

1. Record Nr.	UNINA9910824228403321
Titolo	Effective zSeries performance monitoring using Resource Measurement Facility // Pierre Cassier ... [et al.]
Pubbl/distr/stampa	Poughkeepsie, N.Y., : IBM Corp., International Technical Support Organization, c2005
Edizione	[1st ed.]
Descrizione fisica	xii, 340 p. : ill
Collana	Redbooks
Disciplina	004.6/2
Soggetti	Computer networks - Workload - Management Computer systems - Management IBM computers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This edition applies to Version 1, Release 6 of z/OS (product number 5694-A01)." "April 2005."
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 RMF components -- Chapter 1. RMF data gatherers -- 1.1 Gathering data -- 1.1.1 Monitors for data gathering -- 1.1.2 Storing data -- 1.1.3 Defining measurement options -- 1.1.4 Using the RMF Sysplex Data Server to access data across the sysplex -- 1.2 Long term data gathering with Monitor I and Monitor III -- 1.2.1 Data gathering with Monitor I -- 1.2.2 Data gathering services with Monitor III -- 1.3 Snapshot monitoring with Monitor II -- 1.4 Short term data collection with Monitor III -- 1.4.1 Common Monitor III report measurements -- 1.5 RMF Linux data gatherer -- Chapter 2. RMF performance data front ends -- 2.1 The RMF performance management menu -- 2.2 Monitor II or Monitor III -- 2.3 Monitor II -- 2.3.1 Using the Monitor II ISPF session -- 2.4 Monitor III -- 2.4.1 Using the Monitor III ISPF session -- 2.4.2 Generating WTO messages -- 2.5 Postprocessor -- 2.5.1 Using the Postprocessor to create reports -- 2.6 Spreadsheet Reporter -- 2.6.1 Spreadsheet Reporter concept -- 2.6.2 Getting started -- 2.7 RMF Performance Monitoring -- 2.7.1 Using RMF PM -- 2.7.2 Troubleshooting -- 2.8 RMF Web browser interface --

