

IOportal Cloud Service – [www.hitachi-ioportal.com](http://www.hitachi-ioportal.com)

## Get the most out of your Hitachi Storage Systems

### The IOportal

The IOportal is a cloud-based web service that allows you to create routine and ad hoc performance and capacity reports at any time and anywhere. Simplify and shorten the analysis process dramatically and respond to requests immediately. Intuitive graphics and a focus on ease-of-use make the IOportal ideal for management reports and fast root cause analysis. Now you can respond much faster to events and ensure your service quality.

For more details visit:

[www.hitachi-ioportal.com](http://www.hitachi-ioportal.com).

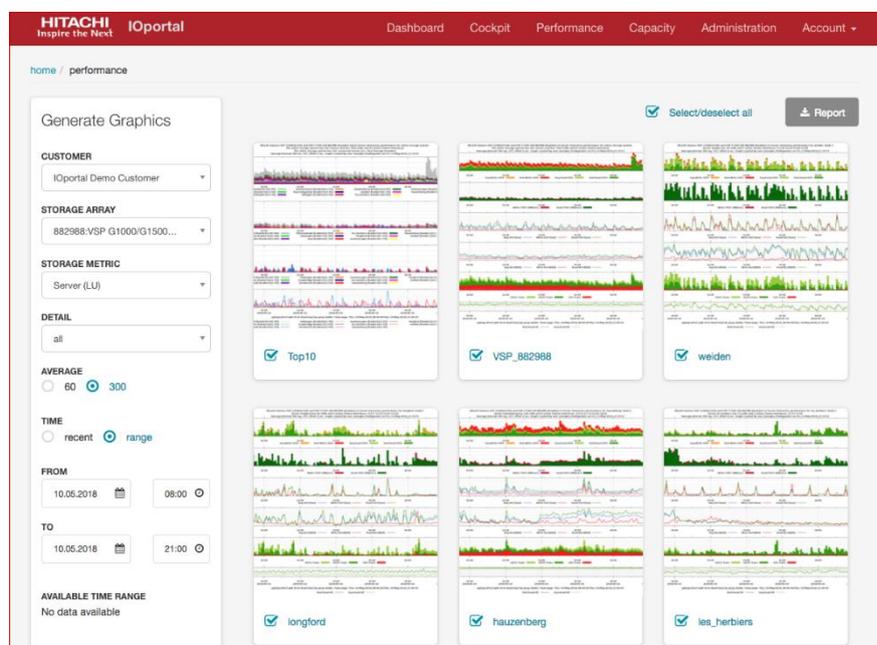
### The Challenge

With ever increasing service levels it becomes a key requirement for IT departments to respond fast and comprehensively to any deviation of storage and server critical capacity and performance values. Therefore I/O utilization needs to be made visible in an easy and transparent way. The IOportal allows you to create routine and ad-hoc performance and capacity reports in order to simplify the analysis process. The IOportal supports all current block storage products of Hitachi. The IOportal also helps analyze the I/O performance of servers connected to the storage systems, regardless of their operating system and application.

### Ease of Use

The IOportal solution is designed to be intuitive and easy to use. It creates predefined capacity and performance graphs, which provide an overview of both the storage system and the physical servers. Users may choose amongst a number of predefined graphs with the

possibility to change the time scale to suit their individual needs. The IOportal is specifically designed to allow fast and easy access and to provide graphical reports that can be shared with application owners and management.



## The Data Sources

The IOportal graphs and reports are based on the same data sources that the Hitachi support uses to investigate support issues. The raw data is automatically collected at the customer site and uploaded to the Cloud-based IOportal service infrastructure to be viewed and analyzed at any time and from anywhere. The performance data can be averaged and displayed over any interval and can be retrieved and accessed during a whole year at highest resolution. You may add comments to the graphs with individual remarks like your conclusions and findings and save your work as a PDF report. Furthermore, you have the option of downloading the data as a CSV file to process it further with the spreadsheet application of your choice.

## The Reasons for the IOportal

The IOportal offers an affordable capacity and performance management solution for all Hitachi block storage systems. It supports small IT departments as well as global IT organizations in drawing the right conclusions and making the right decisions when needed. Intuitive navigation and comprehensible graphs get you up-to-speed in a very short time to become a storage expert yourself. With additional services offered on top of the IOportal, like the IOportal Proactive Service, we can support your day-to-day business as well as long term planning tasks and thus ensure the optimum infrastructure and performance to drive your company's business.

## Key Data

The quality and correctness of the IOportal data is our mission. The following key data is offered by the IOportal to help you master all your Capacity and Performance Management tasks around storage.

