



SAP Edge Services, on-premise edition
Essential Business Functions Service – API Guide
Version 3.0 FP02

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INTRODUCTION

The Dynamic Edge Processing APIs are exposed through web services that any component can call with certain headers, to populate, update, and get data pertaining to the local database.

The primary targets are developers who want to write ERP applications for the SAP Business Suite. Developers can create applications on the edge, within the Plant Maintenance (PM), Inventory Management (IM), and Materials Management (MM) modules of SAP.

PREREQUISITES

To access the API's stored procedures, the web service requires that the user has been authenticated.

To authenticate against the local database, the following steps must be taken:

1. Set up the local user table (LOCALUSER). For more information, see *Mapping Local Users with Roles in the SAP Dynamic Edge Processing – Configuration Guide*.
2. Set up the LDAP server for authentication. For more information, see *LDAP Setup in the SAP Dynamic Edge Processing – Configuration Guide*.
3. Enable `ws_authenticate` web service.

AUTHENTICATING WITH WS_AUTHENTICATE

When calling `ws_authenticate`, pass the following parameters:

- **Authorization:** "Basic " + base-64 encoded string of `username:password`

SAMPLE: AJAX call using jQuery

```
jQuery.ajax({
  url: "/ws_authenticate",
  headers: {
    "Authorization": "Basic " + btoa(username + ":" + password)
  }
}).done(handleAuthenticationResponse);
```

Upon a successful authentication, the session ID is returned. This session ID is then stored as a browser cookie.

SAMPLE: Response object

```
[{
  "PLANT": "0101",
  "WORK_CENTER": "ELECT",
  "sessionid": "123abc456e_789",
  "connid": "303975",
  "backendUser": "USER001"
}]
```

IMPORTANT NOTE REGARDING S/4HANA SUPPORT

Some functionality is not supported on systems with an S/4HANA backend. Unsupported APIs below are accompanied by a notice. In the absence of a note it should be assumed that an API is supported.

API

Requests must be made to /ws_restful_data_controller or /dep/odata/<request object> (when an OData entity is available as noted for the specific RESTful action). OData support is limited to GET requests to assist with filtering and pagination. Any non-GET requests to an OData URL will either fail or be forwarded to the appropriate /ws_restful_data_controller path.

Requests to /ws_restful_data_controller may have the listed headers provided as follows:

- Request headers:
 - ```
jQuery.ajax({
 url: "/ws_restful_data_controller",
 headers: {
 "REQUEST_OBJECT": "WORKORDER"
 }
});
```
- Query string variables:
  - ```
jQuery.ajax("/ws_restful_data_controller?REQUEST_OBJECT=WORKORDER");
```
- If REQUEST_OBJECT is not found in either the request headers or query string, the URL path following the service root will be used (ie. "/ws_restful_data_controller/workorder")
 - This special case only applies to the REQUEST_OBJECT header

It is important to understand how SQL Anywhere’s JSON parsing works. The main requirement is that elements of an array must all have the same structure.

Objects are parsed into strongly-typed objects that are created dynamically. Objects in an array must have the same properties as one another and the properties of each object must be listed **in the same order** once serialized.

Arrays are parsed into fixed-sized arrays. In the case of a nested array, jagged arrays are invalid as all child arrays must be of the same type and therefore have the same capacity. Shorter child arrays must be padded with null elements until they are the same length as the other nested arrays.

PURCHASE_ORDERS

GET

Header Values

REQUEST_OBJECT: PURCHASE_ORDERS

Description

Returns a list of all purchase orders.

Output Fields:

Field Name	Description	Data Type	Restrictions
------------	-------------	-----------	--------------

EBELN	Purchasing Document Number	NVARCHAR(10)	
BSART	Purchase Requisition Document Type	NVARCHAR(4)	
BEDAT	Purchase Order Date	NVARCHAR(8)	
LIFNR	Vendor Account Number	NVARCHAR(10)	
WAERS	Currency Key	NVARCHAR(5)	
FRGRL	Release Not Yet Completely Effected	NVARCHAR(1)	
NAME1	Name	NVARCHAR(40)	
POTYP	Purchase Order Type	NVARCHAR(1)	
LTXT	Long Text	LONG NVARCHAR	

Sample Implementation

```

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "PURCHASE_ORDERS"
    }
})

```

Sample Output

```

[
    {
        "EBELN": "43001820",
        "BSART": "ZDP",
        "BEDAT": "20130123",
        "LIFNR": "2000001582",
        "WAERS": "USD",
        "FRGRL": " ",
        "NAME1": "ABC, Inc",
        "POTYP": "M",
        "LTXT": ""
    }
]

```

GET (EBELN)

Header Values

REQUEST_OBJECT: PURCHASE_ORDERS

EBELN: < *Purchasing Document Number* >

Description

Returns a list of all items for a specific purchase order.

Output Fields:

Field Name	Description	Data Type	Restrictions
EBELN	Purchasing Document Number	NVARCHAR(10)	
BACKORDER_QTY	Backorder Quantity	DECIMAL(13,3)	
EBELP	Item Number of Purchasing Document	NVARCHAR(5)	
TXZ01	Short Text	NVARCHAR(40)	
MATNR	Material Number	NVARCHAR(40)	
MENGE	Purchase Requisition Quantity	DECIMAL(13,3)	
MEINS	Component Unit of Measure from MATPLANT	NVARCHAR(3)	
BPRME	Order Price Unit	NVARCHAR(3)	
PO_OPEN_QTY	Open quantity	DECIMAL(13,3)	
NETPR	Net order value in PO currency	DECIMAL(11,2)	
PEINH	Price unit	DECIMAL(5,0)	
BWART	Movement Type	NVARCHAR(3)	
LGORT	Storage Location	NVARCHAR(4)	
WI_ID	Work Item ID	NVARCHAR(12)	
SPERR	Posting block due to physical inventory	NVARCHAR(1)	
BWTTY	Valuation category	NVARCHAR(1)	

MULTI_LOC	Whether there are multiple bins for the material	NVARCHAR(1)	
AUFNR	Order Number	NVARCHAR(12)	
IS_CHANGED	Flag indicating if an items is changed	NVARCHAR(1)	"U" updated, "I" inserted
LTXT	Long Text	LONG NVARCHAR	
BRTWR	Gross Order Value in PO currency	DECIMAL(13, 2)	
KNTTP	Account Assignment Category	NVARCHAR(1)	
AVAIL_QTY_101	Available Quantity for movement type 101	DECIMAL(13,3)	
AVAIL_QTY	Available Quantity	DECIMAL(13,3)	
PSTYP	Item category in Purchasing Document	NVARCHAR(1)	
PROCSTAT	Purchasing document processing state	NVARCHAR(2)	
BACKEND_USERNAME	User Name in User Master Record	NVARCHAR(12)	
WAERS	Currency Key	NVARCHAR(3)	
WEPOS	Goods Receipt Indicator	NVARCHAR(1)	

Sample Implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PURCHASE_ORDERS",
    "EBELN": "43001820"
  }
});
```

Sample Output

```
[
  {
    "EBELN": "43001820",
    "BACKORDER_QTY": 1,
    "EBELP": "00001",
    "TXZ01": "TRAINING, ELECTRONIC TECH",
    "MATNR": " "
  }
]
```

```
"MENGE": 1,  
"MEINS": "EA",  
"BPRME": "EA",  
"PO_OPEN_QTY": 0,  
"NETPR": 2300,  
"PEINH": 1,  
"BWAET": "343",  
"LGORT": null,  
"WI_ID": null,  
"SPERR": "",  
"BWTTY": " ",  
"MULTI_LOC": null,  
"AUFNR": "",  
"IS_CHANGED": "",  
"LTXT": null,  
"BRTWR": 2300,  
"KNTTP": "F",  
"AVAIL_QTY_101": 1,  
"AVAIL_QTY": 0,  
"PSTYP": "0",  
"PROCSTAT": "05",  
"BACKEND_USERNAME": null,  
"WAERS": "USD",  
"WEPOS": "X"
```

```
}
```

```
]
```

ATTACHMENT

POST

Header Values

REQUEST_OBJECT: ATTACHMENT

objid: < *Work Order Number* >

filename: <*Name of file*>

Description

Uploads a file that is saved as an attachment with the specified work order. In order to call this function, create a POST request where the payload is the content of the file that is being uploaded. The Content-Length and Content-Type headers must also be set.

Input Fields

The payload for this function is the actual file to be uploaded and is not in json format. A sample payload follows.

Payload:

Content-Type:

image/png

Content-Length:

129

Body

example.png (the actual file, not just the name)

APPROVAL

GET

Header Values

REQUEST_OBJECT: APPROVAL

Description

Returns a list of all approvals.

Output Fields:

Field Name	Description	Data Type	Restrictions
WI_ID	Work Item ID	NVARCHAR(12)	
WERKS	Rig Number	NVARCHAR(4)	
OBJ_NUMBER	Object number	NVARCHAR(20)	
OBJ_KEY	Object Type	NVARCHAR(32)	
WI_CD	Creation date of work item	NVARCHAR(8)	
WI_STAT	Procession Status of a Work item	NVARCHAR(12)	
DECISION	Index of an Alternative of a User Decision	NVARCHAR(4)	
INTEGRATION_STATUS	Integration Status	NVARCHAR(15)	

Sample Implementation

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "APPROVAL"
    }
})
```

Sample Output

```
[
  {
    "WI_ID": "000001140416",
    "WERKS": "0207",
    "OBJ_NUMBER": "10015223",
    "OBJ_KEY": "BUS2105",
    "WI_CD": "20150604",
    "WI_STAT": "READY",
    "DECISION": "0",
    "INTEGRATION_STATUS": "5-NORMAL"
  },
  ...]
```


GET(WI_ID, WERKS)

Header Values

REQUEST_OBJECT: APPROVAL

WI_ID: *Work Item ID*

WERKS: *Plant / Rig / Remote number*

Description

Returns the details of a specific approval

Output Fields:

Field Name	Description	Data Type	Restrictions
WI_ID	Work Item ID	NVARCHAR(12)	
WERKS	Plant / Rig / Remote Number	NVARCHAR(4)	
OBJ_NUMBER	Object number	NVARCHAR(20)	
OBJ_KEY	Object Type	NVARCHAR(32)	
BACKEND_USERNAME	User Name in User Master Record	NVARCHAR(12)	
WI_CD	Creation date of work item	NVARCHAR(8)	
WI_STAT	Procession Status of a Work item	NVARCHAR(12)	
WI_TEXT	Work Item Text	NVARCHAR(120)	
DECISION	Index of an Alternative of a User Decision	NVARCHAR(4)	
PR_TOTAL_COST	Purchase Requisition total cost	decimal(19, 2)	
PO_TOTAL_COST	Purchase Order total cost	decimal(19, 2)	
SE_BEGDATE	Period	NVARCHAR(8)	

SE_ENDDATE	End of period	NVARCHAR(8)	
SE_SHORT_TEXT	Short text of service entry sheet	NVARCHAR(40)	
SE_SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)	
SE_PO_NUMBER	Purchasing Document Number	NVARCHAR(10)	
SE_PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)	
SE_ACCEPTANCE	Acceptance indicator	NVARCHAR(1)	
SE_EXT_NUMBER_LONG	External Entry Sheet Number	NVARCHAR(35)	
SE_CURRENCY	Currency Key	NVARCHAR(5)	
SE_POST_DATE	Posting Date in the Document	NVARCHAR(8)	
INTEGRATION_STATUS	Integration Status	NVARCHAR(15)	

Sample Implementation

```

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "APPROVAL",
        "WI_ID": "000001140333",
        "WERKS": "0207"
    }
})

```

Sample Output

```

[
    {
        "WI_ID": "000001140333",
        "WERKS": "0207",
        "OBJ_KEY": "BUS2105",
        "OBJ_NUMBER": "10015214",
    }
]

```

```
"BACKEND_USERNAME":"SOMC.0207",  
"WI_CD":"20150602",  
"WI_STAT":"READY",  
"WI_TEXT":"Please Approve Purchase Requisition 10015214",  
"DECISION":"0",  
"PR_TOTALCOST":0,  
"PO_TOTALCOST":0,  
"SE_BEGDATE":null,  
"SE_ENDDATE":null,  
"SE_SHORT_TEXT":null,  
"SE_SHEET_NO_LOCAL":null,  
"SE_PO_NUMBER":null,  
"SE_PO_ITEM":null,  
"SE_ACCEPTANCE":null,  
"SE_EXT_NUMBER_LONG":null,  
"SE_CURRENCY":null,  
"SE_POST_DATE":null,  
"INTEGRATION_STATUS":"5-NORMAL"  
}
```

]

POST

Header Values

REQUEST_OBJECT: APPROVAL

Description

Either approves or rejects an approval based on the decision value in the payload.

Input Fields

Field Name	Description	Data Type	Restrictions	Required
WI_ID	Work Item ID	NVARCHAR(12)		Y
WERKS	Plant / Rig / Remote Number	NVARCHAR(4)		Y
OBJ_NUMBER	Object number	NVARCHAR(20)		Y
OBJ_KEY	Object Type	NVARCHAR(32)		Y
WF_LTXT	Creation date of work item	NVARCHAR(8)		
WI_STAT	Procession Status of a Work item	NVARCHAR(12)		
DECISION	Index of an Alternative of a User Decision	NVARCHAR(4)		Y

Sample Implementation:

```
var inputData = [
{
    "WI_ID": "000001230456",
    "OBJ_NUMBER": "10015205",
    "OBJ_KEY": "BUS2105",
    "DECISION": 1,
    "WERKS": "0111",
    "WF_LTXT": ""
} ]

jQuery.ajax({
    url: "/ws_restful_data_controller",
```

```
method: "POST",
data: inputData,
headers: {
  "REQUEST_OBJECT": "APPROVAL"
}
})
```

APPROVAL_SUBDETAILS

GET

Header values:

REQUEST_OBJECT: APPROVAL_SUBDETAILS

WERKS: <Plant/Rig/Remote ID >

WI_ID: <Work Item ID>

Description:

Use this service to retrieve the approval sub-details for a specific work item defined by **WI_ID**.

Output Fields:

Field Name	Description	Data Type	Restrictions
PR_NO_LOCAL	Purchase Requisition External Number	NVARCHAR (60)	
BANFN	Purchase Requisition Number	NVARCHAR (10)	
BNFPO	Item Number of Purchase Requisition	NVARCHAR (5)	
MATNR	Material Number	NVARCHAR (40)	
MENGE	Purchase Requisition Quantity	DECIMAL (13, 3)	
MEINS	Purchase Requisition Unit of Measure	NVARCHAR (3)	
PREIS	Valuation Price	DECIMAL (11, 2)	
TOTALCOST	Total PR Cost	DECIMAL (19, 2)	
WAERS	Currency Key	NVARCHAR (5)	
LIFNR	Desired Vendor	NVARCHAR (10)	
TXZ01	Short Text	NVARCHAR (40)	
LFDAT	Item Delivery Date	NVARCHAR (8)	
ZZEVERS	Freight Mode	NVARCHAR (2)	
POTYP	Purchase Order Type	NVARCHAR (1)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
```

```
headers: {
  "REQUEST_OBJECT": "APPROVAL_SUBDETAILS",
  "WERKS": "0111",
  "WI_ID": "123456"
}
})
```

Sample Output:

```
[
  ....,
  {
    "PR_NO_LOCAL": "10015222",
    "BANFN": "0010015222",
    "BNFPO": "00001",
    "MATNR": " ",
    "MENGE": 1,
    "MEINS": "AU",
    "PREIS": 6000,
    "TOTALCOST": 6000,
    "WAERS": "USD",
    "LIFNR": " ",
    "TXZ01": "DEP Testing Service Order",
    "LFDAT": "20150604",
    "ZZEVERS": "FA",
    "POTYP": "S"
  },
  ....
]
```

PURCHASE_ORDER_GOODS_RECEIPTS

GET (EBELN)

Header Values

REQUEST_OBJECT: PURCHASE_ORDER_GOODS_RECEIPTS

EBELN: *Purchasing Document Number*

Description

Returns a list of all items on a specific purchase order.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Output Fields:

Field Name	Description	Data Type	Restrictions
EBELN	Purchasing Document Number	NVARCHAR(10)	
BACKORDER_QTY	Backorder Quantity	DECIMAL(13,3)	
EBELP	Item Number of Purchasing Document	NVARCHAR(5)	
TXZ01	Short Text	NVARCHAR(40)	
MATNR	Material Number	NVARCHAR(40)	
MENGE	Purchase Requisition Quantity	DECIMAL(13,3)	
MEINS	Component Unit of Measure from MATPLANT	NVARCHAR(3)	
BPRME	Order Price Unit	NVARCHAR(3)	
PO_OPEN_QTY	Open quantity	DECIMAL(13,3)	
NETPR	Net order value in PO currency	DECIMAL(11,2)	
PEINH	Price unit	DECIMAL(5,0)	
BWART	Movement Type	NVARCHAR(3)	
LGORT	Storage Location	NVARCHAR(4)	
WI_ID	Work Item ID	NVARCHAR(12)	

SPERR	Posting block due to physical inventory	NVARCHAR(1)	
BWTTY	Valuation category	NVARCHAR(1)	
MULTI_LOC	Whether there are multiple bins for the material	NVARCHAR(1)	
AUFNR	Order Number	NVARCHAR(12)	
IS_CHANGED	Flag indicating if an items is changed	NVARCHAR(1)	"U" updated, "I" inserted
LTXT	Long Text	LONG NVARCHAR	
BRTWR	Gross Order Value in PO currency	DECIMAL(13, 2)	
KNTTP	Account Assignment Category	NVARCHAR(1)	
AVAIL_QTY_101	Available Quantity for movement type 101	DECIMAL(13,3)	
AVAIL_QTY	Available Quantity	DECIMAL(13,3)	
PSTYP	Item category in Purchasing Document	NVARCHAR(1)	
PROCSTAT	Purchasing document processing state	NVARCHAR(2)	
BACKEND_USERNAME	User Name in User Master Record	NVARCHAR(12)	
WAERS	Currency Key	NVARCHAR(3)	
WEPOS	Goods Receipt Indicator	NVARCHAR(1)	

Sample Implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PURCHASE_ORDER_GOODS_RECEIPTS",
    "EBELN": "43001820"
  }
});
```

Sample Output

```
[
  {
    "EBELN": "43001820",
```

```
"BACKORDER_QTY": 1,  
"EBELP": "00001",  
"TXZ01": "TRAINING, ELECTRONIC TECH",  
"MATNR": " ",  
"MENGE": 1,  
"MEINS": "EA",  
"BPRME": "EA",  
"PO_OPEN_QTY": 0,  
"NETPR": 2300,  
"PEINH": 1,  
"BWART": "343",  
"LGORT": null,  
"WI_ID": null,  
"SPERR": "",  
"BWTY": " ",  
"MULTI_LOC": null,  
"AUFNR": "",  
"IS_CHANGED": "",  
"LTXT": null,  
"BRTWR": 2300,  
"KNTP": "F",  
"AVAIL_QTY_101": 1,  
"AVAIL_QTY": 0,  
"PSTYP": "0",  
"PROCSTAT": "05",  
"BACKEND_USERNAME": null,  
"WAERS": "USD",  
"WEPOS": "X"
```

```
}
```

```
]
```

POST

Header Values

REQUEST_OBJECT: PURCHASE_ORDER_GOODS_RECEIPT

Description

Receives goods to a storage location and creates a material document for the goods movement. For Movement types 101 (goods received for purchase order) and 343 (goods transfer). This request requires a payload including the parameters below.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Input Fields

Field Name	Description	Data Type	Restrictions	Required
BKTX	Document Header	NVARCHAR(25)		
BLDAT	Document Date	NVARCHAR(8)		Y
BUDAT	Posting Date	NVARCHAR(8)		Y
GM_CODE	Code assigned to transaction for BAPI goods movement	NVARCHAR(2)		
GTS_CUSREF_NO	Customs Reference Number for scrapping	NVARCHAR(35)		
MBLNR	Material Document Number	NVARCHAR(10)		Y
MJAHR	Material Document Year	NVARCHAR(4)		Y
XBLNR	Reference Document Number	NVARCHAR(16)		
GoodsReceiptArr	Array of goods			Y
ABLAD	Unloading point	NVARCHAR(25)		
AUFNR	Order Number	NVARCHAR(12)		
AVAIL_QTY	Available Quantity			
AVAIL_QTY_101	Available Quantity for movement type 101			
BACKEND_USERNAME	User Name in User Master Record	NVARCHAR(12)		

<i>BACKORDER_QTY</i>	Backorder Quantity			
<i>BPRME</i>	Order Price Unit	NVARCHAR(3)		
<i>BRTWR</i>	Gross Order Value in PO currency			
<i>BWART</i>	Movement Type	NVARCHAR(3)		Y
<i>BWTAR</i>	Valuation Type	NVARCHAR(10)		
<i>BWTTY</i>	Valuation category	NVARCHAR(1)		
<i>CHARG</i>	Batch Number	NVARCHAR(10)		
<i>EBELN</i>	Purchasing Document Number	NVARCHAR(10)		
<i>EBELP</i>	Item Number of Purchasing Document	NVARCHAR(5)		
<i>ERFME</i>	Unit of Entry	NVARCHAR(3)		Y
<i>ERFMG</i>	Quantity in Unit of Entry	DECIMAL(13,3)		
<i>ERFMG_101</i>	Quantity in Unit of Entry for movement type 101	DECIMAL(13,3)		
<i>ERFMG_343</i>	Quantity in Unit of Entry for movement type 343	DECIMAL(13,3)		
<i>INSMK</i>	Stock Type	NVARCHAR(1)		
<i>IS_CHANGED</i>	Flag indicating if an items is changed	NVARCHAR(1)	"U": Updated, "I": Inserted	
<i>KNTTP</i>	Account Assignment Category	NVARCHAR(1)		
<i>KOSTL</i>	Cost Centre	NVARCHAR(10)		
<i>KZBEW</i>	Movement Indicator	NVARCHAR(1)		
<i>LINE_DEPTH</i>	Hierarchy level of line in document	NVARCHAR(2)		
<i>LGORT</i>	Storage Location	NVARCHAR(4)		Y

<i>LINE_ID</i>	Unique identifier of document line	NVARCHAR(6)		
<i>LTXT</i>	Long Text	LONG NVARCHAR		
<i>MATNR</i>	Material Number	NVARCHAR(40)		
<i>MEINS</i>	Component Unit of Measure from MATPLANT	NVARCHAR(3)		
<i>MENGE</i>	Purchase Requisition Quantity	DECIMAL(13,3)		
<i>MULTI_LOC</i>	Whether there are multiple bins for the material	NVARCHAR(1)		
<i>NETPR</i>	Net order value in PO currency	DECIMAL(11,2)		
<i>PARENT_ID</i>	Unique identifier of immediately superior line	NVARCHAR(6)		
<i>PEINH</i>	Price unit	DECIMAL(5,0)		
<i>PO_OPEN_QTY</i>	Open quantity	DECIMAL(13,3)		
<i>PROCSTAT</i>	Purchasing document processing state	NVARCHAR(2)		
<i>PSTYP</i>	Item category in Purchasing Document	NVARCHAR(1)		
<i>RSNUM</i>	Number of Reservation / Dependent Requirement	NVARCHAR(10)		
<i>RSPOS</i>	item Number of Reservation / Dependent Requirement	NVARCHAR(4)		
<i>SPERR</i>	Posting block due to physical inventory	NVARCHAR(1)		
<i>TXZ01</i>	Short Text	NVARCHAR(40)		
<i>UMWRK</i>	Receiving/Issuing plant	NVARCHAR(4)		
<i>UMLGO</i>	Receiving/Issuing Storage Location	NVARCHAR(4)		

WAERS	Currency Key	NVARCHAR(3)		
WEPOS	Goods Receipt Indicator	NVARCHAR(1)		
WL_ID	Work Item ID	NVARCHAR(12)		

Sample Implementation

```
var inputData = [{
}];

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "PURCHASE_ORDER_GOODS_RECEIPT",
    }
});
```

Sample Output

```
[
  {
    "RESULT": "UPDATE_GOODS_RECEIPT was a success",
    "STATUS": "200"
  }
]
```

WORKORDER

GET

Header values:

REQUEST_OBJECT: WORKORDER

Description:

Use this service to get a list of all work orders

OData Entity:

/dep/odata/Workorder

Output Fields:

Field Name	Description	Data Type
USER_STATUS	Field displaying user status	NVARCHAR (40)
SYSTEM_STATUS	Display lines for system status	NVARCHAR (40)
VORNR	Operation number	NVARCHAR (4)
AUFNR	Order number	NVARCHAR (12)
AUART	Order Type	NVARCHAR (4)
KTEXT	Description	NVARCHAR (40)
TPLNR	Functional Location	NVARCHAR (30)
EQU NR	Equipment Number	NVARCHAR (18)
VAPLZ	Main Work Center	NVARCHAR (8)
WERKS	Plant/Site	NVARCHAR (4)
PLTXT	Description of functional location	NVARCHAR (40)
GLUZP	Basic finish (time)	NVARCHAR (6)
GSUZP	Basic start time	NVARCHAR (6)
KOSTL	Cost Center	NVARCHAR (10)
EQKTX	Description of technical object	NVARCHAR (40)
ABCKZ	FUNCTION Criticality	NVARCHAR (1)

TPLNR_EXT	Function location - external format	NVARCHAR (40)
GLTRP	Basic finish date	NVARCHAR (8)
GSTRP	Basic start date	NVARCHAR (8)
ILART	Maintenance activity type	NVARCHAR (3)
ILATX	Description of maintenance activity type	NVARCHAR (30)
INTEGRATION_STATUS	Status of integration	NVARCHAR (15)

Sample Implementation:

```
//AJAX call option 1
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER"
    }
})

//Condensed AJAX call
jQuery.ajax("/ws_restful_data_controller/WORKORDER")
```

Sample Output:

```
[
    ...,
    {
        "USER_STATUS": "REDY",
        "LastUpdatedAtPlantTS": null,
        "SYSTEM_STATUS": "REL  GMPS MACM SETC",
        "VORNR": "",
        "AUFNR": "V20700000868",
        "AUART": "ZM01",
        "KTEXT": "#1 RO change cartridge filters5 and 20",
        "TPLNR": "0207-761-050-001",
        "EQUNR": "WMSHAT001005",
        "VAPLZ": "1STENG",
        "WERKS": "0207",
        "PLTXT": "WATER MAKER FIRST RO UNIT #1",
        "GLUZP": "011200",
        "GSUZP": "000000",
        "KOSTL": "207151066",
    }
]
```



```
    "EQKTX": "Watermaker, RO unit",
    "ABCKZ": "D",
    "TPLNR_EXT": "0207-761-050-001",
    "GLTRP": "20150424",
    "GSTRP": "20150424",
    "ILART": "018",
    "ILATX": "Routine Maintenance",
    "INTEGRATION_STATUS": "2-PENDING"
  }
  , ...
]
```

GET(AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER

AUFNR: <Order Number>

Description:

Use this service to retrieve details for a work order defined by AUFNR.

