

Records management in SharePoint 2010

Implications and issues

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A preface to The National Archives' assessment of SharePoint 2010

The following paper looks at specific issues with the implementation of records management in SharePoint 2010. This paper is not intended to be a tool to inform decisions on whether or not to implement SharePoint.

Intentionally it does not cover the full spectrum of functionality offered by the platform, but focuses on its records management component. Neither is it intended to cover all issues faced by organisations in looking at managing records in such a hybrid environment.

This paper is only a starting point, and any organisation looking to understand the issues raised in this paper and apply them to their own SharePoint projects or installations, should first contact The National Archives (information.management@nationalarchives.gsi.gov.uk). The National Archives is developing guidance to assist organisations in making their own self-assessment of systems that are being used to manage electronic records.

Such systems should be enablers for organisations to ensure their information assets can meet these appropriate outcomes¹:

- Information can be found by the right people, for the reasons required and in a timely manner
- Information can be opened by the right people, for the required purposes
- Information can be worked with in the appropriate manner, including transfer to other organisations and disposal
- Information can be trusted in that it is what it purports to be and that there is a suitable history of when the information has been changed
- Information can be understood in terms of both its business purpose and what it relates to

The extent to how each outcome needs to be supported may change over time depending on the nature of the information asset. However when organisations:

- can understand their requirements
- can manage the lifecycle of their information beyond the lifecycle of the systems on which they are created, used or held
- have the appropriate governance, policies and processes in place supported by systems that are easy to use

they should be assured they are well placed to be compliant with sections 8 - 12 of the Section 46 Code of Practice², principles 1-3 of the ICT Strategy Information Principles, managing its Digital Continuity requirements. They should also be assured they are well placed to deliver on their accountability and transparency commitments.

¹ nationalarchives.gov.uk/information-management/our-services/dc-what-is.htm

² www.justice.gov.uk/guidance/docs/foi-section-46-code-of-practice.pdf

1 Introduction

The use of SharePoint 2010 (SP2010) to support records management poses challenges for government departments. The National Archives has conducted a review to understand the implications of using SP2010 for records management.

This report reviews SP2010 as a technology to manage records. It identifies issues associated with the costs, implementation and usability of SP2010 and identifies the implications for not resolving them.

The review is designed to help government departments who may be planning to implement SP2010 as a records management solution.

Key findings

1. Without the use of third party solutions, government departments implementing SP2010 out-of-the-box risk non-compliance with the Lord Chancellor's [Code of Practice](#) on the management of records issued under section 46 of the [Freedom of Information Act 2000](#) (s46).
2. Failure to identify business requirements for records management prior to implementation could significantly affect the usability, uptake and support of SP2010.
3. Given the broad nature of SP2010's service offering, an implementation should involve Records and Information Managers, ICT and Information Assurance functions as well as business users.

2 Information Management issues

In this section each issue is explained followed by what is required to ensure compliance with s46. Each requirement is accompanied by a table which identifies specific parts of s46 that may be affected.

s46 reference	9.3; 9.4; 10.10
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In the example above the s46 references are the specific paragraphs within the code relevant to the issue. These are indicative only; compliance with s46 requires a review of the whole code and not the individual parts.

2.1 Configuration versus customisation

Issues

SP2010 has its own development tools which provide flexible configuration options. Whilst configuration is supported by Microsoft using the development tools, care is required to avoid it leading to customisation of the product.

An example of **Configuration** would be: designing team sites using specific styles and metadata, built with SP2010s own development tools, to provide predictable management and workflow outcomes.

An example of **Customisation** would be: accessing the SQL database to add a new column/function not available through SP2010 development tools to provide a required function which cannot be switched off or amended by users from within SP2010. The only way to fix or amend the change is at the database level.

If customised rather than configured, implementations of SP2010 could become unsupported making it difficult or impossible to update or upgrade to a newer version of SharePoint. This is likely to present a significant risk in terms records management and digital continuity.

Requirement for s46 compliance

Any configuration must be carefully managed to avoid a scenario where the system used for records management cannot be supported in the long-term; risking the integrity and management of the digital records it holds.

s46 reference	9.3; 9.4; 10.10
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2.2 Team site deletion

Issues

Microsoft states the following in regard to deletion of a team site:

When you delete a [team] site collection, you are deleting a hierarchy of sites that comprise the collection. When you delete a site collection, you permanently destroy all content and user information...³

This means that the team site and its content cease to exist within SP2010 - deleting document libraries and documents, including any records which had been 'declared in-place'. Users may not know what has been lost as no audit trail would be available for the deleted content other than the action to delete a team site.

