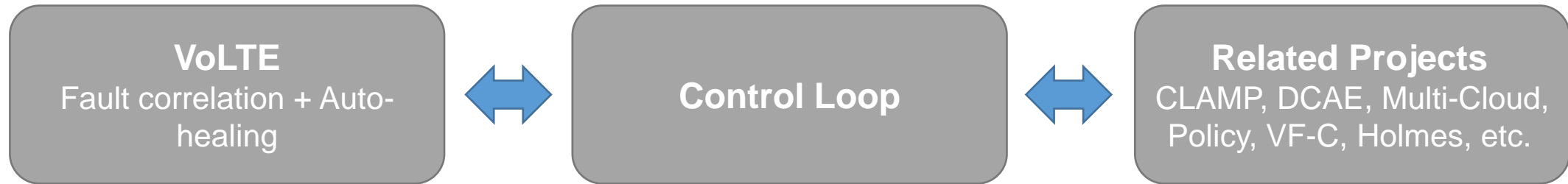




VoLTE Use Case Control Loop Automation

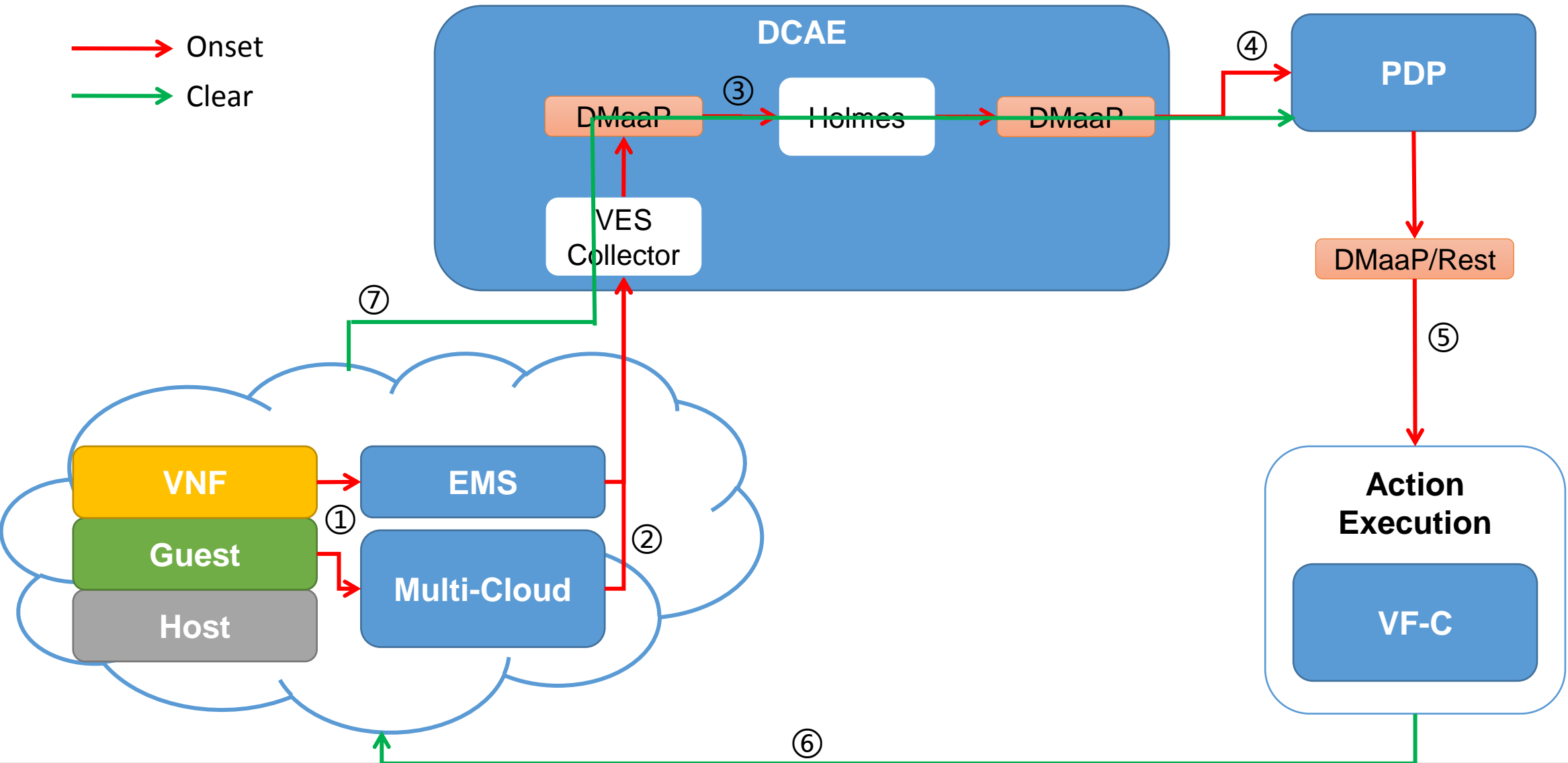
Aug., 2017

Description



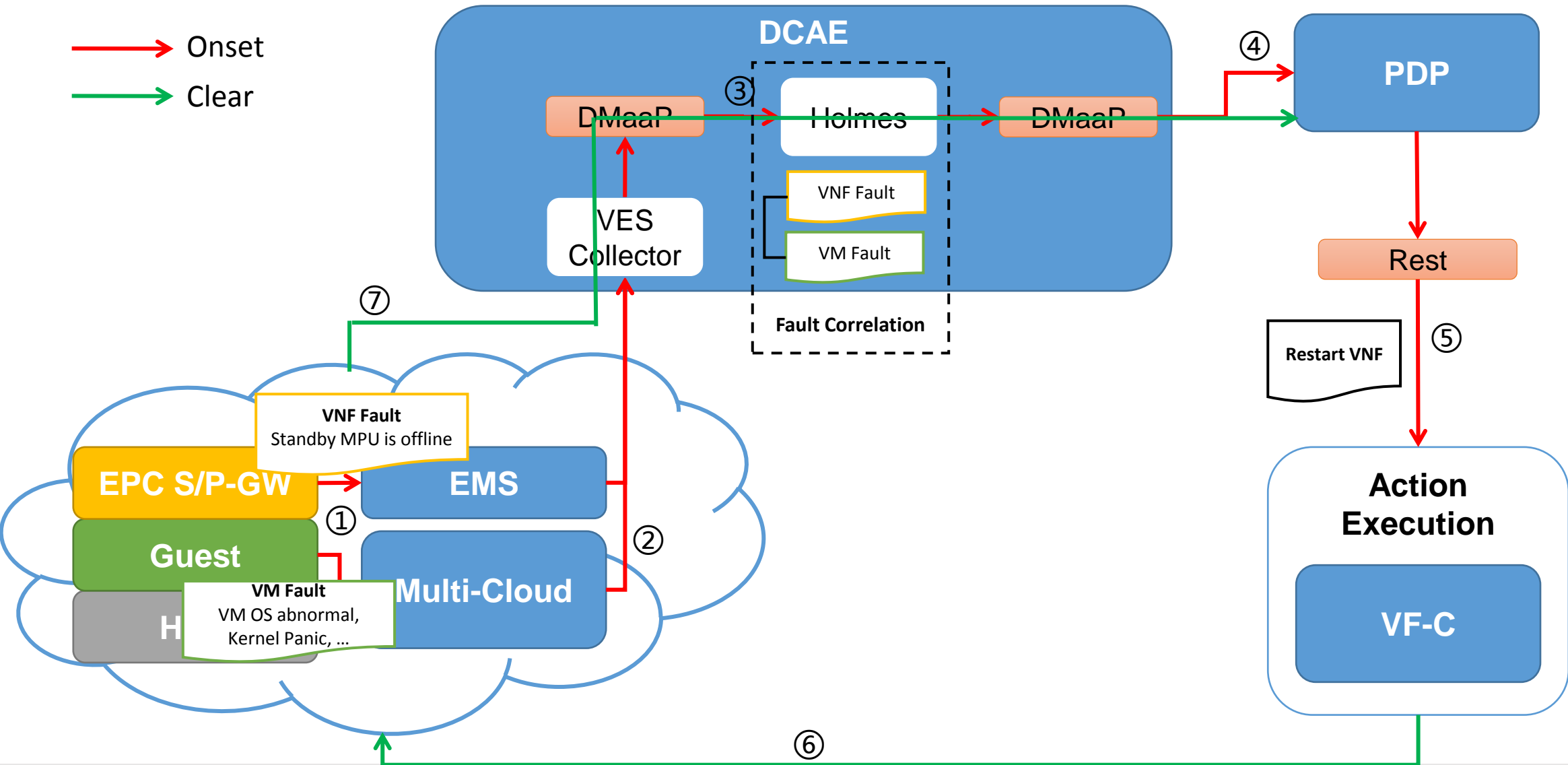
Story

→ Onset
→ Clear



Example for R1

→ Onset
→ Clear



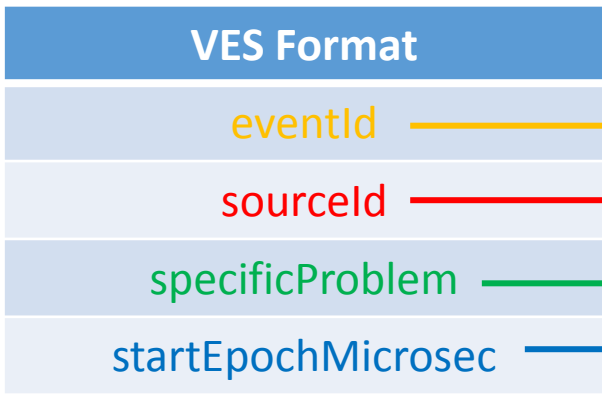
Story

	Alarm	Action
VNF	VNF Fault Alarm EPC S/P-GW – Standby MPU is offline	Restart VNF
Guest	VM Fault Alarm VM OS abnormal, Kernel Panic, VM does not send a heartbeat to an external watchdog service for a long time.	
Host		

Fault Correlation – refer to Holmes rule

```
1 public class VesAlarm{
2     private String eventId;
3     private String sourceId;
4     private String specificProblem;
5     private long startEpochMicrosec;
6     ....
7     // getters and setters are omitted for brevity
8     ....
9 }
```

```
12 import org.onap.sdm.faultcorrelation.packages;
13
14 // Alarm specific problems used in the following rules:
15 // specificProblem
16 // Standby_MPU_offline
17 // No_heartbeat, VM is not available
18
19 // the entity of the rule
20 rule "SameVNF_Relation_Rule"
21 salience 120
22 no-loop true
23
24 when
25     $root : VesAlarm( .....
26     $sourceId: sourceId, sourceId != null && !sourceId.equals(""),
27     specificProblem in ( "No_heartbeat, VM is not available" ),
28     $eventId: eventId) .....
29     $child : VesAlarm( eventId != $eventId,
30     CorrelationUtil.getInstance().isTopologicallyRelated(sourceId, $sourceId),
31     specificProblem in ( "Standby_MPU_offline" ),
32     this after [-60s, 60s] $root) .....
33
34 then .....
35     DmaapService.publishResult(...); .....
36
37 end
```



sourceId is the key to do the correlation among different layers.