Requirements/Design Specification

**Compensation Payout Display**

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Revision** | **Description** | **Author** |
| 10/30/2014 | 1.0 | Initial Version with Requirements | Beckie Holmes |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

The information furnished herein by Republic Services Inc. is proprietary and confidential to Republic Services Inc. personnel and is not to be duplicated, published, or disclosed to any third party in whole or in part without permission from Republic Services, Inc.

© Copyright 2012, Republic Services Inc. - All rights reserved.

Table of contents

1 Business Requirements 6

1.1 Purpose of the Design Specification 6

1.1.1 Business Functional Requirements / Configuration 6

1.1.2 Technical Design Requirements 7

2 Assumptions 7

3 Technical Design 8

3.1 Referenced Documents 8

3.2 Process Flow and Mock Ups 8

3.3 Functional Logic 9

3.4 Data Sources & Mapping 9

3.5 InfoPro Interface 9

4 Report Changes 10

5 Appendix 10

# Business Requirements

## Purpose of the Design Specification

This document highlights items to be implemented for Rate Restriction functionality. In order to get certain functionality to the users quicker, not all items will be implemented in this first iteration.

### Business Functional Requirements / Configuration

| **Business Functional Requirement** | **Notes** |
| --- | --- |
| Config Templates | No change required: “Default Initial Term” is interpreted to be the standard term for the purposes of comp |
| Config Templates | New config template to be added for corporate-level configurable attributes for comp. |
| Config: Start New Quote | Commission estimate only appears for the following sales activity reasons:   1. New/New 2. New/Comp 3. Existing customers as described in BFR-008: |
| Config: Site attributes | Compensation will be based on account type: Perm, Temp Seasonal, with seasonal and perm treated as permanent accounts  Requirement: need temp/perm at container group, not site level.  ~~Short term solution: true up outside of capture assuming account type gets fixed in InfoPro~~  Existing customer issue: what to do about adding temps to perm acct –guidance is to add a new site |
| Commerce: New permanent sites large and small container, existing customers with new permanent sites | Estimated commission will appear at the bottom of the screen under the monthly summary  Commission to be based on the following pricing attributes:   1. Fee Flags on/off FRF, ERF, and Admin (make customizable so we can change which fees drive the payout, add ability to pay differential amount on each piece) - Table Driven 2. Rate restriction on/off, (all or nothing, not based on amount of restriction) Note: 12 month locks count as RATE RESTRICTED 3. Initial contract term – define standard term for each division – add to config template. Payment triggers if term is >= standard term 4. pricing relative to guardrails   Items (1) to (3) above pay a constant % of selling price if desired behavior is achieved. The percent is fixed at the corporate level and is table driven  Item (4) pays a differential rate relative guardrail position: rates are interpolated between guardrails using a straight line formula, with the cost percentage paying below cost and the target percentage paying above target.  The max, min, cost, floor, average, and target percentages are table-driven and set at the corporate level (initial configuration: Max = Target, Min = Floor)  Additional attributes: build ability to make commissionable, set initial payout to 0%:   1. Delivery charge – commission at a fixed percent of revenue, job category specific 2. Industry – add a table – corp level %, job category specific 3. Segment – add a table corp level %, job category specific 4. Waste type/LOB– add a table with %, Large container, small container, waste type (Solid Waste vs OCC vs single stream level), Job category |
| Commerce: New customers large and small container | Ad hoc items are not included in compensation calculation  NOTE: RCC, NRS and other “R” “F” charges appear to be included in the STR measure of revenue but not in the capture measure.  This will be addressed when division-specific charge codes are added (upcoming enhancement). Until then, guardrail percentage is calculated excluding this revenue but total (STR) revenue is used to calculate commission. |
| Commerce: cost calculations | The estimated commission rate used in the cost calculation will reflect an average commission rate: $0.75\* estimated monthly revenue. Estimated commission costs will not vary to reflect actual deal level commission rates |
| Commerce: Commission rates | Commission rates should be allowed to vary by job category  All employees see the commission estimated for their job code (i.e. estimates are not hidden for some types of employees)  Add table that allows us to hide commission for some job codes  Decision to use job code instead of job category to facilitate greater flexibility. Any job code not in the commission table will default to “no commission” shown |
| Commerce: Large container | Commission estimates on large container will be based on the estimated tons per haul and hauls per month entered by the rep. ~~the guardrail quoted but the revenue associated with one ton per haul and one haul per month~~  ~~For example: if haul quoted is 110% of average and disposal is 110% of target, then payout will be (haul revenue \*1 haul +disposal price/ton\*1 ton + rental rate per month ) \* estimated commission rate based on guardrail.~~  Guardrail used is based on the estimated monthly revenue for all large containers on the quote  ~~Or~~  ~~Guardrail is calculated at the container group level~~ |
| Commerce: Existing Customer | For existing customers, the following transactions result in a quality of revenue score that is calculated by the position in the guardrail:  --Price rollback (competitive bid)  --Price rollback (General save)  --PI rollback  --Service change where no part of service increase comes from a competitor  --Change of owner  Score:  0 = below cost  1 = between cost and floor  2 = between floor and average  3 = between average and target  4 = above target  This score is generated at the quote level for all existing container groups on the quote OR  ~~This score is generated at the container group level~~ |
| 1. Existing Customer | New business for existing customers is defined as the following:   1. Adding a new permanent site to an existing customer’s account 2. Adding a new line of business (SW or REC) to an existing site where that business was previously served by another provider   When adding a new small or large container to an existing account, need to add a reason code dropdown to configurator: “New/New” or “New from Competitor” and ajax rule for select competitor when new from competitor. This gets coded with reason code new comp, and pays as new business. if new/new, gets coded as service change and gets a score.  When closing a container group, “lost to competitor”, “service issues”, “Closed business”, “competitor pricing” and “price increase” reasons all code as lost business.  DO WE NEED A SERVICE DECREASE - PERMANENT CONTAINER GROUP CLOSURE REASON?  Commissions for existing customer transactions that are defined as new business will be calculated in the same manner as new/new and new/comp large and small container as outlined above (BFR-002:, BFR-003:, BFR-004:). Commissions that are classified as service change are assigned a score as described in BFR-0010:. |
| Documentation   * CSA * Proposal * Sample Invoice | No Changes |
| 1. Approvals | No Changes |
| 1. Flipping quotes | If a user flips a quote to another user, the commission visible on the screen will relate to the job code of the user currently in possession of the quote (i.e. the current quote owner) |
| 1. Reporting | Compensation estimates should appear in reporting output |
| Finalize Quote | If “Finalized: customer refused to sign” is selected, when rep presses “Finalize Sale” button, check to ensure that month to month was selected as the contract term. If Month to Month was not selected, error message appears “Contract Term is not Month to Month.” Please return to pricing page and reset contract term to month to month if customer will not sign.” |

