July 14, 2011
 D. J. Pascoe, Esq. Assistant Attorney General
State of Michigan Corporate Oversight Div.
P.O. Box 30755
Lansing, MI 48909

Dear Mr. Pascoe:

Re: Point by Point Rebuttal to Michigan AG Letter of Feb 17, 2011

The Service Industry Association (SIA) has studied the letter of Feb 17, 2011 sent to your attention by Ms. Dorian Daley, Sr. Vice President & General Counsel for Oracle. We feel it is appropriate to elaborate on several points made by Oracle with which we strongly disagree. We have followed the structure and syntax of their response as an aid to following the arguments.

Many of the points made by Oracle are incorrect with respect to hardware. Oracle is an industry leader in Licensed Software (Database applications). These products are intangible and cannot be owned by the end user, only licensed. Oracle has, by their own description, applied license concepts to tangible property, creating distortions that beg for clarification on behalf of equipment owners everywhere. If Oracle type policies are allowed to percolate into other products, buyers of electronic products with the least bit of embedded code will never own these devices and should never consider them tangible property.

We are an industry advocacy group enthusiastically dedicated to the concept that equipment owners should be free to purchase hardware break-fix from any party of their choice as a fundamental right of ownership. We freely admit that without OEM cooperation, our job is more difficult but not impossible.   We know that without a right to repair hardware, end users lose competition, choice, and value. These concepts apply to all products, not just Oracle. Our member companies have been providing computer hardware repair for longer than Oracle has been in business.

Before providing our response to Oracle's letter of Feb 17, we attempted to clarify Oracle's assertion that their policies are "Generally prospective", since our experience has been otherwise. Oracle has flatly refused to answer our questions viewing our simple request for clarity as a legal interrogatory posed by a competitor. The AAG may wish to present the same questions on behalf of Oracle end users currently unable to contract freely for services while being told they can contract freely.

Background & Context:

Oracle asserts that it is following industry norms, when in almost all respects the norms they reference are for licensed software, not hardware. The following background is provided as context for the computer hardware industry and hardware maintenance specifically.

　　　　Hardware Maintenance as an Industry

Industry Norms for Hardware Maintenance have been in place since the famous DOJ IBM Consent Decree of 1956. At the time, IBM was found to be abusing its dominant market position in no small part because users could not purchase their equipment, only rent it.   Rental included use of the hardware, and hardware break-fix. Software, as we know it today, did not yet exist. Hardware maintenance was a very large continuing expense requiring on-site field engineering staff skilled in the diagnosis, adjustment, alignment, and repair of all manner of electronics and mechanical devices. In order to force IBM into a competitive situation, IBM was required to sell products. The DOJ wisely recognized that competition also required an independent service option to protect customer options. IBM was forced to allow independent service by selling service parts and making diagnostic routines available. Although the Consent Decree expired many years ago, IBM has remained committed to independent service and a used equipment market for their products. HP, Sun, StorageTek, Amhahl, Hitachi, Fujitsu, Magnussen, Control Data, Memorex, Telex, and many others that were in competition with IBM followed the same policies which remain the current norm for hardware.

Until acquired by Oracle, owners of Sun or StorageTek products could combine hardware break-fix offerings from a variety of options including manufacturer (OEM) service, ISP service (independent service provider), self-service, and even No Service.   Buyers of used equipment could have equipment recertified and placed under service contracts, or not, as they saw fit. Contracts were not only various by provider, but were also variable to the serial number of the equipment.   These policies have allowed end users to readily match their needs for service with available offerings and make appropriate choices for the best cost-benefit for their enterprise. Oracle has removed all of this flexibility with their new policies.

Sun Laxity Regarding Licenses

Oracle presents the case that Sun Microsystems had been lax about enforcement about their Operating Systems products such as Solaris and Java. They wish the AG to believe that their abrupt change of policies with respect to hardware maintenance is a logical protection of IP. This is not the case. Operating systems and application systems are irrelevant to the repair of hardware. Whatever Sun failed to do to protect their IP has nothing to do with Oracle changing policies to eliminate competition for very lucrative hardware break-fix contracts.

