

FARONICS

**DEEPFREEZE™**

ABSOLUTE Workstation Integrity

## **Deep Freeze and Microsoft Volume Activation 2.0**

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### **TECHNICAL WHITEPAPER**

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## Overview

With the release of Windows Vista, Microsoft has released an updated version of their Volume Activation. This updated volume license program includes a new type of license called a KMS license.

This document details how Deep Freeze interacts with this new method of license management and the best practices for ensuring that workstations will not enter a state of reduced functionality.

Note that this only applies to workstations running a Volume License version of Windows Vista. Workstations that ship with OEM Retail or copies of Vista licensed with a MAK license are permanently activated during their initial activation process and will never require reactivation unless major changes are made to the system's internal hardware.

### KMS License

KMS stands for Key Management Service, a new method of licensing the desktop OS that requires the installation of a Key Management Server in the end users environment. The Key Management Server works to activate the user's desktop operating systems without directly contacting Microsoft each time that a workstation requires activation. This method of key management is designed mainly for larger deployments to ensure license compliance and to reduce piracy of volume license versions.

Any workstation activated with a KMS license must contact its activating server every 180 days to renew activation. Workstations that fail to re-contact the activation server within 180 days will eventually enter a mode of reduced functionality until re-activated.

### Deep Freeze & KMS Licenses

Since Deep Freeze restores a workstation to a given state each time the workstation is booted into a Thawed state, there is concern as to how this will affect workstations that need to re-activate their licenses. Because workstations will enter into a reduced functionality mode only after they have failed to renew their activation for 180 days, the risk only exists if 360 days have passed without a successful activation against the KMS server.

To safeguard against this eventuality, Faronics recommends Thawing workstations at some point during the initial 180 days and running a command to force the workstation to re-activate against the KMS server. This can either be done manually or via a script running through the Maintenance mode on a Frozen workstation. The command to update the workstation's activation is shown below:

```
cscript \windows\system32\slmgr.vbs -ato
```

This command must be run as an administrator on the Frozen workstation.