

Mail environment management and retention policies

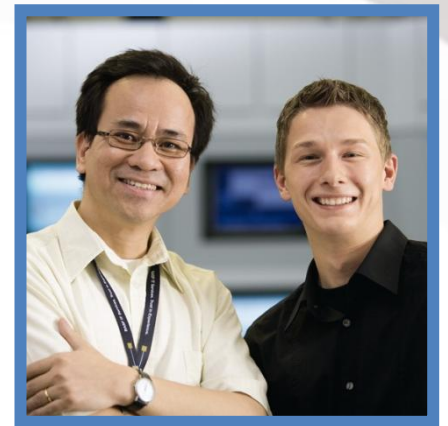
Geert Tilborghs (KBC ICT)
Keno Torfs (BASF IT Services)



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Agenda

- Introduction BASF IT Services @KBC
- Importance of Email ?
- Information Lifecycle Management @KBC
- Email Management Policy
- EMP @ BASF
- EMP @ KBC
 - Concept
 - Implementation
 - Issues
 - Results
 - Next steps

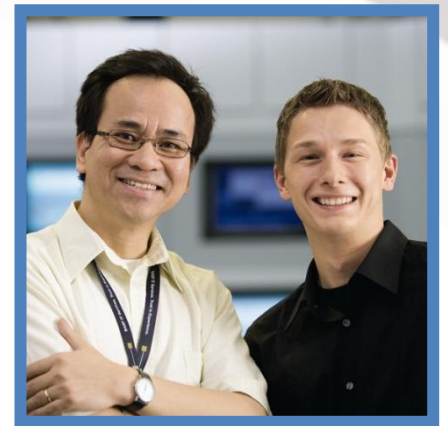


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BASF IT Services

Facts and Figures

- Wholly owned subsidiary of BASF founded in April 2001
- Largest IT service provider of the BASF Group
- Among the leading IT service providers for the process industry in Europe
- Sales 2009: 360 million Euros
- Around 2,300 employees (Dec. 31, 2009)
- Headquarters in Ludwigshafen/Rhein (Germany)
- Locations in 10 countries across Europe
- SAP Service Partner and SAP Special Expertise Partner
- Certified under ISO 9001:2000 and ISO 27001:2005
- IT Service Management according to ITIL

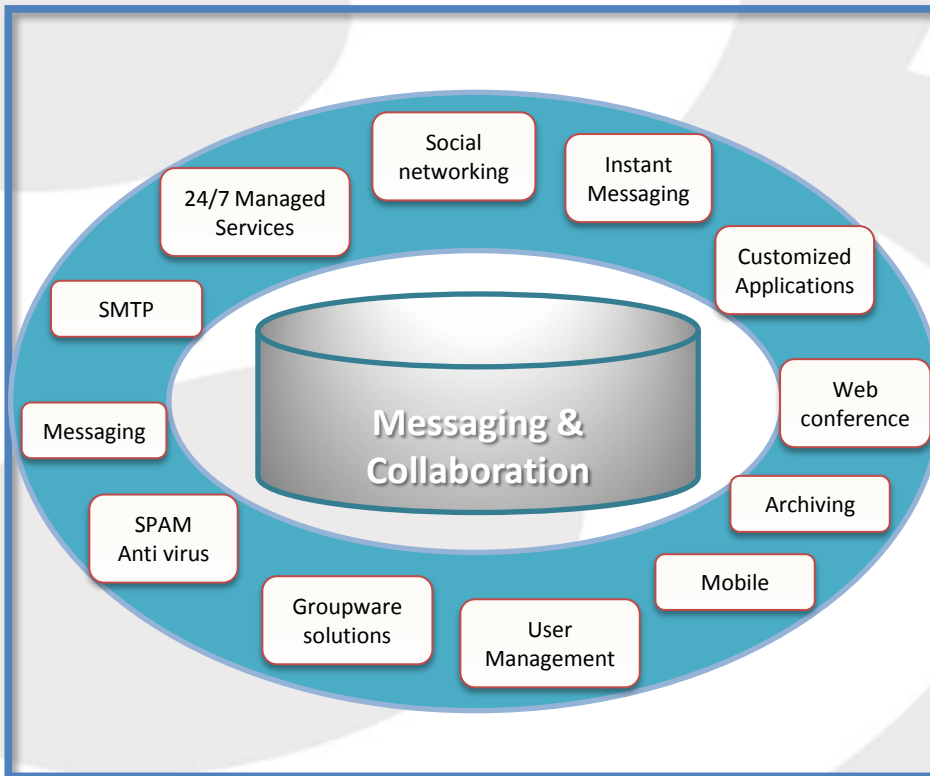


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BASF IT Services & Collaboration

Our Focus

*For everyone, from anywhere, at anytime, we offer reliable, high-performance
Messaging & Collaboration Services*



Service Offering

- Messaging Services Management
- Consultancy and implementation of messaging solutions, policies and mail archiving, based on market standards (Lotus Notes, MS Exchange)
- Collaboration solutions
 - Instant Messaging & Web Conferencing Systems (Sametime)
 - Social networking tools (Connections)
 - Groupware solutions (Quicr)
- Standard collaboration tool and customised specific solutions
- Incident-, Problem- and Change Management according ITIL



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BASF IT Services @ KBC

■ Cooperation between BASF IT Services & KBC ICT

- Started in 2006
- Using datacenters of KBC ICT + HW & OS services provided by KBC ICT
- Messaging application layer + SMTP/spam services provided by BASF IT Services

■ BASF IT Services delivering Messaging services for KBC

- 20.000 Domino / Lotus Notes users
- 8.000 MS Exchange users
- 725 Blackberry users
- Intranet running on Domino
- Productive operation of Quickr & Sametime will start in Q2 2010

■ Adapted toolset

- Integrated / automated user management for Domino & Exchange



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Importance of email ?

- Mailboxes sizes are always increasing
 - Besides important information, people get a lot of junk information in the mailbox
 - Users do not have or do not take the time to keep their mailbox in good condition
 - Mailboxes contain personal data
 - Mailboxes are in most cases not organized cabinets with only relevant data
 - Important information should not be kept in the mailbox, but should be moved to the correct document repository
- ➔ result is that in most cases mass of mail could be seen as non-important, obsolete data
- ➔ It is necessary for a company to have an Information Lifecycle Management !
- ➔ Email Management Policy is needed to keep your systems in a good shape !

Information Lifecycle Management

Problem Description

■ The management of all information stored in mailboxes and on file server (O-/R-/... drives) is depending on the individual employee.

■ In fact, most of this information is NOT MANAGED at all :

From most information we do not know:

- who is responsible
- who is allowed to change / consult the information
- what is the importance of the content
- what is the kind of content
- if it is the most recent version
- if the content is still valid
- when the information can and must (!!) be removed (destroyed)



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Information Lifecycle Management

Consequences

- The consequences are

- **rising costs** – all information is concerned by ICT as if it is critical for the company
- **lower efficiency** – employees are losing time while searching for information
- **lower performance**
- **rising risk to lose information** – current ICT systems are reaching their limits, e.g.
backups are running to long

- This is getting worse year by year

Information Lifecycle Management

Definitions

	Business Process	
	Information	
	Structured data	Non structured content
Solution	Transactional system	Content Management solution
Implementation	Database, back-end, ...	Content Management Group framework (CGF)

What is structured data ?

- A **data structure** is a way of storing data into a computer (typically in a DBMS) so that it can be used efficiently. Can be typical easily processed by a machine.
- Structured data is managed by technology that allows for querying and reporting against predetermined **data types and understood relationships**.

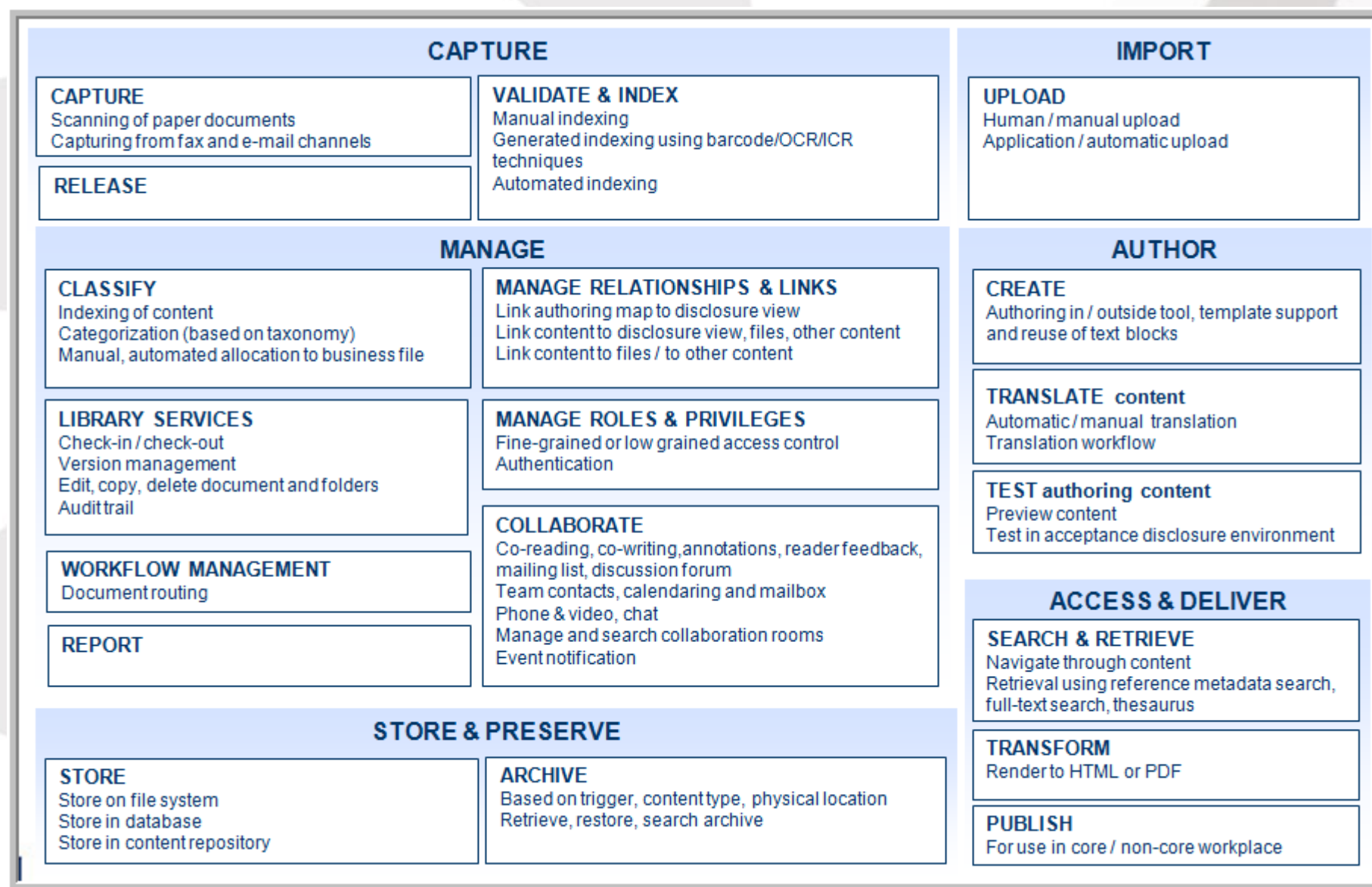
What is unstructured data / rich media ?