Automobile Repair and Maintenance

We are pleased that Oracle brought up the analogy of automobile maintenance, although they undoubtedly intended the AAG to infer that autos are very different when it comes to repair. In fact, automobile repair has become a very apt analogy and not in the least insulting. Most autos today make extensive use of electronics, including many software functions variously called microcode, firmware , embedded code, etc. which control part of the basic operation of the auto. Such equipment specific specialty code performs many functions including engine timing, ABS brakes, dashboard displays, etc. (called On-board diagnostics).   This is a form of intellectual property, yet the owners of automobiles are able to sell, lease, dismantle, modify, and repair equipment without interference from the automobile manufacturer. If engine timing software needs to be reset – the code is available for download.   Local service technicians can get tools, service parts, purchase diagnostic equipment etc. The used automobile market could not exist without such flexibility.

Banks lend money at lower rates when they have tangible collateral. Intangibles, such as software, are difficult to finance because there is nothing to repossess. Implied in the notion of collateral value is resale. If automobiles were treated like Oracle hardware, the repossessing lender could not

have the vehicle returned to service in the event of a breakdown. Oracle does not transfer "On-Board Diagnostics", does not provide service parts, specialty tools, or schematics and manuals. They will not repair a vehicle on a time and materials basis as we all do from time to time at the automobile dealer. Neither the lender nor any secondary buyer would have the benefit of any remaining warranty or pre-paid service agreement since such agreements are now non-transferrable and no longer linked to a serial number. No lender in their right mind would finance a vehicle under these conditions.

Our members are the independent auto-repair shops of the electronics industry.   In order to complete a repair, which is a physical process for both electronics and automobiles, the all the on-board software which we label as Non-Licensed Code (NLC)   must be available or the vehicle (or server) will not operate. Oracle has removed access to all diagnostics, restricted access to all microcode, security patches, firmware, machine code, etc. exclusively to their service teams, and will not sell service parts. Oracle has changed their policies to put themselves in the very same position that caused the DOJ to intervene in 1956.

>### Size and Scale of the Break-Fix Industry

The SIA differs with Oracle's view of our industry as being "trivial" and thereby unworthy of attention by the AAG. Hardware break-fix service is an important part of OEM profitability. It is a common practice for OEMS to deeply discount the hardware sale in order to reap the benefits of the services contracts. The more creatively the OEM can compel clients to purchase break-fix service without a competitive check on pricing, the higher the margins to the OEM. Margins of 90% are not unusual. Oracle is using policy to avoid having to compete on the basis of quality, availability, and price.

We estimate that Oracle is currently billing roughly $ 1.2 billion in post-warranty hardware break-fix of which roughly 50% was formerly provided by ISPs. For many SIA members, revenues have dropped 30% or more with this one sudden policy change having everything to do with older (pre-policy purchase) equipment. Oracle clearly implies that their policy changes were intended to be evolutionary and non-disruptive, when in practice the opposite is the case.

>### Complex Interplay of Hardware and Software

Oracle is correct in noting that the interplay of hardware and NLC at the machine level are inextricably linked. The distinction between types of software is essential to understanding the complaint. It has been the case for decades that there are three major categories of software. The most basic is microcode or firmware which is provided to operate electronics in the most basic sense. These are the bits of code provided that start the machine and allow connections to internal components. Such code is not licensed and had been traditionally treated as part of the equipment. (Thus the acronym NLC for non-licensed code.) This is the only category of software important to the hardware repair process.

Operating systems, such as Windows or Solaris, are installed once the machine is running. These may be licensed products such as "Windows" or "Open Source" products such as "Linux" . Neither is touched by the repair process. The third layers of software are the applications packages which perform specific functions such as EXCEL or Oracle Database products. Oracle appears to be conflating policies that make sense for the top two layers of software and trying to apply them to NLC and hardware.

