CPQ

2011 What’s New

Publish Date: October 20, 2020
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Disclaimer

This document is published and updated before the SAP CPQ releases are deployed, so it is subject to change. To ensure that you have the latest copy of this document, please check the Community for the most up-to-date version.

Revision History

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<tr>
<th>Version</th>
<th>Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>October 20, 2020</td>
<td>The SAP CPQ 2011 What’s New is published.</td>
</tr>
<tr>
<td>2</td>
<td>October 30, 2020</td>
<td>The document is updated with the following resolved support issues:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• User custom field translations can now be successfully saved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Administrators can now successfully use API to attach global scripts to the OnUserLogin event.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Users landing from SAP Cloud for Customer to SAP CPQ are now properly redirected to the quote after saving changes in the User Details and Modify Personal Details tab of the User Page.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Product price is now displayed properly in the quote if Pricebook Lookup is selected as the product’s pricing type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If an SAP Variant Configuration and Pricing product with an inconsistent configuration is added to the quote, the inconsistent flag now properly displays next to the product.</td>
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<tr>
<td></td>
<td></td>
<td>• The issue with the user interface of the Bulk Import/Export page has been resolved. The issue appeared only on Microsoft Internet Explorer IE11.</td>
</tr>
</tbody>
</table>

Additionally, the note Variant Configuration Integration – Separated Pricing and Configuration Services has been updated.
What’s New in SAP CPQ 2011?

We are pleased to announce the release of SAP CPQ 2011. This release brings new features and enhancements to the existing functionalities in SAP CPQ:

- The user interface of Attributes has been significantly improved. The functionality remains largely unchanged, but the overall creation process is now more seamless and user-friendly.
- Both the two-letter and the three-letter country abbreviations are now mandatory in SAP CPQ.
- Administrators can now choose whether product names or product part numbers will be displayed in the **Configuration Tree**.
- Saving and refreshing values of quote item custom fields has been improved.
- When deploying attribute quote item custom fields sourced from a custom or a quote table, administrators can now select whether the source table should be deployed together with the quote item custom field.
- The CTX tag `Quote.ProductType` has been expanded to support the product types with parentheses in their name.
- Email notifications can now have up to 50000 characters in the message body.
- The **development** and **production** environments of the old help portal (hosted by DokuWiki) will no longer be available as of the 2011 release.
• Several standard quote actions have been obsoleted, as they are no longer in use.
• The pricing service and the configuration service are now separated for Variant Configuration products.
• Two new attribute types are made available in this release to support the rollout of the SAP CPQ – SAP Billing and Revenue Innovation Management integration in February 2021 (the 2102 release).
• Performance is improved for the following quote actions that are performed in the Quote 1.0 engine
• When creating a new quote revision, administrators can now control if the revision keeps the Sales Order ID of the quote.
• Customer custom fields from SAP Cloud for Customer are now mapped to SAP CPQ according to the value of the field Name, instead of Label.
• Business Partners is now the default feature for managing customers and other involved parties in quotes in the Quote 2.0 engine.
• The Involved Parties tab has been renamed to Teams.
• All actions that users perform in the Quote 2.0 engine, either on the user interface or via the API, are now recorded in the User Actions audit trail.
• Data protection features are now supported in Quote 2.0.
• Rolled up prices, the item ID and configuration ID are now available in scripting in Quote 2.0.
• Quotes API has been improved and expanded with additional fields.
• Administrators with read-only access rights for the Users section can now use the /setup/api/v1/admin/users endpoint to retrieve user information, but can’t create, update or delete users via the API.
• Some improvements have been made to Federation settings.
• Workflow permissions can now be managed outside SAP CPQ using the WorkflowPermissions API.
- SAP CPQ now supports the Hybrid SCIM scenario, in which users can be created in two steps via the API.
- As of 2011, certain Configurator API endpoints are no longer available. They will need to be replaced with the corresponding Configurations API endpoints.
- New scripting properties are introduced as a replacement for properties from the System.Web namespace, with the goal of improving system security.
- After the version 2011 of SAP CPQ is deployed, the System.Web namespace will be forbidden in scripting with the goal of improving system security. When editing existing scripts or creating new scripts, instead of the System.Web properties, the corresponding properties introduced up to this release should be used.
- UI improvements have been made to the Formula Builder, Table Tag Builder and email templates.
- The Other Quotes tab in the Load Existing Project/Quotation page has been optimized in terms of loading time. As a result, some user interface modifications have been applied to the page.
- Administrators who are using Freeze Templates to roll back the uncustomized templates on broken pages from 2008 version to the 2005 version will need to fix their broken pages before the 2011 is deployed to sandbox and production environments.
- Several responsive templates have been changed during the development of SAP CPQ 2011. They are listed in this document.
- Administrators who have customized the PagerTemplate and TeamsPage templates need to modify their templates according to the provided instructions as soon as SAP CPQ 2011 is deployed in order to avoid breaking changes.
- The /api/rd/v1/Cart/ APIs used for executing actions on quotes will work properly only if the quote has been previously loaded.
# 2011 New Feature Overview

