



# **CrossOver Total Cost of Ownership (TCO): A Study**



## CrossOver: A TCO Study

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**Using Wine offers the best of both worlds—being able to run the applications you want on the operating system you want.**

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**Overview:** Many corporate IT organizations currently support other desktop operating systems besides Windows—Macs in the graphics or marketing groups, say, or Linux-based engineering workstations in electrical engineering. However, these workers need access to the office productivity applications employed by Windows users, particularly MS Outlook for calendar and email. As a result, many organizations are forced to equip these workers with two machines—their “production” machine, and a Windows PC which in many cases is used merely for Outlook. This paper examines the return on investment for eliminating the second PC and replacing its functionality with CrossOver.

In cases such as these, the IT administrator essentially has three options available. The first is to maintain two machines per user. The second is to distribute the needed applications to the desktop via a thin-client Windows solution such as Citrix. The final option is to use a solution like CrossOver Linux Professional to run the needed applications on the production PC without Windows.

Following is a table that examines total cost of ownership (TCO) for a 100-person engineering department over a 3-year period running dual hardware, Citrix, and CrossOver. The analysis examines both the hard and soft costs associated with each deployment solution.

	Dual Hardware Setup	Citrix	CrossOver Linux Professional
<b>Hard Costs</b>			
Hardware Acquisition	\$150,000 <sup>1</sup>	\$5,000 <sup>2</sup>	N/A
Infrastructure Software Licensing (OS, NOS, etc.)	\$15,000 <sup>3</sup>	\$90,000 <sup>4</sup>	\$9,400 <sup>5</sup>
Additional System Administration Costs	\$600,000 <sup>6</sup>	\$45,000 <sup>7 8</sup>	\$18,000 <sup>7 9</sup>
<b>Soft Costs</b>			
License Administration Hassles	Medium-High (Must keep track of licenses on 200 different machines.)	High (Microsoft CALs are an utter nightmare to administer.)	Low (Unlike Microsoft, we actually trust our customers. We also are open to concurrent-usage licensing models.)
Portability	Poor (It's hard to carry two systems around.)	Reasonable (Citrix works well over DSL-speed links.)	Excellent (CrossOver is always on the Linux system.)
<b>Total 3-Year Cost</b>	<b>\$785,000 + Medium licensing hassles</b>	<b>\$140,000 + Nasty licensing hassles + too much antacid</b>	<b>\$23,200 + Minimal licensing hassles</b>

1 Assumes that new hardware is purchased at \$1,500 per PC.

2 Cost of a Citrix server

3 Nominal street cost of 100 copies of WindowsXP Pro or Vista.

4 Cost of 100 licenses of Citrix, plus Windows CALs

5 Based on 100-user volume price of \$52.00 / user Year 1, and \$21.00 / license / year support fee for Year 2 and 3.

6 Based on cost of \$2,000 per machine / year for 100 machines. Note that this is a conservative estimate; some Gartner studies suggest loaded annual costs in excess of \$9,000 annually.

7 No additional PC sys admin costs, as Citrix is running on the users' production systems.

8 Additional Citrix server assumed to take .25 FTE at \$60,000/year, or \$15,000 annually

9 CrossOver and its associated Windows applications can be distributed as an RPM, essentially eliminating sysadmin costs for deployment. CrossOver sysadmin calculated as .1 at \$60,000/ year, or \$6,000 annually.

## Analysis

The numbers presented are undoubtedly not the be-all end-all of cost figures. But by anybody's math, it is clear that by far the largest cost factor in the equation is the care and feeding of additional PC hardware. This makes supporting dual hardware platforms prohibitively expensive, and is to be avoided if at all possible. Citrix is fine solution, but comes with a much higher attendant hassle factor in the form of managing CALs. CrossOver, on the other hand, is both low-cost and low-hassle. Particularly for organizations that already possess Unix administration skills inhouse, CrossOver Linux will fit seamlessly into their current environment, and provide them with much less expensive Windows productivity costs.