### Technical Design Requirements

| **Technical Design Requirement** | **Notes** |
| --- | --- |
| Config Templates | No changes. |
| User Table | Job code is in user\_hiearchy. This will be used to determine what commission rate the rep sees. Any job code not found in commission tables will not display commission  Job code must be added to hierarchy\_exception table |
| 1. New NSD | New NSD tables will be required to manage compensation rules. These tables will be managed via a configuration file and will be uploaded into Capture via a manual process (not automated) |
| Config (Select Service Offering) page |  |
| Commerce |  |
| Documentation   * CSA * Proposal * Sample Invoice | None |
| InfoPro Interface | None |

# Assumptions

The following items are assumptions are out of scope:

These items were discussed and it was determined they are not commissionable:

1. Ad hoc items
2. Service revenue rate changes (outside of delivery); includes removal/delivery charges for service change
3. Zip code level differences in payout
4. Hiearchy-driven differences in payout (Lawson division, IFP division, BU, Area, Region)
5. Competitor-Driven differences in payout (concern on impact on data accuracy if competitor selection drives commission)
6. Compactors –REN , REG, commissionable, installation not commissionable
7. Type of charge (DSP, REG, REN, billing type) – no differential payout based on charge code.
8. Date range – low priority to have commission payouts have start and end dates (revisit). This would need to be market specific and have a start and end date (by job code). Out of scope for now.
9. Will follow current design that Temp/Perm is at the site level. If a new temp needs to be added to a perm site, must add a new site (at the same address). Follow up: Mike Guillaume to determine corp standard…should we support temp/perm at CG level or is this a site concept only?

New lines of business will be added as new configuratable products and commission for those products will be calculated when those products are added

# Technical Design

## Referenced Documents

None

## Process Flow and Mock Ups

### Pricing screen changes

Commission will be visible on the screen under the “Monthly totals” section

Commission will not be visible for those job codes where “Show comp” variable is set to no

A commission estimate will be visible for floor, average, and target guardrails and the proposed price

The total commission % (total commission on all recurring charges / total revenue on all recurring charges – excludes delivery commission) will appear under the commission estimates

On selecting “Detail View”, four lines could appear:

* + Small container estimated commission $
  + Small container estimated commission %
  + Large container estimated commission $
  + Large container estimated commission %

### Configuration screen changes

“Transaction Type” to move from first screen to configurator. Customer only has option of “New business”, “Existing Customer” or “Change of Owner” from screen (1)

Need wireframes: add a section or just put at top of the screen under “Service Criteria”?

