

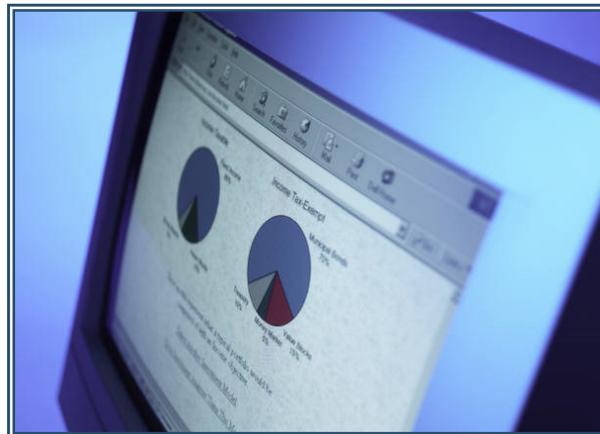
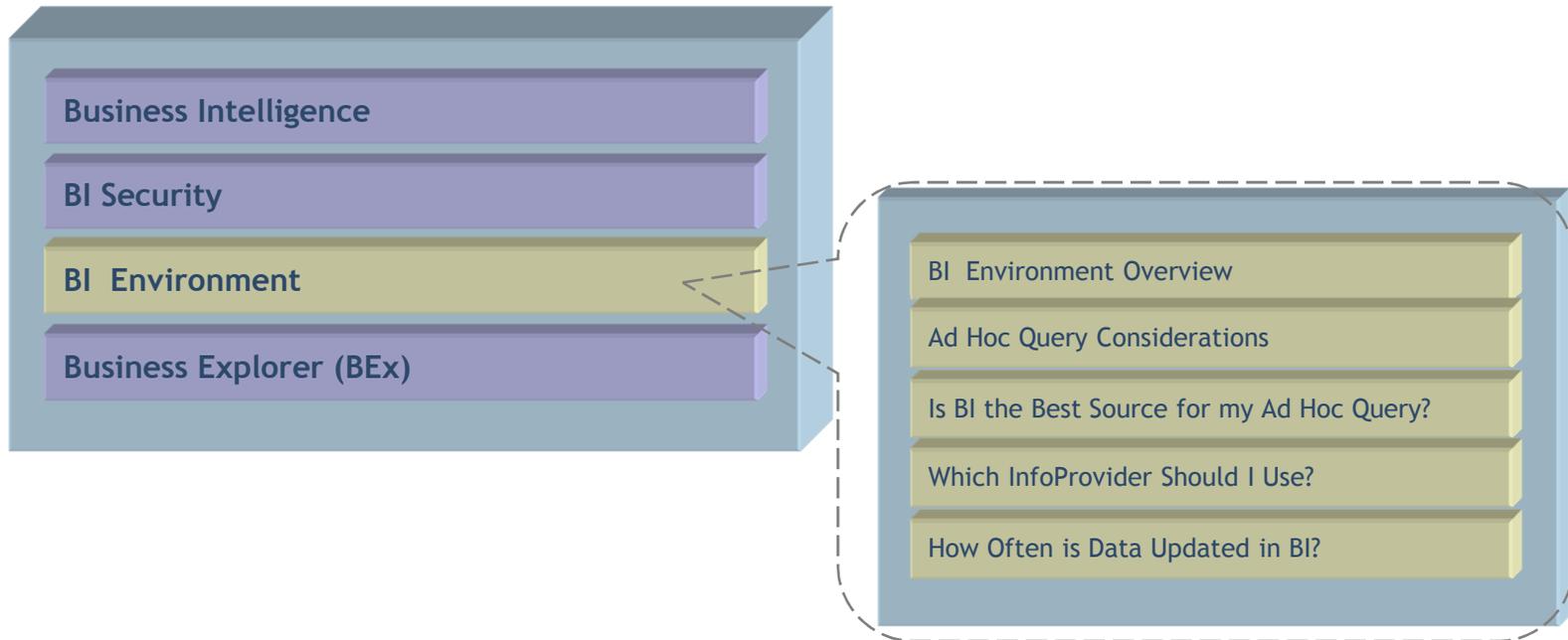
SAP Business Warehouse/Business Intelligence Reporting

BI Environment

Washington State HRMS Business
Warehouse/Business Intelligence (BW/BI)
BW/BI Power User Workshop Materials
General Topics - BW/BI Power Users

