Workforce Planning Performance Blueprint
Powered by TM1

Cognos® software

Executive summary

This application brief describes the objectives and the content of a Web-based planning application for managing headcount and compensation planning projections using IBM Cognos® TM1 9.5 Contributor and Cognos 8.4 Business Intelligence. By implementing the *IBM Cognos Workforce Planning Blueprint Powered by TM1*, a company will have forward-looking visibility into workforce decisions at the operational level, at the company level as a whole and by geographical preference. Headcount projections can be used to drive other planning processes of the organization. The *Blueprint* and processes described in this document apply to employees in any industry. You can configure the model to support the complexity of fixed and variable compensation requirements for any industry. There are also a number of countries reflected in the design.

Introduction

Employee-related costs often make up the greatest share of corporate operating expenses. It is no surprise, then, that executive management focuses on controlling employee expenses in every way possible. At divisional and departmental levels, however, managers must make hiring and compensation decisions that will help their units meet objectives: hiring the right people for the right jobs, compensating them fairly, helping them become productive and retaining them for as long as possible.

Human Resources (HR) administers the headcount and compensation planning process. It makes sure managers adhere to corporate hiring and compensation policies. HR seeks forward visibility for hiring decisions so that it can source the best talent. It analyzes employee trends, such as attrition, so that their corporation can make decisions to help retain top talent.

Workforce planning helps corporations manage cross-enterprise employee headcount, compensation and benefit costs so that they can align business unit decisions with corporate objectives. However, most companies use human resource management systems and spreadsheets for the planning process, which often creates errors, delay and difficulty.

Consequently, executive management, finance and HR are looking for tools and disciplines to manage headcount and compensation planning. To boost accuracy in this vital planning process, a solution with flexible modeling capabilities, personalized analytics and integrated workflows is required. The *Workforce Planning Performance Blueprint Powered by TM1* is that solution, enabling an integrated workforce planning process that aligns corporate financial objectives with divisional workforce decisions.

IBM Cognos Performance Blueprints are pre-configured solution building blocks that enable companies to jump-start their implementations. Blueprints are pre-defined data models that encapsulate the collective best-practice knowledge from the IBM Cognos Innovation Center for Performance Management and its leading customers in specific business process areas. Blueprints enable streamlined project implementation schedules and improve project success rates.

Using the *Workforce Planning Blueprint Powered by TM1*, companies can align corporate financial objectives with divisional workforce decisions. Links to business drivers in other planning areas—such as sales or customer service—can be established to ensure proper alignment with headcount plans. Staff managers throughout a corporation can manage existing and new employee headcounts from one integrated system. Salary, merit and bonus decisions can be managed at the employee level, group level or both. The complexity of fixed and variable compensation requirements can be managed for any industry and company—even those spread over multiple countries.

More specifically, the *Blueprint* helps your company:

- Manage headcount for existing and new employees.
- Manage salary, merit and bonus decisions at the employee and/or group level.
- Determine benefit and tax expenses in multiple countries.
- Link salary and headcount projections as drivers for other items on an expense plan.
- Demonstrate variable compensation capabilities.
- Demonstrate internal transfer planning capabilities.

The *Workforce Planning Blueprint Powered by TM1* has two primary components:

- Reporting, analysis and dashboards using Cognos 8 Business Intelligence
- Planning and forecasting using Cognos TM1 Contributor

The remainder of this document describes these components in detail.

Business intelligence model

The Workforce Planning Dashboard presents critical information to executives at a glance. The top graphs present the trending statistics for salary and headcount over the course of the year. The middle left graphs focus on adjustments and the middle right graph uses drill up and drill down functionality to display total headcounts at the department level so managers can see how employee salaries contribute to the overall totals.

The Employee Summary report prompts a user to select a department and provides the employee details for a breakdown on vital salary related attributes.

There is a compensation letter report that management can use to inform an employee about their performance review and merit increase. This form-based letter pulls the data from the Workforce Planning details.

Planning Model

The *Workforce Planning Blueprint Powered by TM1* features a planning model based on a best-in-class planning process and technology with the following attributes:

- Driver-based
- Modeling flexibility
- High participation
- Top down/bottom up reconciliation
- Web-based deployment of models for data collection and consolidation.
- Real-time workflow
- Real-time consolidation
- Real-time calculations in the browser for immediate results
- Linking functionality to provide collaboration between all areas of the corporation.
- Capability to perform form-based planning with selection boxes to drive application logic and calculations

Real-time workflow visibility

When you log in to the planning application as an administrator, you see the Welcome screen, which displays the first level of the hierarchy for all areas of the company with Total Operations and Total Legal expanded another level down.

You can expand each geographical operations area to get down to a department level. When an individual contributor logs on, the workflow perspective contains only those departments that he or she is responsible for. You can view additional information about the status of the plan and the individual department by clicking the down triangles for each cell. In the following example, we selected the down arrow next to Exec 51 for US Procurement to find out other contributors that could take ownership of this node in the hierarchy. The same row provides information about the state of the node, which in this case is Work in Progress, and the last time data was saved and by whom.

From Total Company, the model breaks down into seven operational areas (Operations, Legal, HR, IT, Finance, Administration and Sales), which are then broken down by country (Australia, Japan, U.S., France, U.K. and Germany). There are 98 departments rolling up to these 6 countries. You can create any hierarchical design you desire. The application also calculates the appropriate taxes based upon country, such as Social Security in the U.S., Superannuation Guarantee (GS) in Australia or CSG (general social contribution) in France.

Before anyone enters data, the state of the plan is designated as ⭕ **Not started**. After someone saves a plan, the state becomes 🟡 **Work in progress** and remains accessible for further editing. When a contributor submits an item, the plan is 🔒 **Locked** and no more changes can be made. The locked state indicates that the plan is ready for review. A reviewer can review the plan in any state, but can only reject a locked plan item. When a locked plan is rejected, it returns to the work in progress state and a departmental manager can make changes to it.

When the workflow status changes, data consolidation and aggregation all occur in real-time, without the need for a batch process to be performed for the database.

