# Pricing Information Element Definition

Quantity – Count by Item unit specified in Price Book

Unit Price – Posted price per unit specified in Price Book

Net Price – Price per unit after discount, or specified by user under As Per Bid pricing method.

PercentDiscount – Percentage of discount taken from Price Book price

Amount – Total from Price Book price

TravelBaseCharge – Travel distance as second Quantity factor involved in Amount calculation of travel chargeable item.

DepthBaseCharge – Well Depth as an indicator for choosing proper Price Book item. Currently it doesn’t involve in calculation.

AmountAfterDiscount- Total of Amount after discount deduction.

DiscountAmount- Total of discount deducted

NetAmount – Final Total, Same as AmountAfterDiscount for now. It allows further deduction or surplus or tax functionality on top of AmountAfterDiscount. Example is TMA currently still left in code.

# Principles

In Group Item, Amount/Discount/Unit Price/AmountAfterDiscount are simulation.

In Bundle Item, Amount/Discount/Unit Price/AmountAfterDiscount are simulation. For billing purpose, Discount should be 0, Quantity/Net Price/NetAmount tells the truth.

In Price Item:

If there is a price in Price Book, the price will be copied to Unit Price, but not allow to modify. In this case, when Discount is changed, Net Price will be recalculated; when Net Price is changed, Discount will be recalculated. This kind of items are discountable.

If there is no price1 in Price Book, price 2 is POR or Cost plus Percentage. Unit Price is only for simulation purpose, will be set as same as Net Price, since discount is 0. This kind of items are not discountable.

For data adjustment:

In price Item, each sing data field has two values, Est. and Adj.. If Adj. is null or blank, it is considered no adjustment happens. So the Adj. field will carry over Est. field value for all calculation and reporting.

# Calculation Formula

1. Single Item Calculation
   1. Discountable Items – UnitPrice is read-only.
      1. When Changing Discount

NetPrice = UnitPrice \* (1 – PercentDiscount/100)

* + 1. When Changing Net Price

PercentDiscount = (UnitPrice – NetPrice)/UnitPrice \* 100

1.1.3 Then Common Calculation

If not IsTraveBaseCharge,

Amount = UnitPrice \* Quantity

NetAmount = NetPrice \* Quantity

Else

Amount = UnitPrice \* Quantity \* TravelBaseCharge

NetAmount = NetPrice \* Quantity \* TravelBaseCharge

End

DiscountAmount = Amount – NetAmount

AmountAfterDiscount = NetAmount

* 1. Non-Discountable Items – Unit Price is calculated and read-only; Discount is 0 and read-only.

Unit Price = Net Price.

Then Common Calculation.

1. Total to Unit Calculation
   1. Pre-condition: Price Item is priced, Unit Price should be read-only. NetPrice is entered. Discount is calculated, and read-only.

If not IsTraveBaseCharge,

Amount = UnitPrice \* Quantity

NetAmount = NetPrice \* Quantity

Else

Amount = UnitPrice \* Quantity \* TravelBaseCharge

NetAmount = NetPrice \* Quantity \* TravelBaseCharge

End

AmountAfterDiscount = NetAmount

DiscountAmount = Amount - AmountAfterDiscount

PercentDiscount = DiscountAmount/Amount

* 1. Pre-condition: Price Item is POR (Price on Request), NetPrice is entered. PercentDiscount is readonly. Unit Price is simulated by Calculation. Unit Price is readonly.

If not IsTraveBaseCharge,

NetAmount = NetPrice \* Quantity

Else

NetAmount = NetPrice \* Quantity \* TravelBaseCharge

End

Amount = SUM(Amount of all direct child items)

Unit Price = Amount/ Quantity

AmountAfterDiscount = NetAmount

DiscountAmount = Amount - AmountAfterDiscount

PercentDiscount = DiscountAmount/Amount

2.2.1 Populate bundled line items

NetAmount = BundleNetAmount \* (Amount/BundleAmount)

NetPrice = NetAmount / Quantity

AmountAfterDiscount = NetAmount

DiscountAmount = Amount – AmountAfterDiscount

PercentDiscount = DiscountAmount/Amoun

1. Unit to Total Bundle Calculation

Bundle Item is not allowed in this calculation.

Calculation is same as Group Calculation, but bundle item rule applies

1. Bundle Only Calculation

Under this condition, not price item is allowed to be added underneath.

* 1. Pre-condition: Price Item is priced, Unit Price should be read-only. NetPrice is entered. Discount is calculated, and read-only.

If not IsTraveBaseCharge,

Amount = UnitPrice \* Quantity

NetAmount = NetPrice \* Quantity

Else

Amount = UnitPrice \* Quantity \* TravelBaseCharge

NetAmount = NetPrice \* Quantity \* TravelBaseCharge

End

AmountAfterDiscount = NetAmount

DiscountAmount = Amount - AmountAfterDiscount

PercentDiscount = DiscountAmount/Amount

* 1. Pre-condition: Price Item is POR (Price on Request), NetPrice is entered. PercentDiscount is 0 and readonly. Unit Price is simulated by NetAmount. Unit Price is readonly.

If not IsTraveBaseCharge,

Amount = NetAmount = NetPrice \* Quantity

Else

Amount = NetAmount = NetPrice \* Quantity \* TravelBaseCharge

End

AmountAfterDiscount = NetAmount

DiscountAmount = 0

PercentDiscount = 0

1. Group Item Calculation

In this Case, Calculation Method is “Unit to Total” and read-only

Quantity = 1

Amount = SUM(Amount of each item)

DiscountAmount = SUM(DiscountAmount of direct child items)

AmountAfterDiscount = SUM(Amount of direct child items)

NetAmount = SUM(NetAmount of each item)

NetPrice = NetAmount

UnitPrice = Amount

PercentDiscount = DiscountAmount/Amount

When Discountable come to As Per Bid situation, discount and net price are all changeable, how we determine if it is a as per bid or bookless discount.

If discount in priceline item is different from global discount from change method, we consider the net price take priority. Other than that, discount will take priority to recalculate net price.

Sudo Code

If Bundle Item

If Item is Priced

UnitPrice is DISABLED

PercentDiscount is changeable to update NetPrice

NetPrice is changeable to update PercentDiscount

If Item is POR

Unit Price is DISABLED

PercentDiscount is DISABLED and set as 0

NetPrice is changeable, assign value to Unit Price

If Calculation Method is BUNDLE ONLY

“Add Price Item” button is disabled.

If Calculation Method is Total to Unit

ercentDiscount and UnitPrice will be updated by simulation data later