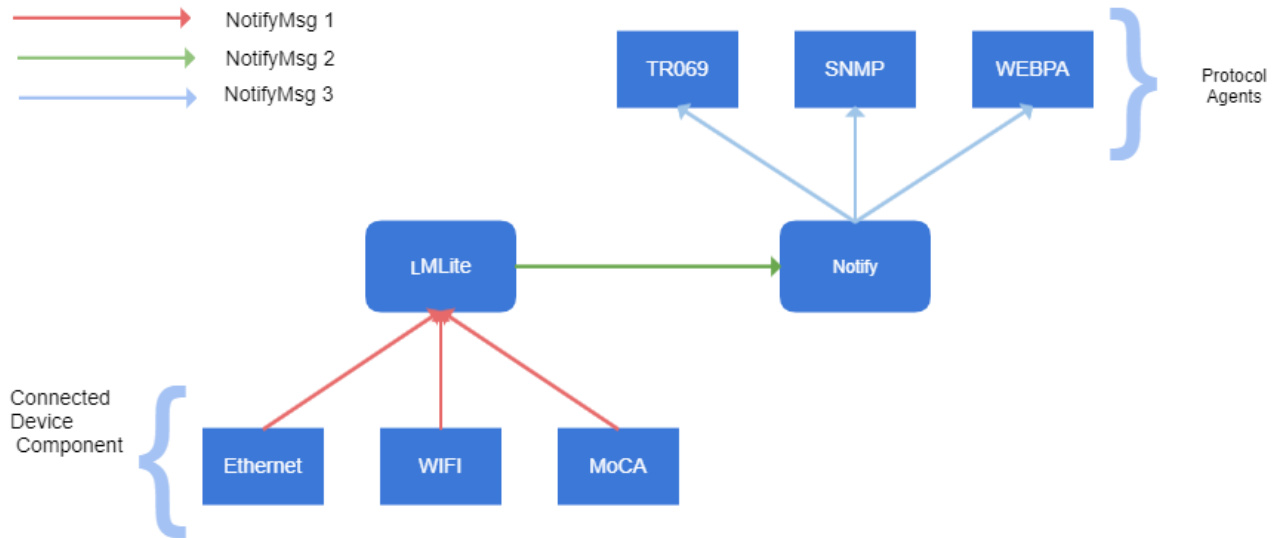


Notify Component - Drafted Version

Notify component is used to notify interested protocol agents to the change of subscribed parameter values/events.

- Interested protocol agents register the parameters they want to get notified from the notify component.
- For example "SNMP PA" can register for events to the notify-component, one such event is "Connected-Client".
- SNMP PA is interested in knowing the Interface, MAC address and other details of the newly connected client. It has a function that subscribes to notify-component for a notification whenever a client connects. This information is first read by LMLite which in turn relays to SNMP PA through notify-component.



Three types of notification messages exist for the notification for connected clients to work.

NotifyMsg 1 : Notification Message from the individual interface component to LMLite about any update of the existing connected devices or any new connections.

NotifyMsg 2: Notification Message from LMLite to the Notify component

NotifyMsg 3: Notification message from Notify component to the PA's who have registered for notifications for connected device.

NotifyMsg 1

In this type of notification message, the connected device components like WiFi, MoCA, Ethernet sets a dedicated parameter of LMLite. As and when this notify message comes from a component to LMLite, the dedicated parameter is parsed and the host table is updated accordingly.

Example: For WiFi the dedicated parameter is "Device.Hosts. X_RDKCENTRALCOM_LMHost_Sync_From_WiFi".

This parameter is of string type and contains values for fields phyAddr, ssid, status and so on

NotifyMsg 2

LMLite monitors the values of all the connected clients. Whenever any connection/disconnection updates happen in host table it updates the notify component.

The data sent from LMLite to notify component is status, MAC, interface of the connected device.

NotifyMsg 3

Notify component maintains a table of parameters for which PA's are interested to be notified.

Whenever the notify component receives a NotifyMsg2 from LMLite, it search's this table and notifies the interested protocol agents.

