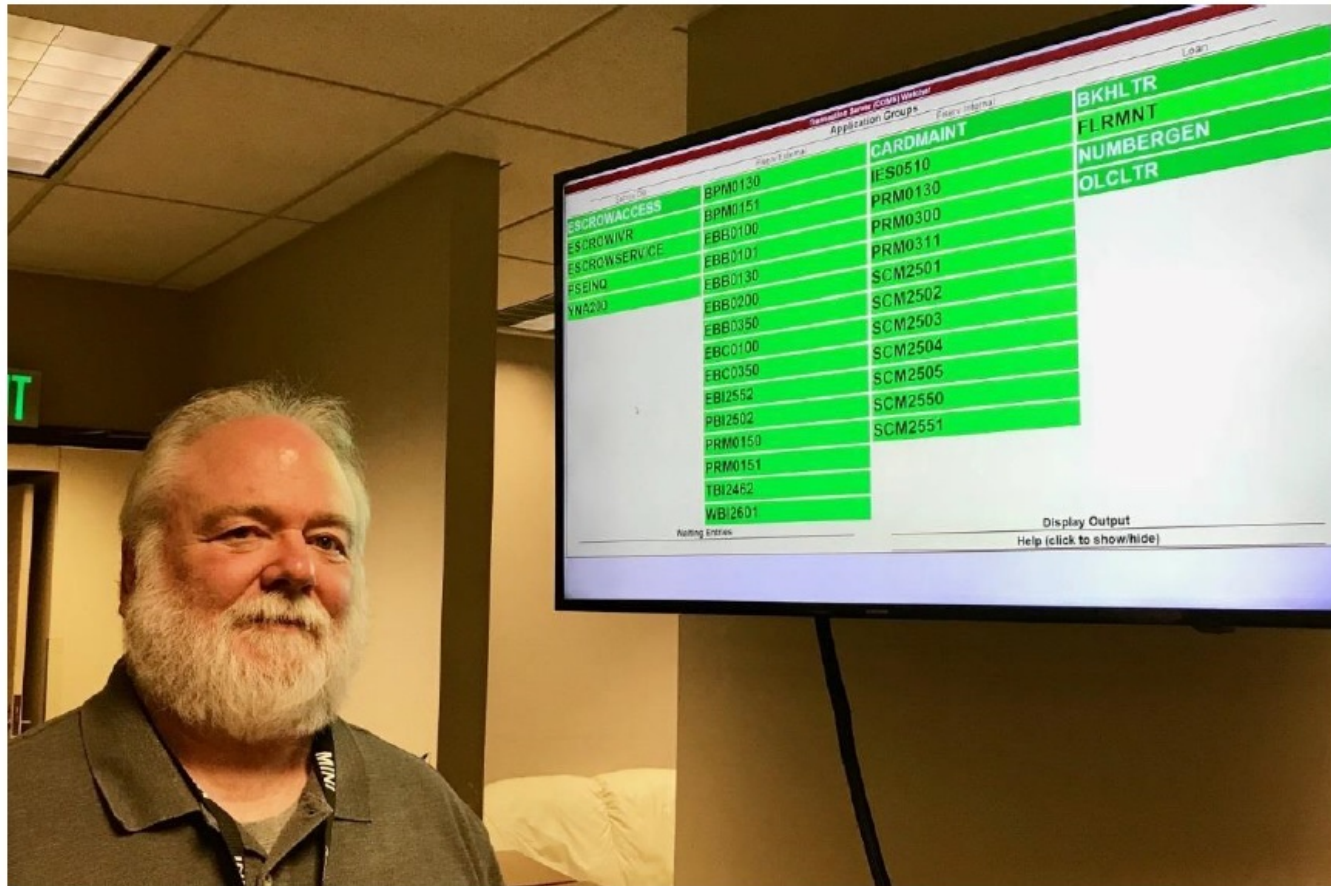
COMS Program Agent Facility

- Library interface to configuration and operational COMS commands
- Unite 2017, Paul Kimpel did a IDKYCDT talk on PAF
Provided an introduction to the text based PAF interface
Link: <http://www.digm.com/UNITE/2017/>
Paul also helped me get the PAF interface working

Server Application

- Runs under COMS
Virtual Interface through the Atlas web server

The dashboard on display



Dashboard

- In the operations area just outside the computer room.
- Visible to all.
- Operators are less tied to ODT/REMOTESPO.

