**xsig**

**Data Design Document**

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| --- | --- | --- | --- |
| **Work Order** | **YYYYYY** |  | |
| **RFC** | **XXXXXX** | | |
| **RFA/Project** |  | | |
| **Development and Testing Estimates (in hrs.)** | **20 Hrs. (Tentative)** | | |
| **Author** | **Ravindra M** | **Date** | **06-Dec-2016** |
| **Reviewed By** |  | **Reviewed Date** |  |
| **Version** | **1** | **Comments** | **Initial Design** |

**LIST OF OBJECTS AFFECTED:**

**Database** [schemas, tables, procedures, functions, views, indexes, triggers etc.]

|  |  |  |  |
| --- | --- | --- | --- |
| **Object Name** | **Object Type** | **Database** | **New Object (Y/N)** |
| EFIW.EFIW\_BUSINESS\_FUNCTION\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_HC\_MEASURE\_COMB\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_HEADCOUNT\_MEASURE\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_LEGAL\_COMPANY\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_PERSONNEL\_TYPE\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_CURRENCY\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_CURRENCY\_RATES\_EXT | EXTERNAL TABLE | ISRVEP | N |
| FTDW.EFIW\_ACCOUNT\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_LEGAL\_ENTITY\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_ORG\_EXT | EXTERNAL TABLE | ISRVEP | N |
| EFIW.EFIW\_PRODUCT\_EXT | EXTERNAL TABLE | ISRVEP | N |
| .FTenv | Shell script | Unix | N |
| feedshell.profile | Shell script | Unix | N |
| EFIW\_DIR | Oracle Directory | ISRVEP | Y |
| FT\_HC\_Monthly\_Load.sh | Shell script | Unix | N |
| FT\_NAPROS\_Master\_Load.sh | Shell script | Unix | N |
| efiw\_hierarchy\_load.sh | Shell script | Unix | N |

**PROBLEM:**

Build a generic process to get EFIW files from efiw-app-prod.apps.mc.xerox.com to EBIP server.

**ANALYSIS:**

**Scope of changes:**

As part of this RFC we will be getting all the files pertaining to EFIW present on efiw-app-prod.apps.mc.xerox.com to EBIP server. So all objects related to this change would get impacted.

Possible changes,

1. Change of directory structure pertaining to old/new files.
2. External tables which are pointing to the files in old/new directories.
3. Shell scripts that are sourcing the files from old/new locations.
4. Parameter files setting the locations for any earlier or present EFIW loading processes.

**Overview of changes (Pseudo Code):**

Design approach goes the following way as an overview,

1. This process should be generic and shouldn’t be specific to any area/module in terms of naming and coding (Say EFIW\_SFTP\_Master.sh).
2. Create a new Unix directory /u25/ftp/SRVE\_FEEDS\_IN/FT/EFIW and give appropriate permissions.
3. Create a new Oracle directory (Say EFIW\_DIR) pointing to this location.
4. Identify and Change all the external tables using EFIW files both HeadCount Module as well as old FT processes (Responsibility.txt, Financial\_Account.txt files) to use the new directory.
5. Add an entry EFIW\_LOC into .FTenv file pointing to /u25/ftp/SRVE\_FEEDS\_IN/FT/EFIW and use this in all respective shell scripts pointing to old directory.
6. Analyze and change if any other scripts/processes are pointing to old files in old directory.
7. Modify the HeadCount, NAPROS master scripts to look for EFIW files in the new directory.
8. As this process is generic and can’t move files from existing directory, respective processes should create a copy of existing files in their respective directories, if necessary.