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<thead>
<tr>
<th>New Feature</th>
<th>Workspace(s)</th>
<th>Impacts End Users</th>
<th>Impacts Administrators</th>
<th>Requires Administrator Action*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redesigned Attributes</td>
<td>General</td>
<td></td>
<td>✓</td>
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<tr>
<td>Two-letter Country Abbreviation now Mandatory</td>
<td>General</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Configuration Tree Product Display Format</td>
<td>General</td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Improved Saving and Refreshing of Quote Item Custom Fields</td>
<td>General</td>
<td>✓</td>
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<tr>
<td>Quote Item Custom Fields Deployment Improvement</td>
<td>General</td>
<td></td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Expanded Body of Email Notifications</td>
<td>General</td>
<td></td>
<td>✓</td>
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<tr>
<td>Old Help Deletion</td>
<td>General</td>
<td>✓</td>
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<td>Feature</td>
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<td>Obsoleting Standard Quote Actions</td>
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<td>Involved Parties Renamed to Teams</td>
<td>Quote 2.0</td>
<td>✔</td>
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<td>User Action Audit Trail Support for Quote 2.0</td>
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<td>Scripting Improvements in Quote 2.0</td>
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<td>Access Rights Improvements</td>
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<td>UI Design</td>
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<tr>
<td>Feature</td>
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<td>Status2</td>
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<tr>
<td>Load Existing Project/Quotation Page Optimization</td>
<td>UI Design</td>
<td>✔️</td>
<td>✔️</td>
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<td>Breaking Changes</td>
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<td>✔️</td>
<td></td>
</tr>
</tbody>
</table>

*Action implies that this feature is not automatically available/present in the SAP CPQ UI. These features must be enabled or configured prior to use.
2011 Browser Support

SAP CPQ 2011 is currently supported on the following browsers:

- Microsoft Internet Explorer IE11 ®
- The latest version of Mozilla Firefox ®
- The latest version of Google Chrome ®
- The latest version of Microsoft Edge ®
- The latest version of Safari

For SAP CPQ to function properly, enable cookies and Javascript for all browsers.
General

New Features and Improvements

Redesigned Attributes

The user interface of Attributes has been significantly improved. The functionality remains largely unchanged, but the overall creation process is now more seamless and user-friendly.

The following functionality aspects are the focus of improvements:

- Container attribute improvements
- Autocomplete attribute improvements
- Process of adding/creating attributes from Products 2.0

Overall Improvements

- The entire Attributes section in Setup has been redesigned according to SAP Fiori standards.
Container Attributes

- In the General tab, administrators first need to select whether the container references products, or not.

Depending on their selection, the options for further configuration are displayed.

- The Ranking button has been added to the Columns tab. It provides an option for administrators to sort columns according to Display Rank and Calculation Rank.
• When the selected column type is **Product Attribute**, administrators can use the **Attribute** search box to browse attributes, and consequently select their values in the popup window.

**Autocomplete Attributes**

• The UI of attribute configuration in **Setup** for autocomplete attributes has been redesigned, making the creation process more user-friendly.
Product Attributes in Products 2.0

- New attributes can now be created directly from the setup of individual products. Clicking the Define New Attribute button takes administrators to the attribute creation screen.
Two-letter Country Abbreviation now Mandatory

Both the two-letter and the three-letter country abbreviations are now mandatory in SAP CPQ. After the 2011 deployment, administrators will have to define both abbreviations for all new countries.

Since only the three-letter abbreviation has been mandatory so far, during the 2011 code deployment, all the existing countries will be updated with the two-letter country code.

No actions are required from administrators as this change doesn’t affect other existing features.

Configuration Tree Product Display Format

Administrators can now choose whether product names or product part numbers will be displayed in the Configuration Tree. This can be set up by selecting Name or Part Number in the Display Product in Configuration Tree using: parameter found in Application Parameters > Configurator.

Improved Saving and Refreshing of Quote Item Custom Fields

Saving and refreshing values of quote item custom fields has been improved so that a user who accesses SAP CPQ via a quote link from an email can now properly open quotes after another user has changed the value of a quote item custom field.

Quote Item Custom Fields Deployment Improvement

When deploying attribute quote item custom fields sourced from a custom or a quote table, administrators can now select whether the source table should be deployed together with the quote item custom field. The selection should be made in the new Optional section in the Quote item custom fields checklist.
CTX Support for Product Types with Parenthesis

The CTX tag `Quote.ProductType` has been expanded to support the product types with parentheses in their name.

Expanded Body of Email Notifications

Email notifications can now have up to 50000 characters in the message body, which allows writing notifications with more tags. For this purpose, the Message Text field in Workflow/Approval > Notifications is expanded.

Old Help Documentation Deletion

The development and production environments of the old help portal (hosted by DokuWiki) will no longer be available as of the 2011 release.

All users and administrators are advised to double-check their bookmarks and replace old links to the help portal with the SAP CPQ online help link which is currently in use.
Obsoleting Standard Quote Actions

The following standard workflow actions are no longer available in SAP CPQ, as we have determined that they are no longer in use.

- Add to project
- After Offline Sync
- Approval Details
- Archive
- Calculate Discount
- Calculate Multiplier
- Goal Seek
- Quote Shipped
- ReleaseStand
- Remove from project
- ReserveStand
- Save To Phone Log
- Send BOM Xml
- Submit BOM
- View project

Performance Improvement for Quote Actions

Performance is improved for the following quote actions that are performed in the Quote 1.0 engine:

- Loading the quote
- Save Quote
- Save (on quote custom fields)
- Copy (on the quote)
• New Revision
• Changing the market
• Reprice
• Edit (on the item)
• Switching between quote tabs

Resolved Support Issues

1. The fonts on Email Customers / Quote Acceptance Settings page are now displayed in their standard size (14px).
2. Administrators who use the French dictionary can now successfully download and upload files in Branding.
3. Line items in the Responder can now be reordered successfully.
4. Newly created permission groups with active Advanced Mode are now visible in the list of permission groups.
5. Now, when XSL files are imported to Pricebooks, validation is performed, and the administrator is informed whether there are any incorrect cell values.
6. The attributes of configurable products are now properly displayed in the Configurator when the products are accessed from Recent Items.
7. The correct display types are now applied to attributes of product aliases in the Configurator.
8. When the Configurator is refreshed as a result of a triggered rule, the scroll is no longer automatically placed at the top of the page.
9. Administrators can now successfully upload XML files with dictionary entries when updating custom dictionaries.
10. The issues with combining the standard and parallel approval processes have been resolved and now the quotes that need to be approved display properly in the Waiting for Approval tab.
11. When trying to send an email with the generated document from SAP CPQ, without stating the email recipients, an error is no longer logged, and an informational message now displays.

