Sitecore Experience Commerce Reports

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Sitecore Experience Commerce Reports Documentation

Compiled from <u>official Sitecore Experience Commerce Reports</u> documentation.

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More Sitecore guidelines and Sitecore related topics can be found on my blog <u>tothecore.sk</u>.

You can find them also directly in my github repositories.

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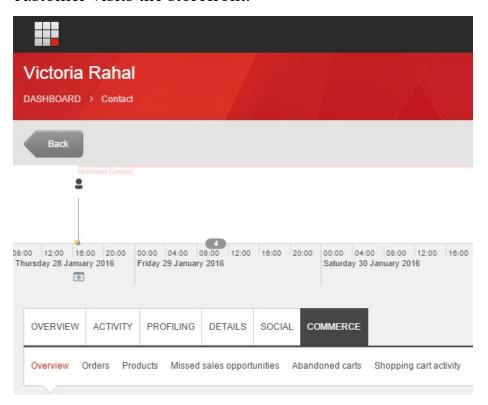
Reports

An overview of the reporting features for Sitecore Commerce Connect.

Experience Profile Commerce tab

The Sitecore Experience Profile application contains reports that display the data gathered by Sitecore Commerce Connect. After you install the Sitecore Commerce Connect module, the Experience Profile contains an additional Commerce tab and six subtabs.

These subtabs contain reports that are independent of the external commerce system that is being used. The data used for the reports comes from the page events, goals, and outcomes that are triggered by Commerce Connect when a customer visits the storefront.



Note

The Experience Profile reports are not available in Commerce Connect 9.0 and 9.0.1.

This topic describes all of the subtabs:

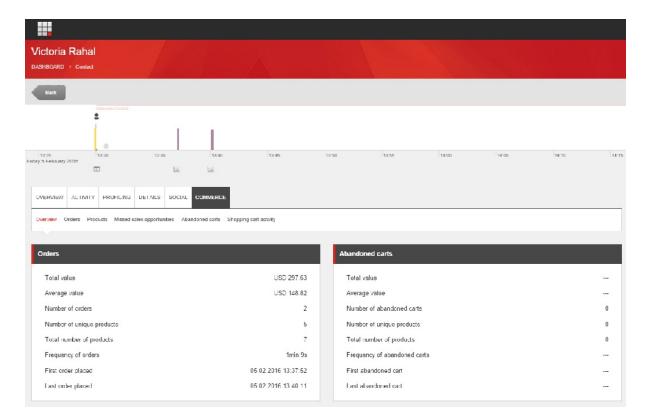
- Overview
- Orders
- Products
- Missed sales opportunities
- Abandoned carts
- Shopping cart activity

Overview

The *Overview* subtab displays the aggregated order and abandoned cart metrics that represent the key performance indicators (KPI) for both turnover and potential missed sales opportunities, including:

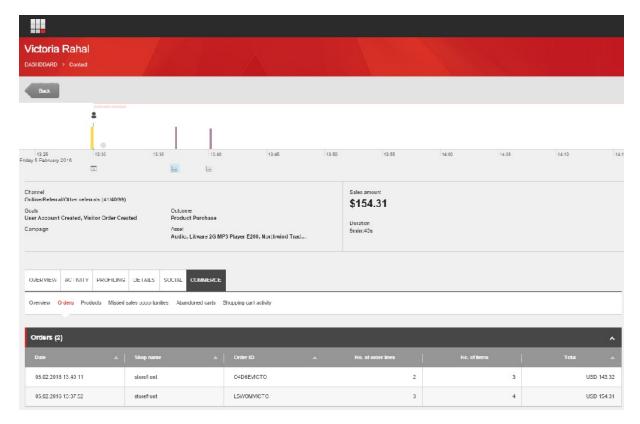
- Total value
- Average value
- Number of orders / abandoned carts
- Number of unique products
- Total number of products
- Frequency of orders / abandoned carts
- First order placed / First abandoned cart
- Last order placed / last abandoned cart

The report contains every recorded interaction that the current contact has made.



Orders

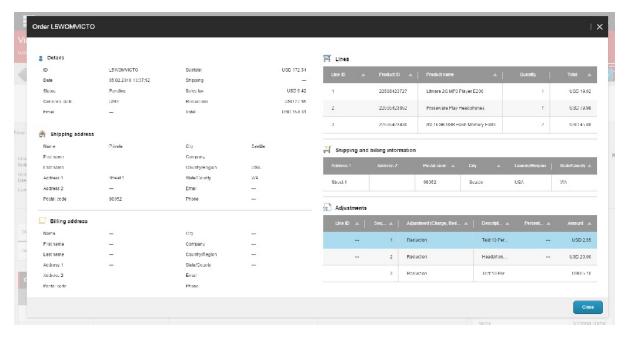
The *Orders* subtab displays a complete history of the orders placed by the current contact including the order history and order details of each order.



To see the order details of an order, select it and open the Order Details report.

On the right-hand side of the Order details report, you can see the individual order lines, the shipping and billing information, and adjustments. Adjustments are the different types of charges and discounts that affect the entire order as well as the individual lines.

If no value is available, two dashes are displayed.



If you move the mouse over an individual order line, a tooltip displays additional information, such as reductions, charges, inventory status, and so on.

If you move the mouse over the individual shipping and billing information lines, a tooltip displays the billing or shipping information, and the cart line IDs.

The list of adjustments includes the charges and reductions that were applied to both the entire order and the individual order lines. In the Adjustments list, the Line ID column can contain a value that refers to the corresponding line in the Lines list. Otherwise the column is left empty.

Products

The *Product* subtab displays three lists – Products viewed, Products added to cart, and Products purchased.

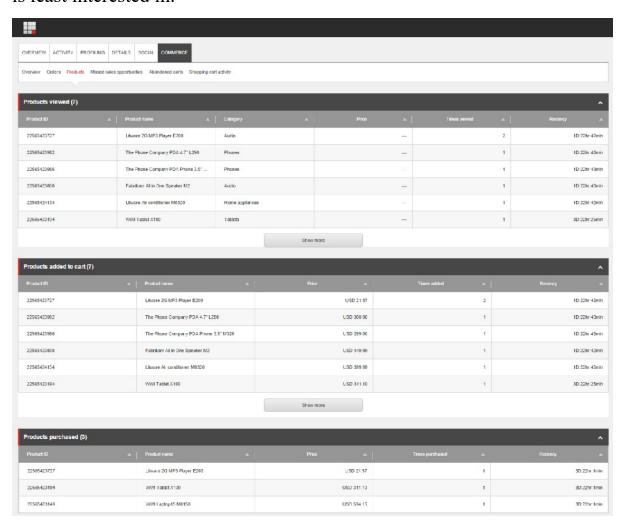
Each list contains information about the:

- Product ID
- Product name
- Price
- Recency
- Number of times the product was viewed

- Number of times the product was added
- Number of times the product was purchased

This indicates the level of interest that the contact has shown in the individual products.

