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# (ops)logix

### CAPACITY MANAGEMENT PACK

WHITE PAPER

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#### "Harnessing the power of foresight"

OpsLogix provides a Reports Management Pack solution that generates forecasting reports for all objects within Microsoft's System Center Operations Manager data warehouse.

#### 1. INTRODUCTION

Capacity management is the term given to managing the capacity planning of IT systems. Its primary goal is to ensure that IT system capacity meets current and future business requirements in a cost-effective manner. In the past 10 years IT systems have developed and changed rapidly, where physical machines and component capacity used to be relatively static. IT systems are now often dynamic and resource-sharing infrastructures, this has become the norm rather than the exception.

The traditional approach to capacity management has become inadequate when attempting to meet operational challenges posed by dynamic environments such as virtual infrastructures and internal clouds.



The OpsLogix Capacity Management Pack (MP) is capable of monitoring and forecasting all infrastructural-related data that uses performance counters. The state and threshold of the parameters (group or class) are fully configurable by an administrator which enables specific and precise enterprise IT infrastructural forecasting.

#### 2. CAPACITY COMMUNITY

This white paper is written for policy makers, IT managers and IT administrators who work for any company with an IT infrastructure. A prerequisite for this MP is that the company uses System Center Operations Manager (SCOM) 2012.

#### 3. LEGAL COMPLIANCE AND SECURITY

All OpsLogix products are developed with the same standard security policies that are dictated by Microsoft and are compliant with the (USA) Federal Cyber Security policy. Additionally, OpsLogix products make use of FIPS (Federal Information Processing Standard) compliant encryption in all its Management Packs.

#### 4. OPSLOGIX CAPACITY REPORTS MP

The OpsLogix Capacity MP efficiently monitors components and systems in an IT environment and delivers clear forecasting information on the infrastructure's capacity.

Capacity management is all about optimizing the balance between knowing what level of IT capacity, in regards to hardware and software, the enterprise will need, while also identifying how this can be proactively supported in the most efficient and cost-effective way. The more accurate the forecasting information the more precise a budget calculation can be. The Capacity MP allows an industry the freedom and peace of mind of being able to maintain a dedicated degree of consistency in their IT infrastructure and business operations.

OpsLogix believes in providing simple logical solutions to optimize functional environments. By augmenting an already established monitoring platform (SCOM) and the collected data found therein, it is efficiently able to deliver additional capacity report utility to an IT environment.

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#### 5. FUNCTIONAL SOLUTION

In the simplest form, the definition of capacity is the maximum amount of a resource that can be stored within a container. This, for example, can be represented by the amount of VMs [resource]

in a cluster [container] to the amount of bandwidth [resource] that can pass through a switch backplane [container].



Availability monitoring in datacenters has been in place for a number of years, yet the monitoring and management of capacity in IT systems is still an often overlooked aspect of an IT environment of infrastructure. Capacity management encompasses a wide utilization scope depending on industry and enterprise needs. Generally, capacity management lies within underlying storage and network infrastructure, operating systems, applications and finally to the end user and their consumption.

The OpsLogix Capacity report MP allows clear monitoring of system object utilizations, by accurately trending the utilizations it is able to present future forecast reports on the varying systems in an IT infrastructure.

#### 6. TECHNICAL SOLUTION

There are a number of capacity management and utility tools available. However, none of them can be implemented with the same ease as the OpsLogix Capacity reports MP.

The OpsLogix Capacity MP software is packaged as a Management Pack Bundle or .MBP file. Installing the MP is simply a matter of importing the file into SCOM and configuring it in an industry relevant manner.

Configuring the Capacity MP dashboards for a variety of relevant industry objects is straightforward and is done entirely within SCOM. This makes the OpsLogix Capacity reports MP the only truly native System Center capacity management tool on the market today.

Operations Manager allows end users to improve their availability and performance metrics through enhanced service level monitoring, while their IT operations staff are able to have the improved access key functionality needed to maintain and enhance the service they deliver to their end users. The product delivers capabilities that extend the value of the existing Operations Manager platform, which customers already see in their Windows Server deployed applications to UNIX and Linux. End users are also able to meet their service level agreements for applications in

the data center in 3 core areas:

- End-to-end Datacenter Service Management
- Best of breed monitoring for Windows and beyond
- Increased efficiency and control

Successful capacity management must address 6 set criteria. These are:

How are enterprise IT systems using current capacity? ( <b>Utilization</b> )	How efficiently is capacity being utilized? ( <b>Trending</b> )	How can an enterprise optimize current capacity, what trend is utilization following and when will capacity reach a maximum critical point? (Forecasting)
How do enterprise systems respond to changes in capacity? ( <b>Adjustment</b> )	How does systems utilization change affect capacity and in turn, how will this affect the need for capacity expansion? (Tuning)	How to optimize enterprise utilization? ( <b>Scheduling</b> )

Capacity is the maximum amount of a resource that can be stored within a container; knowing the values of **Utilization**, **Trending** and **Forecasting** will always improve efficiency. Currently the OpsLogix Capacity MP grants users **Forecasting** reports based on calculating the standard regression (**Trending**) of current **Utilization**.

Future versions of the OpsLogix Capacity MP will take the consequences of **Adjustment** and **Tuning** into account and thereby directly contribute to optimizing enterprise capacity utilization by enabling effective hardware and software **Scheduling**.

The Capacity MP is in essence a framework. Once the MP is imported the user is presented with the ability to generate capacity forecast reports on any of the objects in Operations Manager (OpsMgr) and thereby in the OpsMgr data warehouse.

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Like all OpsLogix products, the Capacity MP makes use of the Full Class Model of OpsMgr when presenting reports. The increment levels of healthy, warning and/or critical can be self-determined by adjusting the relevant thresholds in OpsMgr.

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The Capacity MP gives administrators an accurate visual tool that checks forecasting information. By making use of OpsMgr email-scheduling tasks, emails can be sent out to the relevant individuals should a particular threshold of an application or hardware be reached.

Through the OpsLogix Capacity MP, OpsMgr operators have a lightweight easy-to-use reporting tool that directly contributes to facilitating rapid insight into the state of the IT environment and the IT services running across different systems and workloads.

#### 7. WHAT ARE THE BENEFITS OF USING OPSLOGIX?

#### **Optimize IT**

• By using a readily available platform IT security is guaranteed, managing IT capacity and decreasing operational risk has never been simpler within System Center Operations Manager.

#### **Decrease operational risk**

• There is an increasing amount of legalization and standardization that IT organizations will have to meet both now and in the future. OpsLogix Management Packs are in compliance with (USA) Federal Cyber Security policy. FIPS encryption in OpsLogix products reduce data security risk factors.

#### **Reduce costs**

• The OpsLogix Capacity Management Pack directly contributes to reducing costs by optimizing capacity management. Knowing what level of service a business needs and identifying how this can be supported in the most cost-effective way is of immeasurable importance to any serious enterprise.

#### 8. CONCLUSION

The OpsLogix Capacity reports MP is a software solution that assists successful IT capacity management. The Capacity MP presents forecast reports on the objects of IT systems in any business sector. Its key feature is in enhancing an existing SCOM infrastructure and delivering a simple optimized means of facilitating IT capacity management.