



# BMC Solutions for IMS

## Strategy and Roadmap for IMS Symposium

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# Agenda

- **Strategy**
- **Recent enhancements**
- **Future plans**

# Forces Affecting IMS Landscape



# Top IT Priorities



Cost Optimization

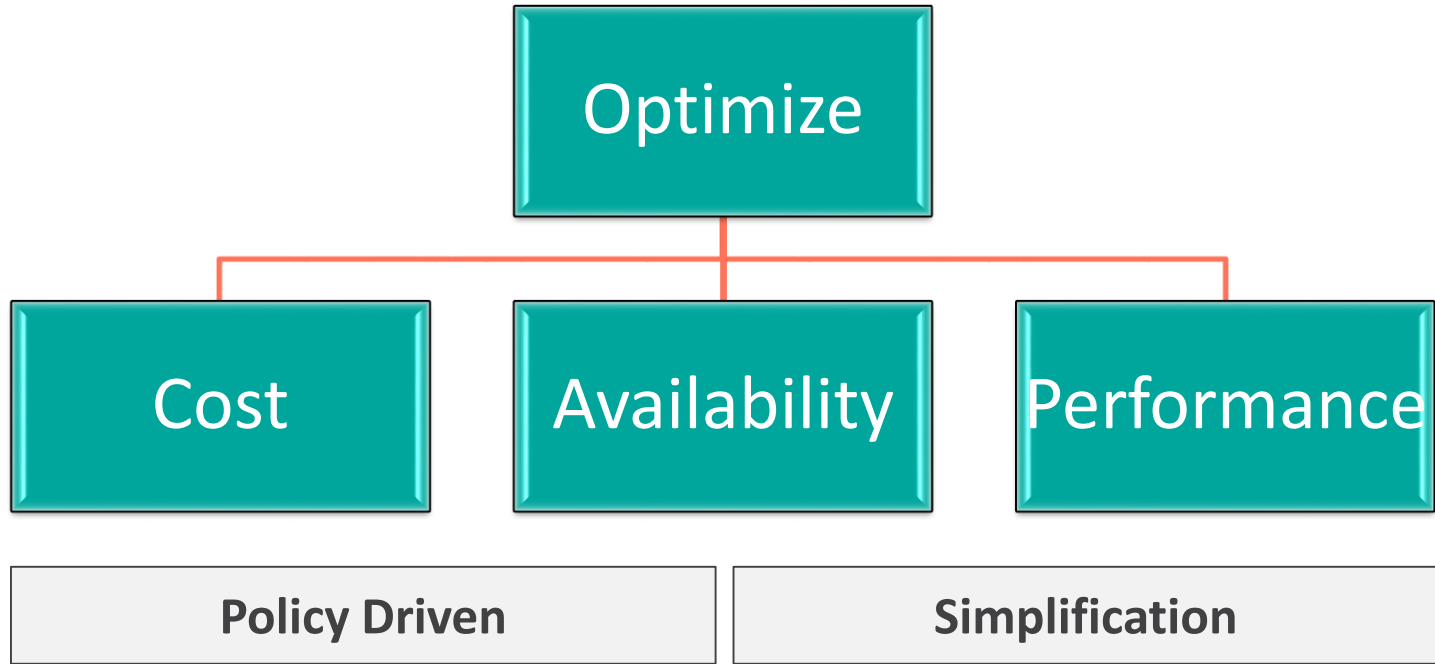


Application Availability



Skill Loss

# IMS Strategy Foundation



# Optimize – Lower Cost

**Specialty Processors**

**Subsystem Placement**

**Application Optimization**

# Optimize – Maximize Availability

**Outage free Reorgs/IC**

**Dynamic Defrag**

**Workload Avoidance**



# Optimize – Maximize Performance

**64-bit addressing**

**Faster I/O technology**

**Hardware changes**



# Recent Enhancements



# Database Products for IMS™ Advisors and Toolkit – January 2014

- Support for IMS Version 13.1
- DBRC List History window graphically presents information from the LIST.HISTORY command and you can also initiate DBRC commands for the selected object and monitor the results
- Historical Analysis Wizard helps you analyze Advisor historical data for statistics of interest
- Recovery Advisor available in MAXM Database Advisor
- The Recovery Wizard now supports recovery to alternate database data sets
- New threshold parameters for freespace and RAA/DOVF space utilization

