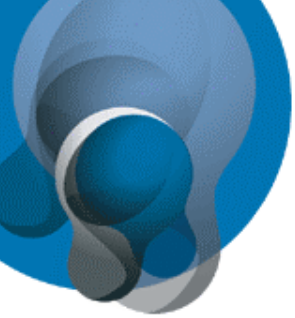


數位權利管理技術的市場應用

優碩資訊科技 產品經理

Hank

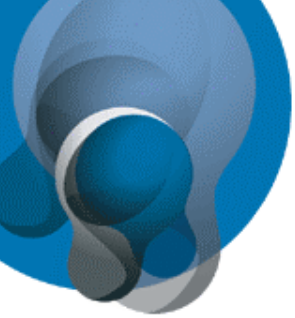


優碩資訊科技簡介

- ▶ 創立時間：2000年
- ▶ 主要以開發數位權利管理產品為主，為國內企業機密文件DRM系統的領導廠商，擁有國內外專業的資安軟體研發團隊
- ▶ 台灣地區 第一家成為 微軟 Microsoft Certified Partner 的DRM 廠商
- ▶ 亞太地區 第一家獲得 Adobe Solution Partner 認證 的DRM廠商
- ▶ 成為IBM PWD (Partner World for Developer)的一員

Microsoft





優碩資訊科技簡介

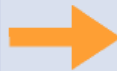
- ▶ 2004年5月 經濟部工業局輔導廠商育成計劃榮獲第一名
- ▶ 2003年9月 TrustView DRM系統榮獲經濟部中小企業處主辦第一屆國家新創獎入選獎
- ▶ 2003年7月 開發出全球第一個直接針對MS Office文件內容作權限管理之DRM系統
- ▶ 2001年12月 經濟部工業局主辦之第一屆創新軟體系統大賽第二名

優碩資訊目前獲得專利項目一覽表

2002年10月
發明第157236號
防止電子文件盜拷
之方法及其系統



2002年11月
發明第159812號
控制電子文件租借效期
的方法及其系統



2004年3月
發明第190368號
防止軟體被非法使用
的系統及其方法



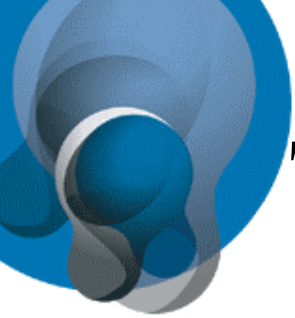
2004年3月
中國證書146173號
防止電子文件盜版
之方法及其系統



TrustView產品家族

- ▶ 保護對象：
 - Microsoft Office文件
- ▶ 規範行爲：
 - 讀取
 - 列印
 - 複製內容
 - 另存新檔
 - 有效期限等權限
 - 追蹤文件使用情況

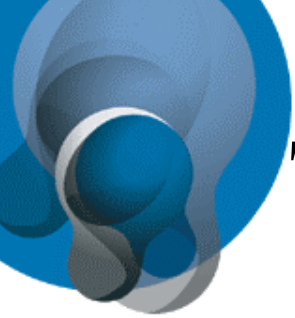




TrustView產品家族

- ▶ 保護對象：
 - Acrobat PDF文件
- ▶ 規範行爲：
 - 讀取
 - 列印
 - 複製內容
 - 另存新檔
 - 有效期限等權限
 - 追蹤文件使用情況





TrustView產品家族

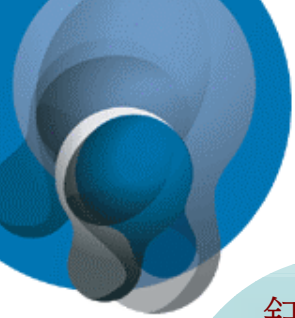
▶ 保護對象：

- 網頁文字
- 網頁圖片
- 動態網頁

▶ 規範行爲：

- 複製
- 列印
- 螢幕抓圖
- 檢視原始檔
- Local Cache





TrustView 參考客戶

鈺碩科技

Attansic

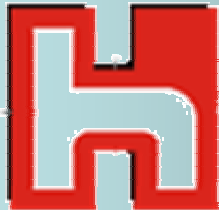
友達光電

au
optronics

中強光電

Coretronic

鴻海精密工業



瀚斯寶麗

HANNspree

盛群半導體



宏達國際電子



群創光電

InnoLux

廣達電腦



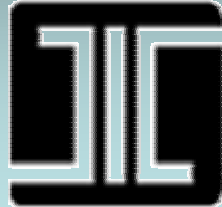
旭富製藥



新力索尼

SONY

工研院

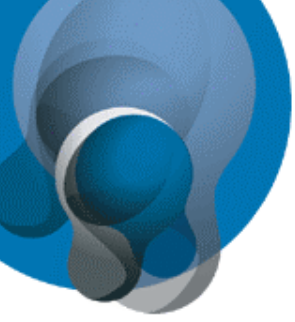


中科院



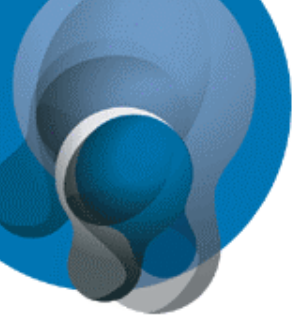
永豐餘





DRM Definition (from IDC)

