

# Consultative Standards Development using Microsoft Office 2000 and Office Server Extensions

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## Abstract

The Communications and Information Policy & Planning section (CIPP) of the Department of Communication, Information, Local Government, Planning and Sport (DCILGPS), Queensland State Government, required a solution to electronically manage the processes and documents associated with the preparation, consultation, release and maintenance of Information Standards. The solution needed to provide a best practice model for other government agencies, to comply with the Government Information Architecture, and utilise existing infrastructure. The team of authors of this paper, from DSTC Pty Ltd, proposed a solution utilizing several standard Microsoft tools. This solution has been trialled and the experience and project outcomes are described in this paper.

**Keywords** Document management, group discussions, Microsoft Office 2000, office server extensions, processes for comment.

## 1 Introduction

The Communications and Information Policy & Planning (CIPP) section of the Department of Communication, Information, Local Government, Planning and Sport (DCILGPS), Queensland State Government (QG) required a solution that would enable them to electronically manage the processes and documents associated with the preparation, consultation, release and maintenance of Information Standards (IS). The solution needed to provide a best practice model for other government agencies and to comply with the Government Information Architecture while utilising existing infrastructure where possible.

The CIPP staff wished to work collaboratively with their client agencies over the Internet to develop standards documents. The original process was manual, although the documents were posted to a web site. The key driver was to have 'one pass' consultation on the draft standard before it is finalised. To accomplish this CIPP required an environment where all the agencies in the review process could not only review the document but also review proposed amendments from other agencies. CIPP also sought a tool that allowed effective online management of the overall document development process.

DSTC proposed a solution utilizing the Microsoft Office 2000 suite [1] and the Office Server Extensions for Internet Information Server (IIS) tools [2]. Also, the "60 Minute Intranet Kit" [3] was used by CIPP to manage its internal organization of the standards documents. The initial implementation was designed to be a "straight out of the box" implementation of the software. Some re-engineering of processes was also required to ensure the tools would support the business process in the most effective manner.

## 2 Standards Development in DCILGPS

### 2.1 Requirement

Information Standards are developed by CIPP for Queensland Government agencies. The standards attempt to give consistency of IT usage across thirty-eight agencies within Queensland Government. Effective uptake and implementation of the standards relies on adequate consultation with all agencies. The current system requires comments returned via e-mail or mailed paper copies. This method is time consuming for CIPP staff, as they are required to collate the comments and resolve comments from different agencies. CIPP required a system where the agencies could efficiently comment and discuss the

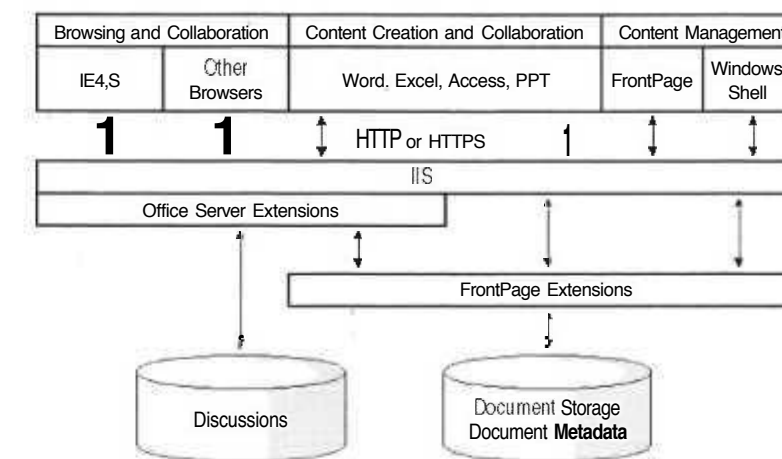


Figure 1 Office Server Extensions Client and Server Architecture

standards on-line, in a transparent context with multiple contributors. The first step was to define a business process that would effectively utilise the affordances of the new tools. The business process was not a paradigm shift but a modification of an effective manual process. The new process is described below.

### 2.2 Business Process

The business process that Information Standards follow from development through to approval is supported by the collaborative tools. The process consists of the following three distinct stages:

**Initiation** - Where a need is identified for a new Information Standard a project brief is developed for approval. After approval, CIPP staff prepare a draft of the new Information Standard. This document is posted to the collaborative site and a working group discusses and collaborates on it until a final Working Draft is developed.

