cockpit
IT Service Manager

Monitoring - Database Access

FAQ document

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Introduction

The purpose of this document is to help technicians set up database access in order to monitor access remotely via the Cockpit IT Service Manager Engine.

DB2

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to DB2 databases. The engine must know the listening port of the database to monitor (50000 ...).

II. User rights

The monitoring user requires only read rights on the target database.

SAP HANA

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to the HANA databases. The engine must know the listening port of the database to monitor. The JDBC HANA listening port varies according to the SAP instance number: 3 <Instance number>15

II. User rights

The monitoring user only needs the SELECT as a privilege.
The user must be able to access the system views (schemas SYS and _SYS_STATISTICS).

III. Parameters

The "ODBC/JDBC" access must be authorized for the user.
From SAP Hana Studio, disable the "disable ODBC/JDBC connection" option.
Alternatively, you can also use the SQL statement:
ALTER USER <user_name> ENABLE CLIENT CONNECT

SAP MaxDB

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to SAP MaxDB databases. The engine must know the listening port of the database to monitor (7210 ...).

II. User rights

- The user must be a “Database user”.
- The database user Class can be “Standard”.
- Grant the necessary privileges to access data and database procedures as needed.

> Note: Up to version 7.7 of MaxDB, the password is limited to 9 characters. From version 7.8 the limit is 256 characters

MS SQL

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to MS SQL databases. The engine must know the listening port of the database to monitor (1433 ...).

II. User rights

The monitoring user requires only read rights on the target database.

MySQL

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to MySQL databases. The engine must know the listening port of the database to monitor (3306 ...).

II. User rights

The monitoring user requires only read rights. The following SQL query can help you to create the user. In this example, the user name is "umonitor". It will:

- connect to the database from all servers
- access the "mydatabase" database
- execute "SELECT" SQL queries
- it will be limited (number of queries, number of connections…)

```
CREATE USER 'umonitor'@'%' IDENTIFIED BY 'mypassword';

GRANT SELECT ON `mydatabase`.*
TO 'mydatabase'@'%'
IDENTIFIED BY 'mypassword'
WITH MAX_QUERIES_PER_HOUR 100
MAX_CONNECTIONS_PER_HOUR 100
MAX_UPDATES_PER_HOUR 1
MAX_USER_CONNECTIONS 5;
```

PostgreSQL

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to PostgreSQL databases. The engine must know the listening port of the database to monitor (5432 ...).

II. User rights

The monitoring user requires only read rights on the target database.

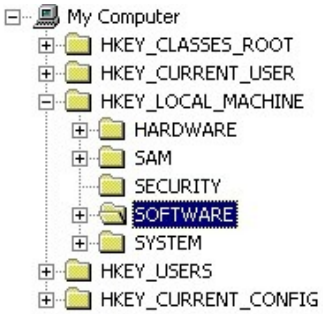
Oracle

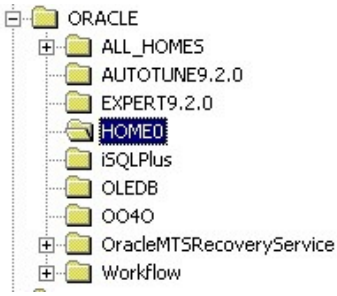
I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to Oracle databases. The engine must know the listening port of the database to monitor (1521, 1527 ...).

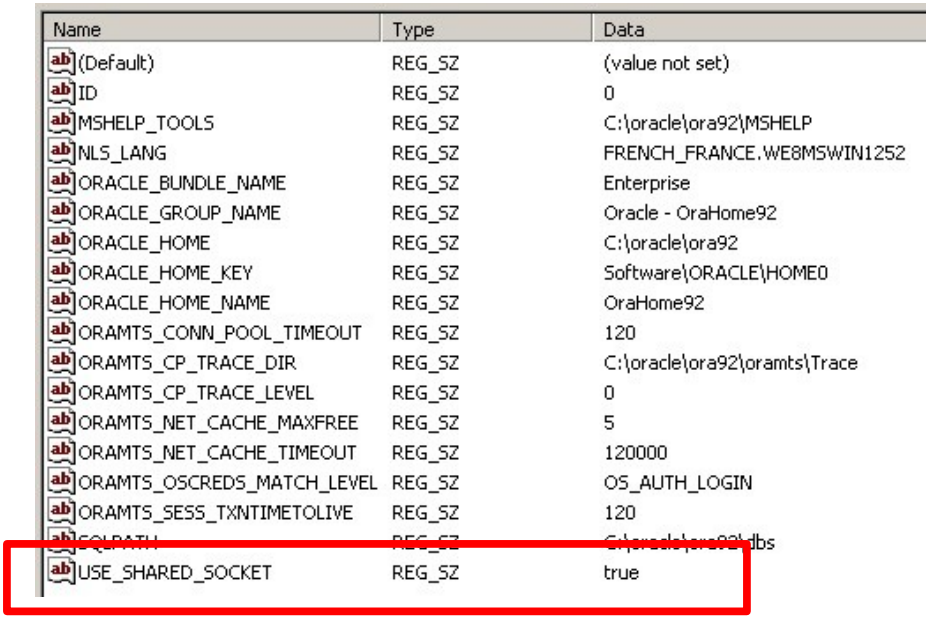
II. Specific parameter for Windows

If the Oracle database is installed on a Windows operating system, check the registry.
Follow the following path:
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME0





The key "USE_SHARED_SOCKET" must have "true" value.



Name	Type	Data
(Default)	REG_SZ	(value not set)
ID	REG_SZ	0
MSHELP_TOOLS	REG_SZ	C:\oracle\ora92\MSHELP
NLS_LANG	REG_SZ	FRENCH_FRANCE.WE8MSWIN1252
ORACLE_BUNDLE_NAME	REG_SZ	Enterprise
ORACLE_GROUP_NAME	REG_SZ	Oracle - OraHome92
ORACLE_HOME	REG_SZ	C:\oracle\ora92
ORACLE_HOME_KEY	REG_SZ	Software\ORACLE\HOME0
ORACLE_HOME_NAME	REG_SZ	OraHome92
ORAMTS_CONN_POOL_TIMEOUT	REG_SZ	120
ORAMTS_CP_TRACE_DIR	REG_SZ	C:\oracle\ora92\oramts\Trace
ORAMTS_CP_TRACE_LEVEL	REG_SZ	0
ORAMTS_NET_CACHE_MAXFREE	REG_SZ	5
ORAMTS_NET_CACHE_TIMEOUT	REG_SZ	120000
ORAMTS_OSCREDS_MATCH_LEVEL	REG_SZ	OS_AUTH_LOGIN
ORAMTS_SESS_TXNTIMETOLIVE	REG_SZ	120
SQLPATH	REG_SZ	C:\oracle\ora92\dbs
USE_SHARED_SOCKET	REG_SZ	true

III. User rights

The monitoring user requires only read rights. The following SQL queries can help you to create the user. In this example, the user name is "umonitor".

```
CREATE USER "umonitor" IDENTIFIED BY "SUPERVIS"
DEFAULT TABLESPACE SYSTEM
QUOTA UNLIMITED ON SYSTEM;

GRANT SELECT ANY DICTIONARY TO umonitor;

GRANT SELECT ANY TABLE TO umonitor;

GRANT "CONNECT" TO "umonitor";

GRANT "RESOURCE" TO "umonitor";

GRANT CREATE SESSION TO umonitor;

ALTER USER "umonitor" DEFAULT ROLE NONE;
```

IV. Error management

The error “ORA-01017: invalid username/password; logon denied” has various reasons:

- In the portal, check the configuration of the database:
  - Verify the username and password filled out.
  - Uncheck the “DBA option (Oracle)”, if the user has not the role DBA and the parameter is checked, the error will be “invalid username/password”.
- Check the Oracle parameter “SEC_CASE_SENSITIVE_LOGON”, since Oracle 11g this parameter is “TRUE” by default. Try with “FALSE” value.

Sybase

I. Ports

The Cockpit IT Service Manager Engine uses JDBC access to connect to Sybase databases. The engine must know the listening port of the database to monitor (4100 ...).

II. User rights

The monitoring user requires only read rights on the target database, for this purpose you can use the "mon_role" role.

GRANT role mon_role to userdb

Portal Configuration

Objectives: Configure the databases and their connections.

Menu: Infrastructure > Other > Databases

Principles:

- Edit or create a database.
- Fill in the following fields.

Tab	Field	Informations
Configuration	Organization	The database is mono-organization.
	Equipment	A database is attached to an equipment.
	Description	The description is used in the menus to identify the database.
	Type	Select the database type.
	Monitoring	Active: Database related supervision checks are performed and metrics collected. Inactive: Database related supervision checks are not performed and metrics are not collected.
	Metrics	Check this option to enable metric collection. This option is not available if the option “Monitoring” is not active.
	Type	Basic: Default connection by database type. Custom: Enter the URL connection. In the example below the connection to a MSSQL database is set with a domain user: jdbc:jtds:sqlserver://<equipement>:<port>/<database>;charset=utf-8;useNTLMv2=true;domain=<Domain_Name>;user=<Username>
	Username	
	Password	
	Options	Oracle: Select “DBA option (Oracle)” if the is “administrator”. Sybase: Select « Password encryption (Sybase) » if the password is encrypted.
	Port	Connection port (only for basic connections).
	Database	Name of the database.
Databases	Databases	For the instance of databases (examples: MSSQL, Sybase), select the databases that you want collect the metrics.
	Metrics	Active the option for databases for which you want to collect the metrics. The option “Metrics” in “Configuration” tab must be active.

Document end