- ▶ The chain of hardware and software services and technologies confining the use of digital content to authorized use and users and managing any consequences of that use throughout the entire life cycle of the content. DRM is one kind of content protection technology.



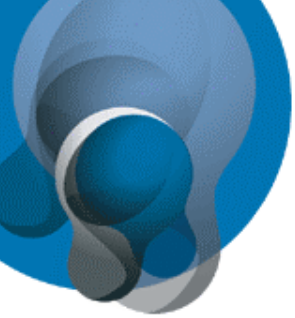
Where are DRM used today?

- Consumer DRM market:

Protect sellable contents against consumer piracy; applied by content publishers and resellers

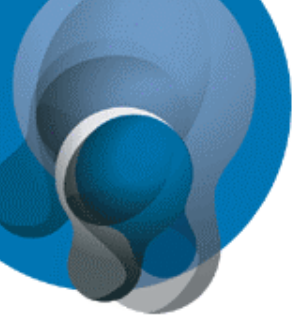
- Enterprise DRM market:

Protect enterprise intellectual properties against digital leakage; applied by large enterprises in many industries



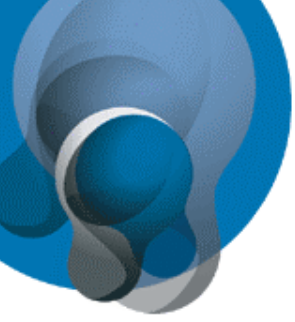
Where are the differences?

cDRM	eDRM
Protect content publisher	Protect enterprise
Protect sellable content	Protect internal documents
Policy enforcement usually device-based	Policy management usually role-based
Rights clearance is one of the focus	Access tracking and auditing is the focus
Authorization based on licensing models	Authorization based on complex organization structures



What drives DRM Market?

- (Demand side) Intellectual property protection
- (Demand side) New revenue opportunities
- (Demand side) Protection of privacy and confidentiality
- (Supply side) Motivated by 1st Mover Advantages



eDRM Vendors

- ▶ Adobe (Adobe Policy Server)
- ▶ AirZip (FileSecure)
- ▶ Authentica (SecureOffice/PDF/Mail)
- ▶ LiquidMachines
- ▶ Mirage
- ▶ Riga (Waha SE)
- ▶ SealedMedia
- ▶ TrustView (TrustView for Office/PDF/Web/Pro-E)



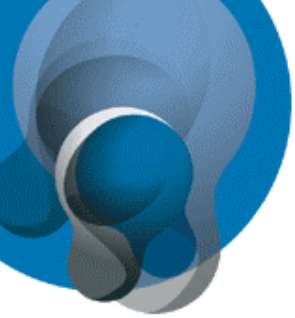
What can eDRM do?

- Establish information security policies on a need-to-know basis
- Dynamically change access rights to accommodate personnel shifts
- Recall expired documents after distribution
- Track access throughout a document's lifecycle



BS7799對文件控管之要求

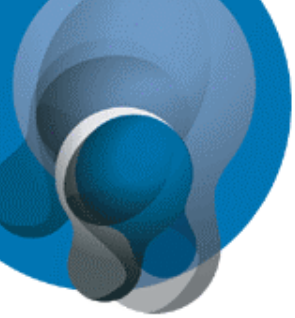
- ▶ 英國標準協會(British Standards Institute, BSI) 1995年制定修改
- ▶ 國際資訊安全稽核規範
 - 幫助企業機構識別，管理和減少資訊所面臨的各種威脅
- ▶ ISO組織接納成爲國際標準(ISO7799)
- ▶ 10大控管重點
 - Information security policy document：資訊安全政策文件化
 - Allocation of information security responsibilities：資訊安全的責任歸屬
 - Information Security Education & Training：資訊安全的教育訓練
 - Reporting of Security Incidents：安全事件的通報機制
 - Virus Controls：病毒的控制
 - Business Continuity Planning Process：企業持續規劃的程序
 - Control of proprietary software copying：軟體複製的管制
 - Safeguarding of organizational records：組織相關紀錄的防護
 - Data Protection：資料保護
 - Compliance with security policy：資訊安全政策的遵循



