

2010

WHITE PAPER

SAP Employee File Management

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Introduction

During 2009 and 2010, SAP has added a variety of Open Text products to the SAP pricelist. All of these products are focussed on providing business solutions for SAP and in most cases, Open Text have provided solutions designed to meet a specific customer requirement rather than just provide a generic enterprise content management (ECM) solution.

SAP Employee File Management (EFM) is not a new product in the Open Text suite however this product was only recently introduced to SAP's price list. The product provides a solution to help customer meet requirements for managing their employee documents and to try address the shortcomings provided in standard SAP.

Native SAP does actually provide some employee file management functionality as standard through an SAP module called ArchiveLink (also referred to as Document Archiving), but there are some limitations to this standard functionality and some customers require ABAP developments to help the solutions to meet their requirements. This normally results in additional cost and risk to the customer's implementation. This is exactly what Open Text have tried to address by providing an out the box EFM solution which is tried and tested ensuring customer don't have to redevelop these solutions.

In this white paper, I'll try to look at this solution in a little more detail along with the advantages SAP EFM provides over the native SAP ArchiveLink functionality.

Native SAP ArchiveLink for HR

SAP ArchiveLink has been a part of the SAP product suite for more than 10 years. Its quite interesting to note that ArchiveLink was actually co-developed by IXOS who were subsequently purchased by Open Text so Open Text actually has a long history with SAP. ArchiveLink can be used in a number of business areas including Accounts Payable, Maintenance and HR. The native SAP ArchiveLink solution can be used by customers with no attached software cost however there are some shortcomings to this native solution:

- The HR functionality requires a separate transaction for storage of documents. This means that if you access an employee's record in transaction PA30, you can view documents but you cannot store directly from the transaction and would be required to go to transaction OAWD, relocate the employee and then store the relevant document. The storage option found in PA30 is designed for an environment where the document is bar-coded, the barcode is then inserted and when the document is scanned at a later point in time, the document is matched to the transaction by the barcode. In some cases this was a practical means to store documents in the past, but most HR staff would now have access to a desktop scanner and would typically scan directly to the transaction. To get past this, some customer may incorporate ABAP development to insert a button in HR to direct the user to OAWD.
- Retrieval of documents could also be considered a little cumbersome. Documents are retrieved via the menu path "Display Facsimile" (display a list of all documents for the employee) or "Display Specific Facsimile" (display a list of all documents specific to the infotype that the user is in) however where a employee has a large number of documents, this may provide some confusion.
- There are limitations on the deletion of documents. To delete a document incorrectly inserted, the user has to go to another transaction OAOR and delete the document. Companies are often hesitant to limit access to OAOR because there is additional functionality used in this area and the result is often that the end user has the ability to delete documents at will. If the user does not have authorization to delete, they would need to forward details of the document to an authorized

user however there is no standard functionality to do this. This requires the user to manually send information of where to find the document along with the request to delete.

- There are limitations around accessing documents from outside of SAP. As an example, if a company wanted to enable access to documents for a security guard at the gate to the plant so he/she could access photos to identify an employee that does not have their access card, or identify a wife who has arrived at the plant to collect her husband's pay check, there is no way to do this without giving them access to PA30 or exporting all HR photos along with relevant metadata. In short, documents cannot be accessed outside of SAP without developing some form of complex interface or export functionality which may open the door to problems if the data is corrupt in incorrectly exported. If the company does enable SAP access for these users, the GUI is often a complex and frightening environment for your non-core SAP users and the training implications of doing so could be tenuous, especially where contractors are involved.
- There is no ability to structure documents within an infotype. For example, if you wanted to break down qualifications into School, University, Driving, Trade Skills etc you would be unable to break these down unless you have specific infotypes for each skill. This could be exacerbated in some areas where there are a high volume of documents like leave forms where you want to separate sick leave requests from annual leave requests.
- There is no ability to apply a document to more than one area. For example, if you wanted a sick note from the person's doctor to be stored in both the medical infotype and another infotype, this is not possible.
- There is no ability to do full text search on the content of a document. This functionality is reserved for documents stored in SAP DMS (using SAP's TREX engine), which does not provide a standard object link to HR. In some cases, companies may build custom integration with the ArchiveLink module but this is generally as an enhancement.
- There is no ability to provide notifications on a date for a document. By this, we mean that if a particular document has an expiry date and you want to be notified of the documents expiry, this would need to be built as an enhancement and you would need to find a way to store a document expiry date so the system knows when to notify you (the native functionality only provides for the document date, not a expiry date).

What's good about native ArchiveLink?

