

Fermo, lì lunedì 16 maggio 2011

Rif. Documento: FT/2011/05/01

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Spett.le **Infarma**

Oggetto: Analisi prestazionale della Server Farm basata su infrastruttura virtuale

Premessa

Lo scopo è quello di analizzare il comportamento della server farm in funzione del carico di lavoro a cui è sottoposto, mettendo in evidenza la distribuzione delle risorse di calcolo disponibili dalle capacità dei sistemi elaborativi, il loro impiego, nonché disponibilità elaborativa osservandone il comportamento nella fascia oraria di punta di un giorno lavorativo di forte intensità transazionale.

Metodo

Al fine di avere uno spaccato comportamentale delle reali capacità elaborative della intera infrastruttura, di valutarne la risposta ed individuarne la capacità residua di carico a cui il sistema può essere sottoposto, si è valutato di effettuare misurazioni reali nella fascia oraria interessata dalla maggiore attività di carico delle seguenti risorse:

- Occupazione CPU in MHz e Percentuale
- Memoria in MB e Percentuale
- Transazioni a Disco in KB/sec e I/O
- Transazioni di Rete in KB/sec

Transazioni globali verso lo storage a disco (SAN)

Le misurazioni interessano tutti i server fisici che partecipano alla infrastruttura

Le misurazioni evidenziano il comportamento nella fascia oraria di maggiore carico ed una più generale che interessa la scala giornaliera

Questo consente di constatare da subito che il maggiore carico di elaborazione lo si percepisce durante la fascia oraria notturna non interessata alle attività degli utenti finali. Carico peraltro giustificato dalle procedure interne e pianificate rivolte ad indicizzare, allineare, esportare, e mettere in sicurezza i dati per le abituali copie di salvataggio. Nonché procedure interne dei Database e dei software di gestione.

Analisi

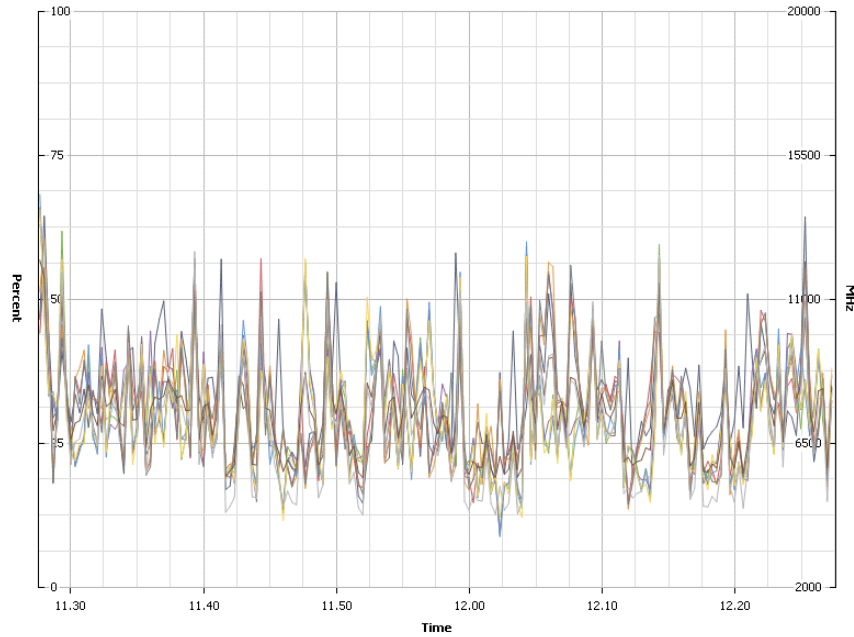
Riportiamo ora i grafici comportamentali di ciascun server nella fascia orario di maggior carico



PROCESSORI



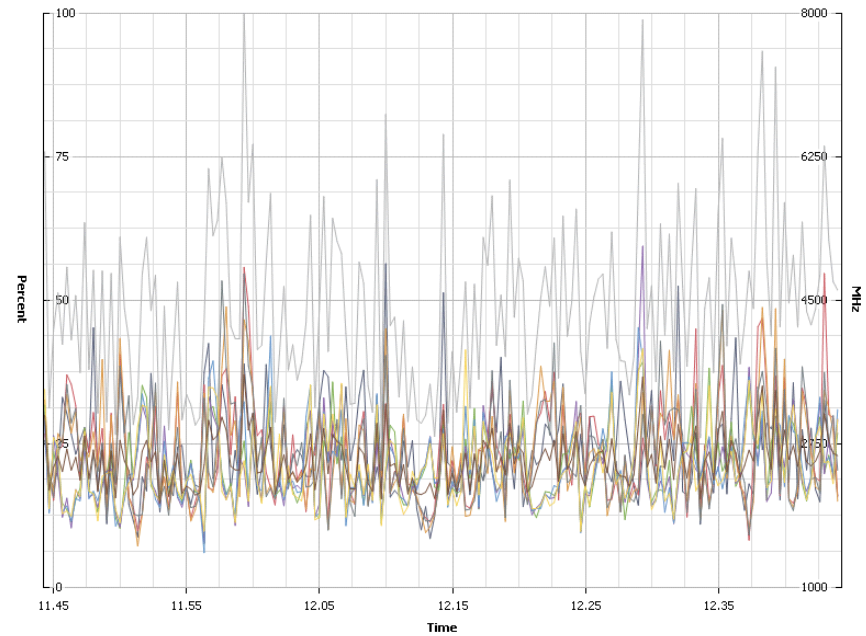
CPU/Real-time, 29/04/2011 11.27.34 - 29/04/2011 12.27.34 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
0	0	CPU Usage (Average)	Percent
1	1	CPU Usage (Average)	Percent
2	2	CPU Usage (Average)	Percent
3	3	CPU Usage (Average)	Percent
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6	6	CPU Usage (Average)	Percent
7	7	CPU Usage (Average)	Percent
esx01.mnt.local	esx01.mnt.local	CPU Usage in MHz (Average)	MHz
esx01.mnt.local	esx01.mnt.local	CPU Usage (Average)	Percent

CPU/Real-time, 29/04/2011 11.44.14 - 29/04/2011 12.44.14 - esx02.mnt.local

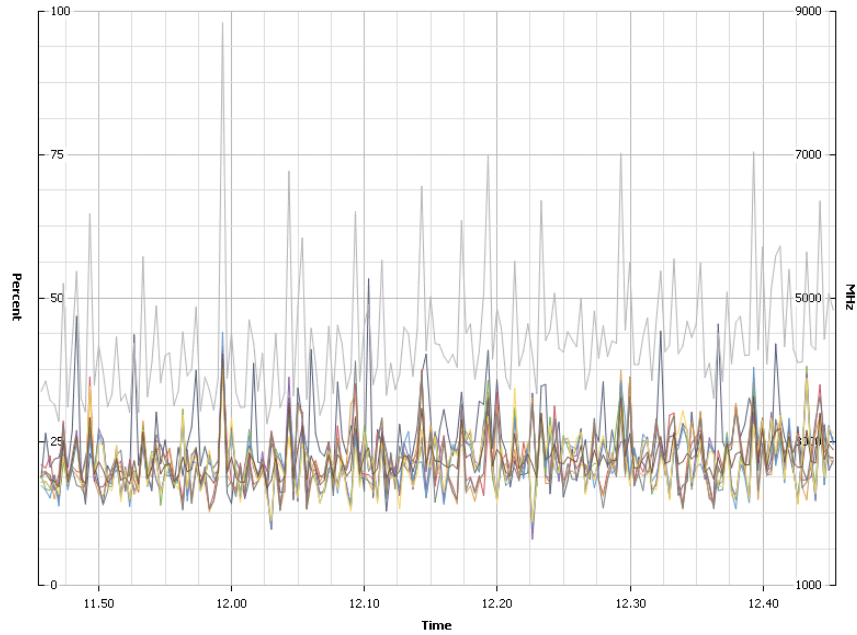


Performance Chart Legend

Key	Object	Measurement	Units
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1	1	CPU Usage (Average)	Percent
2	2	CPU Usage (Average)	Percent
3	3	CPU Usage (Average)	Percent
4	4	CPU Usage (Average)	Percent
5	5	CPU Usage (Average)	Percent
6	6	CPU Usage (Average)	Percent
7	7	CPU Usage (Average)	Percent
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esx02.mnt.local	esx02.mnt.local	CPU Usage (Average)	Percent



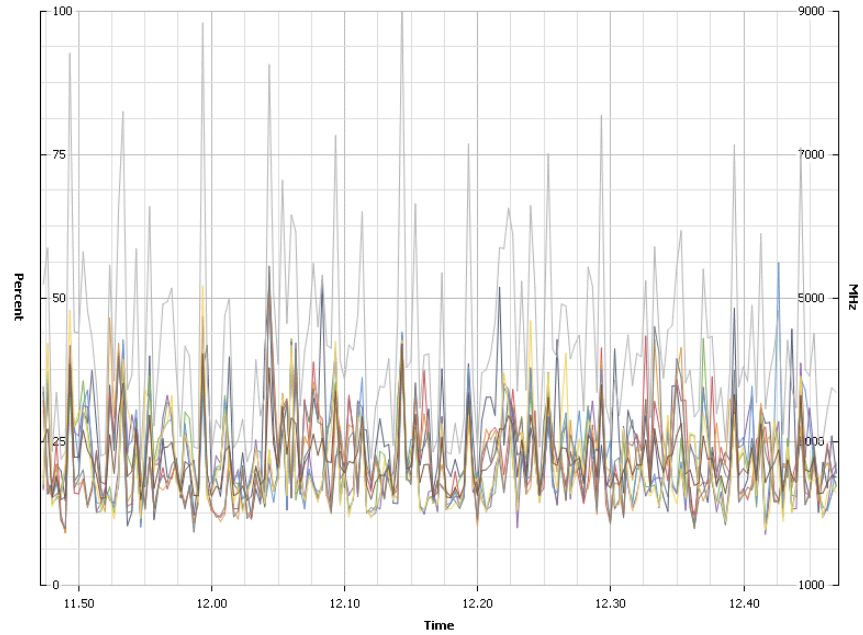
CPU/Real-time, 29/04/2011 11.45.27 - 29/04/2011 12.45.27 - esx03.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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5	5	CPU Usage (Average)	Percent
6	6	CPU Usage (Average)	Percent
7	7	CPU Usage (Average)	Percent
esx03.mnt.local	esx03.mnt.local	CPU Usage in MHz (Average)	MHz
esx03.mnt.local	esx03.mnt.local	CPU Usage (Average)	Percent

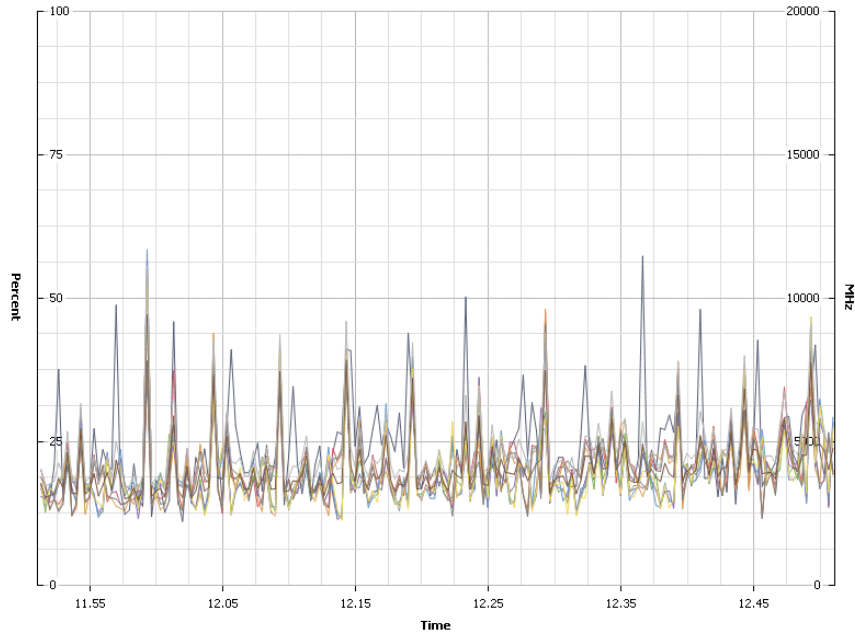
CPU/Real-time, 29/04/2011 11.47.07 - 29/04/2011 12.47.07 - esx04.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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1	1	CPU Usage (Average)	Percent
2	2	CPU Usage (Average)	Percent
3	3	CPU Usage (Average)	Percent
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5	5	CPU Usage (Average)	Percent
6	6	CPU Usage (Average)	Percent
7	7	CPU Usage (Average)	Percent
esx04.mnt.local	esx04.mnt.local	CPU Usage in MHz (Average)	MHz
esx04.mnt.local	esx04.mnt.local	CPU Usage (Average)	Percent

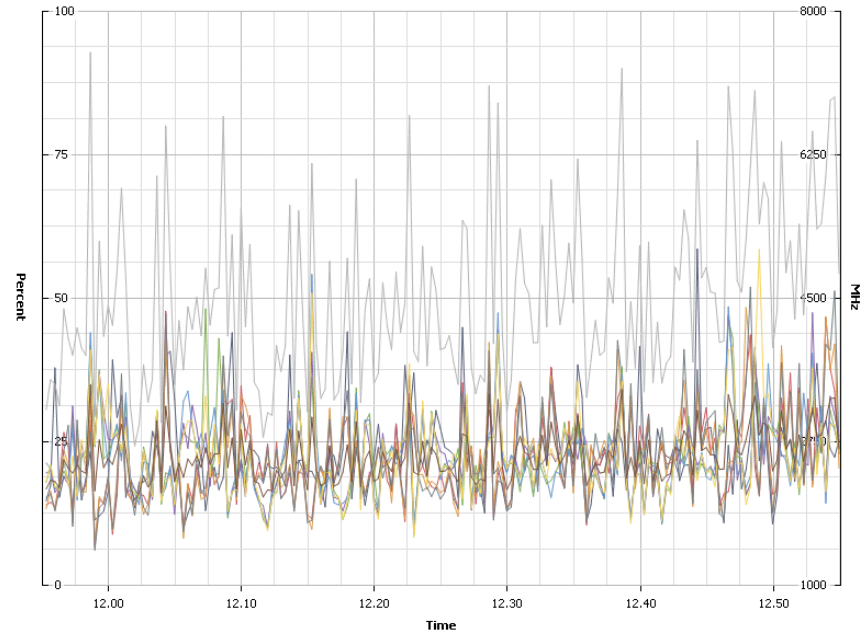
CPU/Real-time, 29/04/2011 11.51.04 - 29/04/2011 12.51.04 - esx05.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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1		CPU Usage (Average)	Percent
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3		CPU Usage (Average)	Percent
4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
	esx05.mnt.local	CPU Usage in MHz (Average)	MHz
	esx05.mnt.local	CPU Usage (Average)	Percent

CPU/Real-time, 29/04/2011 11.55.02 - 29/04/2011 12.55.02 - esx06.mnt.local

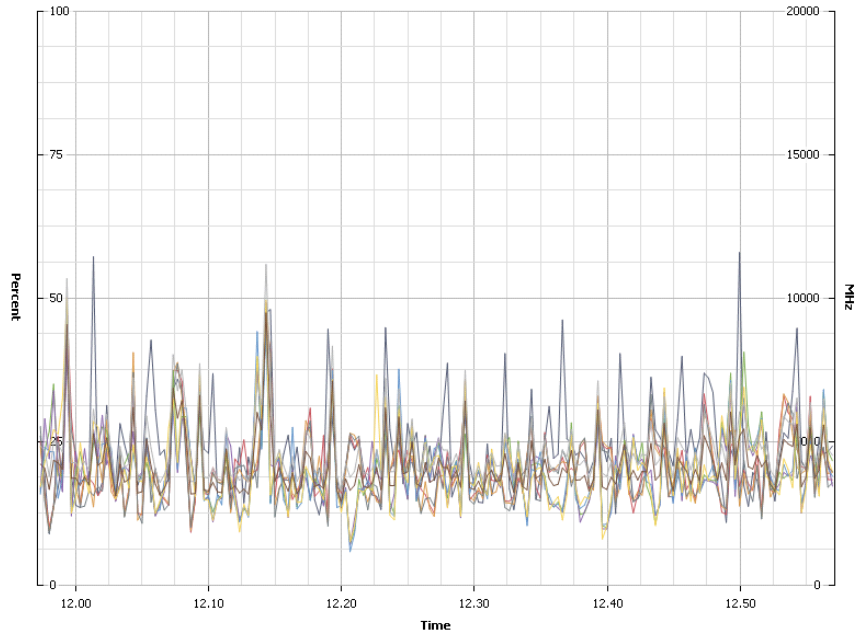


Performance Chart Legend

Key	Object	Measurement	Units
0		CPU Usage (Average)	Percent
1		CPU Usage (Average)	Percent
2		CPU Usage (Average)	Percent
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5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
	esx06.mnt.local	CPU Usage in MHz (Average)	MHz
	esx06.mnt.local	CPU Usage (Average)	Percent



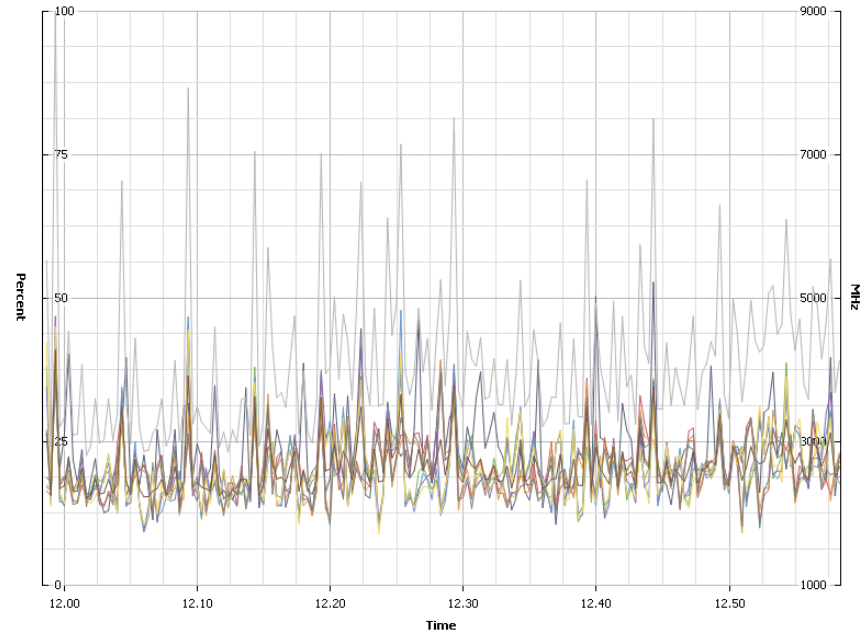
CPU/Real-time, 29/04/2011 11.57.07 - 29/04/2011 12.57.07 - esx07.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
0		CPU Usage (Average)	Percent
1		CPU Usage (Average)	Percent
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4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
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esx07.mnt.local		CPU Usage in MHz (Average)	MHz
esx07.mnt.local		CPU Usage (Average)	Percent

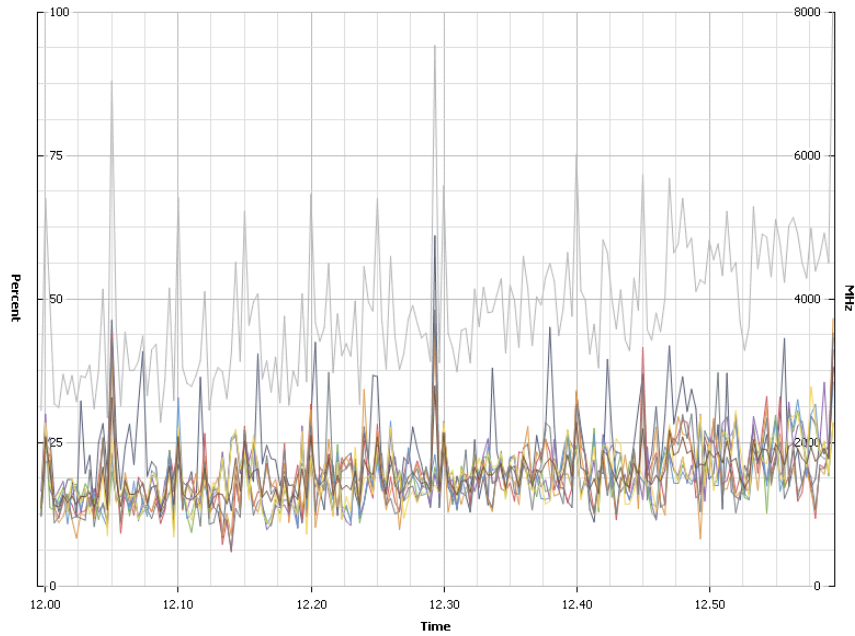
CPU/Real-time, 29/04/2011 11.58.22 - 29/04/2011 12.58.22 - esx08.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
0		CPU Usage (Average)	Percent
1		CPU Usage (Average)	Percent
2		CPU Usage (Average)	Percent
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4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
esx08.mnt.local		CPU Usage in MHz (Average)	MHz
esx08.mnt.local		CPU Usage (Average)	Percent

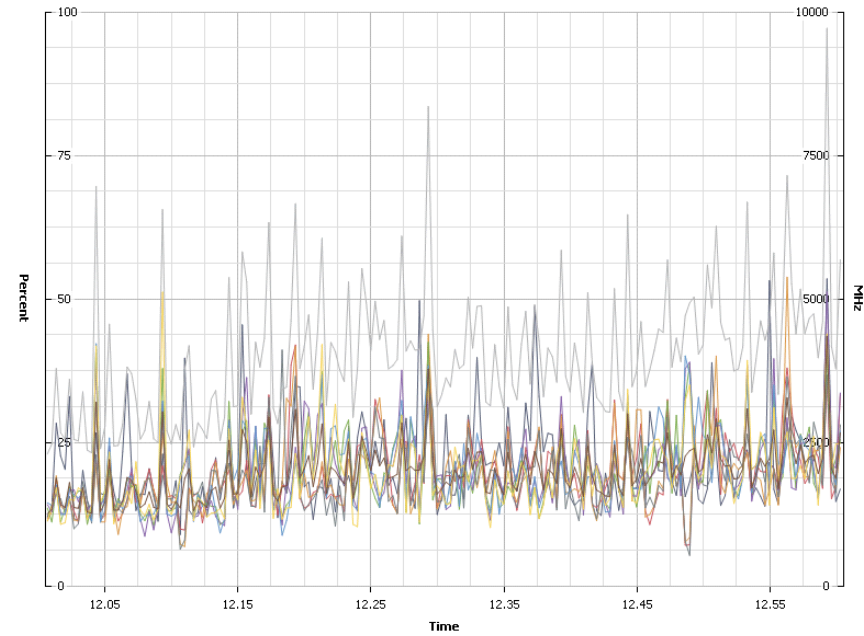
CPU/Real-time, 29/04/2011 11.59.24 - 29/04/2011 12.59.24 - esx09.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
0		CPU Usage (Average)	Percent
1		CPU Usage (Average)	Percent
2		CPU Usage (Average)	Percent
3		CPU Usage (Average)	Percent
4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
esx09.mnt.local		CPU Usage in MHz (Average)	MHz
esx09.mnt.local		CPU Usage (Average)	Percent

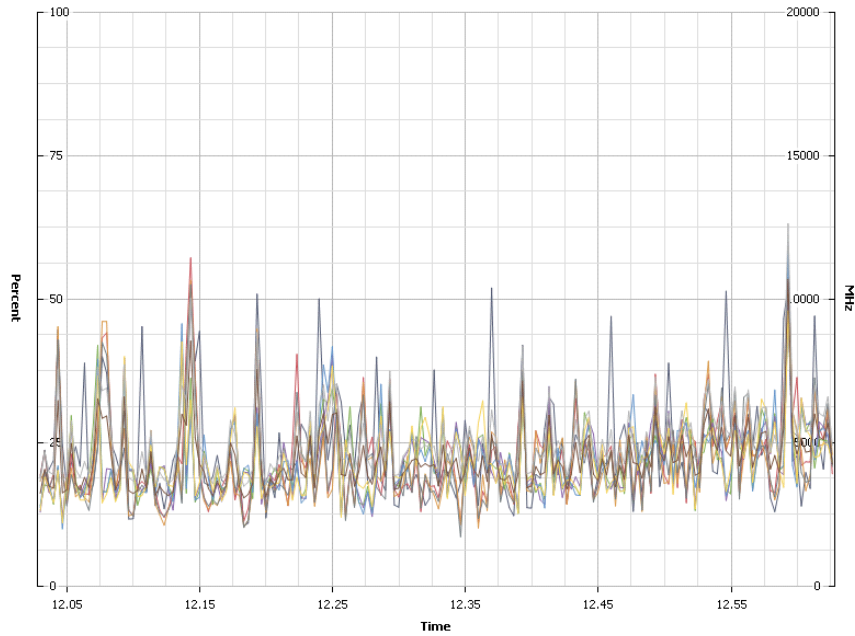
CPU/Real-time, 29/04/2011 12.00.31 - 29/04/2011 13.00.31 - esx10.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
0		CPU Usage (Average)	Percent
1		CPU Usage (Average)	Percent
2		CPU Usage (Average)	Percent
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4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
esx10.mnt.local		CPU Usage in MHz (Average)	MHz
esx10.mnt.local		CPU Usage (Average)	Percent

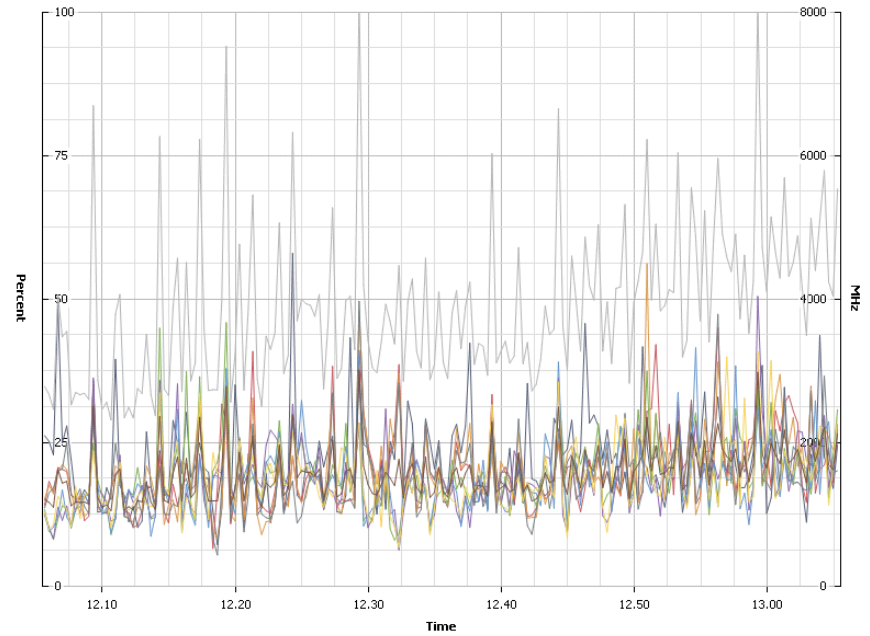
CPU/Real-time, 29/04/2011 12.02.47 - 29/04/2011 13.02.47 - esx11.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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1		CPU Usage (Average)	Percent
2		CPU Usage (Average)	Percent
3		CPU Usage (Average)	Percent
4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
esx11.mnt.local		CPU Usage in MHz (Average)	MHz
esx11.mnt.local		CPU Usage (Average)	Percent

CPU/Real-time, 29/04/2011 12.05.30 - 29/04/2011 13.05.30 - esx12.mnt.local



Performance Chart Legend

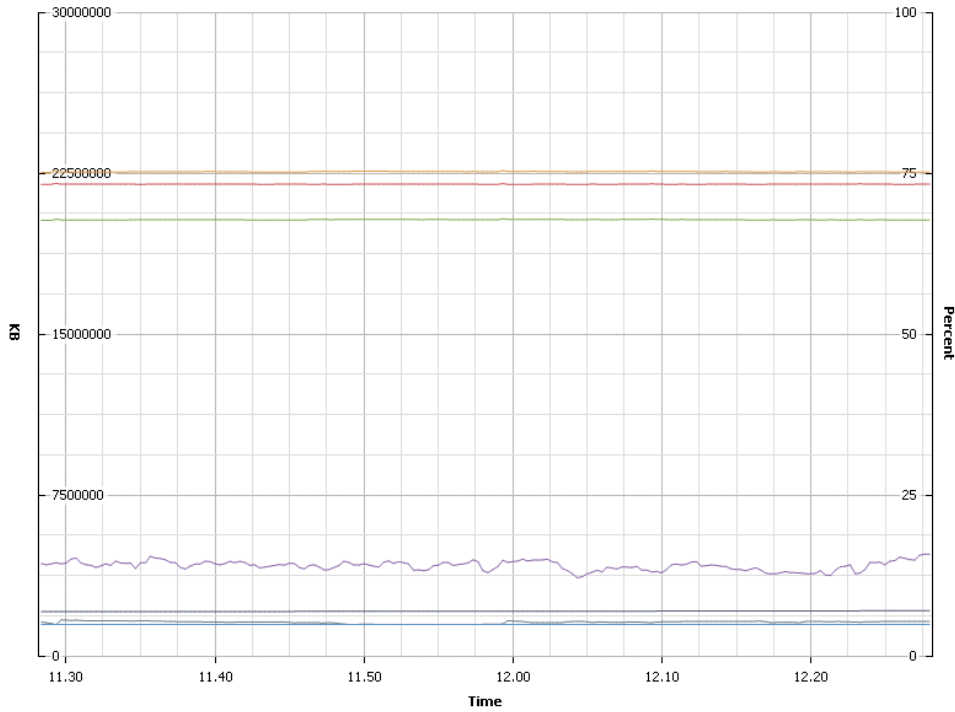
Key	Object	Measurement	Units
0		CPU Usage (Average)	Percent
1		CPU Usage (Average)	Percent
2		CPU Usage (Average)	Percent
3		CPU Usage (Average)	Percent
4		CPU Usage (Average)	Percent
5		CPU Usage (Average)	Percent
6		CPU Usage (Average)	Percent
7		CPU Usage (Average)	Percent
esx12.mnt.local		CPU Usage in MHz (Average)	MHz
esx12.mnt.local		CPU Usage (Average)	Percent