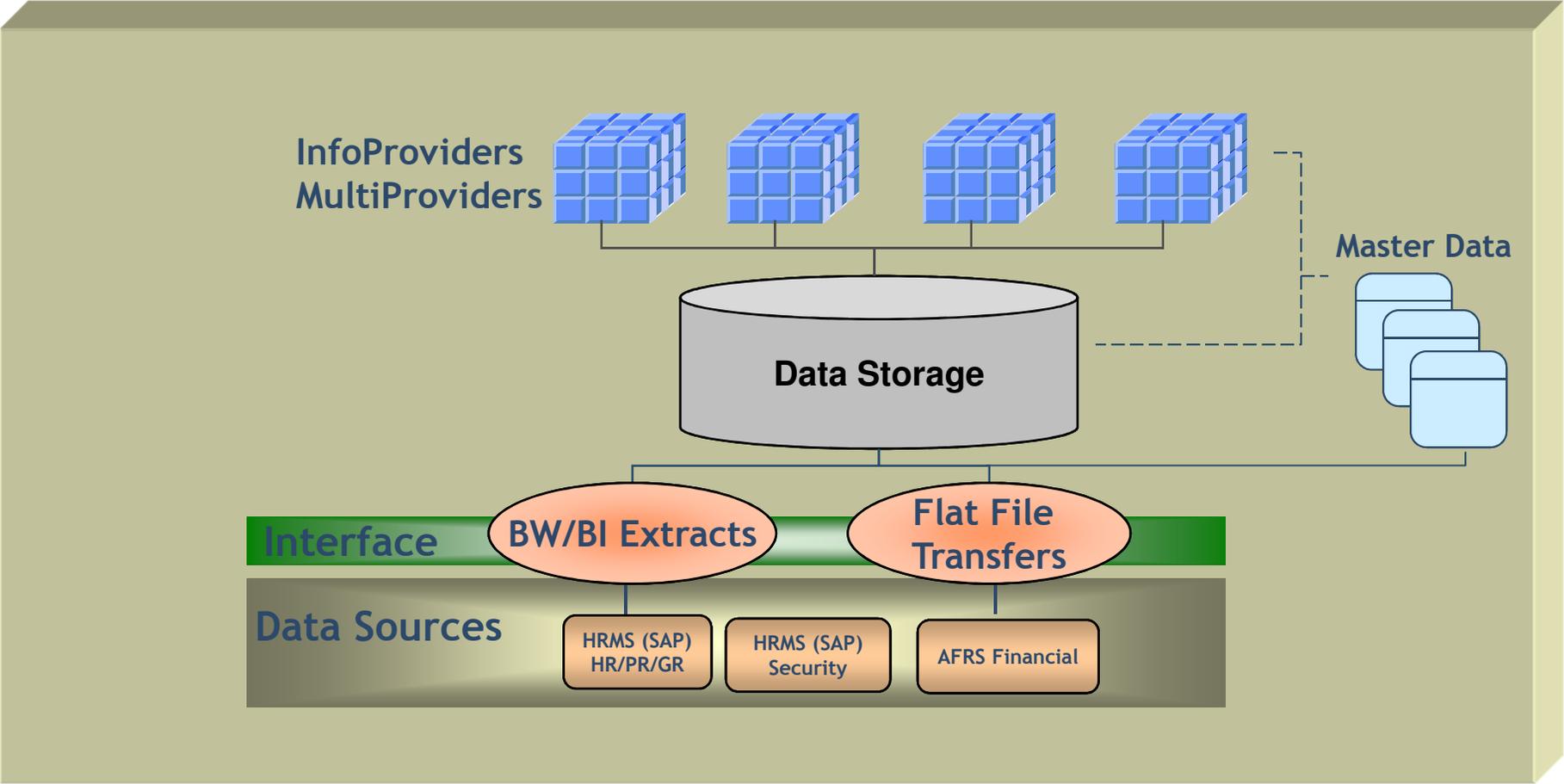
BW/BI Environment

The following section provides an overview of the BI Environment.



