

Set Up DB Monitoring for SAP  
NetWeaver MDM in Solution Manager  
Diagnostics

# SAP NetWeaver® Master Data Management 7.1

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## Typographic Conventions

Type Style	Represents
<i>Example Text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.
	Cross-references to other documentation.
<b>Example text</b>	Emphasized words or phrases in body text, graphic titles, and table titles.
EXAMPLE TEXT	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example text	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
<b>Example text</b>	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<b>&lt;Example text&gt;</b>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

## **Set Up DB Monitoring for SAP NetWeaver MDM in Solution Manager Diagnostics**

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# Set Up DB Monitoring for SAP NetWeaver MDM in Solution Manager Diagnostics

## Introduction

For remote monitoring of MDM databases you can use the DBA Cockpit. The DBA Cockpit is a cross-platform tool that you can use to monitor and administer your database. It provides a graphical user interface (GUI) for all actions and covers all aspects of handling a database in your system landscape.

You access the DBA Cockpit by calling transaction DBACOCKPIT\_SOLMAN in the Solution Manager (ABAP stack) or you select *OS and DB* → *Remote DB Monitoring* in the Solution Manager diagnostics.

The following databases are supported

- [Oracle DB \[Page 2\]](#)
- [MSSQL DB \[Page 3\]](#)
- [MaxDB \[Page 4\]](#)
- [DB2 UDB \[Page 5\]](#)

The following diagram shows an example of remote monitoring of a MAXDB MDM database from the Solution Manager diagnostics:

Remote DB Monitoring			
Overview of Database Activity			
Menu   Back   Cancel   System   Refresh   Restart Monitor   Print Version   Full Screen On / Off			
System Configuration   DB Connections			
System MDM_wdfd			
axDB/liveCache Database Administration			
DB Attributes			
Performance			
Activities Overview			
Display: Transactions			
Database Analyzer			
SQL Locks			
Kernel Threads			
I/O Operations			
SQL Performance			
Space			
Backup and Recovery			
Configuration			
Jobs			
Alerts			
Diagnostics			
Administration			
Tools			
Database Name: MDM Database Server: wdfd00191824a Date / Time: 15.08.2007 21:20:11 Database Start: 23.07.2007 11:25:49			
SQL Statements			
SQL Statements	19.948.053	Creates	64
Prepares	5.701.410	Alters	32
Executes	6.007.750	Drops	
Rollbacks	776	DB Procedure Calls (External)	
Commits	121.844	DB Procedure Calls (Internal)	1
Updates	74.394	Deletes	3.18
Rows Read	209.053	Rows Read	1.45
Rows Changed	74.097	Deleted Rows	1.13
Selects and Fetches	6.020.647	Inserts	2.83
Rows Read	79.973.864	Rows Added	2.70
Qualified Rows	9.778.404		
I/O Activity			
Physical Reads	3.318	Logical Reads	51.535.90
Physical Writes	1.512	Logical Writes	14.706.13
Lock Activity			
Available Entries	76.200	Row Locks	3.886.90
Maximum set	1.800	Table Locks	3.894.86
Average set	3		
Lock Owner	1	Collisions	
Lock Requester	0	Escalations	
Logging Activity			
Log Pages Written	77.599	Group commits	
Waiting for Log Writer	77.512	Log I/O Queue Overflow	
Scan and Sort Activity			
Table Scans	4.039.894	Cache Sorts	
Index Scans	807	Row Sorts	

## Prerequisites

- SAP Solution Manager 7.0.

## Setup

The setup of MDM database monitoring basically consists of the following parts:

- Installation of DBMS-specific client software at operating system level of your Solution Manager host, installation of SAP database-specific software and additional configuration steps at operating system level.
- Establishing a remote database connection between the DBA Cockpit and the MDM database.

The setup steps are DBMS-specific. If the DBMS of the Solution Manager is the same as the DBMS of the remote database to be monitored, the installation of an additional database client may not be required.

## Documentation

You find up-to-date information about the DBA Cockpit and the prerequisites for monitoring remote systems in SAP Note 1027146.