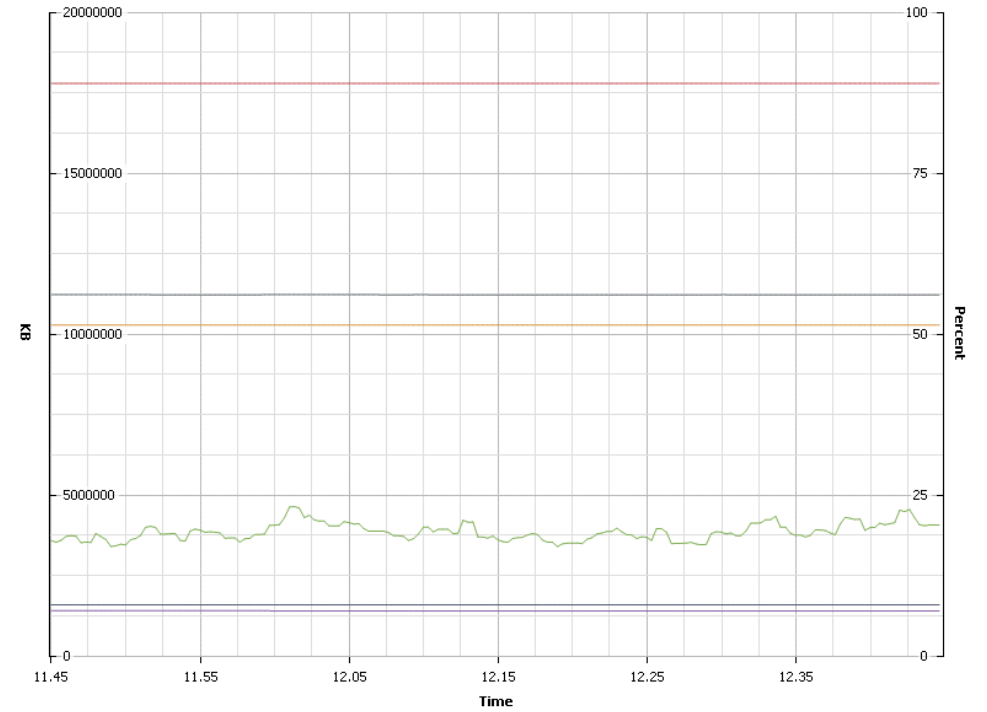
MEMORIA



Memory/Real-time, 29/04/2011 11.28.09 - 29/04/2011 12.28.09 - esx01.mnt.local



Memory/Real-time, 29/04/2011 11.44.53 - 29/04/2011 12.44.53 - esx02.mnt.local



Performance Chart Legend

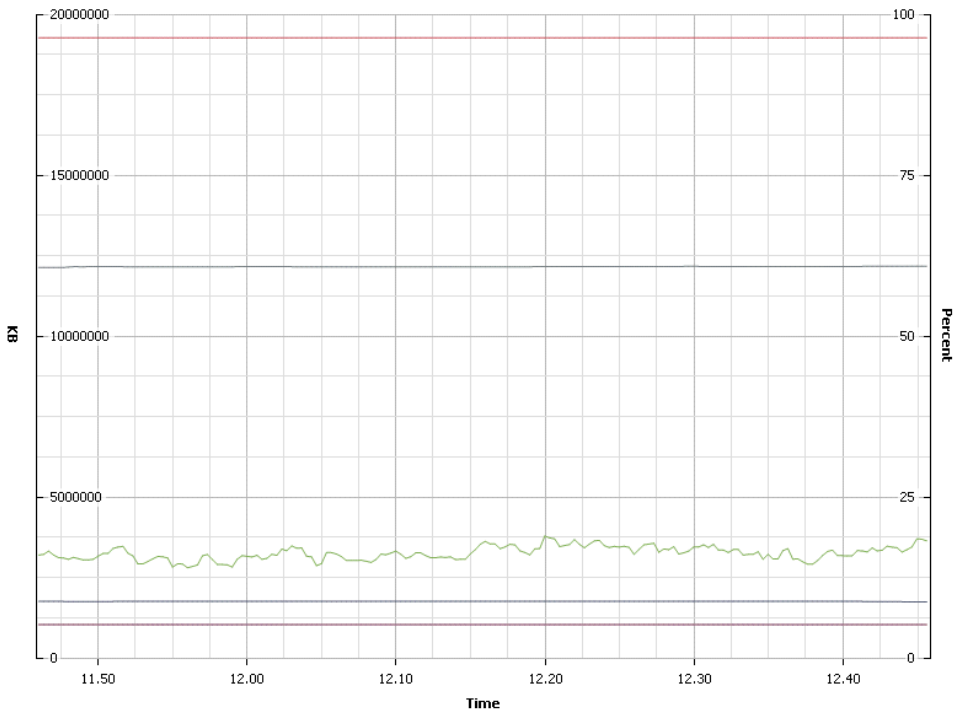
Key	Object	Measurement	Units
■	esx01.mnt.local	Memory Shared Common (Average)	KB
■	esx01.mnt.local	Memory Granted (Average)	KB
■	esx01.mnt.local	Memory Consumed (Average)	KB
■	esx01.mnt.local	Memory Balloon (Average)	KB
■	esx01.mnt.local	Memory Usage (Average)	Percent
■	esx01.mnt.local	Memory Active (Average)	KB
■	esx01.mnt.local	Memory Swap Used (Average)	KB

Performance Chart Legend

Key	Object	Measurement	Units
■	esx02.mnt.local	Memory Shared Common (Average)	KB
■	esx02.mnt.local	Memory Granted (Average)	KB
■	esx02.mnt.local	Memory Balloon (Average)	KB
■	esx02.mnt.local	Memory Usage (Average)	Percent
■	esx02.mnt.local	Memory Active (Average)	KB
■	esx02.mnt.local	Memory Swap Used (Average)	KB



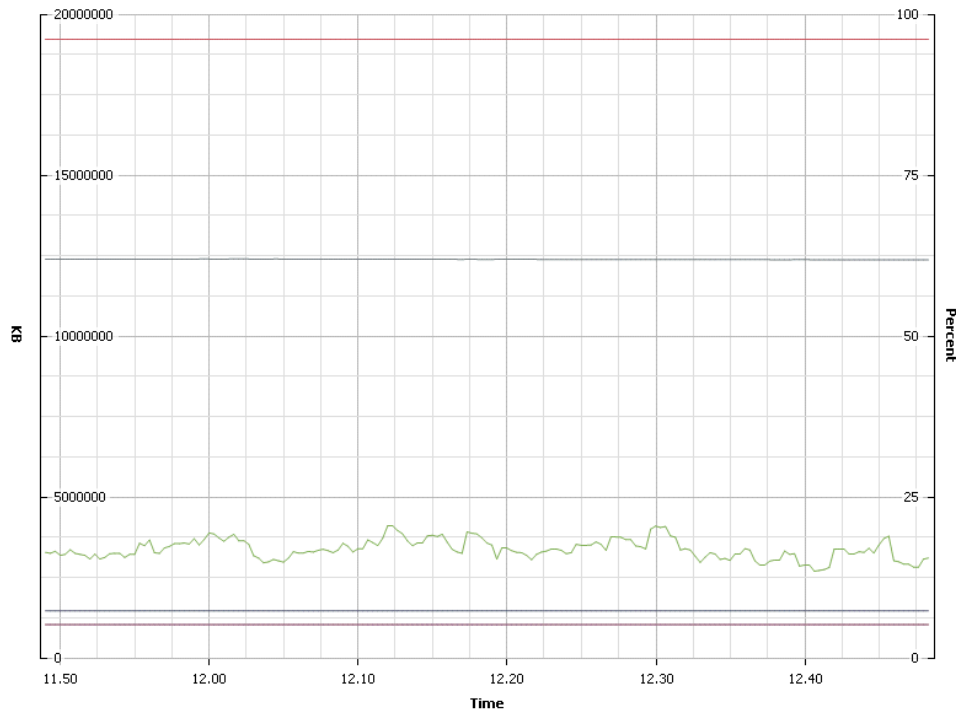
Memory/Real-time, 29/04/2011 11.45.51 - 29/04/2011 12.45.51 - esx03.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx03.mnt.local	Memory Shared Common (Average)	KB
■	esx03.mnt.local	Memory Granted (Average)	KB
■	esx03.mnt.local	Memory Balloon (Average)	KB
■	esx03.mnt.local	Memory Usage (Average)	Percent
■	esx03.mnt.local	Memory Active (Average)	KB
■	esx03.mnt.local	Memory Swap Used (Average)	KB

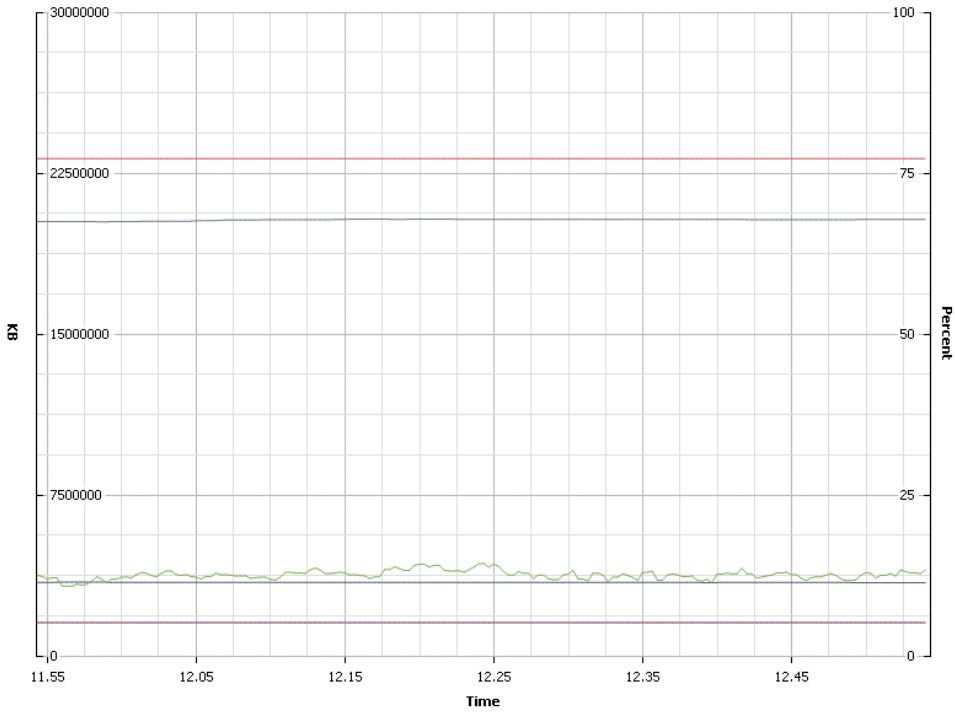
Memory/Real-time, 29/04/2011 11.48.40 - 29/04/2011 12.48.40 - esx04.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx04.mnt.local	Memory Shared Common (Average)	KB
■	esx04.mnt.local	Memory Granted (Average)	KB
■	esx04.mnt.local	Memory Balloon (Average)	KB
■	esx04.mnt.local	Memory Usage (Average)	Percent
■	esx04.mnt.local	Memory Active (Average)	KB
■	esx04.mnt.local	Memory Swap Used (Average)	KB

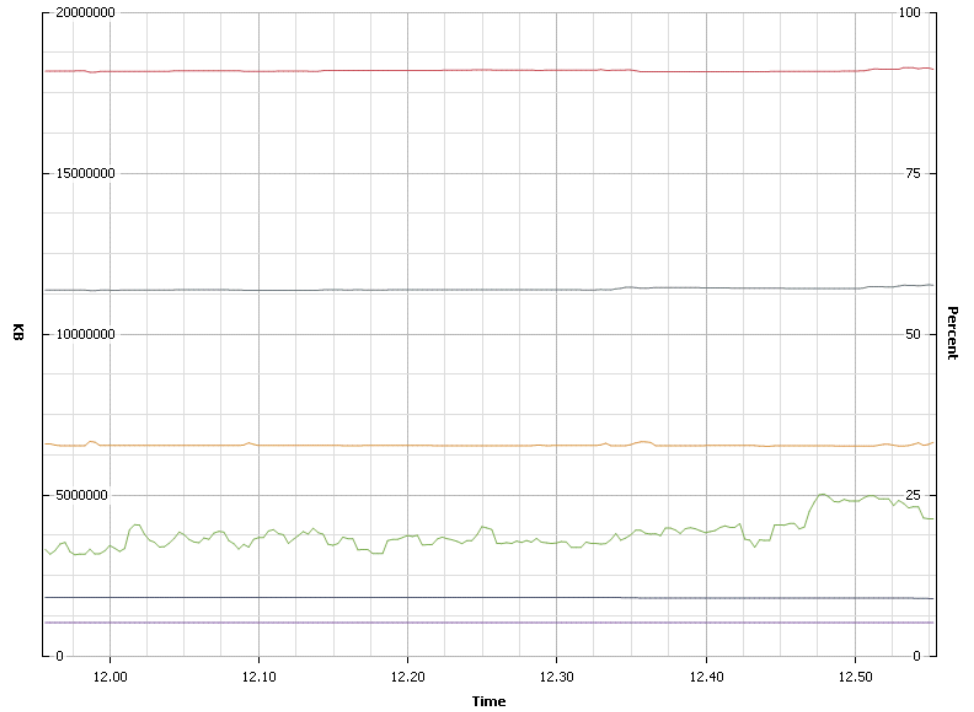
Memory/Real-time, 29/04/2011 11.54.17 - 29/04/2011 12.54.17 - esx05.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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■	esx05.mnt.local	Memory Granted (Average)	KB
■	esx05.mnt.local	Memory Balloon (Average)	KB
■	esx05.mnt.local	Memory Usage (Average)	Percent
■	esx05.mnt.local	Memory Active (Average)	KB
■	esx05.mnt.local	Memory Swap Used (Average)	KB

Memory/Real-time, 29/04/2011 11.55.28 - 29/04/2011 12.55.28 - esx06.mnt.local

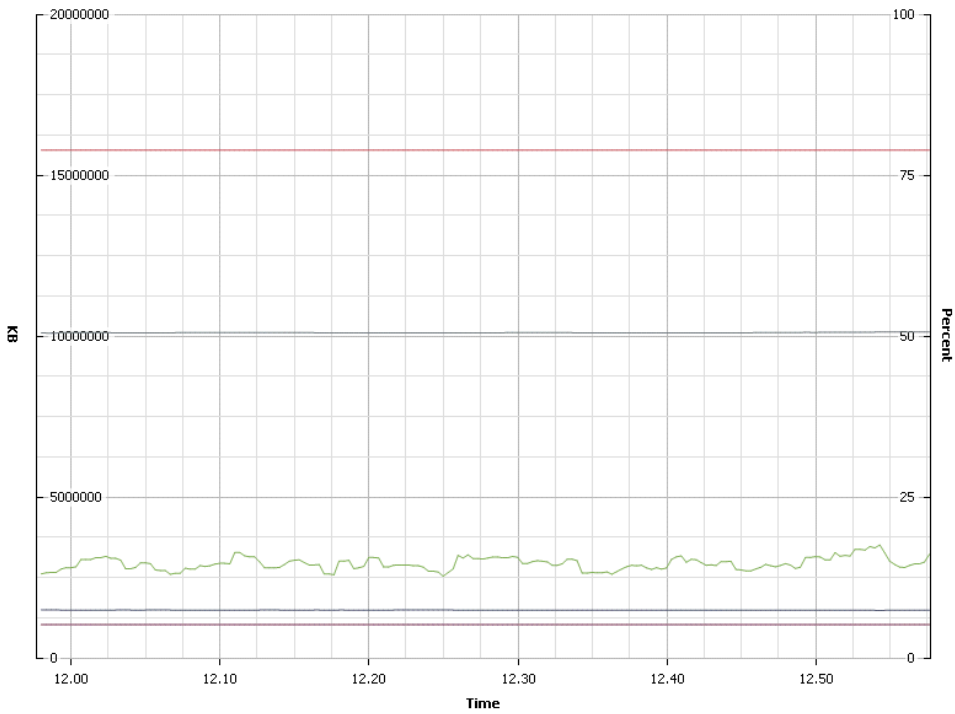


Performance Chart Legend

Key	Object	Measurement	Units
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■	esx06.mnt.local	Memory Granted (Average)	KB
■	esx06.mnt.local	Memory Balloon (Average)	KB
■	esx06.mnt.local	Memory Usage (Average)	Percent
■	esx06.mnt.local	Memory Active (Average)	KB
■	esx06.mnt.local	Memory Swap Used (Average)	KB



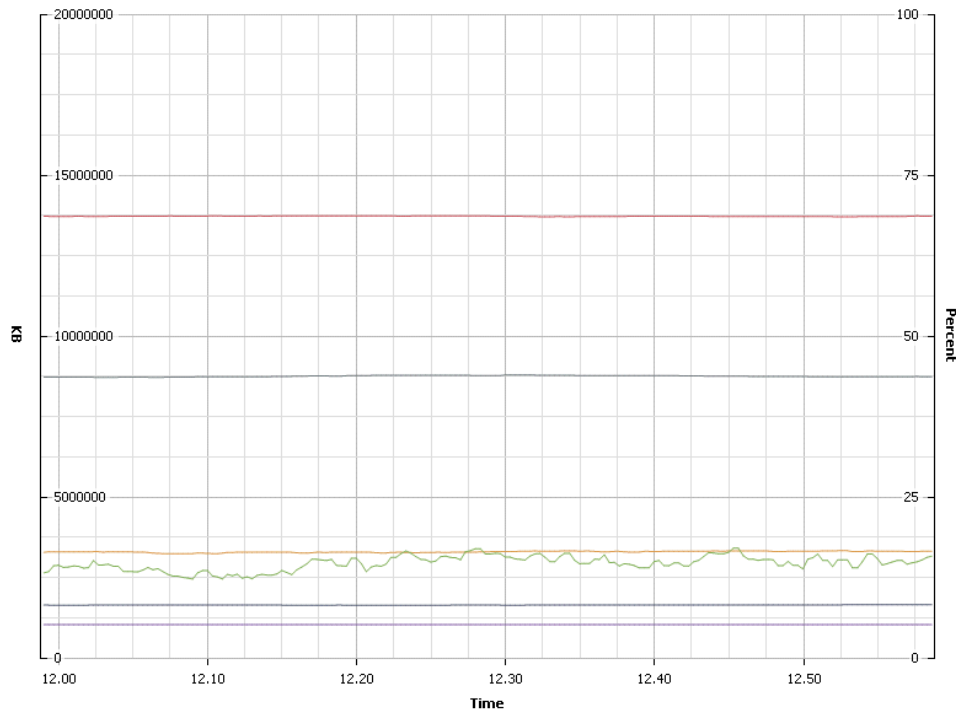
Memory/Real-time, 29/04/2011 11.57.41 - 29/04/2011 12.57.41 - esx07.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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■	esx07.mnt.local	Memory Granted (Average)	KB
■	esx07.mnt.local	Memory Balloon (Average)	KB
■	esx07.mnt.local	Memory Usage (Average)	Percent
■	esx07.mnt.local	Memory Active (Average)	KB
■	esx07.mnt.local	Memory Swap Used (Average)	KB

Memory/Real-time, 29/04/2011 11.58.47 - 29/04/2011 12.58.47 - esx08.mnt.local

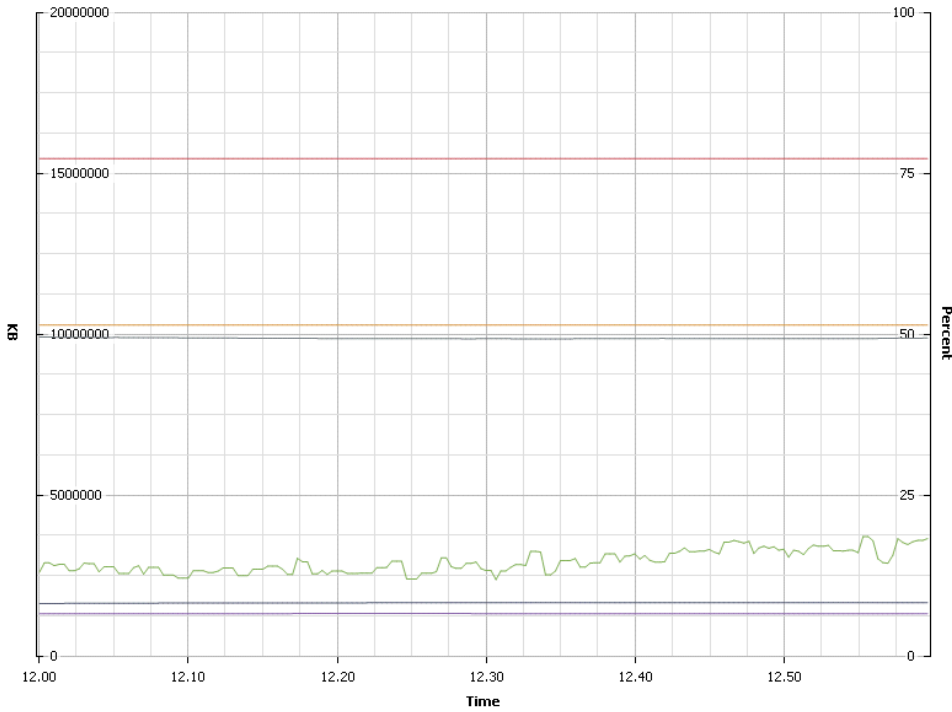


Performance Chart Legend

Key	Object	Measurement	Units
■	esx08.mnt.local	Memory Shared Common (Average)	KB
■	esx08.mnt.local	Memory Granted (Average)	KB
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■	esx08.mnt.local	Memory Usage (Average)	Percent
■	esx08.mnt.local	Memory Active (Average)	KB
■	esx08.mnt.local	Memory Swap Used (Average)	KB



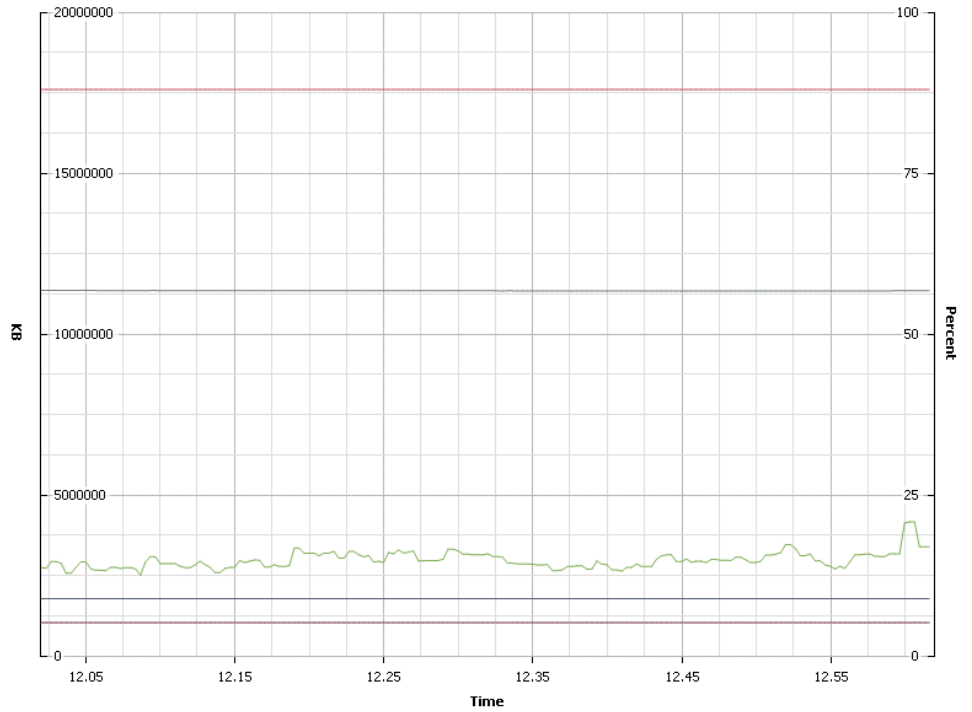
Memory/Real-time, 29/04/2011 11.59.48 - 29/04/2011 12.59.48 - esx09.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
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■	esx09.mnt.local	Memory Granted (Average)	KB
■	esx09.mnt.local	Memory Balloon (Average)	KB
■	esx09.mnt.local	Memory Usage (Average)	Percent
■	esx09.mnt.local	Memory Active (Average)	KB
■	esx09.mnt.local	Memory Swap Used (Average)	KB

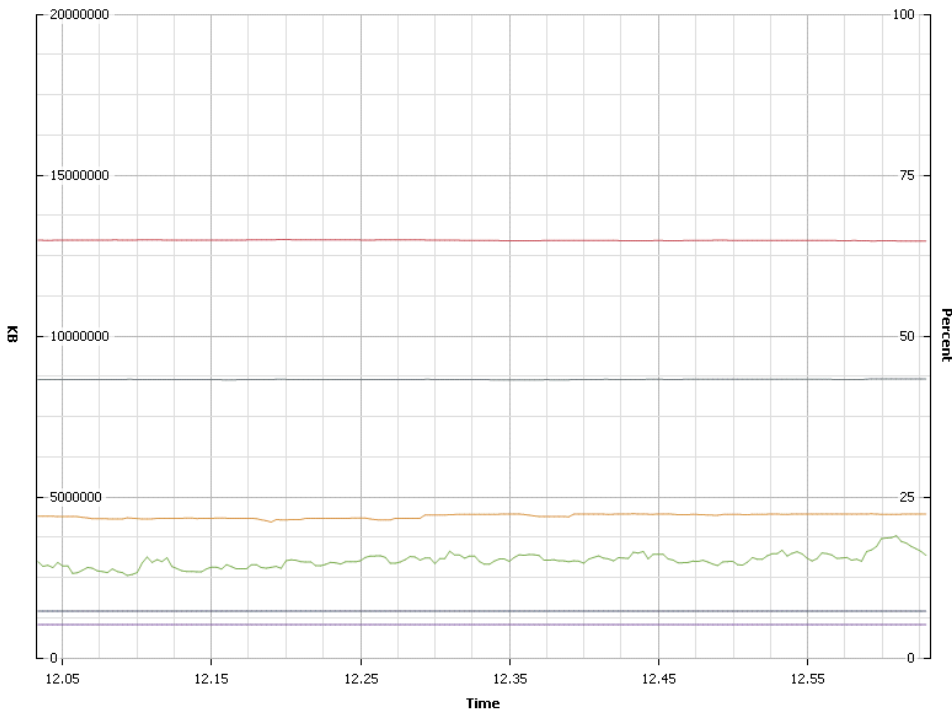
Memory/Real-time, 29/04/2011 12.01.57 - 29/04/2011 13.01.57 - esx10.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx10.mnt.local	Memory Shared Common (Average)	KB
■	esx10.mnt.local	Memory Granted (Average)	KB
■	esx10.mnt.local	Memory Balloon (Average)	KB
■	esx10.mnt.local	Memory Usage (Average)	Percent
■	esx10.mnt.local	Memory Active (Average)	KB
■	esx10.mnt.local	Memory Swap Used (Average)	KB

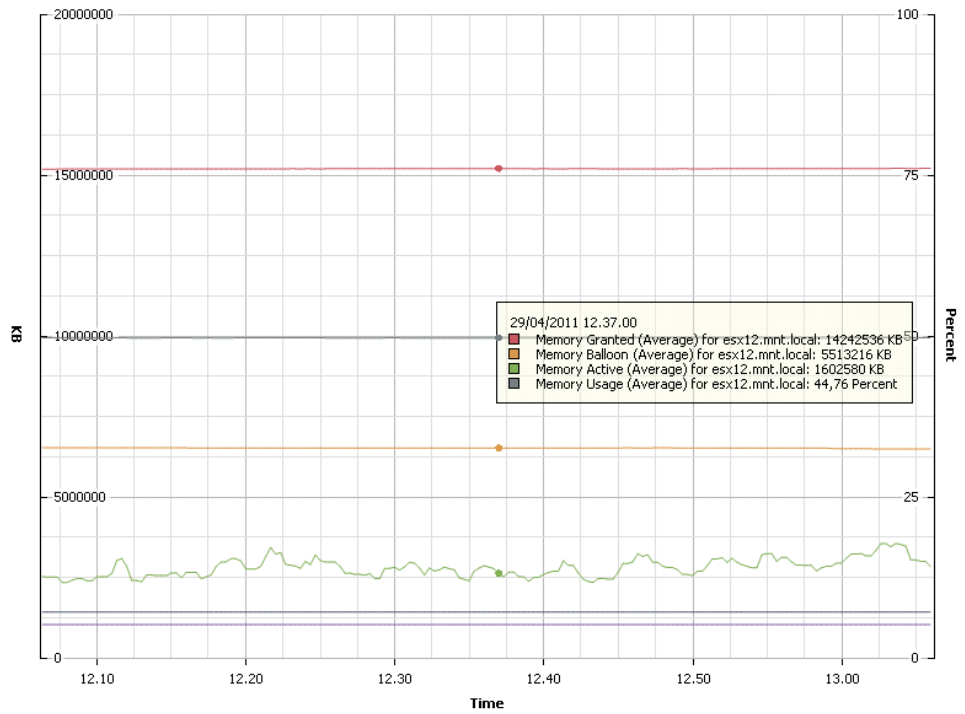
Memory/Real-time, 29/04/2011 12.03.14 - 29/04/2011 13.03.14 - esx11.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx11.mnt.local	Memory Shared Common (Average)	KB
■	esx11.mnt.local	Memory Granted (Average)	KB
■	esx11.mnt.local	Memory Balloon (Average)	KB
■	esx11.mnt.local	Memory Usage (Average)	Percent
■	esx11.mnt.local	Memory Active (Average)	KB
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Memory/Real-time, 29/04/2011 12.06.12 - 29/04/2011 13.06.12 - esx12.mnt.local



