



Published: March 2006

## **CASE STUDY of IMPLEMENTATION eBdesk PRODUCT PT APLIKANUSA LINTASARTA**

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### **Company Profile**

PT Aplikanusa Lintasarta (Lintasarta) was established on 4 April 1988. With the experience as a moving company in the Service of Data Communication and The Added Value Service for all industries sector in Indonesia, right know the customers of Lintasarta reached 1000 company with more than 9000 networks that covered the Frame Relay service, Sambungan Data Langsung (SDL), VSAT IP, VPN MultiService, and the others.

At the beginning of Lintasarta establishment, this company has a mission to develop information technology especially in national banking segment. Lintasarta and Bank of Indonesia co-operated in Automatically Sistem Pelaporan Perbankan implimentation via electronic media. Lintasarta was the pioneer of using ATM (Anjungan Tunai Mandiri) BERSAMA network, where each ATM BERSAMA can be used by the other bank's customer that is combined as ATM BERSAMA members. Lintasarta realised that the telecommunication is the most important aspect in supporting the growth of information in banking sector.

As generally Lintasarta had two kind of services: Data Communication and The Added Value Service. Data Communication service include teresterial and satelite services. Both of these services can be separated or combined depend on the necessity, because each segment have their own carateristic. Lintasarta's services have high achievement level, support protocol based on legacy and the Internet, as well as various applications. Whereas The Added Value Service form Lintasarta increase

portofolio the main service is namely data communication with global internet network.

Lintasarta develop national terrestrial telecommunication network in all Indonesian city. For the international network, Lintasarta co-operate with international telecommunication company such as Equant. To increase his competitiveness, Lintasarta has gotten ISO 9001 certification : 2000 from SGS International.

## Used Product

- eXpander Corporate Portal
- eXpedition Workflow
- eNcyclo Document Management
- Custom Application
  - a. DM Desktop
  - b. Expiration Agent
  - c. Staging WF-DM
  - d. Scanner
  - e. OCR
  - f. Fax

## Background

Document in LINTASARTA is the real proof from company business that will play a strategic role in supporting the company so that in the telecommunication business and *Information Service* made LINTASARTA as "*Knowledge-Driven Corporation*". The Document was the information that would and always needed.

With the increase of the number of the product and services for customer, than was expected to improve the quality also. Its can be achieved by improve the documentation system and workflow become more effective and efficient.

A new strategy is needed in the documentation processing electronically that solidifies with the process of the available work in LINTASARTA. The kind of the document such as reports, contract document, customer's document, SOP, and the others.

Workflow similar with approval/report documentation, review, although document distribution or work paper form one part to another part that in control and track in an electronic Document Management System (e-DMS).

The target value that Lintasarta want to reached:

- a. Serve the customer or partner by quick and accurate information (*Customer Oriented*).
- b. Efficiency and effectivity in all the activity of company's efforts (Internal).
- c. Supporting data supplying and information for exact decision making.

### **Condition before using DM integration and WF eXpedition**

Manual condition in documentation system. Because the lack of of the auxiliary implement (*tools*).

With the complexity scope of the company organization's work, and with increasingly the height of the work connection between the work processes, influential by the increase the number of the document that must be accomodated and processed.

Some of problems that were dealt by Lintasarta regarding the management of document:

1. Difficulty in document categorisation
2. Difficulty in controlling the document access right
3. Difficulty in keeping the document secrecy
4. Difficulty in updating document version
5. Difficulty in searching document quickly

### **Solusion**

Solution for manage Lintasarta document by implementing e-DMS (*electronic data management system*), is a document management system by using Web Browser (Web-based), through the mechanism of access right arrangement.

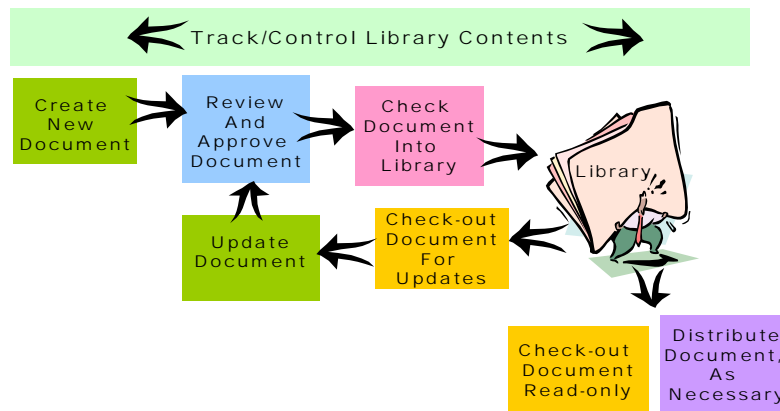
The performance of e-DMS was really determined by the capacity in handling document management in conventional metode. Beside that the easy level of to be

