

vDRA

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Control Plane Optimization for Local and Remote Peers

Feature Summary and Revision History

Table 1: Summary Data

Applicable Product(s) or Functional Area	vDRA
Applicable Platform(s)	Not Applicable
Default Setting	Enabled – Always-on
Related Changes in This Release	Not Applicable
Related Documentation	• CPS vDRA Operations Guide
	• CPS vDRA Advanced Tuning Guide

Table 2: Revision History

Revision Details	Release
In CPS vDRA:	24.2.0
• Introduced a new thread pool to process the global control plane messages and the existing thread process only the local control plane messages.	
• CLI is configured to skip the local publishing and processing of RxB peers control plane messages from the remote sites. The process is applicable for the non-mated systems.	

Feature Description

In vDRA, all the control plane messages from local and remote were handled by a single thread pool *cpSubscriberWorker*. Whenever there is a network outage or peer fluctuation on the remote site, the local site was flooded with control plane messages from the remote site thus, leading to peer expiration in local site followed by traffic loss. Hence, following enhancements are made in CPS vDRA 24.2.0 and later releases:

- A separate thread pool is available to handle the remote sites control plane messages. The addition of a new thread pool helps to overcome the exhaustion of thread pool in local sites during any fluctuation on the remote sites. The control plane worker threads and queue size are increased through:
 - *Policy Builder cpSubscriberWorker* threading configuration to handle the peer status control messages from local sites.
 - *Policy Builder globalCPSubscriberWorker* threading configuration to handle the control messages from remote sites.
- The *control-plane remote-peer-policy global filter-fqdn-with-string* CLI command configures the RxB peer FQDN as a list of substring to skip the local publish of RxB peer status control messages from remote sites.
- The subscribe_messages_drop KPI includes the following labels added along with the existing labels:
 - control_topic
 - system

For more information see, the Advanced Tuning section in the CPS vDRA Advanced Tuning Guide, CLI Commands section in the CPS vDRA Operations Guide, and Statistics/KPI Additions or Changes section in the CPS Release Change Reference Guide.