

BUYING, SUPPORTING, MAINTAINING SOFTWARE AND EQUIPMENT

**An IT Manager's Guide to
Controlling the Product Lifecycle**

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Initial Support and Maintenance

INTRODUCTION

This chapter deals with contracting for maintenance for both hardware and software purposes in the initial negotiation. Forms of maintenance offerings are discussed, as are the common pitfalls in maintenance agreements from various types of providers.

MAINTENANCE IN THE DIGITAL WORLD

Depending on the vendor and type of equipment or software, the term “Maintenance” can mean any number of things ranging from changing toner to applying security patches to installing upgrades and enhancements. It is important for users to ascertain exactly what the vendor includes with their maintenance offerings.

Maintenance of hardware and software is needed because technology breaks and software is not perfect. Users can go without any support agreements at all, which is common for consumer-scale products, but businesses have come to rely upon technology product and application availability 24/7, 365 days a year. The more any activity requires constant uptime, the more essential the support agreement, at least in terms of emotional comfort. Even the most costly service plan does not actually prevent failure; it only prearranges for the services and parts needed to make the urgent repair.

A wide variety of major purchases are offered with postwarranty maintenance contracts in addition to the option of time and materials (T&M) repair. Vendors that do not want to be in the service business leave the

business to others or engage in pass-through contracts that are executed by others. Vendors that want to be in the service business do so because they are seeking high-profit margins. Service contract margins are almost always lucrative; in many cases so lucrative that the product itself may be sold as a loss leader.

Regardless of vendor or duration, maintenance contracts are almost always prepaid in a lump sum in advance of the need for service. In this respect the maintenance contract is similar to paying for an insurance premium, although maintenance contracts are not insurance in any other sense.

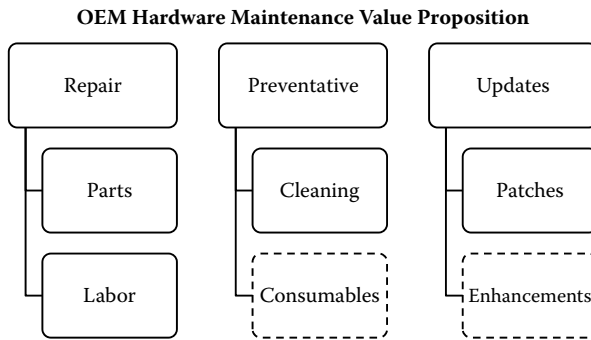
The personal equivalent of a maintenance agreement for hardware or software is to have a prepaid postwarranty service contract with the vendor of one's refrigerator, large screen TV, or cell phone. Such contracts are becoming more common and are offered by the retailer at the point of purchase. Electric and gas utilities have been tapping into the market for postwarranty support of heating and air-conditioning equipment with their own prepaid or monthly billable services. At the household level, we weigh the risks (mostly price) of calling for repair without a contract against the emotional comfort of having such costs fixed. This is the insurance value of any maintenance contract.

Hardware Maintenance

Maintenance for technology hardware products means physical break-fix activities either within or outside of warranty. The maintenance agreement or warranty agreement specifies how service parts are to be supplied and how (or if) technician labor is to be provided. There are usually parameters included as to how the user should notify the warranty provider of a request for repair, and other parameters guide how quickly the provider must respond. (See Figure 2.1.)

Where there is a labor component, hardware maintenance and warranty agreements are often priced to accommodate different levels of technician response such as Next Day Response, 4-Hour Response, or 2-Hour Response. This is an extremely effective sales generator for the original equipment manufacturer (OEM) as the user is provided an "Alternative of Choice" between two to three levels of service, but never the option of no OEM service. Salespeople are trained to offer such choices and it is proven that this sales technique is consistently one of the most effective.

The vendor intends for the choice between service options to mask the option to negotiate the warranty. The entire period and coverage models

**FIGURE 2.1**

Value proposition for hardware maintenance.

of a warranty can be negotiated. Manufacturers can back out of their costs to provide a labor contract, and they can reduce the period of warranty coverage if pressed to do so. It is quite common for buyers of large volumes of low-cost assets, such as personal computers or blade servers, to negotiate the shortest warranty possible and meet their service restoration needs with the purchase of extra units to pop in place as hot spares.

Requests to reduce warranty coverage are not voluntarily offered by OEMs because it eats into their bottom line, which should not be a concern of the buyer. The OEM sales force is unlikely to be prepared for any such requests and will not even hint that such options might be available. It is for the user to make the demand and not wait for the offer. For more on how warranties are constructed and negotiation options, see Chapter 3.

Vendors today often refer to including “Preventative Maintenance (PM)” in their service contracts. Truly effective PM was viable for analog devices but is not viable for digital electronics. There is nothing to adjust. Unless a failure occurs, there is nothing for a technician to do (short of keeping the environmental conditions within spec) to prevent failure. The most effective use of PM in the digital world is cleaning dust from fans.

True upgrades and enhancements are rarely (possibly never) part of a hardware maintenance agreement. It would not be logical for the OEM to provide a valuable new feature for no charge, nor is it possible for hardware features not already manufactured to suddenly create themselves through a downloadable patch. The parts must be there in order to be activated.

