

# NETUITIVE 5.5 REPORTS



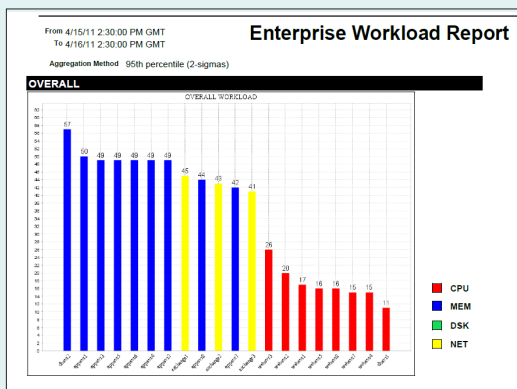
This document describes the reports available in Netuitive 5.5, including some sample screen shots. Netuitive 5.5 reports expand upon the legacy Health and Workload reports by adding a new General Purpose report, and a number of special Virtualization reports - including summaries, forecasts, and chargeback. As in previous versions of Netuitive, all reports are in sharable PDF format, and can be scheduled to run automatically based on saved parameters.

Customized reports can be developed by exporting data from Netuitive's Performance Management Database (PMDB) to third-party reporting tools, or by leveraging JasperReports, the open-source Java reporting tool.

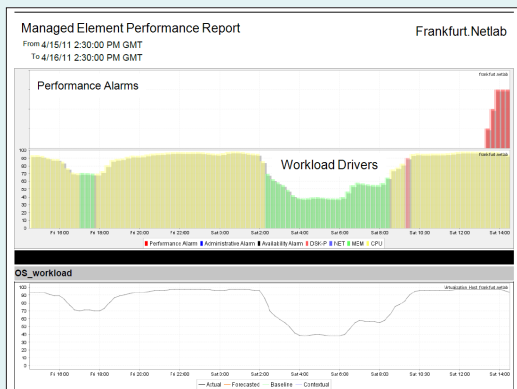


## General Health and Workload Reports

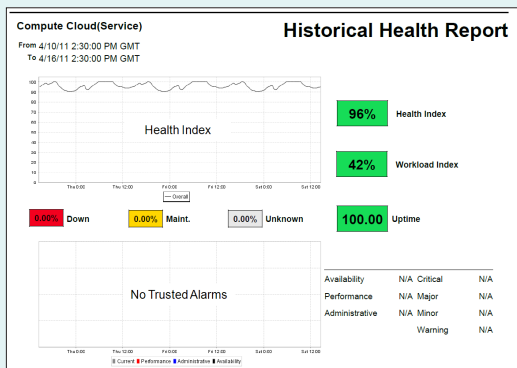
In Netuitive, Health and Workload indices help users simplify the analysis of how IT components are performing - from servers, to clusters, to transactions, to entire services. Instead of having to analyze the behavior of dozens of metrics, users can answer the question "how are my IT systems or services performing" with two composite indices. The reports below facilitate Health and Workload analysis from a historical and infrastructure-wide perspective.



Enterprise Workload Report



Managed Element Performance Report



Historical Health Report

### Enterprise Workload Report

This report compares the workload of server managed elements (server, virtual machine, virtualization host) over a configurable period of time. The report is useful for identifying under / over utilized servers (by comparison to peer servers), and in understanding which resource drives server workload (CPU, memory, disk, I/O).

### Health Comparison Report

This report compares the average values of indices for health, workload, alarm state, and uptime of up to ten managed elements at one time.

### Historical Health Report

This report displays an overview of health, availability, alarm status, and workload for selected managed elements over a configurable time period. The report provides more individual detail than the Health Comparison Report.

### Managed Element Performance Report

This report allows users to analyze a wide range of managed element behavior metrics similar to the Performance Assistant capability in the user interface. Users can toggle on / off the display of specific metrics or baselines and graph them over time in addition to the health and workload values. The report can print performance details for up to four different managed elements, so it is useful for detailed comparisons of server performance.

### Managed Element Report

This report produces a printable version of the search queries that users can run in the Managed Elements page of the user interface, including all of the Advanced Search parameters. It is useful for looking at the current state of managed elements grouped by application, function, or department.

Name	Type	Health	WL %	Incidents	Uptime %	% Time Alarm	Longest Incident
vm22	Virtual Machine	53	37		100		
vm25	Virtual Machine	100	48		100		
vm26	Virtual Machine	100	48		100		
vm28	Virtual Machine	100	48		100		
vm27	Virtual Machine	100	48		100		
vm21	Virtual Machine	63	57		100		
vm23	Virtual Machine	70	61		100		
vm24	Virtual Machine	71	61		100		
vm22	Virtual Machine	70	61		100		
vm12	Virtual Machine	75	68	1	100	26	6:16h 55m

Top N Report - Example: 10 Lowest VM Workloads



## General Purpose Reports

General purpose reports are useful for summarizing the results of ad-hoc search queries that users often run in Netuitive.