BS7799對文件控管之要求

- ▶ 應保護資訊資產，考量分享或限制資訊之需求
- ▶ 避免組織間交換資料時遭遺失、竄改、或誤用
- ▶ 製作事件記錄及稽核
- ▶ 使用加密技術以保護敏感或重要機密資訊



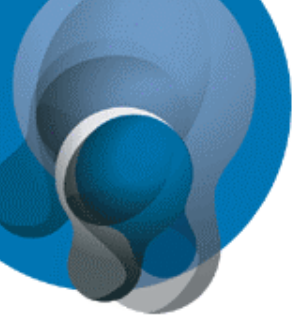


保護資訊資產

- ▶ **BS7799之5.2 確保資訊資產獲得適當之保護層級資訊**
 - 資訊分類與相關保護控制措施，應考量企業分享或限制資訊之需求

BS7799 Compliance with TrustView:

- 針對具有價智慧資產的**Office**及**PDF**文件
本身直接作權限控管



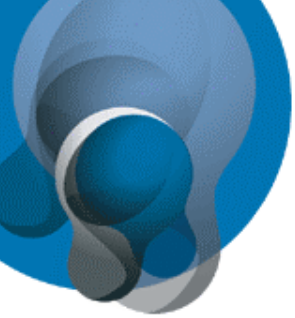
避免資料遭竄改誤用

▶ BS7799之8.7.資訊及軟體交換

- 避免組織間交換資料時遭遺失、竄改、或誤用

BS7799 Compliance with TrustView:

- 可控管機密文件授權閱讀名單、複製、列印、修改及到期日等權限
- 管理者功能可回收文件



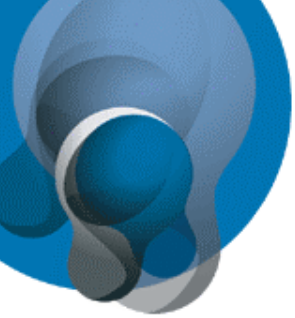
提供製作事件記錄及稽核

▶ BS7799之9.7 監控系統之存取與使用

- 偵測未經授權的活動
- 應製作記錄異常事件及其他安全相關事件之稽核日誌記錄，並保留至規定期間，以便有助於存取控制及未來之調查

BS7799 Compliance with TrustView:

- 管理者功能可追蹤文件使用情況，包括提供文件存取記錄及修改記錄



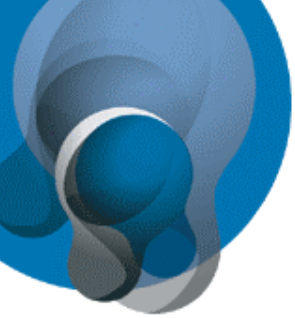
專利加密以保護機密資訊

▶ BS7799之10.3. 密碼控制措施

- 保護資訊之機密性、鑑別性及完整性
- 應使用加密以保護敏感或重要資訊之機密性

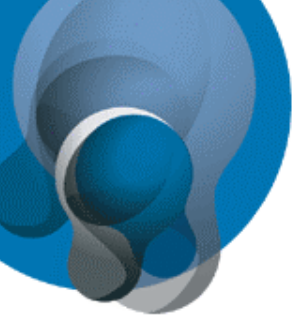
BS7799 Compliance with TrustView:

- 使用**RSA** 最先進的**AES 256bites**加密、**PKI** 認證、及數位權證技術保護
- 防螢幕擷取(**Screen capture**)/抓圖程式
- 文件災難回復機制(**Content recovery**)



那些單位需要機密文件安控？

- ▶ 文件管理中心
 - 企業IP管理
- ▶ 研發技術部門
 - 產品研發資料、產品設計圖檔
- ▶ 管理資訊系統部門（MIS部門）
 - 追蹤控管紀錄
- ▶ 人事行政部門
 - 人事資料、機構行政公文
- ▶ 財務會計部門
 - 稽核資料、機構人員薪資資料、企業財務報表

