# Using Ally’s API

We can use the Ally API to return Blackboard accessibility data. This data was already available through a [CSV export,](https://help.blackboard.com/Ally/Ally_for_LMS/Administrator/Institution_Report/Export) but the API allows for more dynamic integration.

## Documentation

Main documentation is:

* [Reporting API Endpoints](https://help.blackboard.com/Ally/Ally_for_LMS/Administrator/Ally_Institution_Report/Reporting_API_endpoints)
* [Integrate Ally's API with an External Reporting Tool](https://help.blackboard.com/Ally/Ally_for_LMS/Administrator/Ally_Institution_Report/Integrate_Ally_API)

There are also two useful videos:

* [API Tutorial – 01](https://vimeo.com/906534188)
* [API Tutorial – 02](https://vimeo.com/906540326)

## Endpoints

| **Method** | **URL** | **HTTP Request Type** | **Description** |
| --- | --- | --- | --- |
| Overall | https://**[region]**/api/v2/clients/**[Ally Client ID]**/reports/overall | Get | By default, this method returns a dataset with information about the course, WYSIWYG, and files' scores and file types included in each course from the LMS instance, regardless of whether Ally is enabled or not. |
| Issues | https://**[region]**/api/v2/clients/**[Ally Client ID]**/reports/issues | Get | By default, this method returns a dataset with the information related to all the accessibility issues happening in each course, included in the LMS instance, regardless of whether Ally is enabled or not. |

## How to obtain the Authorisation Token

1. Access Blackboard as Admin
2. Open **Admin panel**
3. Select **Ally Report**
4. Select **Export** button
5. Select **Connect external tool**
6. **Copy token**

Tokens last for one year.

## Example using Curl

curl -X GET -H "Authorization: Bearer REMOVED" https://prod-eu-central-1.ally.ac/api/v2/clients/577/reports/issues

## Filtering

As described in [Reporting API Endpoints](https://help.blackboard.com/Ally/Ally_for_LMS/Administrator/Ally_Institution_Report/Reporting_API_endpoints) there are a number of filters. Here are some useful ones.

### Filter by internal course id

Filtering by our “user facing course id” does not seem to be possible. But we can filter by internal course id:

?courseId=\_224036\_1

#### Worked example

curl -X GET -H "Authorization: Bearer REMOVED" <https://prod-eu-central-1.ally.ac/api/v2/clients/577/reports/issues?courseId=_224036_1>

### Filter by course name

We can filter by course name, but have to account for spaces and accented characters:

?courseName=23-24-Allergy%20Dissertation-34625

#### Worked example

curl -X GET -H "Authorization: Bearer REMOVED" <https://prod-eu-central-1.ally.ac/api/v2/clients/577/reports/issues?courseName=23-24-Allergy%20Dissertation-34625>

## Example output

### Overall endpoint

curl -X GET -H "Authorization: Bearer REMOVED" https://prod-eu-central-1.ally.ac/api/v2/clients/577/reports/overall?courseId=\_224036\_1 |jq

 "data": [

 {

 "application/x-link-web": 10,

 "observedDeletedOn": "",

 "termName": "2023-24 Modules",

 "courseId": "\_224036\_1",

 "application/x-item": 0,

 "image": 44,

 "termId": "\_162\_1",

 "document": 6,

 "allyEnabled": true,

 "pdf": 8,

 "application/x-folder": 0,

 "courseCode": "MEDI6078-34625-23-24",

 "departmentId": "\_108\_1; \_267\_1",

 "totalFiles": 63,

 "courseUrl": "https://blackboard.soton.ac.uk/webapps/blackboard/execute/courseMain?course\_id=\_224036\_1",

 "application/x-lti-launch": 0,

 "departmentName": "Clinical and Experimental Sciences (FC); ULTRA",

 "application/x-page": 0,

 "application/x-link-discussion-topic": 0,

 "filesScore": 0.8402830527727062,

 "application/x-learning-module": 0,

 "numberOfStudents": 22,

 "html-page": 0,

 "lastCheckedOn": "2024-04-17 13:43:09",

 "WYSIWYGScore": 0.9890229044834304,

 "totalWYSIWYG": 57,

 "application/x-lesson": 0,

 "application/x-document": 47,

 "courseName": "23-24-Allergy Dissertation-34625",

 "other": 5,

 "overallScore": 0.9140062836206304,

 "presentation": 0

 }

 ],

 "metadata": {

 "filteredTotal": 1,

 "total": 127786,

 "to": 0,

 "status": "Successful",

 "from": 1

 }

}

### Issues endpoint

curl -X GET -H "Authorization: REMOVED" https://prod-eu-central-1.ally.ac/api/v2/clients/577/reports/issues?courseId=\_224036\_1 |jq

 "data": [

 {

 "imageDecorative2": 6,

 "htmlEmptyHeading2": 0,

 "imageSeizure1": 0,

 "observedDeletedOn": "",

 "htmlObjectAlt2": 0,

 "security1": 0,

 "termName": "2023-24 Modules",

 "courseId": "\_224036\_1",

 "languageCorrect3": 0,

 "htmlColorContrast2": 0,

 "htmlLinkName3": 1,

 "termId": "\_162\_1",

 "languagePresence3": 4,

 "allyEnabled": true,

 "htmlLabel2": 0,

 "alternativeText2": 2,

 "htmlImageAlt2": 1,

 "htmlImageRedundantAlt3": 0,

 "headingsPresence2": 2,

 "courseCode": "MEDI6078-34625-23-24",

 "headingsSequential3": 0,

 "departmentId": "\_108\_1; \_267\_1",

 "htmlHeadingsPresence2": 0,

 "courseUrl": "https://blackboard.soton.ac.uk/webapps/blackboard/execute/courseMain?course\_id=\_224036\_1",