# MAXM Database Advisor for IMS – Database Exceptions are the DBA's Work List

- When exceptions exist that becomes the DBA's priority work list
- These are the correlated exceptions
- Increases DBA effectiveness by 50%

BMC Database Management - emal:9333

File Edit View Tools Action Window Help

Navigation

- Enterprise Data
  - Connections
    - BMCA
      - DB2 Subsystems
      - IMS Applications
      - IMS Connects
        - IAGACONN@BMCA
        - IBGACONN@BMCB
      - IMS Databases
        - CSG.IADBIMS.RECON1 (AutoConfigure)
        - CSG.IAGAIMS.RECON1 (AutoConfigure)**
        - IAGA
          - DBRC Resources
          - ALL DATABASES
          - DTGROUP
          - IVP
          - TDG
        - CSG.IAGMIMS.RECON1 (AutoConfigure)
        - CSG.IAPLIMS.RECON1 (AutoConfigure)
      - IMS Subsystems

IMS Exception List IMS Databases/CSG.IAGAIMS.RECON1 (AutoConfigure)

Refresh Filter Export Help

Solutions 26 Exceptions reported on 9 Databases and Resources ! Lowest Status Filter

	Host/SYSPLEX	IMSPLEX	Object Type	Name
✘	BMCA	CSG IAGAIMS.RECON1 (AutoConfigure)	DBD	CUSTHDAM
✘	BMCA	CSG IAGAIMS.RECON1 (AutoConfigure)	DBD	CUSTHDM
✘	BMCA	CSG IAGAIMS.RECON1 (AutoConfigure)	DBD	CUSTHISM
✘	BMCA	CSG IAGAIMS.RECON1 (AutoConfigure)	DBD	DBFSAMD4
✘	BMCA	CSG IAGAIMS.RECON1 (AutoConfigure)	DBD	IVPDB1
✘	BMCA	CSG IAGAIMS.RECON1 (AutoConfigure)	DBD	IVPDB2

	Warning Date	Critical Date	Dead Date	DBD	Partition	DD Name	Description	Threshold	Current Value	DSG	DB Type	DS Type
✘	N/A	2015/03/11	2037/03/05	CUSTHDAM	N/A	CUSTHDAM	INSUFF TOTAL FREE SPACE (LS)	65535%	92%	1	HDAM	OSAM
✘	N/A	2015/03/11	N/A	CUSTHDAM	N/A	CUSTHDAM	INSUFF ALLOC FREE SPACE (LS)	65535%	87%	1	HDAM	OSAM
✘	N/A	2013/02/25	N/A	CUSTHDAM	N/A	CUSTHDAM	NO VALID IMAGE COPY			1	HDAM	OSAM

Exception List IMS Databases/CSG...

# Recovery Wizard – guided workflow

IMS Databases/TK R11 RECON (AUTOCONFIGURE)/DEMOGRP

## Select Recovery Point

Follow the steps in this wizard to generate the appropriate Recovery Plus JCL.

Recovery Point:

- Current Date and Time
- Last Batch Image Copy
- Last Point-In-Time Change Accumulation (PITCA)
- A Specific Point-In-Time

Date/Time: MM / DD / YYYY   
HH : MM : SS : 000000

< Back   Next >   Finish   Cancel

# Monitor Recovery View

File Edit View Tools Action Window Help

Navigation

- Enterprise Data
  - Connections
    - esaj:8851
    - imsa:8851
    - sysm:8851
    - sysp:8800
    - sysp:8851
  - DB2 Subsystems
  - IMS Applications
    - IMS Databases
      - EMAIL1 QA R12 RECON
      - EMAIL1 QA R91 RECON
      - EMAIL2 TK R12 RECON
      - EMAIL2 TK R91 RECON
      - EMAIL3 SP R12 RECON
      - EMAIL3 SP R91 RECON
      - RVP R10 TEST RECON
      - RVP R11 TEST RECON
      - RVP R12 TEST RECON
      - RVP R91 TEST RECON
      - RVP R91.ONLINE.RECON1

