



Addenda and Errata for Cisco ASR 5x00 Documentation

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Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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Addenda and Errata for Cisco ASR 5x00 Documentation

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About this Guide

This document contains content that is new information for (addenda) or content that was erroneous in (errata) the previous versions of Cisco ASR 5x00 documentation. The content in this document will appear in the next published release of the Cisco ASR 5x00 documentation.

Conventions Used

The following tables describe the conventions used throughout this documentation.

Icon	Notice Type	Description
	Information Note	Provides information about important features or instructions.
	Caution	Alerts you of potential damage to a program, device, or system.
	Warning	Alerts you of potential personal injury or fatality. May also alert you of potential electrical hazards.
	Electro-Static Discharge (ESD)	Warns you to take proper grounding precautions before handling ESD sensitive components or devices.

Typeface Conventions	Description
Text represented as a <i>screen display</i>	This typeface represents displays that appear on your terminal screen, for example: Login:
Text represented as commands	This typeface represents commands that you enter, for example: show ip access-list This document always gives the full form of a command in lowercase letters. Commands are not case sensitive.
Text represented as a command variable	This typeface represents a variable that is part of a command, for example: show card slot_number slot_number is a variable representing the desired chassis slot number.
Text represented as menu or sub-menu names	This typeface represents menus and sub-menus that you access within a software application, for example: Click the File menu, then click New

Command Syntax Conventions	Description
{ keyword or <i>variable</i> }	Required keywords and variables are surrounded by grouped braces. Required keywords and variables are those components that are required to be entered as part of the command syntax.
[keyword or <i>variable</i>]	Optional keywords or variables, or those that a user may or may not choose to use, are surrounded by brackets.

Command Syntax Conventions	Description
	<p>Some commands support alternative variables. These options are documented within braces or brackets by separating each variable with a vertical bar.</p> <p>These variables can be used in conjunction with required or optional keywords or variables. For example:</p> <pre>{ nonce timestamp }</pre> <p>OR</p> <pre>[count <i>number_of_packets</i> size <i>number_of_bytes</i>]</pre>

Contacting Customer Support

Use the information in this section to contact customer support.

Refer to the support area of <http://www.cisco.com> for up-to-date product documentation or to submit a service request. A valid username and password are required to access this site. Please contact your Cisco sales or service representative for additional information.

Chapter 1

Addenda

This addenda identifies content new in the latest StarOS Release 12.0. This content will be included in the next Version 12.0 release of the documentation.

Documentation updates provided in this addenda pertain to the documents listed in the following table and correspond to the stated release date(s):

Table 1. Affected Documents

Document	Part Number	Release Date
<i>Cisco ASR 5000 Series Statistics and Counters Reference</i> , Versions 12.0 and 12.1	OL-25193-06	October 26, 2012

Statistics and Counters Reference

SGSN Schema

The following statistics are newly added to the SGSN Schema. This information will be incorporated into the next publication of the *Cisco ASR 5000 Series Statistics and Counters Reference*, Versions 12.0 and 12.1

Variable	Description	Data Type
3G-attach-fail- iu_release-external	<p>Description: This proprietary counter tracks the total number of GPRS Attach Failures due to the Iu being released before the Attach complete due to external triggers in the 3G service.</p> <p>Triggers: The counter increments when any one of the following occurs:</p> <ul style="list-style-type: none"> • Iu Release request from RNC before attach complete. • RAI deletion from the configuration. • RNC deletion from the configuration. • Identity response(for IMSI or IMEI) timeout. • Authentication response timeout. • Detach request from MS during attach procedure. • Security mode control failure due to RNC. • Inter RAT to 2G before during attach procedure. • Outbound inter SGSN RAU during attach procedure. • Attaching to multiple IUPS services. <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-attach-fail- iu_release-internal	<p>Description: This proprietary counter tracks the total number of GPRS Attach Failures due to the Iu being released before the Attach complete due to external triggers in the 3G service.</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32

