1. Record Nr. UNINA9910818500103321

Titolo	SAP on DB2 Universal Database for OS/390 and z/OS : Multiple Components in One Database (MCOD) / / Florence Dubois ... [et al.]
Pubbl/distr/stampa	White Plains, N.Y., : IBM, c2003
Edizione	[1st ed.]
Descrizione fisica	xvi, 279 p. : ill
Collana	Redbooks
Disciplina	650/.0285/53769
Soggetti	IBM computers - Programming Business - Computer programs Computer systems - Evaluation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This edition applies to SAP Basis Release 4.6C, 4.6D, 6.10, and 6.20, as well as all SAP products based on these SAP Basis Releases, for use with IBM DB2 Universal Database for OS/390 and z/OS." "Hands-on scenarios to merge SAP components into an MCOD landscape. How to clone one SAP component using the Control Center. Recovery considerations in an MCOD landscape."
Nota di bibliografia	Includes bibliographical references and index."
Nota di contenuto	Front cover -- Contents -- Figures -- Notices -- Trademarks -- Preface -- The team that wrote this redbook -- Become a published author -- Comments welcome -- Chapter 1. MCOD in a DB2 UDB for OS/390 and z/OS environment -- 1.1 Introduction -- 1.1.1 Motivation -- 1.1.2 Benefits -- 1.1.3 Drawbacks -- 1.1.4 Availability -- 1.2 Technical realization -- 1.2.1 General implementation -- 1.2.2 DB2-specific modifications -- 1.2.3 Independence of components -- 1.2.4 Implementation -- 1.3 Setup options -- 1.3.1 Basic setup considerations -- 1.3.2 Non-data sharing DB2 -- 1.3.3 Data sharing DB2 -- Chapter 2. Planning for an MCOD landscape -- 2.1 Planning for MCOD -- 2.1.1 Keep things as separate as possible -- 2.1.2 Size of the DB2 subsystem -- 2.1.3 Number of SAP systems in the MCOD landscape -- 2.1.4 Bufferpool tuning -- 2.1.5 Recovery of the DB2 subsystem -- 2.1.6 Resources for daily tasks -- 2.1.7 License key -- 2.1.8 Checklist -- 2.2 Install directly -- 2.3 Merging two systems -- 2.3.1 Three methods of merging -- 2.3.2 Additional tasks -- 2.3.3 Checklist for merging -- 2.4 Our system configuration -- Chapter 3.

MCOD installation and merge using SAP tools -- 3.1 Introduction -- 3.1.1 SAP Basis Releases 4.6C and 4.6D -- 3.1.2 SAP Basis Releases 6.10 and later -- 3.2 Installing a new component -- 3.2.1 SAP Basis Releases 4.6C and 4.6D -- 3.2.2 SAP Basis Releases 6.10 and later -- 3.3 Merging components into an MCOD landscape -- 3.3.1 SAP Basis Releases 4.6C and 4.6D -- 3.3.2 SAP Basis Release 6.10 and later -- 3.4 Steps after installation or merge -- 3.5 Minimizing migration down time -- 3.5.1 Incremental migration -- 3.5.2 Merging without moving the data -- Chapter 4. Merging SAP components without moving data -- 4.1 Considerations for using this procedure -- 4.1.1 Reasons for choosing the merge in place procedure -- 4.1.2 Limitations.
4.1.3 Tools we used -- 4.2 Planning considerations -- 4.2.1 Decide on source and target DB2 subsystem -- 4.2.2 Decide on naming conventions for merged system -- 4.2.3 System availability issues -- 4.2.4 System backup and recovery issues -- 4.2.5 Hardware-based backup options -- 4.2.6 Merge in place procedure checklist -- 4.3 Merge in place scenario -- 4.4 Preparation steps -- 4.4.1 Source: Create full backup of source system -- 4.4.2 Target: Create full backup of catalog and directory of target -- 4.4.3 Source: Redefine empty tablespaces as DEFINE NO in source -- 4.4.4 Source: Reorganize tablespaces -- 4.4.5 Source and Target: Create and populate metadata tables -- 4.4.6 Source and Target: Define source objects in target system -- 4.4.7 Target: Update metadata tables -- 4.4.8 Target: Stop newly created databases -- 4.4.9 Target: Prepare RUNSTATS JCL -- 4.5 Migration steps -- 4.5.1 Source: Stop all update activity on source system -- 4.5.2 Source: Perform full backup of source DB2 subsystem -- 4.5.3 Source: Start source databases for UT access -- 4.5.4 Source: Execute REPAIR on page set header pages -- 4.5.5 Source: Stop source DB2 subsystem -- 4.5.6 Target: Delete target data sets and rename source data sets -- 4.5.7 Target: Start target databases in target system -- 4.5.8 Target: Execute REPAIR LEVELID on tablespaces and indexes -- 4.5.9 Cold start target system (optional) -- 4.5.10 Target: Execute RUNSTATS -- 4.5.11 Target: Perform IMAGE COPY -- 4.5.12 Configure SAP application server -- 4.6 Post-migration steps -- 4.6.1 Target: Verify access to objects using RSDB2MAS (optional) -- 4.6.2 Target: Alter the space allocations for TS and IX (optional) -- Chapter 5. Cloning one component out of an MCOD landscape -- 5.1 MCOD cloning: Just another homogeneous system copy -- 5.1.1 Homogeneous system copy (HSC) -- 5.1.2 MCOD cloning.
5.1.3 Control Center support for HSC and MCOD cloning -- 5.2 Cloning scenario -- 5.3 Using the Control Center cloning wizard -- 5.3.1 System requirements -- 5.3.2 Skill requirements -- 5.3.3 Prepare to create a cloning session -- 5.3.4 Running the Control Center cloning wizard -- 5.3.5 Prepare for submitting the generated JCL -- 5.3.6 XMAP member and MCOD cloning -- 5.3.7 When do you have to regenerate JCL -- 5.3.8 Running the generated JCL -- 5.3.9 Additional considerations -- Chapter 6. PPT recovery of one system in an MCOD landscape -- 6.1 Different reasons for MCOD usage -- 6.1.1 Use of SAP MCOD for consistency -- 6.1.2 Use of SAP MCOD for consolidation -- 6.2 Recovery scenarios -- 6.2.1 Determination of the scope of SAP components affected -- 6.2.2 Work with the application owners -- 6.2.3 Determining if a DB2 recovery is needed -- 6.3 Scenario: Recovery of one component -- 6.3.1 Description of the cause of error -- 6.3.2 Determination of recovery steps -- 6.4 Additional considerations -- 6.4.1 Application of scenario to other applications -- 6.4.2 Considerations for multiple SAP component recovery -- 6.4.3 Testing in advance -- Chapter 7. Computer Center Management System (CCMS) and MCOD -- 7.1 Setup of CCMS in an MCOD landscape --

