

Seminar Report: Muty

April 3, 2019

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1 Introduction

Basic Multicast

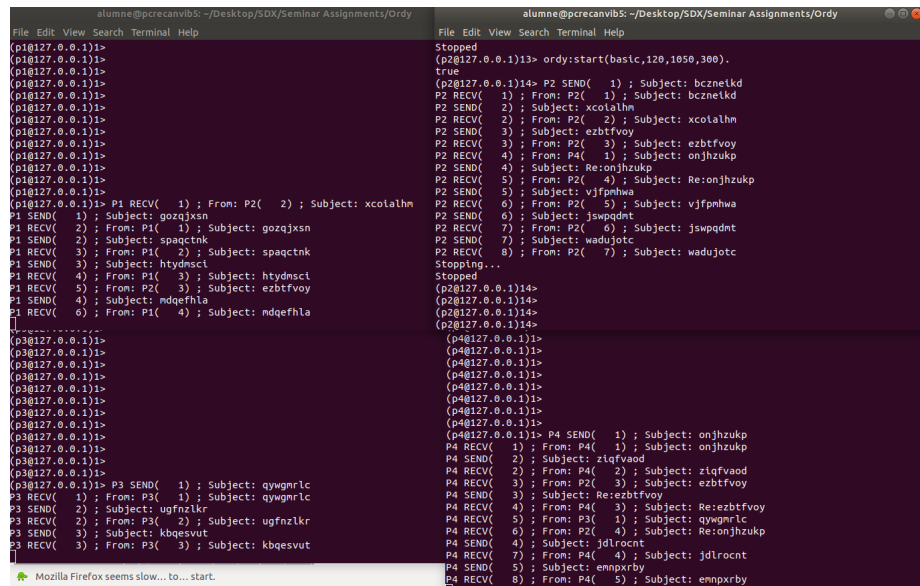
- ### Test 1: Sleep time major que Jitter time

[illegible]

Com podem observar a la figura, hi ha diversos missatges, en el que si que es respecta l'ordre FIFO, però també es pot observar com en alguna ocasió els missatges no arriben en ordre.

Test 2: Sleep time inferior a Jitter time

En aquest cas, és més probable que l'ordre dels missatges es vegi alterat, ja que en el moment en que estem fent multicast, es més probable que hi hagin missatges a ser enviats, de forma que la probabilitat de que un missatge arribi en desordre és major



```
alumn@pcrecanvib: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
(p10127.0.0.1)1>
(p10127.0.0.1)1>
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(p10127.0.0.1)1>
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P1 RECV( 2); From: P1( 1); Subject: gozqjxsn
P1 SEND( 2); Subject: spaqctnk
P1 RECV( 3); From: P1( 2); Subject: spaqctnk
P1 SEND( 3); Subject: htydmscl
P1 RECV( 4); From: P1( 3); Subject: htydmscl
P1 RECV( 5); From: P2( 3); Subject: ezbtfovoy
P1 SEND( 4); Subject: ndqefhla
P1 RECV( 6); From: P1( 4); Subject: ndqefhla
-----
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(p30127.0.0.1)1>
(p30127.0.0.1)1>
(p30127.0.0.1)1>
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P3 RECV( 1); From: P3( 1); Subject: qywgmrlic
P3 SEND( 2); Subject: ugfnzlktr
P3 RECV( 2); From: P3( 2); Subject: ugfnzlktr
P3 SEND( 3); Subject: kbqesvut
P3 RECV( 3); From: P3( 3); Subject: kbqesvut

alumn@pcrecanvib: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
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true
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P2 SEND( 2); Subject: xcolalhm
P2 RECV( 2); From: P2( 2); Subject: xcolalhm
P2 SEND( 3); Subject: ezbtfovoy
P2 RECV( 3); From: P2( 3); Subject: ezbtfovoy
P2 RECV( 4); From: P4( 1); Subject: onjhzukp
P2 SEND( 4); Subject: Re: onjhzukp
P2 RECV( 5); From: P2( 4); Subject: Re: onjhzukp
P2 SEND( 5); Subject: vjfpnhwa
P2 RECV( 6); From: P2( 5); Subject: vjfpnhwa
P2 SEND( 6); Subject: jswpqdnt
P2 RECV( 7); From: P2( 6); Subject: jswpqdnt
P2 SEND( 7); Subject: wadujotc
P2 RECV( 8); From: P2( 7); Subject: wadujotc
Stopping...
Stopped
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(p40127.0.0.1)1>
(p40127.0.0.1)1>
(p40127.0.0.1)1>
(p40127.0.0.1)1>
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P4 RECV( 1); From: P4( 1); Subject: onjhzukp
P4 SEND( 2); Subject: ziqfvaod
P4 RECV( 2); From: P4( 2); Subject: ziqfvaod
P4 RECV( 3); From: P2( 3); Subject: ezbtfovoy
P4 SEND( 3); Subject: Re: ezbtfovoy
P4 RECV( 4); From: P4( 3); Subject: Re: ezbtfovoy
P4 RECV( 5); From: P3( 1); Subject: qywgmrlic
P4 RECV( 6); From: P2( 4); Subject: Re: onjhzukp
P4 SEND( 4); Subject: jdlrocnt
P4 RECV( 7); From: P4( 4); Subject: jdlrocnt
P4 SEND( 5); Subject: emnprrby
P4 RECV( 8); From: P4( 5); Subject: emnprrby
```