Variable	Description	Data Type
3G-attach-fail- iu_release-comb- external	<p>Description: This proprietary counter tracks the total number of COMBO Attach Failures due to the Iu being released before the Attach complete due to external triggers in the 3G service.</p> <p>Triggers: The counter increments when any one of the following occurs:</p> <ul style="list-style-type: none"> • Iu Release request from RNC before attach complete. • RAI deletion from the configuration. • RNC deletion from the configuration. • Identity response(for IMSI or IMEI) timeout. • Authentication response timeout. • Detach request from MS during attach procedure. • Security mode control failure due to RNC. • Inter RAT to 2G before during attach procedure. • Outbound inter SGSN RAU during attach procedure. • Attaching to multiple IUPS services. <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-attach-fail- iu_release-comb- internal	<p>Description: This proprietary counter tracks the total number of COMBO Attach Failures due to the Iu being released before the Attach complete due to internal triggers in the 3G service.</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-actv-rej-network- failure-ext	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'network failure' as cause, due to external triggers.</p> <p>Triggers: The counter increments when any one of the following occurs:</p> <ul style="list-style-type: none"> • GTPC path failure, • DNS failure, • UPCR with system failure (UPCQ triggered due to change in Qos in RAB rsp,UPCQ triggered due to Direct-Tunnel) <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-actv-rej-network- failure-int	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'network failure' as cause, due to internal triggers.</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32

Variable	Description	Data Type
3G-actv-rej-svc-opt- tmp-out-of-order-ext	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'service option temporarily out of order' as cause, due to external triggers.</p> <p>Triggers: SRNS during Activation.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-actv-rej-svc-opt- tmp-out-of-order-int	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'service option temporarily out of order' as cause, due to internal triggers.</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-actv-rej-unspecified- error-ext	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'unspecified error' as cause, due to external triggers.</p> <p>Triggers: The counter increments when any one of the following occurs:</p> <ul style="list-style-type: none"> • CPCR with System failure • CAMEL Release Req during activation • No response for CPCR,UPCR during Activation (UPCQ triggered due to change in QoS in RAB rsp/Direct Tunnel) <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-actv-rej-unspecified- error-int	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'unspecified error' as cause, due to internal triggers.</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-sec-actv-rej- unspecified-error-ext	<p>Description: This proprietary counter tracks the total number of Secondary PDP Activation Rejects, with 'unspecified error' as cause, due to external triggers.</p> <p>Triggers: The counter increments when any one of the following occurs:</p> <ul style="list-style-type: none"> • CPCR with System failure • CAMEL Release Req during activation • No response for CPCR,UPCR during Activation (UPCQ triggered due to change in QoS in RAB rsp/Direct Tunnel) <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-sec-actv-rej- unspecified-error-int	<p>Description: This proprietary counter tracks the total number of Secondary PDP Activation Rejects, with 'unspecified error' as cause, due to internal triggers.</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32

Variable	Description	Data Type
3G-actv-rej-insufficient-resources-ext	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'insufficient resources' as cause, due to external triggers.</p> <p>Triggers: The counter increments when one of the following occurs:</p> <ul style="list-style-type: none"> • QoS Negotiation Failure with GGSN or QoS not present in activation request. • Operator policy restrictions. • GGSN Has No Memory sent as the cause in the CPC response. • GGSN Changed PDP Type in the CPCRCR. • GGSN PDP Addr Alloc Failure. • RNC GTPU Path Failure when activation is in progress. • RNC RAB Establishment Failure. <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-actv-rej-insufficient-resources-int	<p>Description: This proprietary counter tracks the total number of Primary PDP Activation Rejects, with 'insufficient resources' as cause, due to internal triggers.</p> <p>Triggers: SGSN has no memory to process the activation procedure.</p> <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-sec-actv-rej-insufficient-resources-ext	<p>Description: This proprietary counter tracks the total number of Secondary PDP Activation Rejects, with 'insufficient resources' as cause, due to external triggers.</p> <p>Triggers: Increments when any one of the following occurs:</p> <ul style="list-style-type: none"> • QoS Negotiation Failure with GGSN or QoS not present in activation request. • Operator policy restrictions. • GGSN Has No Memory sent as the cause in the CPCRCR. • RNC GTPU Path Failure when activation is in progress. • RNC RAB Establishment Failure. • Activation request when Bundle deactivation is in progress. • Activation request when Primary PDP context activated is GTPv0. <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32
3G-sec-actv-rej-insufficient-resources-int	<p>Description: This proprietary counter tracks the total number of Secondary PDP Activation Rejects, with 'insufficient resources' as cause, due to internal triggers.</p> <p>Triggers: SGSN has no memory to process the activation procedure.</p> <p>Availability: per SGSN service, per RA Type: Counter</p>	Int32

