

# Coping With Digital Rights Management

Stephen Downes

National Research Council Canada

# Key Issues in DRM

- The challenge posed by file sharing – Napster, Gnutella, more...
- Distributing protected content in an online environment
- Protecting protected content
- Personal privacy, security and preferences

# Principles

- An Open Marketplace – no barriers to entry as a content provider
- Multiple distribution models – paid content, free content, co-op networks
- Multiple descriptions of online content
- Simplicity – easier to buy than to steal
- Multiple agents, decentralized model

# Design Objectives

- Rights Expression: how to ask for payment (and to specify use conditions)
- Transaction: how to actually make the payment, and
- Rights management: how to make delivery of the learning resource contingent on the payment

# Digital Rights Expression

- Defining rights expression – XrML, ODRL, DREL, Creative Commons
- Referring to rights expression in learning object metadata
- The role of “vendor brokers”
- Support for rights expression in eduSource

# Transactions: Key Considerations

- Control over the presentation of options – the use of rights expression as a search criterion
- Trust in the payment mechanism
- Ease of making payment – single point of transaction, aggregated payments or licensing

# Transactions: Mechanisms

- The role of the “purchaser broker” – a “one stop” for purchasers, but choice and control
- Mechanism for transactions:
  - determine whether a payment is required
  - decision as to whether to approve the payment
  - make the payment
  - obtain authentication to access the resource

# Rights Enforcement

- Delivery based: the eduSource DRM will provide a method for a secure “key exchange”
- Content based: eduSource will allow and demonstrated the delivery of encrypted or locked content (but these are defined outside eduSource itself)

