

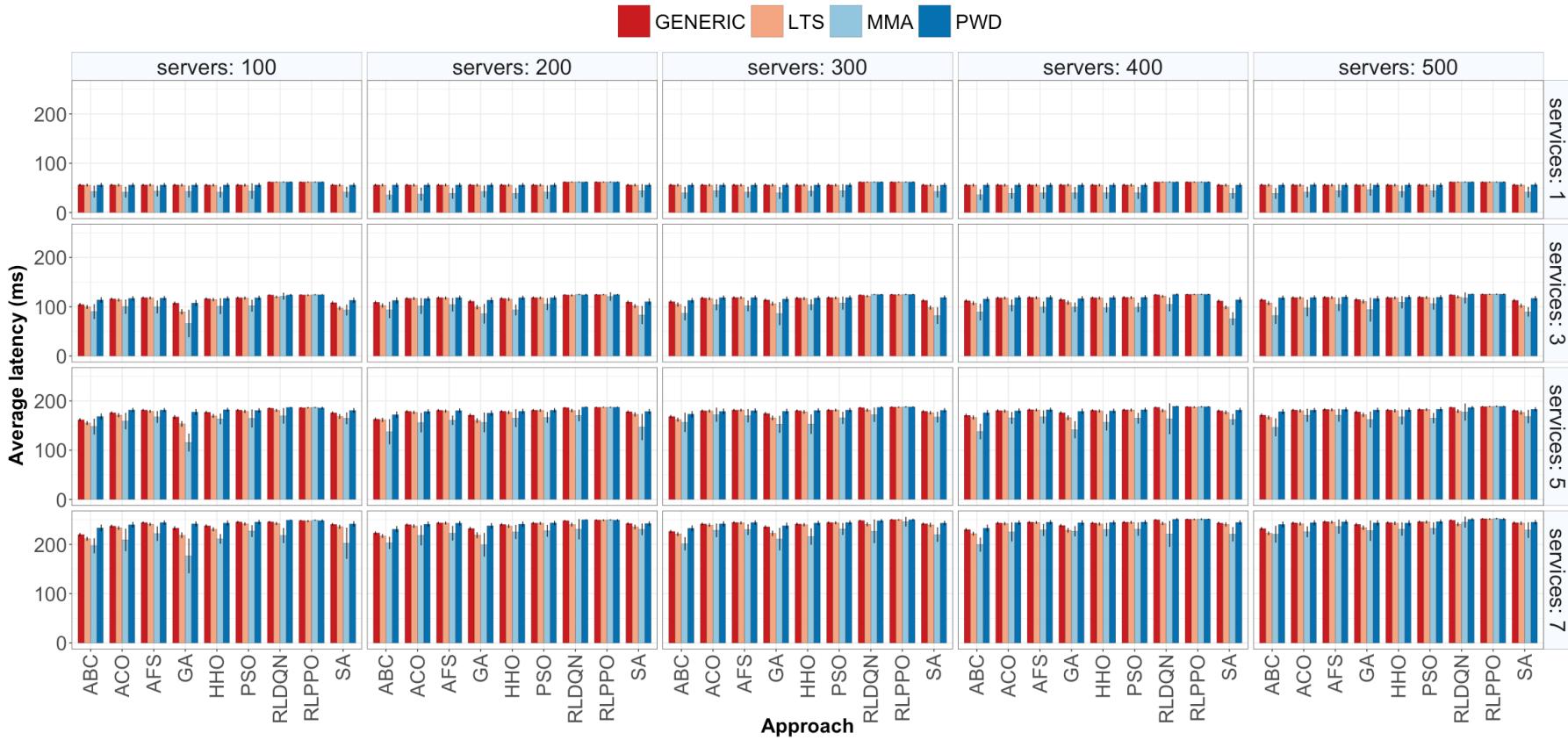
# DSP PLACEMENT RESULTS

- Application requests:
  - Variable number of users: 100, 200, 300, 400, 500
  - Variable request types:
    - Generic, MMA, PWD, and LTS applications
  - Varying resource demand and placement deadlines
    - If a request is not placed within a requested deadline, it's a failure
  - Variable plan length:
    - 1, 3, 5, 7 services
- Edge nodes:
  - Variable number of edge nodes: 100, 200, 300, 400, 500
  - Coverage area for mobile and static nodes
- Metrics (average, min, max, standard deviation):
  - Waiting Time, Network Latency, Distance between Servers, Number of selected Servers, Resource Utilisation, Failure rate

Scenario	Application	Users	Lambda	AvgRequests
Scenario 1	Generic	50	24'	556
Scenario 1	LTS	30	24'	147
Scenario 1	MMA	10	30'	15
Scenario 1	PWD	10	24'	49
Scenario 2	Generic	100	24'	1118
Scenario 2	LTS	60	24'	288
Scenario 2	MMA	20	30'	34
Scenario 2	PWD	20	24'	97
Scenario 3	Generic	150	24'	1686
Scenario 3	LTS	90	24'	433
Scenario 3	MMA	30	30'	49
Scenario 3	PWD	30	24'	144
Scenario 4	Generic	200	24'	2246
Scenario 4	LTS	120	24'	575
Scenario 4	MMA	40	30'	67
Scenario 4	PWD	40	24'	195
Scenario 5	Generic	250	24'	2833
Scenario 5	LTS	150	24'	728
Scenario 5	MMA	50	30'	84
Scenario 5	PWD	50	24'	234

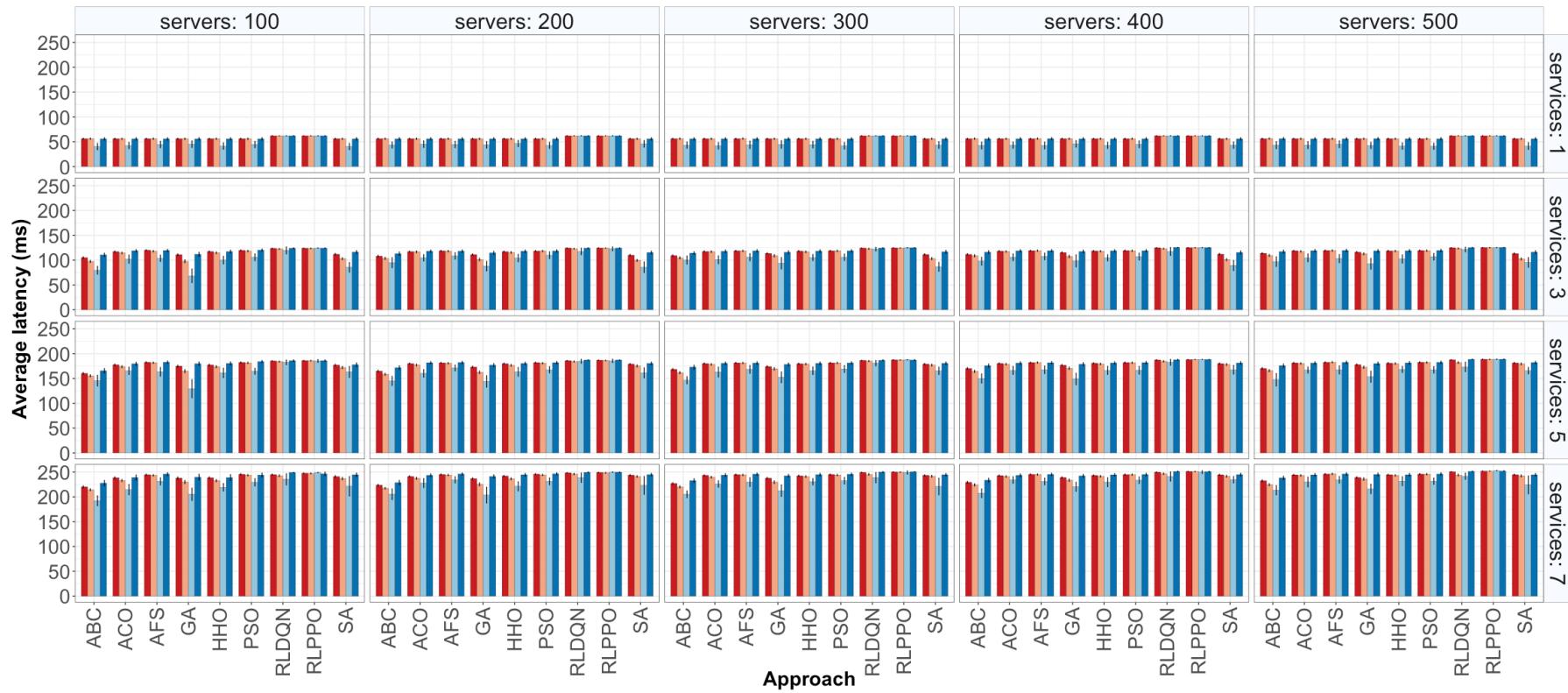
Total 100 Combinations X 4 applications

## Average Latency - SCENARIO 01 (Avg. number of requests=767 (Generic: 556, LTS: 147, MMA: 15, PWD: 49))



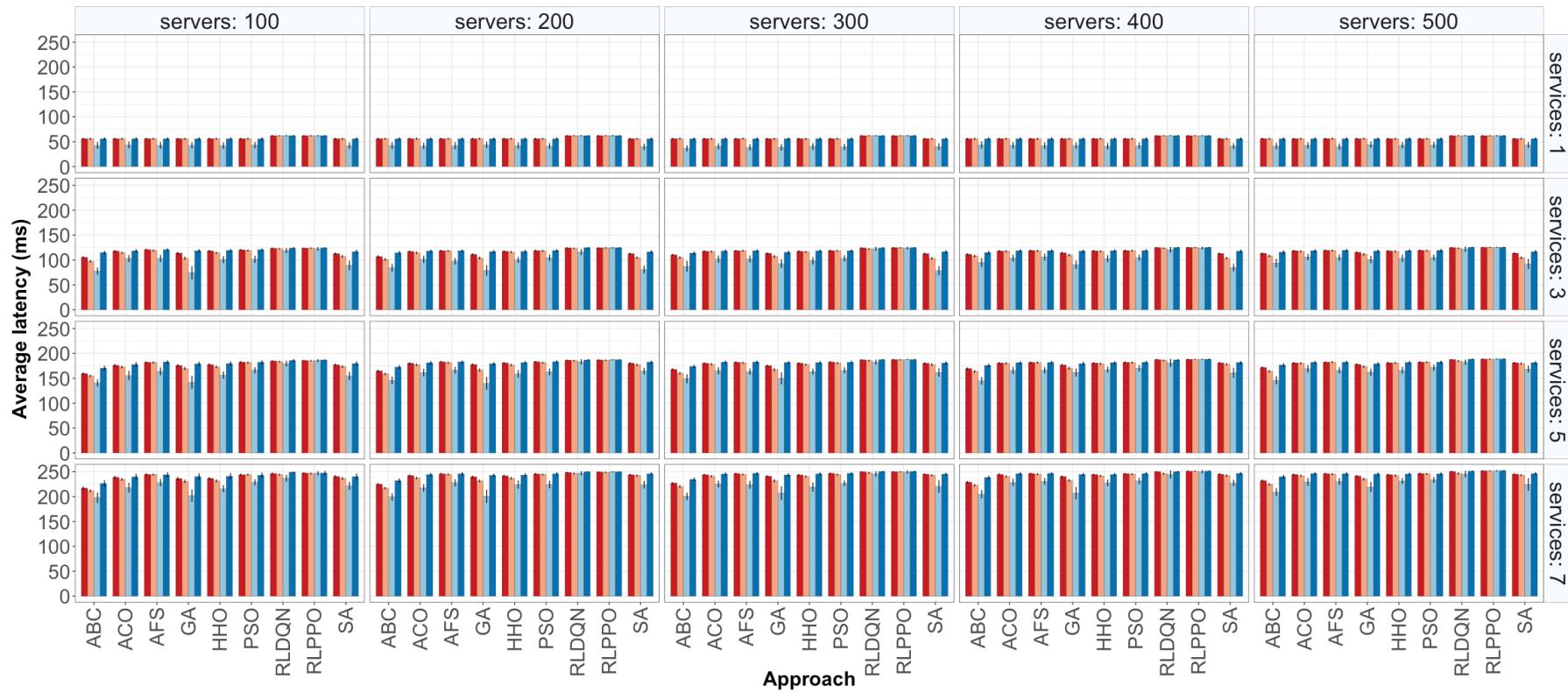
Average Latency - SCENARIO 02 (Avg. number of requests=1537 (Generic: 1118, LTS: 288, MMA: 34, PWD: 97))

