



Human Capital Management (HCM)

Cardinal HR Reports and Queries

August 24, 2023



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Cardinal HR Data



Cardinal: The Key to Accurate HR Data

We should all strive to improve accuracy by catching and fixing errors quickly. Accurate Cardinal HR data is important for several reasons:

Accuracy

- Cardinal is **THE** source of HR data used to generate reports and metrics across all Secretariats.
- HR data impacts benefits, payroll, time and labor, and finance processing.

Efficiency

- HR Data is extracted from Cardinal and interfaced to other systems, including agency-specific systems and third-party systems such as VRS and Anthem.

Compliance

- DHRM is mandated to provide a variety of HR reports to the Secretariats, Chief of Staff, and Governor.
- Cardinal HR data is used in statewide reports where data from all agencies is quantified.

Trust

- Most employees can view their HR data in Employee Self-Service (ESS). Employees are more likely to trust their agency if they know their HR data is accurate.



Impacts of Inaccurate Cardinal HR Data

Accuracy

- The Commonwealth's Learning Management System (COVLC), Recruitment Management System (PageUp), Active Directory, and third-party systems such as VRS and Anthem receive incorrect data, such as birthdates, addresses, job titles, and more.
- Statewide reports, such as Compensation Levels by Job and SOC (RHR427), produce inaccurate median and quartile results when Job Code, VPA, and/or salary data is incorrect. This impacts salary alignment analyses and competitive salary offers.

Efficiency

- Users experience issues accessing systems such as Cardinal, VRS, and COVLC.
- Time and labor and payroll processing fails, requiring research to identify and correct data.
- Benefits enrollment data does not process timely, increasing risk of employees experiencing a lapse in health coverage.



Impacts of Inaccurate Cardinal HR Data (continued)

Compliance

- DHRM HR Reports provided to the Secretariats, Chief of Staff, and Governor contain inaccurate information.
 - Span of Control Report
 - EPR Report
 - Vacancy Rates and Turnover Report
 - Telework Report

Trust

- Employees submit Cardinal VCCC tickets to report inaccurate HR data and request that the Cardinal PPS Team fix it. Per procedure these tickets cannot be resolved by Cardinal, producing frustration from employees.



Validating HR Data Using Reports & Queries

Validating HR data in Cardinal is essential to ensuring the accuracy and reliability of your agency's workforce information. Keying and interfacing errors happen. Utilizing and understanding Cardinal reports and queries will help catch and fix errors quickly.

- Use Cardinal reports and queries to audit your HR data on a recurring basis.
- Cardinal offers several resources to assist in reviewing and understanding the data generated by reports and queries.
 - **Cardinal Reports Catalogs:** These catalogs list the available reports and queries, along with their descriptions.
 - **Cardinal Jobs Aids:** Provide step-by-step instructions on how to use reports and queries and processes to manage HR data.
 - **Web-Based Training (WBT):** NAV225: Cardinal Reporting (HCM) and other WBTs are available on the Cardinal website.
 - **Reporting Tutorial Videos:** these videos demonstrate how to run and generate Cardinal reports and queries.



Reports Catalog Overview



Reports Catalog Overview

Cardinal's reports catalogs provides a comprehensive overview of reports and queries for a specific functional area. The [Cardinal HCM Human Resources Reports Catalog](#) covers the Human Resources (HR) functional area.

[Cardinal Website](#) > Resources > [Reports Catalog](#)

- Reports and queries can be used in multiple functional areas.
- If you cannot find the report or query in your functional area, search the other Cardinal HCM Reports Catalogs, as it may be in a different functional area catalog.
 - Tip: Use the Find feature (Ctrl+F) to easily search the other Cardinal HCM Reports Catalogs.
- **Need help running a report or query?** Use the following job aids and web-based training for support:
 - [NAV225 Generating an HCM Report](#)
 - [NAV225 Running an HCM Query](#)
 - [NAV225: Cardinal Reporting \(HCM\) WBT](#)



Demo

Reports Catalog



Human Resource Queries



Saving Favorite Queries

Cardinal's functionality provides the user the ability to save regularly run queries to the administrator's favorite list.

- **Add a query to My Favorite Queries list:**
 - Navigate to Reporting Tools > Query Viewer
 - Search for the query by name or a portion of the name (e.g., "V_HR")
 - Click on the Add to Favorites Hyperlink

Query Viewer

Enter any information you have and click Search. Leave fields blank for a list of all values.