In configurator, rep selects the following:

1. New Small and New Large: “New/New” or “New from Comp”
   1. Ajax rule bring up competitors
   2. Competitor list is table driven
2. Existing customer: Adding a new container (small or large)
   1. Choices are “New from Comp” and “service increase”
   2. Validation rule: cannot select “New From Comp” unless it is a new waste stream on the account (i.e. if they select a recycling waste type there are no existing recycling containers on the account)
   3. If “New from Comp”, ajax rule brings up list of competitors
   4. List of competitors is table-driven

## Functional Logic

### Table controls which job codes can see their comp estimate

If a job code is not in the table, estimates will not be shown

NOTE: Is this needed? Alternatively, if comp estimate = 0 don’t show comp lines on screen. This logic would be able to be generated from other tables described below.

|  |  |
| --- | --- |
| job\_Code | Show\_Comp |
| DS8K | Y |
| DS8L | N |

### Commission percentage is a calculation based on the following:

Sm\_com\_pct= small\_com\_adder\_pct + small\_com\_base\_pct

Lg\_com\_pct= large\_com\_adder\_pct + large\_ com\_base\_pct

Commission calculation is at the quote level, for large containers and small containers. Ad-Hoc items are not commissionable. Any new LOBs would need to be added to the code and table(s) to be commissionable.

### Adders: Commission add-ons: small\_com\_adder\_pct; large\_ com\_adder\_pct

### small\_ com\_adder\_pct and large\_ com\_adder\_pct are the total add-on commission points that the rep earns from deal-specific configuration items. This is LOB specific so there will be one value for large container and one value for small container. It is calculated as the sum of the individual percentages defined in the configuration file, based on a lookup from the commission table(s). Any job code, LOB or other value not found in the table(s) should return a commission rate of 0

small\_com\_adder\_pct = rate restriction on % + FRF on % + ERF on % + Admin on % + FRF, ERF, Admin on % + ERF, FRF on % + default contract term % + industry % + segment %

large\_com\_adder\_pct = rate restriction on % + FRF on % + ERF on % + Admin on % + FRF, ERF, Admin on % + ERF, FRF on % + default contract term % + industry % + segment %

The lookup to the base\_comp\_factors table will be based on Job Category and LOB (small container or large container).

Variable Descriptions:

* **Fees.** The lookup should return one of the following variables that evaluate to “T”: ERF, FRF, Admin On, ERF and FRF on, ERF on, FRF on, Admin on: The values in the list will be managed manually. The values in the list are mutually exclusive with the rest of the list.
* **Rate Restricted**. If the “rate restricted” box is unchecked, the commission % should be added to the total for that job code and LOB
* **Default Contract Term**. If the contract term selected is >= the default contract term, then the contract % should be added to the total for that job code and LOB
* **Segment**. The commission associated with the segment selected should be added to the commission percent for that LOB and job code
* **Industry**. The commission associated with the industryselected should be added to the commission percentage for that LOB and job code

**comp\_adders\_tbl**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **job\_Code** | **Variable** | **operator** | **Variable\_level** | **LOB** | **Commission %** |
| DS8J | feesToCharge\_quote | = | FRF~ERF~Admin Fee | SMALL CONTAINER | 0.10 |
| DS8J | feesToCharge\_quote | = | FRF~ERF | SMALL CONTAINER | 0 |
| DS8J | feesToCharge\_quote | = | ERF | SMALL CONTAINER | 0 |
| DS8J | feesToCharge\_quote | = | FRF | SMALL CONTAINER | 0 |
| DS8J | feesToCharge\_quote | = | Admin Fee | SMALL CONTAINER | 0 |
| DS8J | customerRateRestriction\_quote | = | FALSE | SMALL CONTAINER | 0.10 |
| DS8J | initialTerm\_quote | >= | initialDefault (From Div\_Term\_Exceptions table) | SMALL CONTAINER | 0 |
| DS8J | segment\_readOnly\_quote | = | Price | SMALL CONTAINER | 0 |
| DS8J | segment\_readOnly\_quote | = | Environmental Solutions | SMALL CONTAINER | 0 |
| DS8J | segment\_readOnly\_quote | = | Performance | SMALL CONTAINER | 0 |
| DS8J | industry\_readOnly\_quote | = | Automotive | SMALL CONTAINER | 0 |
| DS8J | industry\_readOnly\_quote | = | Construction | SMALL CONTAINER | 0 |
| DS8J | industry\_readOnly\_quote | = | Education | SMALL CONTAINER | 0 |
| DS8J | industry\_readOnly\_quote | = | Healthcare | SMALL CONTAINER | 0 |
| DS8J | wasteCategory | = | Solid Waste | SMALL CONTAINER | 0 |
| DS8J | wasteCategory | = | Recycling | SMALL CONTAINER | 0 |
| DS8J | currentQuoteTotal\_quote | < | smallMonthlyTotalFloor\_quote | SMALL CONTAINER | 0.15 |
| DS8J | currentQuoteTotal\_quote | >= | smallMonthlyTotalFloor\_quote | SMALL CONTAINER | 0.25 |
| DS8J | currentQuoteTotal\_quote | >= | smallMonthlyTotalBase\_quote | SMALL CONTAINER | 0.45 |
| DS8J | currentQuoteTotal\_quote | >= | smallMonthlyTotalTarget\_quote | SMALL CONTAINER | 0.75 |
| DS8J | currentQuoteTotal\_quote | >= | smallMonthlyTotalStretch\_quote | SMALL CONTAINER | 1.20 |
| DS8J | currentQuoteTotal\_quote |  | Max Commission | SMALL CONTAINER | 1.20 |
| DS8J | numberOfTotalDeliveryContainers\_quote | >= | 1 | SMALL CONTAINER | 0 |

