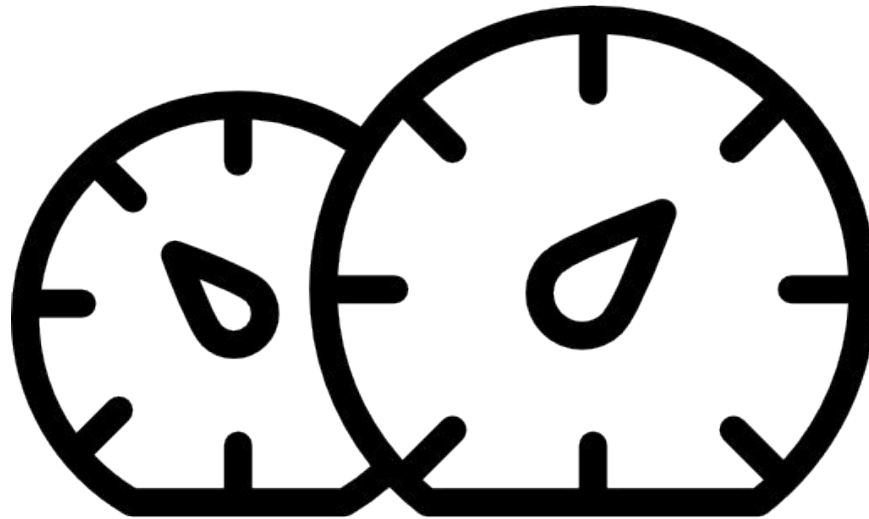
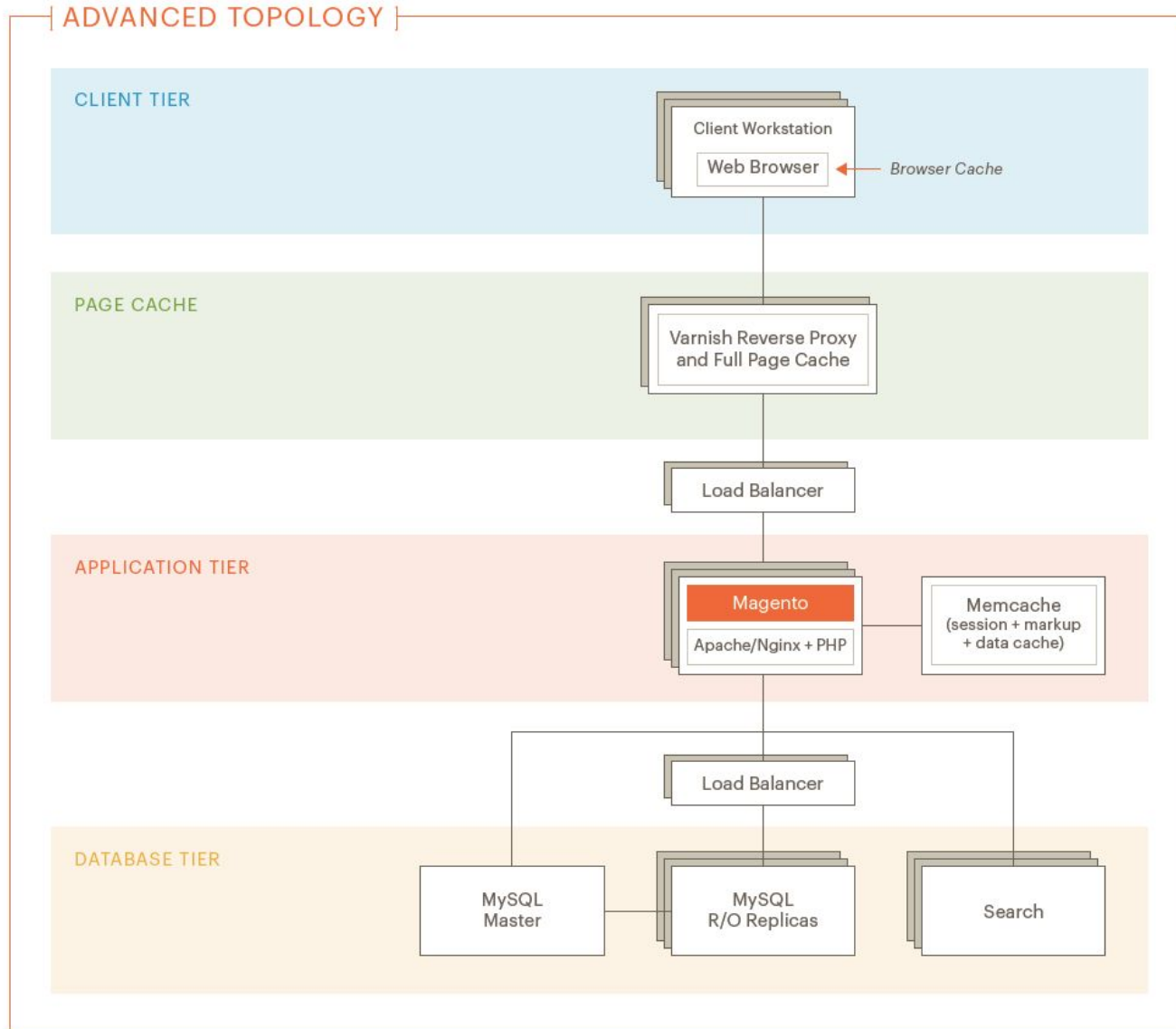