■ GENERIC ■ LTS ■ MMA ■ PWD



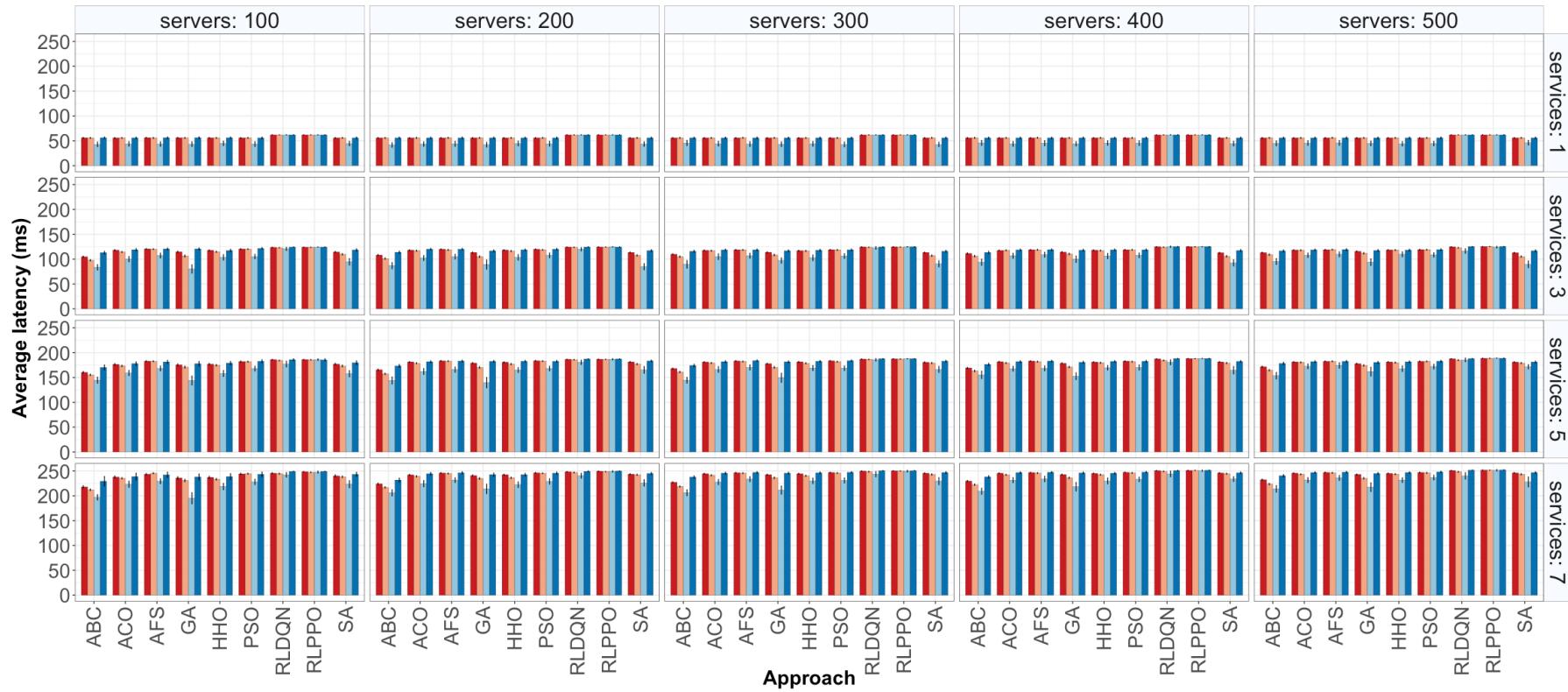
Average Latency - SCENARIO 03 (Avg. number of requests=2312 (Generic: 1686, LTS: 433, MMA: 49, PWD: 144))

■ GENERIC ■ LTS ■ MMA ■ PWD

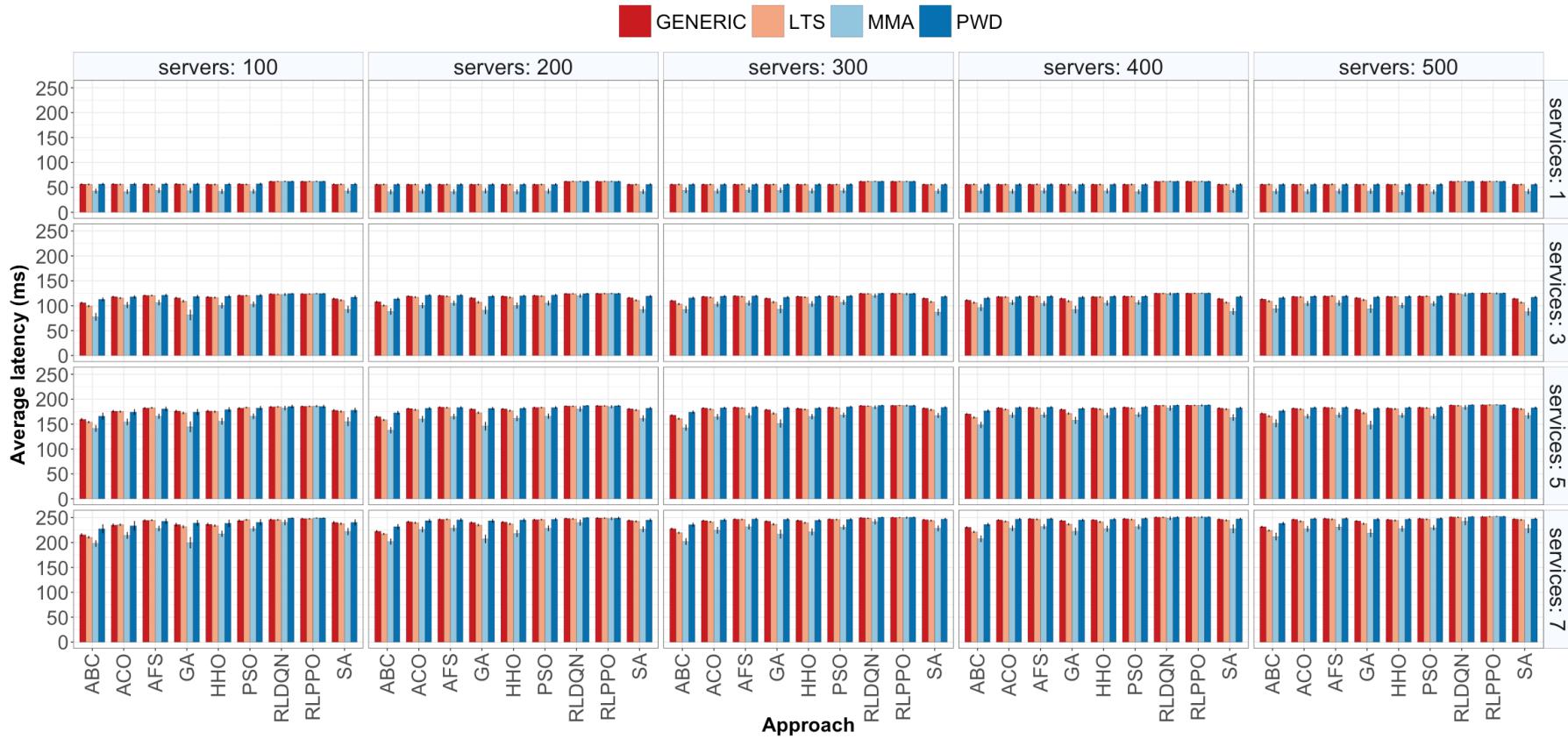


Average Latency - SCENARIO 04 (Avg. number of requests=3083 (Generic: 2246, LTS: 575, MMA: 67, PWD: 195))

■ GENERIC ■ LTS ■ MMA ■ PWD

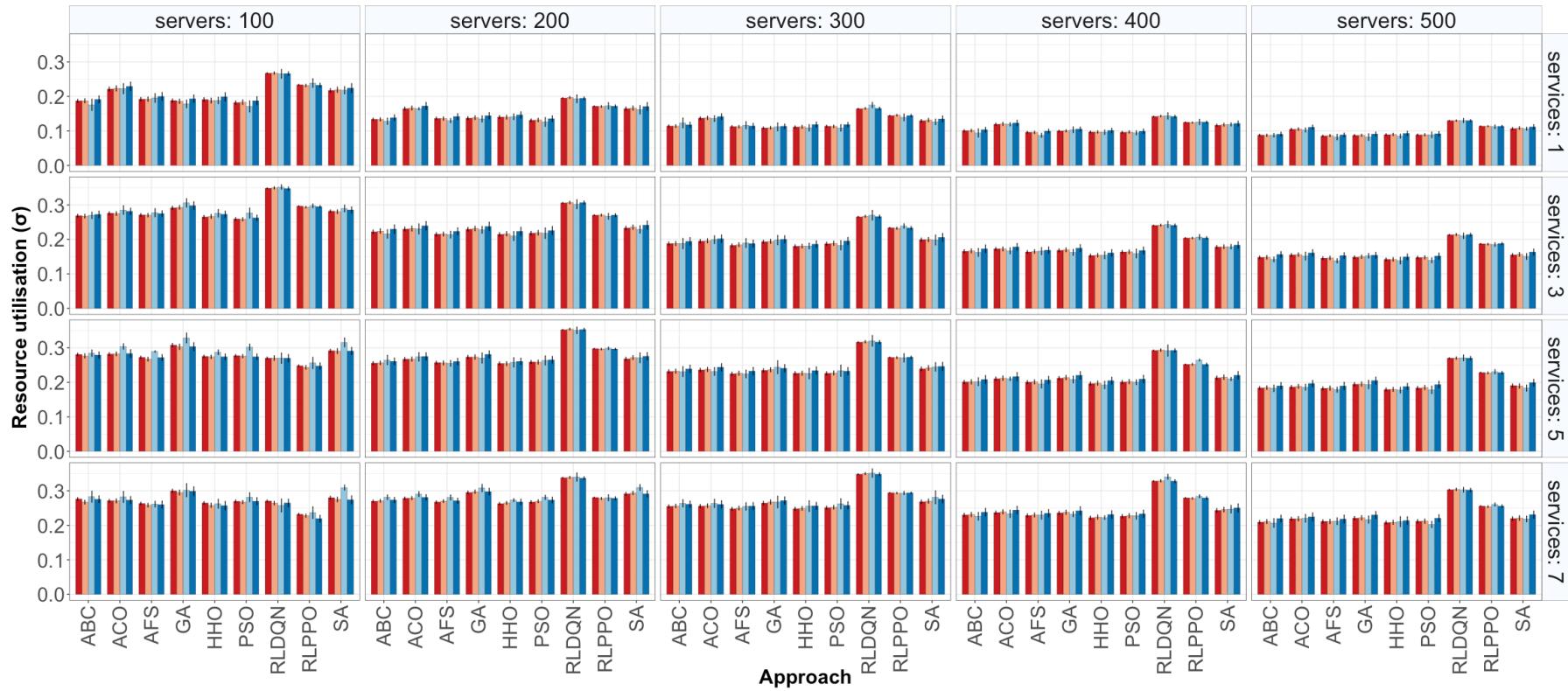


## Average Latency - SCENARIO 05 (Avg. number of requests=3879 (Generic: 2833, LTS: 728, MMA: 84, PWD: 234))

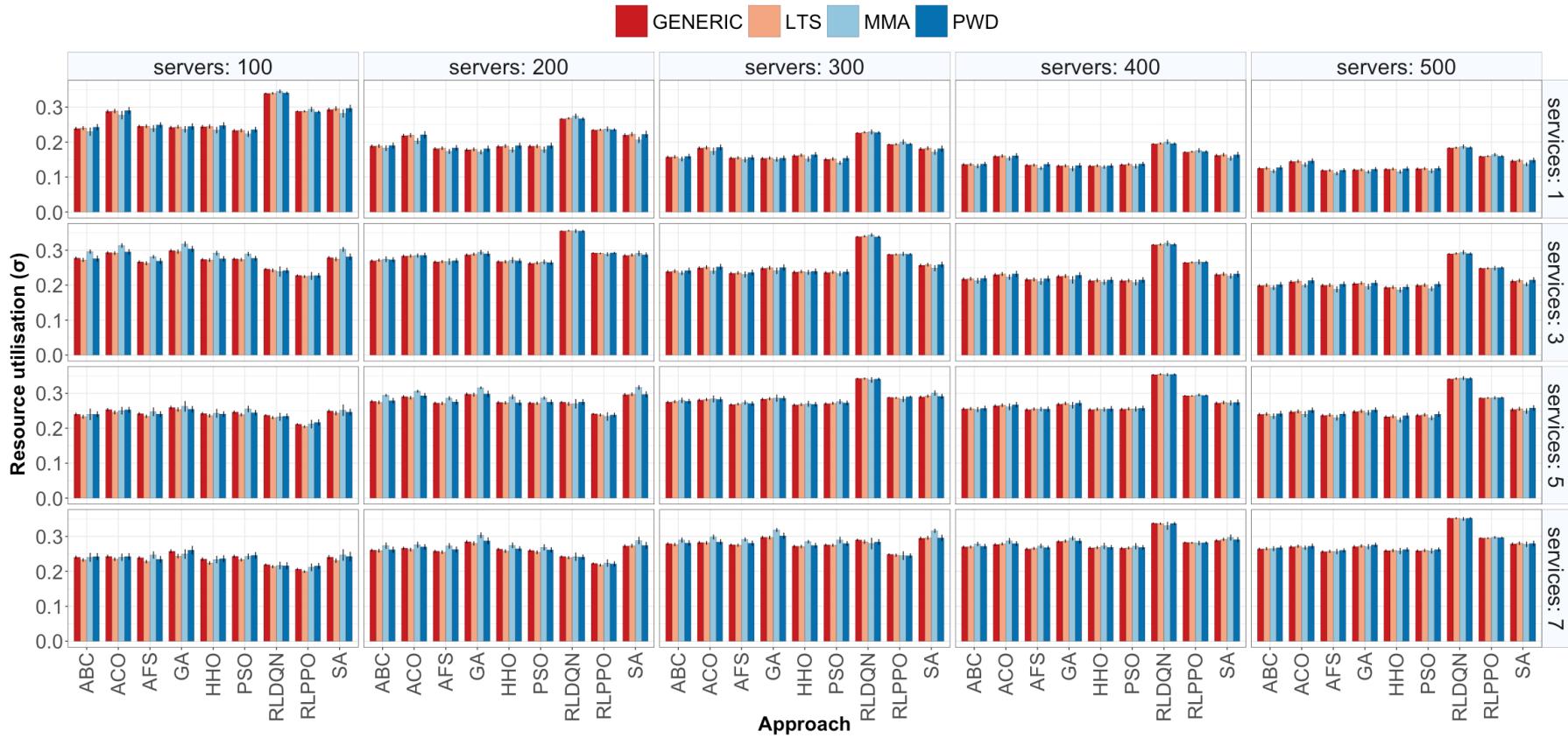


Resource Utilisation - SCENARIO 01 (Avg. number of requests=767 (Generic: 556, LTS: 147, MMA: 15, PWD: 49))