Variable	Description	Data Type
3G-total-actv-reject-internal	<p>Description: This proprietary counter tracks the total number of Primary and Secondary PDP Activation Rejects due to internal triggers.</p> <p>Triggers: SGSN sends an Activate Reject or Activate Secondary Reject to MS due to internal triggers.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-total-actv-reject-external	<p>Description: This proprietary counter tracks the total number of Primary and Secondary PDP Activation Rejects due to external triggers.</p> <p>Triggers: SGSN sends an Activate Reject or Activate Secondary Reject to MS due to external triggers.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
2G-attach-rej-network-failure-ext	<p>Description: This proprietary counter tracks the total number of GPRS Attach Rejects due to external triggers with cause "network failure".</p> <p>Triggers: Increments when one of the following occurs:</p> <ul style="list-style-type: none"> • Throttling due to congestion. • Data missing from HLR. • SAI response timeout. • UGL response timeout. • Check IMEI response timeout from EIR. • Operator policy restrictions. <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-rej-network-failure-int	<p>Description: This proprietary counter tracks the total number of GPRS Attach Rejects due to internal triggers with cause "network failure".</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-comb-attach-rej-network-failure-ext	<p>Description: This proprietary counter tracks the total number of COMBO Attach Rejects due to external triggers with cause "network failure".</p> <p>Triggers: Increments when one of the following occurs:</p> <ul style="list-style-type: none"> • Throttling due to congestion. • Data missing from HLR. • SAI response timeout. • UGL response timeout. • Check IMEI response timeout from EIR. • Operator policy restrictions. <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32

Variable	Description	Data Type
2G-comb-attach-rej-network-failure-int	<p>Description: This proprietary counter tracks the total number of COMBO Attach Rejects due to internal triggers with cause "network failure".</p> <p>Triggers: No internal triggers at this time - this statistic is a placeholder for future development.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
3G-attach-rej-network-failure-ext	<p>Description: This proprietary counter tracks the total number of GPRS Attach Rejects due to external triggers with cause "network failure".</p> <p>Triggers: Counter increments when on of the following occurs:</p> <ul style="list-style-type: none"> • Throttling due to congestion. • Data missing from HLR. • SAI response timeout. • UGL response timeout. • Check IMEI response timeout from EIR. • Operator policy restrictions. • MS has too many Ius. • RNC overloaded. <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-attach-rej-network-failure-int	<p>Description: This proprietary counter tracks the total number of GPRS Attach Rejects due to internal triggers with cause "network failure".</p> <p>Triggers: Session Manager is out of credits.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
3G-comb-attach-rej-network-failure-ext	<p>Description: This proprietary counter tracks the total number of COMBO Attach Rejects due to external triggers with cause "network failure".</p> <p>Triggers: Counter increments when on of the following occurs:</p> <ul style="list-style-type: none"> • Throttling due to congestion. • Data missing from HLR. • SAI response timeout. • UGL response timeout. • Check IMEI response timeout from EIR. • Operator policy restrictions. • MS has too many Ius. • RNC overloaded. <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32

Variable	Description	Data Type
3G-comb-attach-rej-network-failure-int	<p>Description: This proprietary counter tracks the total number of COMBO Attach Rejects due to internal triggers with cause "network failure".</p> <p>Triggers: Session Manager is out of credits.</p> <p>Availability: per SGSN service, per RA</p> <p>Type: Counter</p>	Int32
2G-attach-fail-suspend-received	<p>Description: This proprietary counter tracks the total number of GPRS Attach failures due to Suspend Request received from the MS.</p> <p>Triggers: SGSN received a Suspend Request from the MS.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-bvc-rst-received	<p>Description: This proprietary counter tracks the total number of GPRS Attach failures due to BVC Reset received from the BSS.</p> <p>Triggers: SGSN receives a BVC Reset from the BSS.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-sai-failure	<p>Description: This proprietary counter tracks the total number of GPRS Attach failures due to SAI failure.</p> <p>Triggers: Counter increments when either of the following occurs:</p> <ul style="list-style-type: none"> • SAI response timeout • Negative response for SAI Request from HLR <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-auth-tmr-expiry	<p>Description: This counter tracks the total number of GPRS Attach failures due to expiry of the Auth timer.</p> <p>Triggers: Auth timer expires during authentication.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-sgsn-init-detach	<p>Description: The total number of GPRS Attach failures because of an SGSN-initiated Detach.</p> <p>Triggers: Counter increments when one of the following occurs:</p> <ul style="list-style-type: none"> • Ciphering algorithm negotiation failure and configuration enabled to reject the attach procedure. • IMEI is blacklisted under IMEI profile in SGSN. • Cancel location type Subscription withdrawn. • Admin clears subscribers. <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32