12. When a guest user who needs to change the password on the following login tries to access a quote directly from the URL, the system now properly redirects them to the login page.

13. If users upload an empty Microsoft Excel file into a quote table, the system now properly displays an error message informing them that the structure of the file isn't valid.

14. When searching for products in the quote, the results based on the search term are now displayed in the correct order.

15. If users try to access an SAP CPQ URL to which they don’t have access or the URL that contains a non-existing domain name, they are now successfully redirected to the SAP CPQ login page.

16. If New Revision and New Active Revision actions are disabled via a formula condition in the Workflow, they now display neither in the quote header, nor in the list of all revisions.

17. The login page is now properly displayed in the default language after the user’s selected dictionary is deleted. Additionally, users whose dictionary has been deleted can now log in successfully.

18. If administrators try to access a discount that doesn’t exist in Pricing/Calculations > Discount/Multipliers (for example, by replacing the discount ID in the URL with a non-existing ID), a new page opens allowing them to create a new discount.

19. A change has been made to the Country/Region field and the way certain geographies are displayed.

20. Favorites now have correct category IDs in Knockout. The issue occurred due to changes made to the SAP CPQ user interface.

21. An error no longer occurs when users attempt to edit a configuration if a container attribute in that product configuration, which is saved as a favorite or added to the quote,
references a product, and that product is subsequently removed from container attribute definition.

22. When deploying attribute quote item custom fields sourced from a custom or a quote table, the related tables will not be updated in the target environment, unless administrators have selected that option. For more details, check Quote Item Custom Fields Deployment Improvement.

23. Customer custom fields are now correctly translated to the selected user language.

24. Administrators can now check for more details in the Log when they or their underlying users are unable to log in due to incorrect market visibility formulas. The error is now logged under the title Error getting markets for user.

25. An issue with converting other types of quote custom fields into date quote custom fields has been resolved and users can now successfully access the Load Existing Project/Quotation page.

    The issue occurred specifically when there was a quote custom field of any type other than the Date type and it was set up in Column Headings. After users entered a value in such a field and then administrators changed its type to Date, users could no longer access the Load Existing Project/Quotation page.

26. If quote context is lost while users work on a quote, after which they refresh the page, a message is now displayed informing the users that the quote is not loaded. They can now continue with their work by opening the quote again, unlike before, when the page would freeze, preventing any further actions.

27. A new user custom field imported via the regular and the bulk user import is now assigned with the lowest rank in the system.

28. An error no longer displays after users try to configure a product in the Catalog when there is a custom action attached as a preaction to Add Item in the Workflow.

29. The issue with creating custom tables with special characters in the name has been resolved. Consequently, limitations have been introduced in regard to what the custom table name may contain:
    
    - the name must start with a letter
• lowercase (a-z) and uppercase (A-Z) alphabetic characters
• numbers
• the underscore character

30. It is now possible to successfully deploy products when the names of product category images contain special characters.

31. The attributes that don’t have any values defined in the Excel file used for **Bulk Import/Export** are no longer in the system. Additionally, the issue with importing empty attributes has been resolved.

32. If administrators upload a Microsoft Excel template for bulk user import without all the columns being named, the system no longer creates a new user custom field. From this release on, it is no longer possible to upload these templates without all the columns being names. In case there is a name missing for a column, the system now displays an error message.

33. Administrators can now successfully apply a deployment template to a deployment package in which they previously manually added components.

34. It is no longer possible to add/update customer data via scripting if there is no country defined.

35. User custom field translations can now be successfully saved.

36. Product price is now displayed properly in the quote if **Pricebook Lookup** is selected as the product’s pricing type.

37. The issue with the user interface of the **Bulk Import/Export** page has been resolved.
   The issue appeared only on Microsoft Internet Explorer IE11.
Integrations

New Features and Improvements

**Variant Configuration Integration – Separated Pricing and Configuration Services**

The pricing service and the configuration service can now be used independently from each other for Variant Configuration products in SAP CPQ. For example, administrators can now configure a Variant Configuration product using SAP CPQ configuration or configure that product in SAP Variant Configuration and Pricing but set the pricing in SAP CPQ.

Administrators are now able to select if a configurable product in SAP CPQ should use the standard SAP CPQ configuration engine or the Variant Configurator. Consequently, SAP CPQ rules can now be used on Variant Configuration products that have been converted into SAP CPQ products. Administrators can manage this by choosing between the **Standard** and the **Variant** configuration engine in product definition.

With this feature, administrators can decide whether they want to maintain models in SAP ERP and use the Variant Configurator, as they have previously done, or use the standard SAP CPQ configuration engine and rules on synchronized products instead.

