

Failure Disconnect Reasons Reference

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SMF Disconnect Reasons

This section describes the procedure failure disconnect reasons supported on SMF.

The following table provides the descriptions for the key failure disconnect reasons.

Table 1: Failure Disconnect Reasons

Disconnect Reason	Description
disc_chf_reconciliation	The total number of sessions released by the SMF due to CHF reconciliation.
disc_sess_report_erir_pdn_sess_rel	The total number of 4G or Wi-Fi sessions released by the SMF due to N4 Session Report Request from UPF with ERIR report type. If the ERIR delay timer is configured under access profile, the configured value delays the N4 Session Report Request handling.
disc_pdusetup_create_over_create	The total number of ongoing 5G sessions rejected by the SMF when 5G session establishment is received while handling N11SmContextCreateRequest for 5G session establishment (Create over Create case).
disc_pdurel_amf_init_release_404	The total number of 5G sessions released by the SMF due to 404 response from AMF for N1N2Transfer Request during 5G session modification.
disc_sess_report_erir_pdn_sess_rel	The total number of 4G or Wi-Fi sessions released by the SMF due to N4 Session Report Request from UPF with ERIR report type. If the ERIR delay timer is configured under access profile, the configured value delays the N4 Session Report Request handling.

Disconnect Reason	Description
disc_pdusetup_create_over_create	The total number of ongoing 5G sessions rejected by the SMF when 5G session establishment is received while handling N11SmContextCreateRequest for 5G session establishment (Create over Create case).
disc_pdurel_amf_init_release_404	The total number of 5G sessions released by the SMF due to 404 response from AMF for N1N2Transfer Request during 5G session modification.
disc_pduim_context_not_found	The total number of 5G sessions released by the SMF due to 404 response from AMF for N1N2Transfer Request during idle to active mobility and vice versa.
disc_pdnsetup_smf_mop_offline	The total number of 4G or Wi-Fi sessions rejected by the SMF due to Session Create received when SMF is in maintenance mode and when the offline mode configuration is set in the SMF profile or specifically for a DNN in the DNN profile.
disc_pdusetup_n2_setup_failed	The total number of 5G sessions rejected by the SMF when N2_PDU_SESSION_RESOURCE_SETUP_ UNSUCCESS_TRANSFER is received from AMF indicating the N2 failure during 5G session establishment.
disc_pdusetup_n1n2_transfer_ rsp_failure	The total number of 5G sessions rejected by the SMF due to N11N1N2MessageTransferFailure response from AMF during 5G session setup.
disc_pdnsetup_non5gcapableue_ not_allowed	The total number of 4G or Wi-Fi sessions rejected by the SMF due to Session Create received without 5G InterWorking (IWK_5GS) indication and when the DNN profile is configured to support only NR capable UE by setting **only-nr-capable-ue** to true.
disc_pdnsetup_udm_sub_fetch_failed	The total number of sessions rejected by the SMF due to failure in fetching the session management subscription data (sm-data) from UDM during 4G or Wi-Fi session establishment time. This disconnect reason is pegged in the following scenarios: • SMF request to UDM for fetching the session management subscription data (sm-data) fails. • SMF receives failure response from UDM for SM data request. • Validation of request from UE (SSC mode, PDU session type and Snssai) fails against the subscription allowed based on UDM response.

Disconnect Reason	Description
disc_pdnsetup_udm_sub_fetch_ resp_failed	The total number of sessions rejected by the SMF due to failure in fetching the session management subscription data (sm-data) from UDM during 4G or Wi-Fi session establishment time. This disconnect reason is pegged in the following scenarios: • SMF receives failure response from UDM for session management subscription data (sm-data) request. • Validation of request from UE (SSC mode, PDU session type, and Snssai) fails against the subscription allowed based on UDM response.
disc_pdusetup_release_over_create	The total number of 5G sessions rejected by the SMF due to 5G session release event during ongoing 5G session establishment.
disc_pdusetup_pdu_sess_ does_not_exist	The total number of 5G sessions rejected by the SMF when SmContextCreateRequest is received with RequestType as EXISTING_PDU_SESSION during Wi-Fi to 5G handover, but the session doesn't exist with SMF.
disc_sess_cp_idle_time_exp_release	The total number of 4G or Wi-Fi sessions released by the SMF due to Control Plane (CP) idle timeout that started on successful session establishment. The idle timeout is configured in the DNN profile.
disc_sgw_ctx_failure	The total number of 4G or Wi-Fi sessions rejected by the SMF due to default flow failure caused by S-GW.
disc_pdnsetup_pcf_create_ resp_failed	The total number of 4G or Wi-Fi sessions rejected by the SMF due to PCF Create Failure during 4G or Wi-Fi session establishment.
disc_gtpc_peer_pathfail	The total number of 4G or Wi-Fi sessions released by the SMF due to GTPC path failure in the network.
disc_pdusetup_rm_ exchg_failure	The total number of 5G sessions rejected by the SMF due to IP allocation failure for the PDU session during 5G session setup.
disc_rel_chf_err	The total number of sessions released by the SMF due to CHF-initiated session release.
disc_pdnsetup_udm_reg_ resp_failed	The total number of sessions rejected by the SMF due to SMF registration failure with UDM during 4G or Wi-Fi session establishment time. The SMF sends registration request to UDM for storing UE context management information. This disconnect reason is pegged in the following scenarios: • SMF registration request to UDM fails. • SMF receives failure response from UDM for registration request.