The following chart highlights the work and information flows for the planning application:

The cubes represented above in light **blue** are the points in the model where a contributor may enter data. The model is designed around existing employees and new employees. The Existing Employees cube has three views; **Employee Information**, **Input – Existing Headcount** and **Input Compensation Planning**. Input New Headcount is where new employee information is entered. The dark **blue** cubes are either calculated or consolidated cubes. The light green cubes hold assumption data used in the application. The sections that follow describe these cubes in greater detail.

Employee Information

The first tab in the *Blueprint* is **EmployeeInformation**. It is here that the forecasting and budgeting process begins. A user may view the employees that currently report to a specific department and see information uploaded from your current payroll system. This information is used for calculating both salaries and benefits in the application. A user may change someone's health plan, work location or position from this input screen. This tab is a view of the Existing Employees cube in the model. Here, we have logged in as the contributor to U.S. Procurement. If we had the security clearance and were to log into a different department, we would see the employees in that specific department.

When a user is making selections for a specific employee, dropdown lists are available to aid the user wherever appropriate. The following screen shot shows the dropdown list for position. It becomes viewable when you click on the cell.

	Department	Employee #	FT/PT	FTE	Merit Month	Salary	Position	Grade	Location	Health Plan
⊟ **Total Company**				7		**252,668**				
⊟ **Total Operations**				7		**252,668**				
⊟ **US Operations**				7		**252,668**				
⊟ **US Procurement**				7		**252,668**				
Nation, Anne	1101	15613	FT	1	Jun	37,656	Senior Buyer	8	Minneapolis, MN	Individual Plan
Owens, Julie A	1101	18454	FT	1	Apr	43,310	Senior Buyer		Chicago, IL	
Post, Karon K	1101	19204	FT	1	Feb	50,817			ork, NY	Family Plan
Sarginson, Dawn R	1101	15697	FT	1	Mar	38,557			n, MA	Individual Plan
Shepherd, Kelly Ann	1101	15950	FT	1	Nov	25,360			ngeles, CA	Individual Plan
Smith, Heather M	1101	15788	FT	1	Mar	32,658			apolis, MN	Individual + 1
Spencer, Cecilia	1101	16048	FT	1	Sep	24,310			jo, IL	

Dropdown list (Position):
Account Consultant
Account Entry Spclst
Account Transfer Coordinator
Accountant
Accounting Clerk
Accounting Coordinator
Accounting Dir
Accounting Mgr
Accounts Processor I
Actuarial Analyst
Actuarial Assistant
Actuarial Assistant I
Actuarial Associate
Actuarial Trainee
Admin Assist II
Admin Asst III
Administrative Assistant
Advisory Serv Spec
Agency Manager
Asc Real Estate Finance Legal
Assoc Budget Analyst
Assoc Case Coordinator
Assoc Finance Dir
Assoc New Business Rep
Assoc, Mortgage Loan Servicing
Associate Business Analyst
Associate Call Center Director
Associate Funding Rep
Associate Imaging Clerk
Associate New Business Coord
Associate Office Support Clerk
Associate Press Operator
Associate Quality Analyst
Associate Research Analyst
Associate Voice Comm Specialis

Input – Existing Headcount

The second tab in the *Blueprint*, **Input – Existing Headcount**, is also a view of the Existing Employees cube. After having first verified that we are working with the correct employee pool, we may now manage the status of our existing employees. For each employee, we may take the desired action and decide when said action starts.

Dropdown list (Action):
Active
Suspension w/Pay
Leave W/Pay
Change Merit Month to:
Term w/Severence
Transfer
Suspension
Leave
Retirement
Termination

The Action Code field is a list of codes describing the reason for the Status change. Each of the codes has different business rules associated with it, and the financial ramifications are calculated automatically month-by-month for the user using standardized assumptions. There are no set limits to the number of Action Codes that can be set up in the system; additionally, any business rules and conditions can be set up.

The Action Date provides the effective month for the Status Change and the Corresponding Action Code. The Action Date drives the financial month-by-month changes that occur based on Status Changes or changes to an Action Code.

Below, for Dawn Sarginson, we have selected **Retirement** from the dropdown list for Action and received a Warning that this action needs a date.

When we make a selection from the Action Date – Start dropdown, the warning will disappear.

Certain actions on the list also require an end date such as Suspension or Leave. A Termination with Severance would require a severance amount to prevent a warning.

Companies often have difficulty planning employee transfers in the upcoming year. Employees can sometimes "fall through the cracks" as a department recognizes the transfer out on their plan while the receiving department fails to recognize the incoming employee. The *Blueprint* has processes to manage planned employee transfers effectively.

Fields in gray cannot be edited. Fields in white can be edited and used to manage our existing headcount. As we make changes, they are highlighted in **blue** along with any cells affected by the change. As we make changes to this table, the headcount and salary impacts are being made automatically to all the other tabs affected by the changes.

Input – Compensation Planning
Input – Compensation Planning is the third tab in the *Blueprint* and the final view of the Existing Employees cube. In the first two tabs, we've made decisions about headcount planning for our existing employees. Here, we will manage their compensation. Doing so requires making decisions in four main areas.

We start by selecting a Performance level for each employee from a drop down list of predetermined choices. In our *Blueprint*, an employee may fall into the categories of **Star**, **High**, **Medium** or **Low**. This information combined with where an employee stands relative to their midpoint salary determines the recommended merit increase. We can then adjust the recommended merit increase to reflect what we want. Managing the employee's performance rating will calculate a new salary for the employee.

Having arrived at a new salary, we can, if we wish, make an adjustment to the recommended bonus. The Bonus percentage is looked up in a table based on the employee's performance and what grade level they are. The bonus percentage is a corporate guideline. As with the merit increase, we can adjust the recommended bonus if we wish, which will result in the calculation of a new salary with bonus. Our final decision involves equity. The user may grant employees stock options, restricted share units or other compensation.

After you have made all four of these decisions, the *Blueprint* has all the information it needs to go forward and calculate the monthly salary, benefits and headcount for you. You can plan at the individual employee level or for all employees at one time. Planning at the total department level enables managers to target specific corporate guidelines in areas such as merit compensation or department bonuses.

For example, the following screen capture shows that by terminating Dawn Sarginson, we have affected her merit increase and recommended bonus. The changes caused by our actions are flowing through to this tab and are highlighted in **blue**.

