

Network Bandwidth Management

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Network bandwidth management feature packs

For service providers, managing bandwidth problems used to be a reactive and manual process. The pressure to solve it is huge. Network congestion leads to poor end-customer experiences. Congested links, high latency, and other network impairments lead to a poor perception of the services carried across your network or result in an inability to meet the service level agreements (SLAs) you have with your customers. In the worst-case scenario, your network issues lead to SLA or contract violations and the loss of your brand equity.

Network operators need a toolset to help automate bandwidth optimization, steer traffic with little operator intervention, and ensure that critical links always have sufficient bandwidth to avoid congestion. Cisco Crosswork offers the following feature packs:

- Local Congestion Mitigation (LCM) is a tactical solution for bandwidth management and congestion mitigation. It is best applied when you are attempting to solve congestion issues directly, on the devices themselves, without a full-scale traffic matrix or advanced planning.
- SR Circuit-Style Manager (CSM) is a strategic traffic engineering solution that permits you to reserve bandwidth in advance for critical services, avoiding congestion issues entirely for these high-priority services.
- Bandwidth on Demand (BWoD) is a solution, which provides soft bandwidth guarantee services for SR policies as opposed to strict bandwidth guarantees provided by Circuit Style SR-TE services. Depending on the configuration, BWoD may provide bandwidth reservation, or best-effort bandwidth paths for SR policies. CSM and BWoD feature packs are mutually exclusive. Only one can be enabled at a time.

  Feature pack access requirements

  - Ensure you have the correct licensing package to use feature packs.
  - Users must be assigned admin roles or have certain Device Access Group permissions to access some features or configurations. For more information on RBAC and user roles, see the "Cisco Crosswork Network Controller Administration Guide".