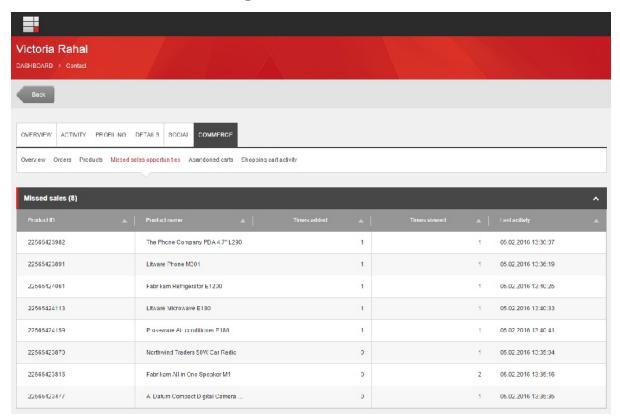
You can reverse each column's sort order to see the products that the contact is least interested in.



Missed sales opportunities

The *Missed sales opportunity* subtab shows you a list of the products that the contact visited or added to a cart but did not purchase. These are grouped by product ID and sorted by the number of times the product was added to a cart. This indicates the level of interest that the contact has shown in the individual products.

The report focuses on products and a shop owner uses it to find those products that contacts most often look at or add to carts without purchasing. The shop owner can use this information to plan discounts and promotions to make the contact finalize the purchase.



Abandoned carts

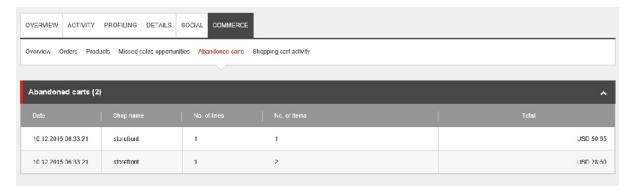
Note

In Commerce Connect 9.0.2, the Abandoned Cart marketing campaign does not trigger the Abandoned Carts outcome. Therefore, the Abandoned Carts report does not show any data.

The *Abandoned carts* subtab displays the complete history of abandoned carts and the details of each individual cart is available in a popup window. The default engagement plan specifies that a cart is considered abandoned after three days.

The list is sorted by date in descending order by default.

Click a row in the list to open a new window that displays the abandoned cart details.

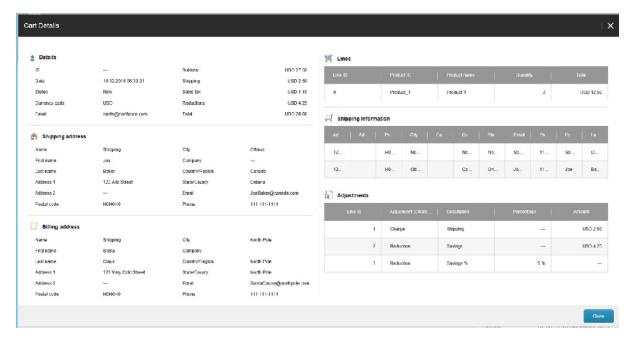


The Abandoned Cart Details list contains information about the cart, such as the status, subtotal, sales tax, reductions and shipping costs. You can also see the shipping and billing addresses for the abandoned cart.

On the right-hand side, you can see the individual cart lines, the shipping and billing information for the individual cart lines and any adjustments that were made. Adjustments are every kind of charge and discount that affects the entire cart as well as the individual lines.

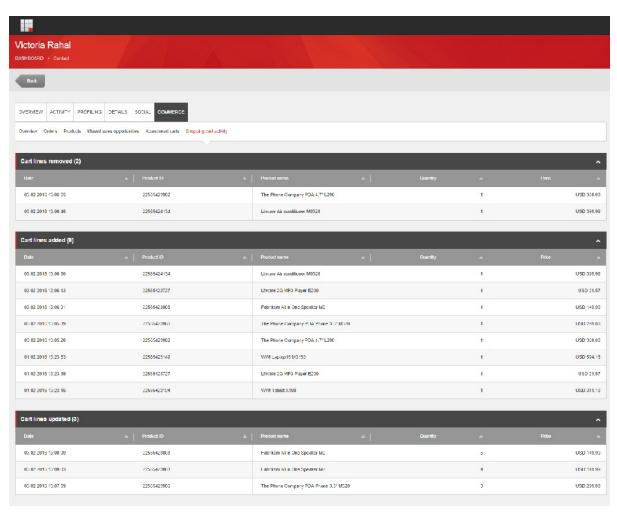
If you move the mouse over a cart line, a tooltip displays additional information about that cart line, such as reductions, charges, inventory status, and so on.

If you move the mouse over a shipping or billing information line, a tooltip displays additional information, such as the billing or shipping information and the cart line IDs.



Shopping cart activity

The *Shopping cart activity* subtab shows you all of the shopping cart activities, including lines removed, lines added, and lines updated. The activities cover sessions, interactions, and shopping carts. This report gives you an overview of what products the contact is interested in over a period of time, as well as and the products they considered buying but for some reason did not.



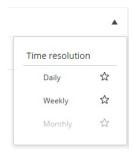
The Experience Analytics reports for Commerce Connect

Note

The Experience Analytics reports are not available in Commerce Connect 9.0 and 9.0.1.

Sitecore Experience Analytics provides dashboards and reports for marketers and marketing analysts to identify patterns and trends in experience data. There is a group of reports that specifically handles data from Sitecore Commerce Connect. These reports are only available when you have installed Commerce Connect.

In charts that show time-related information, you can change the time resolution in the drop-down menu in the upper right corner of the chart:



The menu only shows valid selections as enabled. Other selections are disabled.