*Search By begins with

Search Results

*Folder View

Query

Query Name	Description	Owner	Folder	Run to HTML	Run to Excel	Run to XML	Schedule	Definitional References	Add to Favorites
V_HR_JOBCODE_SALARY	Job code Table Query	Public		HTML	Excel	XML	Schedule	Lookup References	Favorite
V_HR_JOB_MASS_DATA_CHANGE	Job Mass Update query	Public		HTML	Excel	XML	Schedule	Lookup References	Favorite
V_HR_JOB_QUERY	Query to report Job Info.	Public		HTML	Excel	XML	Schedule	Lookup References	Favorite

My Favorite Queries

Query Name	Description	Owner	Folder	Run to HTML	Run to Excel	Run to XML	Schedule	Definitional References	Remove
V_HR_JOB_MASS_DATA_CHANGE	Job Mass Update query	Public		HTML	Excel	XML	Schedule	Lookup References	—



Scheduling a Query

Scheduling a Query is a functionality that is used for running queries that have previously timed out prior to running to completion due to the volume of data being requested.

Navigation: Menu > Reporting Tools > Schedule Queries

- The **Run Date** and **Run Time** fields can be used to schedule the specific run time.
- The **Type** can be updated to define how to deliver the report (e.g., Web vs Email).
- The **Format** can be updated to specify the type of file (e.g., PDF vs XLS).
- Once the query **Run Status** updates to “Success” and the **Distribution Status** updates to “Posted”, the results will be delivered per selected preferences.
- Queries cannot be scheduled to run on a recurring basis in Cardinal.

Refer to the section titled “Running an HCM Query Using the Schedule Query” of the [NAV225 Running an HCM Query](#) job aid for step-by-step guidance on scheduling a query.



Demo

Scheduling a Query



Mismatch Data Cheat Sheet

Position Data Fields			Job Data Fields					
Job Code	Job Code Rules	VPA	Employee Class	Employee Class Descr	Employee Type	Employee Type Descr	Paygroup	Paygroup Descr
00100 - 00999 COVA99	One Agency Head per agency only COVA99 only for non-Executive branch	No	AHD	Agency Hd	S	Salary	SMXX or MNP	Semi-monthly or No Pay
01000 - 09999	Admin Professional Faculty only	No	APF	AdmProFAC	S	Salary	SMXX or MNP	Semi-monthly or No Pay
19000 - 79999	Executive branch classified only	Yes	CLS	Classified	S	Salary	SMXX or MNP	Semi-monthly or No Pay
W10000 - W89999 W9999	All hourly job codes must start with W W9999 only for non-Executive branch	No	EMG	Emerg Hrly	H	Hourly	BWXX	Bi-weekly
W01000 - W09999	All hourly job codes must start with W	No	FAC	AdjntFac	H	Hourly	BWXX	Bi-weekly
W10000 - W99999 W9999	All hourly job codes must start with W W9999 only for non-Executive branch	No	GNW	Wage	H	Hourly	BWXX	Bi-weekly
W01000 - W09999	All hourly job codes must start with W	No	GRD	Grad Asst	H	Hourly	BWXX	Bi-weekly
COVBHO	Health benefits only	No	LDE	LODA Employm	S	Salary (benefits only)	MNP	No Pay
COVA99	Non-executive branch only	No	LGS	Sal No Ben	S	Salary	SMXX or MNP	Semi-monthly or No Pay
COVBHO	Health benefits only	No	LOC	TLC EE	S	Salary (benefits only)	MNP	No Pay
COVBHO	Health benefits only	No	LTD	LTD	S	Salary (benefits only)	MNP	No Pay
90000 - 99999 COVA99	Non-classified positions only COVA99 optional for non-Executive branch	No	ONC	Non Class	S	Salary	SMXX or MNP	Semi-monthly or No Pay
90000 - 99999 COVA99	Non-classified positions only COVA99 optional for non-executive branch	No	OTO	Othr Offcl	S	Salary	SMXX or MNP	Semi-monthly or No Pay
VRSRTO	Health benefits only	No	RET	VRSRetiree	S	Salary (benefits only)	MNP	No Pay
W9999	Non-Executive branch only	No	RJG	Ret Judge	S	Salary (benefits only)	MNP	No Pay
ORPHBO	Health benefits only	No	RTO	ORPRetiree	S	Salary (benefits only)	MNP	No Pay
W10000 - W99999	W9999 only for non-Executive branch	No	SFW	FedWrkStdy	H	Hourly	BWXX	Bi-weekly
W9999	Non-Executive branch only	No	SJG	Sub Judge	H	Hourly	BWXX	Bi-weekly
19000 - 79999	Executive branch classified only	Yes	SPR	SPORS	S	Salary	SMXX or MNP	Semi-monthly or No Pay
W10000 - W99999	W9999 only for non-Executive branch	No	SSW	StWrkStdy	H	Hourly	BWXX	Bi-weekly
W10000 - W99999	W9999 only for non-Executive branch	No	STU	Student	H	Hourly	BWXX	Bi-weekly
01000 - 09999	Non-classified positions only	No	TNR	TchResrch	S	Salary	SMXX or MNP	Semi-monthly or No Pay
90000 - 99999	Non-classified positions only	No	UNV	Univsty EE	S	Salary	SMXX or MNP	Semi-monthly or No Pay
19000 - 79999 90000 - 99999	10000-799999 = classified positions only 90000-99999 = non-classified positions only	Yes No	VAL	VALORS	S	Salary	SMXX or MNP	Semi-monthly or No Pay
W9999	only for non-Executive branch	No	WNE	Wage NON EE	H	Hourly	MNP	No Pay