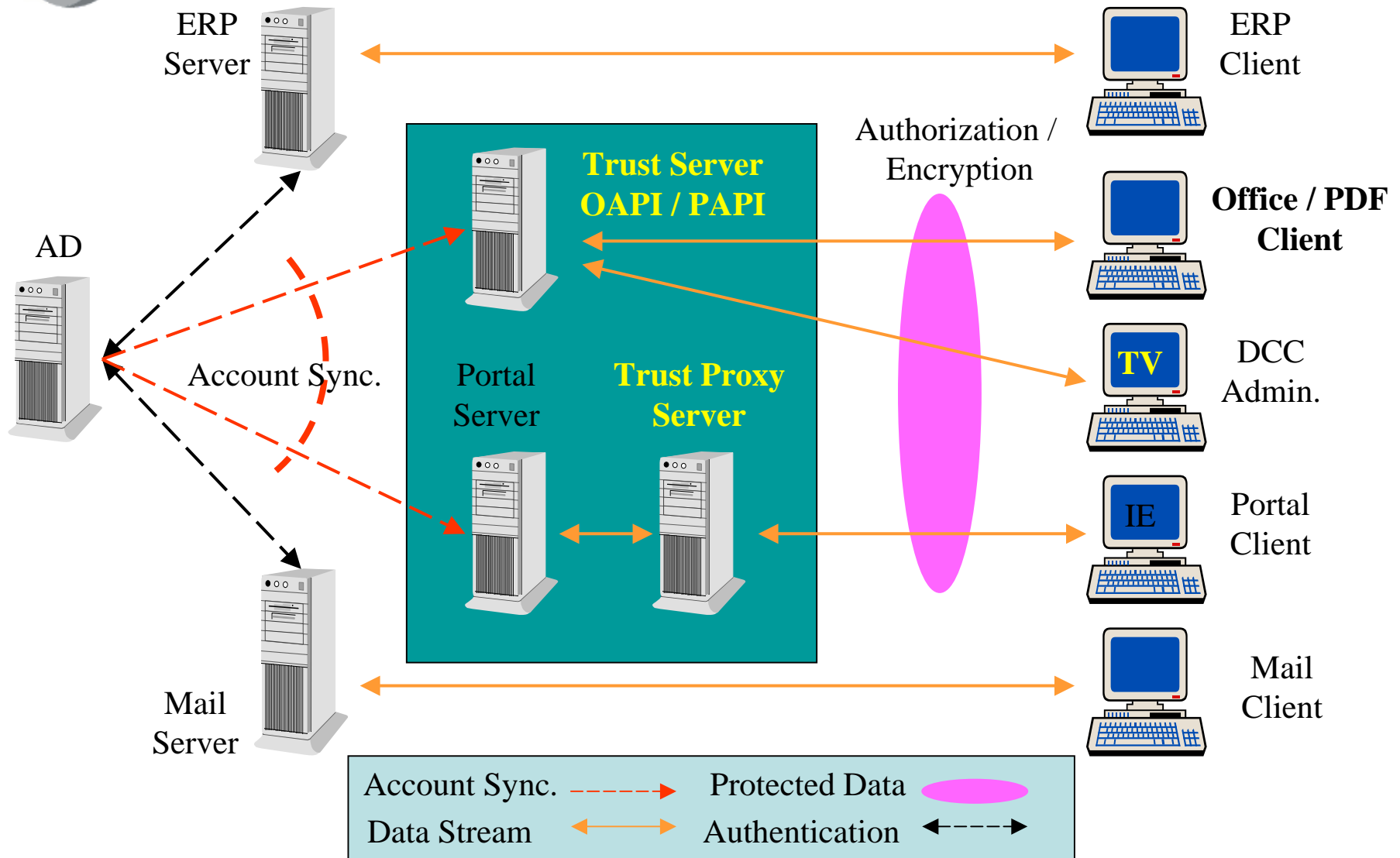


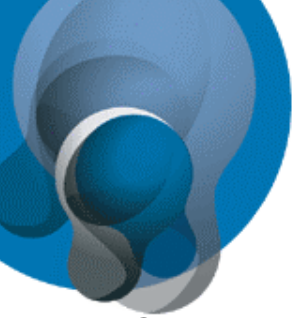
企業內那些資料需要保護？

- ▶ EIP system (Enterprise Information Portal)
- ▶ PDM (產品研發資料)
- ▶ ERP (企業營運資料/財務人事資料)
- ▶ CRM (客戶資料)
- ▶ KM (E-learning 教材資料)
- ▶ EDA (分析數據，ex:晶圓廠WIP/SHIP資料)
- ▶ BPM/WorkFlow (企業營運/線上簽呈)
- ▶ WebMail (Web-based e-mail system)
- ▶ B2Bi/Supply chain (企業交易資料)
- ▶ DM/CM (機密列管文件)
- ▶



DRM應用架構 (Example)





TrustView eDRM Case Study- Attansic

▶ Customer Background:

成立於2000年元旦，目前資本額為2億元，內部擁有頗為堅強的設計工程團隊，從而具備完善的數位、類比及混合信號IC之設計能力，並聚焦開發高性能和高成本效益的產品；現正積極建立與世界級晶圓廠、封裝廠與測試廠的夥伴關係，前景看好

▶ Requirements:

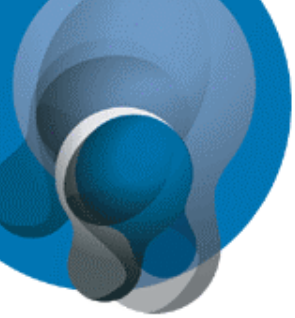
- 為防堵機密外洩，導致適得其反的副作用
- 傳統防水牆的作法無法防範port 80及email的漏洞
- 希望『保護企業機密』與『公司文件使用的方便性』兼顧

▶ Use Scenario:

- 導入TrustView DRM solution應用於EIP、Web APs、Notes、Flow之文件安控
- AD SSO、批次處理、無帳號離線閱讀、Multi-language...