	FTE	Salary	Base Salary	% of Midpoint	Previous Rating	Performance	Merit Target %	Rec. Merit Increase	Merit Adjustment $	Merit Adjustment %	New Salary	Bonus Target %	Rec. Bonus
Total Company	7	252,668	252,668	703.42%			2.63%	6,648	0	2.63%	259,316	13.65%	35,407
Total Operations	7	252,668	252,668	703.42%			2.63%	6,648	0	2.63%	259,316	13.65%	35,407
US Operations	7	252,668	252,668	703.42%			2.63%	6,648	0	2.63%	259,316	13.65%	35,407
US Procurement	7	252,668	252,668	703.42%			2.63%	6,648	0	2.63%	259,316	13.65%	35,407
Nation, Anne	1	37,656	37,656	100.42%	High	High	5.00%	1,098	0	2.92%	38,754	22.00%	8,526
Owens, Julie A	1	43,310	43,310	100.43%	High	Star	7.50%	2,436	0	5.63%	45,746	32.50%	14,867
Post, Karon K	1	50,817	50,817	100.38%	Medium	Low	1.00%	466	0	.92%	51,283	.00%	0
Sarginson, Dawn R	1	38,557	38,557	100.41%	Low	Low	1.00%	321	0	.83%	38,878	.00%	0
Shepherd, Kelly Ann	1	25,360	25,360	100.63%	Medium	Low	1.00%	42	0	.17%	25,402	.00%	0
Smith, Heather M	1	32,658	32,658	100.49%	Star	Star	7.50%	2,041	0	6.25%	34,699	32.50%	11,277
Spencer, Cecilia	1	24,310	24,310	100.66%	High	Medium	3.00%	243	0	1.00%	24,554	3.00%	737

The following screenshot shows a change in the bonus adjustment dollars for my department from 17,200 to 22,000 dollars. Making the change causes the dollar amount to break back proportionally over those persons receiving bonuses.

	Merit Target %	Rec. Merit Increase	Merit Adjustment $	Merit Adjustment %	New Salary	Bonus Target %	Rec. bonus	Bonus Adjustment $	Bonus Adjustment %	New Salary w/Bonus	Stoc Opti
Total Company	2.63%	6,648	0	2.63%	259,316	13.65%	35,407	22,000	22.14%	316,723	1
Total Operations	2.63%	6,648	0	2.63%	259,316	13.65%	35,407	22,000	22.14%	316,723	1
US Operations	2.63%	6,648	0	2.63%	259,316	13.65%	35,407	22,000	22.14%	316,723	1
US Procurement	2.63%	6,648	0	2.63%	259,316	13.65%	35,407	22,000	22.14%	316,723	1
Nation, Anne	5.00%	1,098	0	2.92%	38,754	22.00%	8,526	5,116	25.20%	52,397	
Owens, Julie A	7.50%	2,436	0	5.63%	45,746	32.50%	14,867	5,372	44.24%	65,985	
Post, Karon K	1.00%	466	0	.92%	51,283	.00%	0	0	.00%	51,283	
Sarginson, Dawn R	1.00%	321	0	.83%	38,878	.00%	0	0	.00%	38,878	
Shepherd, Kelly Ann	1.00%	42	0	.17%	25,402	.00%	0	0	.00%	25,402	
Smith, Heather M	7.50%	2,041	0	6.25%	34,699	32.50%	11,277	5,116	47.24%	51,092	
Spencer, Cecilia	3.00%	243	0	1.00%	24,554	3.00%	737	6,395	29.05%	31,686	

Existing Employee Salary Calc

In the previous three tabs, we have made all the decisions necessary for calculating the salaries, benefits and government impositions for the existing employees in this department. **ExistingEmployeeSalaryCalc**, the fourth tab, calculates, by employee by month, the results of our choices. In the following screen capture, you can see the salary, taxes and benefits being calculated for Anne Nation.

Tabs: EmployeeInformation | Input - Existing Headcount | Input - Compensation Planning | ExistingEmployeeSalaryCalc | Input - New Headcount | NewEmployeeSalaryCalc | Headcount Comp Summary
CorporateGuidelineSummary | BenefitAssumptions | BonusPlans | CorporateGuidelines | Differential | GradeLevelBy Position | MidpointPerformance | RecommendedMidSalary

Rows: SalaryCalc [SalaryCalc] — Columns: Months [Months] — Context: US Procurement [Organization], Nation, Anne [ExistingEmployees]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	37,656	37,656	37,656	37,656	37,656	37,656	37,656	37,656	37,656	37,656	37,656	37,656	37,656
Action													
Bonus	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	13,642
Total Salary	4,275	4,275	4,275	4,275	4,275	4,366	4,366	4,366	4,366	4,366	4,366	4,366	51,939
Govt Taxes	425.35	412.95	391.15	391.15	391.15	399.52	337.92	334.03	334.03	334.03	334.03	334.03	4,419.34
Social Security	265.04	265.04	265.04	265.04	265.04	270.72	270.72	270.72	270.72	270.72	270.72	270.72	3,220.22
Medicare	61.99	61.99	61.99	61.99	61.99	63.31	63.31	63.31	63.31	63.31	63.31	63.31	753.12
SUI	64.12	64.12	64.12	64.12	64.12	65.50	3.89	0.00	0.00	0.00	0.00	0.00	390.00
FUTA	34.20	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00
Other Benefits	1,154.21	1,154.21	1,154.21	1,154.21	1,154.21	1,178.93	1,178.93	1,178.93	1,178.93	1,178.93	1,178.93	1,178.93	14,023.55
Health Plan Expense	150	150	150	150	150	150	150	150	150	150	150	150	1,800

Karon Post, if you remember, was terminated with severance in March, which is reflected in the next screen capture.

