

# Microsoft Volume Activation

## 2.0 Notes / Q& A

I attended the MS Live Meeting (10/27/2006) regarding the new Volume Activation 2.0 which will be implemented in the new coming Windows Vista, Windows Server (LongHorn) and also in future MS products. The next version of Volume Activation 3.0 is in the work and will be released in the future.

Some terminologies:

SPP (software protection platform)

MAK (multiple activation keys)

KMS (key management services)

MAK – one time activation against MS.

1- individual act – each machine individually connects can activate with MS

2- proxy activation – one centralized act request on behalf of multiple desktops with one connection to MS

KMS

1- activate against a customer hosted service NOT with MS

2- systems must reactivate by connecting to a corp network at least every 6 months

Volume activation doesn't require end-user action

if have more than 25 machines, it is better to setup kms locally. KMS activates client for 180 days upon each connection.

Systems silently re-connect regularly (def. 7 days) to renew activation.

RFM – reduced functionality mode. when windows not act within 30 days or significant hardware changes or tampering with OS detected.

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Q & A (collected during the live meeting)—————

Question: Will these slides be available for download?

Answer: Yes, it will be available next week

Question: Will this also affect Office in the future?

Answer: Yes for future versions of Office but not the immediate version of Office namely Office2007

Question: Where will the link be posted?

Answer: We will send out an e-mail with links

Question: Does Microsoft plan to expand its Volume Activation program to include Windows Xp or other Windows products?

Answer: Future versions of Windows will leverage this platform. Currently there are no plans to retrofit Windows XP with this model

Question: Why does Microsoft send VLKs to Campus Agreement customers by email?

Answer: We are in the process of updating this process – we will no longer include VLKs in our notifications; these will only be available on MVLS.

Question: Will these deployment methods be compatible with products like Synmantec GHOST Enterprise?

Answer: Yes

Question: From what date will you be ceasing to send VLKs to Campus Agreements via email?

Answer: I've just been corrected... we are looking at removing these in the future, but don't have a date yet. VLKs will continue to be available via MVLS.

Question: How many VAMT hosts for 80,000 PC's?

Answer: If the VAMT host are able see all 80K PCs, one VAMT is sufficient. You can have as many VAMT/KMS host as necessary.

Question: Will KMS be back ported to run on Windows Server 2003?

Answer: Yes, We plan on providing Windows Server 2003 support by Q12007

Question: What ports are needed for the KMS server to open firewall?

Answer: 1688 but it is configurable

Question: How do client machines find the KMS machine on the network?

Answer: Through SRV records in the DNS or through FQDN or IPv4, IPv6 address specified by the IT Pro in the registry

Question: Would the process of activating Vista be any different between a brand new install versus an upgrade from an existing OS?

Answer: No it will be the same

Question: Is the KMS machine required to be a dedicated server?

Answer: No it can be co-hosted with other services.

Question: Can you run multiple KMS machines for redundancy?

Answer: Yes, you can

Question: When will KMS be available and what platform does it run on?

Answer: Now on Windows Vista and Windows Longhorn. Windows Server 2003 support will be available in Q1 of 2007

Question: Are OEMS going to be able to distribute machines that are already activated?

Answer: OEM machines with Windows Vista will come pre-activated. Unless these are reimaged w/ VL media, they would not be impacted by Volume Activation 2.0.

Question: Can an organization get multiple MAKs in different sizes?

Answer: There will be one MAK per your license agreement

Question: Will this method be the same for Academic Select or will VLK's still be available?

Answer: This key technology will be used by all of our VL programs, including Open, Select, Campus, School, etc.

Question: Can an organization use independant MAK, MAK Proxy and KMS at the same time?

Answer: Yes, we anticipate most customers will use all three combinations very often

Question: How will education customers be able to re-image OEM machines that came licensed and pre-activated?

Answer: Our VL customers have rights to re-image a machine with VL media for the identical license. In this event it would not be pre-activated, as the installation would now be managed by Volume Activation 2.0.

Question: Our univerisity system has multiple locations and we have a campus agreement. Will each location receive it's own key or will there be a system-wide key?

