**ERS Interface Specification version x.0 – August 2023**

This document describes the format of each of the interface files that will be input to the Effort Reporting System (ERS). The interface files share these common characteristics:

* Sequential “flat files”
* All data values converted to character
* Dates converted to CHAR(10) using MM/DD/YYYY format
* Encoding converted as required by platforms (e.g., EBCDIC to ASCII if going from MVS to Unix)

For the purposes of this specification, a format of “NOT NULL” means that a value must be present in the interface file, otherwise the value may be null, represented as a series of spaces or blank characters of the appropriate length.

These interface files are expected to be loaded into ERS on a recurring basis, based on campus processing schedules. For ERS processing purposes, the recommendation is that PPS Interface files be created and loaded after each payroll compute. DAVIS LOADS DATA ONCE A MONTH. Campus financial system interface files should be loaded to be in sync with the PPS interface files.

Specifics for each interface file

NEED FROM UCPATH/I-129, UCOP WILL CHANGE FOR CCOA, DEBRA WILL COORDINATE THE CHANGEOVER ERS/PPS Interface File: This file will be produced by a program that will be added to the PPS Base System. It will accept sequential PAR files from an individual compute or a monthly consolidated PAR file.

NEED - Financial Systems Interface File: This is a required interface file. This file is expected to be produced from the campus financial system, contracts and grants system, or a combination of both. The file should contain a complete list of all FAU’s on the campus chart of accounts *that will be used for payroll funds*. See page 5 for additional details on the data required for this file.

NEED - Departments Interface File: This is a required interface file. The organizational hierarchy is used in multiple parts of the ERS system including: display of employee department information on the effort report, and associating projects and funds with the departments that are responsible for them.

NOT FROM IET - User Interface File: This is an optional interface file for campuses that have an integrated authentication system which provides employee ID and email address to the application.For campuses using the ERS internal logon mechanism, this interface file is required to associate authentication IDs with employee IDs for users of the ERS system.

NEED Org/Dept Interface File: This is an optional interface file. When using the decentralized security administration feature, this table provides a mapping between the financial system’s organization code hierarchy, loaded via the DEPT interface file, and the Payroll/Personnel system Home Department code table. This mapping is required to allow

departmental security administrators (AKA COMPLIANCE TEAM MEMBERS), who administer security based on an organization code, to create permissions based on PPS Home Department code. WE ARE GOING TO HAVE TO REBUILD ALL THE ERS COORDINATOR PERMISSIONS AND ANY DELEGATED CERTIFIER PERMISSIONS.

ProjectAlt/User Interface File: This is an optional interface file. This file allows you to pre-build searches for employees, based on the Project\_Alt\_ID column in the FS file. For each unique value found in this column, the job will build a search and associate it with the login ID supplied in this file for that Project\_Alt\_ID value.

NEED Account PI Interface (Project/PI) File: This is an optional interface file. This file is used to load account PI and project Id relationship. This allows account PIs to certify effort charged to their account. This information is used to generate MyCertifications search list.

Location Interface File: This is an optional interface file. This file is used to load location codes and location names relationship. This information is used for generating campus level compliance reports.

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|  | **ERS/UCPATH I1-129 Interface File USE THIS – FROM UCPATH** | | | | Record length: variable, pipe delimited | | |
| **Col** | **Field name** | **Format** | | | **LaborLedger Column** | **I-129 Column** | **Comments** |
| 0 | Pay\_Cycle\_Code | CHAR(1) | NOT | NULL | RUN\_ID (Pay Cycle) | tokens[0] |  |
| 1 | Pay\_Cycle\_End\_Date | CHAR(10) | NOT | NULL | RUN\_ID (Pay Cycle End Date) | tokens[1] | mm/dd/yyyy |
| 2 | Pay\_Sched\_Code | CHAR(1) | NOT | NULL | RUN\_ID(Pay Schedule) | tokens[2] |  |
| 3 | Employee\_ID | CHAR(11) | NOT | NULL | EMPLID | tokens[3] | UCPATH ID may be < 9 digit |
| 4 | Record\_Type | CHAR(2) | NOT | NULL | EMPL\_CLASS | tokens[4] |  |
| 5 | Emp\_Name | CHAR(26) | NOT | NULL | LAST-FIRST-MIDDLE-SUFFIX | tokens[5] |  |
| 6 | Home\_Dept | CHAR(10) | NOT | NULL | UC\_HOME\_DEPT\_CD | tokens[6] | changed 6 digit to 10 digit |
| 7 | Home\_Dept\_Name | CHAR(30) | NOT | NULL | DEPT\_DESCR | tokens[7] | PPS=30, ERSHomeDept=50 |
| 8 | ERN\_FAU | CHAR(30) | NOT | NULL | Concat from table PS\_UC\_LL\_SAL\_DTL | tokens[8] |  |
| X | Trans\_Code (not in I-129) | CHAR(2) | NOT | NULL | N/A | N/A | No I-129 mapping |
| 9 | Rate\_Type\_Code | CHAR(1) | NOT | NULL | UC\_PAY\_BASIS | tokens[9] |  |
| 10 | Pay\_Per\_End\_Date | CHAR(10) | NOT | NULL | PAY\_END\_DT | tokens[10] | mm/dd/yyyy |
| 11 | Paid\_Hours | DECIMAL(5,2) | NOT | NULL | HOURS1 | tokens[11] |  |
| 12 | Paid\_Amount | DECIMAL(7,2) | NOT | NULL | MONETARY\_AMOUNT | tokens[12] |  |
| 13 | Cap\_Rate | DECIMAL(9,4) | NOT | NULL | COMPRATE | tokens[13] |  |
| 14 | Pay\_Rate | DECIMAL(9,4) | NOT | NULL | PAYRATE | tokens[14] |  |
| 15 | Title\_Code | CHAR(6) | NOT | NULL | JOBCODE | tokens[15] |  |