Rows: SalaryCalc [SalaryCalc] — Columns: Months [Months] — Context: US Procurement [Organization], Post, Karon K [ExistingEmployees]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	50,817	50,817	50,817	50,817	50,817	50,817	50,817	50,817	50,817	50,817	50,817	50,817	50,817
Action			Term w/Severence										
Severence	0	0	5,000	0	0	0	0	0	0	0	0	0	5,000
Total Salary	4,235	4,274	5,000	0	0	0	0	0	0	0	0	0	13,508
Govt Taxes	421.36	413.15	457.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,292.01
Social Security	262.55	264.96	310.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	837.52
Medicare	61.40	61.97	72.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.87
SUI	63.52	64.10	75.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	202.62
FUTA	33.88	22.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00
Other Benefits	1,143.38	1,153.86	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,647.25
Health Plan Expense	325	325	0	0	0	0	0	0	0	0	0	0	650

Dawn Sarginson retired in February.

Rows: SalaryCalc [SalaryCalc] — Columns: Months [Months] — Context: US Procurement [Organization], Sarginson, Dawn R [ExistingEmployees]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	38,557	38,557	38,557	38,557	38,557	38,557	38,557	38,557	38,557	38,557	38,557	38,557	38,557
Action		Retirement											
Total Salary	3,213	0	0	0	0	0	0	0	0	0	0	0	3,213
Govt Taxes	319.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	319.70
Social Security	199.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	199.21
Medicare	46.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.59
SUI	48.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.20
FUTA	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.70
Other Benefits	867.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	867.53

You will notice that in all these screen captures that the government impositions are all U.S.-based. This is because we are looking at a U.S. department, specifically, U.S. Procurement. If we were to look at departments in other countries, we would see the corresponding government impositions for those countries being calculated as shown in these examples:

- Australia

Rows: SalaryCalc [SalaryCalc] Columns: Months [Months] Context: Australia Procurement [Organization] — Patrick Mills [ExistingEmployees]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	45,942	45,942	45,942	45,942	45,942	45,942	45,942	45,942	45,942	45,942	45,942	45,942	45,942
Action						Term w/Severence							
Bonus	2,277	2,277	2,277	2,277	2,277	2,277	0	0	0	0	0	0	13,662
Severence	0	0	0	0	0	0	1,000	0	0	0	0	0	1,000
Total Salary	6,106	6,106	6,106	6,316	6,316	6,316	1,000	0	0	0	0	0	38,264
Govt Taxes	223.72	1,139.55	2,055.37	3,009.90	3,957.26	5,244.19	5,363.19	5,329.14	5,329.14	5,329.14	5,329.14	5,329.14	47,638.86
Superannuation Guarantee (GS)	116.31	116.31	116.31	120.32	120.32	120.32	19.05	0.00	0.00	0.00	0.00	0.00	728.93
AUS Income Tax	15.83	931.65	1,847.48	2,794.84	3,742.21	5,029.14	5,329.14	5,329.14	5,329.14	5,329.14	5,329.14	5,329.14	46,335.97
AUS Medical Levy	91.58	91.58	91.58	94.74	94.74	94.74	15.00	0.00	0.00	0.00	0.00	0.00	573.96
Other Benefits	1,648.49	1,648.49	1,648.49	1,705.25	1,705.25	1,705.25	270.00	0.00	0.00	0.00	0.00	0.00	10,331.22
Health Plan Expense	150	150	150	150	150	150	0	0	0	0	0	0	900

- Japan

Rows: SalaryCalc [SalaryCalc] Columns: Months [Months] Context: Japan Manufacturing Control [Organization] — Yoshihisa Naruse [ExistingEmployees]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351	3,571,351
Bonus	24,108	24,108	24,108	24,108	24,108	24,108	24,108	24,108	24,108	24,108	24,108	24,108	289,301
Total Salary	321,721	321,721	321,721	321,721	321,721	321,721	321,721	321,721	321,721	325,203	325,203	325,203	3,871,098
Govt Taxes	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,878.05	4,878.05	4,878.05	58,066.46
Japan Social Security	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,825.81	4,878.05	4,878.05	4,878.05	58,066.46
Other Benefits	86,864.66	86,864.66	86,864.66	86,864.66	86,864.66	86,864.66	86,864.66	86,864.66	86,864.66	87,804.82	87,804.82	87,804.82	1,045,196.37
Health Plan Expense	325	325	325	325	325	325	325	325	325	325	325	325	3,900

- United Kingdom

Rows: SalaryCalc [SalaryCalc] Columns: Months [Months] Context: UK Procurement [Organization] — Amphlett, Edgar [ExistingEmployees]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	42,994	42,994	42,994	42,994	42,994	42,994	42,994	42,994	42,994	42,994	42,994	42,994	42,994
Bonus	287	287	287	287	287	287	287	287	287	287	287	287	3,448
Total Salary	3,870	3,870	3,870	3,870	3,870	3,870	3,870	3,870	3,870	3,870	3,870	3,879	46,452
Govt Taxes	444.95	444.95	444.95	444.95	444.95	444.95	444.95	444.95	444.95	444.95	444.95	446.10	5,340.59
National Insurance	445	445	445	445	445	445	445	445	445	445	445	446	5,341
Other Benefits	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,044.96	1,047.38	12,541.92

- Germany

Rows: SalaryCalc [SalaryCalc] Columns: Months [Months] Context: Germany Patent Protection/IP [Organization] — Strader, Sherman [ExistingEmployees]

