Platius. POS API v2 HTTP wrapper

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# Описание

Приложение **Platius.Service.Api.Front.v2.Client.Host.exe** представляет из себя обертку над [Platius: API для POS-системы](https://docs.google.com/document/d/11UsjfS34D7oOTuLgYzkdEJMjuyOlmnEdA9qq5ahoseU/edit) для вызова методов Platius Front Api по протоколу Http. Может использоваться в случаях, когда невозможна интеграция с использованием in-proc методов (Com-интерфейс, .Net-библиотека).

Приложение может быть запущено как консоль (запуск из командной строки) или как сервис Windows (установка с помощью install.bat).

Названия методов, их параметры, назначение и сценарии использования описаны в [Platius: API для POS-системы](https://docs.google.com/document/d/11UsjfS34D7oOTuLgYzkdEJMjuyOlmnEdA9qq5ahoseU/edit)

В данном документе отражены только правила вызова по http-протоколу.

# Системные требования

Версия .Net Framework: 4.0

Версия Windows: XP и выше

# Особенности сериализации типов данных

Используется стандартная .Net WCF JSON сериализация. Детали описаны в [Stand-Alone JSON Serialization](http://msdn.microsoft.com/en-us/library/bb412170(v=vs.110).aspx). Отдельно стоит выделить способ сериализации дат, т.к. он несколько отличается от общепринятого:

|  |
| --- |
| [DateTime](http://msdn.microsoft.com/en-us/library/system.datetime(v=vs.110).aspx) values appear as JSON strings in the form of "/Date(700000+0500)/", where the first number (700000 in the example provided) is the number of milliseconds in the GMT time zone, regular (non-daylight savings) time since midnight, January 1, 1970. The number may be negative to represent earlier times. The part that consists of "+0500" in the example is optional and indicates that the time is of the [Local](http://msdn.microsoft.com/en-us/library/shx7s921(v=vs.110).aspx) kind - that is, should be converted to the local time zone on deserialization. If it is absent, the time is deserialized as [Utc](http://msdn.microsoft.com/en-us/library/shx7s921(v=vs.110).aspx). The actual number ("0500" in this example) and its sign (+ or -) are ignored.  When serializing [DateTime](http://msdn.microsoft.com/en-us/library/system.datetime(v=vs.110).aspx), [Local](http://msdn.microsoft.com/en-us/library/shx7s921(v=vs.110).aspx) and [Unspecified](http://msdn.microsoft.com/en-us/library/shx7s921(v=vs.110).aspx) times are written with an offset, and [Utc](http://msdn.microsoft.com/en-us/library/shx7s921(v=vs.110).aspx) is written without.  The conversion only takes place if the "/" characters are escaped (that is, the JSON looks like "\/Date(700000+0500)\/"), and for this reason WCF's JSON encoder (enabled by the [WebHttpBinding](http://msdn.microsoft.com/en-us/library/system.servicemodel.webhttpbinding(v=vs.110).aspx)) always escapes the "/" character. |

# Методы

Общее правило: все параметры элементарных типов передаются через строку запроса, все параметры сложных типов передаются через тело запроса и заключены в обрамляюший json-контейнер.

Примеры сняты с помощью программы [Fiddler](http://www.telerik.com/download/fiddler).

Json-объекты в примерах дополнительно отформатированы для повышения читабельности

(в реальном приложении это делать необязательно).

# Заголовки HTTP-запросов

При выполнении вызовов необходимо в заголовках HTTP-запросов дополнительно передавать следующие параметры:

* **Accept-Language** - код локали, согласно RFC 3066.
* **Product** - название программного продукта, использующего POS API.
* **Product-Version** - версия кассового ПО.
* **Tape-Width** - ширина кассовой ленты в символах.
* **Terminal-Id** - строковый идентификатор кассового терминала.
* **Vendor** - разработчик кассового ПО

Все значения параметров должны быть заданы в заголовке каждого запроса и состоять из символов с кодами 32...127. Ограничение на длину значения - 255 символов.