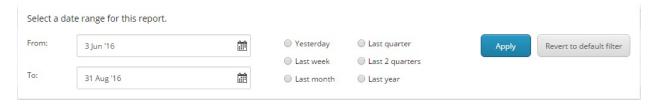
You can filter all reports on two things:

- Time range
- Sites to include

You access the filters by clicking the buttons at the top of the report:



You can set the time range in a number of ways:



The following Commerce Connect reports are available on the Commerce tab in Experience Analytics:

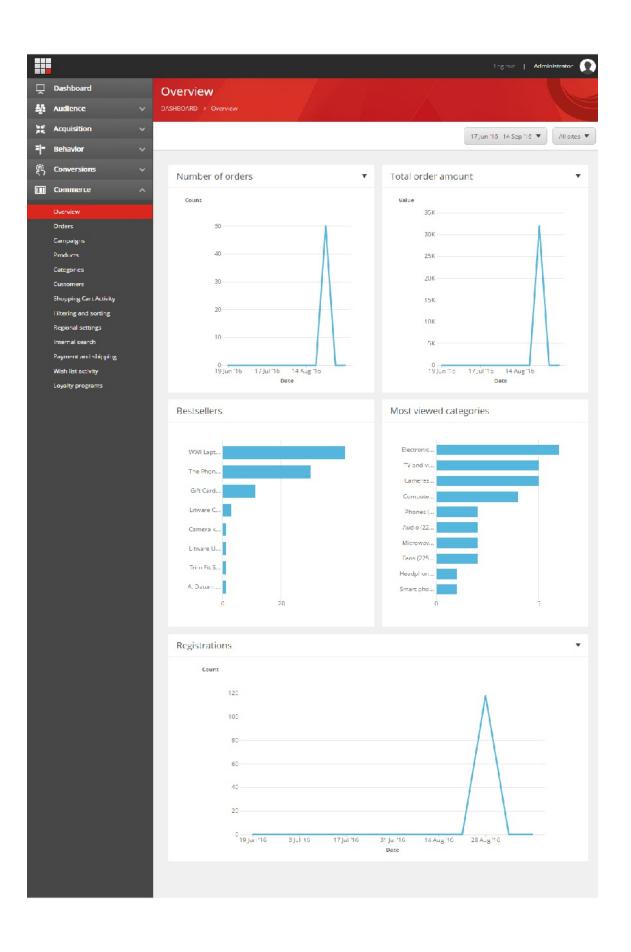
- The Overview report
- The Orders report
- The Campaigns report
- The Products report
- The Categories report
- The Customers report
- The Shopping cart activity report
- The Filtering and sorting report
- The Regional settings report
- The Internal search report
- The Payment and shipping report
- The Wish list activity report
- The Loyalty programs report

The Overview report

The *Overview* report contains five charts that provide a general overview of Commerce Connect activities.

Chart	Description
Number of orders	Shows the total number of orders, broken down by the selected time resolution.
Total order amount	Shows the total value of the orders, broken down by the selected time resolution.

Bestsellers	Shows the number of sold items for the best-selling items.
Most viewed categories	Shows the categories that have the most views.
Registrations	Show the number of visitors that are registered, broken down by the selected time resolution.

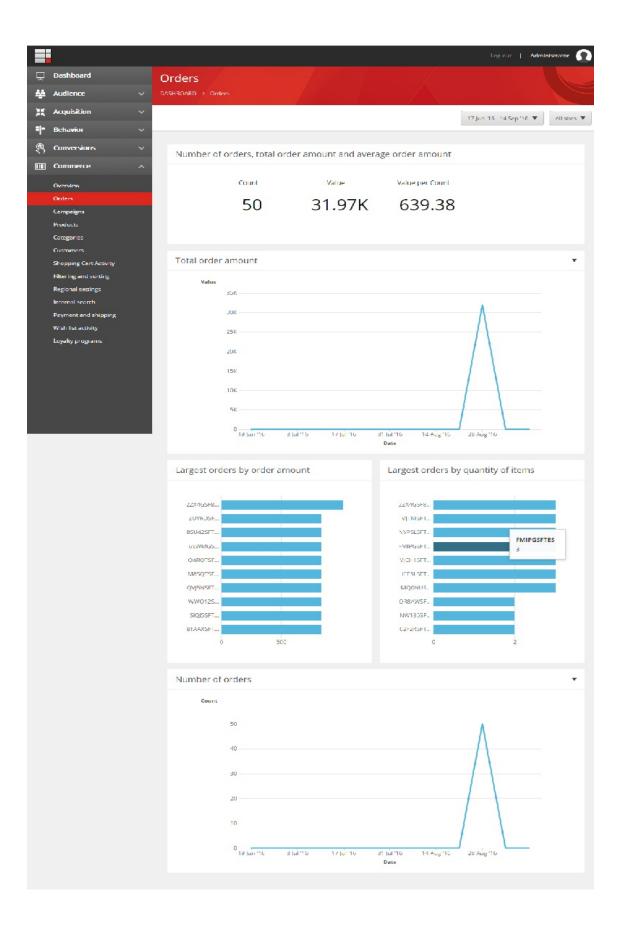


The Orders report

The *Orders* report shows summary information about orders (number of orders, total order amount, and average order amount), and contains four charts that provide more detailed information.

Chart	Description
Total order amount	Shows the total value of the orders, broken down by the selected time resolution.
Largest orders by order amount	Shows the top orders by value.
Largest orders by quantity of items	Shows the top orders by number of items in the order.
Number of orders	Shows the total number of orders, broken down by the selected time resolution.

The order IDs shown can be arbitrary strings, depending on the external commerce system used. The order IDs are in the form of GUIDs in the screenshots.



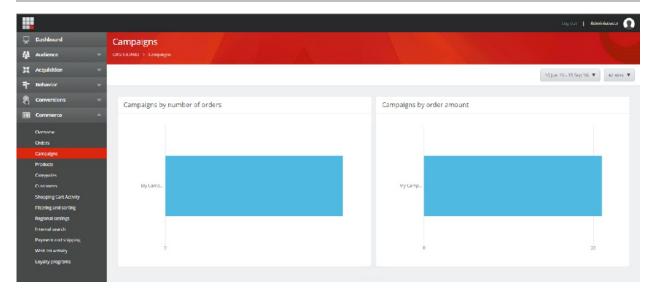
The Campaigns report

The *Campaigns* report contains two charts that provide information about campaigns.

Chart	Description
Campaigns by number of orders	The top campaigns that generate most orders.
Campaigns by order amount	The top campaigns by the amount (value) or the orders they generate.

Note

For both charts, the condition is that the first page visit in the interaction is tagged as a campaign (landing page) and that one or more orders are placed as part of the same interaction. This means that visitors who arrive on a landing page as part of a campaign but do not place an order as part of the initial interaction/session do not count.