Magento 2

Performance-Verbesserungen



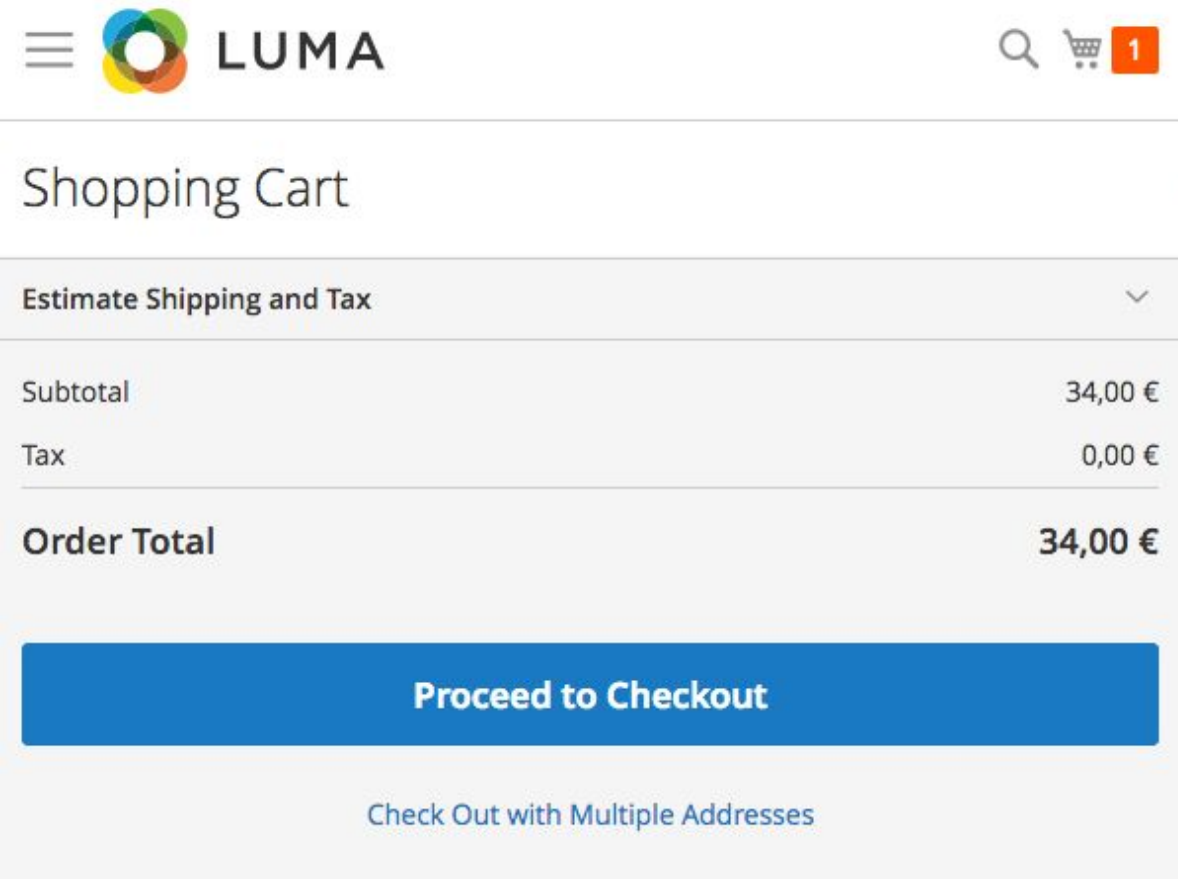
/Schichten der Magento 2-Architektur



/Client-seitige Verbesserungen

- ❑ komplettes HTML, CSS und Javascript wird minified
- ❑ CSS-Preprocessing mit LESS oder SASS
- ❑ Einsatz des Browser Caches für statische Dateien
- ❑ Dynamische Objekte werden im Browser Cache zwischengelagert und als JSON zurückgegeben
- ❑ Verringerung der Ladezeiten durch asynchrone Bearbeitung der Checkout- und Warenkorb-Operationen

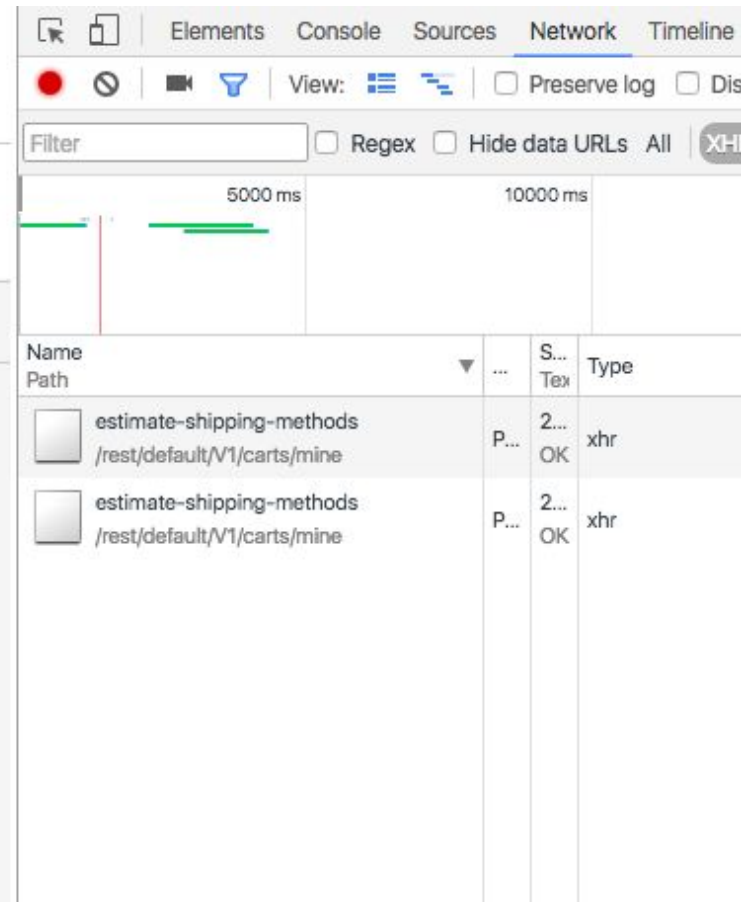
/Client-seitige Verbesserungen



The screenshot shows the LUMA shopping cart page. At the top left is the LUMA logo. To the right are search and cart icons, with the cart icon showing a red badge with the number '1'. The main heading is 'Shopping Cart'. Below it is a section for 'Estimate Shipping and Tax' with a dropdown arrow. The cart items are listed as follows:

Item	Price
Subtotal	34,00 €
Tax	0,00 €
Order Total	34,00 €

At the bottom, there is a large blue button labeled 'Proceed to Checkout' and a link that says 'Check Out with Multiple Addresses'.



