

Querying CDW Meta Views

by Margaret Gonsoulin, PhD

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Thanks

- Richard Pham
- Trinity Hall
- Andy Kelly
- BISL

First, a little background

The manual search for metadata & other introductory talks

The manual search for metadata

The screenshot shows the CDW Home website interface. At the top, there is a navigation bar with dropdown menus for 'BISL', 'CDW', and 'VISNs'. Below this, the 'BISL' logo is on the left, and the main navigation area includes 'CDW Home', 'CDW Support', 'Community', and 'MetaData'. The 'MetaData' menu item is circled in red, with a red arrow pointing to the 'CDW Metadata' link in the 'NEW TO CDW?' section. This link is also circled in red. Other sections visible include 'WHAT'S IN THE WORKS?' with links for 'General Announce', 'Training Announce', and 'CDW Domain Stat (Excel)'; 'EXTERNAL LINKS' with a link for 'HSR&D Listserv'; and 'DATA ACCESS' with a partially visible link.

BISL CDW VISNs

BISL CDW Home CDW Support Community MetaData

Site Contents

NEW TO CDW?

Are you getting started with the Corporate Data Warehouse (CDW)?

- [Intro and Policies](#)
- [CDW Support](#)
- [CDW Metadata](#)

WHAT'S IN THE WORKS?

- [General Announce](#)
- [Training Announce](#)
- [CDW Domain Stat \(Excel\)](#)

EXTERNAL LINKS

- [HSR&D Listserv](#)

DATA ACCESS

Do you want to get connected to CDW?

Arrive at BISL's Metadata Page

BISL CDW VISNs

BROWSE PAGE



[CDW Home](#) [CDW Support](#) [Community](#) [MetaData](#)

- MetaData Home
- Announcements
- CDW View Diagrams
- CDW FAQs
- Libraries
 - CDW Metadata Wiki
 - Metadata Documents
 - Reports
 - Data Sources
- Other Reports
 - Schemas
 - VINCI Central
 - Data Architecture Repository (DAR)

[CDW Home](#) > [MetaData](#)

CDW MetaData

Welcome to the CDW MetaData site, the site that contains information about the metadata for the CDW Data Domains in production. To begin a search through the CDW Production metadata, launch the [CDW Metadata Report](#). Information pertaining to the *Meta* and *BaseCamp* views in a CDW database may be found in the [CDW Metadata Wiki](#). The [DOE Catalog Report](#) lists CDW Workgroup database objects that are available for subscription. The [CDW Data Profiling reports](#) are now available. And, if you have only Vista information like a Vista file number or keywords from its description, use the [CDW Vista FileMan Crosswalk](#) report to locate the data in CDW Production.

Having an issue with the reports or wikis? Email the [CDW Architect Team](#).

Announcements

Title

[CDW Data Profile Report Descriptions](#)

You might have seen the [General Announcement](#) about the removal of **Legacy CDW Data Profiling views**. Below is a little more description about the new Data Profile Reports.

Click to launch



The most current list of production domains

CDW Metadata

Contains a grouped list of available CDW ER Diagrams and members.

ImageDescription

Active Directory 1.0	Image Date: 20 Jul 2016
Allergy 1.0	Image Date: 01 Feb 2014
Appointment 2.2	Image Date: 25 Apr 2016
Consult 2.1	Image Date: 24 Sep 2015
CPRSOrder 1.0	Image Date: 11 Aug 2014
Data Profiling 1.0	Image Date: 21 Feb 2014
Dental 1.0 Diagram 1 of 2	Image Date: 28 Oct 2015
Dental 1.0 Diagram 2 of 2 for Analytics	Image Date: 20 Apr 2016
Dimensions A Through D 7/8/2015	Image Date: 08 Jul 2015
Dimensions E Through K 7/8/2015	Image Date: 08 Jul 2015
Dimensions L Through O 5/4/2016	Image Date: 04 May 2016
Dimensions P Through R 3/7/2016	Image Date: 07 Mar 2016
Dimensions S Through Z 3/7/2016	Image Date: 07 Mar 2016
Dimensions, MRSA	Image Date: 31 Dec 2015

Click the name of the domain to view the Entity Relationship Diagram

Or

Expand the domain tables using the plus sign to the left of the domain name

Keep scrolling to domain of interest

Looking for introductory information?

[-] Getting Started with Using CDW

These products are designed to help new CDW users with understanding the nature of relational data, becoming familiar with CDW structure and logic, finding documentation of CDW content, and knowing what to expect when first viewing CDW data in SQL Server Management Studio (SSMS) software.

Resources	Released	 Resource
CDW: A Conceptual Overview 2017	2017/03/29	
CDW: Locating Its Documentation 2017	2017/04/05	
Getting the Information You Need From CDW: SQL Starter Language	2015/01/26	
Building Your Dataset in CDW: Joining Tables within a Domain	2015/07/27	
Getting CDW Back Together: Joining CDW Tables (Continued)	2016/10/24	
Data Management in SQL: Selected Intermediate SQL Skills	2016/10/31	

Okay, let's get started!

By using basic SQL skills to electronically search CDW metadata

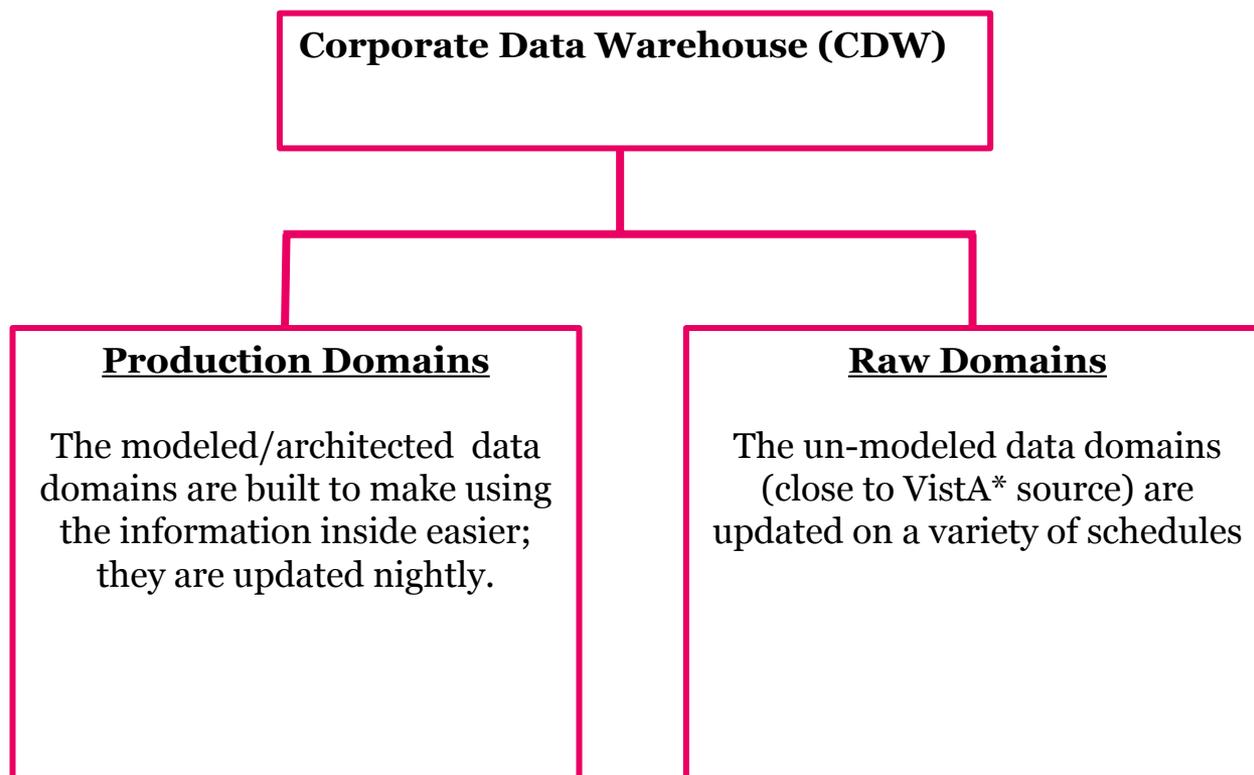
In today's talk...