With all these shortcomings, the first question that may come to mind is why would anyone still want to use native ArchiveLink if it has these shortcomings? Obviously every content management system is likely to have some shortcomings and native ArchiveLink is no different. Because ArchiveLink was co-developed by Open Text, the product was always intended as an integration area for external vendors however SAP opted to provide some native functionality to customers incorporated as standard in the product. Thus SAP has always relied on 3rd party vendors to supply this enhanced functionality as can be seen by other business areas using ArchiveLink like Accounts Payable, where the integration has been extensively used with OCR and invoice automation. For small organisations that do not want to use 3rd party products, there are good reasons to use ArchiveLink, namely:

- ArchiveLink in HR gives a company infotype specific authorizations. When the system is configured correctly, if a document is stored against an infotype type, only those users who have access to the infotype will have access to the document. In addition to this, you can also incorporate document type authorizations for the infotype so you can limit access to documents even if the person has infotype access. For example, you could limit access to the medical infotype but within the medical infotype, you could still ensure that only specific medical staff has

access to highly confidential records such as an HIV test results. This level of authorization allows you to associate documents with a specific employee without any concern with the accidental filing associated with manually creating these authorizations every time you store a document. This obviously reduces the risk for the customer.

- SAP documents can be used to generate SAP transactions using SAP workflow. ArchiveLink provides a number of options to customer for the storage of documents, which include Early Archiving (also called Store for Entry Later in SAP), Late Archiving (also called Store and Assign) and Late Archiving with Workflow (Store for Subsequent assignment) and Late Archiving with Barcode. What this means is that you can either link a document to an existing transaction or you can use a document to generate a transaction. Where you use the document to generate the transaction, the document is directed to a user who then uses the document as an initiator to start the transaction and once they have completed the transaction the document is automatically assigned to it. This ensures that the business have the relevant information on hand to complete business processes and that full auditability for the entire process is maintained for system integrity. If an auditor accesses the relevant transaction, they can see the workflow used to create it, the document used to process it and the approval process if required.
- The obvious advantage is having documents linked directly to the employee in SAP. This link ensures that all information is accessible to people from the relevant record. It also means that should a company embark on a data archiving exercise at a later stage, the documents are archived along with the employee data ensure they remain linked.

What does SAP Employee File Management solution add?

One of the key things to remember with SAP EFM is that this product generally offers no real disadvantages over the existing ArchiveLink functionality, as the solution has been developed to extend this functionality rather than a complete replacement of it. The only obvious disadvantage would be the software costs associated with buying the solution although SAP would argue that over a period of time this would be nullified by the cost of enhancements, the business process improvements of SAP EFM over the standard product, and time savings for employees when using the product.

SAP EFM provides the following additional functionality over native ArchiveLink:

- Storage and retrieval directly from PA30 using the generic object services icon. When implemented, users are given an additional menu option called "Documents". From this area, users can store and retrieve documents whilst in the employee record.
- EFM can scan directly to SAP if the user has a desktop scanner attached to their computer. When a user selects the option to store a document to EFM, they are offered the option to load from file or scan the document directly. This prevents users having to scan to desktop, save the file and then load the file manually from SAP.
- EFM provides mass scanning to HR. The Open Text scan interface supports barcode recognition which will allows users to bulk scan large quantities of documents using barcodes to automatically store the document against the correct record in SAP.
- EFM provides folders for structuring document types. This folder functionality provides users with 3 separate levels of folders to meet their individual business requirements and documents can be associated and stored at any level of the structure depending on how the system is configured. In this way, users can structure document to the standard infotype structure. In conjunction to this, EFM also provides Infotype storage views in a folder like format so that the HR user can view documents based on their infotype if required.
- EFM provides the ability to store documents against multiple points in the folder structure. For

example, you may opt to include an employee's driver's license against their personal identification folder and against a qualification folder. If configured correctly this will occur automatically and if the document is added to one folder, it will appear in both.

- The ability to delete documents with approval. When an HR user wishes to delete a document, they can forward the document to an authorized user for deletion along with a reason for the deletion. This ensures that the company has an auditable history of deletions along with the reasons for them.
- Full audit trails are provided with the activity log. This ensures the company adheres to strict auditing requirements and users can access the logs at any stage to see what has happened with that employee's documentation.
- EFM provides guest access facilities. This could be used to allow an employee access to their own documentation, or allow managers access to documentation for a limited period of time. As an example, if a project manager is assembling a team for a specific requirement, HR could enable access to those files that are of interest so the Project Manager could identify which team members would be suitable for the project. Once the process is completed, access by the Project Manager would be automatically removed based on the expiry date.
- EFM provides the ability to store documents to HR directly from Outlook or Lotus Notes. In cases where HR receives an email from an employee, the files can be uploaded without having to save attachments to their drive or save the email as an .MSG file. Open Text provides the option to store only the attachment or the email as a whole if the content of the email is relevant to the employee file.
- EFM allows the ability to create a "follow up" on documents. If a particular document (like a visa) has an expiry, EFM can automatically notify the user of the expiry so there are no nasty surprises at a later stage. This could include documents like first aid certificates or trade qualifications.
- EFM provides an ATO certified repository ensuring that if the original documents go missing, the company still maintains a valid legal copy of the document.
- EFM supports long-term storage media like optical. In HR, the requirement is to keep some documents for life of the employee, even after the employee leaves the employment of the company so the ability to move documents to a long-term storage media could be critical when dealing with large numbers of employees.
- The EFM viewer supports a wide variety of formats and includes additional functionality over the native viewer like highlighting and annotations.
- Open Text also provides outgoing document archiving, which is the ability to overlay data onto a predefined template and store it as a PDF. It also allows a company to store pay slips with the original logos, which are particularly relevant where a company has been purchased and rebranded, but are required to keep copies of documentation in the original format as they were supplied to the employees.