Furthermore, only products with the **Variant** configuration type now need to be flagged as root items to appear in the **Catalog**. Products obtained via knowledge base synchronization which are not flagged as root items, but have the **Standard** configuration engine selected, will be visible in the **Catalog**.
Preparing the Ground for SAP CPQ – SAP Billing and Revenue Innovation Management Integration

Two new attribute types are made available in this release to support the rollout of the SAP CPQ – SAP Billing and Revenue Innovation Management integration in February 2021 (the 2102 release).

The upcoming integration with SAP Billing and Revenue Innovation Management will enable quoting of subscription products and the new attribute types are created to allow flexible product configuration and billing on the quote.

- The **Contract Duration** attribute type has predefined units (**Day**, **Month** and **Year**) and administrators should define the unit-value pairs, so they display on products in the **Configurator**.
- The **Billing Cycle** attribute type has predefined billing periods. The calendar billing periods start on the first day of a month and end on the last day of the billing period. The rolling periods start on the day when the contract was made effective and end on the last day of the billing period. The billing periods are month, quarter, half-year, and year.

Just as other attribute types, **Contract Duration** and **Billing Cycle** are supported throughout SAP CPQ: in products, product import/export, Attribute API, scripting, and the Deploy/Send feature.

**Usage in Quote Engines and Outside the SAP Billing and Revenue Innovation Management Integration**

**Contract Duration** and **Billing Cycle** are introduced mainly for the SAP CPQ – SAP Billing and Revenue Innovation Management integration that will be rolled out in February 2021 only for Quote 2.0. In the integration scenarios, the new attributes will be created automatically on all
SAP Billing and Revenue Innovation Management products and their values will be propagated from the **Configurator** to the quote in the Quote 2.0 engine.

As of the 2011 release, the new attribute types can also be used outside the integration, in other subscription billing scenarios, in both quote engines. However, the attribute values will be propagated from the **Configurator** to the quote only in the Quote 2.0 engine. In the old engine, custom implementations are required to create the connection between the attributes in the **Configurator** and the quote.

**SAP ERP Integration – Parameter for Copying Sales Order ID to New Quote Revision**

When creating a new quote revision, administrators can now control if the revision keeps the **Sales Order ID** of the quote, via the new application parameter **Copy sales order ID when creating new revision**.

**SAP Cloud for Customer Integration – Customer Custom Fields Mapped by Name**

Customer custom fields from SAP Cloud for Customer are now mapped to SAP CPQ according to the value of the field **Name**, instead of **Label**.

**Note:** By default, as of 2011, the field **Name** will be used for customer custom field mapping. However, in case modeling is affected by this change, it is possible to continue using the field **Label** for customer custom field mapping for the duration of the 2011 release. In order to enable that behavior, please contact the SAP CPQ Support team. However, as of the 2102 release, it will no longer be possible to use the field **Label**, and only the field **Name** will be used for mapping. Consequently, it is necessary to finish adjusting the models before the 2102 release.
Resolved Support Issues

1. The quantity of the main Variant Configuration product is now correctly propagated to the line items.
2. Variant Configuration items are no longer being locked after the session is refreshed.
3. Users can now successfully change the values in quote item custom fields with an underscore character in their name when the SAP CPQ – Variant Configuration integration is enabled.
4. Landing from Salesforce to SAP CPQ now works without any issues when there is a Salesforce user mapped to two or more SAP CPQ users.
5. Products with line item attributes whose values reference other products available in SAP Cloud for Customer, as well as those line item attributes, now have the proper ProductSystemID after the quote is saved in SAP CPQ. This change is made on both Quote 1.0 and Quote 2.0.
6. SAP CPQ performance is improved when there are non-sales-relevant items in the configuration. The pricing service is now called only once per every edit of a sales-relevant item.
7. When users create a new quote revision, the Sales Order ID of the quote is successfully displayed on the revision if the application parameter Copy sales order ID when creating new revision is set to TRUE.
8. Customer custom fields from SAP Cloud for Customer are now mapped to SAP CPQ according to the value of the field Name, instead of Label. More information is available in SAP Cloud for Customer Integration – Customer Custom Fields Mapped by Name.
10. Users landing from SAP Cloud for Customer to SAP CPQ are now properly redirected to the quote after saving changes in the User Details and Modify Personal Details tab of the User Page.
11. If an SAP Variant Configuration and Pricing product with an inconsistent configuration is added to the quote, the inconsistent flag now properly displays next to the product.

## Quote 2.0

### New Features and Improvements

#### Support for Business Partners in Quote 2.0

Business Partners is now the default feature for managing customers and other involved parties in quotes in the Quote 2.0 engine.

The Customers feature has been replaced with Business Partners in Quote 2.0 primarily to streamline the integration flow between SAP CPQ and other SAP products that already have this feature up and running. Business partner data can now easily be maintained and transferred between all SAP systems involved in the sales cycle. Additionally, the overall efficiency of the development and implementation of SAP CPQ has improved.

#### Business Partners in Quote 2.0 and Customers in Quote 1.0

Both Customers and Business Partners are available in SAP CPQ, but their availability depends on the quote engine:

- The old quote engine will use only the Customers feature (as Quote 2.0 will become the default quote engine in the future, Business Partners and similar new features won’t be developed for the old engine).
- All Quote 2.0 tenants created after the 2011 release will by default have only the Business Partners feature.
- Existing clients with the Quote 2.0 engine will continue to use the Customers feature until they migrate the existing customer data to Business Partners. For more details on
the migration procedure and how we will assist you during the transition, please contact the SAP CPQ Support team.