The Products report

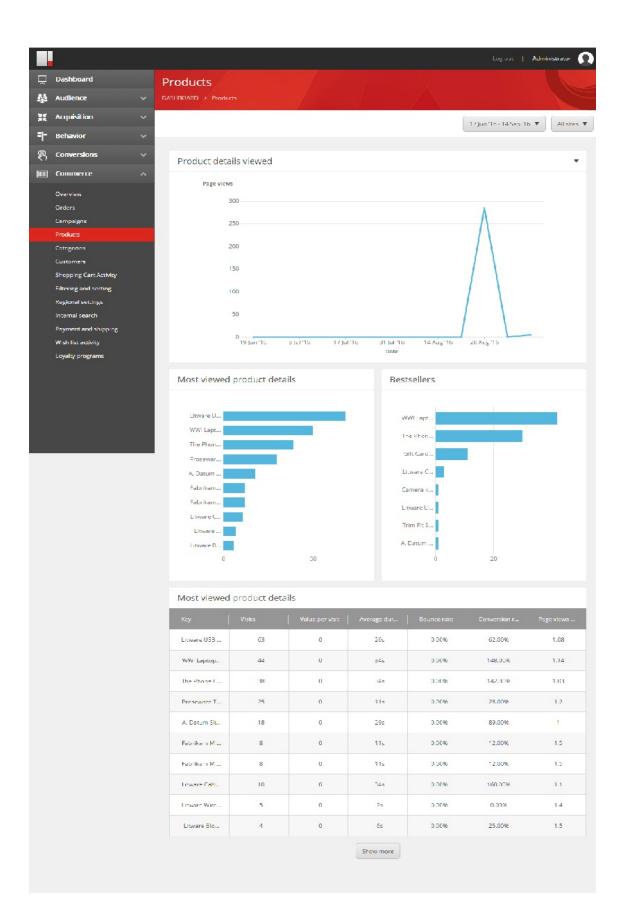
The *Products* report contains three charts and a table that provide information about products.

Chart	Description
Product details viewed	Shows the total number of product detail views, broken down by the

	selected time resolution.
Most viewed product details	Shows the top products by detail views.
Bestsellers	Shows the top selling products by sales.

The *Most viewed product details* table shows the same data as the chart with the same title, but it includes more detail:

Column	Description
Key	The product.
Visits	Number of visits to the product details page.
Value per visit	The engagement value of each visit to the product details page.
Average duration	Average amount of time visitors spent on the product details page.
Bounce rate	Percentage of visitors that left the site after visiting the product details page.
Conversion rate	The conversion rate of the visitors that viewed the product details page.
Page views per visit	The average number of site pages a visitor to this product details page visited.



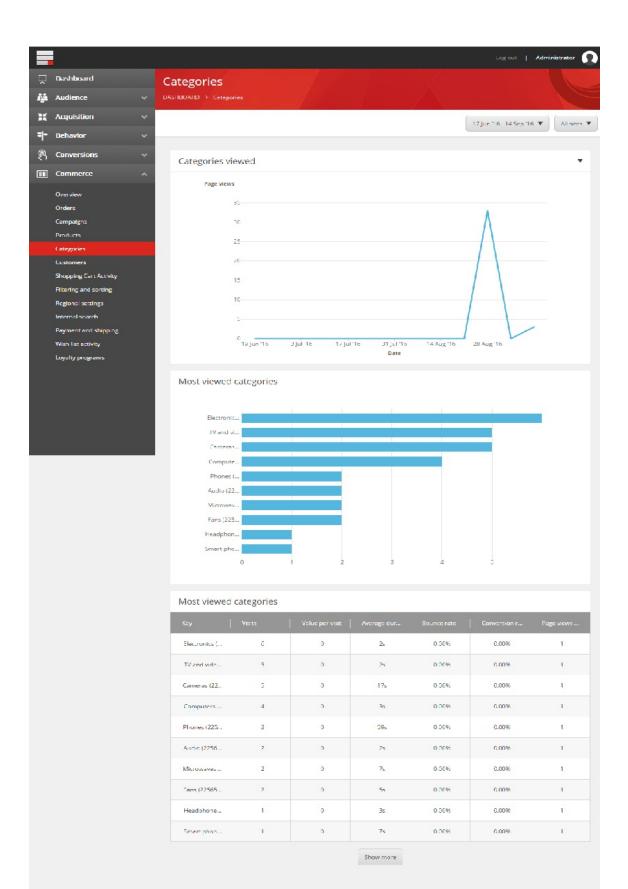
The Categories report

The *Categories* report contains two charts and a table that provide information about categories.

Chart	Description
Categories viewed	Shows the total number of category views, broken down by the selected time resolution.
Most viewed categories	Shows the top categories by views.

The *Most viewed categories* table shows the same measurement as the chart with the same title, but it includes more detail:

Column	Description
Key	The category.
Visits	Number of visits to the pages in the category.
Value per visit	The engagement value of each visit to the pages in the category.
Average duration	Average amount of time visitors spent on pages in the category.
Bounce rate	Percentage of visitors that left the site after visiting pages in the category.
Conversion rate	The conversion rate of the visitors that viewed pages in the category.
Page views per visit	The average number of site pages a visitor to pages in the category visited.



The Customers report

The *Customers* report contains a summary overview, five charts, and two tables that provide information about customers.

Note

A contact refers to an individual whereas a customer can represent an individual in B2C scenarios and businesses or organizations in B2B scenarios. It is the customer that pays for the order and the contact that places the order

The charts are:

Chart	Description
Registrations	Shows the total number of customers that registered.
Top customers by total order amount	Shows the top customers by total value of order.
Top customers by number of orders	Shows the top customers by number of orders.
Top contacts by total order amount	Shows the top contacts by total value of order.
Top contacts by number of orders	Shows the top contacts by number of orders.

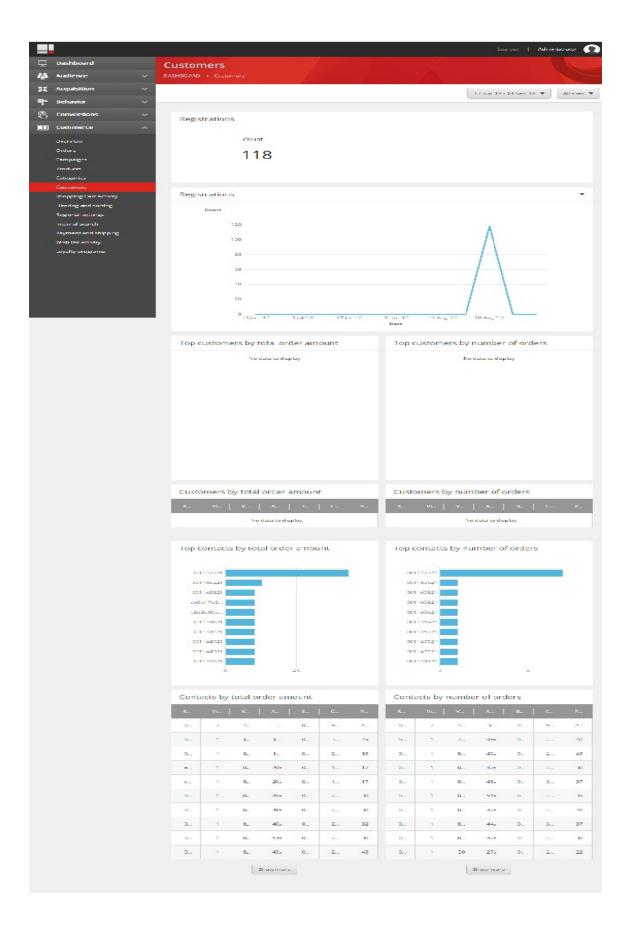
The four tables are:

- Customers by total order amount
- Customers by number of orders
- Contacts by total order amount
- Contacts by number of orders

These tables show the same data as the charts to which they correspond, but they add more information. The columns are:

Column	Description
Key	The customer or contact.