Main Tasks

## Monitor Recovery - RVP R12 TEST RECON

Pause Resume Set Refresh Rate Help

Show jobs within the last: 12 hour(s)

Screen refresh rate every 1 seconds  
 Last Refresh Date: Sep 16, 2013  
 Last Refresh Time: 9:41:55 AM

Jobs List

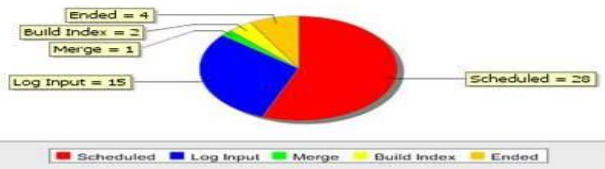
View Activity View Failures View Objects

Name \	Progress	Status
RVPSDB2B	100%	✓
RVPSDB2B	0%	✗
RVPSDB2B	100%	✓
RVPSDB2B	9%	✓

### Job Details

Job name: RVPSDB2B  
 Job number: JOBS3550  
 Step name: RECOVER1  
 Detail Status: ✓ NO warnings or errors  
 Current phase: Merge  
 Start time: Sep 16, 2013 9:41:25 AM  
 Elapsed time: 00 hrs 00 min 17 sec  
 CPU time used: 00:01.45

### Object Phase Summary



Monitor Recovery - RVP R12 TEST RECON

### Messages

Severity	When	Message
OK	Mon, Sep 16 09:33:31 AM	BMCDNA274000I: Connected to: sysp:8851
OK	Mon, Sep 16 09:33:27 AM	BMCIBO310500I: BMC Application Accelerator for IMS version 1.01.00 build 27
OK	Mon, Sep 16 09:33:27 AM	BMCMXA340519I: MAXM Database Advisor for IMS 2.05.00 build 40 is started.
OK	Mon, Sep 16 09:33:27 AM	BMCBRI310500I: Backup and Recovery Solution for IMS has been initialized, version 4.06.00 build 14
OK	Mon, Sep 16 09:33:26 AM	BMCDNA274425I: The Pub/Sub service is listening on port 3683
OK	Mon, Sep 16 09:33:25 AM	Welcome to BMC Database Management Console.

Waiting on UIM Response

# Database Products for IMS™ Advisors and Toolkit – October 2014 SPE

- IMS Status Monitoring feature enables Advisor to detect and report exceptional status conditions for IBM IMS online systems, for example, Advisor can tell you if a system is unavailable or has any locked, in-error, or unavailable objects
- Recovery Advisor provides new parameters for detecting exception conditions and controlling how exception data is handled
- New MEMBERTYPE keyword controls how the Build IDCAMS Control Statements tool constructs data set members to contain the created IDCAMS statements
  - DBD - Build a single member for the selected object
  - DDN - Build a separate member for each data set that belongs to the selected object
- WTO messages that report exception conditions now include the related exception ID
- Schedules window now provides a RUN button

# MAXM Reorg/Online – January 2014

- Support for IMS Version 13.1 across all products
- Reorganize all partitions of a High Availability Large Database (HALDB) in parallel
- Make changes to HALDBs during the reorganization process
- zIIP exploitation using Extended Buffer Manager component (also in Pointer Checker Plus)



# Fast Path/EP Series 3.11 – January 2014

- Support for IMS Version 13.1
- Support for 64-bit storage
- 64-bit storage EXEC statement for offline processing
- Support for IBM IMS zIIP Sort
- Fragmentation Factor now included in the record layout of the history file
- Fast Path Indexer/EP now builds all partitions

