

## CrossTalk™ SNMP ReSync

*Alarm Resynchronization for SNMP Devices*

- ◆ CrossTalk™ SNMP ReSync provides alarm resynchronization for SNMP devices managed by HP TeMIP
- ◆ Unique capability of delivering business strength management of SNMP devices for today's converging Telecommunications networks
- ◆ Build a solid foundation for "IP" based service level management

Convergence of fixed and mobile networks through an "IP" based solution for access and core networks has resulted in the increasing introduction of SNMP managed devices into telecommunications networks. As a result, traditional business strength OSS management mechanisms are being undermined by the basic nature of SNMP device management capabilities.

SNMP devices raise "traps" to indicate alarm conditions. Traps can be lost due to several factors such as network outages, device failure, or downtime on the management system. When connectivity is re-established SNMP provides no means to "replay" traps that are outstanding on the managed devices. Therefore it is impossible to update the operator's view of the network with the real fault status of the equipment.

The consequence of this is a risk of delay in fault detection and subsequent rectification, leading to a possible breach of customer Service Level Agreements.

The CrossTalk™ SNMP ReSync product addresses these issues by providing trap resynchronization of SNMP devices managed by HP TeMIP.

It uses Rule Sets to determine the current trap status of SNMP equipment, which in turn is used to align HP TeMIP alarm conditions should discrepancies be found. It operates in conjunction with the HP TeMIP Internet SNMP Toolkit (IST). Trap status can be determined either from SNMP variables or from a Trap list provided by the agent.

### Resynchronization of SNMP Devices

SNMP ReSync provides a directive to resynchronize a selected SNMP device. The directive determines the current SNMP trap status from the device, as defined by the ReSync Rules. Trap status can be determined either from a trap list provided by the agent, or from

SNMP variables. The trap status is compared with HP TeMIP alarms in a configurable set of reference Operation Contexts (OCs). It then:

- ◆ Identifies and clears HP TeMIP alarms relating to trap inducing conditions that have cleared during connectivity loss
- ◆ Identifies traps that have occurred during the connectivity loss and "signals" them into HP TeMIP to generate new alarms
- ◆ Avoids re-signaling of currently active alarm/trap conditions which were active prior to connectivity loss

Communications with the managed equipment and correlation of SNMP traps to HP TeMIP alarms is performed in conjunction with the SNMP AM customization that manages the equipment.

