

Migrating to StarOffice™ Software from Microsoft Office

Making the Transition as Smooth as Possible
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Chapter 1

Articulate the Goals and Objectives of Your Project

This guide is designed to assist IT decision makers who are considering moving their organizations to the StarOffice™ 7 desktop environment from Microsoft Office 95/97/2000/XP/2003.

As with any large IT project, upgrading or moving to a new system requires thorough planning. You need to:

- Make a business case for moving to a StarOffice desktop environment
- Secure management support and sufficient funding for StarOffice software enterprise license costs, deployment, training, and consulting assistance, where applicable
- Understand the differences in file format and macro programming between applications
- Document your current computing environment, including files and custom solutions
- Establish clear goals and requirements for the planned computing environment

You also should take a close look at your company's current workflow and decision-making dynamics, and how they may be impacted by the move to the new desktop environment.

From the beginning, it is crucial that the goals, objectives, and timing of the migration project are clearly articulated. Of course, the overall goal is to migrate all necessary files and custom solutions to a new desktop environment, safely and efficiently. In addition, however, it is necessary to outline the move in broad strokes. This can be accomplished by answering the following questions prior to developing your migration plan:

- What is your assessment of the current computing and document environment?
- What is your vision for the planned computing and document environment?

- What should be done to ensure that business units and users can maintain their current levels of productivity during and after deployment?
- Do you have sufficient on-site resources and expertise to support and train users during and after deployment?
- What will be done to address the needs of your organization and its business units and users when it comes to sharing files, specific feature requirements, user settings, and custom and third-party applications during and after the rollout?
- What are your plans for upgrading users and converting files and data? Will you upgrade users and convert files during work hours, overnight, or on weekends?
- How will you handle files, macros, templates, and custom solutions that need migrating?
- What mechanisms will be available to monitor and share information about the progress of your migration while fostering cooperation between team members and users?

Answers to these (and possibly other) questions will help refine your goals and objectives, enabling you and your team to develop an effective and comprehensive migration plan that meets the needs of your organization, its business units, and users.

Understanding the Similarities and Differences Between StarOffice Software and Microsoft Office

Understanding the differences between StarOffice software and Microsoft Office will help you anticipate the key challenges involved and determine the best migration option for existing documents, templates, and business applications. Depending on the complexity and value of existing files or custom solutions, the options range from archiving to converting to reengineering source code.

The main steps of the process are:

1. Microsoft Office documents and templates must be converted to the StarOffice software file format.
2. Existing scripting and custom solutions must be migrated.
3. Current business rules and processes may have to be adjusted to take full advantage of StarOffice 7 Office Suite features.
4. In addition, key architectural differences between these two application suites can affect the way they process and store information and data. However, because the suites also share many similarities, it is possible to make the switchover nearly transparent to most users.

File Format Differences Between StarOffice Software and Microsoft Office

Perhaps the biggest challenge is dealing with basic file format differences. Every Microsoft Office version uses a proprietary binary file format that saves text, attributes, embedded graphics, metadata, and layout elements as OLE-structured data. By contrast, the StarOffice 7 Office Suite uses the XML-based file format, which is human- and machine-readable, and openly documented.

The advantages of using the XML file format as the default are that it protects company data and information from future changes to the proprietary Microsoft Office binary file formats while it also enables developers to work with documents and templates in ways they could not utilize previously. The advantages of the open XML document format include:

1. It supports better indexing and hyperlinking for open information publishing.
2. It offers an option to apply templates during publication rather than when the document is created.
3. It enables online content conversion and custom tool development.
4. It ensures files will always work with all future versions of the software.
5. It allows data in StarOffice files to be accessed by a broad variety of applications (not just office suites).

These capabilities become critical when enterprises move data and information from networks and hard disks to Web-based content stores (such as WebDAV-enabled Web servers or Microsoft Exchange), as well as when users publish documents to these online content stores rather than distributing them as e-mail attachments.

Note – For more information about the XML format of the StarOffice Office Suite, please visit xml.openoffice.org.

Chapter 2

The Realities of Sharing and Converting Files

To facilitate file sharing, the StarOffice Office Suite utilizes built-in file format converters (filters) that enable users to open, edit, save, and print Microsoft Office text, spreadsheet, and presentation documents and templates, while preserving the content of the original files. Files can be automatically saved in the respective Microsoft Office 95/97/2000/XP/2003 binary file formats, or in the XML file format for the StarOffice 7 Office Suite (among others).

In many cases, converting Microsoft Office documents and templates is as easy as opening and saving the file in the StarOffice 7 Office Suite format. However, power users and computer-savvy employees often use documents and templates in more complex, and often undocumented, ways. For example, your company may have files with document-based macros and custom scripting solutions that are embedded in automated, application-based workflows. The conversion of these documents and templates requires some preparation and planning in order to maintain full functionality of the original file and its components, as well as to protect vital company data and information. In some instances, where users tap into advanced Microsoft Office functionality, it may be easier to create a new document or template in StarOffice software, rather than revamp an existing one.

