

# The DiMaS System for Authoring Communities: Semantic Multimedia Management on Peer-to-Peer Networks

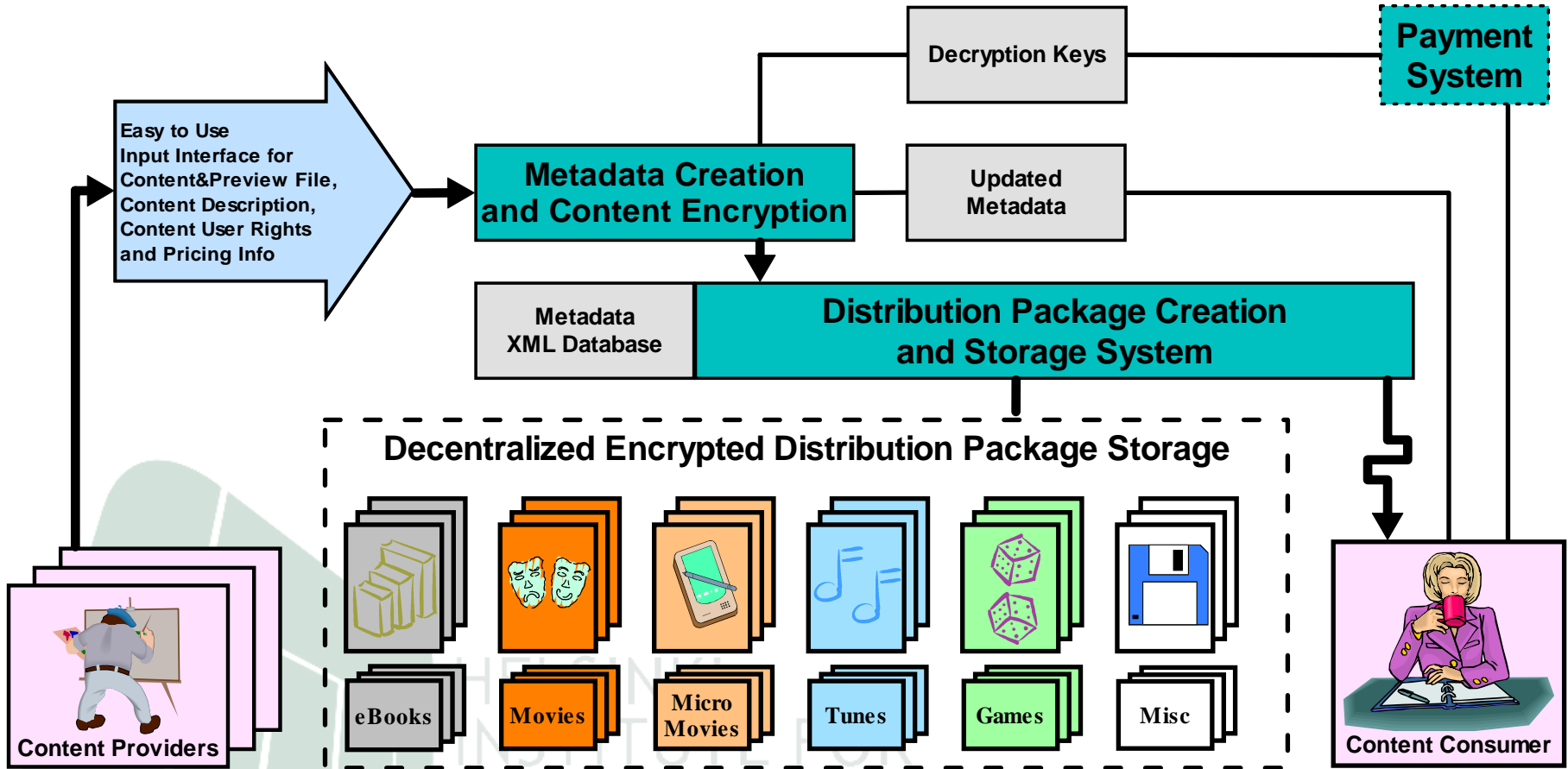
2004-09-03 // Tommo Reti / HIIT

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# Research Questions

1. How to facilitate the user input of content descriptions as well as rights and charging data into standardized metadata?
2. How to make these descriptions compatible and comparable?
3. How to bundle the metadata and the actual content into one package rather than having them in separate files?
4. How to make this package easily accessible by the end-user without creating a new file format and another player application?
5. All this while using decentralized content distribution on uncontrolled P2P networks.