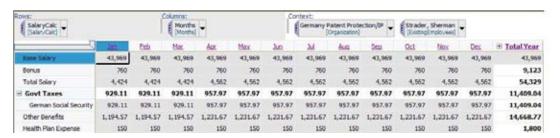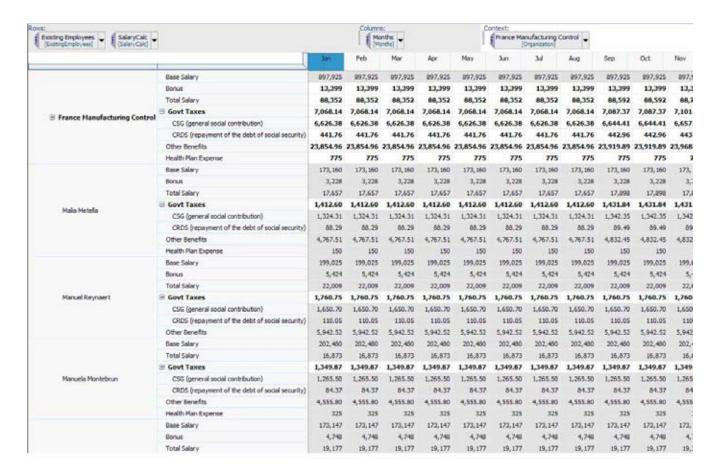|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
Base Salary	43,969	43,969	43,969	43,969	43,969	43,969	43,969	43,969	43,969	43,969	43,969	43,969	43,969
Bonus	760	760	760	760	760	760	760	760	760	760	760	760	9,123
Total Salary	4,424	4,424	4,424	4,562	4,562	4,562	4,562	4,562	4,562	4,562	4,562	4,562	54,329
Govt Taxes	929.11	929.11	929.11	957.97	957.97	957.97	957.97	957.97	957.97	957.97	957.97	957.97	11,409.04
German Social Security	929.11	929.11	929.11	957.97	957.97	957.97	957.97	957.97	957.97	957.97	957.97	957.97	11,409.04
Other Benefits	1,194.57	1,194.57	1,194.57	1,231.67	1,231.67	1,231.67	1,231.67	1,231.67	1,231.67	1,231.67	1,231.67	1,231.67	14,668.77
Health Plan Expense	150	150	150	150	150	150	150	150	150	150	150	150	1,800

The tab may also be re-orientated to a department – employee – salary calc view. In the following example, you can see the calculations for some French employees in the France Manufacturing Control Department. Note the France-specific government impositions.

Rows: Existing Employees [ExistingEmployees] | SalaryCalc [SalaryCalc] Columns: Months [Months] Context: France Manufacturing Control [Organization]

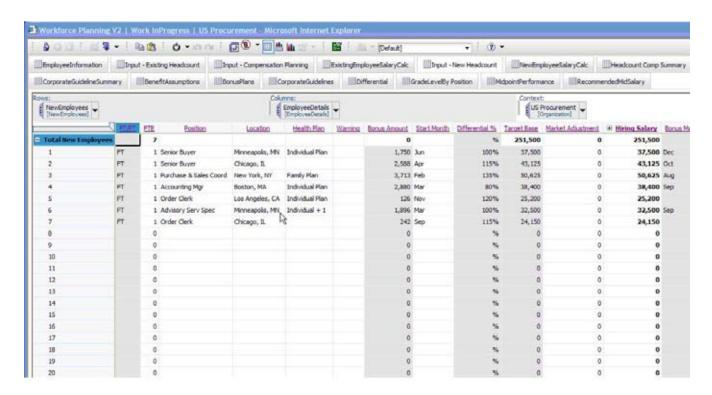|		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
⊟ France Manufacturing Control	Base Salary	897,925	897,925	897,925	897,925	897,925	897,925	897,925	897,925	897,925	897,925	897,9
	Bonus	13,399	13,399	13,399	13,399	13,399	13,399	13,399	13,399	13,399	13,399	13,3
	Total Salary	88,352	88,352	88,352	88,352	88,352	88,352	88,352	88,352	88,592	88,592	88,7
	⊟ Govt Taxes	7,068.14	7,068.14	7,068.14	7,068.14	7,068.14	7,068.14	7,068.14	7,068.14	7,087.37	7,087.37	7,101
	CSG (general social contribution)	6,626.38	6,626.38	6,626.38	6,626.38	6,626.38	6,626.38	6,626.38	6,626.38	6,644.41	6,644.41	6,657
	CRDS (repayment of the debt of social security)	441.76	441.76	441.76	441.76	441.76	441.76	441.76	441.76	442.96	442.96	443
	Other Benefits	23,854.96	23,854.96	23,854.96	23,854.96	23,854.96	23,854.96	23,854.96	23,854.96	23,919.89	23,919.89	23,968
	Health Plan Expense	775	775	775	775	775	775	775	775	775	775	7
Malia Metella	Base Salary	173,160	173,160	173,160	173,160	173,160	173,160	173,160	173,160	173,160	173,160	173,
	Bonus	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,228	3,2
	Total Salary	17,657	17,657	17,657	17,657	17,657	17,657	17,657	17,657	17,898	17,898	17,8
	⊟ Govt Taxes	1,412.60	1,412.60	1,412.60	1,412.60	1,412.60	1,412.60	1,412.60	1,412.60	1,431.84	1,431.84	1,431
	CSG (general social contribution)	1,324.31	1,324.31	1,324.31	1,324.31	1,324.31	1,324.31	1,324.31	1,324.31	1,342.35	1,342.35	1,342
	CRDS (repayment of the debt of social security)	88.29	88.29	88.29	88.29	88.29	88.29	88.29	88.29	89.49	89.49	89
	Other Benefits	4,767.51	4,767.51	4,767.51	4,767.51	4,767.51	4,767.51	4,767.51	4,767.51	4,832.45	4,832.45	4,832
	Health Plan Expense	150	150	150	150	150	150	150	150	150	150	
Manuel Reynaert	Base Salary	199,025	199,025	199,025	199,025	199,025	199,025	199,025	199,025	199,025	199,025	199,0
	Bonus	5,424	5,424	5,424	5,424	5,424	5,424	5,424	5,424	5,424	5,424	5,4
	Total Salary	22,009	22,009	22,009	22,009	22,009	22,009	22,009	22,009	22,009	22,009	22,0
	⊟ Govt Taxes	1,760.75	1,760.75	1,760.75	1,760.75	1,760.75	1,760.75	1,760.75	1,760.75	1,760.75	1,760.75	1,760
	CSG (general social contribution)	1,650.70	1,650.70	1,650.70	1,650.70	1,650.70	1,650.70	1,650.70	1,650.70	1,650.70	1,650.70	1,650
	CRDS (repayment of the debt of social security)	110.05	110.05	110.05	110.05	110.05	110.05	110.05	110.05	110.05	110.05	110
	Other Benefits	5,942.52	5,942.52	5,942.52	5,942.52	5,942.52	5,942.52	5,942.52	5,942.52	5,942.52	5,942.52	5,942
Manuela Montebrun	Base Salary	202,480	202,480	202,480	202,480	202,480	202,480	202,480	202,480	202,480	202,480	202,-
	Total Salary	16,873	16,873	16,873	16,873	16,873	16,873	16,873	16,873	16,873	16,873	16,8
	⊟ Govt Taxes	1,349.87	1,349.87	1,349.87	1,349.87	1,349.87	1,349.87	1,349.87	1,349.87	1,349.87	1,349.87	1,349
	CSG (general social contribution)	1,265.50	1,265.50	1,265.50	1,265.50	1,265.50	1,265.50	1,265.50	1,265.50	1,265.50	1,265.50	1,265
	CRDS (repayment of the debt of social security)	84.37	84.37	84.37	84.37	84.37	84.37	84.37	84.37	84.37	84.37	84
	Other Benefits	4,555.80	4,555.80	4,555.80	4,555.80	4,555.80	4,555.80	4,555.80	4,555.80	4,555.80	4,555.80	4,555
	Health Plan Expense	325	325	325	325	325	325	325	325	325	325	
	Base Salary	173,147	173,147	173,147	173,147	173,147	172,147	173,147	173,147	173,147	173,147	173,
	Bonus	4,748	4,748	4,748	4,748	4,748	4,748	4,748	4,748	4,748	4,748	4,
	Total Salary	19,177	19,177	19,177	19,177	19,177	19,177	19,177	19,177	19,177	19,177	19,

