

# Event Interchange Model Schema Guidelines

(to June 30, 2008)



## 1. Purpose

This document provides a guide for the usage of the EIM schema in the context of the BEST event aggregator. Its primary audience are developers needing to create XML compliant with the BEST aggregator service or those wishing to process data marked up to the EIM schema.

## 2. Overview

Gathering descriptive metadata from repositories is a problem already solved via OAI-PMH harvesting. Repositories shipped with data providers by default will typically be able to expose descriptive metadata about their holdings in Dublin Core and often it is trivial to support other crosswalks (e.g. specific MODS or DC Profile). Event metadata can describe events which repository items play a part in and the EIM schema provides a means to represent this metadata in an XML form.

It is recognised not all data sources will have an OAI-PMH Data Provider. The EIM schema thus provides mechanisms where descriptive and event metadata can be combined in a single document.

The BEST event aggregator service requires that data sources provide an OAI-PMH data provider or web-accessible resource supporting either **best\_dc/ best\_mods** and **eim** metadata formats, or the **eim** metadata format with embedded descriptive metadata. The **best\_dc** format **must** comply with the BEST DC profile (see later in this document). The **best\_mods** format **must** comply with the BEST MODS profile (see later in this document). Where only the **eim** metadata format is supported, for each item whose events are being reported, an embedded metadata record must be provided in the BEST DC or BEST MODS profile. This will be discussed more clearly in the next section.

## 3. Elements

This section of the document describes the EIM schema element by element and details how each element must be used.

### <events>

A wrapper element for **event** elements. This is the root element for all EIM markup.

### <event>

A wrapper element for an individual event. The **type** attribute must be one of the values specified within the EIM schema.

### <timestamp>

The timestamp is a UTC date/time which **must** be of the form YYYY-MM-DDThh:mm:ssZ

### <requesterInfo>

A wrapper element for information about requesting party which initiated the event.

### <ip>

The IP address of the requesting agent.

### <referentInfo>

A wrapper element for information about the target of an event.

### <identifier>

An element containing a globally unique identifier for the referent. This value **must** match the identifier provided in the descriptive metadata about the referent. For example, if descriptive metadata is being provided via a separate OAI-PMH DC harvest, the identifier provided in the DC metadata **must** be the same as in the EIM harvest. This also applies for descriptive metadata embedded within the **metadata** element.

#### <metadata>

A wrapper element containing descriptive metadata about the referent. The value of the **profile** attribute **must** be MODS or DC. The metadata must conform to the BEST MODS or DC profile. This element should only be used where descriptive metadata is not being provided via some other means (e.g. separate OAI-PMH harvest). If multiple events for one referent are being marked up, only one event need contain the descriptive metadata, others may use only the **identifier** element.

#### 4. Descriptive Metadata Profiles

The following table indicates the mapping of descriptive metadata identified as important for the aggregator service to DC and MODS. These mappings are to be considered as BEST profiles and must be strictly adhered to.

Metadata Field	DC	MODS	Notes	Usage*
Item ID	identifier	identifier	Must be globally unique	M, NR
Title	title	titleInfo/title		M, R
Author	creator	name/namePart		O, R
Abstract	description	abstract		O, R
Access Policy	rights	accessPolicy	Values must be "Open Access" or "Restricted"	M, NR
ANZSRC	subject	subject/topic	Values must be ANZSRC codes, MODS authority="anzsrc"	O, R
Item Format	format	physicalDescription/ internetMediaType	Values must be PRONOM format ids, else MIME-type	M, R
Item Type	type	genre	Values must be sourced from MACAR resource type vocabulary	M, R
Item URI	source	location/url	URL resolvable to item metadata and content package	M, NR
Owning Collection	relation	relatedItem/identifier	If the collection is registered within ORCA, this must be the identifier passed to ORCA	O, R
Repository ID	n/a	n/a	To be provided as part of OAI-PMH "identify" request. In the absence of a persistent identifier, the home page url must be used	n/a

\*M=Mandatory; O=Optional; R=Repeatable; NR=Non-Repeatable

Where the above specification is not followed, processing systems are free to discard extraneous fields and/or those fields not meeting the specification. Where the specification cannot be met and may require improvements, feedback is encouraged so the profiles can be improved.

## 5. Example

### Example retrieve events for a single item

```
<events xmlns="http://apsr.edu.au/standards/event">
  <event type="retrieve">
    <timestamp>2007-12-07T01:58:46Z</timestamp>
    <requesterInfo>
      <ip>10.1.3.236</ip>
    </requesterInfo>
    <referrentInfo>
      <metadata profile="MODS">
        <mods:mods xmlns:mods="http://www.loc.gov/mods/v3">
          <mods:identifier>hdl:1885/123</mods:identifier>
          <mods:titleInfo>
            <mods:title>My example item record</mods:title>
          </mods:titleInfo>
          <mods:abstract>The abstract for my item</mods:abstract>
          <mods:genre>type from MACAR vocabulary</mods:genre>
          <mods:subject authority="anzsrc">
            <mods:topic>070108</mods:topic>
          </mods:subject>
          <mods:physicalDescription>
            <mods:internetMediaType>fmt/3</mods:internetMediaType>
          </mods:physicalDescription>
          <mods:accessCondition>Open Access</mods:accessCondition>
          <mods:location>
            <mods:url>http://dspace.uni.edu.au/handle/1885/123</mods:url>
          </mods:location>
          <mods:name type="personal">
            <mods:namePart type="family">Bloggs</mods:namePart>
            <mods:namePart type="given">Joe D</mods:namePart>
          </mods:name>
          <mods:relatedItem>
            <mods:identifier>hdl:1885/120</mods:identifier>
          </mods:relatedItem>
        </mods:mods>
      </metadata>
    </referrentInfo>
  </event>
  <event type="retrieve">
    <timestamp>2007-12-07T01:58:46Z</timestamp>
    <requesterInfo>
      <ip>150.36.9.123</ip>
    </requesterInfo>
    <referrentInfo>
      <identifier>hdl:1885/123</identifier>
    </referrentInfo>
  </event>
</events>
```