Investigating the significant properties of electronic content over time

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InSPECT project

- Concept
- Framework
- Measurement methodology
- Comparison methodology
- Analysis and results
- PRONOM enhancements

Concept

Significant properties are

"*The characteristics of digital objects that must be preserved over time in order to ensure the continued accessibility, usability and meaning of the objects*"

<div align="right">Wilson, 2007</div>

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Framework

- Elaborate and catalogue the significant properties of a digital object
- Assess the **relative** value of the property for the re-creation of the object
- Quantitatively measure the value associated with the property
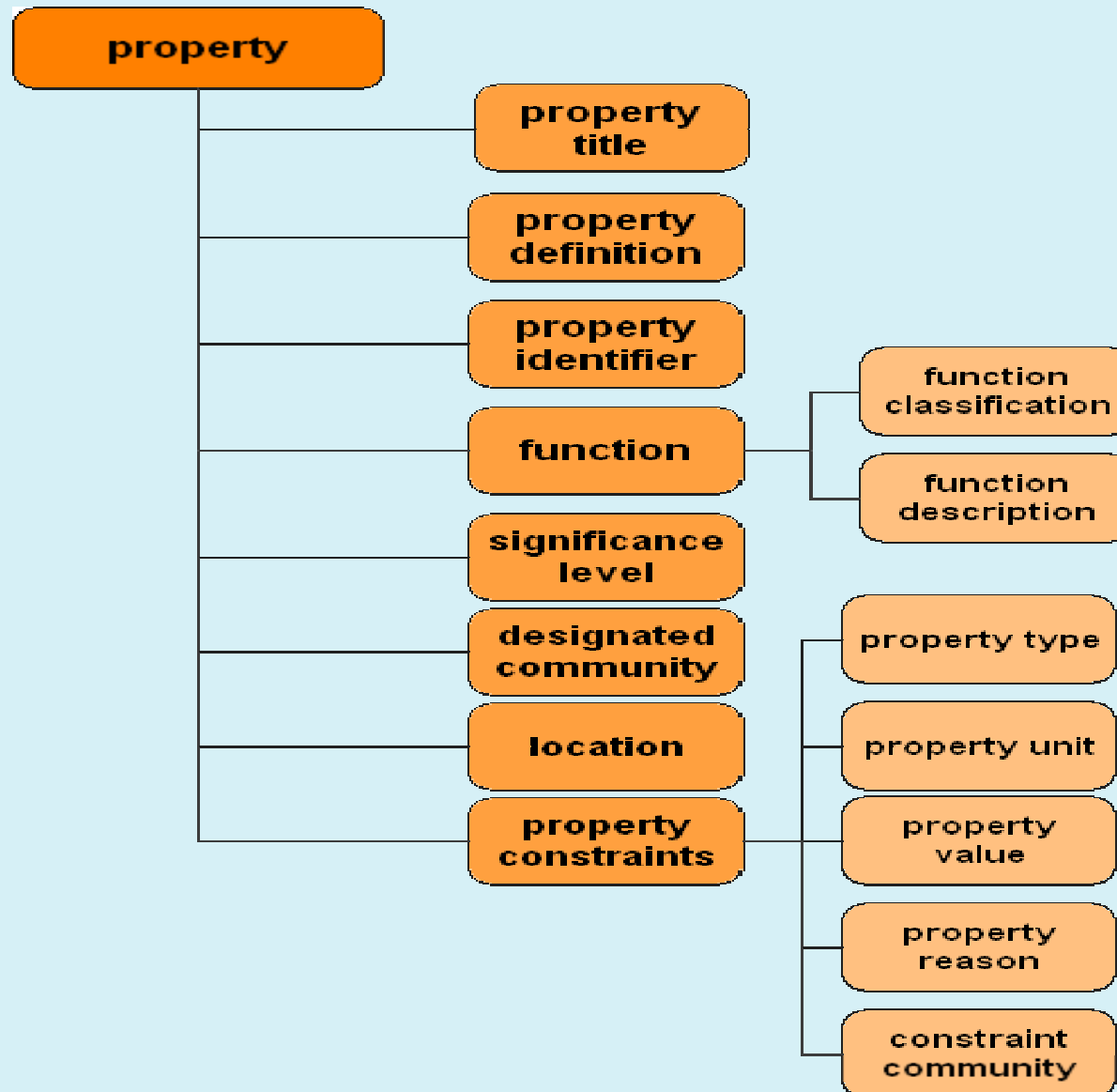- Validate that the value associated with the property is correct