**Comment** - The Working Draft is approved for publication and comment and a new document, the Request for Comment (RFC) is created. The RFC is published to the GIA Web for a period of comment and collaboration with Information Standards Officers from within each Queensland Government agency. Based on these discussions CIPP staff prepare the final Information Standard for approval.

**Release** - When the Information Standard is approved for release it is published to the CIPP Public Website and agencies are notified that a new Information Standard is in force.

To provide an Internet-based collaborative solution to the above described IS development process, we proposed the use of several Microsoft tools. These are described in the next section.

## 3 Microsoft Collaboration Support Tools

Our solution to CIPP's consultative standards development requirements uses the following tools:

Microsoft Office 2000 [1], Office Server Extensions [2] for Internet Information Service (Microsoft's web server software), and the "60 Minute Intranet Kit" [3] for internal collaboration and organization of IS. These products allow documents to be posted to a web site (using Web Folders), permit users to make comments (discussions) about the document, and to be notified of changes to documents (email notifications). These tools and features provide the basis for our solution to CIPP's Internet-based consultative standards development requirements.

### 3.1 Consultative Development

The Office Server Extensions (OSE) architecture uses both client-side components and server-side services. For the purpose of the DCILGPS project the client components, Office 2000, have been deployed within the CIPP environment. However, agency clients are not necessarily configured with Office 2000. Agency clients access to the documents is via a web browser and this may not necessarily be the IE5 browser that supports discussions. Figure 1 shows the overall architecture of the IIS/OSE components. It can be used to describe our procedure for managing documents in the discussions environment.

The system functions in the following steps:

1. The Internet Information Server (IIS) is installed and configured to allow discussions.
2. A workgroup website is created utilising the "60 Minute Intranet Kit", a FrontPage 2000 wizard that creates the web site. This website is used internally by CIPP to manage the overall document development process. (See Section 3.2)
3. An author creates a document and stores it in the appropriate Web Folder (Content Creation and Collaboration box, Figure 1). The wizard creates a web folder and a user of Office 2000 can access the folder as long