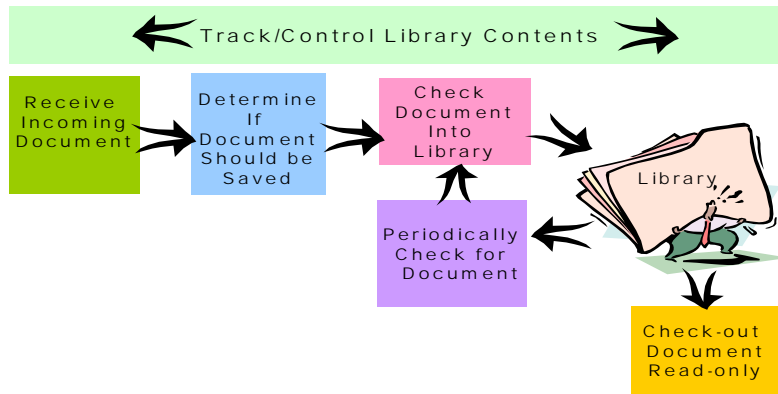
operated very supportive the success of the implementation e-DMS. And not lose the importance of being *packaging* e-DMS in one big system in corporate.

eBdesk Document Management and eBdesk eXpedition Workflow as *tools* in implementing e-DMS, at the principle can be implemented directly integrated with the corporate portal (*eBdesk Corporate Portal*). So as the portal user just do *single sign on* for various application. But, both of this products can be customized accordance with the requirement, or even can be done an *enhancement* to get optimal value. Because of the principle from all eBdesk products eBdesk was the existence of the scalability capacity and adaptation in accordance with *user requirement*, with do some reengineering.

## The Scope

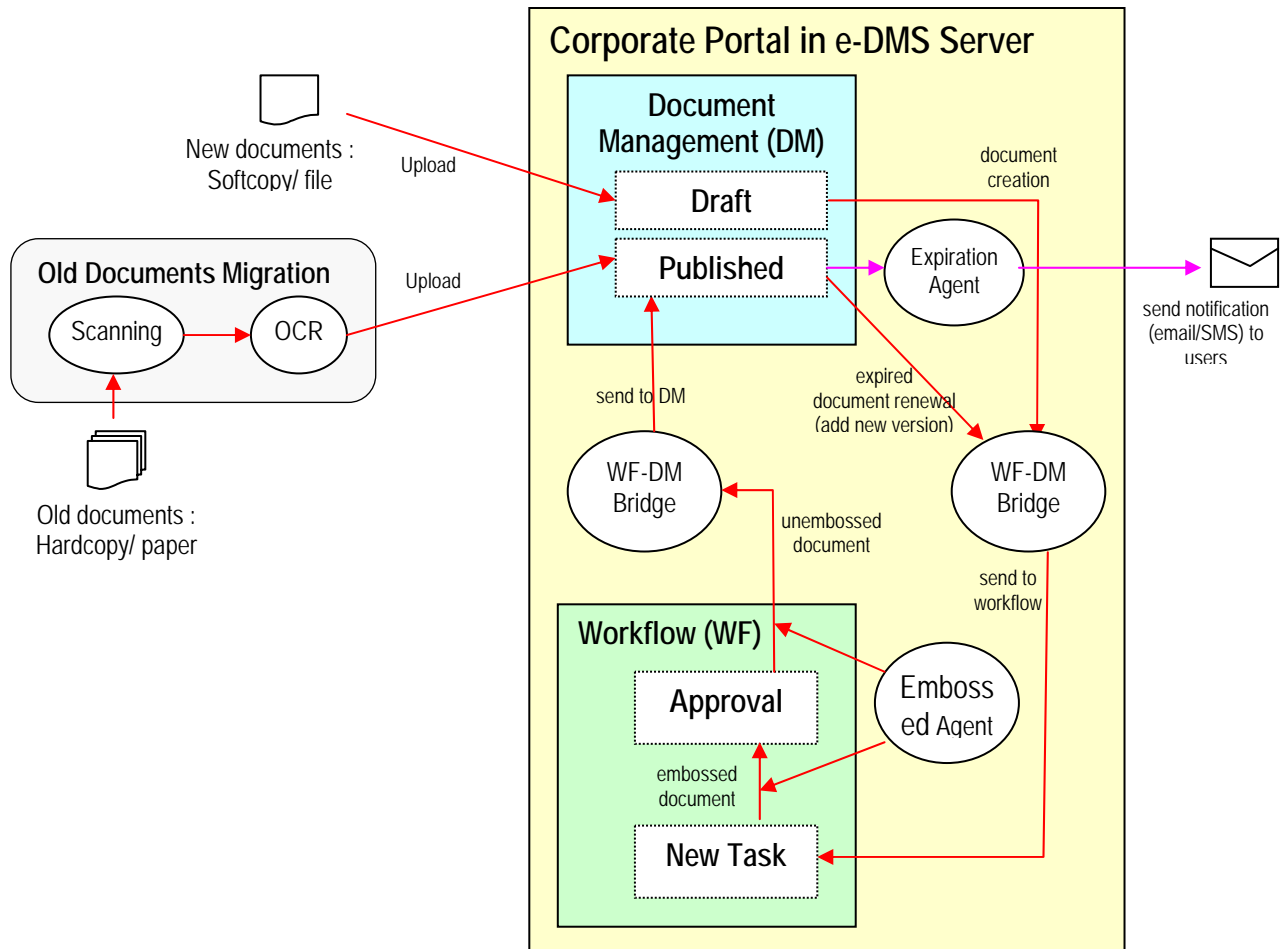
The scope of Lintasarta e-DMS that will be handled by eBdesk Document Management and eBdesk eXpedition Workflow depicted like the picture below:





## Problem Solving

e-DMS implementation accordance with the scope above, by using integrated eBdesk Document Management and eBdesk eXpedition Workflow with eBdesk Corporate Portal, the application architecture that is used as follows:



From the architecture above, can be explained as follows:

1. **Old document migration;** The document that will be migrated has been approved by the authorized user, so when the document is **uploaded** include in **Published** category in **Document Management**.
2. **Old document reform;** After the certain period, this document become expired. **Expiration Agent** program will tell you via email/SMS.
3. **Create a New Document;** basically, this process almost has the similar method with the process of document reform, as the comparison can be seen in the table along with.

Case	Document Reform	Create a New Document
Source Folder	Published	Draft
Destination Folder	Published (add new version)	Published (version 1)
Kind of document operation	Add version with flow	Move file with flow
Initiator/up loader	Staff	Staff
Authorized user	Manager	Manager

For further the new document will through the cycle that was the same as old document, that is the expiration date periodically.

To give the solution for Lintasarta's problems, customization and development that is carried out against eBdesk Document Management as the follows:

- Add move file between category/folder facilities (for example from Draft to Published) via approval in Workflow. No this facility in this DM current packages (**Move File with Flow**).
- Add **Expiration Date** field to indicate expire date of the document. No this facility in this DM current packages.
- Preprocessing Document development.

This module is a desktop application that is run in Windows, its assign to read hardcopy document, change into digital text and upload it into Document Management.

Several functions that was made for:

- **Login**, to check authorized user to process the document.
- **Scan**, to read hardcopy document and change in into image file.
- **Convert** to change image file into digital document with OCR (*optical character recognition*).
- **Upload**, to upload digital document into Document Management.

- The Development of *DM- Workflow Bridge*.  
*DM- Workflow Bridge* is a program that will flow the document from DM to Workflow for the next processing. This Program measures like an *agent/background process* that is working periodically, checking the document availability that will be sent by DM, checking the document availability that was finished in Workflow and send it back to DM.  
 The available alternative like *Service* or *Scheduled Task* that can be arranged form Control Panel on Windows operating system.
- The Development of Expiration Agent.  
 DM-WF Bridge, Expiration Agent constitutes program background that is running periodically. The function that must be available by ths program :
  - Checking all day the existing of expired document in DM on this day.
  - Send a mail to group of user that have authorization on **Published** folder, contain notification about expired document is exist.
- The Development of Embossed Document.  
 Function of Embossed Document is called by Embossed Agent program, is used for:
  - Give watermark on document that was ready to be approved in Workflow
  - Remove the watermark after approval
 If the processed document was limited for Microsoft Office files only, there is a possibility VBA (Visual Basic Application) programming was done. It is must be explored, the end shape was not known yet, library file (\*.dll) or the other.
- The Development of *embossed agent*.  
 As in the case of agent program beforehand, this program is background and running periodically. This agent will call Embossed Document function.
- Development Fax Sending as Mail Attachement.  
 This application is the desktop application similar Preprocessing Document module. *Upload* button was replaced with *Send Mail* button. The program must search the email address in digital text and sent mail to this address.