Name	OB11			ODU O LOUI :	N - 4 O 1/081	-	11		00) 11 0 (40 00 (:		0) 11 = (40.65)		OD!!	
	CPU capacity		al Net Image Type	CPU Speed (GHz)	Net Speed(Mbps)		Hour 1 (8:00-9:00)		00) Hour 3 (10:00-11:00)					
NCHC cloud		6 32 ENT/IPC		-	-	Amarican	10,16	4,24	6,24	8,30	10,14	2,16	16	3:
AIST Cloud	_	2 64 ENT/IPC	· · ·	-	-	Amarican	32,64	30,42	24,54	22,44	0,0	2,8	32	
Indiana University cloud		6 64 IPOP	centos7/hku_biolinux/rocks-basic/rocks-sge	-	-	Amarican	2,2	2,2	6,12	6,12	6,12	6,12	16	
NAIST cloud		2 192 ENT	centos7/hku_biolinux/rocks-basic/rocks-sge	-	-	Japan		92,192	92,192	28,56	28,56	92,192	92	
TOS cloud		4 32 ENT/IPC		-	-	Amarican	16,32	16,32	16,32	16,32	6,10	6,10	64	
TP cloud		2 64 IPOP	centos7/hku_biolinux/rocks-basic/rocks-sge	-	-	Amarican	32,64	32,40	2,2	2,2	4,16	2,8	32	
UCSD cloud		4 128 ENT	centos7/hku_biolinux/rocks-basic/rocks-sge	-	-	Amarican		64,128	32,64	32,64	8,44	8,44	64	
TW cloud		4 64 ENT	centos7/hku_biolinux/rocks-basic/rocks-sge	-	-	Amarican	10,30	10,20	20,40	20,40	20,40	20,40	64	
B1 cloud		2 32 ENT	centos7/rocks-basic/rocks-sge	-	-	Amarican	4,16	4,16	2,2	2,2	4,16	2,8	32	
CC cloud	12	8 64 ENT	centos7/hku_biolinux/rocks-basic/rocks-sge	-	-	Amarican		64,32	64,32	64,40	64,40	64,32	128	6-
							*available cpu,memor	ry						
Note														
This case is used as an examp														
CPU speed and network speed	of muti-site are equal to	the minimum values in all sites.					320	D						
Hour (x, y) x, y is CPU available	e, Memory available at th	at time.												
Zone shows the location of each	ch site that is the same or	not.												
Name of site, CPU, and Memo	ry A self-defined example													
If the search returns the least r	number of sites (ie, if the	number of sites is equal to 2 The search v	rill stop immediately, search for sites 3 and 4)											
Case 1: user receives the exp	pected results.													
Search for:														
No. of sites = Anv. CPU=60 M	em=80, Additional Net=II	OP, Image=rocks-basic. Time begin=8:0), Time end=10:00, Duration=From begin to end											
Flow:		, , , , , , , , , , , , , , , , , , ,	.,											
	dditional Net = IPOP and	Image = ROCK> NCHC cloud AIST C	oud,Indiana University cloud,TOS cloud,TP cloud											
Start with 2 sites: resource of			doud, roo doud, rr doud											
Check for sites that has capa														
		during the time specified by the user (Ho	ur1 to Hour?) >AIST Cloud TB cloud											
Create combination as resul		during the time specified by the user (ric	ui i to Houiz) ->Ai31 Cloud, i P cloud											
-,	is													
Results: Sites	CPU Needed	T. () OD() A . () (O)		CPU Speed	Network Speed				Time End					
		Total CPU Avail./Capacity Mem Ne		CPU Speea	Network Speed	Additional Net		Time Begin						
(AIST Cloud)&(TP cloud)	30:3	0 62/64	40:40 82/128	-	-	IPOP	rocks-basic	8	:00 10:00					
Case 2: User did not get the	expected results.													
