SAP Commerce Klarna Express Checkout

Installation & User Guide

**Table of Contents**

[1. Introduction 3](#_Toc161164797)

[2. Functionality 3](#_Toc161164798)

[3. Add-on Installation steps 5](#_Toc161164799)

[4. Activating Klarna Express Checkout through Backoffice 8](#_Toc161164800)

[5. Extension Model 9](#_Toc161164801)

[6. Additional Information 9](#_Toc161164802)

# Introduction

This document is a technical document to guide you through the process for installing Klarna Express Checkout (KEC) on SAP Commerce platform.

* 1. **Audience**

The expected audience for this document is technical specialists who will be involved in KEC integration into SAP Commerce. These specialists are expected to be familiar with the SAP Commerce platform and installing extensions/add-ons for it.

* 1. **Supported Environments**

KEC is designed and tested with version 2211 of SAP Commerce.

* 1. **Restrictions with this extension**

KEC is not a standalone extension. It is included in the Klarna Payments (KP) extension from version 7.2 onwards. Hence installing KP is a prerequisite for KEC. Please refer the ‘KP Addon Installation and User Guide’ for installing KP.

# Functionality

KEC provides an option for customers to use their Klarna account information for a faster checkout and order placement. Customers can initiate express checkout by clicking on the KEC button provided in the PDP page, Cart page and Mini Cart popup of the Merchant website. On click of the button, Klarna popup will be displayed where customer can view their account and select shipping and payment options. On successful validation, the customer will be redirected to the merchant’s website where the Cart will be prepopulated with the shipping and payment data received from Klarna for faster checkout.

* 1. **Use-cases**

* + 1. **Express Checkout from Cart/Minicart**

KEC button will be displayed in Cart page and Minicart popup. On click of the button, an authorization request will be sent to Klarna with a payload containing the cart details. If the request is valid, a popup will be displayed where customer can enter their phone number and verification code to validate the payment details. On successful validation, an authorization response with client token will be sent back to the merchant’s site.

* + 1. **Express Checkout from PDP**

KEC button in PDP is similar to the one in Cart page and Minitcart. The only difference is that when the button is clicked in PDP, a new session Cart will be created irrespective of whether the customer is already having a session cart or not. The product will be added to the new cart and details of this cart will be sent as payload to Klarna.

* + 1. **Single Step vs Multistep Checkout**

Klarna provides the option for single step checkout where the authorization response from Klarna will contain the authorization token which can be used to create the order in Klarna and take the customer from PDP/Cart page directly to Order Confirmation page.

Klarna supports multistep checkout also where an additional finalize call is required after authorize call to get the authorization token. Multistep checkout can be enabled by sending the parameter ‘autoFinalize’ as ‘false’ while making the authorize call. This option is suitable for the websites which display an order review/summary page before order placement. Here customer can review and if needed, edit their checkout details. In this scenario, the authorization response from Klarna will contain a client token which can be used to make a finalize call from order review/summary page. The response of the finalize call will contain the authorization token which will be sent to Klarna as part of the create order request triggered on click of the Place Order button.

The SAP Commerce platform requires customer orders to include the delivery mode which is something that won’t be available in the Klarna profile of the user. Hence the delivery mode will have to be added to the cart from the checkout page of the merchant website. Once the delivery address is set, a default delivery mode can be selected programmatically in SAP Commerce. Still the customer should be able to view the selected delivery mode before order placement. Besides the order total can change according to the shipping charges for the selected delivery mode. Due to these reasons, the customer should be redirected to the order review page before confirming the order. What this means is that the ‘autoFinalize’ flag should be set to ‘false’ and KEC will always be Multistep in the case of SAP Commerce.

* + 1. **Finalize and Create Order**

In Multistep checkout, on click of ‘Place Order’ button, a finalize call is made to get the authorization token. The client token received in the response of the initial authorize call is required for finalizing the payment.

Customers will have the option to edit the address and/or the delivery mode before placing the order. The payment option will be preselected as ‘Klarna Express Checkout’ and

The updated order details will be sent to Klarna when the finalize call is made. If there is a significant difference in order amount sent in the finalize call when compared to the amount approved initially during the authorize call, a popup will be displayed where customer needs to acknowledge and approve the changed order amount.