Disconnect Reason	Description
disc_pdumodify_context_not_found	The total number of 5G sessions released by the SMF due to 404 response from AMF for N1N2Transfer Request during 5G session modification.
disc_pdusetup_sm_cxt_sess_id_err	The total number of sessions rejected by the SMF when pduSessionId in 5G PDU Session Establishment Request (N11SmContextCreate Request) is either zero or not in the expected format. This disconnect reason is also pegged when there is no subscriber ID (SUPI or PEI) but the ueEpsPdnConnection parameter is present in the request.
disc_pdusetup_upf_setup_rsp_failure	The total number of sessions rejected by the SMF when N4 session establishment with UPF fails during 5G session establishment time.
disc_pdusetup_sess_cp_idle_timeout	The total number of PDN sessions released by the SMF due to Control Plane (CP) idle timer expiry. The CP idle timer expires when there is no control plane activity within the CP idle timeout.
disc_pdusetup_ip_alloc_failed	The total number of sessions rejected by the SMF or PGW-C when IP address allocation fails. This disconnect reason is pegged in the following scenarios: • SMF service (node manager) which handles IP address allocation is down. • SMF service (node manager) couldn't allocate the IP address of the requested PDU session type.
disc_pdusetup_n1n2_transfer_ exchg_failure	The total number of sessions rejected by the SMF when there is failure in N1N2 Transfer Request with AMF during 5G PDU session establishment.
disc_pdnsetup_resource_mgr_ exchg_failed	The total number of sessions rejected by the SMF or PGW-C when resource manager exchange fails due to IP address allocation failure during 4G or Wi-Fi PDN connection time.
disc_pdusetup_pcf_create_rsp_failure	The total number of sessions rejected by the SMF due to Policy Create Failure. This disconnect reason is pegged in the following scenarios: • SMF receives failure from PCF for Policy Create Request during 5G session establishment. • No response from PCF for Policy Create Failure.

Disconnect Reason	Description
disc_pdnsetup_csr_invalid	The total number of Create Session Requests rejected by the SMF when Create Session Request includes invalid parameters. This disconnect reason is pegged in the following scenarios: • Create Session Request with invalid parameters for new PDN connection (4G or Wi-Fi). • Create Session Request with invalid parameters in handover requests—5G to Wi-Fi HO, 4G to Wi-Fi HO, and Wi-Fi to 4G HO.
disc_n26_4g_5g_ho_n4_modify_failed	The total number of sessions released by the SMF or PGW-C when N4 modification with UPF fails in the execution phase of 4G to 5G N26 handover. This disconnect reason is pegged in the following scenarios: • N4 Modification Request failure in the execution phase of N26 HO. • SMF receives failure response from UPF for N4 modification in the execution phase of N26 HO. • SLA timeout at SMF during N4 modification in the execution phase of N26 HO.
disc_sess_cp_idle_time_exp_release	The total number of PDN sessions released by the SMF or PGW-C due to Control Plane (CP) idle timer expiry. The CP idle timer expires when there is no control plane activity within the CP idle timeout.
disc_pdusetup_dnn_not_supported_ in_slice	The total number of sessions rejected by the SMF where the 5G PDU Session Establishment Request (N11smContextCreate) received from AMF contains DNN which is not supported in the requested network slice.
disc_pdusetup_udm_reg_failed	The total number of sessions rejected by the SMF due to SMF registration failure with UDM during 5G session establishment time. The SMF sends registration request to UDM for storing UE context management information. This disconnect reason is pegged in the following scenarios: • SMF registration request to UDM fails. • SMF receives failure response from UDM for registration request.
disc_pdurel_db_conflict	The total number of sessions released by the SMF due to internal issue related to the database conflict.

Disconnect Reason	Description
disc_pdusetup_udm_sub_fetch_ resp_failed	The total number of sessions rejected by the SMF due to failure in fetching the session management subscription data (sm-data) from UDM during 5G session establishment time. This disconnect reason is pegged in the following scenarios: • SMF receives failure response from UDM for session management subscription data (sm-data) request. • Validation of request from UE (SSC mode, PDU session type and Snssai) fails against the subscription allowed based on UDM response.
disc_pdusetup_udm_sub_fetch_failure	The total number of sessions rejected by the SMF due to failure in fetching the session management subscription data (sm-data) from UDM during 5G session establishment time. This disconnect reason is pegged in the following scenarios: • SMF request to UDM for fetching the session management subscription data (sm-data) fails. • SMF receives failure response from UDM for SM data request. • Validation of request from UE (SSC mode, PDU session type, and Snssai) fails against the subscription allowed based on UDM response.
disc_pdnsetup_secondary_auth_ip_addr_conflict	The total number of 4G sessions released by the SMF when the static UE IP address received from access side does not match the Framed IP address received in RADIUS Authentication response.
disc_pdnsetup_pcrf_create_failed	The total number of 4G sessions released by the SMF when the initial request to the PCRF server cannot be sent during session setup.
disc_pdnsetup_pcrf_create_resp_failed	The total number of 4G sessions released by the SMF when the processing of the response of the initial request to the PCRF server fails, resulting in session termination.
disc_pdnsetup_charging_create_resp_failed	The total number of 4G sessions released by the SMF when fetching the response to the initial charging request fails, resulting in session termination.
disc_pdusetup_static_duplicate_ip	The total number of 5G sessions that are rejected by SMF due to detection of duplicate static IP.
disc_pdnsetup_static_duplicate_ip	The total number of 4G or Wi-Fi sessions that are rejected by SMF due to detection of duplicate static IP.