Using SUSHI for Elsevier Usage Reports

Brief explanation of harvesting Usage Reports from Elsevier with SUSHI

Author: G. Marjew
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1 Useful links

COUNTER http://projectcounter.org/code_practice.html
SUSHI http://www.niso.org/schemas/sushi/#counter
NISO page about SUSHI: http://www.niso.org/workrooms/sushi
FAQ (by NISO) http://www.niso.org/workrooms/sushi/faq/

Elsevier SUSHI links
Standard SUSHI
Service http://services.usagereports.elsevier.com:8080/axis/services/SushiServicePort
Testpage http://services.usagereports.elsevier.com/StandardSushiServicesPage.asp

2 Elsevier specific request parameter logic
Elsevier uses a number of specific request parameter value rules to enable SUSHI harvesting for different platforms and at different organizational levels of consortia.

These rules are all applied to the element CustomerReference.ID element of the ReportRequest.

2.1.1 Customer Reference ID value format
The Elsevier CustomerReference id value format is always 10 digits.
The first digit is ‘C’ for an individual account and ‘S’ for a consortium superaccount.
Example: ‘C000001234’ or ‘S123456789’
Exception code 2010 is returned for CustomerReference ID formats shorter than 10 digits.

2.1.2 Platform identifier value
Elsevier supports multiple platforms and needs to know for which platform (Scopus, Sciencedirect or Journal WebSites) statistics must be harvested.
Elsevier expects a platform identifier value in front of the CustomerReference ID value separated by the / sign.


Exception code 2010 is returned for CustomerReference ID values without platform identifier.

### 2.1.3 Support for different Organizational level reports.

Elsevier supports COUNTER statistics harvesting at different organizational dimensions within consortia.

Statistics can be harvested as super account or account level, additional filtering parameters for member or level granting the entitlement can be added to the CustomerReference ID for refinement.

Table below shows which parameter combinations are possible for supported reports. The filtering parameters are not mandatory, if used they are expected behind the CustomerReference ID value and separated by '/'.

**Table 1 – supported reporting dimensions for COUNTER reports**

<table>
<thead>
<tr>
<th>Report</th>
<th>Customer reference ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JR1</td>
<td>‘SD/S123456789’</td>
<td>Lists all journal titles and usage entitled by consortium or members (Super account and Accounts)</td>
</tr>
<tr>
<td></td>
<td>‘SD/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘SD/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td>JR1a</td>
<td>‘SD/S123456789’</td>
<td>Lists all journal titles and usage entitled from archive titles by consortium or members (Super account and Accounts)</td>
</tr>
<tr>
<td></td>
<td>‘SD/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘SD/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td>JR2</td>
<td>‘SD/S123456789’</td>
<td>Access Denied to Full-text Articles by Month, Journal and Category (Super account and Accounts)</td>
</tr>
<tr>
<td></td>
<td>‘SD/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘SD/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td>JR5</td>
<td>‘SD/S123456789’</td>
<td>Lists number of Successful Full-Text Article Requests by Year-of-Publication (YOP) and Journal (Super account and Accounts)</td>
</tr>
<tr>
<td></td>
<td>‘SD/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘SD/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘JS/S123456789/C123456789’</td>
<td></td>
</tr>
<tr>
<td>BR2</td>
<td>‘SD/S123456789’</td>
<td>Lists all book titles and usage entitled by consortium or members (Super account and Accounts)</td>
</tr>
<tr>
<td></td>
<td>‘SD/C123456789’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘SD/S123456789/C123456789’</td>
<td></td>
</tr>
</tbody>
</table>
### Exception codes
The following exception codes are being used to flag exceptions.