1. Locate the views beginning with “meta” schema
2. Explore the columns in the view that allow for you to search for:
 - a. descriptions of a specific CDW column
 - b. fields capturing data on a subject
 - c. whether a specific VistA field/file is in CDW
3. Find information on linking keys
4. Use special columns to improve your query

In today's talk...

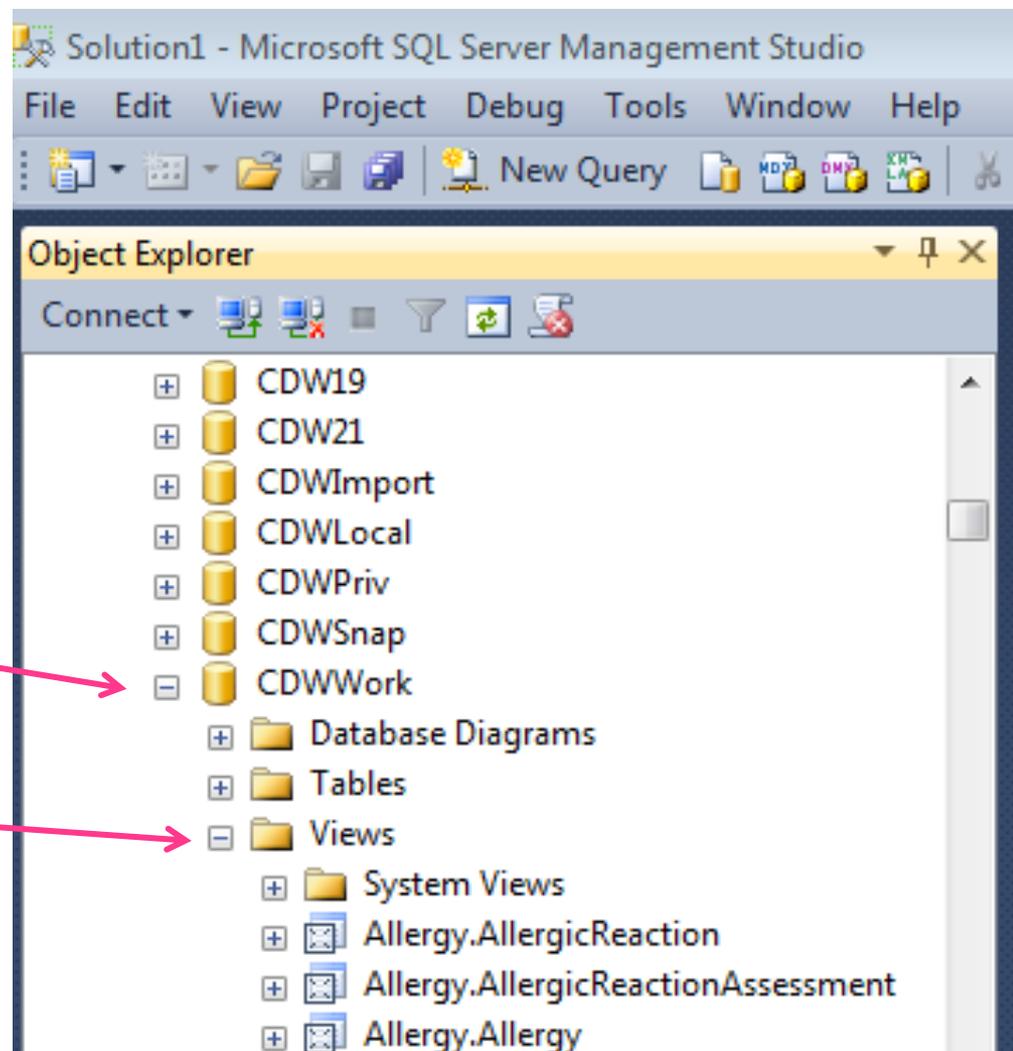
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Only for Production Domains