BW/BI Architecture

The following diagram provides a high level view of the architecture of the Business Intelligence and how data is retrieved and stored:

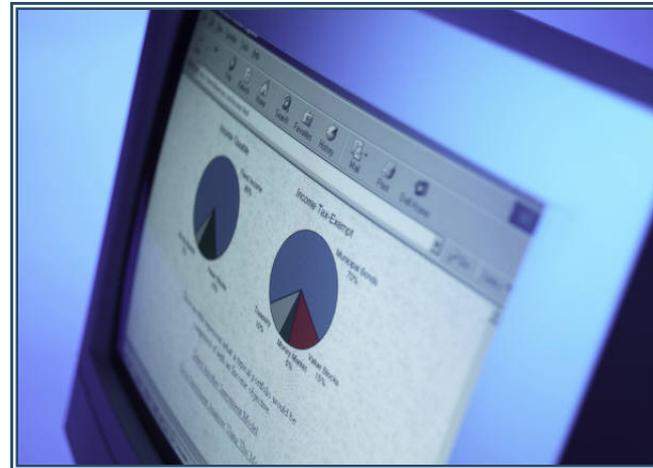


Ad Hoc Query Considerations

Before creating an ad hoc query, BI Power Users need to understand the business requirements for the ad hoc query.

The following sections include considerations BI Power Users need to address prior to creating an ad hoc query in the BI:

- Is BI the Best Source for my Ad Hoc Query?
- Which InfoProvider Should I Use?
- How often is Data Updated in the BI?



Is BI the Best Source for my Ad Hoc Query?

To determine if BI is the best source for an ad hoc query, BI Power Users need to consider:

- Does the ad hoc query require real-time data?
- Does the BI contain data required for the ad hoc query? (For example, if payroll data by Pay Period is required for the ad hoc query, BI will not be the best source since payroll data is not stored in BI by Pay Period).
- Is there an existing report in HRMS?
- Is there an existing report in HRMS BI?



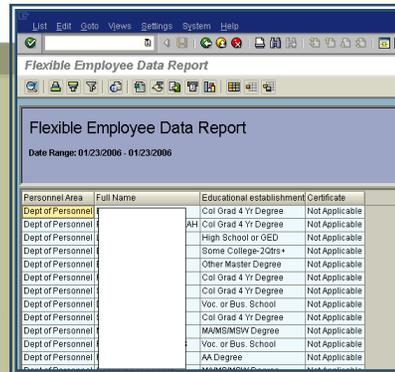
Is BI the Best Source for my Ad Hoc Query?

HRMS contains two basic report types:

1. HRMS Reports: Includes SAP Delivered reports and Custom reports for the State of Washington. Contains real-time data.
2. HRMS Business Intelligence Reports: Includes Custom reports for the State of Washington. Does not contain real-time data.

HRMS Reports

- HRMS reports are accessed in HRMS
- Includes SAP Delivered reports and Customized Reports for the State of Washington
- Provides ability to report from “real-time” data since the data is maintained in the HRMS application



The screenshot shows a web browser window displaying the 'Flexible Employee Data Report'. The report title is 'Flexible Employee Data Report' and the date range is '01/23/2006 - 01/23/2006'. Below the title is a table with columns: Personnel Area, Full Name, Educational establishment, and Certificate. The table contains several rows of data, including entries for 'Dept of Personnel' with various educational levels like 'Col Grad 4 Yr Degree', 'High School or GED', 'Some College-20hrs+', 'Other Master Degree', 'Voc. or Bus. School', and 'AA Degree'.

HRMS BI Reports

- Accessible through the HRMS Portal
- Includes Customized Reports for the State of Washington
- Provides the ability to report from specific data that has been extracted and loaded from HRMS and other sources such as AFRS
- This is NOT “real-time” data since the data is not maintained within the HRMS BI application



The screenshot shows a web browser window displaying the 'Employee History - Part 1' report. The report title is 'Employee History - Part 1' and the date range is '06/01/2006 - 07/01/2006'. Below the title is a table with columns: Employee ID, Employee Name, Action Date, and Action Type. The table contains several rows of data, including entries for 'Employee' with various action types like 'New Hire', 'Initial Conversion', and 'Current Conversion Active'.

Is BI the Best Source for my Ad Hoc Query?

If an ad hoc query requires real-time data, HRMS may be the appropriate source for retrieving data. HRMS provides many options for data retrieval. For example, the Flexible Employee Data Report (Transaction: ZHR_RPTPAN02) in HRMS allows the user to select fields to include on the report. In the example below, the Flexible Employee Data Report was used to retrieve data for Personnel Area, Personnel Number, and Position information.

The screenshot shows the SAP HRMS interface for the 'State of Washington Flexible Employee Data Report'. The 'HR field selection' dialog is open, allowing the user to choose fields for the report. The 'Selected fields' list includes: Personnel Area Code, Personnel Number, Position Number, Position Long Text, and Position Short Text. A red bracket highlights this list, and a callout box indicates that these are the fields selected for the report.