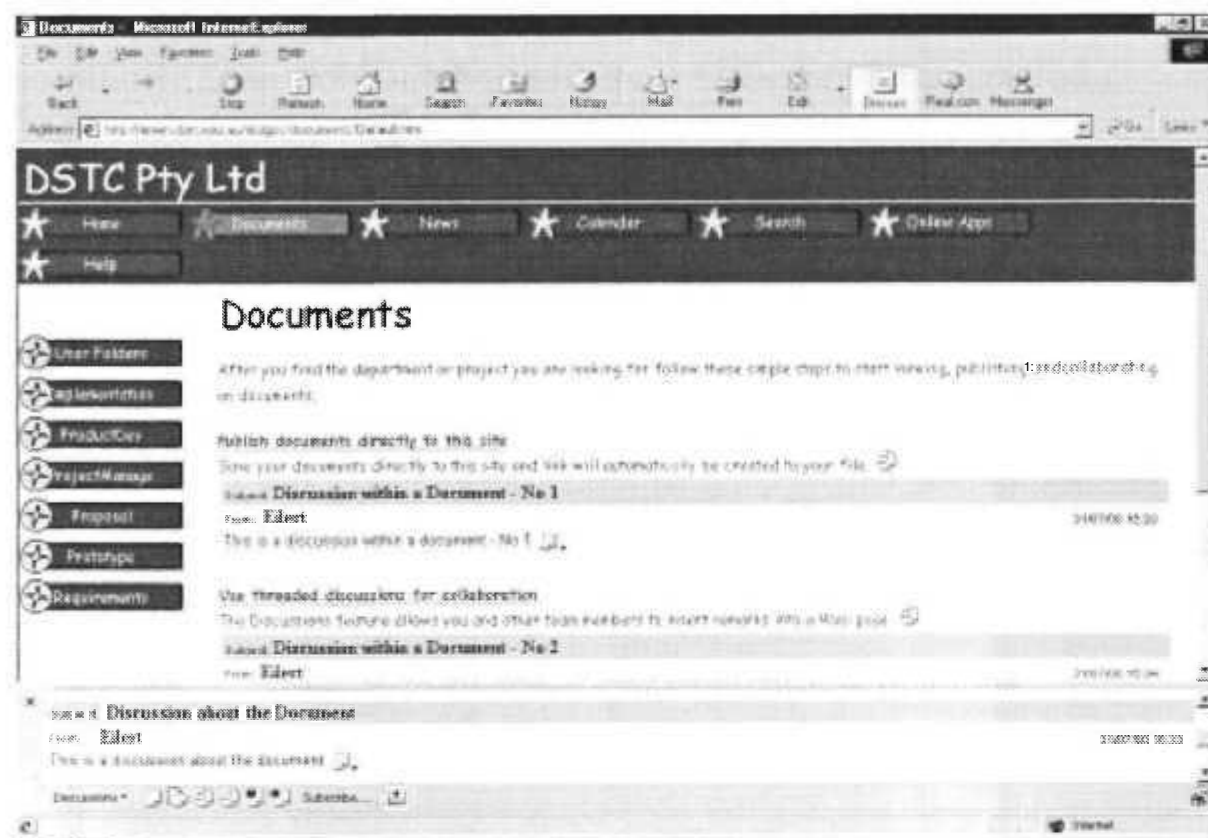


Figure 2 □Work Group Web Site Showing Document Discussions

as they have appropriate permissions. The document is stored in the Document Storage area (see Figure 1).

4. The user accesses the page displayed via the web server (Browsing and Collaboration in Figure 1). Any discussions entered are stored in the discussions database, which is separate to the actual document storage. Users may subscribe to be notified of any change to documents or folders. Figure 2 shows how discussions appear in IE. Notice both "in-document" and "about-document" discussion items are shown.

### 3.2 Internal Development Support

In addition to the support for external agencies to comment on standards under development, CIPP also required support for the overall standards document development process and the "60 Minute Intranet Kit" was used for this. This kit is an advanced wizard that can be added into FrontPage 2000. It permits a user to rapidly (in 60 minutes) develop a team work group web site. The wizard asks a number of basic questions about how the team is to organize its documents, related information and information sources. Based on the answers an integrated web site facility is generated. There are places for all material related to specific aspects of the project and for each user.

Figure 2 shows the results. This is a work group web site generated for the project team in order to manage the DCILGPS project itself.

### 3.3 Client Software Requirements

The Office and browser software versions determine the quality of the user experience. For basic functionality, the client computer requires only a Web browser. Users with Netscape Navigator or Internet Explorer 3.0 can access OSE discussion and subscription features via a frames-based version of the Discussions toolbar. Users with Office 2000 and Internet Explorer 4.01 or higher can access OSE features directly from an Office application or the browser.

## 4 Conclusions and Future Work

### 4.1 Outcomes

The first stage of the implementation has enabled the CIPP staff to effectively collaborate on their own documents. Given they are running MS Office 2000 and there were no security issues, this has proven to be simple to implement and successfully met CIPP's needs. CIPP staff could start using the system straight away with very little training. Issues that arose from this phase of the implementation related to saving the discussions within the document for future reference.

The second stage of the implementation enabled access from outside DCILGPS to Information Standards. This task is ongoing as groups of users are trained. Initial feedback from the users is positive and favourable comments were made about the speed at which the process can now take place. The discussion tools also seeded ideas on how processes could be enhanced to further increase efficiency. Work has begun on managing an Information Standard through its lifecycle at the time this article was written. This work will provide more feedback, however, it is expected that this feedback will focus more on the process than the tool.

### 4.2 Future Work

The initial work has demonstrated the effectiveness of the Microsoft tools for consultative standards development.

Future enhancements may include:

- Extracting discussion text from the SQLServer database, providing enhanced discussion annotation features and merging original document text and discussion text for archival purposes.
- Tracking of issues related to specific information within the document.

Additional Microsoft tools that could be used to enhance the collaboration are:

- MSN Messenger[4] for short real-time discussions
- NetMeeting[5] for real-time discussions of complex issues that cannot be resolved using Messenger
- Digital Dashboard[6] for succinct display of project progress.

These tools can be installed quickly at low or zero cost to the organisation, yet they can provide considerable enhancements to the business processes with minimal training.

### Acknowledgements

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