Пример заголовков:

|  |
| --- |
| Accept-Language: ru-RU  Product: OmegaCash  Product-Version: 1.0.0.2  Tape-Width: 50  Terminal-Id: 3bf65135-264e-447f-9f1a-0c013f31c7df  Vendor: Omega Software |

## Инициализация

Параметры инициализации, аналогичные полям класса StartupParams, задаются через конфигурационный файл приложения (**Platius.Service.Api.Front.v2.Client.Host.exe.config**)

|  |
| --- |
| <applicationSettings>  <Platius.Service.Api.Front.v2.Client.Host.Properties.Settings>  <setting name="Host" serializeAs="String">  <value>http:\\www4.platius.ru:9010</value>  </setting>  <setting name="Login" serializeAs="String">  <value>test</value>  </setting>  <setting name="Password" serializeAs="String">  <value>test</value>  </setting>  <setting name="SyncCallTimeout" serializeAs="String">  <value>00:00:15</value>  </setting>  <setting name="AsycCallTimeout" serializeAs="String">  <value>00:00:03</value>  </setting>  <setting name="UserCompression" serializeAs="String">  <value>True</value>  </setting>  </Platius.Service.Api.Front.v2.Client.Host.Properties.Settings> |

Порт, на котором будет работать http-сервер, задается в файле **Config\serviceModel.Services.config**. По умолчанию равен **7777**.

## 

## Checkin

|  |  |
| --- | --- |
| Сигнатура | CheckinResult Checkin(string credential, UserSearchScope searchScope, Order order, ProductLimit[] limits) |
| Строка запроса | /checkin?credential={credential}&searchScope={searchScope} |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/checkin?credential=12345678&searchScope=PaymentToken HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 796  Expect: 100-continue  Accept-Encoding: gzip, deflate  Connection: Keep-Alive  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft  {  "order":{  "cashierName":"Петя",  "fiscalChequeNumber":null,  "guestCount":0,  "id":"d441b18b-f82c-44ca-bcbb-cdae3b85dd61",  "items":[  {  "amount":1,  "comment":null,  "printTime":null,  "productCategory":null,  "productCode":"111",  "productName":"Чай с лимоном",  "sum":25,  "sumAfterDiscount":25  },  {  "amount":1,  "comment":null,  "printTime":null,  "productCategory":null,  "productCode":"222",  "productName":"Пирожное",  "sum":75,  "sumAfterDiscount":75  }  ],  "number":null,  "openTime":{  "DateTime":"\/Date(-62135596800000)\/",  "OffsetMinutes":0  },  "restarauntSectionName":null,  "sum":25,  "sumAfterDiscount":25,  "tableNumber":null,  "waiterName":null  },  "limits":[  {  "canBePaidByBonuses":true,  "minPrice":10,  "productCode":"111"  },  {  "canBePaidByBonuses":true,  "minPrice":0,  "productCode":"222"  }  ]  } |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 766  Content-Type: application/json; charset=utf-8  Server: Microsoft-HTTPAPI/2.0  Date: Wed, 25 Feb 2015 12:51:36 GMT  {  "chequeFooter":"Подвал чека",  "loyatyResult":{  "programResults":[  {  "name":"Маркетинговая акция TEST1",  "operations":[  {  "code":"FixedSumDiscount",  "comment":"Скидка от маркетинговой акции TEST1",  "discountSum":3.50,  "productCode":"111",  "productName":"Чай с лимоном"  }  ],  "programId":"3a7ed2ca-754a-4a24-9996-67f651f6b3a4"  }  ],  "totalBonus":0  },  "paymentLimits":[  {  "maxSum":10,  "minSum":0,  "walletCode":"bonus"  },  {  "maxSum":5,  "minSum":3,  "walletCode":"paymentCard"  }  ],  "payments":[  {  "sum":1,  "walletCode":"bonus"  },  {  "sum":1,  "walletCode":"paymentCard"  }  ],  "userData":{  "birthday":"\/Date(793716696877+0300)\/",  "fullName":"Петров Иван Васильевич",  "photoUrl":"https:\/\/platius.ru\/apple-touch-icon-precomposed.png"  }  } |

