



# NR UE Security Capability IE for 5G Security Support on MME

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## Feature Summary and Revision History

### Summary Data

Applicable Product(s) or Functional Area	MME
Applicable Platform(s)	<ul style="list-style-type: none"><li>• ASR 5500</li><li>• VPC-DI</li><li>• VPC-SI</li></ul>
Default Setting	Enabled - Configuration Required
Related Changes in This Release	Not Applicable
Related Documentation	<ul style="list-style-type: none"><li>• <i>Command Line Interface Reference</i></li><li>• <i>MME Administration Guide</i></li></ul>

### Revision History

Revision Details	Release
This feature is fully qualified for this release.	21.14.19

Revision Details	Release
<p>First Introduced.</p> <p><b>Note</b> This feature is not fully qualified in this release, and is available only for testing purposes. For more information, contact your Cisco Account Representative.</p>	21.19

## Feature Changes

### Previous Behavior:

- When MME receives UE Additional Security Capability from Attach/TAU, MME parses the UE Additional Security Capability and replays the same in the Security Mode command.
- MME includes or sends the NR UE Security Capability IE over S1AP interface as part of the following messages:
  - INITIAL-CONTEXT-SETUP-REQUEST
  - PATH-SWITCH-REQ-ACK

If MME receives *NR UE Security Capability* in PATH SWITCH REQUEST from eNodeB, it uses the same in PATH SWITCH ACK else, it uses by parsing the *UE Additional Security Capability* received in Attach/TAU request such as, UE-CONTEXT-MODIFICATION-REQUEST, HANDOVER-REQUEST, DOWNLINK-NAS-TRANSPORT.
- MME includes the *UE Additional Security Capability IE* over S10 interface as part of the following messages:
  - FORWARD RELOCATION REQUEST
  - CONTEXT RESPONSE
  - IDENTIFICATION RESPONSE

### New Behavior: After configuring the CLI as **no nr-ue-security-capability-ie**

- MME ignores the *UE Additional Security Capability IE* received in Attach/TAU request.
- MME does not include *Replayed UE Additional Security Capability* in the Security Mode command.
- MME does not include *NR UE Security Capability* over S1AP interface as part of following messages:
  - Initial Context Setup Request
  - MME ignores *NR UE Security Capability IE* received in PATH SWITCH REQUEST from eNodeB and also thereby won't include in PATH SWITCH ACK
  - Downlink NAS messages
  - UE Context Modification Request
  - S1 Handover Request

- MME does not include *UE Additional Security Capability* in MM Context over S10 interface as part of following messages:
  - Forward Relocation Request
  - EGTP Context Response for the Context Received from another MME
  - Identification Response

## Command Changes

### NR UE Security Capability IE

Use the following configuration to configure NR UE Security Capability IE in messages over S1AP and S10 Interfaces to the peer.

```
configure  
  context context_name  
    mme-service nr-ue-security-capability-ie service_name  
      [ no ] nr-ue-security-capability-ie  
    end
```

#### NOTES:

- **mme-service** *service\_name*: Creates an MME service or configures an existing MME service in the current context. *service\_name* specifies the name of the MME service must be a string 1–63 characters.
- **nr-ue-security-capability-ie**: Configures NR UE Security Capability IE for MME service users.
- **no**: Disables CLI **NR UE Security Capability IE** in an MME Service.

