

What's New in IBM Z Workload Scheduler V.10.2.x and Roadmap

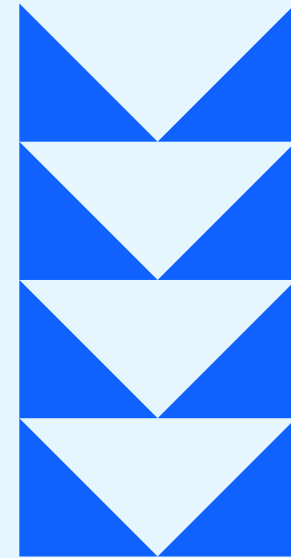
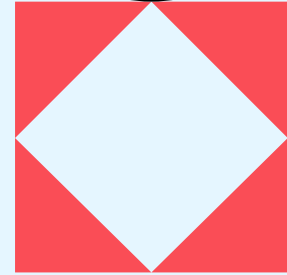
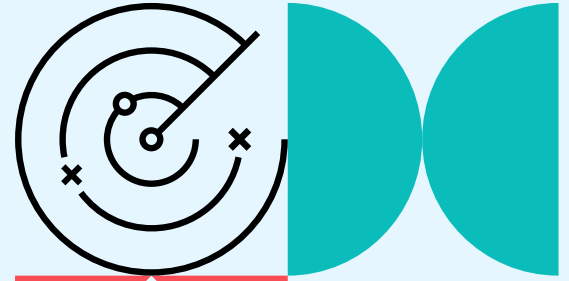
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Agenda

- 01 Automation Market Trend and Overview
- 02 IZWS 10.2 Recap:
Plan mirroring and new Orchestration Monitor
- 03 IZWS 10.2 2025 SPEs:
Enhancements for Mirroring, Monitoring, Cross-dependencies,
Observability, WAPL, and more
- 04 Leverage AI in job flows and as personal assistant
- 05 Roadmap



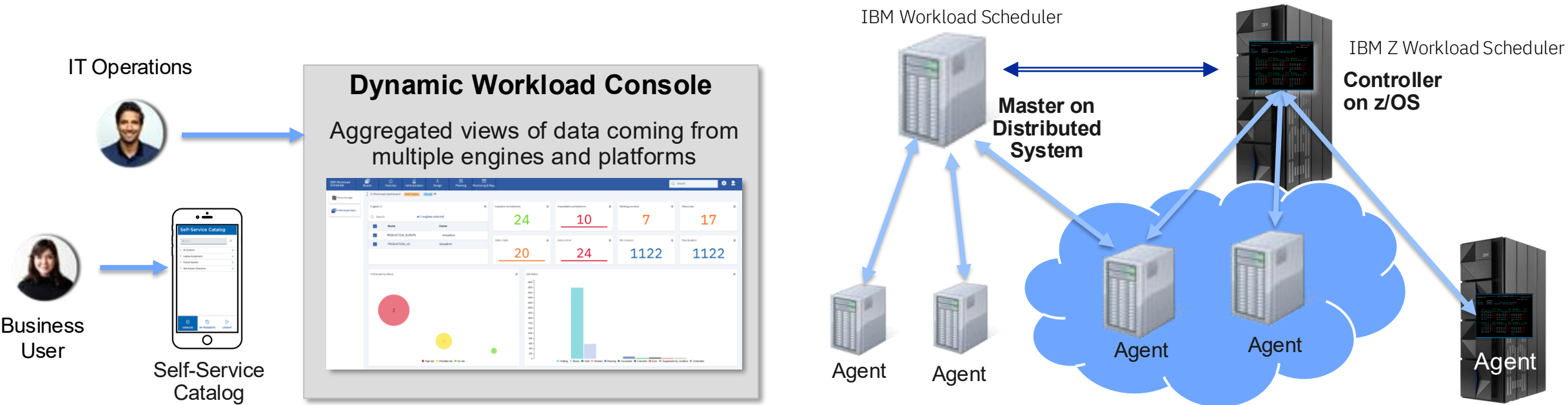
Automation Market Trends


End-to-end orchestration, centralized control, self-service and Agentic AI transformation

- A move toward **broader orchestration**: linking jobs, data pipelines, cloud resources, business processes.
- **Integration in Observability and Analytics** Platforms, as well as **IT Service Management** ecosystems
- **Support business users**, enable **self-service and automation of recurring tasks**
- **Make use of AI/ML capabilities** (e.g., predictive job durations, anomaly detection, optimization, AI agents)



IT Workload Automation with IBM Workload Automation












IBM Workload Automation

Automate any kind of unattended process, triggered by schedules or events, from a centralized point of control

Automation hub with 130+ plugins for hybrid cloud and other integrations




















Predict & Guarantee SLA compliance

AI-based anomaly detection





AI-infused scheduling

Platforms

Hybrid Multicloud Networks

Data

IBM WORKLOAD AUTOMATION ACCELERATES THE DIGITAL TRANSFORMATION

[Automation Hub link](#)

130+ Out-of-the-Box integrations to automate in IT and business domains

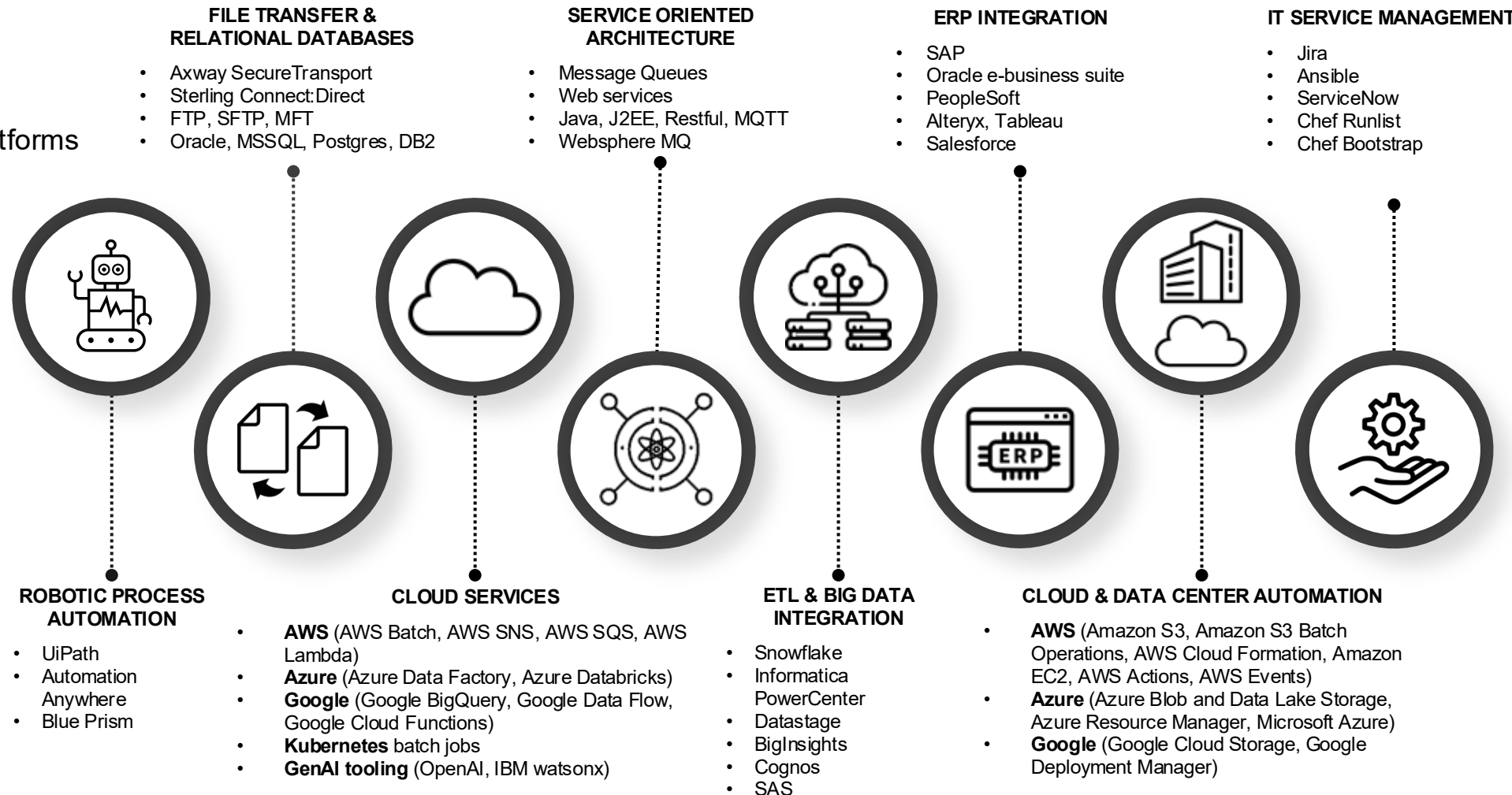
+ Free Development Kit for customers and business partners to develop their own plugins

Managing **costs** and increase **efficiency** with a centralized **end-to-end control** across platforms

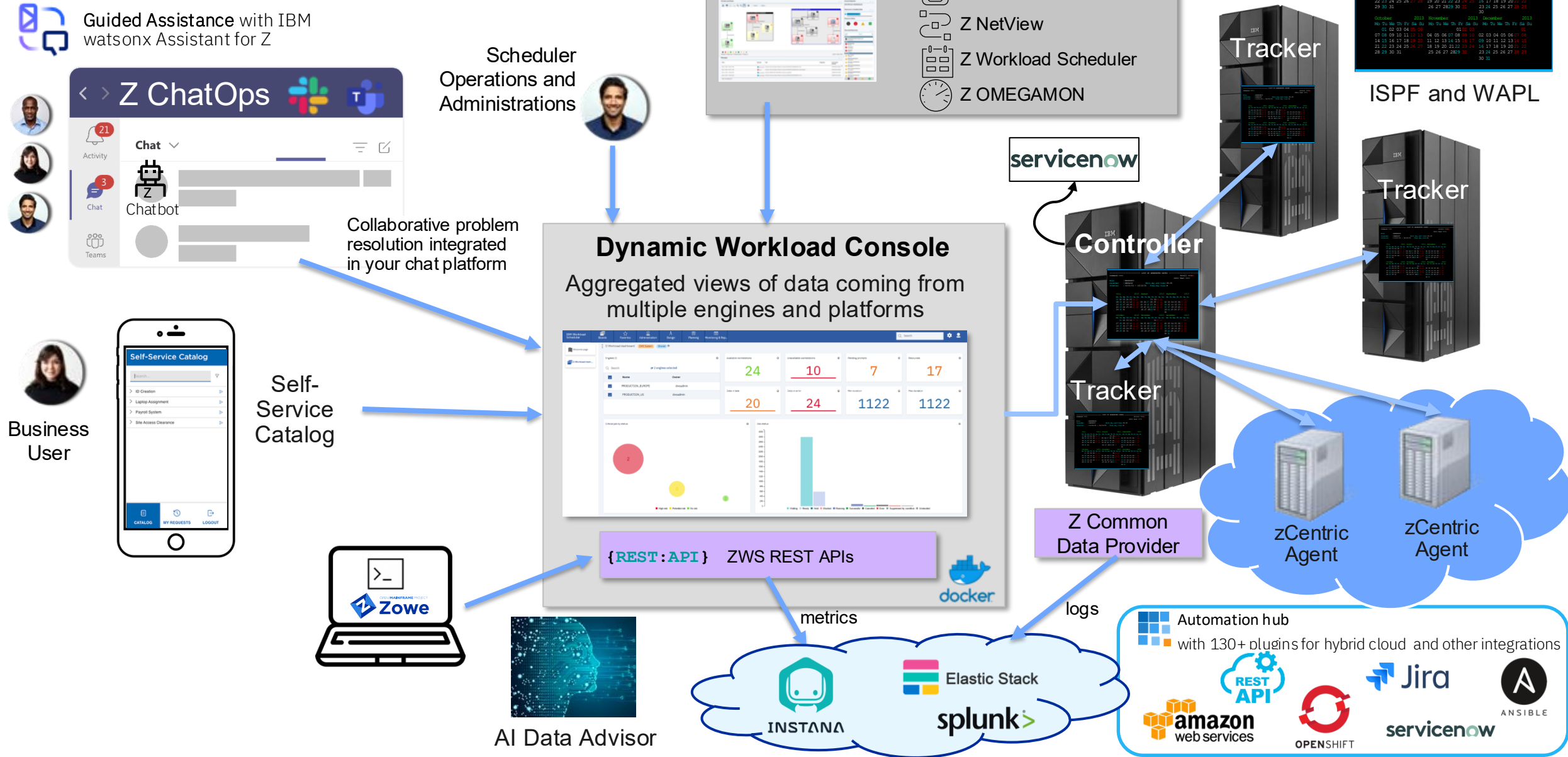
Generating **business value** from modern technologies (**AWS / Azure / Google**)