▶ Why TrustView?

- TrustView 的管理介面相當符合人性化操作方式，是個成熟的產品
- 能支援AD與LDAP，且能提供開放性的整合性、API及等核心技術支援
- 改善Notes文件安控漏洞、或是整合WindChill流程等需求的企業，都得以獲得解決
- 支援 Multi-Language、批次處理等能力、各種常用檔案格式，TrustView企業版皆予以支援，使得其實用性大大增強



TrustView eDRM Case Study- H企業

Customer Background:

成立於1997年的H企業，憑藉卓越的自主研發能力，迄今穩居全球Windows CE的PDA代工龍頭，亦在全球無線通訊裝置領域占有一席之地。該公司自成立以來，已研發出許多「世界第一」的輝煌成就，而這些透過產品生命週期管理(PLM)解決方案所激盪出的研發結晶，格外彌足珍貴，自然需要悉心保全、善加控管

Requirements:

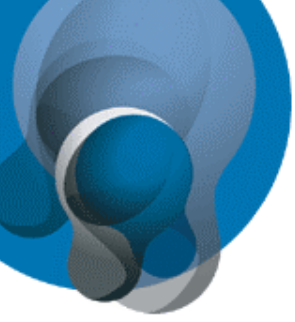
- 原採用的PLM解決方案WindChill當中，雖已具備文件存取的權限管理功能，但面對諸多延伸性質的附加檔案(如MS Office檔案)時，仍無法防止其被複製、列印或散佈之風險，讓文件保全防線徒留缺口
- 暫時性的PDF內建文件保全功能，治標但不治本

Use Scenario:

- 導入TrustView DRM solution解決WindChill於附檔文件安控的缺憾
- 單一簽入、全文檢索、能夠與WindChill本身的權限管理相對應

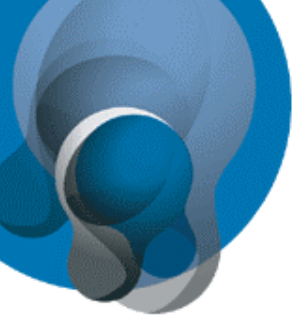
Why TrustView?

- TrustView可輕易協助佈建單一簽入環境
- 透過API得以解決建立index問題以完成全文檢索功能
- 透過API解決在整合WindChill管理機制下不同ID與權限的問題



cDRM Vendors

- ▶ Software: Macrovision
- ▶ Video/Audio: Microsoft, Real Networks
- ▶ Integrated system: Apple (iPOD)