# Fast Path Online Restructure/EP 3.11 – January 2014

- Support for IMS Version 13.1
- Restructure Activity data set contains a log of actions performed during the online restructure process
- Restructure Activity Report provides information about actions performed during the online restructure process for an area
- Restart function enhancements
  - Detects when a modified ACB member is reloaded by DELTA IMS
  - Adds information to the AMSPDS data set when DBRC registration is updated
- Echo deleted DBRC registration information in PFPPRINT

# Backup and Recovery Products 4.6 – January 2014

- Support for IMS Version 13.1
- Enhanced techniques for recovery to alternate data sets
- Support for DBDEF command and associated keywords
- Substitution variables in IDCAMS statements
- User-defined substitution variables in data set names
- Timestamps with microsecond values
- SMS classes for sort work data sets

# Additional Products – January 2014

- Support for IMS Version 13.1 across all products
- Extended Terminal Assist
  - Display the contents at a specified address in the main storage of an IMS DLI/SAS region
- Energizer for IMS Connect
  - Route DRDA messages through the IMS Common Services Layer (CSL) ODBM address space to provide round-robin distribution
  - IRM message now includes user-defined fields for a Virtual Exit
  - Trusted IP address can support a table of IP addresses and DNS names
- Message Advisor
  - Writes new types of records to the IMS log during IMS restart to document the presence of Message Advisor and the actions taken
  - New Queue Protection Facility (QPF) command keywords and parameters

# Application Restart Control 4.0 - December 2014

- ARC Family includes support for DB2, IMS, and VSAM
- Currency
  - Support most recent COBOL version
  - Support IMS Vnext for customers in the IBM QPP
- Enhanced RRSAF support
  - Enable two phase commit processing with DB2 and MQ that use RRSAF

# Recent New Mainframe Products

- **Application Accelerator for IMS**
  - Monitors and analyzes IMS DL/I and BMP batch applications
  - Recommends and dynamically implements optimal resource settings for DL/I and BMP batch applications — with no JCL or application changes required
  - Reduces both CPU and elapsed time
- **Subsystem Optimizer for IMS (Subzero)**
  - Remove requirement that CICS and IMS/DB reside on the same LPAR
  - Save MLC costs by optimizing subsystem placement
  - Mainframe and IMS continue to be a focus for BMC

# Recent Releases – December 2014

- Application Accelerator for IMS (AAI) 1.2 - Support additional situations in BMP processes
  - Support SSAs that are using Boolean AND operators so you can specify more complex criteria when selecting Segment Search Arguments (SSA)
  - Support for PROCSEQ to read a database through a secondary index for faster direct access to the data and processing via an inverted structure
  - Support the use of POS=M to provide multiple positioning for PCBs to reduce processing needed to reposition in a database and support Hogan application
  - Provide support for the “F” command code in SSAs

# BMC Subsystem Optimizer for zEnterprise® (Subzero)

## The Why...

- IBM requires that CICS, DB2, and/or IMS DB run on the same LPAR if a CICS transaction access DB2 or IMS DB
- Increases MLC since all are billed at the combined peak

## The How...

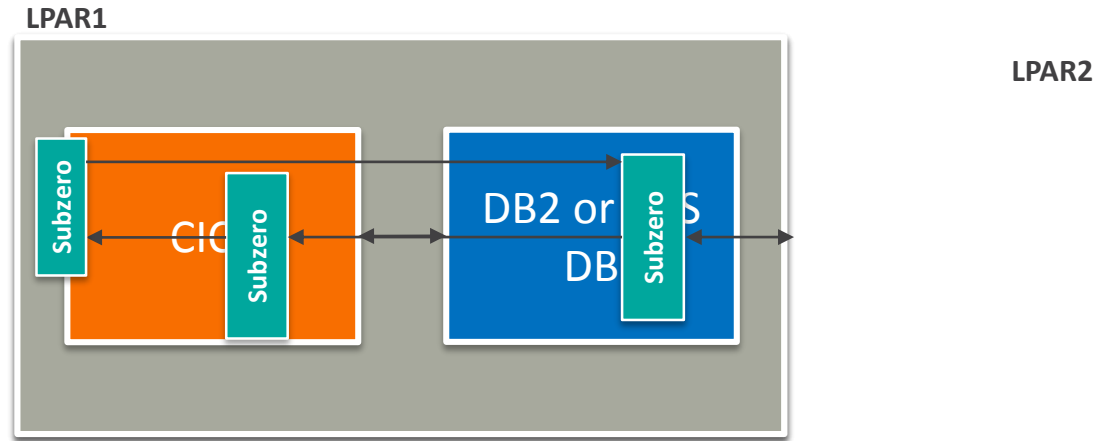
- Remove this IBM requirement and lower MLC
- No application code changes required
- Utilizes IBM published facilities