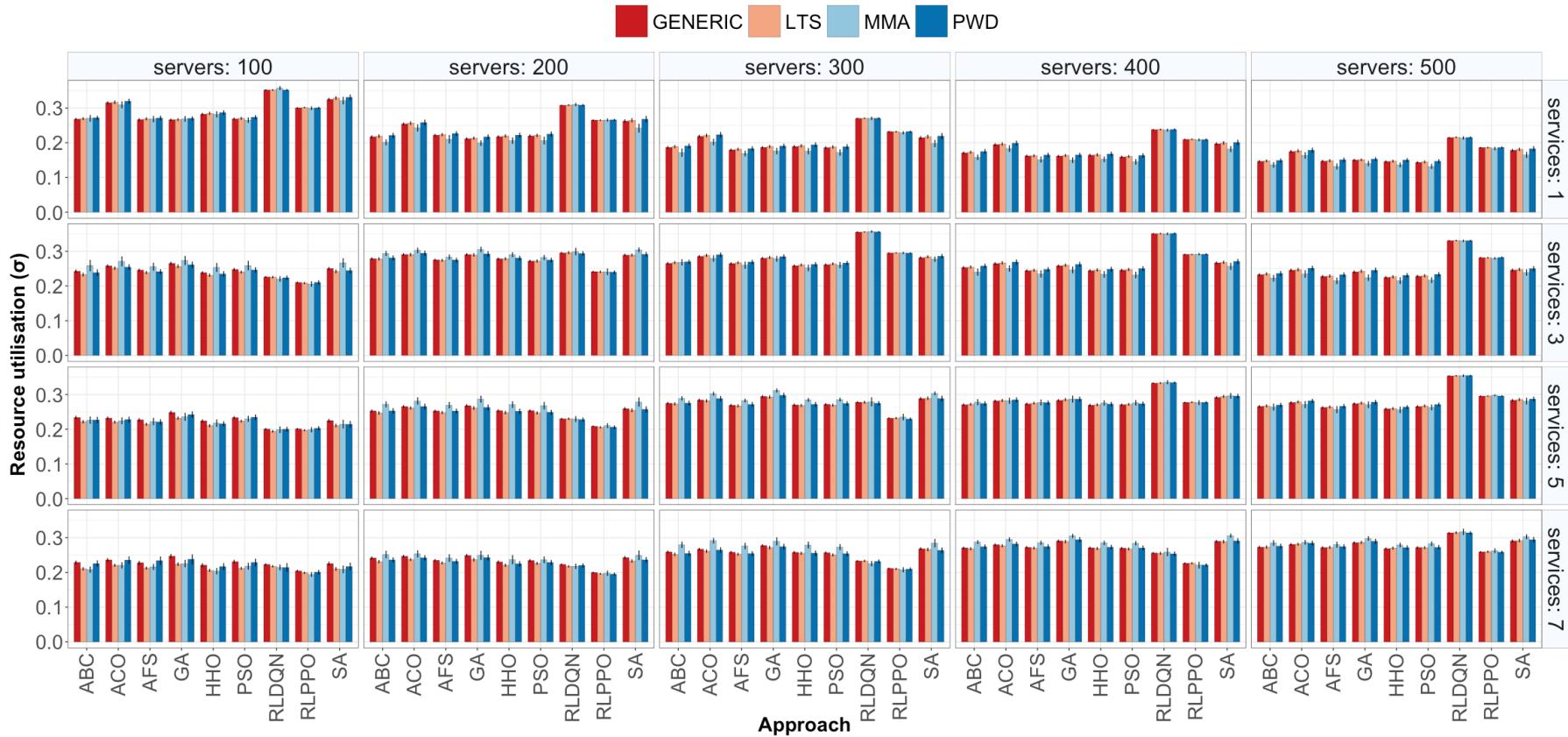
■ GENERIC ■ LTS ■ MMA ■ PWD



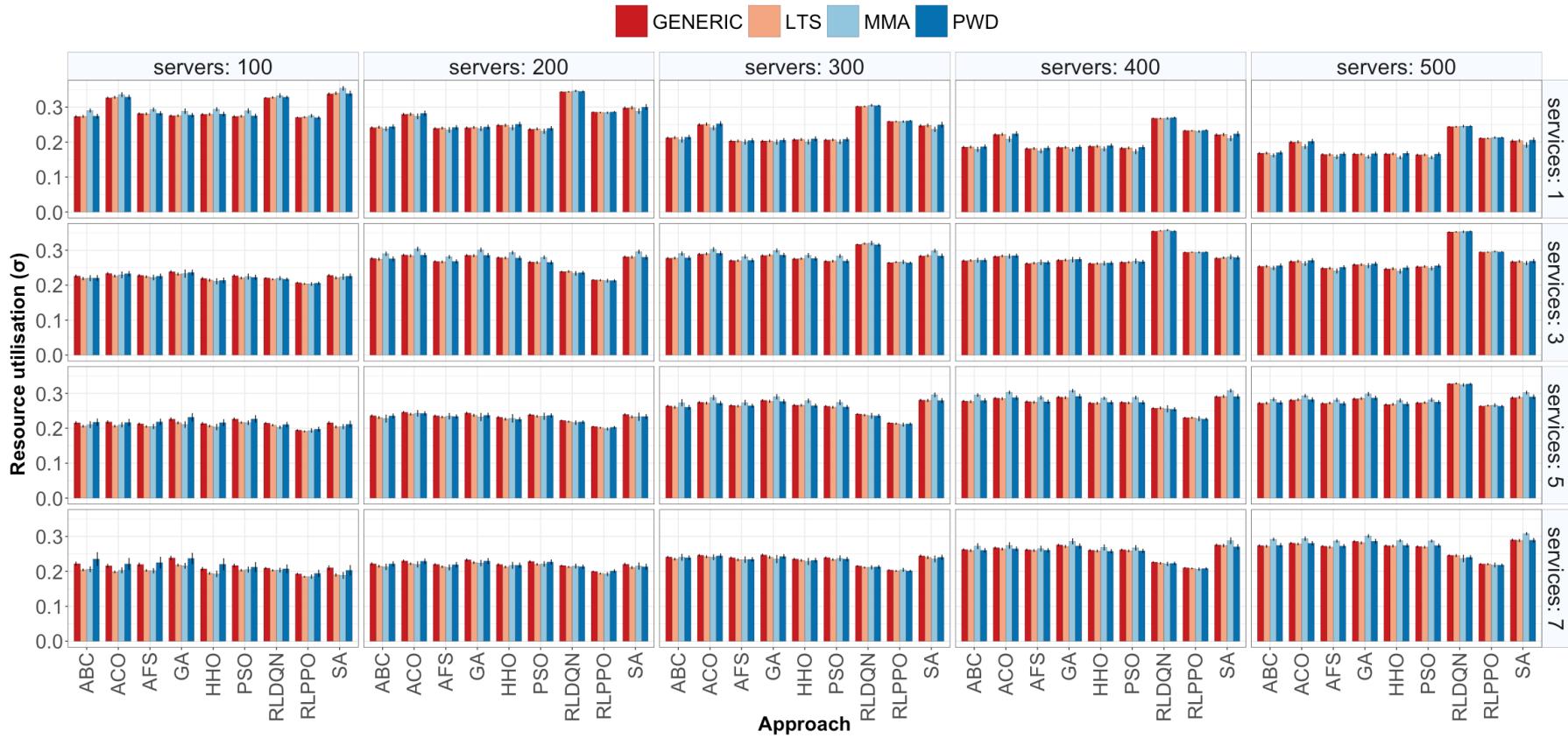
Resource Utilisation - SCENARIO 02 (Avg. number of requests=1537 (Generic: 1118, LTS: 288, MMA: 34, PWD: 97))



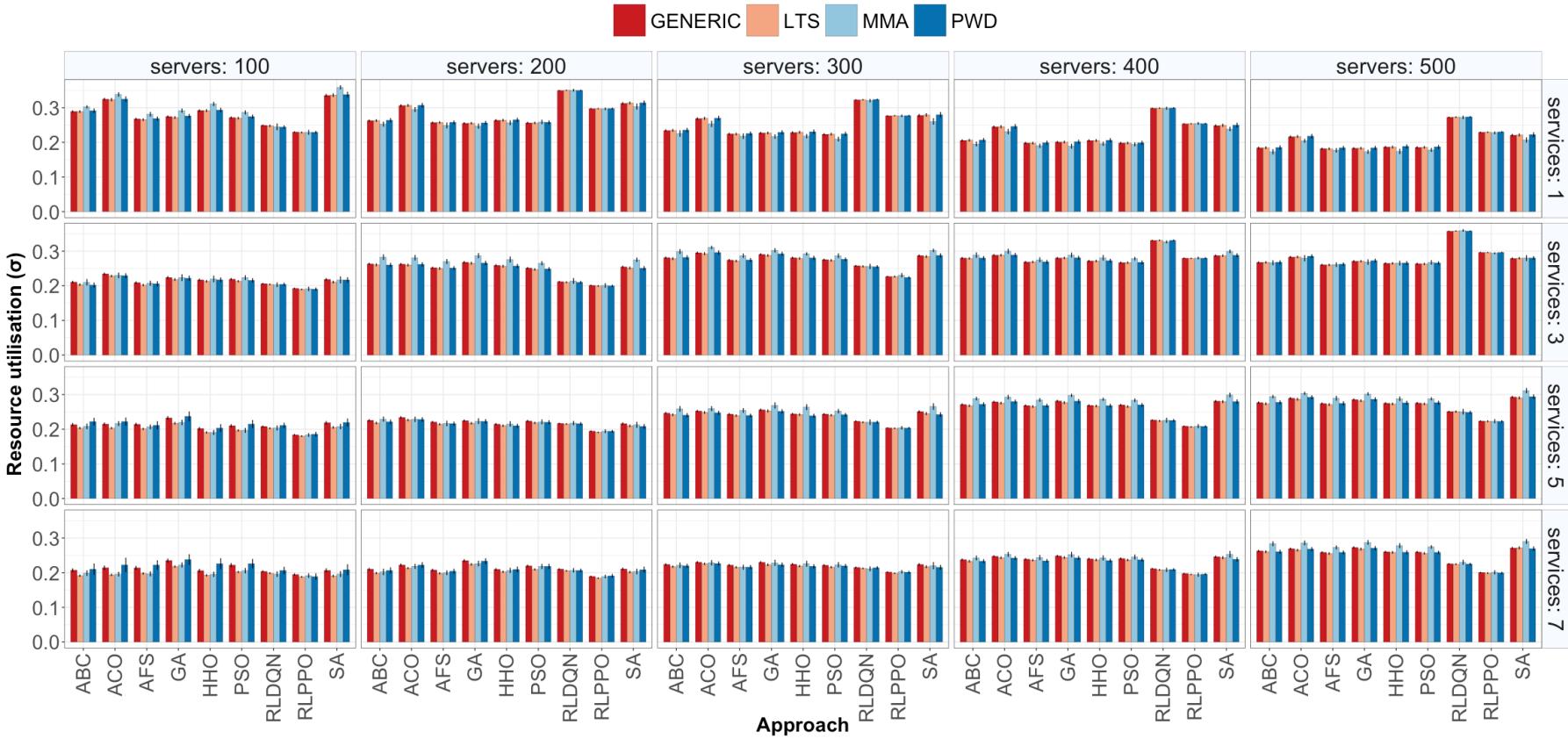
Resource Utilisation - SCENARIO 03 (Avg. number of requests=2312 (Generic: 1686, LTS: 433, MMA: 49, PWD: 144))



Resource Utilisation - SCENARIO 04 (Avg. number of requests=3083 (Generic: 2246, LTS: 575, MMA: 67, PWD: 195))



