



Managing media objects with DigiTool and external streaming services

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Summary

- Context
- Problem
- Solution
- Next steps



Context

- increasing use of audio and video objects
- FEUP produces lots of video documents from
 - official events
 - news clips in television regarding FEUP
 - institutional presentations for marketing
 - video-conference sessions recordings
 - important lectures, seminars and classes
 - student's academic works



Problem

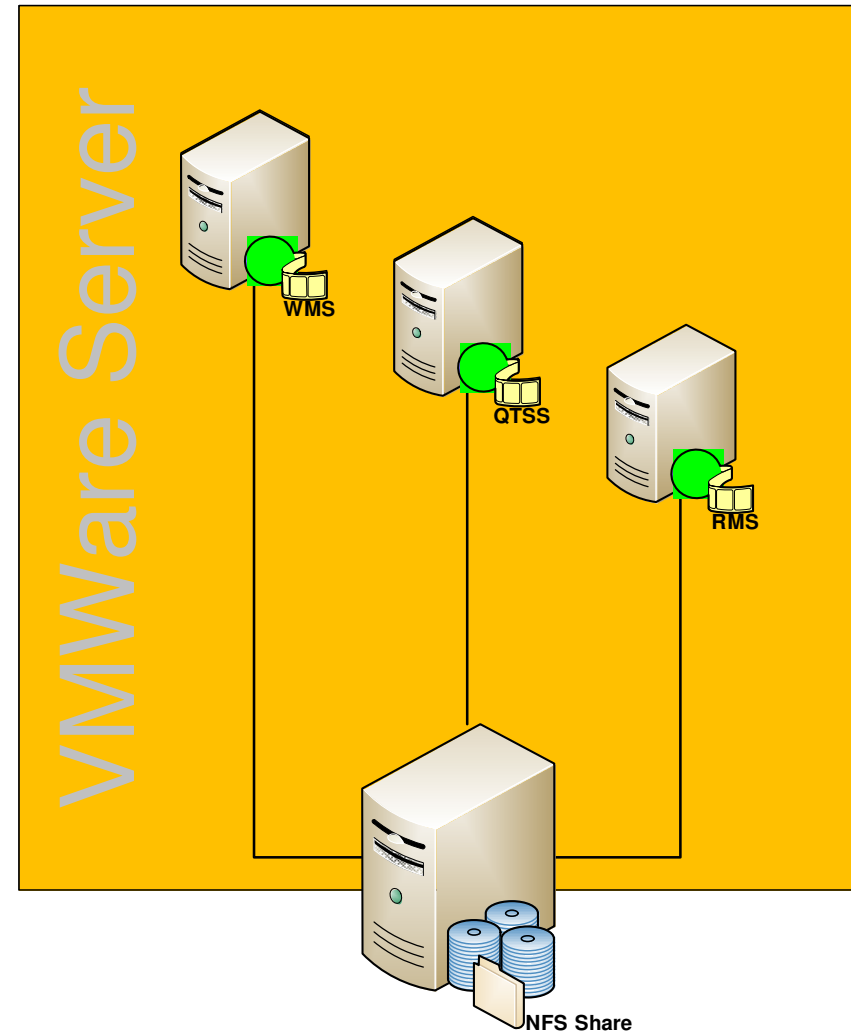
Organize (file management)	Search (metadata association)	Publish (access management and transport)
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- publish in the Internet video clips produced by different people and services
 - video files are big, so they need to be distributed using streaming
 - search techniques for retrieving non-textual documents are still developing
 - distribute the production and publishing of the video clips by different people/services



Solution: publish

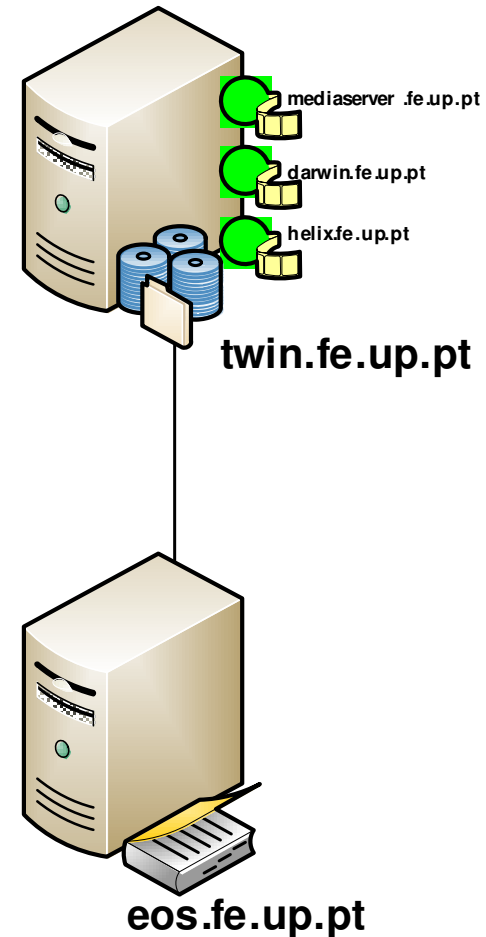
- Streaming servers for the most common formats
 - WMS running on a Windows Server
 - QTSS running on a Linux Server
 - RMS running on a Linux Server
- Why?
 - compatibility with most important video-player clients
 - different contexts require different streaming formats





