



LicenseWatch White Paper

# Software License Management - Virtualisation

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## Introduction

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Virtualisation is an increasingly important part of (business) management in these frantic and challenging economic times. Virtualisation software is available for both hardware and software that is used within companies. It provides companies with many advantages: their IT environment is more manageable and companies can make better use of available resources. Moreover, many organizations implement virtualisation to achieve greater efficiency in general. This applies to both small and large companies.

Virtualisation also offers companies the ability to move software from one server to another server for example when maintenance has to take place. Although there are many advantages, when companies want to use Software License Management, virtualisation can cause problems in mapping the licenses.

## SAM Tool for Optimisation of Virtualisation Software

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Some software vendors licensing programs are not optimally suited for virtual environments. As an example, when clients use a virtual environment where the inventory data is not correct, they will quickly become 'incompliant'. This is of course an undesirable situation with possible financial risks and consequences. A good software asset management tool is therefore essential. Good SAM tooling is also crucial when you work with virtual environments. Based on the existing license conditions, this software can create the most optimal situation for your company. A good SAM tool can establish a link between the software in the virtual environment and the underlying hardware. LicenseWatch is capable of doing this.

## Higher Efficiency

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When it comes to the software or hardware you are using as a company, you always want to achieve the highest possible efficiency. Companies want to make best use of the existing infrastructure. How can you extend the lifecycle of infrastructure and avoid premature investments? Naturally companies want to achieve more with less and they also want to use the existing infrastructure. This is why many customers today have introduced

virtualisation technology in their environment, which in its turn has consequences for the SAM tooling used. With the right SAM tooling you are capable of managing your software assets in a virtual environment. This SAM software gives you the correct information about how your infrastructure is designed or set-up, what you are able to (re)use or what you need to extend or replace. This will optimise the efficiency of your infrastructure. You can do more with your existing IT environment.

## Higher Availability

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With today's 24/7 economy, companies also want to have their services more available to their clients and use those services in the best possible way. This also applies to the applications they run. By using virtualisation, companies are no longer tied to physical hardware. When faced with hardware problems it is possible to create the right availability of hardware precisely where needed. In the meantime problems can be solved without anyone noticing and without loss of hardware performance. With virtualisation you can realise 'space and time' when you need it.

You can disconnect software from your physical hardware and you can still easily use your hardware and your software application without interruption of the services. Using virtualisation ensures a higher continuity of the IT services for its users. Users remain unaware of maintenance being done on the IT infrastructure and servers, reducing downtime dramatically. With virtualisation software you can 'virtualise' your servers, and then run your software and services on it. The machine in the meantime continues without interruption. There is almost no performance loss. When the maintenance is completed you just put the software back in place and everything continues as usual. However when moving software applications, running on a virtual machine, from one physical machine to another, SAM licensing constraints apply. For example compliance, when using CPU based licensing models, depends on the number of CPU's in the physical machine. Good SAM tooling allows you to link the software application on the virtual machine to the physical CPU's.

## Higher Productivity

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Application virtualisation gives you the freedom to access your applications on any device, at any time, anywhere. Virtualisation software will ensure the availability of the software and keeps gaining access to that software simple. This is also the case when working remotely - the new way of working. Providing access to the software application is also a lot easier. The software application itself does not have to be installed locally - you can access it from any machine or even work externally using internet cafe services.

Another advantage of application virtualisation is that you can also use simpler computers when it comes to so-called 'task-based users'. These users, such as a receptionist, only need to use a small part of the available applications and therefore do not need an advanced laptop, computer or something similar. The software used by the receptionist can be installed for example on a central server that gives you access to specific applications (for example via Citrix XenApp). This will result in savings on hardware investments and management costs.

Many application vendors use a Client Access Licensing Model (CAL Model) in virtual application environments. SAM tooling therefore needs to be able to get the access rights from the 'server farm'. This means that the SAM software also knows what user has access to what application, instead of only knowing which application data was actually used by what particular user.

## Deployment Advantages

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Virtualisation of applications has the advantage that you can easily deploy applications. Moreover, it is easier to provide people access to the software based on their 'rights'. All this is independent of the available hardware. In theory, therefore, you can use a very old PC, run the necessary software on a server and use a terminal connection with the specific application. The purchase of expensive machinery is therefore no longer required. By having the software application installed on a central server, deploy-

ment to all machines is no longer needed. Once it is installed on the central server and access to the appropriate users has been granted, users can start using the application. Certain application vendors have second use right policies, which means that when accessing a virtual application, when this application is also installed locally, you only need one license. A good SAM tool will take this into account when building a compliance statement.