OData Entity:

/dep/odata/Workorder_List (note: contains less fields, but is more performant)

Output Fields:

Field Name	Description	Data Type	Restrictions
USER_STATUS	Display lines for user status	NVARCHAR (40)	
SYSTEM_STATUS	Display lines for system status	NVARCHAR (40)	
MOBILE_STATUS	Mobile Object Status	NVARCHAR (10)	
AUFNR	Order Number	NVARCHAR (12)	
AUART	Order Type	NVARCHAR (4)	
KTEXT	Description	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
ERNAM	Name of Person who Created the Object	NVARCHAR (12)	
EQUNR	Equipment Number	NVARCHAR (18)	
WERKS	Rig/Plant/Remote	NVARCHAR (4)	
PLTXT	Description of functional location	NVARCHAR (40)	
GLUZP	Basic finish (time)	NVARCHAR (6)	
GSUZP	Basic start time	NVARCHAR (6)	
GLTRP	Basic finish date	NVARCHAR (8)	yyyymmdd
GSTRP	Basic start date	NVARCHAR (8)	yyyymmdd
KOSTL	Cost Center	NVARCHAR (10)	

ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
PRIOK	Priority	NVARCHAR (1)	
ANLZU	System Condition	NVARCHAR (1)	
PLGRP	Responsible planner group/department	NVARCHAR (3)	
VAPLZ	Main Work Center	NVARCHAR (8)	
IWERK	Rig/Plant/Remote	NVARCHAR (4)	
EQKTX	Description of technical object	NVARCHAR (40)	
FUNC_AREA	Functional Area	NVARCHAR (16)	
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)	
AUSBS	End of Malfunction (Date)	NVARCHAR (8)	
AUZTB	Start of Malfunction (Time)	NVARCHAR (6)	
AUZTV	End of Malfunction (Time)	NVARCHAR (6)	
GSTRI	Actual start date	NVARCHAR (8)	yyyymmdd
GLTRS	Actual finish date	NVARCHAR (8)	yyyymmdd
ABNUM	Maintenance Plan Call Number	INTEGER	
MSAUS	Breakdown Indicator	NVARCHAR (1)	
URCOD	Cause Code	NVARCHAR (4)	
URGRP	Code Group - Causes	NVARCHAR (8)	
URTXT	Cause Text	NVARCHAR (40)	
FECOD	Problem or Damage Code	NVARCHAR (4)	
FEGRP	Code Group - Problem	NVARCHAR (8)	
FETXT	Notification Item Short Text	NVARCHAR (40)	
INGPR	Planner Group for Customer Service and Plant Maintenance	NVARCHAR (3)	
ILART	Maintenance activity type	NVARCHAR (3)	
ILATX	Description of maintenance activity type	NVARCHAR (30)	

IS_EXTERNAL	Flag that indicates external or not	NVARCHAR (1)	0 or 1
QMART	Notification Type	NVARCHAR (2)	
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)	
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)	
URKAT	Catalog Type - Causes	NVARCHAR (1)	
INTEGRATION_STATUS	Status of integration	NVARCHAR (15)	
HAS_REPAIRS	Has reasons flag	NVARCHAR (1)	
CHG_REASON	Reason description	NVARCHAR (32000)	
WO_LTXT	Work order description text	LONG NVARCHAR	
WO_LTXT_ADD	Work order reason to add text	LONG NVARCHAR	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKORDER",
    "AUFNR": "V02340000056"
  }
})
```

Sample Output:

```
[
  {
    "USER_STATUS": "CMPL",
    "SYSTEM_STATUS": "UNIT MAC SET",
    "MOBILE_STATUS": " ",
    "AUFNR": "V02340000056",
    "AUART": "ZM01",
    "KTEXT": "Replace Unit 15",
    "TPLNR": "0207-811-003-001",
    "TPLNR_EXT": "0207-811-003-001",
    "ERNAM": "CLAALF001",
    "EQUNR": "ALMCON005003",
    "WERKS": "0111",
    "PLTXT": "FIRE DETECTION ALARM SYST",
    "GLUZP": "011200",
    "GSUZP": "000000",
```

```

"GLTRP":"20150422",
"GSTRP":"20150422",
"KOSTL":"207151066",
"ABCKZ":"A",
"PRIOK":"1",
"ANLZU":" ",
"PLGRP":" ",
"VAPLZ":"MECHCTR",
"IWERK":"0207",
"EQKTX":"Fire detection & annunciation system",
"FUNC_AREA":" ",
"AUSVN":"20150422",
"AUSBS":"00000000",
"AUZTB":"000000",
"AUZTV":"133410",
"GSTRI":"20150422",
"GLTRS":"20150422",
"ABNUM":0,
"MSAUS":" ",
"URCOD":null,
"URGRP":null,
"URTXT":null,
"FECOD":null,
"FEGRP":null,
"FETXT":null,
"INGPR":"PM",
"ILART":"018",
"ILATX":"Routine Maintenance",
"IS_EXTERNAL":"0",
"QMART":"M1",
"OTKAT":null,
"FEKAT":null,
"URKAT":null,
"INTEGRATION_STATUS":"5-NORMAL",
"HAS_REPAIRS":"0",
"CHG_REASON":"",
"WO_LTXT":"Replace IS Barrier Loop 15\n\nIS Barrier does not have an
output, Loop 15 for paint store\n\nMobile status set to WFRV by user
CLAXXXX on 2015-04-22 09:45:51",
"WO_LTXT_ADD":""

```

}

]

POST (AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER

AUFNR: *Order Number*

Description:

This service is used to create a work order. Do not use this service to update a work order. If the AUFNR header is provided, it will be used as the work order number, otherwise one will be generated. An AUFNR value in the request body will be ignored.

Create Work order is extended to allow user to create a notification without work order, therefore an inactive work order is created in backend.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- WOCreatAllowDuplicates
- WOAddtoLtxtWhenDupPrevented
- WOCreatInitialOperation
- OperationDefaultWorkCenter
- OperationDefaultControlKey
- OperationDefaultOperationShortText
- OperationDefaultPlannedHours
- OperationDefaultNumberofWorkers

Input Fields:

Field Name	Description	Data Type	Required
ANLZU	System Condition	NVARCHAR (1)	Y
ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
ARBEI	Work involved in the activity	DECIMAL (10,1)	Y
ARBPL	Work center	NVARCHAR (8)	
AUART	Order Type	NVARCHAR (4)	Y
AUFNR	Order number	NVARCHAR (12)	(Generated)
AUSBS	End of Malfunction (Date)	NVARCHAR (8)	
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)	
AUZTB	End of Malfunction (Time)	NVARCHAR (6)	

AUZTV	Start of Malfunction (Time)	NVARCHAR (6)	
DAUNO	Normal duration of the activity	DECIMAL (10,1)	Y
ERNAM	Name of Person who Created the Object	NVARCHAR (12)	
EQKTX	Description of technical object	NVARCHAR (40)	
EQUNR	Equipment Number	NVARCHAR (18)	Y
FETXT	Notification Item Short Text	NVARCHAR (40)	
FECOD	Problem or Damage Code	NVARCHAR (4)	
FEGRP	Code Group - Problem	NVARCHAR (8)	
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)	
FENUM	Item Number in Item Record	NVARCHAR (4)	
GLTRP	Basic finish date	NVARCHAR (8)	Y Format: YYYYMMDD
GLUZP	Basic finish (time)	NVARCHAR (6)	
GSTRI	Actual start date	NVARCHAR (8)	
GSTRP	Basic start date	NVARCHAR (8)	Y Format: YYYYMMDD
GSUZP	Basic start time	NVARCHAR (6)	
ILART	Maintenance activity type	NVARCHAR (3)	Y
ILATX	Description of maintenance activity type	NVARCHAR (30)	
INTEGRATION_STATUS	Status of integration	NVARCHAR (15)	
IS_EXTERNAL	Flag that indicates external or not	NVARCHAR (1)	Y values: 0 or 1
ISMNW	Actual work	DECIMAL (10,3)	
IWERK	Plant#	NVARCHAR (4)	
KOSTL	Cost Center	NVARCHAR (10)	
KTEXT	Description	NVARCHAR (40)	Y
WO_LTXT	Work order description text	LONG NVARCHAR	
WO_LTXT_ADD	Work order reason to add text	LONG NVARCHAR	

MAINT_PLANT_RIG	Plant/Rig/Remote Number	NVARCHAR (4)	
MOBILE_STATUS	Mobile status code	NVARCHAR (10)	
MSAUS	Breakdown Indicator	NVARCHAR (1)	
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)	
PLGRP	Responsible planner group/department	NVARCHAR (3)	
PLTXT	Description of functional location	NVARCHAR (40)	
PREIS	Price	DECIMAL (10,2)	
PRIOK	Priority	NVARCHAR (1)	Y
PROBLEM_CAUSE_FLAG	Cause of problem flag	NVARCHAR (1)	
QMART	Notification Type	NVARCHAR (2)	
QMNUM	Notification No	NVARCHAR (12)	
STEUS	Control key	NVARCHAR (4)	Y
SYSTEM_STATUS	Display lines for system status	NVARCHAR (40)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	Y
URCOD	Cause Code	NVARCHAR (4)	
URGRP	Code Group - Causes	NVARCHAR (8)	
URKAT	Catalog Type - Causes	NVARCHAR (1)	
URNUM	Sequential Number for Cause	NVARCHAR (4)	
URTXT	Cause Text	NVARCHAR (40)	
USER_STATUS	Field displaying user status	NVARCHAR (40)	Y (Default: INPL)
VAPLZ	Main Work Center	NVARCHAR (8)	Y
VORNR	Operation number	NVARCHAR (4)	Y (Default: 0010)
WAERS	Currency Key	NVARCHAR (5)	
WERKS	Plant/Site	NVARCHAR (4)	
TPLNR	Functional Location	NVARCHAR (30)	Y

Sample Implementation:

```
var inputData = [
  {
    "ANLZU":0,
    "ABCKZ":"B",
    "ARBEI":"1.0",
    "ARBPL":"2NDENG",
    "AUART":"001",
    "BOM_EXISTS":0,
    "CHG_REASON":"","",
    "DAUNO":"1.0",
    "ERNAM":"","",
    "EQKTX":"REGULATORY INSPECTIONS",
    "EQUNR":"NMOINS001059",
    "FEKAT":"","",
    "FENUM":"","",
    "GLTRP":"20160711",
    "GLUZP":"","",
    "GSTRI":"","",
    "GSTRP":"20160711",
    "GSUZP":"","",
    "ILART":"001",
    "ILATX":"Project Order",
    "INTEGRATION_STATUS":"","",
    "IS_EXTERNAL":"0",
    "ISMNW":"","",
    "IWERK":"0207",
    "KOSTL":"207151066",
    "KTEXT":"Description",
    "LTXA1":"","",
    "WO_LTXT":"Long Text",
    "WO_LTXT_ADD":"","",
    "MAINT_PLANT_RIG":"","",
    "MOBILE_STATUS":"","",
    "MSAUS":"","",
    "OTKAT":"","",
    "PLGRP":"","",
    "PLTXT":"CLASS CERTIFICATES",
    "PREIS":"","",
    "PRIOK":0,
    "PROBLEM_CAUSE_FLAG":"","",
    "QMART":"","",
    "QMNUM":"","",
    "STEUS":"ZINT",
    "SYSTEM_STATUS":"","",
    "TPLNR_EXT":"0207-112-010-001",
```

```

        "TRANSID":"","
        "URKAT":"","
        "URNUM":"","
        "USER_STATUS":"INPL",
        "VAPLZ":"2NDENG",
        "VORNR":"0010",
        "WAERS":"","
        "WERKS":"0207",
        "TPLNR":"0207-112-010-001",
        "AUSBS":"20160711",
        "AUSVN":"20160711",
        "AUZTB":"000000",
        "AUZTV":"16829",
        "FETXT":"","
        "FECOD":"","
        "FEGRP":"","
        "URCOD":"","
        "URGRP":"","
        "URTXT":""
    }
]

// Note: AUFNR can be omitted to generate a new one
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER"
        "AUFNR": "V20700000866"
    }
})

```

PUT (AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER

AUFNR: *Order Number*

Description:

Use this service to modify a work order in the system.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Field displaying user status	NVARCHAR (40)		Y
SYSTEM_STATUS	Display lines for system status	NVARCHAR (40)		
MOBILE_STATUS	Mobile Object Status	NVARCHAR (10)		
AUFNR	Order number	NVARCHAR (12)		Y
AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional location	NVARCHAR (30)		Y
TPLNR_EXT	Function location - external format	NVARCHAR (40)		Y
ERNAM	Name of Person who Created the Object	NVARCHAR (12)		Y
EQUNR	Equipment Number	NVARCHAR (18)		Y
WERKS	Plant	NVARCHAR (4)		Y
PLTXT	Description of functional location	NVARCHAR (40)		
GLUZP	Basic finish (time)	NVARCHAR (6)		
GSUZP	Basic start time	NVARCHAR (6)		
GLTRP	Basic finish date	NVARCHAR (8)	yyyymmdd	Y
GSTRP	Basic start date	NVARCHAR (8)	yyyymmdd	Y
KOSTL	Cost Center	NVARCHAR (10)		

ABCKZ	FUNCTION Criticality	NVARCHAR (1)		
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	System Condition	NVARCHAR (1)		Y
PLGRP	Responsible planner group/department	NVARCHAR (3)		
VAPLZ	Main Work Center	NVARCHAR (8)		Y
IWERK	Rig/Plant/Remote	NVARCHAR (4)		Y
EQKTX	Description of technical object	NVARCHAR (40)		
FUNC_AREA	Functional Area	NVARCHAR (16)		
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)		Y
AUSBS	End of Malfunction (Date)	NVARCHAR (8)		
AUZTB	Start of Malfunction (Time)	NVARCHAR (6)		
AUZTV	End of Malfunction (Time)	NVARCHAR (6)		Y
GSTRI	Actual start date	NVARCHAR (8)	yyyymmdd	
GLTRS	Actual finish date	NVARCHAR (8)	yyyymmdd	
ABNUM	Maintenance Plan Call Number	INTEGER		Y
MSAUS	Breakdown Indicator	NVARCHAR (1)		
URCOD	Cause Code	NVARCHAR (4)		
URGRP	Code Group - Causes	NVARCHAR (8)		
URTXT	Cause Text	NVARCHAR (40)		
FECOD	Problem or Damage Code	NVARCHAR (4)		
FEGRP	Code Group - Problem	NVARCHAR (8)		
FETXT	Notification Item Short Text	NVARCHAR (40)		
INGPR	Planner Group for Customer Service and Plant Maintenance	NVARCHAR (3)		
ILART	Maintenance activity type	NVARCHAR (3)		Y

ILATX	Description of maintenance activity type	NVARCHAR (30)		
IS_EXTERNAL	Flag that indicates external or not	NVARCHAR (1)	0 or 1	Y
QMART	Notification Type	NVARCHAR (2)		
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)		
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)		
URKAT	Catalog Type - Causes	NVARCHAR (1)		
INTEGRATION_STATUS	Status of integration	NVARCHAR (15)		Y
HAS_REPAIRS	Has reasons flag	NVARCHAR (1)		Y
CHG_REASON	Reason description	NVARCHAR (32000)		
WO_LTXT	Work order description text	LONG NVARCHAR		
WO_LTXT_ADD	Work order reason to add text	LONG NVARCHAR		
WO_LTXT_ALL	Work order description text	LONG NVARCHAR		
BOM_EXISTS	Flag indicating whether a build of material exists	NVARCHAR (1)		

Sample Implementation:

```
var inputData = [
{
    {
        "0":{
            "USER_STATUS":"REDY",
            "SYSTEM_STATUS":"REL  GMPS MSPT SETC",
            "MOBILE_STATUS":" ",
            "AUFNR":"V02340000056",
            "AUART":"ZM01",
            "KTEXT":"Spares MODIFIED ",
            "TPLNR":"0207-181-025-001",
            "TPLNR_EXT":"0207-181-025-001",
            "ERNAM":"CLIMCC001",
            "EQUNR":"DIRMAR001007",
```

```

"WERKS":"0111",
"PLTXT":"DIRECT ISSUE MARINE DEPARTMENT",
"GLUZP":"011200",
"GSUZP":"000000",
"GLTRP":"20150414",
"GSTRP":"20150414",
"KOSTL":"207151066",
"ABCKZ":"D",
"PRIOK":"3",
"ANLZU":" ",
"PLGRP":" ",
"VAPLZ":"MECHCTR",
"IWERK":"0207",
"EQKTX":"DIRECT ISSUE MARINE DEPT",
"FUNC_AREA":" ",
"AUSVN":"20150414",
"AUSBS":"00000000",
"AUZTB":"000000",
"AUZTV":"194917",
"GSTRI":"00000000",
"GLTRS":"20150414",
"ABNUM":0,
"MSAUS":" ",
"URCOD":"",
"URGRP":"",
"URTXT":"",
"FECOD":"",
"FEGRP":"",
"FETXT":"",
"INGPR":"PM",
"ILART":"019",
"ILATX":"Safety",
"IS_EXTERNAL":"0",
"QMART":"M1",
"OTKAT":"",
"FEKAT":"",
"URKAT":"",
"INTEGRATION_STATUS":"PROCESSED",
"HAS_REPAIRS":"0",
"CHG_REASON":"",
"WO_LTXT":"\nMobile status set to WFRV by user CLXXXXXX on 2015-
04-14 15:55:43",
"WO_LTXT_ADD":"",
"WO_LTXT_ALL":"Ordering spares for light for safe entering into
confined spaces.\n \nMobile status set to WFRV by user CLXXXXXX
on 2015-04-14 15:55:43",
"BOM_EXISTS":0

```

```
        }
    }
}]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER",
        "AUFNR": "V02340000056"
    }
})
```

WORKORDER_COMPONENTS
GET (AUFNR, VORNR / LGORT)

Header values:

REQUEST_OBJECT: WORKORDER_COMPONENTS

AUFNR: < Order Number >

VORNR: < Operation Number >

LGORT: < Storage Location ID >

Description:

Use this service to retrieve a list of components defined by the work order AUFNR, operation number VORNR, and the storage locations LGORT. One of VORNR or LGORT must be provided.

Additional Notes:

This request includes all properties for the fetched components, including many calculated fields. The following additional request objects are provided to fetch this data in a more effective way and are the preferred method of getting component data:

- WORKORDER_COMPONENTS_LIST
- COMPONENT_ONHAND
- COMPONENT_LTXT

Output Fields:

Field Name	Description	Data Type	Restrictions
OVER	flag indicating required qty is greater than stock quantity	NVARCHAR (1)	If RequirementQuantity is greater than stock quantity, then 1 other wise 0
AUFNR	Work order number	NVARCHAR (12)	
POSNR	BOM item number	NVARCHAR (4)	
RSNUM	Number of Reservation/Dependent Requirement	NVARCHAR (10)	
RSPOS	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	
NAME1	Name	NVARCHAR (35)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MAKTX	Material Description (Short Text) from MATPLANT	NVARCHAR (40)	
MEINS	Component unit of measure from MATPLANT	NVARCHAR (4)	

BDMNG	Requirement Quantity	DECIMAL (13, 3)	
WERKS	Plant	NVARCHAR (4)	
CATEGORY	Category	NVARCHAR (255)	
POSTP	Item Category (Bill of Material)	NVARCHAR (1)	
GPREIS	Price in component currency	DECIMAL (15, 2)	
WAERS	Currency Key	NVARCHAR (255)	
RMAKTX	Material Description (Short Text) from WO_COMP	NVARCHAR (255)	
RMEINS	Component unit of measure from WO_COMP	NVARCHAR (255)	
LGPBE	Storage Bin	NVARCHAR (10)	
QUANT	Valuated Unrestricted-Use Stock SUMMED	DECIMAL (18, 3)	
LGORT	Storage location	NVARCHAR (4)	
ENMNG	Quantity Withdrawn	DECIMAL (13, 3)	
TBMNG	Transfer requirement quantity already requested	DECIMAL (13, 3)	
CHARG	Batch Number	NVARCHAR (10)	
POTX1	BOM Item Text (Line 1)	NVARCHAR (40)	
VORNR	Operation/Activity Number	NVARCHAR (4)	
ERFME	Unit of entry	NVARCHAR (3)	
ZEILE	Line number	NVARCHAR (4)	
CUD_IND	Create, Update, Delete indicator	NVARCHAR (1)	
SPERR	Material locked indicator	NVARCHAR (1)	
MULTI_LOC	Total number of locations for the material number on plant	NVARCHAR (1)	Do not use FF00
BWTTY	Valuation Category	NVARCHAR (1)	
MISKZ	Mixed MRP Indicator (used to release PR)	NVARCHAR (1)	
DIFF	Requirement Quantity - Quantity Withdrawn	DECIMAL (13, 3)	

Sample Implementation:

```
jQuery.ajax({
```

```

url: "/ws_restful_data_controller",
method: "GET",
headers: {
  "REQUEST_OBJECT": "WORKORDER_COMPONENTS",
  "AUFNR": "V01230000056",
  "VORN": "0010"
}
})

```

Sample Output:

```

[
  {
    "OVER": "1",
    "AUFNR": "000040039402",
    "POSNR": "0010",
    "RSNUM": "0000043085",
    "RSPOS": "0001",
    "MATNR": "49692",
    "MFRNR": "3000000599",
    "NAME1": null,
    "MFRPN": "22582302",
    "MAKTX": "SOUNDER, STROBE, COMBINATION, 24",
    "MEINS": "EA",
    "BDMNG": 3,
    "WERKS": "0207",
    "CATEGORY": "Stock item",
    "POSTP": "L",
    "GPRES": 1000,
    "WAERS": "USD",
    "RMAKTX": "SOUNDER, STROBE, COMBINATION, 24",
    "RMEINS": "EA",
    "LGPBE": "DIRECT5",
    "QUANT": 0,
    "LGORT": "0001",
    "ENMNG": 3,
    "TBMNG": 0,
    "CHARG": " ",
    "POTX1": " ",
    "VORN": "0010",
    "ERFME": "EA",
    "ZEILE": "0001",
    "CUD_IND": "",
    "SPERR": "",
    "MULTI_LOC": "0",
    "BWTY": "C",
    "MISKZ": " ",
    "DIFF": 0
  },
  ...
]

```

]

GET (AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER_COMPONENTS

AUFNR: <Order Number>

Description:

Use this service to return all of the long texts for repair components within a work order.

Additional Notes (DEPRECATED):

This request gets and assembles all component long text for an entire work order. The COMPONENT_LTXT request object is the preferred method of getting component long text..

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Work order number	NVARCHAR (12)	
POSNR	BOM item number	NVARCHAR (4)	
RSPOS	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)	
SGTXT	Item Text	LONG NVARCHAR	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_COMPONENTS",
    "AUFNR": "V01230000045"
  }
})
```