In general, StarOffice filters handle basic document conversion very well. In the case of complex documents, however, some layout features and formatting attributes implemented in Microsoft Office 95/97/2000/XP/2003 are unsupported or handled differently in the StarOffice 7 Office Suite. As a result, converted files require some degree of manual cleanup and reformatting; the amount of cleanup that can be expected is in proportion to the complexity of the source document's structure and formatting. Document features that are proprietary implementations of the application in question — such as indexes, fields, frames, and tables — will not convert with 100-percent fidelity. In some cases, basic attributes and settings such as page margins or spacing between paragraphs can be affected by differences between the original and converted documents. Fortunately, features or attributes that provide serious conversion challenges are few, and will not affect anyone's ability to use or work with the content of the converted document.

A feature or attribute may not convert properly due to:

- A limitation of the existing conversion filters. In this case, the feature or attribute can be adjusted manually after conversion.
- Lack of support by the existing conversion filters. The feature or attribute can be added after conversion.
- Lack of support by the StarOffice Office Suite. You may be able to use an alternative StarOffice software solution instead.

Chapter 3

Functional Differences Between StarOffice Software and Microsoft Office

In addition to file format differences, there are also functional differences between the two office suites. At the most basic level, both application suites are built on three architectural layers — application, template, and document — with each layer providing a certain level of functionality. At the base is the built-in application layer, which provides tools and features to create documents and templates. Next up, templates contain a variety of objects, formatting, macros, and settings that streamline the creation of new documents. These can range in complexity, from simple document templates that provide boilerplate text and consistent layout for regularly used documents such as memos or fax covers, to complex business applications that generate critical reports or invoices.

In addition, documents can also include any number and type of objects, formatting, macros, and custom settings that extend the functionality of the template on which they are based. (By design, every new Microsoft Office or StarOffice document is based on a template. It may be global in scope, with objects and settings that are available to all new documents, or it may be document specific, in which case its objects and settings are only available to other documents based on that template.) And like templates, documents can be categorized as simple or complex, depending on the features, formatting, and objects used.

Where both office suites differ is in the type of feature sets they provide and support, and in their document models. In many cases, these differences can be attributed to deliberate design choices and the respective object models. For example, every new Microsoft Office document is based on a (global) default template that is used by the application. In StarOffice applications, however, these default templates are hard-coded in the application layer and not distributed as separate files as they are in the Microsoft Office suite. (Note that StarOffice suite users have the option to specify alternate, file-based default templates).

On the template and document level, each office application supports a collection of styles that helps users structure and format documents in an efficient manner. Compared to Microsoft Office applications, however, some StarOffice applications provide even more style types and choices, which translates into better options for structuring document layout and formatting.

Enterprise Messaging and Collaboration Platforms

The standard StarOffice 7 Office Suite configuration consists of five core applications — StarOffice Writer, StarOffice Calc, StarOffice Impress, StarOffice Draw, and StarOffice Base.

Because the StarOffice 7 Office Suite does not include an e-mail client or scheduling server, no migration of existing data and folders is required; and users can choose their favorite messaging and collaboration tools. The StarOffice 7 Office Suite automatically recognizes the default e-mail client during installation, which does not have to be configured for use with StarOffice software. To utilize the Microsoft Exchange address book, it is necessary to download and install the free Microsoft Data Access Components (MDAC).

The StarOffice software team has had good experiences with Netscape™ Communicator 4.6 (and later versions) as a messaging and collaboration client. However, Microsoft Outlook Express, which is freely available, may also be employed as the e-mail client and newsreader. For e-mail and calendaring needs, Microsoft Outlook can be used as the messaging and collaboration client.

The Microsoft Server Family

Microsoft SQL Server 2000 is a fully Web-enabled database product that supports a variety of protocols. Using the StarOffice database client, users can connect to the Microsoft SQL Server using JDBC™, ODBC, and ADO specifications and generate queries, manipulate database content, or create new database tables. When using BizTalk Server 2002, a StarOffice 7 Office Suite installation provides the same functionality as a Microsoft Office installation. However, at the current time, many of the document-specific technologies of Microsoft Exchange 2000 and SharePoint Portal Server are not fully supported by the StarOffice file format.

Chapter 4

Preparing Your Migration Strategy

The first step in preparing your migration strategy is to identify the key risk factors, which include:

- File format differences
- Functional differences
- Existing macros, shared components, and custom applications
- Existing data sources, including databases and address books
- Third-party software integrated with Microsoft Office

Mitigating these risks begins with determining the scope of the migration project, which is defined by the needs of your organization and available resources. Start by conducting an employee survey to determine the type and volume of existing files, macros, and custom solutions, as well as file usage and information-sharing patterns between organizational units, both inside and outside the company. Also identify which documents, templates, macros, and custom solutions must be migrated.

Document Current and Planned Environments

The next step is to verify whether current desktop and laptop configurations meet the minimum system requirements to run the StarOffice 7 Office Suite:

- Microsoft Windows 98/ME/2000/XP or Windows NT (with Service Pack 6 or later)
- Pentium-compatible PC
- 64 MB of RAM
- 250 MB of available hard disk space (variable depending on the number of modules installed)
- Graphics card with at least 800x600 screen resolution and 256 colors

If StarOffice software-based solutions will be run from the network, verify current network bandwidth and infrastructure as well.