#### Table 2 Return codes SUSHI client request

<table>
<thead>
<tr>
<th>Exception Severity</th>
<th>Level</th>
<th>Exception</th>
<th>Number Invocation Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Info or Debug</strong></td>
<td>Info</td>
<td>0</td>
<td>Any. These messages will never be standardized and service providers can design them as they see fit.</td>
</tr>
<tr>
<td></td>
<td>Debug</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Warnings</strong></td>
<td>Warning</td>
<td>1-999</td>
<td>Any. This range is reserved for the use of service providers to supply their own custom warnings.</td>
</tr>
<tr>
<td><strong>Service Not Available</strong></td>
<td>Fatal</td>
<td>1000</td>
<td>Service is executing a request, but due to internal errors cannot complete the request. Service must return ReportResponse and no payload.</td>
</tr>
<tr>
<td><strong>Service Busy</strong></td>
<td>Fatal</td>
<td>1010</td>
<td>Service is too busy to execute the incoming request. Service must return ReportResponse with this exception and no payload. Client should retry the request after some reasonable time.</td>
</tr>
<tr>
<td><strong>Requestor Not Authorized to Access Service</strong></td>
<td>Error</td>
<td>2000</td>
<td>If Requestor ID is not recognized or not authorized by the service.</td>
</tr>
<tr>
<td><strong>Requestor is Not Authorized to Access Usage for Institution</strong></td>
<td>Error</td>
<td>2010</td>
<td>If Requestor has not been authorized to harvest usage for the institution identified by the CustomerReference ID, or if the customerReference ID is not recognized.</td>
</tr>
<tr>
<td><strong>Report Not Supported</strong></td>
<td>Error</td>
<td>3000</td>
<td>The requested report name, version, or other means of identifying a report that the service can process is not matched against the supported reports.</td>
</tr>
<tr>
<td><strong>Report Version Not Supported</strong></td>
<td>Error</td>
<td>3010</td>
<td>Requested version of the data is not supported by the service.</td>
</tr>
<tr>
<td>Argument</td>
<td>Error</td>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------</td>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Invalid Date Arguments</td>
<td>Error</td>
<td>3020</td>
<td>Any format or logic errors involving date computations, e.g., end date cannot be less than begin date.</td>
</tr>
<tr>
<td>No Usage Available for Requested Dates</td>
<td>Error</td>
<td>3030</td>
<td>Service did not find any data for the date range specified.</td>
</tr>
</tbody>
</table>

### 4 Performance

Especially COUNTER reports for large organizations with a large number of member accounts and many titles can be quite bulky and might consume so much processing capacity and time that frequent time-out exceptions occurs. In those cases information included below might turn out to be useful.

1. If possible Report Requests per member account are more likely to be successful than a single consortium request for all members
2. In current version of SUSHI Elsevier restricted support to month reports only - the ability to run reports for more than one month has been disabled.
3. The reporting service tends to be very busy directly after release of new month reports (first 2-3 days after release notification email). Requests submitted after this period are more likely to be completed successfully without timeouts.
5 SUSHI messages

5.1 ReportRequest

```
sushi:ReportRequest
```

<table>
<thead>
<tr>
<th>Parent Element</th>
<th>Child Element</th>
<th>Description</th>
<th>Possible Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReportRequest</td>
<td>ID</td>
<td>Text Identifier</td>
<td>Any</td>
</tr>
<tr>
<td>Created</td>
<td></td>
<td>Date time stamp of request</td>
<td>Any</td>
</tr>
<tr>
<td>Requestor</td>
<td>ID</td>
<td>Required field ID is the ‘integrator ID’ of the organization submitting the Request. This ID is assigned by Elsevier.</td>
<td>This ID is assigned by Elsevier.</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>Sushi Account Name</td>
<td>Any</td>
</tr>
<tr>
<td>Email</td>
<td></td>
<td>Your e-mail address</td>
<td>Any</td>
</tr>
<tr>
<td>CustomerReference</td>
<td>ID</td>
<td>Required Platform Code</td>
<td>“SD” for ScienceDirect, “SC” for Scopus or ‘JS’ for Journal WebSites with ‘/’ separator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Required Account ID</td>
<td>“C123456789” for Account or “S123456789” for Super Account</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Optional) SA parameter</td>
<td>Optional parameter for showing SA entitled usage preceded by separator ‘/’</td>
</tr>
<tr>
<td>ReportDefinition</td>
<td>Name</td>
<td>Required Name and Release representing report id and version of requested Counter report Names are assigned by Counter.</td>
<td>Acronym of COUNTER report, for Example: JR1, JR1A, CR1, BR2</td>
</tr>
<tr>
<td></td>
<td>Release</td>
<td>Required SUSHI Release</td>
<td>Release number currently supported by Elsevier: 3.0</td>
</tr>
</tbody>
</table>