The screenshot shows the results of the Flexible Employee Data Report. The report title is 'State of Washington Flexible Employee Data Report' with a date range of 02/05/2014 - 02/05/2014. The table displays columns for Personnel Area, Personnel Number, Position Number, Position Long Text, and Position Short Text. A dashed box highlights the table content.

Personnel Area	Personnel Number	Position Number	Position Long Text	Position Short Text
Dept of Enterprise Services	Removed	71025338	MAIL CARRIER-DRIVER	0743-B
Dept of Enterprise Services	Removed	71024794	HUMAN RESOURCE CONSULTANT 3	0493
Dept of Enterprise Services	Removed	71025613	FACILITIES SENIOR PLANNER	0858
Dept of Enterprise Services	Removed	71026155	IT SPECIALIST 4	0141
Dept of Enterprise Services	Removed	71030378	SOLUTIONS CENTER MANAGER	1150
Dept of Enterprise Services	Removed	71025482	MANAGEMENT ANALYST 2	0766
Dept of Enterprise Services	Removed	71024958	CUSTOMER SERVICE SPECIALIST 2	0501
Dept of Enterprise Services	Removed	71025113	IT SYSTEMS/APP SPEC 6	0274
Dept of Enterprise Services	Removed	71025326	MAIL CARRIER-DRIVER	0740
Dept of Enterprise Services	Removed	71024863	EMSO3 DEVELOPMENT MGR.NET	0370
Dept of Enterprise Services	Removed	71025289	IT SPECIALIST 5	0253
Dept of Enterprise Services	Removed	71025089	FISCAL ANALYST 3	0458
Dept of Enterprise Services	Removed	71024928	IT SPECIALIST 4	0403
Dept of Enterprise Services	Removed	71025772	HUMAN RESOURCE CONSULTANT 3	0048
Dept of Enterprise Services	Removed	71025614	FACILITIES SENIOR PLANNER	0859
Dept of Enterprise Services	Removed	71025078	OFFICE ASSISTANT 3	0468
Dept of Enterprise Services	Removed	71025058	FISCAL ANALYST 2	0460
Dept of Enterprise Services	Removed	71036436	CONTRACTS SPECIALIST 1	9025
Dept of Enterprise Services	Removed	71025143	IT SPECIALIST 4	0298

Flexible Employee Data Report Results

BI Power User Workshop materials are specific to HRMS BI reports and ad hoc queries only. HRMS reports are covered in separate HRMS Training Materials.

Is BI the Best Source for my Ad Hoc Query?

If an ad hoc query does not require real-time data, HRMS BI may be the appropriate source for retrieving data.

In the example below, the Headcount and Personnel Actions InfoProvider in HRMS BI was used to retrieve data for Personnel Area, Personnel Number, and Position information.

The screenshot shows the BEx Query Designer interface for a query named 'Demo Position Query'. The interface is divided into several sections:

- InfoProvider:** Shows 'Headcount And Personnel Action' as the selected data source.
- Filter:** Contains 'Characteristic Restrictions' (Employee, Cal. year / month, Employment Status) and 'Default Values' (Personnel Area, Employee, Position, Position Short-Text). There are labels 'Area for Filter Values' and 'Area for Default Values' overlaid on this section.
- Rows/Columns:** Contains 'Free Characteristics' and 'Columns' sections, both labeled 'Area for Dimensions'.
- Rows:** Lists dimensions: Personnel Area, Employee, Position, and Position Short-Text. This section is labeled 'Area for Dimensions'.
- Preview:** A small table showing a grid of data points with labels like 'a-Personne', 'a-Employe', 'a-Position', etc.

A callout box at the bottom of the preview area says: "Select fields for the ad hoc query".

The screenshot shows the results of the 'Demo Position Query' displayed as a table. The table has columns for Personnel Area, Employee, Position, and Position Short-Text. The data is as follows:

Personnel Area	Employee	Position	Position Short-Text
Dept of Enterprise Services	Removed	71025338	MAIL CARRIER-DRIVER
			0743-B
	Removed	71024794	HUMAN RESOURCE CONSULTANT 3
			0493
	Removed	71025613	FACILITIES SENIOR PLANNER
			0858
	Removed	71026155	IT SPECIALIST 4
			0141
	Removed	71030378	SOLUTIONS CENTER MANAGER
			1150
	Removed	71025482	MANAGEMENT ANALYST 2
			0766
	Removed	71024958	CUSTOMER SERVICE SPECIALIST 2
			0501
	Removed	71025113	IT SYSTEMS/APP SPEC 6
			0274
	Removed	71025326	MAIL CARRIER-DRIVER
			0740
	Removed	71024863	EMS03 DEVELOPMENT MGR.NET
			0370
	Removed	71025289	IT SPECIALIST 5
			0253
	Removed	71025089	FISCAL ANALYST 3
			0458
	Removed	71024928	IT SPECIALIST 4
			0403
	Removed	71025772	HUMAN RESOURCE CONSULTANT 3
			0048
	Removed	71025614	FACILITIES SENIOR PLANNER
			0859

The caption below the table reads: "HRMS BI ad hoc query results".