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| 16 | TC\_Name | CHAR(30) | NOT | NULL | JOBCODE\_DESCR | tokens[16] |  |
| 17 | TC\_Pers\_Pgm\_Code | CHAR(1) | NOT | NULL | UC\_PRSNNEL\_PRG\_CD | tokens[17] | Acad\_Appt\_Ind |
| 18 | TC\_Exempt\_Code | CHAR(1) | NOT | NULL | FLSA\_STATUS | tokens[18] |  |
| 19 | TC\_Acad\_Appt\_Basis | CHAR(1) | NOT | NULL | UC\_BAS\_PDOVR\_CD | tokens[19] |  |
| 20 | TC\_Acad\_Pay\_Period | CHAR(1) | NOT | NULL | UC\_BAS\_PDOVR\_CD | tokens[20] |  |
| 21 | Ern\_Derived\_Pct | DECIMAL(5,4) | NOT | NULL | UC\_DRV\_EFT\_PCT | tokens[21] |  |
| 22 | Class\_Title\_Outline | CHAR(3) | NOT | NULL | UC\_CTO\_OS\_CD | tokens[22] |  |
| 23 | RUN\_ID | VARCHAR2(10) |  |  | RUN\_ID | tokens[23] |  |
| 24 | EMPL\_RCD | INTEGER(10) |  |  | EMPL\_RCD | tokens[24] |  |
| 25 | EFFDT | CHAR(10) |  |  | EFFDT | tokens[25] | mm/dd/yyyy |
| 26 | EFFSEQ | INTEGER(10) |  |  | EFFSEQ | tokens[26] |  |
| 27 | OFF\_CYCLE | VARCHAR2(1) |  |  | OFF\_CYCLE | tokens[27] |  |
| 28 | UC\_RUN\_ID\_EARN | VARCHAR2(10) |  |  | UC\_RUN\_ID\_EARN | tokens[28] |  |
| 29 | UC\_ADDL\_SEQ | VARCHAR2(10) |  |  | UC\_ADDL\_SEQ | tokens[29] |  |
| 30 | JOURNAL\_ID | VARCHAR2(10) |  |  | JOURNAL\_ID | tokens[30] |  |
| 31 | JOURNAL\_LINE | VARCHAR2(10) |  |  | JOURNAL\_LINE | tokens[31] | UCPATH = INTEGER(9) |
| 32 | BUSINESS\_UNIT | VARCHAR(5) |  |  | BUSINESS\_UNIT | tokens[32] |  |
| 33 | DOS\_Time\_Code | CHAR(2) | NOT | NULL | UC\_TIME\_CD | tokens[33] |  |
| 34 | DOS\_Pay\_Category | CHAR(2) | NOT | NULL | UC\_PY\_CAT\_CD | tokens[34] |  |
| 35 | RESTATEMENT | CHAR(2) | NOT | NULL | RESTATEMENT | token[35] |  |
| 36 | BUDGET\_REF | VARCHAR(8) | NOT | NULL | BUDGET\_REF | token[36] | "Over The Cap" indicator - not in ERSEarnings |
| 37 | PAID\_PERCENT | DECIMAL(7,4) | NOT | NULL | PAID\_PERCENT | token[37] |  |
| 38 | JOURNAL\_LINE | VARCHAR2(10) |  |  | JOURNAL\_LINE | tokens[38] | UCPATH = INTEGER(9) |

