MDM Performance Must-Gather

This document contains confidential material. It may only be released upon the written consent of IBM and the client.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright holder.

Table of Contents

Static data:	4
Hardware	4
Software	4
MDM	
WAS	
DB2	
Runtime information:	5
Batch Processors / Client Application:	
MDM / Application Server	
DB2 / DB Server	

Static data:

Hardware

 Overall architecture and components: servers involved (application server, database server), network (Best if shown as a diagram)

For each server:

- System Architecture
 - o uname –a
 - o vmstat -s
 - o vmstat -v
- Disks
 - o **df** –**k**
 - o Raid configuration
 - Any additional network storage information
- Network
 - # of interfaces in use per LPAR/Partition
 - o bandwidth at weakest infrastructure link (gigabit?, 100BaseT?, full duplex?)
 - o are there any content-routing or load-balancing components implemented?

Software

MDM

- Detailed information of customized transactions
- Log4JProperties (inside properties.jar)
- Extensions that are in use in the server and data model

WAS

- WAS Version (This can be found in the welcome page of the admin console, top right)
- Has a cluster been configured?
- How many WAS instances of MDM?
- How many other applications are installed on the WAS instances with MDM?
- JVM setting
 - o Java Version (full output of java -version) and Brand (ie IBM JDK 1.5)
 - Heap size min and max (as set by WAS admin console)
 - o Any custom command line arguments provided to the JVM
- Data source definition
 - Oracle Thin Driver version
 - Connection pool setting: mix and max pool size,
 - o Prepared statement size

DB2

- DB2 version (db2level)
- Databases involved other than MDM?
- Snapshots from an active run
- Partitioning/Clustering Configuration
- Storage Configuration

Runtime information:

Batch Processors / Client Application:

- Configuration file for batch (if applicable)
- Any relevant logs collected from client or batch
- JVM "verbose garbage collection" output "java –verbosegc"
- CPU and Memory: vmstat with a measurement interval of 60 seconds (if the Batch Processor / Client Application is running on MDM Application server, use the vmstat interval specified in the section below)

MDM / Application Server

- List of transactions used for load run and their frequency of execution
- MDM Application and WAS logs collected (all the logs generated in that directory)
- Performance Monitor Enabled and set to level 2:
 - /IBM/DWLCommonServices/PerformanceTracking/level = 2
 - /IBM/DWLCommonServices/PerformanceTracking/enabled = true
 - o /IBM/DWLCommonServices/PerformanceTracking/SuspectProcessing/enabled = true
 - /IBM/DWLCommonServices/PerformanceTracking/PartyMatcher/enabled = true
- JVM "verbose garbage collection" output "java –verbosegc" (there is a check box to enable this in the WAS admin console)
- CPU and Memory: vmstat with a measurement interval of 30 seconds
- I/O: iostat –xtc with a measurement interval of 30 seconds
- WAS PMI should be left at the default level (this has a negligible impact)
- Enable Logging in and Watch the Tivoli Performance Viewer during the run, specifically:
 - DWL/Customer datasource pool size
 - DWL/Customer datasource connections
 - ORB Thread count
- For details on the Tivoli Performance Viewer, please refer to chapter 14.3 in the following IBM Redbook: http://www.redbooks.ibm.com/abstracts/sg246392.html?
 Open

DB2 / DB Server

- Snapshots with and without resets (DB2 LUW)
- CPU and Memory: vmstat with a measurement interval of 30 seconds
- I/O: iostat –xtc with a measurement interval of 30 seconds (AIX and Linux, use equivalent for Solaris)
- Any I/O runtime data from Storage System (SAN)
- APAR reports (Oracle)
- Omegamon long format accounting report (DB2 z/OS):

http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2/topic/com.ibm.db2.doc.admin/dsna gj18.pdf?noframes=true