



2TouchPOS DataKey Data API

V4

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About this Document

This document was written for 2TouchPOS version 3.03.6100 and version 4 of the DataKey API.

What is DataKey?

DataKey is a web service enabling you to retrieve your 2TouchPOS historical data and a summary of real time data.



History

Version 1 provides ticket detail data and inventory summary data. A ticket is comprised of menu items, modifiers, payments, gift card increases and gift certificate increases. Inventory summary data reports the total number of menu items and modifiers sold and their quantity used.

Version 2 added historical time clock data consisting of clock in and clock out data, adjustments and manager overrides.

Version 3 added card holder name for credit card payments and auto-generated identifiers.

What's new in Version 4?

Version 4 breaks the download service into a ticket service and a timeclock service and adds an additional web service to provide real time high level business information.



1. You can use V4 of the API to retrieve data from any storage version.
2. Two new fields were added to Ticket Details to indicate open menu items and custom modifiers. These two fields complete the data needed to reproduce the sales summary report.
3. A REST API has been added to allow users multiple ways to access the same data.
4. Naming conventions were updated to be consistent.

Data Identification

We now offer three ways for you and your integration partners to align data from multiple locations. Enterprise Reference Numbers allow you to identify data in 2Touch. Local Reference Identifiers and Local Reference Numbers allow you to identify data in the receiving software.

	Pros	Cons
ERNs	<ul style="list-style-type: none">You control the values	<ul style="list-style-type: none">You have to maintain the values at each location.
LRNs and LRIs	<ul style="list-style-type: none">Automatically supplied.Mapping is centralized	<ul style="list-style-type: none">You have to match the data in every 3rd party application.

Enterprise Reference Numbers (ERNs)

Enterprise reference numbers are identifiers you control and enter into 2Touch to identify departments, categories, menu items, pricing levels, modifier groups, unique modifiers, modifier options, course, employees, job descriptions, stations, station types, payment types, discounts, and coupons. Since you control ERNs, you can make them the same at every location.

Local Reference Identifier (LRIs)

Local Reference Identifiers are globally unique values automatically generated and supplied by 2Touch. Third party software can use these values to identify equivalent data.

LRIs were introduced in the DataKey V3. Data collected in previous versions will not have an LRI. Data collected in V3 or after will have LRIs.

Local Reference Number (LRNs)

Local Reference Numbers are locally unique and supplied by 2Touch. The numbers generated are unique within each location and relative to each data type. For example, no two menu items at a location will have the same LRN.

The numbers are not unique between data types. A menu item and a modifier might have the same LRN.

The numbers are not unique between locations. Two different menu items from two locations might have the same LRN.

In order to properly identify the data, you must use the LRN, the data type, and the location.

LRNs were introduced in the DataKey V3. Data collected in previous versions will not have an LRN. Data collected in V3 or after will have LRNs.

SOAP API Overview

Service Endpoints

<http://DataKey.2TPos.com/2TouchPOS/DataKey/V4/SOAP/TicketService.svc>
<http://DataKey.2TPos.com/2TouchPOS/DataKey/V4/SOAP/TimeClockService.svc>
<http://DataKey.2TPos.com/2TouchPOS/DataKey/V4/SOAP/RealtimeService.svc>

Method Credentials

All service methods take your Application Id, the Site Id and Auth Code as credentials. Requests with an invalid Application Id, Site Id, or Auth Code combination will be rejected. The result will indicate the failure in the status and the status reason will be 'Invalid application id/ site Id / authorization code'. Some methods will require additional parameters such as dates, see each method for specific parameters.

Parameters

Name	Data Type	Notes
applicationId	Guid	
siteId	Guid	
authCode	Guid	

Method Results

All service methods return results of the request. Check the result Status to ensure the operation succeeded. If the operation failed, the reason will be in the result's Reason field. See each method for the specific data type returned.

Returns

Name	Data Type	Notes
Status	Enum	Success = 0, Failure = 1
Reason	String	The reason for a failure
RequestedOn	DateTime	The date and time of the request
Data	<data type>	Varies per request

Example Use of the TicketService using SOAP

Here is a C#.Net example of calling the TicketService and retrieving Metadata using the Visual Studio created wrapper library for the web service.

```
public async Task RefreshData_Executed()
{
    Executing = true;
    ErrorMessage = string.Empty;

    try
    {
        TicketServiceClient client = new TicketServiceClient();
        TicketMetadataResult result = await client.GetMetadataAsync(applId, siteId, authCode);

        if (result.Status == Status.Success)
        {
            TicketMetadata ticketMetadata = result.Data;
            this.EarliestBusinessDate = ticketMetadata.EarliestBusinessDate;
            this.LatestBusinessDate = ticketMetadata.LatestBusinessDate;
            this.EarliestClosedOnDate = ticketMetadata.EarliestClosedOnDate;
            this.LatestClosedOnDate = ticketMetadata.LatestClosedOnDate;
        }
        else
        {
            ErrorMessage = result.Reason;
        }
    }
    catch (Exception ex)
    {
        ErrorMessage = ex.Message;
    }

    Executing = false;
}
```

REST API Overview

Service Endpoints

http://DataKey.2TPos.com/2TouchPOS/DataKey/V4/REST/TicketService
http://DataKey.2TPos.com/2TouchPOS/DataKey/V4/REST/TimeClickService
http://DataKey.2TPos.com/2TouchPOS/DataKey/V4/REST/RealtimeService

HTTP Methods

The REST API uses the standard HTTP GET method. Clients should set the request “Accept” header to the desired response format using either “application/json” or “text/xml”. Parameters should be passed as query string parameters.

Credentials

Credentials are passed to the service using the “Authorization” request header with a custom scheme. Clients should use an authorization scheme of “2TouchDataKey” and a base64 encoded string that contains the siteld, applicationId and authCode as the authorization parameter.

```
Authorization.Scheme = "2TouchDataKey";  
Authorization.Parameter = Convert.ToBase64String(  
    Encoding.UTF8.GetBytes("siteld=F05CE76E-81D2-40E9-90D5-239F002D3FBA& applicationId=46C230F9-  
E72C-4F7A-BF22-FE58880D9621&authCode= 09B806DA-9BDC-48F3-A9AA-B2CD74F77690"));
```

Limiting Results

Clients can limit the results of a request which return an array or list of items. There are two method of limiting results; by setting the “Range” request header to “items=0-9” or by passing in query parameters of “offset=0&limit=10”. When limiting results clients should check for HTTP Status Codes (206 and 416) in addition to other codes and the response header “Content-Range” which will contain the range of the items returned along with the total number of items “items 0-9/43”

Results

The REST API uses standard HTTP response status codes. The response body will contain data for success codes while error codes will contain additional about the error.