**Financial Systems Interface File – ERS 11.0 B007 and later – May 2020**

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| **Financial Systems Interface File**  **USE THIS** | | | | **Record Length: 668 + [Number of Co\_PI\_Emp\_IDs \* 9] characters** | |  |
| **Column name** | **Format Pos** | | | **Possible Values** | **Interpretation** | **Comments** |
| FAU | CHAR(30) 1-30 | NOT NULL | |  | DSH: FAU in ERS is not the full FAU | FAU (Full Accounting Unit) from Payroll transactions  Searchable via the Funds tab. |
| Project\_ID | CHAR(30) 31-60 |  | |  | DSH: PROJECT | A unique identifier required to group multiple FAUs related to the same project on the sponsored project line of the effort report.  This value can be a combination of elements of the FAU such as Account- Fund, or just the Fund, or another campus project identifier.  Not required to be present on the record unless Cert\_Reqd\_Ind = Y or Sponsored\_Ind = Y. Should always be blank when Sponsored\_Ind = N.  If a Project ID is not available in any campus system, the full FAU may be used as the Project ID. |
| Sponsored\_Ind | CHAR(1) 61 | NOT | NULL | Y, N | Y – FAU contains sponsored funds  N – FAU does not contain sponsored funds |  |
| Fed\_Fund\_Ind | CHAR(1) 62 | NOT | NULL | Y, N | Y – FAU contains Federal funds  N – FAU does not contain Federal funds | Not currently used for effort report generation but may be used for ad-hoc reporting to isolate funds that require certification but are not federal funds. |
| Cert\_Reqd\_Ind | CHAR(1) 63 | NOT | NULL | Y, N | Y – Funds require certification of effort N – Funds do not require certification | Implies a value of ‘Y’ in Sponsored\_Ind, above. |
| Effective\_Date | CHAR(10) 64-73 |  | |  |  | Date that this FAU was last updated. May be blank for new records.  If the effective date is newer than the value on a matching record, the funding source will be updated with the new values. If the effective date is blank or older than a matching record, the record will be ignored.  Format: mm/dd/yyyy |

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| Account\_Org\_ID | **CHR(10) 74-83**  **changed** |  |  | DSH: PROJECT DEPARTMENT | Organizational unit that administers the account portion of the funding source.  Refers to the data loaded from the Departments interface file (org\_id column). |
| Fund\_Org\_ID | **CHR(10) 84-93**  **changed** |  |  | DSH: AWARD DEPT | Organizational unit that administers the fund portion of the funding source.  Refers to the data loaded from the Departments interface file (org\_id column). |
| PI\_Emp\_ID | CHAR(9) 94-102 |  |  |  | Principal Investigator Employee ID |
| Sponsor\_Code | CHAR(10) 103-112 |  |  | DSH: REMS # | Sponsoring Agency Code – for ad-hoc reporting. Not displayed in ERS. |
| Sponsor\_Name | CHAR(90) 113-202 |  |  |  | Sponsoring Agency Name – for display and reporting. |
| Contract\_Nbr | CHAR(30) 203-232 |  |  | DSH: SPONSOR AWARD NUMBER | Contract Number (Agency #) – for display and search.  Searchable via the Projects tab. |
| Project\_Name | CHAR(135) 233-367 |  |  | DSH: PROJECT TITLE | Project Name – for display and search.  This name will be displayed on the effort report for each sponsored project and should correspond to the value used for the Project\_ID “groupifier” field. Searchable via the Projects tab. |
| Project\_ID\_Alt | CHAR(50) 368-417 |  |  | DSH: USE AWARD # PROJECT # | Alternate Project ID - for display and reporting.  Will be used for the sponsored project line tooltip. May contain a project ID from the campus contracts and grants system. |
| Project\_Name\_Alt | CHAR(200) 418-617 |  |  | DSH: SHORTENED PROJECT TITLE | Alternate Project Name - for display and reporting. (Was Fund\_Desc)  Will be used for the sponsored project line tooltip. May contain an alternate project name from the campus contracts and grants system. |
| Fund\_Name | CHAR(50) 618-667 |  |  | DSH: AWARD NAME/TITLE | Fund Name (Fund Title) – for display and search.  The name of the fund or funding source. Searchable via the Funds tab. |

