Industry Credentials Implementation Guide

FEBRUARY 3, 2020

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About the Industry Credentials Project

The intake of industry credential data is a key component of the Industry Certification and Education Performance Data System project being developed by the National Student Clearinghouse in partnership with the National Association of Manufacturers and the Manufacturing Institute.

The project goals include:

- Learners: Reliable, transparent data on meaningful program outcomes to improve education decision making and accelerate the path to full employment
- Schools: Expanded access to data needed for reporting requirements, informing opportunities for program improvement and/or expansion
- Employers: Identification of high-performing institutions and quality sources of talent to improve hiring and training decision making
- Certification Providers: Expanded access to employment data to measure the ROI of certification attainment and access to education data showing student achievement

Introduction

This guide explains how to create a file to send industry certificate/credential and other educational achievements data to the Clearinghouse. We encourage you to provide as much information as possible, so the data reflects your students' academic accomplishments for reports.

Please follow these steps when preparing your file to send to the Clearinghouse:

- Read the guide and all exhibits thoroughly
- Ensure all necessary data is captured accurately
- After your program is written and you have verified the accuracy of the data in the file, submit your file to the Clearinghouse
- Upon receipt of your file, the Clearinghouse will perform two types of validations: structural and field. If your file has error(s), you will receive an email notification. You can also log on to the file submission summary page to view your errors and solutions. If your file requires modifications, you will need to submit a new file.
- Once a file is successfully submitted, the data will be loaded into our database and become available for reports

HOW SHOULD THE DATA BE SUBMITTED?

Once you send in your Data Sharing Agreement to the Clearinghouse, a secure FTP account will be set up for you to use to submit credential files.

ESTABLISHING A SECURE FTP ACCOUNT

The National Student Clearinghouse supports secure FTP to safely and securely collect, store, manage, and distribute sensitive information between your organization and the Clearinghouse. You must establish a Clearinghouse secure FTP account at least two business days before you expect to send your first file.

TRANSMITTING FILES

You will use your Clearinghouse Industry Credential-specific secure FTP account to transmit your file.
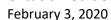
Key features of the secure FTP system are:

- Employs an easy-to-use Web browser interface so users can quickly and securely send and receive files
- Stores files using the U.S. federal encryption standard, FIPS 140-2 validated AES encryption
- Eliminates the need to encrypt or compress data files or enter complicated FTP line commands prior to file transmission
- Allows users with automated environments to use no- or low-cost secure FTP clients to exchange files over encrypted FTPS and SSH connections

Secure FTP supports the following methods of securely exchanging files with the Clearinghouse:

- Web browser interface
- FTP over SSH (SFTP)
- FTP over SSL (FTPS)

The Web browser interface is a quick, easy method of manually transmitting files. For the Web browser interface, follow the instructions below or refer to Secure FTP Help on the Clearinghouse Self-Help Center at https://www.studentclearinghouse.org/help.

1. From a web browser, go to https://ftps.nslc.org
2. Enter your Clearinghouse username and password. (You will receive an email with your credentials as soon as your agreement is set up with us.)
   - Username is NOT case sensitive; password IS case sensitive
   - Your account will be suspended if you attempt to log in too many times with an incorrect password
   - If you are logging in for the first time, you may be prompted to change your password. The password rules are:
     i. Minimum length is six characters
     ii. Must contain at least one alphabetical and one numerical character
     iii. Must not resemble your username
2. Once you are logged in, select "Upload a File Now" and follow the prompts

For automated environments, please refer to Secure FTP Help on the Clearinghouse Self-Help Center at https://www.studentclearinghouse.org/help.

Secure FTP File Receipt Confirmation
The Clearinghouse will send a file receipt confirmation to the email address you provided on the service agreement. If you do not receive a confirmation email within 24 hours of transmission, contact us at secureftp@studentclearinghouse.org.

Questions?
If you have questions or need assistance with secure FTP, contact Clearinghouse technical support at secureftp@studentclearinghouse.org.

If you have other questions or need assistance, contact your Clearinghouse Implementation Coordinator.

Data Record Layouts

This section provides the specifications for laying out and formatting data files in preparation for sending Industry Credential files via secure FTP to the Clearinghouse. It is essential that files are formatted in accordance with the Clearinghouse's specifications so they can be loaded to our database.