- refers to masses of electronic information which do **NOT** have a data structure **easy readable by a machine**
- which have **NO data type definition** – in textual documents a word is simply a word
- examples are audio, video, unstructured text like the body of an e-mail, a spreadsheet and other types of documents.



Content Management

Spotmap



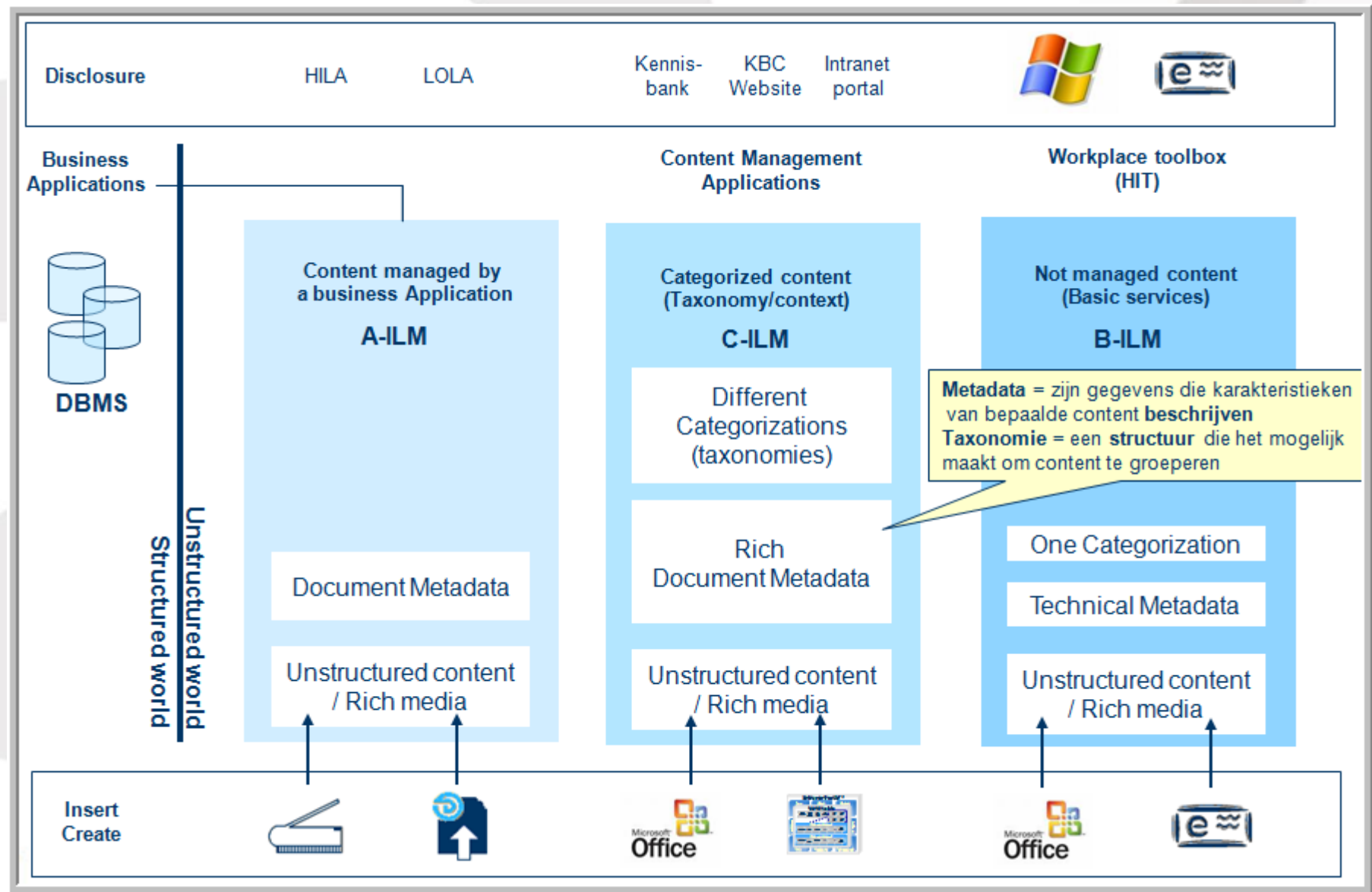
Managing Unstructured data @ KBC

Scenario 3: Starting from an offering

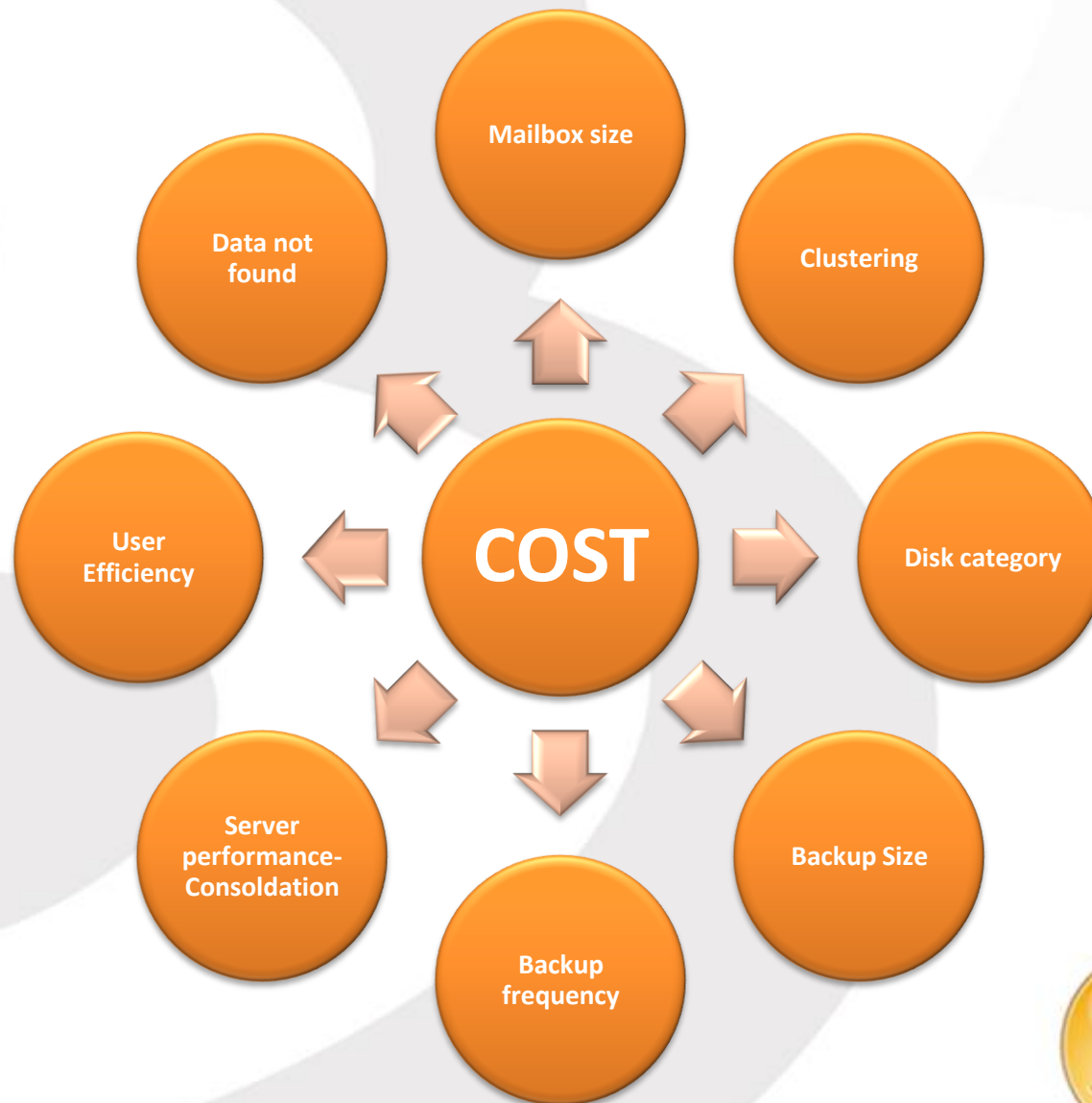
- We made an offering of 3 different worlds :
 - Content Managed by a business Application – A-ILM
 - Not managed content (Basic services) – B-ILM
 - Categorized content (taxonomy/context) – C-ILM
- Our approach
 - We believe 3 different solutions is enough
 - We believe we can make/define those 3 worlds different enough to avoid 'grey-discussions'
 - Approach : define and describe the services in those 3 different worlds
 - Cases choose for services and by that for one of the 3 solutions
- → Chosen scenario



Content Management Architecture



Cost aspects related to mailbox size



Email Management Policy (EMP)

■ Information Lifecycle Management should

- Decide what is important data
- Define the lifecycle of information in general
- Provide the user with the correct tools to store important documents.

