

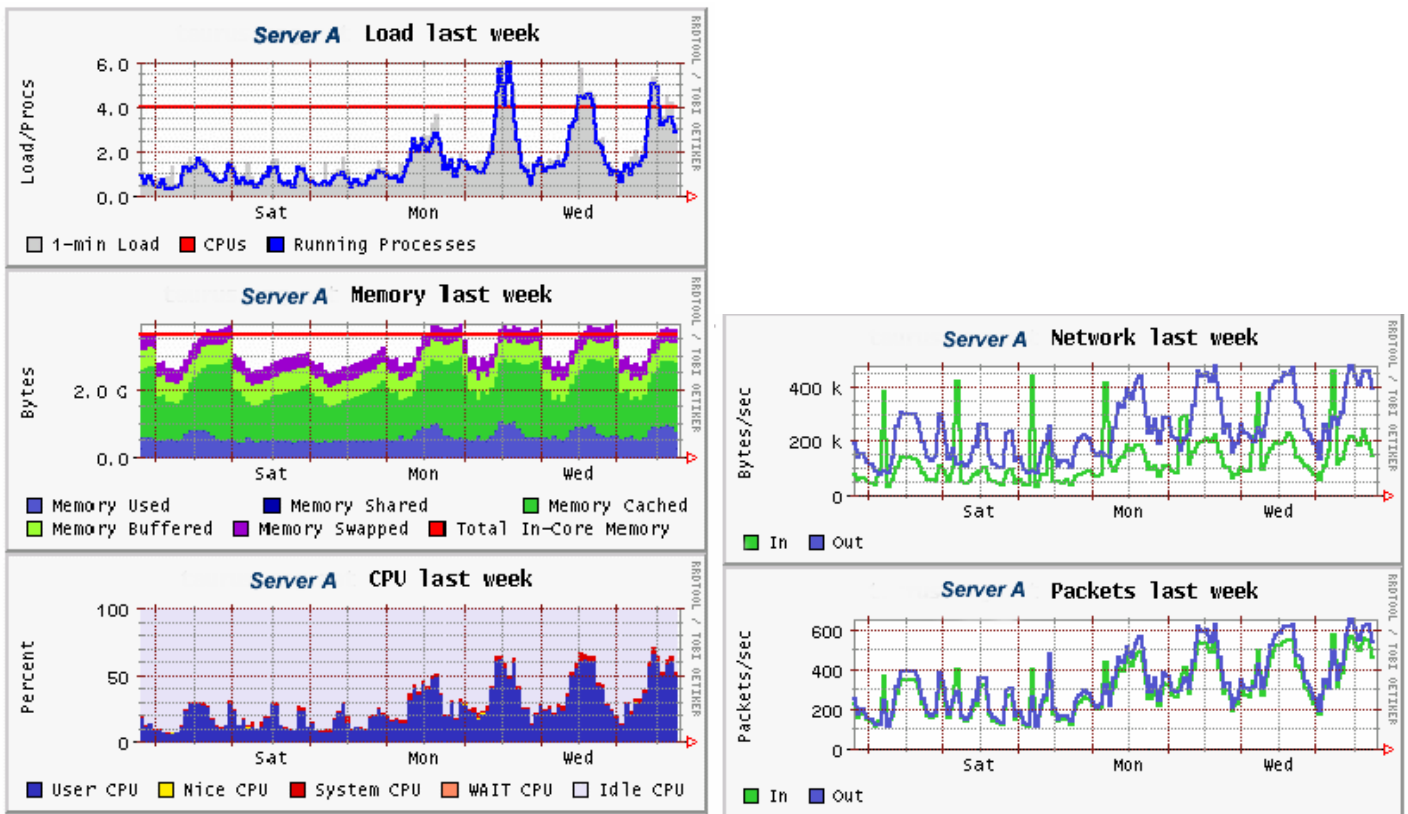
TnR Global, LLC Web Applications Performance Management Services

Examples of Tools We Use: Ganglia, Nagios, Munin, Linux Virtual Server Monitoring

Ganglia

Ganglia is a scalable distributed monitoring system for high-performance computing systems such as clusters and Grids. It is based on a hierarchical design targeted at federations of clusters. It leverages widely used technologies such as XML for data representation, XDR for compact, portable data transport, and RRDtool for data storage and visualization. <http://ganglia.sourceforge.net/>

Examples of Ganglia server monitoring charts:



