TWS | emon

APS | ENTERprise

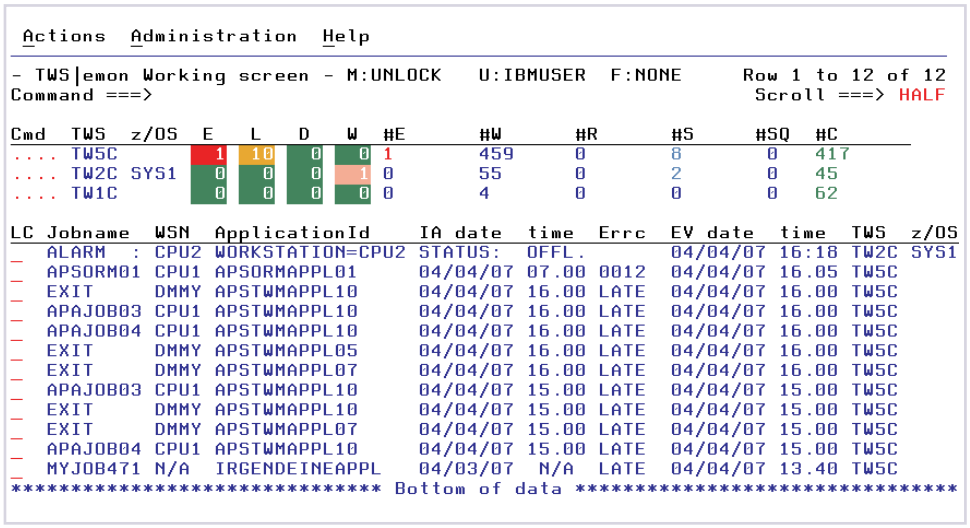
TWS|emon

In today's TWS for z/OS environments maintaining an uninterrupted batch flow is critical. Scheduling staff are required to proficiently run an increasing number of jobs within a static or shrinking batch window. When a failed or delayed job is not identified and attended to immediately the repercussions can extend throughout the entire schedule. On top of all this, Service Level Agreements must still be met.

Available standard functions within TWS for z/OS are insufficient to fulfill these needs. Operators are limited to toggling between ISPF screens to identify outstanding issues. The error list does not have a consolidated view that identifies all potential problems. Critical functionality, such as defining and monitoring milestones, is missing from the standard TWS for z/OS interface. Thus, the monitoring is error-prone, insufficient and extremely time consuming resulting in unnecessary overhead and lack of quality.

TWSemon is specifically designed to address these issues by providing one central point for the monitoring and operating of the TWS for z/OS batch flow running on one or more controllers. The goal of TWSemon is to increase the quality of, and decrease the effort put into, the detection and resolution of out-of-line situations in batch production. Real time monitoring, early detection and timely resolution of these situations is the key to maintaining a smooth running production batch flow.

From one screen all relevant batch production issues are identified through color coding and can be analyzed and immediately resolved. TWS for z/OS controllers of mixed releases are supported and there is no limit to the number of TWS for z/OS controllers that can be monitored. Additional functionality allows for proactive SLA monitoring and monitoring via the web.



TWSemon ISPF Interface

Monitoring

The intuitive ISPF user interface of TWSemon facilitates the early detection of multiple problem situations. From this one interface all TWS for z/OS controllers are presented with color coding to quickly identify potential problems. Different color codes represent the different out-of-line situations that can otherwise be easily missed in daily practice, for example:

Jobs in Error

Jobs in error can be detected immediately for all controllers, without having to call the error lists of possibly several TWS for z/OS controllers.

Long Duration Conditions

TWS for z/OS reports an operation as “Long Duration” when the predefined duration for this operation is exceeded. In most practical situations the duration of an operation is not defined realistically, which invokes numerous unnecessary alarms. Within TWSemon, long duration jobs can be identified through relative or absolute values. This refines the monitoring process by establishing tolerances and reduces “false alarms”.

Milestones (Late Conditions)

Specific jobs can be defined as milestones; which if not completed by a specified timeframe are reported in TWSemon. Thus, critical situations are detected immediately without having to review vast amounts of information from different sources.

Controller Inactivity

TWSemon monitors for the inactivity of TWS for z/OS controllers based upon user specified time intervals where no jobs have been started. Individual time intervals can be specified per controller. This ensures that job submission that has been stopped for any controller, for any reason, will be identified if it is not activated within a certain time frame.