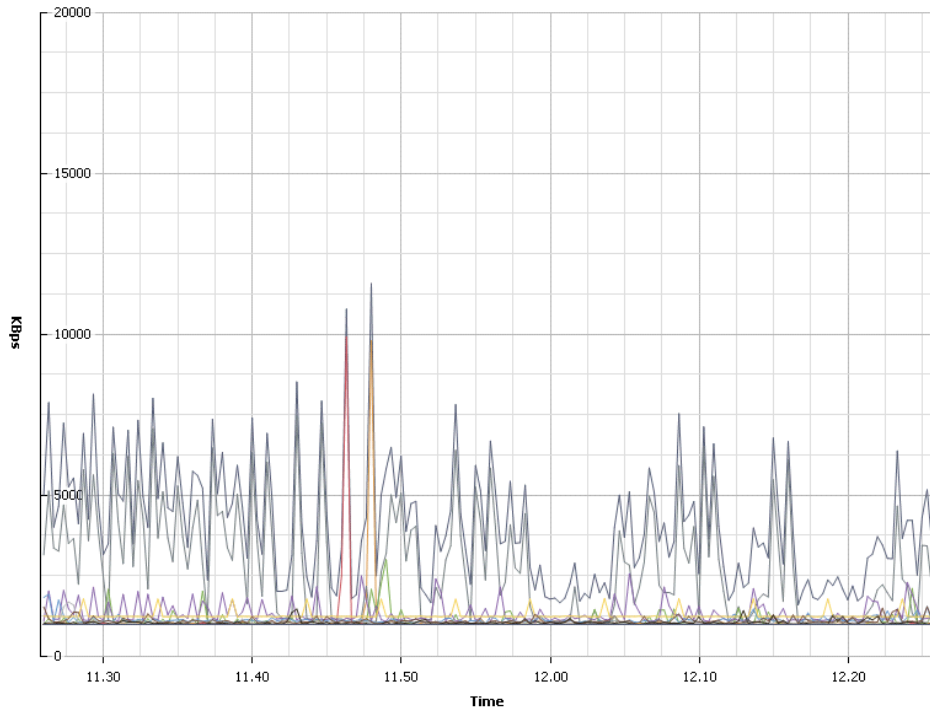
Performance Chart Legend

Key	Object	Measurement	Units
■	esx12.mnt.local	Memory Shared Common (Average)	KB
■	esx12.mnt.local	Memory Granted (Average)	KB
■	esx12.mnt.local	Memory Balloon (Average)	KB
■	esx12.mnt.local	Memory Usage (Average)	Percent
■	esx12.mnt.local	Memory Active (Average)	KB
■	esx12.mnt.local	Memory Swap Used (Average)	KB



DISCHI

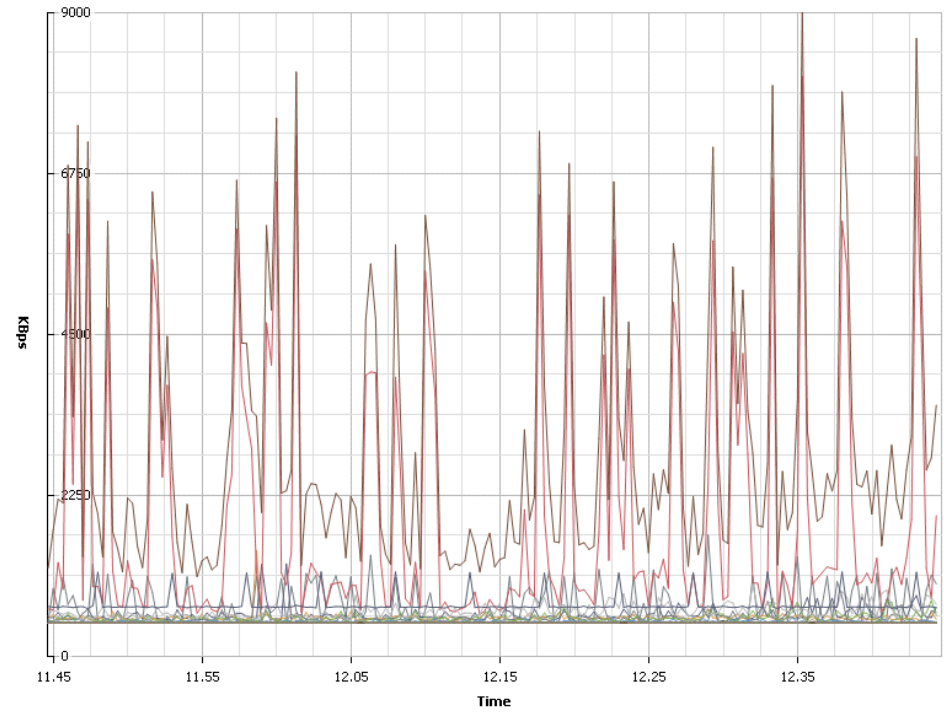
Disk/Real-time, 29/04/2011 11.25.47 - 29/04/2011 12.25.47 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
█	esx01.mnt.local	Disk Usage (Average)	KBps
█	vmhba2:0:3	Disk Read Rate	KBps
█	vmhba2:0:3	Disk Write Rate	KBps
█	vmhba2:0:8	Disk Write Rate	KBps
█	vmhba2:0:8	Disk Read Rate	KBps
█	vmhba2:0:7	Disk Write Rate	KBps
█	vmhba2:0:6	Disk Write Rate	KBps
█	vmhba1:1:0	Disk Write Rate	KBps
█	vmhba2:0:4	Disk Write Rate	KBps
█	vmhba2:0:2	Disk Write Rate	KBps
█	vmhba2:0:1	Disk Write Rate	KBps
█	vmhba2:0:7	Disk Read Rate	KBps
█	vmhba2:0:0	Disk Read Rate	KBps
█	vmhba2:0:1	Disk Read Rate	KBps
█	vmhba1:1:0	Disk Read Rate	KBps
█	vmhba2:0:4	Disk Read Rate	KBps
█	vmhba2:0:9	Disk Write Rate	KBps
█	vmhba2:0:6	Disk Read Rate	KBps
█	vmhba2:0:31	Disk Read Rate	KBps

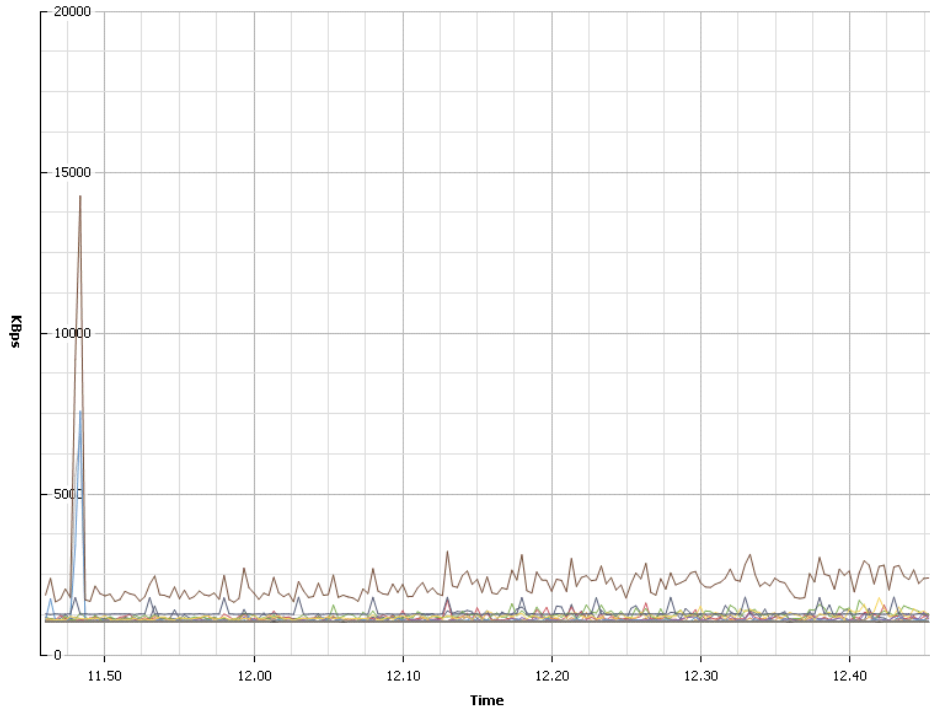
Disk/Real-time, 29/04/2011 11.44.37 - 29/04/2011 12.44.37 - esx02.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
█	vmhba2:0:31	Disk Read Rate	KBps
█	vmhba2:0:0	Disk Read Rate	KBps
█	vmhba2:0:1	Disk Read Rate	KBps
█	vmhba2:0:2	Disk Read Rate	KBps
█	vmhba2:0:3	Disk Read Rate	KBps
█	vmhba2:0:4	Disk Read Rate	KBps
█	vmhba2:0:5	Disk Read Rate	KBps
█	vmhba2:0:6	Disk Read Rate	KBps
█	vmhba2:0:7	Disk Read Rate	KBps
█	vmhba2:0:8	Disk Read Rate	KBps
█	vmhba2:0:9	Disk Read Rate	KBps
█	vmhba2:0:0	Disk Write Rate	KBps
█	vmhba2:0:1	Disk Write Rate	KBps
█	vmhba2:0:2	Disk Write Rate	KBps
█	vmhba2:0:3	Disk Write Rate	KBps
█	vmhba2:0:4	Disk Write Rate	KBps
█	vmhba2:0:5	Disk Write Rate	KBps
█	vmhba2:0:6	Disk Write Rate	KBps
█	vmhba2:0:7	Disk Write Rate	KBps

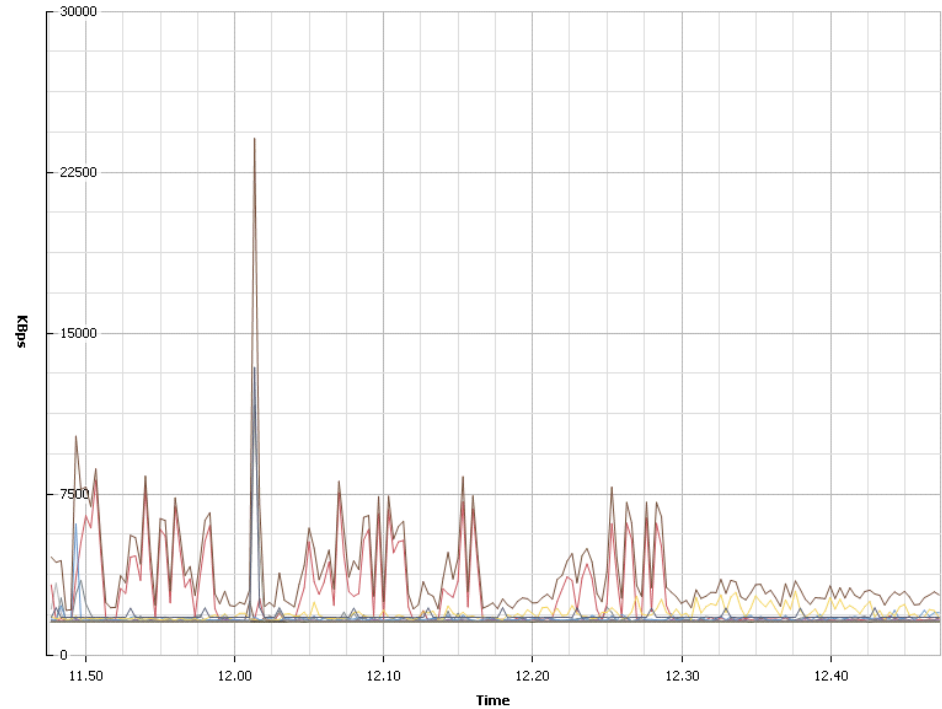
Disk/Real-time, 29/04/2011 11.45.40 - 29/04/2011 12.45.40 - esx03.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

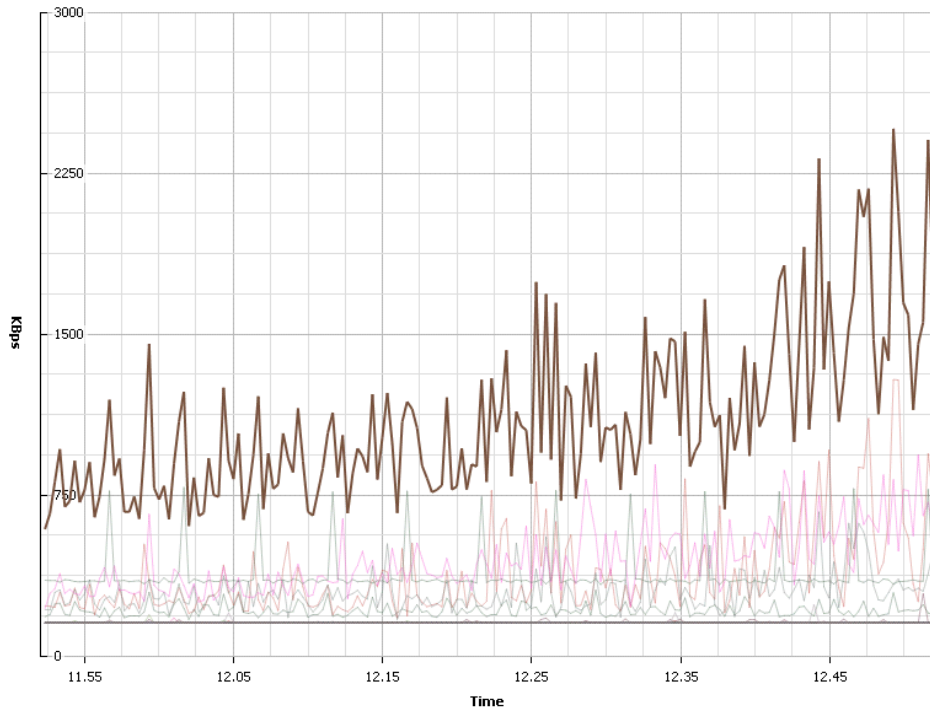
Disk/Real-time, 29/04/2011 11.47.21 - 29/04/2011 12.47.21 - esx04.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

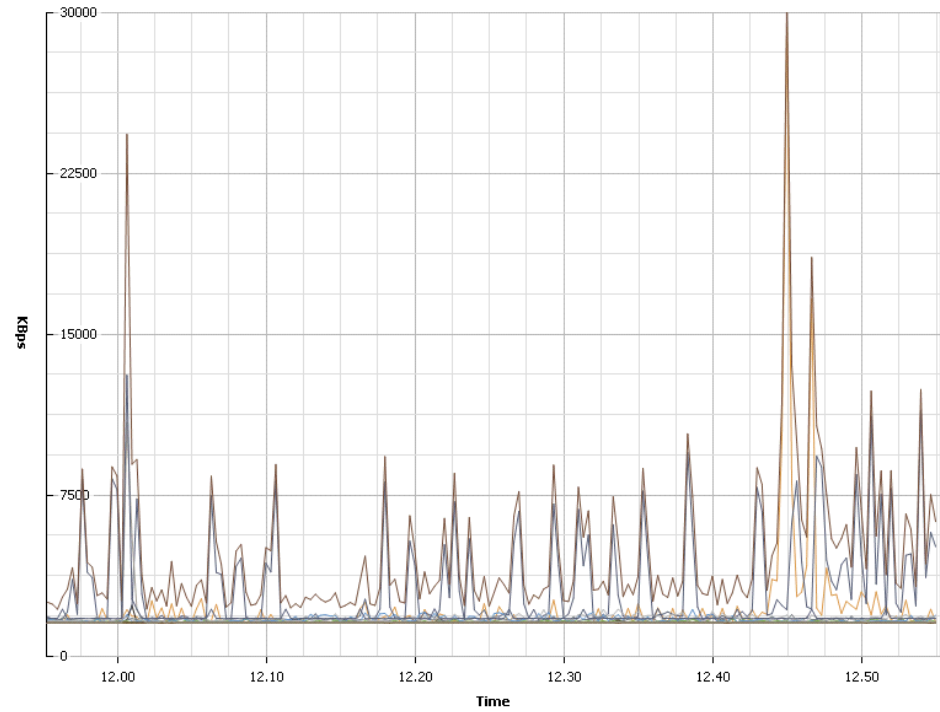
Disk/Real-time, 29/04/2011 11.52.02 - 29/04/2011 12.52.02 - esx05.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

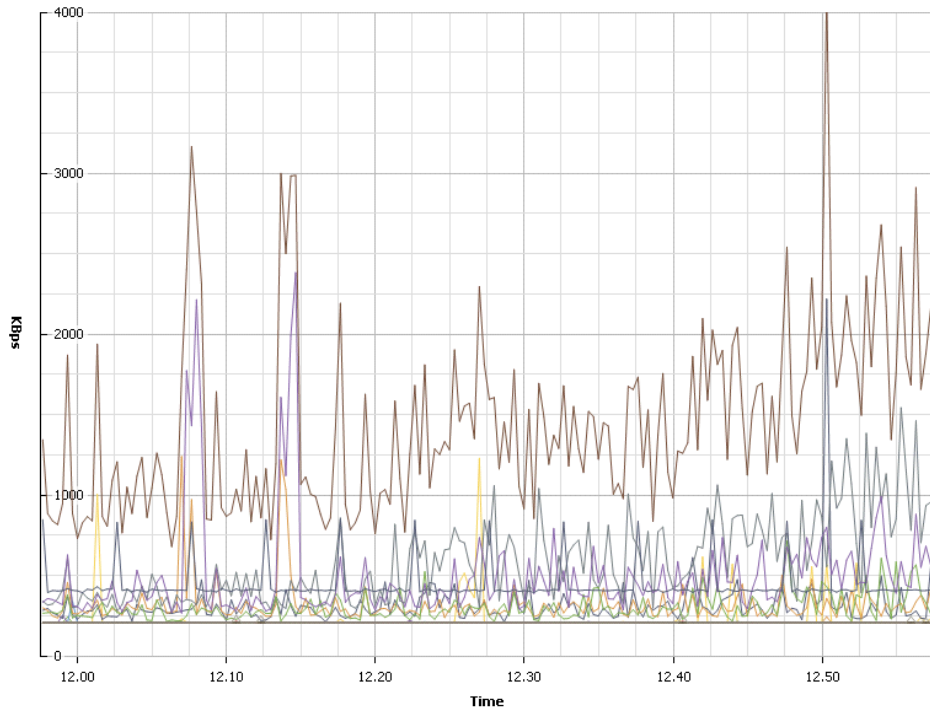
Disk/Real-time, 29/04/2011 11.55.15 - 29/04/2011 12.55.15 - esx06.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

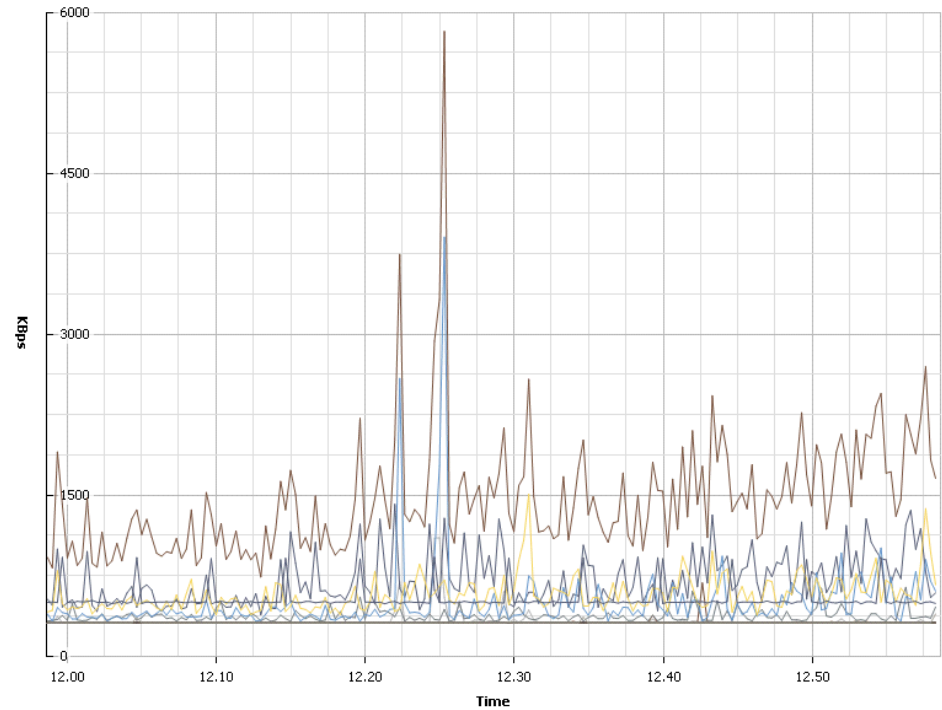
Disk/Real-time, 29/04/2011 11.57.31 - 29/04/2011 12.57.31 - esx07.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

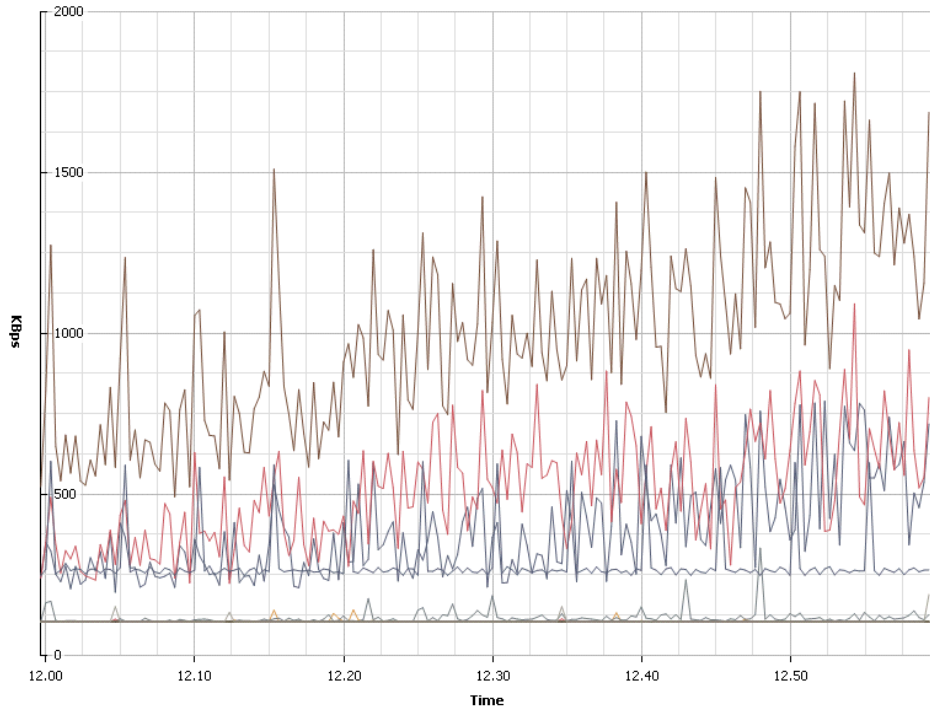
Disk/Real-time, 29/04/2011 11.58.36 - 29/04/2011 12.58.36 - esx08.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

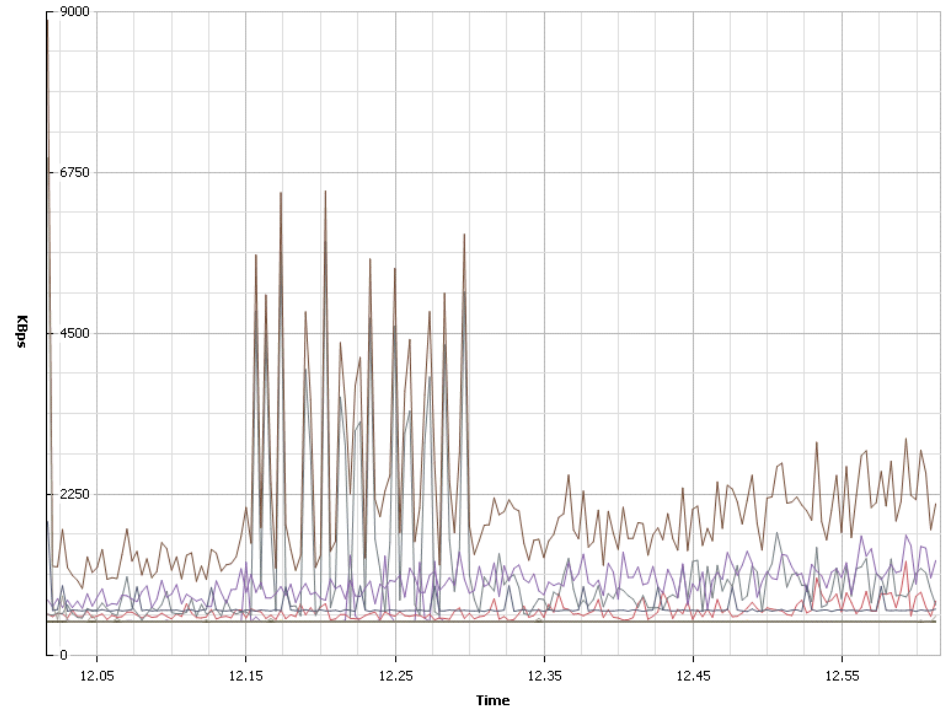
Disk/Real-time, 29/04/2011 11.59.39 - 29/04/2011 12.59.39 - esx09.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

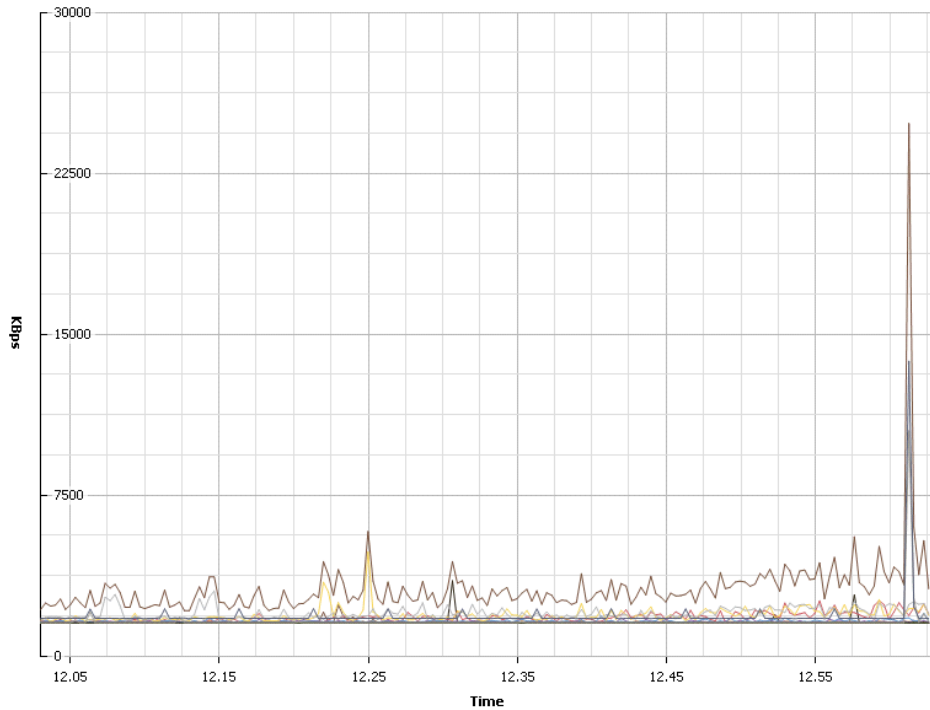
Disk/Real-time, 29/04/2011 12.01.35 - 29/04/2011 13.01.35 - esx10.mnt.local



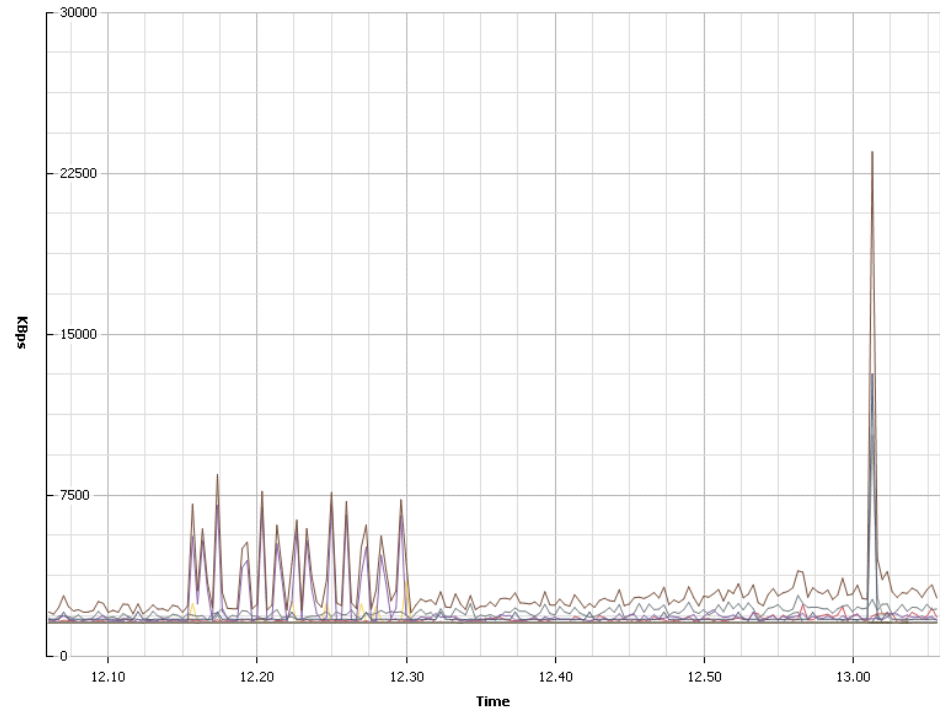
Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

Disk/Real-time, 29/04/2011 12.02.59 - 29/04/2011 13.02.59 - esx11.mnt.local



Disk/Real-time, 29/04/2011 12.05.51 - 29/04/2011 13.05.51 - esx12.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps

Performance Chart Legend

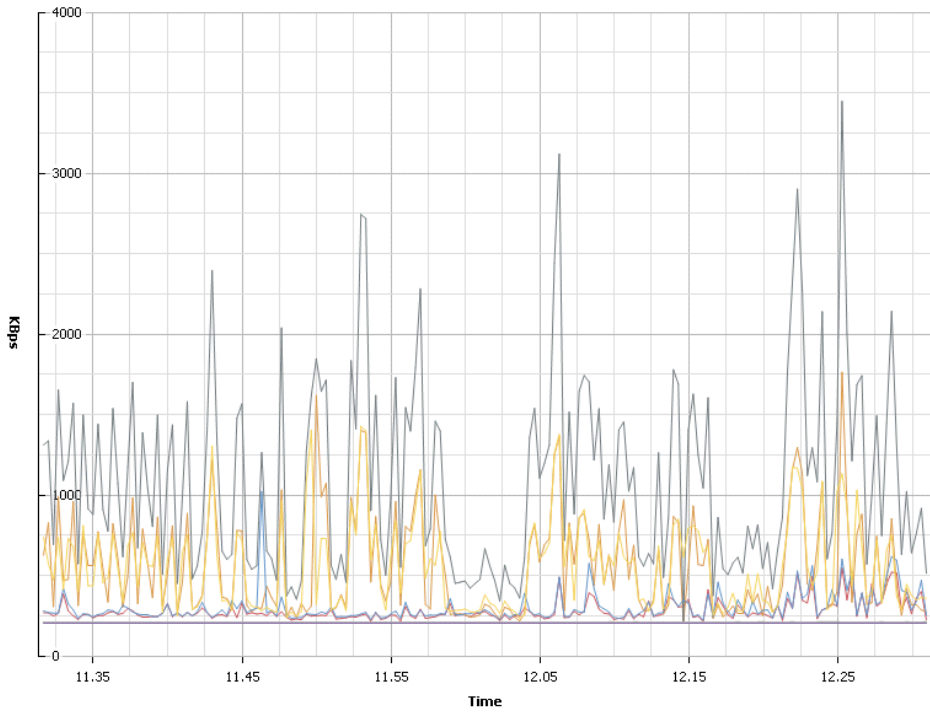
Key	Object	Measurement	Units
■	vmhba2:0:31	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Read Rate	KBps
■	vmhba2:0:1	Disk Read Rate	KBps
■	vmhba2:0:2	Disk Read Rate	KBps
■	vmhba2:0:3	Disk Read Rate	KBps
■	vmhba2:0:4	Disk Read Rate	KBps
■	vmhba2:0:5	Disk Read Rate	KBps
■	vmhba2:0:6	Disk Read Rate	KBps
■	vmhba2:0:7	Disk Read Rate	KBps
■	vmhba2:0:8	Disk Read Rate	KBps
■	vmhba2:0:9	Disk Read Rate	KBps
■	vmhba2:0:0	Disk Write Rate	KBps
■	vmhba2:0:1	Disk Write Rate	KBps
■	vmhba2:0:2	Disk Write Rate	KBps
■	vmhba2:0:3	Disk Write Rate	KBps
■	vmhba2:0:4	Disk Write Rate	KBps
■	vmhba2:0:5	Disk Write Rate	KBps
■	vmhba2:0:6	Disk Write Rate	KBps
■	vmhba2:0:7	Disk Write Rate	KBps



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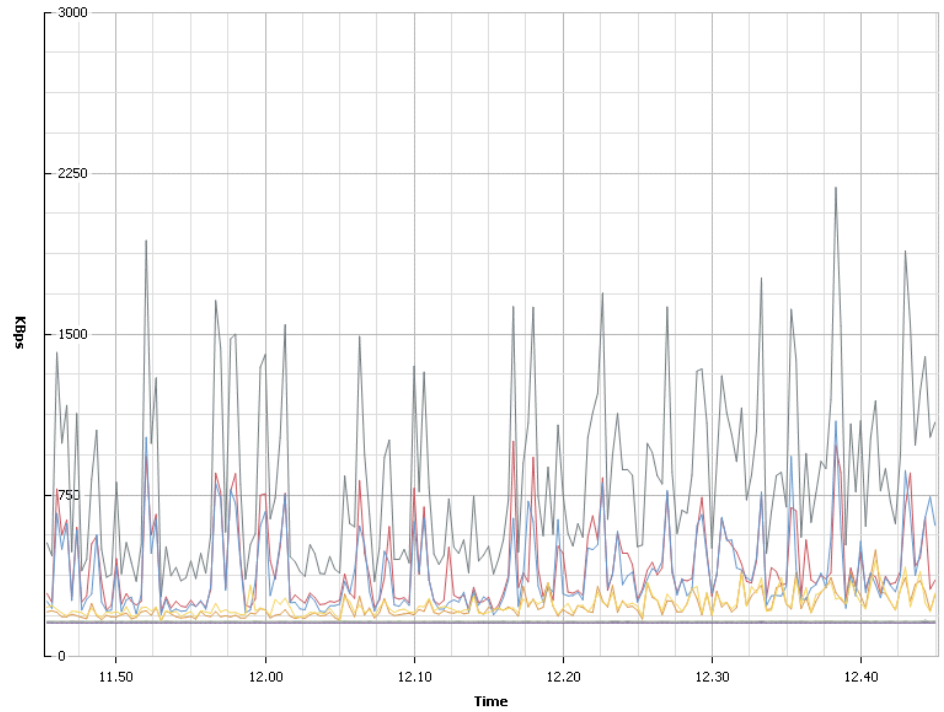
Network/Real-time, 29/04/2011 11.31.20 - 29/04/2011 12.31.20 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx01.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

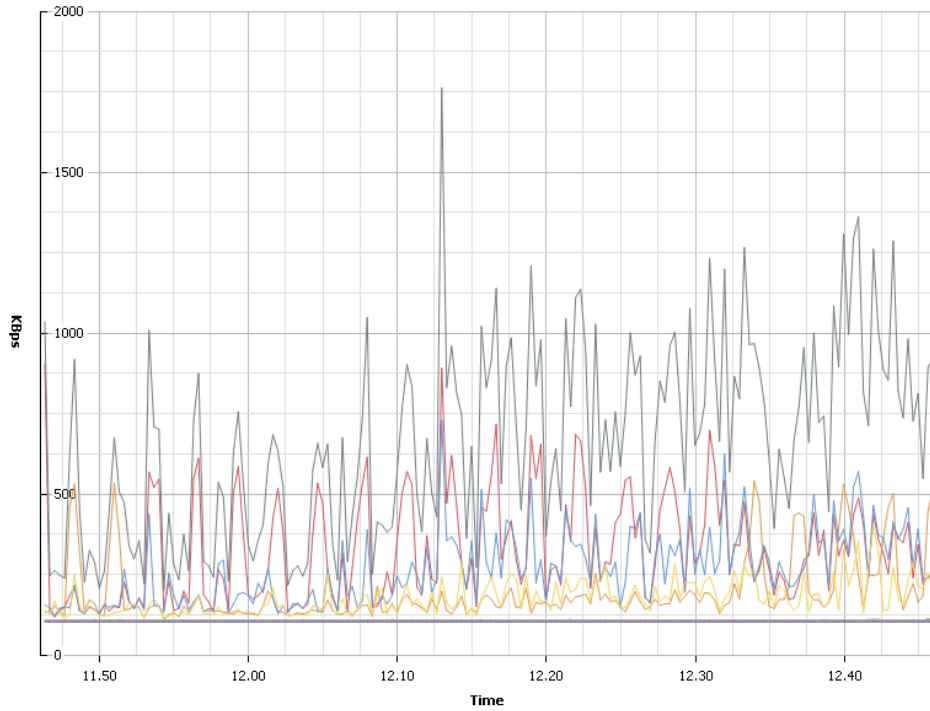
Network/Real-time, 29/04/2011 11.45.10 - 29/04/2011 12.45.10 - esx02.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx02.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

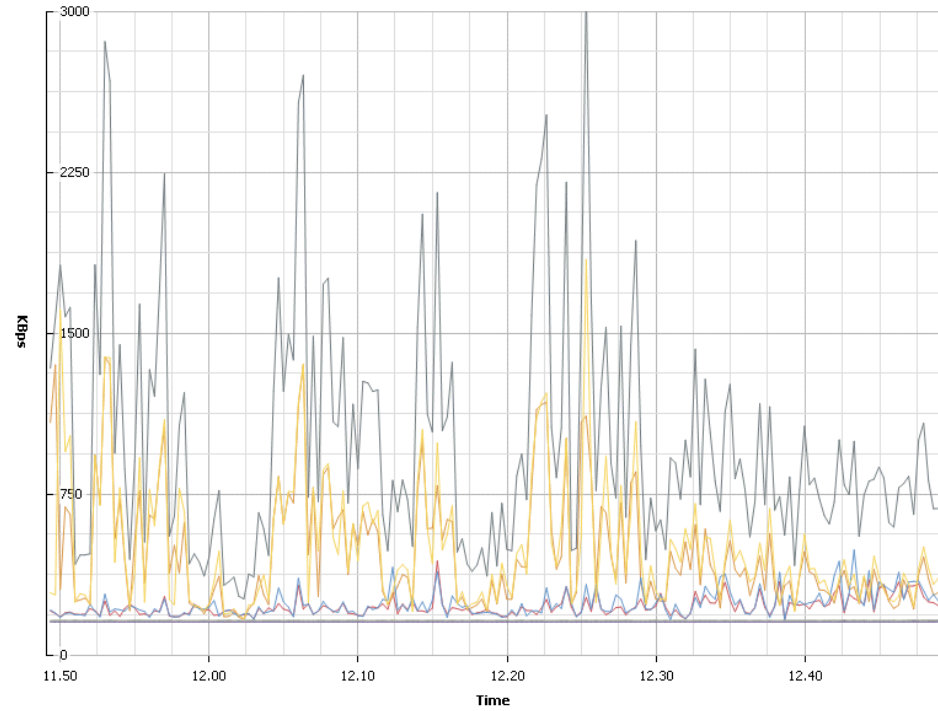
Network/Real-time, 29/04/2011 11.46.03 - 29/04/2011 12.46.03 - esx03.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx03.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

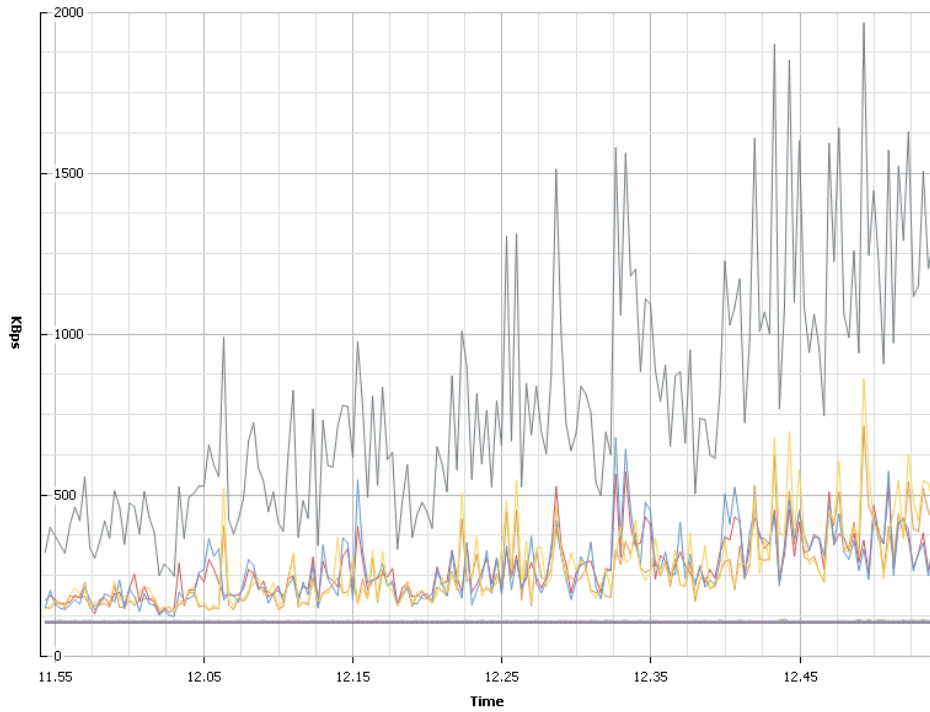
Network/Real-time, 29/04/2011 11.49.04 - 29/04/2011 12.49.04 - esx04.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx04.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

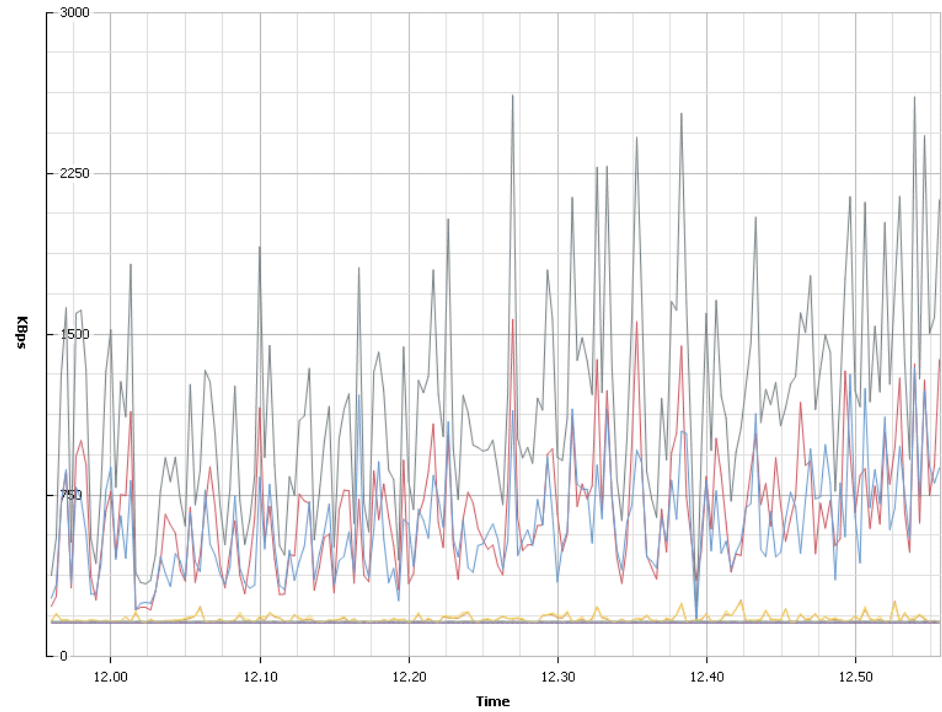
Network/Real-time, 29/04/2011 11.54.01 - 29/04/2011 12.54.01 - esx05.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx05.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

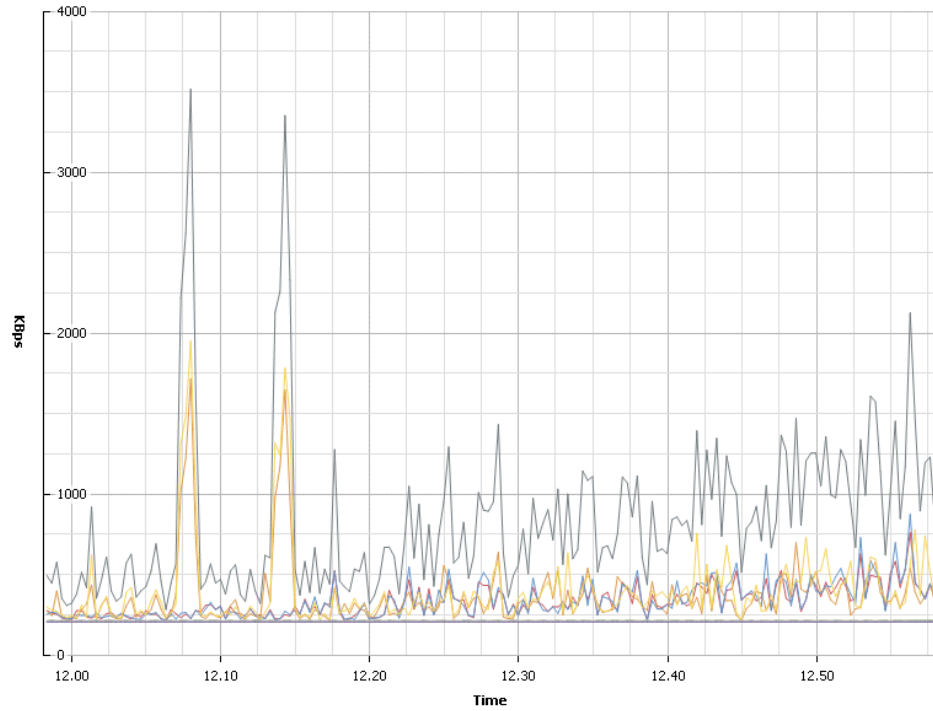
Network/Real-time, 29/04/2011 11.55.40 - 29/04/2011 12.55.40 - esx06.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx06.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

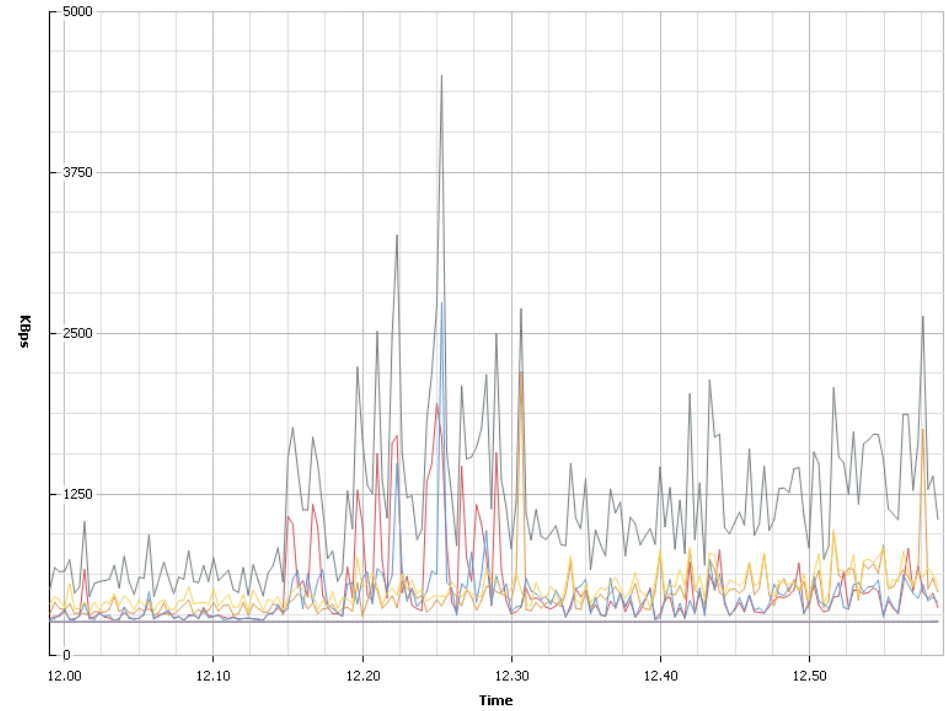
Network/Real-time, 29/04/2011 11.58.06 - 29/04/2011 12.58.06 - esx07.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx07.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

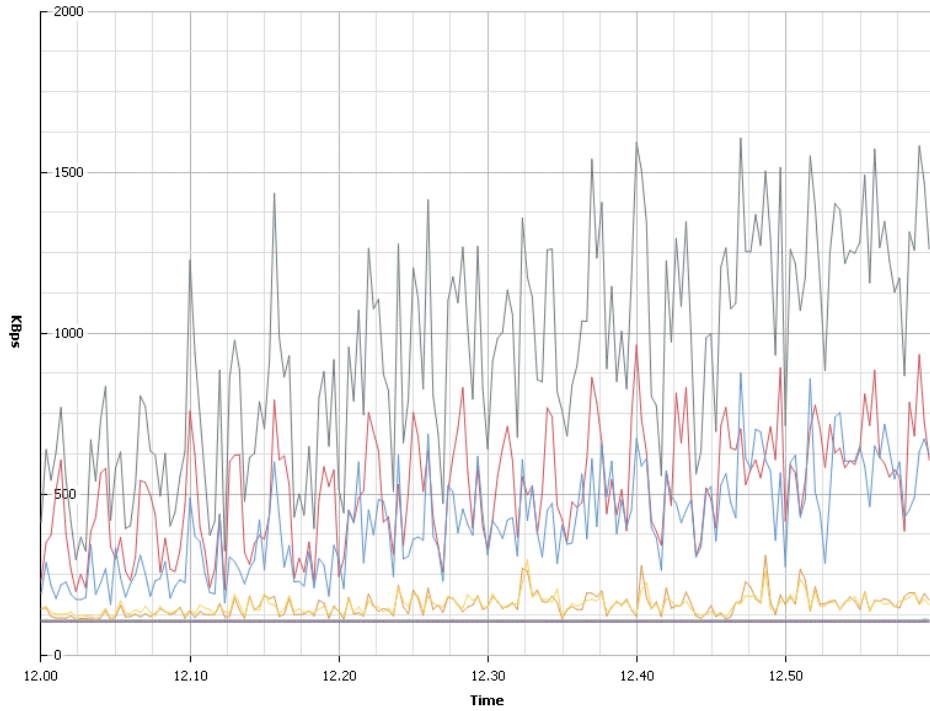
Network/Real-time, 29/04/2011 11.58.59 - 29/04/2011 12.58.59 - esx08.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx08.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

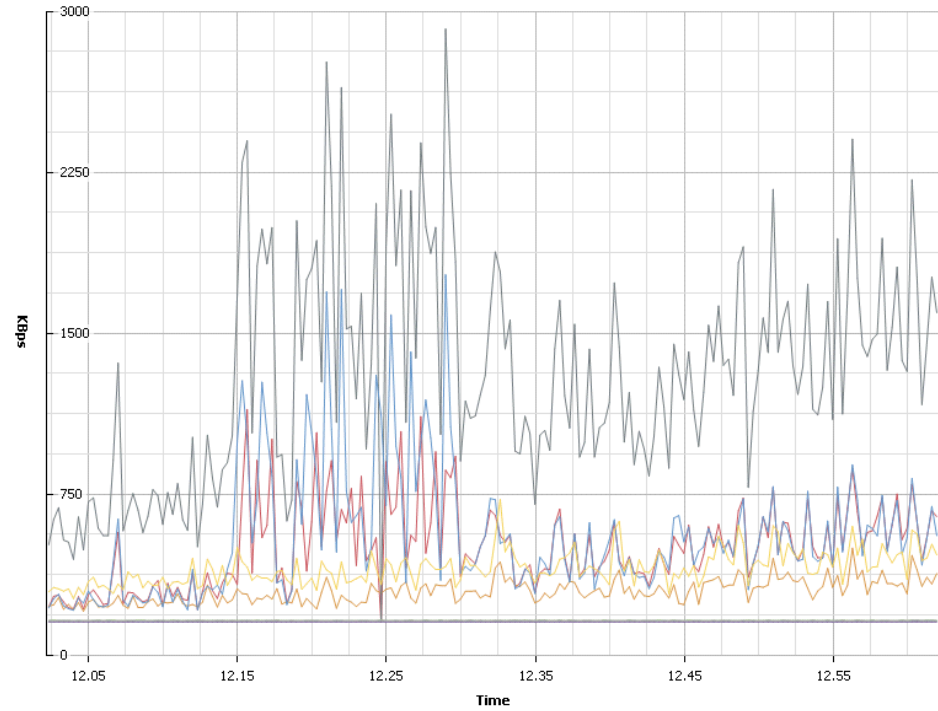
Network/Real-time, 29/04/2011 11.59.57 - 29/04/2011 12.59.57 - esx09.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx09.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

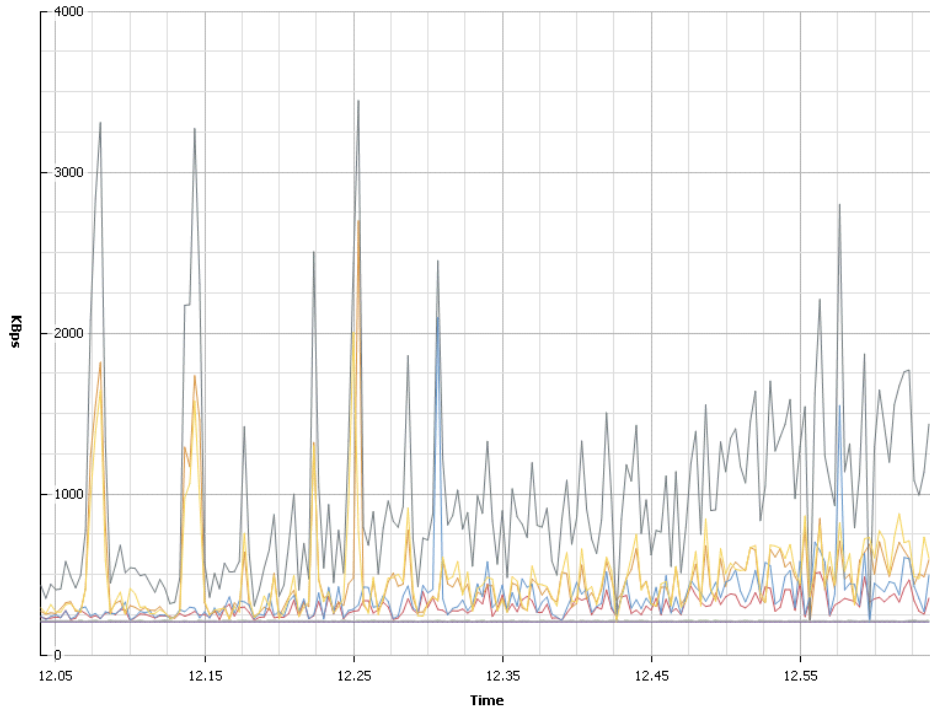
Network/Real-time, 29/04/2011 12.02.11 - 29/04/2011 13.02.11 - esx10.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx10.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

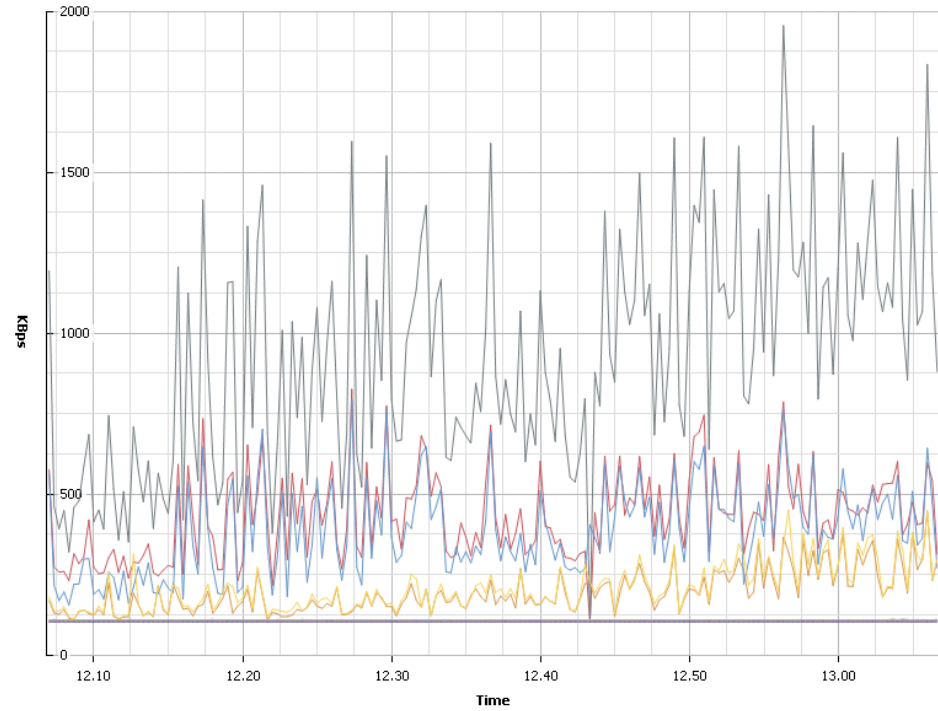
Network/Real-time, 29/04/2011 12.03.58 - 29/04/2011 13.03.58 - esx11.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx11.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps

Network/Real-time, 29/04/2011 12.06.49 - 29/04/2011 13.06.49 - esx12.mnt.local



Performance Chart Legend

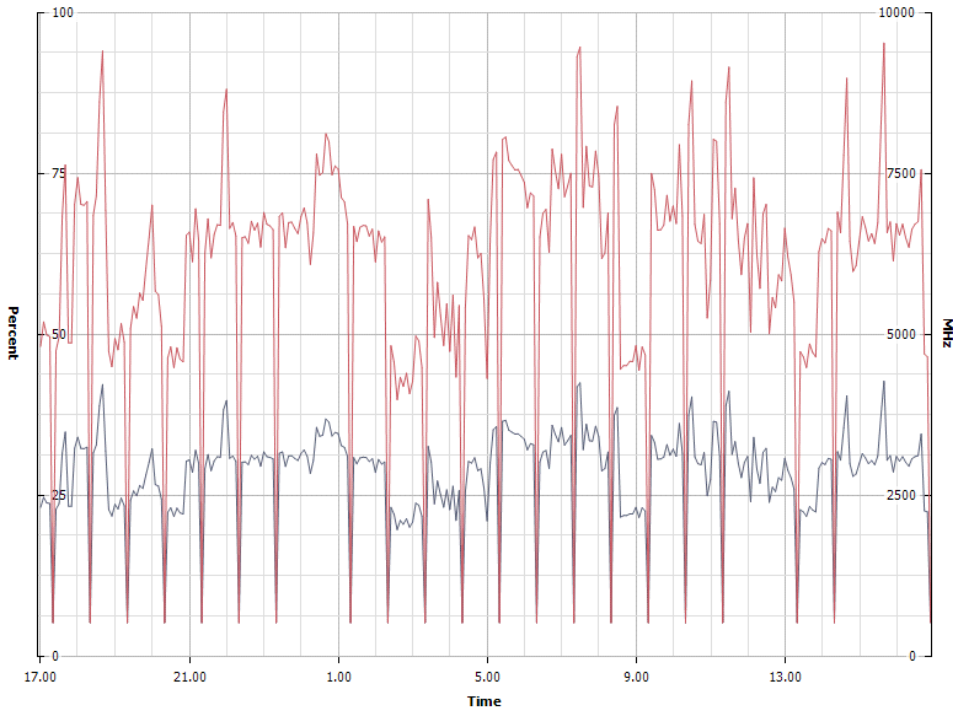
Key	Object	Measurement	Units
■	vmnic0	Network Data Receive Rate	KBps
■	vmnic1	Network Data Receive Rate	KBps
■	vmnic2	Network Data Receive Rate	KBps
■	esx12.mnt.local	Network Usage (Average)	KBps
■	vmnic3	Network Data Receive Rate	KBps
■	vmnic0	Network Data Transmit Rate	KBps
■	vmnic1	Network Data Transmit Rate	KBps
■	vmnic2	Network Data Transmit Rate	KBps
■	vmnic3	Network Data Transmit Rate	KBps