Transaction Server (COMS) Watcher

Application Groups

Escrow DB	Fiserv External	Fiserv Internal	Loan
ESCROWACCESS	BPM0130	CARDMAINT	BKHLTR
ESCROWIVR	BPM0151	IES0510	FLRMNT
ESCROWSERVICE	EBB0100	PRM0130	NUMBERGEN
PSEINQ	EBB0101	PRM0300	OLCLTR
YNA200	EBB0130	PRM0311	
	EBB0200	SCM2501	
	EBB0350	SCM2502	
	EBC0100	SCM2503	
	EBC0350	SCM2504	
	EBI2552	SCM2505	
	PBI2502	SCM2550	
	PRM0150	SCM2551	
	PRM0151		
	TBI2462		
	WBI2601		

Waiting Entries

Display Output

Help (click to show/hide)

Home Page

- Only page returned by TSWATCH
- Immediately requests status update on all programs specified in the configuration file
- Polls for program status updates every 5 seconds

Transaction Server (COMS) Watcher

Application Groups

Escrow DB	Fiserv External	Fiserv Internal	Loan
ESCROWACCESS	BPM0130	CARDMAINT	BKHLTR
ESCROWIVR	BPM0151	IES0510	FLRMNT
ESCROWSERVICE	EBB0100	PRM0130	NUMBERGEN
PSEINQ	EBB0101	PRM0300	OLCLTR
YNA200	EBB0130	PRM0311	
	EBB0200	SCM2501	
	EBB0350	SCM2502	
	EBC0100	SCM2503	
	EBC0350	SCM2504	
	EBI2552	SCM2505	
	PBI2502	SCM2550	
	PRM0150	SCM2551	
	PRM0151		
	TBI2462		
	WBI2601		

Waiting Entries

Display Output

Help (click to show/hide)

Program Buttons

An icon will appear briefly in front of the "Program List" title indicating the program status has been checked.



Application is ENABLED and Running.



Application is ENABLED but not currently running.



Possible causes:

- Application is DISABLED by OPS, this may be OK. Once ENABLED the application should run normally.
- There are 1 or more jobs/tasks waiting.



Action should be taken to fix the problem.

Possible causes:

- Application was DISABLED by COMS indicating a TASK failure.
- The WINDOW associated with the application is DISABLED. This should never occur.
- One of the running copies has taken over 60 seconds processing a transaction. The application could be stuck in a loop.

Status not updated

Application status has not been checked. Click to update the status.

Action Buttons

En

Enable this program allowing it to run normally. If the program is already ENABLED, this has no effect.

Dis

DISABLE this program causing it to shut down until ENABLED.

Upd

UPDATE this program causing it to restart. This is normally used when a new version of the applicaion is installed.

Help Dropdown

- Program status
- 'OK - Running'
- 'OK - Not Running'
No copies are in the mix
- 'Warning(s)'
Application disabled by operator or PAF
Waiting jobs or tasks
- 'Alert(s)'
Application disabled by COMS - task failure
Window associated with application is disabled
One of the application copies has taken over 60 seconds to respond (program loop?)
- 'Status Not Updated'
Configuration error

