

IBM Sterling CPQ Version 9.4

Multiple Price Type Support



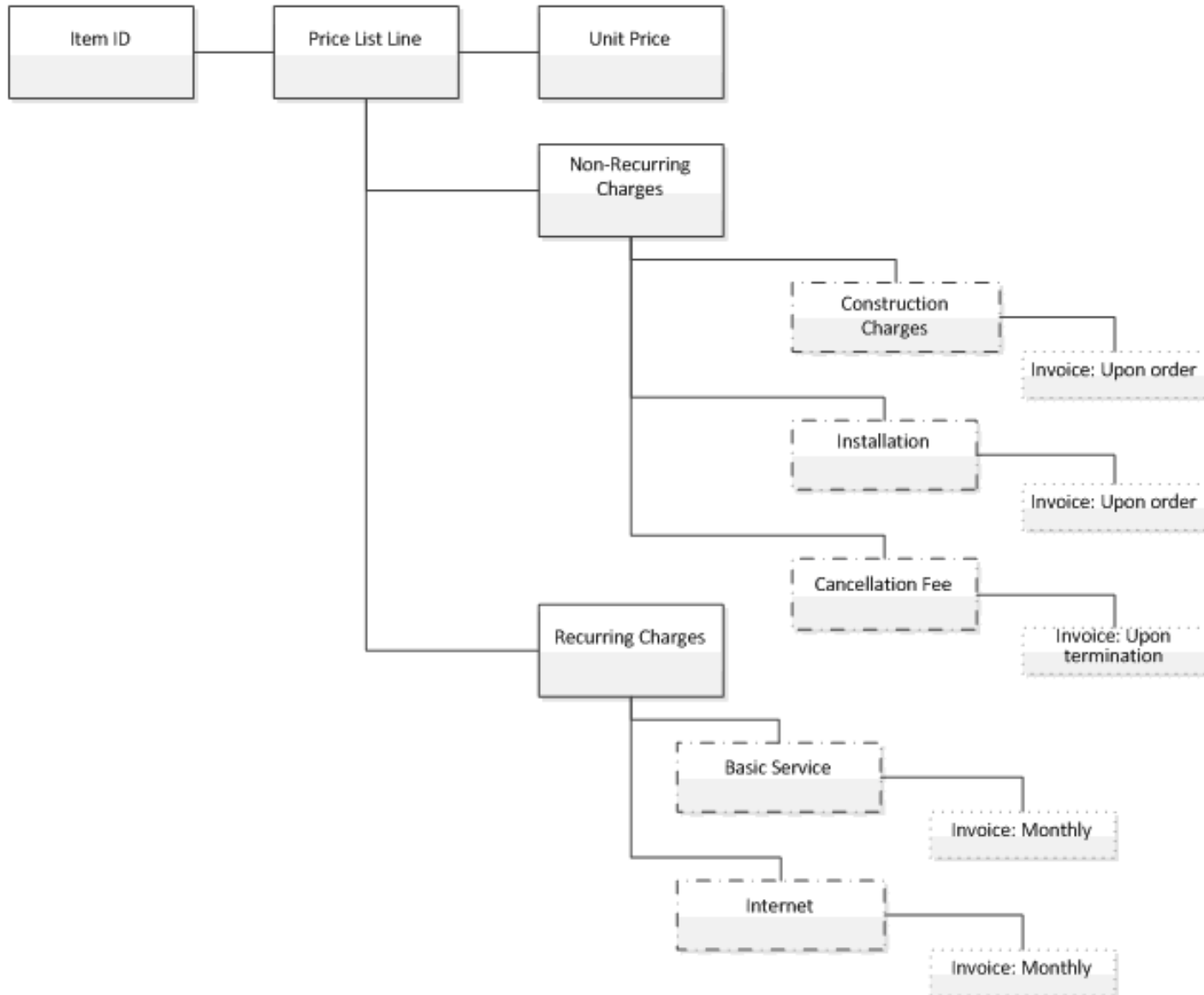
Agenda

- Multiple Price Types - Overview
- Sterling Business Center Enhancements
- Sterling Field Sales Enhancements
- Multiple Price Type support for Visual Modeler & Configurator
- Demo