Enhancing **file exchange** ensuring **business continuity** with **MFT** integration

45% improved **business agility**
60% **saving** on manual effort with **RPA** integration



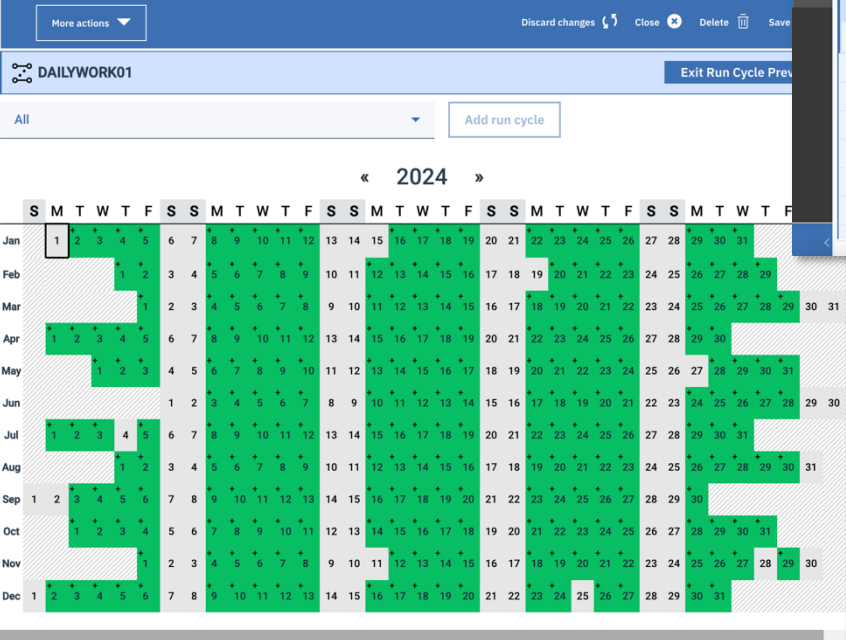
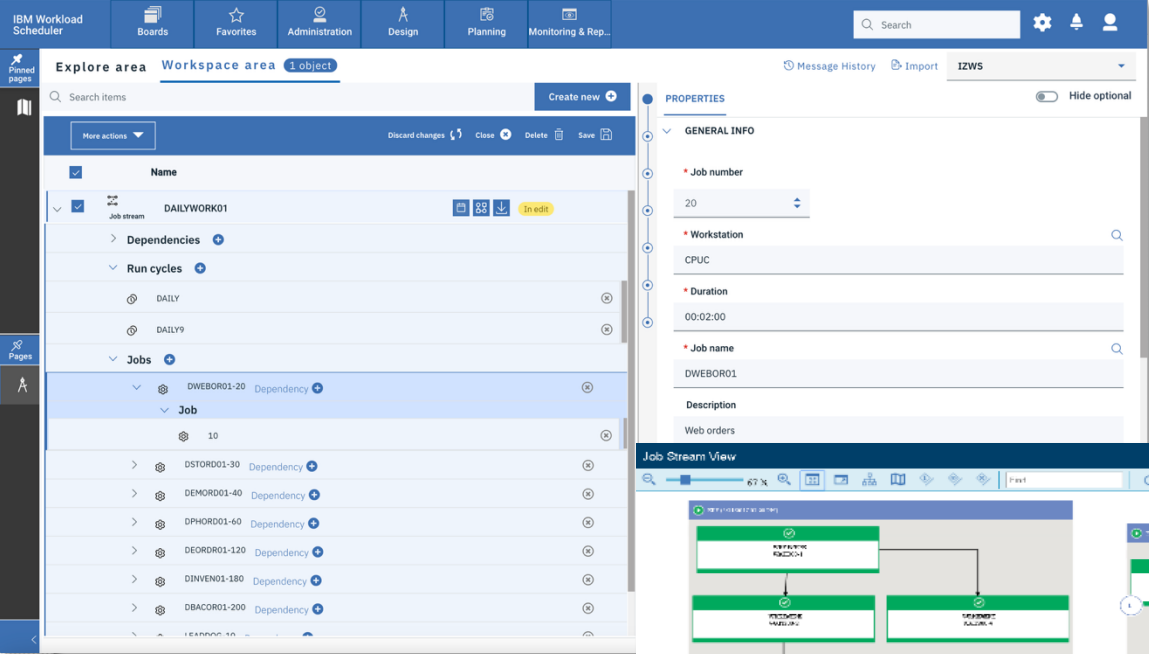
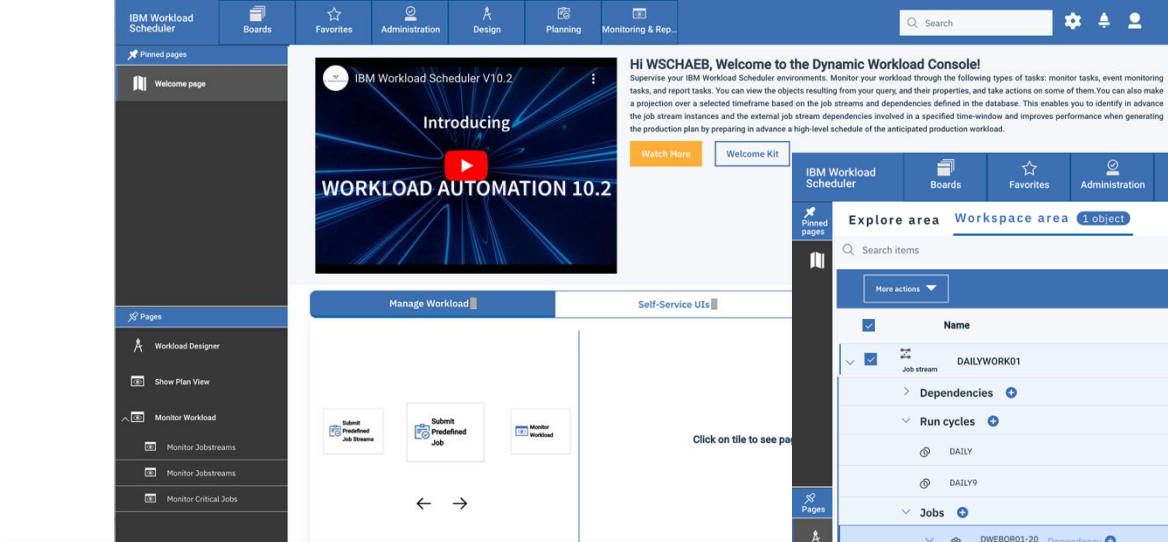
The modern mainframe: User experiences and integrations for IBM Z Workload Scheduler



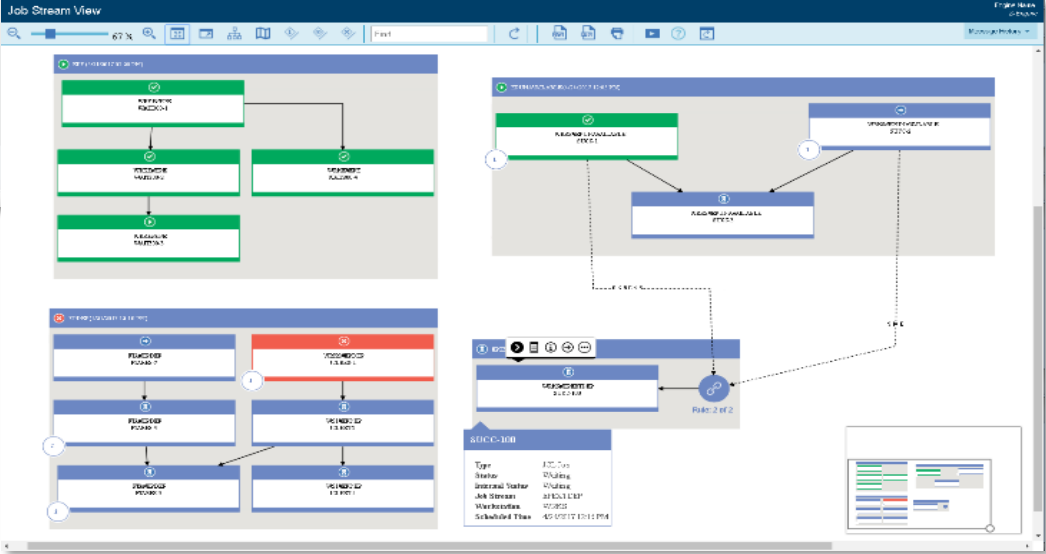
Dynamic Workload Console

Modern and intuitive web-based user interface for modelling

Define jobs and job streams and all scheduling dependencies and rules



Graphical view of a job stream, job dependencies and scheduling plan results



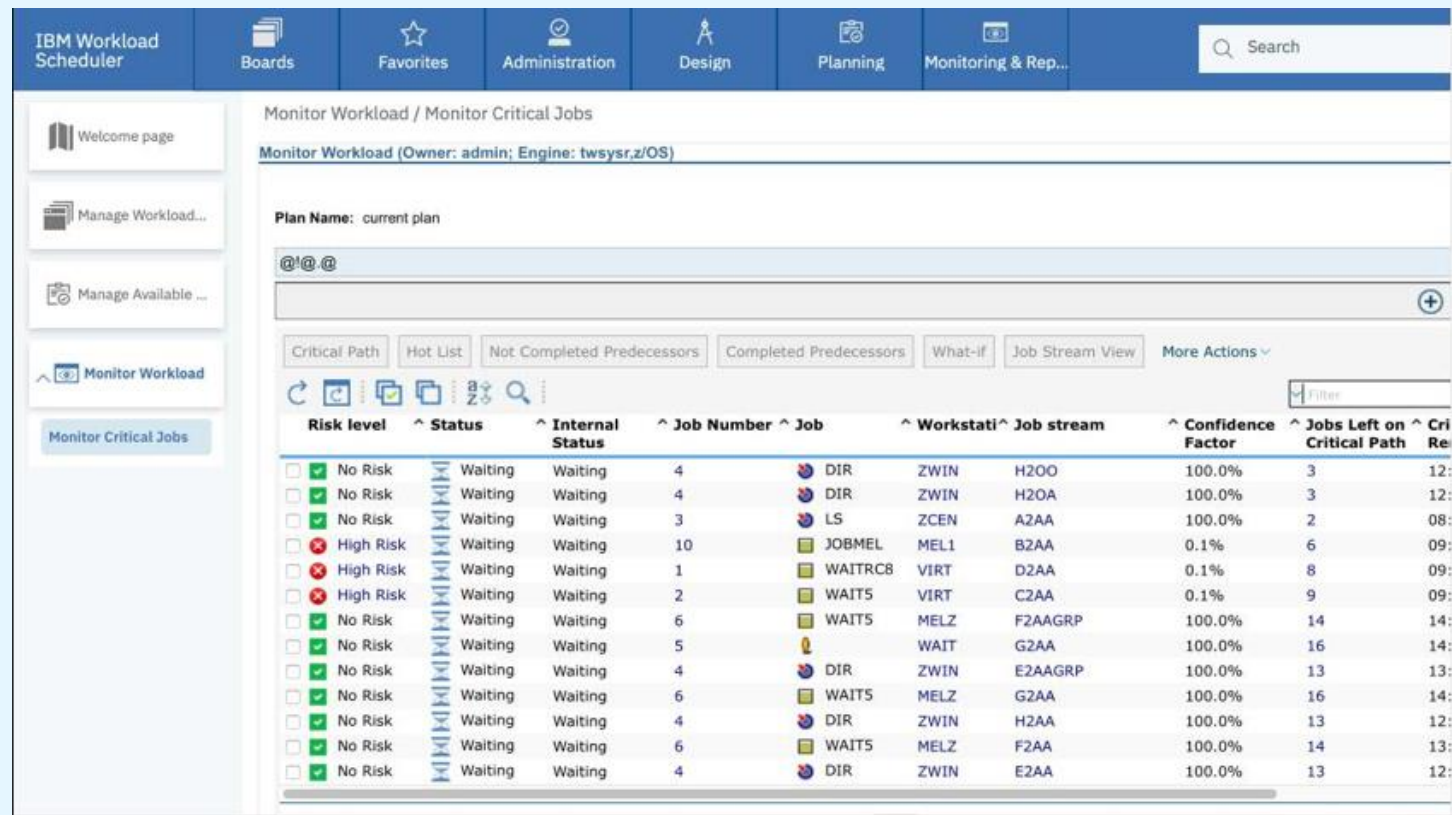
Predictive scheduling: Workload Service Assurance Overview

Embedded SLA
management to keep
under control deadlines

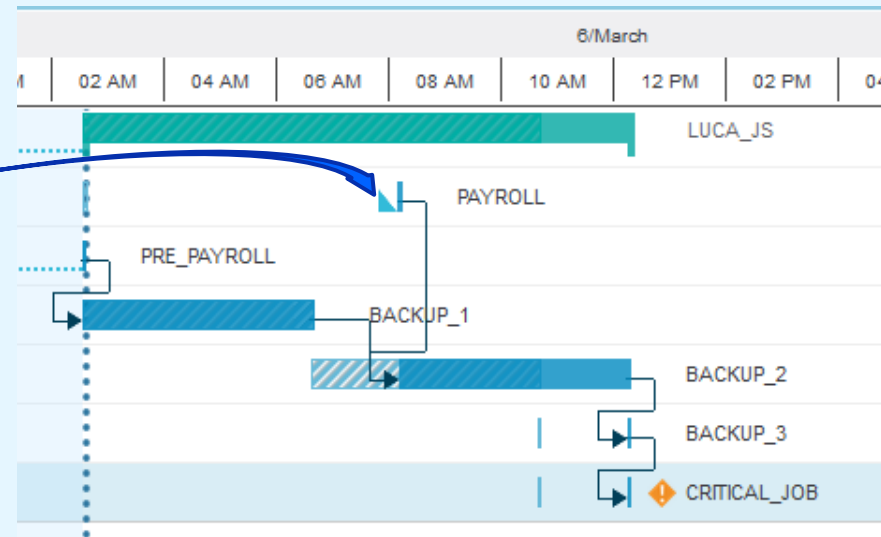
Automatic prediction of
job risk level based on
embedded analytics

Built-in integration with
IBM z/OS Workload
Manager for service class
promotion of risky job

What-if simulation
dashboards to visualize
impacts in critical path



Payroll input will arrive later than planned: what is the impact on batch execution?