Transaction Server Watcher x comp.sys.unisys - Google G... x Escrow Basic Access x Escrow Query x Elegant JSON Editor x +

cpmcp1/TSWATCH

Search

Transaction Server (COMS) Watcher

Application Groups

Escrow DB	Fiserv External	Fiserv Internal	Loan
ESCROWACCESS	BPM0130	CARDMAINT	BKHLTR
ESCROWIVR	BPM0151	IES0510	FLRMNT
ESCROWSERVICE	EBB0100	PRM0130	NUMBERGEN
PSEINQ	EBB0101	PRM0300	OLCLTR
YNA200	EBB0130	PRM0311	
	EBB0200	SCM2501	
	EBB0350	SCM2502	
	EBC0100	SCM2503	
	EBC0350	SCM2504	
	EBI2552	SCM2505	
	PBI2502	SCM2550	
	PRM0150	SCM2551	
	PRM0151		
	TBI2462		
	WBI2601		

Waiting Entries

```

-Job--Task-Pri---Elapsed----- WAITING JOB/TASK -----
8619/ 8619 50 0:00:09 Job (CTIMMERMAN) (CTIMMERMAN)WFL/TEST ON DISK
PROGRAMMATICALLY SUSPENDED
DISPLAY:Wait test - Ignore this message.
    
```

Display Output

Help (click to show/hide)

Other Indicators

- Favicon - Changes when warnings/alerts are present
- Status update indicator - flashes on every poll

Transaction Server (COMS) Watcher

Application Groups

Escrow DB	Fiserv External	Fiserv Internal	Loan
ESCROWACCESS	BPM0130	CARDMAINT	BKHLTR
ESCROWIVR	BPM0151	IES0510	FLRMNT
ESCROWSERVICE	EBB0100	PRM0130	NUMBERGEN
PSEINQ	EBB0101	PRM0300	OLCLTR
YNA200	EBB0130	PRM0311	
	EBB0200	SCM2501	
	EBB0350	SCM2502	
	EBC0100	SCM2503	
	EBC0350	SCM2504	
	EBI2552	SCM2505	
	PBI2502	SCM2550	
	PRM0150	SCM2551	
	PRM0151		
	TBI2462		
	WBI2601		

Waiting Entries

Display Output

```

Program status for EBB0100
Codefile: *ITI/EBB/0100
Queue depth: 0, Response time: 0.00149759880192 secs, Messages processed: 25258
Input Queue memory in use for this Program: 1807 words
This program is currently ENABLED.
Associated window is EBB0100 (ENABLED).
The following copies are active:
Copy 1: Mix 2428: idle
    Message from station for dialog ,
    Task Queue Depth = 0
Copy 2: Mix 2429: idle
    Message from station for dialog ,
    Task Queue Depth = 0
Copy 3: Mix 2430: idle
    Message from station for dialog ,
    Task Queue Depth = 0
;
    
```

Help (click to show/hide)

Requesting a program status

- Click any program control for a current status
- Similar to '?STATUS PROGRAM PROGID'
- Useful for diagnosing warnings and alerts

Transaction Server (COMS) Watcher

Application Groups

Escrow DB	Fiserv External	Fiserv Internal	Loan
ESCROWACCESS	BPM0130	CARDMAINT	BKHLTR
ESCROWIVR	BPM0151	IES0510	FLRMNT
ESCROWSERVICE	EBB0100	PRM0130	NUMBERGEN
PSEINQ	EBB0101	PRM0300	OLCLTR
YNA200	EBB0130	PRM0311	
	EBB0200	SCM2501	
	EBB0350	SCM2502	
	EBC0100	SCM2503	
	EBC0350	SCM2504	
	EBI2552	SCM2505	
	PBI2502	SCM2550	
	PRM0150	SCM2551	
	PRM0151		
	TBI2462		
	WBI2601		

Waiting Entries

```

-Job--Task-Pri---Elapsed----- WAITING JOB/TASK -----
8818/ 8818 50 0:00:28 Job (CTIMMERMAN) (CTIMMERMAN)CANDE/TEXT900 ON DISK
PROGRAMMATICALLY SUSPENDED
DISPLAY:wait test - Ignore this message.
    
```

Display Output

Help (click to show/hide)

Waiting Entries

- Added late
- Usually not a problem but requires operator action
- Tried to duplicate REMOTESPO display