Multiple Price Types - Overview

- Item can be associated with more than one price.
 - E.g. Installation Fee, Activation charges, Monthly fee, Cancellation charges etc.
- Price Types can be
 - Recurring or Non Recurring
 - Invoiced at the time of order creation or Invoiced later
- Unit Price remains as is
 - Non Recurring & Invoiced immediately upon ordering the item
- Prices are defined for each price type of an item
 - Alpha Modem (\$120) = Unit Price (\$100) + Installation Fee (\$20)
- Price types are setup for Items or Categories
- Promotions can be targeted for price types or unit price or both
 - Buy Alpha Modem and get 25% off on Installation Fee
 - Buy Alpha Modem and get 10% off on Base Price
 - Buy Alpha Modem and get 20% off on Total Price

Multiple Price Types - Illustration



Upfront & Non Upfront Charges

- Upfront Charges
 - Invoiced at the time of ordering (Included in Order total)
 - E.g. Installation Fee, Delivery Charges etc..
- Non Upfront Charges
 - Not invoiced at the time of order creation
 - Mostly recurring charges
 - E.g. Monthly Fee, Annual Maintenance Charges, Cancellation Fee etc..
- Scenario:
 - Alpha Modem : \$120
 - Unit Price : \$100
 - Installation Fee (Non recurring & Upfront) : \$20
 - Data Plan (Recurring & Non Upfront) : \$30

IBM Sterling Business Center Enhancements

- Ability to perform following functionalities:
 - Define and assign price types to Items and Categories.
 - Define prices for each price types assigned for an Item.
 - Define pricing rules for one or more price types.
- Enterprise level configuration to turn on/off the feature

IBM Sterling Business Center Enhancements

Business Center

- Home
- Products
- Pricing
- Customer
- Inventory
- System Setup

Pricing Rule Summary

Related Tasks

- Pricing Rule**
 - Find Pricing Rule
 - Copy Pricing Rule
 - Global Pricing Exclusion
 - Localize
- Test Configuration**
 - Test Pricing
- Pricing Overrides**
 - Pricing Validations

Specify price types

Set up qualifying condition for adjustment

Specify qualifying amount

Adjustment Criteria

The adjustment will be applied if the quantity of items is equal to or greater than the quantity specified below.

Item Quantity: *

Set up adjustments

Adjustment Type: * Adjustment in %: *

Maximum Adjustment in \$:

Apply adjustment only to values above the qualifying quantity

Add Condition

Apply adjustments to

- Single Occurrence of Highest Priced Item
- Single Occurrence of Lowest Priced Item
- Single Occurrence of Each Qualifying Item
- All Occurrences of Each Qualifying Item
- Specific Occurrences of Each Qualifying Item

Specify price types

<input type="checkbox"/>	Price Type
<input type="checkbox"/>	Installation Fee

Analytics

For analytics and accounting purpose the adjustment shall be collected against the following charge name:

Discount Charge Name:

Multi Price type support in Sterling Field Sales

- Sales representative can perform the following in SFS
 - View the price breakup in the product detail screen
 - View the additional charges in quote summary screen
 - View the breakup of upfront and non upfront charges for a quote line
 - Apply price type promotion
 - View the total upfront charges for a quote in the pricing summary
 - Generate a quote proposal with additional charges included

IBM Sterling Field Sales Enhancements

- Quote Details Screen
 - New column ‘Additional Charges’ added in the Quote details screen.
 - The total upfront charges excluding unit price displayed
 - An Icon to list all non upfront charges added
- Product Details Screen
 - Total billable amount which is the sum of unit price and additional upfront charges will be displayed
 - Unit price is displayed
 - A new tab is added under the product detail page to display the multiple price types that are associated to an item
 - Additional charges will be displayed under this tab
- Generate Proposal
 - The OutputXML for generate proposal will have a details on the AdditionalLinePrices under the OrderLine element

```
<AdditionalPrices>
```

```
  <PriceType Name=" " value=" " Billable=" " Reccuring=" " />
```

```
</AdditionalPrices>
```

IBM Sterling Field Sales UI Enhancements

Field Sales

Administrator Help | Preferences | Sign Out



Field Sales

Administrator Help | Preferences | Sign Out



Home Opportunities Quotes

Saved Search

Quote Details

Save

Navigation

Search...

Create

Create...

Tasks

Next Steps

Request Approval

Other Tasks

- View Quote Summary
- Validate Quote
- Mark as Primary Quote
- Manage Attachments
- Generate Proposal
- Copy as New Quote
- Copy as Alternative Quote
- View Alternative Quotes
- Abandon Quote

Recently Modified

Quote1

Quote - Quote1

Business Customer1 (123)456-7890
abcd@efgh.com

Status: Created
Opportunity Name: Quote1

Quote ID: Y100000300
This is the primary quote.