Sample Output:

```
[
  {
    "AUFNR": "000040031463",
    "POSNR": "0010",
    "RSPOS": "0001",
    "SGTXT": "Sample long text"
  }, {
    "AUFNR": "000040034595",
    "POSNR": "0010",
    "RSPOS": "0001",
    "SGTXT": "Sample long text"
  }
]
```

]

POST

Header values:

REQUEST_OBJECT: WORKORDER_COMPONENTS

Description:

Use this service to create a work order component.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Field displaying user status	NVARCHAR (40)		Y
MOBILE_STATUS	Mobile Object Status	NVARCHAR (10)		Y
AUFNR	Settlement order	NVARCHAR (12)		Y
AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional Location	NVARCHAR (30)		Y
TPLNR_EXT	Function location in external format	NVARCHAR (40)		Y
EQUNR	Equipment Number	NVARCHAR (18)		Y
GLUZP	Basic finish (time)	NVARCHAR (6)		Y
GSUZP	Basic start time	NVARCHAR (6)		Y
GLTRP	Basic finish date	NVARCHAR (8)	yyyymmdd	Y
GSTRP	Basic start date	NVARCHAR (8)	yyyymmdd	Y
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	System Condition	NVARCHAR (1)		Y
VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)		Y
ILART	Maintenance activity type	NVARCHAR (3)		Y

IS_EXTERNAL	Component is external	NVARCHAR (1)		Y
ComponentsArr	An array of component items	LONG NVARCHAR	Data must be represented in JSON	Y
AUFNR	Order Number	NVARCHAR(12)		
VORNR	Operation/Activity Number	NVARCHAR (4)		Y
POSNR	BOM item number	NVARCHAR (4)		
RSNUM	Number of Reservation/Dependent Requirement	NVARCHAR (10)		
RSPOS	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)		
MATNR	Material Number	NVARCHAR (40)		Y
BDMNG	Requirement Quantity	DECIMAL (13, 3)		Y
POSTP	Item Category (Bill of Material)	NVARCHAR (1)		Y
GPREIS	Price in component currency	DECIMAL (15, 2)		
RMAKTX	Material Description (Short Text) from WO_COMP	NVARCHAR (255)		
RMEINS	Component unit of measure from WO_COMP	NVARCHAR (255)		Y
ENMNG	Quantity Withdrawn	DECIMAL (13, 3)		
TBMNG	Transfer requirement quantity already requested	DECIMAL (13, 3)		
POTX1	BOM Item Text (Line 1)	NVARCHAR (40)		
CUD_IND	Create/Update/Delete indicator	NVARCHAR (1)	U (Update)	
MISKZ	Mixed MRP Indicator (used to release PR)	NVARCHAR (1)		
SGTXT	Item Text	LONG NVARCHAR		

Sample Implementation:

```
var inputData = [
    {
```

```

        "USER_STATUS": "INPL",
        "MOBILE_STATUS": "",
        "AUFNR": "V02340000056",
        "AUART": "ZM01",
        "KTEXT": "sdf",
        "TPLNR": "0207-761-050-004",
        "TPLNR_EXT": "0207-761-050-004",
        "EQUNR": "ABC001007",
        "GLUZP": "",
        "GSUZP": "",
        "GLTRP": "20160401",
        "GSTRP": "20160401",
        "PRIOK": "3",
        "ANLZU": "0",
        "VAPLZ": "MECHCTR",
        "ILART": "004",
        "IS_EXTERNAL": "0",
        "ComponentsArr": [{
            "VORNR": "0010",
            "POSNR": "",
            "RSNUM": "",
            "RSPOS": "",
            "MATNR": "",
            "BDMNG": "1",
            "WERKS": "0111",
            "POSTP": "N",
            "GPREIS": "123",
            "RMAKTX": "",
            "RMEINS": "EA",
            "ENMNG": "",
            "TBMNG": 0,
            "POTX1": "test",
            "CUD_IND": "C",
            "MISKZ": "",
            "SGTXT": "test"
        }]
    }
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER_COMPONENTS",
    }
})

```


PUT

Header values:

REQUEST_OBJECT: WORKORDER_COMPONENTS

Description:

Use this service to update a work order component.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Field displaying user status	NVARCHAR (40)		Y
MOBILE_STATUS	Mobile Object Status	NVARCHAR (10)		Y
AUFNR	Settlement order	NVARCHAR (12)		Y
AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional Location	NVARCHAR (30)		Y
TPLNR_EXT	Function location in external format	NVARCHAR (40)		Y
EQUNR	Equipment Number	NVARCHAR (18)		Y
GLUZP	Basic finish (time)	NVARCHAR (6)		Y
GSUZP	Basic start time	NVARCHAR (6)		Y
GLTRP	Basic finish date	NVARCHAR (8)	yyyymmdd	Y
GSTRP	Basic start date	NVARCHAR (8)	yyyymmdd	Y
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	SystemCondition	NVARCHAR (1)		Y
VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)		Y
ILART	Maintenance activity type	NVARCHAR (3)		Y
IS_EXTERNAL	Component is external	NVARCHAR (1)		Y

ComponentsArr	An array of component items	LONG NVARCHAR	Data must be represented in JSON	Y
<i>AUFNR</i>	Order Number	NVARCHAR(12)		
<i>VORNR</i>	Operation/Activity Number	NVARCHAR (4)		Y
<i>POSNR</i>	BOM item number	NVARCHAR (4)		
<i>RSNUM</i>	Number of Reservation/Dependent Requirement	NVARCHAR (10)		
<i>RSPOS</i>	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)		
<i>MATNR</i>	Material Number	NVARCHAR (40)		Y
<i>BDMNG</i>	Requirement Quantity	DECIMAL (13, 3)		Y
<i>POSTP</i>	Item Category (Bill of Material)	NVARCHAR (1)		Y
<i>GPREIS</i>	Price in component currency	DECIMAL (15, 2)		
<i>RMAKTX</i>	Material Description (Short Text) from WO_COMP	NVARCHAR (255)		
<i>RMEINS</i>	Component unit of measure from WO_COMP	NVARCHAR (255)		Y
<i>ENMNG</i>	Quantity Withdrawn	DECIMAL (13, 3)		
<i>TBMNG</i>	Transfer requirement quantity already requested	DECIMAL (13, 3)		
<i>POTX1</i>	BOM Item Text (Line 1)	NVARCHAR (40)		
<i>CUD_IND</i>	Create/Update/Delete indicator	NVARCHAR (1)	U (Update)	
<i>MISKZ</i>	Mixed MRP Indicator (used to release PR)	NVARCHAR (1)		
<i>SGTXT</i>	Item Text	LONG NVARCHAR		

Sample Implementation:

```
var inputData = [
    {
        "USER_STATUS": "INPL",
        "MOBILE_STATUS": "",
    }
]
```

```

    "AUFNR": "V02340000056",
    "AUART": "ZM01",
    "KTEXT": "sdf",
    "TPLNR": "0207-761-050-004",
    "TPLNR_EXT": "0207-761-050-004",
    "EQUNR": "ABC001007",
    "GLUZP": "",
    "GSUZP": "",
    "GLTRP": "20160401",
    "GSTRP": "20160401",
    "PRIOK": "3",
    "ANLZU": "0",
    "VAPLZ": "MECHCTR",
    "ILART": "004",
    "IS_EXTERNAL": "0",
    "ComponentsArr": [{
        "VORN": "0010",
        "POSNR": "",
        "RSNUM": "",
        "RSPOS": "",
        "MATNR": "",
        "BDMNG": "1",
        "WERKS": "0111",
        "POSTP": "N",
        "GPREIS": "123",
        "RMAKTX": "",
        "RMEINS": "EA",
        "ENMNG": "",
        "TBMNG": 0,
        "POTX1": "test",
        "CUD_IND": "U",
        "MISKZ": "",
        "SGTXT": "test"
    }]
}
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER_COMPONENTS",
    }
})

```

DELETE (AUFNR, VORNR, POSNR, RSPOS)

Header values:

REQUEST_OBJECT: WORKORDER_COMPONENTS,

AUFNR: < Order Number >

VORNR: < Operation/Activity Number >

POSNR: < BOM item number >

RSPOS: < Reservation Number >

Description:

Use this service to delete a work order component.

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "DELETE",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_COMPONENTS",
    "AUFNR": <AUFNR>,
    "VORNR": <VORNR>,
    "POSNR": <POSNR>,
    "RSPOS": <RSPOS>
  }
})
```

WORKORDER_COMPONENTS_LIST
GET (AUFNR, VORNR, POSNR, RSPOS)

Header values:

REQUEST_OBJECT: WORKORDER_COMPONENTS_LIST

AUFNR: < Order Number >

VORNR: < Operation Number >

POSNR: < BOM item number >

RSPOS: < Reservation Number >

Description:

Fetches a list of work order components that match the criteria determined by the headers provided. Each header is optional, though if any headers are provided, AUFNR must be one of them.

Output Fields:

Field Name	Description	Data Type
AUFNR	Work order number	NVARCHAR (12)
POSNR	BOM item number	NVARCHAR (4)
RSNUM	Number of Reservation/Dependent Requirement	NVARCHAR (10)
RSPOS	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)
MATNR	Material Number	NVARCHAR (40)
BDMNG	Requirement Quantity	DECIMAL (13, 3)
WERKS	Plant	NVARCHAR (4)
POSTP	Item Category (Bill of Material)	NVARCHAR (1)
GPREIS	Price in component currency	DECIMAL (15, 2)
WAERS	Currency Key	NVARCHAR (255)
RMAKTX	Material Description (Short Text) from WO_COMP	NVARCHAR (255)
RMEINS	Component unit of measure from WO_COMP	NVARCHAR (255)
ENMNG	Quantity Withdrawn	DECIMAL (13, 3)
TBMNG	Transfer requirement quantity already requested	DECIMAL (13, 3)
CHARG	Batch Number	NVARCHAR (10)
POTX1	BOM Item Text (Line 1)	NVARCHAR (40)

VORNR	Operation/Activity Number	NVARCHAR (4)
ERFME	Unit of entry	NVARCHAR (3)
MISKZ	Mixed MRP Indicator (used to release PR)	NVARCHAR (1)

COMPONENT_ONHAND

GET (MATNR, LGORT)

Header values:

REQUEST_OBJECT: COMPONENT_ONHAND

MATNR: < *Material Number* >

LGORT: < *Storage Location* > (*optional*)

Description:

Get stock on hand quantities for a specific MATNR. LGORT can be provided to only include a specific storage location's stock level. If LGORT is not provided, all storage locations will be represented in the response array. A sum of stock levels across all storage locations is not returned and must be calculated client-side.

Output Fields:

Field Name	Description	Data Type
MATNR	Material number	NVARCHAR (40)
LGORT	Storage location number	NVARCHAR (4)
STOCK_ON_HAND	Onhand quantity for the storage location	INTEGER

COMPONENT_LTXT

GET (AUFNR, POSNR, RSPOS)

Header values:

REQUEST_OBJECT: COMPONENT_LTXT

AUFNR: < Order Number >

POSNR: < BOM item number > (optional)

RSPOS: < Reservation Number > (optional)

Description:

Fetches the long text for a text component matching the criteria determined by the provided headers.

Output Fields:

Field Name	Description	Data Type
AUFNR	Work order number	NVARCHAR (12)
POSNR	BOM item number	NVARCHAR (4)
RSPOS	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)
SGTXT	Item Text	LONG NVARCHAR

WORKORDER_NOTIFICATION

GET

Header values:

REQUEST_OBJECT: WORKORDER_NOTIFICATION

Description:

Use this service to retrieve a list of all work order notifications.

OData Entity:

/dep/odata/Workorder_Notification

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
AEDAT	Date on which the object was last changed	NVARCHAR (8)	
AENAM	Name of the user who last changed the object	NVARCHAR (12)	
ARTPR	Priority Type	NVARCHAR (2)	
AUSBS	End of Malfunction (Date)	NVARCHAR (8)	yyyymmdd
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)	yyyymmdd
AUZTB	Start of Malfunction (Time)	NVARCHAR (6)	hhmmss
AUZTV	End of Malfunction (Time)	NVARCHAR (6)	hhmmss
EQUNR	Equipment Number	NVARCHAR (18)	
ERDAT	Date on which the object was created	NVARCHAR (8)	
ERNAM	Name of User Who Created the Object	NVARCHAR (12)	
FECOD	Damage code group	NVARCHAR(8)	
FEGRP	Damage code	NVARCHAR(4)	
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)	
FETXT	Damage code description	NVARCHAR(40)	
KOSTL	Cost Center	NVARCHAR(10)	

MSAUS	Breakdown Indicator	NVARCHAR (1)	
MZEIT	Notification Time	NVARCHAR (6)	
OBJNR	Object Number	NVARCHAR (22)	
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)	
PRIOK	Priority	NVARCHAR (1)	
QMART	Notification Type	NVARCHAR (2)	
QMDAT	Date of Notification	NVARCHAR (8)	
QMNUM	Notification Number	NVARCHAR (12)	
QMTXT	Notification Description	NVARCHAR (40)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	
URCOD	Cause Code	NVARCHAR (4)	
URGRP	Code Group - Causes	NVARCHAR (8)	
URKAT	Catalog Type - Causes	NVARCHAR (1)	
URTXT	Cause Text	NVARCHAR (40)	
WO_EXISTS	Identifier for active work order	NVARCHAR (1)	

Sample Implementation:

```
//AJAX call option 1
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_NOTIFICATION"
    }
})

//Condensed AJAX call
jQuery.ajax("/ws_restful_data_controller/Workorder_Notification")
```

Sample Output:

[

```

.../
{
  "AUFNR": "000040034267",
  "ARTPR": "PM",
  "OBJNR": "QM000010034197",
  "EQUNR": "ADRPMC003005",
  "TPLNR": "0207-322-011-001",
  "TPLNR_EXT": "0207-322-011-001",
  "ABCKZ": "D",
  "KOSTL": "207151050",
  "QMNUM": "10034197",
  "QMART": "M1",
  "QMTXT": "1825 DAY TMC AIR DRYER - ENG ROOM",
  "QMDAT": "20130710",
  "ERNAM": "MBOOTH",
  "ERDAT": "20130709",
  "AENAM": "KANMAN001",
  "AEDAT": "20130818",
  "PRIOK": "3",
  "MZEIT": "094324",
  "MSAUS": " ",
  "AUSVN": "20130818",
  "AUZTV": "201444",
  "AUSBS": "00000000",
  "AUZTB": "000000",
  "OTKAT": null,
  "FEKAT": null,
  "FEGRP": null,
  "FECOD": null,
  "FETXT": null,
  "URKAT": null,
  "URGRP": null,
  "URCOD": null,
  "URTXT": null,
  "WO_EXISTS": "X"
}
...
]

```

GET(AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER_NOTIFICATION

AUFNR: <Order Number>

Description:

Use this service to retrieve details for a notification defined by AUFNR.

OData Entity:
/dep/odata/Workorder_List

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
AEDAT	Date on which the object was last changed	NVARCHAR (8)	
AENAM	Name of the user who last changed the object	NVARCHAR (12)	
ARTPR	Priority Type	NVARCHAR (2)	
AUSBS	End of Malfunction (Date)	NVARCHAR (8)	yyyymmdd
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)	yyyymmdd
AUZTB	Start of Malfunction (Time)	NVARCHAR (6)	hhmmss
AUZTV	End of Malfunction (Time)	NVARCHAR (6)	hhmmss
EQU NR	Equipment Number	NVARCHAR (18)	
ERDAT	Date on which the object was created	NVARCHAR (8)	
ERNAM	Name of User Who Created the Object	NVARCHAR (12)	
FECOD	Damage code group	NVARCHAR(8)	
FEGRP	Damage code	NVARCHAR(4)	
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)	
FETXT	Damage code description	NVARCHAR(40)	
KOSTL	Cost Center	NVARCHAR(10)	
MSAUS	Breakdown Indicator	NVARCHAR (1)	
MZEIT	Notification Time	NVARCHAR (6)	
OBJNR	Object Number	NVARCHAR (22)	
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)	

PRIOK	Priority	NVARCHAR (1)	
QMART	Notification Type	NVARCHAR (2)	
QMDAT	Date of Notification	NVARCHAR (8)	
QMNUM	Notification Number	NVARCHAR (12)	
QMTXT	Notification Description	NVARCHAR (40)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	
URCOD	Cause Code	NVARCHAR (4)	
URGRP	Code Group - Causes	NVARCHAR (8)	
URKAT	Catalog Type - Causes	NVARCHAR (1)	
URTXT	Cause Text	NVARCHAR (40)	
WO_EXISTS	Identifier for active work order	NVARCHAR (1)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_NOTIFICATION",
    "AUFNR": "000040034267"
  }
})

```

Sample Output:

```

{
  "AUFNR": "000040034267",
  "ARTPR": "PM",
  "OBJNR": "QM000010034197",
  "EQUNR": "ADRTMC003005",
  "TPLNR": "0207-322-011-001",
  "TPLNR_EXT": "0207-322-011-001",
  "ABCKZ": "D",
  "KOSTL": "207151050",
  "QMNUM": "10034197",
  "QMART": "M1",
  "QMTXT": "1825 DAY TMC AIR DRYER - ENG ROOM",

```

```

"QMDAT": "20130710",
"ERNAM": "MBOOTH",
"ERDAT": "20130709",
"AENAM": "KANMAN001",
"AEDAT": "20130818",
"PRIOK": "3",
"MZEIT": "094324",
"MSAUS": " ",
"AUSVN": "20130818",
"AUZTV": "201444",
"AUSBS": "00000000",
"AUZTB": "000000",
"OTKAT": null,
"FEKAT": null,
"FEGRP": null,
"FECOD": null,
"FETXT": null,
"URKAT": null,
"URGRP": null,
"URCOD": null,
"URTXT": null,
"WO_EXISTS": "X"
}

```

POST

Header values:
REQUEST_OBJECT: WORKORDER_NOTIFICATION

Description:
This service is used to create a notification with an accompanying inactive work order.

Input Fields:

Field Name	Description	Data Type	Required
ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
ANLZU	System Condition	NVARCHAR (1)	Y
AUSBS	End of Malfunction (Date)	NVARCHAR (8)	
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)	
AUZTB	End of Malfunction (Time)	NVARCHAR (6)	
AUZTV	Start of Malfunction (Time)	NVARCHAR (6)	

EQUNR	Equipment Number	NVARCHAR (18)	Y
EQKTX	Description of technical object	NVARCHAR (40)	
FETXT	Notification Item Short Text	NVARCHAR (40)	
FECOD	Problem or Damage Code	NVARCHAR (4)	
FEGRP	Code Group - Problem	NVARCHAR (8)	
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)	
INACTIVEWO	Identifier to create active/inactive workorder	NVARCHAR(5)	
KOSTL	Cost Center	NVARCHAR (10)	
MSAUS	Breakdown Indicator	NVARCHAR (1)	
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)	
PRIOK	Priority	NVARCHAR (1)	Y
PLTXT	Description of functional location	NVARCHAR (40)	
QMART	Notification Type	NVARCHAR (2)	
QMDAT	Notification Date	NVARCHAR (8)	
QMTXT	Description	NVARCHAR (40)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	Y
TPLNR	Functional Location	NVARCHAR (30)	Y
URCOD	Cause Code	NVARCHAR (4)	
URGRP	Code Group - Causes	NVARCHAR (8)	
URKAT	Catalog Type - Causes	NVARCHAR (1)	
URTXT	Cause Text	NVARCHAR (40)	

Sample Implementation:

```
var inputData = [
  {
    "ABCKZ": "D",
    "ANLZU": "1",
    "AUSBS": " 20180524",
    "AUSVN": "20180125",
```

```

    "AUZTB": "000000",
    "AUZTV": "014354",
    "EQKTX": "Satellite systems for crew",
    "EQUNR": "ACCSAT001003",
    "FECOD": "CORS",
    "FEGRP": "PM1",
    "FEKAT": "",
    "FETXT": "Corrosion",
    "INACTIVEWO": "True",
    "KOSTL": "207151066",
    "MSAUS": "X",
    "OTKAT": "",
    "PLTXT": "SATELLITE SYSTEMS FOR CREW",
    "PRIOK": "3",
    "QMART": "M1",
    "QMDAT": "20180125",
    "QMTXT": "test",
    "TPLNR": "0207-546-030-001",
    "TPLNR_EXT": "0207-546-030-001",
    "URCOD": "ENDF",
    "URGRP": "PM1",
    "URKAT": "",
    "URTXT": "Engineering Design Flaw"
}
];

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER_NOTIFICATION"
    }
});

```


PUT

Header values:

REQUEST_OBJECT: WORKORDER_NOTIFICATION

Description:

This service is used to update the notification.