Transaction Server (COMS) Watcher

Application Groups

Escrow DB				Fiserv External				Fiserv Internal				Loan			
ESCROWACCESS	En	Dis	Upd	BPM0130	En	Dis	Upd	CARDMAINT	En	Dis	Upd	BKHLTR	En	Dis	Upd
ESCROWIVR	En	Dis	Upd	BPM0151	En	Dis	Upd	IES0510	En	Dis	Upd	FLRMNT	En	Dis	Upd
ESCROWSERVICE	En	Dis	Upd	EBB0100	En	Dis	Upd	PRM0130	En	Dis	Upd	NUMBERGEN	En	Dis	Upd
PSEINQ	En	Dis	Upd	EBB0101	En	Dis	Upd	PRM0300	En	Dis	Upd	OLCLTR	En	Dis	Upd
YNA200	En	Dis	Upd	EBB0130	En	Dis	Upd	PRM0311	En	Dis	Upd				
				EBB0200	En	Dis	Upd	SCM2501	En	Dis	Upd				
				EBB0350	En	Dis	Upd	SCM2502	En	Dis	Upd				
				EBC0100	En	Dis	Upd	SCM2503	En	Dis	Upd				
				EBC0350	En	Dis	Upd	SCM2504	En	Dis	Upd				
				EBI2552	En	Dis	Upd	SCM2505	En	Dis	Upd				
				PBI2502	En	Dis	Upd	SCM2550	En	Dis	Upd				
				PRM0150	En	Dis	Upd	SCM2551	En	Dis	Upd				
				PRM0151	En	Dis	Upd								
				TBI2462	En	Dis	Upd								
				WBI2601	En	Dis	Upd								

Waiting Entries

Display Output

Help (click to show/hide)

Control Page

- Set in configuration file
- Additional controls using PAF interface
 - Enable
 - Disable
 - Update

Thinking Out Loud

- No requests for enhancements yet.
- Efficiency
Monitor software should have a minimal impact on production applications.
Adding "waiting entries" increased response time by about a factor of 10.
- Integrate with System Assistant...
Whichever is most appropriate.
SA can display a message and wait for AX response.
- Identify more types of application problems. We may have all of the low hanging fruit.
Stopped programs? No, does this happen anymore?
- ODT commands - Maybe
AX or OK
- Simple history (log) - Session only, did anything happen while I was at lunch?
- Inquire on entity configuration for problem resolution.

TSWATCH Configuration

- Atlas (Transaction Server) virtual directory
Routes requests to TSWATCH COMS program
- Ajax based
After presenting the initial WEB page, passively waits for requests from browser
Interpretation and presentation controlled by browser
- JQUERY javascript environment handles:
Server interface
Web page updates
- Algol server application, required for PAF_REQUEST

Request:

```
{
  "action": "program_status",
  "program_list": [
    {
      "ts_id": "EBB0100"
    }
  ]
}
```

Reply:

```
{
  "program_list": [
    {
      "ts_id": "EBB0100",
      "code_file": "*ITI/EBB/0100",
      "enabled": "1",
      "queue_depth": "0",
      "window_name": "EBB0100",
      "window_status": "1",
      "active_copies": "3",
      "code_list": [
        {
          "copy_number": "1",
          "mix_number": "3902",
          "dialog": "0",
          "task_status": "2",
          "elapsed_time": "0",
          "queue_depth": "0"
        },
        {
          "copy_number": "2",
          "mix_number": "3904",
          "dialog": "0",
          "task_status": "2",
          "elapsed_time": "0",
          "queue_depth": "0"
        }
      ]
    }
  ]
}
```

```
    },  
    {  
      "copy_number": "3",  
      "mix_number": "3905",  
      "dialog": "0",  
      "task_status": "2",  
      "elapsed_time": "0",  
      "queue_depth": "0"  
    }  
  ]  
}  
]
```

[Pause](#) [Resume](#) [Next](#) [Previous](#)