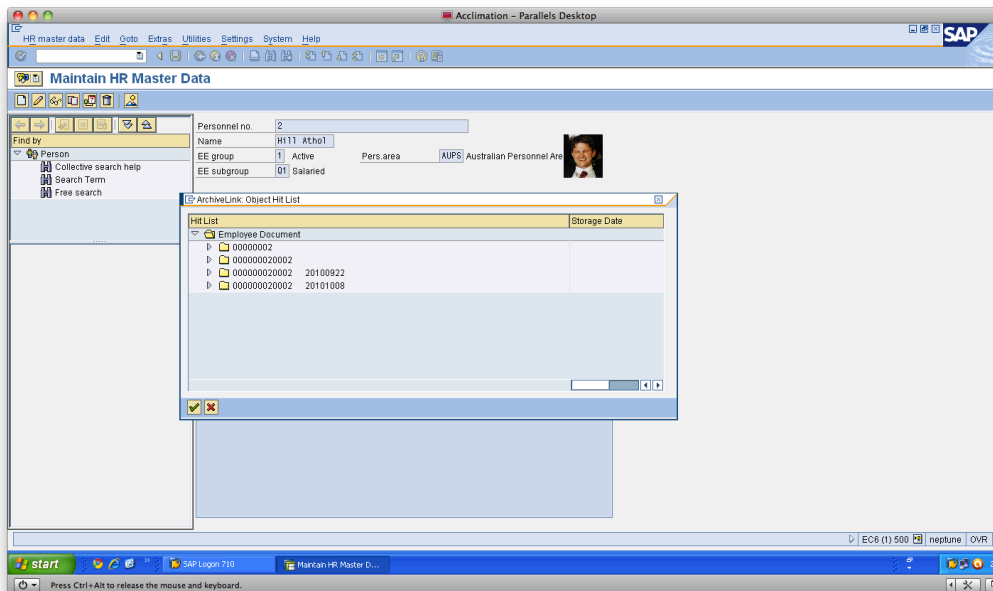
Usability Comparisons

One of the key benefits of the SAP Employee File Management solution is the usability advantage it provides over standard SAP ArchiveLink. The SAP interface is improved to ensure that users have access to the information without having to move to separate transactions.

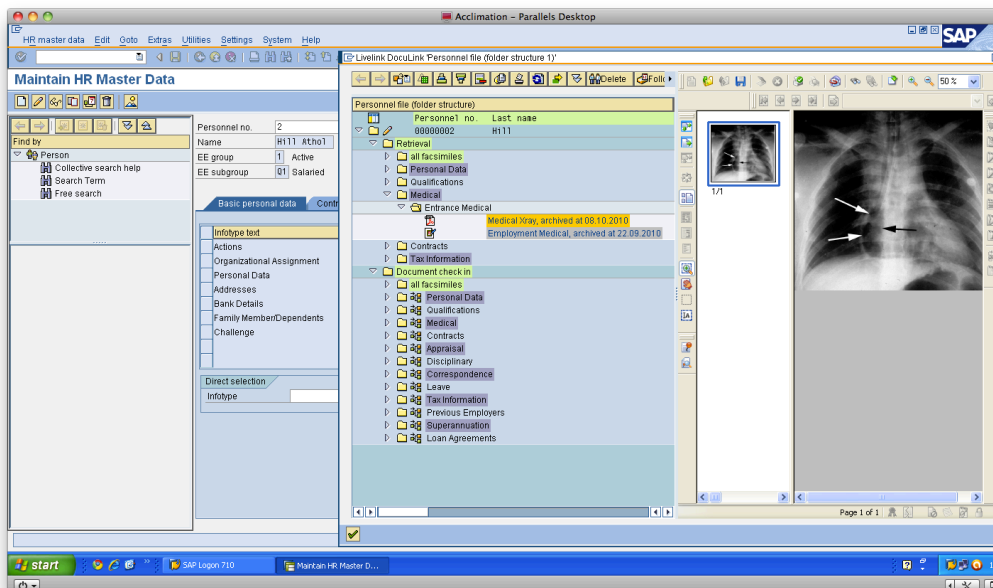
PA30 – From the Employee Record

The standard view provides only limited information to the user making it slightly more difficult to find the specific documents they are looking for as the infotype folders do not include the actual description of the infotype. SAP EFM on the other hand provides a descriptive view of the folder or infotypes depending on the view selected by the user.