Demo

**Running Job Data Query and
Identifying Inaccurate Data**



Missing and Pending Email Addresses

The Email address in personal data is a key field as it drives security access in Cardinal. Agency provided email and employee provided email **must be a valid email address that is unique to the employee.**

- **Exception:** When no email address is available, **ALWAYS** use noemail@virginia.gov
- Employees cannot use their spouses email address if their spouse also has personal data in Cardinal.
 - Example: COVA health benefited locality employees have personal data in Cardinal. If the spouse is a state employee, the same email address cannot be used for both personal data records.
- The only email address that CAN be duplicated is the placeholder email address noemail@virginia.gov when using the pending email address.
- Changing the case in an email address does not make it unique and different email address.

Impacts of invalid/bad email address

- Employee cannot log in to Cardinal
- VRS and benefit vendors receive bad email data impacting user benefits



Missing and Pending Email Addresses (continued)

V_HR_MISSING_EMAIL

- Lists employees that have a pending business email and employees who have an employee provided email of “noemail@virginia.gov”
- **Navigation:** Menu > Reporting Tools > Query > Query Viewer > V_HR_MISSING_EMAIL

- Query identifies missing and pending email addresses assisting with timely corrections.
- Run this query and check pending and missing email addresses on a recurring basis.
- No other variations of missing and pending email addresses will show up in this query, therefore it is important to follow the rules provided on the previous slide when missing and pending emails are entered.
- Follow-up with the employees or with your agency IT department to retrieve the correct email address.

Use the [HR351 Viewing and Modifying Personal Data](#) job aid for instructions on correcting email addresses.



Managing Temporary SSNs

Occasionally new employees may not have a social security number (SSN) yet, which requires a temporary SSN to be assigned until the SSA issues a true SSN.

V_HR_WAGE_EE_TEMP_SSN

- Identify the next available SSN
- **Navigation:** Menu > Reporting Tools > Query Viewer > V_HR_WAGE_EE_TEMP_SSN

V_HR_TEMP_SSN

- Monitor which employees need to provide a SSN from the SSA
- **Navigation:** Menu > Reporting Tools > Query Viewer > V_HR_TEMP_SSN

- If the new hire will be a VRS member, request a temporary SSN from VRS and use it in Cardinal to sync VNAV and Cardinal.
- The 907 prefix must be used for all temporary SSNs, so that the V_HR_TEMP_SSN query will return temporary SSNs for monitoring purposes.
- Only the DHRM iHelp Team can change a SSN in Cardinal.
- Once a SSN is changed, communicate the change to your agency payroll office



Human Resource Reports



Additional Audit Reports and Queries

Audit Report / Query	Description
Employee Data Change Audit Report (RHR002)	Shows job changes by EMPL ID for the BU and who entered those changes during a specified period of time
Position History Report (RHR461H)	Shows position data updates, who made those changes and when for the specified position number
Person Data Changes Report (RHR501)	Shows personal data changes by EMPL ID for the BU and who entered those changes during a specified period of time
Reward and Recognition Audit Query (V_HR_REWARD_RECGN_AUDIT)	Provides changes to rewards ID pay amounts and who entered those changes during a specified period of time
Disciplinary Actions Audit Query (V_HR_DISC_ACTIONS_AUDIT)	Provides changes made to disciplinary actions and who entered those changes during a specified period of time
Performance Ratings Audit Query (V_PERFORMANCE_RATINGS_AUDIT)	Provides changes to performance ratings and who entered those changes during a specified period of time