Solution: searching and managing

- DigiTool is the tool
 - supports metadata management
 - manages the files in the servers
 - supports the publishing process





Solution: configuration

Storage Group Definitions

+ Add Storage Group

	Storage Group Description	Policy		Order	Description	Storage Type	Root	Files Per Directory	Directory Prefix	Total Space (MB)
	Default Storage Group	Random		999	Default Storage	NFS	/exilbris/dt/si/s_1/digital...	100	file_	100000
	Twin	Random		20	Storage-1 (Twin)	NFS	/repository_on_twin	1000	file_	100000
	Preserve	Random		1	Para backup	NFS	/exilbris/dt/sio/preserv	1000	file_	100000
	Not preserve	Random		10	Sem backup	NFS	/exilbris/dt/sio/notpres	1000	file_	100000

Storage Rule Definitions

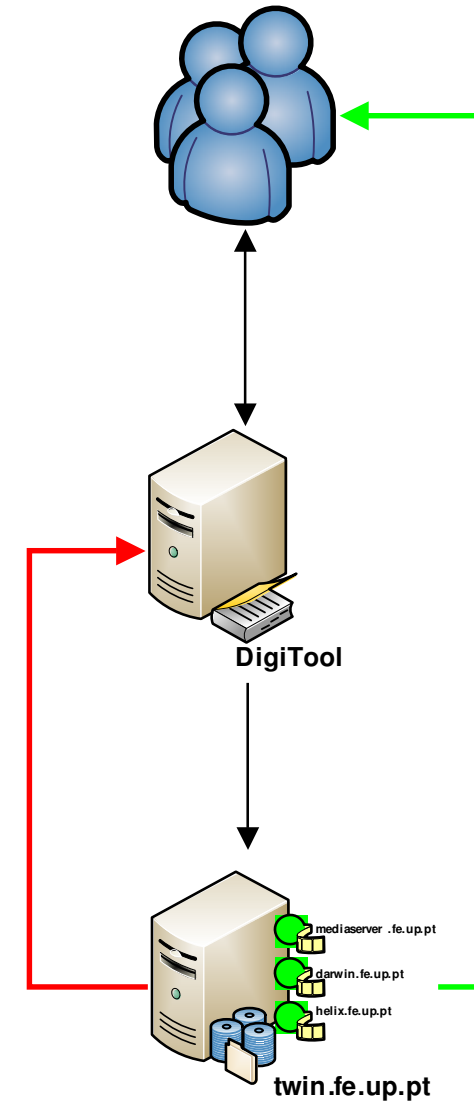
+ Add Storage Rule

	Order	PartitionA	Adm	Preservation Level	File Extension	Mime Type	More Than (KB)	Storage Group
	10	any	EDG01	low	any	any	0	Not preserve
	20	twin	EDG01	any	any	any	0	Twin
	50	any	EDG01	any	any	any	0	Preserve



Solution: the problem

- DigiTool viewers collect the files from NFS and send them to the users, so the presented file was not using the streaming services
- ExLibris developed a new viewer to use the Streaming Server to present the video clips instead of the regular DigiTool process