### Key data:

#### ✓ **Dashboard:**

Key Performance Indicators for capacity, workload, performance and thresholds. Trend graphics covering 3 months

#### ✓ **Cockpit:**

Cross-customer comparison of important metrics for the previous day by means of bubble charts. The Cockpit offers the easiest and fastest way to identify outliers and "low" performers

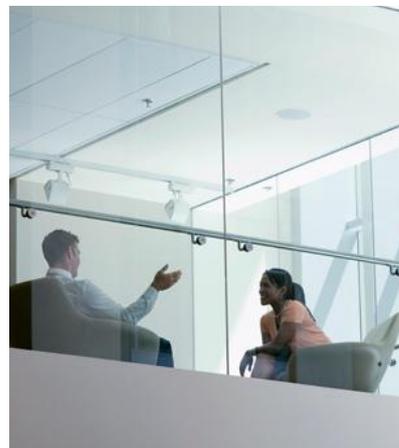
#### ✓ **Performance:**

Workload / Performance data of all critical storage system resources and threshold values. Workload and Performance of all connected servers including Top10 resource consumers.

#### ✓ **Capacity:**

Pool full risk assessment, compression factor, tier distribution, overprovisioning ratio, materialized or used capacity. Comprehensive views of all relevant capacity values, for the entire storage system, its pools and connected servers.

## Together, We Set the Storage Objectives and a Standard of Excellence for Your Organization



## Demo

Contact us for a demo. With minimal effort we can demonstrate with your data how the IOportal allows you to respond fast and with the right facts at your fingertips to any task or challenge in your Hitachi storage environment.

For more details visit:

[www.hitachivantara.com](http://www.hitachivantara.com)  
[www.hitachi-ioportal.com](http://www.hitachi-ioportal.com)



## Hitachi Vantara

Corporate Headquarters  
2845 Lafayette Street  
Santa Clara, CA 95050-2639 USA  
[HitachiVantara.com](http://HitachiVantara.com) | [community.HitachiVantara.com](http://community.HitachiVantara.com)

Regional Contact Information  
Americas: +1 866 374 5822 or [info@hitachivantara.com](mailto:info@hitachivantara.com)  
Europe, Middle East and Africa: +44 (0) 1753 618000 or [info.emea@hitachivantara.com](mailto:info.emea@hitachivantara.com)  
Asia Pacific: +852 3189 7900 or [info.marketing.apac@hitachivantara.com](mailto:info.marketing.apac@hitachivantara.com)

HITACHI is a registered trademark of Hitachi, Ltd. VSP is a trademark or registered trademark of Hitachi Vantara Corporation. IBM, FICON, GDPS, HyperSwap, zHyperWrite and FlashCopy are trademarks or registered trademarks of International Business Machines Corporation. Microsoft, Azure and Windows are trademarks or registered trademarks of Microsoft Corporation. All other trademarks, service marks and company names are properties of their respective owners.

June 2018, 4.0



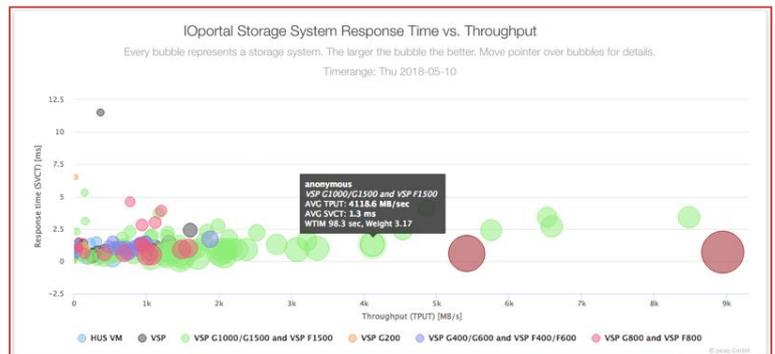
## IOportal Dashboard

The IOportal dashboard provides the key performance indicator (KPI) values of all storage systems at a single glance like capacity, workload and performance providing a high-level management health view. The IOportal Dashboard may be accessed via Internet by any smart mobile device.



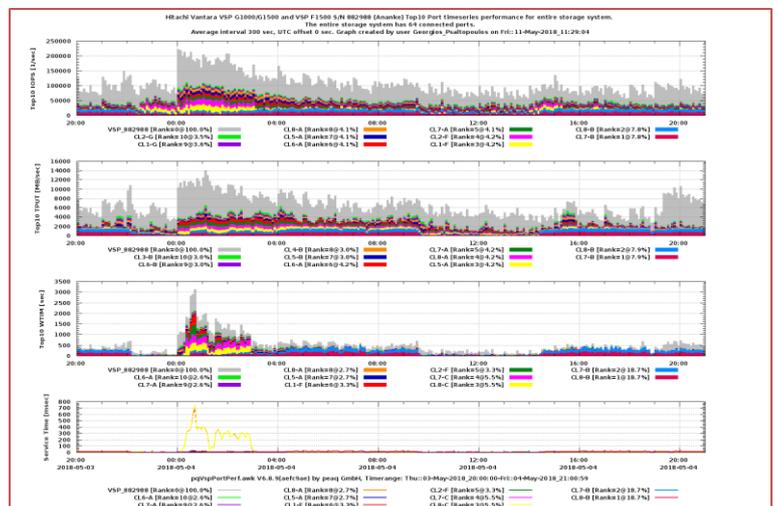
## IOportal Cockpit

The IOportal Cockpit page presents a cross-customer comparison of important metrics for the previous day by means of bubble charts. The Cockpit offers an easy and very fast way to identify outliers and "low" performers, since the user is only presented with resources or servers that exceed predefined thresholds.