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| FAU\_Reused\_Flag | CHAR(1) 668 |  | Y, blank | DSH: NOT SURE THIS IS RELEVANT, LEAVE BLANK | Value ‘Y’ indicates that this FAU was previously used for a different project. Once this flag is set, any new payroll activity will be treated as a new sponsored project on effort reports generated after this point. |
| Co\_PI\_Emp\_ID | CHAR(9) 669-677 |  |  | DSH: NON-PRIMARY PI(S) ON AWARD  ENABLES THEM TO CERTIFY EFFORT – WOULD REDUCE NEED FOR SPECIAL PERMISSIONS | Co-Principal Investigator Employee ID (This value is Optional. Also if present, multiple Co\_PI\_Emp\_IDs can be possible.) |

# Identifying Funds That Require Certification of Effort

The Financial Systems interface file should list each FAU on the campus chart of accounts *that will be used for payroll funds*. If an FAU will never contain payroll funds and can be identified as such by object code or subaccount, then this FAU may be omitted from the interface file. Certain FAU’s which are used to pay employees will require certification of effort. The interface record has three indicator fields which tell ERS how to treat the payroll activity – specifically, whether and where to include it on the effort report. The three indicators for each fund on the ERS interface file are:

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| Sponsored Indicator | Y, | N, | blank | ‘Y’ - the fund contains funds from a contract, grant cooperative agreement | or | other |
| Federal Funds Indicator | Y, | N, | blank | ‘Y’ – the funding source is the US Government | | |
| Certification Required Indicator | Y, | N, | blank | ‘Y’ – the funding source requires effort reporting | | |

The data elements needed to set the indicators in the ERS interface file are part of the Corporate Account/Fund Profile (CAFP) specification. Therefore, these elements should be available in the campus financial system that is used to prepare input to CAFP. The primary determinants are FUND GROUP CODE and FLOW THROUGH CODE. For the complete CAFP specification see: <http://www.ucop.edu/irc/campus_specs/caf/>

Sponsored Indicator (field Sponsored\_Ind)

Funds with Fund Group codes that identify contracts, grants and cooperative agreements from any source should be treated as sponsored funds. This includes private restricted grants and contracts, and clinical drug trials.

Currently these fund groups are: **406210**, **406310** (federal); **404210** (state); **405210** (local govt); **408300,408410,408420**

(private/restricted).

All funds with one of these Fund Group codes should have the Sponsored Indicator set to 'Y' in the ERS interface file. Fund groups containing “overhead clearing accounts” such as 406220, 406320, 408430 should **not** be flagged as sponsored funds.

Federal Fund Indicator (field Fed\_Fund\_Ind)

Certain Fund Group codes identify federal funds. Funds in these Fund Groups should have the Federal Funds Indicator set to 'Y' in the ERS interface file. Currently these fund groups are: **406210** and **406310**.

Certification Required Indicator (field Cert\_Reqd\_Ind)

Certain Fund Group codes identify federal funds. Funds in these Fund Groups should have the Certification Required Indicator set to 'Y' in the ERS interface file. Currently these fund groups are: **406210** and **406310**.

If sponsored funds from a non-Federal source require certification of effort, and the campus decides to use the Effort Reporting System to produce the effort reports, then the Certification Required Indicator must be set to ‘Y’ in the ERS interface file for these non-Federal funds as well.

Examination of the Flow-Through-Code

In addition to the rules above, any other funds, regardless of Fund Group code, that have Flow Through Code value of '2' or '3' are considered federal funds and should have the Sponsored Indicator set to 'Y', Federal Funds Indicator set to 'Y', and the Certification Required Indicator set to 'Y' in the ERS interface file.

Note that CAFP edits will normally insure that the Flow Through Code is set consistently for the Fund Group code, however we recommend that this additional check be included in the procedures used to prepare the ERS interface file.

**NOTE: As of this version of the interface specification, discussion is underway to expand the list of values for Flow- Through-Code and Award-Type in the CAFP to allow the flag settings on the ERS interface file to be more readily determined. These notes will be revised once the final CAFP changes have been specified.**

Principal Investigators

Place the employee ID of the PI for the project at positions 86-94. This is the same position it occupied pre-Release

8.1. For any number of co-PIs, append each employee ID to the end of the line. The test for validity of an FS line is now at least 660 chars, and if > 660, then the difference must be evenly divisable by 9 (length of an employee ID). (660 + [Number of Co\_PI\_Emp\_IDs \* 9] or ([line length] -660 ) % 9 == 0.) DSH: PAD WITH BLANK SINCE UCPATH ID IS 8 CHAR

