



Establishing a best practice enterprise classification scheme

Business white paper



Table of contents

Introduction	3
What are best practices—why are they important?	3
Why do classification?	3
Benefits of new directions in classification, indexing, and retrieval	4
How to develop a best practice Enterprise Classification Scheme	6
Implementation planning.....	9
Help and direction from the standards	10
Conclusion	11

Written by



Recordkeeping Innovation

Introduction

A failure to address ease of use can be a significant barrier to the successful adoption of enterprise records management (ERM) systems. Users resist attempts to increase their workloads, and do not want to think about how and where to store content. Traditional classification approaches, whether alphabetical, chronological, color-coded, numerical, or based on the organization chart have been superseded by a functional approach, a scheme aligned with what the organization actually does and improves user acceptance of ERM.

Classification is the process of assigning categories or grouping records in a sequence of related transactions that tell a story of what happened and in what order. An enterprise classification scheme (ECS), also known as functional classification, establishes control over records by associating them with the business activities that produce the records. It enables records to be managed more effectively by placing control at the transaction rather than at the document level and by using the concept of inheritance or relationship automatically completes item or document level metadata. This removes the burden of complex recordkeeping from individual users.

While records can be classified, or grouped, in many different ways depending on business objectives and points of access, it's important to understand that when considering best practice records management an ECS approach is an essential method, rather than just another view of how to maximize the benefit of an ERM. A functional classification scheme has the advantages of being logical to the end user, more able to be automated and more adaptive to organizational changes.

This paper re-assesses the role of classification as a key aspect of the recordkeeping framework, showing how links between classification, access, and disposal are important both for control and for automation. It also discusses:

- The limitations of past practices and new directions in classification, indexing, and retrieval
- Issues in developing classification schemes and how to overcome these
- How to develop a best practice ECS
- Who should develop and own the business classification scheme

What are best practices—why are they important?

Before discussing how organizations should approach enterprise classification schemes and ERM, it is important to understand the term best practices and why they are important.

Best practice approaches to recordkeeping are described in a range of industry standards, including the pivotal ISO 15489 that outlines the key requirements for recordkeeping systems and controls such as an enterprise classification scheme that describes business activity.

The international standards and specifications relate to the systems associated with providing records management functions: capture, description, metadata tagging, and indexing, and the rules that govern access, distribution, tracking, amendment, and version control. The industry best practice for classification is changing and can now reflect enhanced capabilities in these technologies to provide a range of user definable “views” along with wider corporate needs for records in context.

A best practice approach will help provide a framework to ensure a greater return on the investment, sustainability for records over time and better outcomes for managing information.

Why do classification?

Organizations need records to provide demonstrably authentic evidence of transactions. Classification is one of the attributes contributing to authenticity and is an important component in enabling assertions about the authenticity of records—that it was part of a business, at a specific time and place. Without classification links, records are not contextualized.

Classification is about systemization, the automatic and reliable linking of records to the business process that created them, and about creating links and relationships between records that are part of the transaction sequence.

In the hardcopy world these relationships are established by physical structuring of files with individual records placed in chronological sequence within the file to create the “story” of the transaction.

In the digital world this link to context is more important than ever. A digital record provides none of the visible clues to how it was created that we previously found in hardcopy records, such as:

- Its place in a sequence
- Who has custody of the records
- The name of the agency on the file cover, and so on

Electronic information harvests a range of metadata attributes that show these links and relationships. In essence classification binds the record and the transaction.

With careful configuration for the application of metadata we can attribute records classifications to workspaces or forms, and tailor classifications to individual roles. The ECS can be customized by linking selected terms to users who are responsible for particular transactions. This reduces the burden of metadata attribution by users while improving the accuracy of tagging. It also reduces ad hoc and inconsistent attribution. This is highly valuable to record keepers as they want to enable maximum automation of recordkeeping processes—things that need to happen in managing records behind the scenes and away from the view of the end users.

Benefits of new directions in classification, indexing, and retrieval

There is a long running industry debate about the approaches to classification for records and some innovative approaches have recently emerged. Often rigidity in past classification practices have led to poor levels of user acceptance of enterprise records management systems, low levels of compliance for capturing electronic documents especially email that have undermined the success of enterprise wide digital recordkeeping. Information professionals have a range of views about classification vs freetext retrieval, indexing, folksonomies, tagging, facets, and search strategies. Vendors of new search technologies have even declared that the need for classification has passed—everything is searchable using Google, so why bother?