Battleground: DRM Expression Language

- ▶ XrML
- ▶ XACML
- ▶ ODRL
- ▶ EBX
- ▶ MPEG
- ▶ SDMI

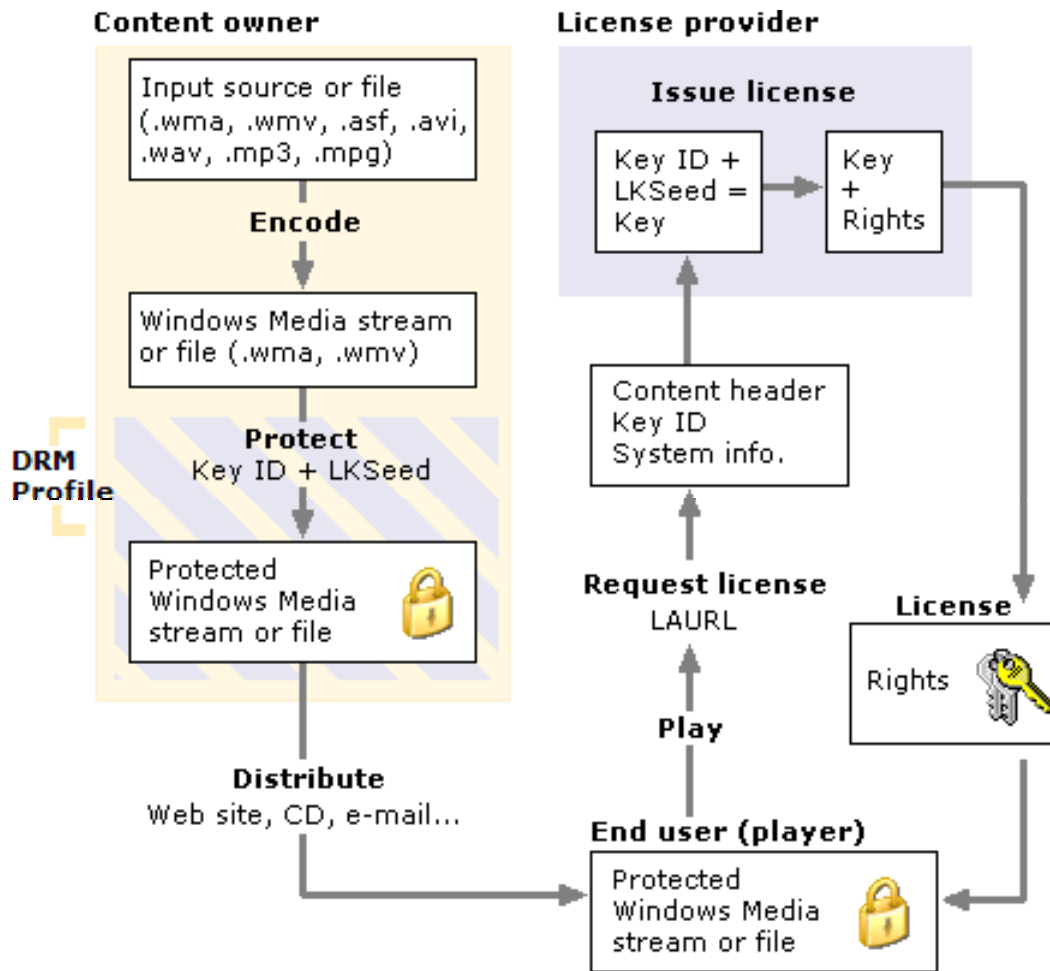


cDRM Enables Business Models

- ▶ Distributed Retail: pay per copy
- ▶ Streaming: pay per view
- ▶ Multiple Licenses: super distribution
- ▶ Rental: try-and-buy, annual license
- ▶ Subscription: all-you-can-see



cDRM: Microsoft Media Technology with Rights Manager





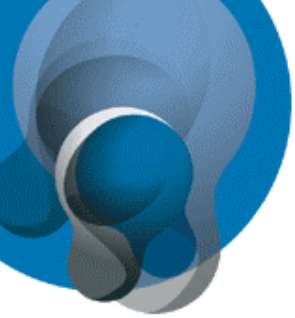
eDRM Technologies Status

- ▶ Less than 1% market penetration of target audience
- ▶ Commercialization by vendors
- ▶ Pilots and deployments by industry leaders
- ▶ Sometimes many customizations for large deployments



TrustView Future Developments

- Expand DRM product lines to mCAD and eCAD
- Support more file format, both breadth and depth
- Better integration with PLM solutions
- Better integration with KM/DM solutions



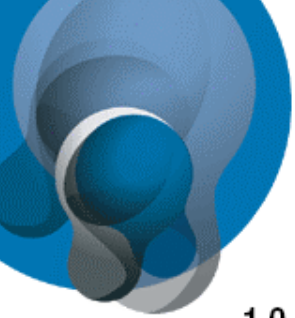
DRM Trends

▶ Today

- Piecemeal
- Standalone
- Visible
- Security focused
- Content type specific
- PC only

