



Best practices

Troubleshooting Platform Symphony

MapReduce

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Introduction to Platform Symphony MapReduce

IBM Platform Symphony MapReduce (PMR) is an implementation of the MapReduce framework by IBM Platform Computing. It is a special application running on Platform Symphony. PMR is compatible with the Hadoop interface, and is more powerful than Hadoop because it provides more advanced resource management, as well as job and task scheduling abilities.

When running a MapReduce job on PMR, errors may occur. To help determine the root cause of an error, here are some tips for troubleshooting PMR.

Platform Symphony MapReduce log system

Platform MapReduce (PMR) is an application of Symphony, so PMR's log system contains Symphony logs including SD, SSM, and SIM, as well as MapReduce-specific logs.

The logs of SD, SSM, and SIM are written into the soam log directory located at `${EGO_TOP}/soam/logs` and the MapReduce specific logs are written into the MapReduce log directory located at `${EGO_TOP}/soam/mapreduce/logs`.

There are three kinds of MapReduce-specific logs: MRSS log, service log, and task log. The MRSS log contains information pertaining to the Shuffle Server and the service log contains the information pertaining to the MapReduce SI. There are separate log files for each MapReduce task that are located at `${EGO_TOP}/soam/mapreduce/logs/tasklogs/MapReduce6.1.1/${jobID}/`.

Tips for checking logs

When errors happen, users can run the `"grep -r . * | grep ERROR"` command to see the ERROR messages, which are logged under the MapReduce log directory. The messages can help a user to identify which code generated the error message and what caused the error.

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