



IDMS and Smart/ RESTART: The Perfect Pair for Enhanced Performance

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Business Challenges

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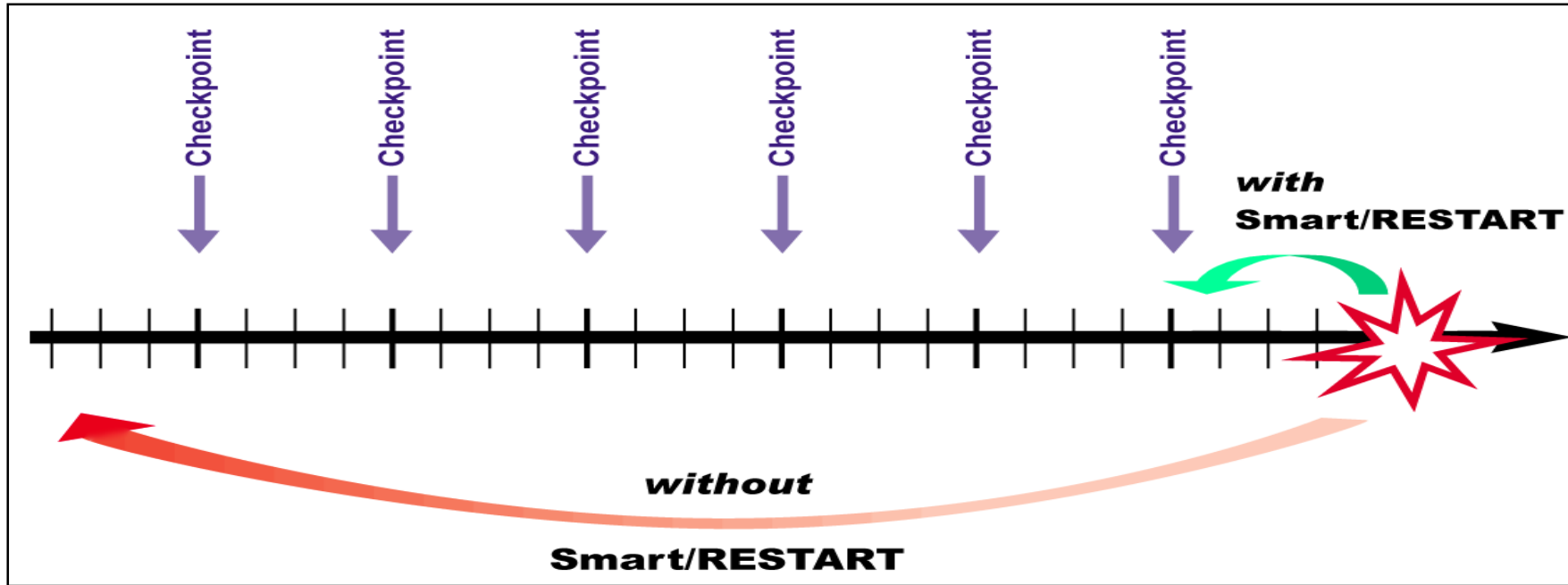
- Many organizations need to run operations 24 hours a day, 7 days a week, 365 days a year.
 - Batch Windows reduced
 - Avoid outages as much as possible
 - Required mechanisms to recover from the failure and be able to RESTART the processing quickly and with minimum impact on operations
- Batch and Online concurrency
 - Batch Job restart after failing
 - Batch Job failing due to Online
 - Online failing due to a Batch Job
- Multiple applications share the same data Checkpoint (and restart) capability is a prerequisite for concurrency in shared data environments.
- Backing out batch updates would destroy changes applied by other, concurrently active processes that simultaneously access and update the same shared data.



What is Smart/RESTART?