## Pay

|  |  |
| --- | --- |
| Сигнатура | void Pay(Guid orderId, Guid transactionId, WalletPayment[] payments, AppliedDiscount[] discounts) |
| Строка запроса | /pay?orderId={orderId}&transactionId={transactionId} |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/pay?orderId=677d4849-0e6f-438b-b950-e2e6c7f680c0&transactionId=9fd7c365-ce9b-4606-baac-86bac8f073fc HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 275  Expect: 100-continue  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft  {  "payments":[  {  "sum":10,  "walletCode":"bonus"  },  {  "sum":86.5,  "walletCode":"paymentCard"  }  ],  "discounts":[  {  "comment":null,  "operationCode":"FixedSumDiscount",  "productCode":"111",  "productName":"Чай с лимоном",  "programId":"9fb41ecc-7aaf-4837-85a2-3aaf1e359138",  "sum":3.50  }  ]  } |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 0  Server: Microsoft-HTTPAPI/2.0  Date: Fri, 14 Nov 2014 13:06:51 GMT |

## Refund

|  |  |
| --- | --- |
| Сигнатура | RefundResult Refund(Guid orderId, WalletRefund[] refunds, CancelledOrderItem[] cancelledItems) |
| Строка запроса | /refund?orderId={orderId} |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/refund?orderId=4cba8738-83bb-4142-8ee6-b0901caa83f2 HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 104  Expect: 100-continue  Accept-Encoding: gzip, deflate  Connection: Keep-Alive  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft  {  "refunds":[  {  "sum":1.5,  "walletCode":"paymentCard"  }  ],  "cancelledItems":[  {  "amount":1,  "productCode":"111"  }  ]  } |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 40  Content-Type: application/json; charset=utf-8  Server: Microsoft-HTTPAPI/2.0  Date: Fri, 14 Nov 2014 13:24:19 GMT  {  "chequeFooter":"Подвал чека"  } |

## Close

|  |  |
| --- | --- |
| Сигнатура | CloseResult Close(Order order, decimal sumForBonus) |
| Строка запроса | /close?orderId={orderId}&sumForBonus={sumForBonus} |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/close?orderId=04b5816e-8ecb-4eea-a443-7096879f1135&sumForBonus=25 HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 0  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 98  Content-Type: application/json; charset=utf-8  Server: Microsoft-HTTPAPI/2.0  Date: Fri, 14 Nov 2014 13:30:35 GMT  {  "chequeFooter":"Подвал чека",  "loyaltyResult":{  "programResults":null,  "totalBonus":86.5  }  } |

## 

## Abort

|  |  |
| --- | --- |
| Сигнатура | void Abort(Guid orderId) |
| Строка запроса | /abort?orderId={orderId} |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/abort?orderId=677d4849-0e6f-438b-b950-e2e6c7f680c0 HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 275  Expect: 100-continue  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 0  Server: Microsoft-HTTPAPI/2.0  Date: Fri, 14 Nov 2014 13:06:51 GMT |

## 

## Reset

|  |  |
| --- | --- |
| Сигнатура | void Reset(Guid orderId) |
| Строка запроса | /reset?orderId={orderId} |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/reset?orderId=677d4849-0e6f-438b-b950-e2e6c7f680c0 HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 275  Expect: 100-continue  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 0  Server: Microsoft-HTTPAPI/2.0  Date: Fri, 14 Nov 2014 13:06:51 GMT |