View/Add Notes

Customer Products Terms

Pricing Date: 11/26/2014 Adjustments: \$0.00 **Adjust Price** Total: \$757.99

Quote Lines Recommended Lines

Show Filter Options

Enter the Product ID **Browse** **Add Line Adjustment** **More**

Line #	Product	Quantity	Unit Price	Additional Charges	Adjustment	Line Total
1	Tierra 42" Plasma Television/ HDTV (1...	1.00 Each	\$749.99	\$10.00	-\$2.00	\$757.99

1 Lines

Price Breakdown

Charges and Discounts

Adjustment	Type	Price Type	Amount
20% off on Installation Fee	Automatic	Installation Fee	-\$2.00

Total: -\$2.00
Cost: \$0.00
Profit Margin: 100.00%

API changes for Multiple Price Types

- New APIs
 - managePriceType
 - new API to create/modify/delete PriceTypes
 - managePriceTypeAssociation
 - new API to associate pricetype to categories/items
 - getPriceTypeDetails
 - new entity API used to retrieve details about a specific Price Type
 - getPriceTypeList
 - new entity API used to retrieve price types list
 - getItemPriceTypeList
 - new API used to retrieve supported price types list for an Item.

API changes for Multiple Price Types

▪ Updated APIs

– Following new elements are added under OrderLine:

```
<AdditionalLinePrices>
```

```
  <AdditionalLinePrice LinePriceID="Order passes LinePriceKey if already exists" PriceTypeName=""  
  IsPriceLocked="" RecurringType="" IsPriceTypeForInformationOnly="" Price="" >
```

```
  <ManualRuleAdjustments>
```

```
    <ManualRuleAdjustment Adjustment="" PricingRuleKey="" PricingRuleName=""/>
```

```
</ManualRuleAdjustments>
```

```
<ManualAdjustments>
```

```
  <ManualAdjustment AdjustmentID="" AdjustmentPerLine="" AdjustmentPerUnit="" ChargeCategory=""  
  ChargeName="" Reference=""/>
```

```
</ManualAdjustments>
```

```
  </AdditionalLinePrice>
```

```
</AdditionalLinePrices>
```

– createOrder/changeOrder

- The <AdditionalLinePrices> element can be passed under OrderLine in the API input
- The <AdditionalLinePrices> element will be added under orderline for additional line price output

API changes for Multiple Price Types

- Updated APIs
 - getItemListForOrdering
 - The AdditionalLinePriceTotal attribute on the ComputedPrice element will represent the sum of the AdditionalLinePrice Prices for the Item as well as any adjustments that apply to them getPriceTypeDetails
 - getOrderPrice
 - API accepts additional line prices in addition to unit price
 - Output will contain details on Additional line prices
 - validateItemForOrdering
 - Output will contain details on Additional line prices

Multi price type support in Visual Modeler & Item Configurator

- With multiple price types enabled
 - The modeler can use the multi price types for an item in their configuration models to define price based rules
 - The modeler can price lock a particular price type value based on certain rules.
 - Shopper/business user to view the price break up in the configuration summary page once configuration of a model is complete
- No UI changes in Visual Modeler to support Multiple Price Types
- Use Visual Modeler properties to refer the price type of an item & the price lock of a price type
- Multi price type property names defined in the format *MPT: <Price Type Name>*
- Multi price type price lock property names defined in the format *CONFIG: MPT_PRICE LOCKED_<Price Type Name>*

Multi price type support in Item Configurator

- Modeler defines the multi price type properties in Visual Modeler and attach to the item where price type manipulation/rule is required
- Scenario: Modeler wants to set a property if the installation charges for an item is greater than \$10 (*Assumption: A Price type named 'Installation Charges' exist and items are associated to it.*)
 - Using Visual Modeler, the modeler performs the following:
 - Edits the model and defines a new property **MPT: Installation Charges** with a default value
 - Attach this property to the item where the check need to be performed
 - Creates a rule using the property name **MPT: Installation Charges** for the desired result
 - Save and compile the model

Conditions:

The screenshot shows a rule editor interface. At the top, there is a grey bar with a right-pointing triangle icon. Below this, there is a dropdown menu with the word "and" and a downward arrow. To the right of the dropdown is a text input field containing the expression "value(MPT:Installation Charges) > 10 [Fragment is false]". Below the input field, there are two small blue icons: a circle with a plus sign and a circle with a minus sign.

