

Prior Learning

You don't need any prior knowledge for this lesson other than basic computer skills.

It is helpful to understand workflows.

Learning Outcomes

1. Understand document management.
2. Understand the various features of document management systems.
3. Understand how Workflow Connect implements these features.

Document Details

- Workflow Connect 4.1
- Revision 1.0



Introduction

We all use documents, but most of us do little to manage them short of dumping them in folders and using some features of search.

The purpose of document management is for an organisation to take control of the documents that underpin their business and organise them into a single source of truth that is always current. The types of documents that could be managed include

- Policies and procedures
- Templates
- Training manuals and guides
- Forms
- and so on.

In this lesson we will look at the core principles of document management and how to achieve them using the Workflow Connect Cloud Service.

What is a document?

When we are talking about documents, what do we mean? It is very rare that an organisation will only use Microsoft Word Documents. Documents are really any electronic file though typically documents can be:

- Word processing documents
- Spreadsheets
- Presentation files
- PDF files
- Graphical images
- Desktop Publishing documents.

Increasingly organisations are also storing

- Video files
- Audio files.

But let's not forget that documents could include

- Technical schematics
- Proprietary formatted documents.



The most important principle is that documents come in a variety of formats. In document management, initially we treat all documents equally and manage them in the same way and if necessary apply special features to manage documents.



Workflow Connect has native support for many file formats such as RTF, doc. etc however Workflow Connect treats all documents in the same way.

What document format should I use?

Document management systems should be able to manage any type of file. You can upload Word Documents, Excel Spreadsheets, PowerPoint Presentations, AVI video files, PDF, image files and well any file that you have.

You can of course create a document in one format and publish it in another. Word Documents can be converted into web pages, spreadsheets can be published as PDF and an image created in Photoshop could be saved as a JPEG image. Not to mention newer electronic publishing formats such as EPUB.

The real issue is how the other person will view the file. Most people would have Microsoft Word on their computer but not a desktop publishing package such as Adobe InDesign.

Publishing in package most people can read – such as Microsoft Word – has many advantages.

- Those with permissions can edit and change the document from document management system.
- Those without permissions can read but not change the document.

However when the document is created in a format that others can't readily read then publishing it in a different format has some advantages.

- The reader only needs a free reader installed on their computer.
- The document can't be easily changed by the reader.
- Usually publication in something like PDF, JPEG and EPUB will make the file size smaller.
- PDF, JPEG and EPUB overcome most configuration issues that might exist between 2 different computer platforms.

What is document management?

Document management is all about getting control over your documents at the department, process or enterprise level. Exactly how you might control your documents depends on your purpose. This means that document management is not a single thing to all people.

So what do we mean by document management

“Document management is organising, storing, distributing and tracking organisational documents in a controlled manner with flexibility to meet a variety of needs for the purpose of supporting the operational activities of an organisation.”

In a much shorter form

“Establishing a Single Source of Truth.”



There are lots of ways that we can achieve this. For more than 20 years most companies have had file servers where organisational documents are located. Lots of organisations have added “document management” features to their file server, including archived backups to allow the recovery of old versions of files, web servers to let people outside of the organisation open some of those files and manual systems such as version numbers to maintain some version control. All of this works but none of it is ideal.

At the opposite end of the spectrum are tools such as Google Docs which are great for highly collaborative environments where multiple people can be editing the same document at the same time. Certain professions (I am thinking of journalists) don’t know how they lived without these tools. But this is not really document management as most organisations use or need it.

Document management is about operational documents. If you have documents about the safe operation of a forklift, recruiting a new staff member, handling a complaint or any other procedure in your organisation, they probably won’t change that much. When it does change, the change needs to be done carefully and distributed appropriately in your organisation to maintain quality and consistency and ensure efficiency and effectiveness.

When choosing a good document management system you have to ask how well does it support the operations of your company?



Workflow Connect is exactly that, an enterprise orientated document management system that is designed to act as a core system upon which additional functionality can be built. Using a combination of folders and workflows you can capture your business processes and communicate them to an audience within your organisation or across the world.

This core system can act as the basis many different business modules including

- Compliance & Audit
- Risk
- Customer Relations Management
- Complaint Handling
- HACCP
- Quality Monitor
- Calibration and Equipment
- Workflow Automation
- And much more.

Did You Know ?

- Information is doubling every 2.5 years.
- Pages-per-employee is increasing at 10% per year.
- Organizations now maintain 30 times more data than in 1999.

The Cost of Handling Documents

Imagine if you have an employee that is paid \$70,000 per annum, or around \$32.95 per hour, without on-costs!

So, if this person spends just 20 hours per month, or around 1 hour per working day filing, retrieving, looking for or just plain old wondering if they have the right document then this costs \$659 per month! So multiply this by how many staff you have and it's not hard to justify a document management system even if it only saves you 50% in time. Of course this doesn't take into account all those other items such as lost opportunity costs, the costs of the document and the frustration and angst that is so very often observed in an organisation.

Did You Know ?