**Business Partners and Partner Functions Overview**

The business partners of an organization are all the entities that have business relationships with that organization. A business partner can be an organization, a person, a group of organizations, a group of persons, and so on. Typically, the business partners of an organization or a company are customers, vendors, employees, contact persons, organizational units, and so on.

The **Business Partners** section is added in **Setup** for administrators to create new and manage existing business partners. They can enter and update general, contact and payment details, and add partners into permission groups.

Partner functions are handled in **Partner Functions** in the **Quotes** section in **Setup**. Partner functions are assigned to quotes and business partners are, on their end, assigned to partner functions based on their involvement in the transaction made via the quote, sales order, contract, opportunity, and so on. This way, it is possible to track, from a legal and business perspective, all the parties that have participated in a business transaction. Partner functions essentially show how a business partner is involved in a transaction.
Partner functions are assigned to business partners.

On the user side, the Customer Info tab is replaced by the Involved Parties tab in Quote 2.0. By selecting a business partner and a partner function in the Involved Parties tab in quotes, users create an involved party.

Example: A Jamie Peters is the recipient of the goods sold through a quote. Previously, Jamie Peters would be assigned the Ship To customer role in SAP CPQ. Now, in the concept of business partners, an administrator would create a business partner Jamie Peters and a partner function Ship To. On the quote, the user would create a new involved party by selecting Jamie Peters from the list of existing business partners and Ship To from the list of partner functions.
Business Partners and Partner Functions APIs

A new set of APIs is now available for managing business partners and partner functions from external systems.

Business Partners Endpoints

- DELETE /api/businesspartner/v1/businesspartner/{id} – Deletes the business partner.
- GET /api/businesspartner/v1/businesspartner/{id} – Gets the business partner with the provided ID.
- PUT /api/businesspartner/v1/businesspartner/{id} – Updates the business partner.
- GET /api/businesspartner/v1/businesspartner - Gets all business partners.
- POST /api/businesspartner/v1/businesspartner – Creates a business partner.
- POST /api/businesspartner/v1/businesspartner/{id}/permission - Adds a permission to the business partner.
- PUT /api/businesspartner/v1/businesspartner/{id}/permission - Adds or updates multiple business partner permissions.
- DELETE /api/businesspartner/v1/businesspartner/{id}/permission/{permissionId} - Deletes permissions assigned to the business partner.
• GET /api/businesspartner/v1/businesspartner/lookups/businesspartnertype – Used only in the Setup user interface for populating the Business Partner Type field when creating a new or updating an existing business partner.

Partner Functions Endpoints

• GET /api/businesspartner/v1/partnerfunction/{id} - Gets the partner function by the specified ID.
• PUT /api/businesspartner/v1/partnerfunction/{id} - Updates the specified partner function.
• GET /api/businesspartner/v1/partnerfunction - Gets all partner functions.
• POST /api/businesspartner/v1/partnerfunction - Creates the partner function.
• DELETE /api/businesspartner/v1/partnerfunction/{key} - Deletes the partner function with the specified key.
• POST /api/businesspartner/v1/partnerfunction/translations - Saves the translations for a partner function.

Existing Features Adjusted to Support Business Partners

Since the Customers feature is now replaced with Business Partners in Quote 2.0, some existing features have been expanded or adjusted to support this change:

• The existing features related to customers are no longer visible or active in Quote 2.0 (applicable only for tenants with the Business Partners feature enabled).
• Quotes API has been expanded with the following endpoints:
  o GET /api/v1/quotes/{quoteId}/involvedParties – retrieves the list of involved parties on the quote.
o DELETE
/api/v1/quotes/{quoteId}/involvedParties/{involvedPartyId} – deletes an involved party.

o PATCH
/api/v1/quotes/{quoteId}/involvedParties/{involvedPartyId} - updates an involved party.

o POST
/api/v1/quotes/{quoteId}/involvedParties/{partnerFunctionKey} – creates an involved party.

- Involved party CTX tags are available in the Formula Validator.
- Involved party data is exposed for Iron Python scripting.
- New event On Involved Parties Changed has been added for global scripts.
- Document generation tags for involved parties are available.
- The email form for sending generated documents is adjusted.

**Involved Parties Renamed to Teams**

The Involved Parties tab in Quote 2.0 has been renamed to Teams (the feature remains unchanged).

The change of name is due to the new Business Partners feature which will be maintained in the new Involved Parties tab.

**User Action Audit Trail Support for Quote 2.0**

All actions that users perform in the Quote 2.0 engine, either on the user interface or via the API, are now recorded in the User Actions audit trail in compliance with law regulations and auditing requests within companies.

The same as in the Quote 1.0 engine, the User Action audit trail logs the following data:
• quote number
• quote revision name and number
• quote status
• quote item ID
• product name
• attribute name
• name of the performed action
• name of the affected field
• URL to the page on which the action is performed
• previous value of the field
• new value of the field
• first name, last name and username of the user performing the action
• date when the change was performed

Not every type of data is displayed for every record (for example, when the user’s actions are not related to a quote, there is no information recorded for quote number, quote revision name and number, quote status and quote item ID).

**Support for Data Protection Features in Quote 2.0**

The following features that already exist in the Quote 1.0 engine are now supported in the Quote 2.0 engine as well:

- Automatic data deletion - enables administrators to set a data retention policy and/or manage their account’s storage space by defining a period after which the system automatically and permanently deletes data (quotes, users, customers, user actions and administrator actions). Additionally, by using this feature administrators can prevent a quote, user or customer from being deleted from SAP CPQ. This feature is accessible in **Setup > Security > Data Deletion**.
- Lookup, view and export of personally identifiable information.
• Logging of changes made to personally identifiable information in Setup > Personal Data Log.