■ An Email Management Policy should

- Be aligned to the company ILM
- Give the user the chance to Export documents to Archive or other systems
- Manage all other data in the mailbox
- Remind users to keep information where it belongs
- To keep the mailing system healthy and performant

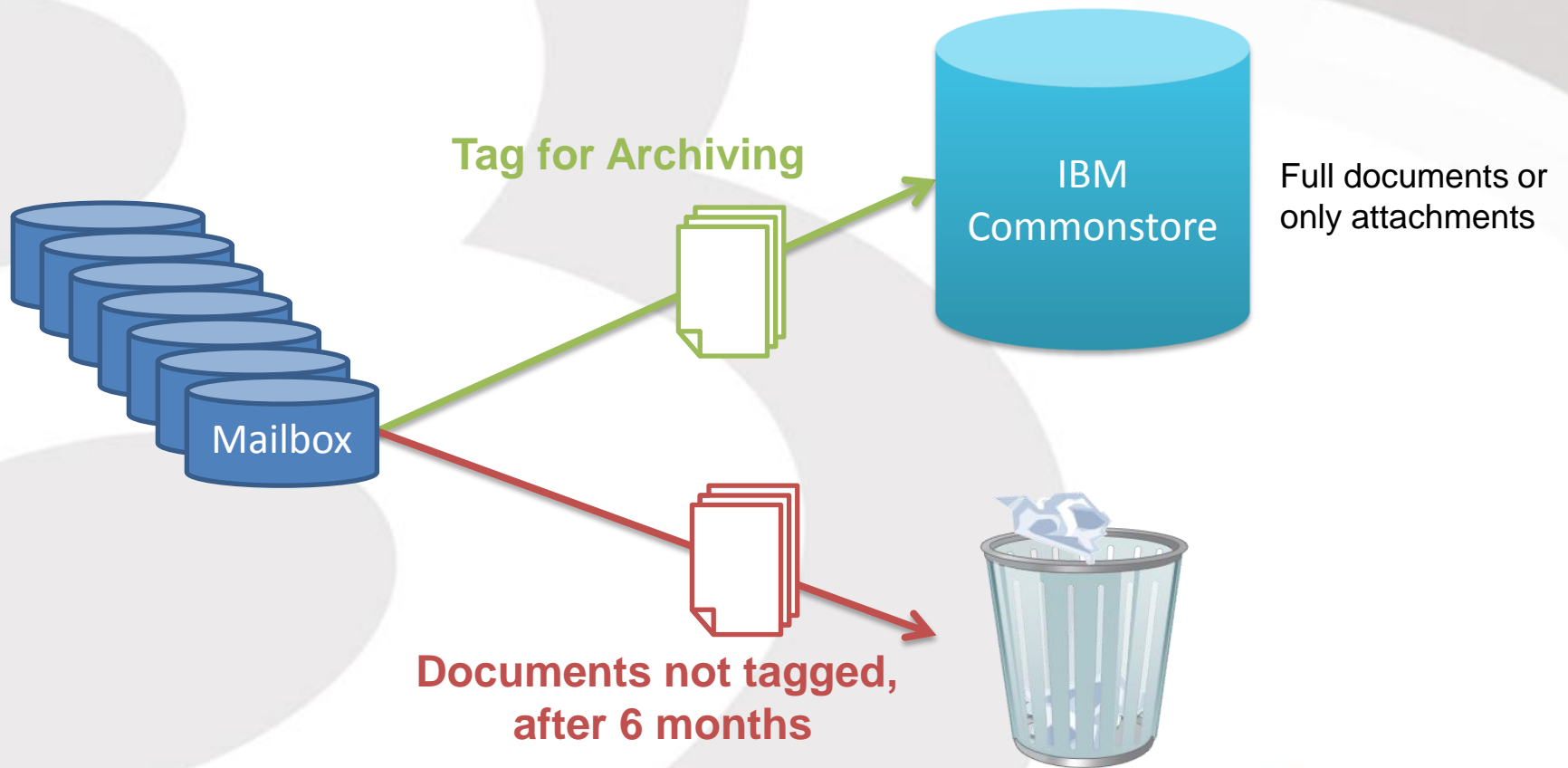


BASF 'EMP' Project

- For the BASF group already in 2003 an EMP concept has been worked out.
- Main concept:
 - Non-important mails older than 6 months are automatically removed
 - Important mails have to be 'tagged' and will be archived in Commonstore
 - Mandatory retention
 - Legal implications → fixed retention period per document type
 - Dedicated user group
 - Worthy for Retention
 - Available to all users
 - Choice to keep 1-3 years in Archive




BASF 'EMP' Project



Mark for Archiving

BASF DELETION POLICY



Lotus Notes 8.5

Re: BASF catalysys - IBM Lotus Notes

File Edit View Create Actions Section Tools Window Help

Open Home BASF User - Mail Re: BASF catalysys

New Reply Reply to All Archiving Forward Display

Re: BASF catalysys
Mark G Cucciniello to: BASF User, John Smith, Chris Quinn

Delete tagging
Set tagging

Here is the screenshot for the settings you need to make for sametime. Just make sure use token b

Do realize that both you & chris can't be on sametime with this basf user id @ the sametime - otherw

Preferences

type filter text

- Accounts
- Basic Notes Client Configuration
- Calendar and To Do
- Connections
- Contacts
- Feeds

bc-st01-us.na.basf.com

Server community type: Sametime

Server community status: Available

Server community name: bc-st01-us.na.basf.com:cooch0

This is your default server community. The default server community can be rese

Tagging of documents is performed by each individual user. To archive an email; open the message (or messages) to be archived. From the menu button, select the "archiving" button and "Set Tagging". Enter the archiving information such as archive type and comments, and enter the amount of time you'd like to store the document. Click "OK" to confirm and archive the document.

Deletion policy@ BASF

BASF DELETION POLICY



Lotus Notes 8.5

Yes, the E-mail Management procedure applies for the entire BASF Corp and does not allow any exceptions.

Q: Am I required to conform to the BASF Email Management policy?

Q: What are the main points of the E-mail Management procedure?

Q: Can I keep a copy of my e-mail messages on my own PC?

Q: What kinds of documents are subject to obligatory retention?

Q: What will happen with my calendar documents?

Q: Will my Administrative Assistant or the person covering for me during vacation have access to my moved/archived attachments?

Q: My colleague has been out sick for several weeks now and will not be back at his/her workstation for quite awhile. What can be done to make sure that they don't lose any important e-mail?

Q: I have tagged documents for retention and the retention period has expired. I still need to retain these documents. What do I do to prevent their deletion?

Q: What happens if I delete a "Tagged" e-mail?



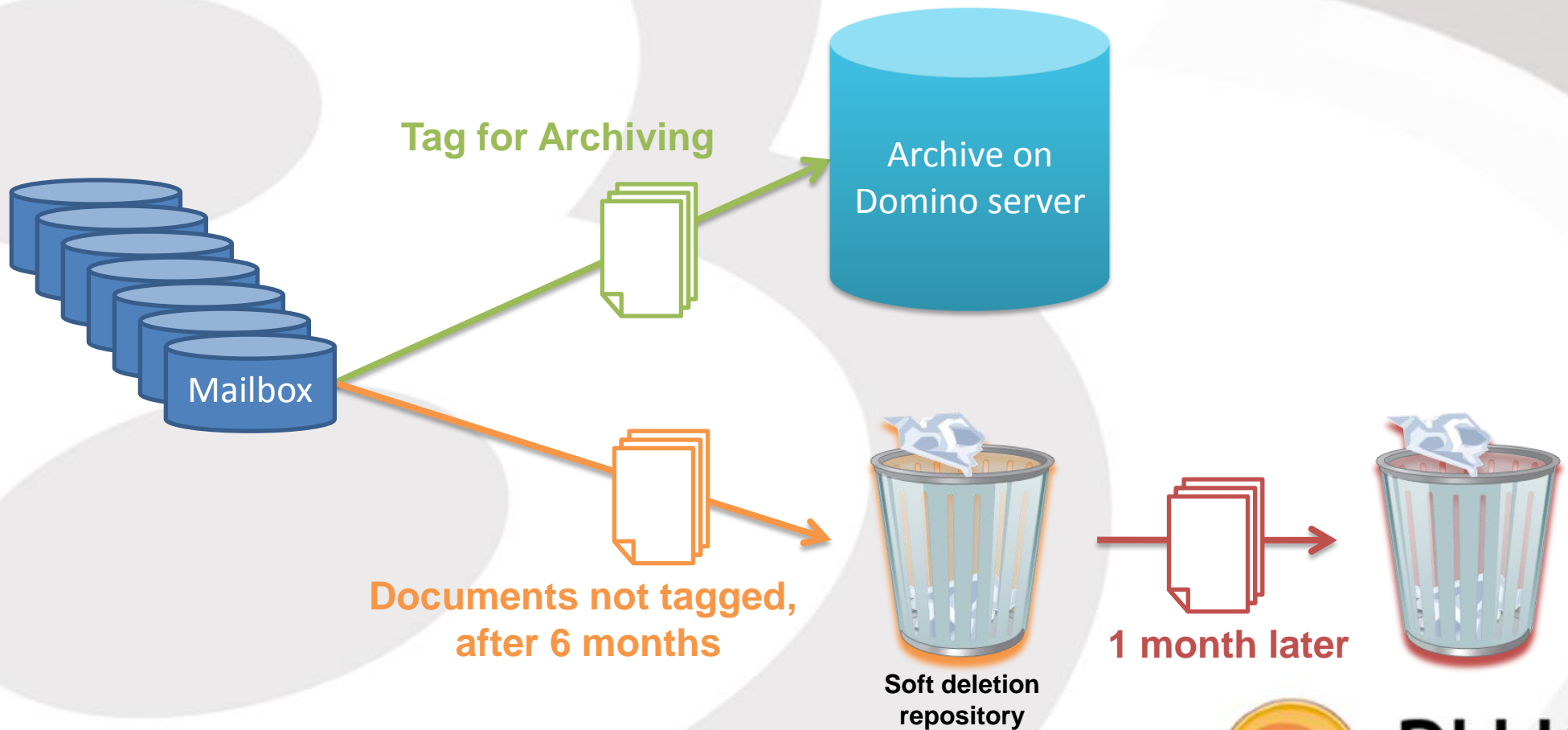
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KBC 'EMP' Project