It is not necessary to display this tab. We have included it here as a courtesy for informational purposes. An administrator of the TM1 Contributor application could make the determination to hide this tab and allow the user to see the consolidated results in the Headcount Comp Summary tab.

The Salaries, Bonus and Severance lines are calculated by entries in the previous tabs. The Benefits lines are calculated as a standard rate per active employee. Government impositions are calculated employee-by-employee using the appropriate rates and taxable caps. Headcount can be a driver for additional expense line items.

All information is calculated in the local currency. This *Blueprint* can feed the *Expense Planning and Control Blueprint Powered by TM1*, which would convert the information from the local currency to the chosen corporate standard.

Input New Headcount

Having completed our modeling for our existing employees, we can make decisions regarding new hires. This tab allows 20 new hires per department. This number can be increased or decreased based on company need. Planning is by position, dropdown boxes are provided to assist in the decision-making process.

To hire a new employee:

1. A selection is made from a list of pre-approved positions,

2. The employee's FTE is chosen and then the FT/PT field is instantly calculated,

3. A location where this employee will be working is picked from a list you tailor.

4. The new employee is assigned to a Health Plan Choice if known.

5. A start month is selected.

The *Blueprint* calculates a differential to be paid based on where the employee will be located. Minneapolis is our baseline, so a location of Minneapolis would pay 100% of the recommended midpoint for this position. Someone working in New York, as you can see, would get a differential equal to 135% of the midpoint, while someone working in Sioux Falls, South Dakota would get 85% of the midpoint. The midpoints also have exchange rates built into them so that a position in Narita Japan, being paid in Yen instead of dollars would have a very large differential associated with it. Differentials are described later in this document

Each position has an associated salary grade. It is the combination of salary grade and location choice that causes the target base to be populated. The user can make a marketing adjustment to the target base to arrive at a hiring salary. The Bonus percentage is arrived at using business rules embedded in the model. Based on the grade, and assuming all first year employees perform at mid level, a lookup table brings up a bonus. Our model pays a bonus to employees who serve at least six months in the calendar year. These rules are assumptions made in the existing *Blueprint*. It is very easy to modify a *Blueprint* to reflect your own set of headcount and payroll assumptions.

This tab is form-based so that you can prepare a plan based on the decisions you would make to manage their employees, rather than burdening you with the month-by-month calculations of cost and headcount. This makes workforce planning easy for department managers, while providing visibility for corporate into the decisions that make up changes to the workforce, rather than just receiving the change in dollars spent in a department.
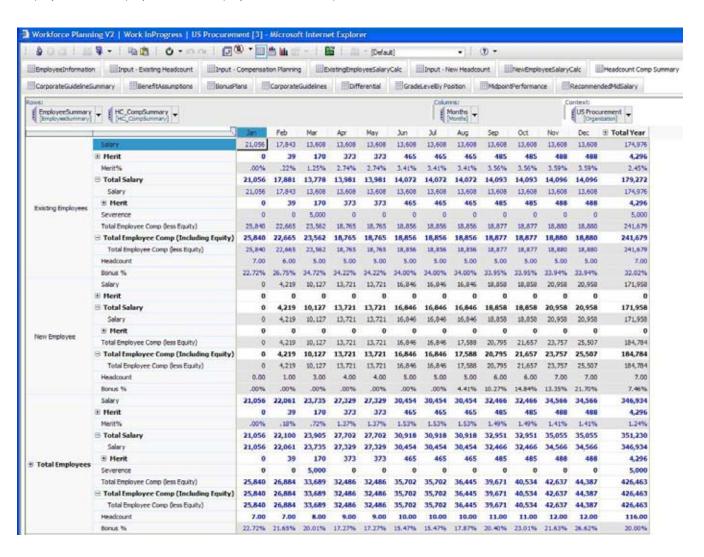
New Employee Salary Calc

The sixth tab in the *Blueprint* is **NewEmployeeSalaryCalc**. It requires no input and in this case is based entirely on information entered into **Input – New Headcount** and the assumptions and rules built into the model. This tab is displayed for the convenience of the user and can be hidden in a deployed model by an administrator.
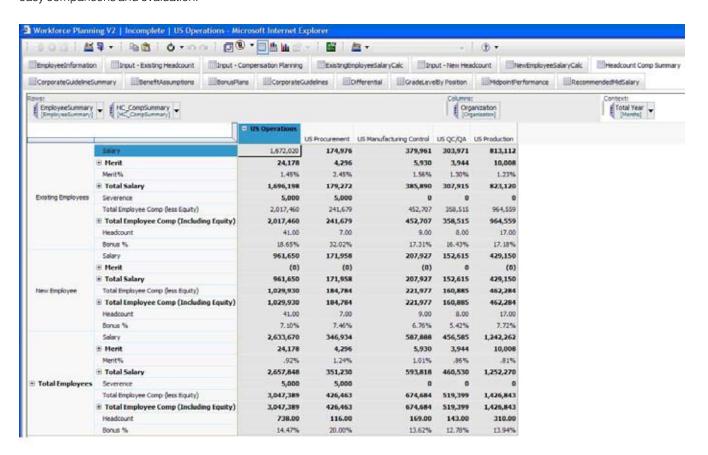

In the previous section, our first hire was for a Senior Buyer that we wanted to start in June at a target base of 37,500 with a 1,750 bonus payable in December. In the screen capture here you can view the results for those choices. As with existing employees, the appropriate government impositions are charged based on location.