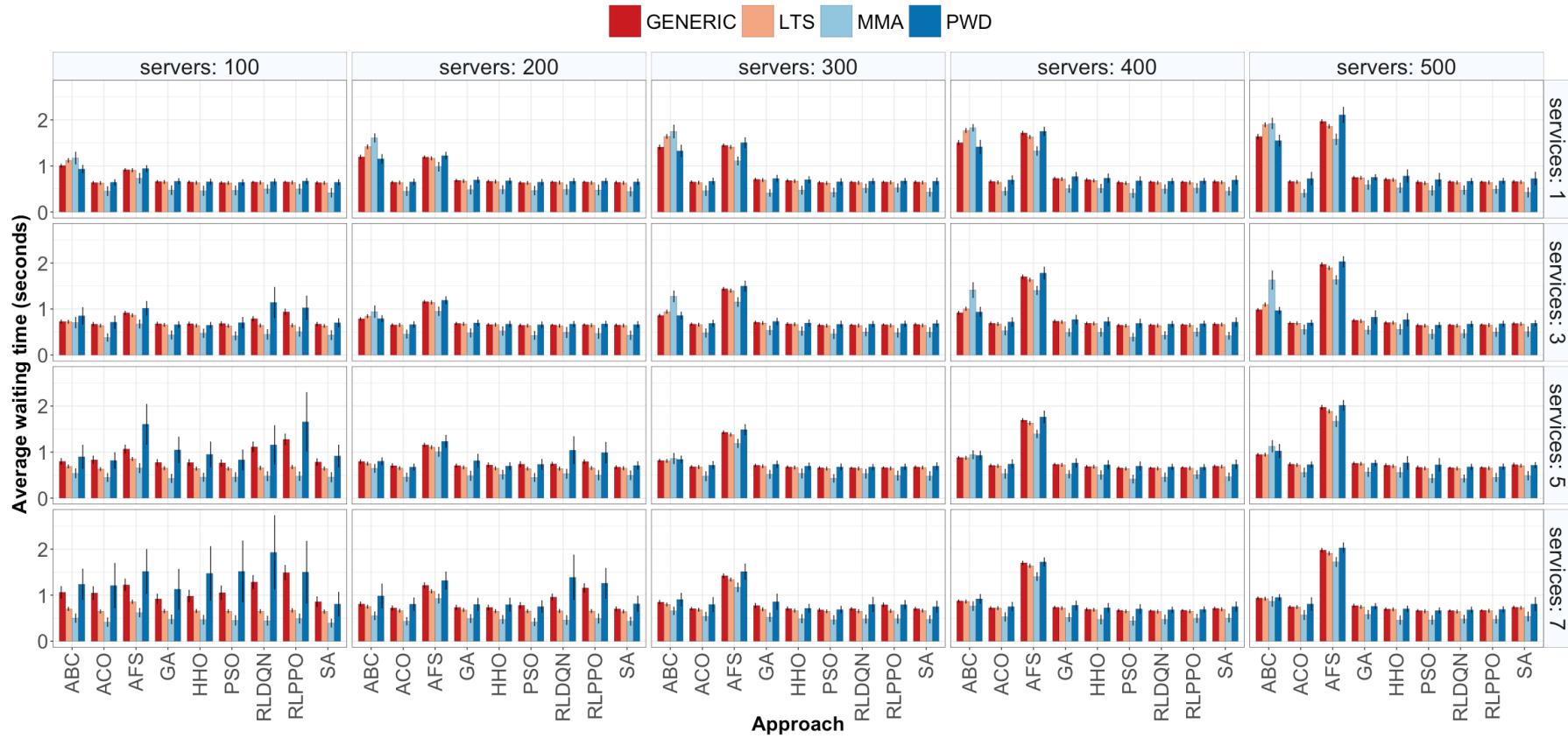
Resource Utilisation - SCENARIO 05 (Avg. number of requests=3879 (Generic: 2833, LTS: 728, MMA: 84, PWD: 234))



Average Waiting Time - SCENARIO 01 (Avg. number of requests=767 (Generic: 556, LTS: 147, MMA: 15, PWD: 49))

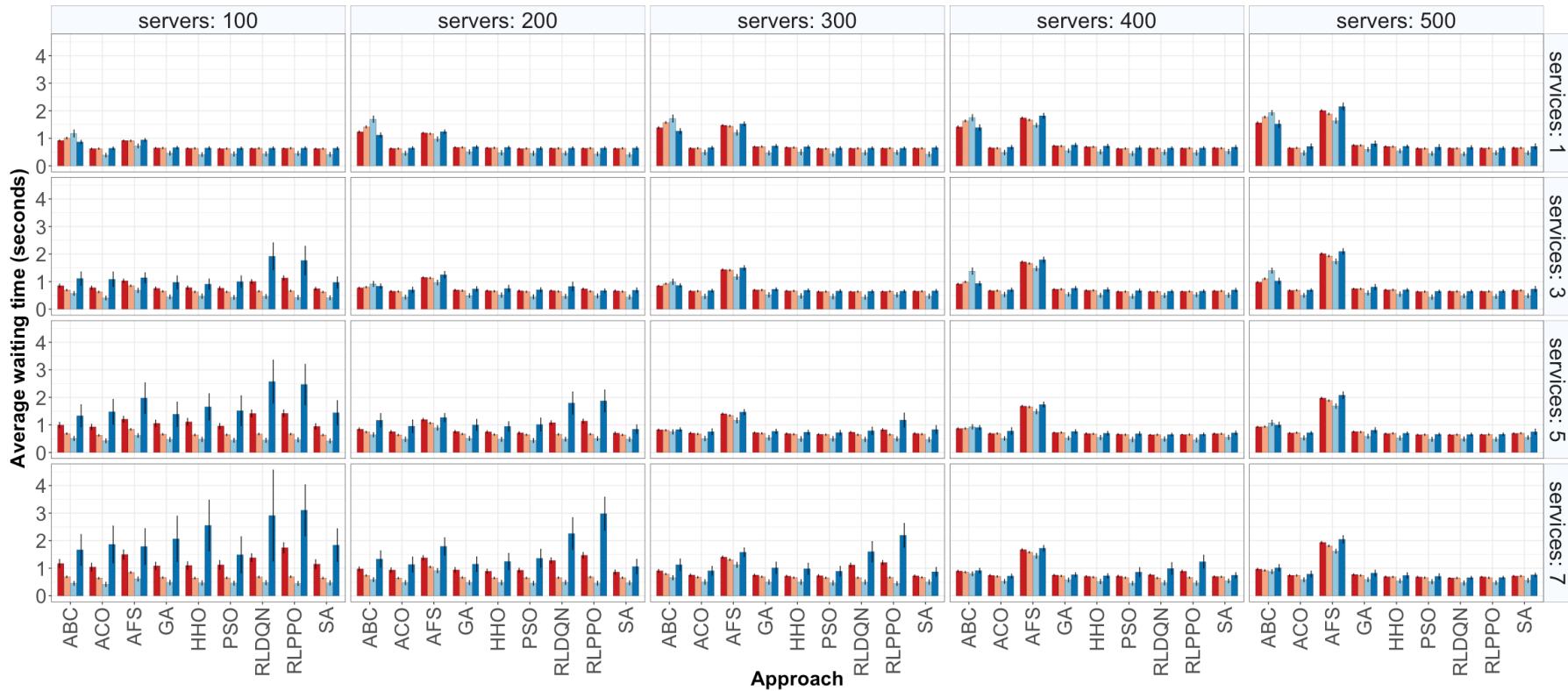


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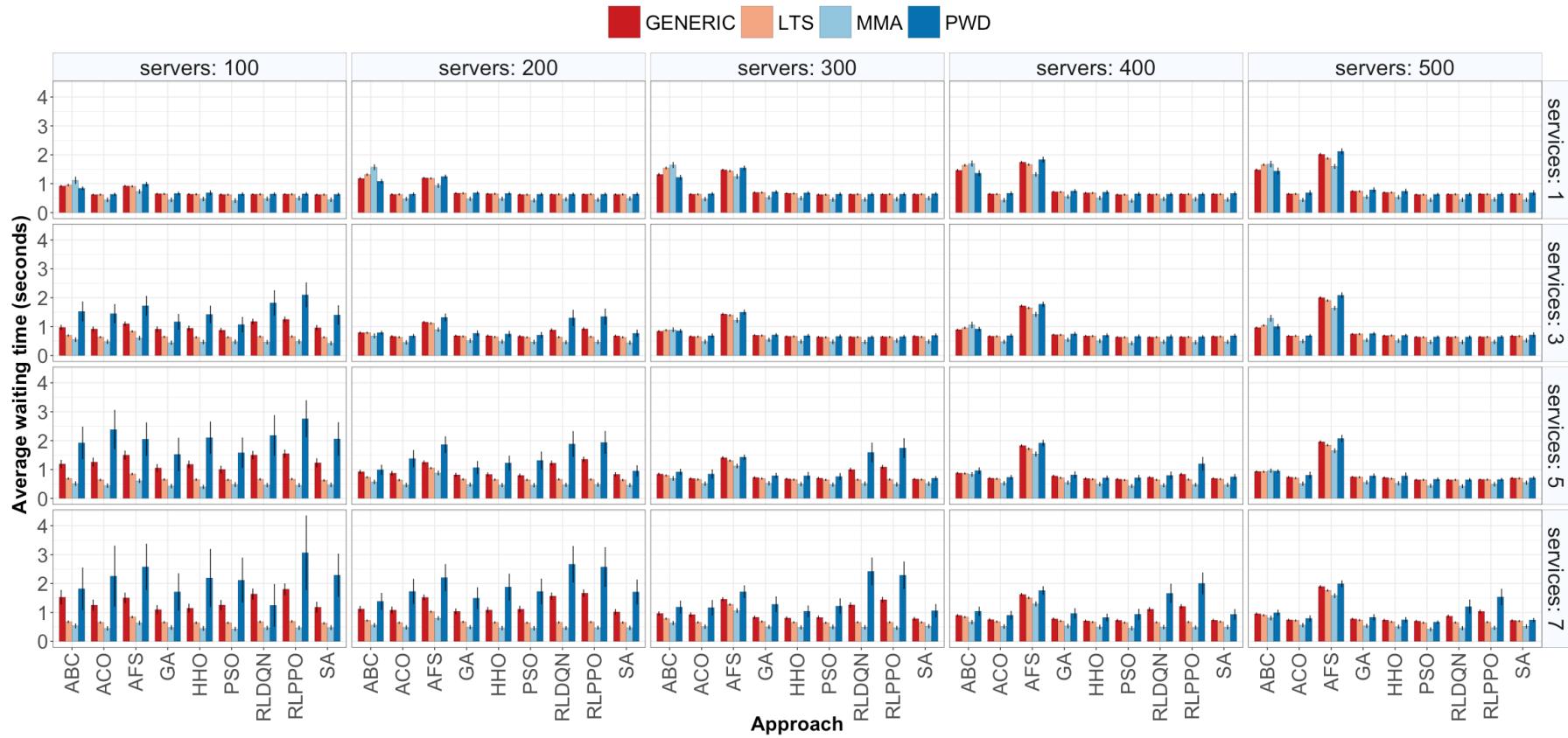


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■ GENERIC ■ LTS ■ MMA ■ PWD



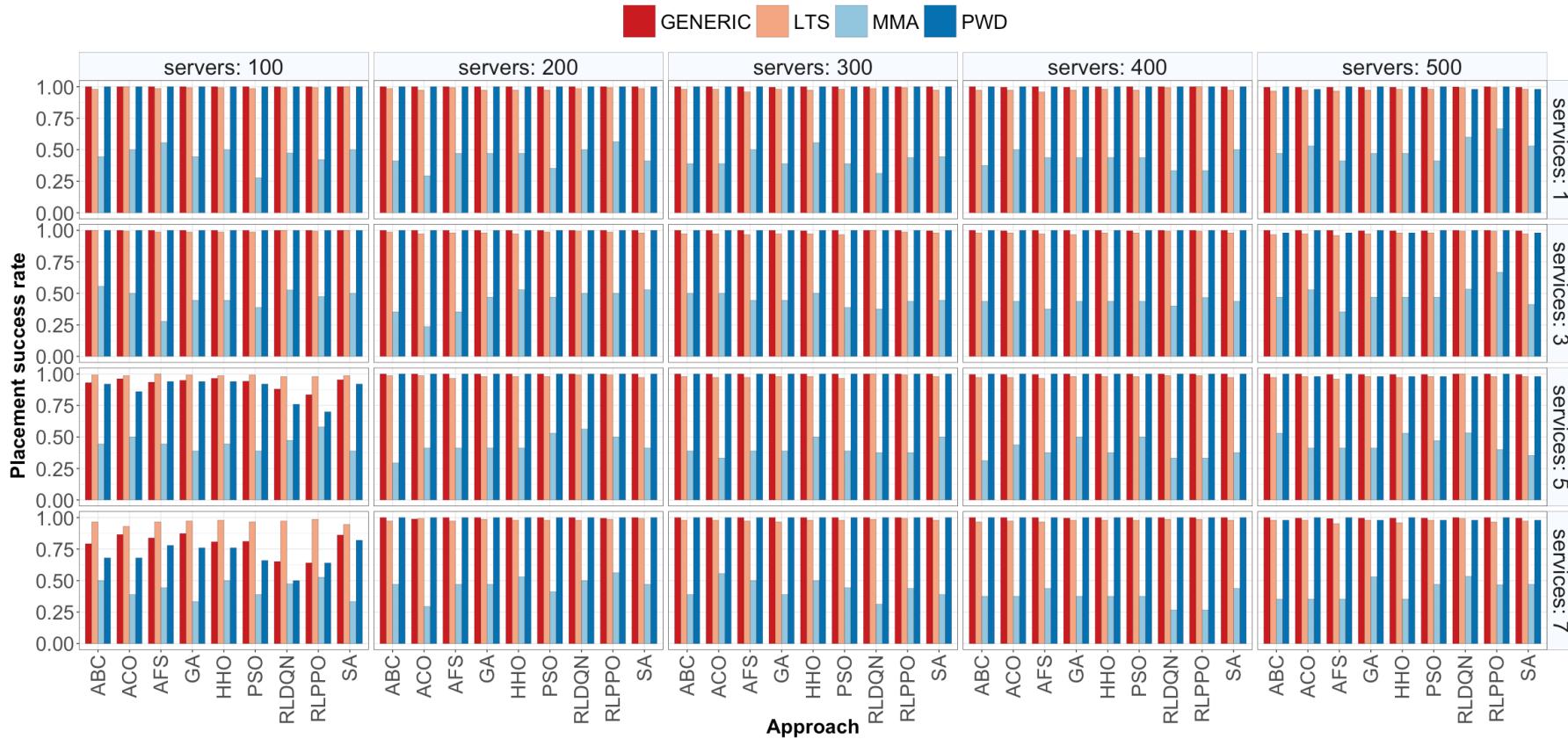
Average Waiting Time - SCENARIO 04 (Avg. number of requests=3083 (Generic: 2246, LTS: 575, MMA: 67, PWD: 195))