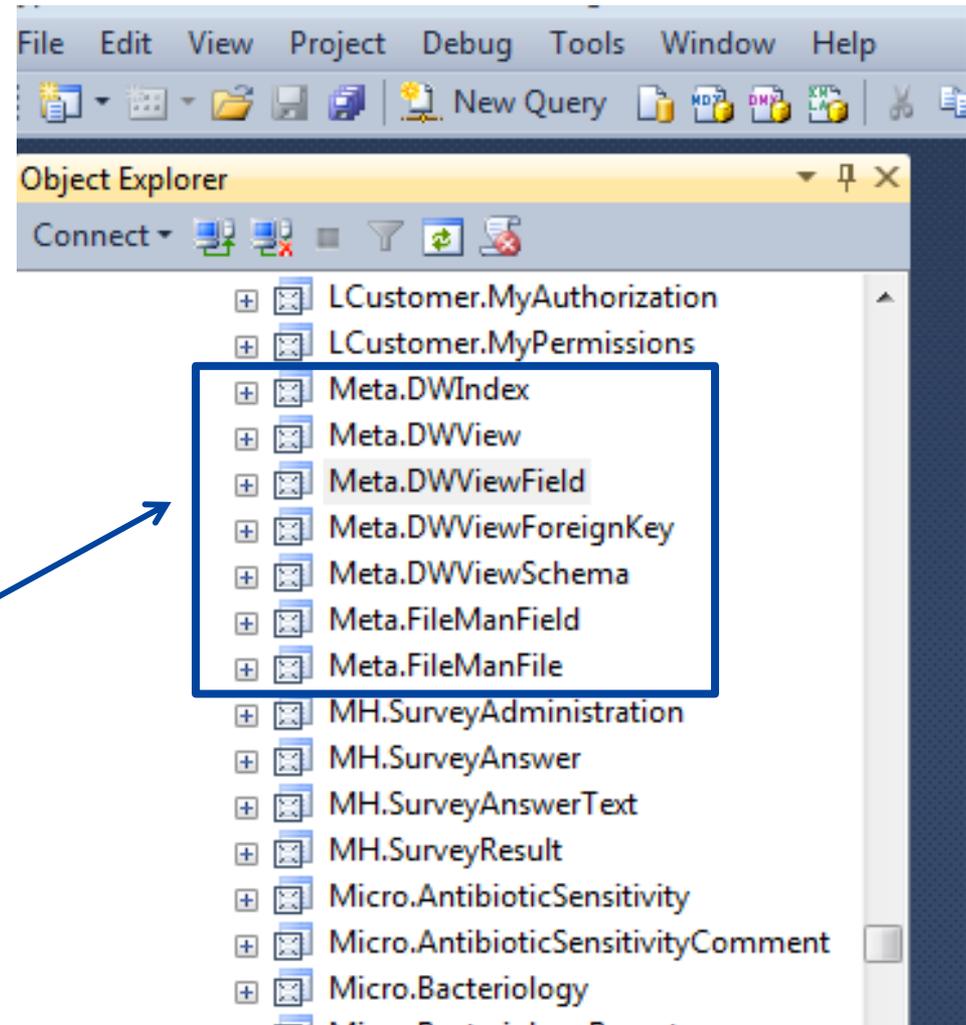
Getting the Right Place

- Open SSMS software from your program menu
- Type in your full server name (e.g., VHACDWrbo2.vha.med.va.gov)
- Locate the folder called CDWork
- Expand CDWork
- Expand Views

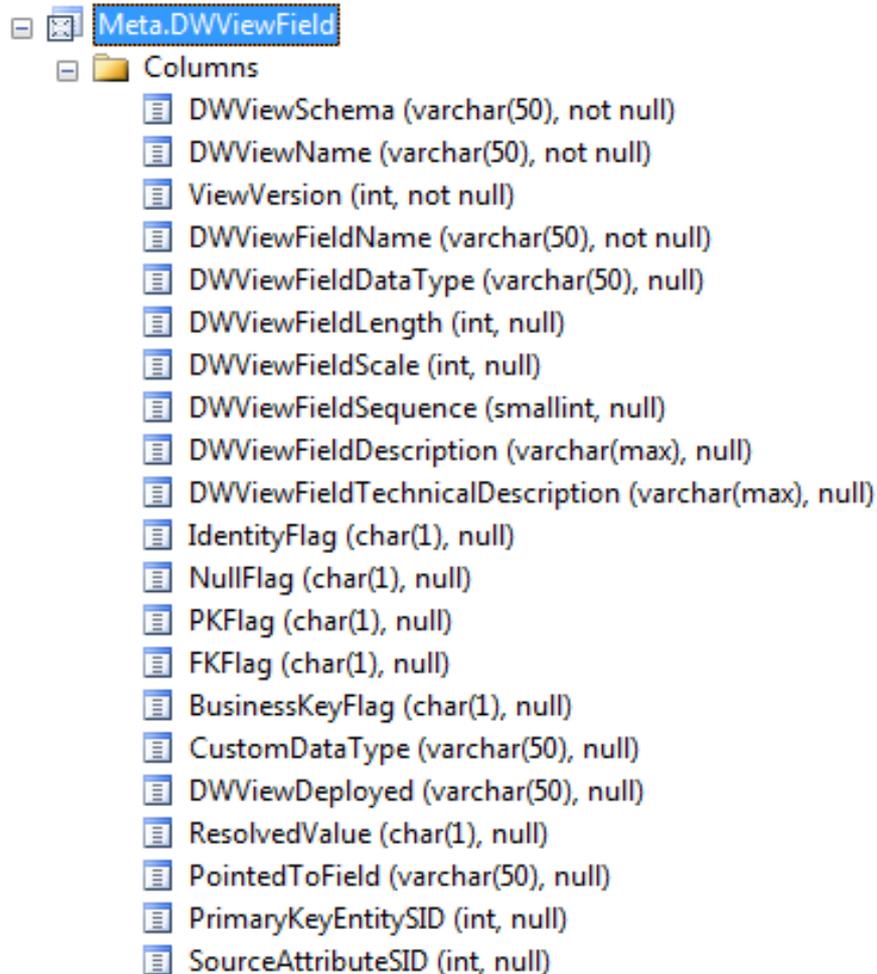


Finding Meta Views

- Scroll down through the views
- They are in alphabetic order
- Meta.xxx holds a variety of helpful information



Fields in Meta.DWViewField



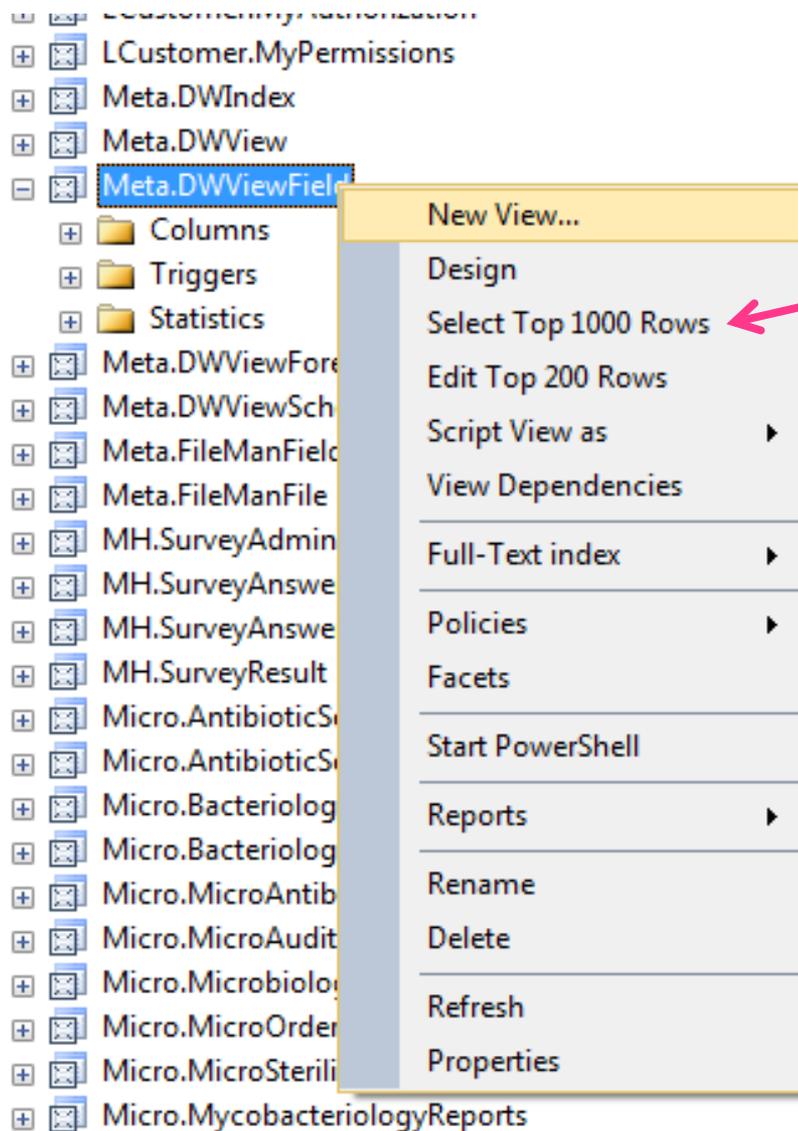
Field Name	Data Type	Nullability
DWViewSchema	varchar(50)	not null
DWViewName	varchar(50)	not null
ViewVersion	int	not null
DWViewFieldName	varchar(50)	not null
DWViewFieldDataType	varchar(50)	null
DWViewFieldLength	int	null
DWViewFieldScale	int	null
DWViewFieldSequence	smallint	null
DWViewFieldDescription	varchar(max)	null
DWViewFieldTechnicalDescription	varchar(max)	null
IdentityFlag	char(1)	null
NullFlag	char(1)	null
PKFlag	char(1)	null
FKFlag	char(1)	null
BusinessKeyFlag	char(1)	null
CustomDataType	varchar(50)	null
DWViewDeployed	varchar(50)	null
ResolvedValue	char(1)	null
PointedToField	varchar(50)	null
PrimaryKeyEntitySID	int	null
SourceAttributeSID	int	null

