

Preservica Email Preservation

Michael Hope July 2017



Email Preservation Workflow

- Email selection
- Transfer
- Unpacking transfer format into archival format and structure
- Ingest
- Preservation
- Data management
- Search, view and download



Email Preservation

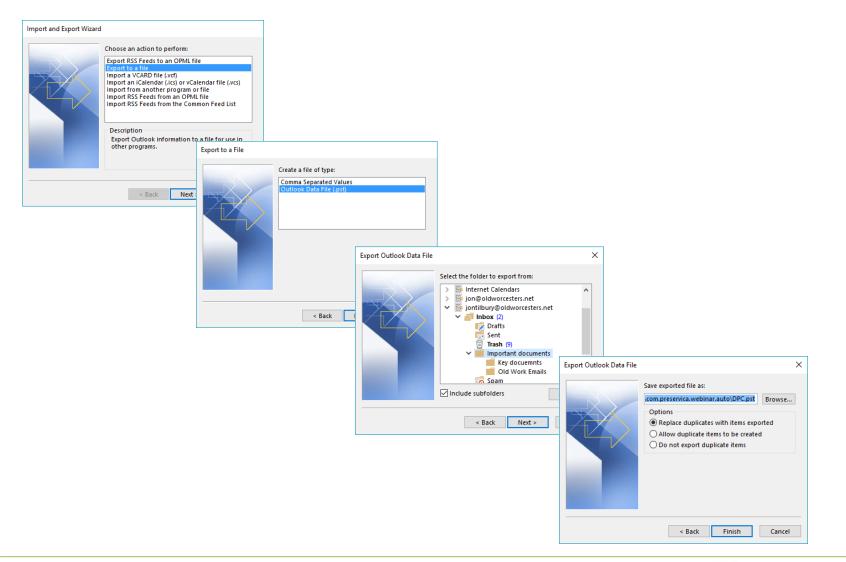
reservica				Jon Tilbury (0)	English 🔻
	servation	Data Management Admini	stration Help Q	Search Archiv	e
ot PASIG email export 17062015.pst Top of	Outlook dat	a file Inbox (2014-10-30 09:17:1	2) Images for Wildlife Exhibition		
Sync Tree	Tools	View 🦊 👚		Manifestation Preservation 2	(Active, Original)
	▲ #	Name	Description	Size	Туре
format collection format coll		elephant-baby-285515_640.jpg	JPEG File Interchange Format	127.811 KB	File
		elephant-baby-285515_640_1.jpg	JPEG File Interchange Format	127.811 KB	File
 PASIG Digital Content email export 17062015.pst Search Root SPAM Search Folder 2 		gavial-275959_640.jpg	JPEG File Interchange Format	79.487 KB	File
		gavial-275959_640_1.jpg	JPEG File Interchange Format	79.487 KB	File
 Gradient of definition of the file Top of Outlook data file Deleted Items Deleted Items 	"	Images for Wildlife Exhibition.eml	Internet Message Format	56.397 KB	File
 (2014-10-30 09:17:12) Images for Wildlife Exhibition (2014-10-30 14:03:53) inline image (2014-10-30 14:18:44) Re: Expenses and year end accounts (2014-11-03 09:32:55) RE: Expenses and year end accounts (2014-11-04 09:38:25) Re: demo email (2014-11-04 09:38:25) Re: demo email 					
Wildlife Exhibition	🚽 🛛 Filter	Apply 🕑 🤮	Show accrued files 📃 Show children 📃 Show de	eprecated	

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- Email selection
 - identify the emails of interest (by person, by action e.g. copy to folder, by keyword)
- Transfer
 - continuous via HTTP
 - continuous by file extract
 - manual extract of single mails
 - entire mailbox in PST or MBOX