Create an Inventory of Existing Files

Before you can determine which documents and templates must be converted, you need to know their location and owners. For example, documents and templates may be used by several workgroups or by an individual; company-wide or only within a certain business unit. Files may be stored centrally on a server, or locally on a client.

Knowing where your files are located will help determine the conversion options. Files that are stored centrally on a server can be converted using a batch process. For files that are owned by an individual and stored locally on a client, ask the employee to place them in a specified location on the server where the migration team can retrieve them for file conversion; or the employee can handle the file conversion, which may require additional training.

In addition, collect information about which version of Microsoft Office was used to create the files. Microsoft Office 97 introduced major changes over earlier versions of Microsoft Office, including file format changes. Current StarOffice conversion filters have been optimized for files created in Microsoft Office 97 or later. In addition, StarOffice software also includes filters for files created in Microsoft Office 95 and earlier. (For files created in Microsoft Office 95 and earlier, it is recommended that they first be converted to the Microsoft Office 97 (or later) file format before converting them to the StarOffice 7 Office Suite format.)

Identify Files Still in Use

Moving to a new productivity environment provides an opportunity for some housecleaning. Chances are that many documents, templates, and business applications are no longer in use, and should be classified as legacy or archival. Legacy documents and templates have not been used for awhile or will not be used again — they should be backed up to offline media for future reference. Archival files are still used for printing and viewing only, and usually include correspondence letters, invoices, time sheets, basic reports, and legal documents.

Ask users to identify active files of the same type (such as basic reports or time sheets) that are opened, modified, and saved each time under a different name. Then convert a single version to be used as a template going forward. Identify files that are shared in a mixed office environment between organizational units and partners who may be using Microsoft Office. To streamline your file migration efforts, consider allocating server space where users can place legacy and archival documents for backup, as well as files that are waiting to be converted.

Analyze and track files and business applications that use or depend on OLE, DDE, databases and other data sources, macros, and custom scripting solutions. Using macros or shared components such as ODBC or Data Access Components may be the two most pervasive methods of creating custom Microsoft Office applications, as well as the biggest challenge during the migration process. Make sure you have a way to identify these files by name, business unit or owner, type of software, components, or custom solution used.

Classify Files Based on Complexity and Importance

Based on the inventory and file analysis, proceed to classify files as simple or complex documents and templates/business applications.

- Simple documents do not contain macros, proprietary graphics (such as Microsoft WordArt), vector graphics, complex formatting, or advanced elements such as footnotes, end notes, tables, or indexes. Typically, simple documents make up the bulk of an organization's documents and can be converted in batches with the built-in StarOffice conversion utility or by opening each file, then saving it in the StarOffice format.
- Complex documents contain macros and shared components; character, paragraph, or page formatting; proprietary and vector graphics; multiple links and cross references; OLE objects; as well as frames, text boxes, footnotes and end notes, active content, form fields, form controls, formulas, or tables. Some of these elements may not convert easily for several reasons: Equivalent functions have not yet been implemented in StarOffice conversion filters, a feature is handled differently, or it is not supported.
- Simple templates consist of generic text and formatting that serve as starting points for new documents. The conversion options are the same as with simple documents.
- Complex templates contain form fields and automation features that may not convert easily and may have to be recreated in the respective StarOffice module. Or, as in the case of complex, document-based scripting solutions, they may need to be reengineered by an experienced StarOffice software developer.

Finally, to help set migration priorities and further determine conversion options, identify how files and business applications are used throughout the organization. For example, identify the level of collaboration between business units in the organization and departments in other organizations.

Chapter 5

Prepare a Migration Roadmap

Once the scope of the migration project is known, you can define objectives, including the look and feel of the planned environment, and prepare a roadmap that details the migration strategy. Depending on the size of the company and the way employees work together and share information and files, you may choose either to migrate all users at once or in groups (workgroup by workgroup, business unit by business unit, and so on). Each choice requires a document conversion plan, training options, and a timeline that details various migration milestones.

Document Conversion Options

In general, there are three options for moving files and business solutions:

1. Convert individually or on an as-needed basis
2. Reengineering
3. Convert wholesale using batch processing

Converting Files Individually

Converting individual files may be as simple as opening files in the StarOffice suite, then saving them in the StarOffice format. This is the recommended strategy for complex files or files that can be converted on an as-needed basis.

Reengineering Files

Reengineering is the recommended strategy for complex documents and business solutions that may not convert easily or would require a considerable amount of post-conversion cleanup. This is also an option for simple templates, documents, or reports that can be easily recreated in StarOffice software, in cases where the amount of time spent to recreate the file may be the same or less than it would take to convert and clean up.