The screenshot shows the Network tab of a browser's developer tools. The top navigation bar includes 'Elements', 'Console', 'Sources', 'Network', and 'Timeline'. The Network tab is active, showing a list of requests. The first request is highlighted, and its details are shown below. The request is an XHR to the path 'estimate-shipping-methods /rest/default/V1/carts/mine'. The status is '2... OK'.

Name	Path	S...	Type
estimate-shipping-methods	/rest/default/V1/carts/mine	P...	xhr
estimate-shipping-methods	/rest/default/V1/carts/mine	P...	xhr

/Client-seitige Verbesserungen

Menu Account

Welcome, Niels!

My Account

My Wish List

Sign Out

Elements Console Sources Network Timeline Profiles Application Security Audits EditThisCookie

View: [List Icon] [Code Icon] [Toggle] Preserve log [Toggle] Disable cache [Toggle] Offline No throttling [Dropdown]

Filter [Input] [Toggle] Regex [Toggle] Hide data URLs [Toggle] All XHR JS CSS Img Media Font Doc WS Manifest Other

100 ms 200 ms 300 ms 400 ms 500 ms 600 ms 700 ms 800 ms

Name	Path	Headers	Preview	Response	Cookies	Timing
magento-de...				92 93 eader links"> <li class="greet welcome" data-bind="scope: 'customer'"> 94 <!-- ko if: customer().fullname --> 95 96 97 <!-- /ko --> 98 <!-- ko ifnot: customer().fullname --> 99 100 <!-- /ko --> 101 > 102 ipt type="text/x-magento-init"> 103		
a9d9e364b2...	/pub/static/_...					
logo.svg	/pub/static/fr...					
c5a63d2093...	/pub/static/...					

/Caching

- ❑ Varnish mit ESI-Includes und asynchronem Laden von dynamischen Daten
- ❑ weitere Magento Caches
 - ❑ FPC
 - ❑ Database Schema
- ❑ Konfiguration für Redis, Nutzung als Session-Storage

/System-Konfiguration

Full Page Cache

Caching Application [global]	Varnish Cache (Recommended) ▼	<input type="checkbox"/> Use system value
TTL for public content [global]	86400	<input checked="" type="checkbox"/> Use system value

Public content cache lifetime in seconds. If field is empty default value 86400 will be saved.

⊖ Varnish Configuration

Access list [global]	localhost
--------------------------------	-----------

IPs access list separated with \,\, that can purge Varnish configuration for config file generation. If field is empty default value localhost will be saved.

Backend host [global]	localhost
---------------------------------	-----------

Specify backend host for config file generation. If field is empty default value localhost will be saved.

Backend port [global]	8080
---------------------------------	------

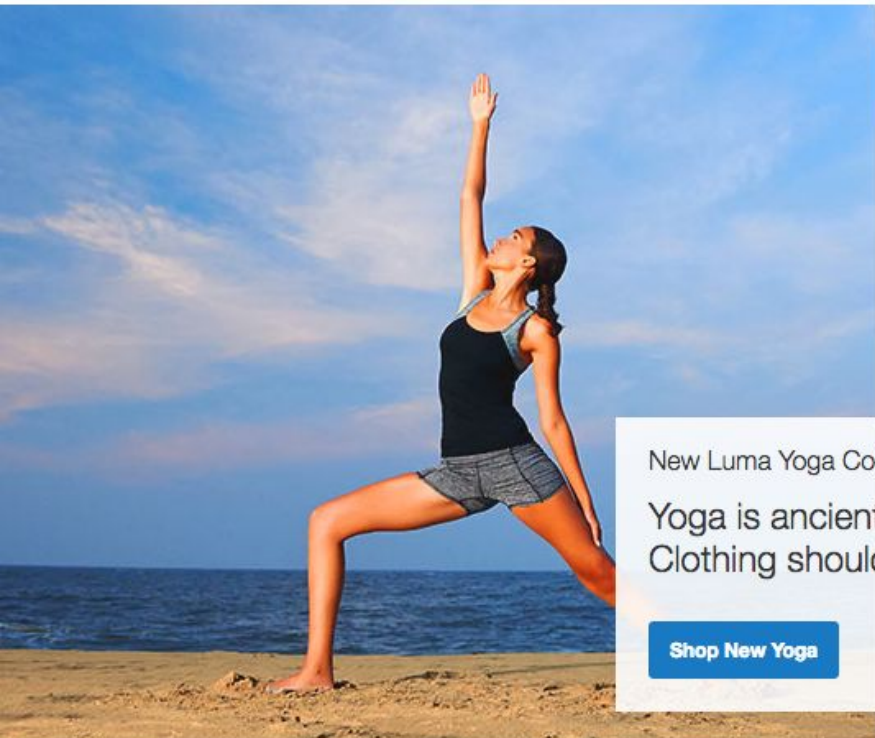
Specify backend port for config file generation. If field is empty default value 8080 will be saved.