The authorization token received in the response of the finalize call is passed during create order call. KEC follows the same process as KP for finalize and create order.

* + 1. **Collect Shipping Address**

During authorize call, a parameter called ‘collectShippingAddress’ is passed to indicate whether customer’s shipping address needs to be included in the response sent from Klarna. The value of this parameter flag is configurable from Backoffice.

When the flag is on, the shipping address received from Klarna is set to the Cart as the delivery address and the billing address. Also, in case the user is not logged into the Website, a guest checkout user will be created with the email id got from the collected shipping address.

When the flag is off, no shipping address will be received from Klarna. In this scenario, logged in customers will be redirected to the Checkout delivery address step for adding the address instead of redirecting to the Checkout summary page. After adding the shipping address, the customer will have to select the preferred delivery mode. However, the customer won’t need to submit the payment details again and ‘Klarna Express Checkout’ will be preselected as the payment option in the Checkout payment step.

If the user is not logged in and there is no address received from Klarna, a guest user cannot be created automatically since the email id of the customer is not available. Hence the customer will be redirected to Checkout login page. Besides, the customer will need to resubmit the payment details by selecting Klarna Payment in the Checkout payment step.

It is recommended to set the ‘collectShippingAddress’ flag to true since setting it to false will make it normal checkout instead of express checkout. If the customer wants to use a different address, they can do it by modifying the address from the Order Summary page before placing order.

# Add-on Installation steps

Since KEC is part of the KP plugin, no separate installation of the addon or extensions is required. However if KEC is being enabled on top of an existing KP installation, a clean build followed by system update of the KP extensions from HAC is required for adding the KEC configuration table ‘KlarnaExpCheckoutConfig’ to the database schema.

* 1. **Mandatory Code changes**

To enable KEC, the following code changes should be made in the storefront extension.

1. Add the below entry in the master.tag file for loading Klarna script library and for defining the configurations required for initializing KEC button.

*<c:if test="${isKlarnaExpCheckoutEnabled}">*

*<spring:url value="/klarna/express-checkout/create-authorize-payload" var="expCheckoutAuthorizePayloadUrl"/>*

*<spring:url value="/klarna/express-checkout/process-authorize-response" var="expCheckoutProcessAuthorizeResponseUrl"/>*

*<spring:message code="klarna.expcheckout.error" var="klarnaExpCheckoutErrorMessage"/>*

*<input type="hidden" class="text" name="klarnaCollectShippingAddress" id="klarnaCollectShippingAddress" value="${klarnaExpCheckoutConfigData.collectShippingAddress}" >*

*<input type="hidden" class="text" name="klarnaButtonTheme" id="klarnaButtonTheme" value="${klarnaExpCheckoutConfigData.buttonTheme}" >*

*<input type="hidden" class="text" name="klarnaButtonShape" id="klarnaButtonShape" value="${klarnaExpCheckoutConfigData.buttonShape}" >*

*<input type="hidden" class="text" name="currentLocale" id="currentLocale" value="${currentLocale}" >*

*<input type="hidden" id="klarnaClientKey" name="klarnaClientKey" value="${klarnaExpCheckoutConfigData.clientKey}"/>*

*<script src="${fn:escapeXml(klarnaExpCheckoutConfigData.scriptUrl)}" async></script>*

*<input type="hidden" name="expCheckoutAuthorizePayloadUrl" id="expCheckoutAuthorizePayloadUrl" value="${expCheckoutAuthorizePayloadUrl}"/>*

*<input type="hidden" name="expCheckoutProcessAuthorizeResponseUrl" id="expCheckoutProcessAuthorizeResponseUrl" value="${expCheckoutProcessAuthorizeResponseUrl}"/>*

*<input type="hidden" id="klarnaExpCheckoutErrorMessage" name="klarnaExpCheckoutErrorMessage" value="${klarnaExpCheckoutErrorMessage}"/>*

*</c:if>*

1. To display KEC button in PDP, add following code to productDetailsPanel.tag file.

*<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>*

*<c:if test="${isKlarnaExpCheckoutEnabled and (product.stock.stockLevelStatus.code ne 'outOfStock')}">*

