

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0214319 A1

Rodriguez Natal et al.

Jun. 27, 2024 (43) **Pub. Date:**

(54) PROXY STATE SIGNALING FOR NETWORK **OPTIMIZATIONS**

(71) Applicant: Cisco Technology, Inc., San Jose, CA

Inventors: Alberto Rodriguez Natal, Leon (ES); John A. Joyce, Nashua, NH (US); Saswat Praharaj, Pleasanton, CA (US); Timothy James Swanson, Westford, MA (US); Lorand Jakab, Gheorghieni

(RO); Fabio R. Maino, Palo Alto, CA (US); Pradeep Kumar Kathail, Los Altos, CA (US)

Appl. No.: 18/201,998

(22) Filed: May 25, 2023

Related U.S. Application Data

(60)Provisional application No. 63/435,418, filed on Dec. 27, 2022.

Publication Classification

(51) Int. Cl. H04L 47/2475 (2006.01)H04L 67/564 (2006.01)

U.S. Cl. CPC H04L 47/2475 (2013.01); H04L 67/564 (2022.05)

(57)ABSTRACT

Techniques for signaling, to a network controller, a connection state of a proxy for use by the network controller to correlate proxied-connections with application pairs for traffic optimization. In some examples, the techniques may include receiving, at a controller of a network, control plane information associated with a proxy that manages a proxied flow through the network. Based on the control plane information, the controller may determine that application traffic is flowing across the proxied flow between a first application and a second application. In this way, based at least in part on a policy associated with at least one of the first application or the second application, the controller may reconfigure a network element of the network for optimizing the application traffic flowing across the proxied flow.