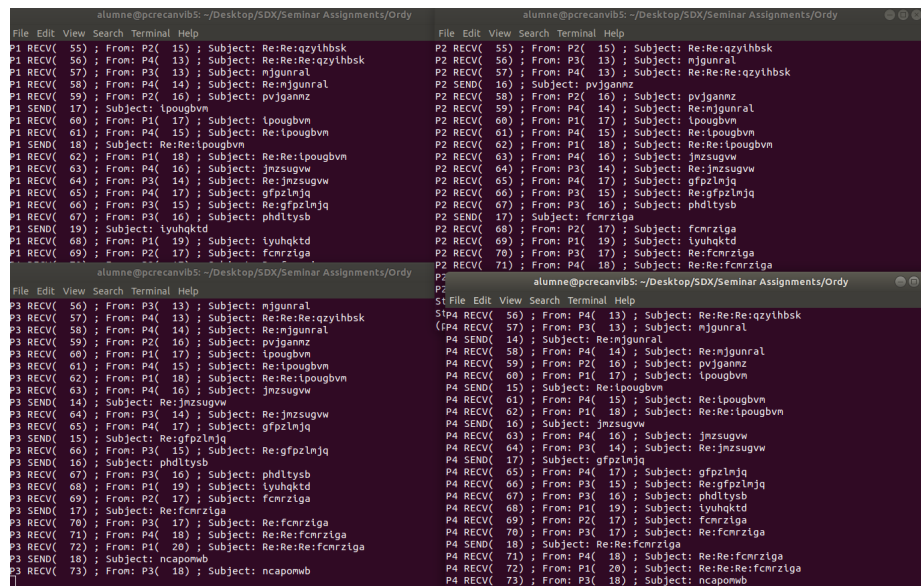
Com podem veure, ara és més fàcil observar desordres en els missatges, degut a que en el període en el que fem multicast, s'estan enviant més missatges.

