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

System Control Program

**Gabriel Nieves** 

2025 TPF Users Group Conference May 05-07, Austin, Texas

IBM Z



### Disclaimer

Any reference to future plans are for planning purposes only. IBM reserves the right to change those plans at its discretion. Any reliance on such a disclosure is solely at your own risk. IBM makes no commitment to provide additional information in the future.



#### **Problem Statement**

Concurrent instances of module copy processing or the primeduplicate comparison utility can run only on the main Istream, which impacts other system processing on the main Istream 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 primeduplicate comparison utility can run across all in-use Istreams, 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

© Copyright IBM Corporation 2024. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. Any statement of direction represents IBM's current intent, is subject to change or withdrawal, and represent only goals and objectives. IBM, the IBM logo, and ibm.com are trademarks of IBM Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available at Copyright and trademark information.