Search for:														
Search for: No. of sites = 2, CPU=70, Mem		, Image=rocks-sge, Time begin=8:00, Tir	ne end=13:00, Duration=2 hours											
Search for: No. of sites = 2, CPU=70, Mem Flow:	n=40, Additional Net=EN													
Search for: No. of sites = 2, CPU=70, Mem Flow: 1) Check for sites that match A	n=40, Additional Net=ENT dditional Net = ENT and	mage = rocks-sge> NCHC cloud,AIST	ne end=13:00, Duration=2 hours	,B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Mem Flow: 1) Check for sites that match A 2) Start with 2 sites: resource of	n=40, Additional Net=ENT dditional Net = ENT and lemand CPU=35, Mem=2	mage = rocks-sge> NCHC cloud,AIST 0 on each site	Cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud	,B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Mem Flow: 1) Check for sites that match A 2) Start with 2 sites: resource of 3) Check for sites that has cap.	n=40, Additional Net=ENT additional Net = ENT and lemand CPU=35, Mem=2 acity for the resource der	mage = rocks-sge> NCHC cloud,AIST 0 on each site nand>NAIST cloud,TOS cloud,UCSD c	Cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud	,B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Mem Flow: 1) Check for sites that match A 2) Start with 2 sites: resource of 3) Check for sites that has cap.	n=40, Additional Net=ENT additional Net = ENT and lemand CPU=35, Mem=2 acity for the resource der	mage = rocks-sge> NCHC cloud,AIST 0 on each site	Cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud	,B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Mem Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availa	n=40, Additional Net=ENT dditional Net = ENT and lemand CPU=35, Mem=2 acity for the resource der able cpu,memory > dema	mage = rocks-sge> NCHC cloud,AIST 0 on each site nand>NAIST cloud,TOS cloud,UCSD c	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud lour1 to Hour3)>NCHC cloud	.B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Menr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availa: 4.2) For each site, check availa:	a=40, Additional Net=ENT dditional Net = ENT and lemand CPU=35, Mem=2 acity for the resource der able cpu,memory > dema	mage = rocks-sge> NCHC cloud,AIST 0 on each site nand>NAIST cloud,TOS cloud,UCSD c nd during the time specified by the user (cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3)>NCHC cloud four2 to Hour4)>None	,B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Menr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availa: 4.2) For each site, check availa:	a=40, Additional Net=ENT additional Net = ENT and lemand CPU=35, Mem=2 acity for the resource deriable cpu,memory > dema able cpu,memory > dema able cpu,memory > dema	mage = rocks-sge> NCHC cloud,AIST 0 on each site and> NAIST cloud,TOS cloud,UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3)>NCHC cloud four2 to Hour4)>None	B1 cloud,CC cloud										
Search for: No. of sites = 2, CPU=70, Mem Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap 4.1) For each site, check availe 4.2) For each site, check availe 4.3) For each site, check availe	a=40, Additional Net=ENT additional Net = ENT and lemand CPU=35, Mem=2 acity for the resource deriable cpu,memory > dema able cpu,memory > dema able cpu,memory > dema	mage = rocks-sge> NCHC cloud.AIST 0 on each site nand> NAIST cloud,TOS cloud.UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (ites = 2	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3)>NCHC cloud four2 to Hour4)>None		Hour 4 (11:00-12:00		Hour 3 (10:00-11:00	Hour 4 (11:00-12	:00) Hour 5 (12:00-13:00)					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap 4.1) For each site, check availa 4.2) For each site, check availa 5) Create combination as result	=40, Additional Net=ENT dditional Net = ENT and lemand CPU=35, Mem=2 acity for the resource der tible cpu_memory > dema abile cpu_memory > dema abile cpu_memory > dema ts ->No results if No. of s	mage = rocks-sge> NCHC cloud.AIST 0 on each site nand> NAIST cloud,TOS cloud.UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (ites = 2	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud tour1 to Hour3)>NCHC cloud tour2 to Hour4)>None tour3 toHour5)>None		Hour 4 (11:00-12:00		Hour 3 (10:00-11:00 92,192) Hour 4 (11:00-12:	-00] Hour 5 (12:00-13:00) 28:66					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availat 4.2) For each site, check availat 4.3) For each site, check availat Hour 1 (8:00-9:00)	a=40, Additional Net=ENT dditional Net = ENT and temand CPU=35, Mem=2 acity for the resource deribite cpu,memory > dema tible cpu,memory > dema tible cpu,memory > dema tible cpu,memory > dema tible cpu,memory > dema	mage = rocks-sge> NCHC cloud.AIST 0 on each site nand>NAIST cloud,TOS cloud.UCSD c nd during the time specified by the user (nd during the time specified by the user (nd during the time specified by the user (nd turing the time spec	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3) ->NCHC cloud four2 to Hour4) ->None four3 toHour5) ->None Hour 2 (9:00-10:00)	Hour 3 (10:00-11:00)	Hour 4 (11:00-12:00 28,56 16,32			Hour 4 (11:00-12) 28.56 16.32	:00) Hour 5 (12:00-13:00) 28.56 6.10					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cape 4.1) For each site, check availe 4.2) For each site, check availe 5) Create combination as result Hour 1 (8:00-9:00) 92,192 15.32	dditional Net=ENT dditional Net = ENT and temand CPU=35, Mem=2 acity for the resource der able cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema ts ->No results if No. of s Hour 2 (9:00-10:00) 92,192 16.32	mage = rocks-sge> NCHC cloud.AIST 0 on each site nand>NAIST cloud,TOS cloud.UCSD c nd during the time specified by the user (nd during the time specified by the user (nd during the time specified by the user (nd turing the time spec	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3) ->NCHC cloud four2 to Hour4) ->None four3 toHour5) ->None Hour 2 (9:00-10:00)	Hour 3 (10:00-11:00) 92,192 16,32	Hour 4 (11:00-12:00 28.55 16.32 32.64)	92,192 16,32	Hour 4 (11:00-12- 28.56 16.32 32.64	:00) Hour 5 (12:00-13:00) 26:56 6:10 8:44					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availat 4.2) For each site, check availat 4.3) For each site, check availat Hour 1 (8:00-9:00)	a=40, Additional Net=ENT dditional Net = ENT and temand CPU=35, Mem=2 acity for the resource deribite cpu,memory > dema tible cpu,memory > dema tible cpu,memory > dema tible cpu,memory > dema tible cpu,memory > dema	mage = rocks-sge> NCHC cloud,AIST 0 on each site land> NAIST cloud,TOS cloud,UCSD of d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (lites = 2 Hour 3 (10:00-11:00) 92,192 16,32	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3)NCHC cloud four2 to Hour4)None four3 toHour5)None Hour 2 (9:00-10:00) 92,192 16,32	Hour 3 (10:00-11:00)	28,56 16,32			28,56 16,32	28,56 6,10					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cape 4.1) For each site, check availe 4.2) For each site, check availe 5) Create combination as result Hour 1 (8:00-9:00) 92,192 15.32	dditional Net=ENT dditional Net = ENT and temand CPU=35, Mem=2 acity for the resource der able cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema ts ->No results if No. of s Hour 2 (9:00-10:00) 92,192 16.32	mage = rocks-sge> NCHC cloud.AIST 0 on each