Establish a Migration Timeline

Ultimately, the time it takes to move users to the new desktop environment depends on the migration strategy, company size, and how employees work together. Even when given the choice between migrating the company all at once or workgroup by workgroup, no two scenarios are alike. This general migration framework may be used as the basis for developing your own detailed migration plan. Two scenarios with general milestone dates are offered to help prepare your own migration schedule. For each scenario, the following prerequisites must be met prior to the official migration start date:

- The scope of the migration has been determined and all files have been analyzed and categorized based on complexity and scope, and a conversion option has been specified for each category.
- Training and support plans have been put in place.
- Mission-critical systems and important custom solutions have been identified, and the process of converting or reengineering them has started.

This final item is necessary because due to the complexity of mission-critical systems and business solutions, which may take more time to convert or reengineer than regular documents and templates.

Scenario A: Migrate the Entire Company at Once

This scenario is best suited for companies with fewer than 500 employees. A possible timeline may break down into the following milestones and tasks:

- 1. Kick off migration.** This milestone officially marks the beginning of your migration process and includes the following tasks:
 - Install the StarOffice 7 Office Suite on the server and clients. It can coexist peacefully with Microsoft Office on the same system.
 - Prepare company files that qualify for batch conversion.
 - Organize employees into teams and start training them in how to use the new software and audit converted files. This will enable them to verify the fidelity of converted documents and templates, as well as how to make any necessary changes as soon as documents have been converted. Training should also address the challenges of working in a mixed office environment.
- 2. Start converting files that belong to the company or business units.** At this point, the StarOffice suite has been installed on all systems, and conversion of critical documents and templates that are used company-wide or within workgroups can begin.
- 3. Start auditing converted files.** All critical templates have been converted and basic training is finished, so users can start verifying the fidelity of converted files. Employees who are not (or no longer) involved in auditing files can begin converting their own documents.

4. Start using StarOffice software for new files. All critical templates have been audited and cleaned up and training is finished, so users know how to create new documents using the StarOffice desktop applications and tools. Use of Microsoft Office should be limited to printing and editing existing Microsoft Office documents.
5. Confirm the sunset date for Microsoft Office. All company and workgroup documents should now be converted to the format for StarOffice suite, all mission-critical systems should be running within a StarOffice desktop environment, and users should be proficient in using the StarOffice productivity tools.
6. Remove Microsoft Office. The migration of all documents and business solutions should be finished, and everyone has begun to use StarOffice software.

Scenario B: Migrate the Company Workgroup by Workgroup

In general, this scenario is very similar to Scenario 1, with the proviso that the various milestones apply on a workgroup level, rather than a company-wide level. The key difference is to determine the order to use when migrating the individual workgroups.

1. Start with those departments that are autonomous or have little need to exchange documents with other departments. This will limit the challenges that result from working in a mixed office environment.
2. Continue with departments that need to view or print documents only from other departments or workgroups.
3. Finally, migrate departments that need to exchange document-based information with other departments.

General Advice

In theory, the resources and support of the entire organization should be available when preparing and executing a migration project. Special circumstances can force changes in the initial migration plans and schedule. To minimize the impact of these changes, keep a close eye on variables that may adversely affect the migration plans, such as important, business unit-specific project deadlines that may conflict with the migration schedule.

Be sure to document all experiences during this migration process — issues, successes, failures, lessons learned — and pass on the information to the internal Help Desk. These notes will be an invaluable resource for the support group when assisting customers and employees during and after the migration process.

Last, but not least, be prepared to deal with users who are not enthusiastic about having to give up their old Microsoft ways. Beyond the technical aspects of migration planning and deployment, it is absolutely essential to create enthusiasm for the migration project. To minimize frustration and maximize productivity during and after the migration process, create a user feedback system and be prepared to adequately respond to their needs.

Chapter 6

Preparing Files for Conversion

In most cases, converting Microsoft Office text, spreadsheet, and presentation documents is as easy as opening the file in StarOffice software, then saving it in the file format for the StarOffice 7 Office Suite. Depending on a document's structure and complexity of formatting, however, the final result can often be greatly improved by some preconversion cleanup.

Preparing Text Documents

In most cases, the text contents of Microsoft Word documents convert accurately because both Microsoft Word and StarOffice Writer recognize the same ANSI character mappings. However, in some instances, content may be lost if text appears in a form field or hyperlink, or is linked to a nonsupported font set to create internal characters, letterheads, or logos.

Likewise, the StarOffice suite does a good job when importing layout information from Microsoft Word documents. However, because each application defines formatting and layout differently, there may be some instances in which parts of the converted document look slightly different than the source document. In most of these instances, the quality of the converted document can be improved by asking users to adjust formatting and layout features prior to conversion.

Preparing Spreadsheets

Layout formatting does not generally pose a challenge when Microsoft Excel spreadsheets are converted to the StarOffice Calc format. StarOffice Calc does a good job of keeping the overall document structure. However, large and complex spreadsheets must be thoroughly revised to make sure that very advanced formatting and contained logic (formulas, add-ins) are accurately converted. In particular, third-party and standard Microsoft Excel add-ins should be evaluated before a conversion is attempted because StarOffice Calc does not support all of them. Some key areas to check are:

- Data source setup for charts in Microsoft Excel
- Password protection on documents
- Array constants in formulas
- Sheet names for special characters
- Size of spreadsheets
- View settings
- Right-aligned text

Preparing Presentations

The StarOffice Impress filters usually handle Microsoft PowerPoint presentations flawlessly. However, presentations that use advanced layout and effect functionality tend to be affected by the differences between the two applications. To help preserve original formatting:

- Remove unwanted or unsupported object shadows
- Modify object attributes
- Anticipate document property information loss
- Anticipate different names and appearances for object and slide transition effects
- Rerecord or split the narration

Converting Files Individually

As mentioned earlier, converting individual files may be as easy as opening the file in question in the StarOffice suite, then saving it in the StarOffice format. Converting files individually is recommended for complex documents, but can also be applied in the case of simple documents or documents that are converted on an as-needed basis.