Team site deletion must be restricted and controlled with a clear policy and firm administrative controls within SP2010.

Requirement for s46 compliance

All systems used to manage records should prevent accidental or deliberate deletion of records outside of an established disposal policy.

s46 reference	9.3 (f) & (h); 10.11; 12.4
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2.3 Metadata management

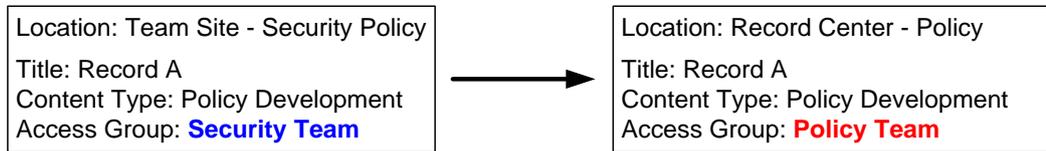
Issues

SP2010 has a number of issues in relation to management of metadata for records specifically:

- Records sent to the record centre can lose the metadata relating to previous location
- This issue can be resolved within SP2010 but must be configured to do so

³ [Deleting a SharePoint Team Site](#)

- Changes made to metadata within a document library or Team Site can be cascaded to all documents and records, irrespective of any specific access or disposal metadata they may have



In this example a record moved from Security Policy to the record centre has its access group updated automatically; potentially compromising security.

Where groups of records are moved together at once, or where a change to team site metadata is inherited by documents and records, an administrator would have to note the access controls and then reapply them.

Requirement for s46 compliance

Changes to metadata used to manage groups of records must be carefully controlled by authorised users only.

s46 reference	9.3 (e); 10.5; 10.14
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2.4 Export of metadata

Issues

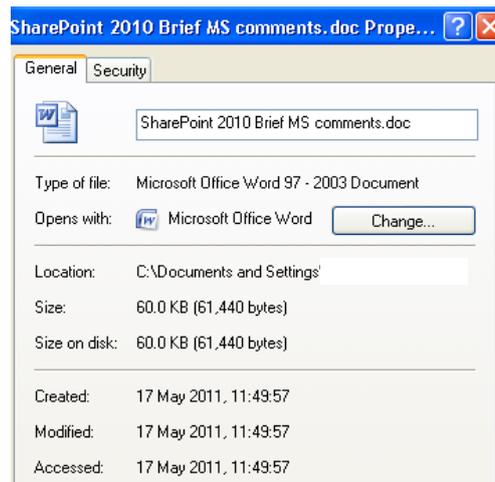
Records exported from SP2010 lose their contextual metadata creating significant records management risks including:

- inability to transfer the required core metadata to The National Archives as part of a digital transfer⁴ alongside the digital records

⁴ [The National Archives digital transfer road map](#)

- inability to transfer contextual metadata with digital records to another government department under a Machinery of Government Change
- difficulty in managing records out of SP2010 without losing their context

Records copied out only retain metadata embedded in the record (such as document title, date modified and file format information). Here is an example of the available metadata from an exported record.



Requirement for s46 compliance

You should give consideration to exporting contextual metadata with the exported digital records.

s46 reference	10.14
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2.5 Disposal

Issues

Within SP2010 disposal is usually associated with key dates of the record (for example, date created, date last modified). This means it is not possible to create disposal schedules for related records (which have different content types) using an external event as the trigger for disposal (for example, end of financial year).

Owing to this, it is likely that complex processes will need to be developed to establish disposal for related records of differing content types; or to allow external events to trigger disposal.

Without this records will be disposed of on an ad-hoc basis outside of defined disposal policies. This creates an environment where disposal would quickly become unmanageable and risk records being disposed of improperly.

Requirement for s46 compliance

Where SP2010 is unable to meet requirements for disposal; an assessment should be made as to what tools or processes will be able to deliver the desired level of disposal management. See 2.7 Reliance on Third Party Solutions.

s46 reference	9.6; 12.5 (b); 12.14
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2.6 Email

Issues

Integration with MS Outlook is not supported by SP2010, meaning storage and management of emails in context with associated records cannot be performed out-of-the-box. Third party solutions can provide options to allow MS Outlook integration. See 2.7 Reliance on Third Party Solutions.