Patches provided as “upgrades” accessed within the framework of a hardware maintenance agreement are almost always repairs to defects (equipment or associated machine code) or additions to code needed to

support new hardware features or models. There may be the odd situation where a new function is added to hardware, but most new functionality cannot be delivered within a patch. (Software patching can deliver new features.) Adding attachment support to a processor for a new feature, such as a new model of disk drive, is arguably an *upgrade* since the code must be developed in order to attach the physical device. The upgrade is the new feature, but the processor code must be updated to recognize the feature. The manufacturer must provide the attachment code or they cannot sell the feature.

Unfortunately, blocking access to the “updates” that support new features is a powerful weapon used to prevent used equipment from being installed at a later date. If the feature-specific code is not on the processor, then the used market for both processors and peripherals is diminished.

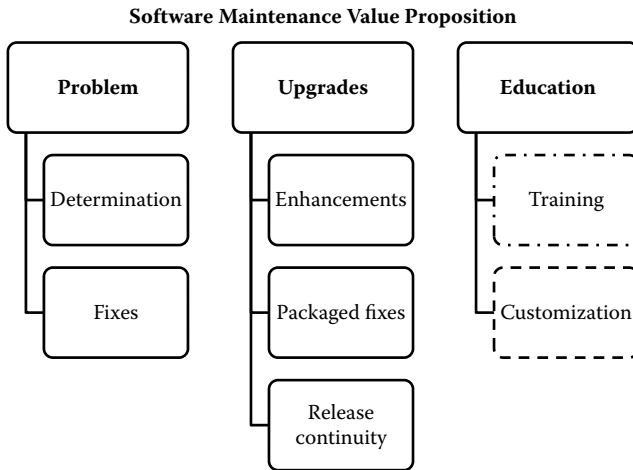
Users should not treat such self-serving code changes as upgrades they should pay to access. As an example, this is no different than HP producing a new model of printer and shipping a driver on a disk. The driver is only needed if the product is purchased. During initial negotiations, users have the opportunity to require all future updates and feature support as part of their purchase agreement.

Reference to upgrades within a hardware maintenance agreement is therefore suspicious marketing language and should be challenged. Buyers can flush out the real purpose of any vaguely described upgrades by asking “What is the new functionality included with this upgrade?”

Users are occasionally offered maintenance agreements that include IMAC (installations, moves, adds, and changes). Provisioning hardware upgrades and IMAC is often done by the same technicians but is not considered maintenance. These should be considered bundled agreements and dissected to make sure that all elements of the work have been properly subject to competition. For example, in an IMAC agreement that includes maintenance, the revenue for any hardware upgrades is typically booked by the hardware sales team, the revenue for IMAC falls into the revenue goals of the services team, and the hardware technician’s time for the maintenance portion is billed by the maintenance team.

Software Maintenance for OS and Applications

Software maintenance is an agreement on the part of the software provider (developer) to undertake problem diagnosis and associated programming changes in the form of a patch or fix following the expiration of the initial

**FIGURE 2.2**

Value proposition for software maintenance.

license warranty. (See Figure 2.2.) A warranty is a limited time period, usually a year or less, during which time the buyer is automatically supported for these activities at no additional cost.

The type of software and the acquisition channel determines the extent and responsibility for software support. Many consumer class or small business software license agreements offer chargeable calls for “support” as a necessary way to prevent being overwhelmed with how-to questions and not actual bugs. In these situations, many honorable vendors do not charge for calls made with legitimate problems.

Within the business partner/channel partner delivery model, the partner is often tasked with handling all the inbound calls for support and being the first line to the customer for all problems, including hardware and software. Only after the partner is satisfied that they cannot support the customer from their own resources is the call passed to the OEM. Selecting a partner with important software and engineering skills for their first level support can be far more worthwhile than driving the last dollar out of the purchase agreement.

Enterprise software licenses are almost always negotiated directly with the licensor. All calls for support are almost always directed immediately to the vendor once the problem is passed through the user help desk or service desk for problem tracking and triage. The more complex the environment, the more useful it is for the user to control calls for help through a prescreening process. The help desk or service desk is usually tasked

with discerning which types of problems can be solved internally and which require external support.

Diagnosing software problems is costly for any vendor, particularly when problems are not easily made to recur. The skills needed to diagnose problems and write corrections are in high demand worldwide. The software vendor does not want to be patching code, particularly code that does not generate revenue. Software maintenance is often more costly to provide than hardware maintenance because the solutions to problems have a highly trained labor component.

Postwarranty software maintenance contracts are exclusively offered by the vendor to continue the support tasks beyond the minimum real warranty for some period of years. These agreements are the cash cow of the industry and, as discussed in Chapter 1, can be extremely difficult to control.

In contrast to the hardware maintenance contract, legitimate upgrades are commonly part of a software maintenance agreement within a particular release and all associated subreleases. Typically, a software maintenance agreement does not guarantee any rights to the next release without a new license agreement. Many software vendors create upgrade “paths” to coax customers into new versions. Software maintenance agreements are highly negotiable over these points.

Consumables

Consumables-based maintenance programs are another form of maintenance largely confined to printers and copiers. These maintenance programs tend to include not only housekeeping services such as vacuuming dust from inside the frame but also reloading consumable items and changing high-wear parts on a scheduled basis. Oil changes within a warranty period for automobiles or the toner changes for a copier also fall into this category.