Quotes API Improvements

The following improvements are made to the Quotes API for Quote 2.0:

• The response of the Quotes API for fetching quote items (GET /api/v1/quotes/{quoteId}/items) now contains the DisplayType field showing the display type of the item.
• The response of the GET /api/v1/quotes/{quoteId}/items API has been expanded with the SyncedFromBackOffice flag. This flag shows whether the item is created out of the product obtained via knowledge base synchronization with SAP ERP and SAP Variant Configuration and Pricing.
• The response of the API for creating quotes (/api/v1/quotes) now contains the QuoteNumber of the created quote.
• The Distribution Channel of a pricebook is now included in the response of the GET /api/v1/quotes/{quoteId} API.

Scripting Improvements in Quote 2.0

Two improvements have been made in the scripting for Quote 2.0:

• Quote item has been extended with the AsMainItem property in scripting to allow setting and retrieving rolled up prices for main items.
• It is now possible to retrieve the item ID and the item configuration ID via scripting. R
Resolved Support Issues

1. The issue with changing the values of quote item custom fields with the aggregate type Min and Max in Quote 2.0 has been resolved.
   The issue occurred specifically when the value of the quote item custom field was changed to a value that was higher than the previous value (for Min aggregate type) or lower than the previous value (for Max aggregate type). The system wouldn’t recognize the new values, which consequently lead to issues with calculations and item allocation.

2. The issue with renaming sections that can contain products has been resolved.

3. The MappedOpportunityStatus, OpportunityId, and OpportunityName properties are now working properly in the Salesforce integration with Quote 2.0.

4. It is now possible to successfully configure products that are part of container attributes in the Quote 2.0 engine. The issue occurred only for containers using products as source.

5. When copying a quote in the Quote 2.0 engine, the owner of the new quote is now the user who made the copy (if the application parameter Owner of a Copied Quote is set to User that Made a Copy).

6. If Disable action if Quote has incomplete items is selected in the Workflow for an action and that actions is invoked in an incomplete quote via the API POST api/v1/quotes/{quoteId}/actions/{actionId}/invoke, the API response now contains the same message that displays in the application in the same scenario. The message explains that the action can’t be executed because the quote has incomplete items.

7. Users can now confirm the entered values in the Solution Design tab in Quote 2.0 by pressing Enter.
Security

New Features and Improvements

Access Rights Improvements

Administrators with read-only access rights for the Users section can now use the /setup/api/v1/admin/users endpoint to retrieve user information, but can't create, update or delete users via the API.

Federation Improvements

The following improvements have been made to Federation Settings:

- Now, Federated sign-out method is available only when an IdP metadata file with a SignOut binding is uploaded. If the file doesn't contain SignOut binding, only Local and Custom sign-out methods will be available.
- The character limit in the Name (required) column in the Attribute mappings table has been increased to 200 characters.

Resolved Support Issues

1. The Audit Trail and Deploy/Send Changes sections in Setup can now be successfully hidden from all user types via the Access Rights.
2. The error no longer displays when users are logging in via the IdP-initiated SSO for the first time or while using the incognito mode in their browser.
3. All administrators with enabled access rights for the Manage Content Documents page can now successfully upload documents.
API

New Features and Improvements

Workflow Permissions REST API
Workflow permissions can now be managed from systems outside SAP CPQ using one of the following endpoints:

- GET /api/workflow/v1/permissions – gets a list of user types assigned to each action according to workflow permissions.
- POST /api/workflow/v1/permissions – replaces the user types assigned to an action with a new set of user types.
- DELETE /api/workflow/v1/permissions/action/{actionId}/userType/{userId} – deletes the workflow permissions that are assigned to a user type for an action.

SCIM API Improvements
SAP CPQ now supports the Hybrid SCIM scenario, in which users can be created in two steps via the API. This feature gives administrators the option of separating the process of user creation and assignment of permissions to those users.

In the first step of user creation via API, administrators can send the user information without stating their user type and permission group. They will be assigned the System user type and marked as inactive, which means they can’t log into SAP CPQ until their user type and permission group are stated in the following API call.

The /api/scim/v2/Users/{uid} endpoint has been extended to support update of groups parameter. All standard operations are now supported (add, remove and replace).
Removing Configurator API Endpoints in 2011

As of 2011, the Configurator API endpoints listed in the table will no longer be available. You will need to replace them with the corresponding Configurations API endpoints.

<table>
<thead>
<tr>
<th>Configurator API Endpoint (removed)</th>
<th>Configurations API Endpoint (new)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST /api/rd/v1/Configurator/Clone</td>
<td>POST /api/configuration/v1/configurations/{configurationId}/clone</td>
</tr>
<tr>
<td>GET /api/rd/v1/Configurator/GetConfiguration</td>
<td>GET /api/configuration/v1/configurations/{configurationId}</td>
</tr>
<tr>
<td>DELETE /api/rd/v1/Configurator/DeleteConfiguration</td>
<td>DELETE /api/configuration/v1/configurations/{configurationId}</td>
</tr>
<tr>
<td>POST /api/rd/v1/Configurator/Preserve</td>
<td>There is no substitute for the endpoint Preserve because, with the new API, the configuration is saved on every change, which renders it unnecessary.</td>
</tr>
</tbody>
</table>

Resolved Support Issues

1. Users' federation ID is no longer reset when the webservice endpoint /wsAPI/wssrv.asmx?WSDL is used for updating user custom fields.
2. An informational error message is now displayed after executing the POST /api/rd/v1/Cart/ExecuteAction API without any parameters other than the actionId. Previously, the API execution would crash.
3. The issue in the LinkOpportunity API which prevented successful linking of SAP CPQ quotes and Salesforce opportunities has been resolved.