Logs

190412-09:07:06.362896 [mod=NOTIFY, lvl=NOTICE] [tid=8101] Connect to bus daemon...
190412-09:07:06.399693 [mod=NOTIFY, lvl=INFO] [tid=8101] INFO: bus_handle: 0x 42de98
190412-09:07:07.409584 [mod=NOTIFY, lvl=NOTICE] [tid=8101] ssp_engage
190412-09:07:07.410030 [mod=NOTIFY, lvl=WARN] [tid=8101] Register empty object : com.
190412-09:07:07.410183 [mod=NOTIFY, lvl=WARN] [tid=8101] Register empty object : com.cisco.
190412-09:07:07.410317 [mod=NOTIFY, lvl=WARN] [tid=8101] Register empty object : com.cisco.spvtg.
190412-09:07:07.410462 [mod=NOTIFY, lvl=WARN] [tid=8101] Register empty object : com.cisco.spvtg.ccsdp.
190412-09:07:07.413791 [mod=NOTIFY, lvl=WARN] [tid=8101] DM Library module name = CCSP Base Data Model
190412-09:07:07.437794 [mod=NOTIFY, lvl=WARN] [tid=8101] DM Library module name = COSA_TR181_USGv2
190412-09:07:07.474303 [mod=NOTIFY, lvl=WARN] [tid=8101] Search for empty object in 'dslhCpeCheckEmptyObject'
190412-09:07:08.973951 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.IP.Interface.1.IPv4Address.1.IPAddress is added in the list by eRT.com.cisco.spvtg.ccsdp.tr069pa
190412-09:07:29.180399 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.NotifyComponent.X_RDKCENTRAL-COM_Connected-Client is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.197046 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.Bridging.Bridge.1.Port.8.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.216638 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.Bridging.Bridge.2.Port.2.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.233987 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.DeviceInfo.X_COMCAST_COM_xfinitywifiEnable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.264136 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.1.Security.ModeEnabled is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.277507 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.1.Security.X_COMCAST_COM_KeyPassphrase is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.295182 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.1.SSIDAdvertisementEnabled is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.311655 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.1.X_CISCO_COM_MACFilter.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.324732 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.1.X_CISCO_COM_MACFilter.FilterAsBlackList is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.338687 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.2.Security.ModeEnabled is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.349138 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.2.Security.X_COMCAST_COM_KeyPassphrase is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.362761 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.2.SSIDAdvertisementEnabled is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.373733 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.2.X_CISCO_COM_MACFilter.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.386728 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.AccessPoint.2.X_CISCO_COM_MACFilter.FilterAsBlackList is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.399528 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.Radio.1.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.415133 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.Radio.2.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.427273 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.SSID.1.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.442179 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.SSID.1.SSID is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.457338 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.SSID.2.Enable is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.468374 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.WiFi.SSID.2.SSID is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.480294 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_DeviceControl.LanManagementEntry.1.LanMode is added in the list by eRT.com.cisco.spvtg.ccsdp.webpaagent
190412-09:07:29.492051 [mod=NOTIFY, lvl=INFO] [tid=8108]

Notification : Parameter Device.X_CISCO_COM_Security.Firewall.FilterAnonymousInternetRequests is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.504599 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_Security.Firewall.FilterHTTP is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.528328 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_Security.Firewall.FilterIdent is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.540371 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_Security.Firewall.FilterMulticast is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.552318 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_Security.Firewall.FilterP2P is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.568543 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_Security.Firewall.FirewallLevel is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.583100 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_DeviceControl.LanManagementEntry.1.LanIPAddress is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.595523 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.X_CISCO_COM_DeviceControl.LanManagementEntry.1.LanSubnetMask is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.607201 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.DHCPv4.Server.Pool.1.MinAddress is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.618843 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.DHCPv4.Server.Pool.1.MaxAddress is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.633372 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.DHCPv4.Server.Pool.1.LeaseTime is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.652253 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.NAT.X_CISCO_COM_DMZ.Enable is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.664287 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.NAT.X_CISCO_COM_DMZ.InternalIP is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.677985 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.NAT.X_CISCO_COM_DMZ.IPv6Host is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:29.697284 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.NAT.X_Comcast_com_EnablePortMapping is added in the list by eRT.com.cisco.spvtg.ccsp.webpaagent
190412-09:07:34.188906 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.NotifyComponent.X_RDKCENTRAL-COM_Connected-Client is added in the list by eRT.com.cisco.spvtg.ccsp.meshagent
190412-09:08:25.453146 [mod=NOTIFY, lvl=INFO] [tid=8108]
Notification : Parameter Device.ManagementServer.ConnectionRequestURL is added in the list by eRT.com.cisco.spvtg.ccsp.tr069pa