

# Thread Dump in JBoss and WebSphere (WAS)

What is a Thread Dump?

A thread dump is like taking a snapshot of all the threads (small tasks) running in a Java application at a moment.

Why do we need it?

- To check why server is hanging, slow, or using high CPU.
- To find stuck, waiting or blocked threads.
- To detect deadlocks and bottlenecks.

Real-Life Example:

Like seeing what every cook in a kitchen is doing - cooking, waiting, or stuck.

How to Take Thread Dump in JBoss:

1. Using jstack:

Find PID: `ps -ef | grep java`

`jstack 12345 > /tmp/thread_dump.txt`

2. Using CLI:

`./jboss-cli.sh --connect`

`:dump-threads`

How to Take Thread Dump in WAS:

1. Using Admin Console:

## 2. Using kill -3:

Find PID: `ps -ef | grep java`

`kill -3 23456`

(This creates `javacore.*.txt` in logs folder)

Where is the thread dump?

- JBoss: as you save it, e.g. `/tmp/thread_dump.txt`

- WAS: logs directory as `javacore.*.txt`

Summary:

Feature | JBoss | WebSphere

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How | jstack, CLI | Admin Console, kill -3

File | `thread_dump.txt` | `javacore.*.txt`

Why | Debug hangs/slowness | Same

Thread dumps help diagnose stuck threads, long tasks, deadlocks, and performance issues.