File Format
The file must be in a pipe delimited file format and contain a header record, body record and trailer record. Please see the following tables for more details.

Header Record Layout

The header record identifies the type of data contained in the body of the file. For Industry Credentials data, it is important that the value "IC1" appear in the record type field to ensure it is processed and merged accurately.

All files must have a header, the Clearinghouse cannot process the file without a header.

Example of a Header Record:

IC1|10031103|100000020||||20160601||20160501||CLientFileID100||||

Column for Excel Format	Field Name	Max Length	Req'd	Type	Comments
A	Record Type	3	R	AN	Value is "IC1"
B	Service Account	15	R	N	An account number that the Clearinghouse will be assigned with the service agreement. Must be an active* service account and associated with the sending organization in our enterprise account management application, which will be initially setup by our implementation team. *Your service account will be active once your completed and signed service agreement is submitted to the Clearinghouse.
C	Organization Code	9	R	N	Organization's unique code, please use the Taxpayer ID (no hyphens)
D	Filler 1	0	O	AN	Filler fields for future enhancements to the file
E	Filler 2	0	O	AN	Filler fields for future enhancements to the file
F	Filler 3	15	O	AN	Filler fields for future enhancements to the file
G	Submission Date	8	R	N	Submission date the file was submitted to the Clearinghouse, must be in YYYYMMDD format and cannot be future date
H	Filler 4	0	0	AN	Filler fields for future enhancements to the file

Column for Excel Format	Field Name	Max Length	Req'd	Type	Comments
I	Certification Date	8	R	N	The date when the data is certified by
J	Filler 5	0	O	AN	Filler fields for future enhancements to the file
K	Client File ID	50	R	S	File name that the sending organization wants to use (such as Fall 2016 Credentials)
L	Filler 6	0	O	AN	Filler fields for future enhancements to the file
M	Filler 7	0	O	AN	Filler fields for future enhancements to the file
N	Filler 8	0	O	AN	Filler fields for future enhancements to the file
O	Filler 9	0	O	AN	Filler fields for future enhancements to the file

The "Req'd" column in the layouts displays the required codes in this document that are "R" required, "C" conditional, and "O" optional. Conditional means that in certain circumstances, the field is required. The file layout and indicated exhibits provide additional information.

Detail Record Layout

All files must have at least one detail record.

Examples of a detail record: Total of 53 fields must be present, if the fields require the value be entered. If the field is optional there must be a pipe | for that field in the file of each record. All detail records must start with record type "D1."

Example of detail record, which contains all required and optional data:

D1|596821111||John|J|Doe|Mr|Johnathan|Joe|CS|19800101|Credential ID 123|W|M|1|2|Northern Virginia Community College|NVCC20170412|1 main St |Annandale|NC|22003|USA|abcx@gmail.com|Northern Virginia Community College|Community College |Welding- Basic Techniques Career Studies Certificate|Certificate|Career Preparation |1|1|SENS Program|Procter Center |1|2|3|4|5|Pass|Basic Welding|Material|Heat|SideEffect|Industry|Pass|20160815|1|Pass|Advanced|20160915|20161014 |20170101|GasWelding|1

Example of detail record, which contains all required and some optional data: There are empty pipes in place for unavailable information.

D1|||John||Smith|||||19800101|||||||||Herndon|VA|20147|USA| Someone@somewhere.com|| Community College| Career Advancement||1|||||||||||||||||||1|Pass||20140202||||

Data specification for detail record:

Column for Excel Format	Field Name	Length	Req'd	Type	Comments
A	Record Type	2	R	AN	Value for each detail record is "D1"
B	Student SSN	9	O	N	Numbers only, no hyphens. Last 4 is acceptable.
C	Credential Block	1	O	A	Block Student Credential. Allowable values: "Y" for yes, student's credentials should be blocked and not shared with educational institutions, verification agencies, or other industry credential providers. "N" for no. This will be read as the student's credentials may be shared. Blank: Same as "NO" credentials are not blocked. If you previously submitted a record and a student requested that you not share the credential afterwards, include the student in a file as a "Y" and we will stop sharing the student's credential.
D	First Name	60	R	AN	Student's first name
E	Middle Name	60	O	AN	Student's middle name or, if full name is not available, middle initial
F	Last Name	60	R	AN	Student's last name. Last name field allows the following special characters: hyphen, apostrophe and period. Please remove any other special characters from last name.
G	Name Suffix	5	O	AN	e.g. III, JR, SR, etc.
H	Previous Last Name	60	O	AN	Student's previous last name
I	Previous First Name	60	O	AN	Student's previous first name
J	Students Preferred Name	60	O	AN	Student's preferred name
K	Date of Birth	8	O	N	Student's date of birth in YYYYMMDD