4. The SearchQuotes API now properly returns the search results when the password of the authenticated user is set to expire in the following days.

5. When using the GET /api/custom-table/v1/customTables/{tableName} endpoint to retrieve a custom table that doesn’t exist in the system, the system now properly returns the 404 response with an appropriate message.

6. When a product is updated via Simple Product Administration API, the product now retains the correct product type. If the DisplayType node is not provided in the XML payload, the product type remains the same in case the product already exists. If a new product is created via API without the DisplayType node, it is created as a simple product.

7. When creating or editing products via Simple Product Administration API, attributes now remain in their designated configurator tabs.

8. Administrators can now successfully generate JWT tokens via the POST /api/rd/v1/Core/GenerateJWT API.

9. The issue which made it possible to update blocked users via the API has been solved.

10. Administrators can now successfully use API to attach global scripts to the OnUserLogin event.
Scripting

New Features and Improvements

RequestContext.RawUrl and HttpUtility Properties for Scripting

The properties `RequestContext.RawUrl`, `HttpContext.Url` and `HttpUtility` are introduced to Iron Python scripting. The properties are introduced as a replacement for properties from the `System.Web` namespace, with the goal of improving system security.

`RequestContext.RawUrl` is an enhancement of the `RequestContext.Items` property which obtains the raw URL from the current request. This property is equivalent to the `HttpContext.Current.Request.RawUrl` property from the `System.Web` namespace.


`HttpUtility` is used for encoding and decoding the URL. For example, if `System.Web.HttpUtility` is used in scripts, it is possible to switch to the standard implementation for `HttpUtility` in Iron Python by removing the import of the `System.Web` namespace, as the global variable name is the same (`HttpUtility`).

System.Web Namespace Forbidden in Iron Python Scripting After 2011

After the version 2011 of SAP CPQ is deployed, the `System.Web` namespace will be forbidden in scripting with the goal of improving system security. When editing existing scripts or creating new scripts, instead of the `System.Web` properties, the corresponding properties introduced up to this release should be used.
All existing scripts that contain `System.Web` properties will continue to work as normal. However, you will only be able to edit the components of these scripts that use `System.Web` properties if you replace `System.Web` properties with the new properties. In addition, you will need to use the new properties in any new scripts created after 2011.

Here you can find a list of `System.Web` properties and the corresponding new properties that should be used as of 2011:

<table>
<thead>
<tr>
<th><code>System.Web</code> property (old)</th>
<th>New property (used as of 2011)</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>HttpContext.Current.Items</td>
<td>RequestContext.Items</td>
<td>Used for saving data between scripts that are executed in the same request.</td>
</tr>
<tr>
<td>System.Web.HttpUtility</td>
<td>HttpUtility</td>
<td>Used for encoding and decoding the URL.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note:</strong> If <code>System.Web.HttpUtility</code> is used in scripts, it is possible to switch to the standard implementation for <code>HttpUtility</code> in Iron Python by removing the import of the <code>System.Web</code> namespace,</td>
</tr>
</tbody>
</table>

If `System.Web.HttpUtility` is used in scripts, it is possible to switch to the standard implementation for `HttpUtility` in Iron Python by removing the import of the `System.Web` namespace.
Resolved Support Issues

1. The scripting method `User.BelongsToPermissionGroup()` now uses the user’s username instead of their first and last name when checking whether they belong to a certain permission group.
2. The scripting method `CustomerHelper.GetCustomer` now properly retrieves the name of the customer custom field instead of the label.
3. Administrators can now successfully set the value of a quote item custom field referencing an autocomplete attribute via scripting.
4. It is no longer possible to add/update customer data via scripting if there is no country defined.

UI Design

New Features and Improvements

**UI Improvements**

- The **Formula Builder** modal has been expanded in such a way that all fields are visible without the need to use the scrollbar.
• The **Table Tag Builder** modal has been expanded in such a way that all fields are visible without the need to use the scrollbar.
• The identical email template is now used for user registration, password creation and emails for unlocking locked SAP CPQ accounts.

Load Existing Project/Quotation Page Optimization

The Other Quotes tab in the Load Existing Project/Quotation page has been optimized in terms of loading time. When the Optimize queries for customers and other users quotes parameter is set to Other Quotes Page or Other Quotes and Customer List Page, the Number of Items field on Load Existing Project/Quotation > Other Quotes doesn’t show the exact number of quotes until users navigate to the second page. Once they do, the number of items will display the exact number of quotes there are in the tab.

As a result, breaking changes may occur on environments with customized templates. Administrators should fix these templates by following the instructions.
Resolved Support Issues

1. The Filter by Date field in the Load Project/Quotation page now displays properly on Quote 1.0.
2. The Date column entries are now displayed in all Audit Trail tabs.
3. The preview of multi-section templates is now displayed at the center of the screen in Responsive Design.

Breaking Changes

Freeze Templates Rollback Reminder

Administrators who are using Freeze Templates to roll back the uncustomized templates on broken pages from 2008 version to the 2005 version will need to fix their broken pages before the 2011 is deployed to sandbox and production environments on November 7 and November 21 respectively, in order to have a fallback mechanism in 2102.

If administrators do not fix broken pages on time, each of the environments will appear as they did before the freeze was applied. In brief, the pages which contain unfixed customized templates will be broken and will need to be fixed again from the beginning.