 "headingsStartAtOne3": 4,

 "departmentName": "Clinical and Experimental Sciences (FC); ULTRA",

 "htmlHeadingsStart2": 18,

 "htmlTdHasHeader2": 0,

 "htmlList3": 1,

 "htmlDefinitionList3": 0,

 "htmlCaption2": 0,

 "tableHeaders2": 4,

 "htmlEmptyTableHeader2": 1,

 "htmlHasLang3": 0,

 "ocred2": 0,

 "scanned1": 0,

 "htmlBrokenLink2": 0,

 "numberOfStudents": 22,

 "htmlHeadingOrder3": 1,

 "lastCheckedOn": "2024-04-17 13:43:09",

 "headingsHigherLevel3": 0,

 "contrast2": 4,

 "title3": 5,

 "imageOcr3": 0,

 "tagged2": 2,

 "libraryReference": 14,

 "courseName": "23-24-Allergy Dissertation-34625",

 "imageContrast2": 2,

 "imageDescription2": 6,

 "htmlTitle3": 0,

 "parsable1": 0

 }

 ],

 "metadata": {

 "filteredTotal": 1,

 "total": 127786,

 "to": 0,

 "status": "Successful",

 "from": 1

 }

}

## What data is supplied by each API and how does it compare with the “courses.csv” file?

The table below lists the fields returned in the ally courses.csv export, the overall API end point, and the issues endpoint.

| **Courses.csv** | **Overall API endpoint** | **Issues API Endpoint** |
| --- | --- | --- |
| Ally enabled | allyEnabled | allyEnabled |
| AlternativeText:2 |  | alternativeText2 |
| application/x-document | application/x-document |  |
| application/x-folder | application/x-folder |  |
| application/x-item | application/x-item |  |
| application/x-learning-module | application/x-learning-module |  |
| application/x-lesson | application/x-lesson |  |
| application/x-link-discussion-topic | application/x-link-discussion-topic |  |
| application/x-link-web | application/x-link-web |  |
| application/x-lti-launch | application/x-lti-launch |  |
| application/x-page | application/x-page |  |
| Contrast:2 |  | contrast2 |
| Course code | courseCode | courseCode |
| Course id | courseId | courseId |
| Course name | courseName | courseName |
| Course url | courseUrl | courseUrl |
| Department id | departmentId | departmentId |
| Department name | departmentName | departmentName |
| document | document |  |
| Files score | filesScore |  |
| HeadingsHigherLevel:3 |  | headingsHigherLevel3 |
| HeadingsPresence:2 |  | headingsPresence2 |
| HeadingsSequential:3 |  | headingsSequential3 |
| HeadingsStartAtOne:3 |  | headingsStartAtOne3 |
| HtmlBrokenLink:2 |  | htmlBrokenLink2 |
| HtmlCaption:2 |  | htmlCaption2 |
| HtmlColorContrast:2 |  | htmlColorContrast2 |
| HtmlDefinitionList:3 |  | htmlDefinitionList3 |
| HtmlEmptyHeading:2 |  | htmlEmptyHeading2 |
| HtmlEmptyTableHeader:2 |  | htmlEmptyTableHeader2 |
| HtmlHasLang:3 |  | htmlHasLang3 |
| HtmlHeadingOrder:3 |  | htmlHeadingOrder3 |
| HtmlHeadingsPresence:2 |  | htmlHeadingsPresence2 |
| HtmlHeadingsStart:2 |  | htmlHeadingsStart2 |
| HtmlImageAlt:2 |  | htmlImageAlt2 |
| HtmlImageRedundantAlt:3 |  | htmlImageRedundantAlt3 |
| HtmlLabel:2 |  | htmlLabel2 |
| HtmlLinkName:3 |  | htmlLinkName3 |
| HtmlList:3 |  | htmlList3 |
| HtmlObjectAlt:2 |  | htmlObjectAlt2 |
| html-page | html-page |  |
| HtmlTdHasHeader:2 |  | htmlTdHasHeader2 |
| HtmlTitle:3 |  | htmlTitle3 |
| image | image |  |
| ImageContrast:2 |  | imageContrast2 |
| ImageDecorative:2 |  | imageDecorative2 |
| ImageDescription:2 |  | imageDescription2 |
| ImageOcr:3 |  | imageOcr3 |
| ImageSeizure:1 |  | imageSeizure1 |
| LanguageCorrect:3 |  | languageCorrect3 |
| LanguagePresence:3 |  | languagePresence3 |
| Last checked on | lastCheckedOn | lastCheckedOn |
| LibraryReference |  | libraryReference |
| Number of students | numberOfStudents | numberOfStudents |
| Observed deleted on | observedDeletedOn | observedDeletedOn |
| Ocred:2 |  | ocred2 |
| other | other |  |
| Overall score | overallScore |  |
| Parsable:1 |  | parsable1 |
| pdf | pdf |  |
| presentation | presentation |  |
| Scanned:1 |  | scanned1 |
| Security:1 |  | security1 |
| TableHeaders:2 |  | tableHeaders2 |
| Tagged:2 |  | tagged2 |
| Term id | termId | termId |
| Term name | termName | termName |
| Title:3 |  | title3 |
| Total files | totalFiles |  |
| Total WYSIWYG | totalWYSIWYG |  |
| WYSIWYG score | WYSIWYGScore |  |