Providers of hardware break-fix need access to diagnostics and NLC as part of the repair process. Repairs do not involve rewriting or hacking into code – they only involve resetting or restoring

existing code. It seems obvious to us that under the DMCA Section 117 such code is specifically permitted to be copied, yet Oracle has blocked access to this code calling it "IP". NLC is definitely IP, but in the event that an update to a piece of NLC is needed to restore equipment to service, the buyer of the equipment would likely expect access to the code as a basic right along the lines of automobile recalls even for equipment outside of warranty.

When non-licensed code is treated as licensed code – no electronic machine (Computer or automobile) has value as a whole device. The machine itself is only valuable as scrap metal and plastic. What is a printed circuit board without the means to use it? By extension, if a buyer must continue to pay fees to the manufacturer for continued use – as with Oracle contracts blocking access to machine code behind the guise of IP – the buyer is now a licensor, not an owner. Oracle users are now fully back in the pre-1956 situation where they never own the equipment and can only rent it.

> Break-Fix

Hardware maintenance is known as "break-fix".   This work is necessary because equipment does break, and often enough that users feel the repair function is highly valuable. Break-fix is so commonly needed that many machines are arranged to be fully redundant so as to provide a complete duplicate machine to manage workload while the other machine is down for repair. As testament to the differences between hardware maintenance and software maintenance, Oracle's own organization separates the two. Oracle claims that they alone can correctly service their equipment, yet they routinely outsource hardware maintenance to several of the very same members of the SIA who are not allowed to support Oracle equipment directly. It is disingenuous of Oracle to claim a unique skill set when they clearly utilize the very same skills through ISPs when it suits them. The only difference is in marketing, not execution.

SIA Contentions:
   1. **All or Nothing**

Oracle disagreed with SIA contentions that their policy was forcing clients into an "all or nothing" choice between Oracle support or no support. We made this assertion based on negotiations with our mutual customers, many of whom have been Sun and StorageTek equipment users for decades, and who have cancelled ISP contracts on equipment purchased prior to 03/16/10 as a condition of coming into compliance with Oracle's new policy. It is the client base that is telling us they are not offered the option of some support from Oracle and some support from an ISP. Despite requests dating back to May of 2010 from the SIA, Oracle has refused to clarify to the SIA how clients can integrate ISP hardware service with Oracle hardware service within their enterprise.

Further, the assertions in the letter from Ms. Daley are not supported by the published policy documents. All statements made by the SIA are pulled from the policy documents which contradict both experience in the field and assertions made by Counsel.

> **"Freeriding and Integrity of Support Pricing"**

The SIA fully supports the enforcement of contracts by any vendor. Pricing and pricing integrity is of no concern to the SIA. It is irrelevant to the discussion that Sun may have been sloppy in their license enforcement.

> **"Every system must be under support"**

It is a fact that hardware systems are acquired over many years and represent many different stages of product development and capabilities. Most businesses invest in hardware that they wish to keep well beyond the initial warranty period and intend to redeploy assets within their enterprise using

different levels of hardware maintenance support as dictated by the application. This is not possible under the new Oracle policy. We see no distinction between the word "All" and the word "Every". In practice, despite the wordplay, Oracle has been demanding that "All" equipment, except that which they no longer wish to support (end of life) be on a pre-paid support agreement, including equipment that is not currently on an Oracle service contract.

In the automobile analogy, this is equivalent to a car manufacturer demanding that a buyer of a new car also buy a pre-paid service agreement for the used car the teenage son is driving as a condition of getting a new car warranty. Oracle is telling the end user, "Sure, you can skip the new car warranty and get all the service you want from your ISP".