site land> NAIST cloud,TOS cloud.UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (lets = 2 Hour 3 (10:00-11:00) 92.192 16.32 32.64	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3)NCHC cloud four2 to Hour4)None four3 toHour5)None Hour 2 (9:00-10:00) 92,192 16.32 64,128	Hour 3 (10:00-11:00) 92,192 16,32 32,64	28,56 16,32		92,192 16,32	28,56 16,32	28,56 6,10 8,44					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap 4.1) For each site, check availe 4.2) For each site, check availe 4.3) For each site, check availe 5) Create combination as resul Hour 1 (8:00-9:00) 92,192 15.32 64,128 10.30	dditional Net=EN1 dditional Net=EN1 dditional Net = ENT and temand CPU=35, Mems=2 acity for the resource der able cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema ts ->No results if No. of t Hour 2 (9:00-10:00) 92,192 16,32 64,128 10,20	mage = rocks-sge> NCHC cloud,AIST 0 on each site land> NAIST cloud,TOS cloud,UCSD o d during the time specified by the user (d during the time specified by the user (land during the time specified by the user (land during the time specified by the user (land see = 2 Hour 3 (10:00-11:00) 92,192 16,32 32,64 20,40	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud four1 to Hour3)>NCHC cloud four2 to Hour4)>None four3 toHour5)>None Hour 2 (9:00-10:00) 92,192 16,32 64,128 10,20	Hour 3 (10:00-11:00) 92,192 16,32 32,64	28,56 16,32	5	92,192 16,32	28,56 16,32	28,56 6,10 8,44					
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Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availe 4.2) For each site, check availe 4.2) For each site, check availe 5) Create combination as resul Hour 1 (8:00-9:00) 92,192 10.32 64,128 10.30 Case 3: The system tries to s Search for: No. of sites = Any, CPU=80, M Flow:	dditional Net=ENT and dditional Net=ENT and temand CPU=35, Mem=2 acity for the resource detailed pulmenory > demand bible cpu_memory > demand bible cpu_memory > demands = NNo results if No. of thou 2 (9:00-10:00) 92,192 16.32 64,128 10.20 chow the results by chamber of the control of the co	mage = rocks-sge> NCHC cloud,AIST 0 on each site nand> NAIST cloud,TOS cloud,UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (lites = 2 Hour 3 (10:00-11:00) 92,192 16:32 32,54 20,40 nging the search rule from the 50/50 ru one, Image=centos7, Time begin=11:00,	cloud,NAIST cloud,TOS cloud,UCSD cloud,TW cloud oud,TW cloud dourt to Hour3)NCHC cloud dour2 to Hour4)None tour3 toHour5)None Hour 2 (9:00-10:00) 92,192 16,32 64,128 10,20 le to the 80/20 rule. Time end=13:00, Duration=From begin to end	Hour 3 (10:00-11:00) 92,192 16,32 32,64 20,40	28,56 16,32 32,64 20,40		92,192 16,32	28,56 16,32	28,56 6,10 8,44					
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Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availa 4.2) For each site, check availa 4.2) For each site, check availa 5) Create combination as resul Hour 1 (8:00-9:00) 92,192 16,32 64.128 10,30 Case 3: The system tries to s Search for: No. of sites = Any, CPU=80, M Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4) For each site, check availab 5) Create combination as resul Hour 4 (11:00-12:00) 28,58 16,32 32,64 20,40 64,40 6) System return to Start sites	dditional Net=ENT dditional Net=ENT and demand CPU=35, Mems2- acity for the resource der able cpu,memory > dema able cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema ts ->No results if No. of a Hour 2 (9:00-10:00) 92,192 16,32 64,128 10,20 how the results by cha am=60, Additional Net=N dditional Net = None and temand CPU=40, Mems2- acity for the resource der te cpu,memory > demand can be solved to the solv	mage = rocks-sge> NCHC