HTTP Status Code	Description	API meaning
2xx	Success	
200	OK	
204	No Content	The request was successful but there is no data to retrieve.
206	Partial Content	The request contained a range smaller than the range of the content. Only data in the requested range was returned.
4xx	Request Error	

HTTP Status Code	Description	API meaning
400	Bad Request	The request contains invalid syntax. See specific error response for details.
401	Unauthorized	The request was unable to grant access with the supplied siteld, applicationId and authcode.
403	Forbidden	Access could not be granted.
404	Not Found	The requested resource was not found.
416	Requested Range Not Satisfiable	The request contained a range that was outside of the range of the data.
5xx	Server Error	
500	Internal Server Error	Unexpected condition occurred on the server.

Examples Use of the TicketService using REST

Here is a javascript/jQuery example for calling the TicketService retrieving Metadata and MenuItemUsage

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/2.1.4/jquery.min.js"></script>
<script type="text/javascript">
    function CreateAuthHeader() {
        return '2TouchDataKey ' + window.btoa('applicationId= CB73C139-2941-4462-BB49-53EB4475CF0E ' +
            '&siteId=46C230F9-E72C-4F7A-BF22-FE58880D9621' +
            '&authCode=09B806DA-9BDC-48F3-A9AA-B2CD74F77690');
    }

    function SendRequest(action, path, data, success, error) {
        $.ajax(
        {
            url : 'http://datakey.2tpos.com/2TouchPOS/DataKey/V4/REST/' + path,
            type: action,
            headers: { 'Authorization': CreateAuthHeader() },
            contentType: 'application/json',
            data: data,
            success: success,
            error: error
        });
    }

    function GetMetadata() {
        SendRequest('GET', 'TicketService/Metadata', null,
            function (data) {
                alert(data.LatestBusinessDate);
            },
            function (jqXHR, textStatus, errorThrown) {
                alert(errorThrown);
            });
    }

    function GetMenuItemUsage(fromDate, toDate)
    {
        SendRequest('GET', 'TicketService/MenuItemUsage', { fromDate: fromDate, toDate: toDate },
            function (data) {
                alert(data.NetSales);
            },
            function (jqXHR, textStatus, errorThrown) {
                alert(errorThrown);
            });
    }

    function OnClick() {
        GetMetadata();
        GetMenuItemUsage('6/8/2011','6/9/2011');
    }
</script>
```

Here is a C#.Net example for calling the TicketService retrieving Metadata and MenuItemUsage.

```
public class ErrorResponse
{
    public string Message { get; set; }
}

public class TicketMetadata
{
    public DateTime LatestBusinessDate { get; set; }
    public DateTime LatestClosedOnDate { get; set; }
    public DateTime EarliestBusinessDate { get; set; }
    public DateTime EarliestClosedOnDate { get; set; }
}

public class MenuItemUsage
{
    public string ERN { get; set; }
    public int? LRN { get; set; }
    public Guid? LRI { get; set; }
    public string Name { get; set; }
    public double Quantity { get; set; }
    public double InventoryUsage { get; set; }
    public decimal SalesAmount { get; set; }
}

public class MenuItemUsageSummary
{
    public decimal NetSales { get; set; }
    public decimal Tax { get; set; }
    public decimal Total { get; set; }
    public List<MenuItemUsage> Details { get; set; }
}

public class RESTTicketClient
{
    private Guid siteld;
    private Guid applicationId;
    private Guid authCode;

    public RESTTicketClient(Guid siteld, Guid applicationId, Guid authCode)
    {
        this.siteld = siteld;
        this.applicationId = applicationId;
        this.authCode = authCode;
    }

    private T SendRequest<T>(string Path, string QueryParameters)
    {
        try
        {
            using (var client = new HttpClient())
            {
                client.BaseAddress = new Uri("http://DataKey.2TPos.com/");
                client.DefaultRequestHeaders.Accept.Clear();
                client.DefaultRequestHeaders.Accept.Add(new MediaTypeWithQualityHeaderValue("application/json"));
                client.DefaultRequestHeaders.Authorization = new AuthenticationHeaderValue("2TouchDataKey",
                Convert.ToBase64String(Encoding.Default.GetBytes(string.Format("siteld={0}&applicationId={1}&authCode={2}",
                siteld, applicationId, authCode))));

                var response = client.GetAsync("2TouchPOS/DataKey/V4/REST/TicketService" + Path +
```

```

        (string.IsNullOrWhiteSpace(QueryParameters) ? "" : HttpUtility.UrlPathEncode("? " +
QueryParameters))).Result;
        var result = response.Content.ReadAsStringAsync().Result;

        if (response.IsSuccessStatusCode)
        {
            T data = JsonConvert.DeserializeObject<T>(result);
            return data;
        }
        else
        {
            ErrorResponse errorStatus;
            if ((response.Content.Headers.ContentType != null) &&
(response.Content.Headers.ContentType.MediaType == "application/json"))
            {
                errorStatus = JsonConvert.DeserializeObject<ErrorResponse>(result);
                // Handle error
            }
            else
            {
                // Handle error
            }
        }
    }
}
catch (Exception)
{
}
return default(T);
}

public TicketMetadata Refresh_MetaData()
{
    return SendRequest<TicketMetadata>("/Metadata", "");
}