EPR Reports & Queries

EPR Report	Description
Employee Position Summary Report (RHR019)	Provides Full-Time Equivalent (FTE) count and type of funding source, based on available hours in a calendar month.
Employee Position Summary Report (RHR471)	Provides specific position details and summarizes position data, position counts and percentage of population's filled positions by Business Unit and Department and average vacancy rate.
Position Data Query (V_HR_POSITION_DATA)	Look at column J "reg-temp" <ul style="list-style-type: none">• X = restricted positions• R = regular (non-restricted positions)
Position Default Funding Query (V_HR_POSN_DFLT_EMPL_DATA)	Review the Fund, Program, Department columns to determine how the positions are funded based. <ul style="list-style-type: none">• Confer with agency Budget Processor to understand how these positions are funded (general fund and non-general fund)

DHRM iHelp publishes the monthly EPR report for Governor's cabinet based on the data agencies enter/certify. DHRM ihelp is available to assist with questions related to EPR.

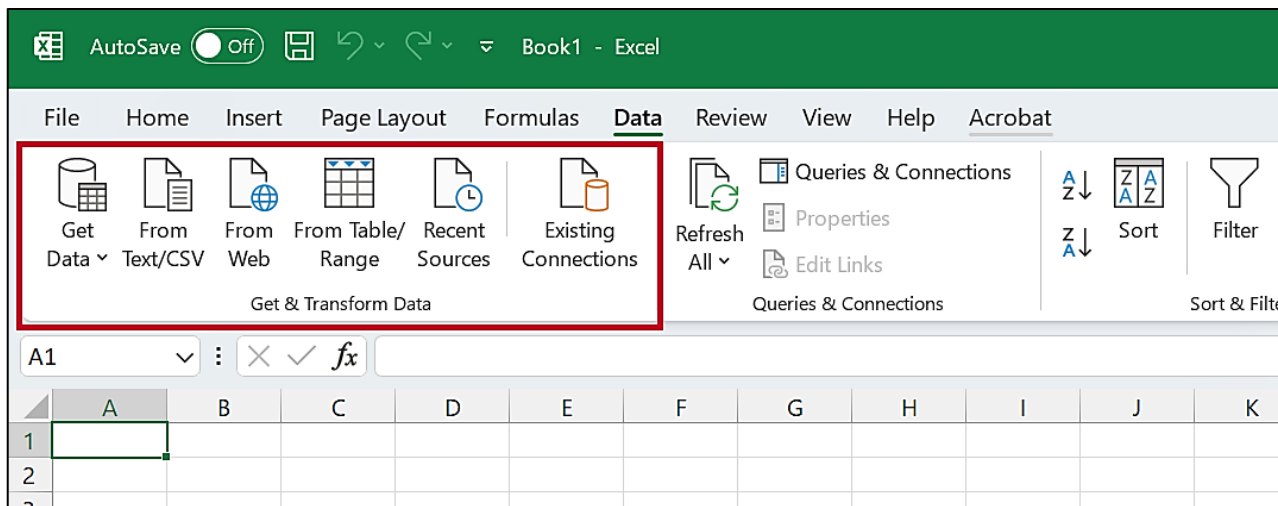


Excel Tips & Tricks

Power Query for HR Administrators

Three primary HR Queries (Position Data, Location, and Job Code) are already so large that adding additional columns is not feasible without negatively impacting performance. Senior HR Analysts and HR Managers may need to merge data results from multiple queries into one workbook.

- Power Query allows a user to import data from any number of sources, clean it, transform it, and reshape to your needs.
- Included as a built-in tool in Excel 2016 and Excel 365, makes merging multiple data results much easier than the VLOOKUP functionality.
- Available in the Get & Transform Data Section under the Data Tab.





Merging Three Queries into One Workbook

True Scenario:

Compensation Analyst needs the following fields added to the Position Data Query (V_HR_POSITION_DATA query) results:

1. Job Code Descr (Role title) – V_HR_JOBCODE_SALARY query
2. Location Description – V_HR_LOCATION query
3. Location City - V_HR_LOCATION query



Demo

**Merging Three Queries into One
Excel Workbook**



Using Excel Formulas

EDATE() function can be used in Excel to calculate the number of months before or after a specified date.

DATEDIF() function can be used in Excel to calculate the number of days, months, or years between two dates.