Note: If possible, administrators should avoid using the Freeze Templates feature.

Additional useful information for fixing broken pages independently can be found on the Responsive Design Troubleshooting Help page.

The Support team should be contacted if any assistance is required.
Templates Changed in 2011

Listed here are the templates changed during the development of SAP CPQ 2011, along with where you can find them.

- **Configurator**
  - AttributeBasedSearchSummaryView
  - ConfigurationTreeView
- **Catalog**
  - CatalogPage
- **Cart**
  - CustomerFeedbackDialogTemplate
  - Proposal
  - CustomFieldsPage
- **QuoteList**
  - QuoteListFilterBar
  - QuoteListFilterEditor
- **CartList**
  - CartListPage
- **Shared**
  - PagerTemplate

Tips for Fixing Breaking Changes

Pager Template (Shared Page)

When the **Optimize queries for customers and other users quotes** parameter in **General > Application Parameters > Shopping Cart and Quotes** is set to **Other Quotes** and the **PagerTemplate** on the **Shared** page is customized or frozen to the previous version, breaking changes may occur.
The following lines of CSHTML have been added to the system version of the PagerTemplate and should be applied to the customized template as well to ensure that it works properly:

- Between line 21 and 22:

```html
<!-- ko if: totalCount() >= 0 -->
```

- Between line 22 and 23:

```html
<!-- /ko -->
    <!-- ko if: totalCount() == -1 -->
    <label class="pager-number-of-items-item">... &nbsp;</label>
    <a href="#" aria-label="Description Popover" class="pull-right hide-no-more-tables autoClosePopover tooltip-trigger" data-bind="popover : { autoClose: true, container: 'body', placement: 'auto right' }, tooltip: { title: $parent.noTotalNumberOfItemsTooltip }" data-original-title="" title="">
        <span class="sap-icon"></span>
    </a>
<!-- /ko -->
```

- Between lines 37 and 38:

```html
<!-- ko if: totalCount() >= 0 -->
```

- Between lines 38 and 39:

```html
<!-- /ko -->
    <!-- ko if: totalCount() == -1 -->
<!-- /ko -->
```
• Between lines 40 and 41:

```html
<!-- ko if: totalItemCount() >= 0 -->

```

• Between lines 50 and 51:

```html
<!-- /ko -->

<!-- ko if: totalItemCount() == -1 -->

```html
<li data-bind="css: { disabled: !hasNextPage() }">
    <a href="#" data-bind="attr: { id: pagerId + '_nextPage', tabindex: !hasNextPage() ? '-1' : '0' }" aria-label="@Translation.Get("PagerTemplate.NextPage")" &e066;></a>
  </span>
</li>

```html
<li class="disabled">
    <a href="#" data-bind="attr: { id: pagerId + '_lastPage', tabindex: isOnLastPage() ? '-1' : '0' }" aria-label="@Translation.Get("PagerTemplate.LastPage")" &xf163;></a>
  </span>
</li>
```

```html
<!-- /ko -->
```

**TeamsPage (Cart Page)**

If the Cart page is customized or frozen to the previous version, the ID of the div container in the TeamsPage template needs to be changed from cartInvolvedPartiesContainer to cartTeamsContainer in order to prevent any breaking changes from occurring. This breaking change concerns the Quote 2.0 engine only.
Cart API (/api/rd/v1/Cart/) Breaking Change

As of this release, the /api/rd/v1/Cart/ APIs used for executing actions on quotes will work properly only if the quote has been previously loaded. This is applicable whenever a Cart API is used for triggering any of the quote actions that can be executed on the user interface, in all quote tabs.

**Note**: If you are using any of the Cart APIs for triggering quote actions in your Iron Python scripts, make sure to revise them and adjust them accordingly. To load the quote before executing an action, use `GET URL + 'cart/edit?cartCompositeNumber=' + QuoteNumber`.

**Example Script**

To help you adjust your scripts using the Cart API, we have provided an example script with logging and loading the quote:

```python
import clr
clr.AddReference("System.Net")
from System.Net import CookieContainer
from System.Net import Cookie
from System.Net import WebRequest
```
from System.Net import HttpWebResponse
clr.AddReference('Newtonsoft.Json')
from Newtonsoft.Json import JsonConvert

url = 'https://test.webcomcpq.com/
username = 'testuser'
password = 'abc123'
domain = 'testdomain'
quoteNumber = '0123456'
loginRequest = WebRequest.Create(url +
'api/rd/v1/Core/LogIn?username='+username+'&password='+password+'&domain='+domain+'')
loginRequest.CookieContainer = CookieContainer()
loginRequest.Method = 'POST'
loginRequest.ContentLength = 0
loginResponse = loginRequest.GetResponse()
cookies = loginResponse.Cookies
loginResponse2 = clr.Convert(loginResponse, HttpWebResponse)
xCrfHeader = ""
strdata = StreamReader(loginResponse.GetResponseStream())
xCrfHeader = strdata.ReadToEnd()
xCrfHeaderFinal = JsonConvert.DeserializeObject(xcrfHeader)
loadCartRequest = WebRequest.Create(url +
'cart/edit?cartCompositeNumber=' + quoteNumber)
loadCartRequest.Method = 'GET'
loadCartRequest.ContentLength = 0
loadCartRequest.CookieContainer = CookieContainer()
loadCartRequest.ContentType = "application/json"
if cookies is not None:
loadCartRequest.CookieContainer.Add(cookies)
loadCartResponse = loadCartRequest.GetResponse()