

## Sysload 5.0

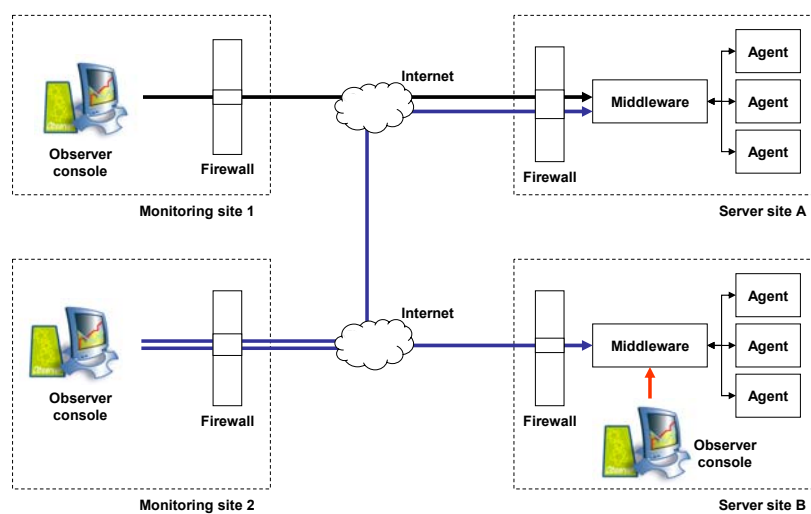
### "The" IT Performance & Capacity Management Solution

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## Simple and secure communication

### Increased security

Sysload's previous 2-tier client-server architecture has now become 3-tier, with the introduction of a middleware tier handling communications between the Sysload Agents and the Sysload Consoles. The result is a simplified and more secure communication protocol for the Sysload solution.



Overview of Sysload 5.0 communication

## User authentication

Version 5.0 improves security by providing user authentication, controlling access to the Sysload information and to the configuration of the Sysload agents. The security is controlled by the new middleware tier.



Observer Console 5.0 user logon

## Encryption of information

The communication between the Observer console and the middleware for transmitting login and password information is encrypted.

## Team collaboration

### Centralization of models

The following Sysload Observer console objects are now stored and managed centrally by the Middleware tier: workspaces, enterprise event model, period lists, profile lists. This provides enhanced team collaboration by allowing the sharing of Sysload Observer console objects.

Sysload version 5.0 also provides a central entity definition managed by the middleware tier. This means the definition of applications, users and other entities can be defined once and distributed to different agents in a very flexible manner.

### User-to-user and middleware-to-user communication

Sysload Observer console users can communicate with each other through a chat window. An example use of this is if a System Engineer needs to notify operators that a reboot of the server is required.

The chat window is also used for users to receive system messages from the middleware. Example: "User John has modified the workspace you are currently working on; do you want to load the updated workspace?"

## Enhanced diagnostics

Sysload diagnostic functions have always been a very strong feature of the Sysload solution. Sysload 5.0 enhances this powerful feature even more with the addition of new utilization diagnostic metrics. It is now very easy to compare the processor load of different servers and applications when the servers have different processor capabilities.

## Sysload Focus: RPI

**Normalization: intelligently compare and evaluate**

The RPI (Relative Performance Index) represents an abstraction layer for each monitored IT system. The RPI is a useful and necessary mechanism for “viewing” and “comparing” the actual processing capability of each IT system irrespective of the CPU type (Intel, Sparc, etc.) or IT system vendors (Sun, HP, IBM, Fujitsu-Siemens, Dell, etc.).

Example:

Server	Capacity		Utilization	
	max CPU	max RPI	CPU	RPI
A	1 proc 1 GHz	500	50%	250
B	32 proc 1,5 GHz	6000	50%	3000

Traditional techniques would indicate that both servers are 50% utilized. This utilization figure does not take into account the actual physical processing capacity of the IT system. The RPI allows us to see the “real” utilization and the “real” capacity of the IT systems. In this example, Server B has 12 times spare capacity than Server A.

## Support of virtual environments

Operating system partitioning has become a standard feature within a number of IT infrastructures. Sysload has been specifically designed to support this new technology thus allowing the performance and capacity management of the individual partitions.

### AIX 5.3

AIX 5.3 can be configured as a physical partition hosting several virtual partitions. The physical (or host) partition is known as the ‘virtual I/O server’, whereas the virtual partitions are known as ‘client partitions’.

In this type of configuration, Sysload agents are installed in each client partition. The agents automatically detect the resources allocated to the client partitions (known as entitled capacity). Hot changes to the entitled capacity (e.g. addition of processor capacity) are taken into account dynamically by the agents.

The Sysload RPI (Relative Performance Index) of the host machine is the RPI of the physical machine. The RPI of the client partitions is calculated dynamically and is based upon the client partition’s CPU entitlement. This provides valuable information for the Sysload capacity reports.

The agent for AIX 5.3 contains new metrics specific to partitioned operating systems which help to manage capacity on demand:

- Number of entitled processors (ent).
- Percentage of entitled processors consumed (entc).
- Number of physical processors consumed (physc).
- Number of available processors in the shared pool (app).
- Percentage of logical processor utilization (lbusy).

*Remark: Specific license types are requested by agents running in client partitions.*

### Solaris 10

Solaris 10 systems can be divided into several partitions called ‘zones’. The main partition is called the ‘global zone’.

The Sysload agent for Solaris 10 is installed in the global zone. This agent can see the processes running in the other zones. The top process window displays the names of the zones in which processes are running. The name of the zone can be defined in the definition of entities in order to differentiate the processes running in the various zones.

### OS/400 V5R3

OS/400 V5R3 can also run in partitioned mode.



The Sysload agent for OS/400 is installed in each partition. The information provided by the agent is relative to the capacity allocated to the partition in which it is running.

A set of new metrics help to manage the capacity on demand:

- Number of processors in the processor pool that are not allocated to any partition and available for allocation.
- Percentage of the uncapped shared processor capacity used by the partition.
- Percentage of the shared processor pool capacity used by all partitions using the pool.

*Remark: Specific license types are requested by agents running in client partitions.*

## VMware

Sysload Software will soon release an agent for VMware ESX.

## Other enhancements

- Support of dual core technology.
- New log file analysis with a new module: Log Monitor.
- New reactions to Sysload events with a new module: Alert Manager.
- New agents: IIS, SAP R/3, Sybase, etc.
- New look and feel of the Observer console.
- Possibility to set the colors of events in the Observer console by event severity, not necessarily by event state.
- New look and feel of HTML reports. These can now be customized via templates.