

???? RHEL 5 ????? Virtual machine ?? PV ?? FV,???????? Host ? RHEL5 ? PV Guest OS ????? RHEL5 ?????
???RHEL 5 ????? Guest ? PV ?????????? FV.????? RedHat ??? (<http://www.redhat.com/rhel/server/advanced/virt.html>) ?????????????????????,???????????????????????????????????? SuSE Linux,??? VMware ??
Xen Source ??? RedHat ? SuSE.

PV(Paravirtualized):

????? x86 ??????????,????????????????(nonvirtualizable instructions)????? Ring 0 ?? ?? Paravirtualization
????????,????????(Guest OS)???,????????(Guest OS)????????????????(nonvirtualizable instructions)????? VMM
????????(hypercall),?? VMM ??????????.????(Windows 2000/XP)????????(Microsoft ?????????????????),??????
Paravirtualization.???? hypercall ??? OS kernel ? syscall ??? hypercall ??? hypervisor(VMM)?.

FV(Fully Virtualized):

??? VT ??? VMM ?????? Ring 0 ??,Dom0 ? kernel ?????? Ring1(Dom0 ?????? Xen ??????????).????? DomU ?????
Ring1(?? Para-Virtualized,?? VT ??? Xen ??? full-Virtualized).????? AP ?????? Ring 3.?????? Para-Mode ?
Guest OS ????? VMM ??? ?????? Full-Mode ?.???? VT ?????? VMM ?Guest OS(Para/Full-Mode)????????? Ring0 ?
?.?? VMM ??? Guest OS ??????.Root Mode Privilege Levels.????????(nonvirtualizable instructions)?????
hypervisor ????????? binary translation ? paravirtualization ??????

????? virtual machine ?????? FV(Fully Virtualized),???????? CPU ?????,?????? CPU ??? AMD-V Pacifica (Flag ? svm) ,Intel VT (flag ? vmx) ,???? BIOS ?? CPU virtualization ?????.

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|-------------|--|
| PV | Para-Virtualized: ?????????????????? |
| FV | Fully-Virtualized: ??????????????(CPU) ??? - Intel VT ?? AMD-V. |
| Optimized | ?? PV ?? Guest OS kernel / driver ???????? |
| Supported | ?? PV ? Guest OS kernel / driver ?????????? |
| Unsupported | ????? Guest OS ??????? |
| N/A | ????????? |

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| Tech Preview | ??????????????????.. |
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??? <http://www.redhat.com/rhel/server/advanced/virt.html>

| Red Hat Enterprise Linux 5.2 Virtualization Guest Matrix | | | |
|--|---------------------------|---------------------------------|-------------------------|
| | | Kernel & Processor Architecture | |
| Guest Operating System | Enterprise Linux 5 x86-64 | Enterprise Linux 5 x86-32 (PAE) | Enterprise Linux 5 IA64 |
| Supported Enterprise Linux Combinations | | | |
| Red Hat Enterprise Linux 3 x86-64 FV | Optimized | N/A | N/A |
| Red Hat Enterprise Linux 3 x86-32 FV | Optimized | Optimized | N/A |
| Red Hat Enterprise Linux 3 IA64 FV | N/A | N/A | N/A |
| Red Hat Enterprise Linux 4 x86-64 PV | Optimized | N/A | N/A |
| Red Hat Enterprise Linux 4 x86-64 FV | Optimized | N/A | N/A |
| Red Hat Enterprise Linux 4 x86-32 PV | Tech Preview ¹ | Optimized | N/A |
| Red Hat Enterprise Linux 4 x86-32 FV | Optimized | Optimized | N/A |
| Red Hat Enterprise Linux 4 IA64 PV | N/A | N/A | N/A |
| Red Hat Enterprise Linux 4 IA64 FV | N/A | N/A | Supported |
| Red Hat Enterprise Linux 5 x86-64 PV | Optimized | N/A | N/A |
| Red Hat Enterprise Linux 5 x86-64 FV | Optimized | N/A | N/A |

| | | | |
|--|------------------------------|------------------------|-----------|
| Red Hat Enterprise Linux 5 x86-32 PV | Tech Preview ¹ | Optimized | N/A |
| Red Hat Enterprise Linux 5 x86-32 FV | Optimized | Optimized | N/A |
| Red Hat Enterprise Linux 5 IA64 PV | N/A | N/A | Optimized |
| Red Hat Enterprise Linux 5 IA64 FV | N/A | N/A | Supported |
| Supported 3rd Party Operating Systems | | | |
| Windows Server 2000 32-Bit | Supported ² | Supported ² | N/A |
| Windows Server 2000 64-Bit | Unsupported ³ | N/A | N/A |
| Windows Server 2000 IA64 | N/A | N/A | Supported |
| Windows Server 2003 32-Bit | Supported ² | Supported ² | N/A |
| Windows Server 2003 64-Bit | Unsupported ³ | N/A | N/A |
| Windows Server 2003 IA64 | N/A | N/A | Supported |
| Windows XP 32-Bit | Supported ² | Supported ² | N/A |
| Windows XP 64-Bit | Unsupported ³ | N/A | N/A |
| Windows Vista 32-Bit | Supported ² | Supported ² | N/A |
| Windows Vista 64-Bit | Supported ² | N/A | N/A |