

Agenda

- Introduce latest version
 - This version has become pretty mature
 - Most of the work is due to Lars Heuer (Thank you, Lars)
- Present issues
 - Those sent in for ISO process (N881)
 - Those added by the editors at their latest meeting
 - Two more (from Dmitry)
- Next things
 - How to achieve CTM 1.0 in Kyoto?

New in this version

- Colon (:) now allowed with typed names:

```
john - fullname: "John Ono Lennon"
```

- Syntax for variants:

```
variant → ( literal scope [ reifier ] )
```

```
john - "John Lennon" ("lennon, john" @tm:sort)
```

- New directives:
 - user-directive
 - stop-directive

New in this version

- Section 3.3.6 Topic References
 - Wildcards, [11], [12]
 - TMCL requirement to create new topics with random item identifiers

New template functionality

- Import of templates from another CTM document
- Templates can contain:
 - topics, associations, user directives and prefix directives
- Template declarations delimited with ‘def’ and ‘end’
- Offer both “infix” and “prefix” notation
 - Example using predefined template 'isa':

```
# prefix notation
```

```
isa (mccartney, person)
```

```
# infix notation
```

```
# (first ID is start of topic block)
```

```
mccartney
```

```
    isa person3
```

Template examples

```
def has-audio-recording( $opera, $cat-number )
  $opera
    audio-recording: $cat-number
    # Catalogue number is modeled as occurrence
end

def composed-by( $opera, $composer )
  composed-by( work: $opera, composer: $composer )
end

w:Tosca isa opera
  composed-by puccini
  has-audio-recording "7 471755 8"
  webpage: operaglass:Puccini/Tosca/main.html
```

Issues

- **Qnames** (see *also* More Issues #4)
 - CTM Qnames allow slashes, colons, and hashes within the local part of the QName
 - Are these characters compatible with TMQL? At least the slashes are very useful for CTM authors.

%prefix ex <http://psi.example.org/>

all of the following are valid

ex:a/path/here

ex:#fragment

ex:1:2:3

(also allows us to use isbn:2020202)

- Cf <http://www.w3.org/TR/rdf-sparql-query/#QSynIRI> and <http://www.w3.org/2001/sw/BestPractices/HTML/2005-10-27-CURIE>

Issues (cont.)

- How should CTM reference other standards?
 - How to describe the date / dateTime in the grammar?
 - Using RegExes or by referencing XML Schema Part 2?
 - How to describe absolute / relative IRIs?
 - By referencing the RFC?
- CTM vs. TMQL
 - Does CTM contain syntax constructs which are not compatible with TMQL?
- *Additional issues raised at last editors' meeting:*
 - *Some FYI, others TBD...*

#1. Replace 'iko' with 'ako' (FYI)

- Rationale:
 - AKO (“a kind of”) is more widely used than IKO
 - CTM should not be gratuitously different from accepted usage
- *Accepted by the editors.*

#2. Delimit list of scoping topics with comma (FYI)

- Rationale:
 - Avoids the need for end-of-definition marker after scoped associations (see §3.6, note 2)
 - More consistent with [27], [36], [42]
- Change involved:
`[13] scope → @ topic-ref { , topic-ref }`
- *Accepted by editors. – OK 2007-09-08 SCP*
- *INFORM TMQL EDITORS!*

#3. Disallow colon with default name type (*help!*)

- The current proposal allows a choice when specifying a name with the default name type. Either of the following are valid:

`john -: "John" . #1`

`john - "John" . #2`

- The editors are divided 2:2
 - A & B want to disallow #1. C & D want to allow both #1 and #2
- A & B & LMG say:
 - #1 looks odd.
 - The colon is a type marker, so it should be omitted if the type is omitted.
 - It is less confusing to have just one way to do things like this.
- C & D say:
 - #1 makes it easy to add a type later on.
 - #2 would feel inconsistent for users that (also) use explicitly typed names.
- *The editors seek guidance from the WG.*