Reviewing Converted Documents

As a rule, all converted documents should be audited by their owners to verify document fidelity, including character size, margins, tabs, and indentations, line length and spacing, paragraph spacing, tables, headers and footers, lists, and graphics. Scripts and macros will come in handy when restoring features of formatting lost or modified in the conversion process, as well as when sharing documents in heterogeneous office environments.

A Note About Fonts

Fonts are licensed products that enhance the variety and appeal of documents. In most cases, the fonts installed on a system are either part of the operating system installation or come with a software product, including desktop applications. Microsoft Office has its own set of licensed fonts, as does the StarOffice suite.

Fonts typically cause a problem only when they are not installed, either on the desktop or in the printer. In these cases, the application or printer will substitute another font for the missing font. A good substitution is not readily detectable, but a bad substitution creates visible differences in text appearance as well as layout changes because each character in the substituted font has a different height or width than the same character in the original font.

Chapter 7

Migrating Templates and Custom Solutions

Microsoft Word templates may contain any number of word processing elements and objects, including boilerplate text, graphics, and formatting, as well as AutoText entries, macros, and custom user settings (including keyboard assignments, menus, and toolbar settings). When converting Microsoft Word templates to the StarOffice format, the same results and limitations will be encountered. However, it is currently not possible to convert Microsoft Word macros and custom user settings; these will have to be recreated in the StarOffice desktop environment. AutoText entries can be easily imported using the AutoText Import feature.

Migrating Custom Solutions

Many companies deploy custom solutions to extend the functionality of the Microsoft Office suite. Custom solutions fall into two groups: Document-based scripting solutions and external applications.

To determine the best possible migration path for external applications, identify the type of application (custom-built or out-of-the-box) as well as the person or third party who built it. Identifying the developer of an application will help determine who legally owns the application source code. This information will affect your choice of migration options.

In general, there are two options for migrating an external application: Integrate it into StarOffice software or replace it with an alternative solution. For example, if an existing custom solution was built internally, chances are your company owns the source code. In this case, you can port the existing solution to the StarOffice desktop environment by modifying the source code as necessary.

However, if the custom solution was built by someone outside the company, you may have no rights to the source code. If these rights cannot be secured, you may not be able to integrate the existing solution, and will have to replace it with an alternative solution or consider modifying your current workflow.

Chapter 8

Migrating Macros and Scripting Solutions

Macros and scripts are the most pervasive methods for creating document-based custom solutions to automate an organization's interdepartmental workflow. Many organizations that are standardized on Microsoft Office also utilize WordBasic, XLM, or Microsoft Visual Basic macros, depending on the Microsoft Office version or applications in use. As a rule, these custom solutions cannot run in a StarOffice desktop environment due to fundamental programmatic differences between each product's object model. However, this does not mean that your organization must forgo the advantages of using macros or scripts to increase productivity and streamline your company's workflow.

Exploring Migration Options

Before sketching a migration path for document-based custom solutions, assess the existing document and template environment.

1. Identify documents and templates that use macros or scripting solutions.
2. Determine how macros or scripting solutions are used.
3. Determine who has the rights to the source code of these solutions.
4. Classify existing macros and scripting solutions in order of importance.

Converting an Existing Scripting Solution

This scenario is best suited for simple scripting solutions (less than 100 lines of code). It requires that your developer or solutions provider be familiar with both the Microsoft Office and StarOffice suite programming environments, and understand StarOffice software well enough to know the most efficient way to accomplish any given task. To convert an existing Visual Basic script, a developer must analyze its source code within the context of the Microsoft Office programming environment. The objective is to determine and reconstruct what tasks the code accomplishes and how these tasks can be implemented or emulated using the StarOffice suite API.

StarOffice Software Development Basics

The StarOffice suite provides a powerful set of document creation and management features that are available to developers in the form of reusable programmable components (or objects). Developers can control and incorporate nearly all of these components into custom business solutions, using the StarOffice Basic macro programming language, as well as the Java™ language and C++.

Chapter 9

Migrating Databases and Other Data Sources

The StarOffice 7 Office Suite has the ability to integrate with a multitude of database types, with interfaces for Adabas, JDBC, ODBC, and ADO specifications, and spreadsheet data sources. The ADO interface, which is used for connecting to Microsoft Access, is available only for systems running Microsoft Windows and requires special configuration. With the help of these interfaces, it is possible to enable read and write access to the database tables. However, StarOffice software does not support the built-in queries, forms, and reports of the actual database. These must be rebuilt manually in the StarOffice suite.