public MenuItemUsageSummary Refresh_MenuItemUsage(DateTime fromDate, DateTime toDate)
{
    return SendRequest<MenuItemUsageSummary>("/MenuItemUsage",
        string.Format("fromDate={0}&toDate={1}", fromDate.ToShortDateString(), toDate.ToShortDateString()));
}
public static void MainProgram()
{
    RESTTicketClient client = new RESTTicketClient(Guid.Parse("CB73C139-2941-4462-BB49-53EB4475CF0E "),
        Guid.Parse("46C230F9-E72C-4F7A-BF22-FE58880D9621"),
        Guid.Parse("09B806DA-9BDC-48F3-A9AA-B2CD74F77690"));
    client.Refresh_MetaData();
    client.Refresh_MenuItemUsage(DateTime.Parse("6/8/2011"), DateTime.Parse("6/9/2011"));
}
}

```

Ticket Methods

Metadata

SOAP : GetMetadata

REST: /Metadata

Returns summary information about your ticket data. Specifically, it returns the earliest business date, latest business date, earliest ticket closed on date, and latest ticket closed on date. This method should be used to ensure data is available before calling other methods.

Returns

TicketMetadata:

Name	Data Type	Notes
EarliestBusinessDate	DateTime	Date only
EarliestClosedOnDate	DateTime	
LatestBusinessDate	DateTime	Date only
LatestClosedOnDate	DateTime	

Menu Item Usage

SOAP : GetMetadata

REST: /MenuItemUsage

Returns summary data about the menu items used during the provided time period.

Parameters

Name	Data Type	Notes
fromDate	DateTime	
toDate	DateTime	

From Date and to Date are filters on ticket business dates. They are inclusive.

Returns

MenuItemUsageSummary:

Name	Type	Notes
Details	MenuItemUsage[]	
NetSales	Decimal	
Tax	Decimal	
Total	Decimal	

MenuItemUsage:

Name	Data Type	Max Length	Nullable	Notes
ERN	string	36	Y	
LRI	Unique Identifier	36	Y	
LRN	Int		Y	

InventoryUsage	double		N	
Name	string		N	
Quantity	double		N	
Sales Amount	Decimal		N	

Modifier Usage

SOAP : GetModifierUsage

REST: /ModifierUsage

Returns summary data about the modifiers used during the provided time period.

Parameters

Name	Data Type	Notes
fromDate	DateTime	
toDate	DateTime	

From Date and to Date are filters on ticket business dates. They are inclusive.

Returns

ModifierGroupUsageSummary:

Name	Data Type	Max Length	Nullable	Notes
ERN	string	36	Y	
LRI	Unique Identifier	36	Y	
LRN	Int		Y	
Modifiers	ModifierUsage[]		N	
Name	string		N	
Quantity	double		N	

ModifierUsage:

Name	Data Type	Max Length	Nullable	Notes
ERN	string	36	Y	
LRI	Unique Identifier	36	Y	
LRN	Int		Y	
InventoryUsage	double		N	
Name	string		N	
PriceLevel	String		N	
PriceLevelERN	String	36	Y	
PriceLevelLRI	Unique Identifier	36	Y	
PriceLevelLRN	Int		Y	
Quantity	double		N	

Ticket Details

SOAP : GetTicketDetails

REST: /TicketDetails

Returns complete data about tickets.

Parameters

Name	Data Type	Notes
businessDate	DateTime	

Returns

Ticket:

A Ticket contains summary data for a ticket as well as Menu Items, Payments, Gift Card Increases, and Gift Certificate Increases.

Field	Data Type	Max Length	Nullable	Notes
Id	Unique Identifier		N	Unique Id of this record
AmountDue	Decimal		Y	The total amount due from the customer
AnnualZCount	Int		N	The number of Z's since the beginning of the year. The format is YYYYdddd where YYYY is the year and dddd is the number of Zs processed this year.
APIVersion	Float		N	The DataKey version used to upload the ticket.
AutoTabEmployeeId	String	25	Y	The Id of the employee that owns the ticket when this is an AutoTab ticket
AutoTabEmployeeERN	String	36	Y	The ERN of the employee that owns the ticket when this is an AutoTab ticket
AutoTabEmployeeLRI	Unique Identifier	36	Y	The LRI of the employee that owns the ticket when this is an AutoTab ticket
AutoTabEmployeeLRN	Int		Y	The LRN of the employee that owns the ticket when this is an AutoTab ticket
AutoGratuityHouseAmount	Decimal		Y	The amount of the Auto Gratuity tip kept by the establishment.
AutoGratuityTotalAmount	Decimal		Y	The amount of tip from the check as determined by the Auto Gratuity Percent and the Sub-Total, Total, Discounted Sub-Total or Discounted Total depending on the system settings.
BusinessDate	Date		N	The business date of this ticket.
ClosedOn	DateTime		N	The Date and Time the ticket was closed.
Cost	Float		Y	The total cost of menu items and modifiers
CreatedOn	DateTime		N	The Date and Time the ticket was

				created. Note that due to split checks and item transfers, the ticket header could be created after a line item.
EmployeeId	String	25	N	The employeeId of the employee that owns the ticket. This could be the employee that opened the ticket or closed the ticket based on your settings. The owner could have been transferred to another employee.
EmployeeERN	String	36	Y	The ERN of the employee that owns the ticket.
EmployeeLRI	Unique identifier	36	Y	The LRI of the employee that owns the ticket.
EmployeeLRN	Int		Y	The LRN of the employee that owns the ticket.
FuturePayment	Float		Y	The Payment amount taken on an a Future Order prior to completing the order.
GiftCardIncreases	GiftCardIncrease[]		Y	
GiftCertificateIncreases	GiftCertificateIncrease[]		Y	
GuestCount	Int		Y	The number of people on a ticket when using table management. Guest count is not necessarily required and can be null.
GrossSaleAmount	Decimal		Y	The total gross sale amount
MenuItems	MenuItem[]		Y	
NetSaleAmount	Decimal		Y	The total of the ticket line items without taxes.
OrderOrigin	String	3	Y	Where the order started. A value of NULL means the order was started at a POS Station. A value of 'W' means the order started from 2TouchPOS' Online Ordering module.
Payments	Payment[]		Y	
PromoAmount	Decimal		Y	The total of the promo amounts