Column for Excel Format	Field Name	Length	Req' d	Type	Comments
L	Credential Engine Identifier	40	O	AN	Credential Engine Identifier is the identifier used to register with the credential engine (e.g., CTID number)
M	Race and Ethnicity	2	O	A	Please select a valid value. The race/ ethnicity code and descriptions are: • A= Nonresident Alien • AN = Asian • B = Black, Non-Hispanic • IA = American Indian/Alaskan Native • NP = Native Asian / Pacific Islander • H = Hispanic • HP = Native Hawaiian or Other Pacific Islander • W = White, Non-Hispanic • TM = Two or more Race/Ethnicity categories
N	Gender	1	O	A	Student gender. Valid values: • M = Male • F = Female • U= Unknown/Not Specified
O	Military Status	1	O	N	Provide military status. Valid values: • 0 = None • 1 = Active Duty • 2 = Veteran • P3 = Reserves/Guard
P	Institution Type	1	O	N	Type of school the individual attended to receive training or instruction related to certificate. Valid values: • 0 = Unknown • 1 = Secondary • 2 = Post-Secondary
Q	Institution Name	150	O	S	Name of Institute the individual attended to receive training or instruction related to the certificate

Column for Excel Format	Field Name	Length	Req' d	Type	Comments
R	Industry Credential Provider ID	20	O	AN	Industry credential provider identifier. This field can be used to indicate a student- or credential-level identifier used by your organization.
S	Street Line 1	40	O	S	Street address of the student
T	City	30	O	AN	City address of the student (no special characters allowed other than space, hyphen, apostrophe or period)
U	State	2	O	A	State abbreviation of the student's address, if foreign please enter "FO"
V	Zip	15	O	AN	Zip Code of the student's address
W	Country	80	O	AN	Country of the student's address (no special characters other than spaces)
X	Personal Email Address	255	O	S	Personal email address of the student (no pipe allowed)
Y	Training Institution	150	O	S	Name of the institution(s) where related education and training took place
Z	Credential Organization Type	60	R	AN	Type of organization that creates and issues one or more credential, such as university, community college, industry/professional certification organization or government agency (no special characters other than spaces)
AA	Credential/Certification Name	80	R	S	Title or name of the credential/ certification (all special characters, other than pipes|, are allowed)
AB	Credential Type	20, if free	R	AN	Type of credential issued by the credentialing organization, such as degree, certificate, certification or license
AC	Purpose of the credential	150	R	AN	Intended purpose(s) or use(s) of the credential, including general education, career preparation and advancement, preparation for further education and credentialing (no special characters, other than spaces)

Column for Excel Format	Field Name	Length	Req'd	Type	Comments
AD	Certification Endorsed Curriculum/Program	1	O	N	This field is populated with "yes," if the credentialing body provides an endorsed training curriculum for institutions or training providers to use to teach
AE	Certificate Endorsing Industry	1	O	N	Credential provider endorsing the certification (i.e., AWS, MSSC, NIIMS or other valid values) 1 = AWS 2 = NIMS 3 = MSSC 4 = Other
AF	Certified Program	60	O	S	Certified program (e.g., AWS has SENS program)
AG	Credential/Certification Test Provider	60	O	S	Credential/certification test provider. Can be an organization facility or online test site website address.
AH	Practical Test-1	60	O	S	Practical test includes experiential learning, such as hands-on application of welding skills. The student can take up to 5 practical tests in order to attain a given certification.
AI	Practical Test-2	60	O	S	
AJ	Practical Test-3	60	O	S	
AK	Practical Test-4	60	O	S	
AL	Practical Test-5	60	O	S	
AM	Practical Test Score	20	O	AN	Score or level of score that the student achieved (pass/fail/completed)
AN	Knowledge Test-1	60	O	S	Knowledge tests are typically written tests that assess a student's knowledge of the subject matter related to the certification program requirements. The student can take up to 5 knowledge-based tests in order to attain a given certification.
AO	Knowledge Test-2	60	O	S	
AP	Knowledge Test-3	60	O	S	

