Composition

- 2 R720
- 2 R720+K20
- 1 R730+K20
- 1 R730+K80
- 2 R720+PHI
- 1 R730
- 4 R820

R720

CPU	2 x Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz → 16 cores
Memory	256Go
Storage	6To

R720 + K20

CPU	2 x Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz → 16 cores
Memory	256Go
GPU	2 x NVidia Tesla K20m
Storage	6To

R730 + K20

CPU	2 x Intel(R) Xeon(R) CPU E5-2670 v3 @ 2.30GHz → 24 cores
Memory	256Go
GPU	1 x NVidia Tesla K20m
Storage	14To

R730 + K80

CPU	2 x Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz → 20 cores
Memory	256Go
GPU	1 x NVidia Tesla K80
Storage	3To

R720 + PHI

CPU	2 x Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz → 16 cores
Memory	256Go
Coprocesseurs	2 x INTEL XEON PHI 5110P
Storage	6To

R730

CPU	2 x Intel(R) Xeon(R) CPU E5-2699 v3 @ 2.30GHz → 36 cores
Memory	512Go
Storage	13To
CPU	2 x Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz → 24 cores
Memory	256Go
Storage	18To
CPU	2 x Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz → 20 cores
Memory	256Go
Storage	20To

R820

CPU	4 x Intel(R) Xeon(R) CPU E5-4620 0 @ 2.20GHz → 32 cores
Memory	512Go
Storage	5,5To

Total

Nous avons à disposition :

Machine	Quantité	Cores	Total	Mémoire par machine (Go)	Puissance théorique (hors coprocesseur)
R720	2	16	32	256	32 * 2,60GHz * 8 flops = 665,6 Gflops
R720 + K20	2	16	32	256	16 * 2,60GHz * 8 flops = 332,8 Gflops
R730 + K20	1	24	24	256	24 * 2,30GHz * 16 flops = 883,2 Gflops
R730 + K80	1	20	20	256	20 * 2,20GHz * 16 flops = 704 Gflops
R720 + PHI	2	16	32	256	16 * 2,60GHz * 8 flops = 332,8 Gflops
R730	3	36+24+20	80	512 + 2*256	36 * 2,30GHz * 16 flops = 2 873,6 Gflops
R820	4	32	128	512	32 * 2,20GHz * 8 flops = 563,2 Gflops
Total	**15**		**348**	**4 352**	**6 355,2 Gflops**

Réseau

L'interconnexion se fait en 10Go optique, sur commutateur Dell PowerConnect 8132F.