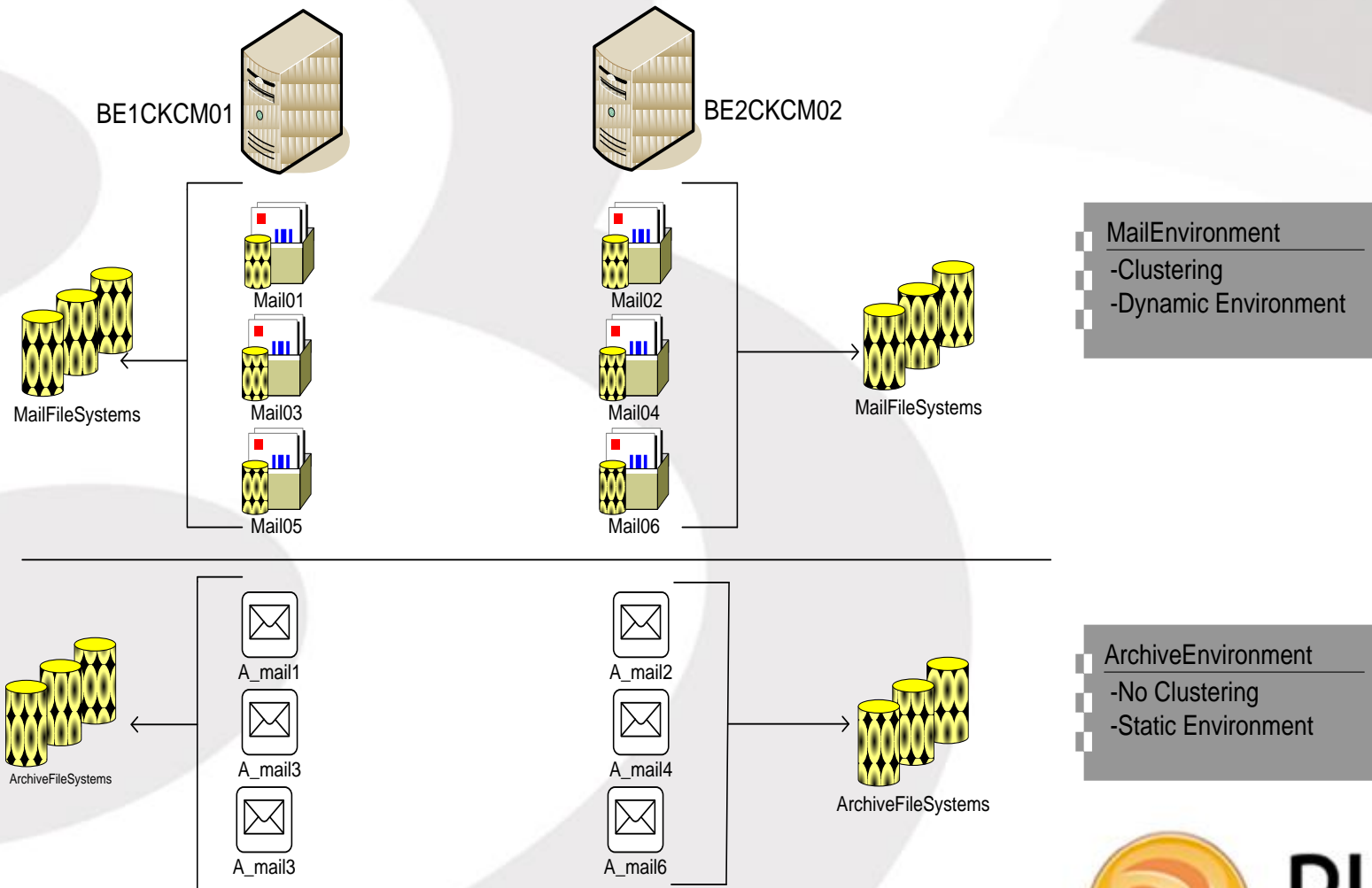
- KBC had decided to implement an EMP solution based on the same principles as the solution implemented for the BASF group
- Main focus was to reduce the cost and increase performance (user & system)
- Would be implemented together with the R8 upgrade project (joint development / communication benefits)
- Completely Domino solution
- Primary target:
 - 17.000 Domino users - mailboxes