Export Configuration [global]	Export VCL for Varnish 3
[global]	Export VCL for Varnish 4

/Caching



Women

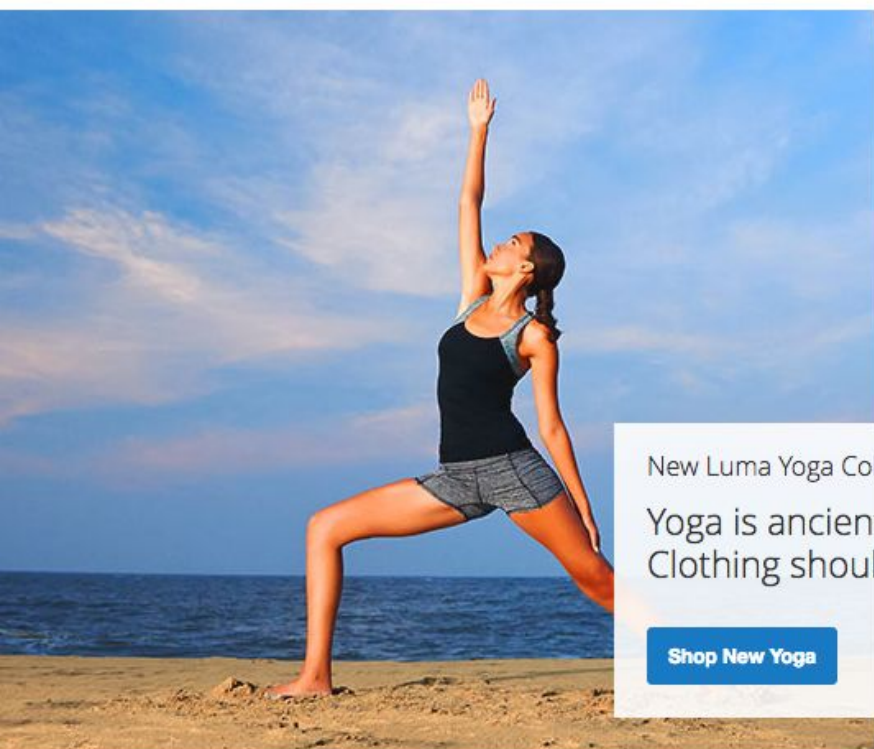


Name	Path	...	Te	T	...	S	Time	Latency	Timeline - Start Time
women.html		...	...	dc	...	10	352 ms		
82a8a1ebabe6410...	/pub/static/_cache/...	...	...	sty	...	41	6 ms		
c5a63d20931baa3...	/pub/static/_cache/...	...	...	sc	...	41	85 ms		
styles.css	/pub/media	...	...	sty	...	4.1	5 ms		
logo.svg	/pub/static/frontend...	...	...	sv	...	3.1	3 ms		
styles-l.min.css	/pub/static/frontend...	...	...	sty	...	10	6 ms		
womens-main.jpg	/pub/media/wysiwy...	...	...	jpe	...	78	4 ms		
womens-t-shirts.png	/pub/media/wysiwy...	...	...	pr	...	6.1	3 ms		
womens-pants.jpg	/pub/media/wysiwy...	...	...	jpe	...	48	3 ms		
womens-erin.jpg	/pub/media/wysiwy...	...	...	jpe	...	9.1	3 ms		
womens-erin.jpg	/pub/media/wysiwy...	...	...	jpe	...	9	2 ms		
womens-erin.jpg	/pub/media/wysiwy...	...	...	jpe	...	5	2 ms		

/Caching



Women

A screenshot of the Network tab in a web browser's developer tools. The top bar shows "Elements", "Console", "Sources", "Network", "Timeline", "Profiles", and "Application". The "Network" tab is active, showing a list of resources. The table below lists the resources with their names, paths, methods, status codes, types, sizes, and times. A timeline visualization at the top shows the duration of each resource load.