Classification based on organizational functions and activities has been the preferred method since the wide acceptance of the ISO 15489 and is the fundamental building block of recordkeeping regimes. Often associated with physical structuring as a single hierarchy view of organizations, the limitations in implementing business classification schemes have resulted in some negative reactions. However disassociated from physical constructs and using the power of today's

technology, business classification offers powerful advantages for managing records. In particular, in the emerging discipline of enterprise architecture, where business is modeled to contain and rationalize investment and implementation of technology, business classification isn't an unnecessary expense, but a vital tool in enabling business to transform paper-based processes for a digital environment.

This functional approach to classification is increasingly being supported by complementary classification methods supporting content description, format identification, access, and security labeling. The key to enabling this flexibility is to recognize that the digital world provides opportunity for different implementations of classification. We need to think laterally about implementing classification and to throw out the vestiges of the paper mind sets.

With physical information, classification forced a single view of the record within its container with the level of detail available for searching and retrieval being limited. Documents weren't registered, but attached to a file cover, and retrieval was entirely dependent upon the quality of the file title. With electronic information we can capture document metadata automatically (or nearly so, with a minimum of user completed metadata attributes). The digital environment now offers potential for a variety of different views of these relationships between documents and folders.

In a world consisting of hybrid paper and digital records, we need to be clear on the problem that we are asking "classification" to solve. Records in any format need classification, but a digital environment offers new and additional possibilities. In a digital environment classification can free us from the constraints of physical structuring and single presentation views. We can use metadata in clever ways to present different views. The fully digital world allows:

1. Search that is not constrained by a single view—the ability to query on multiple fields in our recordkeeping data.
2. Additional indexing, language control, and access points for searching, using both controlled and free text language. We are no longer constrained by overloading a single title field with all the relevant indexing points.
3. Association of additional indexing points and free text searching, assuming the users focus is normally on free text or indexing points, provides the ability to split what used to be the single 'title' element into more specific elements, only one of which is the classification.

How to develop a best practice Enterprise Classification Scheme

Developing an ECS requires significant resource allocation and it should be managed like any other project. The initial scoping phase will identify:

- The size of the organization
- The level of risk, volume, and complexity of records in the organization
- The proposed extent and reach of the ERM deployment
- A broad statement of recordkeeping requirements embodied in the relevant regulatory and compliance framework
- The appropriate model for the ECS based on assessment of:
 - Extent of change and end user involvement suited to the organization
 - Options for implementation
- the functionality and degree of flexibility available in the ERM system. (See our white paper on selecting a best practice Enterprise Records Management solution at www.hp.com/go/ermplatform)

These decisions ultimately come down to the needs of the business.

Once scoped, a typical ECS development project looks like this:

1. Data collection

This phase of the project involves gathering information about the business drivers and the regulatory and compliance framework that govern specific work practices. Often known as a contextual analysis, it involves interviews with key staff to understand the work practices and information flows, and examines documentary sources to learn about the business:

- Legislation, regulations, business rules, delegations, standards, industry codes and best practice, legal requirements, potential litigation issues, risk assessments, corporate plans and work instructions, workflow, business process analysis, and information architecture diagrams. Other information sources are annual reports, business cases, project summaries and system design documentation.

The data collection process should deliver a set of process descriptions. These may be drafted in diagrammatic forms, or be lists of processes and records.

2. Who should design, own, and manage the ECS

Designing an ECS requires a combination of strong analytical skills with knowledge of the business processes. Sometimes internal staff are ideally suited for the task, especially where they already have good working relationships across the business and a commitment to the success and acceptance of both the ECS and the ERM system that supports it. However, the advantages of an insider's knowledge are sometimes offset by a lack of authority to resolve conflicts between staff, especially staff that may have seniority. Then there is the perennial problem of how to manage competing priorities, the need to complete the normal daily duties or urgent tasks and still have enough time to devote to ECS in order to complete it within an acceptable timeframe.