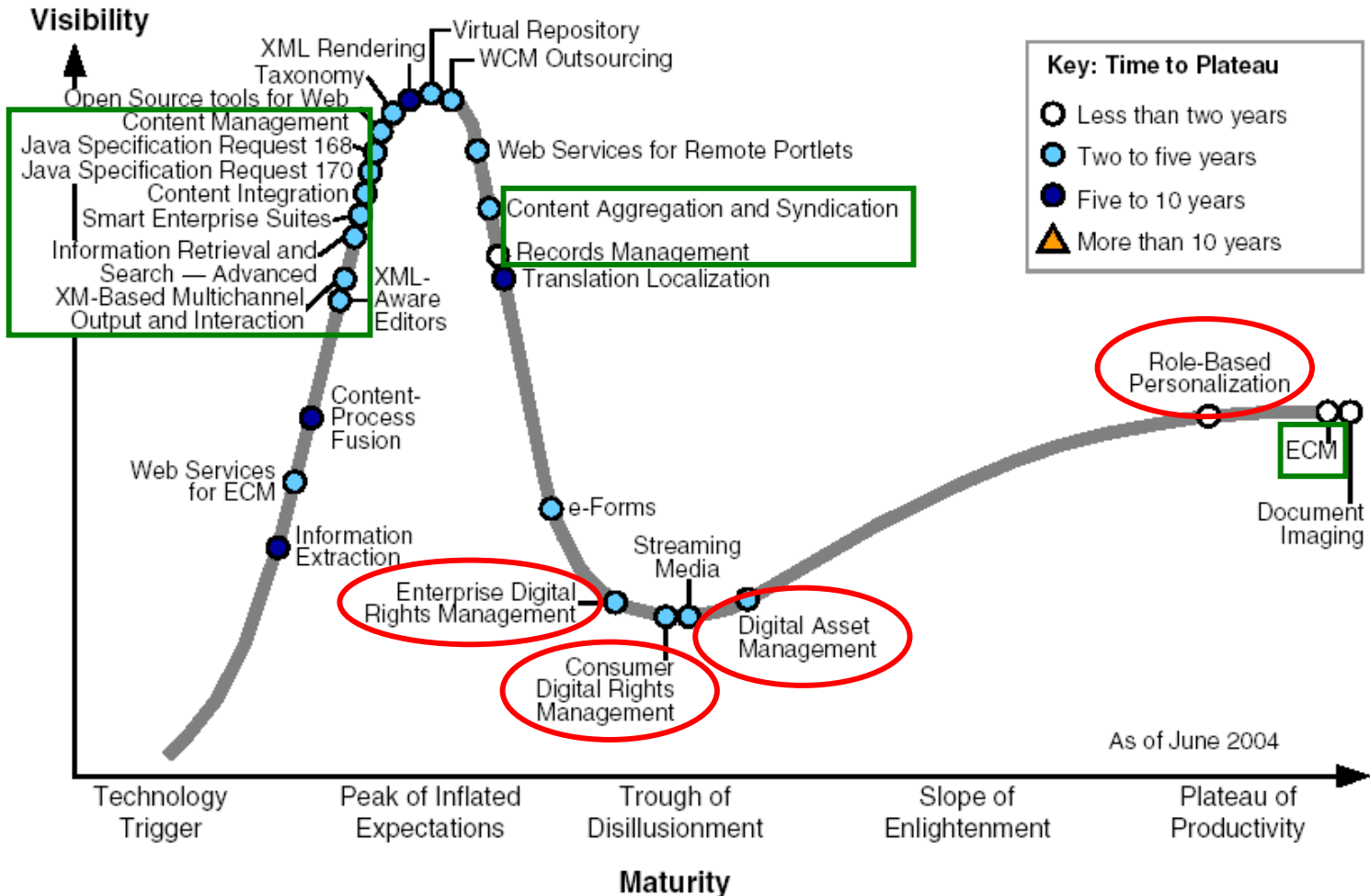
▶ Trend

- Integrated
- Transparent
- Ease of use
- Ease of management
- Hybrid content type
- Across devices
- High performance, Fault-Tolerance, High scalability



