

US 20230231786A1

### (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2023/0231786 A1 Kairali et al. (43) Pub. Date: Jul. 20, 2023

## (54) ENHANCING SOFTWARE APPLICATION HOSTING IN A CLOUD ENVIRONMENT

- (71) Applicant: **International Business Machines Corporation**, Armonk, NY (US)
- (72) Inventors: Sudheesh S. Kairali, Kozhikode (IN); Sarbajit K. Rakshit, Kolkata (IN)
- (21) Appl. No.: 17/648,530
- (22) Filed: Jan. 20, 2022

#### **Publication Classification**

- (51) **Int. Cl. H04L 43/0852** (2006.01)

### (57) ABSTRACT

In an approach to optimize server connection timeout errors in a cloud environment, embodiments create a knowledge corpus associated with connection timeout patterns based on historical learning of transaction parameters and predicts a criticality of a transaction based on one or more identified contextual situations. Further, embodiments dynamically adjust a connection timeout range of the transaction based on the predicted criticality and one or more identified contextual situations of the transaction, and selectively identify a connection timeout range for the transaction based on an evaluation of the one or more contextual situations. Additionally, embodiments analyze generated timeout errors on a remote server from within a service mesh, and adjust timeout values of the transaction based on the analyzed generated timeouts errors. Responsive to the transaction receiving a timeout error, embodiments output a recommended timeline detailing when the transaction can be reinitiated.