Average Waiting Time - SCENARIO 05 (Avg. number of requests=3879 (Generic: 2833, LTS: 728, MMA: 84, PWD: 234))

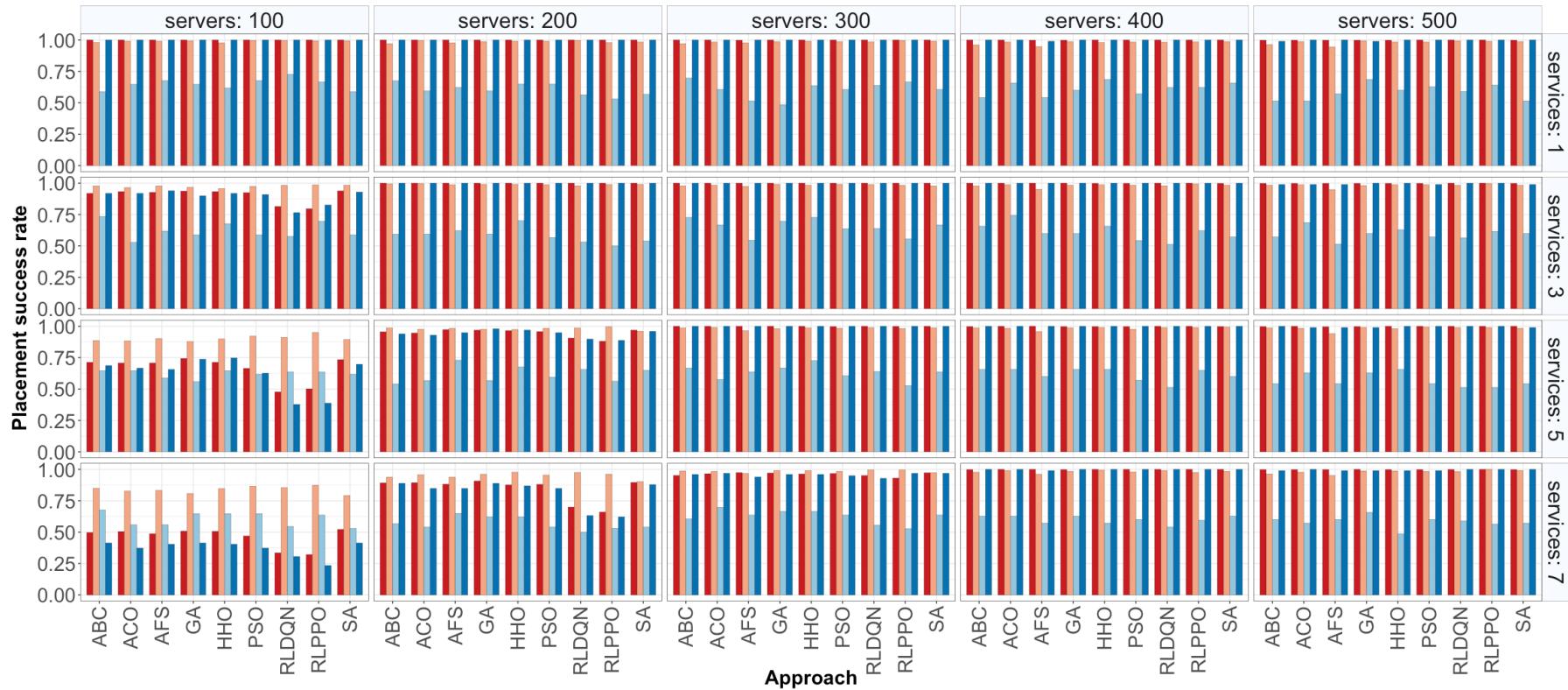


## Placement Success Rate - SCENARIO 01 (Avg. number of requests=767 (Generic: 556, LTS: 147, MMA: 15, PWD: 49))

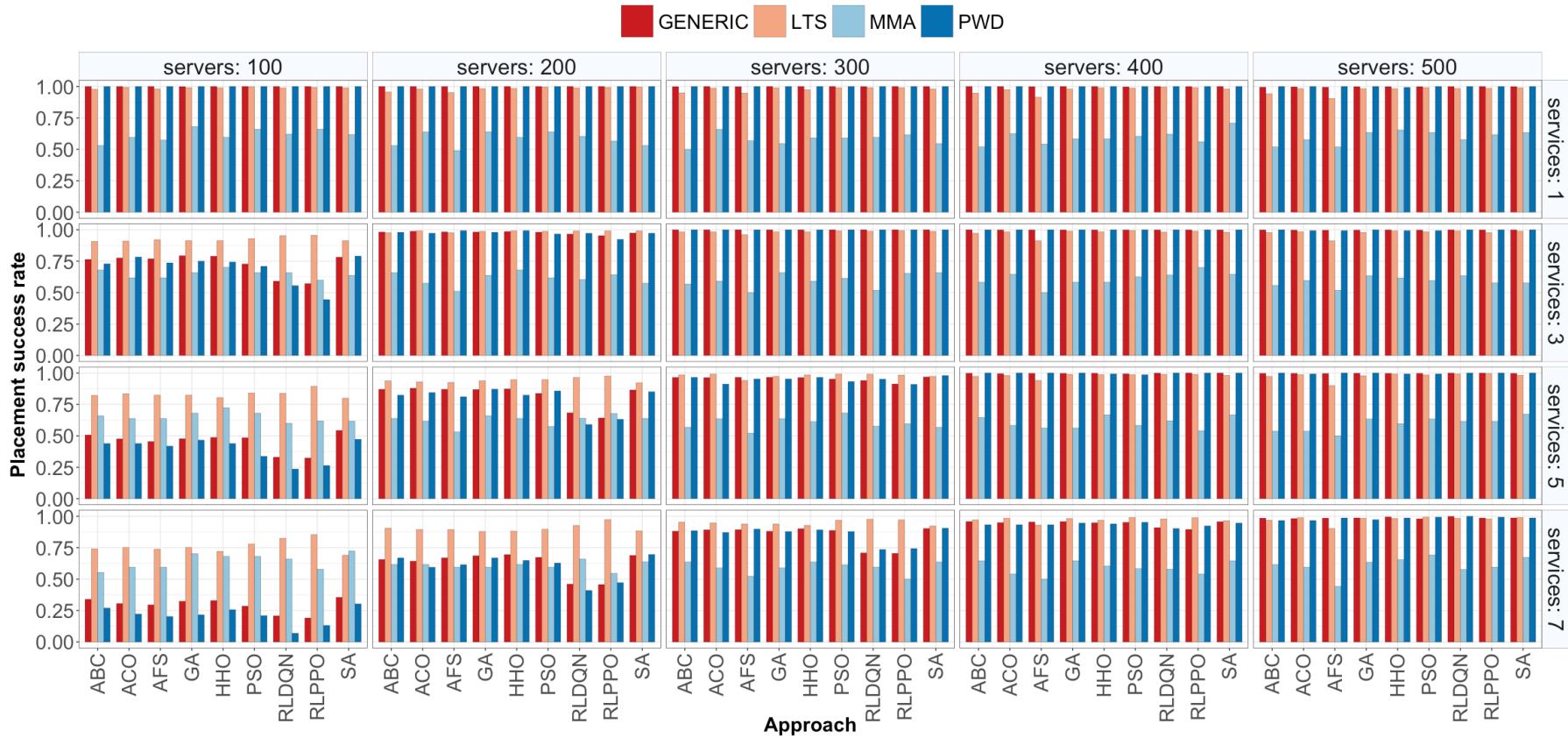


Placement Success Rate - SCENARIO 02 (Avg. number of requests=1537 (Generic: 1118, LTS: 288, MMA: 34, PWD: 97))

