

ERS Interface Specification version 4.1

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. Campus financial system interface files should be loaded to be in sync with the PPS interface files.

Specifics for each interface file

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.

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.

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.

Cost Sharing Interface File: This is an optional interface file. If present, cost sharing commitments will be associated with the employee and presented on the Effort Report as a default value. If this interface file is not loaded, employees can still enter cost sharing percents on the effort report manually.

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.

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, who administer security based on an organization code, to create permissions based on PPS Home Department code.

| ERS/PPS Interface File | | | Record length: 220 characters | | | |
|------------------------|---------------------|----------|-------------------------------|--------------|-----------|---|
| Field name | Format | | DB2 Source | DB2 Type | DE Number | Comments |
| Pay_Cycle_End_Date | CHAR(10) 1-10 | NOT NULL | PPPERN.PAY_CYCLE_END_DATE | DATE | PAR0140 | Convert DATE to CHAR(10) Format (mm/dd/yyyy) |
| Pay_Cycle_Code | CHAR(2) 11-12 | NOT NULL | PPPERN.PAY_CYCLE_CODE | CHAR | PAR0190 | |
| Employee_ID | CHAR(9) 13-21 | NOT NULL | PPPERN.EMPLOYEE_ID | CHAR | PAR0120 | |
| Record_Type | CHAR(2) 22-23 | NOT NULL | PPPERN.RECORD_TYPE | CHAR | PAR0280 | |
| Pri_Gross_Ctl | CHAR(3) 24-26 | NOT NULL | PPPERN.PRI_GROSS_CTL | CHAR | PAR0130 | |
| Entry_Seq_No | CHAR(4) 27-30 | NOT NULL | PPPERN.ENTRY_SEQ_NO | SMALLINT | | Convert to CHAR(4) |
| Emp_Name | CHAR(26) 31-56 | NOT NULL | PPPEUD.EMP_NAME | CHAR | PAR0571 | |
| Home_Dept | CHAR(6) 57-62 | NOT NULL | PPPEUD.HOME_DEPT | CHAR | PAR0720 | |
| Home_Dept_Name | CHAR(30) 63-92 | NOT NULL | PPPHME.HME_DEPT_NAME | CHAR | HME1000 | Lookup based on above |
| ERN_FAU | CHAR(30) 93-122 | NOT NULL | PPPERN.ERN_FAU | CHAR | | (Not currently defined in the PAR data dictionary) |
| Trans_Code | CHAR(2) 123-124 | NOT NULL | PPPERN.TRANS_CODE | CHAR | PAR3590 | |
| Pay_Sched_Code | CHAR(1) 125 | NOT NULL | PPPERN.PAY_SCHED_CODE | CHAR | PAR3140 | |
| Rate_Type_Code | CHAR(1) 126 | NOT NULL | PPPERN.RATE_TYPE_CODE | CHAR | PAR3300 | |
| Pay_Per_End_Date | CHAR(10) 127-136 | NOT NULL | PPPERN.PAY_PER_END_DATE | DATE | PAR3750 | Convert DATE to CHAR(10) Format (mm/dd/yyyy) |
| Paid_Hours | CHAR(7) 137-143 | NOT NULL | PPPERN.PAID_HOURS | DECIMAL(5,2) | PAR3980 | Convert to CHAR(6) |
| Paid_Amount | CHAR(9) 144-152 | NOT NULL | PPPERN.PAID_AMT | DECIMAL(7,2) | PAR3990 | Convert to CHAR(9) |
| Paid_Percent | CHAR(7) 153-159 | NOT NULL | PPPERN.PAID_PERCENT | DECIMAL(5,4) | PAR4000 | Convert to CHAR(6) |
| Pay_Rate | CHAR(11) 160-170 | NOT NULL | PPPERN.DIST_PAYRATE | DECIMAL(9,4) | PAR3260 | Convert to CHAR(11) |
| Title_Code | CHAR(4) 171-174 | NOT NULL | PPPERN.TITLE_CODE | CHAR | PAR3846 | |
| TC_Name | CHAR(30) 175-204 | NOT NULL | PPPTCI.TCI_TITLE_NM_ABBRV | CHAR | TCT1120 | Lookup based on Title_Code, above |