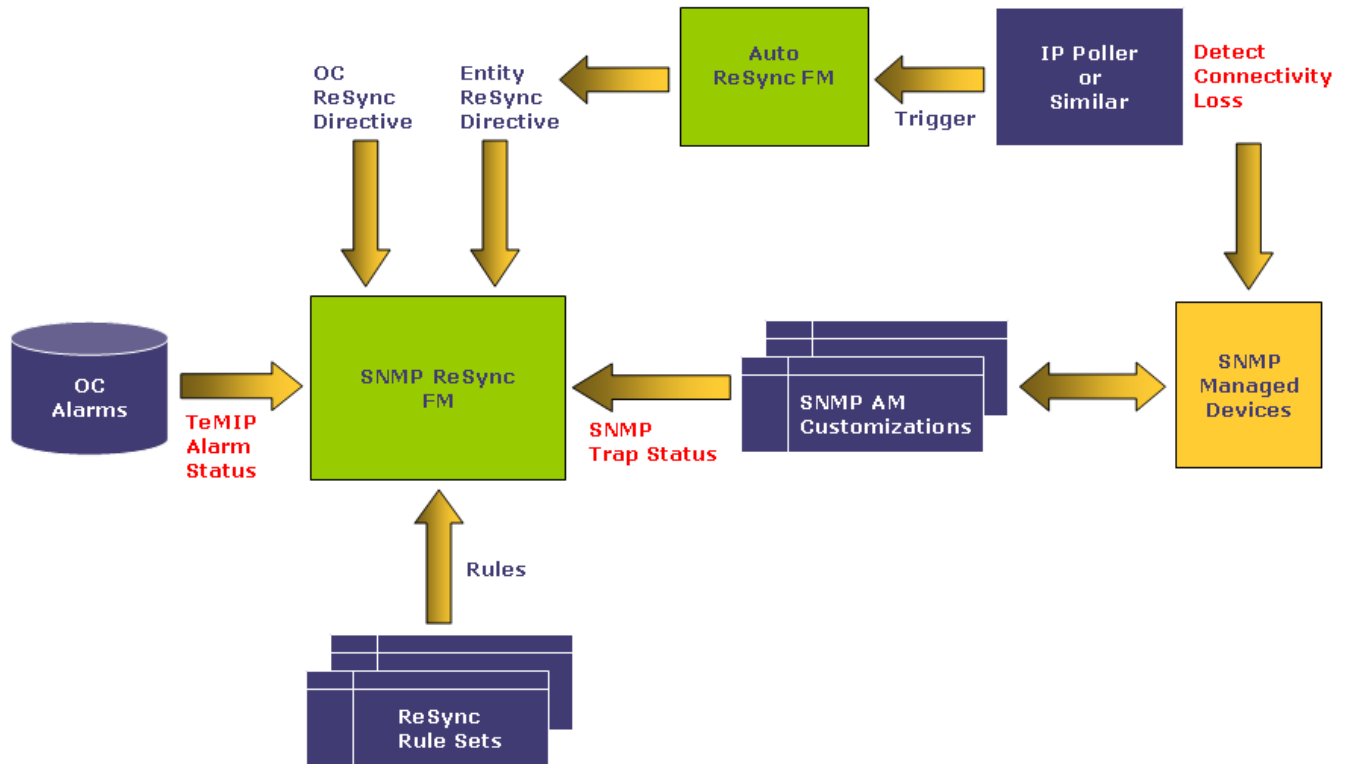
### Operation Context Resynchronization

SNMP Resync provides a directive to resynchronize a selected Operation Context with the SNMP managed devices it is monitoring. The directive traverses the domain members associated with the OC to determine the SNMP resynchronization entities. Each of these in turn is resynchronized using the specified OC as the alarm reference repository.

### Automated SNMP Resynchronization

SNMP ReSync provides automatic resynchronization of SNMP traps. The function module listens for specific events from selected SNMP devices and upon reception of such events, triggers a resynchronization of the related device. The events that trigger resynchronization are configurable, so for example it can be set to resynchronize when the HP TeMIP IP Poller raises an IPReachabilityUp event for an SNMP device.

# CrossTalk™ SNMP ReSync



## Key Features

- ◆ Provides business strength management of SNMP devices, delivering a solid foundation for "IP" service level management
- ◆ Available "off the shelf" for HP TeMIP Access Module Library AMs
- ◆ SNMP Resynchronization of individual devices or Operation Contexts via HP TeMIP directives
- ◆ Realigns HP TeMIP alarm status with the SNMP trap status of managed equipment
- ◆ Supports Resynchronization using a Trap List provided by the agent or SNMP Variables
- ◆ Updates the operator's view of the network with the real fault status of the equipment
- ◆ Avoids regeneration of already active HP TeMIP alarms, so that timestamps, status, and user operator notes are maintained persistently
- ◆ Manual or Automatic resynchronization
- ◆ Automatic SNMP ReSync triggered by IP Poller or other HP TeMIP applications or scripts
- ◆ SNMP ReSync Rules work in conjunction with SNMP AM and the HP TeMIP dictionary
- ◆ User defined SNMP Resynchronization Rules—i.e. the user can define the scope of entities to which a rule applies

## Systems Mechanics Ltd

Ferndale Court, West End Road, Mortimer, Reading, RG7 3SY  
Tel: +44 (0)118 9332220  
Fax: +44 (0)118 9333807

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