IBM Z WORKLOAD SCHEDULER 10.2 RE-CAP

IZWS PLAN MIRRORING
NEW DWC ORCHESTRATION MONITOR AND V2 REST APIS
ENHANCEMENTS ON CROSS-DEPENDENCIES
CUSTOMER IDEAS

IZWS Plan mirroring for DWC and V2 REST API

What is “Federated Mirroring”?

- Mirror current plan data – jobs, job streams, and workstations – (until now only available in the product VSAM files) to a supported database
- New internal **Federator** component, automatically installed with DWC, manages mirroring process, and provides access to mirrored plan data with new **V2 REST APIs**
- DB data will be populated during the CP creation phase and updated during the plan execution
- All the security will be demanded to SAF (on mainframe)



IZWS Plan mirroring for DWC and V2 REST API

Why?

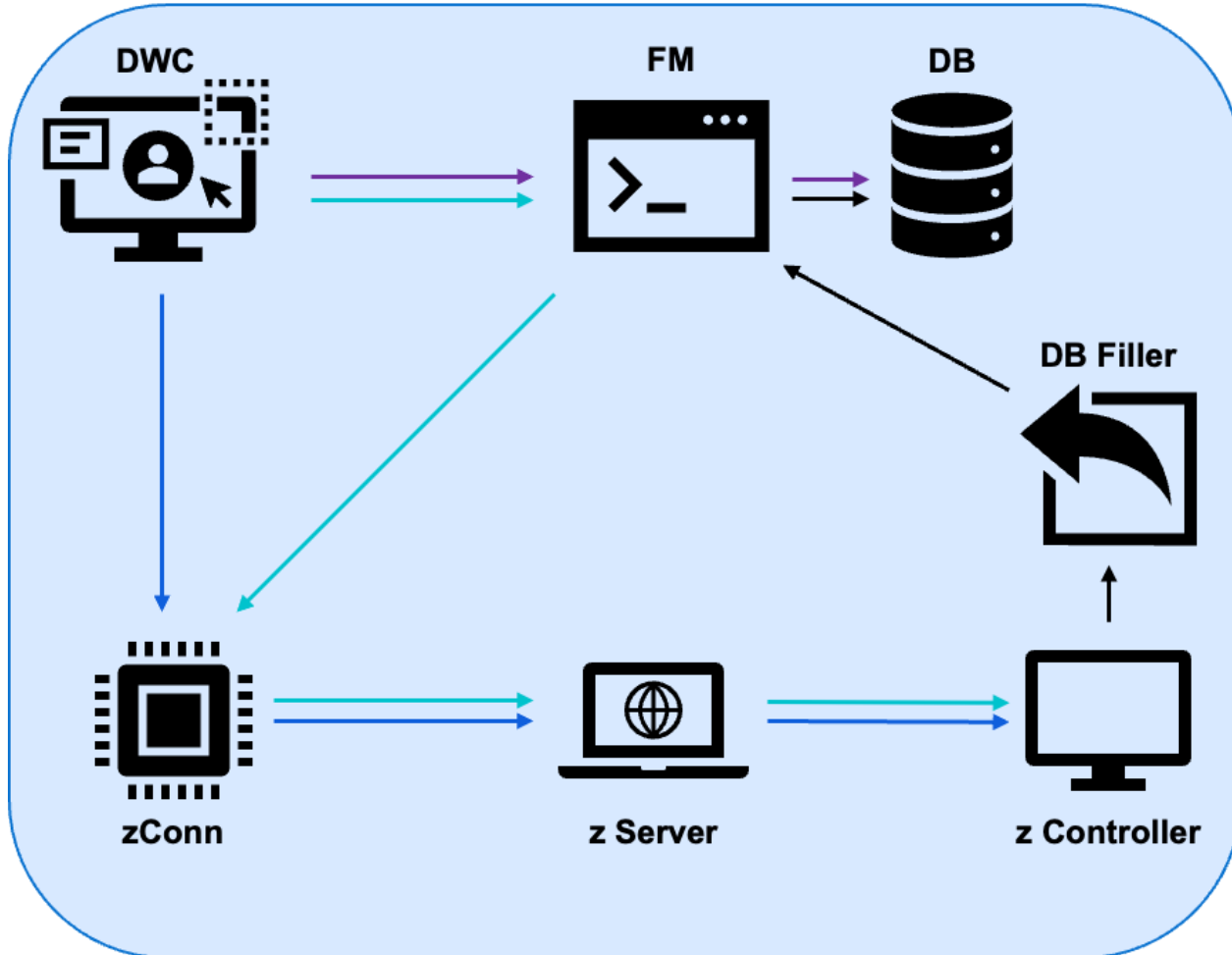
- **Faster Queries, No Impact on z/OS Controller**
 - Users can now query **jobs, job streams, and workstations** directly on the configured database, avoiding load on the Z controller.
- New DWC Orchestration Monitor (enabled via V2 REST APIs) provides a fast, scalable and modern monitoring experience
- Enables new and more complex filtering options on the DWC



By offloading query processing to a **dedicated database**, this feature allows businesses to **increase efficiency, improve user experience, and optimize system performance**—a **must-have** for enterprises managing complex workloads on **z/OS**

IZWS Plan mirroring for DWC and REST APIs V2

Architecture and communication flow



Bulk Event (Initial population of the DB with Controller data and engine registration):

z Controller → DB Filler → FM
→ DB

Query from DWC Orchestration Monitor:

DWC → FM → DB

Action from DWC Orchestration Monitor:

DWC → FM → zConn → z Server
→ z Controller

Dynamic Events to reflect any changes to the current plan:

z Controller → DB Filler → FM
→ DB

The New Orchestration Monitor

TWSW_xKxbswn8 Job stream Last update: 3:15 PM IST Refresh

Saved queries

Unnamed query Save

@ Advanced query

Jobs Dependencies Set complete Properties Job Stream View

<input type="checkbox"/>	Status	Internal status	Job stream	Scheduled time	Priority
Select	Select	Select	Search...	Select Date	Search...
<input type="checkbox"/>	Waiting	WAIT	TWSWEXT	07/02/2024 10:30:00 PM IST	5
<input type="checkbox"/>	Started	STARTED	CECIAPAR	07/02/2024 12:23:00 PM IST	5
<input type="checkbox"/>	Completed	COMPLETE	APPLTEST	07/03/2024 11:30:00 AM IST	4
<input type="checkbox"/>	Completed	COMPLETE	APPLTESTGG	07/03/2024 11:30:00 AM IST	4
<input type="checkbox"/>	Completed	COMPLETE	APPLTEST1	07/03/2024 11:30:00 AM IST	4
<input type="checkbox"/>	Completed	COMPLETE	APPLTEST2	07/03/2024 11:30:00 AM IST	4

Items per page 25 1 - 6 of 6 items 1 of 1 pages 1

The New Orchestration Monitor

The screenshot displays the Orchestration Monitor interface. On the left, a sidebar shows 'Saved queries' with filters for 'Saved by Me' and 'Shared with me'. The main area shows a table of job streams with columns for 'Jobs', 'Dependencies', 'Set complete', 'Properties', and 'Job Stream V'. The table lists several job streams, including 'TWSWEXT' which is currently in a 'Waiting' state.

On the right, a 'TWSWEXT Properties' dialog box is open, showing details for the selected job stream. The dialog has two tabs: 'General properties' (selected) and 'Time Properties'. A search bar is present at the top of the dialog.

General information

Job stream name	TWSWEXT
Occurrence token	df547da8d936e6c2
Owner	CASCIOL
Owner Description	
Description	routine ltp cp
Authority group name	
Priority	5
JCL variable table	
Job stream group	
Added by	
Calendar	DEFAULT
Generating Run Cycle	ROUTINEW

Status

Actual start	
Runtime	
Status	Waiting
Rerun Requested	No
Contains Monitored Job	

Buttons: Cancel, Save

The New Orchestration Monitor

TWSWEXT Properties ×

General properties | Time Properties

🔍 ×

General information

Occurrence token	df547da8d936e6c2
------------------	------------------

Status

Remaining on Critical Path

The New Orchestration Monitor

Advanced Query ×

General filter 1

Job stream
*

Job stream group

Occurrence token

Owner

Authority group

Extended job name

Clear filter

Cancel Apply

Table Configuration ×

Columns

<input checked="" type="checkbox"/> Status	<input checked="" type="checkbox"/> Internal status
<input checked="" type="checkbox"/> Job stream	<input checked="" type="checkbox"/> Scheduled time
<input checked="" type="checkbox"/> Priority	<input type="checkbox"/> Late job stream
<input type="checkbox"/> Description	<input type="checkbox"/> Occurrence token
<input type="checkbox"/> Most Critical Job	

Options

Allow column re-order

Row size

Medium ▾

Cancel Save

New Orchestration Monitor: managing queries

The screenshot displays the Orchestration Monitor interface with an 'Edit Query' dialog box open. The background interface includes a top navigation bar with 'Favorites', 'Administration', 'Design', and 'Monitoring' tabs, a search bar, and a user profile icon. The main content area shows a tree view on the left with '1. EU_Loans' selected, and a central pane displaying the query details for 'EU_Loans' with a path of '/@/!/@#/EMEA/LOANS/@'. The 'Edit Query' dialog box has the following fields and options:

- Name:** EU_Loans
- Share with:** Share with, Only selected users
- Filter by:** All, Users, Groups
- User selection:** A dropdown menu with 'wauser' selected and a 'User' label next to it.
- Buttons:** 'Cancel' and 'Save' buttons at the bottom.

New Orchestration Monitor: take actions

The screenshot shows the Orchestration Monitor interface for the 'Monitor FINALPOSTREPORTS job'. The top navigation bar includes 'Favorites', 'Administration', 'Design', and 'Monitoring'. A search bar and user profile icons are on the right. The main content area shows a table of job elements with columns for Status, Internal status, Folder (Job stream), Job type, Workstation (Job), Job stream, and Workstation. A 'More actions' dropdown menu is open over the selected row, listing options: Job Stream View, Hold job, Release job, Kill, Cancel, and Cancel Pending. The table shows 3 elements, with the bottom one selected.

