

1. Record Nr.	UNINA9910956483703321
Titolo	IMS Version 8 implementation guide : a technical overview of the new features // [Jouko Jantti ... et al.]
Pubbl/distr/stampa	[United States], : IBM, International Technical Support Organization, 2002
Edizione	[1st ed.]
Descrizione fisica	xvi, 334 p. : ill
Collana	IBM redbooks
Altri autori (Persone)	JanttiJouko
Disciplina	005.74/068
Soggetti	Database management IMS (DL/I) (Computer system)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"October 2002." "SG24-6594-00."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover -- Contents -- Notices -- Trademarks -- Preface -- The team that wrote this redbook -- Become a published author -- Comments welcome -- Part 1 Introduction -- Chapter 1. Overview -- 1.1 Introduction to the enhancements -- 1.2 Availability and recoverability -- 1.2.1 Database Recovery Control (DBRC) enhancements -- 1.2.2 Database Image Copy 2 enhancements -- 1.2.3 HALDB enhancements -- 1.2.4 Batch Resource Recovery Service (RRS) support -- 1.2.5 Remote Site Recovery (RSR) enhancement -- 1.2.6 Enhanced availability by using the Resource Manager (RM) -- 1.2.7 Common Queue Server (CQS) enhancements -- 1.2.8 APPC and OTMA enhancements -- 1.2.9 APPC/IMS enhancements -- 1.2.10 IMS Online Recovery Service (ORS) support -- 1.2.11 System Log Data Set (SLDS) dynamic backout processing -- 1.3 Performance and capacity enhancements -- 1.3.1 Fast Path enhancements -- 1.3.2 Parallel database processing enhancement -- 1.3.3 IMS MSC FICON CTC support -- 1.3.4 Virtual storage constraint relief -- 1.4 Systems management enhancements -- 1.4.1 BPE enhancements -- 1.4.2 Common Service Layer -- 1.4.3 Installation and configuration enhancements -- 1.4.4 Syntax Checker -- 1.4.5 Transaction trace -- 1.5 Application enablement enhancements -- 1.5.1 Java enhancements -- Part 2 IMS Version 8 base enhancements -- Chapter 2. Packaging