Workstation Offline

If a workstation becomes offline an event will be logged in the TWSemon event list.

Real time statistics are displayed within each controller for the various statuses of the jobs running under that controller, which include:

- Jobs in waiting status
- Jobs in error status
- Jobs in completed status
- Jobs in started status
- Jobs in ready status

The ISPF interface contains a consolidated real-time out-of-line list for all monitored controllers. The event list can be sorted on up to five fields at a time.

The interface is completely customizable. Multiple filters can be created that filter what will / will not appear in the interface. Filters can be created on any combination of Application Id, Owner Id, Authority Group Id and Group definition. Wilds card are fully supported.

Operating

The TWSemon interface is also used as a single point of operation of the TWS for z/OS controllers it monitors. Several line commands are available that allow the user to quickly and easily work with a specific issue for a specific controller.

For example, an operator can enter the line command “E” next to an error in the TWSemon event list and be positioned directly within the TWS for z/OS error list panel of the corresponding TWS for z/OS system. The target controller can be on the same LPAR, another LPAR, CPU, SYSPLEX or even another data center regardless of where you are monitoring from. At this point users are working directly with TWS for z/OS to resolve the error reducing the error prone and unproductive task of navigating through several panels.

A logging facility is available to assign and enter free form comments to any issue, possibly to document why or how an issue was resolved. For those issues that can not be readily resolved this logging facility offers the operator a way to comment on the situation for possible follow-up later, facilitating communications between shifts. Logging removes an issue from the interface so operators can concentrate on more immediate issues.

The “CALL” command can also be used to navigate directly to the TWS for z/OS Primary Option menu of any controller being monitored creating a standardized way to access to all TWS for z/OS controllers.

Reporting & Archiving

All out-of-line situations and actions are logged by the TWSemon Archive Facility, creating a completely centralized audit trail. An archive list can be displayed in the ISPF interface. The entire archive list can be sorted and searched field-by-field or by free form text. When searching by field, users can use multiple fields in the search (Application Id, Jobname, Workstation, etc.). Wildcards are supported when searching.

Proactive Notification & Automation

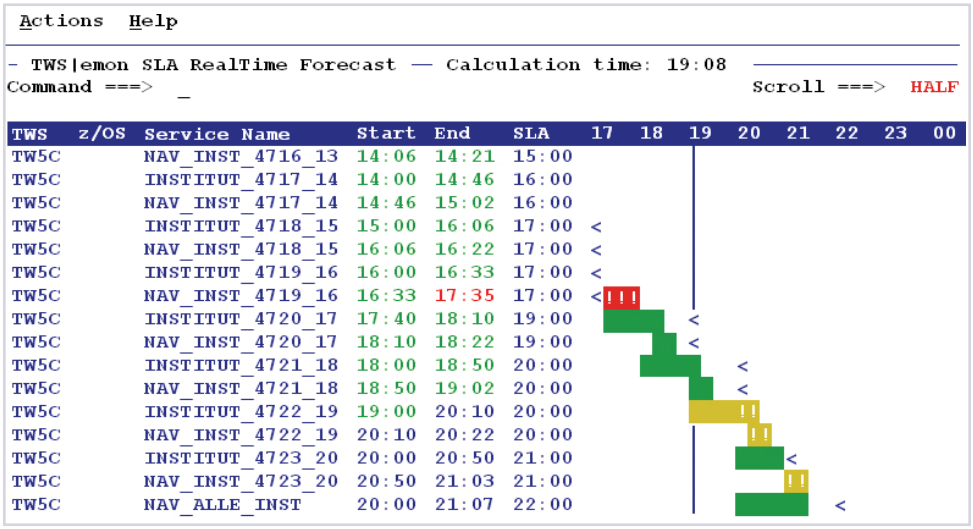
A WTO alert message can be issued to the z/OS console for every new event that TWSemon detects. From there any console automation package can be configured to proactively notify personnel about specific TWS errors (email, text message, page, etc.) or automate some type of corrective action.