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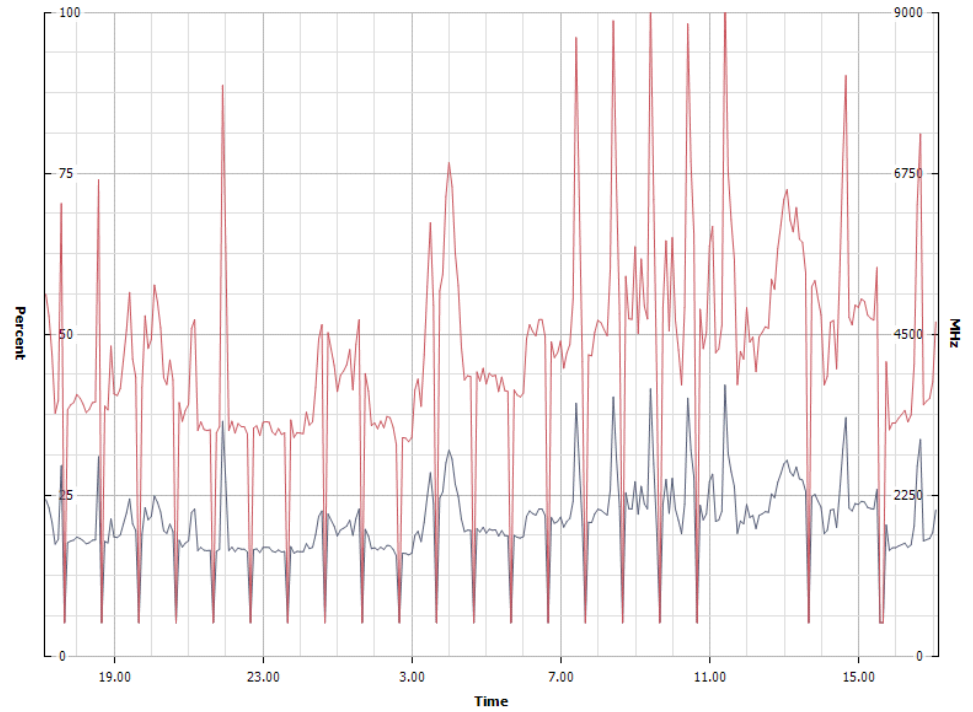
CPU/Past Day, 28/04/2011 16:55:16 - 29/04/2011 16:55:16 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx01.mnt.local	CPU Usage (Average)	Percent
■	esx01.mnt.local	CPU Usage in MHz (Average)	MHz

CPU/Past Day, 28/04/2011 17:07:58 - 29/04/2011 17:07:58 - esx02.mnt.local

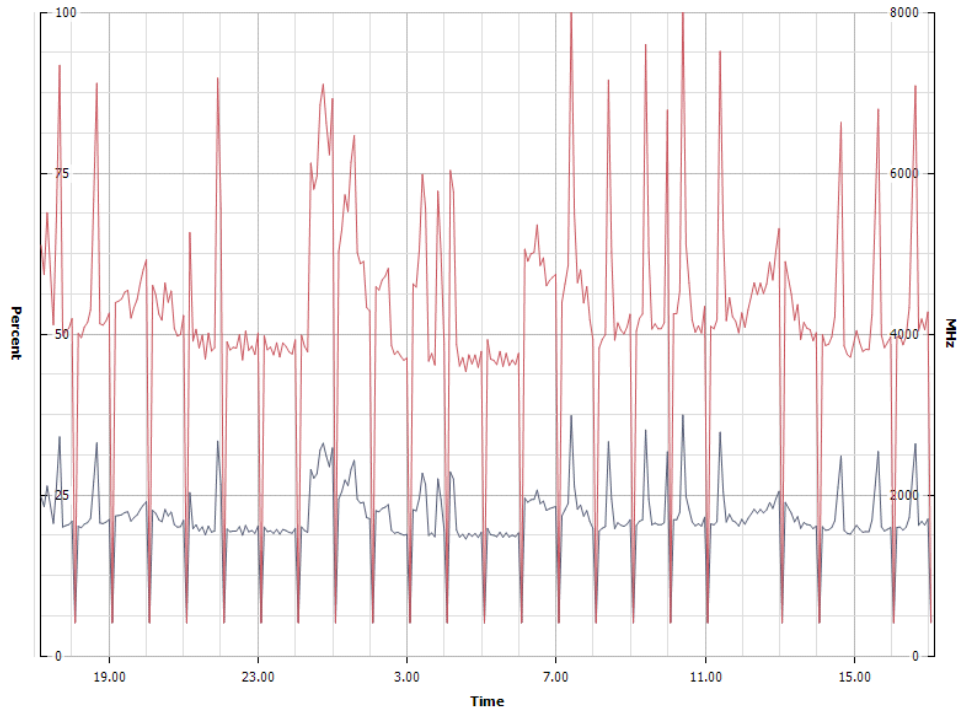


Performance Chart Legend

Key	Object	Measurement	Units
■	esx02.mnt.local	CPU Usage (Average)	Percent
■	esx02.mnt.local	CPU Usage in MHz (Average)	MHz



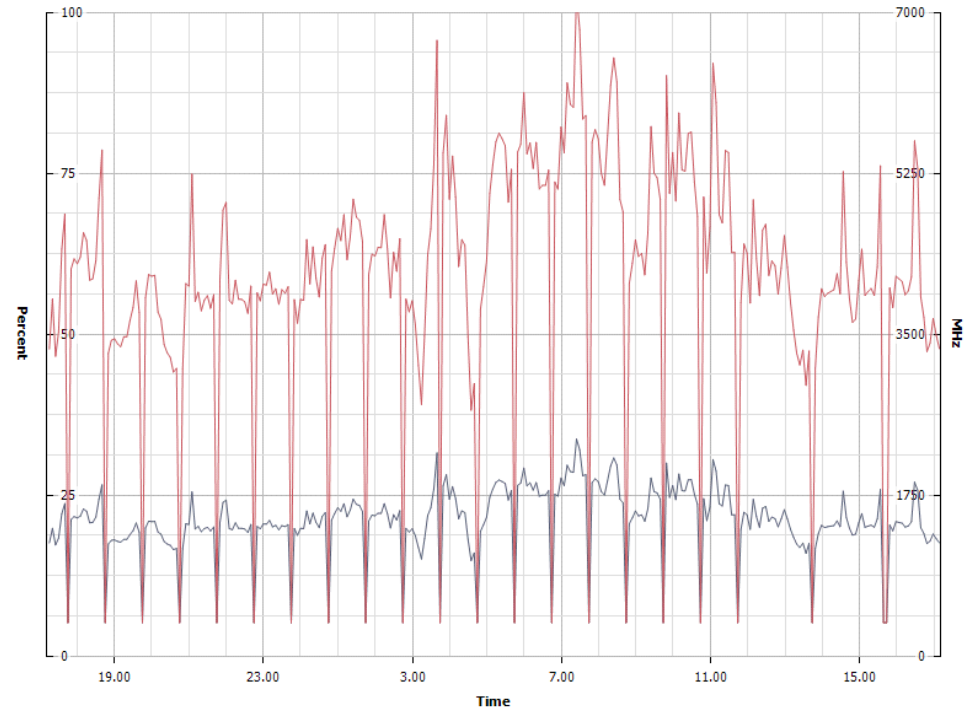
CPU/Past Day, 28/04/2011 17:09:22 - 29/04/2011 17:09:22 - esx03.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx03.mnt.local	CPU Usage (Average)	Percent
■	esx03.mnt.local	CPU Usage in MHz (Average)	MHz

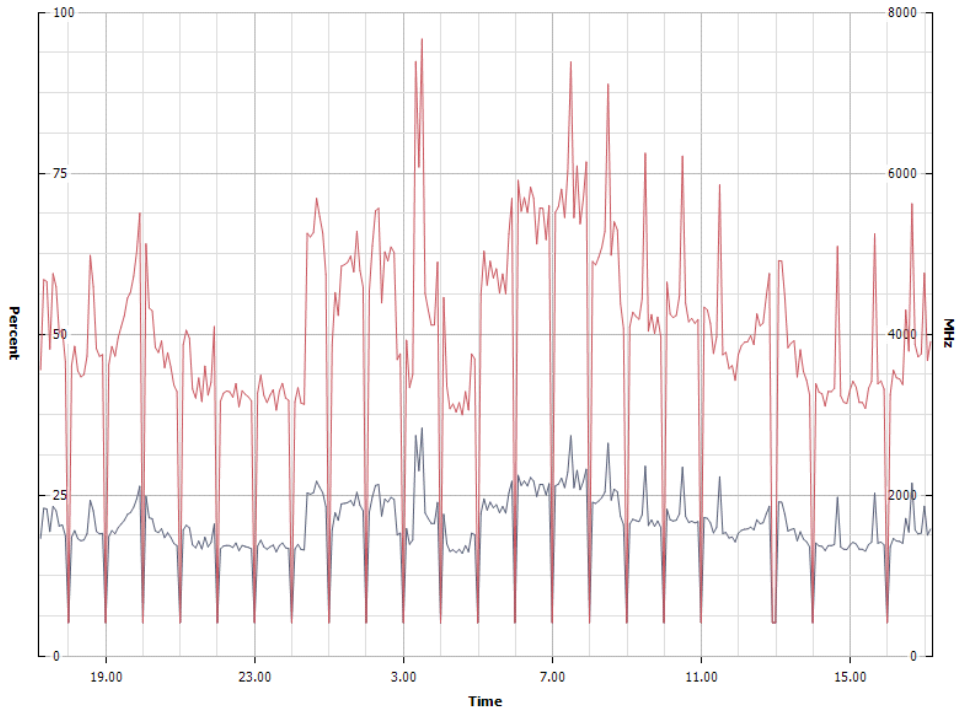
CPU/Past Day, 28/04/2011 17:10:32 - 29/04/2011 17:10:32 - esx04.mnt.local



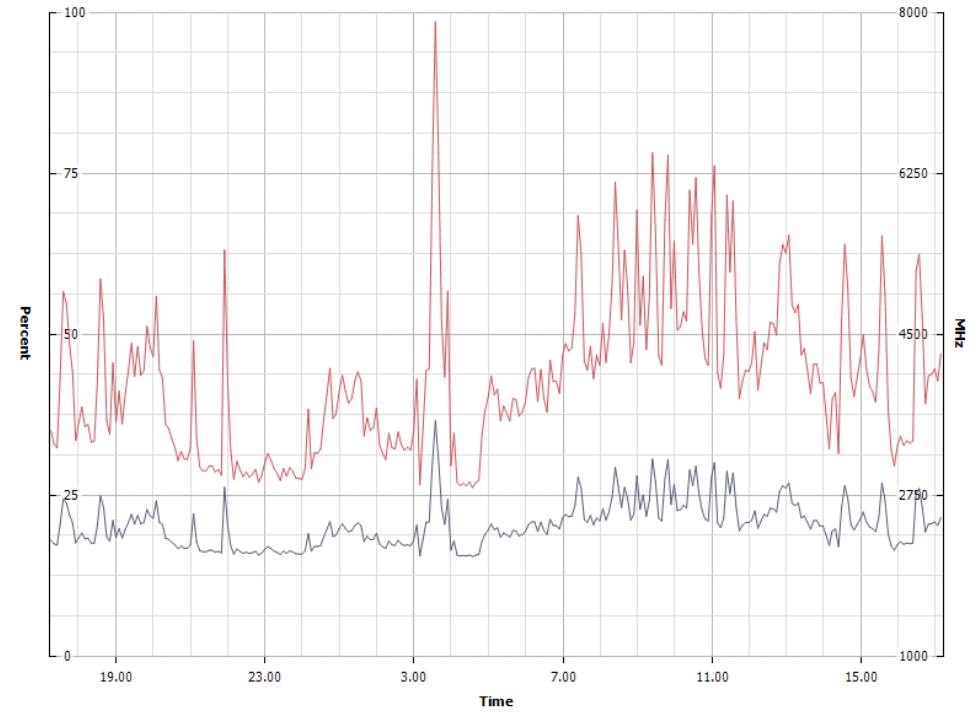
Performance Chart Legend

Key	Object	Measurement	Units
■	esx04.mnt.local	CPU Usage (Average)	Percent
■	esx04.mnt.local	CPU Usage in MHz (Average)	MHz

CPU/Past Day, 28/04/2011 17:11:48 - 29/04/2011 17:11:48 - esx05.mnt.local



CPU/Past Day, 28/04/2011 17:12:57 - 29/04/2011 17:12:57 - esx06.mnt.local



Performance Chart Legend

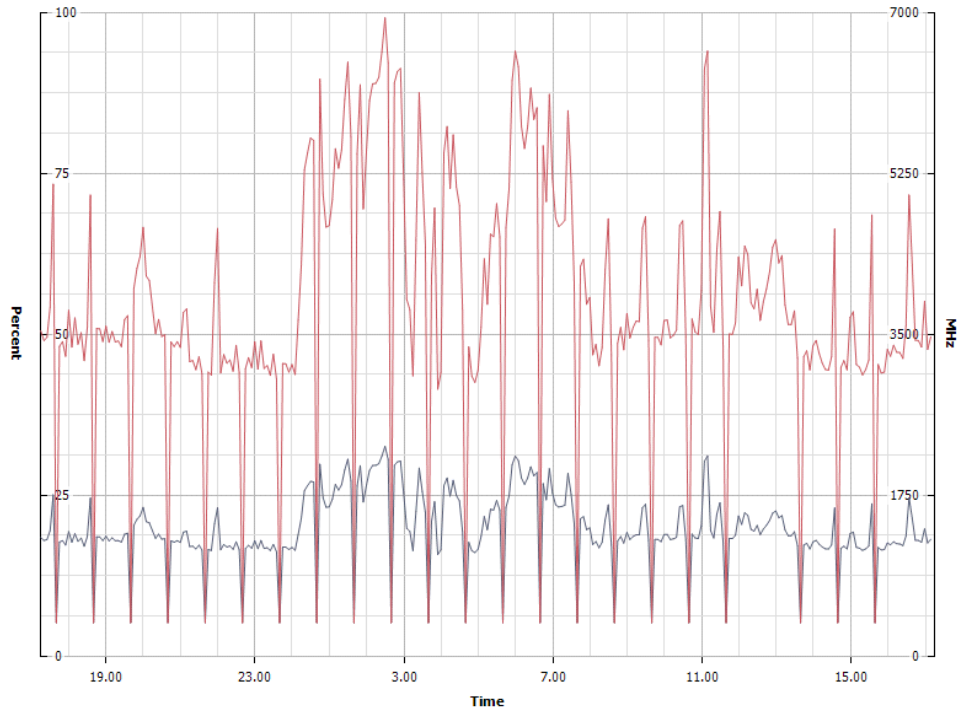
Key	Object	Measurement	Units
■	esx05.mnt.local	CPU Usage (Average)	Percent
■	esx05.mnt.local	CPU Usage in MHz (Average)	MHz

Performance Chart Legend

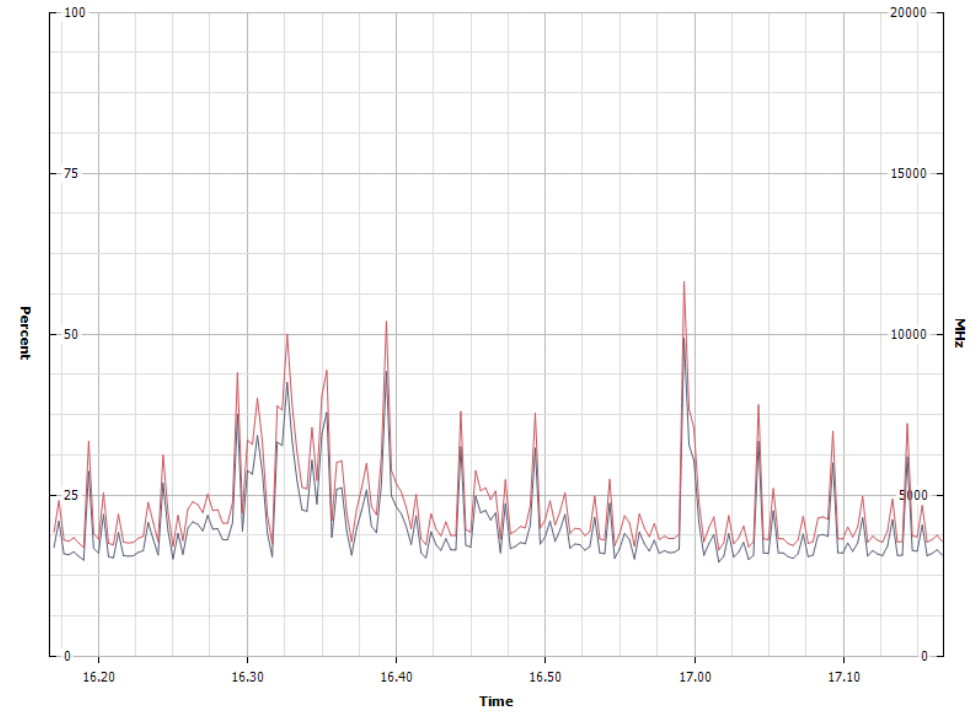
Key	Object	Measurement	Units
■	esx06.mnt.local	CPU Usage (Average)	Percent
■	esx06.mnt.local	CPU Usage in MHz (Average)	MHz



CPU/Past Day, 28/04/2011 17:14:39 - 29/04/2011 17:14:39 - esx07.mnt.local



CPU/Real-time, 29/04/2011 16:16:42 - 29/04/2011 17:16:42 - esx08.mnt.local



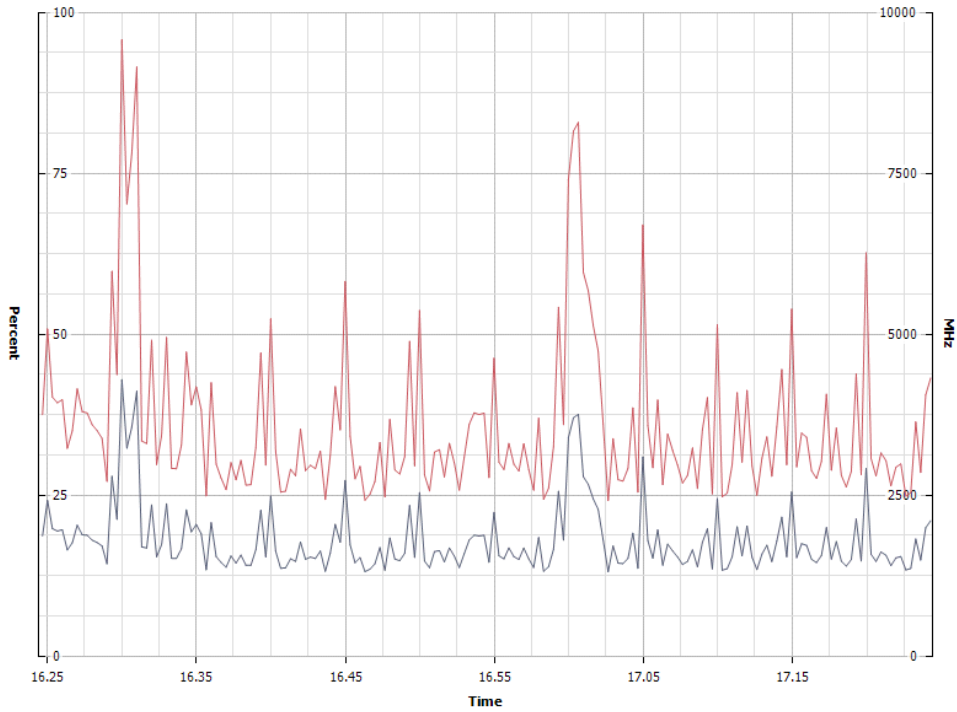
Performance Chart Legend

Key	Object	Measurement	Units
■	esx07.mnt.local	CPU Usage (Average)	Percent
■	esx07.mnt.local	CPU Usage in MHz (Average)	MHz

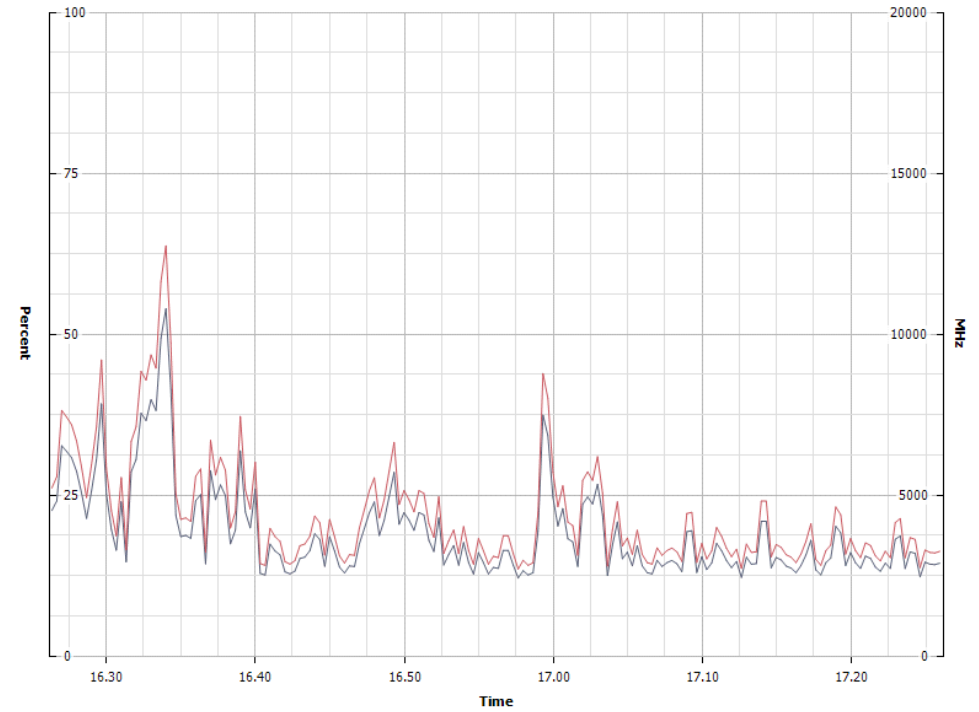
Performance Chart Legend

Key	Object	Measurement	Units
■	esx08.mnt.local	CPU Usage (Average)	Percent
■	esx08.mnt.local	CPU Usage in MHz (Average)	MHz

CPU/Real-time, 29/04/2011 16:24:24 - 29/04/2011 17:24:24 - esx09.mnt.local



CPU/Real-time, 29/04/2011 16:26:11 - 29/04/2011 17:26:11 - esx10.mnt.local



Performance Chart Legend

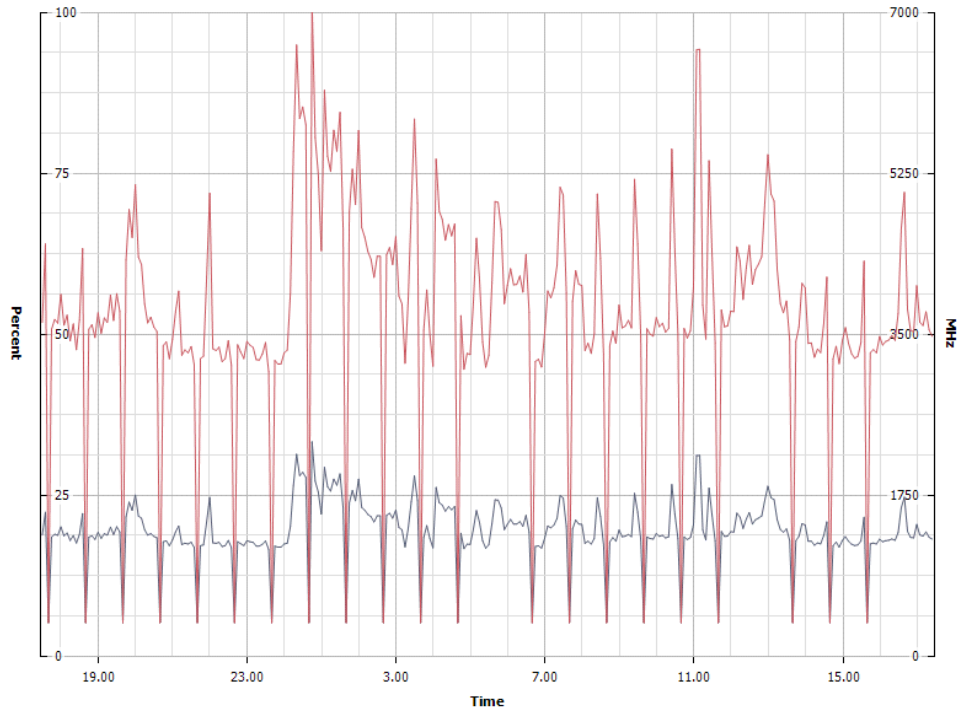
Key	Object	Measurement	Units
■	esx09.mnt.local	CPU Usage (Average)	Percent
■	esx09.mnt.local	CPU Usage in MHz (Average)	MHz

Performance Chart Legend

Key	Object	Measurement	Units
■	esx10.mnt.local	CPU Usage (Average)	Percent
■	esx10.mnt.local	CPU Usage in MHz (Average)	MHz



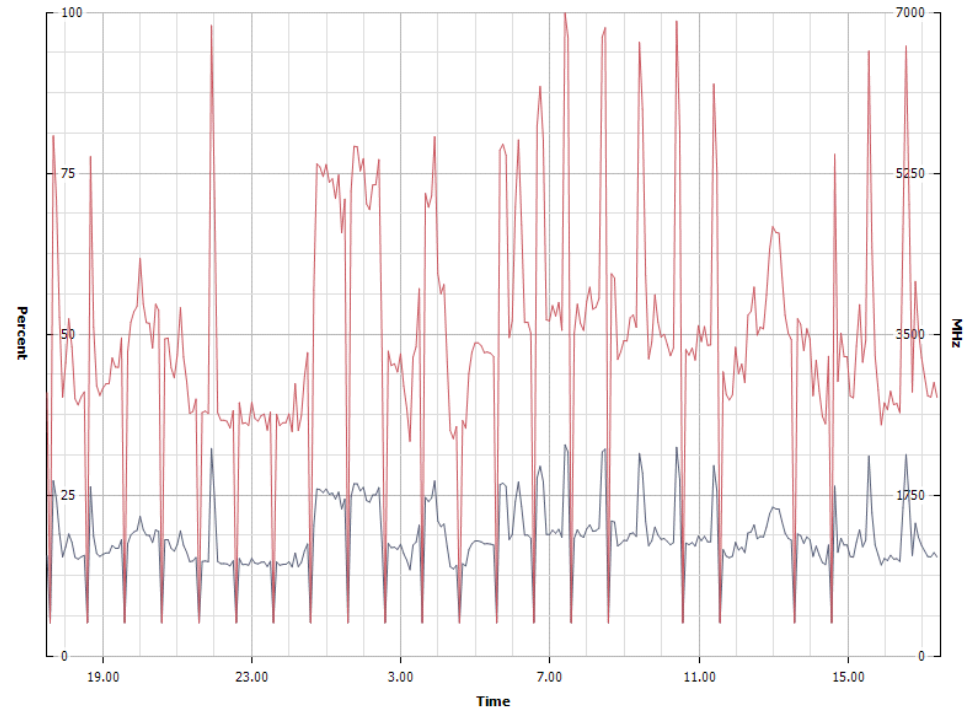
CPU/Past Day, 28/04/2011 17:27:18 - 29/04/2011 17:27:18 - esx11.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx11.mnt.local	CPU Usage (Average)	Percent
■	esx11.mnt.local	CPU Usage in MHz (Average)	MHz

CPU/Past Day, 28/04/2011 17:29:12 - 29/04/2011 17:29:12 - esx12.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx12.mnt.local	CPU Usage (Average)	Percent
■	esx12.mnt.local	CPU Usage in MHz (Average)	MHz