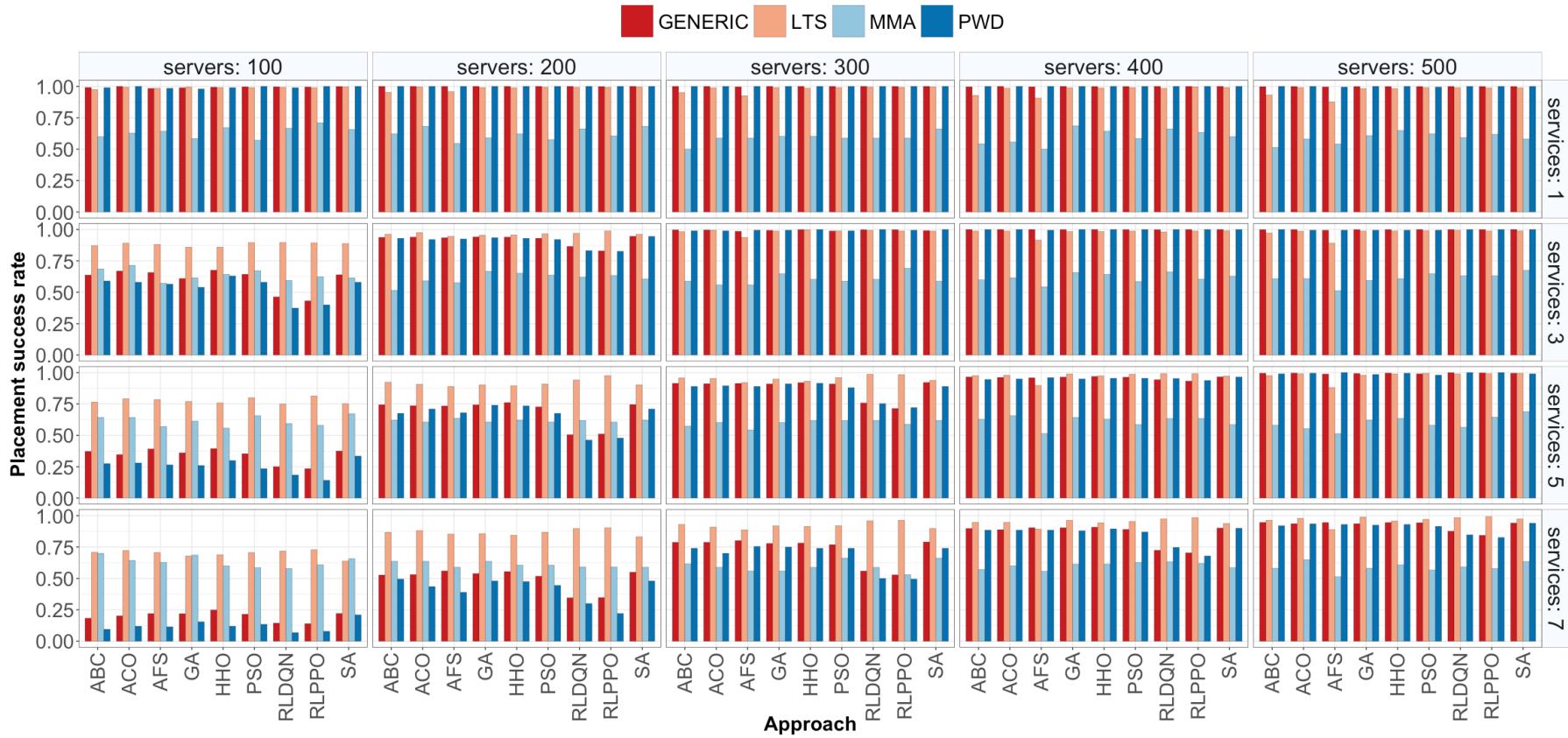
■ GENERIC ■ LTS ■ MMA ■ PWD



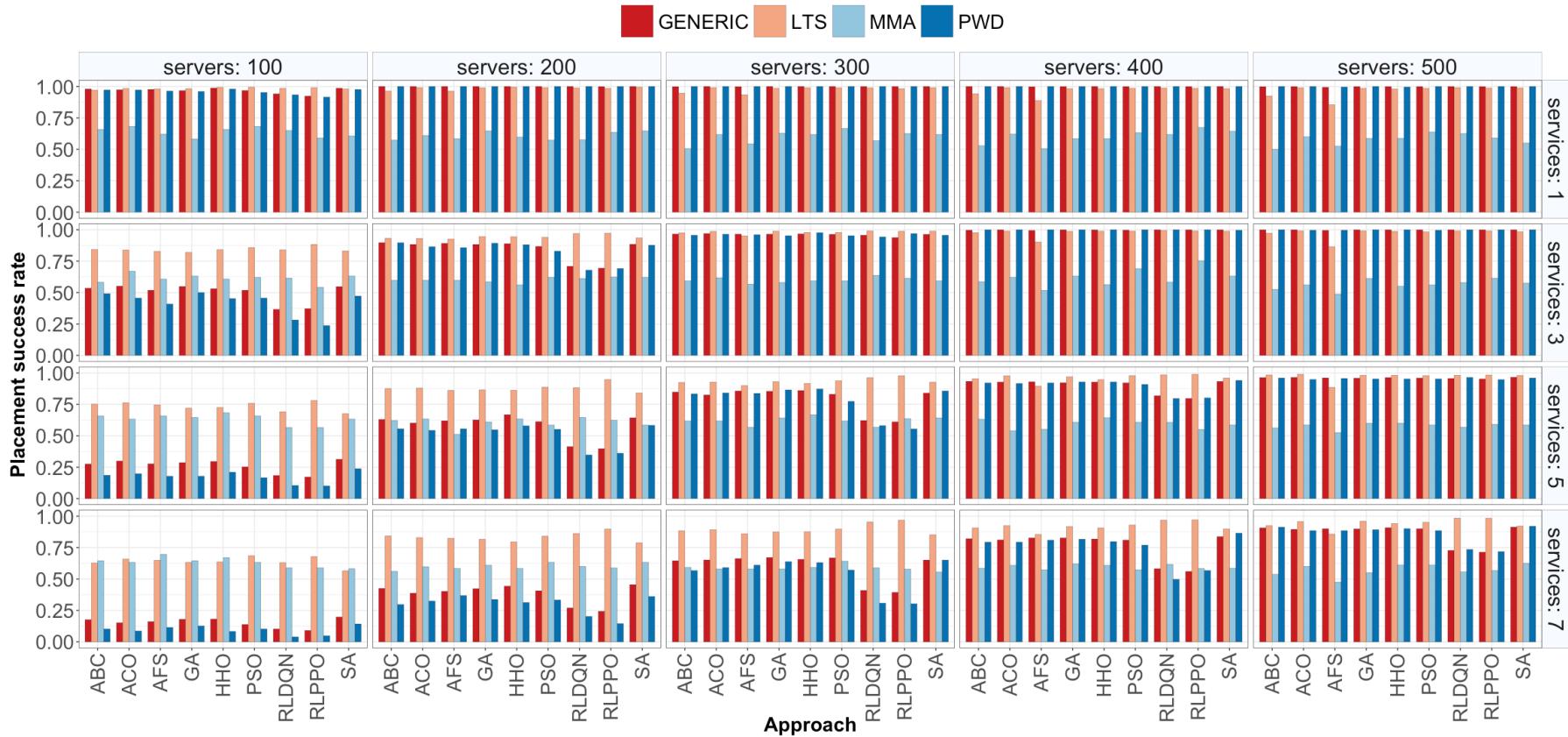
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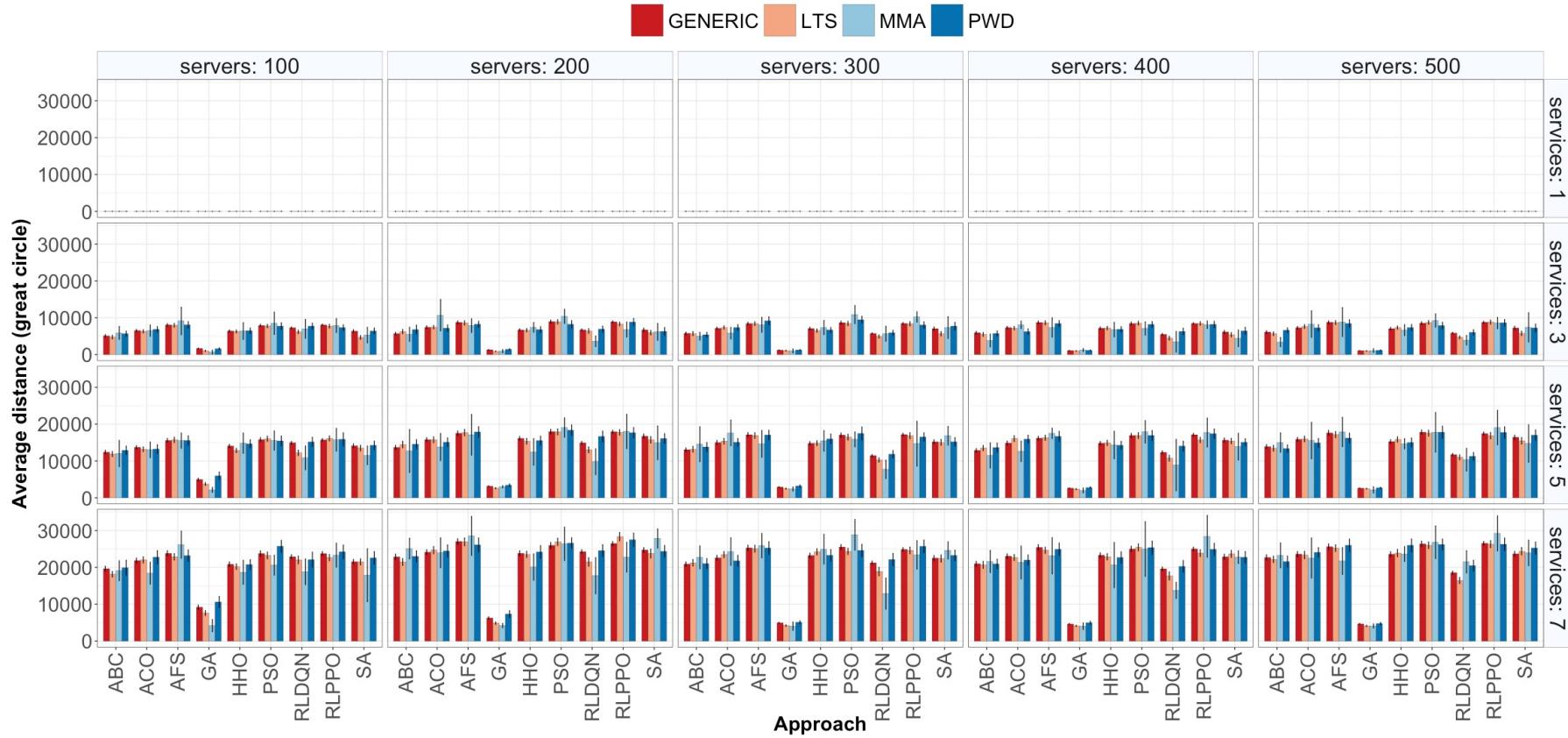
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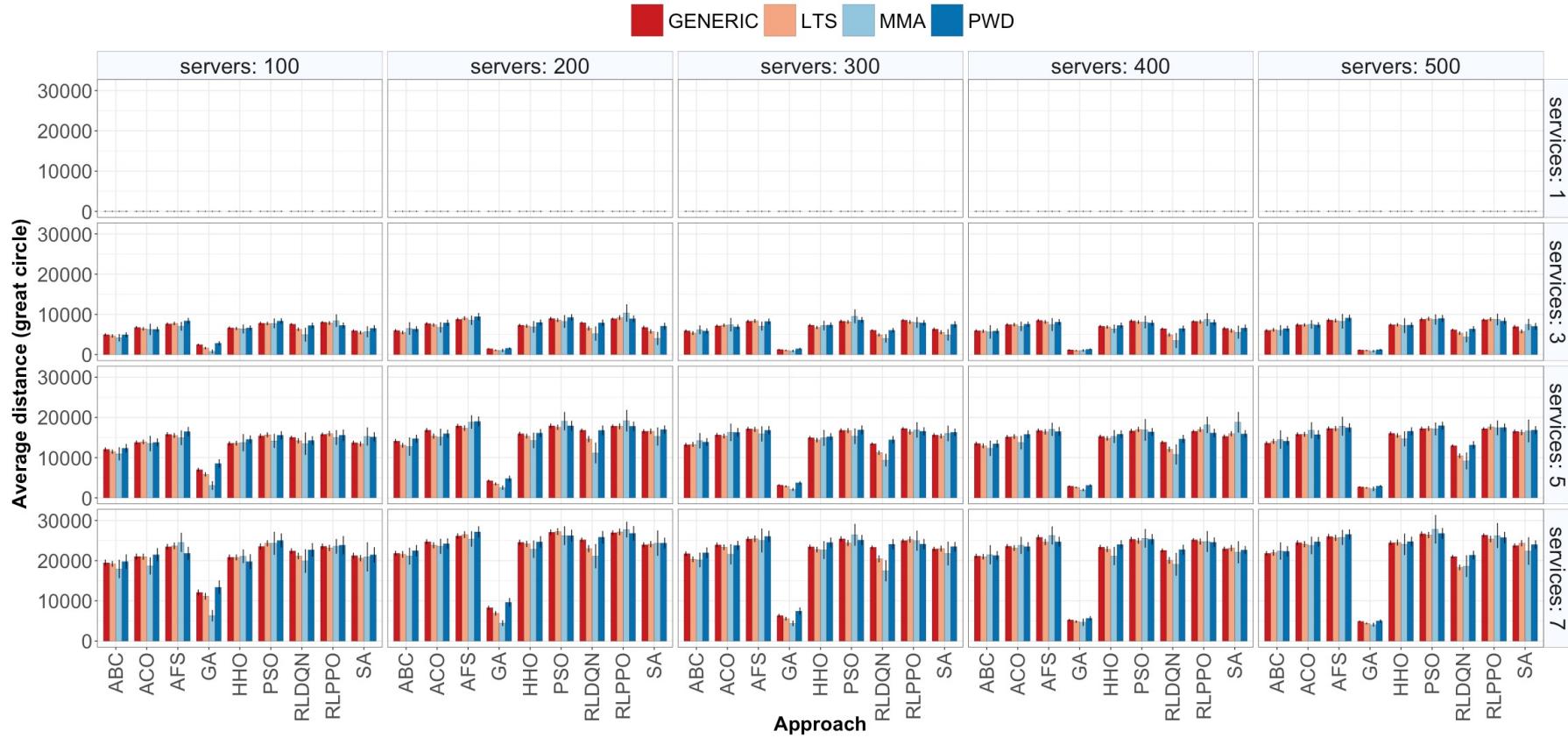
## Placement Success Rate - SCENARIO 05 (Avg. number of requests=3879 (Generic: 2833, LTS: 728, MMA: 84, PWD: 234))



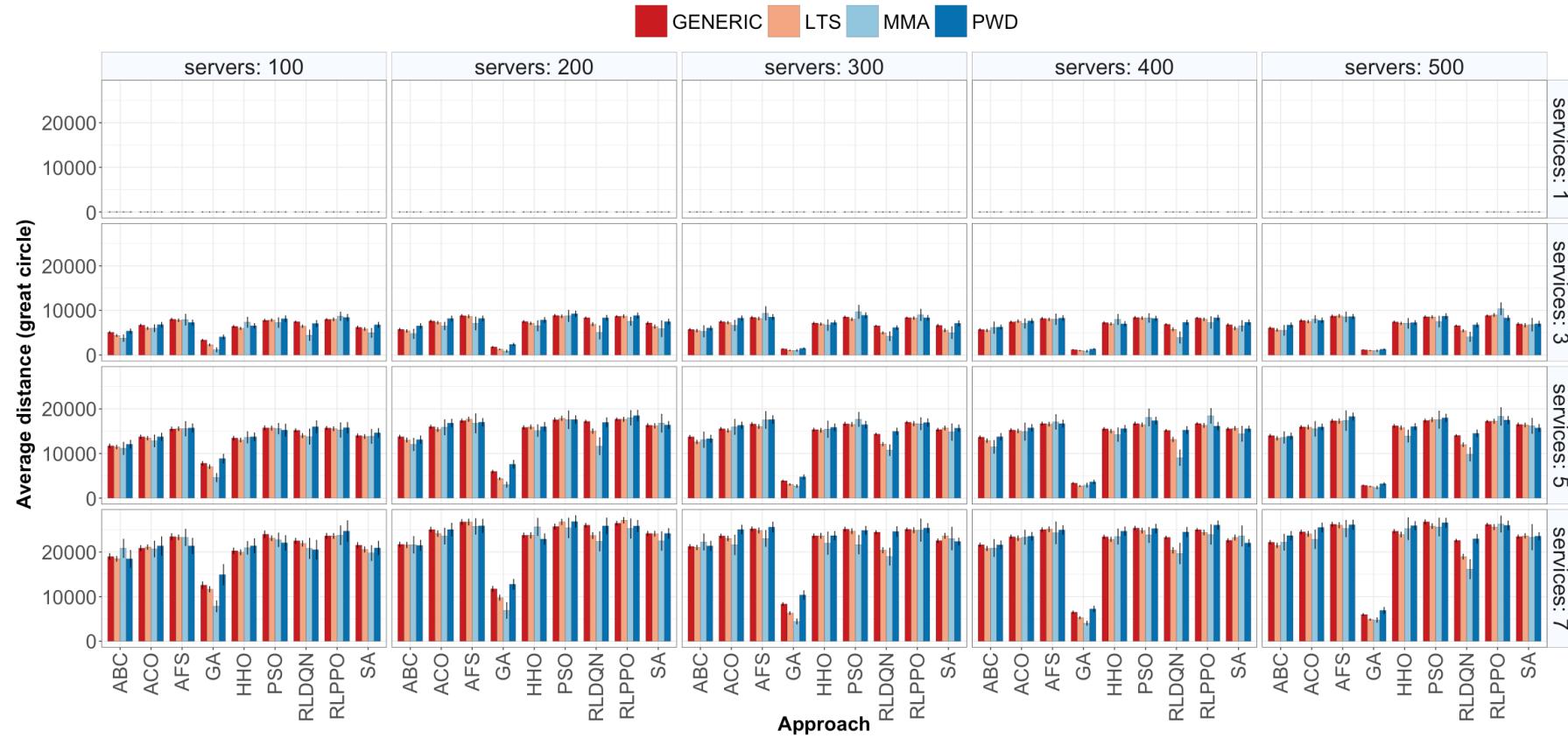
Average Distance - SCENARIO 01 (Avg. number of requests=767 (Generic: 556, LTS: 147, MMA: 15, PWD: 49))



