

Review, Update and Plan for PCE in Native IP network

[\[draft-ietf-teas-native-ip-scenarios\]](#)

[\[draft-ietf-teas-pce-native-ip\]](#)

[\[draft-ietf-pce-pcep-extension-native-ip\]](#)

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Scenario and Solution Review

TEAS Working Group
Internet-Draft
Intended status: Experimental
Expires: December 28, 2018

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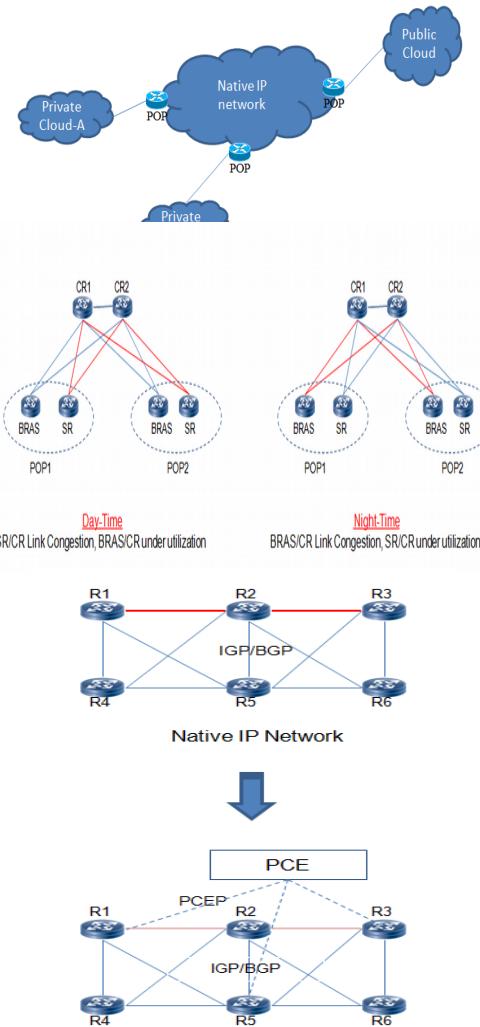
CCDR Scenario, Simulation and Suggestion
[draft-ietf-teas-native-ip-scenarios-01](https://datatracker.ietf.org/doc/draft-ietf-teas-native-ip-scenarios-01)

Abstract

This document describes the scenarios, simulation and suggestions for the "Centrally Control Dynamic Routing (CCDR)" architecture, which integrates the merit of traditional distributed protocols (IGP/BGP), and the power of centrally control technologies (PCE/SDN) to provide one feasible traffic engineering solution in various complex scenarios for the service provider.

Traditional MPLS-TE solution is mainly used in static network planning scenario and is difficult to meet the QoS assurance requirements in real-time traffic network. With the emerge of SDN concept and related technologies, it is possible to simplify the complexity of distributed control protocol, utilize the global view of network condition, give more efficient solution for traffic engineering in various complex scenarios.

[\[draft-ietf-teas-native-ip-scenarios\]](https://datatracker.ietf.org/doc/draft-ietf-teas-native-ip-scenarios)



[\(Detail Material\)](#)

Solution Key Points

1. Deploy PCE/SDN Controller in the native IP network
 - PCE/SDN Controller is responsible for the complex algorithm to optimize the necessary traffic upon the real network situation
2. Populate traffic prefixes via different BGP sessions between peers
3. Manipulate the path to BGP nexthop of these prefixes via PCE to different traffic forwarding path.

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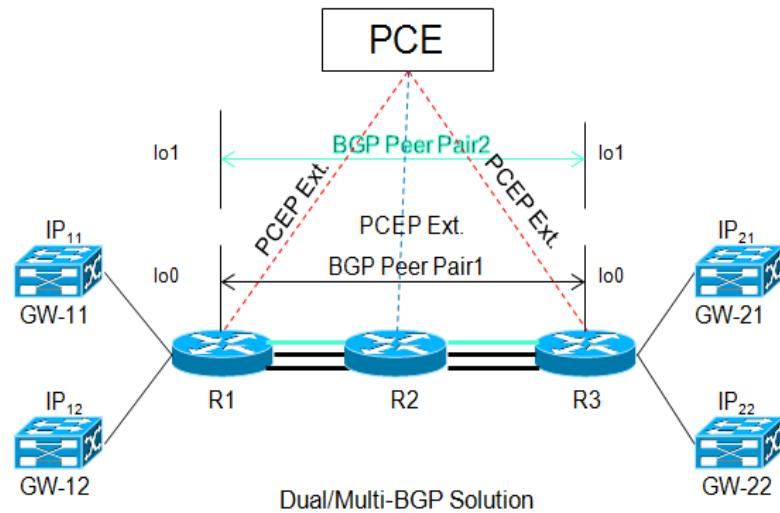
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PCE in Native IP Network
[draft-ietf-teas-pce-native-ip-01](https://datatracker.ietf.org/doc/draft-ietf-teas-pce-native-ip-01)

Abstract

This document defines the framework for CCDR traffic engineering within Native IP network, using Dual/Multi-BGP session strategy and PCE-based central control architecture. The proposed central mode control framework conforms to the concept that defined in [RFC8283]. The scenario and simulation results of CCDR traffic engineering is described in draft [I-D.ietf-teas-native-ip-scenarios].

[\[draft-ietf-teas-pce-native-ip\]](https://datatracker.ietf.org/doc/draft-ietf-teas-pce-native-ip)



Updated Contents

- [draft-ietf-teas-native-ip-scenarios]:
 - Editorial Update/Update Reference
 - Add section “Security Consideration”
 - Add co-author Mr. Zhenqiang Li from “China Mobile”
- [draft-ietf-teas-native-ip-scenarios]:
 - Editorial Update/Update Reference
 - Add section “Security Consideration”

Further Plan

- More Scenarios and Solutions are welcome
- New PCEP extension?
 - [\[draft-ietf-pce-pcep-extension-native-ip\]](#)
- Drafts Finalized at the mid of next year(Estimated)
- Thanks all the co-authors and experts for past review.
- Comments?

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