



# RAN/NAS Cause IE support in S2b Messages

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## Feature Information

### Summary Data

Status:	New Feature
Introduced-In Release:	21.2
Modified-In Release(s):	ePDG
Applicable Product(s):	Cisco ASR 5500, VPC-SI, VPC-DI, UGP
Customer Specific:	No
Default Setting:	Disabled
CDETS ID(s)	CSCvd28732
Related Changes in this Release:	NA
Related Documentation:	ePDG Admin Guide, CLI Ref Guide and RCR

### Revision History



**Important** Revision history details are not provided for features introduced before release 21.2.

Revision Details	Release	Release Date
New in this release.	21.2	April 27, 2017

## Feature Description

This feature supports RAN/NAS Cause IE in S2b messages, IE is sent in the below S2b messages:

- Delete Session Request
- Create Bearer Response
- Update Bearer Response

Key functionalities of RAN/NAS Cause IE in S2b Messages:

- IE is sent in delete session request to denote the internal/UE/Diameter cause, which will result in session termination.
- IE is sent in Create Bearer Response to denote the internal cause due to which the “request bearer creation” have to be rejected. As ePDG does not interact with UE/AAA for create bearer request it will send internal cause codes.
- IE is sent in Update Bearer Response to denote the internal cause due to which the “request bearer update” have been rejected. As ePDG does not interact with UE/AAA for update bearer request, so ePDG will send internal cause codes.
- New CLI is introduced under call-control profile which enables/disables sending of RAN/NAS Cause IE and internal failure causes.

### Assumptions and Limitations

- eGTPC rejected requests do not have RAN/NAS Cause IE stack.
- If Notify Payload is not received as part of Delete request from UE, internal failure cause would be sent in RAN/NAS cause IE.

## Configuring RAN/NAS Cause IE support in S2b

New CLI introduced as part of RAN/NAS Cause IE support in S2b

```
config
    call-control-profile profile_name
    epdg-s2b-gtpv2 send ran-nas-cause internal-failure protocol-type
8
    [remove] epdg-s2b-gtpv2 send ran-nas-cause internal-failure
    exit
exit
```

## Monitoring and Troubleshooting the ePDG RAN/NAS Cause IE Support In S2b

New show command outputs introduced as part of RAN/NAS Cause IE support in S2b:

show call-control-profile full name

- Sending RAN NAS CAUSE
- Sending RAN NAS CAUSE Internal Failures
- RAN NAS CAUSE Internal Failures Protocol Type

