

# HTTP-запросы

## 1. Отправка GET запроса на сайт <https://developer.mercedes-benz.com/products>

Для этого я сначала подключился к серверу с использованием флага --ssl, так как сервер использует HTTPS. Затем я отправил GET запрос:

GET /products HTTP/1.1

Host: developer.mercedes-benz.com

Connection: close

```
Administrator: PowerShell
PS C:\Users\matin> nc -ssll developer.mercedes-benz.com 443
GET /products HTTP/1.1
Host: developer.mercedes-benz.com
Connection: close

HTTP/1.1 200 OK
Date: Sat, 15 Mar 2025 20:11:45 GMT
Content-Type: text/html; charset=UTF-8
Content-Length: 4000
Connection: close
Cache-Control: no-store
Content-Security-Policy: style-src *.usersnap.com 'unsafe-inline' https://googletagmanager.com https://www.googletagmanager.com https://tagmanager.google.co
n https://fonts.googleapis.com 'self'; img-src mbdevportal.blob.core.windows.net *.usersnap.com *.usercentrics.eu https://*.google-analytics.com https://*.g
oogletagmanager.com https://*.analytics.google.com https://*.g.doubleclick.net https://*.google.com https://*.google.de https://googletagmanager.com https://
/ssl.gstatic.com https://www.gstatic.com https://fonts.gstatic.com data: 'self'; media-src mbdevportal.blob.core.windows.net 'self'; font-src *.usersnap.com
https://fonts.gstatic.com data: 'self'; connect-src *.usersnap.com *.usercentrics.eu mubeapi.connect-business.net api.mercedes-benz.com nonprod.api.mercede
s-benz.com ssoalpha.dvb.corpinter.net service.connect-business.net service-preprod.connect-business.net service-dev.connect-business.net ssoalpha.am.dvb.cor
pinter.net service-preprod.amap.connect-business.net service.amap.connect-business.net https://*.google-analytics.com https://*.analytics.google.com https:/
/*.googletagmanager.com https://*.g.doubleclick.net https://*.google.com https://*.google.de 'self'; script-src 'strict-dynamic' 'nonce-PGbySBrCkBU8BtuvaPR8
808NkHc8sW3+GhveGi2oNDM='; frame-src status.data.mercedes-benz.com; default-src 'self'; frame-ancestors 'none';
Expires: 0
Pragma: no-cache
Set-Cookie: connect.sid=s%3AKwTHL0N0v7a0p5Pa7yk04TF0D9Liy0CI.02xhb9hLkeq6WM%2Fi0jIJPkaN6E8aPSX4Zg%2BtEuGQw; Path=/; HttpOnly; Secure; SameSite=Lax
X-Content-Type-Options: nosniff
X-Request-Id: d2cb38e7-e2ea-47b4-a0ed-8a06e26564cd
X-Xss-Protection: 1
Strict-Transport-Security: max-age=31536000; includeSubDomains

<!-- prettier-ignore -->
<!doctype html>
<html lang="en-US">
<head>
  <!-- Google Tag Manager -->
  <script nonce="PGbySBrCkBU8BtuvaPR8808NkHc8sW3+GhveGi2oNDM=" data-processing-service="Google-Tag-Manager">
    <!-- Set default consent to denied -->
    window.dataLayer = window.dataLayer || []
    function gtag() {
      dataLayer.push(arguments)
    }
    gtag('consent', 'default', {
      ad_user_data: 'denied',

      ad_user_data: 'denied',
      ad_personalization: 'denied',
      ad_storage: 'denied',
      analytics_storage: 'denied',
      wait_for_update: 2000,
    })
    gtag('set', 'ads_data_redaction', true)

    ;(function (w, d, s, l, i) {
      w[l] = w[l] || []
      w[l].push({ 'gtm.start': new Date().getTime(), event: 'gtm.js' })
      var f = d.getElementsByTagName(s)[0],
          j = d.createElement(s),
          dl = l != 'dataLayer' ? '&l=' + l : ''
      j.async = true
      j.src = 'https://www.googletagmanager.com/gtm.js?id=' + i + dl
      f.parentNode.insertBefore(j, f)
    })(window, document, 'script', 'dataLayer', 'GTM-KLSB8XM')
  </script>
  <!-- End Google Tag Manager -->
  <meta charset="utf-8" />
  <meta
    name="description"
    content="Mercedes-Benz /developers - The API platform by Mercedes-Benz"
  />
  <meta property="og:type" content="website"><meta property="og:title" content="Mercedes-Benz /developers &ndash; The API platform by Mercedes-Benz"><meta property="og:image" content="https://developer.mercedes-benz.com/static/img/logo_developers_sharing.jpg"><meta property="og:description" content="We make our API products available to encourage the development of innovative business models. Join us in driving digital progress in the automobile industry."><meta property="twitter:description" content="We make our API products available to encourage the development of innovative business models. Join us in driving digital progress in the automobile industry."><meta property="twitter:image" content="https://developer.mercedes-benz.com/static/img/logo_developers_sharing.jpg"><meta property="twitter:card" content="summary_large_image"><meta property="og:url" content="https://developer.mercedes-benz.com/products"><meta property="twitter:url" content="https://developer.mercedes-benz.com/products">
  <meta property="csp-nonce" content="placeholder" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <link rel="icon" href="/static/devportal/img/favicon.ico" />
  <title>Mercedes-Benz /developers - The API platform by Mercedes-Benz</title>
</head>
```

```

/*
 * this is frame-busting remediation for UI Redressing (CWE-693)
 */
    html {
        display: none;
    }
</style>
<script nonce="PGbySBrCkBU8BtuvaPR8808NkHcBsW3+GhveGi2oNDM=">
    let isIE = /*@cc_on!@*/ false || !!document.documentMode
    if (isIE) {
        window.location.href = '/static/unsupported-browser.html'
    }
</script>
<meta
    name="google-site-verification"
    content="UcCLbv002MV4TrRGa02LLpYEHlgb80k7e2LA5nU3bE4"
/>
<script nonce="PGbySBrCkBU8BtuvaPR8808NkHcBsW3+GhveGi2oNDM=" id="usercentrics-cmp" src="https://web.cmp.usercentrics.eu/ui/loader.js" data-settings-id="NOZ0DHIIIV" async></script>
<script nonce="PGbySBrCkBU8BtuvaPR8808NkHcBsW3+GhveGi2oNDM=" type="module" crossorigin src="/assets/main-Bk05-IXK.js"></script>
<link rel="stylesheet" crossorigin href="/assets/main-8o7dQujv.css">
</head>
<body>
    <div id="app"></div>
    <!-- built files will be auto injected -->
    <script nonce="PGbySBrCkBU8BtuvaPR8808NkHcBsW3+GhveGi2oNDM=">
        // @todo consider using modernizr
        'ontouchstart' in window &&
            document.documentElement.classList.add('touchevents')
        // this is frame-busting remediation for UI Redressing (CWE-693)
        if (self === top) {
            document.documentElement.style.display = 'block'
        } else {
            top.location = self.location
        }
    }
</script>
</body>
</html>