Migrating Database Queries

StarOffice software does not import database queries directly. Instead, it provides a similar look and feel to Microsoft Access, and gives a query designer the ability to set up relationships between database tables. However, it is not possible to use different types of controls — such as combo boxes or option buttons — to edit data, as is the case with Microsoft Access.

Chapter 10

Coexisting With Microsoft Office Users

Coexistence is an important aspect of migration planning. At some stage before, during, or after a migration from Microsoft Office to StarOffice software, it will become necessary to facilitate a seamless exchange of documents between user groups using different office suites. The following scenarios exemplify the need to identify the right coexistence strategy.

Note – This section describes high-level coexistence strategies. Filter limitations can cause converted documents to lose information or display it differently. Round-trip conversions — from the StarOffice file format to the Microsoft Office format and back again — are particularly likely to introduce changes. It is therefore helpful to be aware which features are supported by the StarOffice suite filters. In addition, documents and templates that are used company-wide should be formatted to stick with supported filter features.

Coexistence Scenarios

Compared to one-way migration from Microsoft Office to StarOffice software, coexistence introduces an entirely new layer of complexity. To help understand the subtleties of continuous exchange of documents, it is helpful to describe a few likely scenarios.

Scenario 1

A company has decided to capitalize on the cost savings that StarOffice software offers, and plans to move its entire workforce of 20,000 employees away from Microsoft Office. Despite the enormity of this project, only very limited resources are available to help migrate documents, train users, and redesign existing application logic that is dependent on Microsoft Office. Therefore, the project manager plans for a phased roll-out of the StarOffice 7 Office Suite into individual workgroups over a period of six months. While this transition takes place, the workgroups that have already been migrated still need to interact with workgroups that have not yet been affected. The project manager must ensure that although two office applications are being used within the organization, everyday business incurs minimal disruption. Most importantly, since there are now two main document formats, everyone needs guidelines as to how, when, and in which format documents should be created and shared by members of different workgroups.

Scenario 2

A medium-sized company has successfully rolled out the StarOffice suite throughout its workforce. However, many of its customers and partners are still using Microsoft Office. Nomadic employees (such as the sales force) have frequent interaction with customers, and must be able to exchange documents such as contracts directly at the customer site. In many cases, it is not always clear in advance whether or not the customer has StarOffice software available.

Scenario 3

A large financial institution has decided to replace Microsoft Office with the StarOffice suite for 50 percent of its employees. While the internal finance staff — which makes heavy use of Microsoft macros, extensive spreadsheets, and advanced functionality — will continue using the Microsoft product bundle, all other business units and customer branches will migrate to StarOffice software. Document exchange within the corporation must be managed and planned carefully so that the two prevalent office suites and their corresponding file formats do not have a negative effect on employee productivity.

The Need for Coexistence Strategies

These three scenarios stress the importance of a coexistence strategy to successfully deal with the challenges of heterogeneous office application environments. While the actual migration planning focuses on one-time document conversion and adapting workflow processes to take advantage of the StarOffice suite, coexistence addresses complementary issues, such as multiple or round-trip conversions of documents between different formats, and how to share information beyond the department or company walls.

Which File Format to Use

Whenever documents are exchanged within or between groups using the StarOffice suite alongside Microsoft Office, the primary objective is to make information viewable, editable, and interoperable beyond the application's boundaries. Given the fact that, despite perpetual filter improvements, there will probably never be 100-percent interoperability between the StarOffice suite and Microsoft Office file formats. The most obvious solution might seem to be to standardize on — and use exclusively — only the most common denominator of both office suites. In the case of file formats, this would be the Microsoft Office format.

However, one of StarOffice software's biggest advantages is its ability to migrate away from a closed, proprietary document format, which is the only option in today's Microsoft Office. Any new creation of documents in the Microsoft Office format would counter one of the most significant migration benefits. Today, many pilots and deployments of StarOffice software are driven by the intention of reducing, if not totally eliminating, dependency on a closed, proprietary file format that can be read only by specific versions of a single office application. The StarOffice 7 Office Suite, through its open and fully published XML file format, sweeps away these barriers — making a strong case for standardizing on it.

Heterogeneous Office Environments

Since the world of office applications cannot be treated as an isolated island, and is still largely dominated by versions of Microsoft Office, it is necessary to deal with document exchange between Microsoft Office and StarOffice software users. This type of interaction can be grouped into two main scenarios.

1. Passive Document Sharing

Here, a document or template is distributed to an audience with the sole purpose of pushing out information — no feedback is required. This includes publishing corporate information, such as new policies among employees, or distributing standard contractual terms and conditions to customers and partners. Since no feedback to the document's author is required and round-trip conversions are not necessary, it is often easiest to distribute the document in a common publishing format, such as HTML or PDF. These formats lend themselves to read-only distribution due their wide adoption and ease of creation. They may not be suitable for complex documents, such as a very large spreadsheet using calculations, however, many standard forms, letters, and templates are ideal candidates for HTML or PDF formats. The applications necessary to view them — a standard browser or PDF viewer — are easily obtainable, widely deployed, and freely available. In addition, these formats generally make few demands on system resources compared to full-featured office application suites.