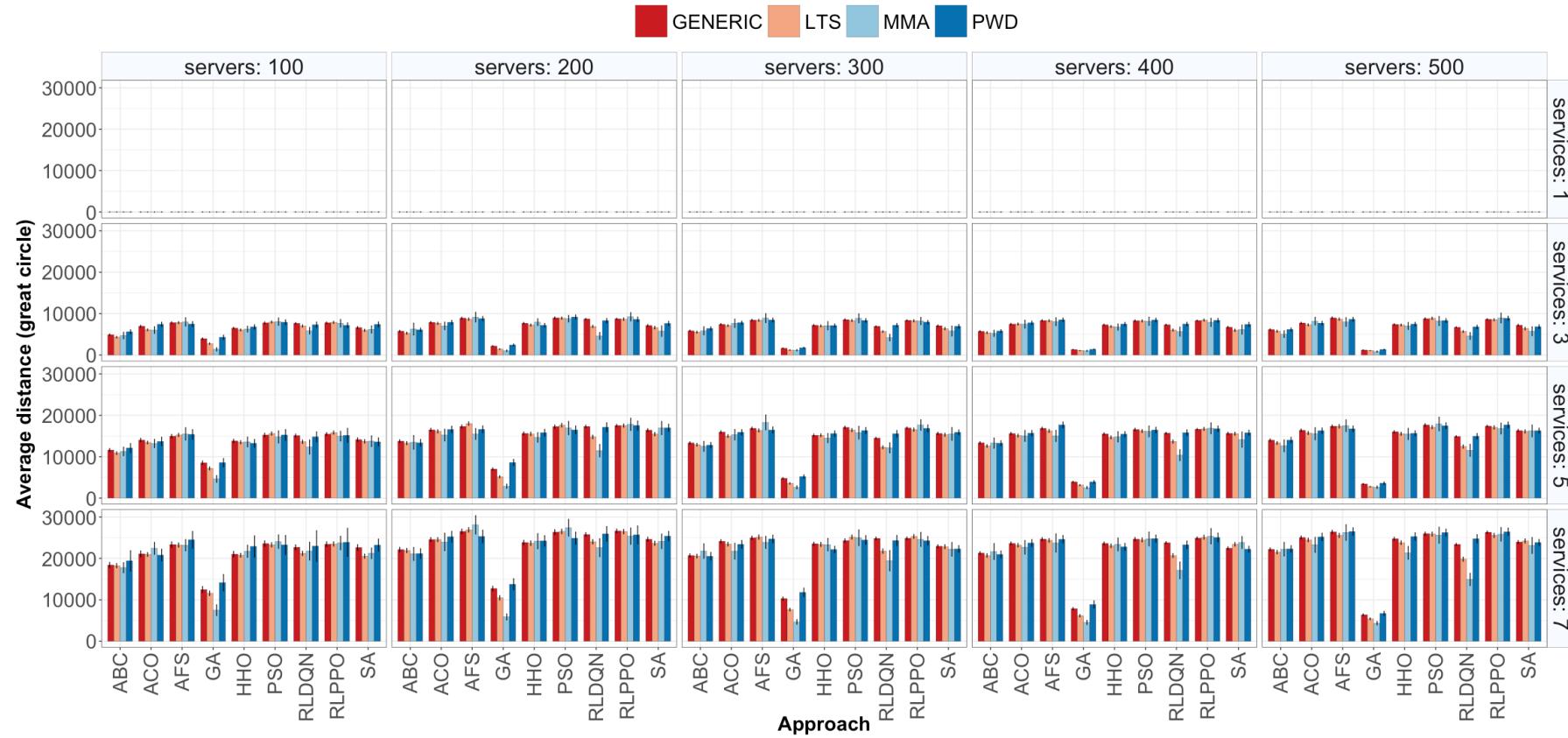
Average Distance - SCENARIO 02 (Avg. number of requests=1537 (Generic: 1118, LTS: 288, MMA: 34, PWD: 97))



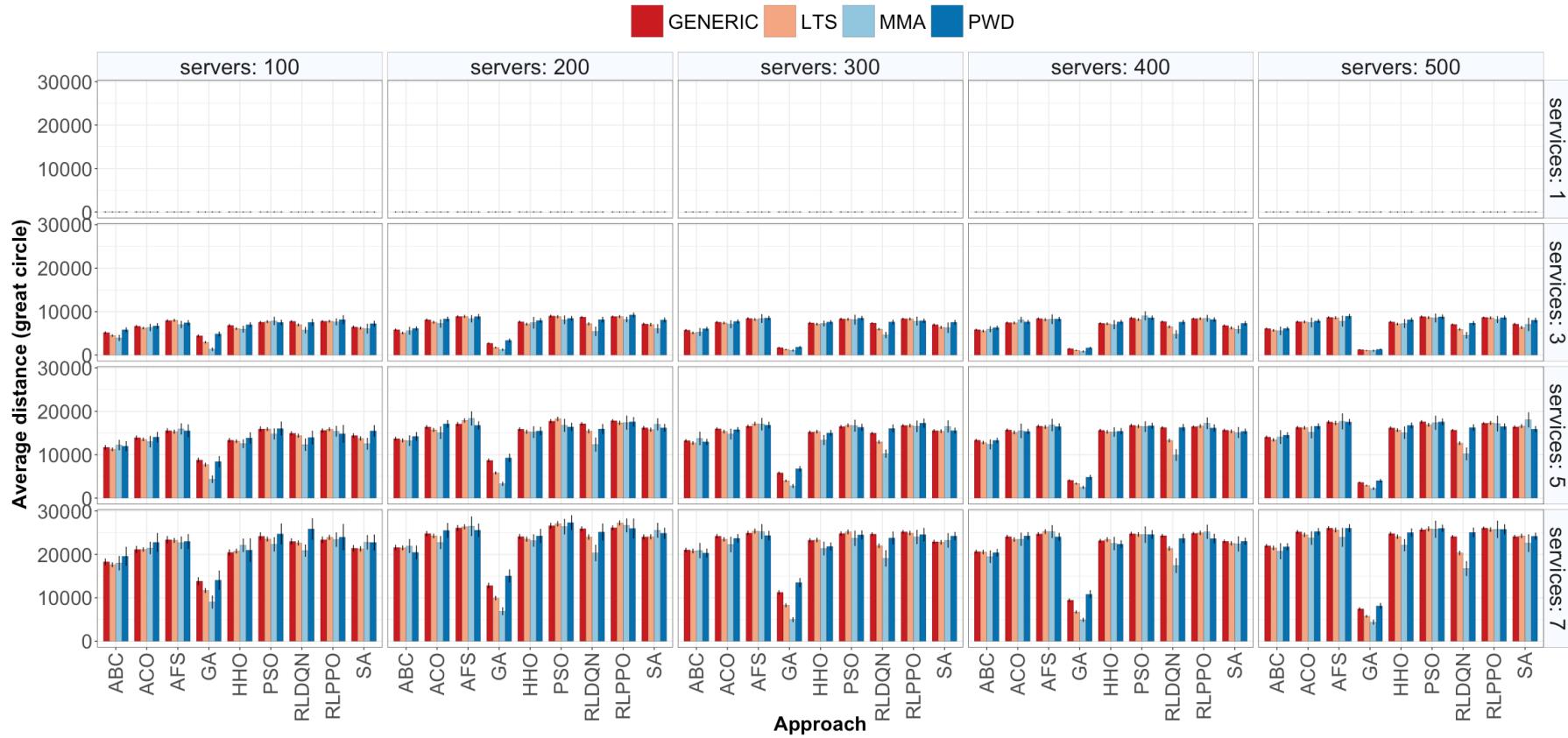
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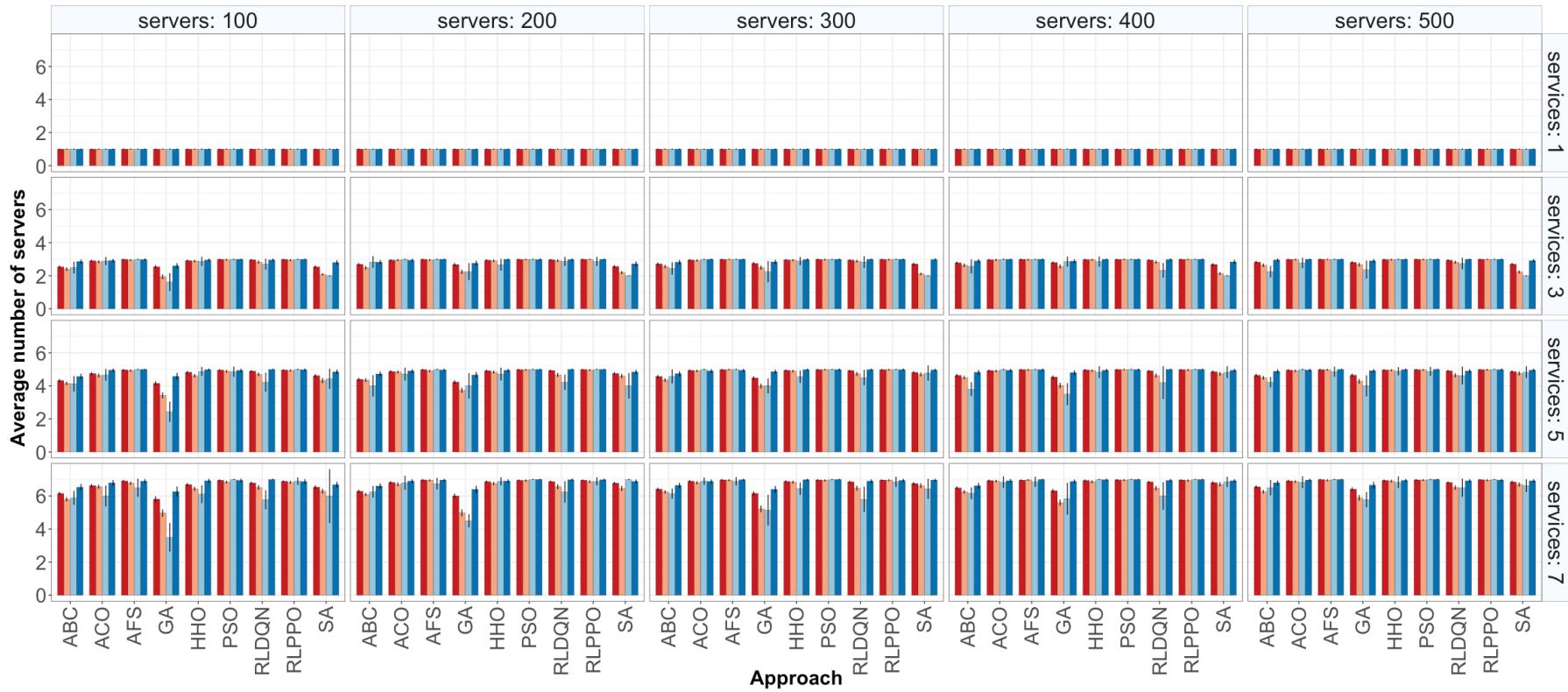