Causal order multicast

1. Set up the causal order multicast system, and repeat the previous tests.

Test 1: Sleep time inferior a Jitter time

Amb el Causal order, haurien de arribar els missatges en l'ordre correcte, ja que comprova que el missatge que s'està rebent és el esperat i que s'han rebut tots els anteriors del procés que l'ha enviat.



```
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File Edit View Search Terminal Help
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P1 REC( 56) ; From: P4( 13) ; Subject: Re:Re:qzythbsk
P1 REC( 57) ; From: P2( 13) ; Subject: njgunral
P1 REC( 58) ; From: P4( 14) ; Subject: Re:njgunral
P1 REC( 59) ; From: P2( 16) ; Subject: pvjgannz
P1 SEND( 17) ; Subject: lpougvm
P1 REC( 60) ; From: P1( 17) ; Subject: lpougvm
P1 REC( 61) ; From: P4( 15) ; Subject: Re:lpougvm
P1 SEND( 18) ; Subject: Re:Re:lpougvm
P1 REC( 62) ; From: P1( 18) ; Subject: Re:Re:lpougvm
P1 REC( 63) ; From: P4( 16) ; Subject: jnzsgvw
P1 REC( 64) ; From: P3( 14) ; Subject: Re:jnzsgvw
P1 REC( 65) ; From: P4( 17) ; Subject: gfpzlnjq
P1 REC( 66) ; From: P3( 15) ; Subject: Re:gfpzlnjq
P1 REC( 67) ; From: P3( 16) ; Subject: phdlysb
P1 SEND( 19) ; Subject: lyuhqktd
P1 REC( 68) ; From: P1( 19) ; Subject: lyuhqktd
P1 REC( 69) ; From: P2( 17) ; Subject: fcnrziga

alumni@pcrecanvib5: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
P2 REC( 55) ; From: P2( 15) ; Subject: Re:Re:qzythbsk
P2 REC( 56) ; From: P3( 13) ; Subject: njgunral
P2 REC( 57) ; From: P4( 13) ; Subject: Re:Re:qzythbsk
P2 SEND( 16) ; Subject: pvjgannz
P2 REC( 58) ; From: P2( 16) ; Subject: pvjgannz
P2 REC( 59) ; From: P4( 14) ; Subject: Re:njgunral
P2 REC( 60) ; From: P1( 17) ; Subject: lpougvm
P2 REC( 61) ; From: P4( 15) ; Subject: Re:lpougvm
P2 REC( 62) ; From: P1( 18) ; Subject: Re:Re:lpougvm
P2 REC( 63) ; From: P4( 16) ; Subject: jnzsgvw
P2 REC( 64) ; From: P3( 14) ; Subject: Re:jnzsgvw
P2 REC( 65) ; From: P4( 17) ; Subject: gfpzlnjq
P2 REC( 66) ; From: P3( 15) ; Subject: Re:gfpzlnjq
P2 REC( 67) ; From: P3( 16) ; Subject: phdlysb
P2 SEND( 17) ; Subject: fcnrziga
P2 REC( 68) ; From: P2( 17) ; Subject: fcnrziga
P2 REC( 69) ; From: P1( 19) ; Subject: lyuhqktd
P2 REC( 70) ; From: P3( 17) ; Subject: Re:fcnrziga
P2 REC( 71) ; From: P4( 18) ; Subject: Re:Re:fcnrziga

alumni@pcrecanvib5: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
P3 REC( 56) ; From: P3( 13) ; Subject: njgunral
P3 REC( 57) ; From: P4( 13) ; Subject: Re:Re:qzythbsk
P3 REC( 58) ; From: P4( 14) ; Subject: Re:njgunral