7.1.1 Required patches -- 7.1.2 Setup of SAP collector tools saposcol and rfcoscol -- 7.1.3 Central DBA planning calendar -- 7.2 MCOD enhancements -- 7.2.1 Tables and indexes monitor (transaction DB02) -- 7.2.2 Central DBA planning calendar (transaction DB13C) -- 7.2.3 DBA planning calendar (transaction DB13): Backup -- 7.2.4 Backup monitor (transaction DB12) -- 7.2.5 CCMS monitor set (transaction RZ20) -- 7.2.6 Database performance analysis (transaction ST04) -- Appendix A. Database layout -- Overview -- General remarks -- R/3 Releases 3.0F, 3.1H, 3.1I, and 4.0B -- R/3 Releases 4.5A and 4.5B. Basis Releases 4.6B, 4.6C, and 4.6D -- Basis Releases 6.10 and 6.20 -- Rename procedure -- General procedure -- Mixed layouts -- Appendix B. Merge in place: Working with metadata tables -- Creating metadata tables -- DDL for creation of ZMCODDB -- DDL for creation of ZMCOD_STOGROUP -- DDL for creation of ZMCOD_DATABASE -- DDL for creation of ZMCOD_TABLESPACE -- DDL for creation of ZMCOD_TABLES -- DDL for creation of ZMCOD_INDEXES -- Populating metadata tables -- SETUPSTG -- SETUPDB -- SETUPTS -- SETUPTAB -- SETUPIX -- JCL to run the population REXX procedures -- Moving metadata tables across systems -- JCL to unload metadata tables on the source system -- JCL to load metadata tables into the target system -- JCL to reset copy pending status on tablespaces -- Working with metadata tables -- DUPLICDB -- JCL to run the duplicate resolution REXX procedure -- Updating metadata tables -- POSTDDL -- POSTDDL2 -- JCL used to run the update REXX procedures -- Appendix C. Merge in place: Defining source objects in target system -- Generating DDL using DB2 Admin -- Invoking DB2 Admin -- JCLGEN -- JCLGENDB -- JCLGENTS -- JCLGENTB -- JCLGENIX -- JCL to run generation REXX procedure and submit the generated JCL -- Tailoring the output from DB2 Admin -- TAILORTS -- TAILORIX -- TAILORTB -- JCL to run the tailoring REXX procedures -- Sample DDL for creating objects -- Using filler tablespaces to reserve OBIDs -- Appendix D. Merge in place: Migrating the data -- Running the migration procedures -- PDS libraries used -- Input parameters for all migration procedures -- Extracting information from the metadata tables -- ZMCDBSR -- ZMCINSR -- ZMCTSSR -- PQUERYTB -- Issuing DB2 START and STOP DATABASE commands -- PDSNDBST -- Executing REPAIR on page set header pages -- PREPTSOB -- PREPINOB -- Deleting created target data sets and renaming source data sets -- PVSATSDE. PVSAINDE -- PVSATSAL -- PVSAINAL -- Executing REPAIR LEVELID on tablespaces and indexes -- PREPTSLV -- PREPINLV -- Generating DDL for views -- IBMVIST -- PCREATVI -- Generating DDL for altering object sizes -- IBMTSSR -- IBMINSR -- PTEPTSAL -- PTEPINAL -- Appendix E. Additional material -- Locating the Web material -- Using the Web material -- How to use the Web material -- Abbreviations and acronyms -- Related publications -- IBM Redbooks -- Other References -- SAP Notes -- Referenced Web sites -- How to get IBM Redbooks -- IBM Redbooks collections -- Index -- Back cover.

Sommario/riassunto

The Multiple Components in One Database (MCOD) feature of SAP enables a reduction in the number of DB2 systems that need to be installed and maintained. This significantly simplifies overall database administration and is considered one of the major DB2 competitive advantages. This IBM Redbooks publication will help systems administrators, database administrators, managers, and operation staff to plan, implement, and administer an SAP MCOD landscape with DB2 Universal Database (UDB) for OS/390 and z/OS as the database management system. We describe how to merge existing systems into a single DB2 subsystem. Two different methods are developed, each of them addressing different needs. For small-to-medium SAP systems

where high availability is not a requirement, we explain how to use SAP tools. For large systems, where the down time needed by SAP standard procedures is not acceptable, we document a technique to merge SAP components without moving the data. We also provide a cloning procedure using the Control Center. We show how to clone one component out of an MCOD landscape. We address the backup and recovery implications in an MCOD environment, to help database administrators plan accordingly. We also describe how to set up and use the Computer Center Management System (CCMS) in an MCOD landscape. Please note that the additional material referenced in the text is not available from IBM.