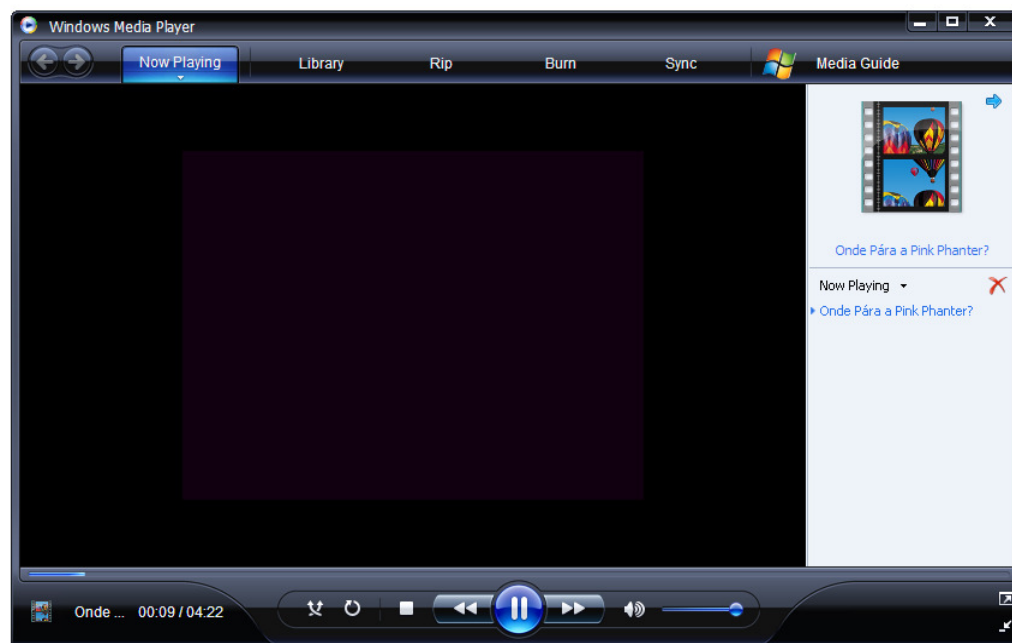
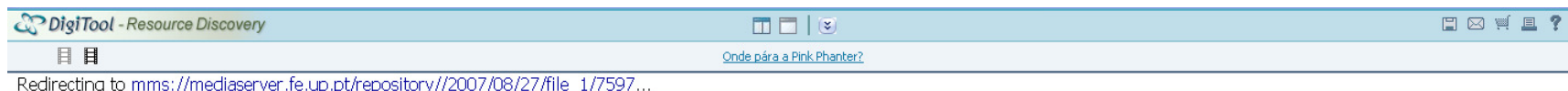
Solution: viewer configuration

Edit Delivery Rule

Order:	<input type="text" value="100"/>	IP:	<input type="text" value="ANY"/>				
Disable:	<input type="checkbox"/>	Custom Att1:	<input type="text" value="ANY"/>				
Application:	<input type="text" value="ANY"/>	Custom Att2:	<input type="text" value="ANY"/>				
Admin Unit:	<input type="text" value="ANY"/> ▼	Custom Att3:	<input type="text" value="ANY"/>				
User Mode:	<input type="text" value="ANY"/>	Viewer URL:	<input type="text" value="rtsp://darwin.fe.up.pt/repository"/> Edit Selected URL Add New URL				
Entity Type:	<input type="text" value="VIDEO_STREAM"/>	Viewer Pre Processor:	<input type="text" value="DirectStreamViewerPreProcessor"/> ▼				
Mime Type:	<input type="text" value="ANY"/>	Viewer Parameters:	<input type="button" value="Add"/> <input type="button" value="Remove"/>				
File Extension:	<input type="text" value="mov"/> ...	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Name</th> <th style="width: 50%;">Value</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		Name	Value		
Name	Value						
Usage Type:	<input type="text" value="ANY"/>	<input type="button" value="Save Changes"/> <input type="button" value="Cancel"/>					
PartitionA:	<input type="text" value="twin"/>						
PartitionB:	<input type="text" value="ANY"/>						
PartitionC:	<input type="text" value="ANY"/>						

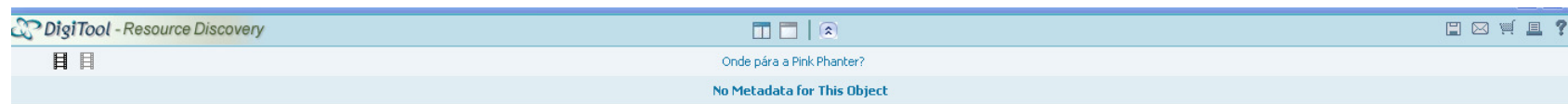


Solution: an example





Solution: another example





Next steps

- include the players in a DigiTool web page
- scale the solution according to FEUP requirements
- define the deposit and ingest workflows
- define collections to present the objects to the final users



Thank You