Headcount Comp Summary

The seventh tab is **HeadcountCompSummary**. It displays the results based on the choices made by a user. There are a number of expandable calculations. A user may also view quarterly results if desired. This functionality is available for all tabs calculated by month. This view gives the contributor a consolidated view of Existing Employees, New Employees and all employees within the department.

If a user happens to be a reviewer of more than one department, they may re-orientate this tab to view the compensation for all their reporting departments for easy comparisons and evaluation.

Corporate Guideline Summary

Tab eight, **CorporateGuidelineSummary**, compares **Proposed Merit Increase**, **Bonuses granted**, and **Equity awarded** to the corporate guidelines that have been set. Looking at the following screen, we notice that we were in a position to grant more merit dollars and stock options.

	Corporate Guideline	Proposed	Variance	Comments
Merit%	3.00%	1.24%	1.76%	
Bonus%	20.00%	20.00%	.00%	
Options	2,000	1,000	1,000	
RSU's	1,000	0	1,000	
Other	0	0	0	

This tab may also be re-orientated to give us a view of multiple departments.

| | EmployeeInformation | Input - Existing Headcount | Input - Compensation Planning | ExistingEmployeeSalaryCalc | Input - New Headcount | NewE |
| CorporateGuidelineSummary | BenefitAssumptions | BonusPlans | CorporateGuidelines | Differential | GradeLevelBy Position | MidpointPerfor |

Rows: Organization [Organization]

Columns: CorporateGuidelineMeasures [CorporateGuidelineMeasures] CorporateGuidelines [CorporateGuidelines]

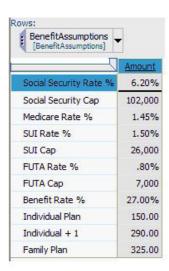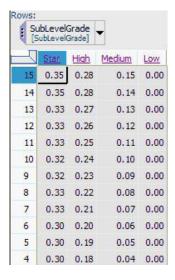|	Corporate Guideline					Proposed					Variance				
	Merit%	Bonus%	Options	RSU's	Other	Merit%	Bonus%	Options	RSU's	Other	Merit%	Bonus%	Options	RSU's	Other
⊟ **US Operations**	3.00%	20.00%	0	0	0	.92%	14.47%	**4,475**	0	0	2.08%	5.53%	(4,475)	0	0
US Procurement	3.00%	20.00%	2,000	1,000	0	1.24%	20.00%	1,000	0	0	1.76%	.00%	1,000	1,000	0
US Manufacturing Control	3.00%	20.00%	2,000	1,000	0	1.01%	13.62%	900	0	0	1.99%	6.38%	1,100	1,000	0
US QC/QA	3.00%	20.00%	2,000	1,000	0	.86%	12.78%	875	0	0	2.14%	7.22%	1,125	1,000	0
US Production	3.00%	20.00%	2,000	1,000	0	.81%	13.94%	1,700	0	0	2.19%	6.06%	300	1,000	0

Benefit Assumptions

This tab is the first of seven that are used to hold assumptions and corporate guidelines. The information they contain does not vary by department and no user input is allowed. At the discretion of your administrator, they may be hidden from the *Blueprint* users.

Rows: BenefitAssumptions [BenefitAssumptions]

	Amount
Social Security Rate %	6.20%
Social Security Cap	102,000
Medicare Rate %	1.45%
SUI Rate %	1.50%
SUI Cap	26,000
FUTA Rate %	.80%
FUTA Cap	7,000
Benefit Rate %	27.00%
Individual Plan	150.00
Individual + 1	290.00
Family Plan	325.00

To show both types of functionality, some government impositions are calculated by referring to this cube for rates and caps; other government impositions have the caps and rates built into the calculation rules. Both methods work well and are easily updated.
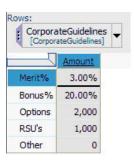
Bonus Plans

When entering a performance level in the Input – Compensation Plan tab, this tab is referred to for calculating the bonus target percentage

Rows: SubLevelGrade [SubLevelGrade]

	Star	High	Medium	Low
15	0.35	0.28	0.15	0.00
14	0.35	0.28	0.14	0.00
13	0.33	0.27	0.13	0.00
12	0.33	0.26	0.12	0.00
11	0.33	0.25	0.11	0.00
10	0.32	0.24	0.10	0.00
9	0.32	0.23	0.09	0.00
8	0.33	0.22	0.08	0.00
7	0.33	0.21	0.07	0.00
6	0.30	0.20	0.06	0.00
5	0.30	0.19	0.05	0.00
4	0.30	0.18	0.04	0.00

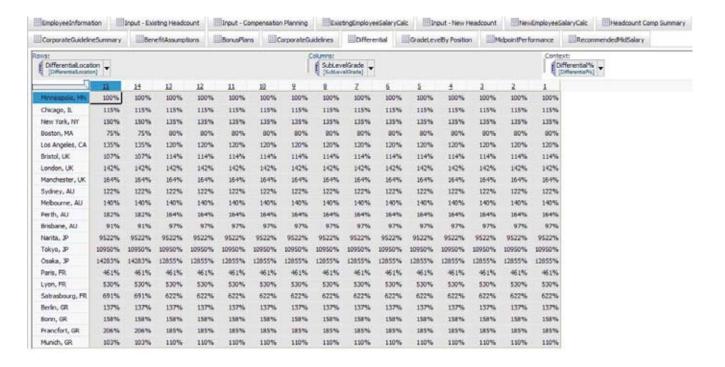## Corporate Guidelines

Corporate guidelines are used in the Corporate Guidelines Summary tab. In our model, corporate guidelines are the same for all departments. If desired, the data here could be maintained at the department level.