TWSemon SLA Realtime Forecast

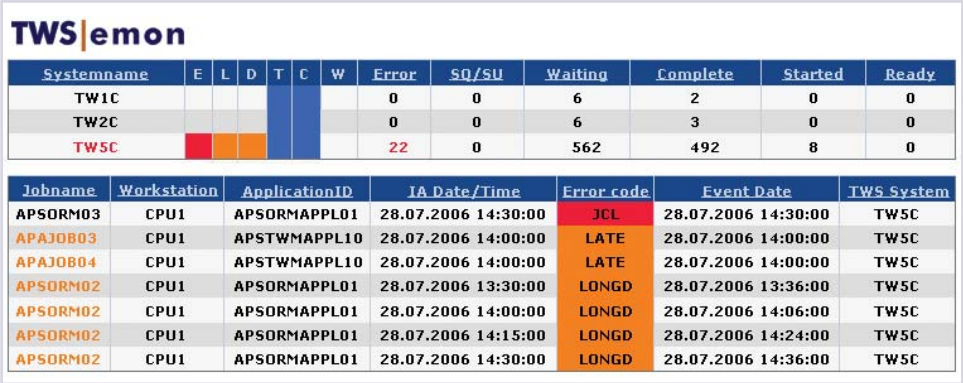
Based on the defined services and SLA points critical services are listed with their expected or real completion times and the SLA points. Those services which could not be completed within the agreed SLA points, or which most likely will fail to meet future SLA points, can easily be identified. On the basis of:

- historical runtime data, which will be collected by the TWSemon SLA Realtime Forecast over time,
- the structure of the Current Plan and
- the planned start- and end-times calculated by TWS for z/OS

TWSemon SLA Realtime Forecast will create a basis for the realtime forecast calculation. At a defined interval, the SLA realtime forecast calculator recalculates the plan basis



TWSemon SLA Realtime Forecast



TWS|emon

Systemname	E	L	D	T	C	W	Error	SQ/SU	Waiting	Complete	Started	Ready
TW1C							0	0	6	2	0	0
TW2C							0	0	6	3	0	0
TW5C							22	0	562	492	8	0

Jobname	Workstation	ApplicationID	IA Date/Time	Error code	Event Date	TWS System
APSORM03	CPU1	APSORMAPPL01	28.07.2006 14:30:00	JCL	28.07.2006 14:30:00	TW5C
APAJOB03	CPU1	APSTWMAPPL10	28.07.2006 14:00:00	LATE	28.07.2006 14:00:00	TW5C
APAJOB04	CPU1	APSTWMAPPL10	28.07.2006 14:00:00	LATE	28.07.2006 14:00:00	TW5C
APSORM02	CPU1	APSORMAPPL01	28.07.2006 13:30:00	LONGD	28.07.2006 13:36:00	TW5C
APSORM02	CPU1	APSORMAPPL01	28.07.2006 14:00:00	LONGD	28.07.2006 14:06:00	TW5C
APSORM02	CPU1	APSORMAPPL01	28.07.2006 14:15:00	LONGD	28.07.2006 14:24:00	TW5C
APSORM02	CPU1	APSORMAPPL01	28.07.2006 14:30:00	LONGD	28.07.2006 14:36:00	TW5C

TWSemon Web Interface

considering all status changes in the Current Plan. Structural changes in the Current Plan, like the addition of a triggered application (ETT) will also be considered in the calculation.

TWSemon SLA Realtime Forecast fulfills an essential requirement to proactively determine business services that are at risk of missing agreed service levels. Batch processes under TWS for z/OS can now be managed in a more professional way. Reliable information replaces professional estimates for higher accuracy, predictability and manageability of your mission critical batch processes.

TWSemon SLA Realtime Forecast allows the definition of a service and a time when this service needs to be completed by (SLA point). At regular intervals it calculates the expected completion time for a defined business service running under TWS for z/OS. The impact of errors or delays in a defined business service will then be recognized by TWSemon SLA Realtime Forecast and potential delays that could put the agreed service levels under risk are flagged before the business is adversely impacted. Corrective actions can be taken with the standard TWSemon functionality.