## 

## UpdateOrder

|  |  |
| --- | --- |
| Сигнатура | CheckinResult UpdateOrder(Order order, ProductLimit[] limits) |
| Строка запроса | /update |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/update HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 796  Expect: 100-continue  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft  {  "order":{  "cashierName":"Петя",  "fiscalChequeNumber":null,  "guestCount":0,  "id":"677d4849-0e6f-438b-b950-e2e6c7f680c0",  "items":[  {  "amount":1,  "comment":null,  "printTime":null,  "productCategory":null,  "productCode":"111",  "productName":"Чай с лимоном",  "sum":25,  "sumAfterDiscount":25  },  {  "amount":1,  "comment":null,  "printTime":null,  "productCategory":null,  "productCode":"222",  "productName":"Пирожное",  "sum":75,  "sumAfterDiscount":75  }  ],  "number":null,  "openTime":{  "DateTime":"\/Date(-62135596800000)\/",  "OffsetMinutes":0  },  "restarauntSectionName":null,  "sum":25,  "sumAfterDiscount":25,  "tableNumber":null,  "waiterName":null  },  "limits":[  {  "canBePaidByBonuses":true,  "minPrice":10,  "productCode":"111"  },  {  "canBePaidByBonuses":true,  "minPrice":0,  "productCode":"222"  }  ]  } |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 766  Content-Type: application/json; charset=utf-8  Server: Microsoft-HTTPAPI/2.0  Date: Wed, 25 Feb 2015 13:13:40 GMT  {  "chequeFooter":"Подвал чека",  "loyatyResult":{  "programResults":[  {  "name":"Маркетинговая акция TEST1",  "operations":[  {  "code":"FixedSumDiscount",  "comment":"Скидка от маркетинговой акции TEST1",  "discountSum":3.50,  "productCode":"111",  "productName":"Чай с лимоном"  }  ],  "programId":"9fb41ecc-7aaf-4837-85a2-3aaf1e359138"  }  ],  "totalBonus":0  },  "paymentLimits":[  {  "maxSum":10,  "minSum":0,  "walletCode":"bonus"  },  {  "maxSum":5,  "minSum":3,  "walletCode":"paymentCard"  }  ],  "payments":[  {  "sum":1,  "walletCode":"bonus"  },  {  "sum":1,  "walletCode":"paymentCard"  }  ],  "userData":{  "birthday":"\/Date(793718020646+0300)\/",  "fullName":"Петров Иван Васильевич",  "photoUrl":"https:\/\/platius.ru\/apple-touch-icon-precomposed.png"  }  } |

## 

## Precheque

|  |  |
| --- | --- |
| Сигнатура | CheckinResult Precheque(Order order, ProductLimit[] limits) |
| Строка запроса | /precheque |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/precheque HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 796  Expect: 100-continue  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft  {  "order":{  "cashierName":"Петя",  "fiscalChequeNumber":null,  "guestCount":0,  "id":"677d4849-0e6f-438b-b950-e2e6c7f680c0",  "items":[  {  "amount":1,  "comment":null,  "printTime":null,  "productCategory":null,  "productCode":"111",  "productName":"Чай с лимоном",  "sum":25,  "sumAfterDiscount":25  },  {  "amount":1,  "comment":null,  "printTime":null,  "productCategory":null,  "productCode":"222",  "productName":"Пирожное",  "sum":75,  "sumAfterDiscount":75  }  ],  "number":null,  "openTime":{  "DateTime":"\/Date(-62135596800000)\/",  "OffsetMinutes":0  },  "restarauntSectionName":null,  "sum":25,  "sumAfterDiscount":25,  "tableNumber":null,  "waiterName":null  },  "limits":[  {  "canBePaidByBonuses":true,  "minPrice":10,  "productCode":"111"  },  {  "canBePaidByBonuses":true,  "minPrice":0,  "productCode":"222"  }  ]  } |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 766  Content-Type: application/json; charset=utf-8  Server: Microsoft-HTTPAPI/2.0  Date: Wed, 25 Feb 2015 13:13:40 GMT  {  "chequeFooter":"Подвал чека",  "loyatyResult":{  "programResults":[  {  "name":"Маркетинговая акция TEST1",  "operations":[  {  "code":"FixedSumDiscount",  "comment":"Скидка от маркетинговой акции TEST1",  "discountSum":3.50,  "productCode":"111",  "productName":"Чай с лимоном"  }  ],  "programId":"9fb41ecc-7aaf-4837-85a2-3aaf1e359138"  }  ],  "totalBonus":0  },  "paymentLimits":[  {  "maxSum":10,  "minSum":0,  "walletCode":"bonus"  },  {  "maxSum":5,  "minSum":3,  "walletCode":"paymentCard"  }  ],  "payments":[  {  "sum":1,  "walletCode":"bonus"  },  {  "sum":1,  "walletCode":"paymentCard"  }  ],  "userData":{  "birthday":"\/Date(793718020646+0300)\/",  "fullName":"Петров Иван Васильевич",  "photoUrl":"https:\/\/platius.ru\/apple-touch-icon-precomposed.png"  }  } |