It is therefore imperative that the person/s responsible for the successful implementation of an ECS engage staff and/or external consultants who are dedicated resources. They should have the appropriate organizational authority to make decisions, the ability to escalate issues to higher levels in the organization for negotiating resolutions, and the project and budget controls to affect a successful project outcome. If all work is done internally, an option may be to engage an external consultant to undertake a review during and after each project stage in order to bring industry expertise to the project team.

Once developed the process of amendment and updating the ECS must be clearly allocated, preferably to an internal expert, or where this is not feasible, entering a maintenance agreement for periodic review by an external consultant. Using the security controls over functionality in the ERM system is critical to restrict users amending the ECS without authorization. Only system administrators or selected high end users should have the rights to amend the ECS. Amendments should be authorized, documented and dated within the system. This is a note of caution for anyone using an ERM system where "see classification" privileges also invoke rights to delete and amend classification terms.

Figure 1: Typical ECS development



3. Detailed design planning

This phase is about ensuring that the ECS design meets the needs of the organization. Understanding that there is more than one model of classification structure available depending on the complexity and needs of the organization is critical. In this phase it is important to establish the reach and expectations of the ECS, to understand the business activities that the records capture, as well as providing the basis for a planned approach for implementation.

The ECS will be affected by the method of deployment, whether it is intended only for paper based records, a hybrid system which is a combination of paper and electronic, or exclusively for digital records. Certainly the fully digital environment offers greater potential for flexibility and clever capture and metadata tagging techniques. Other issues to be considered are:

- What other systems, schemes, or processes need to be taken into consideration?
- Will the organization's publications and information resources fit within the scheme, and if so, how?
- Will the system be used for metadata tagging website content?
- How else might the ECS system be used, for example, in database tagging, forms design, or capture of scanned images?
- Who is expected to use it and how will staff access the ECS and what is the distribution method?
- What workflow and approval processes are part of the project?

The planning stage is also important for the assessment of training and change management needs during implementation. For more information on change management issues and managing feedback in classification design see the whitepaper The Importance of Best Practice Change Management in Enterprise Records Management at www.hp.com/go/ermchangemanagement

4. Drafting terms and construction

The process of drafting the ECS requires a high level of skill, attention to detail and experience of working collaboratively. Expect a need for at a minimum a couple of drafts, perhaps more depending on the complexity, so the ability to track versions and

document the reasons for accepting or rejecting changes is needed. This is especially important for later stages when staff demand justification for why suggested changes have not been accepted.

Using the outcomes of the data collection process, process descriptions should be collated, refined and consolidated. In addition during the drafting process retaining the steps in process order will assist users to follow the process order. The drafting will also identify process owners as well as other business units who access or use records. This information is important for determining access rules which are determined at later stages.

It is important to analyze, document, and assign the ownership of business processes that create records. Careful consultation can avoid problems over claims that certain processes and records "belong" to one group or another, or are more important and need greater prominence in the hierarchy. Key considerations are that the ECS is comprehensive, ownership of processes is documented and processes are not missed, and that the processes are described accurately avoiding overlap or duplication. Scope notes should be drafted to include definitions, related or alternative terms, and explanations to help define boundaries between terms where these may be unclear.

While many organizations have also created alphabetic thesauri as an index, the use of search technology in the ERM should eliminate or at least reduce the need for an alphabetic thesaurus. However, many organizations still produce these as an aid for new users.

5. User consultation and feedback

User engagement with the design process may require a number of iterations, first in the data collection phases where a combination of one on one interviews and group sessions may be needed. Once drafted the ECS requires further user engagement to verify the accuracy and completeness of the draft. Verification sessions need to be open to alternatives and options, ensuring that user feedback is handled effectively and that users feel engaged with the process of development. Unless this engagement is handled sensitively, there is a risk that user acceptance of the final result will be low.

The user consultation process should seek out subject matter experts. Staff with experience and who will use the system extensively will contribute as to whether the draft is practical, can be understood and is easy to navigate. Often there will be extensive debate about which terms belong together, how to associate or relate some processes and whether there is overlap between terms which should be avoided.

It can be difficult to explain the draft ECS, particularly to staff with no previous experience, so initial training and communication about the implementation and conversion process is almost always necessary. Don't underestimate the difficulty of change management at this stage. For staff who are comfortable operating in a completely ad hoc environment, the imposition of rules may come as a shock and be quite unwelcome. Expect significant challenges in justifying the proposed improvement in levels of corporate control.