Column for Excel Format	Field Name	Length	Req' d	Type	Comments
AQ	Knowledge Test-4	60	O	S	
AR	Knowledge Test-5	60	O	S	
AS	Knowledge Test Score	20	O	AN	Score or level of score that the student achieved (pass/fail/completed)
AT	Credential Test Date	8	R	N	Test date; must be in YYYYMMDD format. The date when the student took the test, not the date the certification was awarded.
AU	Credential Status	1	R	N	1 = Pass, completed 2 = Fail
AV	Score/Score Level	20	R	AN	Score or level of score that the student achieved
AW	Assessment of Learning	40	O	S	Level of learning (e.g., level I, II, III, or advanced, beginning, etc.)
AX	Credential Award Date	8	R	N	Date the credential was awarded; must be in YYYYMMDD format
AY	Expiration Date	8	O	N	Date the credential will expire; must be in YYYYMMDD format
AZ	Renewal Date	8	O	N	Date the credential must be renewed by
BA	Apprenticeship	20	O	AN	Name of apprenticeship completed (no special characters, other than spaces.)
BB	Level of Apprenticeship	1	O	N	Level of any apprenticeship

Trailer Record Layout

All files must have a trailer, the Clearinghouse cannot process the file without a trailer.

Example of a Trailer Record: A total of three fields must be present, if the fields require the value to be entered. If the field is optional, there must be a pipe for that field | in the file for each record. Trailer records must start with record type T1.

T1|10|

Column for Excel Format	Field Name	Required	Max Length	Data Type	Comments
A	Record Type	R	5	AN	Value must be "T1"
B	Total Record Count	R	10	N	Total count equals the number of student detail records plus two (the header and trailer records are included in the total)
C	Filler 1	O	0	TBD	Filler fields for future enhancements to the file

Other noteworthy information on the trailer record:

- Trailer record should be the last row in the file, no blank spaces, etc.
- Alpha = alphabetical characters only
- Numeric = numbers only
- Alphanumeric = alphabetical characters and numbers
- String = alphabetical characters, numbers and special characters, such as hyphen, underscore, ampersand, exclamation point, etc.
- A valid value must be provided for all required fields, **please do not enter the word "Null" as a value.**

Sample Industry Credential Pipe Delimited File:

IC1|10031103|100000020||||20160601||20160501||FallFile||||
D1|596821111||John|J|Doe|Mr|Johnathan|Joe|CS|19800101|Credential ID
123|W|M|1|2|Northern Virginia Community College|NVCC20170412|1 main St
|Annandale|NC|22003|USA|abcx@gmail.com|Northern Virginia Community
College|Community College |Welding- Basic Techniques Career Studies
Certificate|Certificate|Career Preparation |1|1|SENS Program|Procter Center
|1|2|3|4|5|Pass|Basic
Welding|Material|Heat|SideEffect|Industry|Pass|20160815|1|Pass|Advanced|20160915|201
61014|20170101|GasWelding|1
D1|596821111||John|J|Doe|Mr|Johnathan|Joe|CS|19800101|Credential ID
123|W|M|1|2|Northern Virginia Community College|NVCC20170412|1 main St
|Annandale|NC|22003|USA|abcx@gmail.com|Northern Virginia Community
College|Community College |Welding- Basic Techniques Career Studies
Certificate|Certificate|Career Preparation |1|1|SENS Program|Procter Center
|1|2|3|4|5|Pass|Basic
Welding|Material|Heat|SideEffect|Industry|Pass|20160815|1|Pass|Advanced|20160915|201
61014|20170101|GasWelding|1
T1|4

If you have no data for an optional field or the filler fields, you must insert a pipe to replace the null content. Many of the optional fields in the file are critical to better reporting outcomes. **We encourage you to submit optional fields to support your goal.**

RESOURCES

To access **FTP Support**, visit http://secureftp.helpdocsonline.com/home.

Need more support? Email the **Industry Credentials team** at
industrycredentials@studentclearinghouse.org