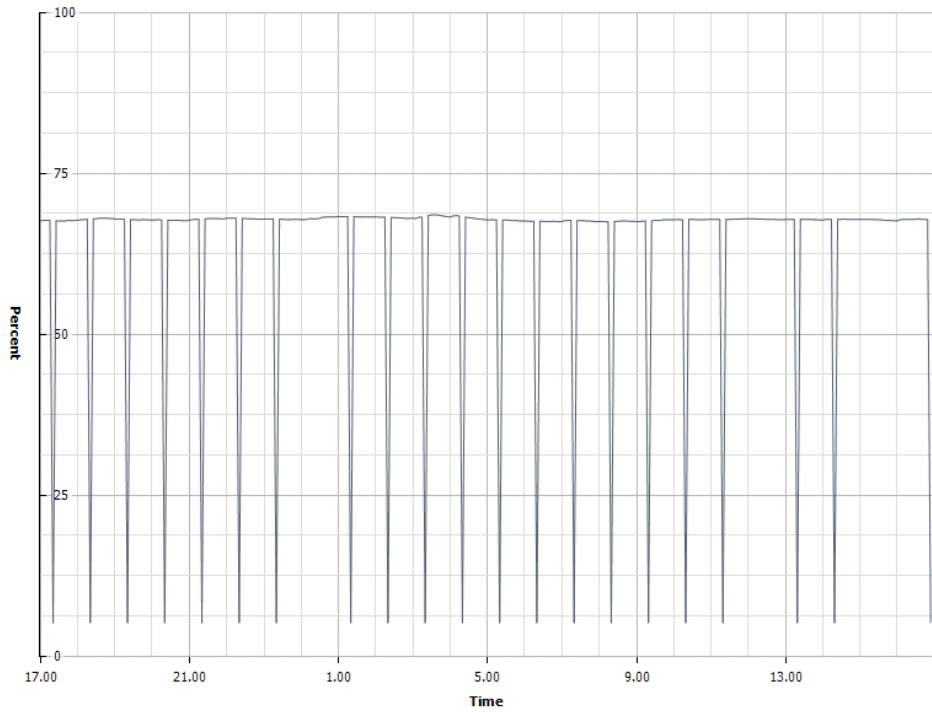


ANALISI PERFORMANCE SU SCALA GIORNALIERA

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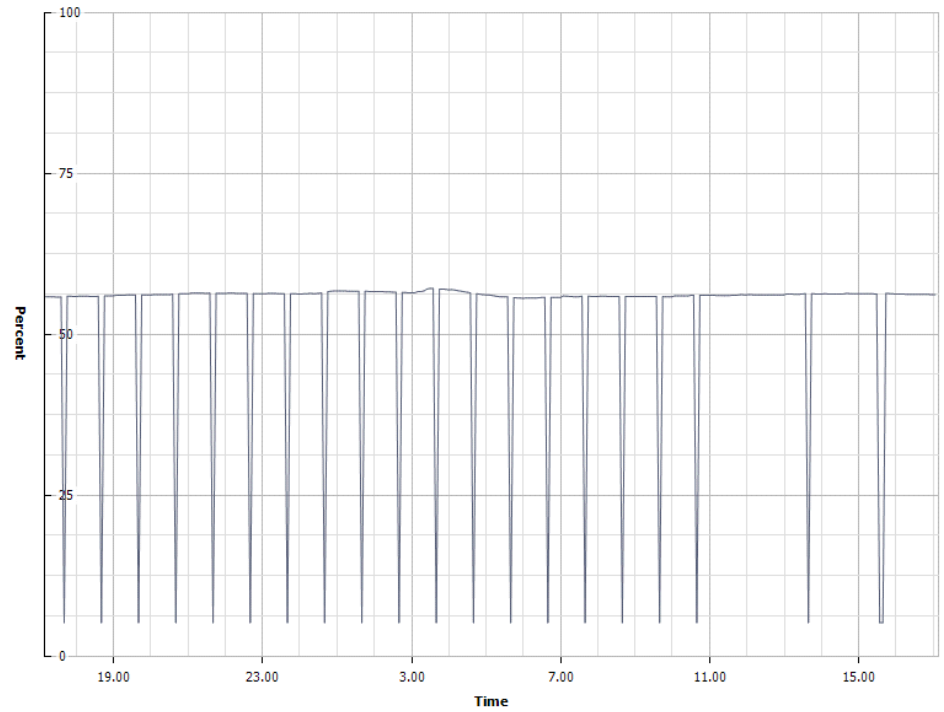
Memory/Past Day, 28/04/2011 16:58:16 - 29/04/2011 16:58:16 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx01.mnt.local	Memory Usage (Average)	Percent

Memory/Past Day, 28/04/2011 17:08:27 - 29/04/2011 17:08:27 - esx02.mnt.local

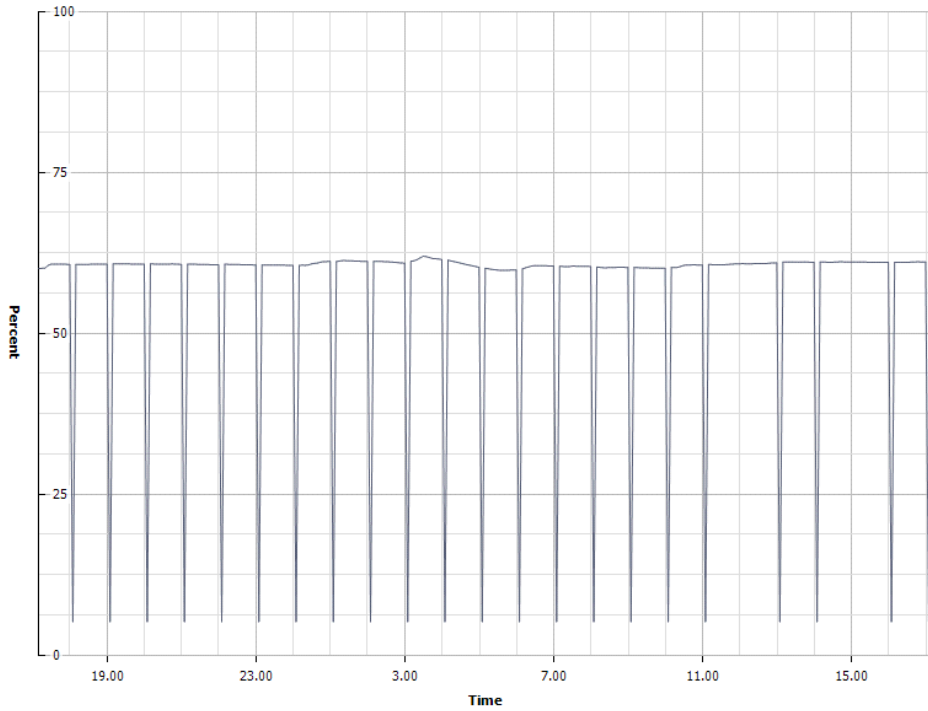


Performance Chart Legend

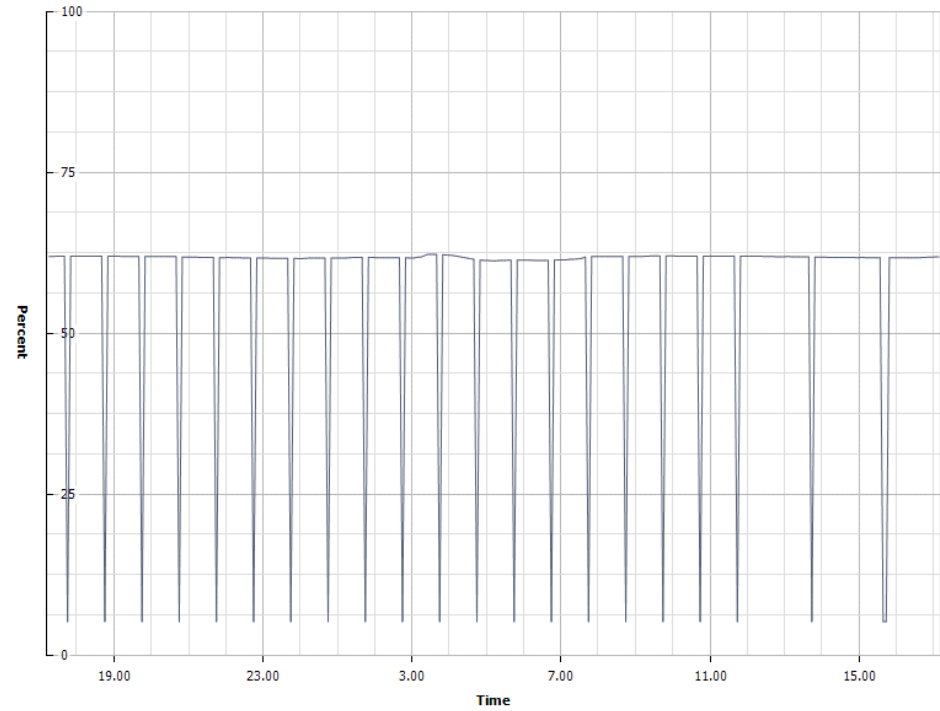
Key	Object	Measurement	Units
■	esx02.mnt.local	Memory Usage (Average)	Percent



Memory/Past Day, 28/04/2011 17:09:48 - 29/04/2011 17:09:48 - esx03.mnt.local



Memory/Past Day, 28/04/2011 17:11:10 - 29/04/2011 17:11:10 - esx04.mnt.local



Performance Chart Legend

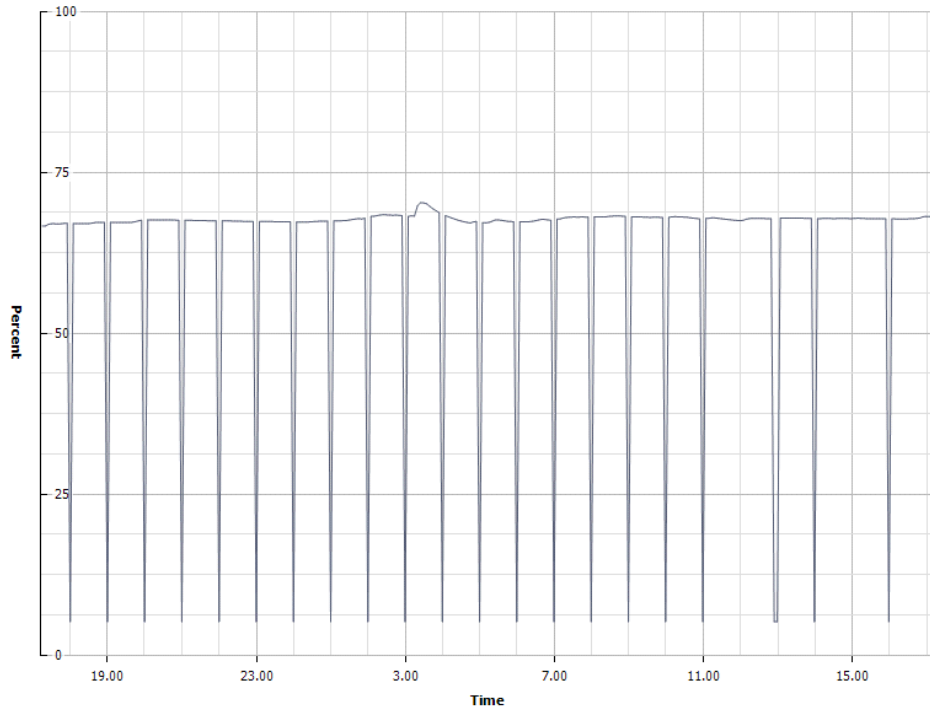
Key	Object	Measurement	Units
■	esx03.mnt.local	Memory Usage (Average)	Percent

Performance Chart Legend

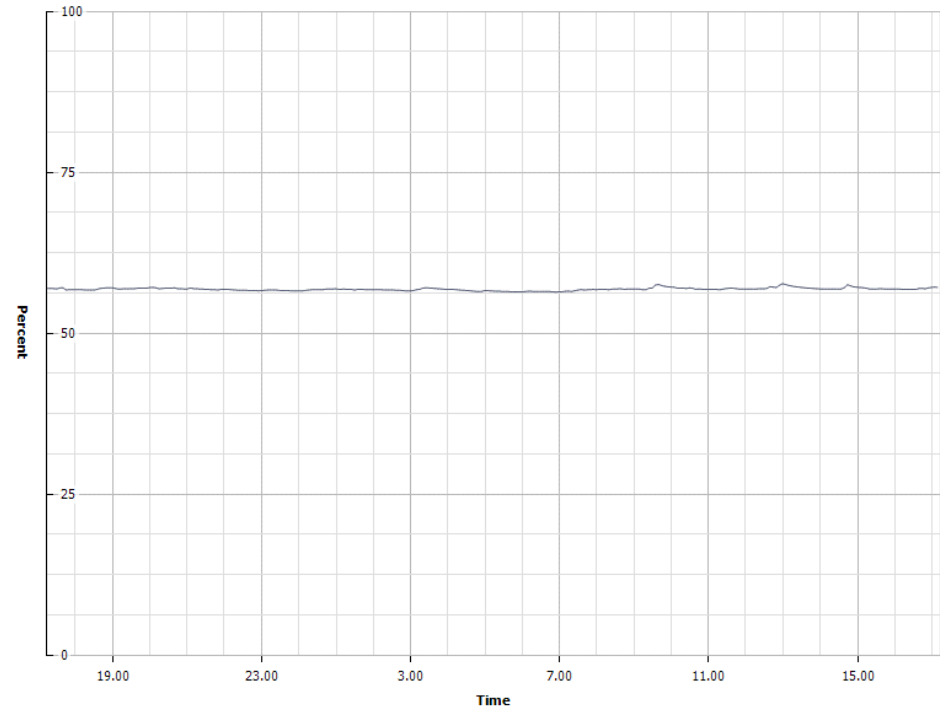
Key	Object	Measurement	Units
■	esx04.mnt.local	Memory Usage (Average)	Percent



Memory/Past Day, 28/04/2011 17:12:14 - 29/04/2011 17:12:14 - esx05.mnt.local



Memory/Past Day, 28/04/2011 17:13:31 - 29/04/2011 17:13:31 - esx06.mnt.local



Performance Chart Legend

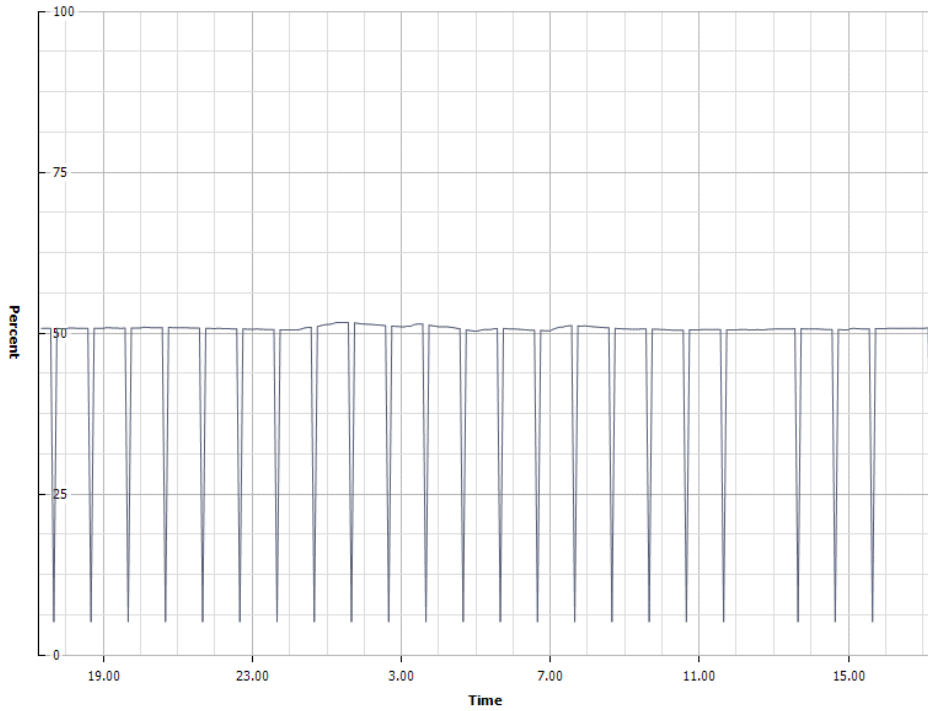
Key	Object	Measurement	Units
■	esx05.mnt.local	Memory Usage (Average)	Percent

Performance Chart Legend

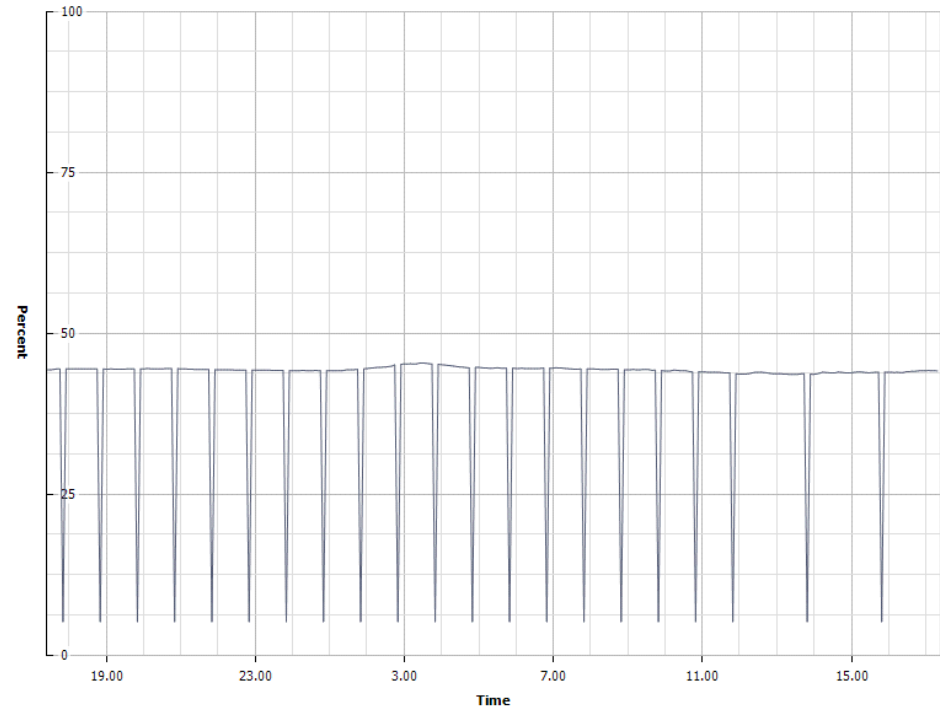
Key	Object	Measurement	Units
■	esx06.mnt.local	Memory Usage (Average)	Percent



Memory/Past Day, 28/04/2011 17:15:30 - 29/04/2011 17:15:30 - esx07.mnt.local



Memory/Past Day, 28/04/2011 17:23:32 - 29/04/2011 17:23:32 - esx08.mnt.local



Performance Chart Legend

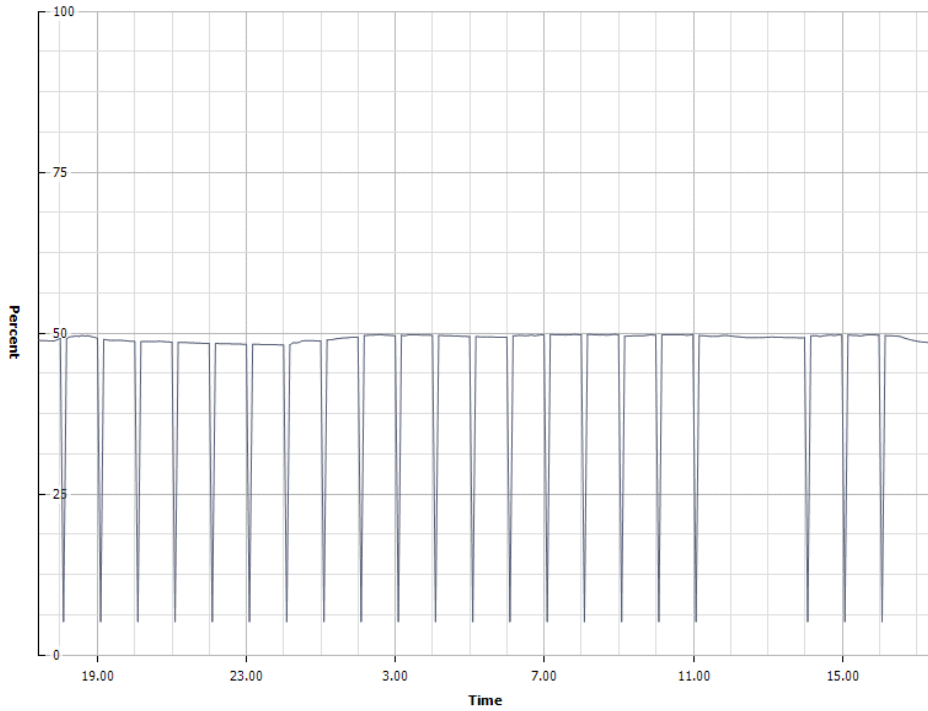
Key	Object	Measurement	Units
■	esx07.mnt.local	Memory Usage (Average)	Percent

Performance Chart Legend

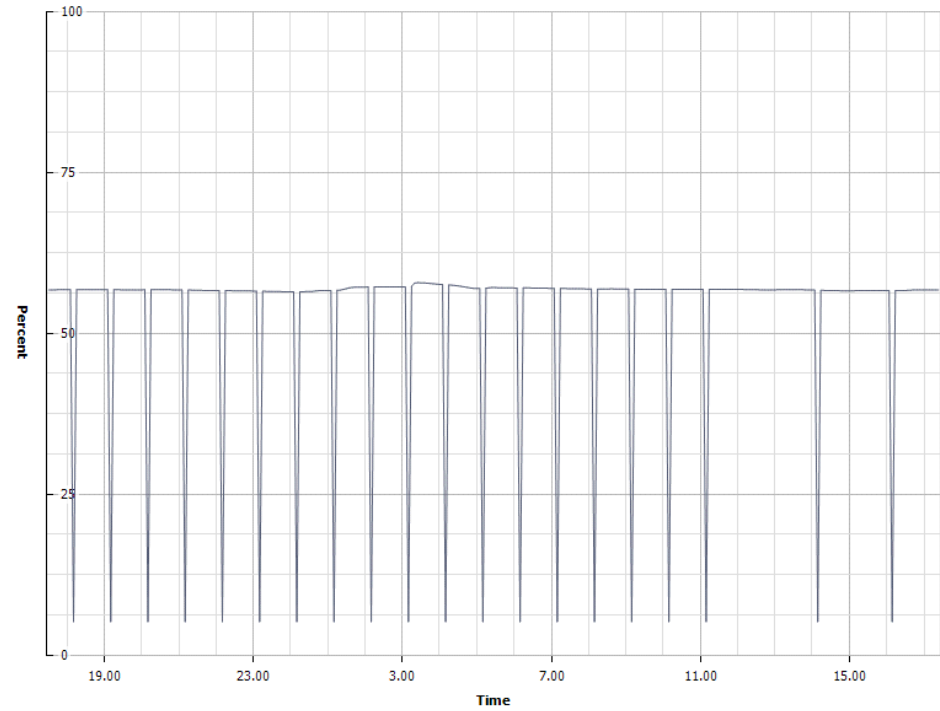
Key	Object	Measurement	Units
■	esx08.mnt.local	Memory Usage (Average)	Percent



Memory/Past Day, 28/04/2011 17:24:57 - 29/04/2011 17:24:57 - esx09.mnt.local



Memory/Past Day, 28/04/2011 17:26:34 - 29/04/2011 17:26:34 - esx10.mnt.local



Performance Chart Legend

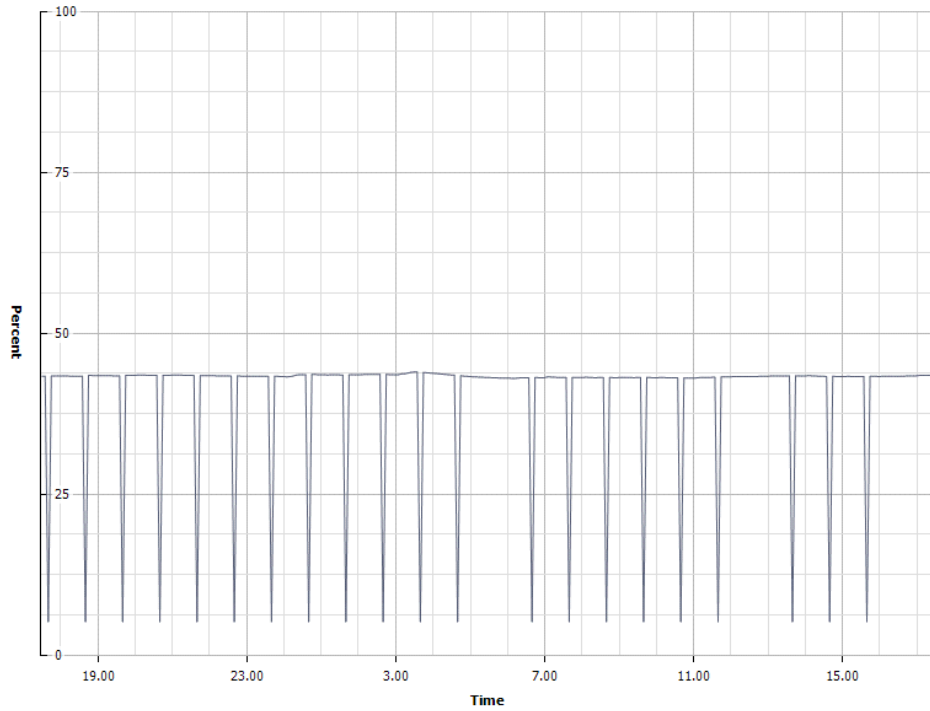
Key	Object	Measurement	Units
■	esx09.mnt.local	Memory Usage (Average)	Percent

Performance Chart Legend

Key	Object	Measurement	Units
■	esx10.mnt.local	Memory Usage (Average)	Percent



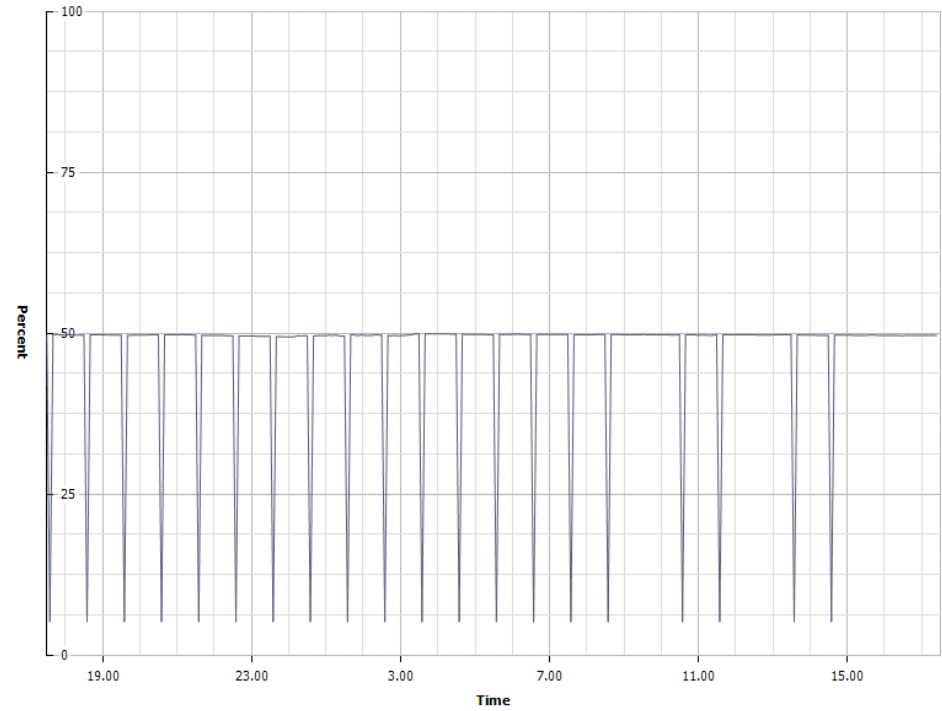
Memory/Past Day, 28/04/2011 17:27:41 - 29/04/2011 17:27:41 - esx11.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx11.mnt.local	Memory Usage (Average)	Percent

Memory/Past Day, 28/04/2011 17:29:41 - 29/04/2011 17:29:41 - esx12.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx12.mnt.local	Memory Usage (Average)	Percent

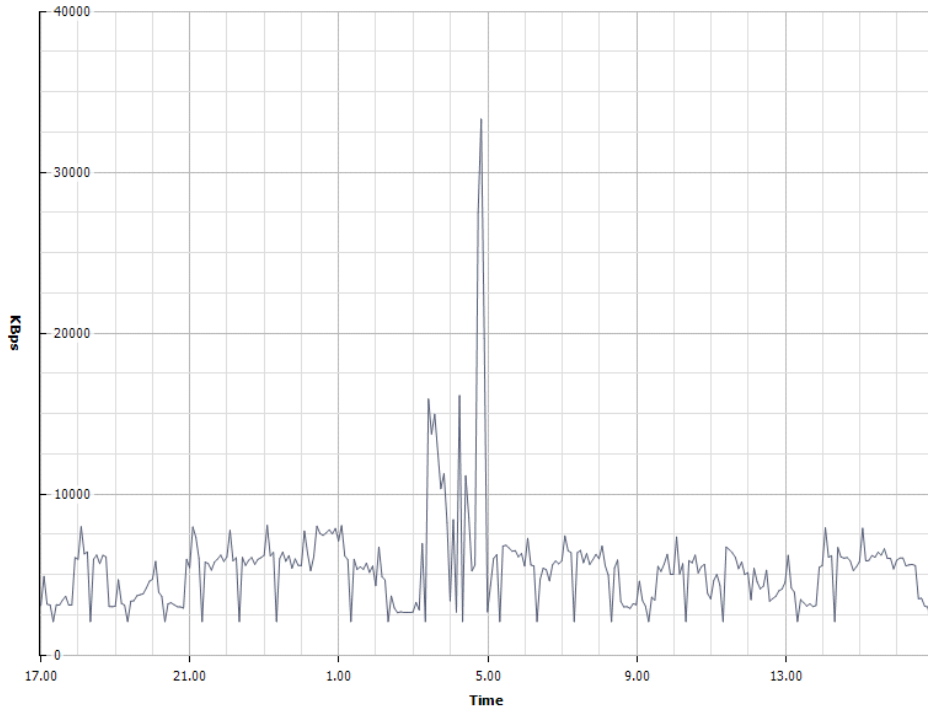


ANALISI PERFORMANCE SU SCALA GIORNALIERA

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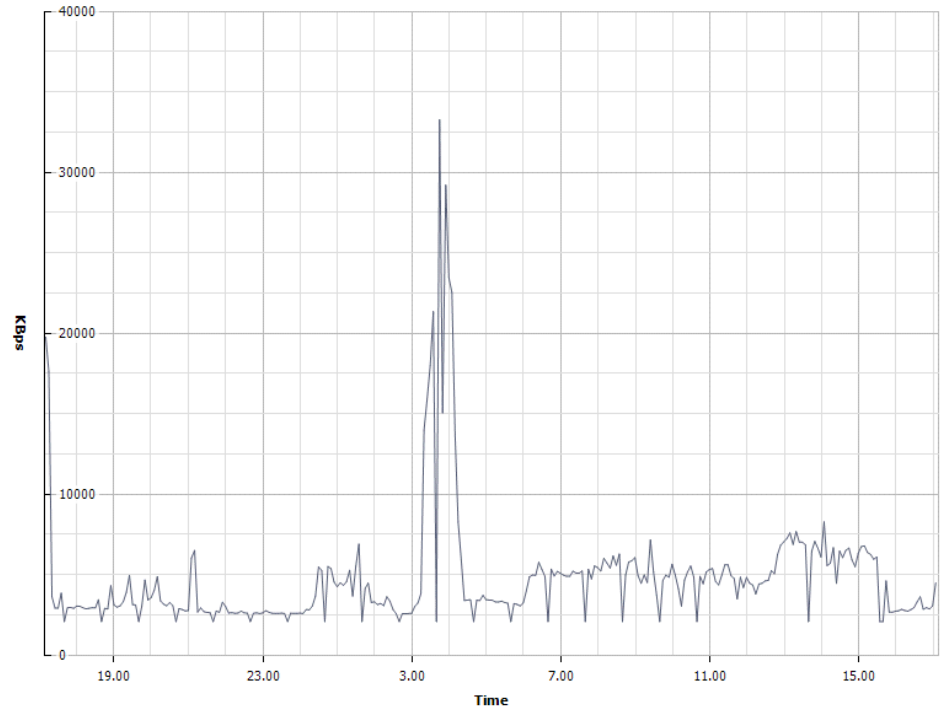
Disk/Past Day, 28/04/2011 16:57:59 - 29/04/2011 16:57:59 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx01.mnt.local	Disk Usage (Average)	KBps