Visits	Number of visits to pages for this customer or contact.
Value per visit	The monetary value of each visit to the pages for this customer or contact.
Average duration	Average amount of time the customer or contact spent per visit.
Bounce rate	Percentage of customers or contacts that left the site after visiting one page.
Conversion rate	The conversion rate of the customer or contact.
Page views per visit	The average number of site pages the customer or contact visited per visit.



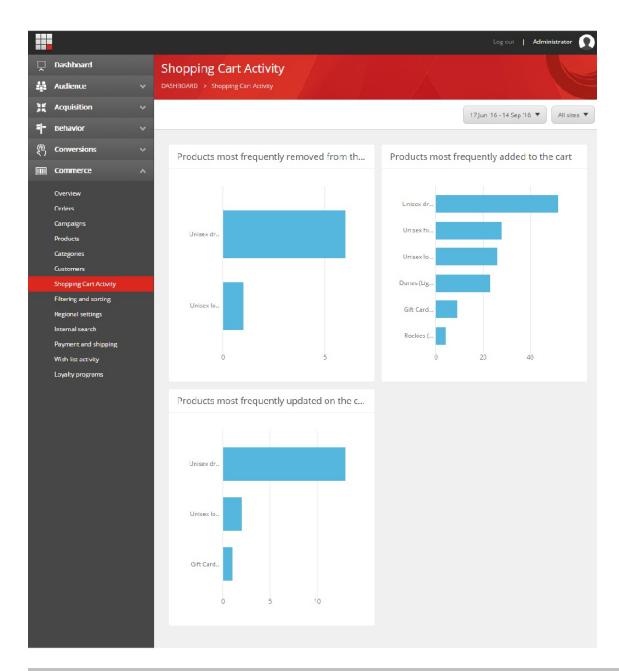
Note

Sitecore Experience Platform assigns a GUID to anonymous visitors and once an account is created, an account ID is shown. This is why some contacts are represented by a GUID and some by an integer number in the screenshot.

The Shopping cart activity report

The *Shopping cart activity* report shows information about shopping carts and the activities around them. There are three charts:

Chart	Description
Products most frequently removed from the cart	Shows the top products most frequently removed from a shopping cart.
Products most frequently added to the cart	Shows the top products most frequently added to a shopping cart.
Products most frequently updated on the cart	Shows the top products most frequently updated in a shopping cart.



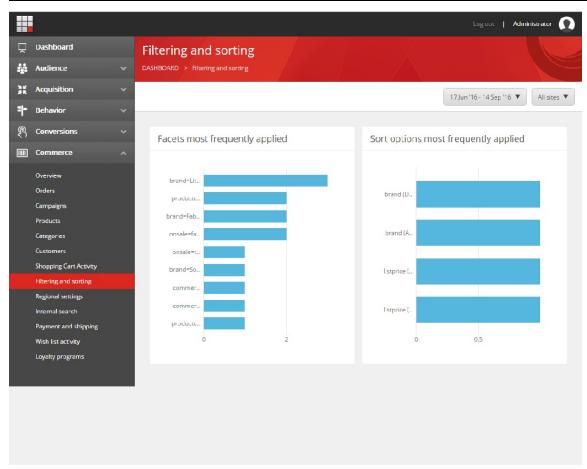
Note

For each item, the product name is retrieved (when possible) and the product ID is shown in parentheses. To retrieve the product name, the property *SitecoreItemID* must be populated on the *CartProduct* for each cart line

The Filtering and sorting report

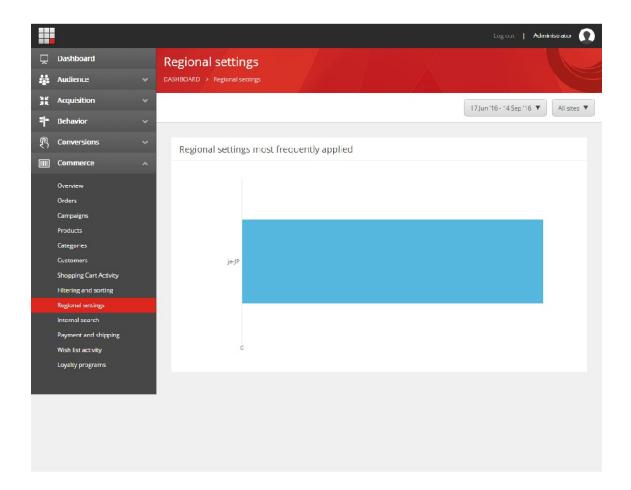
The *Filtering and sorting* report contains two charts with information about the filtering and sorting options visitors most frequently use.

Chart	Description
Facets most frequently applied	Shows the top facets most frequently applied by visitors.
Sort options most frequently applied	Shows the top sort options most frequently applied by visitors. Sort order is reflected in the label.



The Regional settings report

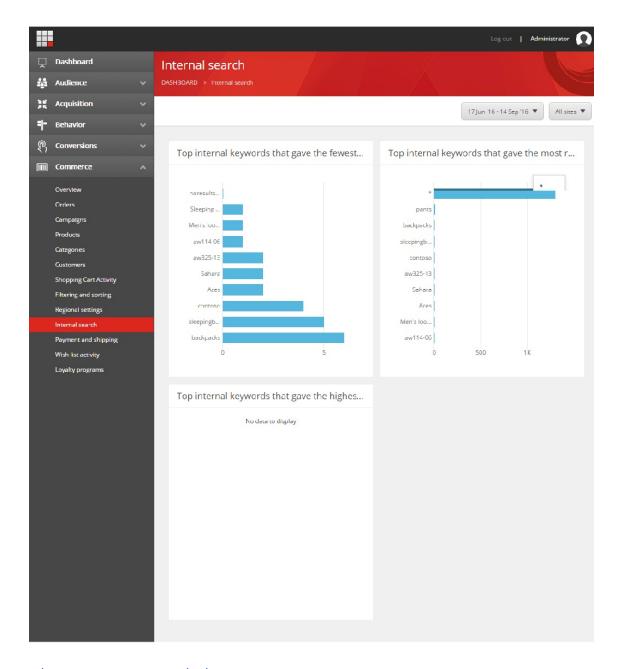
The *Regional settings* report contains one chart with information about the top regional settings used by visitors in the storefront.