Variable	Description	Data Type
2G-attach-fail-identity-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to Identity failure.</p> <p>Triggers: Counter increments when either of the following occurs:</p> <ul style="list-style-type: none"> Identity response timeout (IMSI, IMEI/IMEISV) Negative response for identity request (IMSI, IMEI/IMEISV) from MS <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-radio-status-cell-resel	<p>Description: This counter tracks the total number of GPRS Attach failures due to "radio status cell reselection".</p> <p>Triggers: Radio status cell reselection occurs.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-check-imei-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to Check IMEI Response Failure.</p> <p>Triggers: Increments when either of the following occurs:</p> <ul style="list-style-type: none"> Check IMEI response timeout from EIR. IMEI being Black Listed in the EIR. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-rej-due-to-congestion	<p>Description: This counter tracks the total number of GPRS Attach failures due to throttling because of congestion.</p> <p>Triggers: Throttling occurs due to congestion.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-camel-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to CAMEL failure.</p> <p>Triggers: Increments when either of the following occurs:</p> <ul style="list-style-type: none"> CAMEL response timeout. CAMEL release response. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-radio-status-bad	<p>Description: This counter tracks the total number of GPRS Attach failures due to occurrence of Radio Status Bad.</p> <p>Triggers: Bad Radio Status received from the BSS.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-t3350-expiry	<p>Description: This counter tracks the total number of GPRS Attach failures due to T3350 timer expiry.</p> <p>Triggers: T3350 timer expires prior to receiving the Attach Accept.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32

Variable	Description	Data Type
2G-attach-fail-auth-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to Auth response failure.</p> <p>Triggers: XRES mismatch in Auth Response occurs during authentication.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-glu-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to UGL failure.</p> <p>Triggers: Increments in response to:</p> <ul style="list-style-type: none"> • UGL response timeout • Negative response for UGL request from HLR <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-ms-init-detach	<p>Description: This counter tracks the total number of GPRS Attach failures due to SGSN receiving Detach Request from the MS.</p> <p>Triggers: SGSN received a Detach Request from an MS.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-opr-policy-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to Operator Policy restrictions.</p> <p>Triggers: Operator Policy includes restrictions.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-cl-init-detach	<p>Description: This counter tracks the total number of GPRS Attach failures due to the SGSN receiving a Cancel Location Request from the HLR.</p> <p>Triggers: Cancel Location Request is received from the HLR.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-abort-on-attach	<p>Description: This counter tracks the total number of GPRS Attach failures due to abort during attach.</p> <p>Triggers: MS does 3G Attach when 2G Attach is in progress.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-attach-on-attach	<p>Description: This counter tracks the total number of GPRS Attach failures due to attach on attach.</p> <p>Triggers: MS tries to attach again when attach is in progress.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-ready-tmr	<p>Description: This counter tracks the total number of GPRS Attach failures due to expiration of the READY timer.</p> <p>Triggers: READY Timer expiry.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32

Variable	Description	Data Type
2G-attach-fail-camel-srv-not-assoc	<p>Description: This counter tracks the total number of GPRS Attach failures due to CAMEL service not being associated with the GPRS service.</p> <p>Triggers: CAMEL service not associated with GPRS service for the Prepaid type MS.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-p-tmsi-sign-mismatch	<p>Description: This counter tracks the total number of GPRS Attach failures due to PTMSI signature mismatch.</p> <p>Triggers: Configuration enables SGSN to reject the Attach Request when PTMSI signature mismatch occurs.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-xid-resp-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to XID response failure.</p> <p>Triggers: LLC XID error response for XID Request.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-internal-failure	<p>Description: This counter tracks the total number of GPRS Attach failures due to Internal Failures.</p> <p>Triggers: Any one of the following:</p> <ul style="list-style-type: none"> • Invalid DB record. • Attach Request PDU corruption. • Application initiated abort on the attach procedure. • Identity request sending failure from the stack. • Failure in decoding the CLP from the PTMSI. • Resource allocation failure. • CLP recreation failing during the inter RAT. <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-comb-suspend-received	<p>Description: This counter tracks the total number of COMBO Attach failures due to SGSN receiving a Suspend Request from the MS.</p> <p>Triggers: Suspend Request from MS</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32
2G-attach-fail-comb-bvc-rst-received	<p>Description: This counter tracks the total number of COMBO Attach failures due to SGSN receiving a BVC reset from the BSS.</p> <p>Triggers: BVC Reset from the BSS.</p> <p>Availability: per GPRS service</p> <p>Type: Counter</p>	Int32