Disk/Past Day, 28/04/2011 17:08:12 - 29/04/2011 17:08:12 - esx02.mnt.local

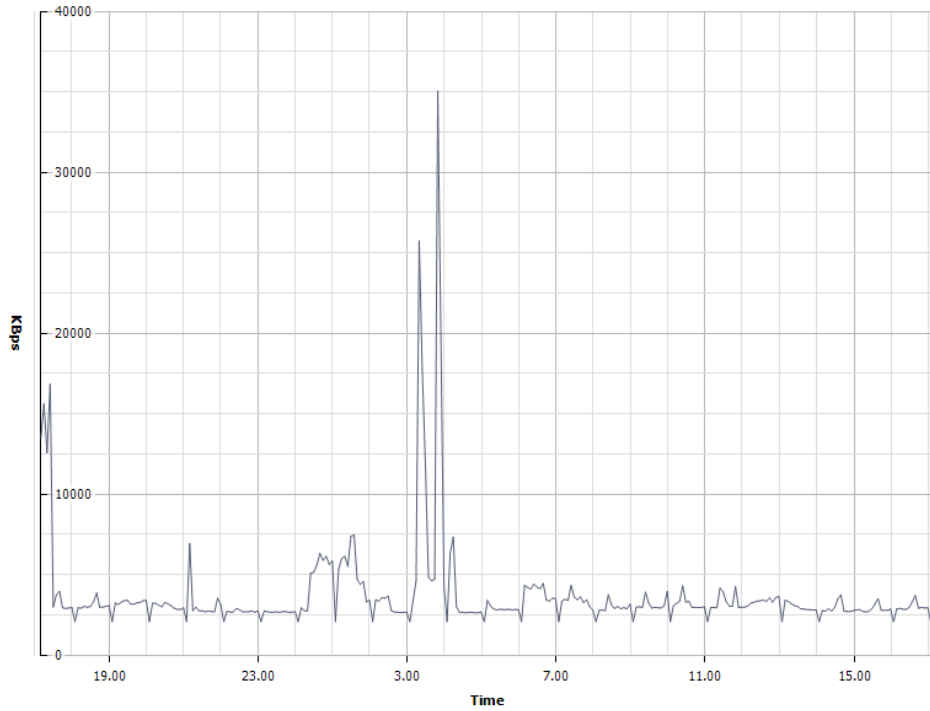


Performance Chart Legend

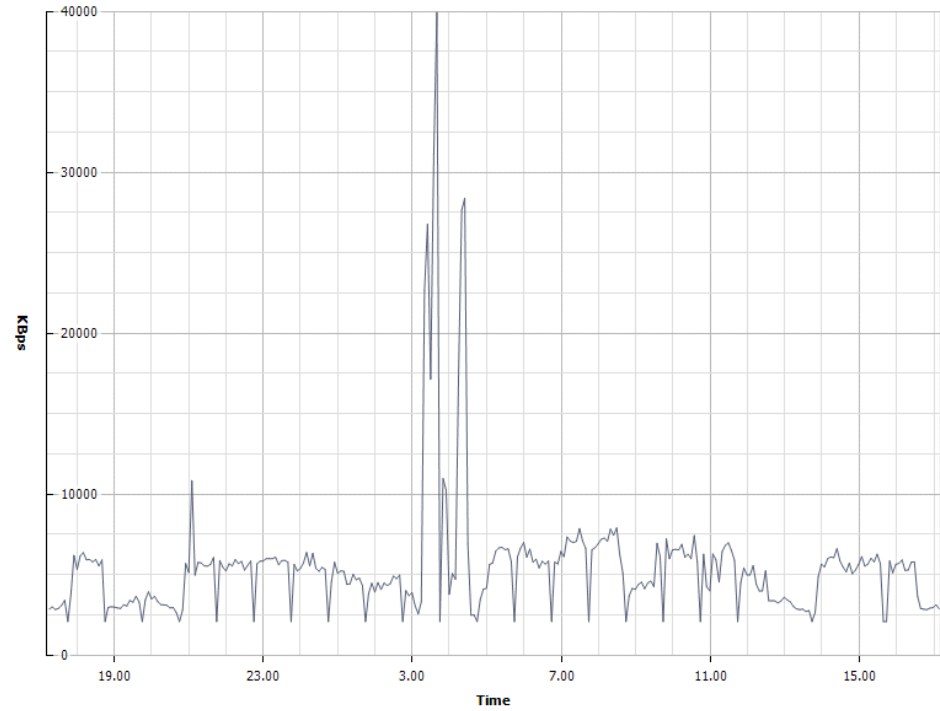
Key	Object	Measurement	Units
■	esx02.mnt.local	Disk Usage (Average)	KBps



Disk/Past Day, 28/04/2011 17:09:36 - 29/04/2011 17:09:36 - esx03.mnt.local



Disk/Past Day, 28/04/2011 17:10:46 - 29/04/2011 17:10:46 - esx04.mnt.local



Performance Chart Legend

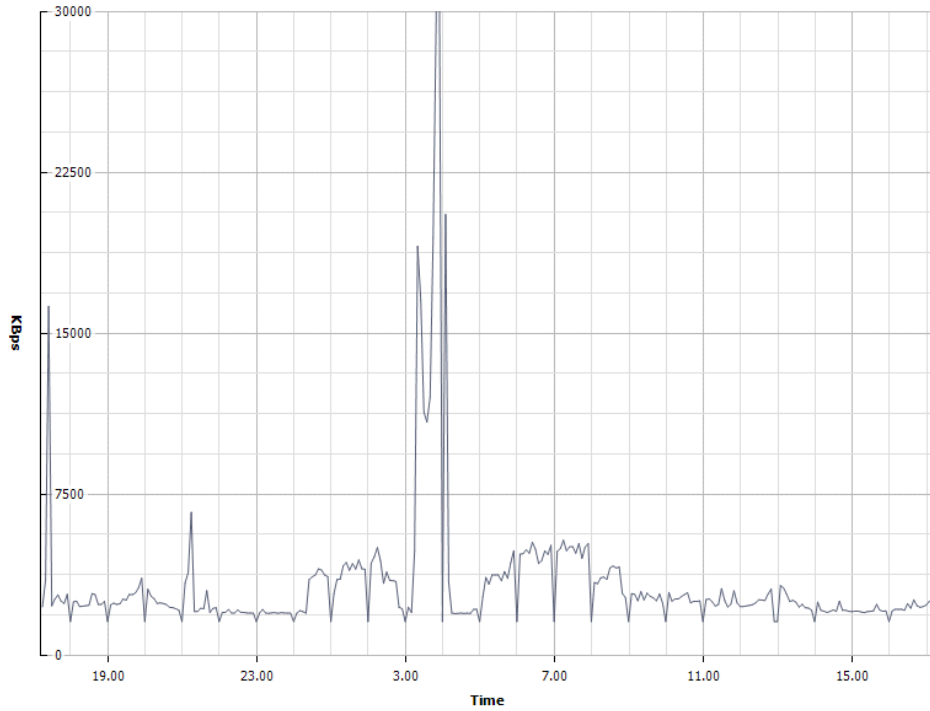
Key	Object	Measurement	Units
■	esx03.mnt.local	Disk Usage (Average)	KBps

Performance Chart Legend

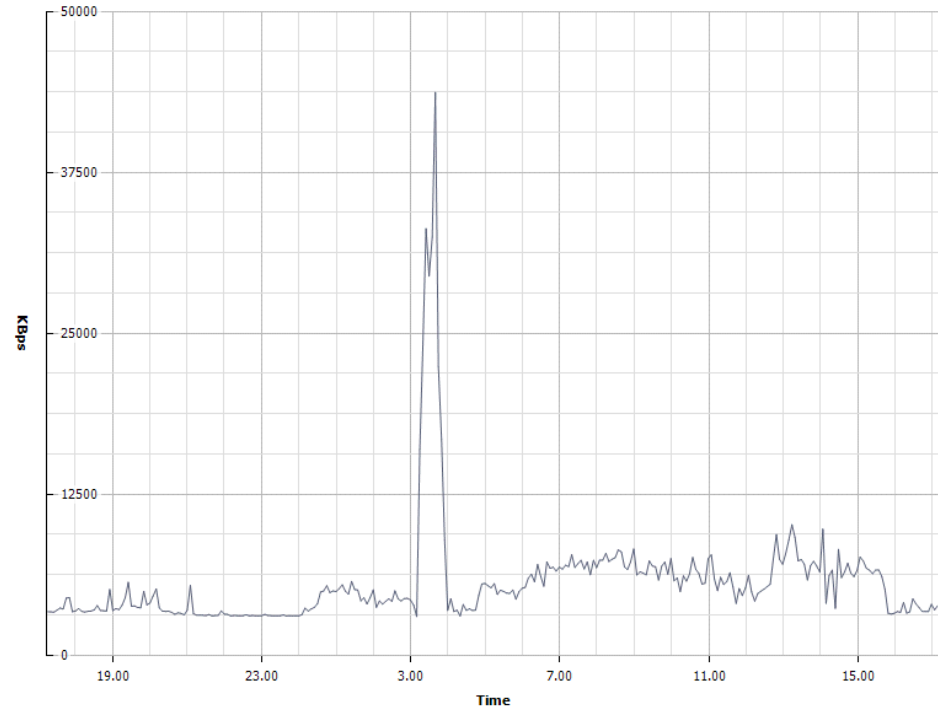
Key	Object	Measurement	Units
■	esx04.mnt.local	Disk Usage (Average)	KBps



Disk/Past Day, 28/04/2011 17:12:01 - 29/04/2011 17:12:01 - esx05.mnt.local



Disk/Past Day, 28/04/2011 17:13:15 - 29/04/2011 17:13:15 - esx06.mnt.local



Performance Chart Legend

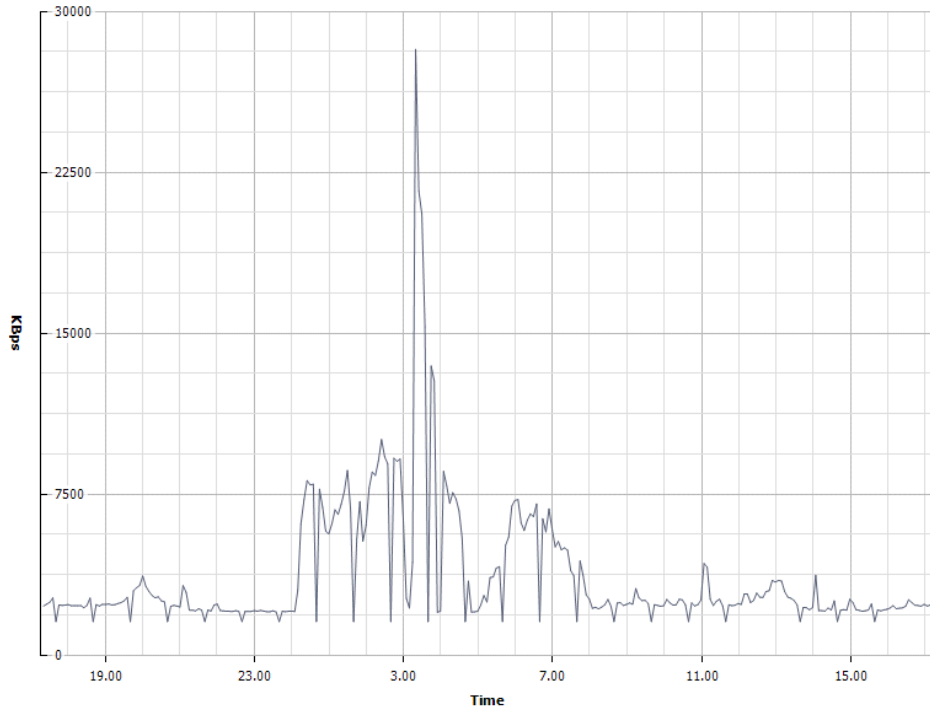
Key	Object	Measurement	Units
■	esx05.mnt.local	Disk Usage (Average)	KBps

Performance Chart Legend

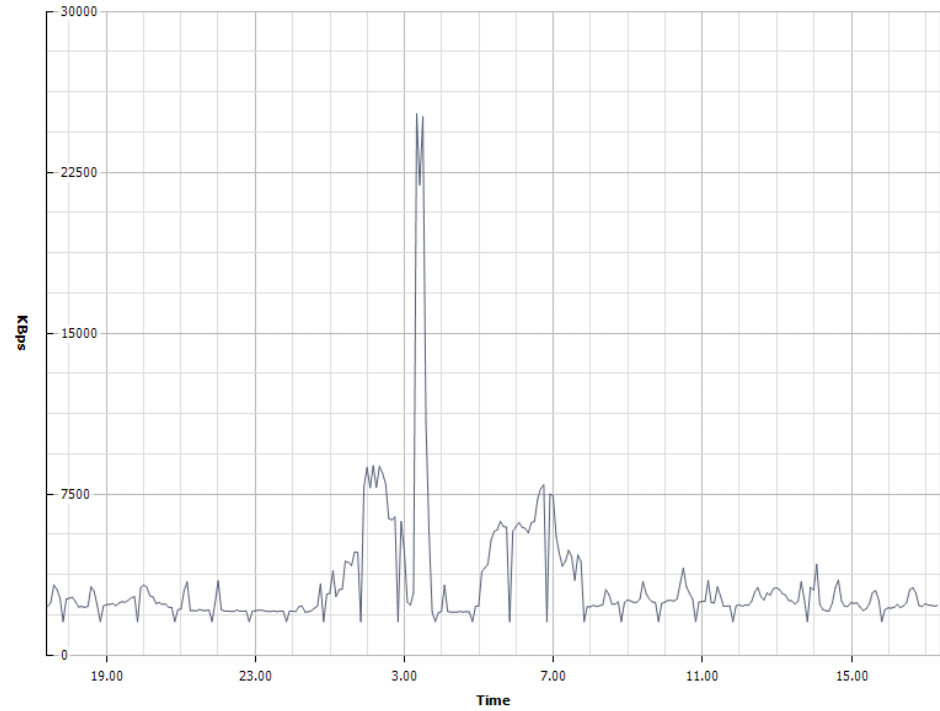
Key	Object	Measurement	Units
■	esx06.mnt.local	Disk Usage (Average)	KBps



Disk/Past Day, 28/04/2011 17:15:16 - 29/04/2011 17:15:16 - esx07.mnt.local



Disk/Past Day, 28/04/2011 17:23:20 - 29/04/2011 17:23:20 - esx08.mnt.local



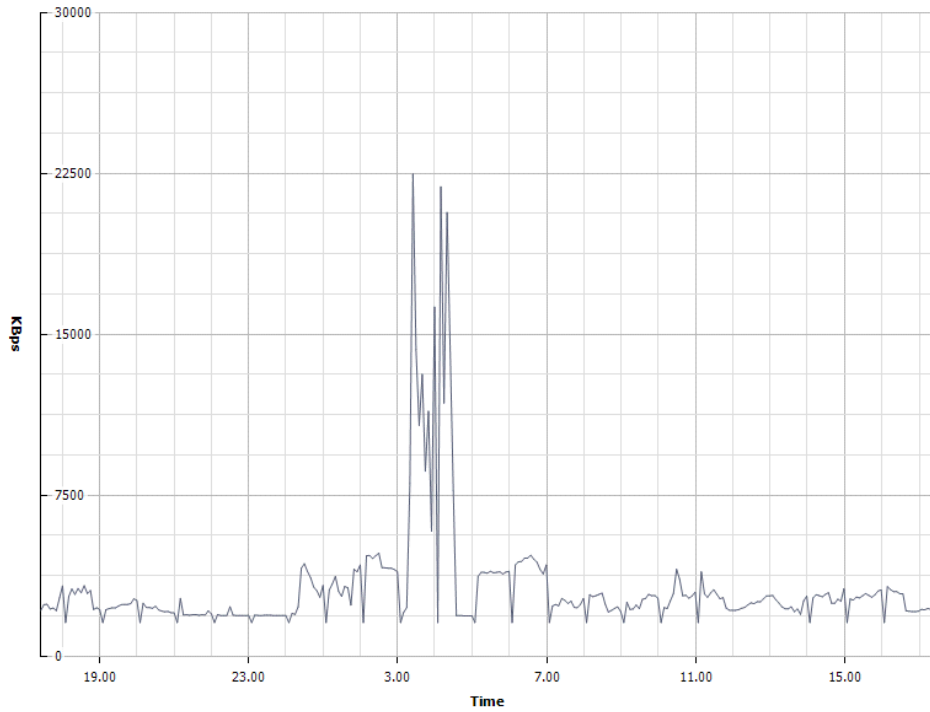
Performance Chart Legend

Key	Object	Measurement	Units
■	esx07.mnt.local	Disk Usage (Average)	KBps

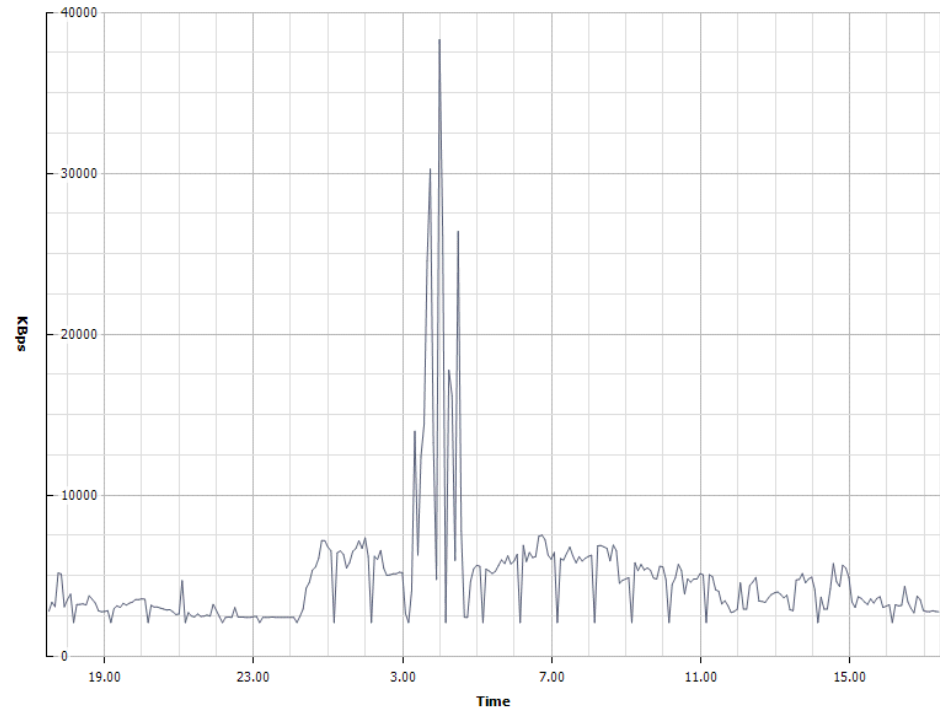
Performance Chart Legend

Key	Object	Measurement	Units
■	esx08.mnt.local	Disk Usage (Average)	KBps

Disk/Past Day, 28/04/2011 17:24:38 - 29/04/2011 17:24:38 - esx09.mnt.local



Disk/Past Day, 28/04/2011 17:26:23 - 29/04/2011 17:26:23 - esx10.mnt.local



Performance Chart Legend

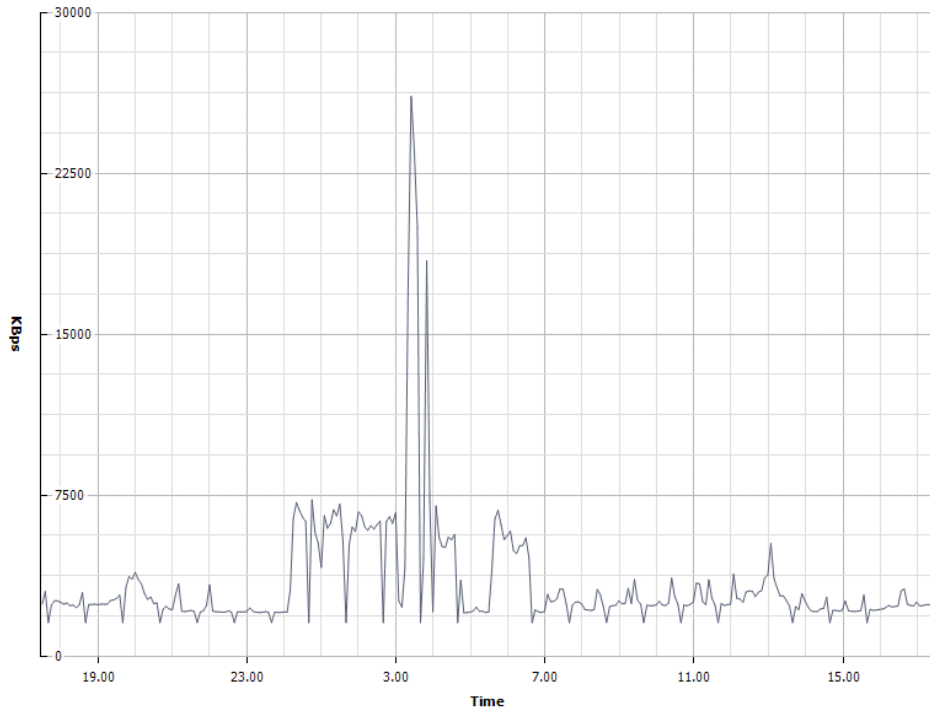
Key	Object	Measurement	Units
■	esx09.mnt.local	Disk Usage (Average)	KBps

Performance Chart Legend

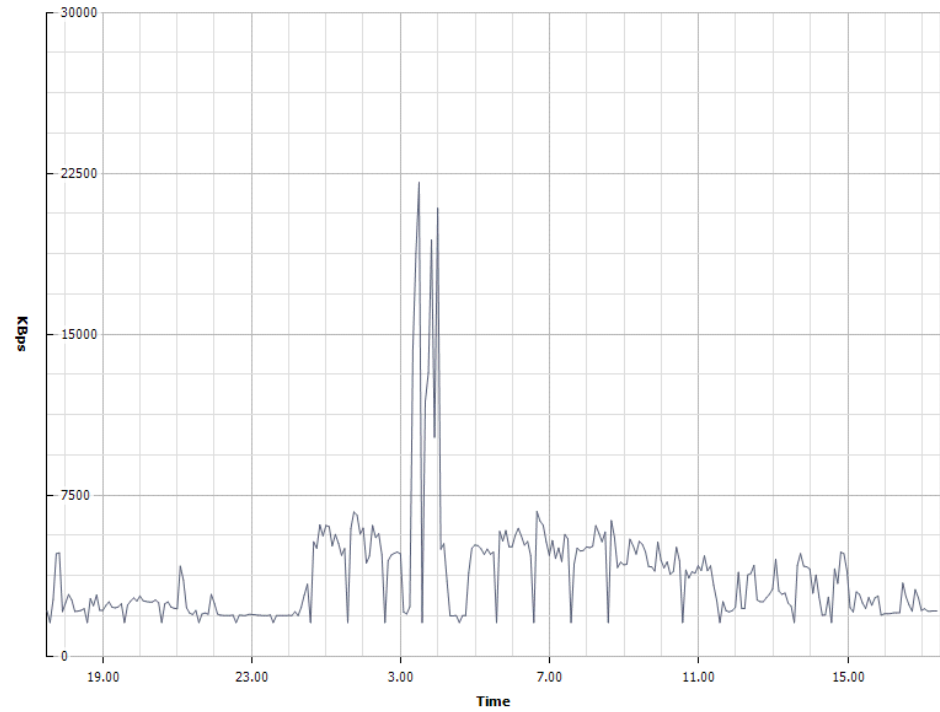
Key	Object	Measurement	Units
■	esx10.mnt.local	Disk Usage (Average)	KBps



Disk/Past Day, 28/04/2011 17:27:30 - 29/04/2011 17:27:30 - esx11.mnt.local



Disk/Past Day, 28/04/2011 17:29:25 - 29/04/2011 17:29:25 - esx12.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx11.mnt.local	Disk Usage (Average)	KBps

Performance Chart Legend

Key	Object	Measurement	Units
■	esx12.mnt.local	Disk Usage (Average)	KBps

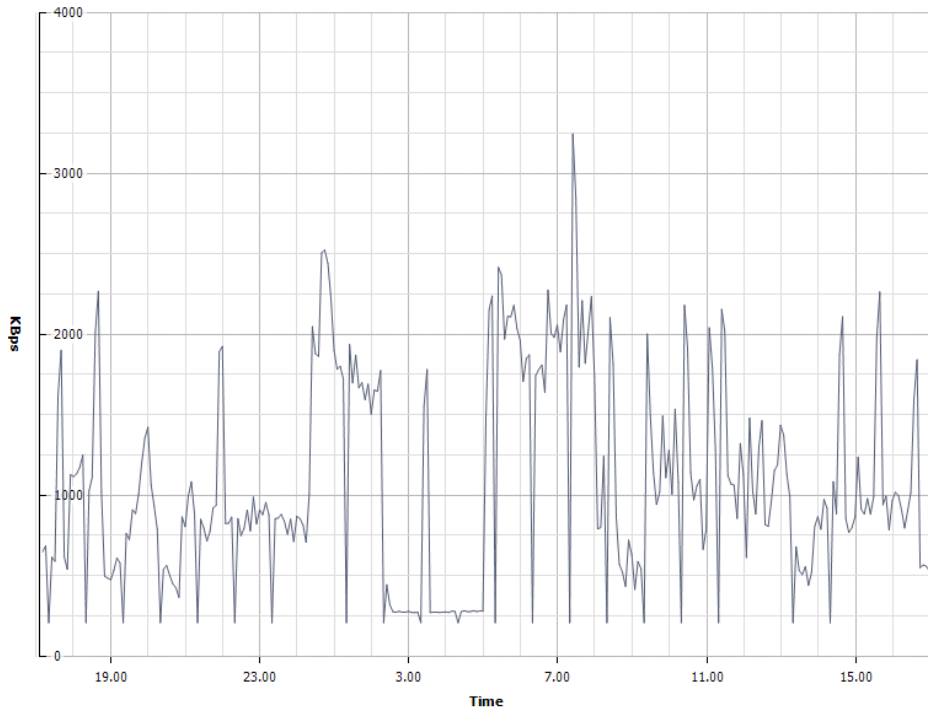


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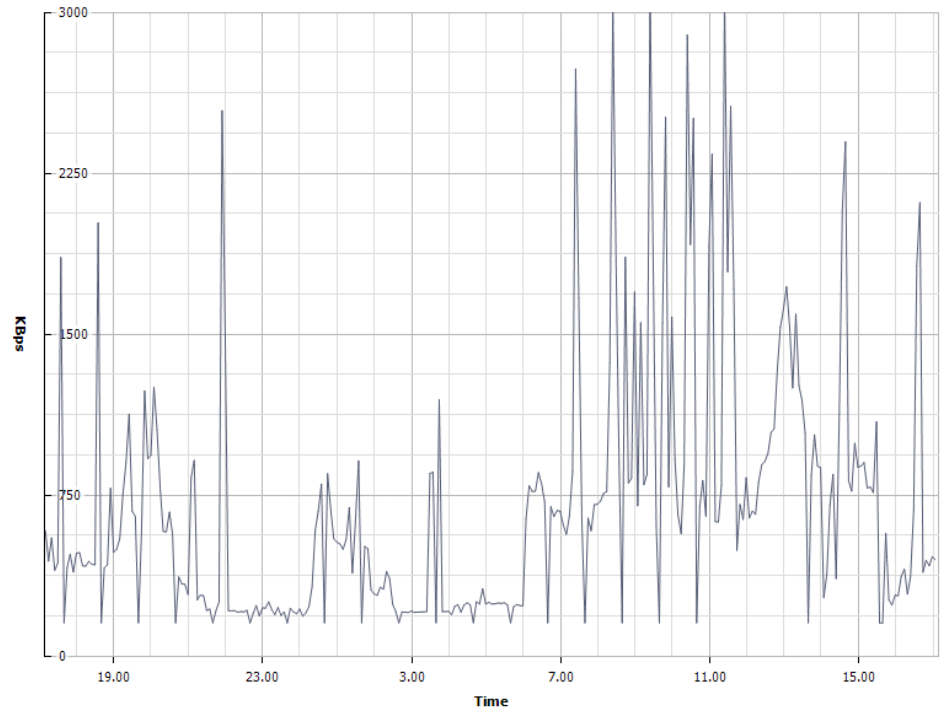
Network/Past Day, 28/04/2011 17:05:15 - 29/04/2011 17:05:15 - esx01.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx01.mnt.local	Network Usage (Average)	KBps