2.8.1 Using RMF Web browser interface -- 2.9 Using RMF application programming interfaces -- 2.9.1 Calling services ERBDSQRY, ERBDSREC, ERB2XGDS, and ERB3XDRS -- Part 2 Setting up and customizing RMF components -- Chapter 3. Setup and customization of the traditional favorites -- 3.1 RMF customization -- 3.1.1 Basic customization -- 3.1.2 Advanced RMF configuration -- 3.2 Monitor I -- 3.2.1 Relationship to SMF -- 3.2.2 Monitor I customization considerations -- 3.2.3 Starting Monitor I -- 3.3 Monitor II -- 3.3.1 Customization of the Monitor II background session. 3.3.2 Starting the Monitor II background session -- 3.4 Monitor III -- 3.4.1 Customization of the Monitor III gatherer -- 3.4.2 Monitor III in-storage buffer -- 3.4.3 Starting the Monitor III gatherer -- 3.4.4 Using preallocated data sets -- 3.4.5 Transmitting Monitor III data to another location -- 3.5 Sysplex Data Server -- Chapter 4. Setup and customization of the new RMF facilities -- 4.1 RMF Spreadsheet Reporter -- 4.1.1 Prerequisites -- 4.1.2 Installation -- 4.1.3 Starting the Spreadsheet Reporter -- 4.2 RMF Distributed Data Server -- 4.2.1 Setting up the Distributed Data Server -- 4.3 RMF Linux data gatherer -- 4.3.1 Installation -- 4.3.2 Customization -- 4.3.3 Start RMF Linux data gatherer -- 4.4 RMF Performance Monitor -- 4.4.1 Installing RMF PM under Microsoft Windows -- 4.4.2 Installing RMF PM under Linux on your workstation -- Part 3 Using RMF to answer your performance questions -- Chapter 5. Performance analysis -- 5.1 Defining performance -- 5.1.1 Service level agreements (SLA) -- 5.2 Performance analysis overview -- 5.2.1 Performance management -- 5.2.2 General performance management metrics -- 5.2.3 Processor performance metrics -- 5.2.4 I/O performance and metrics -- 5.3 z/OS CPU time considerations -- 5.3.1 Capture ratio -- 5.3.2 Service definition coefficient (SDC) -- 5.3.3 z/OS preemptability -- 5.4 How to measure performance -- 5.5 Planning system capacity -- 5.6 Using RMF -- 5.6.1 Analyzing workload characteristics -- 5.6.2 Measuring resource utilization by workload -- 5.7 Workload Management (WLM) highlights -- Chapter 6. Using RMF for performance monitoring and problem diagnosis -- 6.1 RMF approaches to performance management -- 6.2 Running a performance health check -- 6.2.1 Health checking focusing on throughput -- 6.2.2 Checking the processor -- 6.2.3 I/O Subsystem -- 6.2.4 Coupling Facility. 6.3 Running problem diagnosis -- 6.3.1 Monitor III Sysplex Summary report -- 6.3.2 Monitor III Response Time Distribution report -- 6.3.3 Monitor III Work Manager Delays report -- 6.3.4 System Information report -- 6.3.5 Evaluating virtual storage problems -- 6.4 Diagnosing Coupling Facility performance -- 6.4.1 Coupling Facility response time and utilization -- 6.4.2 Coupling Facility structures -- 6.4.3 Coupling facility links -- 6.4.4 Links between Coupling Facilities -- 6.4.5 XCF signalling resources -- 6.4.6 Coupling Facility study with the Spreadsheet Reporter -- Chapter 7. Monitoring batch workloads using RMF -- 7.1 Introduction -- 7.1.1 Summary report as a good starting point -- 7.2 CPU delay investigation -- 7.2.1 Using the CPU Activity report -- 7.2.2 Using Monitor III -- 7.2.3 Using the Workload Activity report -- 7.3 I/O delay investigation -- 7.3.1 Investigating delays -- 7.3.2 Investigating cache activity -- 7.3.3 Investigating channel activity -- 7.3.4 ESS performance features -- 7.4 Other batch-oriented problems -- 7.4.1 Duration of performance periods -- 7.4.2 Capping delays -- 7.5 Batch performance -- 7.5.1 Batch window -- 7.5.2 Exploiting Data-in-Memory -- 7.5.3 Improving performance using BatchPipes® -- 7.5.4 VSAM Record Level Sharing (RLS) -- 7.5.5 WLM batch initiator -- Chapter 8. Monitoring transactional workloads using RMF -- 8.1 Introduction -- 8.2 Monitoring CICS workload -- 8.2.1 CICS

and WLM -- 8.2.2 Using the Workload Activity report -- 8.2.3 Using Monitor III -- Chapter 9. Understanding the new RMF reporting capabilities -- 9.1 Workload Licensing Charges considerations -- 9.1.1 Defined Capacity -- 9.1.2 Monitoring Defined Capacity -- 9.2 Intelligent Resource Director -- 9.2.1 IRD in action and RMF reports -- 9.2.2 IRD and capping -- 9.3 Analyzing crypto performance -- 9.3.1 Crypto and workload reports. 9.4 zAAP on RMF reports -- 9.4.1 A sample scenario -- 9.4.2 Using and Delay samples -- 9.4.3 RMF reports -- 9.4.4 zAAP Projection Tool -- 9.5 Monitoring UNIX System Services (USS) applications -- 9.5.1 OMVS System Call activity -- 9.5.2 OMVS Process activity -- 9.5.3 OMVS Inter-process communication -- 9.5.4 HFS Global Statistics report -- 9.5.5 HFS File System Statistics report -- 9.5.6 OMVS process data report -- 9.6 Monitoring WebSphere Application Server workload -- 9.6.1 WebSphere Application Server configuration -- 9.6.2 Some specific definitions for WebSphere Application Server -- 9.6.3 WLM Delay Monitoring -- 9.6.4 Performance monitoring -- 9.6.5 Performing problem diagnosis -- Chapter 10. Using RMF to investigate Linux performance -- 10.1 Linux -- 10.1.1 Linux on zSeries -- 10.1.2 Linux performance metrics -- Appendix A. Formulas and laws in performance management -- Little's law -- Markov's equation -- 80/20 Rule -- 80/20 rule and service class periods -- Partition's law -- Law of diminished returns (LDR) -- Principle of locality -- Related publications -- IBM Redbooks -- Other publications -- Online resources -- How to get IBM Redbooks -- Help from IBM -- Index -- Back cover.