### Base commission calculation: small\_com\_base\_pct; large\_ com\_base\_pct

small\_ com\_base\_pct and large\_ com\_base\_pct are calculated based on guardrail position. Steps:

* Compare small container proposed\_price or large\_container\_proposed price to each guardrail total for large container or small container. Return guardrail that is closest to proposed price:
  + If proposed price < cost, then Min commission
  + If proposed price >=cost and <Floor then Cost Commission
  + If proposed price >= floor and < average then floor commission
  + If proposed price >= average and < target then average commission
  + If proposed price >= target then target commission
* For the guardrail selected, interpolate the distance between guardrails the following way:
  + If Min commission: base\_com\_pct = Min Commission % + proposed price $ \*(cost commission % – min commission %) /(cost guardrail $)
  + If Cost commission: base\_com\_pct = Cost Commission % + (proposed price $ - cost price $)\* (floor commission % – cost commission %) /(floor guardrail $ - cost guardrail $)
  + If Floor commission: base\_com\_pct = Floor Commission % + (proposed price $ - floor price $)\* (average commission % – floor commission %) /(average guardrail $ - floor guardrail $)
  + If Average commission: base\_com\_pct = Average Commission % + (proposed price $ - average price $)\* (target commission % – average commission %) /(target guardrail $ - average guardrail $)
  + If Target commission: base\_com\_pct = Target Commission % + (proposed price $ - target price $)\* (max commission % – target commission %) /(max guardrail $ - target guardrail $)

**comp\_base\_tbl**

This table contains the lookup commission percentages to drive the base commission calculation plus the delivery and waste type adders. This lookup should be based on the sales rep’s job code and is LOB specific. There will be two base commissions calculated: one for small container and one for large container. This calculation is done at the quote level for all large and small containers on the quote.

### Commission Total

To calculate commission, the following formula should be applied

Total Small Container Commission = total small container proposed price \* sm\_com\_pct + total small container delivery fees \* delivery fee commission rate + total small container proposed price for recycling containers \* recycling commission rate + total small container proposed price for solid waste containers \* solid waste commission rate

Total Large Container Commission = total large container proposed price \* large\_com\_pct + total large container proposed delivery fees \* delivery fee commission rate + total large container proposed price for recycling containers \* recycling commission rate + total large container proposed price for solid waste containers \* solid waste commission rate

Where

recycling commission rate, delivery fee commission rate and solid waste commission rate are lookups based on job code and small/large container

**Total Commission = Total Large Container Comission + Total Small Container Comission**

## Data Sources & Mapping

* For detailed mapping information, please refer to the BMI [Enterprise Mapping Document](http://itpmo-2013projects/Pricing%20Initiative/2.0%20Planning%20and%20Requirements/BMI%20Enterprise%20Mapping%20Document.xlsx).
* Additional NSDs must be added as described above

## InfoPro Interface

N/A

# Report Changes

Need to add compensation varibles to report interface: these should be quote-level currency variables, possibly a percent variable: Estimated Large container commission, Estimated small container commission, estimated large container %, estimated small container %, existing customer guardrail

# Appendix

Question: What’s in the STR for monthly revenue? (From Suzanne)

Yes, I can tell you what is considered as monthly equivalent revenue.

* all rates billed as recurring (we do not look at the charge code)
* all **REG** S-Q rates (haul charges)

For disposal revenue, the program uses the primary DSP S-W rate.

The program does not consider DIS charge as additional charges or OVR disposal rates in the calculation.  In the example below, the monthly equivalent revenue would be 175.00 (175.00 \* 1 est lift) and the disposal revenue would be 36.00 \* 1 \* the division average or customer average weight if over 75 days.  No other rates are considered.  If the container had a 50.00 monthly rental, the revenue would be 225.00 or if the LIN charge was LIN R – Q instead of S – Q, the revenue would be 215.00.  Disposal revenue would be the same.  Please let me know if you have any questions.