In self-contained user groups where only Microsoft Office is deployed, the most straightforward option is to continue using the corresponding binary format and rely on import filters to make documents viewable by StarOffice software users. Likewise, users can make documents available in the Microsoft format by using export filters. The open StarOffice software XML file format cannot be used to exchange information directly with Microsoft Office users. If the recipient of a document does not have StarOffice software available and does not have to do any editing, the most flexible and open alternative should be used.

PDF and HTML represent two suitable formats. Their key benefits are:

- High-fidelity rendering of documents (for complex documents, PDF is preferred)
- Portability to other desktops on the same or different platforms
- Ease of viewing corresponding documents from within ubiquitous browsers

PDF, in particular, is a popular and widely supported format. Because it can embed fonts from the author's workstation, it enables high-fidelity rendering on multiple platforms, even on the same platform where the necessary fonts are not installed. The drawback is that HTML export of data created in the StarOffice suite is limited — much inherent style information is lost. StarOffice 7 software can directly export to PDF and create PDF files from StarOffice documents.

There is a strong case for avoiding the use of Microsoft Office file formats. However, when creating or receiving such documents, the import and export filters of the StarOffice suite enable the viewing of this information. Naturally, this also allows any remaining Microsoft Office users to use that application to create or read one-way documents. When exporting to the Microsoft Office file format, it is recommended to verify the success of this operation by viewing the result using a free document viewer (available for download from Microsoft). This has limited functionality, but the low cost, easy deployment, and trivial maintenance make it preferable. Alternatively, a full version of Microsoft Office can be maintained on a central computer. Converted files can be manually uploaded to it in order to check the fidelity of the conversion. This means that changes can be made if the result is not satisfying before it is distributed any further.

2. Editable Document Exchange

The situation becomes more complex when documents are distributed with the intention of enabling recipients to open and edit the information, possibly with the aim of providing feedback to the author or passing on the edited document to a third party. This editing pattern may occur a number of times, making multiple conversions and round-trip import/export scenarios likely. The common denominator between groups using Microsoft Office and the StarOffice suite is the Microsoft binary file format, where pure read-only formats are no longer suitable.

Note – Of course, Adobe® Acrobat also provides the ability to edit PDF documents. However, this requires the equivalent of an office suite (not just a free viewer), and Adobe Acrobat is a for-fee Adobe product.

It is not easy to find a generally applicable recipe for dealing with these cases. The situation is made even more complex by the fact that it is not always possible to know in advance whether a recipient uses the StarOffice suite or Microsoft Office. This will often be the case with documents that leave the company's boundaries when they are sent to partners and customers. With the previously outlined read-only information, it is reasonable to assume that the recipient is able to (or can easily facilitate the ability to) view a PDF or HTML document.

However, for collecting feedback, it cannot be expected that the recipient will deploy StarOffice software for this purpose. Therefore, blindly sending out StarOffice software documents in the default XML file format has its risks. This raises several considerations.

First of all, depending on the percentage of StarOffice suite users in an organization, it may be a smart move to declare the StarOffice software XML file format as the default file format. The power of standardization is often underestimated, but by standardizing on a single (or a small number of) document exchange formats, it is easier to exchange, track, and support documents and their infrastructure. Remaining Microsoft users will have to work with the StarOffice suite to exchange editable documents. For this purpose, a parallel installation of StarOffice software on each machine, or a shared installation of the StarOffice desktop environment on a workgroup basis, should be deployed.

If only a few Microsoft Office users remain, then this is a reasonable approach. Similarly, if the office suites used by recipients outside the company's boundaries are known, an acceptable strategy may be to use the StarOffice suite format to exchange information with them. Ideally, the recipients would already have StarOffice software deployed or be willing to install it. On-demand conversions to the Microsoft Office format can cover the remaining group of recipients.

On the other hand, if the company has only a small percentage of StarOffice software users, or if the office application used by recipients cannot be identified, then StarOffice software export filters can be used to convert files to the Microsoft format on a regular basis. This assumes that Microsoft Office is deployed on the recipient's computer. While statistically this is more likely to be the case than finding a StarOffice software user at the receiving end, an increasing number of companies are finding alternatives to the proprietary barriers of a binary file format. Therefore, lack of the StarOffice 7 Office Suite should not necessarily imply that the recipient would prefer to use Microsoft Office to communicate editable documents.

Realistically, it is usually possible to investigate which exchange format is accepted by the recipient by making a phone call. In cases where this is not possible, it is a good idea to distribute dual or multiple copies of any documents to be shared. Minimally, for every Microsoft Office file distributed, a copy of the original StarOffice suite XML source should be included. This makes all the more sense if the StarOffice suite XML file format is declared the standard exchange format within the sender's company or group. If nothing else, the StarOffice software file format becomes visible to the recipient and may trigger an installation of the StarOffice 7 Office Suite. This enables the recipient to properly display the original document without risking any conversion loss. In this way, future document exchanges will become less of a burden on the sender. At worst, the receiving party can use the Microsoft file to make necessary edits.