P3 REC( 59) ; From: P2( 16) ; Subject: pvjgannz
P3 REC( 60) ; From: P1( 17) ; Subject: lpougvm
P3 REC( 61) ; From: P4( 15) ; Subject: Re:lpougvm
P3 REC( 62) ; From: P1( 18) ; Subject: Re:Re:lpougvm
P3 REC( 63) ; From: P4( 16) ; Subject: jnzsgvw
P3 SEND( 14) ; Subject: Re:jnzsgvw
P3 REC( 64) ; From: P3( 14) ; Subject: Re:jnzsgvw
P3 REC( 65) ; From: P4( 17) ; Subject: gfpzlnjq
P3 SEND( 15) ; Subject: Re:gfpzlnjq
P3 REC( 66) ; From: P3( 15) ; Subject: Re:gfpzlnjq
P3 SEND( 16) ; Subject: phdlysb
P3 REC( 67) ; From: P3( 16) ; Subject: phdlysb
P3 REC( 68) ; From: P1( 19) ; Subject: lyuhqktd
P3 REC( 69) ; From: P2( 17) ; Subject: fcnrziga
P3 SEND( 17) ; Subject: Re:fcnrziga
P3 REC( 70) ; From: P3( 17) ; Subject: Re:fcnrziga
P3 REC( 71) ; From: P4( 18) ; Subject: Re:Re:fcnrziga
P3 SEND( 18) ; Subject: ncapomb
P3 REC( 72) ; From: P1( 20) ; Subject: Re:Re:fcnrziga
P3 REC( 73) ; From: P3( 18) ; Subject: ncapomb

alumni@pcrecanvib5: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
P4 REC( 56) ; From: P4( 13) ; Subject: Re:Re:qzythbsk
P4 REC( 57) ; From: P3( 13) ; Subject: njgunral
P4 SEND( 14) ; Subject: Re:njgunral
P4 REC( 58) ; From: P4( 14) ; Subject: Re:njgunral
P4 REC( 59) ; From: P2( 16) ; Subject: pvjgannz
P4 REC( 60) ; From: P1( 17) ; Subject: lpougvm
P4 SEND( 15) ; Subject: Re:lpougvm
P4 REC( 61) ; From: P4( 15) ; Subject: Re:lpougvm
P4 REC( 62) ; From: P1( 18) ; Subject: Re:Re:lpougvm
P4 SEND( 16) ; Subject: jnzsgvw
P4 REC( 63) ; From: P4( 16) ; Subject: Re:jnzsgvw
P4 REC( 64) ; From: P3( 14) ; Subject: Re:jnzsgvw
P4 SEND( 17) ; Subject: gfpzlnjq
P4 REC( 65) ; From: P4( 17) ; Subject: gfpzlnjq
P4 REC( 66) ; From: P3( 15) ; Subject: Re:gfpzlnjq
P4 REC( 67) ; From: P3( 16) ; Subject: phdlysb
P4 REC( 68) ; From: P1( 19) ; Subject: lyuhqktd
P4 REC( 69) ; From: P2( 17) ; Subject: fcnrziga
P4 REC( 70) ; From: P3( 17) ; Subject: Re:fcnrziga
P4 SEND( 18) ; Subject: Re:Re:fcnrziga
P4 REC( 71) ; From: P4( 18) ; Subject: Re:Re:fcnrziga
P4 REC( 72) ; From: P1( 20) ; Subject: Re:Re:fcnrziga
P4 REC( 73) ; From: P3( 18) ; Subject: ncapomb
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Com podem veure, el ordre s'ha mantés, es a dir no hem rebut ningun missatge no esperat, es a dir que el missatges del emissor arriben en ordre i que no hi ha cap missatge de resposta enviat abans del primer, però el ordre total no s'ha mantés.

Test 2: Sleep time superior a Jitter time