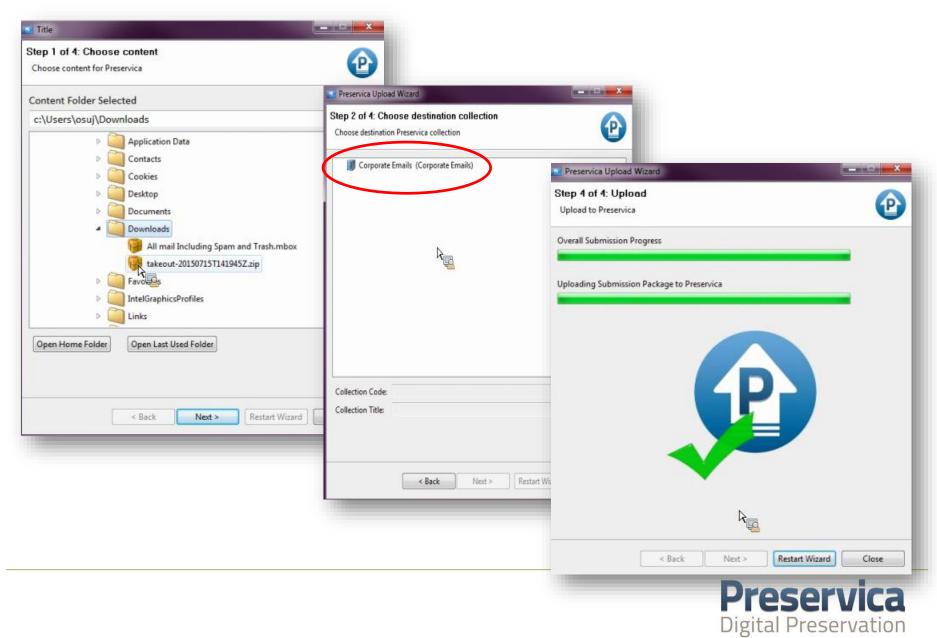


Export (Outlook example)





Transfer



- Unpacking transfer format into archival format and structure
 - unpack PST or MBOX container into hierarchy of messages
 - handle tagging as well as folder hierarchy
 - where to put individual message file in hierarchy
 - extract message, metadata, and attachments from email file into separate objects for preservation
 - what format should the message be kept in (text, HTML)
 - Q: handling link rot : are external links / objects / images referenced by the HTML incorporated or not
 - Q: is the PST, MBOX, MSG container kept or just an artefact of transfer



- Ingest
 - use rules to reject unwanted emails
 - identify duplicates and ignore if email / attachments already there
 - characterise message and attachments
 - normalise attachments and message if required



					Workflow I	Details		
		Work	cflow Con	text U	pload Wizard Ing	est		
		Work	dlow Def	inition S	tandard Ingest W	orkflow (Auto Selection)		
		Work	dlow ID	9	524			
		Work	dlow Sta	te A	ctive			
		Date	Started	1	5.07.15 10:25:03			
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(State	Identify Packages Import from Transfe Process Package Virus Check	er Area	Back	Step Pro	Started 15.07.15 10:25:03 15.07.15 10:25:07 15.07.15 10:25:10 15.07.15 10:25:11 15.07.15 10:25:13 15.07.15 10:25:31 15.07.15 10:25:34 15.07.15 10:25:37	15.07.15 10:25:07 15.07.15 10:25:10 15.07.15 10:25:13 15.07.15 10:25:31 15.07.15 10:25:34 15.07.15 10:25:37	Message
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15.07.15 10:25:52 15.07.15 10:25:55