KBC 'EMP' Project

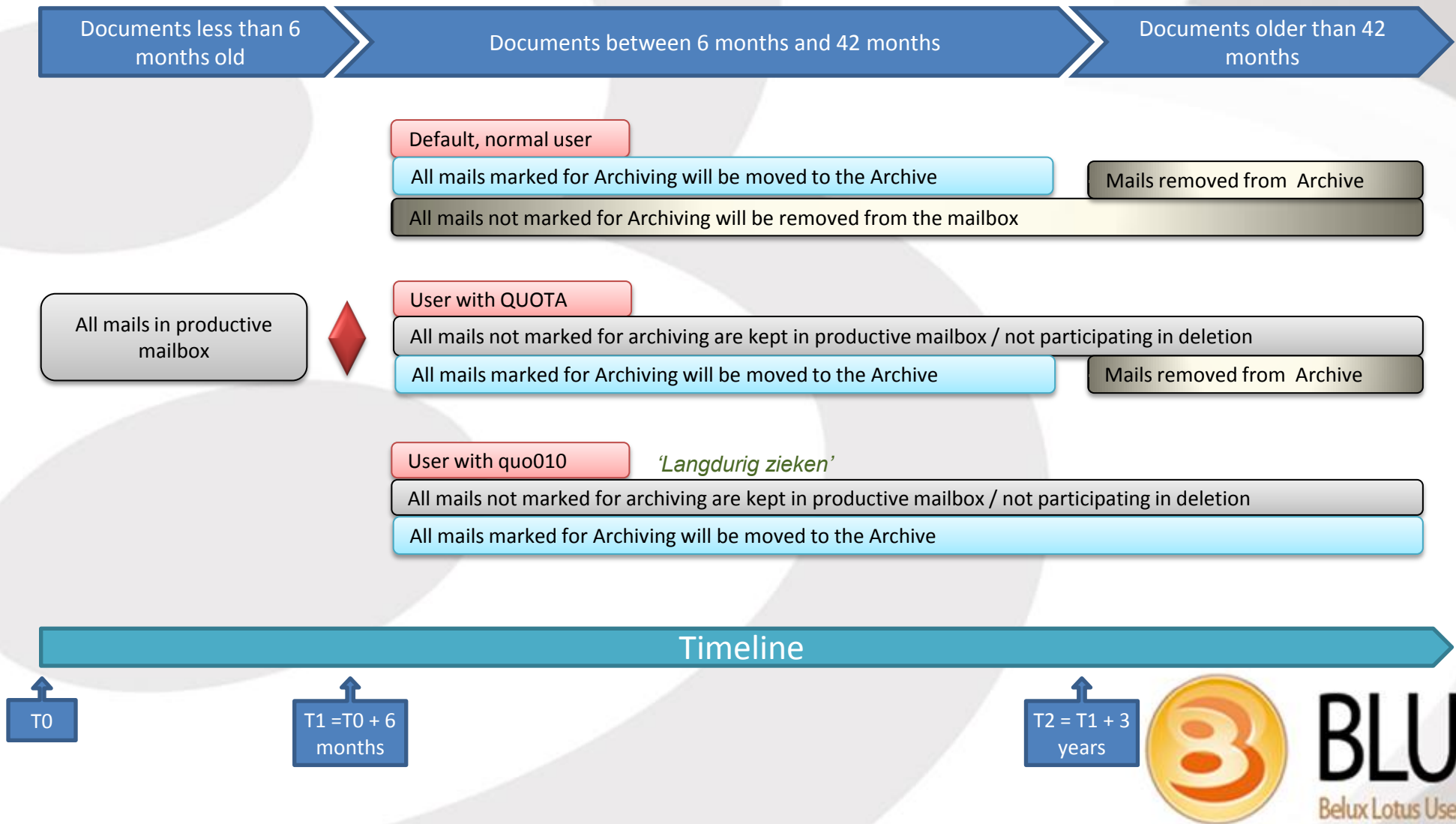


Mailbox versus Archive



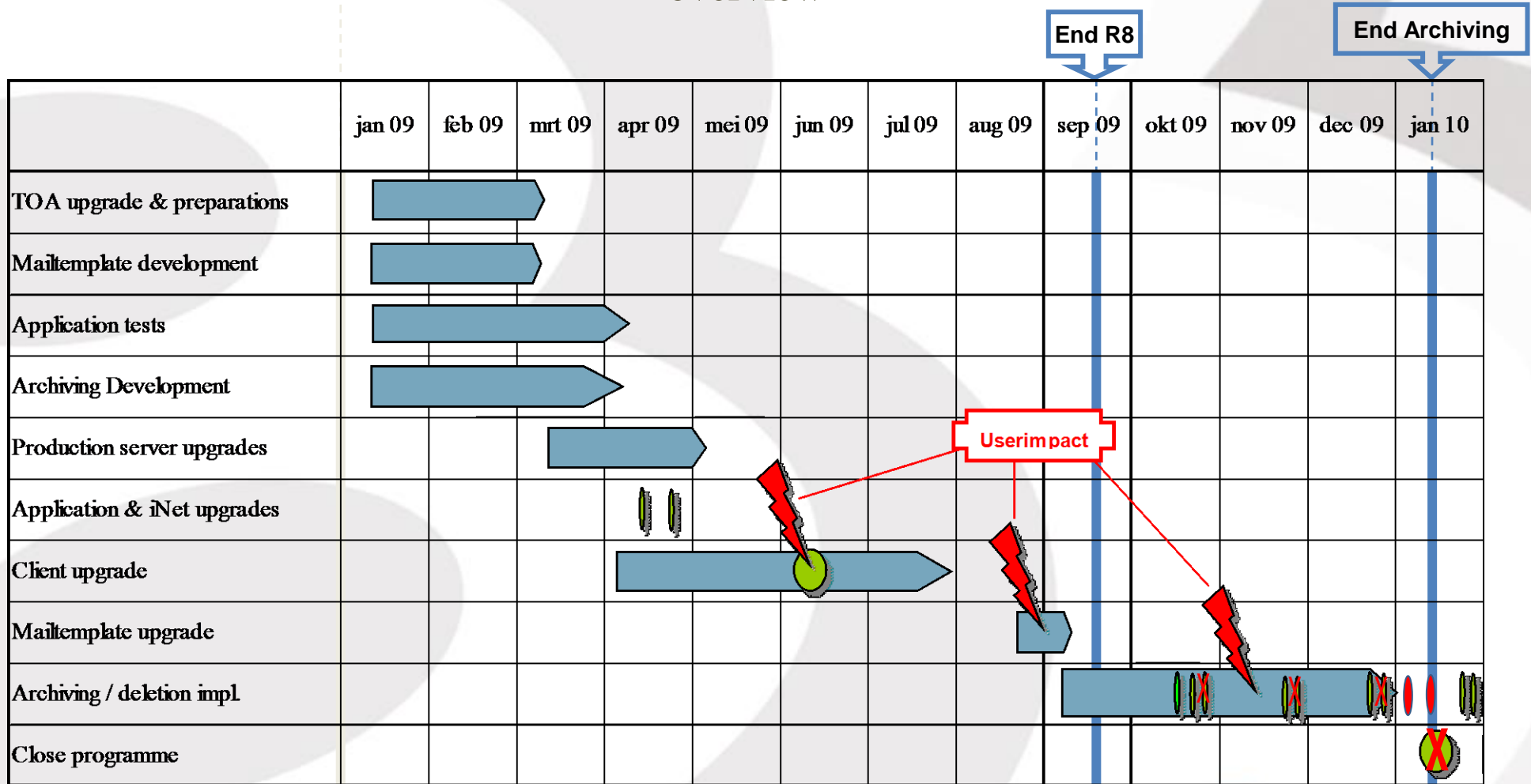
Tiering options & timeline overview

Initial scope



Project plan

overview



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KBC Tiering

Enhanced scope

Default, normal user

All mails marked for Archiving will be moved to the Archive

Mails removed from Archive

All mails not marked for Archiving will be removed from the mailbox

User with QUOTA

All mails not marked for archiving are kept in productive mailbox / not participating in deletion

All mails marked for Archiving will be moved to the Archive

Mails removed from Archive

User with quo010

'Langdurig zieken'

All mails not marked for archiving are kept in productive mailbox / not participating in deletion

All mails marked for Archiving will be moved to the Archive

User with quo020

'privileged users – No Deletion'

All mails not marked for archiving are kept in productive mailbox / not participating in deletion

All mails marked for Archiving will be moved to the Archive

User with quo030

'Privileged users – Archive All'

All mails marked automatically and moved to the Archive

Mails removed from Archive

All mails in productive mailbox

Due to 'complaints'
new options
introduced for
privileged users

Timeline

T0

T1 = T0 + 6
months

T2 = T1 + 3
years

▶ default	16074
▶ QU0010	313
▶ QU0020	66
▶ QU0030	94
	16547



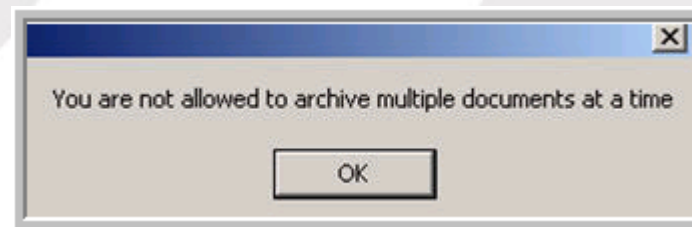
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Mark for Archiving

- Users have to tag the required documents to mark them for Archiving



- Users can only tag 1 document at a time !
 - To force users to think twice
 - To not just move 'garbage' to another location



Overview in mailbox / Archive

The first screenshot shows the Outlook Mail interface with the 'Folders...' section expanded. A red box highlights the 'Archive' folder, which contains sub-folders: 'Open Archive', 'Status', and 'Restored'. A red arrow points from this box to the second screenshot.

The second screenshot shows the 'Mail' window for 'DANIE KEPPENS'. The left pane shows the folder structure, including 'Inbox (261)', 'Drafts', 'Sent', 'Follow Up', 'All Documents', 'Junk', 'Trash', 'Views', 'Folders...', 'Archive', 'Open Archive', 'Status', 'Restored', and 'Tools'. The right pane shows the 'Will be archived' and 'Will be deleted' sections.

The third screenshot shows a detailed view of the 'Will be archived' section. It lists emails with columns for sender, subject, date, and size. The 'Will be deleted' section is also visible below it.

Will be archived			
In October 2009			
MARC AELBRECHT	Testen nieuwe release KBC-sjablonen	26/06/2003 16:58	3K
KARIN ADRIAENSSEN	Verslag vergadering opleidingen bureautica	25/06/2004 12:52	60K
In November 2009			
In December 2009			
In January 2010			
Will be deleted			
In October 2009			
ANNE OFDECAM	Re: woordgebruik	01/04/2003 09:27	1K
FREDDY VANTHIENEN	Re: cursisten Centea	13/05/2004 16:27	7K
Michele Garritzen	Offerte Migratie 2003	10/06/2005 13:46	577K
Lut Leys	Kennisbank/knoppenbalk - Wordtemplates	14/03/2006 14:48	7K
Martijn Vandewijer	TO DO: Centraal bijhouden van opleidingsmateriaal	05/09/2007 08:57	4K
In November 2009			
In December 2009			
In January 2010			

Folder structure in Central Archive (is permanent, not possible to move mails!)

Please note

The folder structure in the Central Archive:

- has a permanent structure (is taken from your active mailbox)
- you cannot delete folders
- you cannot create folders



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Communication

Kennisbank

Mail management archiving: automatic monthly actions by the system + timings

will be deleted

All mails (older than 6 months) **in your mailbox** that **are NOT marked for archiving** and are therefore mentioned in the status overview under 'will be deleted' – in (current) month, are deleted definitively and irrevocably.

Example:

▼ Will be deleted				
▼ In october 2009				
	ANNE OPDECAM	Re: woordgebruik	01/04/2003 09:27	1K
	FREDDY VANTHIENEN	Re: cursisten Centea	13/05/2004 16:27	7K
	Michele Garitsen	Offerte Migratie 2003	10/06/2005 13:46	577K
	Martijn Vandewijer	TO DO: Centraal bijhouden van opleidingsmateriaal	05/09/2007 08:57	4K

will be archived

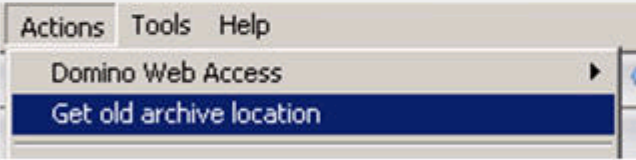
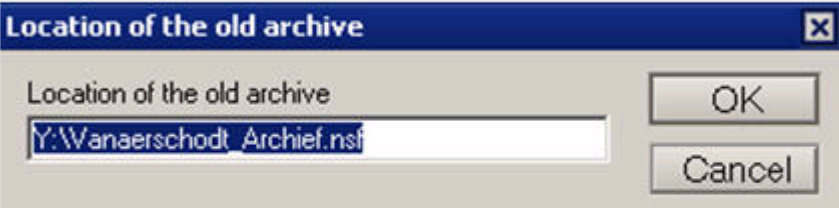
All mails (older than 6 months) **in your mailbox** that **are marked for archiving** and are therefore mentioned in the status overview under 'will be archived' – in (current) month, are moved to your central archive.

Example:

▼ Will be archived				
▼ In december 2009				
	ERIK DUMONT	Re: Praktisch Wordgebruik voor kredietbeslissers Vastgoed	27/01/2009 10:07	9K
	Jan Van Puyvelde	verslag Workshop/Demo R8 20/02/09	23/02/2009 14:38	296K

If the marked mail is included in one or more folders, the same folder is created during the archiving in the central archive file and the archived message will be placed there.

Old Archives ?

