Addendum to the ISV License & Support Agreement

VIRTUALIZATION SUPPORT AND SERVICE

This Addendum is additive and no terms herein shall supersede the existing Support Agreement's terms.

The additive operating environments and related management processes defined herein will be supported and governed pursuant to the Licensor's existing Support Agreement with the Licensee and all pre-existing terms shall apply, including but not limited to the support services, services levels and performance measures.

The Licensor represents and warrants to the Licensee the service levels and performance measures contained within the existing Support Agreement relative to the additive operating environments and the related management processes defined herein.

1. Introduction
The advent and wide spread adoption of Virtualization Technologies in the marketplace dictate that the existing Support Agreement between the Licensor and Licensee be adapted to address this new operating environment. The Licensor and Licensee agree that the introduction of Virtualization Technology is imminent and is already occurring as part of the Licensee’s normal course of business. The Licensor acknowledges its intent to support its products when they are running in a Virtualized Operating Environment, with the expectation that such products will function properly.

2. Definitions
As used in this Agreement, each of the following capitalized terms shall have the meaning ascribed to it as set forth below.

2.1.1. “Virtualization Technology”: a framework or methodology of dividing the resources of a computer into multiple execution environments, by applying one or more concepts or technologies such as hardware and software partitioning, time-sharing, partial or complete machine simulation, emulation, quality of service, and many others.

2.1.2. “Virtualized Operating Environment”: Within the deployment of Virtualization Technology wherein the installation and operation of software occurs.

2.1.3. “Virtualization Layer”: That portion of the computing environment which contains the virtualization technology which also integrates with the resident applications.

2.1.4. “VDI”: Virtual desktop infrastructure is the practice of hosting a desktop operating system within a virtual machine (VM) running on a centralized server.

2.1.5. “MAV”: Acronym for Microsoft Application Virtualization which is software that provisions applications to the desktop operating system environment.

2.1.6. “Appliances”: A method for creating application suites by "packaging" a group of applications with their own operating system, each running within a virtual machine.

2.1.7. “Nonconformity”: A failure of any Services (to the extent applicable) to conform to the applicable specifications.

2.1.8. “Errors”: Any Nonconformity or the existence of a virus, worm, or disabling code in the Service.
3. **Scope of Support Services**
During the Term of the existing Support Agreement, the Licensor will provide to the Licensee unqualified support for the Licensor’s products deployed within a Virtualized Operating Environment. Nothing in this Addendum will in any way restrict the ability of the Licensee to purchase the same or similar services or applications from a third party.

The Licensor and Licensee agree to engage the provider of the virtualization platform if required to successfully resolve any Errors or Nonconformity. The Licensor agrees to formally participate in those support programs provided by the applicable Virtualization Technology platform providers which are tailored to enabling independent software vendors, specifically including those provided by VMware and Microsoft.

4. **Virtualization Error Resolution Process**
The Licensee will determine when an Error has occurred, and pursuant to the terms of the existing Service Agreement, the Licensee will classify the severity of the Error, and the Licensor will address the Error in the manner specified for the severity level.

When reporting Errors to the Licensor, the Licensee shall provide a written description of the Error in reasonably sufficient detail to enable the Licensor to diagnose the problem.

The Licensor will use commercially reasonable efforts to resolve errors in a timely manner as set forth in the existing Support Agreement, as reported by the Licensee or any other of the Licensor’s customers or those identified by the Licensor itself.

When an Error has occurred with the Licensor’s product(s) within a Virtualized Operating Environment, both parties will participate in the following activity:

1. The Licensee will validate that the virtual machine and applications within the Virtualized Operating Environment are properly configured and that all available patches for the virtualization software have been installed.

2. The Licensor will diagnose the Error providing its findings to the Licensee, reporting on the identified root causes consistent with manner as set forth in the existing Support Agreement.

3. If the Licensor determines that the Error has been caused by its software, then the Licensor will provide to the Licensee a remedial plan of action designed to eliminate, prevent or reduce the future likelihood of recurrence of such root causes, immediately proceeding to carry out such remedial plan consistent with manner as set forth in the existing Support Agreement.

4. If the Licensor determines that the Error is being caused in part or in whole by the virtualization layer, then the Licensor and the Licensee will jointly engage with the provider of the virtualization platform in joint diagnostic processes. Together the parties will put forth a good faith effort to determine and agree upon the underlying cause of the Error, proceeding to define and carry out a remedial plan consistent with manner as set forth within the applicable Support Agreement(s).
**Exhibit A**

Sample support statement and VMware resources available to ISVs

**VMware Technology Alliance Partner Program**
ISVs can obviously provide support for their applications running in a virtualized environment without any involvement of VMware. Alternatively, ISVs can join VMware’s Technology Alliance Program (TAP) which provides resources to assist the ISV in providing support, including: software licenses, technical enablement, and potentially access to VMware personnel to assist them with the support validation efforts.

**VMware Applications Validation Pilot**
VMware offers a service to ISVs to help them test & validate their applications on VMware Infrastructure. It provides ISVs with a suite of resources: testing labs, technical engineering personnel to assist with testing, test methodologies and frameworks, as well as VMware software. If an ISV chooses to have the validation done at its premises, VMware can provide onsite technical resources.

**ISV Support**
The ISV should be encouraged to provide a statement like the one below for all of their products.

*Example Support Statement*
(ISV) confirms that we will support customers running (Application Names) on supported Operating Systems in a VMware virtual machine environment.

(ISV) will provide unqualified support for (Application Names) running in a VMware virtual environment in an identical manner as with (Application Names) running on any other major x86 based systems without requiring reproduction of issues on native hardware.

Should (ISV) suspect that the virtualization layer is the root cause of an incident; the customer will be required to contact the appropriate VMware support provider to resolve the VMware issue.

**Support Process between ISV and Virtualization Provider**
We encourage the ISV to engage with the virtualization provider via a third-party support facilitation organization like TSA Net or a Joint Customer Support Agreement established directly with the virtualization vendor.

**Licensing**
In an effort to ensure software license compliance and reduce the effort by both the Licensee and Licensor to track license use accurately, we would encourage the ISV to adopt a virtualization-friendly licensing policy if it has not already done so. ISVs, particularly those licensing based on some form of hardware metric (core, processor or server), need to consider that virtualization is breaking the traditional bond between hardware and software such that applications are no longer tied to a particular physical host or processor. For a better understanding of the underlying
technology that impacts traditional hardware-based licensing, the ISV may want to refer to the VMware White Paper, “ISV Licensing in Virtualized Environments.”

To help customers maintain compliance, ISVs must first clearly articulate usage rights, including those for virtualization deployment scenarios. Second, license enforcement strategies must take into account virtualization use cases. Specifically, an ISV that generates a license key that is tied to the physical characteristics of a particular piece of hardware (node-locked) may have challenges with this key strategy if its software is deployed in virtual environments. Virtualization concepts, such as application mobility and resource pools, the node-locked license key may prevent the application from running as intended.

Where possible, ISVs should use non-hardware based metrics but if this isn’t possible, the metric definition must equate virtual processors/machines to physical. We believe that ISVs have multiple options. First, if piracy is a major concern, there are third-party vendors that offer license activation and registration solutions. A second option may be serial-based license keys and/or electronic license files that unlock product functionality yet do not limit deployment to specific physical hosts. Site-based or user-based licensing models and related key strategies may be applicable for some ISVs.