```

## Отправка POST запроса

```

Method and/or path not allowed* Connection #0 to host developer.mercedes-benz.com left intact
PS C:\Users\matin> ncatt --ssl reqres.in 443
POST /api/users HTTP/1.1
Host: reqres.in
Content-Length: 36
Content-Type: application/json

{"name": "john", "job": "programmer"}
HTTP/1.1 201 Created
Date: Wed, 19 Mar 2025 13:13:33 GMT
Content-Type: application/json; charset=utf-8
Content-Length: 84
Connection: keep-alive
Report-To: {"group": "heroku-nel", "max_age": 3600, "endpoints": [{"url": "https://nel.heroku.com/reports?ts=1742390013&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&scW90xv3ITDZWX81SHvV7e6YfQFqicLwoxLUKcW3b8%3D"}]}
Reporting-Endpoints: heroku-nel=https://nel.heroku.com/reports?ts=1742390013&sid=c4c9725f-1ab0-44d8-820f-430df2718e11&scW90xv3ITDZWX81SHvV7e6YfQFqicLwoxLUKcW3b8%3D
Nel: {"report_to": "heroku-nel", "max_age": 3600, "success_fraction": 0.005, "failure_fraction": 0.05, "response_headers": ["Via"]}
X-Powered-By: Express
Access-Control-Allow-Origin: *
Etag: W/"54-n5o09G7sCSnhZR1hPrD24mh8uo8"
Via: 1.1 vegur
cf-cache-status: DYNAMIC
Server: cloudflare
CF-RAY: 922d3a47dc39f123-DME
server-timing: cfL4;desc="?proto=TCP&rtt=22726&min_rtt=22387&rtt_var=9073&sent=7&recv=6&lost=0&retrans=0&sent_bytes=2819&recv_bytes=770&delivery_rate=149396&gcdwnd=146&unsent_bytes=0&cid=5598ecf2d18a590c&ts=8083&x=0"

{"name": "john", "job": "programmer", "id": "490", "createdAt": "2025-03-19T13:13:33.198Z"}