**Detailed explanation:**

1. Create a new directory /u25/ftp/SRVE\_FEEDS\_IN/FT/EFIW and give 777 permissions

(This is because any generic user in EBIP should be able to access these files irrespective of where they are part of same OS group or not)

1. Create a new Oracle directory EFIW\_DIR pointing to this location and give necessary grants to read and write to this directory.
2. Old file locations for EFIW files are,

/u25/ftp/SRVE\_FEEDS\_IN/FT/

/u25/ftp/SRVE\_FEEDS\_IN/FT/OTHER

/u25/ftp/SRVE\_FEEDS\_IN/FT/HEADCOUNT/source\_files

1. Below are the list of external tables we need to update the Directory locations with new directory names as mentioned,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **OWNER** | **TABLE\_NAME** | **LOCATION** | **DIRECTORY\_NAME** | **TO BE CHANGED TO** |
| EFIW | EFIW\_BUSINESS\_FUNCTION\_EXT | Business\_Function.txt | FT\_HEADCOUNT\_DIR | EFIW\_DIR |
| EFIW | EFIW\_HC\_MEASURE\_COMB\_EXT | Headcount\_Measures\_H9999\_row.txt | FT\_HEADCOUNT\_DIR | EFIW\_DIR |
| EFIW | EFIW\_HEADCOUNT\_MEASURE\_EXT | Headcount\_Measure.txt | FT\_HEADCOUNT\_DIR | EFIW\_DIR |
| EFIW | EFIW\_LEGAL\_COMPANY\_EXT | Legal\_company.txt | FT\_HEADCOUNT\_DIR | EFIW\_DIR |
| EFIW | EFIW\_PERSONNEL\_TYPE\_EXT | Personnel\_type.txt | FT\_HEADCOUNT\_DIR | EFIW\_DIR |
| EFIW | EFIW\_CURRENCY\_EXT | Currency.txt | FT\_HIER | EFIW\_DIR |
| EFIW | EFIW\_CURRENCY\_RATES\_EXT | Currency\_Rates.txt | FT\_HIER | EFIW\_DIR |
| FTDW | EFIW\_ACCOUNT\_EXT | Financial\_Account.txt | FT\_HIER | EFIW\_DIR |
| EFIW | EFIW\_LEGAL\_ENTITY\_EXT | Legal\_Company.txt | FT\_LOC | EFIW\_DIR |
| EFIW | EFIW\_ORG\_EXT | Responsibility.txt | FT\_LOC | EFIW\_DIR |
| EFIW | EFIW\_PRODUCT\_EXT | Offering\_Group.txt | FT\_LOC | EFIW\_DIR |

1. Move all the files to /u25/ftp/SRVE\_FEEDS\_IN/FT/EFIW and drop and recreate the external tables as mentioned above with necessary changes so that data will be available at any point.
2. Add variable declaration as EFIW\_LOC in .FTenv for all environments as /u25/ftp/SRVE\_FEEDS\_IN/FT/EFIW. This will be referred in all shell scripts that point to EFIW files.
3. Change below scripts with FT\_LOC by adding an entry for EFIW\_LOC and use it,

*/home/isrveprd/FT/ETL/HEADCOUNT/scripts/FT\_HC\_Monthly\_Load.sh*

*/home/isrveprd/FT/ETL/NAPROS/scripts/FT\_NAPROS\_Master\_Load.sh*

*/home/isrveprd/bin/ft\_load/feedshell.profile*

*/home/isrveprd/bin/ft\_load/efiw\_hierarchy\_load.sh*

1. Create EFIW\_SFTP\_Master.sh with necessary changes to existing FT\_HC\_SFTP\_Load.sh (like user information, directory structures etc. ) and mention all the files we need to pull from EFIW, by changing the target directories.
2. We need to intimate LEASE Cube team about the change and get necessary confirmations on the implementation.

**Testing Strategy:**

1. Check if the files are getting pulled without disturbing the files in the source server.
2. Check if mentioned external tables are loaded with latest files pulled from source server.

**ASSUMPTION / RISK:**

1. Variables and settings might change from environment to environments.
2. User to be contacted while testing as data/file set up needs to be done.
3. End to end Data loading process is not covered in this design as we are fixing the SFTP problem.
4. Assuming DBAs have setup the necessary environment by placing the keys, maintaining appropriate directories and permissions.