## IOportal Performance

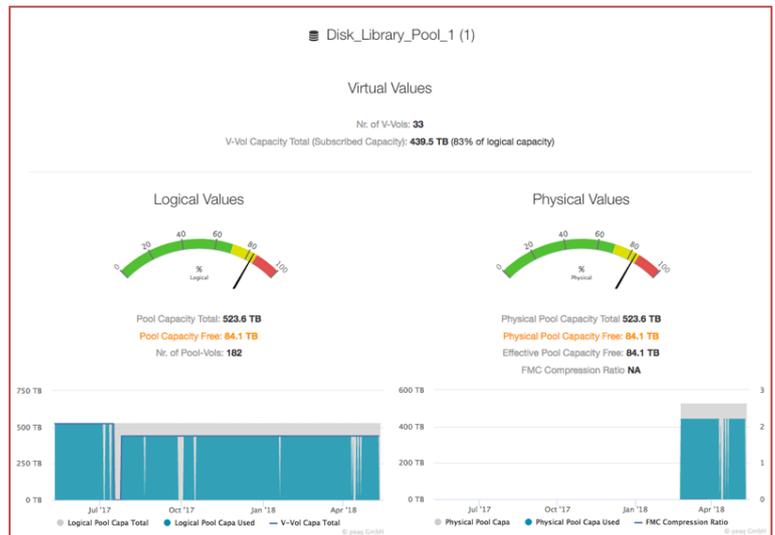
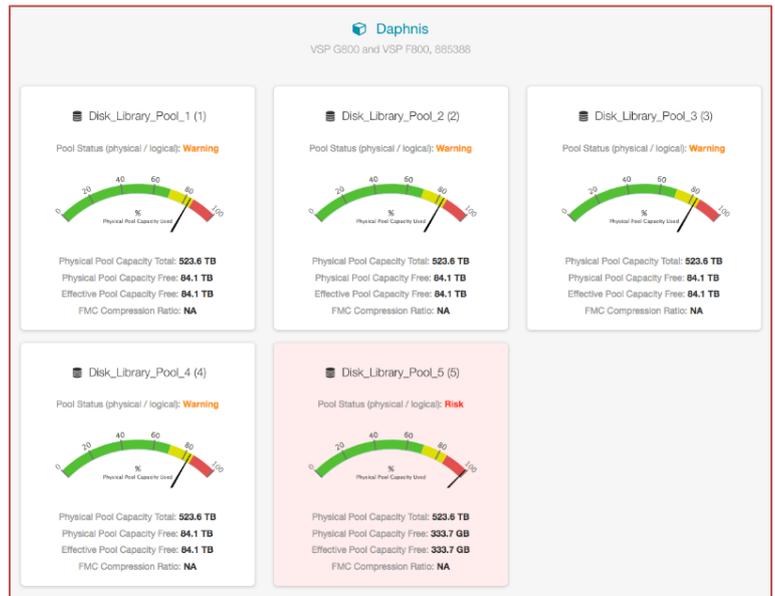
The IOportal performance graphs reveal every detail of the I/O workload of the connected servers as well as the performance of storage systems. Predefined threshold values help identify resource constraints and critical situations without specific know-how of storage systems architecture. The IOportal Performance graphs present the data in pre-aggregated ways doing most of the analysis job for you which makes them uniquely helpful for root cause analysis and deep dives into specific performance issues.



## IOportal Capacity

The IOportal Capacity view provides intuitive insight on the relevant capacity metrics drawing your attention by means of colors to pools at risk of running short of disk space. Log on to the IOportal, click on the capacity view and immediately identify pools at risk.

All important capacity metrics on a storage system, pool and server / cluster level are combined in a few comprehensive graphs to allow you to quickly grasp the key capacity parameters of your storage environment and to safely plan future capacity needs.



## Solution Overview

A physical or virtual server on customer premises acts as an "upload buffer": the server periodically collects export and horcm data from the monitored storage systems and uploads them securely via https to the IOportal cloud service. Upon reception, the IOportal transforms and processes the data files appropriately so that the users can view the latest state of their storage arrays and create graphics on the IOportal website. Users can access the IOportal over the internet from any web browser and any location.