Variable	Description	Data Type
2G-attach-fail-comb-sai-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to SAI failure.</p> <p>Triggers: Any one of the following:</p> <ul style="list-style-type: none"> • SAI Response timeout. • Negative response for SAI Request from the HLR. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-auth-tmr-expiry	<p>Description: This counter tracks the total number of COMBO Attach failures due to Auth timer expiry.</p> <p>Triggers: Auth timer expires during authentication.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-sgsn-init-detach	<p>Description: This counter tracks the total number of COMBO Attach failures due to SGSN-initiated Detach.</p> <p>Triggers: Any one of the following:</p> <ul style="list-style-type: none"> • Ciphering algorithm negotiation failure and configuration enabled to reject the attach procedure. • IMEI is blacklisted under IMEI profile in SGSN. • Cancel location type Subscription withdrawn. • Admin clears subscribers. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-identity-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to Identity failure.</p> <p>Triggers: Either one of the following occurs:</p> <ul style="list-style-type: none"> • Identity Response timeout (IMSI, IMEI/IMEISV). • Negative response for Identity Request (IMSI, IMEI/IMEISV) from MS. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-radio-status-cell-resel	<p>Description: This counter tracks the total number of COMBO Attach failures due to radio status cell reselection.</p> <p>Triggers: Radio status cell reselection.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32

Variable	Description	Data Type
2G-attach-fail-comb-check-imei-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to Check IMEI Response failure.</p> <p>Triggers: Either one of the following occurs:</p> <ul style="list-style-type: none"> • Check IMEI response timeout from EIR. • IMEI being Black Listed in the EIR. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-rej-due-to-congestion	<p>Description: This counter tracks the total number of COMBO Attach failures due to throttling which has occurred in response to congestion.</p> <p>Triggers: Throttling due to congestion.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-camel-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to CAMEL failure.</p> <p>Triggers: Either one of the following:</p> <ul style="list-style-type: none"> • CAMEL response timeout. • CAMEL release response. <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-radio-status-bad	<p>Description: This counter tracks the total number of COMBO Attach failures due to the SGSN receiving Bad Radio Status from the BSS.</p> <p>Triggers: Bad Radio Status received from the BSS.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-t3350-expiry	<p>Description: This counter tracks the total number of COMBO Attach failures due to the expiration of the T3350 timer for the Attach Accept.</p> <p>Triggers: T3350 timer expiry for Attach Accept.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-auth-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to Auth response failure.</p> <p>Triggers: XRES mismatch in Auth Response during authentication.</p> <p>Availability: per GPRS service Type: Counter</p>	Int32
2G-attach-fail-comb-glu-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to UGL failure.</p> <p>Triggers: Either of the following:</p> <ul style="list-style-type: none"> • UGL Response timeout. • Negative response for UGL Request from the HLR. <p>Availability: per GPRS service Type: Counter</p>	Int32