Name	Path	M	T	S	Time	Timeline - Start Time
					Latency	
women.html		GET	200	105	4 ms	
82a8a1ebabe6410...	/pub/static/_cache/...	GET	200	412	6 ms	
c5a63d20931baa...	/pub/static/_cache/...	GET	200	411	85 ms	
styles.css	/pub/media	GET	200	411	9 ms	
logo.svg	/pub/static/fronten...	GET	200	313	6 ms	
styles-l.min.css	/pub/static/fronten...	GET	200	106	8 ms	
womens-main.jpg	/pub/media/wysiw...	GET	200	78	6 ms	
womens-t-shirts.p...	/pub/media/wysiw...	GET	200	61	5 ms	
womens-pants.jpg	/pub/media/wysiw...	GET	200	48	6 ms	
womens-erin.jpg	/pub/media/wysiw...	GET	200	91	5 ms	
womens-category...				51	5 ms	

/Performance-Verbesserungen in der Anwendung

- ❑ Optimierung für PHP7
- ❑ PHP Code Compilation
- ❑ Layout Compilation
- ❑ asynchrone Datenbearbeitung in der Produkt- und Bestellverwaltung
- ❑ Event-Driven-Approach mit Nginx

/Performance-Verbesserungen in der Anwendung

- ❑ Kontextabhängige Konfiguration
 - ❑ Development
 - ❑ Production
 - ❑ (Default)

/Datenbank-Verbesserungen

- ❑ Multiple Datenbanken, pro Subsystem verwendbar
- ❑ Command Query Responsibility Segregation (CQRS) database pattern
- ❑ MySQL Cluster Support

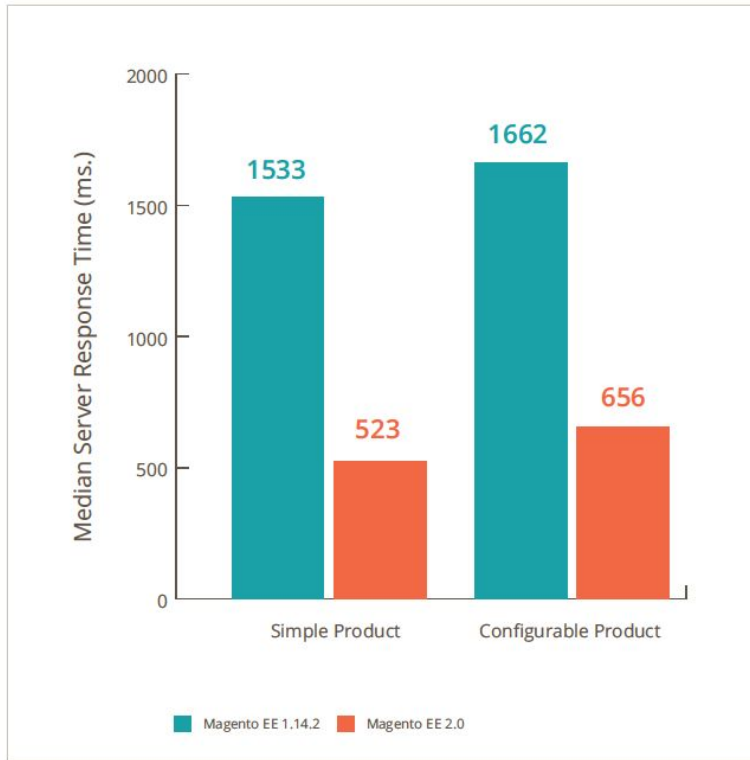
/Performance messen

The Magento Performance Toolkit:

- ❑ Skript und diverse jMeter Tests für konsistente und kontinuierliche Performance-Tests

/Performance messen

Add to Cart



Customer Checkout Operations (All Steps Combined)