El cas de tenir un sleep time menor al Jitter time, no hauria de causar ninguna mena de desordre, en tot cas el que provocarà, és que els missatges triguin més a ser rebuts, ja que els processos estaran en sleep time més estona, com podem veure en la figura.

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alumni@pcrcanvis: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
P1 RECV( 581 ) ; From: P3( 145 ) ; Subject: Re:elzxinuc
P1 RECV( 582 ) ; From: P3( 146 ) ; Subject: mqyaldvb
P1 RECV( 583 ) ; From: P1( 171 ) ; Subject: Re:Re:xdzpzuno
P1 RECV( 584 ) ; From: P4( 139 ) ; Subject: Re:fenjbonz
P1 RECV( 585 ) ; From: P4( 140 ) ; Subject: Re:Re:jdeakooq
P1 RECV( 586 ) ; From: P4( 141 ) ; Subject: Re:Re:fvlcbgjp
P1 RECV( 587 ) ; From: P4( 142 ) ; Subject: dbtzcpl
P1 RECV( 588 ) ; From: P4( 143 ) ; Subject: lrtawcfc
P1 RECV( 589 ) ; From: P4( 144 ) ; Subject: Re:bqnlhdoe
P1 RECV( 590 ) ; From: P4( 145 ) ; Subject: jtbplgyz
P1 RECV( 591 ) ; From: P4( 146 ) ; Subject: fznyclns
P1 RECV( 592 ) ; From: P4( 147 ) ; Subject: Re:Re:vurttfzoh
P1 RECV( 593 ) ; From: P4( 148 ) ; Subject: Re:xdzpzuno
P1 SEND( 172 ) ; Subject: jdbexspf
P1 RECV( 594 ) ; From: P1( 172 ) ; Subject: jdbexspf
P1 RECV( 595 ) ; From: P4( 149 ) ; Subject: Re:sgvjntyn
P1 SEND( 173 ) ; Subject: Re:Re:sgvjntyn
P1 RECV( 596 ) ; From: P4( 150 ) ; Subject: chxntowk
P1 RECV( 597 ) ; From: P4( 151 ) ; Subject: utbpdfay
P1 RECV( 598 ) ; From: P4( 152 ) ; Subject: dnuxyzft
P1 SEND( 174 ) ; Subject: Re:dnuxyzft
P1 RECV( 599 ) ; From: P1( 172 ) ; Subject: Re:Re:sgvjntyn
P1 RECV( 600 ) ; From: P1( 174 ) ; Subject: Re:dnuxyzft

P3 RECV( 574 ) ; From: P3( 176 ) ; Subject: womuyqba
P3 RECV( 575 ) ; From: P2( 127 ) ; Subject: bcgrjthg
P3 RECV( 576 ) ; From: P2( 128 ) ; Subject: xgqlrffe
P3 RECV( 577 ) ; From: P2( 129 ) ; Subject: saugwvfc
P3 SEND( 177 ) ; Subject: jxvklhbl
P3 RECV( 578 ) ; From: P3( 177 ) ; Subject: jxvklhbl
P3 RECV( 579 ) ; From: P4( 144 ) ; Subject: Re:bqnlhdoe
P3 SEND( 178 ) ; Subject: Re:Re:bqnlhdoe
P3 RECV( 580 ) ; From: P4( 145 ) ; Subject: jtbplgyz
P3 RECV( 581 ) ; From: P4( 146 ) ; Subject: fznyclns
P3 RECV( 582 ) ; From: P4( 147 ) ; Subject: Re:Re:vurttfzoh
P3 RECV( 583 ) ; From: P3( 178 ) ; Subject: Re:Re:bqnlhdoe
P3 RECV( 584 ) ; From: P1( 130 ) ; Subject: Re:glfkznsp
P3 RECV( 585 ) ; From: P1( 131 ) ; Subject: dltfnepb
P3 RECV( 586 ) ; From: P1( 132 ) ; Subject: Re:Re:rehtfzrjgy
P3 RECV( 587 ) ; From: P1( 133 ) ; Subject: Re:okmwehrc
P3 RECV( 588 ) ; From: P1( 134 ) ; Subject: Re:Re:olzfrmg
P3 RECV( 589 ) ; From: P1( 135 ) ; Subject: Re:elzxinuc