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Framework for description

For each significant property

- Assign identifier to each property
- Describe its function
- Designate a level of significance
- Describe designated community (optional)
- Note any property constraints (optional)

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Measurement schematic

property
- property title
- property definition
- property identifier
- function
  - function classification
  - function description
- significance level
- designated community
- location
- property constraints
  - property type
  - property unit
  - property value
  - property reason
  - constraint community

Compare and contrast

File formats chosen

- Audio
  - BWF v1, MP3, WMA
- Email
  - ASCII text, HTML, Outlook MSG
- Raster images
  - GIF 89a, JPEG/JFIF 1.02, TIFF 6.0
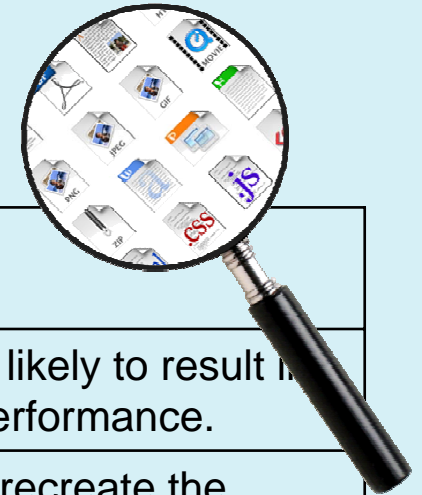- Structured text
  - HTML 3.2, HTML 4.0, XHTML 1.0

Significance is human

- Values assigned are human too and not just technical
- Some properties are more significant than others
- Insight from Diplomatics
  - Provenance, authenticity, integrity
  - A culture of analysis and of making judgements
- Assign values for properties
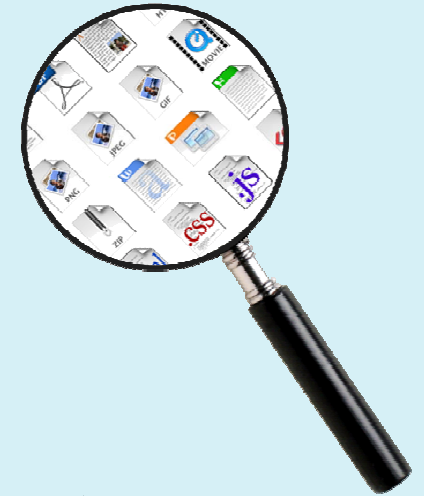 - Open to comment, refinement and community uptake

Measuring significance

Numeric Value	Summary	Description
10	Essential and unchanged	Removal or damage to the property is likely to result in the inability to use or reproduce the Performance.
7-9	Essential but some variation allowed	The property should be maintained to recreate the Performance. However, the value assigned to the property may be changed to some degree, intentionally or unintentionally, without significant effect on the re-creation of the Performance.
4-6	Beneficial	The property is used in the Performance and may be maintained. However, other properties exist that perform the same or similar purpose.
1-3	Minor contribution	The removal of, or damage to, the property results in minor loss and does not contribute to significant loss to the Performance.
0	Not Applicable	The property is unimportant for the reproduction of the Performance and does not contribute to the semantic understanding or use of the Performance.

Next steps

- Investigate links with related projects
- Develop measurement and comparison methodologies
- Perform testbed migrations
- Analyse and compare results

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