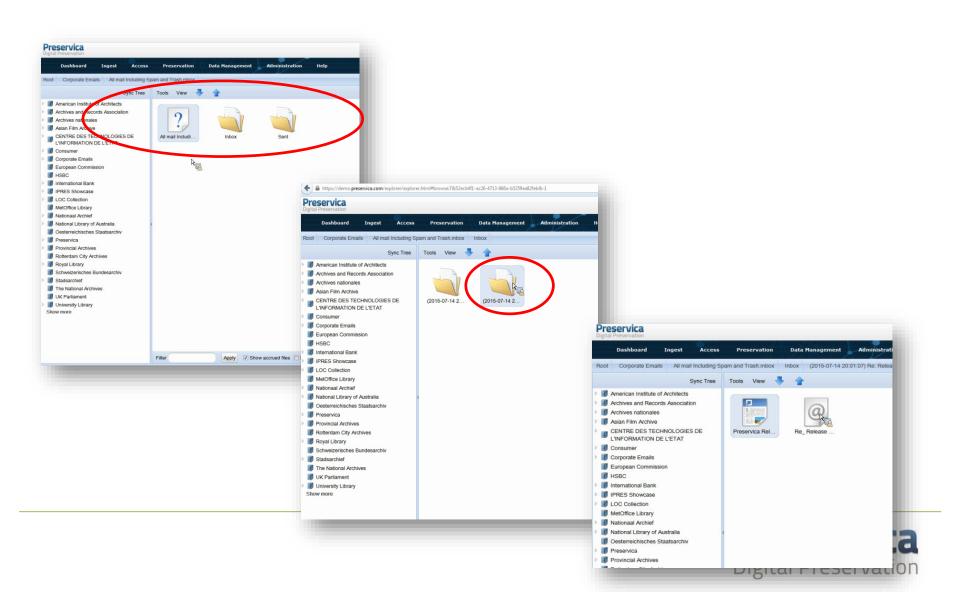
15.07.15 10:25:55 15.07.15 10:25:58

Store Files

Store Metadata

Ingest

Unpacked folder structure



Individual Emails

Dashboard	Ingest	Access	Preservation	Data Management	Administration	Help		
Corporate Em	ails All mail	I Including Spai	m and Trash.mbox	Sent (2015-07-14 19:	57:00) Release Note cha	inges Release	Note changes.eml	Properties F
							Release N	ote changes
From				Jack O'Sulliva	n			
То				maite.braud@	preservica.com,			
cc								
BCC								
Attachments				Preservica	Release Note V5.R4.M 332 KB	10.docx		
Hi Maite, I have attache Thanks, <r></r>	d the inal ver	sion of the 5.4	I Release Notes. Ca	an you please check and	approve th last few ch	anges we discus	ised in the meeting	1?
jack.oʻsullivan@p br>This messag	e, Suite 202, I reservica.com e is commercia messages sent	W: www.press I in confidence or received by	arvica.com TW: @df and may be prvileged	 It is intended for the address system may be moitored as 	essee(s) only. Access to t			ized and strictly pro



- Preservation
 - conduct ongoing migration on attachments and message
- Data management
 - auto-classification of incoming emails driving security settings and retention profile
 - editing and restructuring rules
 - schema to use for extracted metadata
 - appraisal and disposal of expired messages



Preservation

Key docuemnts	All -	Thu 27/04/2017 15:53	
4 Older		Jonathan Tilbury <jonathan.tilbury@prese< td=""><td></td></jonathan.tilbury@prese<>	
Jonathan Tilbury Interesting article Hi Here is an interesting article on ICT and fundamental	0 27/04/2017	To O Jon Tilbury	
Jon Tilbury U.S. Department of Education Parcel Services Hi Here is the paper I mentioned which looks pretty	0 25/04/2017	art64-19.wpd 106 KB	
Jonathan Tilbury ROI calculator Hi This is the ROI calculator I found which may suit your	0 25/04/2017	Hi Here is an interesting article on ICT and fundamental rights and the debate in th	1
Jonathan Tilbury Gartner MQ Hi Here is some information on the Gartner MQ for ECM I	U 25/04/2017	not	
		Chief Technology Officer Preservica 21 The Quadrant, Abingdon Science Park, Abingdon, Oxfordshire, OX14 3YS T: 444(0)1235 428949 M: 444(0)7808 950580 E: jonathan tilbury@preservica.com W: www.pi Preservica Digital Preservation This message is commercial in confidence and may be privileged. It is intended for the addressee(s) only. Acc Preservica entot that messages sent or received by the Preservica e-mail system may be monitored and stored in Please consider the environment and do not print this e-mail unless you really need to.	
le Inbox Important do	cuments Ke	ey docuemnts (2017-04-27 14:52:35) Interesting article	
Fools View 🐣 /			Manifestation Preservation 3 (Active)
# Name		Description	Size Preservation 3 (Active)
art64-19.odt		OpenDocument Text	40.143 K
Interesting article.en	ıl	Internet Message Format	22.311 K Preservation 2 (Original)



- Search, view and download
 - facetted and fielded search via extracted metadata
 - render individual emails and attachments
 - download messages and attachments
 - viewer for a set of emails that looks like an email application
 - whole collection email analysis



Search and access

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Preservica Active digital preservation	WELCOM	E ABOUT CONTACT Hello tiljær		
EXPLORE		est DATA:		
264 total results		Sort by Relevance ~	▲ 📰 🎟 👪	
P-TILIERS	Title 🔺 🔻	Descr 🔺 🔻	Date 🔺 🔻	
Email subject: outlook	Microsoft Outlook Test Mess	(2017-06-29 11:43:59) Microsoft OutL		
	Microsoft Outlook Test Mess	(2017-06-29 11:53:19) Microsoft OutL		
From jontilbury@oldworcesters.ne	Microsoft Outlook Test Mess	(2017-06-29 11:54:02) Microsoft OutL		
jonathan.tilbury@preservica	Microsoft Outlook Test Mess	(2017-06-29 11:55:42) Microsoft OutL		
Top tevel collection Format collection New Inbox Test Area	Microsoft Outlook Test Mess	(2017-06-29 11:43:59) Microsoft OutL		
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☐ File ☐ Record ☐ Collection	Microsoft Outlook Test Mess	(2017-06-29 11:55:42) Microsoft OutL		rvica servation

Conclusions

- Email preservation requires a full understanding of the whole life information lifecycle
- The core digital preservation problem is done
- The challenge is acquiring the correct emails and extending analytics
- The community should put its efforts into defining the framework for the email lifecycle then passing this on to vendors to code