Status	Internal status	Folder (Job stream)	Job type	Workstation (Job)	Job stream	Workstation
Waiting	HOLD	/EMEA/LOANS/	ER	/WA-SERVER_XA	FINALPOSTREPORTS	WA-SERV
Waiting	HOLD	/EMEA/LOANS/	ER	/WA-SERVER_XA	FINALPOSTREPORTS	WA-SERV
Waiting	HOLD	/EMEA/LOANS/	UPDATESTATS OTHER	/WA-SERVER_XA	FINALPOSTREPORTS	WA-SERV

Items per page: 25 | 1 - 3 of 3 items | 1 of 1 pages

New REST API V2

Federated Mirroring feature-mirroring_release_SNAPSHOT.g588081 OAS 3.0
/openapi.json
Federated Mirroring microservice

Servers: /

Authorize

- Key Resolution
- V2 APIs - API Key
- V2 APIs - Access Control List
- V2 APIs - Authentication
- V2 APIs - Calendar
- V2 APIs - Common
- V2 APIs - Consumed jobs for licensing
- V2 APIs - Credentials
- V2 APIs - Domain
- V2 APIs - Engine
- V2 APIs - Engine Configuration

Federator Swagger :
/twsd/swagger-ui

Swagger
Select a definition REST API V2

z/OS Workload Automation API V2 10.2.3 OAS3
/openapi.json
z/OS Workload Automation REST API V2, to consult instead the API V1, select in the Swagger Topbar dropdown menu: REST API V1

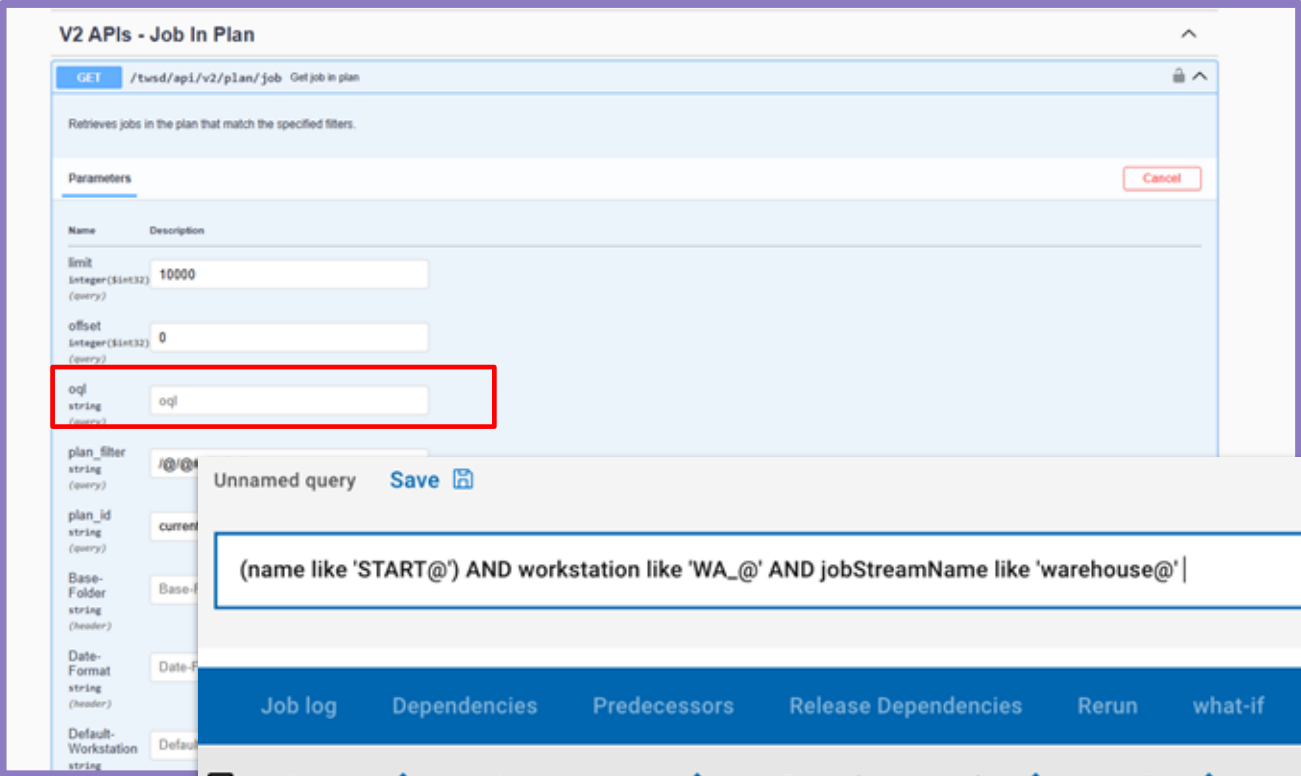
Servers: /

Authorize

- V2 APIs - Engine
- V2 APIs - Job In Plan
- V2 APIs - Job Stream In Plan
- V2 APIs - Workstation In Plan
- Schemas

ZConnector Swagger :
/twsz

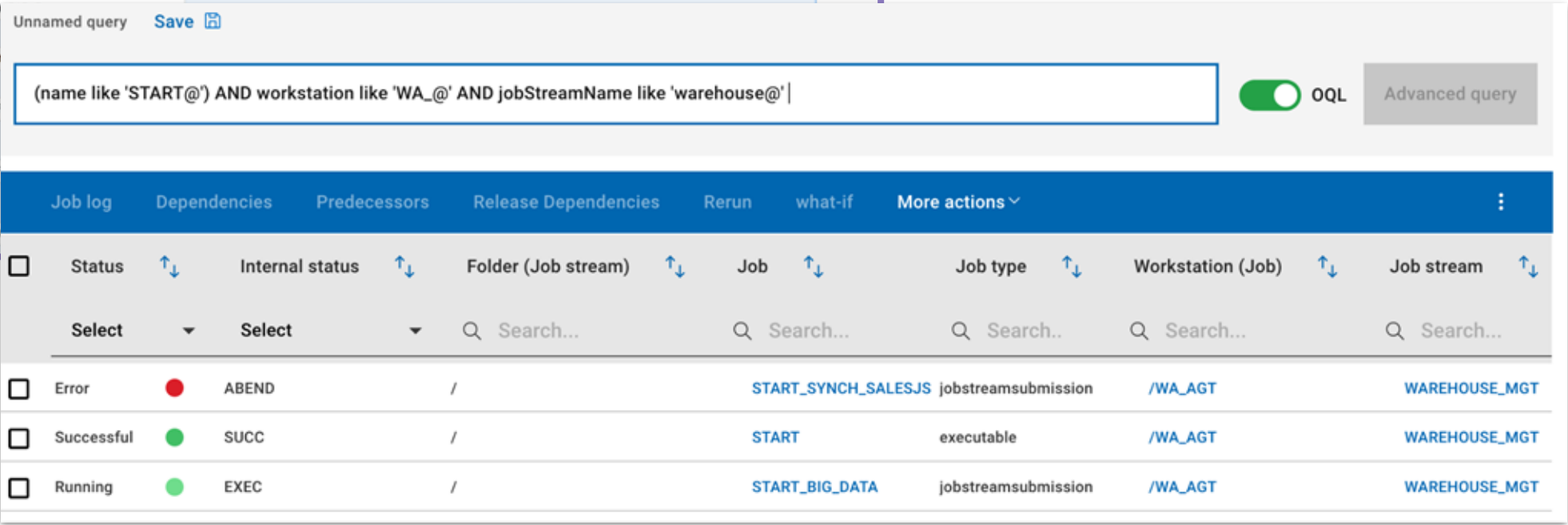
Filter using OQL from REST API and Orchestration Monitor



OQL: Object Query Language

Field Operator Value

```
jobStreamName LIKE 'test1@'
```



```
JobStreamName = 'accounting' OR jobName IN ['italy','united_kingdom'] AND workstation NOT IN ['wks2', 'wks5']
```

Advantages of Mirroring feature

- More efficient, user-friendly, and faster Rest API V2 and New Monitoring for handling large numbers of objects
- More performant controller on z/OS, independent of monitoring queries
- Enables New Orchestration Monitor in DWC
- Infrastructure to view aggregated data from multiple engines



IBM Z WORKLOAD SCHEDULER 10.2 SPES

SPE 1 – APRIL 2025
SPE 2 – AUGUST 2025
SPE 3 – DECEMBER 2025

What's new in IBM Z Workload Scheduler 10.2 **SPE1**



IBM Z
WORKLOAD
SCHEDULER

Advanced Monitoring With OQL: Precision Control

Gain unmatched visibility and control with Orchestration Monitor and OQL, enabling advanced filtering, monitoring, and real-time actions on jobs, job streams, and workstations via REST APIs.

List the successor shadow jobs bound to a job in CP (ISPF): Enhanced Monitoring

Easily assess job dependencies and impacts in the Current Plan with the new ISPF panel feature that lists all successor shadow jobs linked to a local job.

Faster data flow between Controller and Federator (Mirroring): Enhanced Performance

Optimize event handling with new THREADNUM and SOCKETNUM parameters, delivering faster, parallelized data flow between the Z Controller and Federator.

Updated EQQJVXIT sample code with latest DSECT: Enhanced Clarity

The updated EQQJVXIT sample now aligns with the latest plan layout DSECTs, improving clarity and simplifying exit customization for developers (ZWS-I-31)

What's new in IBM Z Workload Scheduler 10.2 **SPE2**



IBM Z
WORKLOAD
SCHEDULER

Workflow Details per plug-in jobs

Monitor plug-in jobs from any Dynamic Workload Console by placing the job's jar file in the designated folder.

WAPL: System Automation Info included in CPOPCOM request

Retrieve system automation info for current plan operations via the LIST CPOPCOM request. (ZWS-I-68)

Enriched metrics for AIDA and observability tools

Gain deeper insights with enhanced metrics to improve workload performance and system reliability.

New MODIFY command to collect CP statistics

Use MODIFY command /F procname, CPRECCNT to log current plan record counts and statuses for better tracking.

The Federator component of DWC supports Db2 for z/OS

The supported databases where you replicate (mirror) your current plan and run your queries through the Federator now include Db2 for z/OS.

What's new in IBM Z Workload Scheduler 10.2 **SPE3**



IBM Z
WORKLOAD
SCHEDULER

Smarter z/OS Shadow Job Binding

New matching criteria to bind remote jobs to enable more precise and flexible job instance association:

- Closest preceding
- Same scheduled date
- Relative or absolute interval

Orchestration Monitor – Set Status

Change the status of jobs and workstations directly from the Orchestration Monitor in the DWC

Provide runtime information to guide with buffer pool and dependency nesting configuration (RFE-I-78)

- Message EQQN259I now guides proper limits
- Prevents CPBPLIM from exceeding 50% and default dependency nesting above 99
→ Helps prevent misconfiguration and performance issues.

WAPL: Store original Application ID when cloning it (WAO-I-415)

- New TMPLADID field in LIST CPOC
- Enables listing cloned occurrences by their original AD ID
→ Better traceability, monitoring, debugging, and reporting

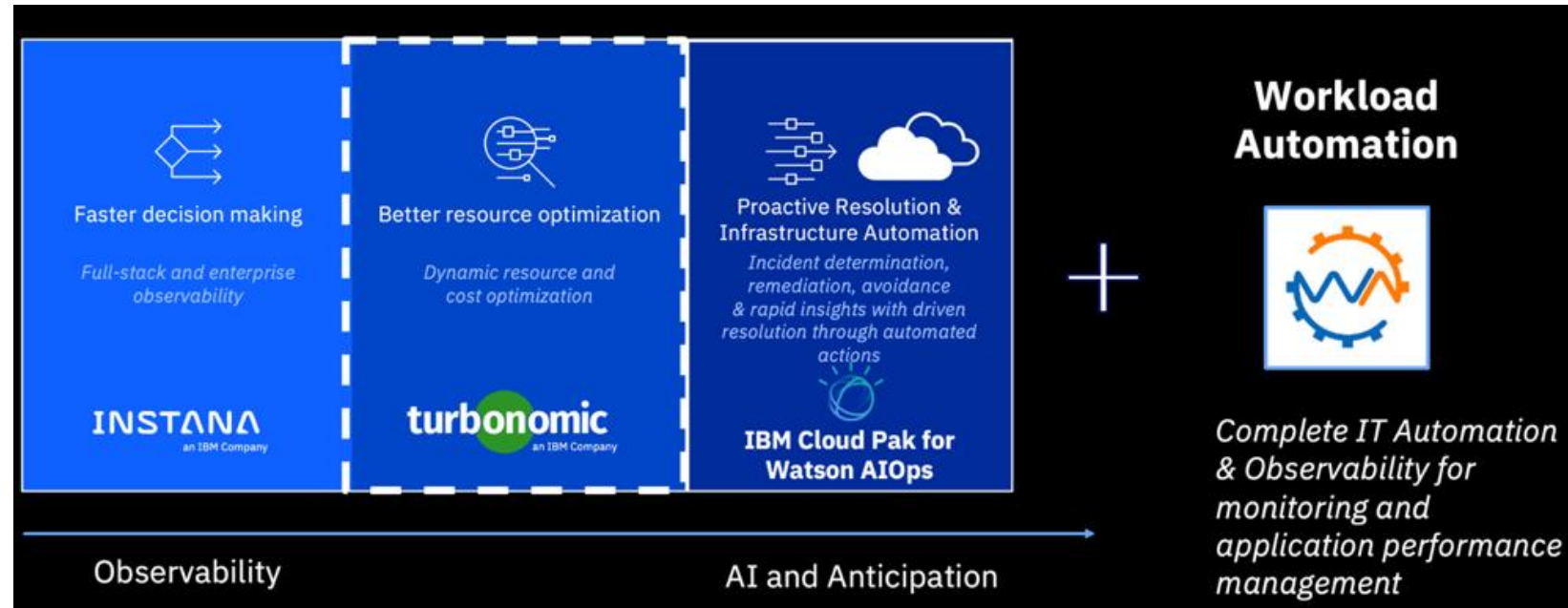


OBSERVABILITY METRICS FOR CRITICAL PATH MANAGEMENT

IBM Workload Scheduler is observable

IZWS 10.2 SPE2 adds enhanced metrics for critical jobs

- **Observability** is the **evolution of monitoring** into a process that offers insight into digital business applications
- IBM Observability strategy is based on **Instana** (IBM acquisition)
- Being “**observable**” means exposing workload scheduling data for the three main telemetries: Metrics, Logs and Traces