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|--------------------|---------------------|----------|---------------------------|--------------|---------|--------------------------------------|
| TC_Pers_Pgm_Code | CHAR(1) 205 | NOT NULL | PPPTCI.TCI_PERSONL_PGM_CD | CHAR | TCT1050 | Lookup based on Title_Code, above |
| TC_Exempt_Code | CHAR(1) 206 | NOT NULL | PPPTSL.TSL_OVRTM_EXMPT_CD | CHAR | TCT3360 | Lookup based on Title_Code, above |
| TC_Acad_Appt_Basis | CHAR(1) 207 | NOT NULL | PPPTPA.TPA_ACAD_APPT_BAS | CHAR | TCT2180 | Lookup based on Title_Code, above |
| TC_Acad_Pay_Period | CHAR(1) 208 | NOT NULL | PPPTPA.TPA_ACAD_PAY_PERD | CHAR | TCT2190 | Lookup based on Title_Code, above |
| Dist_DOS | CHAR(3) 209d-211 | NOT NULL | PPPERN.DIST_DOS | CHAR | PAR3870 | |
| DOS_Time_Code | CHAR(1) 212 | NOT NULL | PPPDOS.DOS_TIME_CODE | CHAR | DOS8500 | Lookup based on Dist_DOS, above |
| DOS_Pay_Category | CHAR(1) 213 | NOT NULL | PPPDOS.DOS_PAY_CATEGORY | CHAR | DOS1600 | Lookup based on Dist_DOS, above |
| Ern_Derived_Pct | CHAR(7) 214-220 | NOT NULL | PPPERN.ERN_DERIVED_PCT | DECIMAL(5,4) | PAR0343 | Convert to CHAR(11) |

| Financial Systems Interface File | | | Record Length: 660 + [Number of Co_PI_Emp_IDs * 9] characters | | |
|----------------------------------|-------------------|----------|---|---|---|
| Column name | Format Pos | | Possible Values | Interpretation | Comments |
| FAU | CHAR(30) 1-30 | NOT NULL | | | FAU (Full Accounting Unit) from Payroll transactions Searchable via the Funds tab. |
| Project_ID | CHAR(30) 31-60 | | | | 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 | CHAR(6) 74-79 | | | | 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 | CHAR(6) 80-85 | | | | 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) 86-94 | | | | Principal Investigator Employee ID |
| Sponsor_Code | CHAR(10) 95-104 | | | | Sponsoring Agency Code - for ad-hoc reporting. Not displayed in ERS. |
| Sponsor_Name | CHAR(90) 105-194 | | | | Sponsoring Agency Name - for display and reporting. |
| Contract_Nbr | CHAR(30) 195-224 | | | | Contract Number (Agency #) - for display and search. Searchable via the Projects tab. |
| Project_Name | CHAR(135) 225-359 | | | | 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) 360-409 | | | | 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) 410-609 | | | | 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) 610-659 | | | | 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_Reusable_Flag | CHAR(1) 660 | | Y, 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) 661-669 | | | | 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 or other cooperative agreement |
| 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 CAFPP 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 CAFPP to allow the flag settings on the ERS interface file to be more readily determined. These notes will be revised once the final CAFPP 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 divisible by 9 (length of an employee ID).
(660 + [Number of Co_PI_Emp_IDs * 9] or ([line length] -660) % 9 == 0.)

| Departments Interface File | | | Record Length: 42 characters | | |
|----------------------------|-------------------|----------|------------------------------|----------------|--|
| Column name | Format | | Possible Values | Interpretation | Comments |
| Org_ID | CHAR(6) 1-6 | NOT NULL | | | Organization (department) code-must be unique. |
| POrg_ID | CHAR(6) 7-12 | | | | Parent organization (department) code |
| Org_Name | CHAR(30) 13-42 | NOT NULL | | | Organizational unit name |

| Cost Sharing Interface File | | | Record Length: 65 characters | | |
|-----------------------------|-------------------|----------|------------------------------|----------------|---|
| Column name | Format | | Possible Values | Interpretation | Comments |
| FAU | CHAR(30) 1-30 | NOT NULL | | | FAU on which this cost sharing commitment was made. This value must match the FAU provided on the Financial Systems interface file. |
| Employee_ID | CHAR(9) 31-39 | NOT NULL | | | Employee ID for which this cost sharing commitment applies. |
| Start_Date | CHAR(10) 40-49 | NOT NULL | | MM/DD/YYYY | Date that the cost sharing commitment began or will begin. |
| End_Date | CHAR(10) 50-59 | NOT NULL | | MM/DD/YYYY | Date that the cost sharing commitment ended or will end. During generate, ERS will select only cost sharing records to apply to an effort report when the period defined by the Start Date and End Date overlaps the reporting period. |
| Cost_Sharing_Pct | CHAR(6) 60-65 | NOT NULL | | Percentage | Committed cost sharing percentage, for this employee, for this FAU, that will be applied to any reporting period Format: Decimal(6,2) No sign, no decimal point, leading zeroes |