## 

## GetNotifications

|  |  |
| --- | --- |
| Сигнатура | Notification[] Precheque(Order order, ProductLimit[] limits) |
| Строка запроса | /notifications |
| Http-метод | POST |
| Пример запроса | POST http://msk-dborisov.resto.lan:7777/platius/api/front/notifications HTTP/1.1  Content-Type: application/json; charset=utf-8  Host: msk-dborisov.resto.lan:7777  Content-Length: 22  Expect: 100-continue  Accept-Encoding: gzip, deflate  Accept-Language: ru-RU  Product: DemoCashRegister  Product-Version: 1.0.0.0  Tape-Width: 50  Terminal-Id: c277113b-91d3-49b6-a147-4f51de3dc2e7  Vendor: DemoSoft  {  "orderIds": []  } |
| Пример ответа | HTTP/1.1 200 OK  Content-Length: 1109  Content-Type: application/json; charset=utf-8  Server: Microsoft-HTTPAPI/2.0  Date: Wed, 29 Apr 2015 12:50:42 GMT  [  {  "content":{  "\_\_type":"paymentNotification:#Platius.Service.Api.Front.v2.Data.Notifications",  "isPaid":true,  "payments":[  {  "sum":88.61,  "walletCode":"bonus"  },  {  "sum":411.39,  "walletCode":"paymentCard"  }  ],  "sumToPay":0.0  },  "createdOn":"\/Date(1430310010000+0300)\/",  "id":"56fc5af9-e33a-42af-9529-e5ee00785ffc",  "message":"Оплата по заказу 9ebc5d07-d3b4-4421-bbc8-65e205c15f4e",  "notificationType":1,  "orderId":"9ebc5d07-d3b4-4421-bbc8-65e205c15f4e",  "userData":{  "birthday":"\/Date(465595200000+0300)\/",  "fullName":"Иванов Иван Иванович",  "photoUrl":null  }  },  {  "content":{  "\_\_type":"paymentNotification:#Platius.Service.Api.Front.v2.Data.Notifications",  "isPaid":true,  "payments":[  {  "sum":100.0,  "walletCode":"paymentCard"  }  ],  "sumToPay":0.0  },  "createdOn":"\/Date(1430311828000+0300)\/",  "id":"9d21453f-c677-44ab-a16d-9682431fc8ea",  "message":"Оплата по заказу edfb4e84-5ad6-478e-be43-c140c7b07f96",  "notificationType":1,  "orderId":"edfb4e84-5ad6-478e-be43-c140c7b07f96",  "userData":{  "birthday":"\/Date(465595200000+0300)\/",  "fullName":"Иванов Иван Иванович",  "photoUrl":null  }  }  ] |