Open standards for workload scheduling data collections enable the integration with the most important observability tools on the market



Metrics exposed by Z Connector via DWC

DWC exposes a REST endpoint where metrics are collected in OpenMetrics format:
https://DWC_hostname:DWC_port/metrics

To enable collecting metrics, customize the TWSZOSMetricsConfig.properties

Windows On Windows operating systems

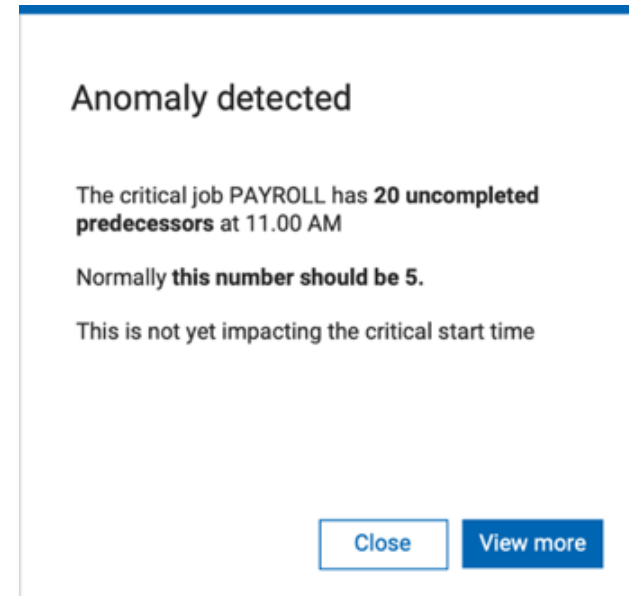
```
<DWC_home>\usr\servers\dwcServer\resources\properties\TWSZOSMetricsConfig.properties
```

UNIX On UNIX operating systems

```
<DWC_DATA_dir>/usr/servers/dwcServer/resources/properties/TWSZOSMetricsConfig.properties
```

New in IZWS 10.2 SPE 2:

Provide Critical Jobs metrics to enable anomaly detection and filtering based on critical jobs



Which metrics are collected?

Metric Name	Description
application_wa_JobsByWorkstation_jobs	Jobs with a specific status on each workstation connected to the z/OS engine. The statuses monitored are: WAITING, READY, RUNNING, SUCCESSFUL, ERROR, CANCELED, HELD, UNDECIDED, BLOCKED, and SUPPRESS.
application_wa_JobsInPlanCount_jobs	Jobs with a specific status in the Current Plan.
application_wa_criticalJob_potentialRisk	Critical jobs whose risk level is Potential
application_wa_criticalJob_highRisk	Critical jobs whose risk level is High
application_wa_criticalJob_confidence_factor	Confidence factor of the critical job
application_wa_criticalJob_uncompletedPredecessor	Uncompleted predecessors of the critical job
application_wa_criticalJob_estimateEnd_seconds	Estimated end of a critical job (seconds until estimated end time)

New and enhanced

Example:

```
application_wa_JobsByWorkstation_job (engine="tsw", jobstatus="SUCCESSFUL",workstation="GEN1"} 12
application_wa_JobsByWorkstation_job (engine="tsw", jobstatus="CANCELED",workstation="GEN1"} 2
application_wa_JobsByWorkstation_job (engine="tsw", jobstatus="CANCELED",workstation="CPU2"} 13
application_wa_JobsByWorkstation_job (engine="tsw", jobstatus="SUCCESSFUL",workstation="CPU1"} 10
application_wa_JobsByWorkstation_job (engine="tsw", jobstatus="WAITING",workstation="CPU1"} 266
application_wa_JobsByWorkstation_job (engine="tsw", jobstatus="ERROR",workstation="CPU1"} 4
```

- On workstation GEN1: 12 jobs are SUCCESSFUL, 2 are CANCELED
- On workstation CPU2: 13 jobs are CANCELED
- On workstation CPU1: 10 jobs are SUCCESSFUL, 266 jobs are WAITING, 4 jobs are in ERROR



CROSS DEPENDENCIES ENHANCEMENTS

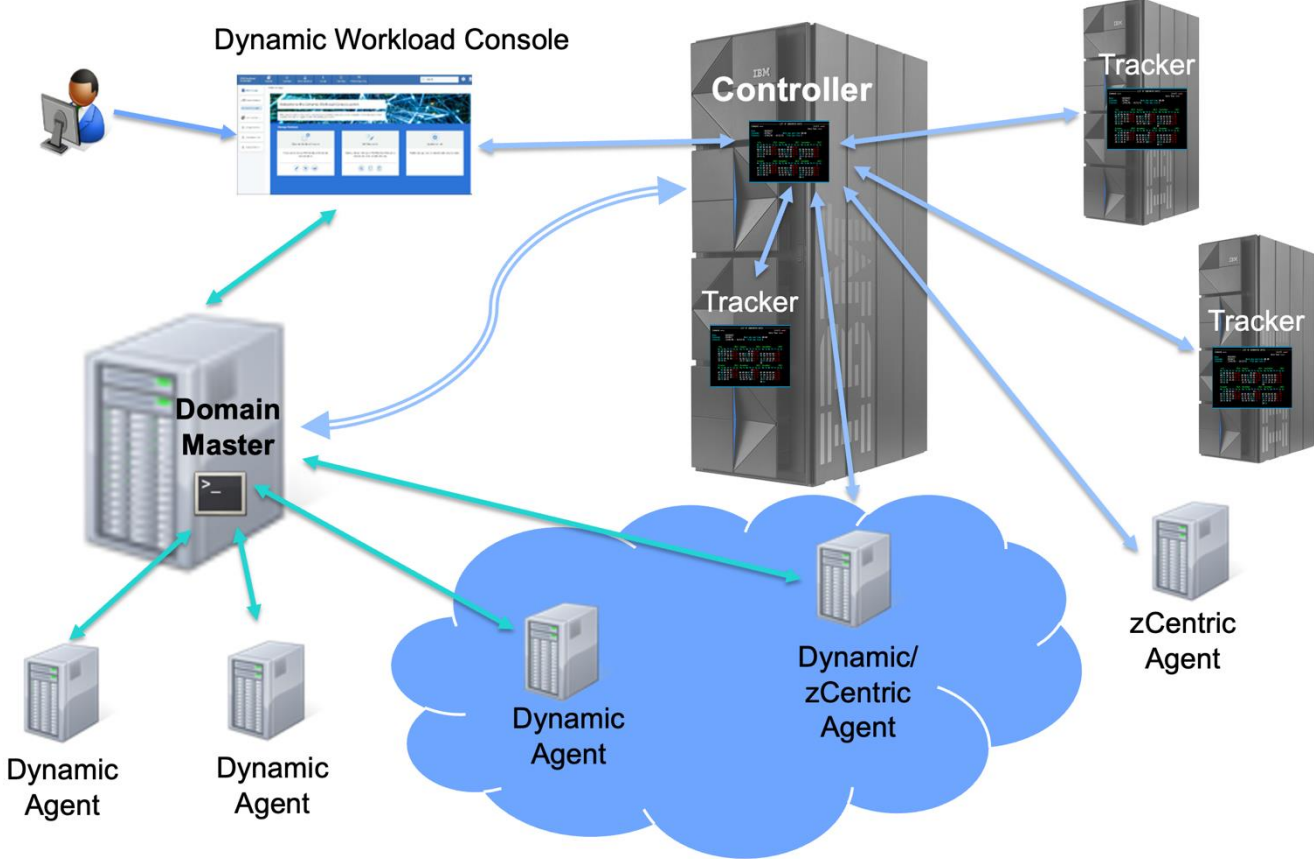
Cross-Dependency Enhancements

Usability and Visibility

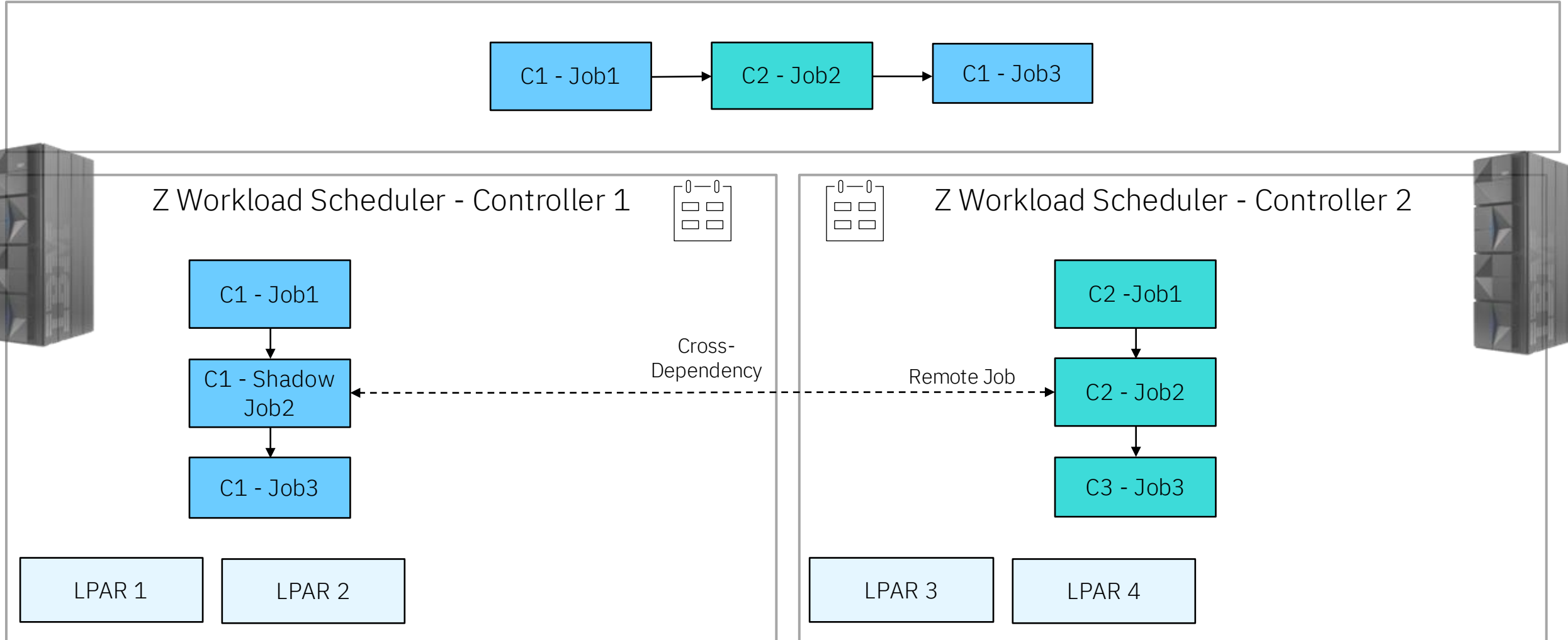
List and show more information about remote shadow jobs on local ISPF panels and in DWC