Where do I find my 'old' (last used) archives?	
Step	Action
1	<p>In the menu, select 'Actions - Get old archive location'</p> <p>Result:</p> 
2	<p>A menu appears where you will find the path and the name of your archives. The location depends on the choice you made when creating your archive folder and archive name.</p> <p>Example:</p> 
3	<p>Note down this name and click OK . You can also use the key combination 'Ctrl + C' (copy) instead of noting down this name.</p>



Issues

- Users complained about upcoming deletion and forced a delay in the schedule
 - Cause: users were afraid to loose data
 - Solution: internal KBC discussion at management level and introduction of 'Archive All (at start) user'
- User can not print / copy / forward from within Archive
 - Cause: users do not have the required role in ACL of Archive (side-effect of initially agreed setting)
 - Solution: On purpose → Works as designed. Helpdesk is informed about this behavior.
- Local Archiving still possible via bypass
 - Cause: Local archiving option is removed in the KBC R8 template, however it is still possible for users to access the settings via the standard Notes properties page
 - Solution: Local archiving disabled via explicit policies
- Not possible to mark documents for archiving on blackberry
 - Cause: was not in scope of project. Blackberry using propriety software
 - Solution: Solution will have to be built manually
- For 23 suspended users with QUO010 the deletion has ran in their mailbox
 - Cause: For suspended users the QUO010 status is not transferred from CRD to the NAB
 - Solution: mailboxes restored ; sync mechanism being updated

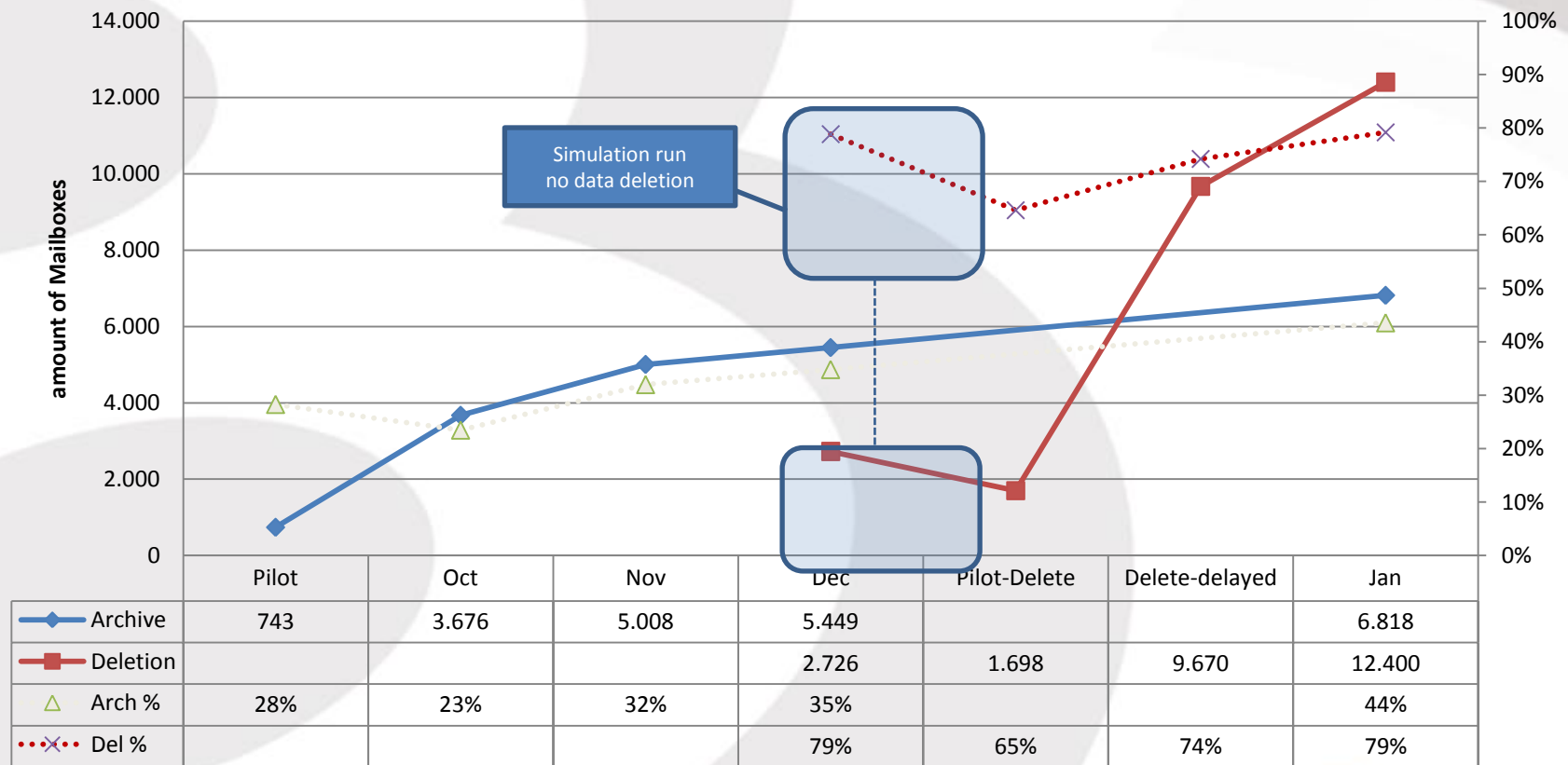


Tiering Results

		run		Data																																
		Pre-pilot			Pilot			Oct			Nov			Dec			Pilot-Delete			Delete-delayed			Jan			Total #Docs	Total GBytes	Total #Db								
Action	Server	#Docs	GBytes	#Db	#Docs	GBytes	#Db	#Docs	GBytes	#Db	#Docs	GBytes	#Db	#Docs	GBytes	#Db	#Docs	GBytes	#Db	#Docs	GBytes	#Db	#Docs	GBytes	#Db											
Archive	BE1CKCM01/SERVERS	7.874	0,79	43	24.237	2,51	360	1.157	0,08	46	32.542	3,69	413	125.543	21,29	439				114.047	17,05	535	305.400		45,41		1.836									
	BE1CKCM02/SERVERS							20.535	1,81	351	21.790	2,74	354	51.736	5,54	401				88.564	9,84	477	182.625		19,93		1.583									
	BE1CKCM03/SERVERS							47.362	3,96	348	29.077	3,35	390	77.251	11,18	405				76.586	11,47	492	230.276		29,96		1.635									
	BE1CKCM04/SERVERS							14.649	1,26	270	33.532	3,53	322	109.033	21,04	344				86.005	9,38	445	243.219		35,21		1.381									
	BE1CKCM05/SERVERS							16.650	1,39	327	21.365	2,45	358	89.063	8,37	394				58.100	8,69	495	185.178		20,91		1.574									
	BE1CKCM06/SERVERS							7.050	1,22	172	13.702	2,77	264	50.814	10,15	298				53.282	9,93	367	124.848		24,07		1.101									
	BE1CKCM07/SERVERS							16.928	1,15	201	36.020	5,03	371	54.256	8,06	432				104.939	17,79	535	212.143		32,04		1.539									
	BE2CKCM01/SERVERS				47.913	4,65	383	2.496	0,80	48	35.289	4,59	427	77.441	16,90	454				100.651	16,28	537	263.790		43,22		1.849									
	BE2CKCM02/SERVERS							27.634	2,84	375	37.343	3,64	373	34.955	4,54	409				75.764	10,23	527	175.696		21,25		1.684									
	BE2CKCM03/SERVERS							17.826	1,40	377	25.591	3,52	398	77.821	13,45	437				80.783	12,75	551	202.021		31,13		1.763									
	BE2CKCM04/SERVERS							20.442	1,89	340	25.605	3,24	355	72.878	9,16	380				66.012	10,61	495	184.937		24,89		1.570									
	BE2CKCM05/SERVERS							34.349	3,00	374	36.295	4,96	396	108.163	18,55	417				198.447	27,09	530	377.254		53,60		1.717									
	BE2CKCM06/SERVERS							16.338	2,39	265	25.680	3,57	289	62.063	10,54	320				94.102	16,46	403	198.183		32,96		1.277									
	BE2CKCM07/SERVERS							12.334	1,25	182	32.428	4,37	298	80.377	13,71	319				120.158	20,92	429	245.297		40,25		1.228									
Archive Total		7.874	0,79	43	72.150	7,16	743	255.750	24,45	3.676	406.259	51,44	5.008	1.071.394	172,48	5.449				1.317.440	198,49	6.818	3.130.867		454,82		21.737									
Deletion	BE1CKCM01/SERVERS	7.951	0,36	31													862.242	70,53	877				598.441	62,68	894	1.468.634		133,57	1.802							
	BE1CKCM02/SERVERS																			768.590	62,00	767	1.266.397		119,62		1.622									
	BE1CKCM03/SERVERS																			1.016.491	77,75	812	1.600.368		143,34		1.679									
	BE1CKCM04/SERVERS																			752.629	65,88	755	566.728		64,71		822	1.319.357	130,60	1.577						
	BE1CKCM05/SERVERS																			847.780	79,82	728	583.189		71,19		894	1.430.969	151,01	1.622						
	BE1CKCM06/SERVERS																			696.163	69,25	937	584.674		84,17		959	2.064.062	234,57	2.861						
	BE1CKCM07/SERVERS																			677.586	59,06	772	708.720		88,11		874	1.386.506	147,17	1.646						
	BE2CKCM01/SERVERS																							567.623	69,89	851	2.224.403	216,93	2.532							
	BE2CKCM02/SERVERS																							777.923	62,29	814	519.981	60,89	870	1.297.904	123,18	1.684				
	BE2CKCM03/SERVERS																							834.347	61,74	810	575.815	62,51	883	1.410.162	124,25	1.693				
	BE2CKCM04/SERVERS																							871.475	62,62	829	577.381	64,82	876	1.448.856	127,44	1.705				
	BE2CKCM05/SERVERS																							956.845	86,86	829	581.554	76,27	890	2.753.493	278,88	2.620				
	BE2CKCM06/SERVERS																							729.688	83,50	887	529.059	76,04	931	1.258.747	159,54	1.818				
	BE2CKCM07/SERVERS																							613.990	61,72	730	539.091	74,42	934	1.153.081	136,14	1.664				
Deletion Total		7.951	0,36	31										2.850.974	270,46	2.726	1.666.367	144,01	1.698	9.543.507	832,49	9.670	8.013.940	978,92	12.400	22.082.739	2.226,24	26.525								
Grand Total		15.825	1,15	74	72.150	7,16	743	255.750	24,45	3.676	406.259	51,44	5.008	3.922.368	442,95	8.175	1.666.367	144,01	1.698	9.543.507	832,49	9.670	9.331.380	1.177,41	19.218	25.213.606	2.681,06	48.265								

		run								
Action	Data	Pre-pilot	Pilot	Oct	Nov	Dec	Pilot-Delete	Delete-delayed	Jan	Grand Total
Archive	#Docs	7.874	72.150	255.750	406.259	1.071.394			1.317.440	3.130.867
	GBytes	0,79	7,16	24,45	51,44	172,48			198,49	454,82
	#Db	43	743	3.676	5.008	5.449			6.818	21.737
Deletion	#Docs	7.951					1.666.367	9.543.507	8.013.940	19.231.765
	GBytes	0,36					144,01	832,49	978,92	1.955,78
	#Db	31					1.698	9.670	12.400	23.799