Input Fields:

Field Name	Description	Data Type	Required
ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
AUFNR	Order number	NVARCHAR (12)	
ARTPR	Priority Type	NVARCHAR (2)	
AENAM	Name of the user who last changed the object	NVARCHAR (12)	
AEDAT	Date on which the object was last changed	NVARCHAR (8)	
AUSBS	End of Malfunction (Date)	NVARCHAR (8)	
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)	
AUZTB	End of Malfunction (Time)	NVARCHAR (6)	
AUZTV	Start of Malfunction (Time)	NVARCHAR (6)	
EQU NR	Equipment Number	NVARCHAR (18)	Y
ERNAM	Name of user who Created the Object	NVARCHAR (12)	
ERDAT	Date on which the record was created	NVARCHAR (8)	
FETXT	Notification Item Short Text	NVARCHAR (40)	
FECOD	Problem or Damage Code	NVARCHAR (4)	
FEGRP	Code Group - Problem	NVARCHAR (8)	
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)	
INACTIVEWO	Identifier to find inactive work order	NVARCHAR (5)	
KOSTL	Cost Center	NVARCHAR (10)	
MSAUS	Breakdown Indicator	NVARCHAR (1)	

MZEIT	Notification Time	NVARCHAR (6)	
OBJNR	Object Number	NVARCHAR (22)	
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)	
PRIOK	Priority	NVARCHAR (1)	Y
QMART	Notification Type	NVARCHAR (2)	
QMDAT	Notification Date	NVARCHAR (8)	
QMNUM	Notification No	NVARCHAR (12)	
QMTXT	Description	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	Y
TPLNR_EXT	Function location - external format	NVARCHAR (40)	Y
URCOD	Cause Code	NVARCHAR (4)	
URKAT	Catalog Type - Causes	NVARCHAR (1)	
URGRP	Code Group - Causes	NVARCHAR (8)	
URTXT	Cause Text	NVARCHAR (40)	
WO_EXISTS	Identifier for active work order	NVARCHAR(1)	

Sample Implementation:

```
var inputData = [
  {
    "ABCKZ": "D",
    "AUFNR": "V02070000273",
    "ARTPR": "",
    "AENAM": "",
    "AEDAT": "",
    "AUSBS": "20180523",
    "AUSVN": "20180125",
    "AUZTB": "000000",
    "AUZTV": "014354",
    "EQUNR": "ACCSAT001003",
    "ERNAM": "SOMC.0207",
    "ERDAT": "",
    "FECOD": "CORS",
    "FEGRP": "PM1",
    "FEKAT": "",
  }
]
```

```
    "FETXT": "Corrosion",
    "INACTIVEWO": "True",
    "KOSTL": "207151066",
    "MSAUS": "X",
    "MZEIT": "",
    "OBJNR": "",
    "OTKAT": "",
    "PRIOK": "3",
    "QMART": "M1",
    "QMDAT": "20180125",
    "QMNUM": "2070000068",
    "QMTXT": "test",
    "TPLNR": "0207-546-030-001",
    "TPLNR_EXT": "0207-546-030-001",
    "URCOD": "ENDF",
    "URGRP": "PM1",
    "URKAT": "",
    "URTXT": "Engineering Design Flaw",
    "WO_EXISTS": " "
  }
};

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "PUT",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "WORKORDER_NOTIFICATION"
  }
});
```

WORKORDER_GOODS_ISSUES

GET

Header values:

REQUEST_OBJECT: WORKORDER_GOODS_ISSUES

Description:

Use this service to retrieve a list of work orders that have goods to be issued.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

OData Entity:

/dep/odata/Workorder_Goods_Issue

Output Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Display lines for user status	NVARCHAR (40)		
LastUpdatedAtPlantTS	Last updated at time	TIMESTAMP		
SYSTEM_STATUS	Display lines for system status	NVARCHAR (40)		
VORNR	Operation/Activity Number	NVARCHAR (4)		
AUFNR	Order Number	NVARCHAR (12)		
AUART	Order Type	NVARCHAR (4)		
KTEXT	Description	NVARCHAR (40)		
TPLNR	Functional Location	NVARCHAR (30)		
EQU NR	Equipment Number	NVARCHAR (18)		
VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)		

WERKS	Plant	NVARCHAR (4)		
PLTXT	Description of functional location	NVARCHAR (40)		
GLUZP	Basic finish (time)	NVARCHAR (6)		
GSUZP	Basic start time	NVARCHAR (6)		
KOSTL	Cost Center	NVARCHAR (10)		
EQKTX	Description of technical object	NVARCHAR (40)		
ABCKZ	FUNCTION Criticality	NVARCHAR (1)		
TPLNR_EXT	Function location in external format	NVARCHAR (40)		
GLTRP	Basic finish date	NVARCHAR (8)		
GSTRP	Basic start date	NVARCHAR (8)		
ILART	Maintenance activity type	NVARCHAR (3)		
ILATX	Description of maintenance activity type	NVARCHAR (30)		
INTEGRATION_STC	Integration status	NVARCHAR (15)	ERROR/PROCESSED/PENDING/UNKNOWN	

Sample Implementation:

```

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_GOODS_ISSUES"
    }
})

```

POST

Header values:

REQUEST_OBJECT: WORKORDER_GOODS_ISSUES

Description:

Use this service to update the goods issue component list.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
MBLNR	Material Document Number	NVARCHAR (10)		Y
MJAHR	Material Document Year	NVARCHAR (4)		Y
BUDAT	Posting Date in the Document	NVARCHAR (8)		Y
BLDAT	Document Date in Document	NVARCHAR (8)		Y
XBLNR	Reference Document Number	NVARCHAR (16)		
BKTXT	Document Header Text	NVARCHAR (25)		
GM_CODE	Assign code to transaction for BAPI goods movement	NVARCHAR (2)		
GTS_CUSREF_NO	Customs Reference Number for Scrapping	NVARCHAR (35)		
USER_STATUS	Field displaying user status	NVARCHAR (40)		Y
SYSTEM_STATUS	System Status	NVARCHAR (40)		Y
MOBILE_STATUS	Mobile Object Status	NVARCHAR (10)		
AUFNR	Order Number	NVARCHAR (12)		Y

AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional Location	NVARCHAR (30)		Y
TPLNR_EXT	Function location - external format	NVARCHAR (40)		Y
ERNAM	Name of Person who Created the Object	NVARCHAR (12)		Y
EQUNR	Equipment Number	NVARCHAR (18)		Y
WERKS	Plant	NVARCHAR (4)		Y
PLTXT	Description of functional location	NVARCHAR (40)		Y
GLUZP	Basic finish (time)	NVARCHAR (6)		Y
GSUZP	Basic start time	NVARCHAR (6)		Y
GLTRP	Basic finish date	NVARCHAR (8)		Y
GSTRP	Basic start date	NVARCHAR (8)		Y
KOSTL	Cost Center	NVARCHAR (10)		Y
ABCKZ	FUNCTION Criticality	NVARCHAR (1)		Y
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	System Condition	NVARCHAR (1)		Y
PLGRP	Responsible planner group/department	NVARCHAR (3)		

VAPLZ	Main Work Center	NVARCHAR (8)		Y
IWERK	Rig/Plant/Remote	NVARCHAR (4)		Y
EQKTX	Description of technical object	NVARCHAR (40)		Y
FUNC_AREA	Functional Area	NVARCHAR (16)		
AUSVN	Start of Malfunction (Date)	NVARCHAR (8)		Y
AUSBS	End of Malfunction (Date)	NVARCHAR (8)		Y
AUZTB	End of Malfunction (Time)	NVARCHAR (6)		Y
AUZTV	Start of Malfunction (Time)	NVARCHAR (6)		Y
GSTRI	Actual start date	NVARCHAR (8)		Y
GLTRS	Scheduled finish	NVARCHAR (8)		Y
ABNUM	Maintenance Plan Call Number	INTEGER		Y
MSAUS	Breakdown Indicator	NVARCHAR (1)		
URCOD	Cause Code	NVARCHAR (4)		
URGRP	Code Group - Causes	NVARCHAR (8)		
URTXT	Cause Text	NVARCHAR (40)		
FECOD	Problem or Damage Code	NVARCHAR (4)		
FEGRP	Code Group - Problem	NVARCHAR (8)		

FETXT	Notification Item Short Text	NVARCHAR (40)		
INGPR	Planner Group for Customer Service and Plant Maintenance	NVARCHAR (3)		Y
ILART	Maintenance activity type	NVARCHAR (3)		Y
ILATX	Description of maintenance activity type	NVARCHAR (30)		Y
IS_EXTERNAL	Is External	NVARCHAR (1)		Y
QMART	Notification Type	NVARCHAR (2)		Y
OTKAT	Catalog Type - Object Parts	NVARCHAR (1)		
FEKAT	Catalog Type - Problems/Defects	NVARCHAR (1)		
URKAT	Catalog Type - Causes	NVARCHAR (1)		
INTEGRATION_STATUS	Integration Status	NVARCHAR (15)		Y
HAS_REPAIRS	Has Repairs	NVARCHAR (1)		Y
CHG_REASON	Reason for Change	NVARCHAR (32000)		
WO_LTXT	Work Order Long Text	LONG NVARCHAR		
WO_LTXT_ADD	Text to Add to Long Text	LONG NVARCHAR		
GoodsToIssueArr	An Array of goods to issue items	LONG NVARCHAR	Data must be represented in JSON	Y
<i>OVER</i>	Flag indicating the required quantity is greater than the stock quantity	NVARCHAR (1)	1 if RequirementQuantity is greater than stock quantity, otherwise 0	Y

<i>AUFNR</i>	Order Number	NVARCHAR (12)		Y
<i>POSNR</i>	Sort Number for Item	NVARCHAR (4)		Y
<i>RSNUM</i>	Number of Reservation/Dependent Requirement	NVARCHAR (10)		
<i>RSPOS</i>	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)		Y
<i>MATNR</i>	Material Number	NVARCHAR (40)		Y
<i>MFRNR</i>	Number of a Manufacturer	NVARCHAR (10)		Y
<i>NAME1</i>	Vendor Name	NVARCHAR (40)		
<i>MFRPN</i>	Manufacturer Part Number	NVARCHAR (40)		Y
<i>MAKTX</i>	Material Description (Short Text)	NVARCHAR (40)		Y
<i>MEINS</i>	Purchase Requisition Unit of Measure	NVARCHAR (3)		Y
<i>BDMNG</i>	Requirement Quantity	DECIMAL (13, 3)	ERFMG + ENMNG <= BDMNG	Y
<i>WERKS</i>	Plant/Rig/Remote	NVARCHAR (4)		Y
<i>CATEGORY</i>	Item Category	NVARCHAR (255)		Y
<i>POSTP</i>	Item Category (Bill of Material)	NVARCHAR (1)		Y
<i>GPREIS</i>	Price in component currency	DECIMAL (15, 2)		Y
<i>WAERS</i>	Currency Key	NVARCHAR (5)		Y
<i>RMAKTX</i>	Material Description (Short Text)	NVARCHAR (40)		Y

<i>RMEINS</i>	Purchase Requisition Unit of Measure	NVARCHAR (3)		Y
<i>LGPBE</i>	Storage Bin	NVARCHAR (10)		Y
<i>QUANT</i>	Store quantities	DECIMAL (13, 3)	ERFMG < QUANT	Y
<i>LGORT</i>	Storage Location	NVARCHAR (4)		Y
<i>ENMNG</i>	Quantity Withdrawn	DECIMAL (13, 3)	ERFMG + ENMNG <= BDMNG	Y
<i>TBMNG</i>	Transfer requirement quantity already requested	DECIMAL (13, 3)		Y
<i>CHARG</i>	Batch Number	NVARCHAR (10)		
<i>POTX1</i>	BOM Item Text (Line 1)	NVARCHAR (40)		
<i>VORNR</i>	Operation/Activity Number	NVARCHAR (4)		Y
<i>ERFME</i>	Unit of Entry	NVARCHAR (3)		Y
<i>ZEILE</i>	Item in Material Document	NVARCHAR (4)		Y
<i>CUD_IND</i>	Single-Character Indicator	NVARCHAR (1)	Must be 'U' (Update) for any that are changed	
<i>SPERR</i>	Posting block due to physical inventory	NVARCHAR (1)		
<i>MULTI_LOC</i>	Flag Material Number is NULL	NVARCHAR (1)		Y
<i>BWTTY</i>	Valuation Category	NVARCHAR (1)		Y
<i>MISKZ</i>	Mixed MRP indicator	NVARCHAR (1)		
<i>DIFF</i>	Difference between requested and fulfilled	DECIMAL (13, 3)		Y

<i>ERFMG</i>	Quantity in Unit of Entry	DECIMAL (13, 3)	Must be a natural number ERFMG < QUANT ERFMG + ENMNG <= BDMNG	Y
<i>ERFMG_101</i>	Goods Receipt (101)	DECIMAL (13, 3)		
<i>ERFMG_343</i>	Available/Received Quantity for Xfer (343), a type of goods movement	DECIMAL (13, 3)		
<i>UMWRK</i>	Receiving/Issuing Plant	NVARCHAR (4)		
<i>UMLGO</i>	Receiving/Issuing Storage Location	NVARCHAR (4)		
<i>KZBEW</i>	Movement Indicator	NVARCHAR (1)		
<i>BWART</i>	Movement Type (Inventory Management)	NVARCHAR (3)		Y
<i>EBELN</i>	Purchase Order Number	NVARCHAR (10)		
<i>EBELP</i>	Item Number of Purchasing Document	NVARCHAR (5)		
<i>ABLAD</i>	Unloading Point	NVARCHAR (25)		
<i>LINE_ID</i>	Line ID	NVARCHAR (6)		
<i>PARENT_ID</i>	Identifier of immediately superior line	NVARCHAR (6)		
<i>LINE_DEPTH</i>	Hierarchy level of line in document	NVARCHAR (2)		
<i>KOSTL</i>	Cost Center	NVARCHAR (10)		
<i>BWTAR</i>	Valuation Type	NVARCHAR (10)		
<i>INSMK</i>	Stock Type	NVARCHAR (1)		

<i>IS_CHANGED</i>	Good to Issue is Changed	NVARCHAR (1)		
<i>MENGE</i>	Quantity	DECIMAL (13, 3)		Y

Sample Implementation:

```
var inputData = [
    {
        "MJAHR":2016,
        "BUDAT":"20160401",
        "BLDAT":"20160401",
        "XBLNR":"",
        "BKTXT":"",
        "GM_CODE":"03",
        "GTS_CUSREF_NO":"",
        "USER_STATUS":"REDY",
        "SYSTEM_STATUS":"REL  GMPS MACM PRC  SETC",
        "MOBILE_STATUS":" ",
        "AUFNR":"000040050809",
        "AUART":"PM01",
        "KTEXT":"Parts needed for next Plant move",
        "TPLNR":"0207-331-009-002",
        "TPLNR_EXT":"0207-331-009-002",
        "ERNAM":"ALABAK001",
        "EQUNR":"BOPCAM005005",
        "WERKS":"0207",
        "PLTXT":"RAM TYPE BOP, UPPER DBL",
        "GLUZP":"223500",
        "GSUZP":"212300",
        "GLTRP":"20140123",
        "GSTRP":"20140123",
        "KOSTL":"207151066",
        "ABCKZ":"A",
        "PRIOK":"1",
        "ANLZU":"1",
        "PLGRP":" ",
        "VAPLZ":"SENSSE",
        "IWERK":"0207",
        "EQKTX":"Ram type BOP",
        "FUNC_AREA":" ",
        "AUSVN":"20140124",
        "AUSBS":"00000000",
        "AUZTB":"000000",
        "AUZTV":"012351",
        "GSTR1":"00000000",
        "GLTRS":"20140123",
    }
]
```

```

"ABNUM":0,
"MSAUS":" ",
"URCOD":"","
"URGRP":"","
"URTXT":"","
"FECOD":"","
"FEGRP":"","
"FETXT":"","
"INGPR":"PM",
"ILART":"006",
"ILATX":"Refurbishment Corrective",
"IS_EXTERNAL":"0",
"QMART":"M1",
"OTKAT":"","
"FEKAT":"","
"URKAT":"","
"INTEGRATION_STATUS":"5-NORMAL",
"HAS_REPAIRS":"0",
"CHG_REASON":"","
"WO_LTXT":"Parts needed for next Plant move",
"WO_LTXT_ADD":"","
"GoodsToIssueArr": [
  ...,
  {
    "OVER":"0",
    "AUFNR":"000040050809",
    "POSNR":"0210",
    "RSNUM":"0000056134",
    "RSPOS":"0021",
    "MATNR":"34928",
    "MFRNR":"3000000237",
    "NAME1":"","
    "MFRPN":"2369759-01",
    "MAKTX":"VALVE: : DRG, 1/4 INCH, 5 KSI WP,",
    "MEINS":"EA",
    "BDMNG":1,
    "WERKS":"0207",
    "CATEGORY":"Stock item",
    "POSTP":"L",
    "GPRES":5753.6,
    "WAERS":"USD",
    "RMAKTX":"VALVE: : DRG, 1/4 INCH, 5 KSI WP,",
    "RMEINS":"EA",
    "LGPBE":"I-28-C",
    "QUANT":3,
    "LGORT":"0001",
    "ENMNG":0,
  }
]

```

```

        "TBMNG":0,
        "CHARG":" ",
        "POTX1":" ",
        "VORNR":"0010",
        "ERFME":"EA",
        "ZEILE":"0018",
        "CUD_IND":"","
        "SPERR":"","
        "MULTI_LOC":"0",
        "BWTY":"C",
        "MISKZ":" ",
        "DIFF":1,
        "ERFMG":"","
        "ERFMG_101":"","
        "ERFMG_343":"","
        "UMWRK":"","
        "UMLGO":"","
        "KZBEW":"","
        "BWART":"261",
        "EBELN":"","
        "EBELP":"","
        "ABLAD":"","
        "LINE_ID":"","
        "PARENT_ID":"","
        "LINE_DEPTH":"","
        "KOSTL":"","
        "BWTAR":"C1",
        "INSMK":"","
        "IS_CHANGED":"","
        "MENGE":0
    },
    ...}
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER_GOODS_ISSUES"
    }
})

```

VALUATION_CATEGORIES

GET

Header values:

REQUEST_OBJECT: VALUATION_CATEGORIES

Description:

Use this service to get valuation categories.

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "VALUATION_CATEGORIES"
  }
})
```

Sample Output:

```
[
  {
    "CATEGORY": "C1",
    "CATEGORY_DESC": "New"
  },
  {
    "CATEGORY": "C2",
    "CATEGORY_DESC": "Repaired"
  },
  {
    "CATEGORY": "C3",
    "CATEGORY_DESC": ""
  },
  {
    "CATEGORY": "C5",
    "CATEGORY_DESC": "Capital"
  }
]
```


EQUIPMENT_BOM

GET

Header values:

REQUEST_OBJECT: EQUIPMENT_BOM

Description:

Use this service to get inventory information from a bill of materials list.

OData Entity:

/dep/odata/Equipment_BOM

Output Fields:

Field Name	Description	Data Type	Restrictions
BOM_NUM	Construction type material of the object	NVARCHAR (18)	
EQUNR	Equipment Number	NVARCHAR (18)	
STLAN	BOM Usage	NVARCHAR (1)	
STLTY	BOM category	NVARCHAR (1)	
STLNR	Bill of material	NVARCHAR (8)	
STLAL	Alternative BOM	NVARCHAR (2)	
EQKTX	Description of technical object	NVARCHAR (40)	
EQUNR_LIST	List of Equipment Numbers	NVARCHAR (2048)	
MATNR_LIST	List of Material Numbers	NVARCHAR (2048)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIPMENT_BOM"
    }
})
```

Sample Output:

[

```
.....  
{  
  "BOM_NUM": "ACCJET001",  
  "EQUNR": "ACCJET001003",  
  "STLAN": "4",  
  "STLTY": "M",  
  "STLNR": "00000567",  
  "STLAL": "1",  
  "EQKTX": "Accommodation toilets",  
  "EQUNR_LIST": "ACCJET001003",  
  "MATNR_LIST": "ACCJET001"  
},  
.....  
]
```

GET (EQUNR)

Header values:

REQUEST_OBJECT: EQUIPMENT_BOM

EQUNR: <Equipment Number>

Description:

Use this service to get a list of materials relating to a BOM, as specified by an equipment number.

Output Fields:

Field Name	Description	Data Type	Restrictions
STLNR	Bill of material	NVARCHAR (8)	
STLKN	BOM item node number	NVARCHAR (8)	
MAKTX	Material Description (Short Text)	NVARCHAR (40)	
IDNRK	BOM component	NVARCHAR (18)	
MEINS	Base Unit of Measure	NVARCHAR (3)	
POSNR	Position in superior technical object	NUMERIC (4)	
POSTP	Item Category (Bill of Material)	NVARCHAR (1)	
POTX1	BOM Item Text (Line 1)	NVARCHAR (40)	
EKGRP	Purchasing Group	NVARCHAR (3)	
MENGE	Purchase Requisition Quantity	NVARCHAR (13)	
MATKL	Material Group	NVARCHAR (9)	
PREIS	Price in Purchase Requisition	NVARCHAR (11)	
PEINH	Price Unit	DECIMAL (5, 3)	
LKENZ	Deletion Indicator	NVARCHAR (1)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIPMENT_BOM",
    "EQUNR": "123456789"
  }
})
```

Sample Output:

```
[
  {
    "STLNR": "00000693",
    "STLKN": "00000001",
    "MAKTX": "SEAL: MECHANICAL HQQV",
    "IDNRK": "16320",
    "MEINS": "EA",
    "POSNR": 10,
    "POSTP": "L",
    "POTX1": " ",
    "EKGRP": " ",
    "MENGE": "1.000",
    "MATKL": " ",
    "PREIS": "0.00",
    "PEINH": 0,
    "LKENZ": " "
  }, {
    "STLNR": "00000693",
    "STLKN": "00000002",
    "MAKTX": "SEAL: MECHANICAL FOR AB10/1A-1B",
    "IDNRK": "16531",
    "MEINS": "EA",
    "POSNR": 20,
    "POSTP": "L",
    "POTX1": " ",
    "EKGRP": " ",
    "MENGE": "1.000",
    "MATKL": " ",
    "PREIS": "0.00",
    "PEINH": 0,
    "LKENZ": " "
  }
]
```

POST

Header values:

REQUEST_OBJECT: EQUIPMENT_BOM

Description:

Use this service to add materials to a bill of materials.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
WERKS	Plant	NVARCHAR (4)		
MATNR	Material Number	NVARCHAR (40)		
MAKTX	Material Description (Short Text)	NVARCHAR (40)		Y
MTART	Material Type	NVARCHAR (4)		
PRDHA	Product hierarchy	NVARCHAR (18)		
EKGRP	Purchasing Group	NVARCHAR (3)		
SERNP	Serial Number Profile	NVARCHAR (4)		
MEINS	Base Unit of Measure	NVARCHAR (3)		Y
XCHPF	Batch management requirement indicator	NVARCHAR (1)		
MAABC	ABC Indicator	NVARCHAR (1)		
MABST	Maximum stock level	DECIMAL (13, 3)		
MINBE	Reorder Point	DECIMAL (13, 3)		
BSTMI	Minimum Lot Size	DECIMAL (13, 3)		
BSTMA	Maximum Lot Size	DECIMAL (13, 3)		
MMSTA	Plant-Specific Material Status	NVARCHAR (2)		
MFRPN	Manufacturer Part Number	NVARCHAR (40)		
MFRNR	Number of a Manufacturer	NVARCHAR (10)		
LGORT	Storage Location	NVARCHAR (4)		

BESKZ	Procurement Type	NVARCHAR (1)		
LGPBE	Storage Bin	NVARCHAR (10)		
NAME1	Name	NVARCHAR (35)		
XCHAR	Batch management indicator (internal)	NVARCHAR (1)		
PNAME	Plant Name	NVARCHAR (40)		
REQQTY	Requested Quantity	DECIMAL (13, 3)		
PREIS	Price	DECIMAL (11, 2)		
IDNRK	BOM component	NVARCHAR (18)		Y
EQU NR	Equipment Number	NVARCHAR (18)		Y
STLAN	BOM Usage	NVARCHAR (1)		Y
STLTY	BOM category	NVARCHAR (1)		Y
STLNR	Bill of material	NVARCHAR (8)		Y
STLAL	Alternative BOM	NVARCHAR (2)		Y
MENGE	Component quantity	DECIMAL (13, 3)		Y
STLKN	BOM item node number	NVARCHAR (8)		
DATUV	Valid-From Date	NVARCHAR (8)		
POSTP	Item Category (Bill of Material)	NVARCHAR (1)		
POSNR	BOM Item Number	NVARCHAR (4)		
MATKL	Material Group	NVARCHAR (9)		
PEINH	Price Unit	DECIMAL (5, 0)		
POTX1	BOM Item Text (Line 1)	NVARCHAR (40)		

Sample Implementation:

```
var inputData = [
  {
    "WERKS": "0207",
    "MATNR": "AGTAKE002",
    "MAKTX": "DIE: TONG, 4 x 11 TEETH - PIPE HANDLER",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": "",
    "MINBE": "",
    "BSTMI": 30,
    "BSTMA": 50,
    "MMSTA": " ",
    "MFRPN": "BA0011921",
    "MFRNR": "3000000231",
    "LGORT": "0001",
    "BESKZ": "X",
    "LGPBE": "F-37",
    "NAME1": "",
    "XCHAR": " ",
    "PNAME": "Ocean Explorer",
    "REQQTY": 1,
    "PREIS": "",
    "IDNRK": "218",
    "EQUNR": "AGTAKE002027",
    "STLAN": "4",
    "STLTY": "M",
    "STLNR": "00000569",
    "STLAL": "1",
    "MENGE": "1.0",
    "STLKN": "",
    "DATUV": "",
    "POSTP": "",
    "POSNR": "",
    "MATKL": "",
    "PEINH": "",
    "POTX1": ""
  }
]

jQuery.ajax({
  url: "/ws_restful_data_controller",
```

```
method: "POST",  
data: inputData,  
headers: {  
    "REQUEST_OBJECT": "EQUIPMENT_BOM"  
}  
})
```


DELETE

Header values:

REQUEST_OBJECT: EQUIPMENT_BOM

EQUNR: <equipment number>

STLKN: <component to remove>

Description:

Use this service to delete materials from a bill of materials.

Notes:

- Previous versions used a request body to indicate the material to delete. The new functionality does this server-side using the primary key, but is backwards compatible if a request body is provided instead.

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller/equipment_bom",
  method: "DELETE",
  headers: {
    "EQUNR": "AHUHAK201003",
    "STLKN": "00000051"
  }
});
```

EQUIPMENT

GET

Header values:

REQUEST_OBJECT: EQUIPMENT

IS_ROOT_EQUIP: <Is root equipment bit> (optional for filtering)

Description:

Use this service to retrieve a list of equipment.