- There are numerous fields in this view
- This screenshot only shows some of them
- Let's explore the columns that are most useful for finding documentation on CDW

In today's talk...

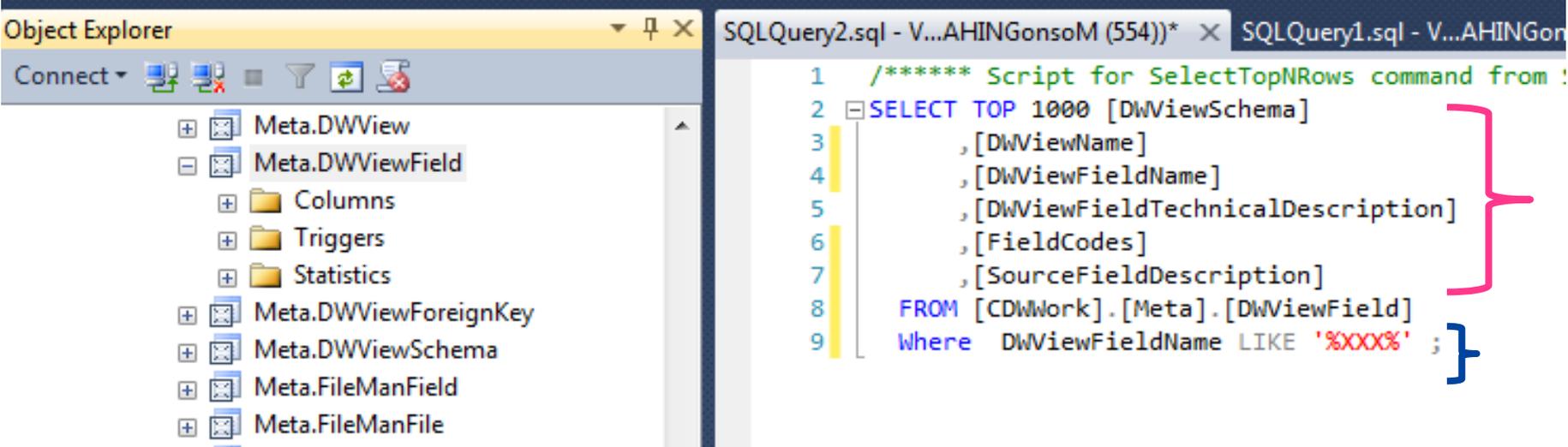
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Start with an Automatic Query



Click “select top 1000 rows” from the drop down menu

Customize the code



The screenshot shows the SQL Server Enterprise Manager interface. On the left, the Object Explorer displays a tree view of a database named 'Meta'. The 'Meta.DWViewField' folder is expanded, showing sub-folders for 'Columns', 'Triggers', and 'Statistics'. On the right, a SQL query window titled 'SQLQuery2.sql' contains the following code:

```
1  /***** Script for SelectTopNRows command from :
2  SELECT TOP 1000 [DWViewSchema]
3     , [DWViewName]
4     , [DWViewFieldName]
5     , [DWViewFieldTechnicalDescription]
6     , [FieldCodes]
7     , [SourceFieldDescription]
8  FROM [CDWork].[Meta].[DWViewField]
9  Where DWViewFieldName LIKE '%XXX%' ;
```

Red and blue brackets on the right side of the code indicate the selection of columns and the WHERE clause, respectively.

1. Select the columns/information you want
2. Add a WHERE statement to ask for the column of interest

Example for Column 'Age'

SQLQuery1.sql - V...AHINGonsoM (418)*

```

1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP 1000 [DWViewSchema]
3     ,[DWViewName]
4     ,[ViewVersion]
5     ,[DWViewFieldName]
6     ,[DWViewFieldTechnicalDescription]
7     ,[SourceFieldDescription]
8     FROM [CDWWork].[Meta].[DWViewField]
9     WHERE DWViewFieldName = 'Age'
  
```

100 %

Results Messages

	DWViewSchema	DWViewName	ViewVersion	DWViewFieldName	DWViewFieldTechnicalDescription	SourceField
1	Patient	Patient	63	Age	NULL	NULL
2	Patient	Patient	178	Age	This field is calculated from DOB the following formu...	NULL
3	SPatient	SPatient	70	Age	This field is calculated from DOB the following formu...	NULL
4	SPatient	SPatient	128	Age	This field is calculated from DOB the following formu...	NULL
5	SStaff	SStaff	11	Age	Computed field to be calculated from FDW to PDW ...	NULL
6	Staff	Staff	144	Age	NULL	NULL

Age

Column	Content
View Name(s)	Patient.Patient SPatient.SPatient
Technical Description	This field is calculated from DOB the following formula : $\text{floor}(\text{datediff}(\text{Day}, \text{DateOfBirth}, \text{ISNULL}(\text{DateOfDeath}, \text{GetDate()}))/365.25)$ ” *
Field Codes	NA
Source Field Description	NA

*This is telling you that Age may contain either the patient's age as of today or the patient's age at date of death.

PatientPeriodOfService

Column	Content
View Name(s)	Outpat.Visit Outpat.Workload
Technical Description	ETL Team to populate from AmbEncDemog.PeriodOfService to this field. '' Entries to be converted to NULL
Field Codes	DIC(21,
Source Field Description	From the available listing select <u>the period of service which best classifies this applicant</u> . The selections displayed are limited based on the eligibility code which must have been entered in order to select a period of service. Once the service record is verified only those users who hold the designated security key may enter/edit this field.