Rows: CorporateGuidelines [CorporateGuidelines]

	Amount
Merit%	3.00%
Bonus%	20.00%
Options	2,000
RSU's	1,000
Other	0

Differential

The differentials in the model are by location and grade. They also take into account exchange rates. This table is used to calculate the target base for new employees and to normalize the midpoint calculations in the compensation planning tab.

| | EmployeeInformation | Input - Existing Headcount | Input - Compensation Planning | ExistingEmployeeSalaryCalc | Input - New Headcount | NewEmployeeSalaryCalc | Headcount Comp Summary |
| CorporateGuidelineSummary | BenefitAssumptions | BonusPlans | CorporateGuidelines | **Differential** | GradeLevelBy Position | MidpointPerformance | RecommendedMidSalary |

Rows: DifferentialLocation [DifferentialLocation] Columns: SubLevelGrade [SubLevelGrade] Context: Differential% [Differential%]

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Minneapolis, MN	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Chicago, IL	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%	115%
New York, NY	150%	150%	135%	135%	135%	135%	135%	135%	135%	135%	135%	135%	135%	135%	135%
Boston, MA	75%	75%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Los Angeles, CA	135%	135%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Bristol, UK	107%	107%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
London, UK	142%	142%	142%	142%	142%	142%	142%	142%	142%	142%	142%	142%	142%	142%	142%
Manchester, UK	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%
Sydney, AU	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%
Melbourne, AU	140%	140%	140%	140%	140%	140%	140%	140%	140%	140%	140%	140%	140%	140%	140%
Perth, AU	182%	182%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%	164%
Brisbane, AU	91%	91%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
Narita, JP	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%	9522%
Tokyo, JP	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%	10950%
Osaka, JP	14283%	14283%	12855%	12855%	12855%	12855%	12855%	12855%	12855%	12855%	12855%	12855%	12855%	12855%	12855%
Paris, FR	461%	461%	461%	461%	461%	461%	461%	461%	461%	461%	461%	461%	461%	461%	461%
Lyon, FR	530%	530%	530%	530%	530%	530%	530%	530%	530%	530%	530%	530%	530%	530%	530%
Satrasbourg, FR	691%	691%	622%	622%	622%	622%	622%	622%	622%	622%	622%	622%	622%	622%	622%
Berlin, GR	137%	137%	137%	137%	137%	137%	137%	137%	137%	137%	137%	137%	137%	137%	137%
Bonn, GR	158%	158%	158%	158%	158%	158%	158%	158%	158%	158%	158%	158%	158%	158%	158%
Francfort, GR	206%	206%	185%	185%	185%	185%	185%	185%	185%	185%	185%	185%	185%	185%	185%
Munich, GR	103%	103%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%

Grade Level by Position

When selecting a position for a new employee, the corresponding grade is looked up in this table.

Rows:
PositionCategory
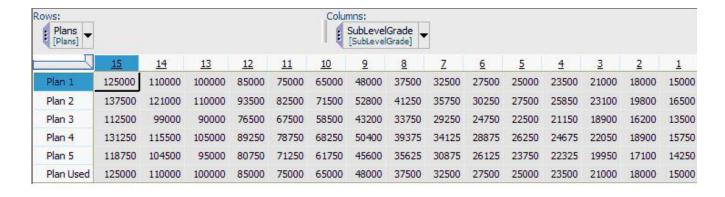[PositionCategory]

	Grade-Level
Account Consultant	9
Account Entry Spdst	7
Account Transfer Coordinator	7
Accountant	8
Accounting Clerk	5
Accounting Coordinator	7
Accounting Dir	9
Accounting Mgr	9
Accounts Processor I	2
Actuarial Analyst	5
Actuarial Assistant	3
Actuarial Assistant I	2
Actuarial Associate	4
Actuarial Trainee	15
Admin Assist II	4
Admin Asst III	3
Administrative Assistant	5
Advisory Serv Spec	7
Agency Manager	9
Asc Real Estate Finance Legal	11
Assoc Budget Analyst	7
Assoc Case Coordinator	10
Assoc Finance Dir	11
Assoc New Business Rep	7
Assoc, Mortgage Loan Servicing	6
Associate Business Analyst	7
Associate Call Center Director	8
Associate Funding Rep	7

Midpoint Performance

The model calculates, in the Input – Compensation tab, the percentage of midpoint for an individual's salary and then, based on which midpoint range that falls into and their performance rating, a merit target percentage is looked up in this table.

Rows: MidpointRanges [MidpointRanges]

	Star	High	Medium	Low
<90%	9.50%	7.00%	4.00%	1.50%
90-105%	7.50%	5.00%	3.00%	1.00%
105-115%	6.00%	4.00%	2.00%	.00%
>115%	5.00%	3.50%	1.50%	.00%

Recommended Mid Salary

In the Input – New Headcount tab, when a position is selected, the grade is automatically looked up from the GradeLevelBy Position tab. That grade is then used to look up a recommended mid-salary from this table. That amount is then acted upon by the differential percentage, which is based upon location. The resulting calculation results in the target base for the new hire.

Rows: Plans [Plans]   Columns: SubLevelGrade [SubLevelGrade]

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Plan 1	125000	110000	100000	85000	75000	65000	48000	37500	32500	27500	25000	23500	21000	18000	15000
Plan 2	137500	121000	110000	93500	82500	71500	52800	41250	35750	30250	27500	25850	23100	19800	16500
Plan 3	112500	99000	90000	76500	67500	58500	43200	33750	29250	24750	22500	21150	18900	16200	13500
Plan 4	131250	115500	105000	89250	78750	68250	50400	39375	34125	28875	26250	24675	22050	18900	15750
Plan 5	118750	104500	95000	80750	71250	61750	45600	35625	30875	26125	23750	22325	19950	17100	14250
Plan Used	125000	110000	100000	85000	75000	65000	48000	37500	32500	27500	25000	23500	21000	18000	15000

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- cut costs

- streamline processes

- boost productivity

- enable rapid response to opportunity

- increase management visibility

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