## The What...

- Flexibility on where you can run CICS, IMS, and DB2
- Enhanced system redundancy and recovery options
- Further workload balancing options



# BMC Subzero basics



1. CICS application SQL or DL/I calls are intercepted by Subzero
2. Subzero routes the data access request to the appropriate DBMS
3. DB2/IMS DB processes the data request and returns the requested data
4. Subzero routes the result set back to the initiating CICS application



# Future Plans



# What's ahead

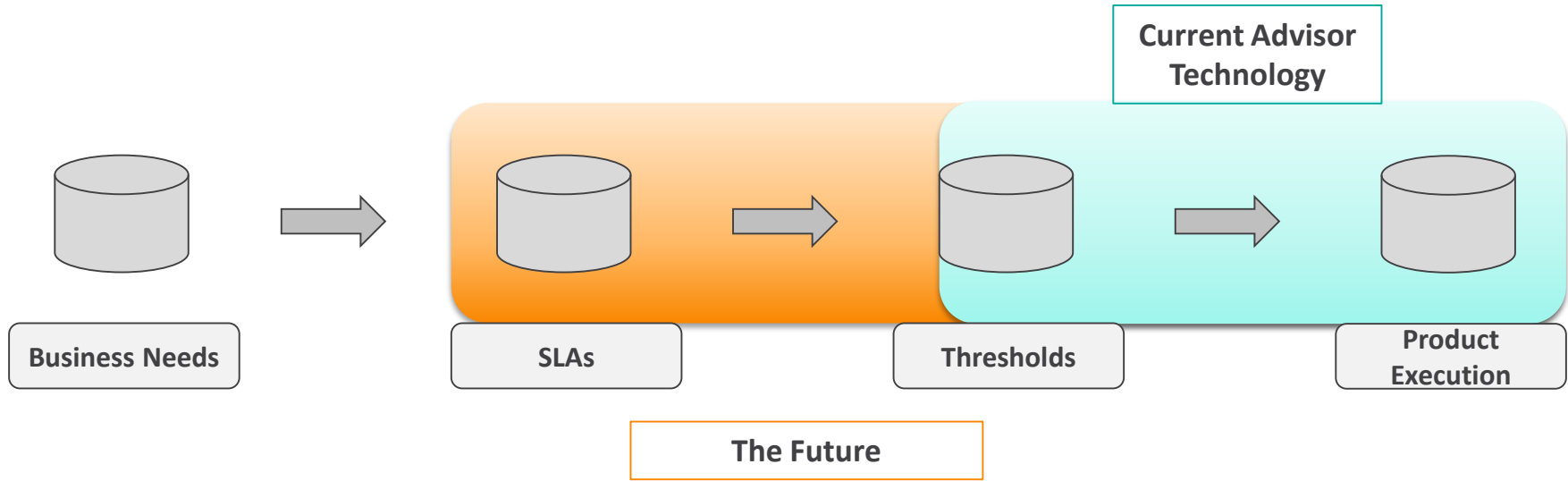
- Merge features/functions from our IMS product offerings
  - Merge selected capabilities from Neon products into go forward heritage BMC products
  - JCL compatibility and JCL generator
- Support IMS V-next
  - As always we are partnering with IBM to support our customers
- Maximize availability in Reorgs and Image Copy processes