OData Entity:

/dep/odata/Equipment

Output Fields:

Field Name	Description	Data Type	Restrictions
EQUNR	Equipment Number	NVARCHAR (18)	
EQART	Type of Technical Object	NVARCHAR (10)	
HERST	Manufacturer of asset	NVARCHAR (30)	
EQKTX	Description of technical object	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
IWERK	Maintenance Planning Plant	NVARCHAR (4)	
ABCKZ	Function Criticality	NVARCHAR (1)	
KOSTL	Cost Center	NVARCHAR (10)	
PLTXT	Description of functional location	NVARCHAR (40)	
SUBMT	Construction type material of the object	NVARCHAR (18)	
HEQUI	Superordinate Equipment	NVARCHAR (18)	
EQKTX_1	Description of technical object	NVARCHAR (40)	
IS_ROOT_EQUIP	If the equipment is a root equipment	BIT	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIPMENT"
  }
})
```

Sample Output:

```
[
  {
    "EQUNR": "WSTSUM002004",
    "EQART": "WST",
    "HERST": "TOOL Co.",
    "EQKTX": "Workshop drilling machine",
    "TPLNR": "0207-441-003-001",
    "TPLNR_EXT": "0207-441-003-001",
    "IWERK": "0207",
    "ABCKZ": "D",
    "KOSTL": "207151066",
    "PLTXT": "MECH WORKSHOP RADIAL ARM DRILL PRESS",
    "SUBMT": " ",
    "HEQUI": " ",
    "EQKTX_1": "",
    "IS_ROOT_EQUIP": true
  }
]
```

REPORTS

GET

Header values:

REQUEST_OBJECT: REPORTS

Description:

Use this service to retrieve a list of all available reports.

Output Fields:

Field Name	Description	Data Type	Restrictions
TCODE	Transaction code	NVARCHAR (20)	
REPVAR	Report variant name	NVARCHAR (14)	
REPDESC	Report description	NVARCHAR (132)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "REPORTS"
  }
})
```

Sample Output:

```
[
  {
    "TCODE": "MB52",
    "REPVAR": "ZHOURLY_EXPORT",
    "REPDESC": "HOURLY EXPORT TO TABLE FOR MB52"
  },
  {
    "TCODE": "MMBE",
    "REPVAR": "100-300-1000",
    "REPDESC": "MATERIAL 100-300 REPORT"
  }
]
```

GET (REPVAR, TCODE)

Header values:

REQUEST_OBJECT: REPORTS

TCODE: <Transaction Code>

REPVAR: <Report Variant Name>

Description:

Use this service to retrieve a list of all reports to date, for a given variant.

Output Fields:

Field Name	Description	Data Type	Restrictions
FILENAME	Short Description	NVARCHAR (255)	
RUNDATE	Date when report was generated	NVARCHAR (8)	yyyymmdd

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "REPORTS",
    "TCODE": "MMBE",
    "REPVAR": "100-300-1000"
  }
})
```

Sample Output:

```
[
  {
    "FILENAME": "SAMPLE-20150604.PDF",
    "RUNDATE": "20150604"
  },
  {
    "FILENAME": "SAMPLE-20150603.PDF",
    "RUNDATE": "20150603"
  }
]
```

MATERIAL_DOCS

GET

Header values:

REQUEST_OBJECT: MATERIAL_DOCS

Description:

Use this service to retrieve a list of material documents.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Output Fields:

Field Name	Description	Data Type	Restrictions
MBLNR	Number of Material Document	NVARCHAR (10)	
BWART	Movement Type (Inventory Management)	NVARCHAR (3)	
BUDAT	Posting Date in the Document	NVARCHAR (8)	
WERKS	Plant	NVARCHAR (4)	
UMWRK	Receiving/Issuing Plant	NVARCHAR (4)	
EBELN	Purchase Order Number	NVARCHAR (10)	
AUFNR	Order Number	NVARCHAR (12)	
AFENR	AFE Number	NVARCHAR (16)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIAL_DOCS"
  }
})
```

Sample Output:

```
[
  ....
  {
    "MBLNR": "0000000026",
    "BWART": "262",
```

```
    "BUDAT": "20150601",
    "WERKS": "0207",
    "UMWRK": " ",
    "EBELN": " ",
    "AUFNR": "V20700000764",
    "AFENR": ""
  },
  {
    "MBLNR": "0000000028",
    "BWART": "261",
    "BUDAT": "20150602",
    "WERKS": "0207",
    "UMWRK": "",
    "EBELN": "",
    "AUFNR": "V02070000041",
    "AFENR": ""
  }
  ....
]
```

GET(MBLNR)

Header values:

REQUEST_OBJECT: MATERIAL_DOCS

MBLNR: <Number of Material Document>

Description:

Use this service to retrieve material document details.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Output Fields:

Field Name	Description	Data Type	Restrictions
MBLNR	Number of Material Document	NVARCHAR (10)	
ZEILE	Item in Material Document	NVARCHAR (4)	
LINE_ID	Line ID	NVARCHAR (6)	
BWART	Movement Type (Inventory Management)	NVARCHAR (3)	
BTEXT	Movement Type Text (Inventory Management)	NVARCHAR (20)	
BUDAT	Posting Date in the Document	NVARCHAR (8)	
WERKS	Plant	NVARCHAR (4)	
UMWRK	Receiving/Issuing Plant	NVARCHAR (4)	
EBELN	Purchase Order Number	NVARCHAR (10)	
AUFNR	Order Number	NVARCHAR (12)	
AFENR	AFE Number	NVARCHAR (16)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (Short Text)	NVARCHAR (40)	
MENGE	Quantity	DECIMAL (13, 3)	
MEINS	Base Unit of Measure	NVARCHAR (3)	
ERFMG	Quantity in Unit of Entry	DECIMAL (13, 3)	
ERFME	Unit of Entry	NVARCHAR (3)	

LGORT	Storage Location	NVARCHAR (4)	
CHARG	Batch Number	NVARCHAR (10)	
UMLGO	Receiving/Issuing Storage Location	NVARCHAR (4)	
KZBEW	Movement Indicator	NVARCHAR (1)	
EBELP	Item Number of Purchasing Document	NVARCHAR (5)	
ABLAD	Unloading Point	NVARCHAR (25)	
KOSTL	Cost Center	NVARCHAR (10)	
BWTAR	Valuation Type	NVARCHAR (10)	
PARENT_ID	Identifier of immediately superior line	NVARCHAR (6)	
LINE_DEPTH	Hierarchy level of line in document	NVARCHAR (2)	
LGPBE	Storage Bin	NVARCHAR (10)	
SPERR	Posting block due to physical inventory	NVARCHAR (1)	
BWTTY	Valuation Category	NVARCHAR (1)	
QUANT	Store quantities	DECIMAL (13, 3)	
KNTTP	Account Assignment Category	NVARCHAR (1)	
RSPOS	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)	
RSNUM	Number of Reservation/Dependent Requirement	NVARCHAR (10)	
REVERSIBLE_QTY	Quantity to Reverse	DECIMAL (13, 3)	
USER_STATUS	Field displaying user status	NVARCHAR (40)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIAL_DOCS",
    "MBLNR": "4900266521"
  }
})

```

Sample Output:

```
[
  ....
  {
    "MBLNR":"4900266521",
    "ZEILE":"0001",
    "LINE_ID":"000004",
    "BWART":"261",
    "BTEXT":"GI for order",
    "BUDAT":"20140511",
    "WERKS":"0207",
    "UMWRK":" ",
    "EBELN":" ",
    "AUFNR":"40048649",
    "AFENR":"",
    "MATNR":"41214",
    "MAKTX":"SEAL: TOP, 18 3/4, 15K CDVS",
    "MENGE":4,
    "MEINS":"EA",
    "ERFMG":4,
    "ERFME":"EA",
    "LGORT":"0001",
    "CHARG":"C1",
    "UMLGO":" ",
    "KZBEW":" ",
    "EBELP":"000000",
    "ABLAD":" ",
    "KOSTL":" ",
    "BWTAR":"C1",
    "PARENT_ID":"000000",
    "LINE_DEPTH":"00",
    "LGPBE":"J-14",
    "SPERR":"",
    "BWTTY":"C",
    "QUANT":6,
    "KNTTP":null,
    "RSPOS":"0004",
    "RSNUM":"0000053663",
    "REVERSIBLE_QTY":4,
    "USER_STATUS":""
  },
  ....
]
```

MATERIAL_DOC_REVERSAL

POST

Header values:

REQUEST_OBJECT: MATERIAL_DOC_REVERSAL

Description:

Use this service to create a reversal material document.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
GM_CODE	Assign code to transaction for BAPI goods movement	NVARCHAR (2)	Should be '03'	
MJAHR	Material Document Year	NVARCHAR (4)		Y
BUDAT	Posting Date in the Document	NVARCHAR (8)		Y
BLDAT	Document Date in Document	NVARCHAR (8)		Y
ComponentsArr	An array of component items	LONG NVARCHAR		Y
WERKS	Plant	NVARCHAR (4)		Y
MATNR	Material Number	NVARCHAR (40)		Y
MAKTX	Material Description (Short Text)	NVARCHAR (40)		Y
LGORT	Storage Location	NVARCHAR (4)		Y
ERFMG	Quantity in unit of entry (physical inventory)	DECIMAL (13)	Same as MENGE	Y
BWTAR	Valuation Type	NVARCHAR (10)		Y
CHARG	Batch Number	NVARCHAR (10)		
ERFME	Unit of entry (physical inventory)	NVARCHAR (3)		Y
BWART	Movement Type (Inventory Management)	NVARCHAR (3)		Y
UMWRK	Receiving/Issuing Plant	NVARCHAR (4)		Y

<i>MENGE</i>	Purchase Requisition Quantity	DECIMAL (13)	Same as ERFMG	Y
<i>UMLGO</i>	Receiving/Issuing Storage Location	NVARCHAR (4)		Y
<i>KZBEW</i>	Movement Indicator	NVARCHAR (1)		
<i>EBELN</i>	Purchasing Document Number	NVARCHAR (10)		
<i>EBELP</i>	Item Number of Purchasing Document	NVARCHAR (5)		
<i>ABLAD</i>	Unloading Point	NVARCHAR (25)		
<i>LINE_ID</i>	Unique identification of document line	NVARCHAR (6)		
<i>PARENT_ID</i>	Identifier of immediately superior line	NVARCHAR (6)		
<i>LINE_DEPTH</i>	Hierarchy level of line in document	NVARCHAR (2)		
<i>KOSTL</i>	Cost Center	NVARCHAR (10)		
<i>RSNUM</i>	Number of Reservation/Dependent Requirement	NVARCHAR (10)		
<i>RSPOS</i>	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)		
<i>QUANT</i>	Store quantities	DECIMAL (13, 3)		

MEASURING_POINTS

GET

Header values:

REQUEST_OBJECT: MEASURING_POINTS

Description:

Use this service to retrieve a list of measuring points.

OData Entity:

/dep/odata/Measuring_Points

Output Fields:

Field Name	Description	Data Type	Restrictions
SWERK	Plant	NVARCHAR (4)	
POINT	Measuring Point	NVARCHAR (12)	
TPLNR	Functional Location	NVARCHAR (30)	
EQU NR	Equipment Number	NVARCHAR (18)	
MPOBJ	Object Number for the Measuring Point Object	NVARCHAR (22)	
PSORT	Position Number of the Object Measuring Point (Sort Field)	NVARCHAR (20)	
PSORTR	Indicator: Position Number Comes From Reference MeasPoint	NVARCHAR (1)	
PTTXT	Description of Measuring Point	NVARCHAR (40)	
MLANG	Language Key	NVARCHAR (1)	
KZLTX	Indicator: Long text exists	NVARCHAR (1)	
MPTYP	Measuring Point Category	NVARCHAR (1)	
IRFMP	Indicator: MeasPoint Is a Reference Measuring Point	NVARCHAR (1)	
ERDAT	Date on which the object was created	NVARCHAR (8)	

ERNAM	Name of User Who Created the Object	NVARCHAR (12)	
AEDAT	Date on which the object was last changed	NVARCHAR (8)	
AENAM	Name of the user who last changed the object	NVARCHAR (12)	
BEGRU	Technical object authorization group	NVARCHAR (4)	
INACT	Indicator: Measuring Point Inactive	NVARCHAR (1)	
LVORM	Deletion Flag for 2-Level Deletion Logic	NVARCHAR (1)	
LOCAS	Assembly for Localization of Measuring Point	NVARCHAR (18)	
REFMP	Reference Meas.Pt	NVARCHAR (12)	
ATINN	Internal characteristic	NVARCHAR (10)	
ATINNR	Indicator: Charac Comes From Reference Measuring Point	NVARCHAR (1)	
EXPON	Power of Ten Exponent for Floating Point Display	INTEGER	
DECIM	Number of Decimal Places for Number Display	INTEGER	
DESIR	Measuring Point Target Value	DOUBLE	
DESIRI	Indicator: Associated Number Field Contains a Value	NVARCHAR (1)	
DESTRR	Indicator: Target Value Comes From Reference Measuring Point	NVARCHAR (1)	
DSTXT	Additional Short Text for Measuring Point	NVARCHAR (40)	
DSTXTR	Indicator: Additional Text Comes From Reference MeasPoint	NVARCHAR (1)	
MRMIN	Lower Measurement Range Limit/Minimum Total Counter Reading	DOUBLE	
MRMINI	Indicator: Associated Number Field Contains a Value	NVARCHAR (1)	
MRMAX	Upper Measurement Range Limit/Maximum Total Counter Reading	DOUBLE	
MRMAXI	Indicator: Associated Number Field Contains a Value	NVARCHAR (1)	
MRNGU	Measurement Range Unit	NVARCHAR (3)	
INDCT	Indicator to Show that Measuring Point Is a Counter	NVARCHAR (1)	

INDRV	Indicator: Counter Runs Backwards	NVARCHAR (1)	
INDTR	Indicator That Measurement Reading Transfer is Supported	NVARCHAR (1)	
TRANS	Measuring Point from Which Meas. Reading Was Transferred	NVARCHAR (12)	
CJUMP	Counter Overflow Reading in SI Unit	DOUBLE	
CJUMPI	Indicator: Associated Number Field Contains a Value	NVARCHAR (1)	
PYEAR	Annual Estimate in SI Unit	DOUBLE	
PYEARI	Indicator: Associated Number Field Contains a Value	NVARCHAR (1)	
CODCT	Catalog Type - Measurement Reading Valuation Code	NVARCHAR (1)	
CODGR	Code Group - Measurement Reading Valuation Code	NVARCHAR (8)	
CODGRR	Indicator: Code Group Comes From Reference Measuring Point	NVARCHAR (1)	
CDSUF	Indicator: Valuation Code Sufficient for Measurement. Document	NVARCHAR (1)	
MODTR	Mode of Counter Reading Transfer	NVARCHAR (1)	
INDTRR	Indicator: Measurement Transfer Comes from Ref. Meas. Point	NVARCHAR (1)	
ATNAM	Characteristic Name	NVARCHAR (30)	
ATFOR	Data type of characteristic	NVARCHAR (4)	
AFVOR	Indicator: Negative Values Allowed	NVARCHAR (1)	
MSEHI	Unit of Measurement	NVARCHAR (3)	
ATDIM	Exponent display	INTEGER	
ANZDZ	Number of Decimal Places	INTEGER	
AUSWAHLMGE	Selected Set	NVARCHAR (8)	
STATION	Character field of length 40	NVARCHAR (40)	
ACTION	Single-Character Indicator	NVARCHAR (1)	
LIMIT_MIN_CHAR	Value in target unit	NVARCHAR (22)	

LIMIT_MIN_CHAR1	Value in target unit	NVARCHAR (22)	
LIMIT_MAX_CHAR	Value in target unit	NVARCHAR (22)	
LIMIT_MAX_CHAR1	Value in target unit	NVARCHAR (22)	
ROLLOVER_CHAR	Value in target unit	NVARCHAR (22)	
ANNUAL_CHAR	Value in target unit	NVARCHAR (22)	
TARGET_CHAR	Value in target unit	NVARCHAR (22)	
UOM_CHAR	Value in target unit	NVARCHAR (22)	
PREV_DOC	Checkbox	NVARCHAR (1)	
P_MDOCM	Measurement Document	NVARCHAR (20)	
P_IDATE	Date of the Measurement	NVARCHAR (8)	
P_ITIME	Time of Measurement	NVARCHAR (6)	
P_READG	Measurement Reading/Total Counter Reading in SI Unit	DOUBLE	
P_CNTRR	Counter Reading in SI Unit	DOUBLE	
P_CDIFF	Counter Reading Difference in SI Unit	DOUBLE	
P_CODCT	Catalog Type - Measurement Reading Valuation Code	NVARCHAR (1)	
P_CODGR	Code Group - Measurement Reading Valuation Code	NVARCHAR (8)	
P_VLCOD	Valuation Code	NVARCHAR (4)	
P_READG_CHAR	Value in target unit	NVARCHAR (22)	
P_CNTRR_CHAR	Value in target unit	NVARCHAR (22)	
P_CDIFF_CHAR	Value in target unit	NVARCHAR (22)	

P_MDTXT	Measurement Document Text	NVARCHAR (40)	
P_CODETXT	Short Text for Code (Up to 40 Characters in Length)	NVARCHAR (40)	
TPLNR_EXT	Functional Location (external)	NVARCHAR (40)	
EQKTX	Description of technical object	NVARCHAR (40)	
PLTXT	Description of functional location	NVARCHAR (40)	
ATINN_EXT	External characteristic	NVARCHAR (40)	
ATBEZ	Characteristic description	NVARCHAR (30)	
OLD_TOTAL	Previous Reading	DECIMAL (22,2)	
CNTRR_C	Reading	DECIMAL (22,2)	
IDATE	Date of previous reading	NVARCHAR (8)	
ITIME	Time of previous reading	NVARCHAR (6)	
READR	Read by User	NVARCHAR (12)	
LAST_RDG	Reading	DECIMAL (22,2)	
READG_C	Reading	DECIMAL (22,2)	
OLD_IDATE	Same as IDATE, can be used to compare previous and new date when entering a new value	NVARCHAR (8)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MEASURING_POINTS"
  }
})

```

});

Sample Output:

```
[
  {
    "SWERK": "0207",
    "POINT": "181",
    "TPLNR": "0207-312-010-001",
    "EQUNR": " ",
    "MPOBJ": "IF0000000000000000018773",
    "PSORT": " ",
    "PSORTR": " ",
    "PTTXT": "DWKS AC DRIVE MOTOR #1",
    "MLANG": "E",
    "KZLTXT": " ",
    "MPTYP": "M",
    "IRFMP": " ",
    "ERDAT": "20130312",
    "ERNAM": "MB_DATALOAD",
    "AEDAT": "20141016",
    "AENAM": "SV_DATALOAD",
    "BEGRU": " ",
    "INACT": " ",
    "LVORM": " ",
    "LOCAS": " ",
    "REFMP": " ",
    "ATINN": "0000000814",
    "ATINNR": " ",
    "EXPON": 0,
    "DECIM": 2,
    "DESIR": 0,
    "DESIRI": " ",
    "DESIRR": " ",
    "DSTXT": " ",
    "DSTXTR": " ",
    "MRMIN": 0,
    "MRMINI": "X",
    "MRMAX": 0,
    "MRMAXI": " ",
    "MRNGU": "H",
    "INDCT": "X",
    "INDRV": " ",
    "INDTR": " ",
    "TRANS": " ",
    "CJUMP": 360000000,
    "CJUMPI": "X",
```

```

"PYEAR": 9000000,
"PYEAR1": "X",
"CODCT": " ",
"CODGR": " ",
"CODGRR": " ",
"CDSUF": " ",
"MODTR": " ",
"INDTRR": " ",
"ATNAM": " ",
"ATFOR": " ",
"ATVOR": " ",
"MSEHI": "H",
"ATDIM": 0,
"ANZDZ": 2,
"AUSWAHLMGE": " ",
"STATION": " ",
"ACTION": " ",
"LIMIT_MIN_CHAR": "0.00",
"LIMIT_MIN_CHAR1": "0.00",
"LIMIT_MAX_CHAR": " ",
"LIMIT_MAX_CHAR1": " ",
"ROLLOVER_CHAR": "          100000.00",
"ANNUAL_CHAR": "          2500.00",
"TARGET_CHAR": " ",
"UOM_CHAR": "Hour",
"PREV_DOC": "X",
"P_MDOCM": "39919",
"P_IDATE": "20150405",
"P_ITIME": "165654",
"P_READG": 22942800,
"P_CNTRR": 22942800,
"P_CDIFFF": 1364400,
"P_CODCT": " ",
"P_CODGR": " ",
"P_VLCOD": " ",
"P_READG_CHAR": "          6373.00",
"P_CNTRR_CHAR": "          6373.00",
"P_CDIFFF_CHAR": "          379.00",
"P_MDTXT": " ",
"P_CODETXT": " ",
"TPLNR_EXT": "0207-312-010-001",
"EQKTX": " ",
"PLTXT": "DWKS AC DRIVE MOTOR #1",
"ATINN_EXT": " ",
"ATBEZ": " ",
"OLD_TOTAL": 6373,
"CNTRR_C": 6373,

```

```

        "IDATE": "20150405",
        "ITIME": "205654",
        "READR": "USER001",
        "LAST_RDG": 6373,
        "READG_C": 6373,
        "OLD_IDATE": "20150405"
    }
]

```

PUT

Header values:

REQUEST_OBJECT: MEASURING_POINTS

Description:

Use this service to update a measuring point.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- [Mpointnumber]_CreateWOWhenOverMax
- [Mpointnumber]_CreateWOWhenUnderMin
- DefaultDescAutoWOCreat
- DefaultActivityTypeAutoWOCreat
- DefaultWorkCenterAutoWOCreat
- DefaultOrderTypeAutoWOCreat
- DefaultControlKeyAutoWOCreat

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
POINT	Measuring Point	NVARCHAR (12)		Y
IDATE	Date	NVARCHAR (8)		Y
ITIME	Time	NVARCHAR (6)		Y
READR	Read by User	NVARCHAR (12)		Y
MDTXT	Measurement Document Text	NVARCHAR (40)		Y
RECDV_CHAR	Measurement Reading in Unit of Entry	NVARCHAR (22)		Y

Sample Implementation:

```
var inputData = [
  {
    "POINT": "181",
    "IDATE": "20160404",
    "ITIME": "113335",
    "READR": "USER001",
    "MDTXT": "DWKS AC DRIVE MOTOR #1",
    "RECDV_CHAR": "7250"
  },
  ...
]

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "PUT",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "MEASURING_POINTS"
  }
})
```

WORKORDER_HISTORY_DETAILS

GET (AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER_HISTORY_DETAILS

AUFNR: <Work order number>

Description:

Use this service to retrieve the history for the work order defined by AUFNR.

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
EQUNR	Equipment Number	NVARCHAR (18)	
EQKTX	Description of technical object	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	
KOSTL	Cost Center	NVARCHAR (10)	
PLTXT	Description of functional location	NVARCHAR (40)	
ABCKZ	FUNCTION Criticality	NVARCHAR (1)	
VORNR	Operation/Activity Number	NVARCHAR (4)	
WO_HISTORY_NOTES	work order history notes	LONG NVARCHAR	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_HISTORY_DETAILS",
        "AUFNR": "V02340000056"
    }
})
```

Sample Output:

```
[{
```

```
"AUFNR": "V02340000056",  
"EQUNR": "WTRELE001001",  
"EQKTX": "Water treatment UV Sterilizer",  
"TPLNR": "0101-581-013-001",  
"KOSTL": "101151019",  
"PLTXT": "POTABLE WATER SYSTEM",  
"ABCKZ": "A",  
"VORNR": "0010",  
"WO_HISTORY_NOTES": ""  
}]
```

PUT

Header values:

REQUEST_OBJECT: WORKORDER_HISTORY_DETAILS

Description:

Use this service to add a note to a work order defined by AUFNR.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
AUFNR	Order Number	NVARCHAR (12)		y
VORNR	Operation/Activity Number	NVARCHAR (4)		y
WERKS	Plant	NVARCHAR (4)		Y
WO_OPNOTE_LTXT	work order history notes	LONG NVARCHAR		y

Sample Implementation:

```
var inputData = [
    {
        "AUFNR": "V02340000056",
        "VORNR": "0010",
        "WO_OPNOTE_LTXT": "SAAP 31/03/2016 @ 13:56\n Test long text"
    }
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER_HISTORY_DETAILS",
    }
})
```


EQUIPMENT_WORKORDER_HISTORY

GET (AUFNR)

Header values:

REQUEST_OBJECT: EQUIPMENT_WORKORDER_HISTORY

AUFNR: <Work Order number>

Description:

Use this service to retrieve the equipment history details of a work order, as defined by AUFNR.

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
AUART	Order Type	NVARCHAR (4)	
KTEXT	Description	NVARCHAR (40)	
START_DATE	Basic start date	NVARCHAR (8)	
END_DATE	Basic end date	NVARCHAR (8)	
EQUNR	Equipment Number	NVARCHAR (18)	
TPLNR	Functional Location	NVARCHAR (30)	
TPLNR_EXT	Function location external format	NVARCHAR (40)	
EQKTX	Description of technical object	NVARCHAR (40)	
USER_STATUS	Display lines for user status	NVARCHAR (40)	
WO_HIST_EQUIP_LTXT	Description of work order history	LONG NVARCHAR	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIPMENT_WORKORDER_HISTORY",
        "AUFNR": "V02070000044"
    }
})
```

Sample Output:

```
[
  {
    "AUFNR":"V20700000468",
    "AUART":"ZM01",
    "KTEXT":"Issue sample jars for bulk system",
    "START_DATE":"00000000",
    "END_DATE":"20150213",
    "EQUNR":"HSGSYS204003",
    "TPLNR":" ",
    "TPLNR_EXT":null,
    "EQKTX":"Pipework & valve system",
    "USER_STATUS":"TECO",
    "WO_HIST_EQUIP_LTXT":""
  },...
]
```

EQUIPMENT_WORKORDER_HISTORY_NOTES

GET

Header values:

REQUEST_OBJECT: EQUIPMENT_WORKORDER_HISTORY_NOTES

AUFNR: <Order number>

Description:

Use this service to retrieve the long text notes for a work order.

