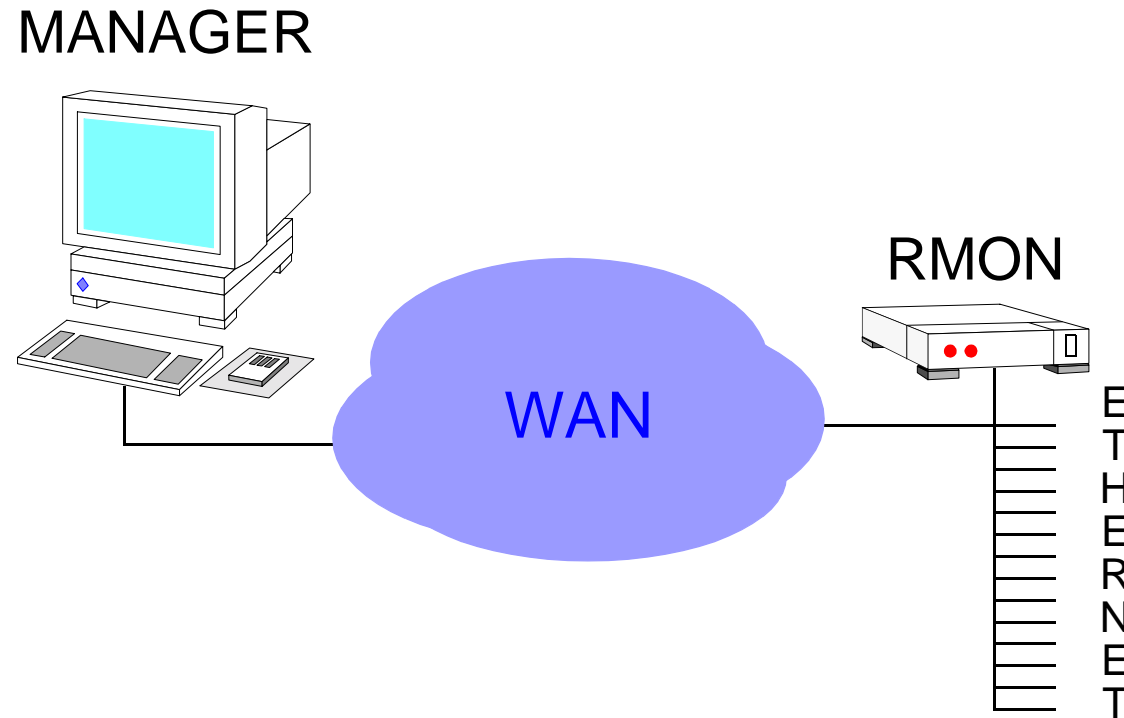


REMOTE MONITORING



- RMON1 (RFC 1757 - DRAFT)
- TOKEN RING EXTENSIONS TO RMON (RFC 1513 - PROPOSED)
- RMON2 (RFC 2021 - PROPOSED)
- SMON (RFC 2613 - PROPOSED)

RMON1 GROUPS

NINE GROUPS:

- STATISTICS
- HISTORY
- HOST
- HOST TOP N
- TRAFFIC MATRIX
- ALARMS
- FILTERS
- PACKET CAPTURE
- EVENTS

STATISTICS GROUP

KEEPS STATISTICS PER ETHERNET SEGMENT

SHOWS:

- PACKETS
- OCTETS
- BROADCASTS
- MULTICASTS
- COLLISIONS
- ERRORS

KEEPS TRACK OF PACKET SIZE DISTRIBUTION:

- 65 - 127 OCTETS
- 128 - 255 OCTETS
- 256 - 511 OCTETS
- 512 - 1023 OCTETS
- 1024 - 1518 OCTETS

STATISTICS GROUP - ERRORS

	< 64 Bytes	64 to 1518	>1518 bytes
WELL-FORMED PACKETS	undersize	GOOD!	oversize
BAD FCS ERRORS	fragments	CRC or alignment errors	jabber

HISTORY GROUP

STORES INFORMATION OF STATISTICS GROUP
EXCEPT PACKET SIZE DISTRIBUTION

USES A CIRCULAR BUFFER

- BUCKETS
- SIZE MAY BE SET BY MANAGER

MANAGER MAY SET:

- THE ETHERNET SEGMENTS (INTERFACES)
 - SAMPLING INTERVAL

HOST INFORMATION

- HOST
- HOST TOP N

IN / OUT:
PACKETS / OCTETS

OUT:
BROADCASTS
MULTICASTS
ERRORS

INFORMATION INDEXED BY:

- INTERFACE AND MAC ADDRESS ([hostTable](#))
 - CREATION TIME ([hostTimetable](#))
- SORTED ON SOME VARIABLE VALUE ([hostTopN](#))