Extended matching criteria

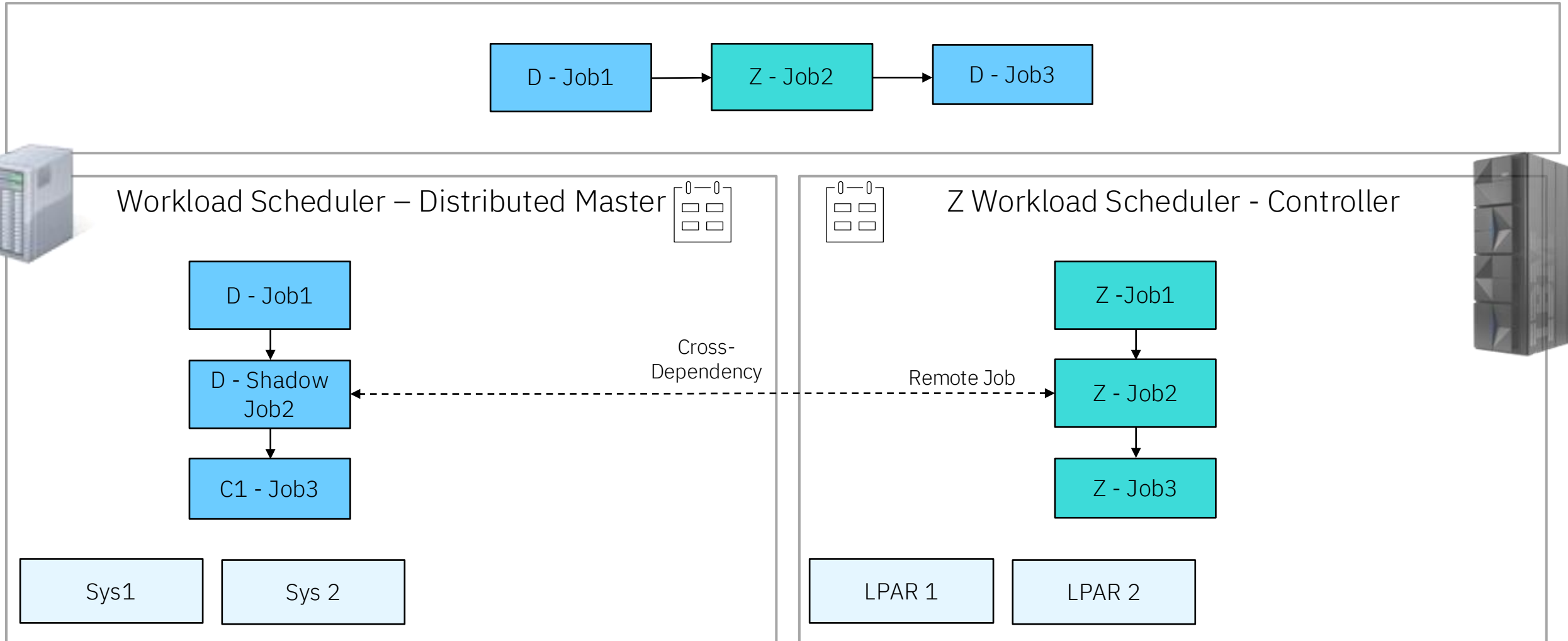
Support all matching criteria that are available for local dependencies also for cross-dependencies



Cross-Dependencies between multiple IBM Z controllers or between IBM Z and Distributed



Cross-Dependencies between multiple IBM Z controllers or between IBM Z and Distributed



List successor shadow jobs on ISPF Panels

```
EQQSPP1L -- PREDECESSORS AND SUCCESSORS TO AN OPERATION (left part) -----  
Command ==> _                               Scroll ==> PAGE  
  
Issue command COND to show list of defined Conditions or DEPX to show the list  
of the successor shadow jobs  
Scroll right or enter the row command S to select an operation for details.  
  
Application          : CROSS  
Operation            : CPU1 1  
Jobname              : JOB1  
Overall Conditions Status :  
Successor shadow jobs : Y
```

You can now use the DEPX command to see the remote shadow jobs associated to the current operation or occurrence (both Z or distributed)

Listing the successor shadow jobs bound to a job in your CP

What's new?

Core Feature included in SPE1, Enhancements in SPE2

Command ==> **DEPX**

```
EQQSHADO ----- LISTING SUCCESSOR SHADOW JOBS ----- Row 1 to 1 of 1
Command ==>                                           Scroll ==> PAGE

Enter the row command S to display successor shadow job details

Application      : APPLRITA
Input arrival    : 25/05/16  02.00

Dest      Application Id      Input Arrival      Type      Job info
-----
REMD      APPLCROSSD          25/06/01  10.00    D          REMR
REML      APPLCROSSSTWSL          25/05/16  05.00    Z          002  REMR
REML      APPLCROSSSTWSL          25/05/16  05.00    Z          003  REMR
REML      APPLCROSSZZ            25/05/16  05.00    Z          001  REMR

***** Bottom of data *****
```

Row command 'S' for details

```
EQQSHADO ----- LISTING SUCCESSFUL
Command ==>

Enter the row command S to display success
```

```
Application      : DEFECT1
Input arrival    : 25/05/05 06.45
```

Row cmd	Dest	Application Id	Input date
S'	MDMZ	NUTELLA	25/05/07

***** Bottom *****

```
EQQSHADD ----- BROWSING D SHADOW JOB INFORMATION -----
```

```
Command ==> _
```

Local job info

```
Application      : DEFECT1          25/05/05 06.45
Job              : IEFBR14          6
Workstation      : CPU1
```

Shadow job info

```
Destination      : MDMZ
Job Stream Name   : NUTELLA
Job Stream Workstation : REMENG1
Input arrival     : 25/05/07 12.45
Job Name          : NUTELLA
JobId             : 2c079aef-1884-3b14-9727-23b7318945d7
```

Extended Matching Criteria for cross-dependencies

The **matching criteria**, already existing in the logic for managing dependencies, are now applied to the handling of the bind between remote and shadow jobs (cross dependencies).

This feature will have an impact:

- At the *database* level, where it will be possible, during the definition of the shadow job, to specify which matching criteria should be applied
- At the *plan* level, when the selected matching criteria logic comes into play to establish the bind.



Extending Matching Criteria for Cross-Dependencies

What is New?

Previously, the matching criteria for Z cross dependencies was **closest preceding**.

Three additional criteria have been added:

- Same scheduled date

- Within a relative interval

- Within an absolute interval

- Define in either ISPF or DWC

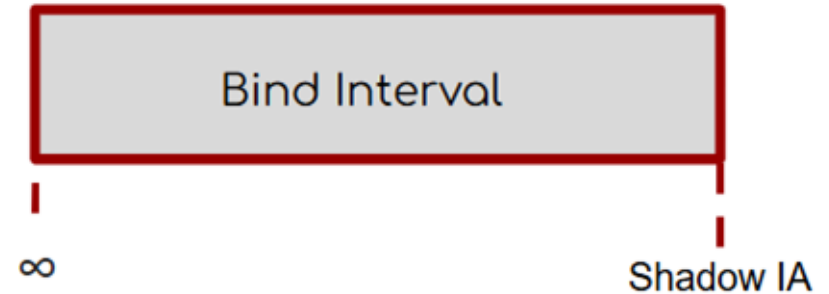
- Achieve consistent behavior between distributed and mainframe engines

- Enable more complex temporal dependencies between jobs that are handled by multiple controllers

Matching Criteria

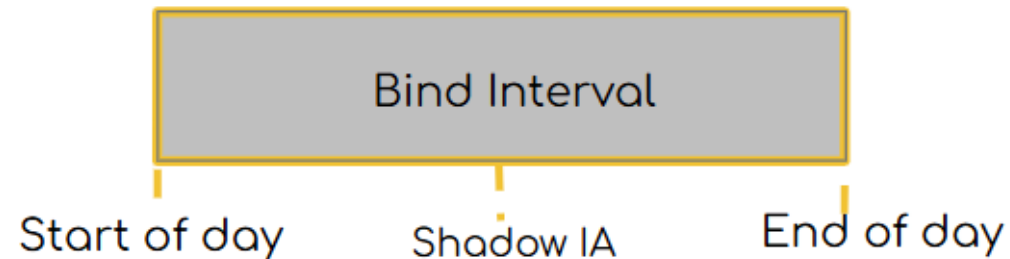
Closest Preceding:

The matching predecessor is the one with the nearest preceding input arrival time. This is the default.



Same scheduled date

The matching predecessor is the one with the nearest input arrival time within the same day of the operation (occurrence) under consideration. A matching predecessor is first searched before the IA time of the operation. Then, if not found, it is searched after the IA time of the operation.



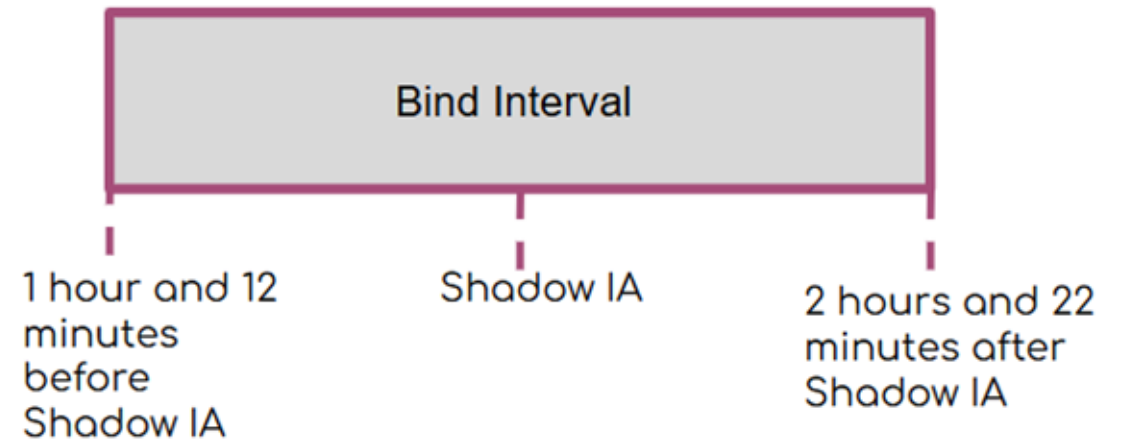
Matching Criteria

Within a relative interval

The matching predecessor is the one with the closest input arrival time within the interval specified. The interval boundaries are calculated using an offset expressed in hours and minutes before or after the IA time of the successor operation. The interval can be timed entirely before, entirely after, or across the IA time of the successor operation.

When the interval is across the IA time, a matching predecessor is first searched before the IA time of the successor operation. Then, if not found, it is searched after the IA time of the successor operation.

```
-(R) Within a relative interval
FROM:
hours (HHH): _01 minutes (MM): 12 when (B/A before/after IA): B
TO:
hours (HHH): _02 minutes (MM): 22 when (B/A before/after IA): A
```



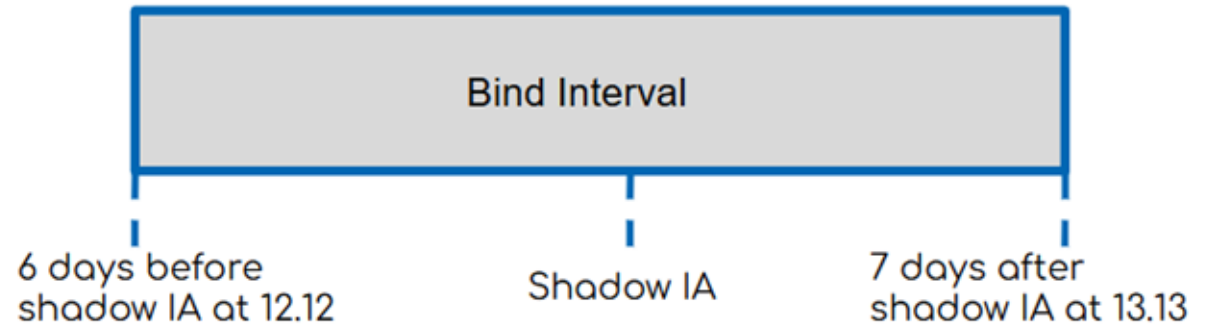
Matching Criteria

Within an absolute interval

The matching predecessor is the one with the closest input arrival time within the specified interval. The interval boundaries are specified by a time and a number of days before or after the IA time of the successor operation. The interval can be timed entirely before, entirely after, or across the IA time of the successor operation.

When the interval is across the IA time, a matching predecessor is first searched before the IA time. Then, if not found, it is searched after the IA time of the operation.

```
-(A) Within an absolute interval
FROM:
time (HH.MM): 12.12 for days (D): 6 when (B/A before/after IA): B
TO:
time (HH.MM): 13.13 for days (D): 7 when (B/A before/after IA): A
```



User Interfaces

Explore area | Workspace area | 1 object

Search items | Create new

More actions | Discard changes | Close | Delete | Save

Name

MATCHING

Dependencies

Run cycles

Jobs

- Z-centric Job
- Shadow Job Distributed
- Shadow Job z/OS
- Dynamic Job

Resolution criteria

Closest preceding
 Same scheduled date
 Within a relative interval
 Within an absolute interval

From

Hours: 0

Minutes: 0

After earliest start time

To

DWC

ISPF

```

----- z/OS REMOTE JOB INFO -----
Command ==> _
Enter/Change data below:
Enter the DEPT command to modify the remote job resolution criteria.

Shadow job data
Application      : CLOSEST
Operation       : MDMZ 1
COMPLETE IF BIND FAILS ==> N   Automatically complete the shadow job
                               if the remote job does not exist (Y/N)

Remote job data
APPLICATION ID   ==> CECI_____
OPERATION NUMBER ==> 001
Resolution criteria : A
    
```

```

----- DEPENDENCY RESOLUTION CRITERIA -----
Command ==>
Remote job resolution criteria
Resolution criteria chosen is:  A  (C/S/R/A)
-(C) Closest preceding
-(S) Same scheduled date
-(R) Within a relative interval
FROM:
hours (HHH):  ___ minutes (MM):  ___ when (B/A before/after IA):  ___
TO:
hours (HHH):  ___ minutes (MM):  ___ when (B/A before/after IA):  ___
-(A) Within an absolute interval
FROM:
time (HH.MM):  12.12 for days (D):  6 when (B/A before/after IA):  B
TO:
time (HH.MM):  13.13 for days (D):  7 when (B/A before/after IA):  A
    
```



MISC. ENHANCEMENTS

New Display Command CPRECCNT

/F <controller_name>, CPRECCNT

The command must be issued from SDSF. The result of the command is issued in the MLOG. The new message that is issued is **EQQE171I**.