Variable	Description	Data Type
2G-attach-fail-comb-ms-init-detach	Description: This counter tracks the total number of COMBO Attach failures due to SGSN receiving Detach Request from the MS. Triggers: Detach Request received from the MS. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-opr-policy-failure	Description: This counter tracks the total number of COMBO Attach failures due to Operator Policy restrictions. Triggers: Restrictions configured in the operator policy. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-cl-init-detach	Description: This counter tracks the total number of COMBO Attach failures because the SGSN has received a Cancel Location Request from the HLR. Triggers: Cancel Location Request from HLR. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-abort-on-attach	Description: This counter tracks the total number of COMBO Attach failures due to abort during attach. Triggers: MS does 3G Attach when 2G Attach is in progress. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-attach-on-attach	Description: This counter tracks the total number of COMBO Attach failures due to attempting an attach during an attach. Triggers: MS does attach when attach is in progress. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-ready-tmr	Description: This counter tracks the total number of COMBO Attach failures due to READY timer expiring. Triggers: READY timer expires. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-camel-srv-not-assoc	Description: This counter tracks the total number of COMBO Attach failures due to CAMEL service not being associated with the GPRS service. Triggers: CAMEL service not associated with GPRS service for the Prepaid type MS. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-ptmsi-sign-mismatch	Description: This counter tracks the total number of COMBO Attach failures because the SGSN has been configured to reject Attach Requests when PTMSI signature mismatch occurs. Triggers: PTMSI signature mismatch. Availability: per GPRS service Type: Counter	Int32
2G-attach-fail-comb-xid-resp-failure	Description: This counter tracks the total number of COMBO Attach failures due to XID Response failure at the LLC. Triggers: XID error response for XID Request. Availability: per GPRS service Type: Counter	Int32

Variable	Description	Data Type
2G-attach-fail-comb-internal-failure	<p>Description: This counter tracks the total number of COMBO Attach failures due to internal failures.</p> <p>Triggers: Any one of the following:</p> <ul style="list-style-type: none"> • Invalid DB record. • Attach Request PDU corruption. • Application initiated abort on the attach procedure. • Identity request sending failure from the stack. • Failure in decoding the CLP from the PTMSI. • Resource allocation failure. • CLP recreation failing during the inter RAT. <p>Availability: per GPRS service Type: Counter</p>	Int32

show gmm-sm verbose

The following fields are newly added to the output generated by the **show gmm-sm verbose** command. This information will be incorporated into the next publication of the *Cisco ASR 5000 Series Statistics and Counters Reference*, Versions 12.0 and 12.1

Field	Description
3G-Iu Release Before Attach Segregation	
GPRS-Attach: External Triggers	This counter records the total number of external failures triggering an Iu being released before a GPRS Attach complete. For more information, refer to bulk statistic info for variable <code>3G-attach-fail-iu_release-external</code> in the SGSN schema.
GPRS-Attach: Internal Triggers	This counter records the total number of internal failures triggering an Iu being released before a GPRS Attach complete. For more information, refer to bulk statistic info for variable <code>3G-attach-fail-iu_release-internal</code> in the SGSN schema.
Comb-Attach: External Triggers	This counter records the total number of external failures triggering an Iu being released before a COMBO Attach complete. For more information, refer to bulk statistic info for variable <code>3G-attach-fail-iu_release-comb-external</code> in the SGSN schema.
Comb-Attach: Internal Triggers	This counter records the total number of internal failures triggering an Iu being released before a COMBO Attach complete. For more information, refer to bulk statistic info for variable <code>3G-attach-fail-iu_release-comb-internal</code> in the SGSN schema.
Activate Context Reject Segregation:	
Total-3G-Actv-Reject: External Triggered	This counter tracks the total number of Activation Rejects triggered by external failures. For more information, refer to bulk statistic info for variable <code>3G-total-actv-reject-external</code> in the SGSN schema.