- . 75% of the cost of a document is in management and logistics.
- Typical office workers spend **40%** of their time looking for poorly-stored information.
- Professionals spend over 500 hours annually reviewing and routing files.
- ...and another 150 hours looking for incorrectly filed documents.
- The average document is copied 9 times.
- 70% of time is spent processing paper.

Document Management Principles

There are core principles of document systems. We will look at the various principles and also how Workflow Connect meets those principles.

Storage

Core to any document management system is storage. You can put documents on a hard drive and maybe organise them into folders. However document management is also about how you get the data out. Storage then should focus on **storing your documents for easy retrieval**.

Organisation

If you are one of those people who always lose your car keys then you will appreciate the **value of organising things**.

There are some people who argue that with advanced search functions we don't really need to organise any more. However search is just one method to help you find the documents that you need when you need them.



Point of use

One of the most important principles in document management is the idea of **point of use**. The document should be available when I need to use it.

How much time do people in your organisation spend trying to find the documents they need? What if an audit is conducted?

A good document management system doesn't just store and manage documents. It also doesn't just make them easily accessible. A great document management system will integrate into your business processes and deliver the documents as you undertake your work.



Workflow Connect uses several methods to achieve **point of use**. Each will be looked at in its own section.

They are

- Storing data in a database so it can be stored and accessed flexibly.
- Use of folders and the ability for a document to appear in more than one folder.
- Use of workflows to organise documents around business processes.
- Use of reports to compile and extract information.
- Use of metadata and search to make finding documents easy.
- Use of a web interface to make it possible to share documents across the room or across the world with the same ease.

Database

Did you know that documents are not stored in folders on your hard drive? Yes, we view the hard drive we will see folders and documents. But what is stored on the drive is actually not just a random collection of documents, it is more accurate to say it is like someone put all your documents in a shredder and put them in a large bin.

The reason why most people don't know this is because what we see is a folders and in each folder, documents. The computer is capable of making sense of what is on the hard drive.

Good document management systems have a database of documents. This database can be easily searched and the documents displayed in many different ways, including in folders. This is how document management is not just a hard drive full of documents. There is no specifically imposed structure or order.



Workflow Connect stores documents in a full relational database. This makes searching both powerful and very fast. It also means that documents can be set to appear in more than one folder or as part of a workflow.

Folders

We are all used to using folders to organise our documents. It is a good way to organise your documents for tasks, departments and also makes applying security much easier.



Workflow Connect easily allows you to organise your documents into folders. However to make collaboration easier your documents can be set to appear in more than one folder. Imagine having a timesheet in the HR department and then letting people in other departments see it by putting copies in each of their department's folders but only having the one master!

Workflows

Most managers have stopped thinking in terms of departments and instead prefer to think in terms of business processes or workflows. These workflows might cross departments, link in with suppliers or in some cases, be only part of what a department does.

If we are thinking in terms of processes why are we still saving documents in folders? We can reap the value of thinking in terms of workflows and having the documents linked into the workflow in 3 critical areas.

1. **Important processes that we don't do very often:** This might be recruiting staff or preparing tax information. Not only can we follow the process definition but we can also access documents for each step in the process without having to know what is used where.
2. **Inductions, training and handover:** Have you ever started a job and not only do you have to work out what your job exactly is, how to do it and then find all the supporting documentation. What if a key staff member leaves or is absent, can anyone take over their job? By organising your documents in terms of workflows new staff can follow the workflow and see the documentation at the same time.
3. **Controlling processes:** We can set standards for a task and provide process documents to meet that standard. Ideally the workflow should be fully linked into the process with no confusion about what to use. This is of course only the beginning. We can use those processes to build in business rules and implement office automation.



Workflow Connect works with the free Workflow Designer desktop tool. With Workflow Designer define your workflows as a flowchart and publish them into Workflow Connect with documents attached to each step in the process. In addition workflows can be linked together. This lets you jump to different process or use a simple easy to understand master workflow, and define each step in that workflow as its own workflow.

You will no longer have to hunt through folders that normally have no relationship to what is stored in them to find the document that you need to complete a job. Instead you will be able to follow the steps in a workflow to get the documentation that you need at each step.

Metadata

Often defined as data about data, metadata is used in document management systems to create a common understanding of all documents regardless of type. Document management systems are capable of recording a range metadata about both documents and folders.



Metadata includes manually generated information such as keywords, descriptions and notes as well as automatically generated data such as date modified and date viewed.



Workflow Connect has a range of manual and automatic metadata.

Manual metadata includes

- Display name (can be different from the file name)
- Description
- Document type
- Notes
- Standards

Automatic metadata includes

- File notes generated from activity such as Check in and Check out.

Searching

No matter how carefully organised and managed your documents are, any realistic collection of document becomes so large that it is not easy to always find the documents that you are looking for.

Some examples of common searches might be to

- Find a specific document
- Find all documents related to particular criteria. Maybe we are searching on a keyword, date modified or for documents related to a particular standard.