Nagios

Nagios is an enterprise-class monitoring solution for hosts, services, and networks released under an Open Source license. www.nagios.org

Example of Nagios server monitoring table and alert messages:

06-20-2007 15:53:32 to 06-21-2007 15:53:32
 Duration: 1d 0h 0m 0s

Service State Breakdowns:



State	Type / Reason	Time	% Total Time	% Known Time
OK	Unscheduled	0d 23h 54m 6s	99.590%	99.590%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 23h 54m 6s	99.590%	99.590%
WARNING	Unscheduled	0d 0h 0m 0s	0.000%	0.000%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 0h 0m 0s	0.000%	0.000%
UNKNOWN	Unscheduled	0d 0h 5m 54s	0.410%	0.410%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 0h 5m 54s	0.410%	0.410%
CRITICAL	Unscheduled	0d 0h 0m 0s	0.000%	0.000%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 0h 0m 0s	0.000%	0.000%
Undetermined	Nagios Not Running	0d 0h 0m 0s	0.000%	
	Insufficient Data	0d 0h 0m 0s	0.000%	
	Total	0d 0h 0m 0s	0.000%	
All	Total	1d 0h 0m 0s	100.000%	100.000%

Examples of Alerts we set up to receive via E-Mail or Pager:

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***** Nagios *****

Notification Type: PROBLEM
Service: check_load
Host: Server A
Address: 218.47.257.199
State: CRITICAL

Date/Time: Wed Jun 20 11:32:38 EDT 2007

Additional Info:

CRITICAL - load average: 55.20, 23.30, 12.88
    
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***** Nagios *****

Notification Type: RECOVERY
Service: HTTP
Host: serverA.support.tnrglobal
Address: serverA.support.tnrglobal
State: OK