*<div id="klarna\_exp\_checkout\_container\_default">*

*<input type="hidden" class="text" name="klarnaExpCheckoutProductCode" id="klarnaExpCheckoutProductCode" value="${product.code}" >*

*<div id="klarnaErrorMessage" title="Klarna Error Message" >*

*</div>*

*</div>*

*</c:if>*

1. To display KEC button to top section of the Cart Page, add following code to cartDisplay.jsp file.

*<c:if test="${isKlarnaExpCheckoutEnabled}">*

*<div class="col-sm-4 col-md-3 pull-right">*

*<div id="klarna\_exp\_checkout\_container\_default">*

*<div id="klarnaErrorMessage" title="Klarna Error Message" >*

*</div>*

*</div>*

*</div>*

*</c:if>*

1. To display KEC button to bottom section of the Cart Page, add following code to checkoutDisplay.jsp file.

*<c:if test="${isKlarnaExpCheckoutEnabled}">*

*<div class="col-sm-4 col-md-3 pull-right">*

*<div id="klarna\_exp\_checkout\_container\_checkout\_display">*

*</div>*

*</div>*

*</c:if>*

1. To display KEC button on Minicart popup, add following code to cartPopup.jsp file.

*<br>*

*<c:if test="${isKlarnaExpCheckoutEnabled}">*

*<div id="klarna\_exp\_checkout\_container\_in\_cartpopup">*

*<script>*

*ACC.klarnaexpcheckout.klarnaButtonLoad("#klarna\_exp\_checkout\_container\_in\_cartpopup");*

*</script>*

*<div id="klarnaErrorMessage" title="Klarna Error Message" >*

*</div>*

*</div>*

*</c:if>*

1. Place order form is submitted via bindPlaceOrder() function in ACC.klarnaplaceorder.js file. To avoid duplicate form submission, remove or comment out the following line in toggleActionButtons() function in acc.checkout.js file

*$('#placeOrderForm1').submit();*

# Activating Klarna Express Checkout through Backoffice

To configure KEC, go to SAP Commerce-Backoffice→ Klarna → Klarna Exp Checkout Config. Creating a new KEC configuration is like creating a new KP configuration. After creating the KEC configuration, it needs to be linked to the Base Store in the same way as a KP configuration is linked. Please refer KP installation document for more details.

KEC configuration can be activated or deactivated from Backoffice. Please note that even if KEC is activated and linked to the Base Store, it will function only if there is an active KP configuration associated to the same Base Store because KEC uses the KP configurations for creating order in Klarna.

* 1. **Klarna Configuration Fields**

**Payment Features Required**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Mandatory** | **Description** |
| Code | Yes | Input any name/code. This will be the internal reference used to recognise and manage KEC configuration within SAP Commerce. |
| Active | Yes | Check to activate KEC configuration; leave unchecked for it to remain inactive. |
| Klarna Client ID | Yes | Generated in Klarna Merchant Portal. |
| Script URL | Yes | URL of the Klarna JS library for enabling KEC. |
| Collect Shipping Address | Yes | Check to get customer’s shipping address from Klarna. |
| Button Theme | No | Colour theme of the KEC button: default/light/dark |
| Button Shape | No | Shape of the KEC button: default/rect/pill |
| Country | Yes | Country of the site. Klarna requires locale to be passed while initiating the KEC button. Locale is formed combining the Website language ISO code and ISO code of the Country selected here. |
|  |  |  |

# Extension Model

Models extended from OOB SAP (Hybris) Commerce platform

|  |  |  |
| --- | --- | --- |
| **Model** | **OOB Model** | **Attributes** |
| BaseStore | BaseStore | KlarnaExpCheckoutConfig |
| KlarnaExpCheckoutConfig | KlarnaExpCheckoutConfig | code  active  clientKey  scriptUrl  collectShippingAddress  buttonTheme  buttonShape  country |
|  |  |  |

# Additional Information

For more information about uninstalling the extensions, troubleshooting and support from Klarna, please refer KP Addon Installation and User Guide.