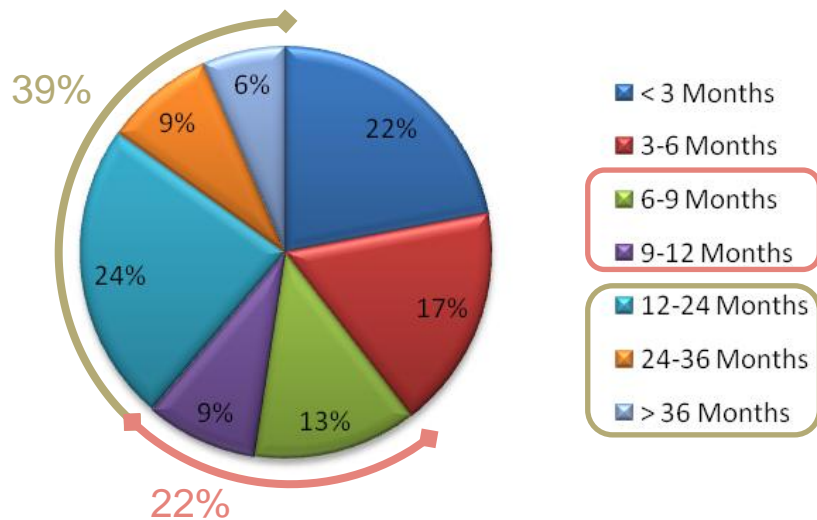
Mailboxes actively involved in Tiering



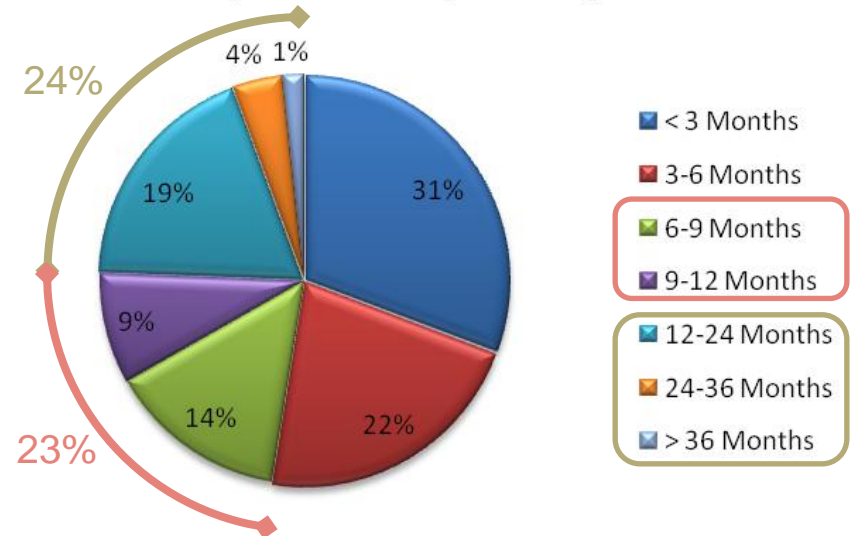
Comparison tiering versus pre-investigation

(June 2007)

Amount of Mails in mail files



Diskspace occupied by mails

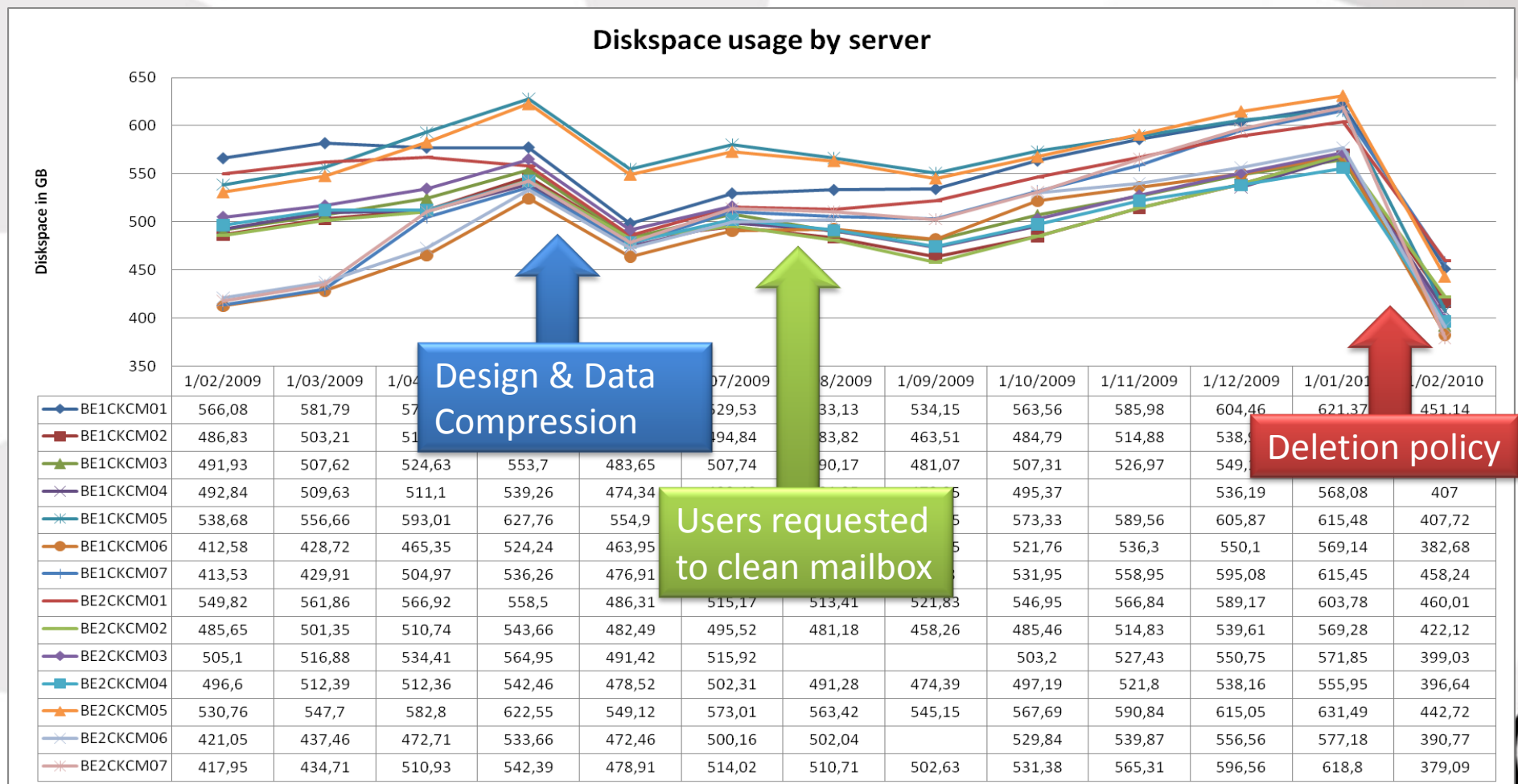


		run		
Action	Data	Pilot + delayed Delete	Jan	Grand Total
Deletion	#Docs	11.209.874	8.013.940	19.223.814
	GBytes	976,50	978,92	1.955,42
	#Db	11.368	12.400	23.768