StationName	String	25	N	The name of the station where the ticket was closed. When the ticket was completed by a driver drop, StationName is the delivery station's name.
StationERN	String	36	Y	The ERN of the station where the ticket was closed.
StationLRI	Unique Identifier	36	Y	The LRI of the station where the ticket was closed.
StationLRN	Int		Y	The LRN of the station where the ticket was closed.
TabName	String	25	Y	The name given to the tab. A null value indicates a transaction that wasn't placed on a table or tab and 2TouchPOS is set to not require names. The name of the tab is provided when the ticket is associated with a table.

TableName	String	25	Y	The name of the table for this ticket. The value will be null when not affiliated with a table.
Tax1Amount	Decimal		Y	The amount of Tax from Tax 1
Tax1ERN	String	36	Y	The ERN of Tax 1
Tax1LRI	Unique Identifier	36	Y	The LRN of Tax 1
Tax1LRI	Int		Y	The LRI of Tax 1
Tax1Name	String	25	Y	The name of Tax 1
Tax2Amount	Decimal		Y	The amount of Tax from Tax 2
Tax2ERN	String	36	Y	The ERN of Tax 2
Tax2LRI	Unique Identifier	36	Y	The LRN of Tax 2
Tax2LRI	Int		Y	The LRI of Tax 2
Tax2Name	String	25	Y	The name of Tax 2
Tax3Amount	Decimal		Y	The amount of Tax from Tax 3
Tax3ERN	String	36	Y	The ERN of Tax 3
Tax3LRI	Unique Identifier	36	Y	The LRN of Tax 3
Tax3LRI	Int		Y	The LRI of Tax 3
Tax3Name	String	25	Y	The name of Tax 3
TicketNumber	String	20	N	A 2TouchPOS generated identifier for the ticket. The format is YYYYMMDDhhmmTTTXXXXX where YYYY is the year, MM is the month, DD is the day, hh is the hour in 24-hour format, mm is the minute, TTT is the terminal number, XXXX is the sequential ticket number for that day.
TicketType	String	12	N	Indicates the type of transaction. The valid values are Transaction, Comp, Spill.

MenuItem:

Column	Data type	Max Length	Nullable	Notes
Id	Unique Identifier		N	Primary Key
TicketId	Unique Identifier		N	Foreign Key to the Ticket
AmountDue	Decimal		Y	NetSaleAmount plus taxes. This is the amount the customer pays.
AnnualZCount	Int		Y	Z report identifier. The number of Z's since the beginning of the year. The format is YYYYdddd where YYYY is the year and dddd is the number of Zs processed this year.
AutoCouponAmount	Decimal		Y	The amount deducted from an automatically applied coupon
BusinessDate	DateTime		Y	The business date of this ticket item.
CashDiscountSurcharge	Bit		Y	Indicates that the item had a surcharge applied to it because it was not paid for in cash.
Cost	Float		Y	The cost of the item as entered into

				2TouchPOS.
CourseName	String	20	Y	The name of the course this item was served in.
CourseERN	String	36	Y	The ERN of the course this item was served in.
CourseLRI	Unique Identifier	36	Y	The LRN of the course this item was served in.
CourseLRN	Int		Y	The LRI of the course this item was served in.
CreatedOn	DateTime		N	The date and time this item was rung onto the ticket.
DepartmentName	String	25	N	The name of the department the item is in.
DepartmentERN	String	36	Y	The ERN of the department the item is in.
DepartmentLRI	Unique Identifier	36	Y	The LRI of the department the item is in.
DepartmentLRN	Int		Y	The LRN of the department the item is in.
DiscountAmount	Decimal		Y	The amount the item was discounted by
DiscountERN	String	36	Y	The ERN of the discount applied to this item.
DiscountEmployeeId	String	50	Y	The name of the employee receiving the employee discount applied to the item.
DiscountEmployeeERN	String	36	Y	The ERN of the employee receiving the employee discount applied to the item.
DiscountEmployeeLRI	Unique Identifier	36	Y	The LRI of the employee receiving the employee discount applied to the item.
DiscountEmployeeLRN	Int		Y	The LRN of the employee receiving the employee discount applied to the item.
DiscountLRI	Unique Identifier	36	Y	The LRI of the discount applied to this item.
DiscountLRN	Int		Y	The LRN of the discount applied to this item.
DiscountName	String	25	Y	The name of the discount applied to this item.
DiscountTax1Amount	Decimal		Y	The amount the tax 1 was discounted by
DiscountTax2Amount	Decimal		Y	The amount the tax 2 was discounted by
DiscountTax3Amount	Decimal		Y	The amount the tax 3 was discounted by
EmployeeId	String	25	N	The employee Id of the employee that rang in this item.
EmployeeERN	String	36	Y	The ERN of the employee that rang in this item.
EmployeeLRI	Unique Identifier	36	Y	The LRI of the employee that rang in this item.
EmployeeLRN	Int		Y	The LRN of the employee that rang in this item.
ERN	String	36	Y	The ERN of the item.
GrossSaleAmount	Decimal		Y	The Price per item * quantity. This before discounts and taxes.

InventoryUsage	Float		Y	The quantity * the inventory factor
LRI	Unique Identifier	36	Y	The LRI of the item
LRN	Int		Y	The LRN of the item
Name	String	50	N	The name of the item.
NetSaleAmount	Decimal		Y	Gross Sale Amount after discounts but before taxes.
OpenItem	Bit		N	The item will not have an ERN, LRI, or LRN as it is a non-inventoried item.
OrderType	String	15	Y	The name of the order type.
OrderTypeERN	String	36	Y	The ERN of the order type.
OrderTypeLRI	Unique Identifier	36	Y	The LRI of the order type
OrderTypeLRN	Int		Y	The LRN of the order type
OriginalTicketNumber	String	20	Y	The ticket number this menu item was original rung on.
PLU	String	14	Y	The price look up of the item.
PriceLevelERN	String	36	Y	The ERN of the price level the menu item was sold at.
PriceLevelLRI	Unique Identifier	36	Y	The LRI of the price level the menu item was sold at.
PriceLevelLRN	Int		Y	The LRN of the price level the menu item was sold at.