# Big Picture



# Main System Parts

1. Content and Metadata Import
2. Publishing System
3. End-User Terminal
4. Key, Metadata Versioning,  
and Feedback Management
5. Payment System



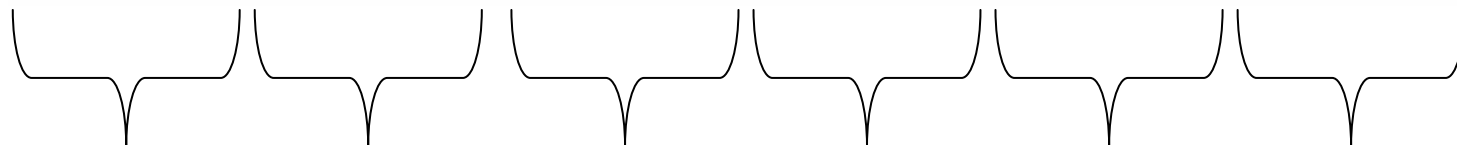
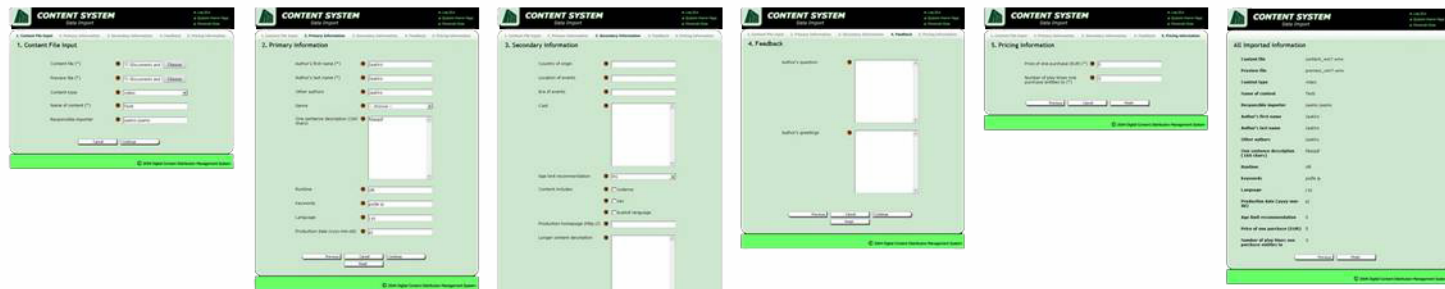
Content Import User Interface as a chain of web forms full of metadata fields.

User-Interface (Java)			
Logic (e.g. metadata update, purchase) (Java)			
Nonencrypted Content Preview File	Hash ID of the Actual Content File	<b>Encrypted Actual Content File</b>	Feedback Questions
Metadata (XML)			
Content Info (MPEG-7)	License Text (RDF)	User Rights (ODRL)	Pricing Info (ODRL)
Extras (links, XML files, multimedia files)			
Skins	Mods	Patches	Graphics



The structure of a Distribution Package. Distribution Package User Interface.