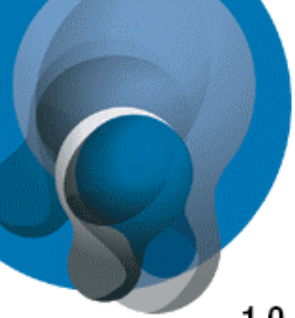
DRM in Content Management

1.0 Hype Cycle for Content Management, 2004



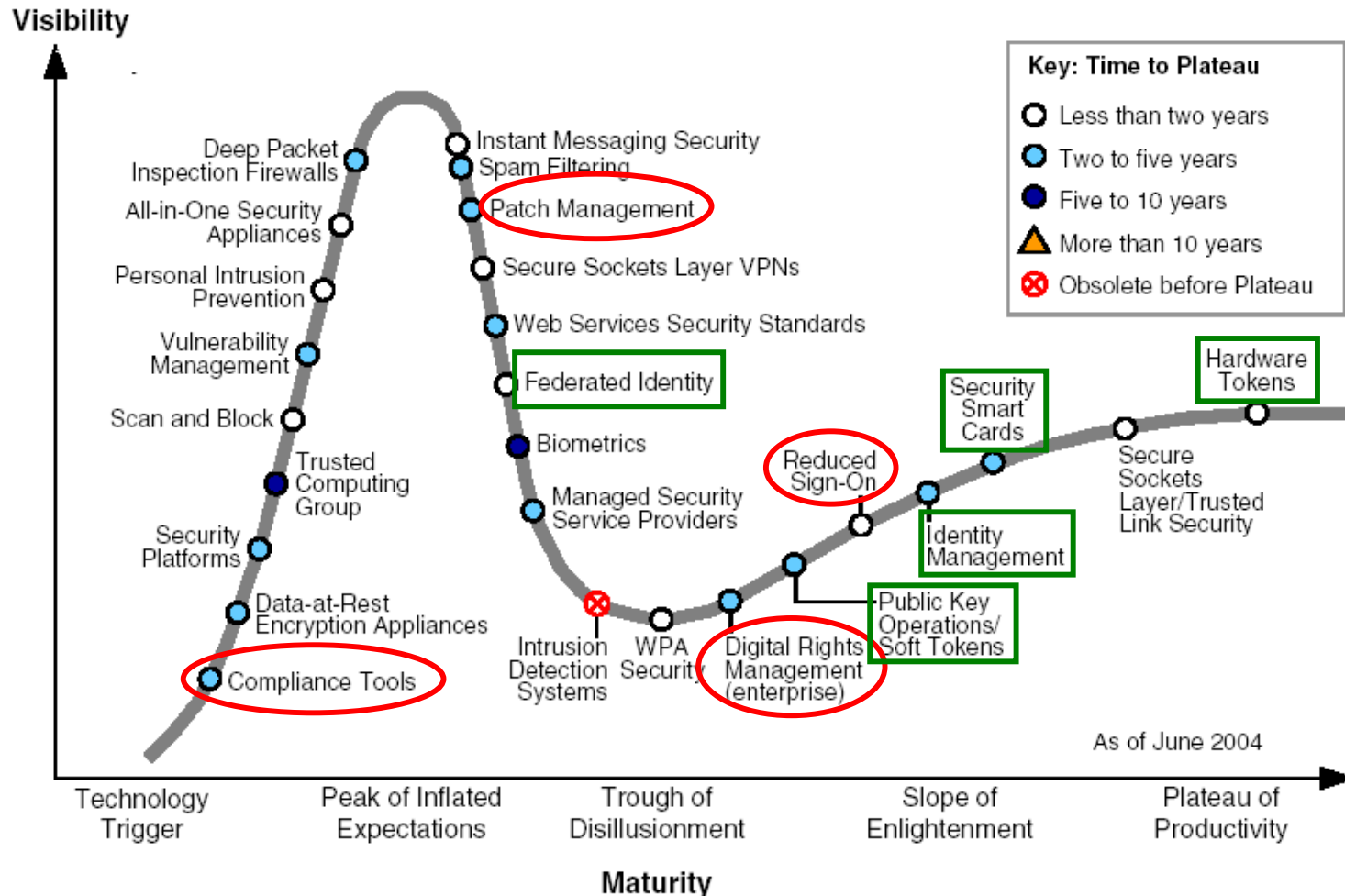
DRM relevant technologies

eDRM technologies need to integrate with other technologies



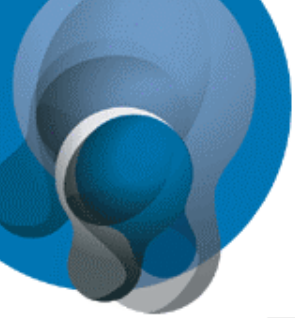
DRM in Information Security

1.0 Hype Cycle for Information Security, 2004



DRM relevant technologies

eDRM technologies need to integrate with other technologies

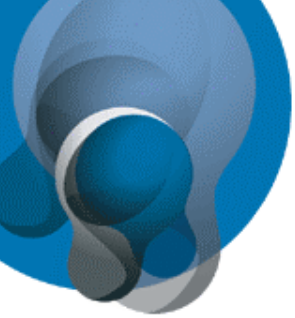


DRM Maturity Levels

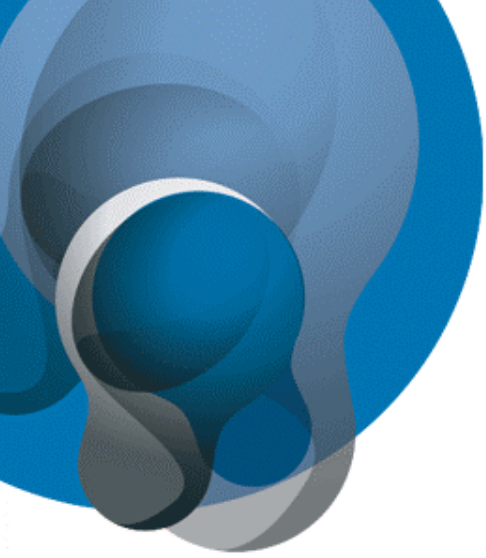
Maturity Level	Status	Products/Vendors
<i>Embryonic</i>	In labs	None
<i>Emerging</i>	Commercialization by vendors Pilots and deployments by industry leaders	First generation High price Much customization
<i>Adolescent</i>	Maturing technology capabilities and process understanding Uptake beyond early adopters	Second generation Less customization
<i>Early mainstream</i>	Proven technology Vendors, technology and adoption rapidly evolving	Third generation More out of box Methodologies
<i>Mature mainstream</i>	Robust technology Not much evolution in vendors or technology	Several dominant vendors
<i>Legacy</i>	Not appropriate for new developments Cost of migration constrains replacement	Maintenance revenue focus
<i>Obsolete</i>	Rarely used	Used/resale market only

Source: Gartner Research (June 2004)

Figure 4. Maturity Levels



Thanks You!



TrustV!ew®
優碩資訊科技股份有限公司

DRM Total Solution 盡在 TrustView 企業版!!