The Internal search report

The *Internal search* report contains three charts that provide information about how visitors use the internal search on the site.

Chart	Description
Top internal keywords that gave the fewest results	The top keywords visitors used that gave the fewest search results.
Top internal keywords that gave the most results	The top keywords visitors used that gave the most search results.
Top internal keywords that gave the highest revenue	The top keywords visitors used that gave the highest revenue.



The Payment and shipping report

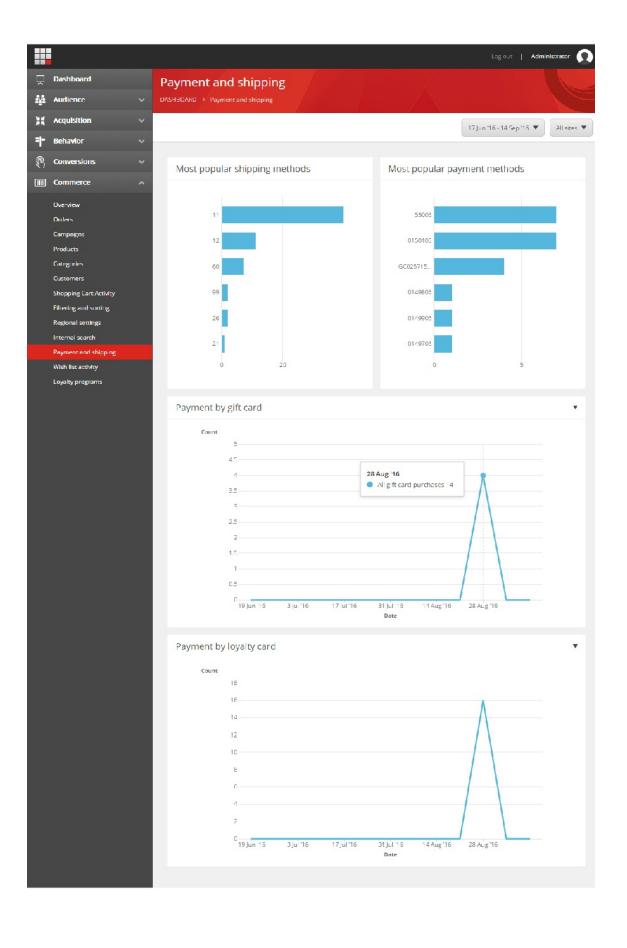
The *Payment and shipping* report contains four charts with information about payment and shipping preferences..

Chart	Description
Most popular shipping methods	Shows the top shipping methods.
Most popular payment methods	Shows the top payment methods.
Payment by gift card	Shows the number of payments by

gift card, broken down by the selected time resolution.
Shows the number of payments by loyalty card, broken down by the selected time resolution

Note

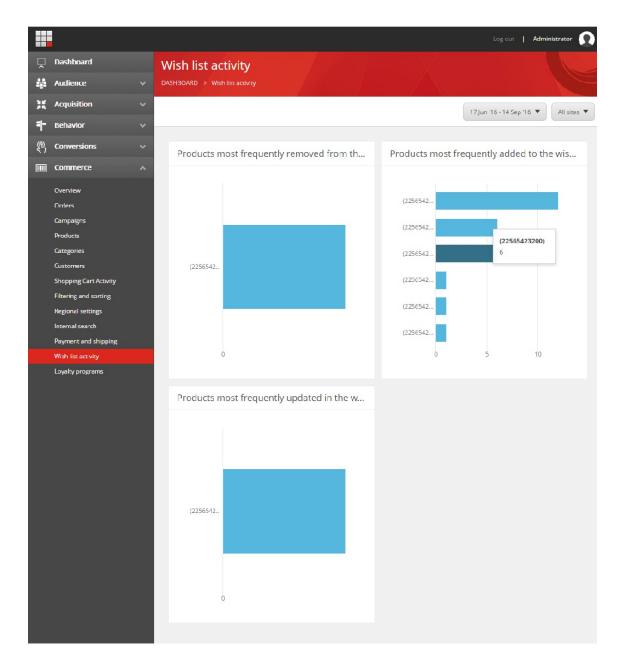
Items listed for both shipping and payment methods refer to the internal IDs used in the external commerce systems.



The Wish list activity report

The Wish list activity report contains three charts with information about how customers use wish lists

Chart	Description
Products most frequently removed from the wish list	Shows the top products most frequently removed from a wish list.
Products most frequently added to the wish list	Shows the top products most frequently added to a wish list.
Products most frequently updated in the wish list	Shows the top products most frequently updated in a wish list.



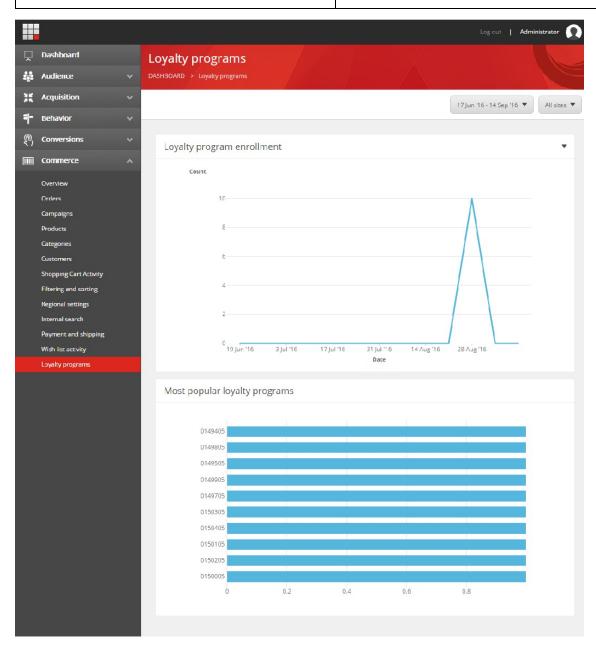
The Loyalty programs report

The *Loyalty programs* report shows information about loyalty programs in two charts.