Standard ArchiveLink View



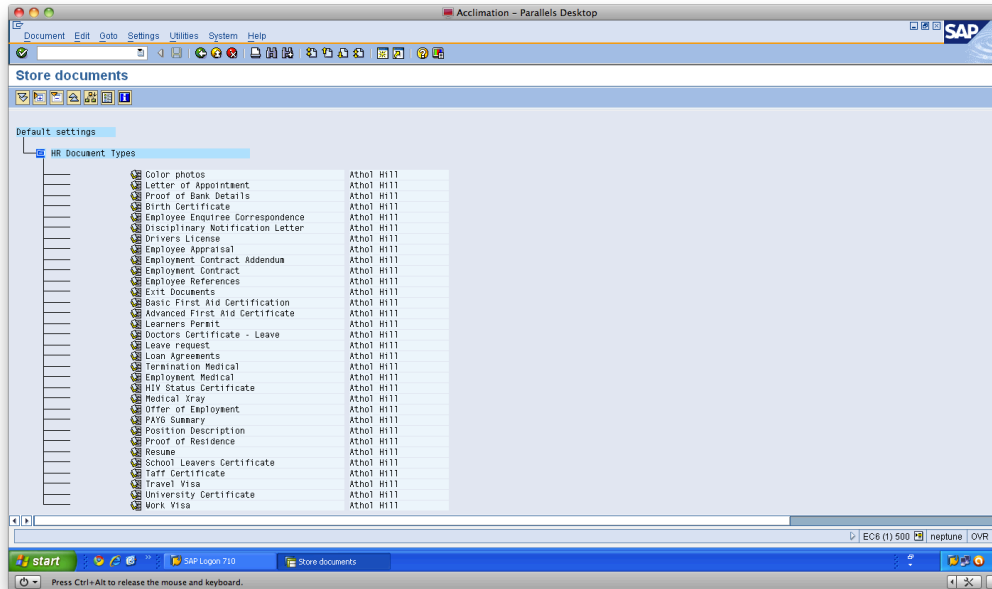
Employee File Management



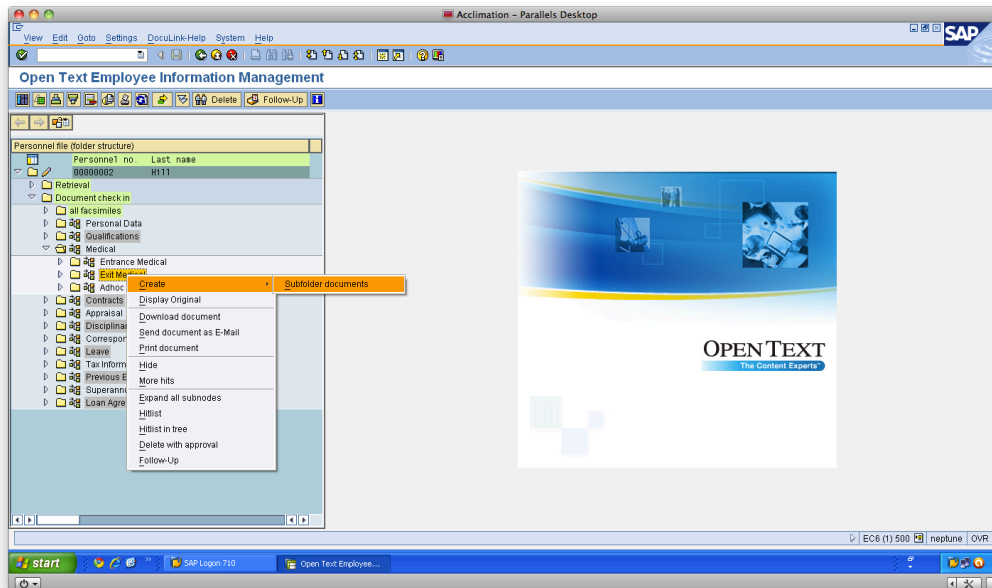
Storing a document

Whilst the native ArchiveLink views requires storage from a separate transaction, SAP EFM allows storage directly from the employee transaction allowing them to right click and store a document at the relevant folder level. OAWD can also be used by SAP EFM for bulk uploads..