TRAFFIC MATRIX

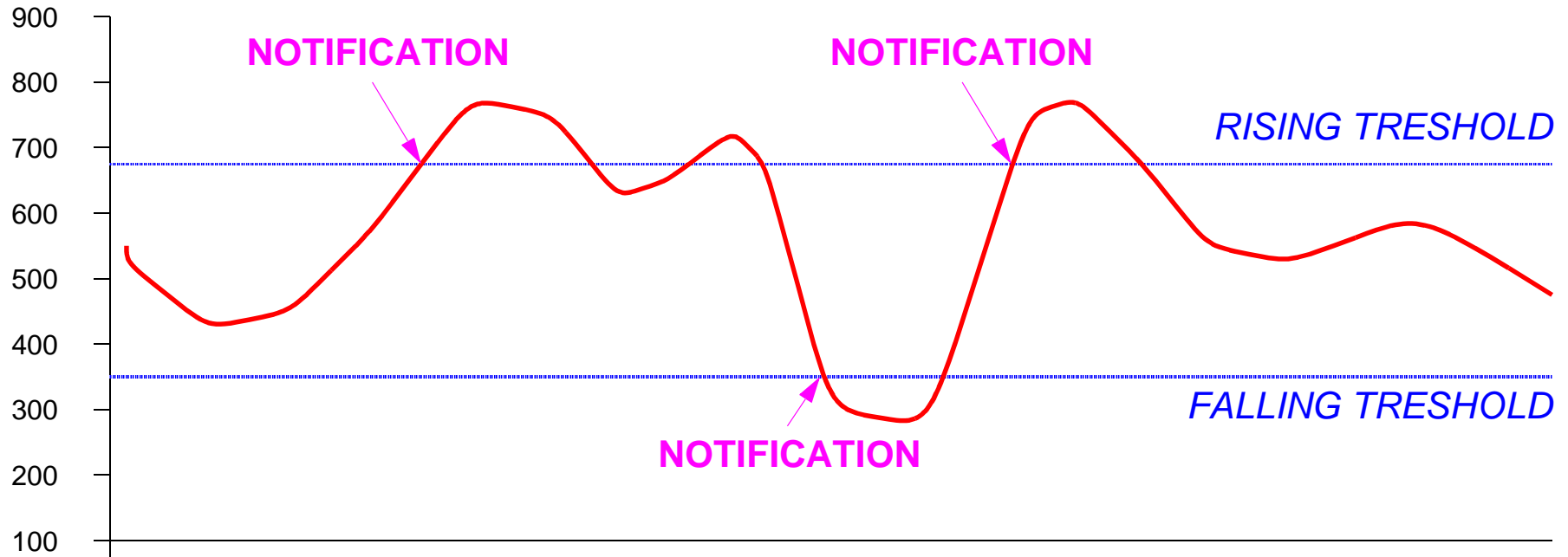
FOR EACH SOURCE & DESTINATION

- PACKETS
- OCTETS
- ERRORS

USEFUL:

- TO PROVIDE "WHAT IF" ANALYSIS
- TO DETECT INTRUDERS

ALARM GROUP

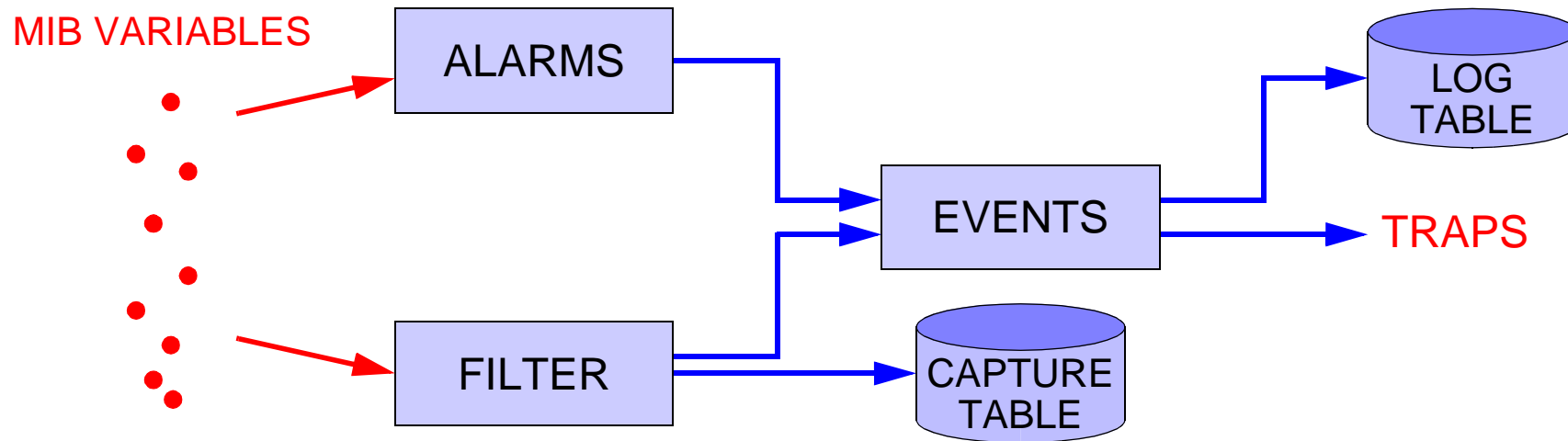


ABSOLUTE OR DELTA VALUES

TRIGGERS ON:

- RISING ALARM
- FALLING ALARM
- RISING OR FALLING ALARM

OTHER GROUPS



FILTER GROUP

- TO COUNT PACKETS THAT CARRY A SPECIFIC BIT-PATTERN

PACKET CAPTURE GROUP

- TO STORE SPECIFIC PACKETS

EVENT GROUP

- TO DEFINE THE VARIOUS EVENTS
- TO DETERMINE ON LOGGING AND / OR TRANSMISSION OF TRAPS

RMON2

TO MONITOR ALL HIGHER LAYER PROTOCOLS

EXTENDS RMON1 WITH FOLLOWING GROUPS:

- PROTOCOL DIRECTORY GROUP
- PROTOCOL DISTRIBUTION GROUP
 - ADDRESS MAPPING GROUP
 - NETWORK LAYER HOST GROUP
 - NETWORK LAYER MATRIX GROUP
- APPLICATION LAYER HOST GROUP
- APPLICATION LAYER MATRIX GROUP
 - USER HISTORY GROUP
- PROBE CONFIGURATION GROUP