

MSDF SDCOE Ed-Fi Transcript Prototype:

Transcript-Backend and CLI Reference

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August 2021 Note:

There is a more comprehensive version of this document in markdown format, with filename “*MSDF SDCOE Ed-Fi Transcript Prototype Backend and CLI Reference v1.0.md*” which should be located in the same folder as this document.

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Documentation Notes

Note: There are sections in this document where a URL, domain name, user name, password, IP address or email address are **highlighted in light orange**. This signifies where each person or organization installing this application will substitute their own information.

Transcript-Backend

In the transcript-backend folder, this is the module that deals with interaction with ODS and for creating standard JSON and pdf files.

```
# in project directory, navigate to transcript-backend module
$ cd transcript-backend
```

Installing Packages

```
$ yarn
```

Help Menu

```
$ yarn transcript-cli --help
```

```
yarn run v1.22.10
warning package.json: License should be a valid SPDX license expression
$ node ./cli/transcript-cli.js --help
Usage: standard-transcript [options] [command]

CLI for Standard Transcript Generator

Options:
  -V, --version                output the version number
  -h, --help                   display help for command

Commands:
  query-composite [compositeName]          Query a specific composite
                                           (educationOrganizationHierarchy, studentTranscript)
  query-transcript-by-student-id [odsConfigFile] [studentId]      Query standard
  transcript provided a studentId
  query-transcript-by-student-demographics [odsConfigFile] [firstName] [lastName] [dateOfBirth] Query
  standard transcript provided student demographics (path to odsConfig file) (firstName, lastName, dob in
```

yyyy-mm-dd)	
render-standard-transcript-pdf [fileName] [destination]	Renders a standard
transcript pdf given a file with a JSON transcript	
render-rop-transcript-pdf [fileName] [destination]	Renders a ROP certificate
pdf given filename with a JSON ROP certificate	
validate-standard-json [fileName]	Validates whether a json file
fits a standard transcript	
handlebar-model-for-standard [fileName]	Creates handlebar model
for standard json. Pass path to standard	
composite-to-standard [transcriptFile] [enrollmentsFile] [educationalOrganizationFile]	Prints
standard JSON for the given composite files	
help [command]	display help for command

Edit .env file

```
$ cp .env.example .env
$ nano .env
# Update the .env values
```

```
CLIENT_ID=dK4jX....
CLIENT_SECRET=RtFWvN...
BASE_URL=https://edfiapi.yourdomain.com
```

And update the client_id, client_secret and base_url in the odsConfig.json file.

```
$ nano cli/configs/odsConfig.json
# Update the values of clientId, clientSecret and baseUrl
```

```
# sample content of odsConfig.json file
{
  "odsConfigs": [
    {
      "clientId": "dK4jX....",
      "clientSecret": "RtFWvN...",
      "baseUrl": "https://edfiapi.yourdomain.com"
    }
  ]
}
# Make sure that the above are correct
```

Commands

1. Query Composite

```
$ yarn transcript-cli query-composite [compositeName]
```

Query a specific composite (educationOrganizationHierarchy, studentTranscript)

Example:

```
$ yarn transcript-cli query-composite educationOrganizationHierarchy
```

```
$ node ./cli/transcript-cli.js query-composite educationOrganizationHierarchy
Authorizing to https://edfiapi.yourdomain.com
Authorized to https://edfiapi.yourdomain.com
Fetching
https://edfiapi.yourdomain.com/composites/v1/SDCOE/Transcript/EducationOrganizationHierarchi
es
[
  {
    schoolResourceId: '1d4f3e85e7fd4b55aed460d41fd26589',
    schoolId: 255901001,
    nameOfSchool: 'Grand Bend High School',
    localEducationAgencyResourceId: '922d768f6b3f4ed78ce77d13e44b505a',
    localEducationAgencyId: 255901,
    nameOfLocalEducationAgency: 'Grand Bend ISD',
    addresses: [ [Object], [Object] ]
  },
  {
    schoolResourceId: 'caf986184c19428c8489119d13353fcb',
    schoolId: 255901044,
    nameOfSchool: 'Grand Bend Middle School',
    localEducationAgencyResourceId: '922d768f6b3f4ed78ce77d13e44b505a',
    localEducationAgencyId: 255901,
    nameOfLocalEducationAgency: 'Grand Bend ISD',
    addresses: [ [Object], [Object] ]
  },
  {
    schoolResourceId: '461bf6cbf8834ed0bd76670f40790bd0',
    schoolId: 255901107,
    nameOfSchool: 'Grand Bend Elementary School',
    localEducationAgencyResourceId: '922d768f6b3f4ed78ce77d13e44b505a',
    localEducationAgencyId: 255901,
    nameOfLocalEducationAgency: 'Grand Bend ISD',
    addresses: [ [Object], [Object] ]
  }
]
Done in 2.77s
```