# Content Import User Interface



**Actual  
File**

**Primary  
Info**

**Secondary  
Info**

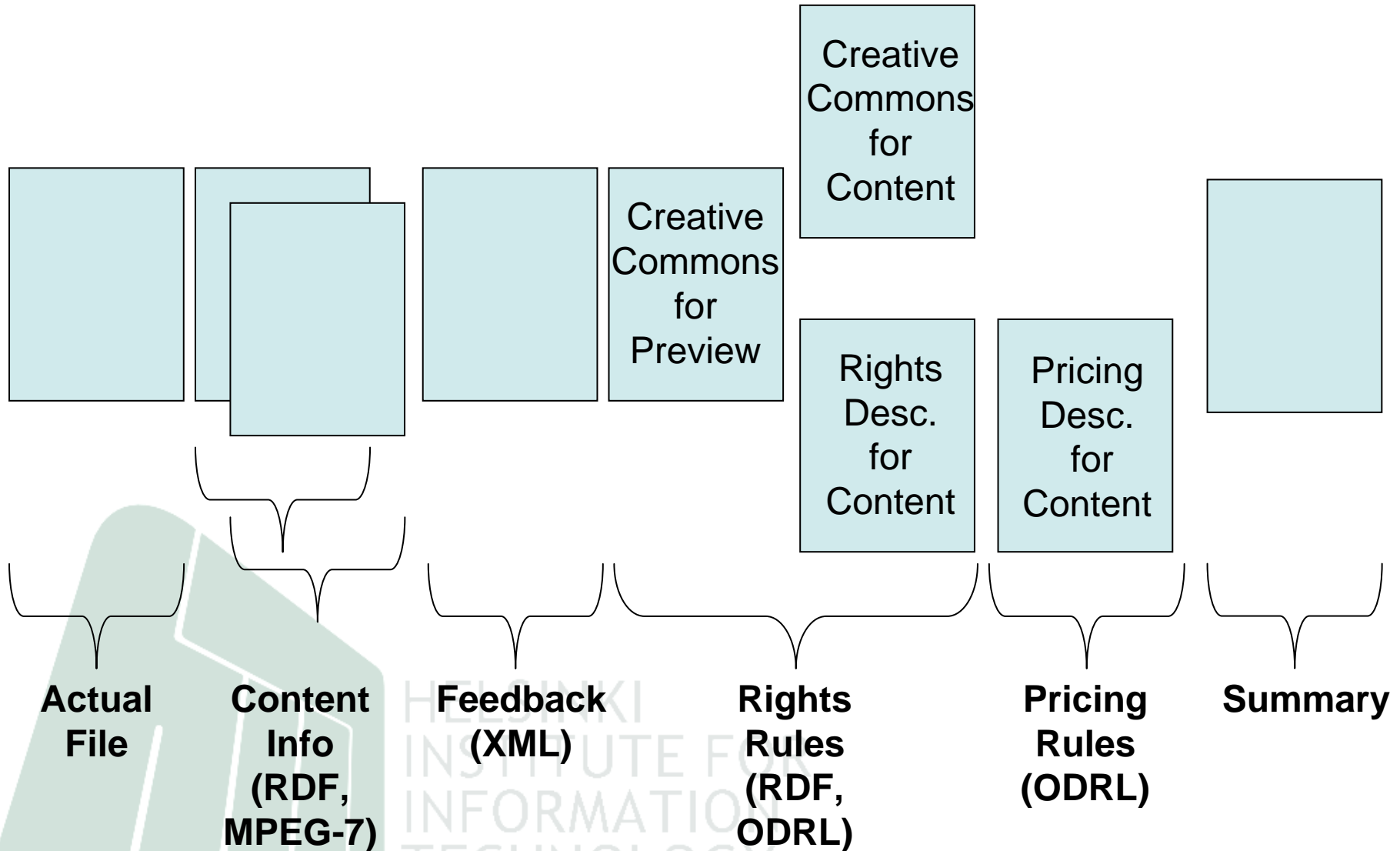
**Feedback**

**Pricing  
Rules**

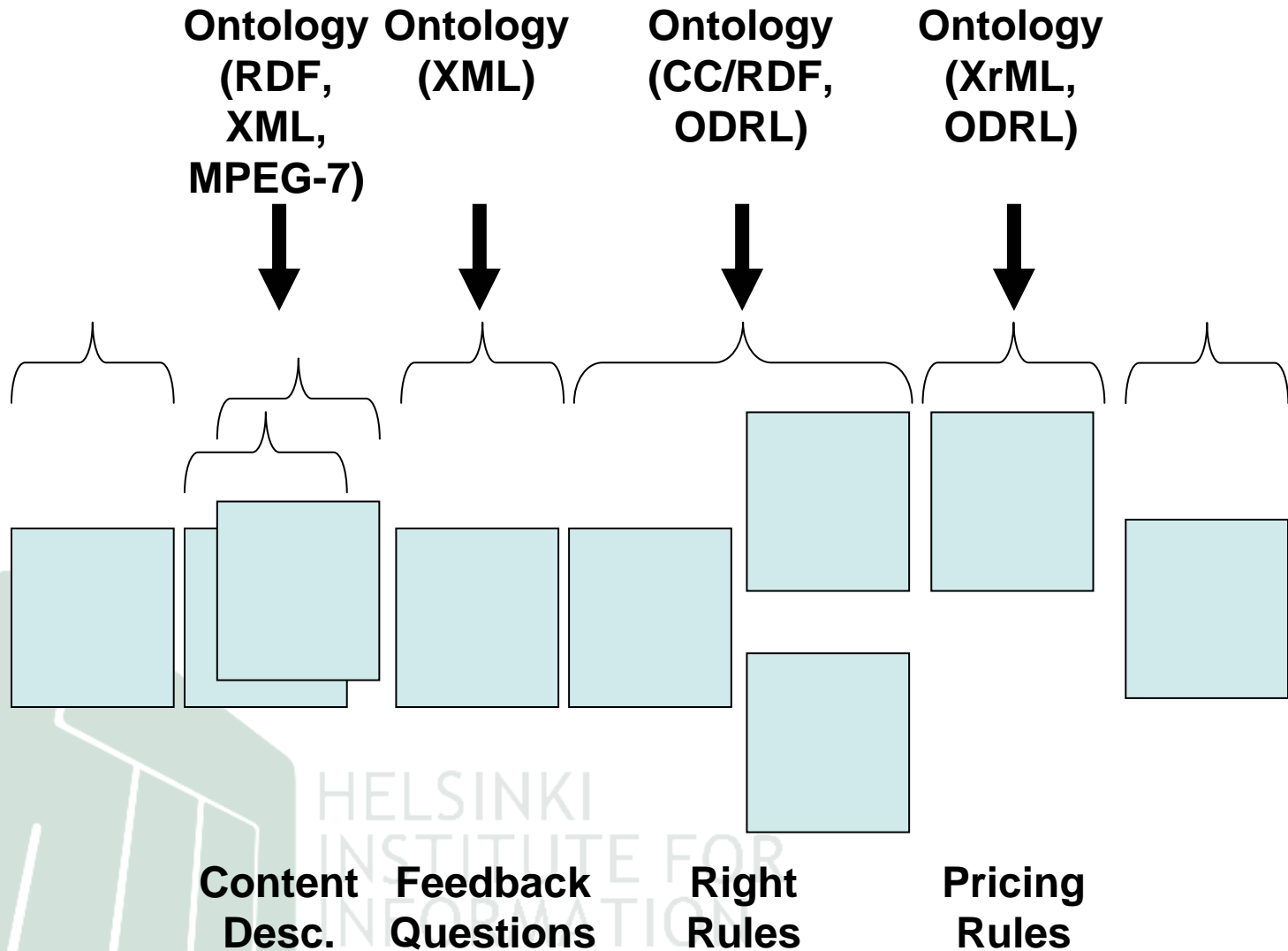