and installing -- 2.1 Product packaging -- 2.1.1 Installation changes -- 2.1.2 Changes in target and distribution data sets -- 2.1.3 SMP/E processing changes in IMS Version 8 -- 2.1.4 User exits in IMS Version 8 -- 2.2 IVP changes -- 2.2.1 Execution steps -- 2.2.2 IMS Java IVP -- 2.3 IMS system definition -- 2.3.1 Changed minimum and default values for RECLNG in MSGQUEUE macro -- 2.4 New and obsolete execution parameters -- Chapter 3. Syntax Checker -- 3.1 Introduction -- 3.2 Getting started -- 3.3 Using the Syntax Checker. 3.3.1 Changing releases -- 3.3.2 Display options -- 3.3.3 Save options -- Chapter 4. Database management enhancements -- 4.1 Database Image Copy 2 enhancements -- 4.1.1 Multiple DBDS and ADS copies -- 4.1.2 Group name support -- 4.1.3 Single output data set -- 4.1.4 Support for the DFSMSdss OPTIMIZE option -- 4.1.5 GENJCL support -- 4.2 Parallel database processing -- 4.2.1 DBRC authorization -- 4.2.2 Full function database allocation, open and close processing -- 4.2.3 Considerations -- 4.3 Fast Path DEDB enhancements -- 4.3.1 DEDB support greater than 240 areas -- 4.3.2 Nonrecoverable DEDBs -- 4.3.3 Coupling Facility support for DEDB VSO -- 4.3.4 Unused IOVF count -- 4.4 Batch RRS support -- 4.4.1 Supported environments -- 4.4.2 Activation and requirements -- 4.5 Coordinated IMS/DB2 disaster recovery support -- 4.5.1 XRC tracking -- 4.5.2 Log synchronization -- 4.5.3 Operations -- 4.5.4 Messages and log records changes -- 4.5.5 Coexistence -- Chapter 5. Database Recovery Control enhancements -- 5.1 Support of 16 MB RECON record size -- 5.1.1 RECON record spanning segments -- 5.1.2 Usage of alerts -- 5.2 DBRC PRILOG compression -- 5.3 DBRC command authorization -- 5.3.1 Security support for DBRC commands and protected resources -- 5.3.2 The resource name table DSPRNTBL -- 5.3.3 How command authorization gets invoked -- 5.3.4 Supported environments -- 5.3.5 Usage of the DBRC command authorization exit (DSPDCAX0) -- 5.3.6 DBRC command authorization examples -- 5.4 Avoidance of certain DBRC abends -- 5.5 Automatic RECON loss notification -- 5.6 IMS version coexistence for DBRC -- Chapter 6. Transaction trace -- 6.1 Transaction trace (MVS component trace) -- 6.1.1 How transaction trace works -- 6.1.2 How to use transaction trace -- 6.1.3 Sample transaction trace output -- Chapter 7. APPC base enhancements -- 7.1 Dynamic LU 6.2 descriptor support. 7.1.1 Add a new LU 6.2 descriptor -- 7.1.2 Delete an LU 6.2 descriptor -- 7.2 CPU time limit for CPI-C driven transactions -- 7.3 Support for APPC outbound LU -- Chapter 8. Application enablement -- 8.1 Overview -- 8.2 Java dependent regions -- 8.2.1 Persistent Reusable Java Virtual Machine -- 8.2.2 Benefits of a JVM environment -- 8.2.3 Other IMS Java considerations -- 8.2.4 DFSJMP and DFSJBP procedures -- 8.2.5 JVMOPMAS and JVMOPWKR members -- 8.2.6 ENVIRON= and DFSJVMAP members -- 8.2.7 IMS system definition considerations -- 8.2.8 PSBGEN considerations -- 8.2.9 /DISPLAY examples -- 8.3 Java standards enhancements -- 8.3.1 Java result set types -- 8.3.2 Java result set concurrency -- 8.3.3 Batch updates -- 8.3.4 New SQL keywords -- 8.4 JDBC access enhancements -- 8.5 Java Tooling enhancement -- 8.6 XML and IMS -- Chapter 9. Java enhancements for IMS and WebSphere -- 9.1 WebSphere 4.0.1 support -- 9.2 J2EE architecture -- 9.3 DataSource -- 9.4 Enterprise Archive (.ear) -- 9.5 Deploying the ear file -- 9.5.1 Configure the WebSphere server region for IMS access -- 9.5.2 Obtain the WebSphere for z/OS System Administration tool -- 9.5.3 Install an IMS JDBC Resource Adapter into a WebSphere server region. -- 9.5.4 Configure and deploy an instance of the IMS JDBC Resource Adapter -- 9.6 Configure and deploy an Enterprise Archive -- 9.7 IVP for WebSphere for z/OS -- 9.7.1 Untar the

IVP Enterprise Archive -- 9.7.2 Configure an IMS JDBC Resource Adapter instance for the IVP EJB -- 9.7.3 Import, deploy and export the IVP application -- 9.7.4 Deploy and configure the Enterprise Archive (imsjavaIVP.ear) -- 9.7.5 Update the HTTP Server for access to the IVP Web application -- 9.8 Test the IVP application -- 9.9 Error logging and tracing in WebSphere for z/OS -- 9.9.1 Sample trace outputs -- Part 3 IMS Version 8 Parallel Sysplex enhancements.

Chapter 10. Coupling Facility structure management -- 10.1 System managed rebuild -- 10.2 Alter and autoalter -- 10.3 System managed duplexing -- 10.3.1 Background -- 10.3.2 Duplexing -- 10.3.3 Enabling duplexing -- 10.3.4 Disabling duplexing -- 10.4 Which structures support which features -- Chapter 11. Base Primitive Environment enhancements -- 11.1 Base Primitive Environment (BPE) enhancements -- 11.2 New BPE address space initialization module -- 11.3 User exits and statistics for BPE -- 11.3.1 BPE configuration parameters member -- 11.3.2 BPE user exit list -- 11.4 Displaying the BPE and CQS versions -- Chapter 12. Shared queues support for APPC and OTMA synchronous messages -- 12.1 Background -- 12.2 Implementation -- 12.3 Migration considerations -- 12.3.1 Synchronous messages and program-to-program switches -- 12.3.2 Error conditions -- 12.3.3 Other miscellaneous migration considerations -- 12.3.4 Support considerations -- Part 4 Common Service Layer -- Chapter 13. Common Service Layer (CSL) architecture -- 13.1 Background -- 13.1.1 The IMSplex -- 13.1.2 Systems management -- 13.1.3 Operations management -- 13.1.4 Resource Management -- 13.2 Common Service Layer (CSL) architecture -- 13.3 Structured Call Interface (SCI) -- 13.4 Operations Manager (OM) -- 13.4.1 Today -- 13.4.2 OM infrastructure -- 13.4.3 OM clients and their roles -- 13.4.4 Commands -- 13.4.5 User exits -- 13.5 Resource Manager -- 13.5.1 Resource management functions -- 13.5.2 Resource management infrastructure -- 13.5.3 RM clients and their roles -- 13.5.4 Resource structure -- 13.5.5 Common Queue Server (CQS) -- 13.5.6 Resource Manager (RM) address space -- 13.5.7 RM characteristics -- Chapter 14. Sysplex terminal management -- 14.1 Sysplex terminal management objectives -- 14.2 Sysplex terminal management environment -- 14.3 IMSplex resources -- 14.4 STM terms and concepts.