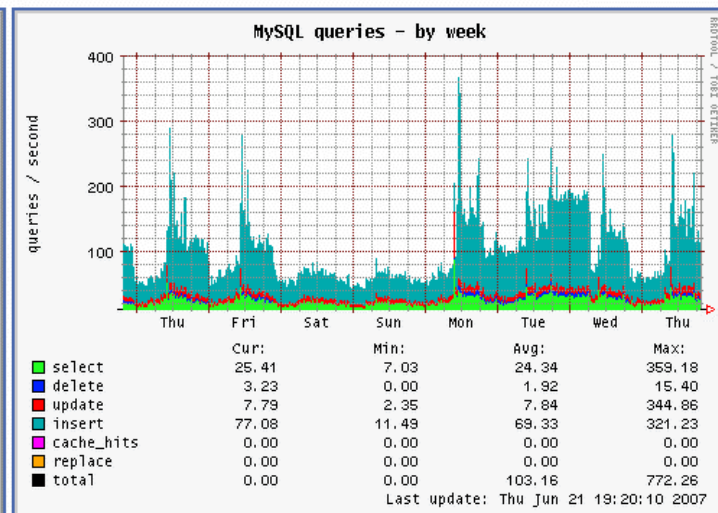
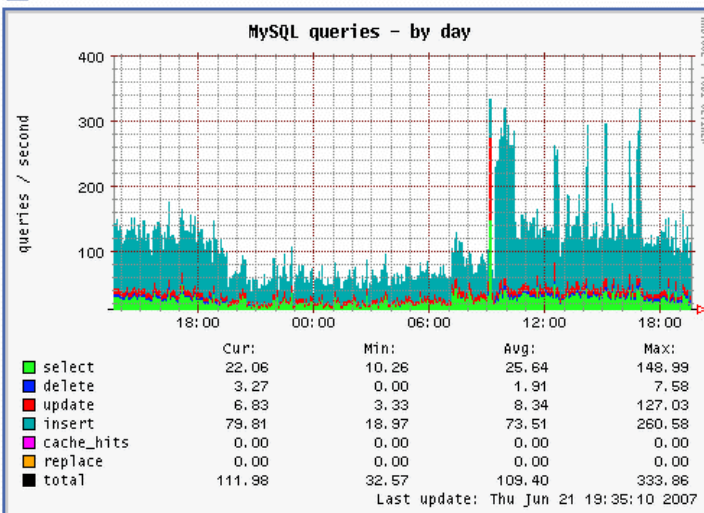
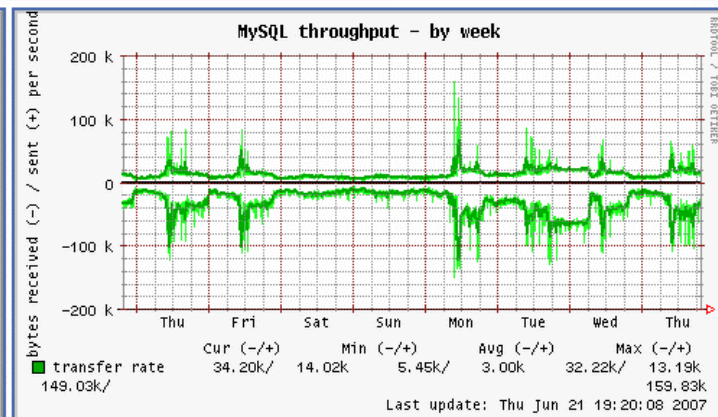
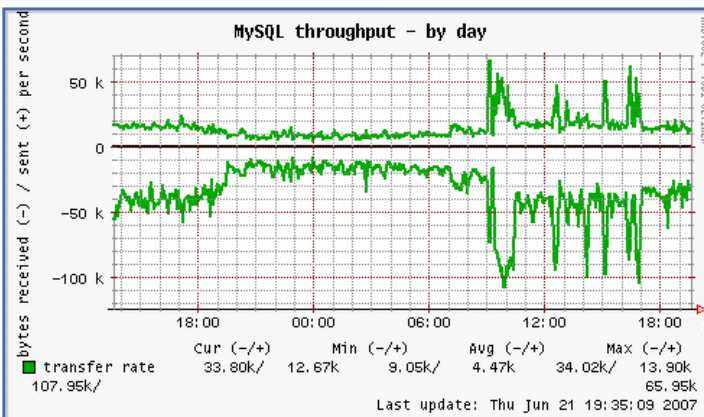
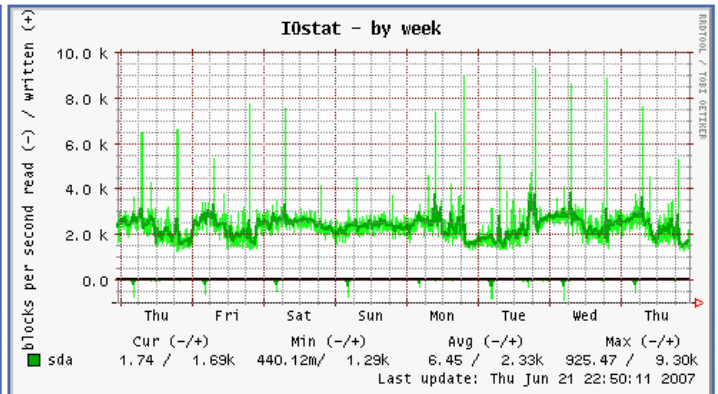
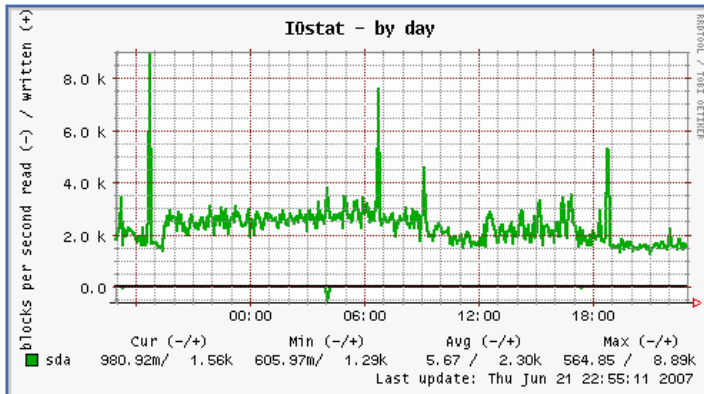
Date/Time: Wed Jun 20 15:31:36 EDT 2007

Additional Info:

HTTP OK HTTP/1.1 200 OK - 1861 bytes in
0.122 seconds
    
```

Munin and Monit

Munin produces graphics about nearly every aspect of your server(s) (load average, memory usage, CPU usage, MySQL throughput, eth0 traffic, etc.) and **monit** checks the availability of services like Apache, MySQL, Postfix and takes the appropriate action such as a restart if it finds a service is not behaving as expected. The combination of the two provides full monitoring: graphics that lets you recognize current or upcoming problems, and a service that ensures the availability of the monitored services



Linux Virtual Server Monitoring Graphs

