

CrossTalk™ Network Visualisation

GIS Visual Representation of HP TeMIP Fault Scenarios

- ◆ CrossTalk™ Network Visualisation integrates and presents HP TeMIP Fault Information on GIS systems
- ◆ Reduces operator time spent on root cause analysis based on geographical associations
- ◆ Improves quality of service where visibility of high impact fault scenarios provides an indication of the scale of faults
- ◆ Reduces the number of alarms that operators need to process to correct a fault scenario by allowing operators to overlook sympathetic alarms which are identified by virtue of their geographical and hence visual representation

The CrossTalk™ Network Visualisation solution is a component that captures and writes key attributes from service affecting alarms into a data repository for presentation by GIS systems. This is a "plug-in" for our HP TeMIP Alarm Application Services (AAS) framework.

Information contained within the original alarm can be used to determine the locality of the fault. This is graphically displayed in a map showing the geographical region covered by the network. The screen capture overleaf depicts an area of the UK, but world-wide representation is available through the use of suitable map back drops.

The solution provides a near real-time repository based inventory of the network status as the basis for a real-time network visualisation component providing a graphical view of service affecting alarms.

The solution works on:

- ◆ Alarms from Ericsson and Nortel equipment (configurable support for other equipment types is available)
- ◆ Alarms in Minor, Major, and Critical States
- ◆ A range of GIS systems (e.g. MapInfo)

The solution:

- ◆ Extracts and "Normalises" information from these alarms
- ◆ Utilises the information to map the alarm to a geographical location
- ◆ Allows the alarm to be augmented with custom information based on the alarm type

- ◆ Stores alarm information within the GIS repository (e.g. Oracle)
- ◆ Keeps the repository up-to-date with the current STATE and PROBLEM_STATUS of the alarm contained in HP TeMIP
- ◆ Removes alarm information from the repository on a correlated clearance or alarm termination
- ◆ Provides a scheduled script to synchronise the alarms contained within the repository with their HP TeMIP counterparts
- ◆ Can be utilised to overlay information on GIS systems other than geographical maps

The solution is non intrusive, working alongside existing solutions to complement current network monitoring.

A constant connection is maintained between HP TeMIP and the GIS system to ensure that modifications to key alarm attributes are mirrored within the GIS alarm repository.

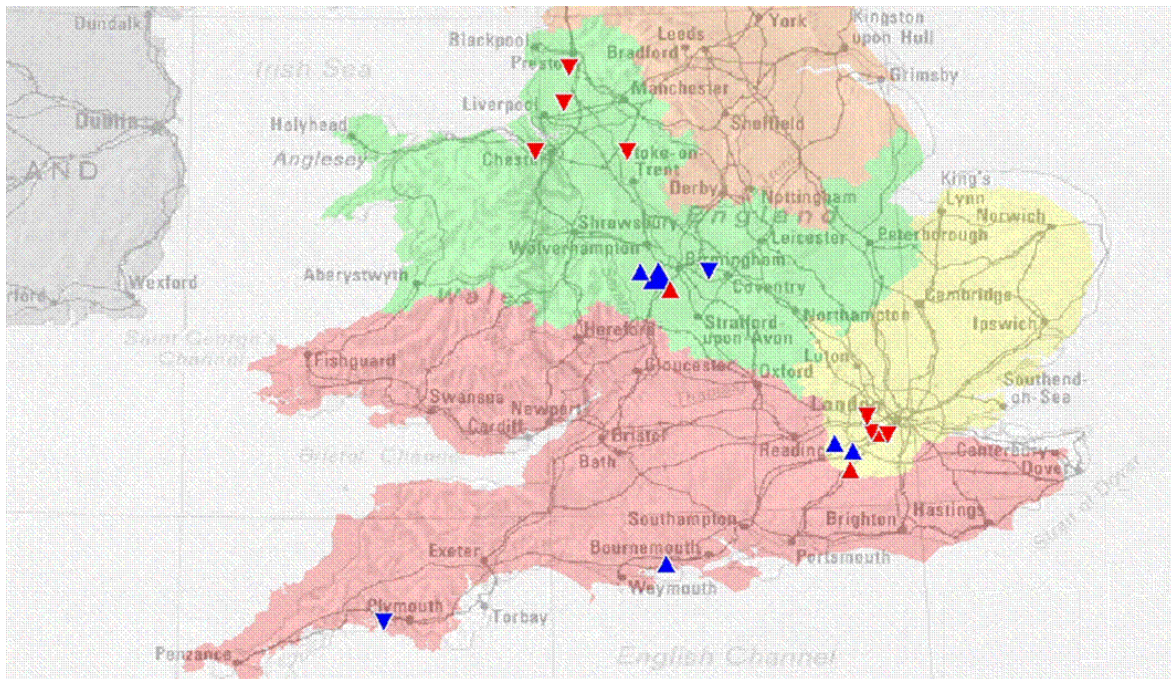
The STATE and PROBLEM_STATUS of the alarm is provided to the GUI to allow visibility of current operator actions.

Custom fields can be created within the repository table and populated with static or dynamic information to augment the information contained within the HP TeMIP alarm.

Multiple alarm types in various tables can be managed by a single solution, allowing specific GIS GUIs to be used for various technologies.

Oracle is currently utilised as the repository, so information on the current network status can be ascertained through standard SQL queries.

CrossTalk™ Network Visualisation



Key Features:

- ◆ Instant geographical visibility of current network problems
- ◆ Reduced operator times for fault diagnosis where geographical associations facilitate the isolation of the root cause of multiple alarms
- ◆ Increases the quality of service by identifying high impact fault scenarios where information in a graphical format allows the scale of faults to be assessed directly
- ◆ Reduces the number of alarms that operators need to process to correct a fault scenario as sympathetic alarms are identified by virtue of their geographical and hence visual representation
- ◆ Provides active synchronisation between HP TeMIP and the GIS system
- ◆ Provides the facility to augment alarm fault information with custom information pertinent to the equipment and fault
- ◆ Extendable across multiple scenarios to allow multiple dependant GUIs from a single plug-in

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