Field	Description
Total-3G-Actv-Reject: Internal Triggered:	This counter tracks the total number of Activation Rejects triggered by internal failures. For more information, refer to bulk statistic info for variable <code>3G-total-actv-reject-internal</code> in the SGSN schema.
3G-Primary-Actv-Reject: External Triggered:	This counter tracks the total number of Primary PDP Activation Rejects triggered by external failures.
3G-Primary-Actv-Reject: Internal Triggered:	This counter tracks the total number of Primary PDP Activation Rejects triggered by internal failures.
3G-Secondary-Actv-Reject: External Triggered:	This counter tracks the total number of Secondary PDP Activation Rejects triggered by external failures.
3G-Secondary-Actv-Reject: Internal Triggered:	This counter tracks the total number of Secondary PDP Activation Rejects triggered by internal failures.
Activate Primary PDP Context Insufficient Resource Cause Segregation: Total 3G-Insuff res triggers:	
Total 3G-Insuff res external triggs:	This counter tracks the total number of Activation Rejects that are triggered by external failures with cause code of insufficient resources. For more information, refer to bulk statistic info for variable <code>3G-actv-rej-insufficient-resources-ext</code> in the SGSN schema.
3G-Qos Negotiation Fail:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered by QoS negotiation failure.
3G-Operator Policy Fail:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered due to operator policy restrictions with cause code set to “insufficient resource”.
3G-GGSN Has No Resources:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered by the GGSN rejecting the activation in the CPCR (create PDP context response) with cause as “no resource”.
3G-GGSN Changed PDP Type:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered because the GGSN changed the PDP address type.
3G-GGSN PDP Addr Alloc Fail:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered because the GGSN was unable to allocate the PDP address.
3G-RNC GTPU Path Failure:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered due to RNC GTPU path failure.
3G-RNC RAB Establishment Fail:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered because the RNC was unable to establish the RAB.
Total 3G-Insuff res internal triggs:	This counter tracks the total number of Activation Rejects that are triggered by internal failures with cause code of insufficient resources. For more information, refer to bulk statistic info for variable <code>3G-actv-rej-insufficient-resources-int</code> in the SGSN schema.
3G-SGSN Has No Memory:	This counter tracks the total number of Primary PDP Activation Rejects that are triggered because the SGSN was unable to allocate the resources.
Activate Secondary PDP Context Insufficient Resource Cause Segregation: Total 3G-Insuff res triggers:	

Field	Description
Total 3G-Insuff res external triggs:	This counter tracks the total number of Activation Rejects that are triggered by external failures with cause code of insufficient resources. For more information, refer to bulk statistic info for variable <code>3G-sec-actv-rej-insufficient-resources-ext</code> in the SGSN schema.
3G-Qos Negotiation Fail:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered by QoS negotiation failure.
3G-Operator Policy Fail:	This counter tracks the total number of Secondary Activation Rejects that are triggered due to operator policy restrictions with cause code set to “insufficient resource”.
3G-Primary is GTPV0:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered because the Primary PDP context was GTPv0.
3G-GGSN Has No Resource:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered by the GGSN rejecting the activation in the PCR (create PDP context response) with cause as “no resource”.
3G-PDP Addr Type Mismatch:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered because the Primary PDP context was PPP type.
3G-RNC GTPU Path Failure:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered due to RNC GTPU path failure.
3G-RNC RAB Establishment Fail:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered because the RNC was unable to establish the RAB.
3G-Ongoing Bundle Deactivation:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered because of ongoing bundle deactivation.
Total 3G-Insuff res internal triggs:	This counter tracks the total number of Activation Rejects that are triggered by internal failures with cause code of insufficient resources. For more information, refer to bulk statistic info for variable <code>3G-sec-actv-rej-insufficient-resources-int</code> in the SGSN schema.
3G-SGSN Has No Memory:	This counter tracks the total number of Secondary PDP Activation Rejects that are triggered because the SGSN was unable to allocate the resources.

Chapter 2

Errata

This errata identifies erroneous content in the previous version of the ASR 5x00 documentation. This content will be included in the next Version 12.0 release of the documentation.

Documentation updates provided in this errata pertain to the documents listed in the following table and correspond to the stated release date(s):

Table 2. Affected Documents

Document	Part Number	Release Date
<i>Cisco ASR 5000 Series AAA and GTPP Interface Administration and Reference</i> , Version 12.0	OL-24895-03	October 26, 2012
<i>Cisco ASR 5000 Series Command Line Interface Reference</i> , Versions 12.0 and 12.1	OL-25190-06	October 26, 2012

AAA Interface Administration and Reference

RADIUS Dictionaries and Attribute Definitions

The “SN-Rulebase” RADIUS attribute’s VSA type has been corrected to 250. In previous releases, it was erroneously listed as 249.

Command Line Interface Reference

AAA Server Group Configuration Mode Commands

radius algorithm

Descriptions for the keywords **first-server** and **round-robin** are inaccurate, only authentication data is sent to the RADIUS authentication server.

Context Configuration Mode Commands

radius algorithm

Descriptions for the keywords **first-server** and **round-robin** are inaccurate, only authentication data is sent to the RADIUS authentication server.

Diameter Endpoint Configuration Mode Commands

associate sctp-parameters-template

This CLI command is available only in StarOS 12.2 and later releases. This command will be removed from the 12.0 documentation.