6. Testing

Testing is recommended during the development of the ECS as it:

- Ensures the completeness of the ECS
- Identifies whether scope notes, descriptions and guidelines are sufficient for non-expert staff to understand what they are expected to do, and
- Identifies whether the draft ECS meets consistency standards

The degree of testing depends on the complexity of the scheme. With simple models it may be adequate to make additions and amendments

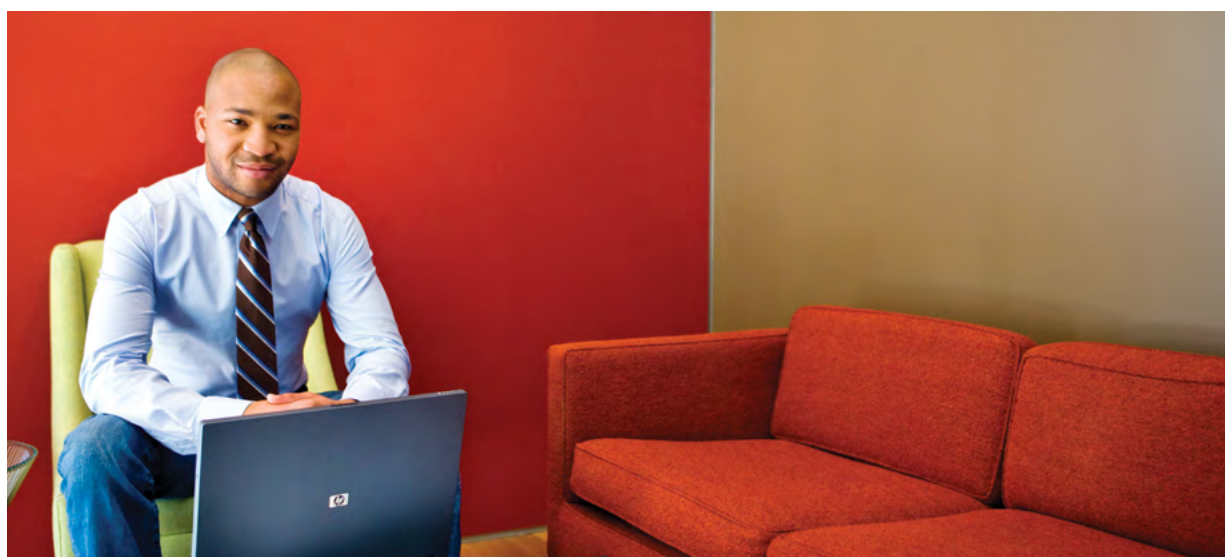
during implementation. For more complex models, in particular models that require pre-release programming, the testing should be conducted with the same rigor as any pre-release software.

Extra care should be taken where classification is allocated automatically, such as through online forms, integrations that capture records directly from business systems and where classification is linked to the inheritance of either disposal or access rights. In these cases a range of scenarios run by different staff members may be needed to test the full functionality of both the ECS and the ERM.

7. Presentation views using Thesaurus compilation software

Most schemes are drafted in business process order. This makes it easier for staff to verify that all steps are accounted for. It is worth noting that draft presentations are not always intuitive for all users to follow so alternative presentations or an index to the ECS is often needed, even for small schemes. This is where the ability to present the output in both hierarchical and/or alphabetic order, showing the broader and narrower terms and the navigation paths is useful.

Using thesaurus software can help avoid compilation errors such as duplicate terms, or terms in both singular and plural form. Caution is needed in using thesaurus products because they are often designed to comply with other standards, and hence fail to display the full contextual string or path. This can cause users further confusion when term relationships are either meaningless or misleading.



Implementation planning

Any best practice new and revised ECS needs an implementation plan. Unfortunately this step is often overlooked as many classification projects are implemented concurrently with ERM. So, while there is full attention to the conversion and change management aspects of the implementation, the changes for users in using new schemes for categorizing records can be underestimated or overlooked.

A new ECS requires the same attention to planning and deployment as the new ERM software. An ECS may be delivered in the ERM software, however the software implementation plan is not enough to deliver ECS across the organization.

