

ACONEX API SAMPLE

MAIL DOWNLOAD

Introduction

This API sample demonstrates how to search for Aconex mails within a certain date interval. Then check the returned mails for attached registered documents, and if any, download the document metadata and its backing file. In this sample, we search only for the mail type "Transmittals", but could be applied for any Aconex mail type.

This sample uses the demo instance "demo.aconex.co.uk" and the project "Hotel VIP Resort" with project id 1879048400.

Step 1: Search for mail transmittals

To search for mails, we are using the "List mail" API service. To filter out only transmittals, we use the query parameter "corrtypeid" with the value "23" (this value can be found using the mail schema service). To further filter out for a specific day, we use the query parameter "sentdate" and the Apache Lucene query syntax to specify an interval value "[20101112 TO 20101112]". To be able to verify that we only get the desired transmittals, we add the "sentdate" to the return_fields parameter.

The request uri string is:

```
https://demo.aconex.co.uk/api/projects/1879048400/mail?
mail_box=inbox&
search_query=corrtypeid:23 AND sentdate:[20101112 TO 20101112]&
return_fields=sentdate
```

Response:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<MailSearch TotalResults="3">
  <SearchResults>
    <Mail MailId="1879050251">
      <SentDate>2010-11-12T19:24:52.000Z</SentDate>
    </Mail>
    <Mail MailId="1879052423">
      <SentDate>2010-11-12T11:54:30.000Z</SentDate>
    </Mail>
    <Mail MailId="1879051919">
      <SentDate>2010-11-12T08:55:18.000Z</SentDate>
    </Mail>
  </SearchResults>
</MailSearch>
```

In the response we find the result count and each mails mail id.

Step 2: Download mail metadata

For each mail id retrieved in step 1, we can request its metadata and inquiry if the mail has any attachments. In this sample we will check the second mail id above. We use the "View mail metadata" API service.

The request uri string is:

<https://demo.aconex.co.uk/api/projects/1879048400/mail/1879052423>

Response:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<Mail MailId="1879052423">
  <ApprovalStatus>Approved</ApprovalStatus>
  <Attachments>
    <RegisteredDocumentAttachment attachmentId="1879074123">
      <Confidential>false</Confidential>
      <DocumentNo>CMP-581-AWD-031</DocumentNo>
      <FileName>CMP-581-AWD-031B.pdf</FileName>
      <FileSize>917003</FileSize>
      <RegisteredAs>1879092457</RegisteredAs>
      <Revision>B</Revision>
      <RevisionDate>2010-11-04T00:00:00.000Z</RevisionDate>
      <Status>For Approval</Status>
      <Title>Compare Drawing 1</Title>
    </RegisteredDocumentAttachment>
    ...
  </Attachments>
  ...
</Mail>
```

Under xml element "Attachments" will all attachments attached to a mail be listed, if any. Three different types of attachments exist, registered documents, local files and another Aconex mail. Unless the attachment is confidential to the user, an attachment id will be present for document or file attachments. For mail attachments, a mail id will be available. The attachment id can be used to download the attachment using the "Download Mail Attachment" service.

For registered documents, two other ids can be present. A "document id" can be available, however this will only be useful if this mail was sent from your organisations. A "RegisteredAs" id can be available, this is a document id valid for your organisation for a received mail from another organisation. This id will only appear if received documents have been registered in your organisations document register.

Step 3: Download document metadata

For each document id retrieved in step 2, we can request its metadata. We use the "View document metadata" API service. Note, this is only applicable to attached registered documents.

The request uri string is:

<https://demo.aconex.co.uk/api/projects/1879048400/register/1879092457/metadata>

Response:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<RegisterDocument DocumentId="1879092457">
  <Attribute1>
    <AttributeTypeNames>
      <AttributeTypeName>Administration</AttributeTypeName>
      <AttributeTypeName>Retail Building</AttributeTypeName>
      <AttributeTypeName>Marina</AttributeTypeName>
    </AttributeTypeNames>
    <AttributeType>ATTRIBUTE1</AttributeType>
  </Attribute1>
  <Attribute2>
    <AttributeTypeNames>
      <AttributeTypeName>WP2.02 - Structural Steelwork</AttributeTypeName>
    </AttributeTypeNames>
    <AttributeType>ATTRIBUTE2</AttributeType>
  </Attribute2>
  <Author>Majestic Builders</Author>
  <Check1>false</Check1>
  <Comments>
  </Comments>
  <Confidential>false</Confidential>
  <ConfidentialUserAccessList />
  <DateModified>2010-11-04T19:59:12.000Z</DateModified>
  <Discipline>Project Wide</Discipline>
  <DocumentNumber>CMP-581-AWD-031</DocumentNumber>
  <DocumentStatus>For Approval</DocumentStatus>
  <DocumentType>Drawing</DocumentType>
  <FileSize>917003</FileSize>
  <Filename>CMP-581-AWD-031B.pdf</Filename>
  <PrintSize>A3</PrintSize>
  <ReviewSource>None</ReviewSource>
  <ReviewStatus>None</ReviewStatus>
  <Revision>B</Revision>
  <RevisionDate>2010-11-04T00:00:00.000Z</RevisionDate>
  <Title>Compare Drawing 1</Title>
</RegisterDocument>
```

For the document metadata response, we can check if a backing file exists and its size in parameters "Filename" and "FileSize".

Step 4: Download document file

If a document has a file, we can use the "Download document file" API service to download it. (Note that we can also use "Download mail attachment" service to download the file, using the attachment id)

The request uri string is:

<https://demo.aconex.co.uk/api/projects/1879048400/register/1879092457>

Response:

The response will be a binary stream containing the document file content. It is saved to disk with the filename found in the document metadata.

References

Aconex Web Services - Developer's Guide.pdf
Aconex_Web_Services_Developer_Support_Information.pdf
Aconex_Web_Services_OAuth_Developer's_Guide.pdf
Aconex API Sample - Web Requests (C#).pdf
Aconex API Sample - Web Requests (Java).pdf
Aconex API Sample - Document Schema.pdf
Aconex API Sample - Document Parameters.pdf
Aconex API Sample - Mail Schema.pdf
Aconex API Sample - Paging.pdf
Aconex API Sample - Mail Download.pdf
Aconex API Sample - Performance Throttling.pdf
Aconex API Sample - Mail Form Fields.pdf
Aconex API Sample - OAuth.pdf

Disclaimer

This sample is only provided to exemplify how certain requests can be made using the Aconex API Web Services and should be treated as such. This sample should not be considered best practice or an Aconex recommended implementation, as each integration project has its own unique challenges and need to be adopted thereafter.