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- A comprehensive z/OS Batch Application Restart tool
 - IDMS
 - Db2
 - IMS
 - MQ
 - VSAM
 - Sequential Files
- Synch Point Manager to ensure consistency across all components
- Automatic restart of batch jobs
- Automatic recovery and retry following Timeout, Deadlock, Resource Unavailable errors
- Smart/RESTART has been successfully implemented in over a 1000 organizations worldwide



- Without Smart/RESTART
 - Rerunning abended z/OS batch applications from the beginning is very costly at best
 - Sequential files and VSAM datasets must be restored to their initial state
 - Successfully completed processing must be discarded and redone
 - RRS compliant resources must be restored to a point of consistency
- With Smart/RESTART
 - z/OS batch applications can resume execution from the last successful checkpoint
 - Successfully processed work is never discarded or redone

Smart/RESTART – Key features

- Batch is restartable on any member of Data Sharing Group
- Batch can be paused or cancelled at unit-of-work boundaries
- Predefine different checkpoint frequencies for separate shifts
- Vary checkpoint frequency dynamically
- Edit program working storage and repair bad data during execution
- Updates to IDMS, Db2, MQ, IMS and other RRS compliant resources remain in sync with:
 - sequential file and cursor position, program storage and random VSAM updates
 - execution resumes from near the point of failure with all resources consistent
 - after abends, recompiles or system IPLs