5.2 ReportRequest parameter values
5.2.1 ReportRequest sample

Below is a sample request message; the fields marked yellow are variables. Table 1 provides an overview of these variables.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  <soapenv:Header/>
  <soapenv:Body>
    <coun:ReportRequest ID="Sample" Created="2000-01-01T01:32:15.156Z">
      <sus:Requestor>
        <sus:ID>Your Sushi Requestor Id</sus:ID>
        <sus:Name>Your Sushi Account Name</sus:Name>
        <sus:Email>test@example.com</sus:Email>
      </sus:Requestor>
      <sus:CustomerReference>
      </sus:CustomerReference>
      <sus:ReportDefinition Name="Report Definition" Release="3.0">
        <sus:Filters>
          <sus:UsageDateRange>
            <sus:Begin>Start Date</sus:Begin>
            <sus:End>End Date</sus:End>
          </sus:UsageDateRange>
        </sus:Filters>
      </sus:ReportDefinition>
    </coun:ReportRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Sample Request with potential values:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  <soapenv:Header/>
  <soapenv:Body>
    <coun:ReportRequest ID="Counter Report Request" Created="2012-10-18T01:23:45.678Z">
      <sus:Requestor>
        <sus:ID>SUSHI-EXAMPLE</sus:ID>
        <sus:Name>SUSHI-EXAMPLE</sus:Name>
        <sus:Email>sushi@example.com</sus:Email>
      </sus:Requestor>
      <sus:CustomerReference>
        <sus:ID>SD/5000000123/C000012345</sus:ID>
      </sus:CustomerReference>
      <sus:ReportDefinition Name="JR1" Release="3.0">
        <sus:Filters>
          <sus:UsageDateRange>
            <sus:Begin>2012-09-01</sus:Begin>
            <sus:End>2012-09-30</sus:End>
          </sus:UsageDateRange>
        </sus:Filters>
      </sus:ReportDefinition>
    </coun:ReportRequest>
  </soapenv:Body>
</soapenv:Envelope>
```
5.2.2 ReportResponse

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
  <soapenv:Body>
    <ReportResponse Created="2012-10-18T14:44:21.753Z"
xmlns="http://www.niso.org/schemas/sushi/counter">
      <ns1:Requestor xmlns:ns1="http://www.niso.org/schemas/sushi">
        <ns1:ID>SUSHI-EXAMPLE</ns1:ID>
        <ns1:Name>SUSHI-EXAMPLE</ns1:Name>
        <ns1:Email>test@sushi.com</ns1:Email>
      </ns1:Requestor>
      <ns2:CustomerReference xmlns:ns2="http://www.niso.org/schemas/sushi">
        <ns2:ID>SD/S000000123/SA</ns2:ID>
      </ns2:CustomerReference>
      <ns3:ReportDefinition Name="CR1" Release="3.0"
xmlns:ns3="http://www.niso.org/schemas/sushi">
        <ns3:Filters>
          <ns3:UsageDateRange>
            <ns3:Begin>2010-08-01</ns3:Begin>
            <ns3:End>2010-08-31</ns3:End>
          </ns3:UsageDateRange>
        </ns3:Filters>
        <ns3:ReportDefinition>
          <Report>
            <ns4:Report ID="1487D5F74FAC7C00D4D8EE949AF0069J" Created="2012-10-18T14:44:02.000Z"
Name="Consortium Report 1: Number of Successful Full-Text Journal Article or Book Chapter Requests by
Month” Title="Consortium Report 1: Number of Successful Full-Text Journal Article or Book Chapter Requests by Month (SA Ent.)" Version="3" xmlns:ns4="http://www.niso.org/schemas/counter">

<ns4:Vendor>
  <ns4:Name>Reed Elsevier B.V.</ns4:Name>
  <ns4:ID>Elsevier - ScienceDirect</ns4:ID>
  <ns4:Contact>
    <ns4:E-mail>sciencedirect@elsevier.com</ns4:E-mail>
  </ns4:Contact>
  <ns4:WebSiteUrl>http://scienceDirect.elsevier.com</ns4:WebSiteUrl>
  <ns4:LogoUrl>http://scienceDirect.elsevier.com/pic/logo.png</ns4:LogoUrl>
</ns4:Vendor>

<ns4:Customer>
  <ns4:Name>Customer Name</ns4:Name>
  <ns4:ID>123456</ns4:ID>
  <ns4:ReportItems>
    <ns4:ItemIdentifier>
      <ns4:Type>Proprietary</ns4:Type>
      <ns4:Value/>
    </ns4:ItemIdentifier>
    <ns4:ItemPlatform>ScienceDirect</ns4:ItemPlatform>
    <ns4:ItemPublisher>Elsevier</ns4:ItemPublisher>
    <ns4:ItemName>Journal Name</ns4:ItemName>
    <ns4:ItemDataType>Journal</ns4:ItemDataType>
    <ns4:ItemPerformance PubYr="0">
      <ns4:Period>
        <ns4:Begin>2010-08-01</ns4:Begin>
        <ns4:End>2010-08-31</ns4:End>
      </ns4:Period>
      <ns4:Category>Requests</ns4:Category>
    </ns4:ItemPerformance>
    <ns4:Instance>
      <ns4:MetricType>ft_html</ns4:MetricType>
      <ns4:Count>234</ns4:Count>
    </ns4:Instance>
    <ns4:Instance>
      <ns4:MetricType>ft_pdf</ns4:MetricType>
      <ns4:Count>324</ns4:Count>
    </ns4:Instance>
    <ns4:Instance>
      <ns4:MetricType>ft_total</ns4:MetricType>
      <ns4:Count>558</ns4:Count>
    </ns4:Instance>
  </ns4:ReportItems>
</ns4:Customer>
</ns4:Report>
</ReportResponse>
</soapenv:Body>
</soapenv:Envelope>