1. Conversion strategies

There are a range of implementation options, and the implementation decisions depend on the size, complexity of the system, as well as the retention and disposition requirements of the organization. There are 3 conversion models:

1. Disable and replace the existing system and implement from day one, going forward
2. Retrospective conversion, which may result in:
 - a. complete re-classification of existing records into the new scheme or;
 - b. a selective pattern of transferring only active, or inactive and long term records. The options should be documented so that the reasons for selection are clear.
3. Maintain parallel systems:

This is a combination of managing the old system until all active use of past records ceases. (Ensure that there is a close off date). This would mean de-activation of old system terms so these cannot be re-used on new records.

Where the records have a short retention period (3–7 years), the simplest conversion strategy is to manage parallel systems, with little or no retrospective conversion. Where records will remain active over 5–10 years, provided that the volumes are not great, then a selective conversion method will deliver the

fastest and easiest transition to the new working scheme with the least disruption to ongoing business.

2. Who should see the ECS?

All users should view the ECS, but the capacity to alter the ECS should be tightly restricted to a very small core team of records experts. In complex deployments, classification may be held separately in thesaurus software where numerous past versions can be re-created at a point in time to show changes and variations in classification methods over time. One example is a federal government agency that has more than 8 complete changes in classification over a 25 year period which need to be retained to access archival records.

In large and complex schemes thought should be given to providing users with simplified or customized views of the ECS from within the ERM application. This can be achieved in more sophisticated products by user level customization, favorites or last used lists. Ideally these could be configured and delivered in bulk to selected workgroups. These customized views however must be persistent as user defined preferences should not be overwritten with each upgrade of the software.

3. Training

Explaining changes to staff so that they know what they have to do and why is a critical component of any classification training strategy. Understanding the reasons behind classification will help achieve the staff compliance with new methods and procedures. This is particularly important when classification is linked to disposal sentencing and for sentencing on creation. If classification is inaccurate, then sentencing will also be incorrect.

Just as with the implementation of ERM software training needs to be targeted at all groups. Once again, don't overlook the significance of the ECS in the process of implementing new ERM software. Implementing a changed ECS is a separate process. Ideally training in both the ERM software and ECS can be delivered concurrently, but this level of change may be more than some staff can handle, so exercise care here.

Training is needed at three levels:

1. System and configuration administrators: Records experts who need to know when changes are required to the system, how to add and deactivate terms, whether conversion is needed, and how to document authorized changes in the system. These staff should be responsible for maintaining the configuration documentation.
2. Records experts: Staff with administrative responsibility for maintaining good recordkeeping standards in their work group and managers who review staff performance. These staff need a thorough understanding of classification in relation to the work they do and should be able to conduct periodic qualitative checks on accuracy, consistency and whether records capture is comprehensive with use of the ECS.
3. Knowledge workers: All staff who use the ERM software need familiarity with the scheme; how to search and classify their records, and what to do if the ECS needs changing. These staff need to understand the methods in place to control classification.

Training needs to be supported by easy access to help, in either written form or as a helpdesk activity. It's important to have quality checks in place on the new classification scheme and early identification process for issues and problems, particularly during the implementation phases. A set of frequently asked questions, cheat sheets, and sound training documentation will provide important assistance to users.

4. Maintenance

Once the ECS is developed and fixed in the ERM there is normally a universal sigh of relief and then it's forgotten. Just as organizations and work processes change, the ECS needs to be maintained to stay valid and reflect these changes. A process of regular review and update will be needed. This should occur every two years or more. Maintenance may be needed to:

- Change terms
- Add or amend scope notes
- Change related or linked terms
- Restructure and retire hierarchies, change groups
- Add and refine topics, terminology, acronyms, preferred and non-preferred terms

Amendments should only be made through a controlled process where staff with adequate knowledge and skills would consider changes, assess options, authorize changes, and document the changed ECS. These amendments should be communicated to all stakeholders. Take care retiring terms from use. Terms should not be deleted, as this compromises the integrity of any records that may

have used the terms. The ECS is in itself a record, so using metadata to record start and end use dates makes for a fully accountable system.

Recording the version control number and source of the term is valuable for making amendments across jurisdictions.