Standard ArchiveLink View (OAWD)



Employee File Management (Right click on folder)

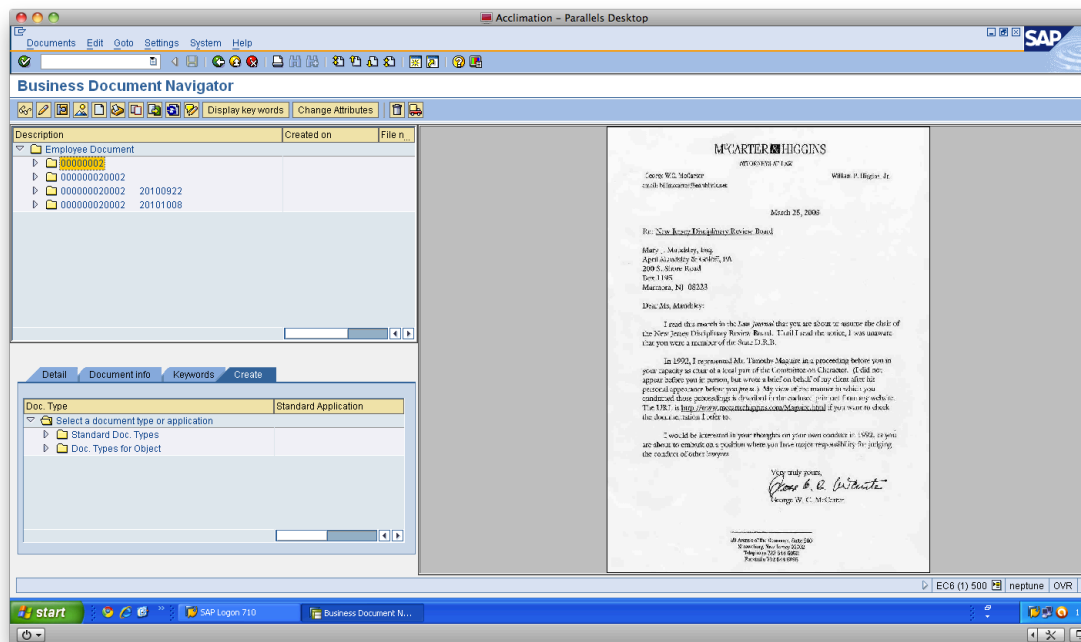


Document retrieval

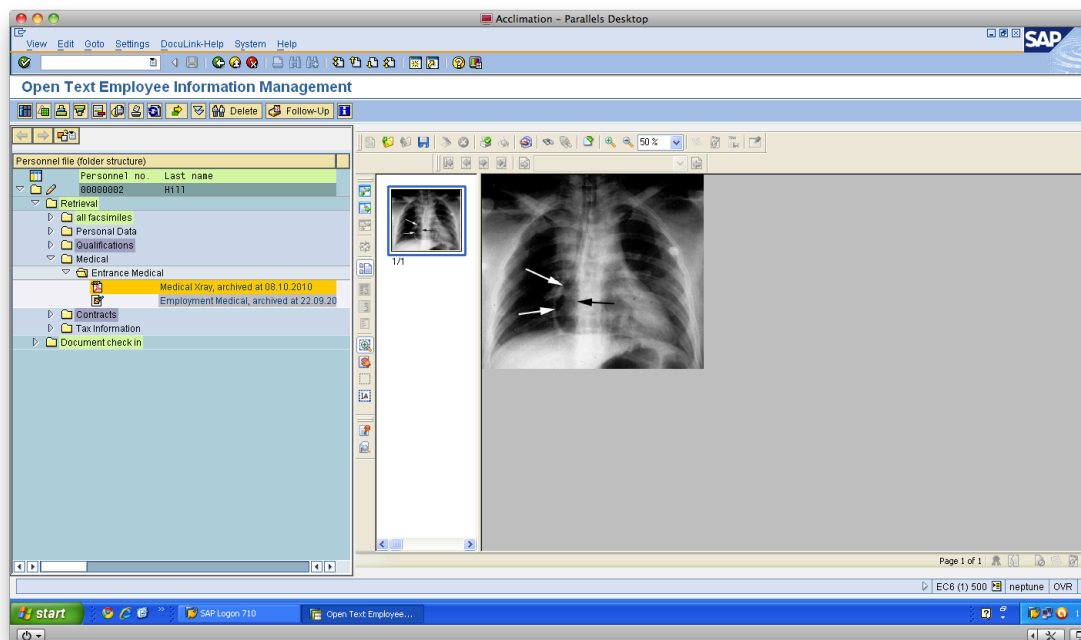
The native ArchiveLink view (using OAOR) provides similar views to that provided in PA30. Functionality in this transaction does incorporate the ability to store documents, but still only provides the infotype numbers in the folder structure view rather than the actual description of the infotype.

Again, SAP EFM provides the additional folder structure view but also offers the infotype view (with descriptions rather than numbers) so users are able to quickly identify the location of these files.