Answer: We will be providing a KMS and MAK key per volume licensing enrollment. If you have a single enrollment covering system-wide, then yes, you would have a single set of keys for the full system.

Question: A little off topic—but does the Windows System Image Manager allow for the configuration of an answer file to automatically perform individual activation?

Answer: Yes, the step-by-step guide that is part of Business Desktop Deployment guide ([www.microsoft.com/desktopdeployment](http://www.microsoft.com/desktopdeployment)) has the required details

Question: If we buy a PC with Vista installed, but we use a Ghost image to deploy Vista over the OEM license, will have have to buy two licenses for that computer? (I.e., OEM plus the volume license.)

Answer: Our VL customers have reimaging rights to reinstall the identical license with VL media (i.e. can not reimage Windows XP Home with Windows XP Pro). In reinstalling the same license, there is no need to purchase again – your sole license would come from the OEM.

Question: To understand this SPP better, we'll be required to re-activate all our computers every

30 days?

Answer: No, only the KMS activated machines require to renew their activation status at least once every 180 days by default it is 7 days but that info is configurable by the administrator

Question: If the O.S. is tampered, do we need to buy a new key/license?

Answer: No you just need to reinstall the OS for integrity purposes and reactivate

Question: Does this activation include Student Select?

Answer: No. Student Select customers are receiving the equivalent of FPP "bits", so there is an individual key, that allows for a single installation.

Question: Is the kms tied to active directory machine accounts?

Answer: No

Question: If we have 2 KMS servers, can we report activity by each KMS server?

Answer: Yes

Question: We have adjunct faculty who occasionally connect through VPN, will the activation happen automatically and how long does it take?

Answer: yes, it is network connectivity sensitive and it exchanges approx 400bytes of data as such it should be quick

Question: Our faculty members often leave for Sabbatical without notifying us. How will we switch those computers (after the fact) from KMS to MAK?

Answer: They will get notification after the 180 days and they will have 30 days before they connect to KMS host to renew their status

Question: Will you make the slides from the presentation available?

Answer: yes

Question: For Students, you note a 'retail product key' for permanent activation. Does this mean media will be required?

Answer: Physical media will be the simplest solution as each student will have their own individual key. You could also image a number of student devices (under Campus/School Student Option) via the VL media but would need to be prepared to manage the activation process overtime.

Question: what kind of hardware change would result in reactivate the key?

Answer: For KMS activated machines if the hard-disk where the OS changes then it will require reactivation, in the case of MAK activation if there are significant changes such as processor, hard-drive that will trigger re-activation request

Question: In the higher ed how do we handle the students that are not on the domain?

Answer: The simplest way will be to leverage standard physical media. This would provide an individual key (good for a single install) to each student.

Question: How does a client know where the KMS is? (by that I don't mean the DNS, but rather the name of the KMS server)?

Answer: It queries the DNS or determines using the FQDN or IPv4, IPv6 info specified by the administrator

Question: Will the student media contain a retail product key for products purchased under the Student Select?

Answer: Yes. The Windows Vista Business Edition Upgrade key will be good for a single installation.

Question: What happens if the MAK is stolen?

Answer: You can work with Microsoft to block the key, we will block it at your request.

Question: Will any of this affect MSDNAA licensing?

Answer: Yes. For deployment on institution owned devices, you would need to leverage the new Volume Activation 2.0; for students, we would need to arrange for individual keys, just as is done today.

Question: If I replace a motherboard, does it use another license. If I have 100 licenses, will this new rebuild count an additional license used?

Answer: activation is not same as license

Question: Can you MAK Activate after initially doing KMS on a machine?

Answer: Yes, we provide scripts to enable you to do it.

Question: If we want to continue using campus multiple license agreement for Microsoft OS (XP or 2000, 2003) and Office 2000/2003, will we have to use Vista and purchase Vista licenses?

Answer: If you are under Campus Agreement, you will need to continue your subscription, but can elect when you wish to deploy Windows Vista. In the interim you are running the previous versions via "downgrade rights".

