

Handling Call Drop in Smart Watch and Multi-SIM Devices

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Feature Summary and Revision History

Summary Data

Applicable Product(s) or Functional Area	MME
Applicable Platform(s)	• ASR 5500 • VPC-DI • VPC-SI
Default Setting	Disabled - Configuration Required
Related Changes in This Release	Not Applicable
Related Documentation	• *Command Line Interface Reference* • *MME Administration Guide*

Revision History

Revision Details	Release
Enhanced Feature Description	21.17.6
First introduced.	21.16

Feature Description

When the user manually switches the VoLTE option from “Data + Voice” to “4G Data Only”, it triggers the handset to detach and re-attach again instead of the standard Tracking Area Update (TAU) this resulted in Mobile Terminated (MT) call failure on a VoLTE capable handset that was IMS VoPS domain registered.

In the subsequent Attach Request the combination of “MS Network Capability” , “Voice Domain Preference and UE's Usage Setting” (that is “SRVCC from UTRAN HSPA or E-UTRAN to GERAN/UTRAN supported”, and “CS Voice Only”), in conjunction with IMS VoPS which is already configured as “Supported”, causes the current MME functionality to return IMS VoPS to “Supported” in all relevant NAS and HSS Diameter based message responses.

By returning IMS VoPS “Supported” back to the HSS (in this case via the Insert Subscriber Data Answer message) resulted in the handset failing the MT forked call, as it did not initiate a PDN connectivity request for the IMS APN.

To overcome this issue, a new configuration feature has been implemented which (when enabled in conjunction with IMS VoPS set to “Supported”) ensures the IMS VoPS settings are returned as “Not Supported”, in all subsequent NAS and diameter based messages, if the Attach or TAU request “Voice Domain Preference and UE's Usage Setting” is “CS Voice Only”.

Configuring Call Drop Handling in Smart Watch and Multi-SIM Devices

This section describes how to configure this feature.

Enabling Multi-SIM

Use the following configuration to enable Multi-SIM customization feature.

```
configure
   call-control-profile call_control_profile_name
     network-feature-support-ie ims-voice-over-ps supported
srvcc-ue-with-voice-domain-pref
     remove network-feature-support-ie
     end
```

NOTES:

- **srvcc-ue-with-voice-domain-pref**: The MME sets IMS VoPS flag based on the voice-over domain preference and unsets VoPS in the case of CS voice only.
- **remove**: Removes the configuration.

Monitoring and Troubleshooting

This section provides information regarding show commands available to monitor and troubleshoot this feature.

Show Commands and Outputs

`show call-control-profile full name <profile_name>`

The output of this command includes the following fields:

- Network Feature Support
- IMS Voice Over PS