2. Query Transcript by student Id

```
$ yarn transcript-cli query-transcript-by-student-id [odsConfigFile] [studentId]
```

Query standard transcript provided a studentId

Example:

```
$ yarn transcript-cli query-transcript-by-student-id cli/configs/odsConfig.json 604821
```

Production Environment

```
# linux
$ NODE_ENV=production yarn transcript-cli query-transcript-by-student-id
cli/configs/odsConfig.json 604821
# windows
$ SET NODE_ENV=production && yarn transcript-cli query-transcript-by-student-id
cli/configs/odsConfig.json 604821
```

```
$ node ./cli/transcript-cli.js query-transcript-by-student-id cli/configs/odsConfig.json 604821
Authorizing to https://edfiapi.yourdomain.com
Authorized to https://edfiapi.yourdomain.com
Fetching
https://edfiapi.yourdomain.com/composites/v1/SDCOE/Transcript/StudentTranscripts?studentUniq
ueId=604821
Authorizing to https://edfiapi.yourdomain.com
Authorized to https://edfiapi.yourdomain.com
Fetching
https://edfiapi.yourdomain.com/composites/v1/SDCOE/Transcript/EducationOrganizationHierarchi
es
MainTranscript {
  studentTranscript: StudentTranscript {
    resourceId: 'a46168c9fb094172a23fdb9ab2ce9177',
    transcriptRunDate: '06/17/2021',
    studentUniqueId: '604821',
    studentUniqueIdType: 'SIS',
    firstName: 'Tyrone',
    lastSurname: 'Dyer',
    birthDate: '2003-11-13T00:00:00',
    birthSexDescriptor: null,
    studentLocalId: '821',
    studentIdentificationSystemDescriptor:
'uri://ed-fi.org/StudentIdentificationSystemDescriptor#Local',
    demographics: [ [Demographics] ],
    guardians: [ [Guardian], [Guardian] ],
```

```

    studentAcademicRecords: [ [AcademicRecord], [AcademicRecord] ],
    programs: [],
    studentAssessments: [],
    awardsAchievements: []
  }
}
Done in 13.84s.

```

3. Query Transcript by student demographics

```
$ yarn transcript-cli query-transcript-by-student-demographics [odsConfigFile] [firstName]
[lastName] [dateOfBirth]
```

Query standard transcript provided student demographics (path to odsConfig file)
(firstName, lastName, dob in yyyy-mm-dd)

Example:

```
$ yarn transcript-cli query-transcript-by-student-demographics cli/configs/odsConfig.json
Tyrone Dyer 2003-11-13
```

Production Environment

```

# linux
$ NODE_ENV=production yarn transcript-cli query-transcript-by-student-demographics
cli/configs/odsConfig.json Tyrone Dyer 2003-11-13
# windows
$ SET NODE_ENV=production && yarn transcript-cli
query-transcript-by-student-demographics cli/configs/odsConfig.json Tyrone Dyer
2003-11-13

```

```

$ node ./cli/transcript-cli.js query-transcript-by-student-demographics cli/configs/odsConfig.json
Tyrone Dyer 2003-11-13
Authorizing to https://edfiapi.yourdomain.com
Authorized to https://edfiapi.yourdomain.com
Fetching
https://edfiapi.yourdomain.com/composites/v1/SDCOE/Transcript/StudentTranscripts?firstName=T
yrone&lastSurname=Dyer&birthDate=2003-11-13
Authorizing to https://edfiapi.yourdomain.com
Authorized to https://edfiapi.yourdomain.com
Fetching
https://edfiapi.yourdomain.com/composites/v1/SDCOE/Transcript/EducationOrganizationHierarchie
s