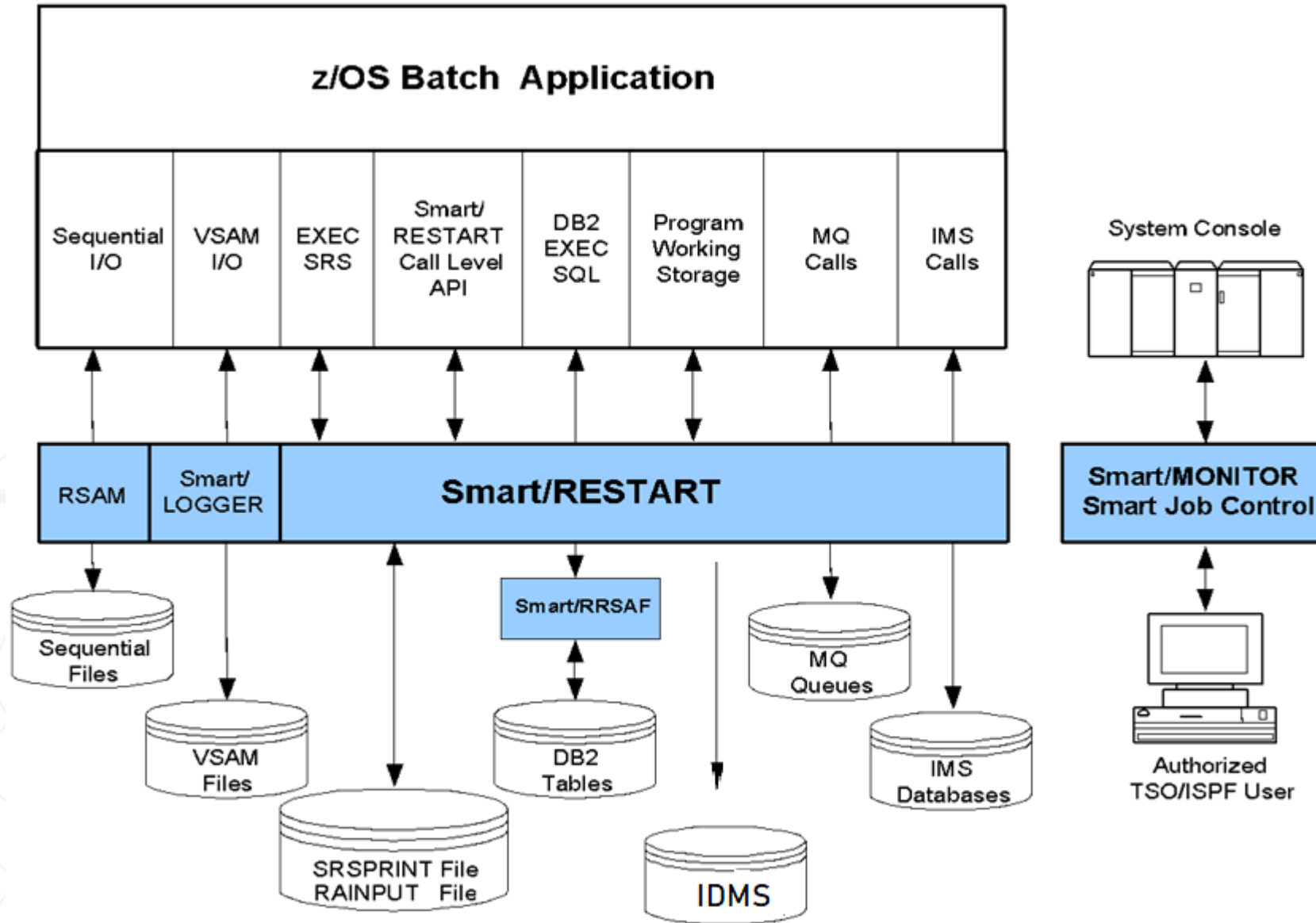
Business Challenges- Revisited

- Many organizations need to run operations 24 hours a day, 7 days a week, 365 days a year.
 - Required mechanisms to recover from the failure and be able to RESTART the processing quickly and with minimum impact on operations
- Enhance disaster recovery by enabling z/OS batch applications with restart capability
- Batch and Online concurrency
 - Batch Job failing due to Online
 - Online failing due to a Batch Job
- Improve concurrency and availability in a datasharing environment
- Restart enable legacy applications without COMMIT logic via *external* checkpoint definitions
- Reduce cost of machine, people from operation, support and development, and also avoid breach of SLAs and business problems

Who Can Benefit from Smart/RESTART?

- Business critical
- Time critical
- Long running jobs or streams
- Hard to restart/complex applications or job streams
- Data/objects shared with other applications, or if data is sent elsewhere
- Online transaction and Batch jobs concurrency

Smart/RESTART Product Architecture



Smart/RESTART components

- Smart/RESTART
- Smart/RRSAF
- Smart/LOGGER
- Smart/MONITOR
- Smart/Console Facility

Smart/MONITOR

Smart/MONITOR 13.1 Smart/RESTART Job Queues Row 1 to 8 of 8

Command ==> Scroll ==> PAGE

-----15:56 RAI007 SRM

Smart/RESTART Checkpoint Synch. DB2 Table Owner: RAI DB2 SSID: DB2T

-----SORT = St-Date/D, St-Time/D

ALL	ALL	ALL	ALL	Checkpoint					
Cnd	Jobname	Job#	Status	St-Date	St-Time	Date	Time	ID	Freq
...	EXAMPLE	9364	RUNNING	2021-01-23	10:31.10	2021-01-23	15:43.11	0000106	0005
...	RAI8XXXX	7234	S222	2021-01-23	12:12.20	2021-01-23	13:03.11	0000006	0005
...	RAI8SRMR	6556	COMPLETE	2021-01-23	30:57.17	2021-01-23	12:04.08	0000026	0100
...	RAI7VSTR	6644	S0C7	2021-01-23	16:25.38	2021-01-23	16:25.41	0000003	0001
...	RAI021	4269	RUNNING	2021-01-23	12:39.22	2021-01-23	12:39.22	0000000	0001
...	RAI021	4269	S13E	2021-01-23	12:35.02	2021-01-23	12:35.29	0000003	0001
...	RAI7NYXR	4181	S0C7	2021-01-23	12:11.01	2021-01-23	12:11.03	0000003	0001
...	RAI7NYXR	4076	S0C7	2021-01-23	11:52.19	2021-01-23	11:52.22	0000003	0001

- Runs as an ISPF Dialog
- Monitors active jobsteps within an LPAR that are running under Smart/RESTART control
- Controls restartable applications *during execution* via commands like QUIESCE and CKPT_PACE
- Displays CPU, elapsed time and I/O activity
- Predicts job completion times
- Displays SQL statement activity and execution times
- Displays entry / exit counts for subroutines within a run unit
- Supports modification of application storage and record contents *during program execution*

**Smart RESTART supporting
IDMS with Db2 as a
repository**

**Removing the need for Db2 as
a repository**



QUESTION 1:

- Would implementing SMART/Restart be beneficial for your organization?