P3 RECV( 590 ) ; From: P1( 136 ) ; Subject: Re:Re:Re:zykfbjt
P3 RECV( 591 ) ; From: P1( 137 ) ; Subject: ncvjdlit

P4 RECV( 567 ) ; From: P3( 137 ) ; Subject: caoybljr
P4 RECV( 568 ) ; From: P3( 138 ) ; Subject: lhexvffq
P4 RECV( 569 ) ; From: P3( 139 ) ; Subject: Re:Re:fvlcbgjp
P4 SEND( 170 ) ; Subject: Re:Re:Re:fvlcbgjp
P4 RECV( 570 ) ; From: P3( 140 ) ; Subject: Re:fenjbonz
P4 SEND( 171 ) ; Subject: Re:Re:fenjbonz
P4 RECV( 571 ) ; From: P3( 141 ) ; Subject: oklprdzu
P4 RECV( 572 ) ; From: P3( 142 ) ; Subject: lxmhtecw
P4 RECV( 573 ) ; From: P3( 143 ) ; Subject: Re:xdzpzuno
P4 RECV( 574 ) ; From: P3( 144 ) ; Subject: sfxwtcl
P4 RECV( 575 ) ; From: P3( 145 ) ; Subject: Re:elzxinuc
P4 RECV( 576 ) ; From: P3( 146 ) ; Subject: mqyaldvb
P4 RECV( 577 ) ; From: P4( 169 ) ; Subject: Re:Re:Re:dcfgmnxz
P4 RECV( 578 ) ; From: P4( 170 ) ; Subject: Re:Re:Re:fvlcbgjp
P4 RECV( 579 ) ; From: P4( 171 ) ; Subject: Re:Re:fenjbonz
P4 SEND( 172 ) ; Subject: skhlocbe
P4 RECV( 580 ) ; From: P4( 172 ) ; Subject: skhlocbe
P4 SEND( 173 ) ; Subject: ncosdmhx
P4 RECV( 581 ) ; From: P4( 173 ) ; Subject: ncosdmhx
P4 SEND( 174 ) ; Subject: frjsglno
P4 RECV( 582 ) ; From: P4( 174 ) ; Subject: frjsglno
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Total order multicast

1. Set up the total order multicast system, and repeat the previous tests.

Test 1: Sleep time inferior a Jitter time

Ni el Sleep time ni el Jitter time, haurien de provocar cap desordre, ja que els missatges s'entregaran en ordre de mínim nSeq de la queue. El que si que notarem, es que degut al alt temps de Jitter, s'enviaran més missatges.

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alumne@pcrecnavib5: ~/Desktop/SDX/Seminar Assignments/OrdY
File Edit View Search Terminal Help
(ok,total)
(p0127.0.0.1)3> P1 RECV( 1) ; From: P2( 1) ; Subject: knlxyapn
P1 SEND( 1) ; Subject: Re:knlxyapn
P1 RECV( 2) ; From: P1( 1) ; Subject: Re:knlxyapn
P1 RECV( 3) ; From: P2( 2) ; Subject: Re:Re:knlxyapn
P1 RECV( 4) ; From: P4( 1) ; Subject: Re:Re:knlxyapn
P1 SEND( 2) ; Subject: hlwyunxr
P1 RECV( 5) ; From: P1( 2) ; Subject: hlwyunxr
P1 RECV( 6) ; From: P2( 3) ; Subject: qzxnaver
P1 RECV( 7) ; From: P3( 1) ; Subject: Re:hlwyunxr
P1 RECV( 8) ; From: P4( 2) ; Subject: xzcstnfq
P1 RECV( 9) ; From: P3( 2) ; Subject: wcknvhao
P1 SEND( 3) ; Subject: rzufnodb
P1 RECV( 10) ; From: P1( 3) ; Subject: rzufnodb
P1 RECV( 11) ; From: P2( 3) ; Subject: Re:rzufnodb
P1 SEND( 4) ; Subject: Re:Re:rzufnodb