CollectionMethod

Column	Content
View Name(s)	Dim.CollectionMethod PatSub.PatientRace PatSub.PatientEthnicity
Technical Description	NA
Field Codes	NA
Source Field Description	<p>This field contains the name of a collection method used to obtain a value for race and ethnicity during enter/edit of patient data information.</p> <p>These entries are maintained by VA Central Office and entry/edit of entries is not allowed.</p>

KidneySource

Column	Content
View Name(s)	Inpat.CensusSurgicalProcedure Inpat. InpatientSurgicalProcedure
Technical Description	NA
Field Codes	1:Live Donor;2:Cadaver;
Source Field Description	This field will indicate where the transplant organ was received from.

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Search for data on a topic

- Search for key words in
 - DWViewFieldTechnicalDescription
 - FieldCodes
 - SourceFieldDescription

```
WHERE DWViewName LIKE '%OEF%' or  
      DWViewFieldName LIKE '%OEF%' or  
      DWViewFieldTechnicalDescription LIKE '%OEF%' or  
      FieldCodes LIKE '%OEF%' or  
      SourceFieldDescription LIKE '%OEF%'
```

- Customer.LCu
- Customer.MyA
- Customer.MyP
- Meta.DWIndex
- Meta.DWView
- Meta.DWViewFi
- Columns
- Triggers
- Statistics
- Meta.DWViewFc
- Meta.DWViewSc
- Meta.FileManFi
- Meta.FileManFi
- MH.SurveyAdm
- MH.SurveyAnsv
- MH.SurveyAnsv
- MH.SurveyResu
- Micro.Antibiotic
- Micro.Antibiotic
- Micro.Bacteriol
- Micro.Bacteriol
- Micro.MicroAnt
- Micro.MicroAuc
- Micro.Microbio
- Micro.MicroOrc
- Micro.MicroSte
- Micro.Mycobac

```

1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP 1000 [DWViewSchema]
3     , [DWViewName]
4     , [DWViewFieldName]
5     , [DWViewFieldTechnicalDescription]
6     , [FieldCodes]
7     , [SourceFieldDescription]
8 FROM [CDWork].[Meta].[DWViewField]
9 Where DWViewName LIKE '%OEF%' or DWViewFieldName LIKE '%OEF%' or
10 DWViewFieldTechnicalDescription LIKE '%OEF%' or
11 FieldCodes LIKE '%OEF%' or SourceFieldDescription LIKE '%OEF%' ;
    
```

	DWViewSchema	DWViewName	DWViewFieldName	DWViewFieldTech...	FieldCodes	SourceFieldDescription
7	PatSub	OEOIFService	OEOIFFromDateSID	NULL	NULL	NULL
8	PatSub	OEOIFService	OEOIFFromDateSID_1	NULL	NULL	NULL
9	PatSub	OEOIFService	OEOIFFromVistaDate		NULL	If the service indicated is OEF or
10	PatSub	OEOIFService	OEOIFServiceIEN		NULL	NULL
11	PatSub	OEOIFService	OEOIFServiceSID	NULL	NULL	NULL
12	PatSub	OEOIFService	OEOIFToDate	NULL	NULL	If the service indicated is OEF or
13	PatSub	OEOIFService	OEOIFToDateSID	NULL	NULL	NULL
14	PatSub	OEOIFService	OEOIFToVistaDate		NULL	If the service indicated is OEF or
15	PatSub	OEOIFService	PatientIEN	NULL	NULL	NULL
16	PatSub	OEOIFService	PatientSID	NULL	NULL	NULL
17	PatSub	OEOIFService	RecordedDate Time	NULL	NULL	This is a time stamp for when the
18	PatSub	OEOIFService	Sta3n	NULL	NULL	NULL

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Looking for Something from VistA?

- Let's start by looking at the Data Architecture Repository (DAR)
 - This site serves as a repository for metadata from around the VA.
 - It includes metadata for VistA.
 - VistA is one of the primary sources of CDW data.
 - Referencing these files can help clarify the meaning of CDW data.

DAR's VistA Metadata

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS INTRANET

VA Intranet Home | About VA | Organizations | Locations | Employee Resources

METADATA REPOSITORY HOME

the Metadata Repository

Metadata Repository provides a means to catalog, search, report, and manage metadata via a web-accessible portal. Metadata is data about metadata. Availability of an enterprise metadata repository enables data management and governance; promotes data understanding. To search metadata using the search below, use the tabs above to view all Metadata, Value Domain, or Thesaurus content, or click on a

**Select "VHA" from the left banner
Then select "VistA" from the menu**

Search For: Search IN: Metadata Name Only WITH: Any of these words
 Identifying Fields Only All of these words
 All Attribute Fields These words as a phrase

Use Thesaurus

Use the options below to apply filter(s) to search results, returning only matches on selected criteria

Metadata Source	Metadata Category	Metadata Type
-----------------	-------------------	---------------

<https://vaausdarmul81.aac.dva.va.gov/pls/apex/f?p=2000:1:4160078295662946::Reset:NO:RP,1>

Search for a subject

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS

VA Intranet Home About VA Organizations Locations Employee Resources

VISTA METADATA REPOSITORY (VISTA)

Home Packages Files Fields Standard Table

The DAR Veterans Health Information Systems and Technology Architecture (Vista) Metadata Repository and navigate the metadata describing Veterans Vista Platinum data structures within the **December 31, 2010** master version of the complete Vista system maintained by the Standards and Compliance Office within the VA. As the Vista system evolves and Platinum images are updated, the metadata will be added to the DAR with the identified publications, the [Vista Monograph](#) and the [Vista Document Library](#).

A listing of VHA national databases can be found within the [DAR VHA Corporate Database Monograph](#). Some service generated data and/or data used for program management and tracking, and

How to Find Vista Metadata

There are several options for searching Vista metadata:

- Use Tabs above to search within packages, files, fields, etc.
- Use the general Search Vista box below to search all packages, files, and field names, and descriptions.
- If you know the package name, you can navigate directly to a specific Vista package with drill down capabilities.
- If you know the file name, you can navigate directly to a specific Vista file with associated field information.

General Search:

Package Name:

File Name (#):

Vista Background

VIREC
RESEARCHERS' GUIDE TO VA DATA

Enter key word and press "Search VistA"

Search Results, Eligibility

The Search VistA window provides the ability to search all packages, files, and field names, and descriptions. Additionally, the search results can then be performed within the second search window.