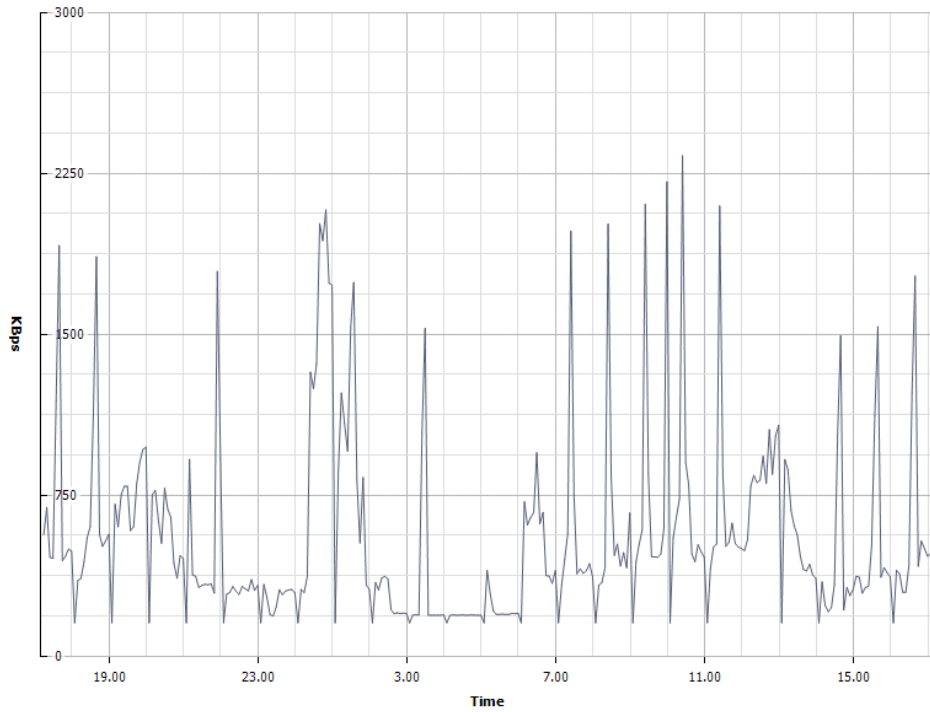
Network/Past Day, 28/04/2011 17:08:43 - 29/04/2011 17:08:43 - esx02.mnt.local



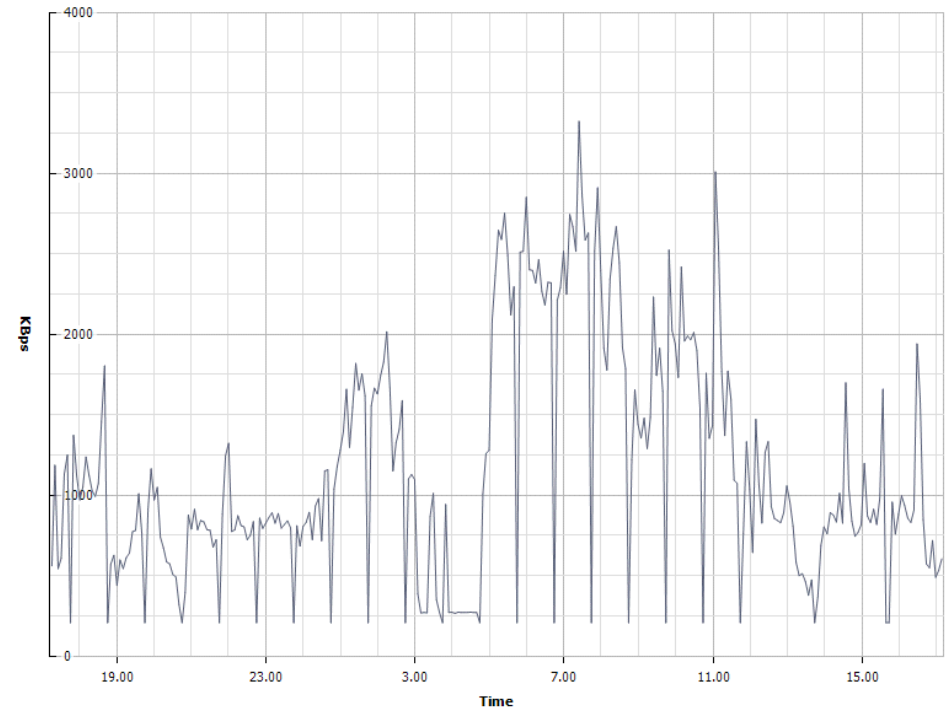
Performance Chart Legend

Key	Object	Measurement	Units
■	esx02.mnt.local	Network Usage (Average)	KBps

Network/Past Day, 28/04/2011 17:10:00 - 29/04/2011 17:10:00 - esx03.mnt.local



Network/Past Day, 28/04/2011 17:11:21 - 29/04/2011 17:11:21 - esx04.mnt.local



Performance Chart Legend

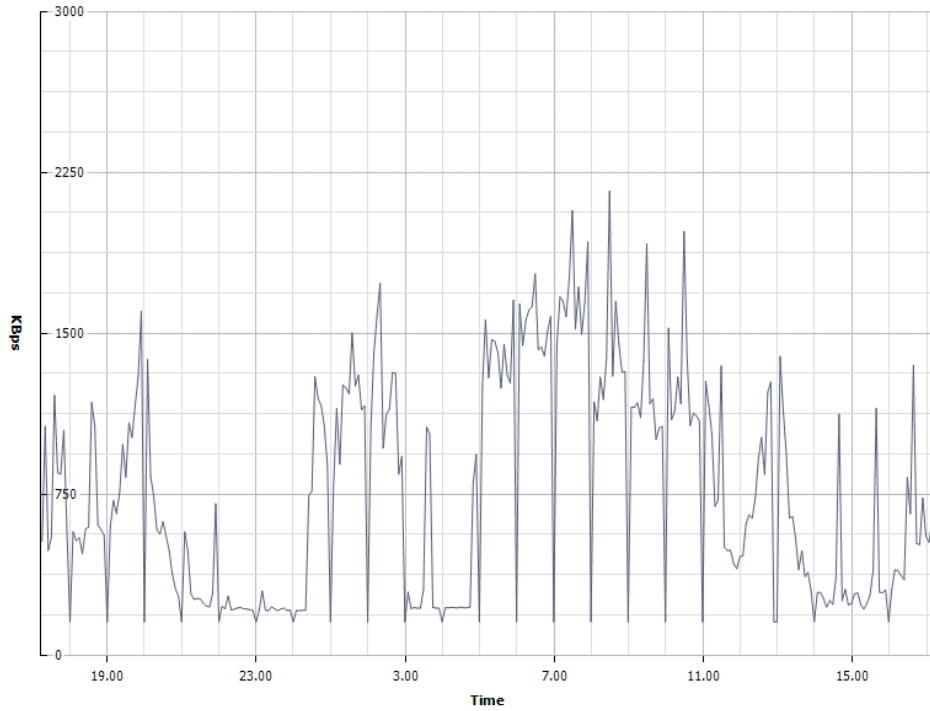
Key	Object	Measurement	Units
■	esx03.mnt.local	Network Usage (Average)	KBps

Performance Chart Legend

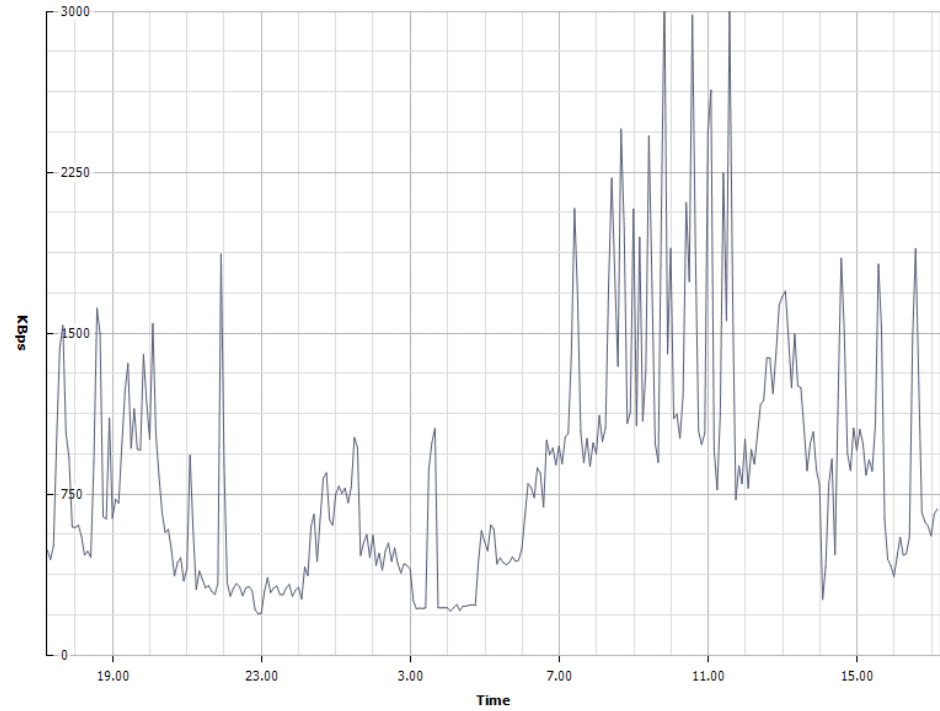
Key	Object	Measurement	Units
■	esx04.mnt.local	Network Usage (Average)	KBps



Network/Past Day, 28/04/2011 17:12:36 - 29/04/2011 17:12:36 - esx05.mnt.local



Network/Past Day, 28/04/2011 17:13:47 - 29/04/2011 17:13:47 - esx06.mnt.local



Performance Chart Legend

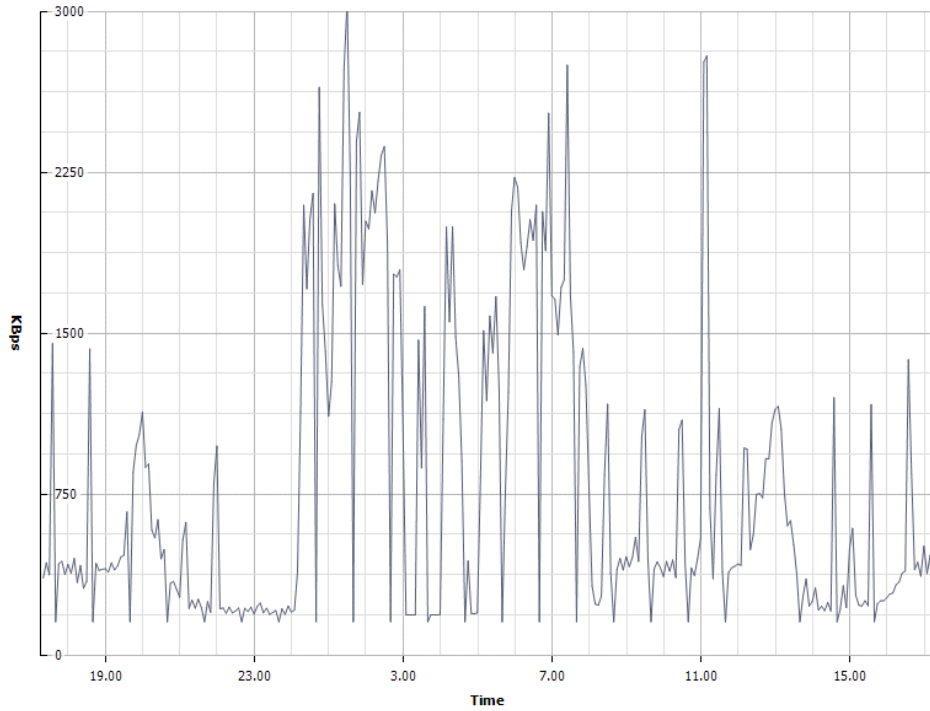
Key	Object	Measurement	Units
■	esx05.mnt.local	Network Usage (Average)	KBps

Performance Chart Legend

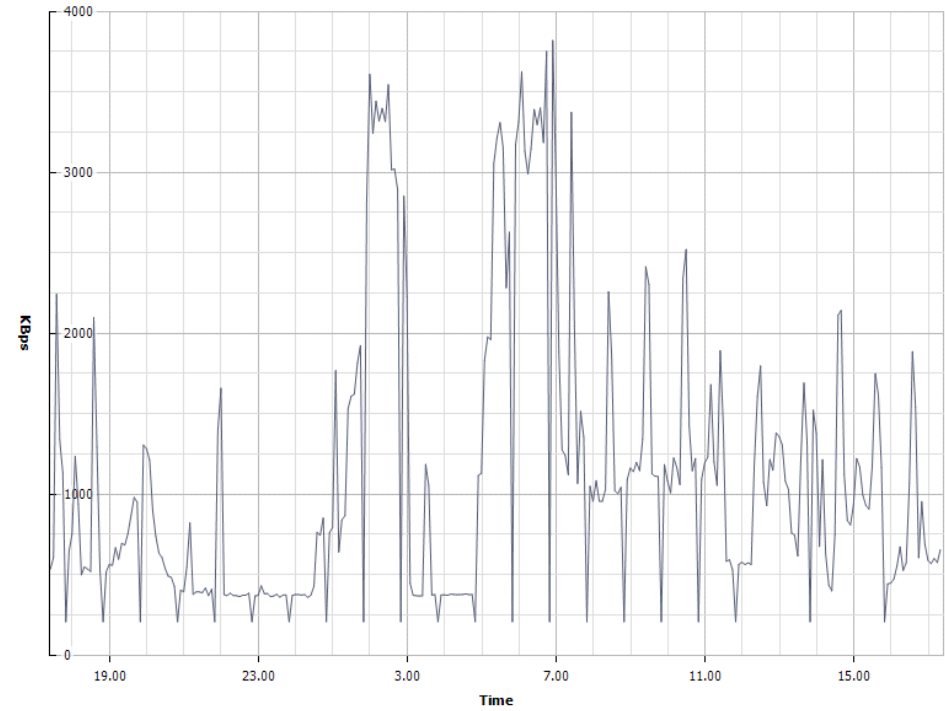
Key	Object	Measurement	Units
■	esx06.mnt.local	Network Usage (Average)	KBps



Network/Past Day, 28/04/2011 17:15:45 - 29/04/2011 17:15:45 - esx07.mnt.local



Network/Past Day, 28/04/2011 17:23:44 - 29/04/2011 17:23:44 - esx08.mnt.local



Performance Chart Legend

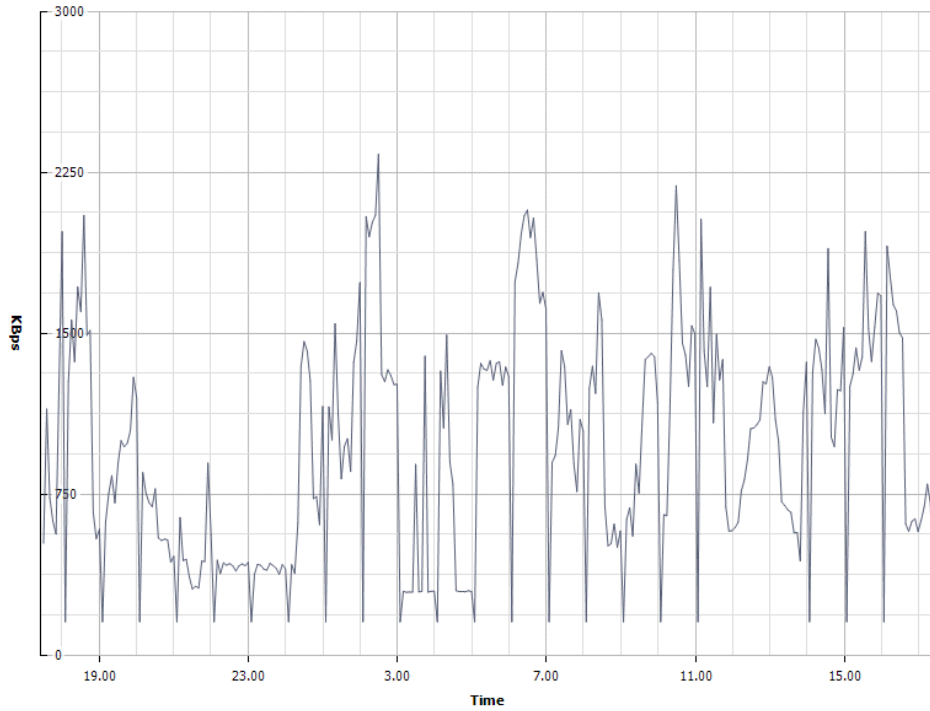
Key	Object	Measurement	Units
■	esx07.mnt.local	Network Usage (Average)	KBps

Performance Chart Legend

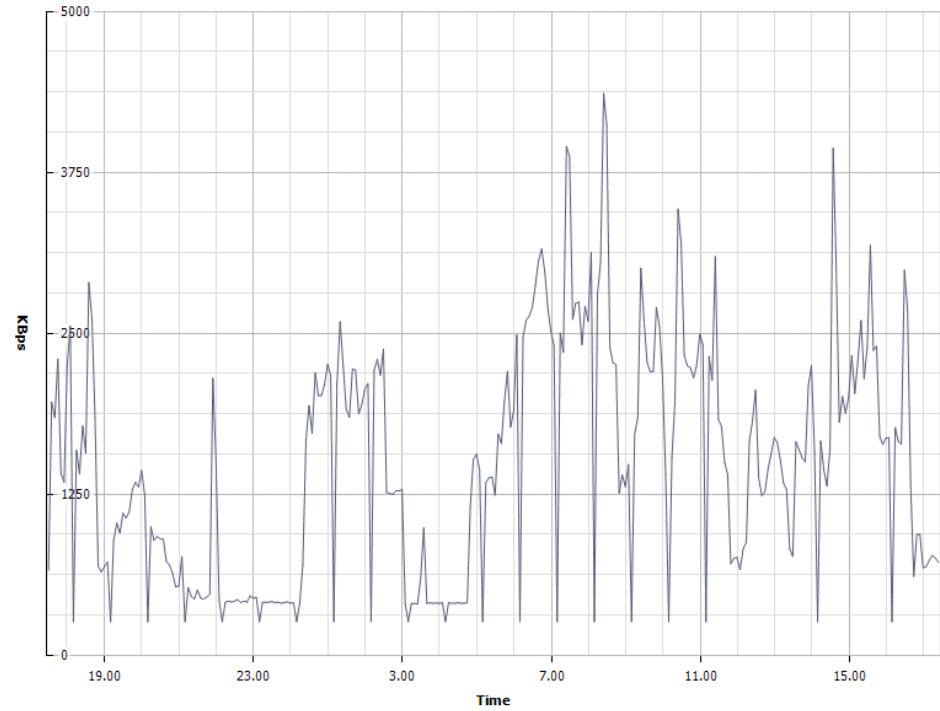
Key	Object	Measurement	Units
■	esx08.mnt.local	Network Usage (Average)	KBps



Network/Past Day, 28/04/2011 17:25:10 - 29/04/2011 17:25:10 - esx09.mnt.local



Network/Past Day, 28/04/2011 17:26:50 - 29/04/2011 17:26:50 - esx10.mnt.local



Performance Chart Legend

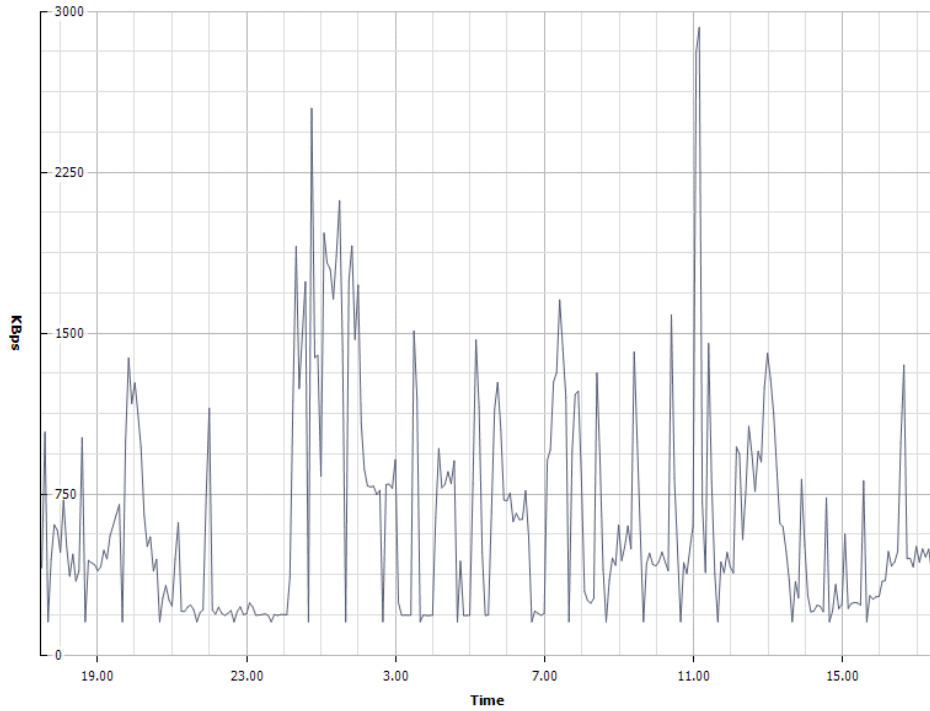
Key	Object	Measurement	Units
■	esx09.mnt.local	Network Usage (Average)	KBps

Performance Chart Legend

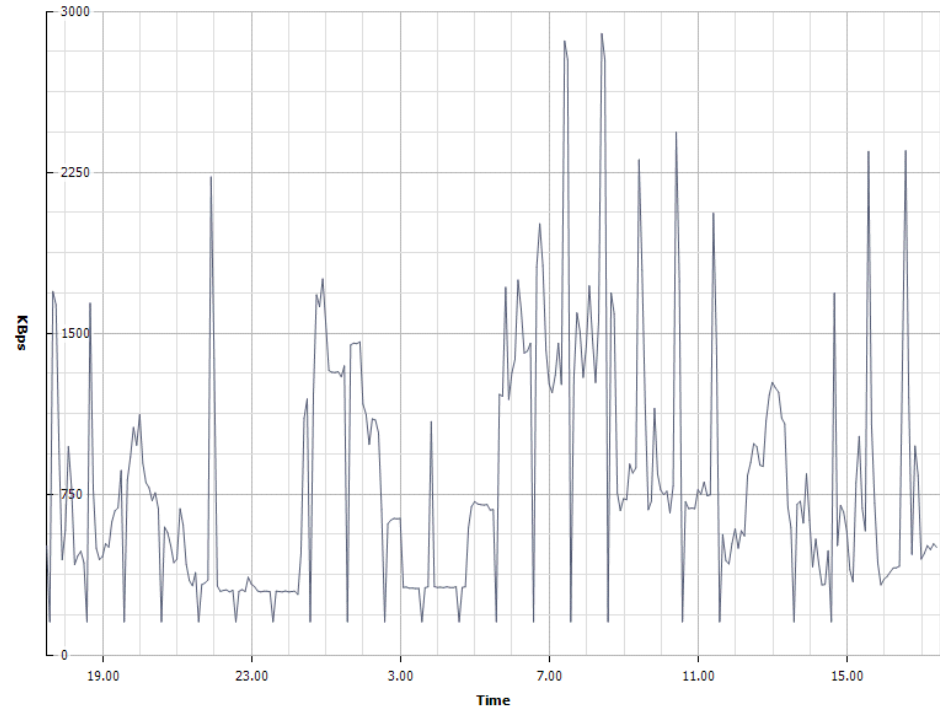
Key	Object	Measurement	Units
■	esx10.mnt.local	Network Usage (Average)	KBps



Network/Past Day, 28/04/2011 17:28:02 - 29/04/2011 17:28:02 - esx11.mnt.local



Network/Past Day, 28/04/2011 17:29:50 - 29/04/2011 17:29:50 - esx12.mnt.local



Performance Chart Legend

Key	Object	Measurement	Units
■	esx11.mnt.local	Network Usage (Average)	KBps

Performance Chart Legend

Key	Object	Measurement	Units
■	esx12.mnt.local	Network Usage (Average)	KBps

Prestazioni SAN

INFARMA_DS4700 - Performance Monitor

Devices	Total IOs	Read Percentage	Cache Hit Percentage	Current KB/second	Maximum KB/second	Current IO/second	Maximum IO/second
Logical Drive OS_ESX01	90	73,3	0,0	0,0	36,6	0,0	7,8
Logical Drive OS_ESX02	90	73,3	0,0	0,0	36,6	0,0	7,6
Logical Drive OS_ESX03	90	73,3	0,0	0,0	36,4	0,0	7,6
Logical Drive OS_ESX04	45	73,3	0,0	0,0	36,4	0,0	7,6
Logical Drive OS_ESX05	45	73,3	0,0	0,0	36,4	0,0	7,6
Logical Drive OS_ESX06	46	71,7	0,0	0,0	36,4	0,0	7,6
Logical Drive OS_ESX07	45	73,3	0,0	0,0	36,2	0,0	7,2
Logical Drive OS_ESX08	46	71,7	0,0	0,0	36,6	0,0	7,8
Logical Drive OS_ESX09	45	73,3	100,0	0,0	36,4	0,0	7,6
Logical Drive OS_ESX10	45	73,3	100,0	0,0	36,4	0,0	7,4
Logical Drive OS_ESX11	45	73,3	0,0	0,0	36,4	0,0	7,6
Logical Drive OS_ESX12	45	73,3	100,0	0,0	36,4	0,0	7,6
Logical Drive DATA_ESX05	160.771	1,4	35,3	327,8	2.634,0	41,4	243,5
Logical Drive DATA_ESX03	71.928	1,9	42,9	213,8	1.340,4	35,0	99,4
Logical Drive DATA2_ESX04	273.353	1,7	48,4	333,0	9.457,0	57,2	439,2
Logical Drive DATA2_ESX01	486.511	2,6	74,9	1.845,2	4.439,6	218,0	604,8
Logical Drive DATA_ESX04	662.150	0,7	41,1	2.690,2	5.794,8	371,2	725,6
Logical Drive DATA2_ESX02	241.813	3,7	51,8	931,4	3.225,8	125,0	376,8
Logical Drive DATA2_ESX03	568.874	1,3	33,5	1.612,0	7.467,4	211,2	695,0
Logical Drive DATA_ESX02	1.495.408	5,6	41,0	5.616,4	28.031,8	635,4	2.758,8
CONTROLLER IN SLOT A	3.213.620	3,4	45,7	11.763,8	33.257,4	1.435,8	3.622,6
Logical Drive DATA_ESX01	1.241.900	17,2	68,7	3.100,2	46.800,2	419,2	3.552,6
CONTROLLER IN SLOT B	1.989.765	11,6	68,0	4.906,2	49.236,4	677,8	3.880,8
STORAGE SUBSYSTEM TOTALS	5.203.385	6,5	63,1	16.670,0	58.650,2	2.113,6	5.975,0

Start: 29/04/11 12.35.17 Stop: Time Monitored: 00:32:26



Conclusioni

La EUROLAB, come IBM Business Partner certificato e qualificato da oltre 15 anni nelle soluzioni infrastrutturali ed in possesso dei seguenti riconoscimenti:

- componente della IBM Blade Value Community come da URL

http://www-304.ibm.com/jct03004c/businesscenter/smb/it/it/bladecommunity/gcl_xmlid/70568

- certificazioni acquisite:
 - IBM High End Disk Solutions
 - IBM Modular Systems – System X & BladeCenter Top Gun
 - VMWARE Enterprise Partner

certifica che la soluzione BLADE-DS4700-VMWARE Infarma sopra descritta, è stata assemblata e configurata secondo le specifiche e nel rispetto dei requisiti di compatibilità e funzionalità forniti dalle rispettive case costruttrici

Alla luce di quanto riportato si possono evincere le seguenti considerazioni:

- Nell'ora di punta di massimo carico utente l'intera infrastruttura assorbe serenamente il carico attestando mediamente le risorse disponibili sui seguenti livelli:
 - o I **processori** si attestano mediamente e con rassicurante costanza nel tempo al di sotto del **25% di carico**
 - o La **RAM** è mediamente utilizzata al **60% del totale** disponibile
 - o I **Dischi** garantiscono uno scambio di dati mediamente al di sotto **dei 5 MBytes/sec** fatta eccezione per alcune ore notturne su alcune macchine dove la mole di dati scambiata, in virtù della esigenza di effettuare i salvataggi, è più importante ma **comunque ampiamente al di sotto dei 10 MB/sec (80Mbps)**
 - o Mentre **Globalmente lo Storage** percepisce transazioni con picchi rilevati nell'ora di punta misurati a **58.650 KB/sec (469.2 Mbps)** ben al di sotto dei 4Gbps supportati dai controller
 - o Dato questo che deve essere affiancato alla misura delle richieste di transazioni nell'unità di tempo che riportano un picco di **5900 I/O per sec.**
 - o Informazione che pone bene in evidenza il fatto che il volume di dati spostati avviene a fronte di una elevato numero di piccolissime richieste. A conferma del tipico comportamento di accesso a dati DB
 - o La **rete** attestata e ripartita su più apparati coinvolge ad ogni modo una mole di traffico che mediamente si attesta ampiamente **al di sotto dei 1500 KB/sec (12Mbps)**, informazione questa che se presa singolarmente per singolo sistema è decisamente rassicurante, ma nella globalità potremmo stimare per eccesso **comunque al di sotto dei 100Mbps quindi al di sotto del 30% del carico massimo sostenibile** sia dagli apparati attivi che dalla dorsale di comunicazione verso il mondo esterno