US 20230231806A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0231806 A1**

PADHYE et al. (43) **Pub. Date: Jul. 20, 2023**

(54) **GHOST ROUTING**

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(21) Appl. No.: **18/191,573**

(22) Filed: **Mar. 28, 2023**

Related U.S. Application Data

(63) Continuation of application No. 17/072,147, filed on Oct. 16, 2020, now Pat. No. 11,652,742.

Publication Classification

(51) **Int. Cl.**

H04L 45/586	(2006.01)
H04L 45/02	(2006.01)
H04L 45/64	(2006.01)

(52) **U.S. Cl.**

CPC ***H04L 45/586*** (2013.01); ***H04L 45/02*** (2013.01); ***H04L 45/64*** (2013.01)

(57) **ABSTRACT**

Ghost routing is a network verification technique that uses a portion of a production network itself to verify the impact of potential network changes. Ghost routing logically partitions the production network into a main network and a ghost network. The main network handles live traffic while the ghost network handles traffic generated for diagnostic purposes. The ghost network may have a network topology identical to the production network and may use the same hardware and software as the production network. An operator may implement a network configuration change on the ghost network and then use verification tools to verify that the network configuration change on the ghost network does not result in bugs. Verifying on the ghost network may not affect the main network. If the network operator verifies the network configuration change on the ghost network, the network operator may implement the network configuration change on the main network.