These formulas can be leveraged to enhance the results of the **Years of Service Report (RHR475)** by following the steps below:

1. After running the Years of Service Report, add two columns to the workbook:
 - a) Today's Date
 - b) Total Years
2. In the **Today's Date** column, populate the **current date** or **service award end date** (if applicable).
3. In the **Total Years** column, type the following **formula** to calculate the employee's service time in years.

=DATEDIF(EDATE(Start Date, -months) new Start Date, End Date, "y")



Using Excel Formulas (continued)

- See this formula in action down below:

“=DATEDIF(EDATE(E21, -F21),R21, “y”)&” years”
= 23 years

	A	B	C	D	E	F	G	H	K	M	N	R	S
	Business Unit	Department	Employee ID	Employee Name	Continuous Service Date	Prev St Svc Mnths	Vet Svc Cred Mnths	Total Svc Cred Mnths	Next St Svc Anniversary Date	Employee Status	Next Anniversary Milestone	Todays Date	Total Years of Service
15	13600	703			8/6/2007	0	0	0	8/6/2027	Active	20	8/22/2023	16 years
16	13600	703			10/25/2022	0	0	0	10/25/2023	Active	1	8/22/2023	0 years
17	13600	703			8/16/1995	0	0	0	8/16/2025	Active	30	8/22/2023	28 years
18	13600	703			6/6/2006	0	0	0	6/6/2026	Active	20	8/22/2023	17 years
19	13600	703			9/10/2020	0	0	0	9/10/2023	Active	3	8/22/2023	2 years
20	13600	703			6/10/2020	248	0	248	10/10/2024	Active	25	8/22/2023	23 years
21	13600	703			6/10/2022	160	0	160	2/10/2024	Active	15	8/22/2023	14 years
22	13600	703			3/10/2023	0	0	0	3/10/2024	Active	1	8/22/2023	0 years
23	13600	703			1/31/2006	0	57	57	1/31/2026	Active	20	8/22/2023	17 years
24													
25													



Demo

Using Excel Formulas



Q & A



Additional Support



Cardinal Reporting and Query Support

Job Aids

- [NAV225 Generating an HCM Report](#) – walkthrough of the processes used to generate an HCM report
- [NAV225 Running an HCM Query](#) – walkthrough of the processes used to run HCM Queries

Reports Catalog

- [Cardinal HCM Human Resources Reports Catalog](#) – covers the Human Resources (HR) functional area

Web-Based Training

- [NAV225: Cardinal Reporting \(HCM\)](#) – provides an overview of the functionality used to generate Reports and Queries within Cardinal HCM

Cardinal HCM Tutorial Videos

- [Cardinal Website](#) > Learning > [Videos \(HCM\)](#) > [Reporting Tutorials for Core Users](#)
 - [Generating an HCM Report](#)
 - [Generating an HCM Query](#)



Cardinal HR Data Support

Job Aids

- [HR351_Overview of Effective Dating](#) – detailed explanation of effective dating in Cardinal
- [HR351_Viewing and Modifying Personal Data](#) – walkthrough of how to view and modify employee's personal data in Cardinal, including updating email addresses
- [HR351_Assigning and Monitoring Temporary SSNs](#) – overview of the processes for obtaining and assigning temporary SSNs
- [HR351_Managing Position Data](#) – walkthrough of creating, cloning, and updating Position Data
- [HR351_EPR Tool Overview](#) – details reports, queries, and steps utilized to assist in troubleshooting issues after verifying and certifying the EPR



Additional Resources: Excel

Excel Support

- [Power Query for Excel Help](#) – Microsoft support page for using Power Query in Excel
- [DATEDIF function](#) – Microsoft support page for the DATEDIF function in Excel
- [EDATE function](#) – Microsoft support page for the EDATE function in Excel



Additional Support

As a Cardinal HCM user, you have several support resources available:

Agency Support

- Follow your agency guidelines on utilizing agency-centered resources to resolve issues/questions (e.g., a specific person, internal shared mailbox).
- Agency contacts are equipped to address agency specific details, including agency system usage, agency-specific HR policies, and procedures.

VCCC Help Desk

- Submit a help desk ticket to vccc@vita.virginia.gov and include “**Cardinal -...**” in the subject line with a brief summary for routing.
 - In the email, provide detailed information about your issue (i.e., functional area, page, actions, error).
 - Be sure to include your name, email address, and a phone number where you can be reached.

DHRM Assistance

- For policy (not system) specific questions, please send any questions to the [DHRM iHelp Mailbox \(ihelp@dhrm.virginia.gov\)](mailto:ihelp@dhrm.virginia.gov)



Meeting Wrap-up