cloud,AIST 0 on each site and> NAIST cloud,TOS cloud,UCSD of during the time specified by the user (lites = 2 Hour 3 (10:00-11:00) 92,192 16,32 32,64 20,40 lging the search rule from the 50/50 ru one, Image = centos7> NCHC cloud,AIST C on on each site and> NAIST cloud,TOS cloud,UCSD of during the time specified by the user (Ho lites = 2	cloud, NAIST cloud, TOS cloud, UCSD cloud, TW cloud oud, TW cloud four! to Hour3)NCHC cloud four! to Hour4)None four3 toHour5)None Hour 2 (9:00-10:00) 92,192 16,32 64,128 10.20 ie to the 80/20 rule. Time end=13:00, Duration=From begin to end oud, Indiana University cloud, NAIST cloud, TOS cloud oud, TW cloud, CC cloud our4 and Hour5)>	Hour 3 (10:00-11:00) 92:192 16:32 32:64 20:40 TP cloud,UCSD cloud,TW (28,56 16,32 32,64 20,40		92,192 16,32	28,56 16,32	28,56 6,10 8,44					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource of 3) Check for sites that has cape. 4.1) For each site, check availe 4.2) For each site, check availe 5) Create combination as resul Hour 1 (8:00-9:00) 92, 192 10.32 64,128 10.30 Case 3: The system tries to s Search for: No. of sites = Any, CPU=80, M Flow: 1) Check for sites that match A 2) Start with 2 sites: resource of 3) Check for sites that has cap. 4) For each site, check availab 5) Create combination as resul Hour 4 (11:00-12:00) 10. Check for sites that match A 2) Start with 2 sites: resource of 3) Check for sites that has cap. 4) For each site, check availab 5) Create combination as resul Hour 4 (11:00-12:00) 10.32 20.56 10.32 20.40 64.40 6) System return to Start sites 7)The system tries to recalcular for the site of the calcular for the site of the calcular for the site of the calcular for the site of the site	dditional Net=ENT and demand CPU=35, Mems-2 catly for the resource der bible cpu,memory > dema to > No results if No. of 1 Hour 2 (9:00-10:00) 92,192 16.32 64.128 10.20 hible with the company of	mage = rocks-sge> NCHC cloud,AIST 0 on each site and> NAIST cloud,TOS cloud,UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (less = 2 Hour 3 (10:00-11:00) 92,192 18,32 32,94 20,40 under the specified by the user (less = 2 India	cloud, NAIST cloud, TOS cloud, UCSD cloud, TW cloud oud, TW cloud four! to Hour3)NCHC cloud four! to Hour4)None four3 toHour5)None Hour 2 (9:00-10:00) 92,192 16,32 64,128 10.20 ie to the 80/20 rule. Time end=13:00, Duration=From begin to end oud, Indiana University cloud, NAIST cloud, TOS cloud oud, TW cloud, CC cloud our4 and Hour5)>	Hour 3 (10:00-11:00) 92:192 16:32 32:64 20:40 TP cloud,UCSD cloud,TW (28,56 16,32 32,64 20,40		92,192 16,32	28,56 16,32	28,56 6,10 8,44					
Search for: No. of sites = 2, CPU=70, Merr Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4.1) For each site, check availa 4.2) For each site, check availa 4.2) For each site, check availa 5) Create combination as resul Hour 1 (8:00-9:00) 92,192 16,32 64.128 10,30 Case 3: The system tries to s Search for: No. of sites = Any, CPU=80, M Flow: 1) Check for sites that match A 2) Start with 2 sites: resource c 3) Check for sites that has cap. 4) For each site, check availab 5) Create combination as resul Hour 4 (11:00-12:00) 28,58 16,32 32,64 20,40 64,40 6) System return to Start sites	dditional Net=ENT dditional Net=ENT and temand CPU=35, Mem=2- acity for the resource der able cpu,memory > dema able cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema bible cpu,memory > dema to = No results if No. of s Hour 2 (9:00-10:00) 92,192 16,32 64,128 10,20 44,128 10,20 45,128 41,20 46,128 41,20 46,128 41,20 46,128 41,20 41	mage = rocks-sge> NCHC cloud,AIST 0 on each site and> NAIST cloud,TOS cloud,UCSD o d during the time specified