Chart	Description
Loyalty program enrollment	Shows the total number of customers enrolling in a loyalty program, broken down by the selected time resolution.

Most popular loyalty programs

Shows the top loyalty programs, based on total enrollment.



Note

Items listed for loyalty programs are referred to by the internal IDs used in the external commerce systems.

Experience Profile Commerce tab - the underlying technology

Note

The Experience Profile reports are not available in Commerce Connect 9.0 and 9.0.1.

The reports that are displayed on the XProfile Commerce tab come with Sitecore Commerce Connect. For more information about installing the Commerce Connect package, see http://dev.sitecore.net.

The reports support the full Sitecore topology in scaled environments, such as cloud deployments, with separate CD, CM, processing, and reporting server roles where xDB queries are performed by the Reporting Service server role. For standalone deployments, everything is included in the core Commerce Connect package.

This topic describes some of the technology and concepts behind these reports:

- The underlying data
- Abandoned carts
- Custom domain model objects
- The currency converter

The underlying data

The underlying data used for the reports comes from the page events, goals and outcomes that are triggered by Commerce Connect when a customer visits the storefront.

All the standard reports are independent of the external commerce system that is being used as they are based on and require that the standard Connect entities are present.

Commerce Connect comes with domain models for each of the service layers and for the Product Purchase and Abandoned Cart outcomes, the full order and cart domain objects are stored in their respective outcomes. Similar objects are persisted for goals and page events.

The following table contains an overview of the reports and where the underlying data comes from:

Report	Outcomes	Page events	Goals
Overview	Abandoned Cart		Visitor Order Created
Orders	Product Purchase		
Orders/Order details	Product Purchase		
Products/Products viewed		Visited Product Details Page	
Products/Products added to cart		Lines Added To Cart	
Products/Products purchased			Visitor Order Created
Missed sales opportunities		Visited Product Details Page, Lines Added To Cart	Visitor Order Created
Abandoned carts	Abandoned Cart		
Abandoned carts/Cart details	Abandoned Cart		
Shopping cart activity/Cart lines removed		Lines Removed From Cart	
Shopping cart activity/Cart lines added		Lines Added To Cart	
Shopping cart activity/Cart lines updated		Lines Updated On Cart	

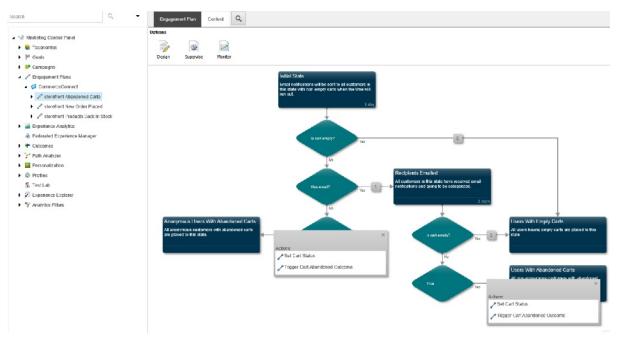
Abandoned carts

Note

In Commerce Connect 9.0.2, the Abandoned Cart marketing campaign does not trigger the Abandoned Carts outcome. Therefore the Abandoned Carts report does not show any data.

The Product Purchase outcome is part of the Experience Platform while the Abandoned Cart outcome is defined in Sitecore Commerce Connect. The monetary value associated with all outcomes contains a negative value equal to the cart total for abandoned carts to indicate the missed sales opportunity.

Abandoned Cart outcomes are triggered by the Abandoned Carts engagement plan and the Trigger Abandoned Cart Outcome action by default. The Abandoned Carts engagement plan comes with Commerce Connect:



Custom domain model objects

Commerce 8.1 introduced AnalyticsData entities for every page event, goal and outcome that is triggered. This encapsulates the analytics data and makes an abstraction that is persisted and defines how to persist and retrieve the data. The AnalyticsData entities are used on both the tracking side, for examples, in the Connect API and on the reporting side.

You can create custom reports and modify the existing reports by adding

custom data that is only available in customized versions of the Connect domain model objects that are used in the individual connectors for the specific external commerce systems. Only the standard Connect entities are tracked and persisted in xDB by default, but both standard and custom entities/objects can be persisted in xDB for extensibility purposes. If your solution is integrated with a commerce system like Experience Commerce 9 where extended domain models are in use, the objects are mapped back to the standard Connect entities and thereby stripped of all the custom values including properties.

Note

Before you can de-serialize an object, the object type must be registered in xDB. This can be a limitation because the Reporting Service server role cannot by default be updated with custom types in certain scenarios. For instance, on Azure, the ARM templates would have to be extended with additional custom WDPs that contain definitions of the custom object types.

The /App_Config/Include/Sitecore.Commerce.config configuration file contains the following setting:

<setting name="Commerce.Analytics.EntitiesIncludedInXDB"
value="Base"/>

This setting determines if the standard Connect objects, custom objects, or both standard and custom objects are persisted in xDB.

The setting takes three values:

Base

The default value

- Custom
- Both

Note

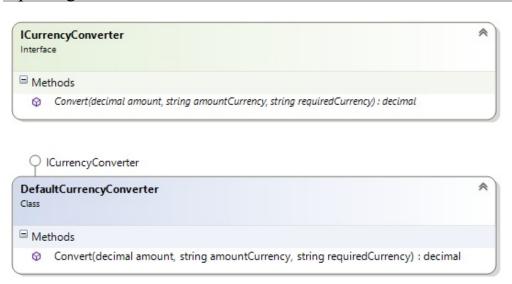
The standard reports require that the standard Connect entities are present for the values Base or Both to work. Setting this value to Both requires more storage space in xDB.

The currency converter

The Commerce Experience Profile reports passes monetary values through a currency converter before it displays these values. The currency converter is responsible for converting the monetary values into the correct currency for the report. If your commerce site uses multiple currencies, you must implement a currency converter because the default version just returns the original value. If you do not do this, the reports will not be correct.

Note

In a distributed environment, the code and configuration will be on the content management (CM) server and the converter is called before the reporting values are returned to the UI.



Method parameter	Description	
amount	Amount to be converted.	
amountCurrency	Currency of the current transaction.	
requiredCurrency	Currency to convert to.	

To create a new currency converter, simply create a class that derives from ICurrencyConverter and implement the Convert method and change the configuration. The following configuration is defined in the Sitecore.Commerce.ExperienceProfile.config file:

```
name="Commerce.ExperienceProfile.ReportingCurrencyCode"
value="USD"/>
</settings>
```

That defines the reporting currency.