Question: If a MAK is stolen, and Microsoft blocks the key, how does that effect MAK and KMS installations using the same license(s)?

Answer: If you perform any genuine validation it will indicate it is non-genuine, we will not do this without customer agreement

Question: What is the download link for this presentation?

Answer: <http://msevents.microsoft.com/CUI/EventDetail.aspx?EventID=1032314520&Culture=en-US>

Question: Will Vista run as a virtual machine (either Microsoft's or VMWARE)?

Answer: Yes, it can and it can be activated as well

Question: In one of your previous answer ("No. Student Select customers are receiving the equivalent of FPP "bits", so there is an individual key, that allows for a single installtion.") what are bits?

Answer: meaning the Vista software

Question: A faculty member has a KMS-activated computer, which he takes to Mongolia for a year with no advance notice to ITS. What happens?

Answer: After 6 months of not being able to reconnect to KMS, they will get a notice that they will go into RFM (Reduced Function Mode) in 30 days if the machine is not activated within that time. After that (~7 months), they could log in for up to an hour to reactivate or rekey the device in RFM.

Question: You mentioned use for software asset management. Is that to manage MS products only? Or can other non-MS products be managed as well?

Answer: we are providing license store and public APIs enabling other vendors to store and manage their license info

Question: Will it be possible to re-image OEM licenses on student owned machines?

Answer: This can only be done under Campus/School Student Option (not Student Select); this would imply that the activation would then need to be managed via Volume Activation 2.0

Question: Will the audio portion of the presentation also be available along with the slides?

Answer: Yes, it will be available in 24 hours here: <http://msevents.microsoft.com/CUI/EventDetail.aspx?EventID=1032314520&Culture=en-US>

Question: Are you going to be offering "deployment classes" for this?

Answer: it is part of the Business Desktop Deployment guidance material and training provided by many partners

Question: Will there be a class on this for us slow learners?

Answer: technical documents will be available on the TechNet site as of next week. There will also be a link to this information on the following site:

<http://www.microsoft.com/licensing/resources/vol/default.aspx> also live next week. Online training will also be available on the Microsoft Partner Program web site

Question: Is there a charge for additional KMS keys?

Answer: No

Question: If activation is different from licensing, why did you answer "enabling other vendors to store and manage their license info"? Can you explain the relationship between activation and licensing?

Answer: Activation is an execution process to support licensing policy, but are not directly linked. Just as we license via a user count under Campus Agreement, that would not match 1:1 to the number of devices covered, which would in turn need to be activated. It would be entirely reasonable to have a greater number of devices than licenses under Campus Agreement (the FTE number is a proxy measurement), and based on changes to hardware, etc. you would have a greater number of activations versus number of covered devices.

Question: What is the process *when* the MAK is stolen? (not IF in a .edu)

Answer: you can report this and all piracy concerns via [piracy@microsoft.com](mailto:piracy@microsoft.com). The key can be blocked and a new key can be reissued. Please note, you will not be liable.

Question: Will All versions of Vista and Lognhorn need to be MAK'ed or KMS'ed?

Answer: All volume edition copies yes.

Question: Is the KMS client for Server 2K3 available now, and if not, when (and where)?

Answer: We are aiming for WinServer 2003 support by the end of this year.

Question: You said OEMs come preactivated—is that typically using MAK method or Key management Service?

Answer: OEM activation uses special BIOS marker that is pre-loaded by the OEMs, if you need to reload the machine with VL images then it has to be activated using MAK or KMS

Question: How does a machine locate a KMS?

Answer: using SRV record in DNS or FQDN or IP address specified by the administrator

Question: Can you email me the URL for the event and the Q&A? (I can't cut/paste the URL from this window)

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Question: How will this new licensing scheme be affected or affect products such as Shared Computer Toolkits, DeepFreeze etc?

Answer: it doesn't

Question: When there are hardware changes, when is a new key required?

Answer: to clarify. A new key would not be necessary – but reactivation may be necessary. With KMS – activations are unlimited. With MAK – this would count as another activation. As for the hardware changes – significant hardware changes would need to happen with MAK before reactivation is needed.