Standard ArchiveLink View



Employee File Management



Web/Portal/Microsoft Storage and Access

Unfortunately standard ArchiveLink does not provide Web accessibility and the ESS portal UI only provides for limited retrieval and no storage so comparisons with this area cannot be provided here.

Employee File Management - Web UI

OPEN TEXT | The Content Experts™ | Open Text Employee Information Management

Home Close Help View

Personnel file (infotype ...) 00100037 Thompson, Sali ... Document check in all facsimiles

Tree View

- Personnel file (infotype structure)
 - 00100037 Thompson, Sally born on 04.04.1960 (Sales)
 - Retrieval
 - Document check in
 - all facsimiles
 - Appraisals
 - Capital Formation
 - Company Pension
 - Contract Elements
 - Education
 - Family Member/Dependents
 - Fiscal Data D
 - Monitoring of Tasks
 - Other/Previous Employers
 - Personal Data
 - Qualifications
 - Residence Status
 - Social Insurance D
 - Withholding Info W4/W5 US
 - 00100038 Gonzales, Victoria born on 20.05.1950 (HR)

Search Results

Up Copy Move Display Original Refresh More hits

Description			
Employee photo (JPG), archived at 30.11.2009			
Resume (TF), date of origin 30.11.2009, archived at 30.11.2009			
Work Contract (TF), date of origin 30.11.2009, archived at 30.11.2009			
Appraisal (TF), date of origin 30.11.2009, archived at 30.11.2009			

Row 1 of 4

4 nodes opened

Open Text ECM Suite for SAP Solutions 9.6.2

ESS/MMS Integration - Portal UI

Welcome Sally Thompson

Employee Self-Service

Overview | Employee Search | Working Time | Benefits and Payment | Personal Information | Career and Job | Purchasing | Work Environment | Travel and Expenses | Life and Work Events | Corporate Information

SAP Employee File Management

Personnel File (infotype ...) 00100037 Thompson, Sali ... Retrieval all facsimiles

Tree View

- Personnel file (folder structure)
 - Thompson 00100037 Sally
 - Retrieval
 - all facsimiles
 - Employee Data
 - Residence Permit
 - Resume
 - Photos
 - Social Insurance
 - Family Members
 - Withholding Info W4/W5 US
 - Pension Plan
 - Contracts
 - Employment Contract
 - Certifications/Appraisals
 - Appraisal
 - Document check in

Documents 1 - 10 from 14 (20 Pages)

Color photos (JPG), date of or...

Resume (FAX), date of origin 1...

Sally Thompson

2148 Marlin Square, Philadelphia Pa. Tel. 800-304-7767

Experience

- 1990-1994 Actor Shoe Southridge, SC
National Sales Manager
 - Increased sales from \$50 million to \$100 million.
 - Outdid sales per representative from \$5 million to \$10 million.
 - Suggested new products that increased earnings by 23%.
- 1985-1990 Ferguson and Bankell Southridge, SC
District Sales Manager
 - Increased regional sales from \$25 million to \$350 million.
 - Managed 200 sales representatives in 10 Western states.
 - Implemented training course for new recruits — speeding profitability.
- 1980-1984 Duffy Vinnyents Southridge, SC
Senior Sales Representative
 - Expanded sales team from 50 to 100 representatives.
 - Tripled division revenues for each sales associate.
 - Expanded sales to include mass market accounts.
- 1975-1980 LFWire, Inc. Southridge, SC
Sales Representative
 - Expanded territorial sales by 400%.
 - Placed company's highest sales award four years in a row.
 - Developed Excellence in Sales training course.

Education

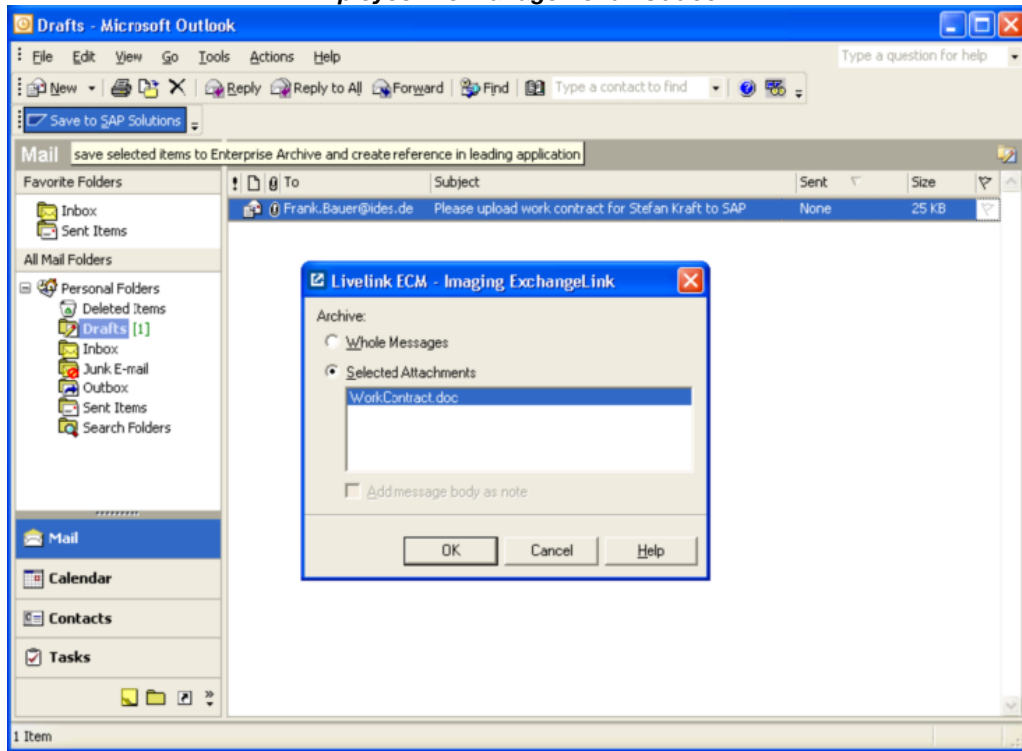
- 1971-1975 Southridge State University Southridge, SC
 - B.A., Business Administration and Computer Science.
 - Graduated Summa Cum Laude.