**Summary**

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# Content Import UI



# Ontology and Expression



**Content  
Desc.**

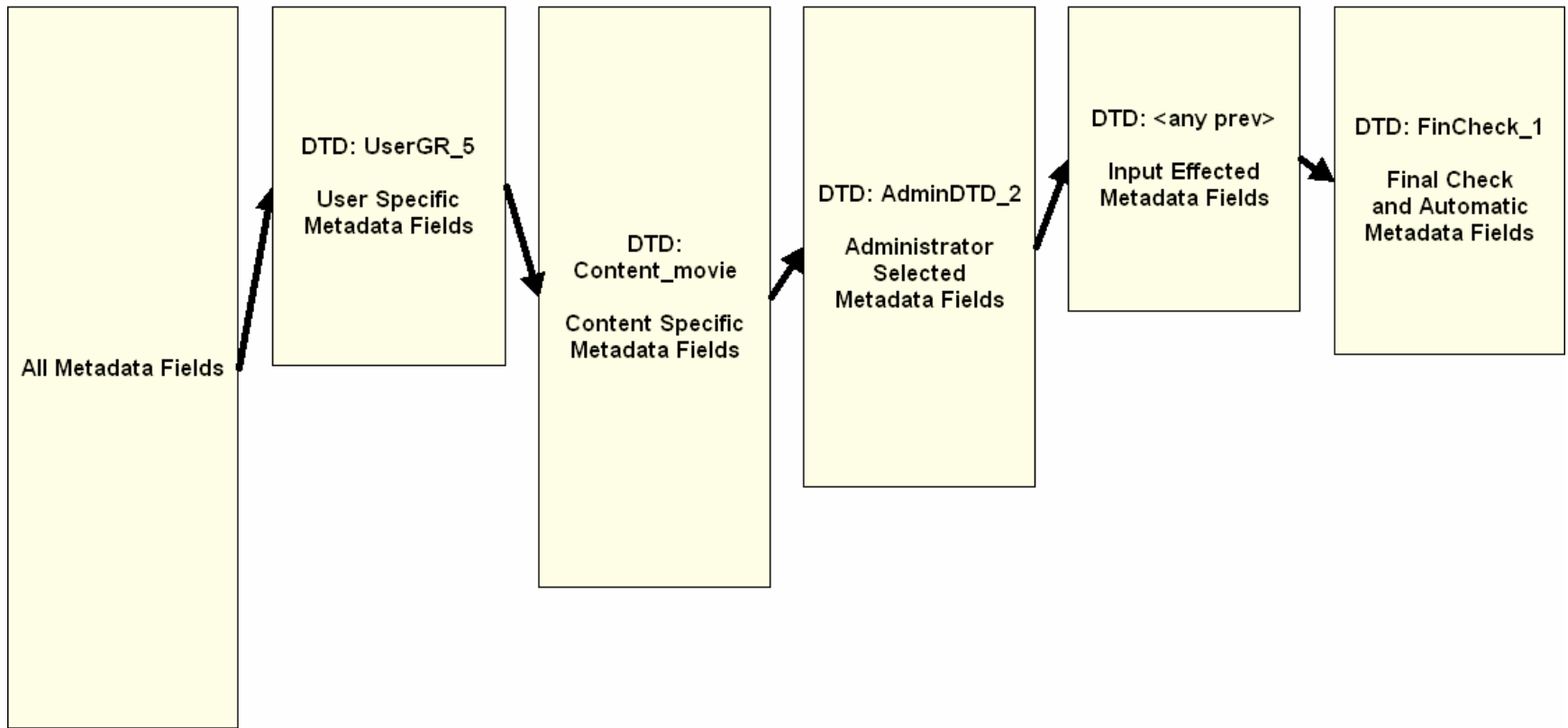
**Feedback  
Questions**

**Right  
Rules**

**Pricing  
Rules**



# Dynamic Use of Metadata Fields



All  
(e.g.  
MPEG-7)

User,  
Group

Content  
type,  
File type

System  
Policy,  
Rule  
sets

Import  
Specific

System  
Validity  
Check

# Kiitos!

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