Which InfoProvider Should I Use?

Once BI Power Users have determined the BI is the best source for the ad hoc query, they need to determine which InfoProvider to use.

For example:

- The Quota Data InfoCube contains quota and accrual balances
- The Headcount and Education MultiCube contains education and training information

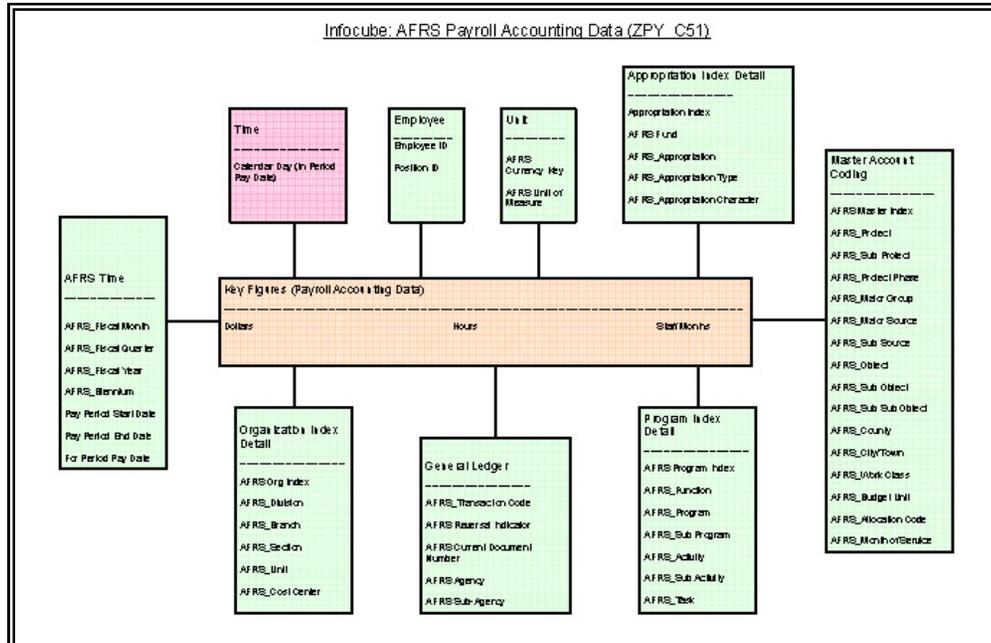
The table below lists BI InfoProviders with examples of how the InfoProvider might be used:

InfoProvider	Example of Use
AFRS Payroll Accounting Data (ZPY_C51)	➤ Employee and Position level Payroll and Financial information provided by AFRS
Employee Specific Payroll Data (ZPY_M01)	➤ Wage types by Personnel Area and/or Employee ➤ Employee count by Wage Type
Employee Specific Payroll Data w/PA (ZPY_M02)	➤ Combines data from Employee Specific Payroll Data (ZPY_M01) and Headcount and Personnel Actions (ZPA_C01)
Headcount and Education (ZPA_M50)	➤ Number of records by Educational Establishment, Certificate and Education/Training ➤ Employee list by Educational Establishment, Certificate and Education/Training
Headcount and Personnel Actions (ZPA_M03)	➤ Summary level employee counts by demographic areas such as Gender, County Code, Employee Group, etc. ➤ Detail level employee counts by employee specific information such as Employee Name, Personnel ID, etc. ➤ Employee count by personnel Action Type or Action Reason ➤ Employee list by personnel Action Type or Action Reason
Headcount PA MILSVC (ZPA_M60)	➤ Headcount and Personnel Actions data ➤ Military Service Date Data
Quota Data (ZPT_M02)	➤ Quota accrual and balances by Personnel Area and/or Employee
Staffing Assignments (ZPAOS_C01)	➤ Position count by Organizational Unit and/or Job Class ➤ Position list by Organizational Unit and/or Job Class
Time and Labor (ZPT_M01)	➤ Time balances and accruals by Personnel Area and/or Employee
Grievance Data (ZGR_M01)	➤ Grievance data by Bargaining Unit.