Output Fields:

Field Name	Description	Data Type	Restrictions
WO_HIST_EQUIP_LTXT	Work order history description.	NVARCHAR (70)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIPMENT_WORKORDER_HISTORY_NOTES",
    "AUFNR": "V10000000018"
  }
})

```

Sample Output:

```

[
  {
    "WO_HIST_EQUIP_LTXT": "13.02.2015 15:12:42 User Name
(CLXXXXXXXX)\user.name 13/2/2015 @ 22:7\n\nSampler jars received
from warehouse and installed at sample valves."
  }
]

```

UNIQUE_MATERIAL

GET (QUERY)

Header values:

REQUEST_OBJECT: UNIQUE_MATERIAL

QUERY: <Search REGEX>

Description:

Use this service to retrieve a unique list of all materials.

OData Entity:

/dep/odata/Unique_Material

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	

MFRNR	Number of a Manufacturer	NVARCHAR (10)	
LGORT	Issue location for production order	NVARCHAR (4)	
BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	
REQQTY	Required Quantity	INTEGER	
PREIS	Price in Purchase Requisition	DECIMAL (11,2)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "UNIQUE_MATERIAL",
        "QUERY": "%pump"
    }
})
```

Sample Output:

```
[
    {
        "WERKS": "0207",
        "MATNR": "101",
        "MAKTX": "SLIPS, ROTARY HAND, C/W STAND",
        "MTART": "ERSA",
        "PRDHA": " ",
        "EKGRP": " ",
        "SERNP": " ",
        "MEINS": "EA",
        "XCHPF": " ",
        "MAABC": "D",
        "MABST": 0,
        "MINBE": 0,
        "BSTMI": 0,
        "BSTMA": 0,
        "MMSTA": " ",
        "MFRPN": "15522",
        "MFRNR": "2000000074",
```

```
"LGORT": "0001",  
"BESKZ": "X",  
"LGPBE": "DIRECT",  
"NAME1": "Supplier Ltd",  
"XCHAR": " ",  
"PNAME": "Oil Rig 01",  
"REQQTY": 1,  
"PREIS": null
```

```
}
```

```
]
```

MATERIALS

GET

Header Values

REQUEST_OBJECT: MATERIALS

Description

Use this this service to retrieve a list of all materials on the current plant.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	

LGORT	Issue location for production order	NVARCHAR (4)	
BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	

Sample implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIALS"
  }
})
```

Sample Output

```
[
  {
    "WERKS": "0207",
    "MATNR": "3388",
    "MAKTX": "KIT: AIR SIDE SEAL, PUMP",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 1,
    "MMSTA": " ",
    "MFRPN": "SKDH66AIR-00",
    "MFRNR": "2000000136",
    "BESKZ": "X",
    "LGPBE": " ",
    "NAME1": "My Company Ltd",
    "XCHAR": " ",
    "PNAME": "XYZ",
```



```
    "LGORT": "FF00"  
  }  
]
```

GET(QUERY)

Header Values

REQUEST_OBJECT: MATERIALS,

QUERY: <Search REGEX>

Description

Use this this service to retrieve a list of all materials on the current rig/plant that match the specified query.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	
LGORT	Issue location for production order	NVARCHAR (4)	

BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	

Sample implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIALS",
    "QUERY": "%pump%"
  }
})
```

Sample Output

```
[
  {
    "WERKS": "0207",
    "MATNR": "3388",
    "MAKTX": "KIT: AIR SIDE SEAL, PUMP",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 1,
    "MMSTA": " ",
    "MFRPN": "SKDH66AIR-00",
    "MFRNR": "2000000136",
    "BESKZ": "X",
    "LGPBE": " ",
    "NAME1": "My Company Ltd",
    "XCHAR": " ",
    "PNAME": "XYZ",
```

```
    "LGORT": "FF00"  
  }  
]
```

GET(MATNR, LGORT)

Header Values

REQUEST_OBJECT: 'MATERIALS'

MATNR: *Material Number*

LGORT: *Issue Location*

Description

Retrieves details for the specified material.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	

LGORT	Issue location for production order	NVARCHAR (4)	
BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	

Sample Implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIALS",
    "MATNR": "101",
    "LGORT": "0001"
  }
})
```

Sample Output

```
[
  {
    "WERKS": "0207",
    "MATNR": "101",
    "MAKTX": "SLIPS, ROTARY HAND, NOV SDML, C/W STAND",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 0,
    "MMSTA": " ",
    "MFRPN": "15522",
    "MFRNR": "2000000074",
    "BESKZ": "X",
    "LGPBE": "DIRECT",
    "NAME1": "MY COMPANY LTD",
```

```
    "XCHAR": " ",  
    "PNAME": "XYZ",  
    "LGORT": "0001"  
  }  
]
```

GET(MATNR, LGORT, WERKS)

Header Values

REQUEST_OBJECT: 'MATERIALS'

MATNR: *Material Number*

LGORT: *Issue Location*

WERKS: *Plant*

Description

Retrieves details for the specified material on the specified site.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	

LGORT	Issue location for production order	NVARCHAR (4)	
BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	

Sample Implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIALS",
    "MATNR": "101",
    "LGORT": "0001",
    "WERKS": "0207"
  }
})
```

Sample Output

```
[
  {
    "WERKS": "0207",
    "MATNR": "101",
    "MAKTX": "SLIPS, ROTARY HAND, NOV SDML, C/W STAND",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 0,
    "MMSTA": " ",
    "MFRPN": "15522",
    "MFRNR": "2000000074",
    "BESKZ": "X",
    "LGPBE": "DIRECT",
    "NAME1": "MY COMPANY LTD",
```

```
    "XCHAR": " ",  
    "PNAME": "XYZ",  
    "LGORT": "0001"  
  }  
]
```

PUT

Header Values

REQUEST_OBJECT: MATERIALS

Description

Updates all fields for the selected material.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
WERKS	Plant	NVARCHAR (4)		
MATNR	Material Number	NVARCHAR (40)		Y
MAKTX	Material Description (short text)	NVARCHAR (40)		Y
MTART	Material Type	NVARCHAR (4)		
PRDHA	Product hierarchy	NVARCHAR (18)		
EKGRP	Purchasing Group	NVARCHAR (3)		
SERNP	Serial Number Profile	NVARCHAR (4)		
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)		
XCHPF	Batch management requirement indicator	NVARCHAR (1)		
MAABC	ABC Indicator	NVARCHAR (1)		Y
MABST	Maximum stock level	DECIMAL (13,3)		
MINBE	Reorder Point	DECIMAL (13,3)		
BSTMI	Minimum Lot Size	DECIMAL (13,3)		Y
BSTMA	Maximum Lot Size	DECIMAL (13,3)		Y
MMSTA	Plant-Specific Material Status	NVARCHAR (2)		
MFRPN	Manufacturer Part Number	NVARCHAR (40)		

MFRNR	Number of a Manufacturer	NVARCHAR (10)		
LGORT	Issue location for production order	NVARCHAR (4)		
BESKZ	Procurement Type	NVARCHAR (1)		
LGPBE	Storage Bin	NVARCHAR (10)		Y
NAME1	Vendor Name	NVARCHAR (30)		
XCHAR	Batch management indicator (internal)	NVARCHAR (1)		
PNAME	Plant Name	NVARCHAR (40)		

Sample Implementation

```
var inputData = [{
    "MATNR": "101",
    "QUANT": 0,
    "MAKTX": "SLIPS, ROTARY HAND, NOV SDML, C/W STAND",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 0,
    "MMSTA": " ",
    "MFRPN": "15522",
    "MFRNR": "2000000074",
    "BESKZ": "X",
    "LGPBE": "DIRECT",
    "NAME1": "MY COMPANY LTD",
    "XCHAR": " ",
    "LGORT": "0001",
    "WERKS": "0207",
    "SPERR": "",
    "INV_NO_LOCAL": "",
    "GJAHR": "",
    "BWTTY": " "
```

```
    "SPEME":0,  
    "LTXT":"SLIPS, ROTARY HAND, NOV SDML, C/W STAND"  
  }];
```

```
jQuery.ajax({  
  url: "/ws_restful_data_controller",  
  method: "PUT",  
  data: inputData,  
  headers: {  
    "REQUEST_OBJECT": "MATERIALS",  
  }  
});
```

Sample Output

```
[  
  {  
    "RESULT": "MATERIAL_QTY_BIN_UPDATE was a success",  
    "STATUS": "200"  
  }  
]
```

MATERIAL_STATUS

GET

Header Values

REQUEST_OBJECT: MATERIAL_STATUS

Description

Lookup object for material statuses used in MATERIALS *PUT* for field MMSTA.

Output Fields:

Field Name	Description	Data Type
KEY	Status key	NVARCHAR
VALUE	Status text	NVARCHAR

Sample implementation

```
jQuery.ajax({  
    url: "/ws_restful_data_controller/material_status",  
    method: "GET"  
});
```

Sample Output

```
[  
    {  
        "KEY": "01",  
        "VALUE": "Active"  
    }  
]
```

MATERIAL_CRITICALITY

GET

Header Values

REQUEST_OBJECT: MATERIAL_CRITICALITY

Description

Lookup object for material criticalities used in MATERIALS *PUT* for field MAABC.

Output Fields:

Field Name	Description	Data Type
KEY	Criticality key	NVARCHAR
VALUE	Criticality text	NVARCHAR

Sample implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller/material_criticality",
  method: "GET"
});
```

Sample Output

```
[
  {
    "KEY": "B",
    "VALUE": "Operational Critical"
  }
]
```

GLOBAL_MATERIALS

GET

Header Values

REQUEST_OBJECT: GLOBAL_MATERIALS

Description

Use this this service to retrieve a global list of all materials.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	

LGORT	Issue location for production order	NVARCHAR (4)	
BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	

Sample implementation

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "GLOBAL_MATERIALS"
    }
})
```

Sample Output

```
[
    {
        "WERKS": "0102",
        "MATNR": "101",
        "MAKTX": "SLIPS, ROTARY HAND, NOV SDML, C/W STAND",
        "MTART": "ERSA",
        "PRDHA": " ",
        "EKGRP": " ",
        "SERNP": " ",
        "MEINS": "EA",
        "XCHPF": " ",
        "MAABC": " ",
        "MABST": 0,
        "MINBE": 0,
        "BSTMI": 0,
        "BSTMA": 0,
        "MMSTA": " ",
        "MFRPN": "15522",
        "MFRNR": "2000000074",
        "BESKZ": "X",
        "LGPBE": " ",
        "NAME1": "MY COMPANY LTD",
        "XCHAR": " ",
        "PNAME": "XYZ Driller",
    }
]
```

```
    "LGORT": "FF00"  
  }  
]
```

GET(QUERY)

Header Values

REQUEST_OBJECT: GLOBAL_MATERIALS,

QUERY: <Search REGEX>

Description

Use this this service to retrieve a list of all materials on the current plant/rig that match the specified query.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13,3)	
MINBE	Reorder Point	DECIMAL (13,3)	
BSTMI	Minimum Lot Size	DECIMAL (13,3)	
BSTMA	Maximum Lot Size	DECIMAL (13,3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	
LGORT	Issue location for production order	NVARCHAR (4)	

BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Vendor Name	NVARCHAR (30)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	

Sample implementation

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "GLOBAL_MATERIALS",
    "QUERY": "%pump%"
  }
})
```

Sample Output

```
[
  {
    "WERKS": "0101",
    "MATNR": "285",
    "MAKTX": "KIT SPARE PARTS F/4 H/K PUMP",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 1,
    "MMSTA": " ",
    "MFRPN": "M6543035",
    "MFRNR": "2000000082",
    "BESKZ": "X",
    "LGPBE": " ",
    "NAME1": "MY COMPANY LTD",
    "XCHAR": " ",
    "PNAME": "XYZ Driller",
    "LGORT": "FF00"
  }
]
```

```
]      }
```

WORKORDER_USERSTATUSES

GET

Header values:

REQUEST_OBJECT: WORKORDER_USERSTATUSES

Description:

Use this service to retrieve a list of user statuses with number. If the additional header DATAKEY: DTUserStatusWithoutNum is provided, the list of unnumbered status codes will be returned.

Output Fields:

Field Name	Description	Data Type	Restrictions
STATUS_CODE	Status Code	NVARCHAR (40)	
STATUS_DESC	Description of Status	NVARCHAR (40)	
SORT_ORDER	Integer indicating order of status	INTEGER	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_USERSTATUSES"
    }
})
```

Sample Output:

```
[{
    "STATUS_CODE": "INPL",
    "STATUS_DESC": "In Planning",
    "SORT_ORDER": 0
}]
```

PUT

Header values:

REQUEST_OBJECT: WORKORDER_USERSTATUSES

AUFNR: <Workorder number>

Description:

Use this service to change the user status of a work order defined by AUFNR.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Field displaying user status	NVARCHAR (40)	<ul style="list-style-type: none"> • INPL (in planning) • WFRV (waiting for review) • CMPL (complete) • TECO (technically complete) 	Y
MOBILE_STATUS	Mobile object status	NVARCHAR (10)		Y
AUFNR	Order Number	NVARCHAR (12)		
AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional Location	NVARCHAR (30)		Y
TPLNR_EXT	Functional Location - external format	NVARCHAR (40)		Y
EQU NR	Equipment Number	NVARCHAR (18)		Y
GLUZP	Basic finish time	NVARCHAR (6)		
GSUZP	Basic start time	NVARCHAR (6)		
GLTRP	Basic finish date	NVARCHAR (6)	yyyymmdd	
GSTRP	Basic start date	NVARCHAR (6)	yyyymmdd	
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	System Condition	NVARCHAR (1)		Y
VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)		Y
ILART	Maintenance activity type	NVARCHAR (3)		Y
IS_EXTERNAL	Internal or external work order flag	NVARCHAR (1)	0 – Internal work order X – External work order	Y

Sample Implementation:

```
var inputData = [
  {
    "USER_STATUS": "WFRV",
    "MOBILE_STATUS": "WFRV",
    "AUART": "ZM01",
    "KTEXT": "ABC radar is not showing any targets.",
    "TPLNR": "0207-411-011-001",
    "TPLNR_EXT": "0207-411-011-001",
    "EQUNR": "NVEFUR005007",
    "GLUZP": "011200",
    "GSUZP": "000000",
    "GLTRP": "20150421",
    "GSTRP": "20150421",
    "PRIOK": "2",
    "ANLZU": " ",
    "VAPLZ": "MECHCTR",
    "ILART": "018",
    "IS_EXTERNAL": "0"
  }
]

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "PUT",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "WORKORDER_USERSTATUSES"
    "AUFNR": "V02340000056"
  }
})
```


WORKORDER_ORDER_TYPE

GET

Header values:

REQUEST_OBJECT: WORKORDER_ORDER_TYPE

Description:

Use this service to retrieve a list of the different work order types.

Output Fields:

Field Name	Description	Data Type	Restrictions
AUART	Work order type	NVARCHAR (4)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_ORDER_TYPE"
  }
})
```

Sample Output:

```
[
  {
    "AUART": "PM02"
  },
  {
    "AUART": "ZM01"
  },
  {
    "AUART": "ZHPM"
  },
  ...
]
```

WORKORDER_PRIORITY

GET

Header values:

REQUEST_OBJECT: WORKORDER_PRIORITY

PRIORITY_TYPE: <Used to filter priority list returned, priorities with an ARTPR of this value> (OPTIONAL HEADER)

Description:

Use this service to retrieve a list of the different work order priorities

OData Entity:

/dep/odata/Workorder_Priority

Output Fields:

Field Name	Description	Data Type	Restrictions
ARTPR	Priority Type	NVARCHAR (2)	
PRIOK	Priority	NVARCHAR(1)	
PRIOKX	Priority Text	NVARCHAR(20)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_PRIORITY"
  }
})
```

Sample Output:

```
[
  {
    "ARTPR": "PM",
    "PRIOK": "1",
    "PRIOKX": "1-Urgent"
  },
  {
    "ARTPR": "PM",
    "PRIOK": "2",
    "PRIOKX": "2-High"
  },
]
```

```
...  
]
```

WORKORDER_SYSTEM_CONDITION

GET

Header values:

REQUEST_OBJECT: WORKORDER_SYSTEM_CONDITION

Description:

Use this service to retrieve a list of the different work order system conditions.

OData Entity:

/dep/odata/System_Condition

Output Fields:

Field Name	Description	Data Type	Restrictions
DO_ID	Data table name	NVARCHAR (40)	
DO_KEY	Syclo Data Table Key Field	NVARCHAR(100)	
VALUE	Syclo Data Table Value field	NVARCHAR(255)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_SYSTEM_CONDITION"
    }
})
```

Sample Output:

```
[
  {
    "DO_ID": "DTSystemCondition",
    "DO_KEY": "0",
    "VALUE": "Not in operation"
  },
  {
    "DO_ID": "DTSystemCondition",
    "DO_KEY": "1",
    "VALUE": "In operation"
  }
]
```

WORKORDER MAINTENANCE ACTIVITY TYPE

GET

Header values:

REQUEST_OBJECT: WORKORDER_PM_ACT_TYPE

Description:

Use this service to retrieve a list of maintenance activity types.

OData Entity:

/dep/odata/Workorder_PM_Act_Type

Output Fields:

Field Name	Description	Data Type	Restrictions
ILART	Maintenance activity type	NVARCHAR (3)	
ILATX	Description of maintenance activity type	NVARCHAR (30)	

Sample Implementation:

```

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_PM_ACT_TYPE"
    }
})

```

Sample Output:

```

[
  {
    "ILART": "001",
    "ILATX": "Client \\/3rd Party"
  },
  {
    "ILART": "002",
    "ILATX": "Equipment Alert Actions"
  },
  ...
]

```

NOTIFICATIONS DAMAGE

GET

Header values:

REQUEST_OBJECT: NOTIFICATIONS_DAMAGE

Description:

Use this service to retrieve a list of damage codes.

OData Entity:

/dep/odata/Damage_Code

Output Fields:

Field Name	Description	Data Type	Restrictions
FEGRP	Code group	NVARCHAR(8)	
FECOD	Damage code	NVARCHAR(4)	
FETXT	Description	NVARCHAR(40)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller/notifications_damage"
})
```

Sample Output:

```
[
  {
    "FEGRP": "PM1",
    "FECOD": "CORS",
    "FETXT": "Corrosion"
  },
  ...
]
```

NOTIFICATIONS CAUSE

GET

Header values:

REQUEST_OBJECT: NOTIFICATIONS_CAUSE

Description:

Use this service to retrieve a list of cause codes.

OData Entity:

/dep/odata/Cause_Code

Output Fields:

Field Name	Description	Data Type	Restrictions
URGRP	Code group	NVARCHAR(8)	
URCOD	Cause code	NVARCHAR(4)	
URTXT	Description	NVARCHAR(40)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller/notifications_cause"
})
```

Sample Output:

```
[
  {
    "URGRP": "PM1",
    "URCOD": "ININ",
    "URTXT": "Incorrect installation"
  },
  ...
]
```

SETTLEMENTS

GET

Header values:

REQUEST_OBJECT: SETTLEMENTS

Description:

Use this service to retrieve a list of all settlement receivers.

Note: Settlement APIs require ERP enhancement pack 6 or above.

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
KTEXT	Description	NVARCHAR (40)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "SETTLEMENTS"
    }
})
```

Sample Output:

```
[
    {
        "AUFNR": "207000113CC0",
        "KTEXT": "HSE Case"
    },
    {
        "AUFNR": "207000115E00",
        "KTEXT": "Torque Tool Replacement"
    }
]
```


GET (AUFNR)

Header values:

REQUEST_OBJECT: SETTLEMENTS

AUFNR: <Settlement order>

Description:

Use this service to retrieve a list of settlements, as specified by the work order number.

Note: Settlement APIs require ERP enhancement pack 6 or above.

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
OBJNR	Object Number	NVARCHAR (22)	
WERKS	Plant	NVARCHAR (4)	
PROZS	Settlement percentage rate	DECIMAL (5,2)	
REC_OBJNR1	Object number for settlement receiver	NVARCHAR (22)	
BUREG	Distribution rule group	NVARCHAR (3)	
LFDNR	Sequence number of distribution rule	NVARCHAR (3)	
PERBZ	Settlement Type	NVARCHAR (3)	
KONTY	Account assignment category	NVARCHAR (2)	
KTEXT	Description	NVARCHAR (40)	
GABJA	Valid-from year	NVARCHAR (4)	
GABPE	Valid-from period	NVARCHAR (3)	
GBISJ	Valid-to year	NVARCHAR (4)	
GBISP	Valid to	NVARCHAR (3)	
ZINCL	Including overheads - indicator	NVARCHAR (1)	
IS_CHANGED	Indicates whether the item has changed	NVARCHAR (1)	
INTEGRATION_STATUS	Integration status	NVARCHAR (15)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "SETTLEMENTS",
    "AUFNR": "V01230000045"
  }
})
```

Sample Output:

```
[
  {
    "AUFNR": "V02070000032",
    "OBJNR": "ORV02070000032",
    "WERKS": "0207",
    "PROZS": 100,
    "REC_OBJNR1": "207000113CC0",
    "BUREG": "000",
    "LFDNR": "001",
    "PERBZ": "GES",
    "KONTY": "OR",
    "KTEXT": "ABC Case",
    "GABJA": "0000",
    "GABPE": "0",
    "GBISJ": "0000",
    "GBISP": "0",
    "ZINCL": "",
    "IS_CHANGED": "",
    "INTEGRATION_STATUS": "1-ERROR"
  },
  ...
]
```

POST

Header values:

REQUEST_OBJECT: SETTLEMENTS

Description:

Use this service to add a settlement.

Note: Settlement APIs require ERP enhancement pack 6 or above.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Field displaying user status	NVARCHAR (40)	INPL (in planning), WFRV (waiting for review), CMPL (complete), TECO (technically complete)	
MOBILE_STATUS	Mobile object status	NVARCHAR (10)		
AUFNR	Order Number	NVARCHAR (12)		Y
WERKS	Plant	NVARCHAR (4)		
AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional Location	NVARCHAR (30)		Y
TPLNR_EXT	Functional Location - external format	NVARCHAR (40)		Y
EQUNR	Equipment Number	NVARCHAR (18)		Y
GLUZP	Basic finish time	NVARCHAR (6)		Y
GSUZP	Basic start time	NVARCHAR (6)		Y
GLTRP	Basic finish date	NVARCHAR (6)		Y
GSTRP	Basic start date	NVARCHAR (6)		Y
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	System Condition	NVARCHAR (1)		

VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)		Y
ILART	Maintenance activity type	NVARCHAR (3)		Y
IS_EXTERNAL	Internal or external work order flag	NVARCHAR (1)	0 or X	Y
VORNR	Operation/Activity Number	NVARCHAR (4)		
SettlementArr	An array of settlement items	LONG NVARCHAR	Data must be represented in JSON	Y
AUFNR	Settlement order	NVARCHAR (12)		Y
OBJNR	Object Number	NVARCHAR (22)		Y
WERKS	Plant	NVARCHAR (4)		
PROZS	Settlement percentage rate	DECIMAL (5,2)		Y
REC_OBJNR1	Object number for settlement receiver	NVARCHAR (22)		
BUREG	Distribution rule group	NVARCHAR (3)		Y
LFDNR	Sequence number of distribution rule	NVARCHAR (3)		
PERBZ	Settlement Type	NVARCHAR (3)		Y
KONTY	Account assignment category	NVARCHAR (2)		Y
KTEXT	Description	NVARCHAR (40)		
GABJA	Valid-from year	NVARCHAR (4)		Y
GABPE	Valid-from period	NVARCHAR (3)		Y
GBISJ	Valid-to year	NVARCHAR (4)		Y
GBISP	Valid to	NVARCHAR (3)		Y
ZINCL	Including overheads - indicator	NVARCHAR (1)		

<i>IS_CHANGED</i>	IU flag	NVARCHAR (1)	"U" for update as this is a PUT	
<i>INTEGRATION_STATUS</i>	Integration Status	NVARCHAR (15)		
<i>USER_STATUS</i>	Field displaying user status	NVARCHAR (40)		

Sample Implementation:

```
var inputData = [
    {
        "USER_STATUS": "REDY",
        "MOBILE_STATUS": " ",
        "AUFNR": "V20700000854",
        "WERKS": "0207",
        "AUART": "ZM01",
        "KTEXT": "#4 ME 6000 hour service",
        "TPLNR": "0207-651-000-004",
        "TPLNR_EXT": "0207-651-000-004",
        "EQUNR": "ENGMAN001016",
        "GLUZP": "011200",
        "GSUZP": "000000",
        "GLTRP": "20150420",
        "GSTRP": "20150420",
        "PRIOK": "3",
        "ANLZU": " ",
        "VAPLZ": "1STENG",
        "ILART": "018",
        "IS_EXTERNAL": "0",
        "VORNR": "0010",
        "SettlementArr": [
            {
                "AUFNR": "V20700000854",
                "OBJNR": "ORV20700000854",
                "WERKS": "0207",
                "PROZS": "100",
                "REC_OBJNR1": "KSVE010207151066",
                "BUREG": "000",
                "LFDNR": "001",
                "PERBZ": "GES",
                "KONTY": "KS",
                "KTEXT": "",
                "GABJA": "0000",
                "GABPE": "0",
                "GBISJ": "0000",
                "GBISP": "0",
            }
        ]
    }
]
```

```
        "ZINCL": "X",
        "IS_CHANGED": "U",
        "INTEGRATION_STATUS": "5-NORMAL",
        "USER_STATUS": "READY"
    },
    ...
]
}
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "SETTLEMENTS"
    }
})
```

PUT

Header values:

REQUEST_OBJECT: SETTLEMENTS

Description:

Use this service to update a settlement.

Note: Settlement APIs require ERP enhancement pack 6 or above.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
USER_STATUS	Field displaying user status	NVARCHAR (40)	INPL (in planning), WFRV (waiting for review), CMPL (complete), TECO (technically complete)	
MOBILE_STATUS	Mobile object status	NVARCHAR (10)		
AUFNR	Order Number	NVARCHAR (12)		Y
WERKS	Plant	NVARCHAR (4)		
AUART	Order Type	NVARCHAR (4)		Y
KTEXT	Description	NVARCHAR (40)		Y
TPLNR	Functional Location	NVARCHAR (30)		Y
TPLNR_EXT	Functional Location - external format	NVARCHAR (40)		Y
EQUNR	Equipment Number	NVARCHAR (18)		Y
GLUZP	Basic finish time	NVARCHAR (6)		Y
GSUZP	Basic start time	NVARCHAR (6)		Y
GLTRP	Basic finish date	NVARCHAR (6)		Y
GSTRP	Basic start date	NVARCHAR (6)		Y
PRIOK	Priority	NVARCHAR (1)		Y
ANLZU	System Condition	NVARCHAR (1)		

VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)		Y
ILART	Maintenance activity type	NVARCHAR (3)		Y
IS_EXTERNAL	Internal or external work order flag	NVARCHAR (1)	0 or X	Y
VORNR	Operation/Activity Number	NVARCHAR (4)		
SettlementArr	An array of settlement items	LONG NVARCHAR	Data must be represented in JSON	Y
AUFNR	Settlement order	NVARCHAR (12)		Y
OBJNR	Object Number	NVARCHAR (22)		Y
WERKS	Plant	NVARCHAR (4)		
PROZS	Settlement percentage rate	DECIMAL (5,2)		Y
REC_OBJNR1	Object number for settlement receiver	NVARCHAR (22)		
BUREG	Distribution rule group	NVARCHAR (3)		Y
LFDNR	Sequence number of distribution rule	NVARCHAR (3)		
PERBZ	Settlement Type	NVARCHAR (3)		Y
KONTY	Account assignment category	NVARCHAR (2)		Y
KTEXT	Description	NVARCHAR (40)		
GABJA	Valid-from year	NVARCHAR (4)		Y
GABPE	Valid-from period	NVARCHAR (3)		Y
GBISJ	Valid-to year	NVARCHAR (4)		Y
GBISP	Valid to	NVARCHAR (3)		Y
ZINCL	Including overheads - indicator	NVARCHAR (1)		

<i>IS_CHANGED</i>	IU flag	NVARCHAR (1)	"U" for update as this is a PUT	
<i>INTEGRATION_STATUS</i>	Integration Status	NVARCHAR (15)		
<i>USER_STATUS</i>	Field displaying user status	NVARCHAR (40)		

Sample Implementation:

```

var inputData = [
    {
        "USER_STATUS": "REDY",
        "MOBILE_STATUS": " ",
        "AUFNR": "V20700000854",
        "WERKS": "0207",
        "AUART": "ZM01",
        "KTEXT": "#4 ME 6000 hour service",
        "TPLNR": "0207-651-000-004",
        "TPLNR_EXT": "0207-651-000-004",
        "EQUNR": "ENGMAN001016",
        "GLUZP": "011200",
        "GSUZP": "000000",
        "GLTRP": "20150420",
        "GSTRP": "20150420",
        "PRIOK": "3",
        "ANLZU": " ",
        "VAPLZ": "1STENG",
        "ILART": "018",
        "IS_EXTERNAL": "0",
        "VORNR": "0010",
        "SettlementArr": [
            {
                "AUFNR": "V20700000854",
                "OBJNR": "ORV20700000854",
                "WERKS": "0207",
                "PROZS": "100",
                "REC_OBJNR1": "KSVE010207151066",
                "BUREG": "000",
                "LFDNR": "001",
                "PERBZ": "GES",
                "KONTY": "KS",
                "KTEXT": "",
                "GABJA": "0000",
                "GABPE": "0",
                "GBISJ": "0000",
                "GBISP": "0",
            }
        ]
    }
]

```

```
        "ZINCL": "X",
        "IS_CHANGED": "U",
        "INTEGRATION_STATUS": "5-NORMAL",
        "USER_STATUS": "READY"
    },
    ...
]
}
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "SETTLEMENTS"
    }
})
```

OPERATION_CONFIRMATION

GET (AUFNR)

Header values:

REQUEST_OBJECT: OPERATION_CONFIRMATION

AUFNR: <Order Number>

Description:

Use this service to retrieve a list of time confirmations for a specified work order.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
AUFNR	Order Number	NVARCHAR (12)	
VORNR	Operation/Activity Number	NVARCHAR (4)	
ARBPL	Work center	NVARCHAR (8)	
ISMNW	Actual work	DECIMAL (13,3)	
ISMNE	Labor unit	NVARCHAR (3)	
LTXA1	Operation short text	NVARCHAR (40)	
BUDAT	Posting Date in the Document	NVARCHAR (8)	
RMZHL	Internal counter	NVARCHAR (8)	
RUECK	Completion confirmation number for the operation	NVARCHAR (10)	
AUERU	Partial/Final Confirmation	NVARCHAR (1)	X if final
STOKZ	Indicator: Document Has Been Reversed	NVARCHAR (1)	
IDAUR	Pm Break Hours	DECIMAL (5,1)	
IDAUE	Unit for actual duration	NVARCHAR (3)	
OFMNW	Forecasted work (actual + remaining)	DECIMAL (7,1)	
OFMNE	Unit of measure for remaining work	NVARCHAR (3)	
STZHL	Used when cancelling	NVARCHAR (8)	

WO_TIMECONFIRM_LTXT	Workorder time confirmation details	LONG NVARCHAR	
INTEGRATION_STATUS	Integration Status	NVARCHAR (15)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "OPERATION_CONFIRMATION",
        "AUFNR": "V02340000056"
    }
})
```

Sample Output:

```
[
    {
        "WERKS": "0111",
        "AUFNR": "V02340000056",
        "VORN": "0010",
        "ARBPL": "MECHSUP",
        "ISMNW": 3,
        "ISMNE": "HR",
        "LTXA1": "test",
        "BUDAT": "20150603",
        "RMZHL": "00000002",
        "RUECK": "",
        "AUERU": "",
        "STOKZ": "X",
        "IDAU": 0,
        "IDAUE": "HR",
        "OFMNW": 0,
        "OFMNE": "HR",
        "STZHL": "00000001",
        "WO_TIMECONFIRM_LTXT": "",
        "INTEGRATION_STATUS": "3-PROCESSED"
    }
]
```

POST

Header values:

REQUEST_OBJECT: OPERATION_CONFIRMATION

Description:

Use this service to add a time confirmation to a work order.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
WERKS	Plant	NVARCHAR (4)		Y
AUFNR	Order number	NVARCHAR (12)		Y
VORNR	Operation/Activity Number	NVARCHAR (4)		Y
ARBPL	Work center	NVARCHAR (8)		Y
ISMNW	Actual work	DECIMAL (10,3)		Y
ISMNE	Labor Unit	NVARCHAR (3)		
LTXA1	Operation short text	NVARCHAR (40)		
BUDAT	Posting Date in the Document	NVARCHAR (8)		
RMZHL	Internal counter	NVARCHAR (8)		
RUECK	Completion confirmation number for the operation	NVARCHAR (10)		
AUERU	Partial/Final Confirmation	NVARCHAR (1)	X if final	Y
STOKZ	Indicator: Document Has Been Reversed	NVARCHAR (1)		Y
IDAUR	Pm Break Hors	DECIMAL (5,1)		
IDAUE	Unit for actual duration	NVARCHAR (3)		
OFMNW	Forecasted work (actual + remaining)	NVARCHAR (7)		Y
OFMNE	Unit of measure for remaining work	NVARCHAR (3)		

STZHL	Used when cancelling	NVARCHAR (8)		
WO_TIMECONFIRM_LTXT	Text describing time confirmation	LONG NVARCHAR		
INTEGRATION_STATUS	Status of integration	NVARCHAR (15)		

Sample Implementation:

```

var inputData = [
{
  "WERKS": "0111",
  "AUFNR": "V02340000056",
  "VORN": "0010",
  "ARBPL": "CHMECH",
  "ISMNW": "1.0",
  "ISMNE": "",
  "LTXA1": "Time Confirmation 1",
  "BUDAT": "",
  "RMZHL": "",
  "RUECK": "",
  "AUERU": " ",
  "STOKZ": " ",
  "IDAU": "",
  "IDAUE": "",
  "OFMNW": "0",
  "OFMNE": "",
  "STZHL": "",
  "WO_TIMECONFIRM_LTXT": "",
  "INTEGRATION_STATUS": ""
}
]]

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "POST",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "OPERATION_CONFIRMATION"
  }
})

```

PUT (AUFNR, VORNR)

Header values:

REQUEST_OBJECT: OPERATION_CONFIRMATION

AUFNR: < Order Number >

VORNR: < Operation/Activity Number >

Description:

Use this service to add a cancellation of a final confirmation for a work order and operation.

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "PUT",
  headers: {
    "REQUEST_OBJECT": "OPERATION_CONFIRMATION",
    "AUFNR": "V02340000056",
    "VORNR": "0010"
  }
})
```

WORKCENTER

GET

Header values:

REQUEST_OBJECT: WORKCENTER

Description:

Use this service to retrieve a list of work centers.

OData Entity:

/dep/odata/Workcenter

Output Fields:

Field Name	Description	Data Type	Restrictions
OBJID	Object ID	NVARCHAR (8)	
VAPLZ	Main work center for maintenance tasks	NVARCHAR (8)	
KTEXT	Description	NVARCHAR (40)	
WERKS	Plant of production version	NVARCHAR (4)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKCENTER"
  }
})
```

Sample Output:

```
[
  {
    "OBJID": "10000333",
    "VAPLZ": "MECHCTR",
    "KTEXT": "Assist Plant Manager",
    "WERKS": "0111"
  }
]
```


GET (VAPLZ)

Header values:

REQUEST_OBJECT: WORKCENTER

VAPLZ: <Main Work Center>

Description:

Use this service to retrieve the planning plant for a specified work center.

OData Entity:

/dep/odata/Workorder_Centerlist

Output Fields:

Field Name	Description	Data Type	Restrictions
VAPLZ	Main Work Center	NVARCHAR (8)	
IWERK	Maintenance Planning Plant	NVARCHAR (4)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKCENTER"
    "VAPLZ": "MECHCTR"
  }
})
```

Sample Output:

```
[
  {
    "VAPLZ": "MECHCTR",
    "IWERK": "0207"
  }
]
```

INTER_PLANT_TRANSFER

GET

Header values:

REQUEST_OBJECT: INTER_PLANT_TRANSFER

Description:

Use this service to retrieve a list of materials that can be added for transfer.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (Short Text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Base Unit of Measure	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13, 3)	
MINBE	Reorder Point	DECIMAL (13, 3)	
BSTMI	Minimum Lot Size	DECIMAL (13, 3)	
BSTMA	Maximum Lot Size	DECIMAL (13, 3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	

BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Name 1	NVARCHAR (35)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant name	NVARCHAR (40)	
LGORT	Storage Location	NVARCHAR (4)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "INTER_PLANT_TRANSFER"
  }
})
```

Sample Output:

```
[
  {
    "WERKS": "0207",
    "MATNR": "101",
    "MAKTX": "SLIPS, ROTARY HAND, C/W STAND",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 0,
    "MMSTA": " ",
    "MFRPN": "15522",
    "MFRNR": "2000000074",
    "BESKZ": "X",
    "LGPBE": "DIRECT",
    "NAME1": "Supplier Ltd",
    "XCHAR": " ",
    "PNAME": "Oil Rig 01",
```

```
    "LGORT": "0001"  
  },  
  ...  
]
```

POST

Header values:

REQUEST_OBJECT: INTER_PLANT_TRANSFER

Description:

Use this service to transfer materials to another remote site.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
MBLNR	Number of Material Document	NVARCHAR (10)		Y
MJAHR	Material Document Year	NVARCHAR (4)		Y
BUDAT	Posting Date in the Document	NVARCHAR (8)		Y
BLDAT	Document Date in Document	NVARCHAR (8)		Y
XBLNR	Reference Document Number	NVARCHAR (16)		
BKTX	Document Header Text	NVARCHAR (25)		
GM_CODE	Assign code to transaction for BAPI goods movement	NVARCHAR (2)		
GTS_CUSREF_NO	Customs Reference Number for Scrapping	NVARCHAR (35)		
TransfersArr	An array of transfer material items	LONG NVARCHAR	Data must be represented in JSON	Y
WERKS	Plant	NVARCHAR (4)		Y
MATNR	Material Number	NVARCHAR (40)		Y
MAKTX	Material Description (Short Text)	NVARCHAR (40)		Y
LGORT	Storage Location	NVARCHAR (4)		Y
ERFMG	Quantity in unit of entry (physical inventory)	DECIMAL (13)	Same as MENGE	Y
BWTAR	Valuation Type	NVARCHAR (10)		Y
CHARG	Batch Number	NVARCHAR (10)		
ERFME	Unit of entry (physical inventory)	NVARCHAR (3)		Y

<i>BWART</i>	Movement Type (Inventory Management)	NVARCHAR (3)		Y
<i>UMWRK</i>	Receiving/Issuing Plant	NVARCHAR (4)		Y
<i>MENGE</i>	Purchase Requisition Quantity	DECIMAL (13)	Same as ERFMG	Y
<i>UMLGO</i>	Receiving/Issuing Storage Location	NVARCHAR (4)		Y
<i>KZBEW</i>	Movement Indicator	NVARCHAR (1)		
<i>EBELN</i>	Purchasing Document Number	NVARCHAR (10)		
<i>EBELP</i>	Item Number of Purchasing Document	NVARCHAR (5)		
<i>ABLAD</i>	Unloading Point	NVARCHAR (25)		
<i>LINE_ID</i>	Unique identification of document line	NVARCHAR (6)		
<i>PARENT_ID</i>	Identifier of immediately superior line	NVARCHAR (6)		
<i>LINE_DEPTH</i>	Hierarchy level of line in document	NVARCHAR (2)		
<i>KOSTL</i>	Cost Center	NVARCHAR (10)		
<i>RSNUM</i>	Number of Reservation/Dependent Requirement	NVARCHAR (10)		
<i>RSPOS</i>	Item Number of Reservation/Dependent Requirement	NVARCHAR (4)		
<i>QUANT</i>	Store quantities	DECIMAL (13, 3)		

Sample Implementation:

```
var inputData = [
    {
        "MBLNR": "0000000010",
        "MJAHR": 2016,
        "BUDAT": "20160401",
        "BLDAT": "20160401",
        "XBLNR": "",
        "BKTX": "",
        "GM_CODE": "04",
        "GTS_CUSREF_NO": "",
        "TransfersArr": [
            {
                "WERKS": "0207",
                "MATNR": "230",
                "MAKTX": "KIT: REPAIR, SEAL F/BONNET Q/MANUAL LOCK",
                "LGORT": "0001",
            }
        ]
    }
]
```

```

        "ERFMG":1,
        "BWTAR":"C1",
        "CHARG":"","
        "ERFME":"EA",
        "BWART":"301",
        "UMWRK":"0101",
        "MENGE":1,
        "UMLGO":"0001",
        "KZBEW":"","
        "EBELN":"","
        "EBELP":"","
        "ABLAD":"","
        "LINE_ID":"","
        "PARENT_ID":"","
        "LINE_DEPTH":"","
        "KOSTL":"","
        "RSNUM":"","
        "RSPOS":""
    }}
}

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "INTER_PLANT_TRANSFER"
    }
})

```

CURRENT_PLANT

GET

Header values:

REQUEST_OBJECT: CURRENT_PLANT

Description:

Use this service to retrieve the current remote ID and description.

Output Fields:

Field Name	Description	Data Type
code	workplant code	NVARCHAR (10)
desc	workplant description	NVARCHAR (256)

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "CURRENT_PLANT"
    }
})
```

Sample Output:

```
[{
    "code": "0111",
    "desc": "Plant #1"
}]
```


OTHER_PLANTS

GET

Header values:

REQUEST_OBJECT: OTHER_PLANTS

Description:

Use this service to retrieve a description of all rigs/plants/remotes registered in the system.

Output Fields:

Field Name	Description	Data Type
WERKS	Plant	NVARCHAR (4)
NAME1	Plant Name	NVARCHAR (40)

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "OTHER_PLANTS",
  }
})
```

Sample Output:

```
[
  {
    "WERKS": "0111",
    "NAME1": "Plant #1"
  },
  ...
]
```

MOVEMENT_TYPE_TRANS_TO_PLANT

GET

Header values:

REQUEST_OBJECT: MOVEMENT_TYPE_TRANS_TO_PLANT

Description:

Use this service to retrieve a list of movement types that can be used for a transfer.

Output Fields:

Field Name	Description	Data Type	Restrictions	Required
BWART	Movement Type (Inventory Management)	NVARCHAR (3)		
BTEXT	Movement Type Text (Inventory Management)	NVARCHAR (20)		

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "MOVEMENT_TYPE_TRANS_TO_PLANT"
    }
})
```

Sample Output:

```
[
  {
    "BWART": "301",
    "BTEXT": "TF trfr plnt to plnt"
  }
]
```

MATERIAL_DOC_NUMBERS

GET

Header values:

REQUEST_OBJECT: MATERIAL_DOC_NUMBERS

Description:

Use this service to retrieve the next available material document number to use, in order to create a new material document.

Output Fields:

Field Name	Description	Data Type	Restrictions
MBLNR	Number of Material Document	NVARCHAR (10)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "MATERIAL_DOC_NUMBERS"
  }
})
```

Sample Output:

```
[
  {
    "MBLNR": "0000000002"
  }
]
```

PURCHASE_REQUISITIONS

GET

Header values:

REQUEST_OBJECT: PURCHASE_REQUISITIONS

Description:

Use this service to display a list of physical requisitions.

OData Entity:

/dep/odata/Purchase_Requisitions

Output Fields:

Field Name	Description	Data Type	Restrictions
PR_NO_LOCAL	Purchase Requisition External Number	NVARCHAR(60)	
BANFN	Purchase Requisition Number	NVARCHAR(10)	
ERDAT	Changed On (date)	NVARCHAR(8)	yyyymmdd
FRGZU	Release status	NVARCHAR(8)	
FRGKZ	Release Indicator	NVARCHAR(1)	
BANPR	Requisition Processing State	NVARCHAR(2)	
WI_ID	Work item ID	NVARCHAR(12)	
DECISION	Index of an Alternative of a User Decision	NVARCHAR(4)	
BACKEND_USERNAME	User Name in User Master Record	NVARCHAR(12)	
NUM_ITEMS	Number of Items	INTEGER	
LTXT	Long Description	LONG NVARCHAR	

POTYP	Purchase Order Type	NVARCHAR(1)	
PR_STATUS	Purchase Requisition Approval Status	NVARCHAR(25)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "PURCHASE_REQUISITIONS"
    }
})
```

Sample Output:

```
[
    ...,
    {
        "BACKEND_USERNAME": ""
        "BANFN": "0010015224"
        "BANPR": "03"
        "DECISION": "0000"
        "ERDAT": "20150605"
        "FRGKZ": "X"
        "FRGZU": " "
        "LTXT": ""
        "NUM_ITEMS": 2
        "POTYP": "M"
        "PR_NO_LOCAL": "10015224"
        "PR_STATUS": "PR_PENDING"
        "WI_ID": null
    }
    , ...
]
```

GET (PR_NO_LOCAL)

Header values:

REQUEST_OBJECT: PURCHASE_REQUISITIONS

PR_NO_LOCAL: <Physical Requisition Number>

Description:

Use this service to display the details of a specific purchase requisition document.

OData Entity:

/dep/odata/Purchase_Requisitions

Output Fields:

Field Name	Description	Data Type	Restrictions	Required
PR_NO_LOCAL	Purchase Requisition External Number	NVARCHAR(60)		
BNFPO	Item Number of Purchase Requisition	NVARCHAR(5)		
BANFN	Purchase Requisition Number	NVARCHAR(10)		
FRGZU	Release status	NVARCHAR(8)		
WI_ID	Work item ID	NVARCHAR(12)		
BANPR	Requisition Processing State	NVARCHAR(2)		
FRGKZ	Release Indicator	NVARCHAR(1)		
RESUBMITTED	Purchase Requisition was submitted	NVARCHAR(2)		
IS_CHANGED	Purchase Requisition is changed	NVARCHAR(1)		
TDTXT	Purchase Requisition Long Description	long NVARCHAR		

PrItemArray	Array of Purchase Requisitions	long NVARCHAR		
MAINT_PLANT_RIG	Plant/Rig/Remote	NVARCHAR(4)		
PR_NO_LOCAL	Purchase Requisition External Number	NVARCHAR(60)		
BNFPO	Item Number of Purchase Requisition	NVARCHAR(5)		
BANFN	Purchase Requisition Number	NVARCHAR(10)		
FRGZU	Release status	NVARCHAR(8)		
TXZ01	Short Text	NVARCHAR(40)		
MATNR	Material Number	NVARCHAR(40)		
MEINS	Purchase Requisition Unit of Measure	NVARCHAR(3)		
RESWK	Supplying (Issuing) Plant in Stock Transport Order	NVARCHAR(4)		
MENGE	Purchase Requisition Quantity	decimal(13, 3)		
LFDAT	Item Delivery Date	NVARCHAR(8)		
PREIS	Price in Purchase Requisition	decimal(13, 3)		
FREIGHT_MODE	Freight Mode	NVARCHAR(2)		

WAERS	Currency Key	NVARCHAR(5)		
LGPBE	Storage Bin	NVARCHAR(10)		
LGPRO	Issue Storage Location	NVARCHAR(4)		
MAABC	ABC Indicator	NVARCHAR(1)		
ZMATNR	Material Number	NVARCHAR(40)		
ZMAKTX	Material Description (Short Text)	NVARCHAR(40)		
ZLGPBE	Storage Bin	NVARCHAR(10)		
ZLGORT	Storage Location	NVARCHAR(4)		
ZMAABC	ABC Indicator	NVARCHAR(1)		
LOEKZ	Deletion Indicator in Purchasing Document	NVARCHAR(1)		
IS_CHANGED	Purchase Requisition Item is changed	NVARCHAR(1)		
WI_ID	Work item ID	NVARCHAR(12)		
BANPR	Requisition Processing State	NVARCHAR(2)		
FRGKZ	Release Indicator	NVARCHAR(1)		
BSTMI	Minimum Lot Size	decimal(13, 3)		
BSTMA	Maximum Lot Size	decimal(13, 3)		
EBELN	Purchase Order Number	NVARCHAR(10)		

KNTTP	Account Assignment Category	NVARCHAR(1)		
EBELN_LIST	List of Purchase Order numbers	long NVARCHAR		

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PURCHASE_REQUISITIONS",
    "PR_NO_LOCAL": "L2015060117304512345825",
  }
})
```

Sample Output:

```
[
  {
    "BANFN": "0010015211"
    "BANPR": "05"
    "BNFPO": "00001"
    "FRGKZ": "2"
    "FRGZU": "X"
    "IS_CHANGED": ""
    "PR_NO_LOCAL": "L2015060117304512345825"
    "RESUBMITTED": "0"
    "TDTEXT": "WO V02070000042 testing deleting requisition by deleting items on
work order"
    "WI_ID": null
    "PRItemArray":
    "[{
      "MAINT_PLANT_RIG": "0207",
      "PR_NO_LOCAL": "L2015060117304512345825",
      "BNFPO": "00001",
      "BANFN": "0010015211",
      "FRGZU": "X",
      "TXZ01": "CARTRIDGE: 12-AB TMC FILTER",
      "MATNR": "10024",
      "MEINS": "EA",
      "RESWK": " ",
      "MENGE": 2,
      "LFDAT": "20150615",
      "PREIS": 105.96,
```

```
    "FREIGHT_MODE": "F7",
    "WAERS": "USD",
    "LGPBE": " ",
    "LGPRO": " ",
    "MAABC": "D",
    "ZMATNR": " ",
    "ZMAKTX": " ",
    "ZLGPBE": " ",
    "ZLGORT": " ",
    "ZMAABC": " ",
    "LOEKZ": "",
    "IS_CHANGED": "",
    "WI_ID": null,
    "BANPR": "05",
    "FRGKZ": "2",
    "BSTMI": 2,
    "BSTMA": 4,
    "EBELN": " ",
    "KNTTP": " ",
    "EBELN_LIST": null
  } ] ]
}
```

POST

Header values:

REQUEST_OBJECT: PURCHASE_REQUISITIONS

PLANDOC_ID: <plandoc_id> (optional)

Description:

Use this service to add a purchase requisition. PR_NO_LOCAL has been intentionally omitted, it is inserted in the data controller.