#4. Disallow path components in Qnames (*help!*)

- Current draft allows path components in local part of a QName.
 - 2 editors think this should not be allowed. 2 are in favour.
 - A & B think the following is powerful and useful:
- C & D think Qnames should be more like QNames and Curies and that two prefixes should be used instead of one:

```
%prefix dc http://purl.org/dc/
```

```
thisdoc
```

```
dc:creator: larsheuer
```

```
dc:terms/created: 2007-08-03
```

```
%prefix dc http://purl.org/dc/elements/1.1/
```

```
%prefix dct http://purl.org/dc/terms/
```

```
thisdoc
```

```
dc:creator: larsheuer
```

```
dct:created: 2007-08-03
```

- *The editors seek guidance.*

#5. (editorial) *(FYI)*

- Move §3.13 (on literals) before §3.4
- *Accepted by editors.*

#6. Distinguish template names from IDs (*help!*)

- Some editors think templates names should be syntactically distinct from IDs
 - Main reason is readability
- ```
def creator($author, $doc)
 dc:creator(dc:resource: $doc,
 dc:value: $author)

end

myDoc creator larsheuer .
myDoc creator: "Lars Heuer" .
```
- Alternatively make their invocation inside a topic block identical to that of occurrence type (DB)

## #7. Align syntax of import directives (FYI)

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- Current draft:

```
template-import-directive →
```

```
 selective-import | namespace-import
```

```
namespace-import →
```

```
 %import doc-reference as identifier
```

```
selective-import →
```

```
 %from doc-reference import (* | template-names)
```

- Proposed simplification:

```
template-import-directive →
```

```
 %from doc-reference import (* | template-names)
```

```
 { as identifier }
```

– If 'as' clause is specified, it's a namespace import; otherwise it's not.

- Accepted. OK 2007-09-08 SCP

## #8. Remove concept of User Directives (*help!*)

- Some editors think that the concept of User Directives (§3.12.8) should be removed
  - Main reason: it will inhibit interoperability
- Others want to keep it
  - Was a feature request on Oslo issue list
  - The text is pretty clear:
    - “Processor may issue...”
    - “This part does not specify...”
- *Guidance sought.*

# Dmitry #1: Privilege subject identifiers

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- Current proposal favours item identifiers compared to subject identifiers
  - Item identifiers are always shorter and simpler
  - This is a hang-over from XML
- Should instead privilege subject identifiers
  - Important for future of Topic Maps to encourage their use and discourage reliance on item identifiers
- Proposal:
  - Allow definition of default CTM document “namespace”  
**%prefix <http://en.wikipedia.org/wiki/>**
  - Contatenate with “bare identifiers” (e.g. 'John\_Lennon') as subject identifier
  - Do not support item identifiers at all (they are already not supported on names, occurrences and associations)

## Dmitry #2: Add support for reified *statements*

- Reification as defined in TMDM applies to relationships, not the statements that represent them
  - Makes it difficult to support provenance, versioning, etc.
- Proposal:
  - Add following syntax:  

```
myDoc - dc:title "Document title" ~=myDocTitle .
myDocTitle creator db dct:created "2007-08-02" .
```
  - Interpretation:
    - myDocTitle reifies the *statement* (not the naming relationship) and adds metadata to it
    - In TMDM, item identifier of this name item becomes the subject locator of myDocTitle