You will usually see staff responsible for document management extensively using search tools to locate documents. Any worthwhile document management tool will have a good search tool. Good search tools let you combine multiple criteria as well as quick search capabilities.



Workflow Connect has both Quick Search and Full Search capabilities.

You can start a search from any screen and some screens – such as document library – have their own quick search.

Workflow Connect's advanced search can be built using multiple criteria on all metadata fields.

Reports

Document managers are not just concerned with documents but also with the people who use them. Much of this information is available through various collaboration features within most document management systems. However this is focused more on a single document or person. Reports, on the other hand, provide an overview across many documents or users.

Usage & Reference

Documents in a system are useless if no one opens and uses them. Part of document management is keeping tabs on how things have changed.

Typical report information includes:

- Which users have access a document?
- Which documents has a user accessed?
- Which documents have been changed?
- Who is following which documents?
- Which documents refer to particular things (For example standards)?



Workflow Connect includes a number of reports with the default system including tracking of

- Acknowledgements
- Subscriptions
- Check ins and Check outs.

In addition you can generate a report listing documents related to various standards or standards to documents

Aggregation

Compiling information about several documents is a very important feature of any document management system.

Imagine if you had to explain to a manager, new employee or auditor how you do a particular action in your company. With a good document management system you could press a button and you can not only identify what was done, how it was done, but also identify all the associated documents.

The main way that document management systems achieve this is through a combination of workflows – which identify what is done and how it is done – and reports, which can output that workflow along with summaries of all the associated documents.



To take advantage of reports that aggregate documents you will need to purchase optional modules such as Compliance Audit, Risk Management, NCR and Corrective Action

Retrieval

Having the documents **you need when you need them** is an important part of any document management system. Much of this has been addressed in other sections which will be summarised here.

Document Management systems address retrieval in a number of ways:

- **Organisation:** Documents are organised in terms of folders or workflows where documents can appear in more than one location where needed.
- **Metadata:** Helps you find and identify the document you need when you need it. This includes many things, such as document codes, keywords, descriptions and notes.
- **Searching:** Unless you have only a few well organised documents that you use all the time, having access to a powerful search tool is essential.
- **Aggregation:** Document management should be able to gather together several related documents.

Version control (Check in and check out)

If you have a document on a shared hard drive, anyone with permissions could change it, but more importantly, they could change it and you may not know who or when they changed something. It also becomes difficult if not impossible to change the document back to an older version.

Document management solves this issue in a number of ways.

- The first is named logins. Everyone is logging into the system with a unique identify so their actions can be both controlled and monitored.
- Another method is check in and check out. A user must check out a document to change it. Which means no one else can change it while it is checked out, but a copy is available for everyone until it is checked back in. Also when the changes are completed the document is checked in, allowing others be notified of changes.
- A third method is version management. Every time a document updated and then is checked in the old document is archived so that the old document can be recovered if need.



Workflow Connect has a number of version management tools.

- Named users usage is monitored. Reports can be generated on who has changed which documents.
- Check in and Check out includes notes about why the document was changed.
- Check ins are tracked and old versions of documents archived.
- Manual Version numbers can be used to set version numbers for documents according to internal document standards.
- Subscriptions can let you see when a document changes.
- Acknowledgements let you notify others that you have changed documents.
- Reviewers can be assigned to documents to review the document.

Collaboration

Any worthwhile document management system will help people work together on documents. Document management systems support collaboration by

- Managing Check ins and Check outs.
- Allow you to notify others about documents.
- Allow you to assign tasks – such as reviews – to other people.
- Allow you to track changes in documents or get notifications when documents change.
- Produce reports on changes to documents.
- Provide an internal messaging system.
- Be able to link to email systems



Workflow Connect has a number of collaboration features

- Check in and Check outs of documents.
- Acknowledgement systems that lets you notify others of changes to documents and track that they have looked at the documents.
- Reviews.
- Subscriptions.
- Internal messaging system.
- Be able to have emails sent to your regular email, in particular with subscriptions notifications.
- A number of standard reports on acknowledgements, changes and subscriptions.

Security and Permissions

Document management systems need to protect the documents from unauthorised access while also making it easy to get the documents that you need.



In Workflow Connect security can be applied for users and groups to documents or folders.

Workflows

We have already talked about workflows in regards to “Point of use”. However workflows have value that goes beyond this.

- Workflows allow documents to be retrieved when and where they are needed (point of use).
- Workflows help you identify what documents you need.
- Workflows are documents themselves. The ideal document system will also be able to visually display workflows as a graphical representation such as a flow chart. **Note:** most document management don't show a visual representation of the flow chart, only keep it hidden in the background.
- Workflows let you control and improve processes, not just document them.
- Workflows are not just about documentation, ideally they also integrate other systems into those workflows. **Note:** most workflow charting tools don't do this.
- Workflows can form the basis for automation or Business Process Management (BPM).



Workflow Connect combines 2 integrated core features which provide a basis for the integration and deployment of other business modules.

1. a workflow orientated system that includes a
2. a document management system.