PriceLevelName	String	25	Y	The name of the price level the menu item was sold at.
PromoAmount	Decimal		Y	Promotional Amount Redeemed to purchase this item.
QuantitySold	Float		Y	The quantity of the item sold.
RefundFlag	Bit		N	Indicates if this line item represents a return.
RewardPointsEarned	Float		Y	The number of rewards points earned
RewardPointsRedeem	Float		Y	The number of rewards points redeemed to purchase this item.
RewardCardNumber	String	9	Y	The Reward Card Number points were added to or subtracted from.
ReportingCategoryERN	String	36	Y	The ERN of the category this item is reported in.
ReportingCategoryLRI	Unique Identifier	36	Y	The LRI of the category this item is reported in.
ReportingCategoryLRN	Int		Y	The LRN of the category this item is reported in.
ReportingCategoryName	String	25	N	The name of the category this item is reported in.
SeatNumber	Int		Y	The seat number ordering the item.
SortOrder	Int		N	The sort order of the menu items and modifiers entered on the ticket.
StationName	String	25	N	The name of the station where the item was rung.
StationERN	String	36	Y	The ERN of the station where the item was rung.
StationLRI	Unique Identifier	36	Y	The LRI of the station where the item was rung.
StationLRN	Int		Y	The LRN of the station where the item was rung.

Tax1Amount	Decimal		Y	The amount of Tax from Tax 1
Tax1Name	String	25	Y	The name of Tax 1
Tax1ERN	String	36	Y	The ERN of Tax 1
Tax1LRI	Unique Identifier	36	Y	The LRI of Tax 1
Tax1LRN	Int		Y	The LRN of Tax 1
Tax2Amount	Decimal		Y	The amount of Tax from Tax 2
Tax2Name	String	25	Y	The name of Tax 2
Tax2ERN	String	36	Y	The ERN of Tax 2
Tax2LRI	Unique Identifier	36	Y	The LRI of Tax 2
Tax2LRN	Int		Y	The LRN of Tax 2
Tax3Amount	Decimal		Y	The amount of Tax from Tax 3
Tax3Name	String	25	Y	The name of Tax 3
Tax3ERN	String	36	Y	The ERN of Tax 3
Tax3LRI	Unique Identifier	36	Y	The LRI of Tax 3
Tax3LRN	Int		Y	The LRN of Tax 3
TaxableAmount	Decimal		Y	The value that taxes were calculated on.

Modifier:

Column	Data type	Max Length	Nullable	Notes
Id	Unique Identifier		N	Primary Key
MenuItemId	Unique Identifier		N	Foreign Key to the Menu Item
ParentModifierId	Unique Identifier		Y	The modifier that this modifier modified. If NULL, this modifier modifies the Menu Item directly.
AmountDue	Decimal		Y	Net Sale Amount plus taxes. This is the amount the customer pays.
AutoCouponAmount	Decimal		Y	The amount deducted from an automatically applied coupon.
CashDiscountSurcharge	Bit		Y	Indicates that the item had a surcharge applied to it because it was not paid for in cash.
Cost	Float		Y	The cost of this modifier. Cost is defined as the per unit cost *quantity * inventory factors.
CourseName	String	20	Y	The name of the course this item was served in.
CourseERN	String	36	Y	The ERN of the course this item was served in.
CourseLRI	Unique Identifier	36	Y	The LRI of the course this item was served in.
CourseLRN	Int		Y	The LRN of the course this item was served in.
CreatedOn	DateTime		N	The date and time this item was rung onto the ticket.
DiscountAmount	Decimal		Y	The amount the item was discounted by
DiscountERN	String	36	Y	The ERN of the discount applied to this

				item.
DiscountLRI	Unique Identifier	36	Y	The LRI of the discount applied to this item.
DiscountLRN	Int		Y	The LRN of the discount applied to this item.
DiscountEmployeeId	String	50	Y	The name of the employee receiving the employee discount applied to the item.
DiscountEmployeeERN	String	36	Y	The ERN of the employee receiving the employee discount applied to the item.
DiscountEmployeeLRI	Unique Identifier	36	Y	The LRI of the employee receiving the employee discount applied to the item.
DiscountEmployeeLRN	Int		Y	The LRN of the employee receiving the employee discount applied to the item.
DiscountName	String	25	Y	The name of the discount applied to this modifier.
DiscountTax1Amount	Decimal		Y	The amount the tax 1 was discounted by
DiscountTax2Amount	Decimal		Y	The amount the tax 2 was discounted by
DiscountTax3Amount	Decimal		Y	The amount the tax 3 was discounted by
EmployeeId	String	25	N	The employee Id of the employee that rang in this item.
EmployeeERN	String	36	Y	The ERN of the employee that rang in this item.
EmployeeLRI	Unique Identifier	36	Y	The LRI of the employee that rang in this item.
EmployeeLRN	Int		Y	The LRN of the employee that rang in this item.
GrossSaleAmount	Decimal		Y	The Price per item * quantity. This before discounts and taxes.
InventoryUsage	Float		N	The quantity * the inventory factor
ModifierGroup	String	25	Y	The Name of the modifier group the modifier is in.
ModifierGroupERN	String	36	Y	The ERN of the modifier group the modifier is in
ModifierGroupLRI	Unique Identifier	36	Y	The LRI of the modifier group the modifier is in
ModifierGroupLRN	Int		Y	The LRN of the modifier group the modifier is in
ModifierOption	String	50	Y	The Name of the modifier option.
ModifierOptionERN	String	36	Y	The ERN of the modifier option.
ModifierOptionLRI	Unique Identifier	36	Y	The LRI of the modifier option.
ModifierOptionLRN	Int		Y	The LRN of the modifier option.
Modifiers	Modifier[]		Y	
NetSaleAmount	Decimal		Y	The Gross Sale Amount less discounts but before taxes
OpenModifier	Bit		N	The modifier will not have an ERN, LRI, or LRN as it is a non-inventoried item.
OriginalTicketNumber	String	20	Y	The ticket number this menu item was original rung on.
PLU	String	14	Y	The price look up of the item.

PriceLevelName	String	25	Y	The name of the price level the menu item was sold at.
PriceLevelERN	String	36	Y	The ERN of the price level the menu item was sold at.