### Top N Report

This highly configurable report produces a prioritized top “N” list of managed elements sorted by health, workload, uptime, performance incident severity or length, or percent of time in alarm state for a given time period. Examples of reports include “Top 10 workloads,” “Top 5 most alarming servers,” etc. It is useful for highlighting the most problematic managed elements in a large infrastructure.



## Virtualization Reports

Virtualization infrastructure performance management is increasingly becoming important to enterprise IT organizations. Netuitive now offers specialized reports that help summarize current and long-term forecasted behavior of this infrastructure for the purposes of performance and capacity management as well as to support chargeback.

### VM Cluster Forecast Reports

This report is useful for analyzing historical resource consumption for a cluster and all the virtualization hosts in the cluster, as well as for forecasting resource requirements. The report shows the resources consumption profile for a single cluster (and hosts) for up to a one year period – six months prior to the current date, and six months after the current date (projected). Subtotals are given at intervals of 30, 60, 90 and 180 days from the current date.



VM Cluster Forecast

### VM Cluster Summary

This report answers the question “how did a cluster perform” in a given application or department over a given period of time? The report displays summary stats for hosts, clusters, consolidation ratios, alarms, and average health and workload. It also displays individual stats for each host in the cluster, including number of VMs, health, workload, alarm index, incidents (minor, major, critical, warning), and capacity (percent CPU, MEM, DISK and NET).

Virtual Host	VM to Host Ratio	Virtual CPUs	Host CPU	vCpu to CPU Ratio
bern.netlab	5 : 1	5	8	0.62 : 1
frankfurt.netlab	10 : 1	10	8	1.25 : 1
Total for: vmcluster1	7.5 : 1	15	16	0.94 : 1

Inventory Summary Report: Virtualization Hosts

### Inventory Summary Report

This report is useful for analyzing the current efficiency of the virtual infrastructure. It displays total statistics for VMs, Hosts, Clusters and the average VM/Host ratio. It also provides a per Host breakdown with host CPU, virtual CPU, VM to Host ratio, and vCPU to CPU ratio.

### VM Utilization Report

This report is useful to analyze resource allocation and consumption for a group of VMs. It includes capacity statistics for VMs within a specified group / view for a specified time frame. This includes vCPU, memory, storage, health and workload as well as average percentage values for CPU, MEM, NET, DISK and storage used.

VM	Cost(\$)	vCPU Alloc	vCPU Used	MEM Alloc (MB)	MEM Used (MB)	Storage Alloc (GB)	Storage Used (GB)
vm21	8.55	1	0.65	512	323.94	11.01	5.78
vm22	9.18	1	0.71	512	335.35	11.01	5.78
vm23	9.18	1	0.71	512	336.26	11.01	5.78
vm24	9.18	1	0.71	512	326.06	11.01	5.78

Chargeback Report

### VM Chargeback Report

This report allows users to associate costs with resources expended by VMs for a given application or departmental group for a given period of time. It applies a resource consumption rate for different resource types (per vCPU, per MB memory, per GB storage) and calculates total cost based on a resource used / resource allocation option. The report also supports different currencies.



## Virtualization Reports (continued)

### VM Storage Forecast Report

This report is useful for analyzing historical and projected storage requirements for NAS filers and disk aggregates supporting the virtualization infrastructure. It is similar to the VM Cluster Forecast Report (shows 6 months of historical and 6 months of trended consumption).



## Custom Reports

Netuitive customers have two options for custom reporting:

Data can be extracted from the Netuitive Performance Management Database (PMDB) for import into third-party business intelligence or reporting tools (e.g. SAS, SAP Crystal Reports, MicroStrategy, etc.). Alternatively, reports can be generated from the PMDB using JasperReports, the open source Java reporting tool.

Netuitive Professional Services is available to support custom report development.



VM Storage Forecast Report

## Trust your performance to Netuitive.

Netuitive provides predictive analytics software for IT. Netuitive replaces human guesswork with automated mathematics and analysis to forecast, identify, and resolve IT performance issues before they impact quality of service. Hundreds of customers, including eight of the 10 largest banks, rely on Netuitive to proactively manage the performance of their critical applications and underlying IT infrastructures - physical, virtual, and cloud. Industry recognition includes the 2011 "CTO Award for Innovation" from Morgan Stanley, the 2011 CODiE Award for "Best Systems Management Solution", the 2010 EMA Award for "Best Analytics", and "Best of VMworld" Awards in 2007, 2009, and 2011.

## Netuitive Predictive Analytics for IT

Contact Netuitive to learn more about Netuitive or to schedule an on-site demonstration.