**Department Interface – (ERSOrganization table) ERS 11.0 B007 and later – May 2020**

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| **Departments Interface File USE THIS** | | | **Record Length: 50 characters** | |  |
| **Column name** | **Format** | | **Possible Values** | **Interpretation** | **Comments** |
| Org\_ID | **CHR(10)**  **1-10**  **(changed)** | NOT NULL |  | DSH: HOME DEPARTMENT | Organization (department) code—must be unique. |
| POrg\_ID | **CHR(10)**  **11-20**  **(changed)** |  |  | DSH: PARENT DEPARTMENT | Parent organization (department) code |
| Org\_Name | CHAR(30) 21-50 | NOT NULL |  | DSH: HOME DEPT NAME | Organizational unit name |

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| --- | --- | --- | --- | --- | --- |
| **User Interface File USE THIS -FROM IET** | | | Record Length: 189 characters | |  |
| **Column name** | **Format** | | **Possible Values** | **Interpretation** | **Comments** |
| Authentication\_ID | CHAR(60) 1-60 | NOT NULL |  |  | Logon ID for ERS, or identity as defined by the external authentication system. |
| Employee\_ID | CHAR(9) 61-69 |  |  |  | Employee ID associated with this authentication ID, if user is an employee. |
| Email\_Address | CHAR(60) 70-129 |  |  |  | Email address associated with this authentication ID. If missing, the user associated with the authentication ID will not be able to participate in the Notification features of the ERS, nor be able to reset their password. |
| Friendly\_Name\_Last | CHAR(30) 130-159 |  |  |  | A displayable version of the user’s name. |
| Friendly\_Name\_First | CHAR(30) 160-189 |  |  |  |  |

**Org Department Interface (ERSOrgDept Table)**

The Org Department Interface is required when user security/permissions are granted by org resource.

This interface provides the list of org resources that can be assigned to a user when org security is needed.

In ERSConfig.xml set the following flag to true to use and org / parent org security hierarchy.

<load-org-flat>true</load-org-flat>

Most campuses do not use org / parent org hierarchy as part of their security scheme and can set the ERSConfig.xml load-org-flat flag to false. The Org Department interface is then not used.

**Org Department Interface – ERS 11.0 B007 and later – May 2020**

**DSH: THIS INTERFACE ALLOWS MY TEAM TO SET UP PERMISSIONS BY EMPLOYEE HOME DEPARTMENT; EVEN IF BOTH DEPT #S ARE THE SAME, IT IS NEEDED TO ASSOCIATE OUR USER PRIVILEGES WITH THE EMPLOYEE DEPTS**

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| **Org/Dept Interface File USE THIS** | | | Record Length: 20 characters | |  |
| **Column name** | **Format** | | **Possible Values** | **Interpretation** | **Comments** |
| Org\_ID | CHR(10) 1-10 | NOT NULL |  | DSH: ACCOUNT ORG-PPM AND  PROJECT ORG-PPM | Organizational unit ID, as defined in the DEPT interface |
| Dept\_ID | CHR(10) 11-20 | NOT NULL |  | DSH: EMPLOYEE HOME DEPT-UCPATH | PPS Home DepartmentID associated with this Org\_ID. Matched against the Home Department code from the employee’s earnings records in the PPS Interface. |

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| **Account\_PI Interface File USE THIS** | | | Record Length: 39 characters | |  |
| **Column name** | **Format** | | **Possible Values** | **Interpretation** | **Comments** |
| PI\_Employee\_ID | CHAR(9) 1-9 | NOT NULL |  | DSH: UCPATH ID OF PI ON PROJECT | Employee Id of the PI associated with the project. Must be 9 character numeric value. |
| Project\_ID | CHAR(30) 10-39 |  |  | DSH: PROJECT ID | A unique identifier required to group multiple FAUs related to the same project on the sponsored project line of the effort report. |
| Action\_Code | CHAR(1) |  | ‘D’ or Blank  Any value other than ‘D’ is interpreted as Blank | DSH: LEAVE BLANK | ‘D’ = Remove the PI as account PI for the project  Blank = Add the PI as account PI for the project  Note: If the config option “one-account- pi-per-project” is set to true, adding a PI as account PI will remove other PIs as account PIs for that project, if any found. |

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| **Location Interface File USE THIS?** | | | Record Length: 76 characters | |  |
| **Column name** | **Format** | | **Possible Values** | **Interpretation** | **Comments** |
| Location Code | CHAR(1) 1-1 | NOT NULL |  | DEBRA IS VERIFYING WITH OP WHETHER WE NEED  3110=3, 3310=L, 3111=S | Location code. Must be 1 character alphanumeric unique value. |
| Location Name | CHAR(75) 2-76 | NOT NULL |  |  | Corresponding location name up to 75 characters. |

**NOTE: This interface file should be loaded in its entirety. Any existing location code/name will be purged from the database as part of this interface file processing.**