It counts within the VSAM Current Plan the various occurrences, operations, and workstations along with their respective statuses.

```
EQQZ048I A MODIFY COMMAND HAS BEEN PROCESSED. MODIFY TWSR,CPRECCN
EQQE171I TOTAL NUMBER OF OCCURENCES, OPERATIONS AND WORKSTATIONS A
EQQE171I TOTAL OCCURENCES (EXCEPT DELETED) = 20333
EQQE171I ->COMPLETED = 8164
EQQE171I ->ERROR = 306
EQQE171I ->STARTED = 676
EQQE171I ->UNDECIDED = 11
EQQE171I ->WAITING = 11176
EQQE171I ->DELETED = 1
EQQE171I TOTAL OPERATIONS (EXCEPT DELETED) = 24673
EQQE171I ->ARRIVING = 111
EQQE171I ->COMPLETED = 10488
EQQE171I ->ERROR = 307
EQQE171I ->INTERRUPTED = 0
EQQE171I ->READY = 2535
EQQE171I ->STARTED = 19
EQQE171I ->UNDECIDED = 10
EQQE171I ->WAITING = 10117
EQQE171I ->SUPPRESSED BY CONDITION = 0
EQQE171I ->READY (PRED NONREPORTING) = 686
EQQE171I ->DELETED = 1
EQQE171I TOTAL WORKSTATIONS = 11
EQQE171I ->ACTIVE = 5
EQQE171I ->OFFLINE = 3
EQQE171I ->FAILED = 0
EQQE171I ->UNKNOWN = 3
```

ZWS-I-18: Enhance Long Duration Alert Message

The following new fields have been added to messages EQQE28I, EQQE38I, EQQE39I:

- Start Time
- Estimated Duration
- Actual Duration
- Operation Status
- Extended JobName

Why?

Provide additional information on [Long Duration alert messages](#) to assist in quicker problem determination.

```
53 EQQE028 ' ' LINES=5
54 'I LONG DURATION FOR JOB &JOBNAME, OPERATION(&OPERNUM), '
55 'I IN APPLICATION &APPL, WORK STATION = &WSID, '
56 'I IA = &ARRTIME, START TIME = &OPSTRTM, OPERATION STATUS = &OPSTATUS, '
57 'I ESTIMATED DURATION = &ESTDUR, ACTUAL DURATION = &ACTDUR, '
58 'I EXTENDED JOBNAME = &EXTJBNM'
```

```
2 EQQE038 ' ' LINES=5 CDP=YES
3 'I LONG DURATION FOR JOB &JOBNAME(&JNUM), OPERATION(&OPERNUM), '
4 'I IN APPLICATION &APPL, WORK STATION = &WSID, '
5 'I IA = &ARRTIME, START TIME = &OPSTRTM, OPERATION STATUS = &OPSTATUS, '
6 'I ESTIMATED DURATION = &ESTDUR, ACTUAL DURATION = &ACTDUR, '
7 'I EXTENDED JOBNAME = &EXTJBNM'
8
9 EQQE039 ' ' LINES=5
0 'I LONG TIME ON INPUT QUEUE FOR JOB &JOBNAME(&JNUM), '
1 'I OPERATION(&OPERNUM), '
2 'I APPL = &APPL, WORKSTATION = &WSID, IA = &ARRTIME, '
3 'I OPERATION STATUS = &OPSTATUS, ESTIMATED DURATION = &ESTDUR, '
4 'I EXTENDED JOBNAME = &EXTJBNM'
5
```

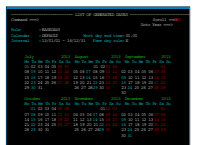
ZWS-I-18: Enhance Long Duration Alert Message

These messages can be customized with **CDP=YES** flag for granular data collection enabling proactive monitoring and custom alerting.

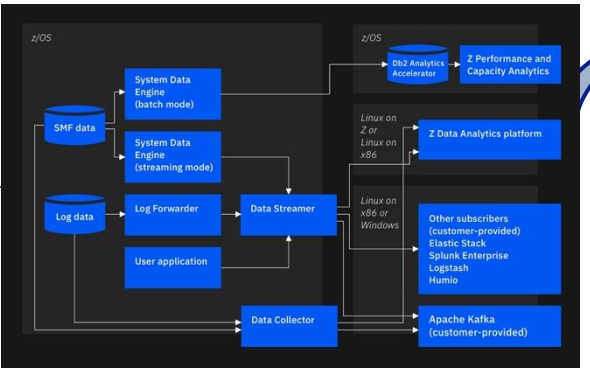
```

EQQE038 ' ' LINES=5 CDP=YES
'I LONG DURATION FOR JOB &JOBNAME (&JNUM), OPERATION (&OPERNUM),
'I IN APPLICATION &APPL, WORK STATION = &WSID,
'I IA = &ARRTIME, START TIME = &OPSTRTM, OPERATION STATUS = &OPSTATUS,
'I ESTIMATED DURATION = &ESTDUR, ACTUAL DURATION = &ACTDUR,
'I EXTENDED JOBNAME = &EXTJBNM
    
```

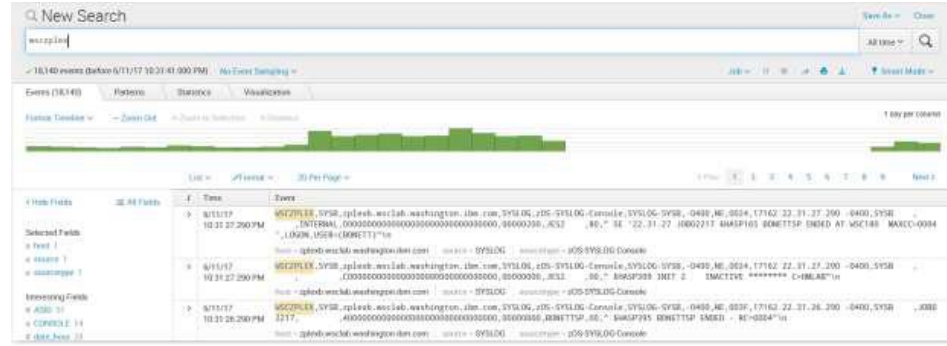
IZWS Controller



Z Common Data Provider



Splunk, Kafka, ...

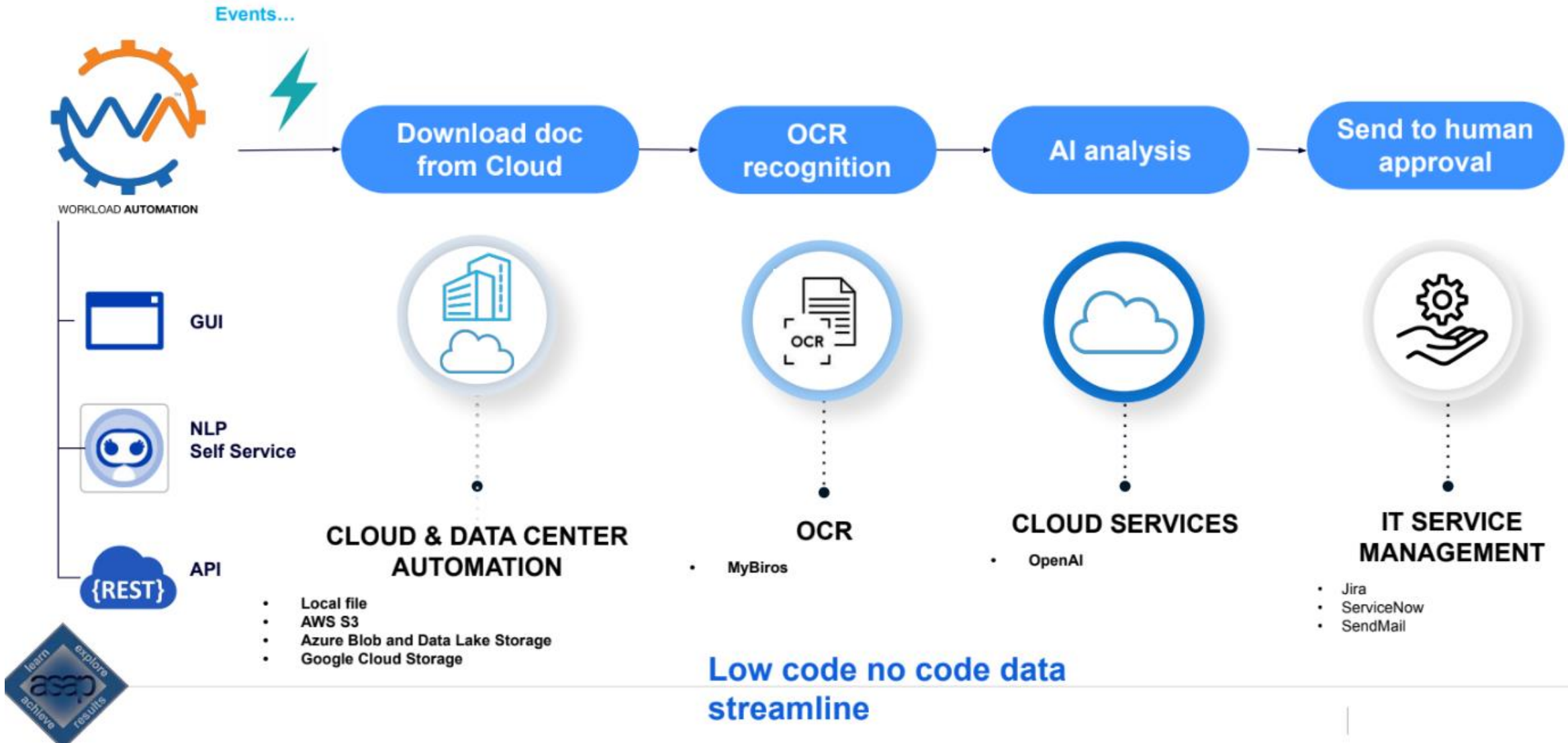




LEVERAGE AI IN JOB FLOWS AND AS PERSONAL ASSISTANT

- A) EXAMPLE FLOW: AI ASSISTED DOCUMENT PROCESSING LEVERAGING AI PLUGINS
- B) IBM WATSONX ASSISTANT FOR Z BASED AI AGENT FOR IZWS

AI-assisted document processing



IBM watsonx Assistant for Z V3

Simplifying and transforming the IBM Z experience



Generative AI responses for IBM Z

Provide an intuitive conversational AI experience for any questions on IBM Z and your enterprise knowledge through natural language.

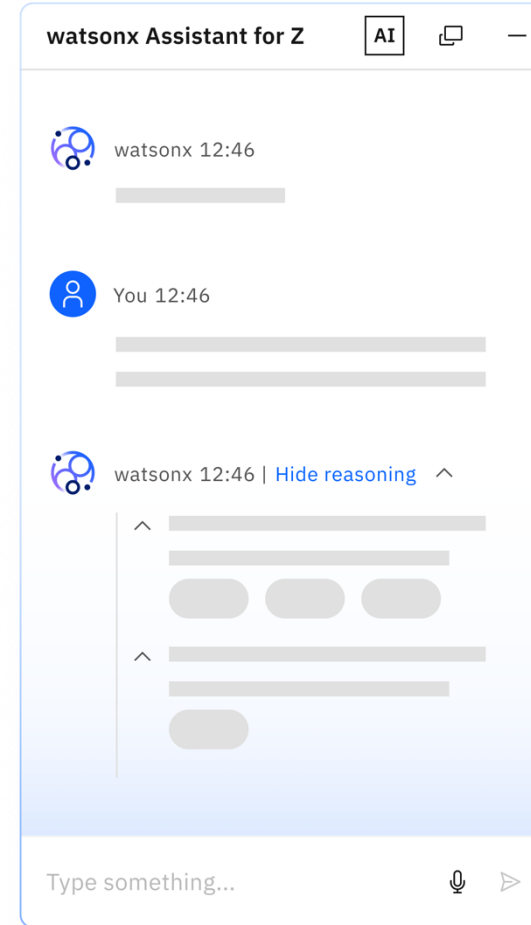
AI-Driven Automation

Execute real-time tasks on your IBM Z systems, directly from an AI-powered conversation.

