Reduce main I-stream impact when running multiple ZMCPY or ZMCMP commands

System Control Program

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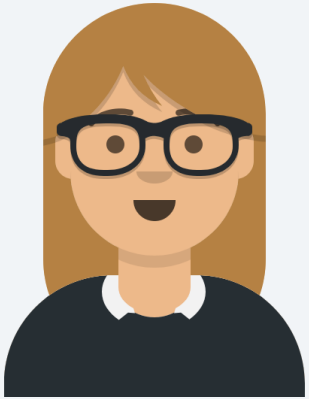
Problem Statement

Concurrent instances of module copy processing or the prime-duplicate comparison utility can run only on the main I-stream, which impacts other system processing on the main I-stream and elongates the total time to complete all required instances.

Users



Maria
Director of Operations

Maria is responsible for managing the continued operation and integrity of the system.

As-Is User Story

- Hardware issues occurred on a specific DASD control unit that caused 600 prime modules to go offline.
- Maria wants to quickly go through module up processing (ZMCPY UP) to minimize time spent in simplex mode.
- Operations limits themselves to running only 20 concurrent ZMCPY UP instances to avoid known input-list-not-serviced problems with running more instances.
- The ZMCPY UP instances and other system processing compete for processing time on the main I-stream, which increases the time needed to complete the module copies.

Pain Points

- A limited number of concurrent ZMCPY UP or ZMCPY ALL instances can be started before risking input-list-not-serviced problems (CLHR0007W) on the main I-stream.
- Running a limited number of module copies concurrently increases the amount of time the system is in simplex mode and exposed with single points of failure.

Value Statement

Concurrent instances of module copy processing or the prime-duplicate comparison utility can run across all in-use I-streams, which reduces main I-stream contention and the total time to complete all required instances.

To-Be User Story

- Hardware issues occurred on a specific DASD control unit that caused 600 prime modules to go offline.
- Maria wants to quickly go through module up processing (ZMCPY UP) to minimize time spent in simplex mode.
- Operations can run up to 100 concurrent ZMCPY UP instances across all in-use I-streams without experiencing input-list-not-serviced messages due to ZMCPY UP activity.
  - The number of multiple module copies you choose to run concurrently will depend on your environment.
- The total time spent to complete the required ZMCPY UP commands is reduced, minimizing the amount of time spent in simplex mode.

Technical Details

- Module copy processing (ZMCPY) and prime-duplicate comparison utility (ZMCMP) are being enhanced so that the bulk of the processing can run on any in-use I-stream.
- The switchable ECB attribute is being used to dynamically load balance across all in-use I-streams.

Conclusion

Target delivery in 3Q 2025.

Thank you