RESOURCE AND PATIENT MANAGEMENT SYSTEM

Data Warehouse Export System

(BDW)

Installation Guide & Release Notes

Version 1.0
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Office of Information Technology (OIT)
Division of Information Resource Management
Albuquerque, New Mexico

Preface

This manual is the installation guide for the RPMS Data Warehouse Export System.

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1.0   Release Notes

The Data Warehouse Export System is an RPMS (Resource and Patient Management System) software application designed for local export of registration and visit data to the IHS National Data Warehouse.

The National Patient Information Reporting System (NPIRS) is a designated organizational unit within the Information Technology Support Center, Division of Information Resources (DIR), Indian Health Service, located in Albuquerque, New Mexico and has been in existence since 1986. The purpose of NPIRS is to provide a broad range of clinical and administrative information to managers at all levels of the Indian health system to allow them to better manage individual patients, local facilities, regional and national programs and to allow IHS Management to provide legislatively required reports to the Administration and Congress. The National Data Warehouse (NDW) project was initiated to upgrade NPIRS to a new, state-of-the-art, enterprise-wide data warehouse environment, to better serve the needs of its users.

This application will allow local RPMS systems to export data to NPIRS' new NDW structure. The data to be exported includes demographic data; third-party eligibility information; patient-based clinical data (e.g., health factors); and encounter-based clinical data (e.g., purpose of visit, procedures, medications, laboratory test results, radiological results). This export will provide for the export of modifications in these data so that the NDW will be able to maintain historical records of changes in these data so information about past as well as current circumstances can be retrieved.

The data is exported via HL7 standard messages. For each registration and visit record that is exported an HL7 message is generated and sent to the NDW.

2.0   Taxonomy Setup

This section describes what needs to be done to set up all taxonomies needed for the Data Warehouse Export System.   Taxonomies are used to find data items in PCC or other RPMS applications in order to determine if a patient or visit meets the criteria for which the software is looking. Taxonomies are groupings of functionally related data elements and identify specific codes (e.g., CPT, ICD-9), code ranges, or terms that need to be used by PCC computer.

2.1   Site-Defined Taxonomies

Site-defined taxonomies are used to mitigate the variations in RPMS medical terminology that is not standardized across each facility, such as lab tests or medications. This means that one site's Pap smear data can be compared to another site, even though the same term is not used for the Pap smear lab test.

For example, one site's Lab table might contain the term Glucose Test while another site's table may contain the term Glucose for the same test. RPMS PCC programs have no means for dealing with variations in spelling, spacing, and punctuation. Rather than attempting to find all potential spellings of a particular lab test, the application would look for a specific taxonomy name that has been standardized at every facility. The contents of the taxonomy are determined by the facility. In this example, the application would use the DM AUDIT GLUCOSE TESTS TAXONOMY. The individual facility will enter all varieties of spelling and punctuation for Glucose Tests used at that particular facility.

2.1.1   Site-Defined Clinical Taxonomies Used by the Data Warehouse Export

The site will need to review the taxonomies that need to be defined by the site and make sure that all appropriate entries exist or are entered. The table below can be used as a checklist. NOTE: Many of these taxonomies may already be set up because they are used by other software applications.

> **NOTE:** To provide accurate counts, you must include ALL test names that have ever been used by your facility, even if these codes are currently inactive. Some indicators search for tests as far back as 10 years.

Taxonomy Name	Description	Members
APCH FECAL OCCULT BLOOD	All Fecal Occult Blood Lab Tests	Occult Blood Fecal Occult Blood
BDW PAP SMEAR LAB TESTS	All Pap Smear tests	Pap Smear
DM AUDIT HDL TAX	All HDL Cholesterol Lab Tests – NOTE: do not include Lipid Panels in this taxonomy	HDL