Interests

- SR Board of Directors, running, gardening, carpentry, computers.

Tips

Select the text you would like to replace, and type your information.

Employee File Management - Outlook**What I'd like to see added to the next version**

SAP EFM is a great product and provides more functionality than any of the competitors in this area, however given the work done by SAP and Open Text, there is still some additional functionality I'd like to see addressed to future versions. Hopefully we will see these addressed in future releases:

- One of the limitations of ArchiveLink is that it automatically names each document by the ArchiveLink document type name rather than the file name. This would mean that should the user insert 5 documents under University Degree, it would show 5 files called "University Degree". There is no standard ability to rename the description of these files and in some cases the customer may wish to rename these files for ease of use. In the case of degrees, they may wish to rename them to Bachelor of Commerce Degree, Masters in Business Administration etc so that they can see the difference between them. In the same manner. Given the ability to structure documents in folders, this is unlikely to be as big an issue as standard SAP ArchiveLink, but it is something that customers may wish. Ideally it would be great if the system provided configuration that allowed a consultant to configure whether the system should prompt the user for a new file name, take the actual file name instead of the document type or take the document type as standard. It would also be great if the system gave the ability to "right click" and change the file description as is provided with the functionality in OAOR.
- With native ArchiveLink, you have the ability to configure a document type to take any format. I.e. using "*" instead of specifying that a document must be in PDF or TIF format. Unfortunately SAP EFM does not support this and whilst there may be some merit to enforcing this on users (i.e. to ensure that all stored documents are PDF so that document content can be searched using OCR), there may be cases where a consultant wishes to leave the option open to cater for circumstances where the format may not be known or cannot be standardized.

- At this stage the logs are provided as a separate transaction. It would be nice to see this added to the default SAP EFM transaction as a button to make it easier for users to access the log files, particularly where they are looking to view logs for a specific employee.
- A generic limitation of both native ArchiveLink and SAP EFM is a lack of versioning available in these products. Open Text has circumvented this with their SAP Extended ECM product (also sold by SAP), but this limitation still applies to SAP EFM and it would be great to see this same functionality applied to EFM so that customers can version documents where required. Although this is not a big requirement, there may be circumstances where a document is modified and the user wishes to update the version. A full form of extended ECM version of this is probably not required, but an option to right click with new version may be a good alternative to provide to users.

Implementation timeframes

One of the advantages of using a pre-developed solution is the ability to plug and play a number of components. As much as ABAP development time can sometimes be sourced at a low cost, the cost of the business users time to blueprint and test these solutions is not and minimising their time out of the business is critical. It's also difficult to redevelop these solutions if you only discover in production that a particular development has shortcomings and does not fully meet the requirements.

The SAP EFM solution itself does not provide a complete template solution to shortcut the process completely, but it does provide the building blocks to remove the requirement for most enhancements and this will reduce the implementation timeframe considerably because most requirements can be met with standard configuration. There is also standard training material, which is likely to reduce the cost of developing this material on the customer's site. The advantage of using vendor provided training material is that additional functionality is provided by the vendor, the cost of updating the training material is met by the vendor rather than the customer. This does limit the customer's ability to make the training material implementation specific but in the case of SAP EFM, this is often not a requirement.

SAP usability is also always an issue for customers where casual users access documents. There is substantial cost attached to creating and maintaining your own web-based views, particularly when the views are integrated into SAP and require constant updates with each SAP version. SAP EFM can provide major cost savings with the supply of standard web and portal UI's for employees and users, which include document storage and retrieval and relying on the vendor to ensure these web views are kept up to date ensures that ongoing costs of maintaining the system are kept to a minimum.