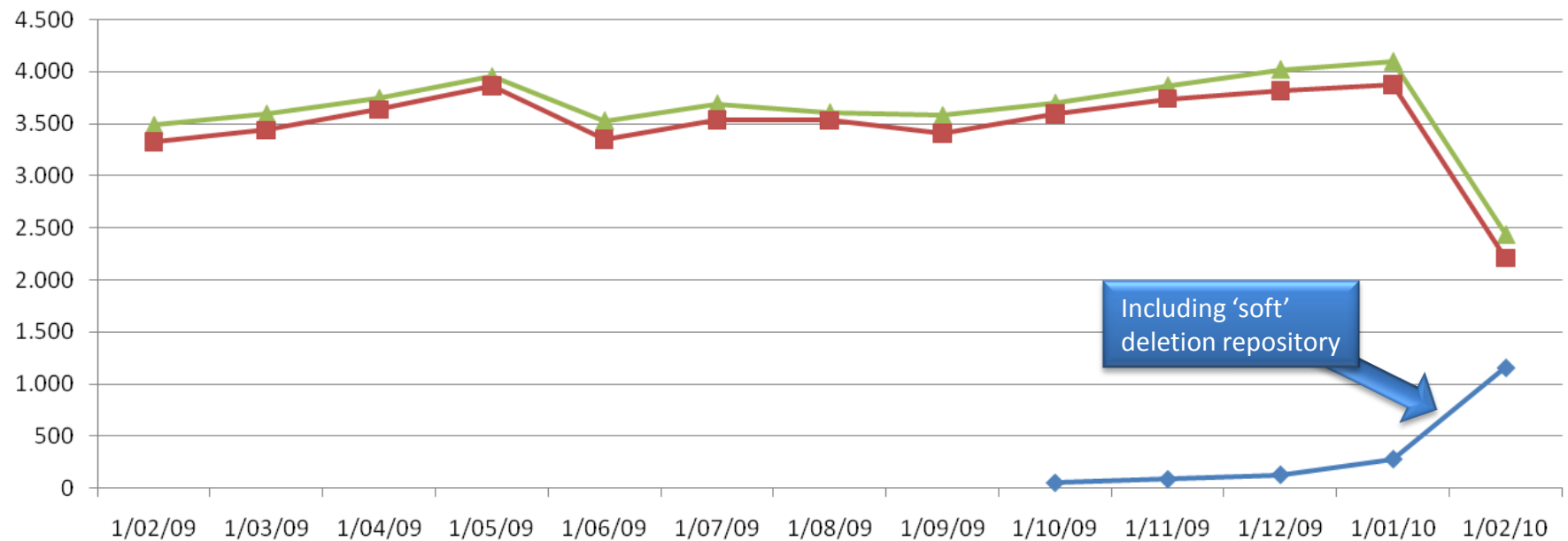


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Disk space Usage by Server



Total disk space – All servers



	1/02/09	1/03/09	1/04/09	1/05/09	1/06/09	1/07/09	1/08/09	1/09/09	1/10/09	1/11/09	1/12/09	1/01/10	1/02/10
Home	3.485	3.593	3.743	3.951	3.529	3.690	3.605	3.578	3.695	3.863	4.019	4.096	2.437
Cluster	3.324	3.437	3.636	3.863	3.346	3.538	3.530	3.410	3.592	3.739	3.815	3.875	2.208
Archive									53	87	131	282	1.161

Home Cluster Archive



Conclusions

■ Acceptance of Archiving / deletion policy by the users

- However deletion was initially postponed, no further delay's or problems have occurred
- Strict Management and very thorough communication plan is needed !
- No functional user complaints have reached BASF IT Services

■ File systems

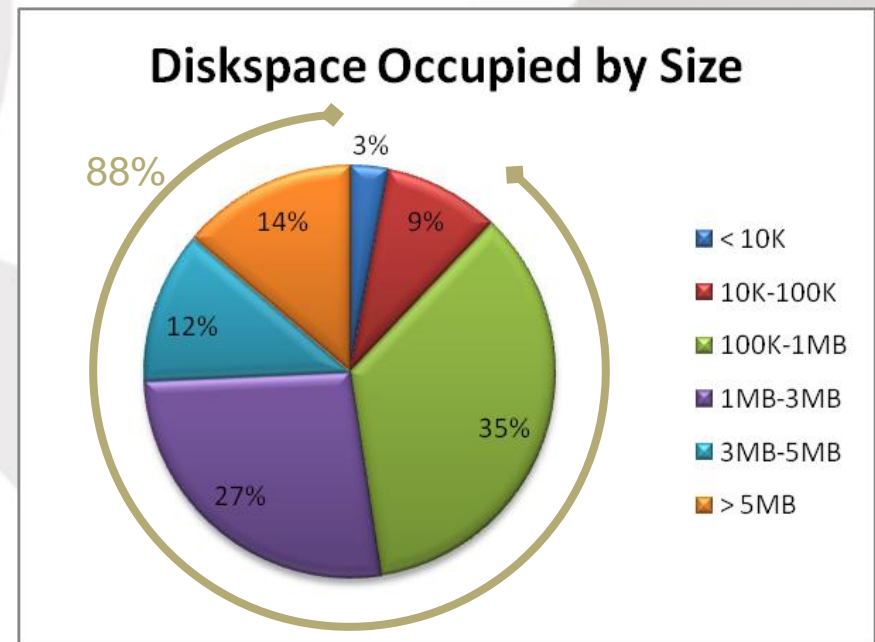
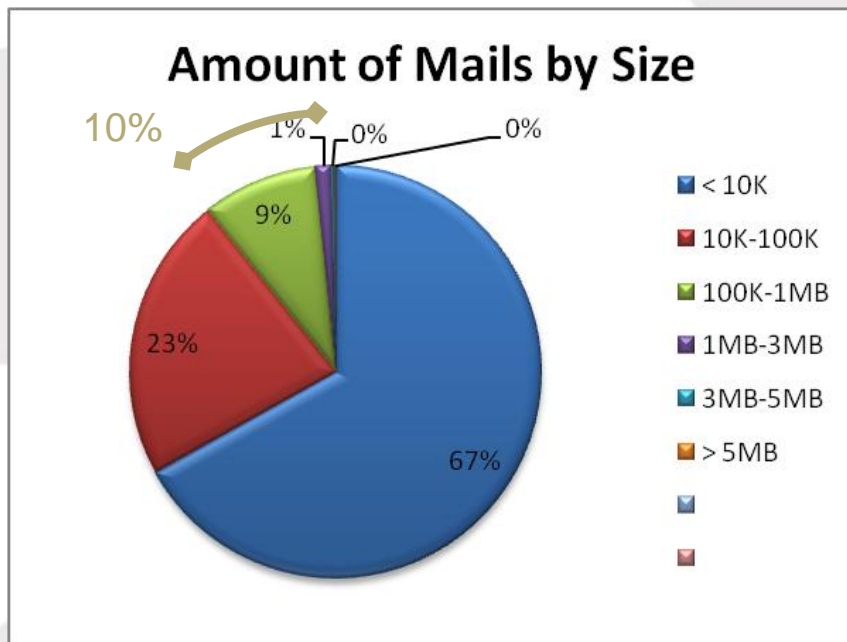
- Forecasting for the needed infrastructure was correct
- Clean-up of file systems should be considered

■ Participation

- Archiving participation can still be considered relatively low: ~45%
- Deletion participation is realistic with ~80%



Further disk space optimization by DAOS?



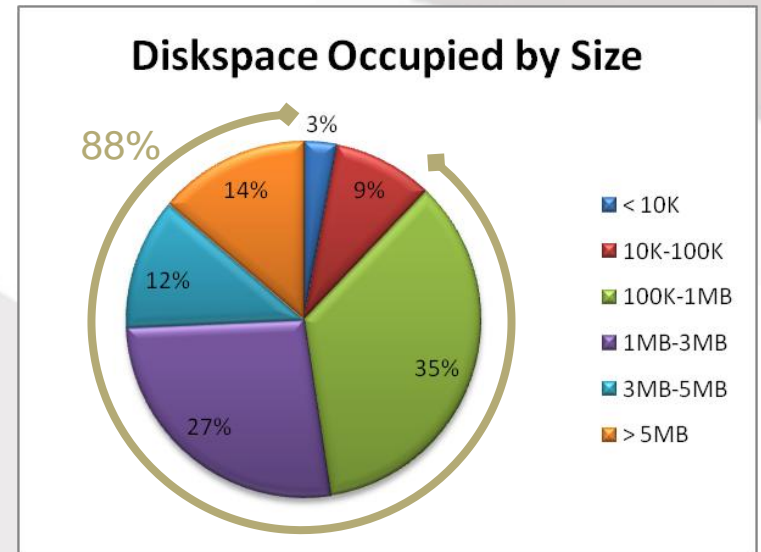
- DAOS will centralize attachments above a minimum size (standard 4KB, IBM advises 64KB)
- In case we assume 'minimum size of object' is 100KB
 - 10% of documents will be in scope
 - 88% of size is in scope

DAOS Estimator

[illegible]

DAOS Minimum Size versus number of NLO's and Disk Space:

0.0 KB will result in	1688203	.nlo files using	225.0 GB
4.0 KB will result in	1577609	.nlo files using	224.9 GB
8.0 KB will result in	1445902	.nlo files using	224.5 GB
16.0 KB will result in	1228594	.nlo files using	223.3 GB
32.0 KB will result in	989142	.nlo files using	220.5 GB
64.0 KB will result in	706280	.nlo files using	213.4 GB
1.0 MB will result in	87594	.nlo files using	128.8 GB
5.0 MB will result in	6697	.nlo files using	34.0 GB
20.0 MB will result in	122	.nlo files using	4.4 GB
100.0 MB will result in	8	.nlo files using	1.3 GB



```
Summary:
Total DB's analyzed: 3646
Total DB's skipped due to errors: 0
Total Size of NSF's Examined: 555.3 GB
Total Attachments found: 1688203
Total Duplicate Attachments found: 762677
Estimated Size of DAOSified NSF's: 171.6 GB
Estimate Size of DAOS dir: 225.0 GB
Total Disk Savings: 158.7 GB
```



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Long term Archiving

Due to business requests and needs a follow up project will/should define how to treat the documents after the time span of 3 years and define possibilities to archive longer in case needed

Default, normal user

All mails marked for Archiving will be moved to the Archive

Mails removed from Archive

All mails not marked for Archiving will be removed from the mailbox

User with QUOTA

All mails not marked for archiving are kept in productive mailbox / not participating in deletion

All mails marked for Archiving will be moved to the Archive

Mails removed from Archive

User with quo010

'Langdurig zieken'

All mails not marked for archiving are kept in productive mailbox / not participating in deletion

All mails marked for Archiving will be moved to the Archive

User with quo020

'privileged users – No Deletion'

All mails not marked for archiving are kept in productive mailbox / not participating in deletion

All mails marked for Archiving will be moved to the Archive

User with quo030

'Privileged users – Archive All'

All mails marked automatically and moved to the Archive

Mails removed from Archive

All mails in productive mailbox



Timeline

T0

T1 = T0 + 6 months

T2 = T1 + 3 years



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Questions and discussion

Thank you for your attention.

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