P1 RECV( 12) ; From: P1( 4) ; Subject: Re:Re:rzufnodb
P1 RECV( 13) ; From: P2( 4) ; Subject: pgylhgb
P1 RECV( 14) ; From: P4( 3) ; Subject: Re:Re:Re:rzufnodb
P1 RECV( 15) ; From: P2( 5) ; Subject: Re:Re:rzufnodb
P1 SEND( 5) ; Subject: Re:Re:Re:rzufnodb
P1 RECV( 16) ; From: P1( 5) ; Subject: Re:Re:Re:rzufnodb
P1 RECV( 17) ; From: P4( 4) ; Subject: kprutjov
P1 SEND( 6) ; Subject: kprutjov
(p0127.0.0.1)3> P3 RECV( 1) ; From: P2( 1) ; Subject: knlxyapn
P3 RECV( 2) ; From: P1( 1) ; Subject: Re:knlxyapn
P3 RECV( 3) ; From: P2( 2) ; Subject: Re:Re:knlxyapn
P3 RECV( 4) ; From: P4( 1) ; Subject: Re:Re:knlxyapn
P3 RECV( 5) ; From: P2( 3) ; Subject: qzxnaver
P3 RECV( 6) ; From: P1( 2) ; Subject: hlwyunxr
P3 SEND( 1) ; Subject: Re:hlwyunxr
P3 RECV( 7) ; From: P3( 1) ; Subject: Re:hlwyunxr
P3 SEND( 2) ; Subject: wcknvhao
P3 RECV( 8) ; From: P3( 2) ; Subject: wcknvhao
P3 RECV( 9) ; From: P4( 2) ; Subject: xzcstnfq
P3 RECV( 10) ; From: P1( 3) ; Subject: rzufnodb
P3 SEND( 3) ; Subject: Re:rzufnodb
P3 RECV( 11) ; From: P3( 3) ; Subject: Re:rzufnodb
P3 RECV( 12) ; From: P1( 4) ; Subject: Re:Re:rzufnodb
P3 RECV( 13) ; From: P4( 3) ; Subject: Re:Re:Re:rzufnodb
P3 RECV( 14) ; From: P2( 4) ; Subject: pgylhgb
P3 RECV( 15) ; From: P2( 5) ; Subject: Re:Re:rzufnodb
P3 RECV( 16) ; From: P1( 5) ; Subject: Re:Re:Re:rzufnodb
P3 RECV( 17) ; From: P4( 4) ; Subject: kprutjov
P3 SEND( 4) ; Subject: kprutjov
(p0127.0.0.1)4> P4 RECV( 1) ; From: P2( 1) ; Subject: knlxyapn
P4 RECV( 2) ; From: P1( 1) ; Subject: Re:knlxyapn
P4 SEND( 1) ; Subject: Re:knlxyapn
P4 RECV( 3) ; From: P4( 1) ; Subject: Re:Re:knlxyapn
P4 RECV( 4) ; From: P2( 2) ; Subject: Re:Re:knlxyapn
P4 RECV( 5) ; From: P1( 2) ; Subject: hlwyunxr
P4 RECV( 6) ; From: P2( 3) ; Subject: qzxnaver
P4 RECV( 7) ; From: P3( 1) ; Subject: Re:hlwyunxr
P4 SEND( 2) ; Subject: xzcstnfq
P4 RECV( 8) ; From: P4( 2) ; Subject: xzcstnfq
P4 RECV( 9) ; From: P3( 2) ; Subject: wcknvhao
P4 RECV( 10) ; From: P1( 3) ; Subject: rzufnodb
P4 RECV( 11) ; From: P3( 3) ; Subject: Re:rzufnodb
P4 RECV( 12) ; From: P1( 4) ; Subject: Re:Re:rzufnodb
P4 SEND( 3) ; Subject: Re:Re:Re:rzufnodb
P4 RECV( 13) ; From: P4( 3) ; Subject: Re:Re:Re:rzufnodb
P4 RECV( 14) ; From: P2( 4) ; Subject: pgylhgb
P4 RECV( 15) ; From: P2( 5) ; Subject: Re:Re:rzufnodb
P4 SEND( 4) ; Subject: kprutjov
P4 RECV( 16) ; From: P4( 4) ; Subject: kprutjov
P4 RECV( 17) ; From: P1( 5) ; Subject: Re:Re:Re:rzufnodb
P4 SEND( 5) ; Subject: Re:Re:Re:Re:rzufnodb
Stopped
(p0127.0.0.1)31>
```