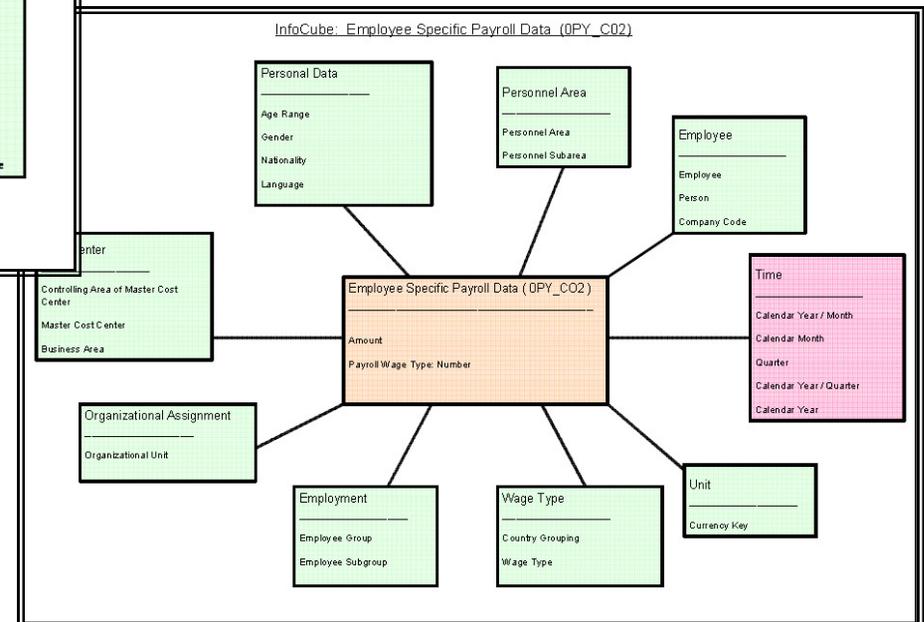
Which InfoProvider Should I Use?

The following designs display the reporting elements included in the BI InfoProviders:

AFRS Payroll Accounting Data (ZPY_C51) - Financials InfoProvider



Employee Specific Payroll Data (ZPY_M01) MultiProvider



InfoProvider Designs can be viewed from the HRMS Customer Support website:

<http://www.hr.wa.gov/payroll/HRMS/HRMSSupport/Pages/BusinessIntelligence.aspx>

How Often is Data Updated in BI?

Once BI Power Users have determined which InfoProvider to use for an ad hoc query, they need to also consider how often the data is updated in the BI since it is not real-time data and update frequencies vary. The table below provides an overview of the update frequency of each InfoProvider in BI .

InfoProvider	Update Frequency	Data Load Schedule
AFRS Payroll Accounting Data (ZPY_C51)	Daily (updates to the AFRS error file) Semi-Monthly	Daily After Payroll Exit
Headcount and Personnel Actions (ZPA_M03)	Daily (2 years - Current and previous year) Monthly (All other years)	Daily Monthly
Headcount PA MILSVC (ZPA_M60)	Weekly	Friday
Staffing Assignments (ZPAOS_C01)	Weekly	Friday
Grievance Data (ZGR_M01)	Weekly	Friday
Employee Specific Payroll Data (ZPY_M01)	Semi-Monthly	After Payroll Exit
Employee Specific Payroll with PA (ZPY_M02)	Semi-Monthly	After Payroll Exit
Time and Labor (ZPT_M01)	Semi-Monthly	After Payroll Exit
Quota Data (ZPT_M02)	Monthly	End of month for previous month
Headcount and Education (ZPA_M50)	Monthly	1 st Friday/mo*

*In the months that HRMS Payroll processing is scheduled to occur over the first Friday of the month, the BI load may be rescheduled. Usually for the second Friday of the month.

How Often is Data Updated in BI?

The table below provides an overview of the update frequency for the most commonly used Master Data in BI.

Master Data	Update Frequency	Data Load Schedule
Employee	Daily	Daily
Person	Daily	Daily
Company Code	Weekly	Friday
Contract Type	Weekly	Friday
Job	Weekly	Friday
Org Unit	Weekly	Friday
Pay Grade Level	Weekly	Friday
Pay Grade Level To	Weekly	Friday
Pay Scale	Weekly	Friday
Pay Scale Level	Weekly	Friday
Pay Scale Level To	Weekly	Friday
Position	Weekly	Friday