```

## 2. Отправьте запросы, выполненные по заданию 2, с помощью cURL.

```
Administrator: PowerShell x Administrator: PowerShell x + v
PS C:\Users\matin> curl --location --request GET 'https://developer.mercedes-benz.com/products' --header 'Accept: application/json'
<!-- prettier-ignore -->
<!doctype html>
<html lang="en-US">
  <head>
    <!-- Google Tag Manager -->
    <script nonce="C7oEbAStk1M6+eZK6HbJTx+hGc1LyRp4LcYdbzD8TOI=" data-processing-service="Google-Tag-Manager">
      <!-- Set default consent to denied -->
      window.dataLayer = window.dataLayer || []
      function gtag() {
        dataLayer.push(arguments)
      }
      gtag('consent', 'default', {
        ad_user_data: 'denied',
        ad_personalization: 'denied',
        ad_storage: 'denied',
        analytics_storage: 'denied',
        wait_for_update: 2000,
      })
      gtag('set', 'ads_data_redaction', true)

      ;(function (w, d, s, l, i) {
        w[l] = w[l] || []
        w[l].push({ 'gtm.start': new Date().getTime(), event: 'gtm.js' })
        var f = d.getElementsByTagName(s)[0],
            j = d.createElement(s),
            dl = l != 'dataLayer' ? '&l=' + l : ''
        j.async = true
        j.src = 'https://www.googletagmanager.com/gtm.js?id=' + i + dl
        f.parentNode.insertBefore(j, f)
      })(window, document, 'script', 'dataLayer', 'GTM-KLSBBXM')
    </script>
    <!-- End Google Tag Manager -->
    <meta charset="utf-8" />
    <meta
      name="description"
      content="Mercedes-Benz /developers - The API platform by Mercedes-Benz"
    />
    <meta property="og:type" content="website"><meta property="og:title" content="Mercedes-Benz /developers &ndash; The API platform by Mercedes-Benz"><meta property="twitter:title" content="Mercedes-Benz /developers &ndash; The API platform by Mercedes-Benz"><meta property="og:description" content="
  "
```

```
Administrator: PowerShell x Administrator: PowerShell x + v
"
  We make our API products available to encourage the development of innovative business models.
  Join us in driving digital progress in the automobile industry.
  "><meta property="twitter:description" content="
  We make our API products available to encourage the development of innovative business models.
  Join us in driving digital progress in the automobile industry.
  "><meta property="og:image" content="https://developer.mercedes-benz.com/static/img/logo_developers_sharing.jpg"><meta property="twitter:image" cont
ent="https://developer.mercedes-benz.com/static/img/logo_developers_sharing.jpg"><meta names="twitter:card" content="summary_large_image"><meta property="og:
url" content="https://developer.mercedes-benz.com/products"><meta property="twitter:url" content="https://developer.mercedes-benz.com/products">
  <meta property="csp-nonce" content="placeholder" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <link rel="icon" href="/static/devportal/img/favicon.ico" />
  <title>Mercedes-Benz /developers - The API platform by Mercedes-Benz</title>
  <style>
    /*
    * this is frame-busting remediation for UI Redressing (CWE-693)
    */
    html {
      display: none;
    }
  </style>
  <script nonce="C7oEbAStk1M6+eZK6HbJTx+hGc1LyRp4LcYdbzD8TOI=">
    let isIE = /*cc_on!@*/ false || !document.documentMode
    if (isIE) {
      window.location.href = '/static/unsupported-browser.html'
    }
  </script>
  <meta
    name="google-site-verification"
    content="UcCLbv082MV4TrRga82LLpYEHlgb80k7e2LA5nU3bE4"
  />
  <script nonce="C7oEbAStk1M6+eZK6HbJTx+hGc1LyRp4LcYdbzD8TOI=" id="usercentrics-cmp" src="https://web.cmp.usercentrics.eu/ui/loader.js" data-s
ettings-id="NOZ0D0HIV" async></script>
  <script nonce="C7oEbAStk1M6+eZK6HbJTx+hGc1LyRp4LcYdbzD8TOI=" type="module" crossorigin src="/assets/main-BkD5-IXK.js"></script>
  <link rel="stylesheet" crossorigin href="/assets/main-Bo7dQujv.css">
</head>

<body>
  <div id="app"></div>
  <!-- built files will be auto injected -->
  <script nonce="C7oEbAStk1M6+eZK6HbJTx+hGc1LyRp4LcYdbzD8TOI=">
```

```
<script nonce="C7oEbAStk1M6+eZK6HbJTx+hGc1LyRp4LcYdbzD8TOI=">
  // @todo consider using modernizr
  'ontouchstart' in window &&
    document.documentElement.classList.add('touchevents')
  // this is frame-busting remediation for UI Redressing (CWE-693)
  if (self === top) {
    document.documentElement.style.display = 'block'
  } else {
    top.location = self.location
  }
</script>
</body>
</html>
PS C:\Users\matin> |
```