Test 2: Sleep time superior a Jitter time

Igual que en el cas anterior, tots els processos rebran els missatges en el mateix ordre, però degut a que el Sleep time, és més alt el numero de missatges rebuts serà menor, tal i com podem veure:

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alunne@prccravnib5:~/Desktop/SOX/Seminar Assignment/Ordry
File Edit View Search Terminal Help
P1 RECVC 61) From: P1( 30) ; Subject: Re:kyogonfr
P1 RECVC 62) From: P1( 31) ; Subject: hqkyrlcp
P1 RECVC 63) From: P3( 12) ; Subject: ptecluqk
P1 RECVC 64) From: P3( 13) ; Subject: oujqkxms
P1 SENDC 32) Subject: hfyvntnu
P1 RECVC 65) From: P1( 32) ; Subject: hfyvntnu
P1 SENDC 33) Subject: mlejowtu
P1 RECVC 66) From: P1( 33) ; Subject: mlejowtu
P1 RECVC 67) From: P4( 9) ; Subject: skdxkwn
P1 RECVC 68) From: P2( 13) ; Subject: pwjavexn
P1 SENDC 34) Subject: Re:pwjavexn
P1 RECVC 69) From: P1( 34) ; Subject: Re:pwjavexn
P1 SENDC 35) Subject: xogagkbl
P1 RECVC 70) From: P1( 35) ; Subject: xogagkbl
P1 RECVC 71) From: P4( 10) ; Subject: owrdnjbq
P1 SENDC 36) Subject: xogagkbl
P1 RECVC 72) From: P4( 11) ; Subject: gwakfztt
P1 RECVC 73) From: P4( 12) ; Subject: ewocnktu
P1 RECVC 74) From: P1( 36) ; Subject: Re:owrdnjbq
P1 SENDC 37) Subject: xogagkbl
P1 RECVC 75) From: P1( 37) ; Subject: edxczcfb
P1 SENDC 38) Subject: yfhrksku
P1 RECVC 76) From: P1( 38) ; Subject: yfhrksku
Stopped
(P28127.0.0.1)32:
alunne@prccravnib5:~/Desktop/SOX/Seminar Assignment/Ordry
File Edit View Search Terminal Help
P4 RECVC 67) From: P4( 13) ; Subject: erdkfsxw
P4 RECVC 68) From: P4( 14) ; Subject: bgkqsvth
P4 SENDC 30) Subject: Re:bgkqsvth
P4 RECVC 69) From: P4( 15) ; Subject: kbyunqe
P4 RECVC 70) From: P2( 30) ; Subject: Re:bgkqsvth
P4 SENDC 31) Subject: bhwtyvrq
P4 RECVC 71) From: P2( 31) ; Subject: bhwtyvrq
P4 SENDC 32) Subject: pqbyuzs
P4 RECVC 72) From: P2( 32) ; Subject: pqbyuzs
P4 RECVC 73) From: P1( 12) ; Subject: wdyrxnhal
P4 RECVC 74) From: P1( 11) ; Subject: Re:xbnuzvgq
P4 RECVC 75) From: P1( 12) ; Subject: Re:xbnuzvgq
P4 RECVC 76) From: P1( 13) ; Subject: kxstvyrv
P4 RECVC 77) From: P1( 14) ; Subject: znanrlwb
P4 RECVC 78) From: P4( 16) ; Subject: awhltbop
P4 RECVC 79) From: P4( 17) ; Subject: jstafchp
P4 RECVC 80) From: P4( 18) ; Subject: lkccvdpd
P4 RECVC 81) From: P4( 19) ; Subject: waqexojl
P4 SENDC 33) Subject: Re:waqexojl
P4 RECVC 82) From: P4( 20) ; Subject: dzufwzfl
P4 SENDC 34) Subject: Re:waqexojl
Stopped...
(P28127.0.0.1)32:
P4 RECVC 76) From: P3( 16) ; Subject: mlhwtvq
P4 RECVC 77) From: P3( 17) ; Subject: naeytsbp
P4 RECVC 78) From: P3( 18) ; Subject: yondtpe1
P4 SENDC 35) Subject: Re:yondtpe1
P4 RECVC 79) From: P3( 19) ; Subject: caddgttl
P4 SENDC 36) Subject: Re:caddgttl
P4 RECVC 80) From: P3( 20) ; Subject: xhlfecwg
P4 SENDC 40) Subject: Re:xhlfecwg
P4 RECVC 81) From: P3( 21) ; Subject: thsrkeua
P4 RECVC 82) From: P3( 22) ; Subject: zjvorkfg
P4 SENDC 41) Subject: Re:zjvorkfg
P4 RECVC 83) From: P3( 23) ; Subject: lveznrbp
P4 RECVC 84) From: P3( 24) ; Subject: Re:ckmnyxags
P4 RECVC 85) From: P3( 25) ; Subject: cjjgtbce
P4 RECVC 86) From: P3( 26) ; Subject: ofkwtupb
P4 RECVC 87) From: P4( 38) ; Subject: Re:yondtpe1
P4 RECVC 88) From: P4( 39) ; Subject: Re:caddgttl
P4 RECVC 89) From: P4( 40) ; Subject: Re:xhlfecwg
P4 RECVC 90) From: P4( 41) ; Subject: Re:zjvorkfg
P4 SENDC 42) Subject: czfvtklo
P4 RECVC 91) From: P4( 42) ; Subject: czfvtklo

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2. We have a lot of messages in the system. Derive a theoretical quantification of the number of messages needed to deliver a multicast message as a function of the number of workers and check experimentally that your formulation is correct

$$\text{Basic} = 1 * \text{send} + n * \text{multicast} + n * \text{deliver} = 2 * n + 1.$$

$$\text{Total} = 1 * \text{send} + n * \text{request} + n * \text{proposal} + n * \text{agreed} + n * \text{deliver} = 4 * n + 1.$$

N = numero de workers.

3 Open questions

4 Personal opinion