Rows

File Name and Number

1 - 25 of 164

Src	Name	Description	Parent
File	ARCH.ELIGIBILITY {161.011}	-	REGISTRATION
File	ELIGIBILITY/BENEFIT {2.322}	-	REGISTRATION
File	ELIGIBILITY {21.01}	-	REGISTRATION
File	ENROLLMENT/ELIGIBILITY UPLOAD AUDIT {27.14}	-	REGISTRATION
File	X12 271 ELIGIBILITY/BENEFIT {365.011}	-	INTEGRATED BILLING
File	ELIGIBILITY/BENEFIT {365.02}	-	INTEGRATED BILLING
File	BT CLAIM ELIGIBILITY CODE {392.41}	-	BENEFICIARY TRAVEL
File	ELIGIBILITY {408.08}	-	REGISTRATION
File	ELIGIBILITY EXCLUSION {43.08}	-	REGISTRATION
File	TPB ELIGIBILITY {52.91}	-	OUTPATIENT PHARMACY
File	PRIMARY ELIGIBILITY CODE (RAD) {790.13}	-	WOMEN'S HEALTH
File	PRIMARY ELIGIBILITY CODE (LAB) {790.14}	-	WOMEN'S HEALTH
File	ROES ELIGIBILITY {791810.4}	-	REMOTE ORDER/ENTRY SYSTEM
File	ROES ELIGIBILITY CONFIRMATION {791814}	-	REMOTE ORDER/ENTRY SYSTEM
File	ELIGIBILITY CODE {8}	-	REGISTRATION
File	MAS ELIGIBILITY CODE {8.1}	-	REGISTRATION
Field	ELIGIBILITY STATUS TEXT	-	509650.9

VistA File “Eligibility Code” #8

Field Name	Field Num ▲	Data Type	Description	Help Text
 NAME	.01	FREE TEXT	This field contains the site specific name for the eligibility. In most cases the name will be the same as the MAS ELIGIBILITY CODE pointed to by the MAS ELIGIBILITY CODE field of this file.	NAME MUST BE 3-30 CHARACTERS, NOT NUMERIC OR STARTING WITH PUNCTUATION
 MAKE RECORD SENSITIVE?	.12	SET	Answer YES if patients with this eligibility should have there records automatically added to the DG SECURITY LOG file so that the patient's record will be listed as sensitive.	Enter YES if patients with this eligibility should have their records automatically placed in the DG SECURITY LOG file.
 CARD COLOR	1	SET	This field indicates the color of the patient's card for the MAS eligibility. This field is automatically updated with the value of the 'CARD COLOR' of the MAS ELIGIBILITY CODE (#8.1) entry pointed to by field #8, MAS ELIGIBILITY CODE. This field is uneditable.	-
 ABBREVIATION	2	FREE TEXT	This field may contain an abbreviation for the eligibility name. It may be used in place of the name in selected prints.	ANSWER MUST BE 1-4 CHARACTERS IN LENGTH
 VA CODE NUMBER	3	NUMERIC	This field contains the VA CODE NUMBER that has been assigned to this eligibility. This field is automatically updated with the value of the 'VA CODE NUMBER' of the MAS ELIGIBILITY CODE(#8.1) entry pointed to by field #8, MAS ELIGIBILITY CODE. This field is uneditable.	Type a Number between 1 and 10, 0 Decimal Digits
 TYPE	4	SET	This field indicates the type of patient that can be assigned this eligibility. The patient is either a 'veteran' or a 'non-veteran' type. This field is automatically updated	-

Tailor the query- search for “Eligibility Code”

SQLQuery1.sql - V...AHINGonsoM (418))* X

```
1  /***** Script for SelectTopNRows command from SSMS *****/
2  SELECT TOP 1000 [DWViewSchema]
3      ,[DWViewName]
4      ,[ViewVersion]
5      ,[DWViewFieldName]
6      ,[DWViewFieldTechnicalDescription]
7      ,[SourceFieldDescription]
8      ,[SourceEntityName]
9      ,[SourceFileNumber]
10     ,[SourceAttributeName]
11     ,[SourceFieldNumber]
12 FROM [CDWork].[Meta].[DWViewField]
13 WHERE SourceEntityName = 'Eligibility Code'
14 ORDER BY SourceFileNumber, SourceFieldNumber;
```

Keep columns on
CDW table & column,
source (VistA in this
case) information

Search for
SourceEntityName
“Eligibility Code”

100 %

Results of query/where it is in CDW

DWViewSc...	DWViewName	ViewVersion	DWViewFieldName	DWView...	SourceFieldDescription
Dim	Eligibility	20	EligibilityIEN	NULL	NULL
Dim	Eligibility	20	EligibilitySID	NULL	NULL
Dim	Eligibility	20	MASEligibilitySID		NULL
Dim	Eligibility	20	Sta3n	NULL	NULL
Dim	Eligibility	20	Eligibility	NULL	This field contains the site
Dim	Eligibility	20	MakeRecordSensitiveFlag	If 1 then ...	Answer YES if patients wi
Dim	Eligibility	20	CardColor		This field indicates the co
Dim	Eligibility	20	Agency		This field contains the AG
Dim	Eligibility	20	AgencyIEN	NULL	This field contains the AG
Dim	Eligibility	20	EligibilityAbbreviation	NULL	This field may contain an
Dim	Eligibility	20	VACodeNumber	NULL	This field contains the VA
Dim	Eligibility	20	VeteranFlag	if Y then ...	This field indicates the typ
Dim	Eligibility	20	EligibilityPrintName	NULL	This field contains a short
Dim	Eligibility	20	InactiveFlag	If 1 then ...	If the eligibility is inactive tl
Dim	Eligibility	20	SelectAsAdditionalFlag	If 1 then ...	This field indicates whethe
Dim	Eligibility	20	IdentificationFormat		This field indicates which

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From Two Entry Points

1. You are in VistA metadata and see a “pointer”. You wonder how to find the corresponding linking key in CDW.
2. You are in CDW metadata (or other documentation), see a linking key*, and wonder how that linking key is defined.

1st Entry - from VistA pointer

VISTA METADATA REPOSITORY (VISTA)

Home > Files > File Details

File Details History Data

File Num	405
File Name	PATIENT MOVEMENT
Description	This file holds the data for all admissions, transfers, discharges, treating specialty changes, and lodger movements. executed to insure data consistency. The following cross-references exist on this file: ^DGPM("ATID",TT,DFN,Inverse Date_AS,DA)=" ^DGPM("APCA",DFN,Corresponding Admission,Date_AS,DA)=" ^DGPM("APMV",Inverse Date_AS,DA)=" ^DGPM("AMV",TT,Date_AS,DFN,DA)=" ^DGPM("ATS",DFN,Corresponding Admission,Inverse Date_AS,Treating Specialty, Ward,DA)=" ***lodgers only** ^DGPM("ARM",IFN of Room-bed,DA)=1 or 0 [1 indicates lodger, 0 indicates non-lodger. TT=Transaction type where choices are as follows: 1=admission 4=check-in lodger 2=transfer 5=check-out lodger. 2=Admission to hospital (automatically generated by module) or 1=discharge from hospital within 30 days of ASIH for non-ASIH movements or ASIH movements where there are not 2 movements at the same date/time]
Owning Package	REGISTRATION

Your are in VistA file
"Patient Movement"