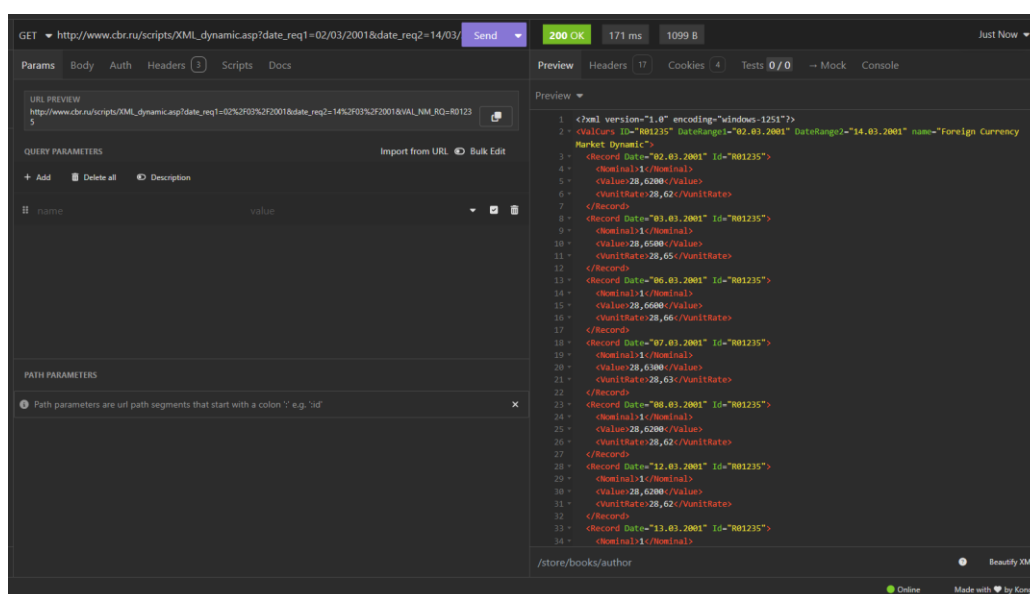
## POST запрос

```
PS C:\Users\matin> curl -X POST -d '{"name':'john','job':'programmer'}' https://reqres.in/api/users
{"{'name':'john','job':'programmer'}":"","id":"51","createdAt":"2025-03-19T13:16:19.645Z"}
PS C:\Users\matin> |
```

3. Установите Insomnia, Postman, HTTPie Desktop или другой инструмент. Отправьте с его помощью GET-запрос для получения курса одной выбранной валюты за выбранный период (задайте любые значения). Используйте API Банка

России: <https://www.cbr.ru/development/sxml/>

Я установил программу INSOMNIA, и с помощью неё отправил GET-запрос, используя API банка России. Получил XML файл, в котором указана дата и курс валюты за эту дату.



