

Chapter XIII

A Model for the Successful Migration to Desktop OSS

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ABSTRACT

Although open source software (OSS) has been widely implemented in the server environment, it is still not as widely adopted on the desktop. This chapter presents a migration model for moving from an existing proprietary desktop platform (such as MS Office on an MS Windows environment) to an open source desktop such as OpenOffice on Linux using the Gnome graphical desktop. The model was inspired by an analysis of the critical success factors in three detailed case studies of South African OSS-on-the-desktop migrations. It provides a high-level plan for migration and is illustrated with an example. This chapter thus provides a practical guide to assist professionals or decision makers with the migration of all or some of their desktops from a proprietary platform to an OSS environment.

INTRODUCTION

The growing market share of open source software (OSS) can be attributed to the rising prices of Microsoft products, the increased availability of OSS, the increased quality and effectiveness

of desktop OSS software, and the drive for open standards in organisations and governments (Wheeler, 2005). However, though OSS has been widely accepted as a viable alternative to proprietary software (PS) in the network server market for some time, desktop usage of OSS still

remains fairly limited (Prentice & Gammage, 2005). Unlike many server OSS installations where the organisational impacts are relatively minor due to their isolation in the server room, moving to an OSS desktop generally requires an organisation-wide migration involving a large number of users. Correspondingly, there has been an increased interest and awareness in guidelines to assist with the migration from proprietary desktop platforms to OSS. (Bruggink, 2003; Government Information Technology Officers Council [GITOC], 2003).

This need for migration guidelines was the inspiration for our research. This chapter thus proposes a practical model to assist with the migration to desktop OSS. The model is based on an in-depth analysis of the critical success factors (CSFs) in three migration case studies in South Africa. However, the model that emerged from this research should prove useful in other contexts, specifically so—but not only, it is hoped—in other developing-country contexts.

For clarity, the term desktop OSS (or OSS on the desktop) will be used to refer to those OSS applications that are utilised by everyday users to perform daily work tasks. This must be contrasted to server-side OSS, which comprises those OSS applications that traditionally reside on a server as opposed to a client (or workstation) and are used primarily by technical staff such as systems administrators to fulfill back-office functions such as e-mail routing and Web hosting. Typical desktop OSS applications include productivity software (e.g., OpenOffice), e-mail clients (e.g., Mozilla Thunderbird), Internet browsers (e.g., Mozilla Firefox), and a variety of other utilities. Although many PC (personal computer) users use one or several OSS applications, the proposed model deals with situations where fairly significant desktop OSS migrations are implemented, that is, those that include at least an OSS operating system (Linux) as well as at least a full productivity software suite.

BACKGROUND

For many organisations, the decision to migrate to OSS from a proprietary platform is a strategic one (Wiggins, 2002). Potential advantages associated with the use of OSS are summarized by Gardiner, Healey, Johnston, and Prestedge (2003), but include lower cost or free licenses, lower total cost of ownership (TCO), access to source code, reliability and stability, support by a broad development community, scalability, and security. The authors also list the following potential disadvantages: lack of vendor support, difficult installation, lack of integration, hardware compatibility problems, security, insufficient technical skills, user resistance, and warranty or liability issues.

Migration requires analysis of the expected return on investment (ROI) in terms of the current and expected TCO and the associated migration costs (Fiering, Silver, Simpson, & Smith, 2003). One of the bigger costs of migrating to a business OSS desktop, such as Novell Linux Desktop, is that proprietary business applications have to be rewritten to run on Linux.

Migration does not have to be an all-or-none decision. For some users, Linux desktops are more appropriate, while for others, there are too many proprietary, non-Linux-compatible applications in use for a migration to make sense. Companies must decide which user groups to migrate and may have to provide support for both the proprietary and OSS products simultaneously (Goode, 2004).

An illustrative ROI analysis by Gartner (Prentice & Gammage, 2005) shows that migration costs are significant when compared to savings. It is possible to reach a breakeven in 1.3 years in the best-case scenario of migrating users from Microsoft Windows 95 to locked Linux desktops, while payback for knowledge workers may still be unattainable in many circumstances. Structured-task users are more likely to take to a locked desktop without impacting their productivity

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