Price lock multi price type prices

- Configurator allows price locking of a multi price type price value for an item
- To price lock multi price type price values:
 - Special config level property need to be defined and attached to an item
CONFIG:MPT_PRICE LOCKED_<Price Type Name>
E.g.: CONFIG:MPT_PRICE LOCKED_Activation Fee
- Configurator price locks the multi price type value by making the property available in the Configurator BOM

Following is a sample BOM snippet that contains the price type properties.

```
<LineItem SKU="TPC1" Name="TPC1" Description="DTH Connection"
  Quantity="1" CommerceItemKey="" Lockprice="true"
  Price="500.0000"
  LeadTime="0.0" ItemID="2" ItemKey="600509" Visible="true"
  RulePicked="false">

  <AdditionalLinePrices>
    <AdditionalLinePrice PriceTypeName="Activation
  Charges" IsPriceLocked="true" Price="10.00" />
    <AdditionalLinePrice PriceTypeName="Installation
  Charges" IsPriceLocked="true" Price="40.00" />
  </AdditionalLinePrices>
</LineItem>
```


Sample Item configurator scenario

- Modeler wants to discount the installation charges for an item and price lock it if a specific property is set in the model. *(Assumption: A Price type named 'Installation Charges' exist and items are associated to it.)*

Conditions:

▶

and value(discountActivation) = True [Fragment is false]

Actions:

▶ Message Actions

▶ Formula and Expansion Actions

▼ Assignment Actions

<input type="text" value="_description"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>
Property	Value	Assign To	Delete
MPT:Installation Charges	<input type="text" value="0"/>	<input type="text"/>	<input type="button" value="X"/>
CONFIG:MPT_PRICE_LOCKED_ Installation Charges	<input type="text" value="True"/>	<input type="text"/>	<input type="button" value="X"/>

Configurator XAPI changes

Following are the APIs which considers/uses the multi price type properties in either input or output XML

- processConfigurationPicks
- punchIntoSubModel
- instantiateSubModel
- returnFromSubModel
- generateConfigurationBOM
- validateConfiguration BOM

Business Use Case

Security company using MPT for selling bundle offers with activation fee and monthly service.

- Consider a Security Company “Alpha Security Systems” selling security packages
- Company has a security package “Alpha Basic Security Package”

Package modeled with MPT:

1. Base Price (Unit Price) = \$100

2. Activation Fee (Upfront Price Type) = \$99

3. Monthly Service Package (Non-Upfront Price Type) = \$42.95 per month

Total Price = \$100 + \$99 = \$199



\$42.95 sent to downstream application for recurring billing

Quote Details

Save

Navigation

Search...

Create

Create... ▼

Tasks

Next Steps

[Request Approval](#)

Other Tasks

- [View Quote Summary](#)
- [Validate Quote](#)
- [Mark as Primary Quote](#)
- [Manage Attachments](#)
- [Generate Proposal](#)
- [Copy as New Quote](#)
- [Copy as Alternative Quote](#)
- [View Alternative Quotes](#)
- [Abandon Quote](#)

Recently Modified

- Quote_10
- Quote_new
- Quote_1
- Quote_7
- Quote_6

Quote - Quote_10

Business Customer1 (123)456-7890
abcd@efgh.com

Status: Created

Quote ID: Y10000500

Opportunity Name: Quote_10

This is the primary quote.

[View/Add Notes](#)

[Customer](#) | [Products](#) | [Terms](#)

Pricing Date: 12/01/2014

Adjustments: \$0.00 [Adjust Price](#)

Total: \$130.00

[Quote Lines](#) | [Recommended Lines](#)

[Show Filter Options](#)

Enter the Product ID [Browse](#) [Add Line Adjustment](#) [More](#) ▼

<input type="checkbox"/>	Line #	Product	Quantity	Unit Price	Additional Charges	Adjustment	Line Total
<input checked="" type="checkbox"/>	7	Alpha Home Security Package (Basic1) 	1.00 Each	\$130.00	\$0.00	\$0.00	\$130.00
							1 Lines

Demo

Knowledge Centre Links for CPQ 9.4

http://www-01.ibm.com/support/knowledgecenter/SS4QMC_9.4.0/com.ibm.help.cpq.newfeatures.doc/c_functional.html