For up-to-date information about the DBA Cockpit for your database platform(s):

- DB2 for Linux, UNIX, and Windows: SAP Note 1027336
  - MaxDB SAP Note 1028751
- Online documentation: [Database Administration in CCMS: MaxDB](#)
- Microsoft SQL Server: SAP Note 1027512
  - Oracle: SAP Note 1028624

You can find the appropriate documentation attached to each SAP Note.

# 1 Connecting a Remote Oracle DB to Solution Manager Diagnostics

This description is an example of the setup on a Windows operating system. For UNIX operating systems you have to perform similar steps.

## 1. Install the Oracle Instant Client

If your Solution Manager Diagnostics runs on an Oracle database, you can skip this step.

Otherwise, install the Oracle Instant Client as described in SAP Note 819829 (if your Solution Manager runs on Unix) or SAP Note 998004 (if your Solution Manager runs on Windows).

## 2. Deploy SAP DB-Dependent Software

Ensure that the correct database library *dboraslib.<ext>* exists in the kernel directory. If not, download the Oracle database-dependent software archive from the *SAP Software Distribution Center* at [www.service.sap.com/swdc](http://www.service.sap.com/swdc) → *Download* → *Support Packages and Patches* → *Entry by Application Group* → *SAP NetWeaver* → *SAP NETWEAVER* → *SAP NETWEAVER 7.0* → *Entry by Component* → *Application Server ABAP* → *SAP KERNEL 7.00 64-BIT UNICODE* → *<OS Version>* → *ORACLE*.

Make sure you download the same patch as your kernel. Extract the archive to a local temp directory.

Copy *dboraslib.<ext>* from the extracted archive into the kernel directory of your ABAP stack. If your SAP Solution Manager runs on several application servers, add the file names of the added files to the *<db\_client>.lst* file in the kernel directory so that the files are distributed to the other instances the next time the system is started.

## 3. Maintain the Oracle Net Configuration Files

Refer to the section *Installing Instant Client for Secondary Connection* in the SAP Note 819829. Afterwards, restart your Solution Manager.

## 4. Establish a Remote Database Connection between the DBA Cockpit and the Remote Database

Refer to the section *Configuring Systems for Remote Monitoring Using Remote Database Connections* in the document *The DBA Cockpit*.

This document is attached to SAP Note 1028624.

## 2 Connecting a Remote MSSQL DB to Solution Manager Diagnostics

Refer to the section *Required Steps to Set Up Remote Monitoring of an SQL Server Database* in the document *The DBA Cockpit for SAP Systems Based on Kernel 7.00*. This document is attached to SAP Note 1027512.

If your SAP Solution Manager runs with an MSSQL database, you can skip the step *Preparing the Database API on the Monitoring Application Server*.



SAP Solution Manager systems with application servers running on non-Windows operating systems can not be used for remote monitoring of SQL Server, since client software for MS SQL is only available for Windows.



## 3 Connecting a Remote MaxDB to Solution Manager Diagnostics

### 1. Install MaxDB Client

If the SAP Solution Manager system runs with a database system other than MaxDB, you must install the MaxDB client software on that SAP Solution Manager system. In this case follow SAP Note 649814.

If the SAP Solution Manager system runs with a MaxDB database, this step is not required.

### 2. Establish a Remote Database Connection between the DBA Cockpit and the Remote Database

1. Create a database connection for remote monitoring of MaxDB databases via transaction DB59.  
More information: [User Data](#).
2. Call transaction DB59, double-click on the new system entry and select *Tools* → *DBA Planning Calendar*. This automatically integrates the DB59-database connection into the DBA Cockpit.

## **4 Connecting a Remote DB2 UDB to Solution Manager Diagnostics**

### **1. Install DB2 Runtime Client**

If the SAP Solution Manager system runs with a database system other than DB2 UDB, then you must install the DB2 UDB client software on that SAP Solution Manager system. In this case refer to the instructions for database client installation in SAP Note 200164.

This step is not required if the SAP Solution Manager system runs with a DB2 UDB database.

### **2. Establish a Remote Database Connection between the DBA Cockpit and the Remote Database**

Refer to the section *Configuring Systems for Remote Monitoring Using Remote Database Connections* in the document *Database Administration Using the DBA Cockpit: IBM DB2 for Linux, UNIX, and Windows*

This documentation is attached to SAP Note 1027336.