Improving Interoperability

The following suggestions are aimed at improving interoperability:

1. Users who collaborate closely enough, with frequent exchange of editable documents, probably work in the same group and are likely to be using a common office productivity application. If this is not the case, it might be worth setting a prerequisite to deploy StarOffice software — even beyond a company's organizational boundaries. A few additional StarOffice software licenses are outweighed by the productivity gains of employing a single office application. Even one copy installed and made available to a key contact of a partner company can make document exchange much smoother and more resistant to conversion problems.

2. An alternate option is to introduce two main phases for contribution to a document. This is especially useful where multiple authors work on the same document. The first phase can be achieved with a single shared primary document; in a mixed environment, this could default to the common denominator, the Microsoft Office file format. Even simpler and just as suitable would be to use HTML or plain ASCII text for content collection. During the second phase, a designated editor creates the final document in a read-only publishable format using HTML or PDF. Or, two versions of the document can be produced: One for the StarOffice software users and the second for Microsoft Office users. Clearly, even here conversion is not completely prevented. However, this approach does help avoid potentially loss-intensive round trips during the editing phases.
3. A third opportunity is to ask authors with the same tool to provide input to a primary document in their office suite's default file format. A copy of the document can then be converted and distributed to the respective group of authors using the other office tool. A final consolidation is completed by a designated editor. Alternative ways of providing feedback, such as through e-mail messages, phone conversations, or even writing on a physical copy, can also be explored.

The aim should be to use the StarOffice software format wherever possible when creating new documents. Since Sun licenses the StarOffice suite on a per-seat basis, it may not be cost-effective or practical for an enterprise to simply deploy StarOffice software to all users' desktops. However, deploying the StarOffice suite to the most strategic desktops can help reduce coexistence challenges. Even in remaining Microsoft Office groups, a designated — and possibly dedicated — computer running StarOffice software can aid interoperability and increase adoption of the open StarOffice software XML file format. Additionally, a parallel deployment of the StarOffice suite alongside Microsoft Office can boost productivity beyond the cost of a few extra licenses. The following example incorporates some of the coexistence issues that were posed in the introductory scenarios.

A Solution Scenario

A large manufacturing company — with the help of its internal IT department — has completed a migration for 90 percent of its workforce. A few Microsoft Office islands remain inside the company, and many of its external contacts (suppliers, customers, partners, and so on) continue to use Microsoft Office as well. The company has set two officially supported document formats for all its documents and communication: The StarOffice suite XML format and PDF.

Internally, communication runs smoothly: The vast majority of users exchange documents in the StarOffice software file format. The groups where Microsoft Office was not replaced (most notably, the finance department) are largely self-contained, so members of these teams generally exchange documents amongst themselves.

To find out what document format someone is using, an additional flag was added and set for each employee in the company's global employee directory. Therefore, just as employees can search for calendar entries, location, and phone numbers of coworkers, they can also query which office suite the recipient prefers and choose the appropriate format for any document exchange. This flag was preset by the IT department, which carried out the migration project.

Whenever documents must be communicated between StarOffice software and Microsoft users, the document is converted to PDF. The company licensed Adobe Acrobat Distiller, although employing free alternatives (such as Ghostscript) would also have been an option. If editing capability is required, then the document is circulated in the StarOffice suite XML format, relying on its import and export filters to make the necessary on-demand conversions. After all contributions are made, the final document is converted back into PDF. In every Microsoft Office user group, there is one designated machine with the StarOffice desktop environment installed on it that is used to make the required conversions. Similarly, individual Microsoft Office installations are available to StarOffice software users on selected machines in all locations to check the success of their conversions.

External communication is mostly one way and read-only, so PDF is the preferred format. When editing capabilities are required and ASCII text is not sufficient, the StarOffice suite XML and Microsoft versions of a file are distributed together — the Microsoft file is created by the StarOffice suite export filters. Similarly, when external documents are received in the Microsoft format, the StarOffice suite import filters are employed.

The IT department set up a Help Desk for conversion problems, where users can send documents that produce problematic or erroneous conversions. The Help Desk tries to reformat the original file and provide better conversion results. If a resolution cannot be found within 24 hours, the author may utilize the appropriate tool to recreate the document from scratch in the desired format. Alternatively, a contracted publisher is available, and the cost is charged back to the requester's department.

Chapter 11

For More Information

The following documents and links provide further information to assist in migration planning.

Documents

- StarOffice 7 Office Suite Administration Guide, available at docs.sun.com
- StarOffice API Tutorial, available as part of the StarOffice SDK available in the StarOffice Enterprise Edition

Links

The Office Development Kit (which contains a StarOffice API tutorial)

- www.openoffice.org/dev_docs/source/latest_build/latest_build.html#odk

StarOffice API specifications and samples

- api.openoffice.org
- udk.openoffice.org

General information about the StarOffice XML format

- xml.openoffice.org

Details on the StarOffice XML file format

- xml.openoffice.org/xml_specification_draft.pdf

Information about file compression and the StarOffice XML file format

- xml.openoffice.org/package.html

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