



ORACLE

Weblogic – OBPM Recommendations

WebLogic 12c (12.1.3, 12.2.1.3, 12.2.1.4.0)

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Program agenda

- 1 Introduction
- 2 Data Source Configuration
- 3 JTA Configuration

Introduction

This document is prepared for the Weblogic Server Administrators who manage and configure the domain resources like managed server, cluster, datasource, JMS server etc.

Weblogic resources are created with a default value for each parameter. This document will only highlight those parameter whose value must be modified other than the default value.

Note: These are the product recommended values which work for most cases. However during the product implementation one has to understand the product usage at site, monitor these resource utilization to see if the recommended parameter values are working for those usages and adjust the parameter values accordingly.

Data Source Configuration

OBPM require two types of data sources as mentioned in the setup guide. In this section we will list down the configuration parameter setting common for both types of datasource followed by setting for specific datasource.

Types of datasoruce:

1. Non-XA Datasource with JTA Support
2. Non-XA Datasource without JTA Support
3. XA Datasource

Data Source Configuration – Common Setting

Section	Parameter Name	Value	Description
Connection Pool	Initial Capacity	50	Pool will be reserved with this number of connections once created.
Connection Pool	Maximum Capacity	150	Maximum number of connections this pool can create.
Connection Pool	Minimum Capacity	50	Should be same as initial capacity. Shrinking configuration uses this value.
Connection Pool	Inactive Connection Timeout	900	Time duration for which a connection once in use can remain idle. After this time the connection will be release to a pool and a thread that is using this connection will get an exception.

Data Source Configuration – Non-XA Datasource with JTA Support

These are the datasources ending with `_GTXN`, used in a OLTP flow. These configuration enable the XA feature on the connection only when multiple resources are involved in a transaction, thereby eliminating the XA overhead in cases where a simple connection is sufficient.

Section	Parameter Name	Value	Description
Transaction	Supports Global Transaction	Check	Connections from this pool will be managed by Weblogic Transaction Manager (JTA) when this is enabled.
Transaction	Logging Last Resource	Select	This is an efficient option to enabled XA behavior on this connection when multiple resources are involved in a transaction. This connection will be the last one to get committed in a transaction.
Connection Pool	Inactive Connection Timeout	0	Disable the connection recovery at pool level. JTA timeout will control this.

JTA Configuration

Section	Parameter Name	Value	Description
JTA	Timeout seconds	900	Time duration after which the transaction will be terminated and underneath resources will be released back to their respective pool.

Thank you

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