Operating systems support

Oracle is correct that ISPs have no reason or rights to be engaged in support of licensed operating systems. The important distinction is that licensed operating systems software is NOT the same as non-licensed microcode or firmware. Access to microcode and firmware is essential to hardware function before an operating system can be installed. Either equipment owners have access to NLC and diagnostics, or they do not. There is no real grey area in which Oracle can claim they must treat non-licensed code as licensed product without producing a license agreement.

2. Prospective vs. Retrospective

We are pleased to see Oracle confirm that their policies apply only to equipment purchased after March 16, 2011. This has not been understood by the end user community and as a result, many end users have cancelled ISP agreements that could have remained intact.

The phrasing "Generally Prospective" leaves considerable doubt as to what parts of Oracle policy are not Prospective. The policy of 3/16/10 is silent on the subject of effective date, and to our knowledge, there are no procedure documents available to customers outlining how they can continue to acquire service under the terms and conditions in place prior to 3/16/10. It is our experience that clients have been compelled, under threat of having no service for valuable software updates, to bring all equipment in their enterprise under a unified contract including those items long ago past warranty and being successfully serviced outside of Oracle. This would include the State of Michigan, a user of Sun/Oracle hardware and software.

In an attempt to fully correct any flaws in our understanding of policy, we requested clarification on June 9, 2011 from Oracle Counsel on the specifics of how these "Generally Prospective" policies would be administered. The following questions were posed directly to Oracle verbatim. Oracle has rebuffed our request for answers to these specific questions. A copy of their refusal to answer our questions is attached.

As an aide to understanding our questions, we have set out the questions and reasoning in italics, below.

(a) Can the user/agent call in for time and material support without an Oracle hardware support agreement?

> *Prior to March 16, 2010, owners of Sun and StorageTek equipment could call for service on a Time & Materials basis. Oracle withdrew all T&M calls and did not provide a procedure for requesting service on equipment purchased previously.*

(b) Can the user/agent get Solaris updates and patches at the previous rate, (if any) without an Oracle hardware support agreement?

> *Prior to March 16, 2010, updates and patches were available without a hardware support agreement. All access has been redirected to a secure website requiring a current contract to access. This is not "prospective" for owners of older equipment unless Oracle provides access instructions.*

(c) Can the user/agent get hardware firmware updates at the previous rate, (if any) without an Oracle hardware support agreement?

> *As above, firmware (NLC) has been restricted to those with hardware support agreements, previously freely available without an agreement. This is not "Prospective" for owners of equipment unless Oracle provides access instructions.*

(d) Can the user/agent get security updates, patches, fixes, etc. at the previous rate, (if any) without an Oracle hardware support agreement?

> *Same issue as above.*

(e) Can the user/agent remove these systems from the Oracle maintenance contract if he has newer systems with Oracle at no charge? If there is a charge, please present the formula.

> *Owners of older model equipment contracted for hardware maintenance on a serial number basis. New Oracle policy states that all equipment must be under a single pre-paid contract and no refunds are available for items removed from service. For Oracle policy to be truly "Prospective", owners of equipment prior to 3/16/10 should continue to have serial number contracting and removal available to them. This is not "Prospective" unless Oracle clarifies for end users how to remove equipment from contract.*

(f) Can the user/agent order spare parts from Oracle?

> *Prior to 3/6/10, Oracle /Sun/StorageTek sold service parts. These parts should continue to be available through Oracle for older equipment, if indeed the policy is "Prospective".*

(g) Please detail out any changes that might exist to the original Sun support policies for the equipment that was obtained prior to 3/16/10.

> *There is no reference in the policy document of 3/16/10 that differentiates between date of equipment purchase. Owners of such equipment have not been informed as to how to manage such equipment outside the new policy.*

(h) How do customers who have multiple service contract end dates based on various warranty expiration dates obtain a co-terminus hardware maintenance agreement?