## Содержимое XML файла:

```
<?xml version="1.0" encoding="windows-1251"?>
<ValCurs ID="R01235" DateRange1="02.03.2001"
DateRange2="14.03.2001" name="Foreign Currency Market Dynamic">
  <Record Date="02.03.2001" Id="R01235">
    <Nominal>1</Nominal>
    <Value>28,6200</Value>
    <VunitRate>28,62</VunitRate>
  </Record>
  <Record Date="03.03.2001" Id="R01235">
    <Nominal>1</Nominal>
    <Value>28,6500</Value>
    <VunitRate>28,65</VunitRate>
  </Record>
  <Record Date="06.03.2001" Id="R01235">
```

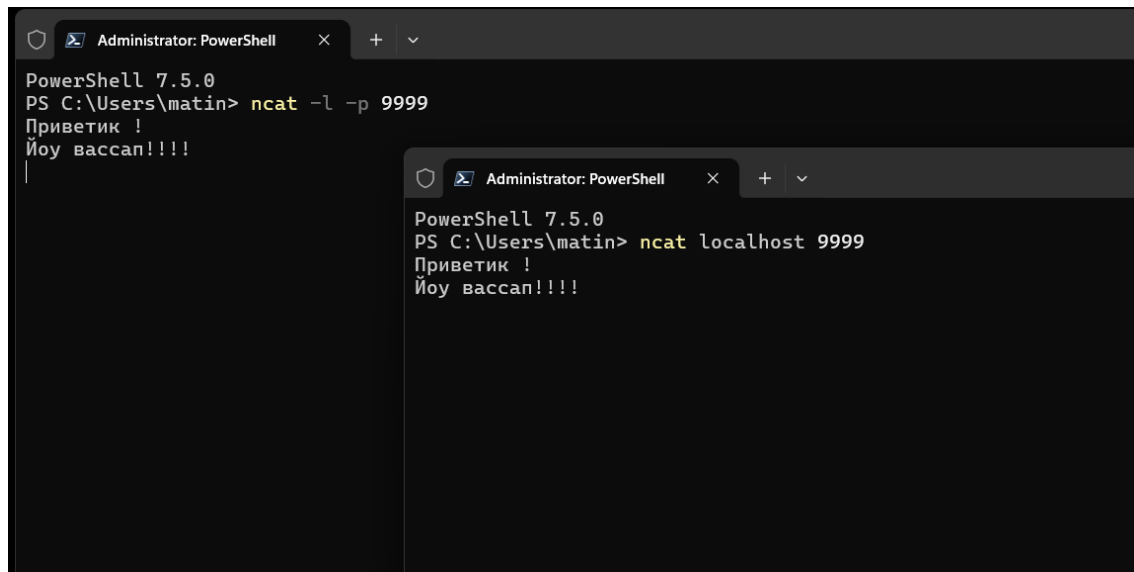
```
<Nominal>1</Nominal>
<Value>28,6600</Value>
<VunitRate>28,66</VunitRate>
</Record>
<Record Date="07.03.2001" Id="R01235">
  <Nominal>1</Nominal>
  <Value>28,6300</Value>
  <VunitRate>28,63</VunitRate>
</Record>
<Record Date="08.03.2001" Id="R01235">
  <Nominal>1</Nominal>
  <Value>28,6200</Value>
  <VunitRate>28,62</VunitRate>
</Record>
<Record Date="12.03.2001" Id="R01235">
  <Nominal>1</Nominal>
  <Value>28,6200</Value>
  <VunitRate>28,62</VunitRate>
</Record>
<Record Date="13.03.2001" Id="R01235">
  <Nominal>1</Nominal>
  <Value>28,6700</Value>
  <VunitRate>28,67</VunitRate>
</Record>
<Record Date="14.03.2001" Id="R01235">
  <Nominal>1</Nominal>
  <Value>28,6500</Value>
  <VunitRate>28,65</VunitRate>
</Record>
</ValCurs>
```

**4. Запустите два процесса netcat — сервер (netcat -l) и клиент (подключается к localhost). Проверьте работу полученного простейшего чата и продемонстрируйте скриншотами в отчёте.**

Сначала в одном окне я запустил сервер на порту 9999.

ncat -l -p 9999, а в другом окне я запустил netcat в режиме клиента, который подключается к локальному хосту (localhost) на тот же порт ncat localhost 9999

У меня получилось окно, в которое можно написать «Приветик!» и сообщение появится на стороне клиента. То же самое работает и наоборот.



```
Administrator: PowerShell
PowerShell 7.5.0
PS C:\Users\matin> ncat -l -p 9999
Приветик !
Йоу вассан!!!!

Administrator: PowerShell
PowerShell 7.5.0
PS C:\Users\matin> ncat localhost 9999
Приветик !
Йоу вассан!!!!
```