# Extended example

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```
tosca wiki:Tosca
 isa: opera
 - "Tosca"
 - nick: "Shaw's shabby little shocker"
 composed-by: puccini
 libretto-by: giacosa libretto-by: illica
 libretto: myOccs:tosca-libretto.htm @local
 libretto: operaglass:Puccini/Tosca/libretto.html @web, operaglass
 based-on: la-tosca
 premiere: teatro-costanzi
 premiere-date: 1900-01-14
 published-by: ricordi-p
 article: wiki:Tosca @web, wikipedia
 audio-recording: "7 47175 8"
 poster: myOccs:tosca_poster.htm @local
 sound-clip: myOccs:vissi-darte.wav @local
 synopsis: met:tosca.html @web operanews
 webpage: operaglass:Puccini/Tosca/main.html @web, operaglass

takes-place-in(opera: toska, place: roma) ~ toska-takes-place-in
based-on(toska, la-tosca)
```

# More issues – and decisions

*Note: In general WG is very satisfied with most of the proposal*

*CTM Editors: please update draft a.s.a.p. for CD ballot*

# More issues

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- LMG
  - several editorial issues
    - will be delivered offline
  - string matching should be case sensitive
    - ACCEPTED; add text to this effect Not implemented SCP
  - line continuation marker does not seem necessary (especially in the light of the removal of the %import directive)
    - ACCEPTED; remove OK 2007-09-08 SCP
  - null type: in the absence of an explanation of what this means and why it is necessary, it should not be included as a data type.
    - ACCEPTED; remove OK 2007-09-08 SCP
  - stop directive: not important enough
    - ACCEPTED; remove (use conventional comments for application specific functionality like this) OK 2007-09-08 SCP
  - random identifier generation incompatible with CXTM
    - ACCEPTED; add predictable ID generation algorithm (after CD ballot)

## More issues (cont.)

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- Prof. Lee
  - important to see parser implementations before final approval
    - This is a strong moral exhortation! (No action from Editors)
  - scope of declared names could be made clearer
    - Editors: Please do so Not implemented SCP
  - template names and identifiers should allow international characters
    - We believe they do. Editors, please confirm.
- DB
  - include advice for implementors (as informative annex)?
    - Canadian comment. (No action from Editors)
  - invocation of template inside topic block should include colon
    - ACCEPTED (see below) OK 2007-09-08 SCP
- PD
  - CTM must specify the use of Unicode for strings
    - ACCEPTED; add text Not implemented SCP

# Decisions on issues in N881

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- QNames
    - local part should allow numbers but not path components (as in SPRQL)
    - Update draft before CD ballot OK 2007-09-08 SCP
  - Referencing other standards
    - use dated references to XML Schema and IRI RFC
    - Update draft before CD ballot OK 2007-09-08 SCP
  - CTM vs. TMQL
    - handed off to TMQL Editors; no action for CTM Editors yet
  - Disallow colon with default name type
    - ACCEPTED; update draft before CD ballot OK 2007-09-08 SCP
  - Distinguish template names from IDs
    - REJECTED in favour of alternative proposal:
  - Use colons after topic-dependent-invocation of template, to make resulting syntax more consistent
    - ACCEPTED; update draft before CD ballot OK 2007-09-08 SCP
- john isa: person** (etc)

## Decisions (cont.)

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- Template import
  - This is too complicated
  - %include and %mergemap should be sufficient
    - %mergemap provides basic TMDM merging functionality
    - %include should be a simple include that includes everything (including all prefixes and templates)
    - having the %include functionality (single namespace for local identifiers) *without* also getting templates is not sufficiently important to justify so many different mechanisms
    - templates can be stored in a separate file and %included
  - Therefore
    - REMOVE template import functionality Not implemented SCP

## Decisions (cont.)

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- User directives
  - Not a good idea to encourage forking the standard
  - REMOVE this concept OK 2007-09-08 SCP
- Dmitry #1
  - Accepted in principle
  - Use %prefix directive without *identifier*
    - Local identifiers are supported using the wildcard facility:  
`%prefix http://en.wikipedia.org/wiki/`  
`Puccini . → http://en.wikipedia/wiki/Puccini`  
`*Puccini . → file:/xyz/foo.ctm#randomID`
  - Without the default prefix the following obtains:  
`Puccini . → file:/xyz/foo.ctm#randomID`
  - UPDATE draft before CD ballot OK 2007-09-08 SCP