In a typical environment where complex workflows aren't required, an implementation can be completed in 15 to 35 days depending on whether the customer already has an existing SAP storage architecture in place, the number of document types, project management methodology and the complexity of the folder structures. If workflows are required for processing documents, your implementation time frames are limited by only the time required to build the additional workflows.

Implementation Considerations

There are a number of considerations one should address prior to embarking on any project of this kind:

- If a company has an immediate requirement for EFM, but only for specific documents, I would recommend that the customer still spend time identifying the entire folder taxonomy for SAP EFM as a whole, even if you do not intend implementing all the document types. Whilst EFM may cater for changes to this folder structure without affecting the stored documents, the folder structure

used may still affect how you break down your document types and this may require migration at a later stage.

- Whilst the SAP content server and SAP database do provide short term storage alternatives for storage of documents, the cost of a formalized migration from these repositories could be extensive (minimum 1 month) and the long term cost implications could increase your overall cost and reduce ROI. It's therefore recommended that you look at your long term ECM strategy before embarking on a quick fix that could cost the company money in the long term.
- Do not underestimate the cost of data cleanup and migration of documents if you intend moving all your historical data into SAP EFM. The physical work required to migrate documents to any ECM system is extensive and if data cleanup and migration is not completely correct, the resulting system will have limited acceptance by the users because the information is not reliable. There are technologies which can be used to increase the speed of migration so it's worth identifying these technologies and seeing if they may provide any benefit to you before starting the project.
- Accessibility of documents outside of SAP EFM provides a major security risk whenever this is used. This should be carefully addressed during the implementation to ensure that it does not expose the company to any dangers. Privacy of information should be considered tantamount in any implementation of HR documents.
- Serious consideration should be applied to the legal requirements surrounding storage and retention of documents for HR. Some countries have specific requirements to store electronic copies locally and any centralized storage could expose the company to potential litigation. There may also be retention requirements that need to be adhered to or the company risks government penalties. Companies should always seek legal advice on these retentions and/or the risk associated with destroying hard copies.
- As with any implementation, business involvement in the design is critical. Business users should be actively involved in design, testing and development of training material for the users. It's also critical that management support the implementation.
- Do not underestimate the impact of usability for users. Where users perceive a system as difficult to use, it's far more likely they will attempt to circumvent the system and revert back to old practices.
- Business Change management should always be included in any implementation that results in changes to the business process and the ways that users interact with the system.

What if we already have another content management system?

The obvious question that may come to mind is that some customers may have already standardised on a vendor like Documentum for their ECM strategy and this may limit their options. Because the majority of SAP EFM has been built within SAP itself, it should be compatible with any ECM vendor who can provide a certified SAP repository or connector. It is important to note that SAP software integration costs are not always included in software vendor's licensing so it's recommended that a customer check licensing costs before embarking on a strategy that may have large cost implications which could throw out the business case.

The solution may be limited by the vendors' repository non-SAP functionality so accessibility to documents outside of SAP, or full text retrieval and authorisations outside of SAP would be subject to your existing ECM product's limitations.

If your ECM system isn't SAP certified or you don't have an existing ECM solution, EFM includes Open Text Content Server Licenses for all licenses users accessing SAP EFM. This can then be expanded later if the customer chooses to implement other solutions like SAP Vendor Invoice Management or SAP Extended ECM.

Who would look at SAP EFM over native SAP ArchiveLink?

The business case for SAP EFM over native ArchiveLink can be fairly complex and can only be looked at on a customer-by-customer basis. Obviously some of the smaller SAP customers will have limited requirements and budgets depending on the number of employees they are managing and how time consuming the administrative function is. In the cases of smaller companies, native ArchiveLink may be sufficient to meet their requirements and/or SAP EFM may be difficult to justify from a financial perspective.

For larger organisation where HR is finding it difficult to manage the volume of files associated with having a large number of employees, this would be a good application to help reduce the workload for HR. This is also particularly important where customers have a shared services environment and all documentation is managed centrally as the administrative workload is increased exponentially and the ability to manage files electronically becomes a major cost saving when you consider the pure volume of files to be stored and managed in one location.

The integration with ESS also opens the door for companies to let their employees help with the document processing and streamline their business process. If employees are able to scan and submit their own documents as supporting documents, it reduces the business process times and improves

Conclusion

For those customers looking at a requirement for HR document management, EFM provides a powerful solution. The enhanced UI's are definitely a big improvement on the standard SAP UI and this is likely to improve utilisation of the system.

For further information on EFM pricing, please contact your SAP Account Executive.

About the Author:

Athol Hill is the SAP Practice Lead for Stonebridge Systems. Athol has more than 10 years experience in SAP content management with some of the largest SAP customers in the world.

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