

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
07 July 2022 (07.07.2022)



(10) International Publication Number
WO 2022/147126 A1

(51) International Patent Classification:

H04L 41/0806 (2022.01) H04L 43/065 (2022.01)
H04L 43/04 (2022.01) H04L 43/08 (2022.01)

(21) International Application Number:

PCT/US2021/065514

(22) International Filing Date:

29 December 2021 (29.12.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/132,611 31 December 2020 (31.12.2020) US
63/138,919 19 January 2021 (19.01.2021) US
17/476,708 16 September 2021 (16.09.2021) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US

17/476,708 (CIP)

Filed on

16 September 2021 (16.09.2021)

(71) Applicant: **CENTURYLINK INTELLECTUAL PROPERTY LLC** [US/US]; 1025 Eldorado Blvd., Broomfield, Colorado 80021 (US).

(72) Inventors: **BENASSI, William R.**; c/o CenturyLink Intellectual Property LLC, 1025 Eldorado Boulevard, Broomfield, Colorado 80021 (US). **O'BRIEN, William**; c/o CenturyLink Intellectual Property LLC, 1025 Eldorado Boulevard, Broomfield, Colorado 80021 (US).

(74) Agent: **LEIBOLD, Gregory D.**; Lewis Roca Rothgerber Christie LLP, P.O. Box 29001, Glendale, California 91209-9001 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

(54) Title: SYSTEMS AND METHODS FOR EDGE SITE SELECTION AND METRICS CAPTURE

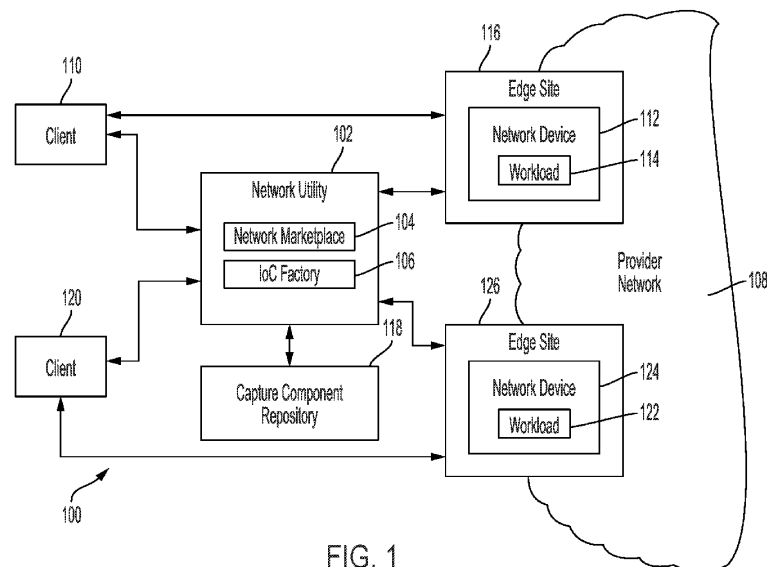


FIG. 1

(57) Abstract: Systems and methods for metrics capture and use in a computing network are provided. In examples, systems and methods are provided to permit network elements (such as network devices and workloads) to be instrumented for metrics collection as part of the process of provisioning the network element on the network. In examples, a collection template is provided to a customer that can be used to generate a collection component for collecting metrics associated with the network element. In examples, the collected metrics can be stored and used by an edge recommendation system to determine one or more recommended edge sites at which the network element should be placed according to optimization criteria.

[Continued on next page]

HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*