Requirement for s46 compliance

Where emails are managed separately, there must be a means of linking them to related records in SP2010.

s46 reference	9.3 (d); 10.1 (all sub-sections)
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2.7 Reliance on Third Party Solutions

Issues

Third party companies have developed methods to improve the records management functionality of SP2010. These solutions need to be carefully assessed and questions should be asked:

- How much does it cost - does it provide value for money?

- How easy and expensive is it to integrate - does the third party solution require an integrator/consultant to implement?
- What is the impact of the solution - does it alter the underlying infrastructure of SP2010? (see 2.1 Configuration versus customisation)
- Is it scalable - can the solution meet potential future demand?
- What is the exit strategy - will the third party solution hinder migrating records to another platform from SP2010?
- What is the long-term support plan - is the third party well enough established to provide ongoing support or can the organisation manage support for it?

Requirement for s46 compliance

Third party solutions must be assessed against long-term business requirements to ensure they help, not hinder, records management in a cost effective way.

s46 reference	9.3 (all sub-sections)
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3 General issues

There are several broader issues with SP2010 that affect how it may be implemented.

3.1 Migration from SharePoint 2007 to SharePoint 2010

Migrating from previous versions of SharePoint will need to take into consideration configurations, third party solutions, or bespoke customisations to ensure continued availability within SP2010. There is an upgrading guide from Microsoft⁵ to help prepare for this.

Early SharePoint 2007 ran on 32bit servers; however SP2010 is designed to run on faster 64bit servers. Before migrating to SP2010 the 32bit servers will need to be upgraded to 64bit servers.

⁵ [Determine upgrade approach \(SharePoint Server 2010\)](#)

At present there is no complete migration path from versions of SharePoint earlier than SharePoint 2007.

Costs of SharePoint 2010 implementation

Although SP2010 licence costs are lower compared with many standard EDRM licences; SP2010 will still incur upfront costs for implementation similar to those for other EDRMS. These costs may include

- potential third party solutions to extend records management capabilities - business requirements versus solution available
- costs of hiring consultants/integrators - consultant fees can be in excess of 1.5 times the cost of the software being purchased⁶
- Team Site and Record Centre configuration
- development of an organisation specific Term Store (metadata taxonomy/library)
- content type definitions to determine how documents are managed as records
- migration of documents into SP2010 from other environments - and assessment of third party solutions required to do this
- training for users in the use and management of team sites, document libraries and application of content types to ensure consistent use of the system
- costs of upgrading other Microsoft products - to ensure ongoing performance and usability of SP2010

You must understand the full set-up costs for SP2010, particularly if cost is a key decision point for selecting SP2010 over upgrading an existing EDRMS.

System compatibility

SP2010 is designed to work best with Microsoft Windows 7 and associated newer MS Office products. Whilst compatible with Microsoft XP and Vista, to realise many of the potential benefits of SP2010 an organisation may need to consider updating the whole Microsoft Windows infrastructure.

⁶ Presentation from Bank of England to Cimtech Conference 2011

Some upgrading will be mandatory; specifically SP2010 will not work with Internet Explorer 6 or older. Any upgrade of systems to support SP2010 will also need to be costed and allowed for in an implementation.

4 Conclusions

Microsoft has taken action in respect to records management within SP2010 but there are unresolved issues with the product.

Use of SP2010 could require significant upfront investment in configuration and design to ensure it performs as needed by an organisation. Beyond that there are issues regarding SP2010's ability to transfer records and metadata out of the product for use in another system or for transfer to The National Archives.

The difficulty in managing metadata also places risk on an organisation in respect of digital continuity and information assurance.

5 Glossary

Content type - a named and uniquely identifiable collection of settings and fields that store metadata for individual items in a SharePoint list

Document library - a container that lists documents and folders

Record centre - an organisation wide web site designed to aggregate records sent to it according to content type once they are no longer needed within a Team Site

Team site - a website created from a template and designed for team collaboration by hosting document libraries

6 Further reading

National Archives guidance on s46

[Guidance on implementing s46](#)
[s46 Self-Assessment Tool](#)

The following guidance explains the necessary processes for transferring records between record management platforms.

Other National Archives guidance

[Digital Continuity in ICT Services Procurement and Contract Management](#)
[Machinery of Government Changes: Guidance on Transfer of Records, Information and Knowledge](#)
[Migrating Information between EDRMS](#)

Further advice and enquiries: information.management@nationalarchives.gsi.gov.uk

The National Archives runs an Information Management Assessment programme for core government departments and their agencies:

[Information Management Assessment programme](#)