# Fast Path Products Version 4.00

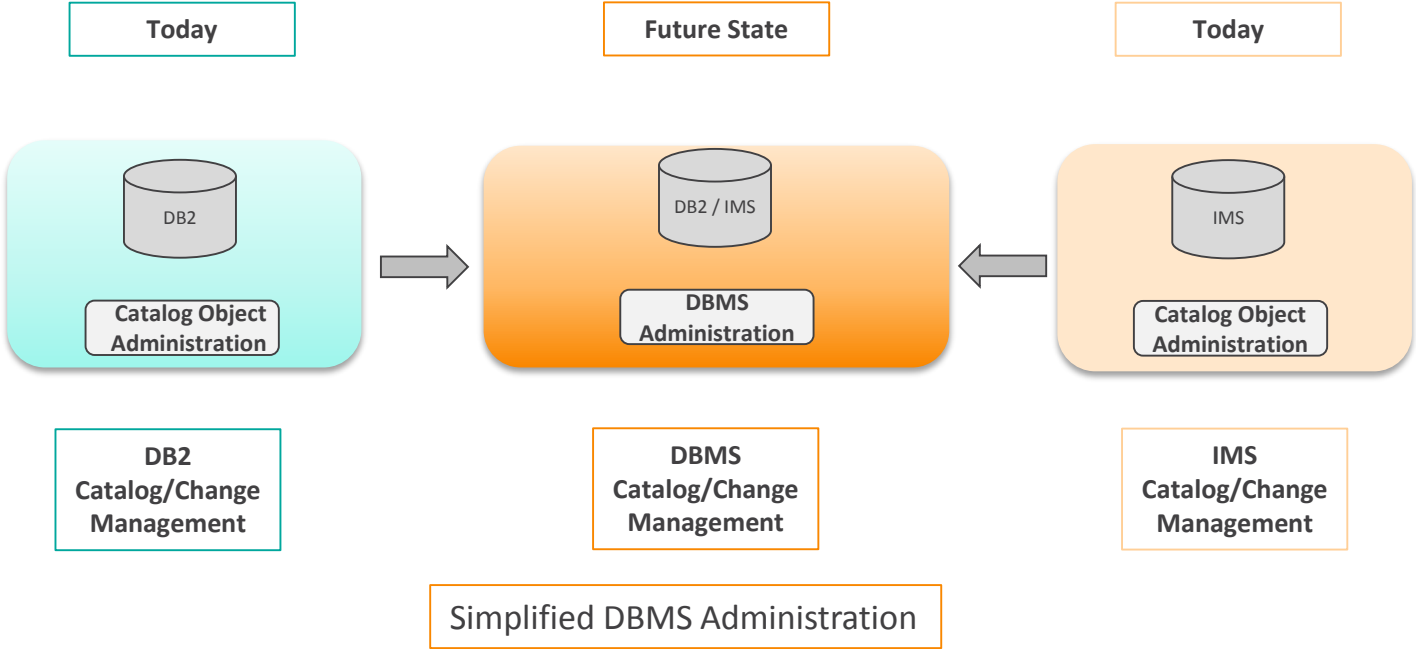
## Enhancements

- Fast Path Online REORG/EP
  - Can use private area buffer pool
  - Supports database buffers “above the bar”
  - Issues in EXTEND IOVF with SDEP segments present resolved
- Fast Path Online Analyzer/EP
  - Performance improvement when handling very long twin changes
  - Miscellaneous report enhancements

# Policy Based DBMS Management



# Optimize – DBMS Administration



# Our Commitment to the Future

**Support new releases**

**Exploit new capabilities**

**Invest in new talent**



# Summary

- BMC IMS products lead the market in ROI
  - Continue to be the innovator in this space
  - Flagship products evolve to participate in future strategies
- We are passionate about understanding customer needs
- Looking to the future
  - New innovations coming to light
  - Enabling the workforce of the future



# Thank You

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