PriceLevelLRI	Unique Identifier	36	Y	The LRI of the price level the menu item was sold at.
PriceLevelLRN	Int		Y	The LRN of the price level the menu item was sold at.
PromoAmount	Decimal		Y	Promotional amount redeemed to purchase this item.
QuantitySold	Float		Y	The quantity of the item sold.
RefundFlag	Bit		N	True if this modifier is being refunded.
RewardPointsEarned	Float		Y	The number of reward points earned in purchasing this modifier.
RewardPointsRedeem	Float		Y	The number of rewards points used to purchase this modifier.
ReportingCategoryName	String	25	N	The name of the reporting category for this modifier.
ReportingCategoryERN	String	36	Y	The ERN of the reporting category for this modifier.
ReportingCategoryLRI	Unique Identifier	36	Y	The LRI of the reporting category for this modifier.
ReportingCategoryLRN	Int		Y	The LRN of the reporting category for this modifier.
SegmentName	String	30	Y	Then name of the segment this item is divided into.
SegmentERN	String	36	Y	Then ERN of the segment this item is divided into.
SegmentLRI	Unique Identifier	36	Y	Then LRI of the segment this item is divided into.
SegmentLRN	Int		Y	Then LRN of the segment this item is divided into.
SortOrder	Int	4	N	The sort order of the menu items and modifiers entered on the ticket.
StationName	String	25	N	The name of the station where the item was rung.
StationERN	String	36	Y	The ERN of the station where the item was rung.
StationLRI	Unique Identifier	36	Y	The LRI of the station where the item was rung.
StationLRN	Int		Y	The LRN of the station where the item was rung.
Tax1Amount	Decimal		Y	The amount of Tax from Tax 1
Tax1Name	String	25	Y	The name of Tax 1
Tax1ERN	String	36	Y	The ERN of Tax 1
Tax1LRI	Unique Identifier	36	Y	The LRI of Tax 1
Tax1LRN	Int		Y	The LRN of Tax 1
Tax2Amount	Decimal		Y	The amount of Tax from Tax 2
Tax2Name	String	25	Y	The name of Tax 2
Tax2ERN	String	36	Y	The ERN of Tax 2
Tax2LRI	Unique Identifier	36	Y	The LRI of Tax 2
Tax2LRN	Int		Y	The LRN of Tax 2

Tax3Amount	Decimal		Y	The amount of Tax from Tax 3
Tax3Name	String	25	Y	The name of Tax 3
Tax3ERN	String	36	Y	The ERN of Tax 3
Tax3LRI	Unique Identifier	36	Y	The LRI of Tax 3
Tax3LRN	Int		Y	The LRN of Tax 3
TaxableAmount	Decimal		Y	The value that taxes were calculated on.
UniqueModifierName	String	25	N	The unique name of this modifier
UniqueModifierERN	String	36	Y	The ERN of the unique modifier
UniqueModifierLRI	Unique Identifier	36	Y	The LRI of the unique modifier
UniqueModifierLRN	Int		Y	The LRN of the unique modifier

GiftCardIncrease:

Column	Data type	Max Length	Nullable	Notes
Id	Unique Identifier		N	Primary Key
TicketId	Unique Identifier		N	The ID of the ticket this Gift Card Increase is associated with
AmountDue	Decimal		N	Net Sale Amount plus taxes. This is the amount the customer pays.
AnnualZCount	Int		Y	Z report identifier. The number of Z's since the beginning of the year. The format is YYYYdddd where YYYY is the year and dddd is the number of Zs processed this year.
BusinessDate	Date		Y	The business date of this ticket item.
CreatedOn	DateTime		N	The date and time this item was rung onto the ticket.
DiscountAmount	Decimal		Y	The amount the item was discounted by
DiscountERN	String	36	Y	The ERN of the discount applied to this item.
DiscountLRI	Unique Identifier	36	Y	The LRI of the discount applied to this item.
DiscountLRN	Int		Y	The LRN of the discount applied to this item.
DiscountName	String	25	Y	The name of the discount applied to this item.
EmployeeId	String	25	N	The employee Id of the employee that rang in this item.
EmployeeERN	String	36	Y	The ERN of the employee that rang in this item.
EmployeeLRI	Unique Identifier	36	Y	The LRI of the employee that rang in this item.
EmployeeLRN	Int		Y	The LRN of the employee that rang in this item.
GiftIncreaseAmount	Decimal		Y	The amount the gift card was increased by
OrderType	String	15	N	The name of the order type.
OrderTypeERN	String	36	Y	The ERN of the order type.

OrderTypeLRI	Unique Identifier	36	Y	The LRI of the order type.
OrderTypeLRN	Int		Y	The LRN of the order type.
OriginalTicketNumber	String	20	Y	The ticket number this menu item was original rung on.
QuantitySold	Float		Y	The quantity of the item sold.
RewardPointsEarned	Float		Y	The number of rewards points earned
RewardPointsRedeem	Float		Y	The number of rewards points used to purchase this modifier.
RewardCardNumber	String	9	Y	The Reward Card Number points were added to or subtracted from.
SeatNumber	Int		Y	The seat number ordering the item.
SortOrder	Int		N	The sort order of the menu items and modifiers entered on the ticket.
StationERN	String	36	Y	The ERN of the station where the item was rung.
StationLRI	Unique Identifier	36	Y	The LRI of the station where the item was rung.
StationLRN	Int		Y	The LRN of the station where the item was rung.
StationName	String	25	N	The name of the station where the item was rung.

GiftCertificateIncrease:

Column	Data type	Max Length	Nullable	Notes
Id	Unique Identifier		N	Primary Key
TicketId	Unique Identifier		N	The ID of the ticket this Gift Certificate Increase is associated with
AmountDue	Decimal		N	Net Sale Amount plus taxes. This is the amount the customer pays.
AnnualZCount	Int		Y	Z report identifier. The number of Z's since the beginning of the year. The format is YYYYdddd where YYYY is the year and dddd is the number of Zs processed this year.
BusinessDate	Date		Y	The business date of this ticket item.
CreatedOn	DateTime		N	The date and time this item was rung onto the ticket.
DiscountAmount	Decimal		Y	The amount the item was discounted by