## Hardware Virtualisation - VMware

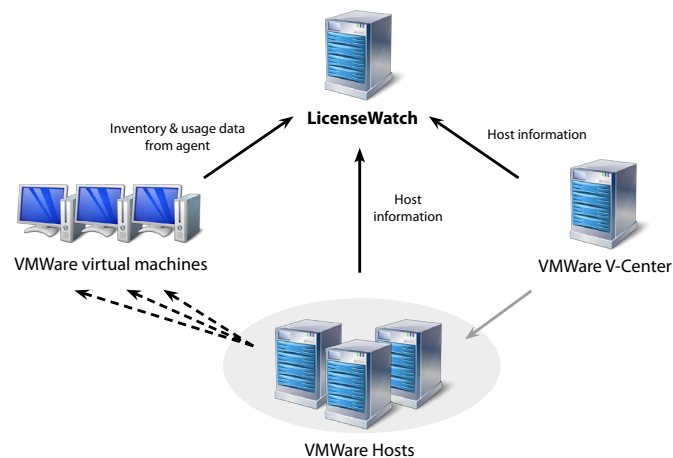
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LicenseWatch supports VMware. VMware is the market leader in hardware virtualisation. How does the LicenseWatch SAM application solve problems in a VMware environment?

The VMware connector of LicenseWatch is implemented as a service running on the LicenseWatch server talking directly to the VMware host or the VMware V-Center. This way, the VMware management environment provides real-time information about the physical environment, and where virtual machines are running. In addition, the LicenseWatch agent can map which applications are installed and how they are used on virtual machines. This provides companies with a good insight. There is also a possibility to integrate with deployment tools such as Microsoft SCCM and Symantec's Altiris Deployment Solution. Instead of using the LicenseWatch agent to see what software is installed on these machines, companies also have the possibility, with the help of the LicenseWatch SAM tool, to use the present Altiris or Microsoft software to get inventory data and information about the usage of software. They get the inventory needed out of the existing environment. This also applies to the physical machine underneath.

An illustrative example is: Microsoft has a licensing rule that says you cannot move an application from one physical host to another physical host in a virtual environment within 90 days. This means you have to wait until these 90 days have passed before you can take action. You must therefore know on what physical host a virtual application is running and on which virtual machine, to properly maintain this rule. LicenseWatch SAM software provides companies

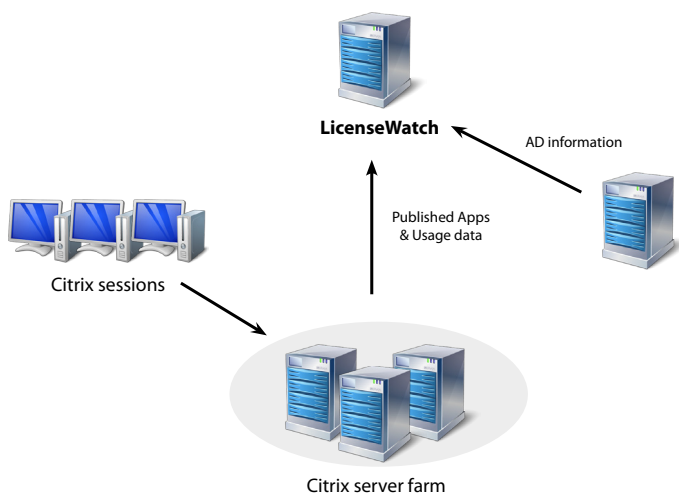
with this information and enables them to be fully compliant. It will also help them to prove they have acted in the right manner, should they for any reason have to do so.



## Virtualisation Software - Citrix

With Citrix you can provide access to applications in two ways. One way is to publish the whole desktop, and give access to the entire virtual PC.

Installing the LicenseWatch agent on the virtual desktop helps companies to properly manage and administer user access and licenses. The other way is to publish an application instead of an entire desktop. With the LicenseWatch service you will know that a user is authorised to access an application. This information is of course very important.



The LicenseWatch Citrix Connector is implemented as a service, that can communicate with the Citrix server 'farm'. This combination ensures that companies know exactly and real-time which users are authorised to access which virtual applications. LicenseWatch combines this with knowledge regarding user access data about which users have been using what machine, and for which (specific) applications. This way, we can ensure that the Client Accessing regulations and rules can be maintained properly. For example, if you have a laptop on which MS Office is installed and you would start MS Office on it using a Citrix server, you only need one license. You do not need another license for Citrix or your operating environment. This is called second use rights and because LicenseWatch can provide this information at any time, it is also possible to implement these second use rights if necessary.

## Future Developments in Virtualization

Regarding the future, it is clear that virtualisation will be used more frequently in companies. VDI will play an increasingly bigger role. The usage of virtualisation will also increase at the hardware side. The SAM tool must be able to distinguish the relationship between virtual machines and physical layers. LicenseWatch can properly make that distinction. SAM vendors increasingly have to take into account the standard of for example Microsoft, such as Windows servers. LicenseWatch has already taken into account all these developments. This is visible in, amongst others, the product roadmap of LicenseWatch.

## About LicenseWatch

LicenseWatch is today's leading software vendor that makes Software Asset Management extremely simple, providing cost effective control and compliance. With offices in Copenhagen - Denmark, Stockholm - Sweden, Ratingen - Germany and Amsterdam - The Netherlands, LicenseWatch focuses on delivering world class solutions that help its customers to save on licensing costs and help them prevent under-licensing risks.

LicenseWatch is covering both desktop and enterprise Software License Management, a unique and efficient combination, which is very easy to install. Furthermore, our strengths lies in cost effectiveness; with our software, companies are able to reduce their costs considerable. Compliance and risk is what we take into account for our customers. Last but not least, LicenseWatch has lots of features, functionalities, and possibilities: an advanced, complete solution.

## Contact details

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