

Title (en)
HIERARCHICAL PRIORITIZED ROUND ROBIN (HPRR) SCHEDULING

Title (de)
ABLAUFSTEUERUNG MIT UMLAUFEND HIERARCHISCHEN PRIORITÄTEN

Title (fr)
PROGRAMMATION PAR PERMUTATION CIRCULAIRE (HPRR) PAR ORDRE DE PRIORITE HIERARCHIQUE

Publication
EP 1221214 A4 20060607 (EN)

Application
EP 00965409 A 20000925

Priority
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• US 15612399 P 19990925

Abstract (en)
[origin: WO0124428A1] The HPRR method uses token bucket rate classifiers to mark each individual packet as conforming or not conforming to a traffic specification for the flow [PER-FLOW QUEUES 1, 2, 3, 4]. Flows are considered to be in a single service class [CLASS A, B, D]. One such class is distinguished as a default "best effort" service class [D]. Each service class is assigned a weight corresponding to its fraction of bandwidth granted to the class when all classes are active. The HPRR method allows a packet from a flow to be forwarded in one of two ways, either as part of its class's allocated bandwidth or as part of the best effort bandwidth. By always providing two paths for a flow to send its packets, a flow is always given its fair share of two different classes: its primary or configured class and the best effort class.

IPC 1-7
H04J 3/22; **H04L 12/56**

IPC 8 full level
H04L 12/54 (2013.01); **H04L 47/20** (2022.01); **H04L 47/21** (2022.01); **H04L 47/31** (2022.01); **H04L 47/52** (2022.01); **H04L 47/525** (2022.01)

CPC (source: EP)
H04L 47/20 (2013.01); **H04L 47/215** (2013.01); **H04L 47/2441** (2013.01); **H04L 47/31** (2013.01); **H04L 47/50** (2013.01); **H04L 47/525** (2013.01); **H04L 47/527** (2013.01); **H04L 47/621** (2013.01); **H04L 47/6215** (2013.01); **H04L 47/6225** (2013.01)

Citation (search report)
• [Y] EP 0790726 A2 19970820 - LUCENT TECHNOLOGIES INC [US]
• [XAY] SHREEDHAR M ET AL: "EFFICIENT FAIR QUEUEING USING DEFICIT ROUND ROBIN", COMPUTER COMMUNICATION REVIEW, ACM, NEW YORK, NY, US, vol. 25, no. 4, 1 October 1995 (1995-10-01), pages 231 - 242, XP000541659, ISSN: 0146-4833
• [PX] MACGREGOR M H ET AL: "Deficits for bursty latency-critical flows: DRR++", NETWORKS, 2000. (ICON 2000). PROCEEDINGS. IEEE INTERNATIONAL CONFERENCE ON SEPTEMBER 5-8, 2000, PISCATAWAY, NJ, USA, IEEE, 5 September 2000 (2000-09-05), pages 287 - 293, XP010514114, ISBN: 0-7695-0777-8
• See references of WO 0124428A1

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DOCDB simple family (application)
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