Question: How do we address the issue of students who have a habit of needing to reinstall Windows multiple times per year (such as computer science and engineering)? Also, in the case WGA for those of who worked with MS Enginerring to determine the the WGA error was in fact an MS error, what are we supposed to do in the future to prevent this from happening again?

Answer: we are working very hard to resolve these type of issues and ensure it doesn't repeat.

Question: Do you have a link to the BBD guide?

Answer: it should be up next week on the technet site:

<http://www.microsoft.com/technet/desktopdeployment/default.mspx> a link will be added

Question: does the KMS require any sort of authentication such as username/password or domain login or is it open to any machine that can access that port on the KMS host?

Answer: no it currently requires no additional authentication

Question: Student media currently allows for two installations so that the student is able to reinstall the software in case of a system failure. Will that be the same for Vista Student Media?

Answer: The current media actually allows an unlimited number of installations (reinstalls) on the SAME machine. It provides for installation on a single machine only (Office provides "secondary use rights" so Office could be installed on a primary and secondary machine used by the same user).

Question: Is there a Vista sysprep tool available currently so that we can start testing?

Answer: yes,

Question: There are many 3rd party license management tools. Is there any effort by MS to work with these other vendor's products?

Answer: yes, we are working with them so that they can consume the data provided by Microsoft

Question: Home Use Media will no longer contain individual licenses? Must we then use VA 2.0 to manage our home users as well?

Answer: Work at Home (WAH) media will continue to contain individual keys.

Question: KMS sounds complicated. You have to have a server and if a machine goes out of use for a while off campus it deactivates. What is the benefit of using KMS over MAK? What is the downside of MAK that I'm not getting?

Answer: KMS provides more administrator control and no activation limit

Question: This is a followup. KMS clients need to 'know' where the KMS service is located. Is the user prompted for this info or can we add this info via script so the activation is silent?

Answer: there is no user interaction. it is determined through auto-discovery or explicit registration by the admin

Question: When is the exact release date for Vista and the new Office?

Answer: We expect to have Windows Vista and Office 2007 available to our VL customer before the end of the year (MVLS will be the first place to get access), and general availability in retail in the January timeframe.

Question: How long before the Key Management Server software will be released? Even if still in beta or prerelease.

Answer: KMS is available now, KMS on W2K3 will be available in Q1 of 2007

Question: Is the KMS server located by forest or by domain?

Answer: It is a service running on any Vista or Longhorn machine. As long as DNS info is set for cross-forest discovery it should be able to serve all machines

Question: Where do we get keys to give to students that graduate and are entitled to a perpetual license?

Answer: We would recommend starting by issuing physical media which is individually keyed - in this instance there is no change needed at graduation. If the student devices are managed via KMS



, that install can be rekeyed to a retail key (available w/ physical media).

Question: Will Office 2007 use the same activation technology as Vista or will it be activated like previous versions of Office.

Answer: Office 2007 currently doesn't use this activation technology

Question: What happens when you've had to activate a machine more than twice due to various failures and you reach the activation limit?

Answer: In the case of KMS there is no limit and in case of MAK you can request for revision in the limit

Question: Will the keys continue to change annually, a current frustration for us?

Answer: At this point we have moved to "re-using" enrollment numbers under Campus, so both the enrollment number and keys will continue to be available (won't change annually).

Question: how do programs effect activation ex deep freeze?

Answer: there will be no impact

Question: Reference DeepFreeze; only concern would be 6 month reactivation DeepFreeze would have to be thawed to accomplish this.

Answer: There should be no impact on using DeepFreeze

Question: what version of Vista will .edu be getting?

Answer: Most likely Enterprise version, ultimate will be an upgrade.

Question: if you have 40 kms servers all in dns, is it a registry setting at a site that directs the workstations to the local KMS server?

Answer: no not at this moment, it is random

Question: If there's no impact on DeepFreeze, how do systems maintain lease-life info?

Answer: we probably need to follow-up on this since we don't know much about Deepfreeze please follow-up

Question: Will there be a web archive of the text Q&A window for this event?

Answer: yes

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