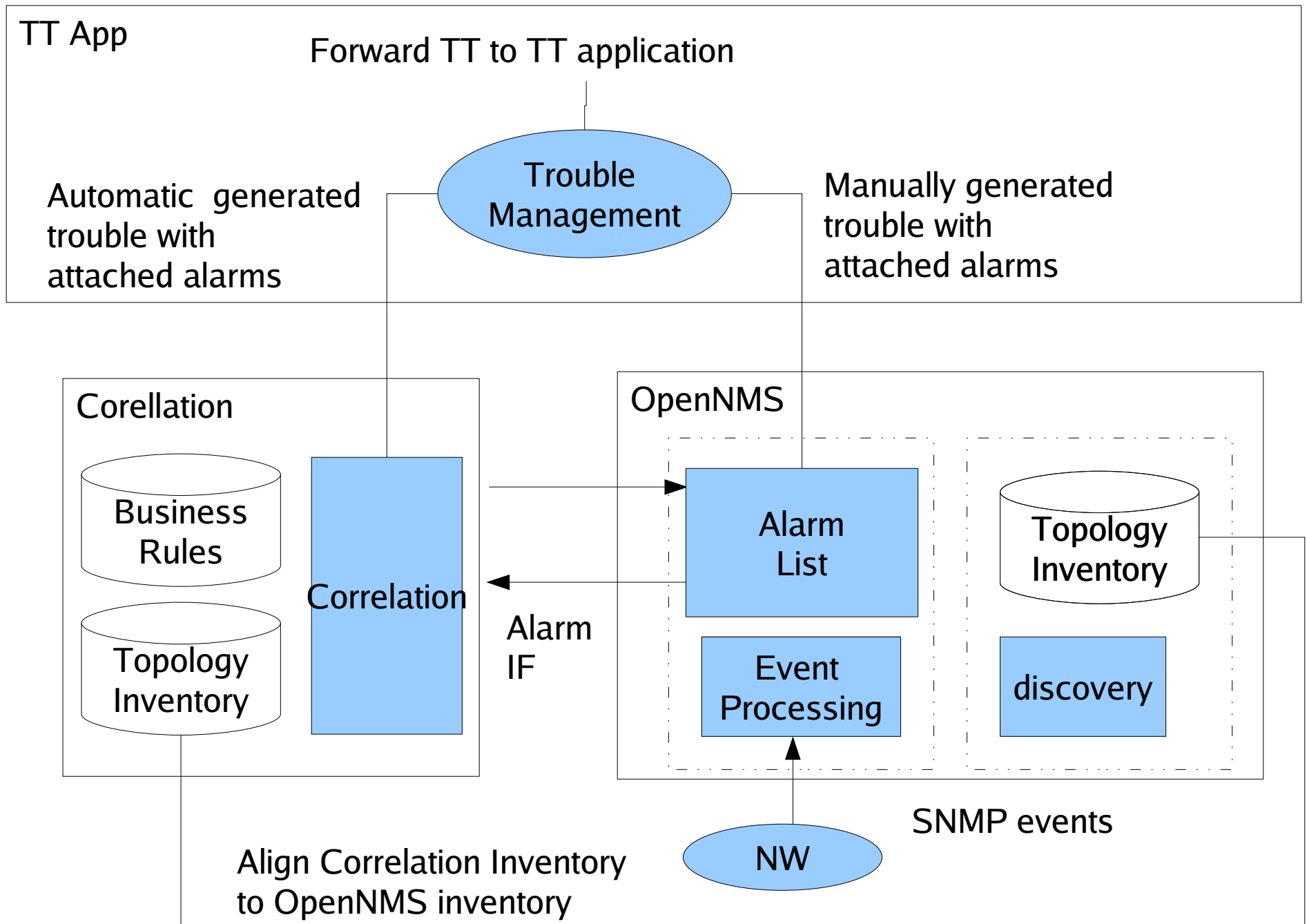


Correlation Business Logic 1

- OpenNMS is enhanced with rule based correlation (see JSR-94) and the user is able to change alarm, and notification behaviors based on business rules
- Alarm Correlation capability – user benefit
 - Ability to connect to external correlation capability which can provide support to human decision making
 - Remove ‘wall of red’
 - Auto acknowledge sympathetic alarms
 - Identify route cause alarms
 - Change alarm prioritizings based upon business logic (time of day / configuration etc)
 - BASIC: Linear alarm list processing (boolean logic)
 - ADVANCED: Topology based alarm processing – process alarms against common topology model
 - Ability to tag correlated problems to trouble ticket for management
 - (Notification is like TT but single event)

Correlation / Topology / Trouble Ticket



Correlation Business Logic 2

- Base case:
 - ‘OpenNMS is enhanced with rule based correlation (see JSR-94) and the user is able to outage, alarm, and notification behaviors based on business rules’
- Alarm Correlation Interface
 - API to allow separate alarm correlation Module to connect to OpenNMS alarm list and process alarms using rules db. This allows choice of engines and for injection of new/modified/ correlated alarms from external systems engines
- Topology Interface
 - Ability to export and / or align opennms topology / inventory database with external rules and/or topology model system
- TTicket Interface
 - Ability to (manually / and / or automatically) generate trouble tickets with tagged route cause and sympathetic alarms and user comments. Ability to forward this to external TT system

Corellation Business Logic 3

- Alarm Processing – base bahaviour
 - Alarm Cycle
 - New alarm -> new alarm acknowledged
 - alarm cleared -> alarm cleared & acknowledged
 - alarm cleared and acknowledged -> archive
 - Mark incomming alarms which are root cause alarms
 - Create new route cause alarms from sympathetic alarms
 - Mark sympathetic alarms as acknowledged and corellated to route cause
 - Support OSS alarm processing paridigm
 - In particular Managed object instance and managed object type and application DN/Alarmid
 - Support the X733 alarm definition.

Corellation Business Logic 4

- Gui
 - Filter / display by route cause alarms and corellated sympathetic alarms (auto acknowledge corellated?)
- Corellation Engine – base technology
 - Ideally based upon JSR93 corellation interface – Jboss Drools, JESS, ILOG Jrules
 - Easy to write busines rules – rule writing tool kit
- Trouble Ticket interface
 - (Trouble Ticket I/F) attach route cause and sympathetic alarms to trouble ticket (Trouble ticket interface)
 - (Trouble Ticket I/F) Manually tag alarms to attach to trouble ticket

Corellation Business Logic 5 - Enablers

- OSSJ alarm interface (X733)
 - JVT (ejb) alarm interface – events and queries
 - XVT (XML) alarm interface - events and queries
- Base use cases
 - OpenNMS can connect to another OSS/J interface and;
 - Register for alarm events (new, cleared, acknowledge, change, comments?)
 - Resynchronize with current alarm list from remote system
 - Receive new alarms events from other system
 - Receive acknowledge events
 - Other system can connect to OpenNMS OSS/J interface and;
 - Register for alarm events (new, cleared, acknowledge, change, comments?)
 - Resynchronize the alarm list from openNMS
- OSSJ TT interface