Taxonomy Name	Description	Members
DM AUDIT HGB A1C TAX	All HGB A1C lab tests.	Hgb A1C, A1C, HbA1c, Hemoglobin A1C, Glycosyolated hemoglobinHgb, Glycohemoglobin A1c
DM AUDIT LDL CHOLESTEROL TAX	All LDL Cholesterol Lab Tests – **NOTE**: do not include Lipid Panels	LDL, LDL-C
DM AUDIT MICROALBUMINURIA TAX	All Microalbuminuria Lab Tests.	Microalbuminia Micral Microalbuminia, Urine A/C Ratio, AC Ratio, ACR, Microalbumin/ Creatinine Ratio, Microalbumin Random
DM AUDIT TRIGLYCERIDE TAX	All Triglyceride Lab Tests – **NOTE**: do not include Lipid Panels	Triglyceride
DM AUDIT URINE PROTEIN TAX	All Urine Protein Lab Tests.	Urine Protein, Urine Protein Screen
DM AUDIT GLUCOSE TESTS TAX	All Glucose tests.	
BDW PSA TESTS TAX	All PSA tests.	
DM AUDIT ACE INHIBITORS	All ACE Inhibitor Drugs	
DM AUDIT DIET EDUC TOPICS	All DM diet education topics used at your site.	

3.0   Installation Notes

Prefix: BDW

Current Version: 1.0

> **Note**: Read Entire Notes File Prior to Attempting Any
> Installation.

3.1   General Information

Make a copy of this distribution for off-line storage. Print all notes/readme files.

It is recommended that the terminal output during the installation be captured using an auxport printer attached to the terminal at which you are performing the software installation. This will insure a printed audit trail if any problems should arise.

3.2   Contents of Distribution

- bdw_0100.t1k—Kids file containing software
- bdw_010i.pdf—Installation guide in PDF format
- bdw_010t.pdf—Technical manual in PDF format
- bdw_010u.pdf—User's guide in PDF format

3.3   Requirements

- Kernel v8.0 or higher
- FileMan v22 or higher
- IHS Patient Dictionaries (AUPN) v99.1 through patch 14
- PCC Management Reports v3.0 through patch 16
- Taxonomy System v5.1 through patch 7
- XB/ZIB Utilities v3.0 through patch 10
- AUM table update v5.1 through patch 8
- IHS VA Support Files (AVA) v 93.2 through patch 18
- RPMS Registration v7.0 through patch 5
- GIS Version 3.1 and patches 1, 2, 11

- After this BDW software is installed you will be required to install GIS Version 3.1 patch 12. It is important that you install GIS patch 12 after the install of this package even IF you previously installed GIS patch 12.

4.0   Installation Instructions

In all UCIs running the IHS RPMS Data Warehouse Export System:

1. Save all routines (^%RS (MSM) or ^%RO (CACHE)) and globals (^%GS (MSM) or ^%GO (CACHE) in the BDW* namespace for use in returning to your existing version, if needed.

> **Note**: If this is a first time install, there will be no routines or globals in this namespace.

2. Delete all routines (^%RDEL(MSM) or ^%RDELETE(CACHE)) in the BDW namespace (if any exist).

> **Note**: This installation is a KIDS install. If you have any questions on how to do a KIDS installation, please contact your Area information systems support personnel.

3. Install bdw_0100.t1k. This file is the KIDS file for GPRA Reporting System.

4. Install or **Re-install** if it has already been installed before, GIS patch 12.

5. GIS patch is gis_0301.12k. Follow the notes distributed with GIS patch 12 for instructions on how to install the patch.

6. Assign security keys:

    a. BDWZMENU (unlocks main menu)

    b. BDWZ RESET (allows re-setting a log entry)

    c. BDWZ REG EXPORT (allows user to do a full registration export)

    d. BDWZ BACKLOAD MENU (give this key to the person doing the initial backloading of data, do not give to anyone else)