by the user (d during the time specified by the user (d during the time specified by the user (see the search see the s	cloud, NAIST cloud, TOS cloud, UCSD cloud, TW cloud oud, TW cloud four! to Hour3)NCHC cloud four! to Hour4)None four3 toHour5)None Hour 2 (9:00-10:00) 92,192 16,32 64,128 10.20 ie to the 80/20 rule. Time end=13:00, Duration=From begin to end oud, Indiana University cloud, NAIST cloud, TOS cloud oud, TW cloud, CC cloud our4 and Hour5)>	Hour 3 (10:00-11:00) 92:192 16:32 32:64 20:40 TP cloud,UCSD cloud,TW (28,56 16,32 32,64 20,40		92,192 16,32	28,56 16,32	28,56 6,10 8,44					

10 1) For each site, check avail	lable 80% of cou 80% of m	nemory > demand during the ti	ime specified by the user (Hour4 and Hours	5) ->CC cloud									
11) from 8) Check for sites that		, ,		-,									
			ime specified by the user (Hour4 and Hours	5) ->NAIST cloud CC clo	oud								
12) Create combination as resi		iemory - demand during the t	ine specified by the user (riour4 and riour	5) IVAIOT GIOUG, GO GI	Juu								
Results:	uits iroin 10.1) and 11.1)												
Sites	CPU Needed	Total CRII Avail /Canacity	Mem Needed Total Mem Avail./Capa	oitr	CPU Speed	Network Speed	Additional Net	Imaga Tupas	Time Beain	Time End			
	16:64			60/96		Network Speed					3:00		
(NAIST cloud)&(CC cloud)	16:64	92/220	24:36	60/96		-	- None	centos	37 11:00) 1	3:00		
Case 4: The system tries to s	how the reculte by chan	ging the search rule from th	e 50/50 rule to Putting resources into th	a ract of the recourses	ae many recourc	ae ae naeeihla							
Search for:	mow the results by chair	ging the search rule from th	e 30/30 rule to r utting resources into th	e reat of the resources	, as many resourc	es as possible.							
	m=150 Additional Net=EN	IT Imane≡hku hiolinux Time	begin=8:00, Time end=10:00, Duration= -										
Flow:	iii 100, radiaonaritet Er	Tr, image mia_bioimax, rime	begin c.co, rime and re.co, baration										
	dditional Net = ENT and Ir	mage = hku biolinux>NAIST	cloud,TOS cloud,UCSD cloud,TW cloud,C	C cloud									
2) Start with 2 sites: resource of			,										
			d,UCSD cloud,TW cloud,CC cloud										
4) For each site, check availab	le cpu,memory > demand	during the time specified by th	e user (Hour1 to Hour2) ->.NAIST cloud										
5) Create combination as resul	ts ->No results if No. of sit	tes = 2 (in rule 50/50)	,										
6)The system tries to find the s	ite with the most resource:	s left over from all>NAIST cl	oud										
7)The system uses all the reso	urces of the NAIST cloud a	and then selects the rest to rec	duce the size of the resource.										
8)NAIST cloud CPU Using res	ources to shrink the remain	ning needs 150-92 = 58											
9)NAIST cloud Memory can be	e used only if the other site	e is not using memory, which is	a violation of the rules that the site must r	eserve at least 2 units o	f memory. This site	is reserved for 148 remaining	ng needs 2						
10)The required resources are	left to CPU = 58, Memory	= 2 to be searched.											
NAIST cloud CPU = 92 memor	y 148 Missing site with CP	PU = 58 and memory = 2											
11) Start with CPU = 58 and m	emory = 2 Check for sites	that has capacity for the resou	rce demand>UCSD cloud,CC cloud										
12) It get NAIST combine with	UCSD cloud and CC cloud	i											
Result:													
Sites	CPU Needed	Total CPU Avail./Capacity	Mem Needed Total Mem Avail./Capa	ncity	CPU Speed	Network Speed	Additional Net	Image Types	Time Begin	Time End			
(NAIST cloud)&(UCSD cloud)	92:58	156/156	148:2	320/320		-	- ENT	hku_biolinu	JX 8:00	1	0:00		
(NAIST cloud)&(CC cloud)	92:58	156/220	148:2	224/256		-	- ENT	hku_biolinu	JX 8:00	1	0:00		