14.4.1 Resource type consistency -- 14.4.2 Resource name uniqueness -- 14.4.3 Resource status -- 14.4.4 Significant status -- 14.4.5 Status recovery mode (SRM) -- 14.4.6 Status recoverability (RCVYxxxx) -- 14.5 Enabling sysplex terminal management -- 14.5.1 Setting SRM and RCVYxxxx -- 14.5.2 Overriding SRM and RCVYxxxx defaults -- 14.6 Ownership and affinities -- 14.6.1 Resource ownership and RM affinity -- 14.6.2 VTAM generic resources affinity -- 14.6.3 Setting VGR affinity management responsibility -- 14.6.4 VGR affinities and IMS Version 8 -- 14.7 Resources and the resource structure -- 14.7.1 Resource structure components and characteristics -- 14.7.2 Resource entries in the resource structure -- 14.8 STM in action -- 14.8.1 Before the first IMS joins the IMSplex -- 14.8.2 Start IMSplex address spaces -- 14.8.3 Log on from a static NODE -- 14.8.4 Logon from an ETO NODE -- 14.8.5 Signon from an ETO NODE -- 14.8.6 Commands that change significant status -- 14.8.7 Work which changes end-user significant status -- 14.8.8 Commands which change end-user status -- 14.8.9 Session termination with significant status (not IMS failure) -- 14.8.10 Logon from NODE which already exists in resource structure -- 14.8.11 IMS failure -- 14.8.12 IMS emergency restart -- 14.8.13 Recovering significant status -- 14.8.14 Recovering conversations -- 14.8.15 Recovering Fast Path -- 14.8.16 Recovering STSN sequence

numbers -- 14.8.17 Summary of STM in action -- 14.9 Resource structure -- 14.9.1 Defining the resource structure -- 14.9.2 Managing the resource structure -- 14.9.3 Structure failure -- 14.9.4 Loss of connectivity to a structure -- 14.9.5 SCI, RM, CQS, or structure failure -- 14.10 Miscellaneous other considerations -- 14.10.1 IMS exits -- 14.10.2 Global callable services -- 14.10.3 Extended Recovery Facility (XRF) considerations. 14.10.4 Rapid Network Reconnect (RNR) considerations.

Sommario/riassunto

In this IBM Redbooks publication, we describe the new features and functions in IMS Version 8. We document the tasks necessary to exploit the features, and identify migration, coexistence, and fallback considerations. We also identify specific hardware and software requirements that are needed to exploit certain enhancements. First we provide an overview, where we have grouped the various enhancements and their discussion into the categories availability and recoverability, performance and capacity, systems management, and application enablement. Then we have more detailed chapters for describing the individual enhancements. The base enhancements part of the book describes the base product enhancements that apply to all users migrating to IMS Version 8. The Parallel Sysplex enhancements part of the book describes enhancements in IMS Version 8 that apply to both existing users of IMS Version 6 or IMS Version 7 in a Parallel Sysplex environment and users that are considering sysplex functionality. The Common Service Layer part documents the Common Service Layer (CSL), new in IMS Version 8, which is the next step in IMS Parallel Sysplex evolution. The CSL enables IMS systems to operate in unison in an OS/390 Parallel Sysplex. The CSL components provide the infrastructure for an IMSplex. Please note that the additional material referenced in the text is not available from IBM.