To identify the implementation of the currency converter that Sitecore calls before returning the monetary values the UI:

Experience Analytics Commerce tab - the underlying technology

The reports on the Experience Analytics Commerce tab come with Sitecore Commerce Connect. For more information about installing the Commerce Connect package, see http://dev.sitecore.net.

This topic describes some of the technology behind these reports:

- The underlying data
- The currency converter

Note

The Experience Analytics reports are not available in Commerce Connect 9.0 and 9.0.1.

The underlying data

The table below shows where the underlying data in the reports come from:

Report	Chart	Page event/goal	Segment	Table ke
Orders	Number of orders	Visitor Order Created	All orders	OrderID
Orders	Average order amount	Visitor Order Created	All orders	OrderID
Orders	Total order amount	Visitor Order Created	All orders	OrderID
Orders	Total order amount	Visitor Order Created	All orders	OrderID

Orders	Longost	Visitor	All orders	OrderID
Orders	Largest orders by order amount	Order Created	All orders	OrderID
Orders	Largest orders by quantity of items	Visitor Order Created	All orders	OrderID
Orders	Number of orders	Visitor Order Created	All orders	OrderID
Campaigns	Campaigns by number of orders	Visitor Order Created	Campaigns by orders	CampaignId
Campaigns	Campaigns by order amount	Visitor Order Created	Campaigns by orders	CampaignId
Products	Product details viewed	Visited Product Detail Page	All products visited	ItemID_ProductID
Products	Bestsellers	Visitor Order Created	All products purchased	SitecoreProductItemI
Products	Most viewed product details	Visited Product Detail Page	All products visited	ItemID_ProductID
Products	Most viewed product details	Visited Product Detail Page	All products visited	ItemID_ProductID

Categories	Categories viewed	Visited Category Page	All categories visited	ItemID_CategoryID
Categories	Most viewed categories	Visited Category Page	All categories visited	ItemID_CategoryID
Categories	Most viewed categories	Visited Category Page	All categories visited	ItemID_CategoryID
Customers	Registrations	User Account Created	All user registrations	ExternalID
Customers	Registrations	User Account Created	All user registrations	ExternalID
Customers	Top customers by total order amount	Visitor Order Created	All customer orders	CustomerID
Customers	Top customers by number of orders	Visitor Order Created	All customer orders	CustomerID
Customers	Customers by total order amount	Visitor Order Created	All customer orders	CustomerID
Customers	Customers by number of orders	Visitor Order Created	All customer orders	CustomerID
Customers	Top contacts by total	Visitor Order	All contact orders	UserID

	order amount	Created		
Customers	Top contacts by number of orders	Visitor Order Created	All contact orders	UserID
Customers	Contacts by total order amount	Visitor Order Created	All contact orders	UserID
Customers	Contacts by number of orders	Visitor Order Created	All contact orders	UserID
Cart lines	Products most frequently removed from the cart	Lines Removed From Cart	All cart removals	ProductID
Shopping Cart Activity	Products most frequently added to the cart	Lines Added To Cart	All cart additions	ProductID
Shopping Cart Activity	Products most frequently updated on the cart	Lines Updated On Cart	All cart updates	ProductID
Shopping Cart Activity	Product- quantity most frequently updated on the cart	Lines Updated On Cart	All cart updates	ProductID
Filtering and sorting	Facets most frequently	Facet Applied	All facets applied	Facet name

	applied			
Filtering and sorting	Sort options most frequently applied	Product Sorting	All sort options	Sort key_Sort direction
Regional settings	Regional settings most frequently applied	Culture Chosen	All cultures selected	Culture
Internal search	Top internal keywords that gave the fewest results	Search	All search terms	Search term
Internal search	Top internal keywords that gave the most results	Search	All search terms	Search term
Internal search	Top internal keywords that gave the highest revenue	Search event Visitor Order Created event	All search term purchases	Search term
Payment and shipping	Most popular shipping methods	Visitor Order Created	All Shipping Methods	ShippingMethodID
Payment and shipping	Most popular payment methods	Visitor Order Created	All Payment Methods	PaymentMethodID
Payment and	Payment by gift card	Gift Card Purchase	All gift card purchases	GiftCardPurchase (co

shipping				
Payment and shipping	Payment by loyalty card	Loyalty Card Purchase	All loyalty card purchases	LoyaltyCardPurchase string)
Wish list activity	Products most frequently removed from the wish list	Lines Removed From WishList	All wishlist removals	ItemId_ProductId
Wish list activity	Products most frequently added to the wish list	Lines Added to WishList	All wishlist additions	ItemId_ProductId
Wish list activity	Products most frequently updated in the wish list	Lines Updated On WishList	All wishlist updates	ItemId_ProductId
Loyalty programs	Loyalty program enrollment	Loyalty Program Joined	All loyalty programs joined	ExternalId
Loyalty programs	Most popular loyalty programs	Loyalty Program Joined	All loyalty programs joined	ExternalId

The currency converter

The Commerce Experience Analytics dimensions save monetary values as part of the data. These values are saved in the original currency of the orders, which means that if your site supports multiple currencies, the values might be difficult to analyze. However, the Connect Experience Analytics dimensions call a special currency converter to help solve this problem. The converter allows the dimensions to resolve the monetary values in the

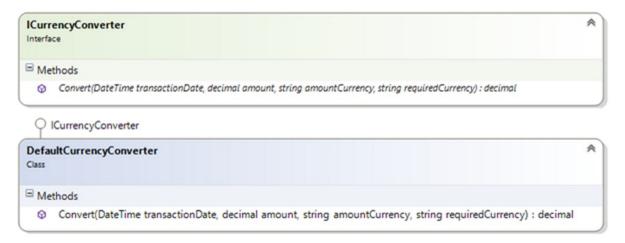
specific reporting currency that you require.

The default implementation of the currency converter simply returns the original value and therefore it is up to you to supply an implementation that will convert the monetary values accordingly.

Note

In a distributed environment, the code and configuration is on the processing server, and the converter is called just before the dimension data is written to the database.

Use this information to implement the conversion:



Method parameter	Description
transactionDate	The date that the transaction occurred. Use this to determine when the transaction occurred so that you can convert the amount correctly. In Sitecore, you can regenerate the dimension so that this date may represent a past transaction.
amount	The amount to be converted.
amountCurrency	The currency of the current transaction.
requiredCurrency	The currency that you want to convert to.

To create a new currency converter, create a class that implements the interface *ICurrencyConverter*, implement the *Convert* method, and then change the configuration in the

```
Sitecore.Commerce.ExperienceAnalytics.config file:
```

This defines your reporting currency. The configuration in the following sample identifies the implementation of the currency converter that will be called prior to the dimension data being written to the database: