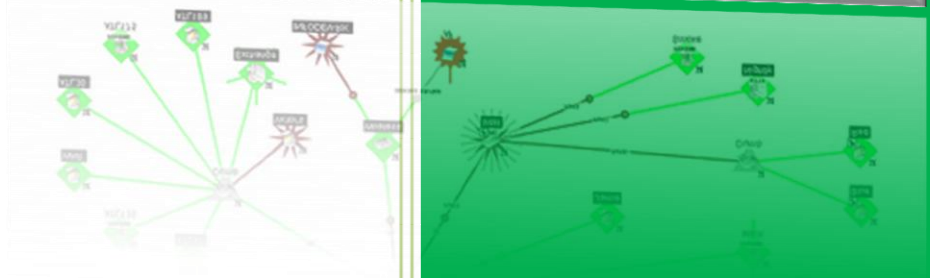
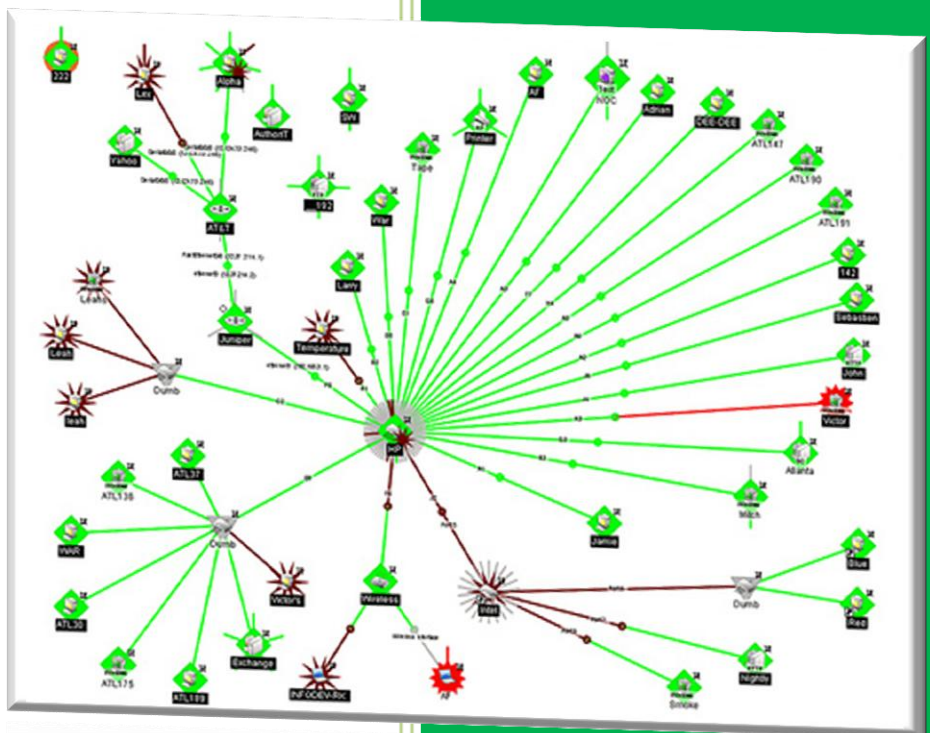


# Oracle Server Monitoring in WhatsUp Gold



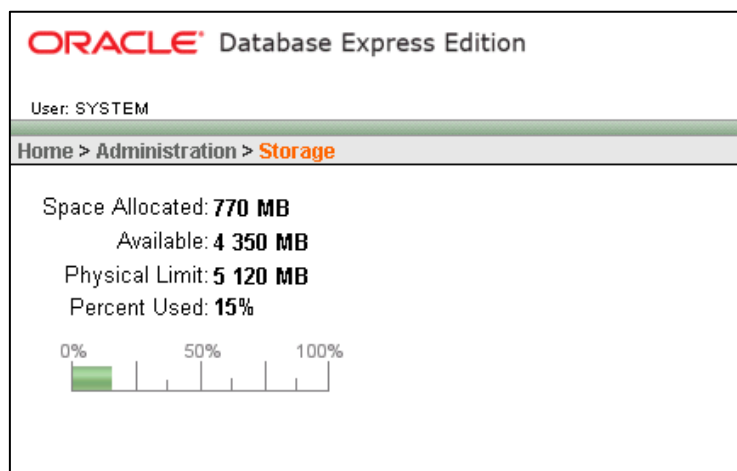
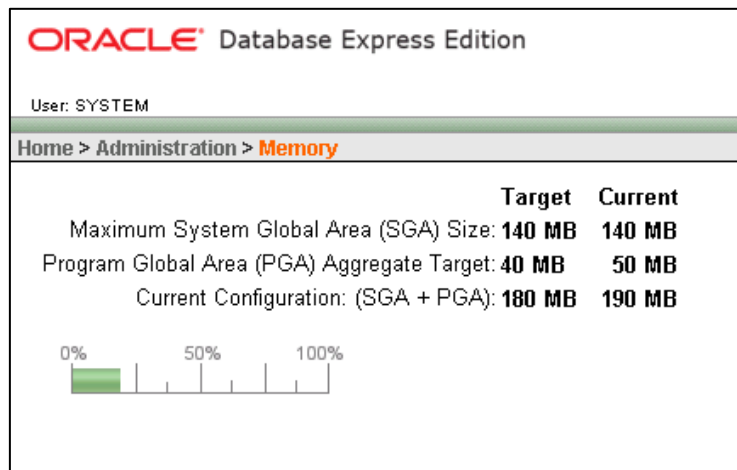
## Introduction:

In order to monitor Oracle Server and Databases, it is possible to rely on the Oracle web interface directly. It offers some informations and performances counters of Oracle environments. This interface allow to obtain a global view of Oracle Server and some counters of Oracle Databases like active sessions or in/out instance disk.

To centralize all monitoring informations in a single console, we would like integrate Oracle Monitoring in our WhatsUp Gold Console. We will describe in this document, how to implement an Oracle monitoring and how to configure different monitors.

## Oracle performance counters:

The Oracle web interface offers a complete solution to monitor an Oracle environment. You can access some Oracle System counters like memory or storage.



In Monitor interface, we have System Statistics informations.

**ORACLE** Database Express Edition

User: SYSTEM

Home > Administration > Database Monitor > **System Statistics**

**Refresh Report**      **Save Statistics**

Show delta between current and saved values

<p><b>Physical I/O Statistics</b></p> <p>physical reads 9 776 physical writes 675</p>	<p><b>Logical I/O Statistics</b></p> <p>session logical reads 587 013 db block changes 66 821 redo size 9 494 772</p>
<p><b>Time Statistics (Seconds)</b></p> <p>CPU used by this session 17,84 DB time 977,32 cluster wait time 0,00 concurrency wait time 0,23 application wait time 0,53 user I/O wait time 20,86</p>	<p><b>SQL Cursor Statistics</b></p> <p>opened cursors current 129 session cursor cache hits 25 160 parse time elapsed 803 parse count (total) 23 121 parse count (hard) 2 002 execute count 46 141</p>
<p><b>Memory Statistics</b></p> <p>session uga memory 25 784 130 612 session pga memory 41 488 300 workarea executions - optimal 6 567 workarea executions - onepass 0 workarea executions - multipass 0</p>	
<p><b>Transaction Statistics</b></p> <p>user commits 276</p>	

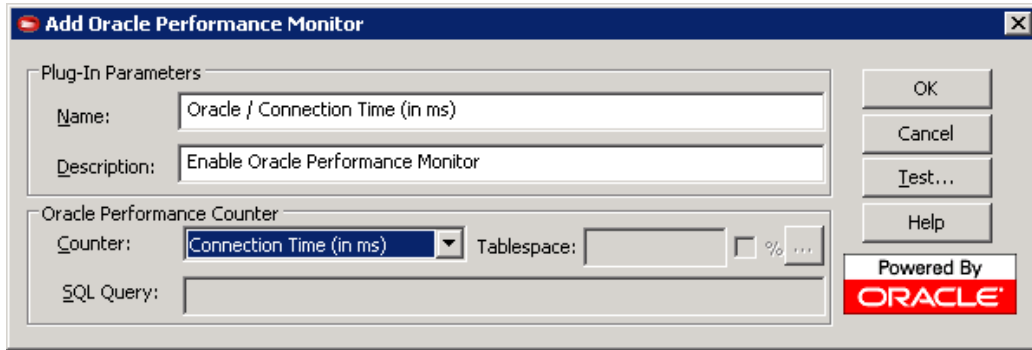
To simplify the monitoring of our environment, we wanted to integrate all of our monitoring data in a single console. So we use Oracle Performance Monitor and Oracle Active Monitor in WhatsUp Gold.

## Monitoring Oracle in WhatsUp Gold

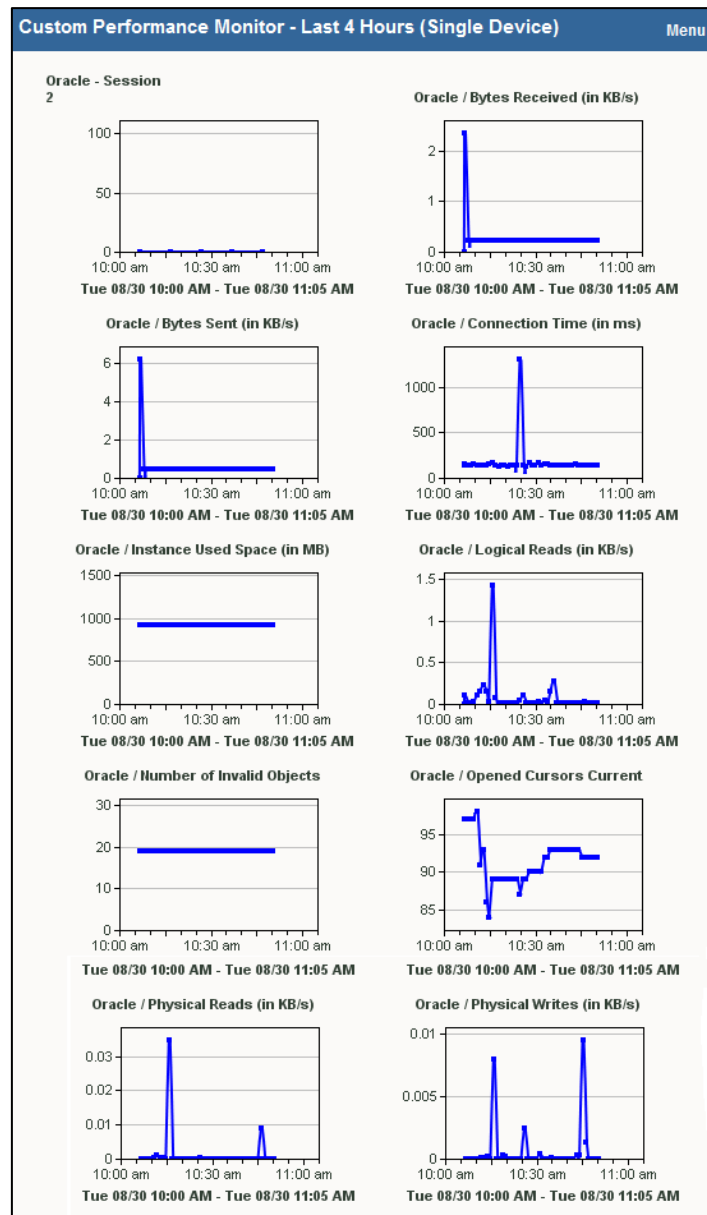
In WhatsUp Gold, 2 tools allow monitoring Oracle environment. First, Oracle Performance Monitor generates some performance counters and graphs from different parameters of Oracle System. Then, Oracle Active Monitor enables the alert thresholds establishment on parameters to be alert in case of trouble. Both tools allow WhatsUp Gold to offer a complete solution to monitor Oracle environment.

In the next part, we will explain how we implemented such a solution, we will detail some counters.

Oracle Performance monitor allows checking some pre-defined parameters or manual parameters. To monitor a specific parameter, we need to use an SQL Query.



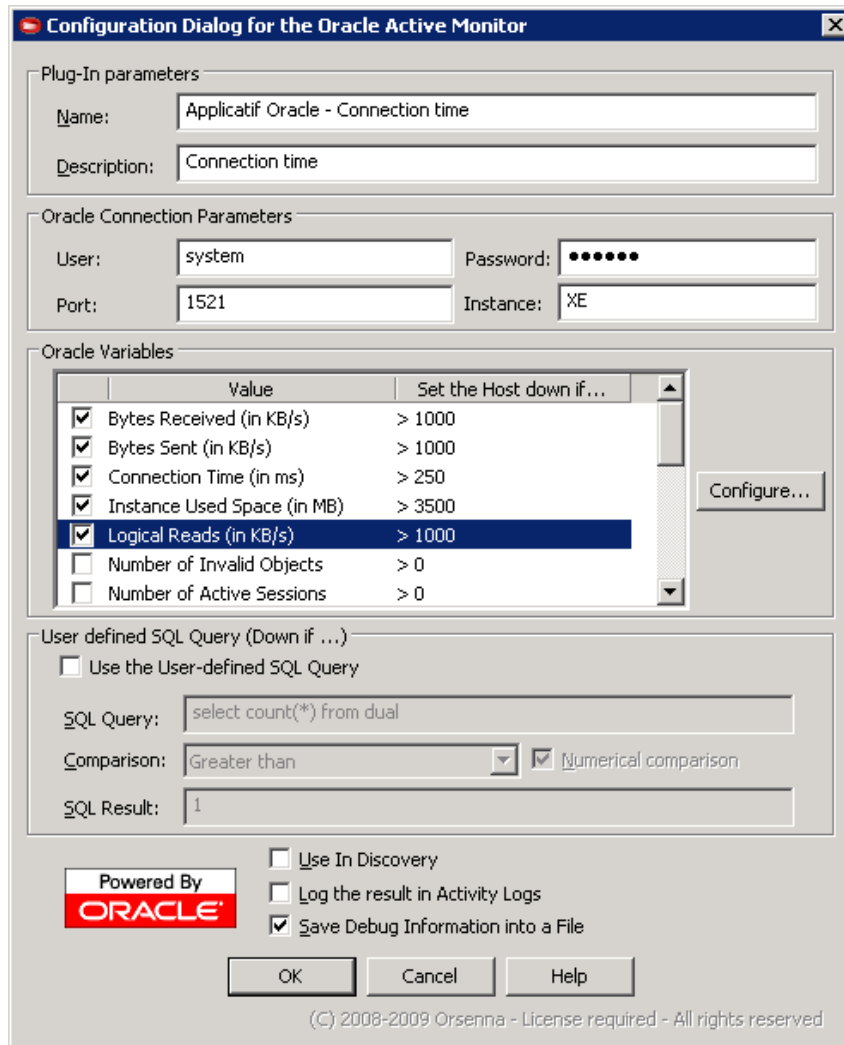
In our case, we implemented some parameters like connection time, user sessions ...



## Last poll: Oracle Performance Monitor

Custom Performance Monitor - Last Poll (Single Device)				Menu
Name	Poll Time	Time Delta	Value	
Oracle - Session 2	Tue 08/30 10:46 AM	0.17 hour	0	
Oracle / Bytes Received (in KB/s)	Tue 08/30 10:50 AM	0.05 hour	0,229492	
Oracle / Bytes Sent (in KB/s)	Tue 08/30 10:50 AM	0.05 hour	0,455016	
Oracle / Connection Time (in ms)	Tue 08/30 10:50 AM	0.05 hour	141	
Oracle / Instance Used Space (in MB)	Tue 08/30 10:50 AM	0.05 hour	917,504	
Oracle / Logical Reads (in KB/s)	Tue 08/30 10:50 AM	0.05 hour	0,010246	
Oracle / Number of Invalid Objects	Tue 08/30 10:50 AM	0.05 hour	19	
Oracle / Opened Cursors Current	Tue 08/30 10:50 AM	0.05 hour	92	
Oracle / Physical Reads (in KB/s)	Tue 08/30 10:50 AM	0.05 hour	0	
Oracle / Physical Writes (in KB/s)	Tue 08/30 10:50 AM	0.05 hour	0	

Then, Active Monitor allows implementing alert thresholds on different parameters. So, more access some counters, WhatsUp Gold will alert in case of trouble.



**Configuration Dialog for the Oracle Active Monitor**

Plug-In parameters

Name:

Description:

Oracle Connection Parameters

User:  Password:

Port:  Instance:

Oracle Variables

	Value	Set the Host down if...
<input checked="" type="checkbox"/>	Bytes Received (in KB/s)	> 1000
<input checked="" type="checkbox"/>	Bytes Sent (in KB/s)	> 1000
<input checked="" type="checkbox"/>	Connection Time (in ms)	> 250
<input checked="" type="checkbox"/>	Instance Used Space (in MB)	> 3500
<input checked="" type="checkbox"/>	Logical Reads (in KB/s)	> 1000
<input type="checkbox"/>	Number of Invalid Objects	> 0
<input type="checkbox"/>	Number of Active Sessions	> 0

Configure...

User defined SQL Query (Down if ...)

Use the User-defined SQL Query

SQL Query:

Comparison:   Numerical comparison

SQL Result:

Powered By **ORACLE**

Use In Discovery

Log the result in Activity Logs

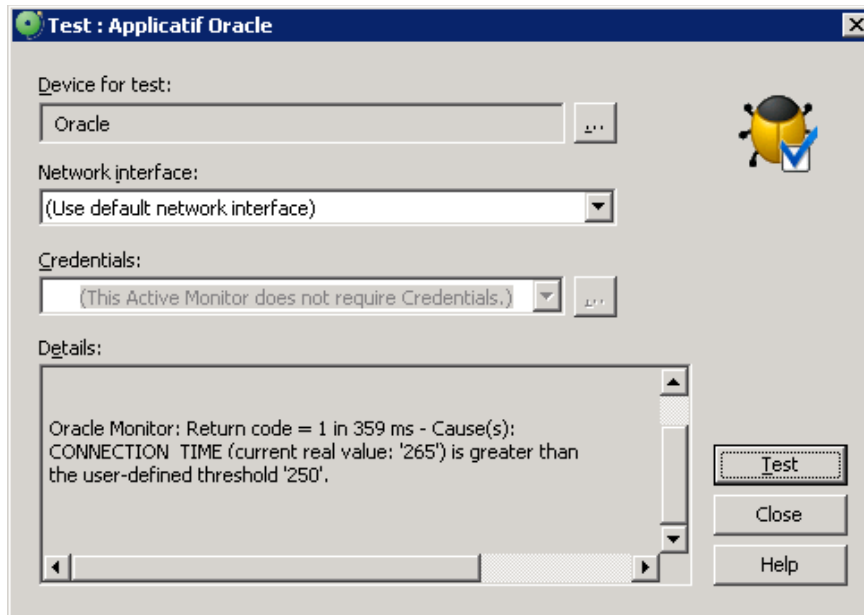
Save Debug Information into a File

OK Cancel Help

(C) 2008-2009 Orsenna - License required - All rights reserved

---

**Generated alert: Time response greater than threshold**



To conclude on this solution, we can say that WhatsUp Gold offers a complete solution to monitor your Oracle environments. Like in the Oracle web interface you can access some performance counters, and more you can fix alert thresholds on this different parameters.

Oracle Performance and Active monitor are available in the last version of WhatsUp Companion. You will find all informations on this plugin, in this address:

<http://www.orsenna.com/store/>