Field Name	Field Num	Data Type	Description
TRANSACTION	.02	POINTER	Enter in this field the transaction type of the movement. Choose from: 1 ADMISSION 2 TRANSFER 3 DISCHARGE 4 CHECK-IN LODGER 5 CHECK-OUT LODGER 6 SPECIALTY TRANSFER
PATIENT	.03	POINTER	Enter the patient for which this movement occurred. This field is a pointer to the PATIENT file.
TYPE OF MOVEMENT	.04	POINTER	Choose the type of movement this patient had. You will be selecting from active FACILITY MOVEMENT TYPES for which the TRANSACTION TYPE of this movement matches the TRANSACTION TYPE of the FACILITY MOVEMENT TYPE. For example, if you are admitting a patient, you will only be able to select active admission types.
TRANSFER FACILITY	.05	POINTER	If this movement is a TRANSFER IN (admission from another facility), TRANSFER OUT (discharge to another facility), or an ASIH movement to another facility (TO ASIH (OTHER FACILITY), for example), you will be prompted for TRANSFER FACILITY and will be asked to choose from an entry in the INSTITUTION file. This field is required for those movement types mentioned above.
WARD LOCATION	.06	POINTER	Enter in this field the WARD to which this patient is being admitted or transferred to. Choose from ACTIVE entries in the WARD LOCATION file. This field will only be prompted for movements to WARDS at the home facility.
ROOM-BED	.07	POINTER	Select the ROOM-BED to which you are admitting or transferring this patient. Select from those ACTIVE beds in the ROOM-BED file which are assigned to the WARD LOCATION chosen for this movement.
PRIMARY PHYSICIAN	.08	POINTER	Enter the healthcare provider with primary responsibility for the direct care of the patient. This may be the resident or intern in a teaching facility or the staff physician in a nonaffiliated hospital. This field will only be prompted for movements with a transaction type

Use “Related” File and Field

```

1  /***** Script for SelectTopNRows command from SSMS *****/
2  SELECT TOP 1000 [DWViewSchema]
3      ,[DWViewName]
4      ,[ViewVersion]
5      ,[DWViewFieldName]
6      ,[ERDiagramTitles]
7      ,[RelatedFileNumber]
8      ,[RelatedFieldNumber]
9  FROM [CDWork].[Meta].[DWViewField]
10 WHERE RelatedFileNumber = '405' and RelatedFieldNumber = '.06';

```

	DWViewSchema	DWViewName	ViewVersion	DWViewFieldName	ERDiagramTitles	RelatedFileNumber	RelatedFieldNumber
1	Inpat	Inpatient	37	AdmitWardLocationSID	Inpatient 3.0	405	.06
2	Inpat	Lodger	7	WardLocationSID	Inpatient Fee Lodger	405	.06
3	Inpat	PatientTransfer	16	GainingWardLocationSID	Inpatient 3.0	405	.06
4	Inpat	ProvisionalMovement	3	WardLocationSID	Inpatient 3.0	405	.06

Remember from Vista - the WARD to which this patient is being admitted or transferred. This field will only be prompted for movements to WARDS at the home facility.

From Two Entry Points

1. You are in VistA metadata and see a “pointer”. You wonder how to find the corresponding linking key in CDW.
2. **You are in CDW metadata (or other documentation), see a linking key*, and wonder how that linking key is defined.**

From CDW Metadata

CDW Home > MetaData > Reports

Actions | Refresh | 1 of 1 | Find Next | 100%

ICD-9-PCS and ICD-10-PCS	ER Diagram Date: 8/10/2015
Immunization 2.1	ER Diagram Date: 8/15/2017
Inpatient 2.0 Census	ER Diagram Date: 4/15/2017
Inpatient 3.0	ER Diagram Date: 11/8/2017
Inpatient Fee Ledger	ER Diagram Date: 4/15/2017
Integrated Billing	ER Diagram Date: 12/8/2017
Lab Microbiology 2.0	ER Diagram Date: 7/5/2015
LabChem Release 2.0	ER Diagram Date: 4/3/2017
Mental Health 1.1	ER Diagram Date: 5/23/2016
NonVAMeds 1.0	ER Diagram Date: 8/11/2015
Outpat Workload	ER Diagram Date: 3/7/2018
Outpatient 2.1	ER Diagram Date: 12/18/2017
Patient 2.0	ER Diagram Date: 11/7/2017

Click the “+” to expand metadata

Search Linking Keys for PatientTransfer

Inpat.InpatientICDProcedure	24	601 (45.05)	View Version: 10	Cutoff Field: DischargeDateTime
Inpat.InpatientRelease	16	PTF RECORD (45.831)	DWViewDeployed: xDWWork View Version: 1	Partition Key: EnteredDateTime Cutoff Field: EnteredDateTime
Inpat.InpatientSurgicalProcedure	27	401 (45.01)	DWViewDeployed: xDWWork View Version: 11	Partition Key: DischargeDateTime Cutoff Field: DischargeDateTime
Inpat.PatientTransfer	37	PATIENT MOVEMENT (405)	DWViewDeployed: xDWWork View Version: 10	Partition Key: PatientTransferDateTime Cutoff Field: PatientTransferDateTime
Inpat.PatientTransferDiagnosis	17	501 (45.02)	DWViewDeployed: xDWWork View Version: 6	Partition Key: PatientTransferDateTime Cutoff Field: PatientTransferDateTime
Inpat.PresentOnAdmission	14	DSIP POA TRACKING (19640.1)	DWViewDeployed: xDWWork View Version: 17	Partition Key: PresentOnAdmissionEnteredDateTime Cutoff Field: PresentOnAdmissionEnteredDateTime



CDW Foreign Keys

Provides a listing of the foreign and primary keys for CDW views.

FKSchemaName	FKViewName	FKViewFieldName	FKViewVersion	PKSchemaName	PKViewName	PKViewFieldName
Inpat	Inpatient535Multiple	PatientTransferSID	4	Inpat	PatientTransfer	PatientTransferSID
Inpat	PatientTransfer	ASIHInpatientSID	16	Inpat	Inpatient	InpatientSID
Inpat	PatientTransfer	AttendingPhysicianStaffSID	16	Staff	Staff	StaffSID
Inpat	PatientTransfer	EnteredByStaffSID	16	Staff	Staff	StaffSID
Inpat	PatientTransfer	FacilityMovementTypeSID	16	Dim	FacilityMovementType	FacilityMovementTypeSID
Inpat	PatientTransfer	GainingWardLocationSID	16	Dim	WardLocation	WardLocationSID
Inpat	PatientTransfer	InpatientSID	16	Inpat	Inpatient	InpatientSID
Inpat	PatientTransfer	LastEditedByStaffSID	16	Staff	Staff	StaffSID
Inpat	PatientTransfer	LosingSpecialtySID	16	Dim	Specialty	SpecialtySID



Using another meta view/ Make a plan

Will need both tables

Meta.FileManField

Meta.DWIndex
 Meta.DWView
 Meta.DWViewField
 Columns
 Triggers
 Statistics
 Meta.DWViewForeignKey
 Meta.DWViewSchema
 Meta.FileManField
 Columns
 VistaFieldSID (int, null)
 SourceAttributeSID (int, not null)
 VistaFileSID (int, null)
 ★ SourceEntitySID (int, null)
 ★ FileNumber (varchar(50), not null)
 ★ FieldNumber (varchar(50), not null)
 FileName (varchar(50), null)
 ★ FileName (varchar(50), not null)
 FieldType (varchar(50), not null)
 FieldLength (int, null)
 FieldCodes (varchar(500), null)
 PointsToFileNumber (varchar(50), null)
 GlobalNode (varchar(500), null)
 Piece (int, null)
 MultipleFileNumber (varchar(50), null)
 ParentFileNumber (varchar(50), null)
 WholeNumberDigits (int, null)
 DecimalDigits (int, null)
 ★ Description (varchar(8000), null)

Meta.FileManField

“Fileman” is a term used in Vista to describe the control of files in that system.