Amalgamation and disaggregation

Machinery of government change is frequent. It's also not unusual in the private sector with mergers and acquisitions. Any business change will have an impact on the ECS. This may be a trigger for an ECS review, particularly where the previous methods of the two organizations may be incompatible with a simple merging of their past classification schemes. In some cases the use of common classification schemes for administrative records has meant that organizations could merge their functional terms into a shared ECS with little or minimal change to the functional terms.

The challenge is to maintain a level of consistency and ensure that if there are similar functions, that terminology accurately reflects the shared activities and that a merging of existing hierarchies doesn't create duplication or potential overlap. In some cases change management processes will be helpful to address the people aspects of the changes, such as protecting "my place" in the new organization. If change management isn't addressed then the efficacy of the ECS may be impacted.

Help and direction from the standards

The emerging classification guidelines recognize that organizations of different sizes, operating in different regulatory environments, will have different needs, ranging from simple to highly complex. The models and implementation advice assist organizations select the most appropriate models to meet their needs and avoid over designed or overly complex ECS models. Remember, it's not about standardization, or one size ECS fits all, but more about meeting business needs within a consistent framework.

Below are some standards to reference when developing your ECS:

- ISO/TR 26122: 2008 Information and documentation – Work process analysis for records (for functional and sequential analysis of business process for the creation, capture and control of records)
- ISO 23081:2008 Metadata for Records
- ISO 15489: 2001 Records Management, the ISO standard for international best practice.

The Standards Australia, Handbook 8317 Records Classification will be published in late 2010.

Conclusion

Recordkeepers need classification and use it proactively as a means of documenting records in their business context(s). Understanding that the role of classification in the records framework is about contextual links. To assert authenticity, records places classification design as a key component in any best practice compliant system. There is now a shift from models based on hardcopy management of documents within containers, to metadata tagging. This has the benefits of more accurate and specific indexing at the item level, greater precision and consistency in tagging and improved ability to present search results in ways that are more meaningful to users. Users are then not constrained to navigation through hierarchical folder structures. The use of a range of non-exclusive topic, subject and client specific tags allows innovative and new ways of data retrieval. This requires re-assessment of ERM design, the capture of metadata and innovative ERM software configuration.

The functional approach to classification remains valid with its ability to allow classification terms to imply other recordkeeping controls, such as disposal, access and security.

To achieve the objective of a fully adopted enterprise classification systems that addresses the needs to the business, the process of developing the ECS relies on a number of well defined steps. Skilled user consultation and a process of change management are needed to enable an adequate level of user engagement in the design process. Although this may take longer in the design phase, the benefits are clear in terms of the levels of user acceptance and compliance with the end product. There will be different ECS models depending on the size of the organization, the complexity and volumes of the records to be managed and the ability of the ERM to present more flexible views, including customization, to users. Finally, the process of conversion or implementation of a new ECS should not be overlooked in the process of implementing ERM software. It may be a concurrent process, however they are two separate but related bodies of work. A best practice approach would entail separate training and implementation activities that maximize the return on the ERM program.

HP TRIM

Best practice records management for your enterprise, for SharePoint, for all your information.

HP TRIM is a proven records management system that provides a scalable, policy driven foundation to your information governance strategy.

With tight desktop integration and the ability to scale across large, distributed environments, HP TRIM helps you capture, manage, and secure your enterprise information—from electronic to physical records and from creation to eventual disposal. HP TRIM helps you meet governance and regulatory compliance obligations, and improves business process efficiency, records integrity, and staff productivity.

HP TRIM incorporates over 25 years of information management expertise into a comprehensive, out-of-the-box software solution, providing document and records management, email management, Web content management, imaging, workflow, and document-centric collaboration to organizations around the world.

- Deliver proven records management capabilities to your enterprise
- Obtain transparent management and site archiving for Microsoft® SharePoint 2010 and SharePoint 2007
- Implement quickly using commercial off-the-shelf software
- Manage physical and all electronic records regardless of their source with the same rigor and rules
- Increase compliance and faster response to legal discovery requests
- Improve employee productivity and business process efficiency

To know how you can enhance your information governance strategy through HP TRIM, visit

www.hp.com/go/imhub/hptrim



Share with colleagues



Get connected

www.hp.com/go/getconnected

Get the insider view on tech trends, alerts, and HP solutions for better business outcomes

© Copyright 2010 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft is a U.S. registered trademark of Microsoft Corporation.

4AA1-1346ENW, Created November 2010

