Cloud based - Digital Rights Management (DRM)

Ali Hussain NextGen@ICANN60 Student@University of Malaya

Main Points of Presentation

- Role of private sector in privacy need of individual and corporates
- Need of Cloud DRM tools in today's market
- Service delivery model of Cloud based DRM solution
- legal and Governance challenges linked with DRM
- Popular DRM solutions today

Privacy need of Individual and corporates

- Threats to Data and Reputation
- Threats to Flexibility
- Threats to Innovation
- Threats to Data Movement and Competitiveness

Need of DRM tools in today's market

- A new level of security for document collaboration and sharing
- Industry standard cloud based solutions suffer from traditional security attacks
- E.g. Stolen password, wifi cracked, or broken devices
- So need dedicated mechanism to protect data itself, not just the cloud infrastructure
- PwC study show 37% Current and 27% previous employees account for data breach
- https://www.pwc.com/gx/en/services/people.../workforce-of-the-future.html

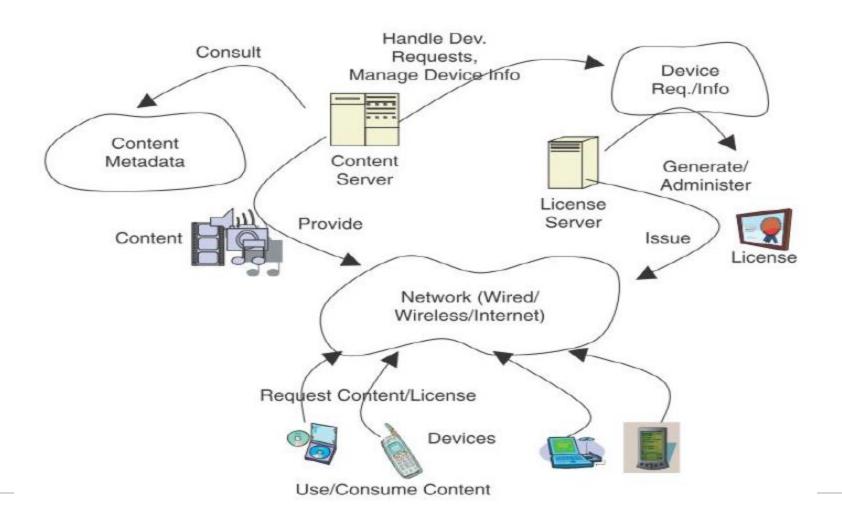
Distributed Control of Files

- DRM software encrypts individual file and transform into proprietary format
- The access rights assigned to each files are also distributed and if files are leaked
- The intruder will not be able to decrypt it
- If user share file over email or copy it onto a thumb drive the digital rights travels with it an unauthorised person cannot open it

Permission Associated with documents

	OWNER	MANAGER	EDITOR	READER
view	/	~	~	/
edit	~	~	~	×
share	/	~	×	×
elete a tresor	~	×	×	×
print	/	~	×	×
copy-paste	~	~	×	×
print-screen	/	~	×	×
forward	×	×	×	×

Generic Architecture of DRM



DRM Laws and Internet Governance

- legal and regulatory environment surrounding copyright protection
- Importance of state backed proper legislations
- Challenges in the area of technology governance for law enforcements
- Multiple cloud DRM services birth to many Internet Governance issue

Popular DRM Solution providers

- Microsoft PlayReady is Microsoft Cloud based DRM service for content protection, Intellectual Property, premium content and assets
- Google Widevine is Google's multiplatform DRM and video optimization solution
- Apple FairPlay Streaming is Apple DRM service but only supported on apple products
- SkyDRM from NextLabs

DRM Economy Statistics

 Global Forecast to 2020, The DRM market is estimated to grow from USD 1,066.3 Million in 2015 to USD 2,898.9 Million by 2020, at a CAGR of 22.1% from 2015 to 2020.

Summary

- Company needs to keep data safe while stored on the cloud and in transit to users
- Companies do not need to have expensive infrastructure and large IT team to have complete digital security
- More control to business by extending security to documents once they have been shared
- The Need for International Consensus on role of private sector and governments in data protection and privacy
- Security and privacy are major concerns impact global cloud adoption

Thanks

Thank You!

Question's?

Ali Hussain
University of Malay
NextGen@ICANN60
Abu Dhabi | 28th Oct – 3rd Nov 2017