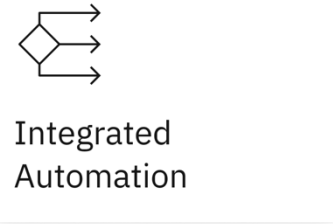
Foundational Agentic Framework for IBM Z

Agents collaborate, execute the right tools to gather all the necessary information and provide with comprehensive response to any question for better decision-making with minimal human supervision.

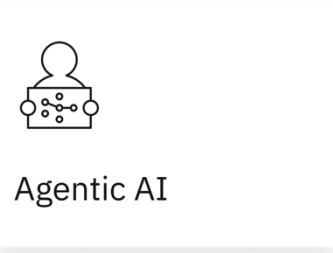
Ask any question and let the agents do the work for you



Generative AI responses for IBM Z



Integrated Automation



Agentic AI

Benefits:

Reduce learning curve

Increase productivity

Increase efficiency

Reduce errors

System Insights Agents powered by IBM watsonx Assistant for Z and Z AIOps

Get [live operational insights](#) with AI agents that provide information about the health of subsystems monitored by IBM Z OMEGAMON, applications and systems automated by IBM Z System Automation and IBM Z NetView, and batch jobs managed by IBM Z Workload Scheduler, [to pinpoint problem areas and bottlenecks from a single tool through an AI conversation.](#)



IBM Z OMEGAMON Insights Agent

Get insights on the health of your LPARs, Db2®, IMS, MQ, CICS subsystems, Networks, Storage, JVMs, and situation events based on OMEGAMON data. Identify performance issues across subsystems and navigate in context to deep-dive views.



What are the top CPU consumers on LPAR LP11?

Are there any critical storage events?



IBM Z Automation Insights Agent

Get insights on the status of applications and systems automated by IBM Z System Automation and IBM Z NetView. Find out if applications are running as expected, check log messages from the system log, navigate in context to the automation web console, and much more.



What is the status of my CICS1 application group?

Show me the latest log messages from LP11



IBM Z Workload Scheduler Insights Agent

Get insights on batch jobs automated by IBM Z Workload Scheduler. Find out which job is scheduled next, if jobs are late, navigate in context to the Dynamic Workload Console and much more.



Show me the batch jobs in the PAYROLL job stream

Who is the owner of the PAYROLL job?



Instant access to IBM Z AIOps tooling



Reduced risk of errors; increased productivity



Context-based detailed responses



Part of a broader z/OS AI strategy

You 11:19 AM

Show me details of job DMOPALRT

IBM Z Workload Scheduler Insights Agent 11:19 AM | Show Reasoning

Job	Status	Extended Job Name	Job Number	Internal Status	Description	Priority	Schedule
DMOPALRT	ERROR		15	ZOSERROR	High CPU Loop Job	5	2025-08-12T12:00:00.000Z

I can provide the details of engines, jobs, critical jobs, job streams and workstation. We also give detailed information regarding all these systems.

You 11:22 AM

Show me details about job stream DMO7B

IBM Z Workload Scheduler Insights Agent 11:22 AM | Show Reasoning

Job Stream	Owner	Deadline Time	Status	Internal Status	Description	Priority	Schedule
DMO7B	BOB	2025-08-12T14:40:00.000Z	ERROR	ZOSERROR	PST SCENARIO 7B	5	2025-08-12T12:00:00.000Z

I can provide the details of engines, jobs, critical jobs, job streams and workstation. We also give detailed information regarding all these systems.

You 11:23 AM

Show jobs in this job stream

IBM Z Workload Scheduler Insights Agent 11:23 AM | Show Reasoning

Job	Job Stream	Job Number	Scheduled Time	Status	Workstation	Engine
START	DMO7B	5	2025-08-12T12:00:00.000Z	SUCCESSFUL	NONR	OCON
DMOPALRT	DMO7B	15	2025-08-12T12:00:00.000Z	ERROR	CPU1	OCON
DMOPALR2	DMO7B	30	2025-08-12T12:00:00.000Z	WAITING	CPU1	OCON
TWSCDUMM	DMO7B	50	2025-08-12T12:00:00.000Z	WAITING	NONR	OCON

I can provide the details of engines, jobs, critical jobs, job streams and workstation. We also give detailed information regarding all these systems.



Example use case for IZWS AI Agent: Look at job details using IZWS



ROADMAP

IWA Portfolio - Roadmap Priorities for 2026

	Spring 2026	Summer 2026	Winter 2026
IWA/IWS	<ul style="list-style-type: none"> • Support folders in cross-dependencies • Submission of Job streams groups • Enhance Orchestration Monitoring 	<ul style="list-style-type: none"> • New Dashboards • Graphic Monitoring • System settings & security 	<ul style="list-style-type: none"> • Cross-engine submit & track • Workspaces approval flows • Federated mirroring & multiple engine queries
IZWS	<ul style="list-style-type: none"> • zCentric gateway • Intelligent JES2 job selection • Enhancements on mandatory dependencies 	<ul style="list-style-type: none"> • Cross-dependencies with IWA • Support broker in Orchestration Monitoring • Graphic Monitoring 	<ul style="list-style-type: none"> • Cross-engine submit & track • V2 REST API for DB • zCentric variable passing
Automation Hub	<ul style="list-style-type: none"> • SAP S/4 HANA Utilities (SAP IS-U) • HPE NonStop (Tandem) • Databricks on AWS • Oracle Cloud for Retail • Mulesoft 	<ul style="list-style-type: none"> • Oracle Peoplesoft • Azure Queue Storage • SAP Analytics Cloud • Oracle Fusion Cloud ERP • Google Cloud Scheduler 	<ul style="list-style-type: none"> • Apache Kafka • IBM Tririga • SAP Fiori • Azure Synapse Analytics • Matillion

Graphical Designer

- Canvas
- Draggable Items
- Engine Selection
- Properties Panel

The screenshot displays the Graphical Designer interface. At the top, a navigation bar includes 'Boards', 'Favorites', 'Administration', 'Design', 'Planning', and 'Monitoring & Rep...'. A search bar and user profile icon are on the right. Below this is a 'Workspace' header with a yellow box around the 'engine' label and a 'Change' button. A 'Deploy' button is also visible.

The main canvas shows a workflow diagram with nodes: 'JS-Node' (containing 'JOB_EXEC_10'), 'FILE_TRANSFER', 'JS_PROMPT_1' (containing 'J_BASE1', 'J_BASE10', and 'J_BASE1_B'). Arrows indicate the flow between these nodes. A 'MASTERAGENTS' label is also present.

On the left, a sidebar contains 'Blocks' and 'Assets' tabs. Under 'Assets', there are 'Job Stream' and 'Job' icons. Below that is a 'Join condition' icon. A 'Most used' section lists 'File Transfer', 'Automation utilities', 'Cloud', 'Database and integrations', and 'ERP'.

On the right, a 'Job Stream' properties panel is open, showing fields for 'Folder', 'Name', 'Workstation', 'Valid from', 'Valid to', and 'Time zone'. The 'Name' field is set to 'JS-Node' and the 'Workstation' field is set to '/MASTERAGENTS'. There are 'Edit' and 'Preview' buttons, and a 'Contextual help' link at the bottom.

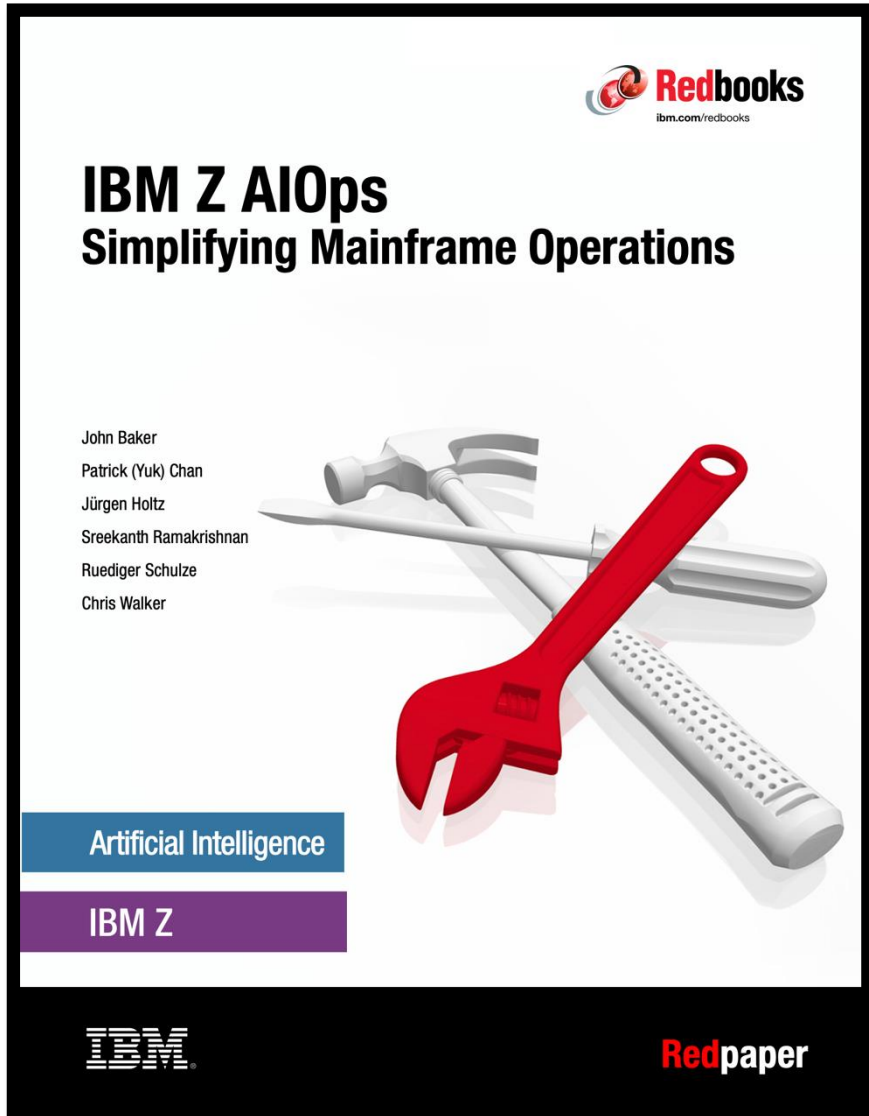
Observability and AIOps for IBM Z sessions at SHARE Orlando

Day	Time	Title	Featured Products
Monday	9:45 am	Data Center Automation - Z System Automation and Agentic AI	Z System Automation
	10:30 am	Using OpenTelemetry to Integrate the Mainframe Into Your Enterprise-Wide Observability Platform	Z Observability Connect, Instana
	1:15 pm	BYOD Lab: WXA4Z Agentic Hands-on Workshop	watsonx Assistant for Z
	1:15 pm	Intelligent Automation of a Hybrid Data Center With Next Generation of Z System Automation	Z System Automation
	2:30 pm	IBM Z NetView Technical Updates	Z NetView
	3:45 pm	Simplify Mainframe Operations with the Latest IBM Z OMEGAMON Enhancements	OMEGAMON
Tuesday	10:30 am	Stronger, Smarter Operations: How BPER Reinvented Data Resiliency Management with IZBR	Z Backup Resiliency
	2:30 pm	What's New in IBM Z Workload Scheduler V.10.2.x and Roadmap	Z Workload Scheduler
Wednesday	9:15 am	IBM Concert for Z, an AI-Powered Mainframe Resilience Platform: Solutions vs. Alerts	Concert for Z
	1:45 pm	BYOD Lab: AI Enabled Proactive Monitoring to Get the Most From Your System With IBM Concert for Z	Concert for Z
	2:30 pm	IBM Z Cyber Vault Explained - Soup to Nuts and Nose to Tail	Z Backup Resiliency
	3:45 pm	Using AI for Capacity Planning and Performance Management in Z	IntelliMagic
Thursday	10:30 am	IBM Z NetView Hints and Tips	Z NetView

Connect with IBM technical leaders and product management team:

Concert for Z Domenico D'Alterio Fabricio Miatto	watsonx Assistant for Z Wolfgang Schaeberle CICS Agent: Kye Maloe	OMEGAMON Ash Mahay	Z Observability Connect Instana Chris Walker	NetView Derrick Washington	Z System Automation Johannes Hausch	Z Workload Scheduler Domenico D'Alterio Wolfgang Schaeberle	IMS Tools Tracy Dean
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New Redpaper



How can you simplify mainframe operations? To answer this question, this IBM Redbooks publication draws on Lean Thinking, which focuses on identifying waste and strain in any process.

By applying AI and machine learning technologies to mainframe operations, you can deliver improved efficiency and effectiveness.

64

Download your copy:

<https://ibm.biz/Redpaper-SMO-2025>



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