| User Interface File | | | 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/Dept Interface File | | | Record Length: 12 characters | | |
|-------------------------|-----------------|----------|------------------------------|----------------|---|
| Column name | Format | | Possible Values | Interpretation | Comments |
| Org_ID | CHAR(6) 1-6 | NOT NULL | | | Organizational unit code, as defined in the DEPT interface |
| Dept_ID | CHAR(6) 7-12 | NOT NULL | | | PPS Home Department code associated with this Org_ID. Matched against the Home Department code from the employee's earnings records in the PPS Interface. |

| ProjectAlt/User Interface File | | | Record Length: 110 characters | | |
|--------------------------------|--------------------|----------|-------------------------------|----------------|---|
| Column name | Format | | Possible Values | Interpretation | Comments |
| Project_ID_Alt | CHAR(50) 1-50 | NOT NULL | | | 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. |
| Authentication_ID | CHAR(60) 51-110 | NOT NULL | | | Logon ID for ERS, or identity as defined by the external authentication system. |

Change Log

| Version | Date | Changes |
|---------|-----------|--|
| 4.1 | 7/27/07 | FS file definition change. (PI Normalization) |
| 4.0 | 5/15/07 | Added ProjectAltUser file layout for SponsoredProject Search Interface. |
| 3.0 | 9/18/06 | Added ORGDEPT file layout |
| 2.9 | 7/25/06 | Revise FS to remove acceptable value "blank" for Cert_Reqd_Ind and others |
| 2.8 | 2/10/06 | Revise descriptions on FS interface for further clarity. Add field position numbers to FS file format description. |
| 2.7 | 12/6/2005 | FS: Revised field descriptions for clarity. Added Project_ID_Alt. Renamed Fund_Desc to Project_Name_Alt. Expanded Sponsor_Code. |
| 2.6 | 10/3/2005 | Corrected record length on PPS file (should be 220, was 219) |
| 2.5 | 8/29/2005 | Added wording for clarification of FAU selection on FS interface - FAUs that will never contain payroll funds need not be included in the file. |
| 2.4 | 7/8/2005 | Removed Effective Date from DEPT interface; we do not need to support Department Code reuse or reassignment. |
| 2.3 | 6/27/2005 | Added notes clarifying use of ProjectID, Project_Name, Account_Org_ID and Fund_Org_Id; added FAU_Reusable_Flag to FS interface file and removed Project_Effective_Date; added Friendly_Name fields to the User interface file and reduced field length for email address; removed CS_Period_Code, CS_Start_Date, CS_End_Date from CS interface file and added Start Date and End Date; changed Project_ID to FAU on CS interface file; removed Depth indicator and Exclude indicator from DEPT interface file. |
| 2.2 | 4/19/2005 | Added Project_Effective_Date, changed both effective dates to nullable |
| 2.1 | 4/11/2005 | Added clarification of use of Project_Name field on the financial systems interface (FS) and use of Project_ID field on the cost sharing (CS) interface file. Added clarification on use of Effective Date on the financial systems interface (FS) and departments (DEPT) interface files. |
| 2.0 | 2/11/2005 | PPS interface-restored Pay Sched Code, had been removed. Financial interface-renamed Org_ID to Account_Org_ID, added Fund_Org_ID to allow distinct searching on different criteria. Reworded instructions on how to identify funds requiring certification |
| 1.9 | 2/3/2005 | PPS interface-added fields: Home Dept Name, Earnings amount, Trans code |
| 1.8 | 1/20/2005 | Changed Contract_Nbr to Project_ID on CS interface, recalc record lengths |
| 1.7 | 1/19/2005 | Added PAYRATE to PPS interface, added Project_ID to FS interface |

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| 1.6 | 1/18/2005 | Added ERSUSR new interface file; added "specifics" information on p.1 |
| 1.5 | 1/18/2005 | Changed Contract_Nbr on FS interface to be part of key |
| 1.4 | | Added Sponsored_Ind to FS interface |
| 1.3 | | Added additional title code elements to PPS interface |
| 1.2 | | Added additional title code elements to PPS interface |
| 1.1 | | Expand ERN_DERIVED_PCT on PPS interface to char(7) |
| 1.0 | 12/7/2004 | Initial release for review by TAG |