DiscountERN	String	36	Y	The ERN of the discount applied to this item.
DiscountLRI	Unique Identifier	36	Y	The LRI of the discount applied to this item.
DiscountLRN	Int		Y	The LRN of the discount applied to this item.
DiscountName	String	25	Y	The name of the discount applied to this item.
EmployeeId	String	25	N	The employee Id of the employee that rang in this item.
EmployeeERN	String	36	Y	The ERN of the employee that rang in this item.

EmployeeLRI	Unique Identifier	36	Y	The LRI of the employee that rang in this item.
EmployeeLRN	Int		Y	The LRN of the employee that rang in this item.
GiftIncreaseAmount	Decimal		Y	The amount the gift certificate was increased by
OrderType	String	15	N	The name of the order type.
OrderTypeERN	String	36	Y	The ERN of the order type.
OrderTypeLRI	Unique Identifier	36	Y	The LRI of the order type.
OrderTypeLRN	Int		Y	The LRN of the order type.
OriginalTicketNumber	String	20	Y	The ticket number this menu item was original rung on.
QuantitySold	Float		Y	The quantity of the item sold.
RewardPointsEarned	Float		Y	The number of rewards points earned
RewardPointsRedeem	Float		Y	The number of rewards points used to purchase this modifier.
RewardCardNumber	String	9	Y	The Reward Card Number points were added to or subtracted from.
SeatNumber	Int		Y	The seat number ordering the item.
SortOrder	Int		N	The sort order of the menu items and modifiers entered on the ticket.
StationERN	String	36	Y	The ERN of the station where the item was rung.
StationLRI	Unique Identifier	36	Y	The LRI of the station where the item was rung.
StationLRN	Int		Y	The LRN of the station where the item was rung.
StationName	String	25	N	The name of the station where the item was rung.

Payment:

Records a payment where a payment is cash, credit card, or coupon. Rewards and Loyalty purchases are recorded against the menu item.

Column	Data type	Max Length	Nullable	Notes
Id	Unique Identifier		N	Primary Key
TicketId	Unique Identifier		N	Foreign Key to the Ticket
AnnualZCount	Int		Y	The number of Z's since the beginning of the year. The format is YYYYdddd where YYYY is the year and dddd is the number of Zs processed this year.
BusinessDate	DateTime		N	The business date of the payment.
CardHolderName	String	26	Y	The card holder's name for credit card payments
CardType	String	20	Y	AMEX, DISCOVER, MASTERCARD, DINERS, VISA
ChangeGiven	Decimal		Y	
ChangeKept	Decimal		Y	
CouponName	String	20	Y	Name of the coupon
CouponERN	String	36	Y	The ERN of the coupon used in this transaction

CouponLRI	Unique Identifier	36	Y	The LRI of the coupon used in this transaction
CouponLRN	Int		Y	The LRN of the coupon used in this transaction
CouponPercent	Float		Y	The percent reduction in cost due to the coupon
CouponType	String	50	Y	The type of coupon used
CreditCardNumberLast4Digits	String	4	Y	Last 4 digits of the credit card
EmployeeName	String	25	N	The employee Id of the employee that rang in this item.
EmployeeERN	String	36	Y	The ERN of the employee that rang in this item.
EmployeeLRI	Unique Identifier	36	Y	The LRI of the employee that rang in this item.
EmployeeLRN	Int		Y	The LRN of the employee that rang in this item.
ForeignAmount	Decimal		Y	The amount paid in foreign currency
IncentiveCardNumber	String	9	Y	The card number used to make a loyalty/reward card payment
PaymentTakenOn	DateTime		N	Date and time that the payment was taken
PaymentType	Int		N	Type of payment
PaymentName	String	50	N	Name of the payment type
PaymentERN	String	36	Y	The ERN of the payment type
PaymentLRI	Unique Identifier	36	Y	The LRI of the payment type
PaymentLRN	Int		Y	The LRN of the payment type
StationName	String	25	N	The name of the station where the payment was taken.
StationERN	String	36	Y	The ERN of the station where the payment was taken.
StationLRI	Unique Identifier	36	Y	The LRI of the station where the payment was taken.
StationLRN	Int		Y	The LRN of the station where the payment was taken.
TipAmount	Decimal		Y	The amount of tip including the amount the house keeps from the tip.
TipHouseAmount	Decimal		Y	Amount the house keeps from the tip.
TotalAmount	Decimal		Y	The total amount paid including the tip amount

Time Clock Methods

Time clock data is not locked after any amount of time. That is, an adjustment to a time clock entry can be made at any time in the future. Therefore, who clocked in when and how long they worked could change at any time.

Note that a clock out is required before the data for the individual interaction to be uploaded.

Time Clock Adjustments

What Triggers and Adjustment?

Adjusting any of the following creates an adjustment record.

- Clock in time
- Clock out time
- Job type
- Pay Rate
- Cash Tips
- Credit card Tips
- Account tips
- Auto Gratuity tips
- Sales total

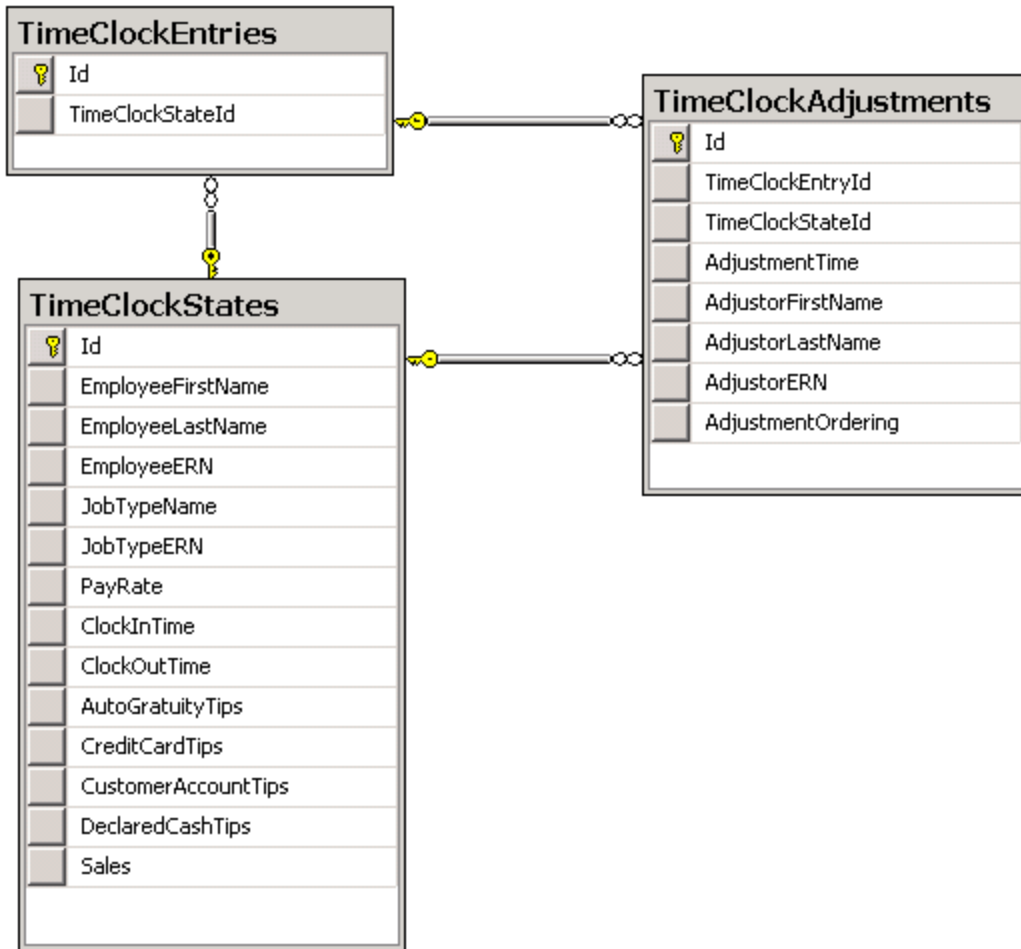
Creating a clock in entry creates an adjustment record. Deleting a clock entry also creates an adjustment record.

How is the Data Related

In every scenario, a TimeClockEntry is created. The TimeClockEntry ties all of the details together. In the majority of cases, you will have a TimeClockEntry and an associated TimeClockState. If adjustments have been performed, they will be related to the TimeClockEntry and point to new TimeClockStates. TimeClockAdjustments are ordered. When processing adjustments, it is important to process them in order.

Special Cases

If the user clocks in, then the TimeClockEntry will have a TimeClockState. If the manager clocks in an employee then the TimeClockEntry's TimeClockState will be null. The manager clock in will be captured as an adjustment. The adjustments state represents the clock in. If the TimeClockEntry is deleted, the last TimeClockAdjustment's TimeClockState will be null.