5.0   Sample Installation

```
Select Kernel Installation & Distribution System Option:


   KIDS    Kernel Installation & Distribution System ...
   NTEG    Build an 'NTEG' routine for a package
   PG      Programmer mode
           Calculate and Show Checksum Values
           Clean Error Trap
           Delete Unreferenced Options
           Error Processing ...
           Global Block Count
           List Global
           Map Pointer Relations
           Number base changer
           Routine Tools ...
           Test an option not in your menu

Select Programmer Options Option: KIDS  Kernel  Installation & Distribution System


           Edits and Distribution ...
           Utilities ...
           Installation ...

Select Kernel Installation & Distribution System Option: Installation


   1        Load a Distribution
   2        Verify Checksums in Transport Global
   3        Print Transport Global
   4        Compare Transport Global to Current System
   5        Backup a Transport Global
   6        Install Package(s)
            Restart Install of Package(s)
            Unload a Distribution

Select Installation Option: 1  Load a Distribution
Enter a Host File: c:\rpms\bdw\bdw_0100.t1k

KIDS Distribution saved on Jun 03, 2004@07:48:58
Comment: dw 6-3-04

Want to Continue with Load? YES//
Loading Distribution...

Build BDW IHS DATA WAREHOUSE 1.0 has an Environmental Check Routine
Want to RUN the Environment Check Routine? YES//

Will first run the Environment Check Routine, BDWPRE

                    Patch "AVA*93.2*18" is installed.
                    Patch "AUPN*99.1*13" is installed.
Use INSTALL NAME: BDW IHS DATA WAREHOUSE 1.0 to install this Distribution.


   1        Load a Distribution
   2        Verify Checksums in Transport Global
   3        Print Transport Global
```

```
   4       Compare Transport Global to Current System
   5       Backup a Transport Global
   6       Install Package(s)
           Restart Install of Package(s)
           Unload a Distribution

Select Installation Option: INstall Package(s)
Select INSTALL NAME: BDW IHS DATA WAREHOUSE 1.0     Loaded from Distribution
    Loaded from Distribution  6/4/04@14:04:09
     => dw 6-3-04  ;Created on Jun 03, 2004@07:48:58

This Distribution was loaded on Jun 04, 2004@14:04:09 with header of
   dw 6-3-04  ;Created on Jun 03, 2004@07:48:58
   It consisted of the following Install(s):
BDW IHS DATA WAREHOUSE 1.0
Checking Install for Package BDW IHS DATA WAREHOUSE 1.0
    Will first run the Environment Check Routine, BDWPRE

                      Patch "AVA*93.2*18" is installed.
                      Patch "AUPN*99.1*13" is installed.

Install Questions for BDW IHS DATA WAREHOUSE 1.0

Incoming Files:


   90212.1   BDW SITE FILE
Note:  You already have the 'BDW SITE FILE' File.


   90212.2   BDW ERROR CODES  (including data)
Note:  You already have the 'BDW ERROR CODES' File.
I will OVERWRITE your data with mine.


   90212.3   BDW VISIT AUDIT RECORD DEFINTION  (including data)
Note:  You already have the 'BDW VISIT AUDIT RECORD DEFINTION' File.
I will OVERWRITE your data with mine.


   90213     BDW DATA WAREHOUSE EXPORT LOG
Note:  You already have the 'BDW DATA WAREHOUSE EXPORT LOG' File.


   90214     BDW VISIT BACKLOAD FILE
Note:  You already have the 'BDW VISIT BACKLOAD FILE' File.


   90215     BDW REG BACKLOAD LOG
Note:  You already have the 'BDW REG BACKLOAD LOG' File.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES// NO



Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME//
```

```
     qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

Install Started for BDW IHS DATA WAREHOUSE 1.0 :
               Jun 04, 2004@14:08:45

Build Distribution Date: May 25, 2004

 Installing Routines:
               Jun 04, 2004@14:08:45

 Running Pre-Install Routine: PRE^BDWPRE

Beginning Pre-install routine (PRE^BDWPRE).
hold on....removing old data warehouse export file....be patient
killing old ADW xref on Visit file....please be patient...
Deleting dd fields....
Pre-install routine is complete.

 Installing Data Dictionaries:
               Jun 04, 2004@14:08:45

 Installing Data:
               Jun 04, 2004@14:08:45
 Installing PACKAGE COMPONENTS:

 Installing BULLETIN

 Installing SECURITY KEY

 Installing OPTION
               Jun 04, 2004@14:08:46

 Running Post-Install Routine: POST^BDWPRE
Creating BDW PAP SMEAR LAB TESTS Taxonomy...
Creating BDW PSA TESTS TAX Taxonomy...

 Updating Routine file...

 Updating KIDS files...

 BDW IHS DATA WAREHOUSE 1.0 Installed.
               Jun 04, 2004@14:08:46

                          BDW IHS DATA WAREHOUSE 1.0

Install Completed




   1       Load a Distribution
   2       Verify Checksums in Transport Global
   3       Print Transport Global
   4       Compare Transport Global to Current System
   5       Backup a Transport Global
   6       Install Package(s)
           Restart Install of Package(s)
           Unload a Distribution
```

Figure 5-1: Sample Installation Screenshot

6.0   Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (505) 248-4371 or (888) 830-7280 (toll free)

Fax: (505) 248-4363

Web: http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm

Email: support@ihs.gov