QUESTION 2:

We'd like to extend an invitation for a follow-up discussion with our team to explore the wide range of benefits that Smart Restart can offer your organization. We value your interest and would be delighted to delve deeper into this exciting opportunity together.

- Would you be open to joining us ?



DEMO

Architect: Kevin Baker

General IDMS Announcements

Broadcom Mainframe Technical Exchanges

In-person events are back!

- **North American in-person event in Plano, TX: June 13-15**
 - IDMS Group Sessions and Event Night: June 12
- **Global virtual event: October 3-5**

Make plans to attend

- Network with peers and Mainframe technical experts
- Technical education, product update, how-to and roundtable sessions
- No registration fee! Open to all Broadcom customers



IDMS MTE Sessions

June 13 - 15, 2023 | Hilton Granite Hotel

- Welcome & Opening Keynote
- Data Management Keynote
- DB Modernization & Embrace Open Innovation
- Usability Testing: Mainframe Database User Interface
- IDMS New Features
- HostBridge Integration with Datacom and IDMS
- Partner Insights: IDMS Hidden Gems
- IDMS Shadow REORG Sneak Peek
- Customer Insights: IDMS Modernization to Support New Business Requirements
- IDMS Extract, Transform, and Load with Test Data Manager
- IDMS Performance Monitoring Best Practices for Users at All Levels
- Modernizing IDMS Applications to Exponentially Increase MF Access

SO much content!

- AIOps - Alert Central, Sysview, Observability, OPS/MVS, Topology, NetMaster, MOI, etc.)
- Data Management (Db2, Datacom, IDMS, Output, Storage, etc.)
- DevOps & Open Mainframe (Zowe, VS Code, Endeavor, Gen, Hostbridge, etc.)
- General (NextGen, Easytrieve, MRI, SCRT, z/OSMF, etc.)
- Security & Workload (ACF2, Top Secret, TAMz, CEM, CA 7, ESP, AAI, etc.)

IDMS User Group Workshops & Event Night

June 12, 2023 | Plano, Texas

- Pre-conference Technical User Group Workshops
- Must register separately from the MTE event
- **Broadcom Office (5465 Legacy Drive, Plano, TX 75024) on Monday, June 12**
 - Mainframe Technical Exchange (June 13-15) occurs at Hilton Granite Hotel, Plano TX
- Food, Drinks, and Transportation provided
- **Monday Night Networking Event at Pinstack** (6205 Dallas Parkway, Plano, TX 75024)



For more details, please visit:

<https://mainframe.broadcom.com/idms-datacom-user-group-workshops-event-night>

IDMS User Group Workshop Sessions

June 12, 2023 | Broadcom Office

Morning (Before Lunch)

1. How to Deep Dive: IDMS Systems REST API
2. Database Business API: Install, Configure, & Deploy
3. VS Code / Code4z: Install, Configure, & Deploy

Afternoon (After Lunch)

4. IDMS Security Insights (Part I & II)
5. IDMS Performance & Tuning (Part I & II)

****Optional: 1:1 UX-Led Sessions to cover Database Modernization UI Prototypes & Wireframes**

— Still in planning

Monthly Community Webcasts (June 15 @ 11:00 ET)

June IDMS Community Webcast
CANCELLED
due to
Mainframe Technical Exchange Event

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Community
Webcast

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Register Now

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Q & A

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Thank you