Metadata

SOAP : GetMetadata

REST: /Metadata

Returns summary information about your data. Specifically, it returns the earliest Clock In time and the latest Clock Out time. This method should be used to ensure data is available before calling other methods.

Returns

TimeClockMetadata:

Name	Data Type	Notes
EarliestClockInTime	DateTime	
LatestClockOutTime	DateTime	

GetAdjustedTimeClockData

SOAP : GetAdjustedTimeClockData

REST: /AdjustedTimeClockData

Returns adjusted time clock entries whose clock out time is after the from date and before the to date at the time of the request.

Parameters

Name	Data Type	Notes
fromDate	DateTime	This is filtering on the Clock Out time.
toDate	DateTime	This is filtering on the Clock Out time.

Returns

TimeClockState:

Name	Data Type	Max Length	Nullable	Notes
AutoGratuityTips	Decimal		N	The amount of tips collected via Auto Gratuity
ClockInTime	DateTime		N	The date and time of the clock in
ClockOutTime	DateTime		N	The date and time of the clock out
CreditCardTips	Decimal		N	The amount of tips from credit card transactions
CustomerAccountTips	Decimal		N	The amount of tips from payments to customer accounts
DeclaredCashTips	Decimal		N	The amount of cash tips declared
EmployeeERN	String	36	Y	The ERN of the employee.
EmployeeLRI	Unique Identifier	36	Y	The LRI of the employee.
EmployeeLRN	Int		Y	The LRN of the employee.
EmployeeFirstName	String	25	N	The employee's first name.
EmployeeLastName	String	25	N	The employee's last name.
Id	Guid		N	Unique Id for this record
JobTypeERN	String	36	Y	The ERN assigned to the job type.
JobTypeLRI	Unique Identifier	36	Y	The LRI assigned to the job type.
JobTypeLRN	Int		Y	The LRN assigned to the job type.
JobTypeName	String	25	N	The name of the job type
PayRate	Decimal		N	The payrate for this clock in/out
Sales	Decimal		N	The amount of sales generated for this clock in/out

RawTimeClockData

SOAP : GetRawTimeClockData

REST: /RawTimeClockData

Returns the raw data for time clock interactions. The way the DataKey captures time clock data is through a sequence of TimeClockStates. The first state is normally created when the user

clocks in. This state is also used to capture the clock out time so long as no adjustments are made. Each new state represents the best data at that moment.

Parameters

Name	Data Type	Notes
fromDate	DateTime	
toDate	DateTime	

Returns

RawTimeClockData:

Name	Data Type	Notes
Adjustments	TimeClockAdjustment[]	The array of adjustments
Entries	TimeClockEntry[]	The array of time clock entries

TimeClockAdjustment:

Name	Data Type	Max Length	Nullable	Notes
AdjustmentOrdering	Int		N	An integer indicating the order in which this adjustment occurred
AdjustmentTime	DateTime		N	The date and time the adjustment occurred
AdjustorERN	String	36	Y	The ERN of the employee that made the adjustment
AdjustorLRI	Unique Identifier	36	Y	The LRI of the employee that made the adjustment
AdjustorLRN	Int		Y	The LRN of the employee that made the adjustment
AdjustorFirstName	String	25	N	The first name of the employee that made the adjustment
AdjustorLastName	String	25	N	The last name of the employee that made the
Id	Guid		N	Unique Id for this record
TimeClockEntryId	Guid		N	The id of the time clock entry being adjusted
TimeClockState	TimeClockState		Y	The resulting state from this adjustment. See TimeClockState in GetAdjustedTimeClockData

TimeClockEntry:

Name	Data Type	Notes
Id	Guid	The id of the time clock entry
TimeClockState	TimeClockState	The time clock state created on clock in.
TimeClockStateId	Guid	The id of the time clock state created on clock in.

Realtime Methods

Realtime data is a summary of the day's current sales and staffing levels. It is composed of:

1. Current metrics such as the number of open tickets and labor.
2. Summarized data based on the previous rolling hour.
3. Summarized sales data since the last Z and labor data since the start of the business day.

SOAP : GetData

REST: /Data

Returns

RealtimeData:

Name	Data Type	Notes
CapturedOn	DateTime	
LocationName	DateTime	
ProductId	string	
Sales	SalesSummary	
Labor	LaborSummary	

SalesSummary:

Name	Data Type	Notes
Current	SalesSnapshot	
PreviousRollingHour	SalesTimeSpan	
SinceLastZ	SalesTimeSpan	

SalesSnapShot:

Name	Data Type	Notes
OpenChecks	Checks	

SalesTimeSpan:

Name	Data Type	Notes
CashSales	Decimal	
ClosedChecks	Checks	
CompAmount	Decimal	
CreditCardSales	Decimal	
OtherSales	Decimal	
PaidOutAmount	Decimal	
SpillAmount	Decimal	
TotalDiscountAmount	Decimal	
VoidAmount	Decimal	
SalesByDepartment	SalesGrouping[]	
SalesByRevenueCenter	SalesGrouping[]	
SalesByStation	SalesGrouping[]	
SalesByServer	SalesGrouping[]	
TopMenuItems	MenuItem[]	

Checks:

Name	Data Type	Notes
TotalAmount	Decimal	
CheckCount	Int	

GuestCount	Int	
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SalesGrouping:

Name	Data Type	Notes
Name	String	
ERN	String	
LRN	Int	
LRI	Guid	
Sales	Decimal	

MenuItem:

Name	Data Type	Notes
Name	String	
ERN	String	
LRN	Int	
LRI	Guid	
Amount	Decimal	
Count	Decimal	

LaborSummary:

Name	Data Type	Notes
Current	JobTypeSnapshot[]	
PreviousRollingHour	JobTypeTimeSpan[]	
SinceStartOfBusiness	JobTypeTimeSpan[]	

JobTypeSnapShot:

Name	Data Type	Notes
Name	String	
ERN	String	
LRN	Int	
LRI	Guid	
ProjectedCost	Decimal	
Count	Int	

JobTypeTimeSpan:

Name	Data Type	Notes
Name	String	
ERN	String	
LRN	Int	
LRI	Guid	
Cost	Decimal	
ClockedInCount	Int	
ClockedOutCount	Int	
AverageCount	float	