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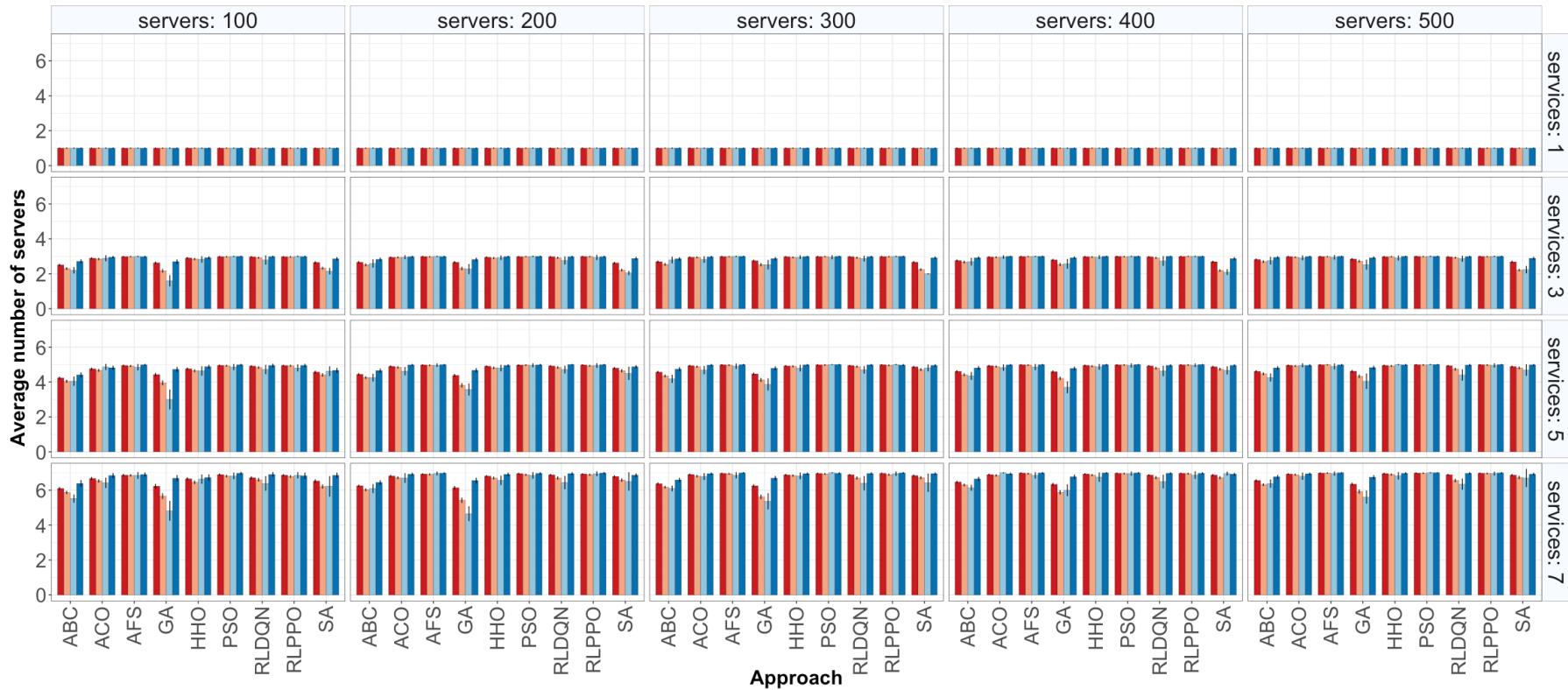
Average no. of Servers - SCENARIO 01 (Avg. number of requests=767 (Generic: 556, LTS: 147, MMA: 15, PWD: 49))

■ GENERIC ■ LTS ■ MMA ■ PWD

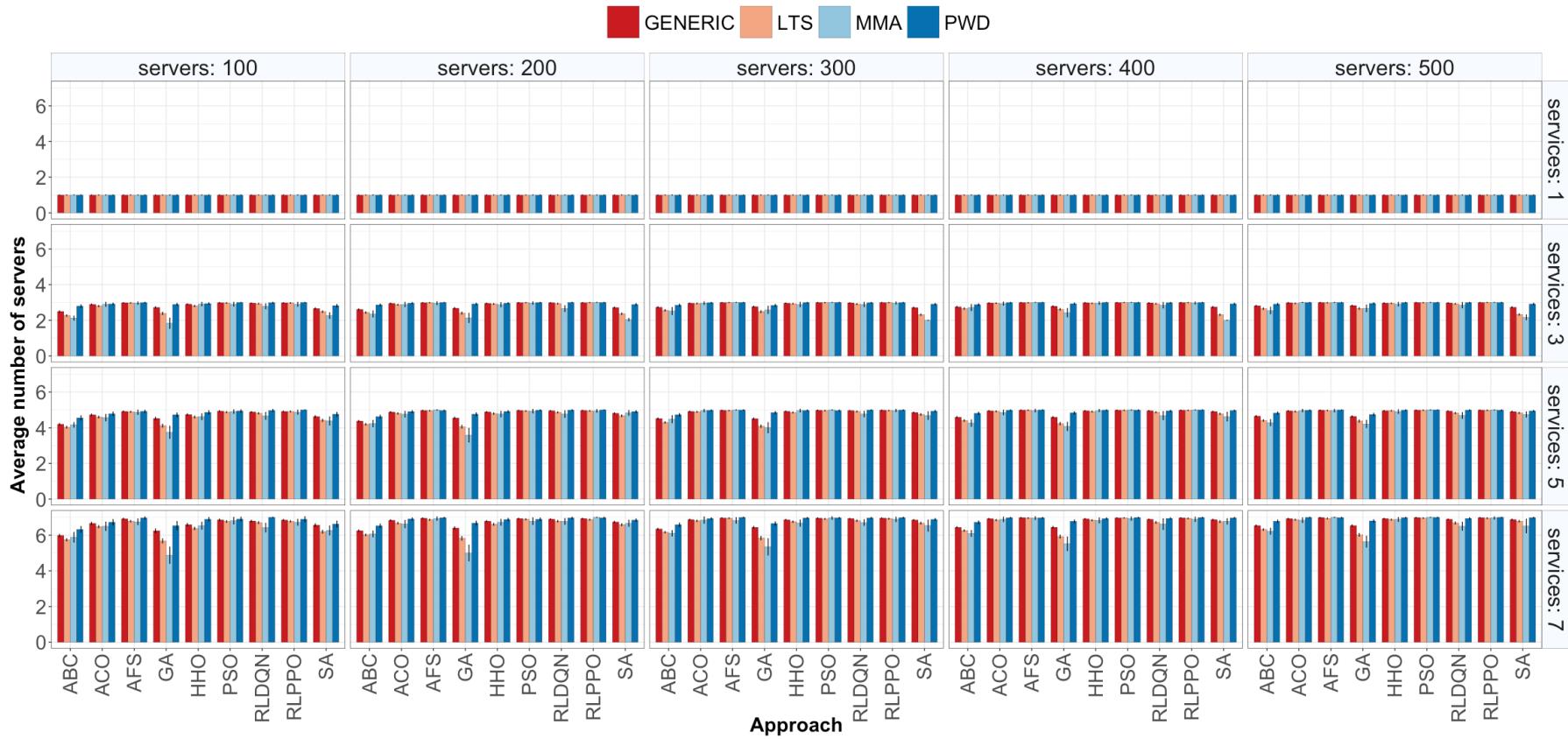


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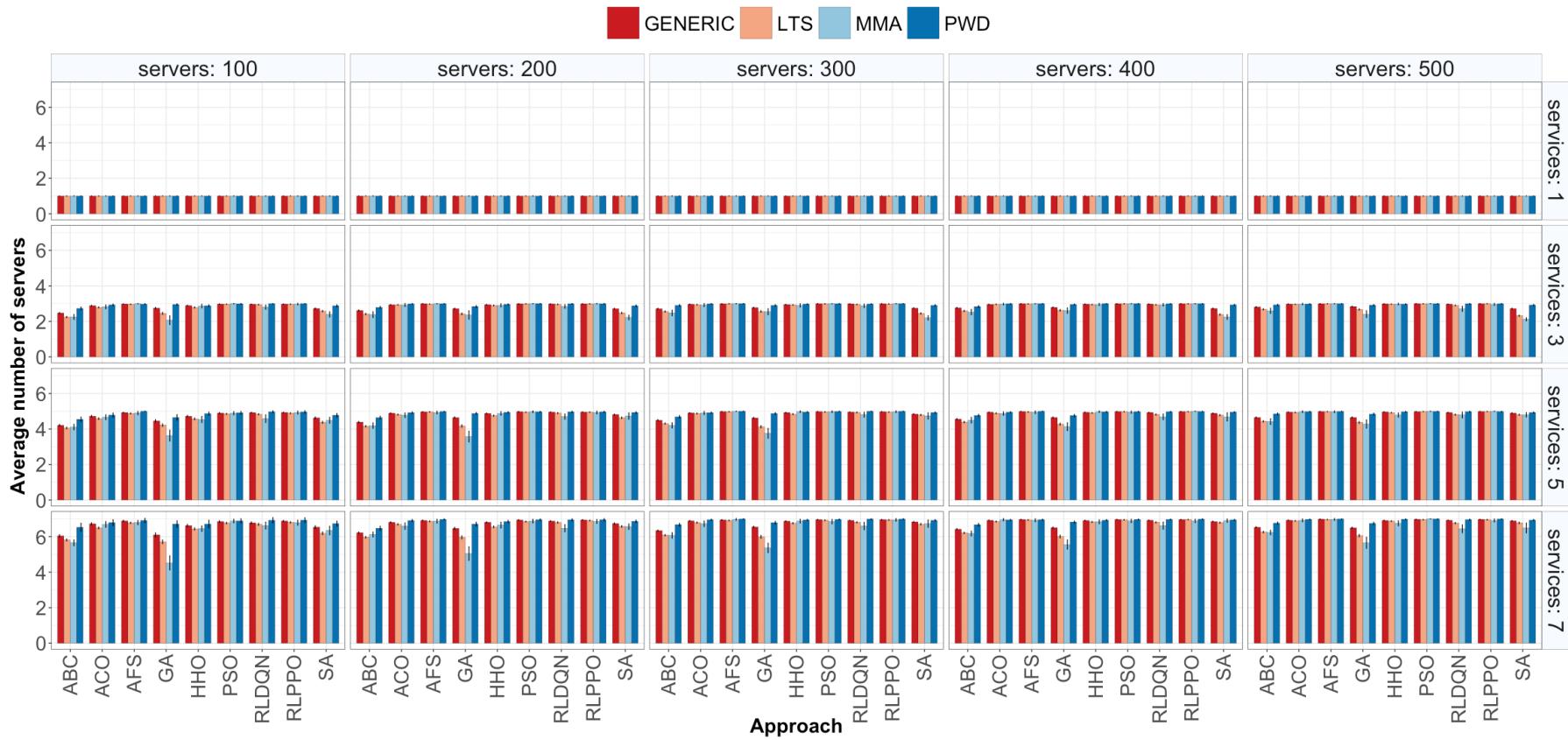
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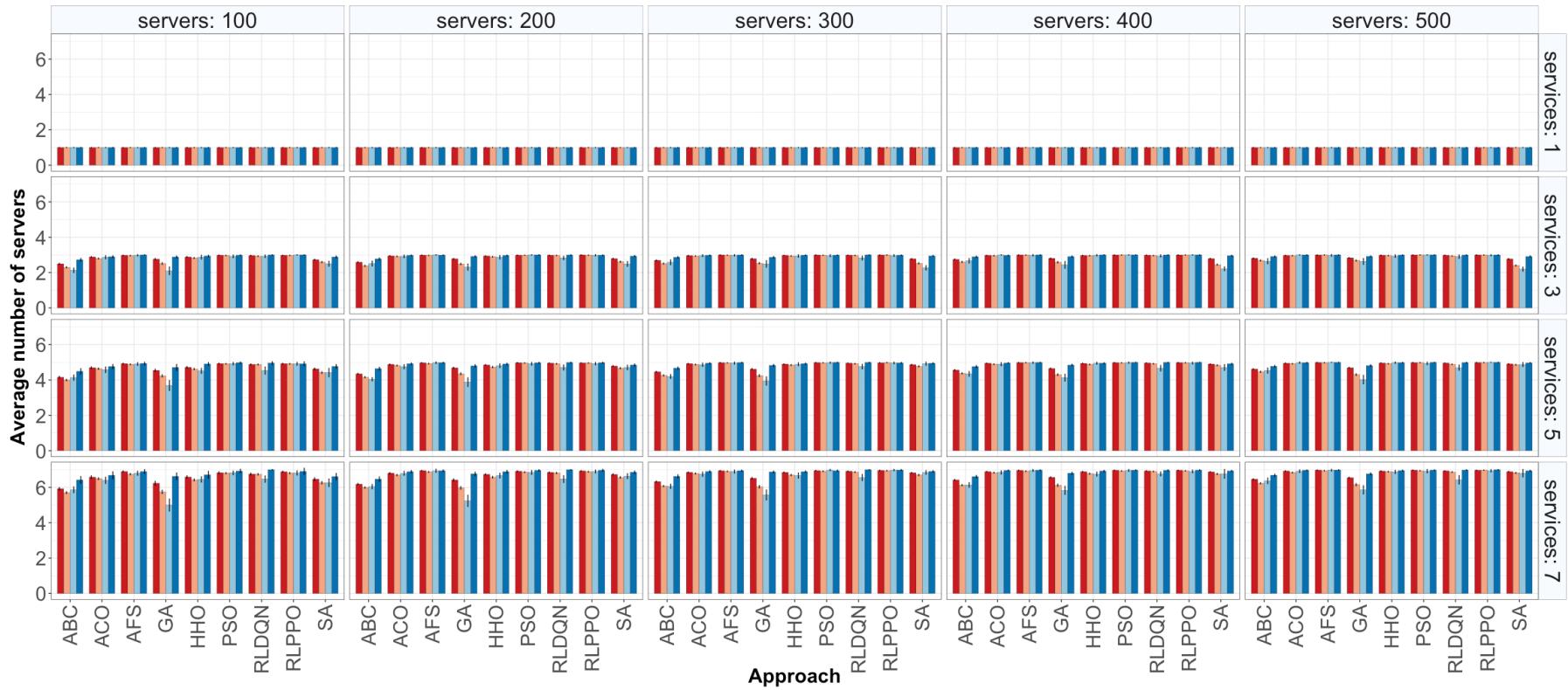


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Approach