So, this will view contain information that we might other look in the DAR* to find.

Writing a Query

```
SQLQuery3.sql - V...HAHINGonsoM (81))* x
1 SELECT TOP 1000 v.[DWViewName]
2     ,v.[DWViewFieldName]
3     ,v.[RelatedFileNumber]
4     ,v.[RelatedFieldNumber]
5     ,f.[FieldName]
6     ,f.[Description]
7 FROM [CDWork].[Meta].[DWViewField] v
8 JOIN [CDWork].[Meta].[FileManField] f
9     on v.SourceEntitySID = f.SourceEntitySID
10    and v.RelatedFileNumber = f.FileNumber
11    and v.RelatedFieldNumber = f.FieldNumber
12 where DWViewFieldName = 'AttendingPhysicianStaffSID' and DWViewName = 'PatientTransfer';
13
```

From DWViewField

From FileManField

Link on three columns

For the CDW table PatientTransfer and column AttendingPhysicianSID

Query Results

SQLQuery3.sql - V...HAHINGonsoM (81)*

```

1 SELECT TOP 1000 v.[DWViewName]
2     ,v.[DWViewFieldName]
3     ,v.[RelatedFileNumber]
4     ,v.[RelatedFieldNumber]
5     ,f.[FieldName]
6     ,f.[Description]
7 FROM [CDWork].[Meta].[DWViewField] v
8 JOIN [CDWork].[Meta].[FileManField] f
9     on v.SourceEntitySID = f.SourceEntitySID
10    and v.RelatedFileNumber = f.FileNumber
11    and v.RelatedFieldNumber = f.FieldNumber
12 where DWViewFieldName = 'AttendingPhysicianStaffSID' and DWViewName = 'PatientTransfer';
13

```

100 %

Results Messages

	DWViewName	DWViewFieldName	RelatedFileNumber	RelatedFieldNum...	FieldName	Description
1	PatientTransfer	AttendingPhysicianStaffSID	405	.19	ATTENDING PHYSICIAN	Enter the supervising physician who is responsib...

Description Reads –

Enter the supervising physician who is responsible for the care of the patient. Nonaffiliated hospitals may choose not to use this field. This field will be prompted for movements with a transaction type of 'specialty change' only.

In today's talk...

1. Locate the views beginning with “meta” schema
2. Explore the columns in the view that allow for you to search for:
 - a. descriptions of a specific CDW column
 - b. fields capturing data on a subject
 - c. whether a specific VistA field/file is in CDW
3. Find information on linking keys
4. Use special columns to improve your query

Meta.DWIndex

Another view

A domain I am working with

	DWSchema	DWViewName	ViewVersion	ClusteredFlag	UniqueFlag	IndexColumns	IndexType
1	Output	ProblemList	6	N	Y	,Sta3n,ProblemListIEN	AK
2	Output	ProblemList	6	Y	N	,Sta3n,EnteredDate	CDX
3	Output	ProblemList	6	N	N	,ETLBatchID,OpCode	ETL
4	Output	ProblemList	6	N	N	,ICD10SID	Other
5	Output	ProblemList	6	N	N	,ICD9SID	Other
6	Output	ProblemList	6	N	N	,PatientSID	Patient
7	Output	ProblemList	6	N	Y	,ProblemListSID	PK
8	Output	VDiagnosis	24	N	Y	,Sta3n,VDiagnosisIEN	AK
9	Output	VDiagnosis	24	Y	N	,Sta3n,VisitDateTime	CDX

Column that are indexed

- An *index* helps SQL Server find the row or rows of values more quickly and efficiently.
- *Clustered indexes* sort and store the data rows in the table or view based on their values.

Partition Keys Listed in Metadata

DWViewName	Field Count	FileMan File Data Source	View Version	Relevant Dates	Relations
Inpat.Inpatient	92	PTF (45)	DWViewDeployed: xDWWork View Version: 37	Partition Key: DischargeDateTime Cutoff Field: DischargeDateTime	
Inpat.Inpatient501Multiple	35	501 (45.02)	DWViewDeployed: SPVNext View Version: 4	Partition Key: MovementDateTime Cutoff Field: MovementDateTime	
Inpat.Inpatient501Transaction	44	501 (45.02)	DWViewDeployed: xDWWork View Version: 2	Partition Key: DischargeDateTime Cutoff Field: DischargeDateTime	
Inpat.Inpatient501TransactionDiagnosis	20	501 (45.02)	DWViewDeployed: xDWWork View Version: 2	Partition Key: SpecialtyTransferDateTime Cutoff Field: SpecialtyTransferDateTime	
Inpat.Inpatient535Multiple	21	535 (45.0535)	DWViewDeployed: SPVNext View Version: 4	Partition Key: MovementDateTime Cutoff Field: MovementDateTime	
Inpat.Inpatient535Transaction	24	535 (45.0535)	DWViewDeployed: xDWWork View Version: 2	Partition Key: DischargeDateTime Cutoff Field: DischargeDateTime	
Inpat.InpatientCloseout	15	PTF CLOSE OUT (45.84)	DWViewDeployed: xDWWork View Version: 3	Partition Key: CloseOutDateTime Cutoff Field: CloseOutDateTime	
Inpat.InpatientCPTProcedure	25	INPATIENT CPT CODE (46)	DWViewDeployed: xDWWork View Version: 9	Partition Key: CPTProcedureDateTime Cutoff Field: DischargeDateTime	
Inpat.InpatientDiagnosis	13	PTF (45)	DWViewDeployed: xDWWork View Version: 12	Partition Key: DischargeDateTime Cutoff Field: DischargeDateTime	

What is Table Partitioning?

2012-01-01	...	...
2012-12-31	...	...
2013-01-01	...	...
2013-12-31	...	...
2014-01-01	...	...
2014-12-31	...	...

Table partitioning is a way to divide a large table into smaller, more manageable parts without having to create separate tables for each part. Data in a partitioned table is physically stored in groups of rows called *partitions* and each partition can be accessed and maintained separately. Partitioning is not visible to end users, a partitioned table behaves like one logical table when queried.

Questions?

Feel free to email us anytime as additional/new questions arise at virec@va.gov