> *Hardware is purchased over months and years as needed and will have variations in warranty and service contract end dates. Aligning contract end dates to a single point in time requires either all contracts to expire, or all contracts to be re-written. Re-writing of existing contracts for the purposes of new policy compliance we believe would be "Retrospective".*

We also requested links to documents for procedures elaborating on each of the above policies so that we could direct our members and customers to the link.

3. **Time and Materials**

T&M does not backstop the ISP, who has no need of Oracle service, but rather it facilitates the flow of equipment in the secondary market. Buyers of used hardware often prefer to place equipment under OEM service contracts, which in turn requires that the buyer or seller to pay for any necessary repairs before equipment is accepted. Refusal to offer T&M service is one of several policies intended to thwart used equipment transactions, along with refusal to offer return to service at reasonable rates and refusal to recertify used equipment without penalty.

4. **Reinstatement Policies**

Oracle is legally correct about their unilateral rights to change policies, however their explanations are incorrect. ISOs do not need reinstatement policies to backstop their service contracts. End users need reinstatement policies to allow them to manage their fleets of equipment, both new and used. Without a reinstatement policy, end users are not able to easily redeploy assets across their enterprise, cannot add used equipment even if the application is optimized for an older model, and are unable to sell their equipment in a secondary market because the pricing of the reinstatement fees is easily manipulated to exceed the market value of the item. Oracle has a very clear self-interest in making used equipment undesirable as they seek to sell more new equipment.

Administrative Burden

Oracle dramatically overstates the difficulties of adding equipment back on contract. Traditionally hardware service contracts are written and administered to the serial number level. This has not been difficult for all other OEMs , and remains commonplace for tangible assets everywhere including the smallest consumer products such as ipods and cell phones. Ironically, Oracle sells the very same type of software used by other OEMS to manage service agreements to the serial number level.

Oracle is telling the AAG that field service is a burden and not a profit center. This is entirely opposite the experience of OEMs where 90% or more of the service contract is profit. Many hardware OEMs sell equipment as "loss leaders" in order to reap the benefits of the high margin service contract. Because the margins are so desirable, OEMS with field service organizations are always interested in adding to their service revenue and offer incentives, not penalties, to bring equipment back under what are always very lucrative agreements. StorageTek, prior to its acquisition by Sun, was in the multi-vendor service business and offered competitive service options as an ISP. Oracle is well aware of the profit margins for their own break-fix service and are intent upon capturing all the service revenue possible by preventing competition from ISPs.
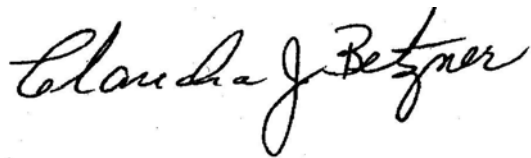
Freeloading

Oracle implies that taking hardware back on service is allowing users to "freeload" for support they didn't have. This is entirely at odds with the hardware service business model for both manufacturers and ISPs. Providers of hardware service do not maintain staff or parts inventories without contracts. Oracle has no costs when it has no service contract. They are not harmed in any way for equipment maintained by others. In the world of licensed software, users that eschew support and later return to support are engaging in a form of "freeloading". This is not the case with hardware.

Gaming the System

As to a client having fore-warning of upcoming hardware failures and "gaming" the system, we have no evidence that such a capability exists outside of Oracle. The failure rate of equipment made by Oracle is not public. If Oracle is engaging in predictive modeling, such information would be very unlikely to be used against them. This is also a very odd argument since Oracle also asserts that their equipment "rarely" fails – in which case the incentives to game the system should not exist.

We hope our additional commentary has been clear and concise. We continue to believe that Oracle has created policies which serve no purpose other than to prevent competition in hardware break-fix. The primary damage is to the end users now unable to manage their own fate as equipment owners. The same rights that we all expect as owners of automobiles with electronic parts should apply equally to other products with electronic parts – including computers.

Claudia J Betzner

Executive Director SIA