



Load-based Selection of UPF

- [Feature Summary and Revision History, on page 1](#)
- [Feature Description, on page 1](#)

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Product(s) or Functional Area	SMF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 2: Revision History

Revision Details	Release
First introduced.	Pre-2020.02.0

Feature Description

Load based User Plane Function (UPF) selection in SMF distributes calls among active UPFs associated with SMF.

SMF Support for Load Control Feature

3GPP specifies Load Control feature as optional feature over N4 reference points. This enables UPF to send its load information to CP functions. To support Load Control feature, SMF can receive UPF provided Load Control information in the following PFCP messages:

- Session Establishment Response
- Session Modification Response
- Session Deletion Response
- Session Report Request

Load Control procedure details are mentioned in 3GPP TS 29.244 v14.0.0 Release 14 Section 6.2.3 and SMF adheres to the CP functionality.

Load Based UPF Selection

SMF stores the load information provided by UPF and uses it in selecting the UPF for new sessions being established. SMF selects the less loaded UPF among the candidate (DNN based) active UPFs.

This feature considers priority and capacity configured statically against each UPF. In cases where UPF does not send the load information statically, configured capacity is considered while selecting the UPFs.

Standards Compliance

The feature complies with the following standards:

- 3GPP TS 29.244 v14.0.0 Release 14