```

```

MainTranscript {
  studentTranscript: StudentTranscript {
    resourceId: 'a46168c9fb094172a23fdb9ab2ce9177',
    transcriptRunDate: '06/17/2021',
    studentUniqueId: '604821',
    studentUniqueIdType: 'SIS',
    firstName: 'Tyrone',
    lastSurname: 'Dyer',
    birthDate: '2003-11-13T00:00:00',
    birthSexDescriptor: null,
    studentLocalId: '821',
    studentIdentificationSystemDescriptor:
'uri://ed-fi.org/StudentIdentificationSystemDescriptor#Local',
    demographics: [ [Demographics] ],
    guardians: [ [Guardian], [Guardian] ],
    studentAcademicRecords: [ [AcademicRecord], [AcademicRecord] ],
    programs: [],
    studentAssessments: [],
    awardsAchievements: []
  }
}
Done in 45.97s.

```

4. Render Standard Transcript PDF

```
$ yarn transcript-cli render-standard-transcript-pdf [fileName] [destination]
```


Renders a standard transcript pdf given a file with a JSON transcript

Example:

```
$ yarn transcript-cli render-standard-transcript-pdf
transcripts/resources/standard-large-sample.json output.pdf
```

```
$ node ./cli/transcript-cli.js render-standard-transcript-pdf
transcripts/resources/standard-large-sample.json output.pdf
PDF Rendered : output.pdf
SUCCESS
Done in 1.76s.
```

Output File created: [output.pdf](#)



Grand Bend Elementary School				
TRANSCRIPT OF STUDENT PROGRESS				
Tyrone Dyer			PARENT/GUARDIAN INFO	
Student ID:	821	Name:	Carmen Dyer	
Sex:	Male	Address:	243 New Street, Grand Bend, TX 78834	
D.O.B:	11/13/2003	Phone:	(940) 342-7322	
Perm ID#:	604821			
ID	COURSE TITLE	MARK	ATT	CMP
Fall Semester 2012 Grand Bend Elementary School				
ART-03	Art, Grade 3	F	1	0.5
ELA-03	English Language Arts, Grade 3	D	1	1
MATH-03	Mathematics, Grade 3	C	1	1
MUS-03	Music, Grade 3	D	1	1
PE-03	Physical Education, Grades 1-6	B	1	1
SCI-03	Science, Grade 3	A	1	1
SS-03	Social Studies, Grade 3	B	1	1
		CREDIT ATT: 7	CMP: 6	
Spring Semester 2012 Grand Bend Elementary School				

5. Render ROP Transcript PDF

```
$ yarn transcript-cli render-rop-transcript-pdf [fileName] [destination]
```

Renders a ROP certificate pdf given filename with a JSON ROP certificate

Example:

```
$ yarn transcript-cli render-rop-transcript-pdf
transcripts/resources/standard-large-sample.json outputROP.pdf
```

```
$ node ./cli/transcript-cli.js render-rop-transcript-pdf
transcripts/resources/standard-large-sample.json outputROP.pdf
PDF Rendered : outputROP.pdf
SUCCESS
Done in 1.09s.
```

Output File created: [outputROP.pdf](#)

The screenshot displays a PDF document titled "San Diego County Office of Education Regional Occupational Program". The document contains the following information:

- Student Name:** Tyrone Dyer
- Birth Date:** November 13, 2003
- Gender:** M
- Course Section:** ART-03
- Title:** Art, Grade 3
- Course Hours:** 0.5
- Hours:** 0.5
- Course Section:** ELA-03
- Title:** English Language Arts, Grade 3
- Course Hours:** 1
- Hours:** 1
- Course Section:** MATH-03
- Title:** Mathematics, Grade 3
- Course Hours:** 1
- Hours:** 1
- Course Section:** MUS-03
- Title:** Music, Grade 3
- Course Hours:** 1
- Hours:** 1
- Total Hours:** 3.5

The PDF also includes a sidebar with three thumbnails labeled 1, 2, and 3, and a footer with the following text:

Re: Transcript of Attendance
In accordance with the authorization to release student information of the file in this office, the following data is provided:
Please Note: Pursuant to Education Code Section 49075, you are hereby notified that the transmission of the above stated information to others is strictly forbidden without the written consent of the parent (if the student is under 18 years of age) or the student.
Duplicate certificate older than three years are issued in a form of a transcript.
Learning and Leadership Division
Curriculum and Instruction
www.sdcour.net