

## Chapter XXVII

# Open Source Software Use in Local Governments

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### ABSTRACT

*Free, libre, or open source software (FLOSS) offers the promise of cost-free, modifiable, high-quality software, for a multitude of tasks (e.g. desktop operating systems, office suite applications, graphics manipulation packages, etc.). Given that this software is free in terms of cost and ability to modify, we should see its widespread use throughout public administrations whose limited budgets generally give rise to the need to find ways to cut costs wherever possible, while simultaneously providing ever-expanding ranges of services to their constituencies. However, we find open source software's use at the desktop and application level rather sparse. We look at 3 specific cases of open source software use: one for provision of local e-government services, a case where a small municipality has applied open source software within a desktop environment, and a case where a large city government has embarked on the wholesale replacement of the operating system and office application suite of an entire city's implementation of desktop workstations.*

### INTRODUCTION

In this digital age, more and more members of the administrative and professional class are tasked with the responsibility of working with ever-greater numbers of, and increasingly more complicated, technologies to accomplish their day-to-day jobs. A glance at many of the Public Administration job postings on-line will give you

the picture: Help Wanted! Must have working knowledge of Microsoft Windows and Microsoft Word! Microsoft Excel knowledge desired! But what are these job postings really asking for when they say this? Are they asking for knowledge of specific applications? Or are they asking for a broader knowledge, one that can be elusive to many: the ability to get along well with technology, no matter what brand, while simultaneously get-

ting along well with people, both their coworkers and their constituencies.

As cities are increasingly being required to account for every dollar they spend, and to show returns on investments in unprecedented ways, information technology departments in a few cities worldwide are becoming highly innovative. Some, like Andy Stein's Information Technology department of Newport News, Virginia, are collaborating with other local governments around the world to produce eGovernment portals through which their citizens can access government resources. While most IT departments went the decentralized route of the Personal Computer, others, like Harold Schomaker's department in Largo, Florida started following a centralized model that allows them to flourish with just over half the support staff of similarly-sized cities, while being innovative with their approach. Still others, like the city of Munich, Germany, are investing today in a complete replacement of their desktop environment to ensure their constituents the highest standards in privacy while still being able to keep costs as low as possible and guarantee functionality.

The secret to each of these innovative moves is the judicious use of open source software – software that the information technology administrators in each of these communities can review for holes that may lead to breaches in privacy. Software that allows custom-tailored development to provide workflow management that fits like a glove. Software that frees agencies from the ever-circular cycle of: Buy expensive hardware, apply expensive software, get more expensive software to assure security, upgrade, repeat.

Yet as Corine Stofle says in her September 7, 2006, article regarding open source software on the Government Technology website: "... agencies nationwide are still slow to get onboard. According to Hammersla, a recent study by Shawn McCarthy, a senior analyst at the research firm IDC, shows that only 12 percent of government agencies are using Linux, and the projected increase for 2009 is a mere 3 percent. These statistics seem to in-

dicate a lingering hesitation to try open source." (Stofle, 2006)

While the software is oftentimes free, or at substantially low cost, there is a price involved in migrating to the freedom afforded. Sometimes, as you will see, those costs can be minimal. Sometimes, those costs are potentially prohibitive. Yet the cities you will read about here all made the decision that the investment in cost and time in the migration would be well worth the effort.

To start, we offer an introduction to the world of open source software. Through this introduction, foundational explanations are made on what the concept is, why it doesn't always mean free as in cost, and what some of the benefits and hidden costs are to adoption. Next, we proceed to describe what the major factors are in considering software "purchase" decisions, and provide reasons for why open source should rightly share in the process. Then we consider two sides of the same debate, in a treatment of the right of governments to know what their software is doing with their private data versus the right of companies to maintain the privacy of their intellectual property. Next, we describe how three municipalities have implemented open source software for very different reasons. Finally, we wrap up with a conclusion, where we offer our thoughts for the future.

## **SOME BACKGROUND ON OPEN SOURCE SOFTWARE**

Before we look toward answering the central question of this chapter, "What is open source software, and how can it help local governments in their information technology implementations?", it may help to settle on a turn of phrase to describe that which we're discussing. Some in the community, because of the (cost)free or free(dom) nature of the software refer to it as "free." Others, who try to differentiate between the definitions of "free" choose to call it "software libre". Still others prefer to refer to it plainly as "open source" software.

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