ROCS

3270 MAPPING MODULE MASTER

MIMS SW 3804/1

RC NET

General

MIMS is interfacing ROCS to the 3270 master module (SW3806) thus enabling the connection of 3270 cluster systems to ROCS networks via a number of 3271 BSC links. The main task in MIMS is to handle the buffer administration when datastreams are mapped between ROCS and the 3270 master protocol module (M3270). Furthermore MIMS assembles packets into one transaction if these are received from ROCS with the more data indication set before sending it to M3270, and MIMS prevents mix of datapackets from various control units before sending it to ROCS.
Commands can be given to MIMS through ROCS. Commands to stop or start control units are accepted if they are sent from the master system. Commands to require statistics are accepted from all sites.

Functional description

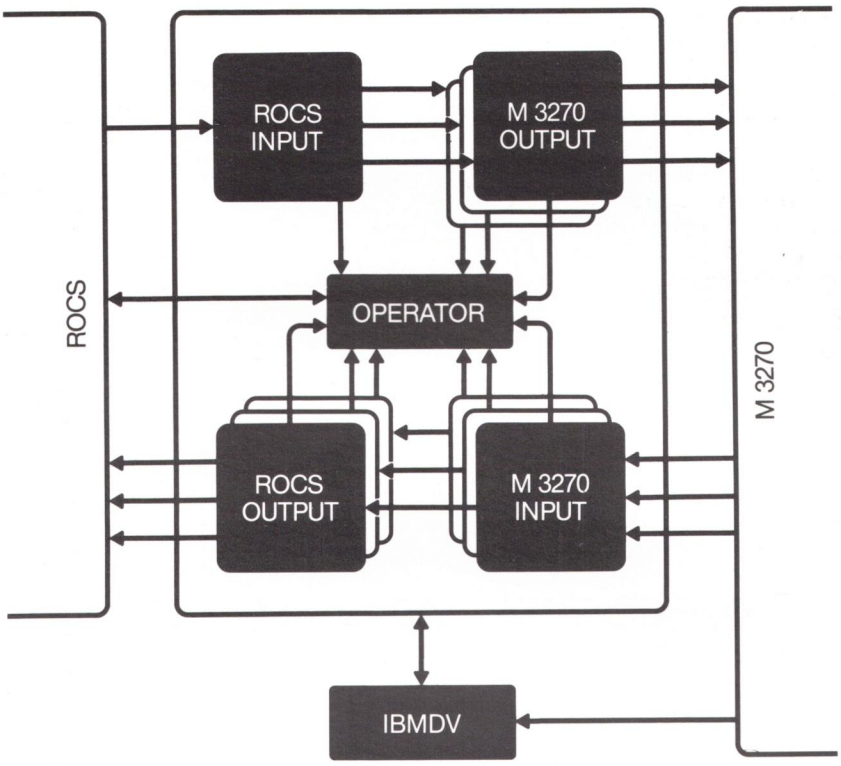
MIMS can be divided into four logical parts. ROCS interface, M3270 interface, operator commands and operator messages.

ROCS Interface:

Input: A number of input buffers are sent to ROCS and they will be returned when ROCS has data to available. All data belonging to one transaction will be collected in one buffer before it is sent to M3270. Together with data ROCS delivers a destination address, and after validation data is guided to the correct port of the M3270 interface.
Output: When data is received from the M3270 interface to be sent to ROCS a status check is performed on the sending control unit. If no error condition occurs data will be sent to ROCS, else data will be discarded. If ROCS does not accept data due to network errors an error message will be created and returned to the sending terminal.

M3270 Interface:

Input: Initially M3270 receives one input buffer for each BSC-line being active. If the first BSC-block in a sequence is received on a line up to 8 inputs are allocated to this line enabling reception of a complete transaction. In this way it is possible to sequence the packets belonging to one terminal transaction correctly and forward these to ROCS without any mix of blocks from other lines. The address of the sender i.e. line, cu, dev, is augmented to each packet delivered to ROCS.
Output: When datapackets are received from ROCS they are assembled into one transaction and decompressed in case compression is used. Status of the receiving control unit is inspected and in case the unit is not available the transaction is discarded. If the delivery of a transaction to the control unit cause a status/sense response it will be transformed to a packet and returned to ROCS for transportation to the sending Host computer.



Internal structure

The internal program and buffer structure is described in ref. 1.

Operator Commands:
Three commands can be given to MIMS: START, STOP and STAT. START and STOP can only be used from the master station enabling the operator to start or to stop the polling of a specified control unit on a specified line. This means that the master station operator has complete control on all control units in the network. The STAT command will generate statistics to be written on the console. This command can be issued from both master and remote stations. For further information see ref. 2.
All commands to MIMS must be issued through ROCS.

Operator Messages:
Most operator messages are informative and will not influence the program run. Operator messages are used in connection with errors to indicate the type of errors detected. All operator messages are described and explained in ref. 2.

Configurationtable:
MIMS is using a configuration table called IBMDV. This table contains information of all existing control units at the remote station.
A description of the configuration table is found in ref. 1. The precense of the table has the advantage that only the table has to be changed if a station must be reconfigurated. MIMS will remain unchanged as long as the number of control unit it is generated to support, is greater than or equals the number of control unit in IBMDV.

Environments/program size

Hardware requirements: RC3803 CPU, 64Kb or 128 Kb memory.
Software requirements: MUS or DOMUS operating system.
MUSIL coroutine monitor CM011 or later versions.
Configurationtable IBMDV.
MUSIL code procedure module CPM RC36-0095.01 or compatible versions.
Program size for a version supporting 4 lines and 4 CU's 19300 bytes.
One extra CU needs approximately 206 bytes.
One extra line needs approximately 737 bytes.

Documentation

1. MIMS Programmers Reference Manual RCSL: 43-GL10612.
2. ROCS/3270 Operators Reference Manual RCSL: 43-GL10936.

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AS REGNECENTRALEN af 1979

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