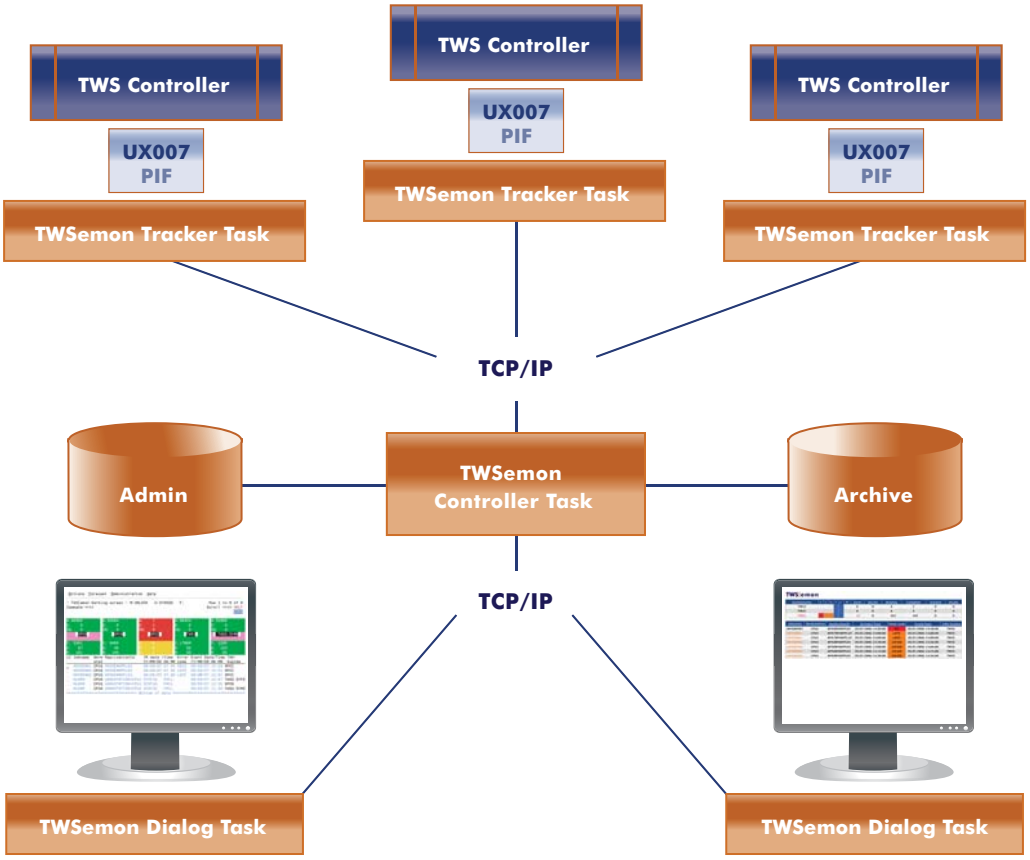
TWSemon WebAccess

TWSemon WebAccess is a web accessible version of the TWSemon Supervisor Screen (monitoring only). Users can monitor one or multiple TWS for z/OS controllers right from the intra/internet, without having to sign onto the mainframe. This eliminates the cost and overhead associated with TSO/mainframe access.

Product Architecture & Performance

TWSemon was intelligently designed to have a very low footprint on your systems. TWSemon utilizes the operation-status-change exit (EQQUX007) for most of its interfacing with TWS for z/OS. The advantage to this design is that the status of your TWS for z/OS jobs are reflected almost instantaneously within the TWSemon interface while having extremely low overhead.

The flexible architecture of TWSemon allows users to monitor and operate multiple TWS for z/OS controllers on multiple LPARS, CPUs, SYSPLEXes or even other data centers. TWSemon fully supports IBM's TWS End-To-End architecture.



BENEFITS

Benefits:

- ☑ Increased productivity in detecting, identifying and resolving TWS for z/OS issues
- ☑ Refined monitoring by event filtering and focusing on “real” issues
- ☑ Time savings through direct analysis and problem resolution without change of system or platform
- ☑ Standardization of monitoring and operating for all TWS for z/OS controllers
- ☑ Monitoring of situations that can not be monitored by standard TWS for z/OS functionality
- ☑ Complete reporting and archiving
- ☑ Location independent monitoring
- ☑ Immediately beneficial upon installation with virtually no training required
- ☑ Scalable solution with low resource consumption

ROI

Return on Investment:

- ☑ Cost savings by increased percentage of meeting SLAs
- ☑ Reduce workload required to monitor and respond to out-of-line situations
- ☑ Reduce the time and effort put into responding to “false alarms”
- ☑ Reduce costs associated by TSO/mainframe access by monitoring via web
- ☑ Quickly achieve productivity gains in problem detection and resolution
- ☑ Sarbanes-Oxley / ITIL / ISO regulatory compliance
- ☑ Improved customer service resulting in higher customer satisfaction

APS|ENTERprise offers a free, no obligation, 30 day trial. During your trial period you will receive full support for the installation, set-up and trial of TWSemon.

Please contact us for further information or to schedule an on or off site demonstration.

For your local APS|ENTERprise partner please visit: www.aps-enterprise.com.

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