If PLANDOC_ID is provided, the matching PR Planning Document will be updated with the new purchase requisition's PR_NO_LOCAL to associate the entities. If no planning document was used as reference for the new PR, omit this header.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- CreatePRforDupItemPending
- CreatePRforDupItemWFApproval
- CreatePRforDupItemRejected
- CreatePRforDupItemApproved

OData Entity:

/dep/odata/Purchase_Requisitions

Note:

A “dry-run” of this action is available by using the REQUEST_OBJECT: CHECK_PR_MATERIAL_DUPLICATE. This will not persist the new purchase requisition. Full documentation for this functionality follows this section.

Output Fields:

Field Name	Description	Data Type	Restrictions	Required
TDTXT	Purchase Requisition Long Description	long NVARCHAR		
PRItemArray				
<i>BNFPO</i>	Item Number of Purchase Requisition	NVARCHAR(5)		
<i>BANFN</i>	Purchase Requisition Number	NVARCHAR(10)		

<i>RESWK</i>	Supplying (Issuing) Plant in Stock Transport Order	NVARCHAR(4)		
<i>LOEKZ</i>	Deletion flag	NVARCHAR(1)		
<i>MAINT_PLANT_RIG</i>	Plant/Rig/Remote	NVARCHAR(4)		
<i>MATNR</i>	Material Number	NVARCHAR(40)		Y
<i>TXZ01</i>	Short Text	NVARCHAR(40)		Y
<i>MENGE</i>	Purchase Requisition Quantity	decimal(13)		Y
<i>MEINS</i>	Purchase Requisition Unit of Measure	NVARCHAR(3)		
<i>LFDAT</i>	Item Delivery Date	NVARCHAR(8)		Y
<i>FREIGHT_MODE</i>		NVARCHAR(2)		
<i>WAERS</i>	Currency Key	NVARCHAR(5)		
<i>PREIS</i>	Price	decimal(11)		
<i>IS_CHANGED</i>	To indicate if item has changed or same as before	NVARCHAR(1)	If anything changed for that particular array item send "C" else ""	

Sample Implementation:

```
var inputData = [
    {
        "TDTXT": "Sample Text",
        "BANFN": "0010015221",
        "BANPR": "05",
        "BNFPO": "00001",
        "FRGKZ": "2",
        "FRGZU": "X",
        "IS_CHANGED": "",
        "RESUBMITTED": "0",
    }
]
```

```

        "WI_ID":null,
        "PRItemArray":[{
            "BNFPO":"00002",
            "BANFN":"0001",
            "BANPR":"05",
            "BSTMA":"30",
            "BSTMI":"20",
            "RESWK":"0",
            "LOEKZ":"",
            "LGPBE":"DIRECT",
            "FRGKZ":"2",
            "FRGZU":"X",
            "MAABC":"D",
            "MAINT_PLANT_RIG":"0207",
            "MATNR": 15132,
            "TXZ01": VALVE: PRESSURE, REDUCING C/W GAUGE,
            "MENGE":"4",
            "MEINS":"EA",
            "LFDAT":"20160412",
            "FREIGHT_MODE":"F1",
            "WAERS":"USD",
            "PREIS":"0.99",
            "IS_CHANGED":"C"
        }],
    }];
}
]
}
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "PURCHASE_REQUISITIONS",
    }
})

```

CHECK_PRMATERIAL_DUPLICATE

POST

Header values:

REQUEST_OBJECT: CHECK_PRMATERIAL_DUPLICATE

Description:

Use this service to check if a material is already part of an existing purchase requisition. This request returns a different message than most other POST requests. This is a “dry-run” for validation and will **not** persist the new purchase requisition provided to it.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- CreatePRforDuplItemPending
- CreatePRforDuplItemWFApproval
- CreatePRforDuplItemRejected
- CreatePRforDuplItemApproved

OData Entity:

/dep/odata/Check_PRMaterial_Duplicate (POST only)

Input Fields:

Field Name	Description	Data Type	Required
PRItemArray	Acceptance indicator	NVARCHAR(1)	
MATNR	Material Number	NVARCHAR(40)	Y

Output Fields:

Field Name	Description	Data Type	Restrictions
PR_NO_LOCAL	Purchaser Requisition number of PR that contains the material(s) specified in the payload	NVARCHAR(60)	
MATNR	Material Number	NVARCHAR(40)	
PR_STATUS	Status of purchase requisition		
CONFIG	Configuration for creation of purchase requisition that contains a duplicate material as another purchase requisition with a status specified by PR_STATUS. 'Y' indicated allowed.	NVARCHAR(1)	
CONFLICT_TYPE	“WARNING” or “ERROR” indicating if the configuration will prevent this material from being added to a new purchase requisition.	NVARCHAR(8)	

LFDAT	Item Delivery Date	NVARCHAR(8)	
-------	--------------------	-------------	--

Sample Implementation:

```
var inputData =
[
  {
    PRItemArray: [{"MATNR":"000816"}]
  }
]

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "POST",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "CHECK_PRMATERIAL_DUPLICATE",
  }
})
```

Sample Output:

```
[
  {
    "PR_NO_LOCAL":"10015232",
    "MATNR":"000816",
    "PR_STATUS":"PENDING",
    "CONFIG":"Y",
    "CONFLICT_TYPE":"WARNING",
    "LFDAT":"20150605"
  },
  ...
]
```

WANTED_STOCK

GET

Header values:

REQUEST_OBJECT: WANTED_STOCK

Description:

Use this service to retrieve a list of stock wanted items

OData Entity:

/dep/odata/Stock_Wanted

- The OData entity does not add the “Z” prefix to field names
- A navigation property called ONHAND can be expanded to calculate the current stock onhand

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR(32)	
GUID	Temporarily not used	NVARCHAR(32)	
RUNDATE	Date	NVARCHAR(8)	
RUNTIME	Time	NVARCHAR(6)	
RECCNT	Item Number	INTEGER	
ZVEND	Vendor ID	NVARCHAR(10)	
ZMATNR	Material Number	NVARCHAR(40)	
ZPLWRK	Plant for Work Center	NVARCHAR(4)	
ZMAABC	Criticality	NVARCHAR(1)	
ZMAKTX	Description	NVARCHAR(40)	
ZDISPO	MRP Controller (Materials Planner)	NVARCHAR(3)	
ZBERID	MRP ID	NVARCHAR(10)	
ZBERTX	MRP Desc	NVARCHAR(40)	
ZLGORT	Storage Location	NVARCHAR(4)	
ZLGPBE	Storage Bin	NVARCHAR(10)	

ZEISLO	Minimum Safety Stock	DECIMAL(13,3)	
ZMABST	Max Stock	DECIMAL(13,3)	
ZEISBE	Safety Stock	DECIMAL(13,3)	
ZMINBE	Reorder Point	DECIMAL(13,3)	
ZMEINS	Base Unit of Measure	NVARCHAR(3)	
ZSUM01	Warehouse Stock	DECIMAL(13,3)	
ZSUM02	Total of Promised Receipts	DECIMAL(13,3)	
ZSUM03	Total of Planned Receipts	DECIMAL(13,3)	
ZSUM04	Total of Promised Issues	DECIMAL(13,3)	
ZSUM05	Total of Planned Issues	DECIMAL(13,3)	
ZAUFNr	Order Number	NVARCHAR(12)	
ZCHARG	Batch Number	NVARCHAR(10)	
ZBDTER	Requirement Date for the Component	NVARCHAR(8)	
ZBDMNG	Requirement Quantity	DECIMAL(13,3)	
ZEQUIP_NO	Equipment Number	NVARCHAR(18)	
ZFUNC_DESC	Function Description	NVARCHAR(40)	
ZRES_IND	Reserved Indicator	NVARCHAR(1)	
ZREQQTY	Required Quantity	DECIMAL(13,3)	
ZPRQTY	Available quantity	DECIMAL(13,3)	
ZSPMON	Period (month) to Analyze	NVARCHAR(7)	
ZMGVBR	Total Consumption	DECIMAL(13,3)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WANTED_STOCK"
  }
})

```

})

Sample Output:

```
[
  {
    "BSTMA":8
    "BSTMI":4
    "RES_IND":" "
    "SAAP_PREIS":15.539999999999997
    "SUM05":1
    "ZAUFNR":"V02070000050"
    "ZBDTER":"20150602"
    "ZCHARG":" "
    "ZDDATE":"00000000"
    "ZEQUIP_NO":"AGTAKE001040"
    "ZEVERS":" "
    "ZFUNC_DESC":"MUD AGITATOR #B MUD STORAGE TANK #2"
    "ZLGORT":"0001"
    "ZLGPBE":"G-14-A"
    "ZMAABC":"D"
    "ZMABST":8
    "ZMAKTX":"FUSE: FAST ACTING, GLASS TUBE"
    "ZMATNR":"10013"
    "ZMEINH":"EA"
    "ZMINBE":4
    "ZNOTES":" 6 Mths Usage: 0.000 1 Yr Usage: 0.000 "
    "ZPRQTY":0
    "ZREQQTY":0
    "ZSUM01":1
    "ZSUM02":0
    "ZVEND":"20000000504"
    "ZVEND_NAM":" "
  },
  ...
]
```

PHYSICAL_INVENTORY_DOCUMENTS

GET

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_DOCUMENTS

Description:

Use this service to display a list of physical inventory documents.

OData Entity:

/dep/odata/Physical_Inventory_Documents

Output Fields:

Field Name	Description	Data Type	Restrictions
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)	
IBLNR	Physical Inventory Document	NVARCHAR (10)	
INVNU	Physical Inventory Number	NVARCHAR (16)	
GJAHR	Fiscal Year	NVARCHAR (4)	
WERKS	Rig/Plant/Remote	NVARCHAR (4)	
LGORT	Storage Location	NVARCHAR (4)	
VGART	Transaction/Event Type	NVARCHAR (2)	
BLDAT	Document Date in Document	NVARCHAR (8)	
GIDAT	Planned Date of Inventory count	NVARCHAR (8)	
NAME1	Name	NVARCHAR (40)	
ZSTAT	Status of count	NVARCHAR (1)	
LSTAT	Status of delete flag	NVARCHAR (1)	
DSTAT	Status of adjustment posting (inventory differences)	NVARCHAR (1)	
KEORD	Type of grouping criterion	NVARCHAR (2)	
USNAM	Username	NVARCHAR (12)	
TOTAL_ITEMS	Total Items	INTEGAR	

ITEMS_UNCOUNTED	Number of Uncounted Items	INTEGAR	
-----------------	---------------------------	---------	--

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PHYSICAL_INVENTORY_DOCUMENTS"
  }
})
```

Sample Output:

```
[
  ...,
  {
    "INV_NO_LOCAL": "L201506041314281",
    "IBLNR": "",
    "INVNU": "",
    "GJAHR": "2015",
    "WERKS": "0207",
    "LGORT": "0001",
    "VGART": "",
    "BLDAT": "20150604",
    "GIDAT": "",
    "NAME1": "",
    "ZSTAT": "",
    "LSTAT": "",
    "DSTAT": "X",
    "KEORD": "",
    "USNAM": "OIM 0207",
    "TOTAL_ITEMS": 5,
    "ITEMS_UNCOUNTED": 0
  }
  , ...
]
```

GET (INV_NO_LOCAL, GJAHR, LGORT)

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_DOCUMENTS

INV_NO_LOCAL: <Physical Inventory Location No.>

GJAHR: <Fiscal Year>

LGORT: <Storage Location>

Description:

Use this service to display the details of a physical inventory document.

Output Fields:

Field Name	Description	Data Type	Restrictions
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)	
IBLNR	Physical Inventory Document	NVARCHAR (10)	
ZEILI	Line Number	NUMBER (3, 0)	
GJAHR	Fiscal Year	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
ERFMG	Quantity of unit of entry (new quantity)	DECIMAL (13, 3)	
ERFME	Unit of measure	NVARCHAR (3)	
WAERS	Currency	NVARCHAR (5)	
LGORT	Storage Location	NVARCHAR (4)	
CHARG	Batch Number	NVARCHAR (10)	
XNULL	Zero Count indicator	NVARCHAR (1)	
XZAEL	Item has been counted indicator	NVARCHAR (1)	
MAKTX	Material Description	NVARCHAR (40)	
MEINS	Units of measure	NVARCHAR (3)	
XDIFF	Difference Posted indicator	NVARCHAR (1)	
MFRPN	Manufacturer Part number	NVARCHAR (40)	
MFRNR	Number of Manufacturer	NVARCHAR (10)	
NAME1	Manufacturer	NVARCHAR (40)	

LGPBE	Storage Bin	NVARCHAR (10)	
BQUAN	Book Quantity	DECIMAL (13, 3)	
IS_CHANGED	CRUD flag	NVARCHAR (1)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PHYSICAL_INVENTORY_DOCUMENTS",
    "INV_NO_LOCAL": "111",
    "GJAHR": "2015",
    "LGORT": "0001"
  }
})
```

Sample Output:

```
[
  ...,
  {
    "INV_NO_LOCAL": "100025325",
    "IBLNR": "100025325",
    "ZEILI": 1,
    "GJAHR": "2014",
    "MATNR": "9030",
    "ERFMG": 100,
    "ERFME": "EA",
    "WAERS": "USD",
    "LGORT": "0001",
    "CHARG": " ",
    "XNULL": " ",
    "XZAEL": "X",
    "MAKTX": "COVER: SHOE PLASTIC, BLUE",
    "MEINS": "EA",
    "XDIFP": "X",
    "MFRPN": " ",
    "MFRNR": " ",
    "NAME1": "",
    "LGPBE": "C-10",
    "BQUAN": 12,
    "IS_CHANGED": ""
  }
  , ...
]
```

POST

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_DOCUMENTS

Description:

Use this service to add a physical inventory document.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	nvarchar(16)		
GJAHR	Fiscal Year	NVARCHAR (4)		Y
WERKS	Rig/Plant/Remote	NVARCHAR (4)		
IBLNR	Physical Inventory Document	NVARCHAR (10)		
INVNU	Physical Inventory Number	NVARCHAR (16)		
LGORT	Storage Location	NVARCHAR (4)		Y
VGART	Transaction/Event Type	NVARCHAR (2)		
BLDAT	Document Date in Document	NVARCHAR (8)		Y
GIDAT	Planned Date of Inventory count	NVARCHAR (8)		
NAME1	Name	NVARCHAR (30)		
ZSTAT	Status of count	NVARCHAR (1)		
LSTAT	Status of delete flag	NVARCHAR (1)		
DSTAT	Status of adjustment posting (inventory differences)	NVARCHAR (1)		
KEORD	Type of grouping criterion	NVARCHAR (2)		
TOTAL_ITEMS	Total Items	INTEGER		Y

ITEMS_UNCOUNTED	Number of Uncounted Items	INTEGER		Y
USNAM	Username	NVARCHAR (12)		
PIDocItemArray	An array of physical inventory document items	LONG NVARCHAR	Data must be represented in JSON	Y
WERKS	Rig/Plant/Remote	NVARCHAR (4)		
MATNR	Material Number	NVARCHAR (40)		Y
MFRPN	Manufacturer Part number	NVARCHAR (40)		Y
MAKTX	Material Description	NVARCHAR (40)		Y
LGPBE	Storage Bin	NVARCHAR (10)		Y
QUANT	Store quantities	DECIMAL (13, 3)		
NAME1	Name	NVARCHAR (30)		
MFRNR	Number of Manufacturer	NVARCHAR (10)		
MEINS	Units of measure	NVARCHAR (3)		Y
IS_CHANGED	CRUD flag	NVARCHAR (1)		
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)		Y
GJAHR	Fiscal Year	NVARCHAR (4)		Y
ZEILI	Line Number	NUMBER (3, 0)		Y
IBLNR	Physical Inventory Document	NVARCHAR (10)		
ERFMG	Quantity of unit of entry (new quantity)	DECIMAL (13, 3)		Y
ERFME	Unit of Entry	NVARCHAR (3)		
WAERS	Currency Key	NVARCHAR (5)		
LGORT	Storage Location	NVARCHAR (4)		Y
CHARG	Batch Number	NVARCHAR (10)		
XNULL	Zero Count indicator	NVARCHAR (1)		

XZAEI	Item has been counted indicator	NVARCHAR (1)		
XDIFF	Difference Posted indicator	NVARCHAR (1)		

Sample Implementation:

```
var inputData = [
    {
        "GJAHR": "2016",
        "WERKS": "",
        "IBLNR": "",
        "INVNU": "",
        "LGORT": "0001",
        "VGART": "",
        "BLDAT": "20160401",
        "GIDAT": "",
        "NAME1": "",
        "ZSTAT": "",
        "LSTAT": "",
        "DSTAT": " ",
        "KEORD": "",
        "TOTAL_ITEMS": 0,
        "ITEMS_UNCOUNTED": 0,
        "USNAM": "",
        "PIDocItemArray": [
            ...,
            {
                "WERKS": "0207",
                "MATNR": "34331",
                "MFRPN": "SR 12-9",
                "MAKTX": "BATTERY, 12V, 9AH, VALVEREGULATED LEAD",
                "LGPBE": "A-1",
                "QUANT": 4,
                "NAME1": " ",
                "MFRNR": "3000001822",
                "MEINS": "EA",
                "IS_CHANGED": "I",
                "GJAHR": "2016",
                "ZEILI": 1,
                "IBLNR": "",
                "ERFMG": "0",
                "ERFME": "",
                "WAERS": "",
                "LGORT": "0001",
                "CHARG": "",
                "XNULL": ""
            }
        ]
    }
]
```

```
        "XZAEL": "",
        "XDIFF": ""
    }
}
]
}
]
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "PHYSICAL_INVENTORY_DOCUMENTS",
    }
})
```

PUT

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_DOCUMENTS

Description:

Use this service to edit/add physical inventory count to items on the physical inventory document.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
GJAHR	Fiscal Year	NVARCHAR (4)		
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)		
WERKS	Rig/Plant	NVARCHAR (4)		
IBLNR	Physical Inventory Document	NVARCHAR (10)		
INVNU	Physical Inventory Number	NVARCHAR (16)		
LGORT	Storage Location	NVARCHAR (4)		
VGART	Transaction/Event Type	NVARCHAR (2)		
BLDAT	Document Date in Document	NVARCHAR (8)		
GIDAT	Planned Date of Inventory count	NVARCHAR (8)		
NAME1	Name	NVARCHAR (30)		
ZSTAT	Status of count	NVARCHAR (1)		
LSTAT	Status of delete flag	NVARCHAR (1)		
DSTAT	Status of adjustment posting (inventory differences)	NVARCHAR (1)		
KEORD	Type of grouping criterion	NVARCHAR (2)		
TOTAL_ITEMS	Total Items	INTEGER		

ITEMS_UNCOUNTED	Number of Uncounted Items	INTEGER		
USNAM	Username	NVARCHAR (12)		
PIDocItem Array	An array of physical inventory document items	LONG NVARCHAR	Data must be represented in JSON	
WERKS	Rig/Plant	NVARCHAR (4)		
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)		
MATNR	Material Number	NVARCHAR (40)		
MFRPN	Manufacturer Part number	NVARCHAR (40)		
MAKTX	Material Description	NVARCHAR (40)		
LGPBE	Storage Bin	NVARCHAR (10)		
QUANT	Store quantities	DECIMAL (13, 3)		
NAME1	Name	NVARCHAR (30)		
MFRNR	Number of Manufacturer	NVARCHAR (10)		
MEINS	Units of measure	NVARCHAR (3)		
IS_CHANGED	CRUD flag	NVARCHAR (1)		
GJAHR	Fiscal Year	NVARCHAR (4)		
ZEILI	Line Number	NUMBER (3, 0)		
IBLNR	Physical Inventory Document	NVARCHAR (10)		
ERFMG	Quantity of unit of entry (new quantity)	DECIMAL (13, 3)		
ERFME	Unit of Entry	NVARCHAR (3)		
WAERS	Currency Key	NVARCHAR (5)		
LGORT	Storage Location	NVARCHAR (4)		
CHARG	Batch Number	NVARCHAR (10)		

XNULL	Zero Count indicator	NVARCHAR (1)		
XZAEI	Item has been counted indicator	NVARCHAR (1)		
XDIFF	Difference Posted indicator	NVARCHAR (1)		

Sample Implementation:

```
var inputData = [
  {
    "GJAHR": "2016",
    "WERKS": "",
    "IBLNR": "",
    "INVNU": "",
    "LGORT": "0001",
    "VGART": "",
    "BLDAT": "20160401",
    "GIDAT": "",
    "NAME1": "",
    "ZSTAT": "",
    "LSTAT": "",
    "DSTAT": " ",
    "KEORD": "",
    "TOTAL_ITEMS": 1,
    "ITEMS_UNCOUNTED": 1,
    "USNAM": "",
    "PIDocItemArray": [
      .../
      {
        "WERKS": "0207",
        "MATNR": "34331",
        "MFRPN": "SR 12-9",
        "MAKTX": "BATTERY, 12V, 9AH, VALVEREGULATED LEAD",
        "LGPBE": "A-1",
        "QUANT": 4,
        "NAME1": " ",
        "MFRNR": "3000001822",
        "MEINS": "EA",
        "IS_CHANGED": "U",
        "GJAHR": "2016",
        "ZEILI": 1,
        "IBLNR": "",
        "ERFMG": "4",
        "ERFME": "",
        "WAERS": ""
      }
    ]
  }
]
```

```
        "LGORT":"0001",
        "CHARG":"",
        "XNULL":"",
        "XZAEL":"X",
        "XDIFP":""
    }
    ...
]
}
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "PHYSICAL_INVENTORY_DOCUMENTS",
    }
})
```

PHYSICAL_INVENTORY_BIN

GET (LGORT)

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_BIN

LGORT: <Storage Location >

Description:

Use this service to retrieve a list of bins for an inventory storage location.

Output Fields:

Field Name	Description	Data Type	Restrictions
LGPBE	Storage Bin	NVARCHAR (10)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": " PHYSICAL_INVENTORY_BIN ",
    "LGORT": "1234"
  }
})

```

Sample Output:

```

[
  {
    "LGPBE": " "
  },
  {
    "LGPBE": "A-1"
  },
  ...
]

```

GET (LGPBE_start, LGPBE_end, LGORT)

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_BIN

LGORT: <Issue location for production order>

LGPBE_start: <Storage Bin min>

LGPBE_end: <Storage Bin max>

Description:

Use this service to get a list of materials in a storage location contained within a specified bin range.

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MAKTX	Material Description (short text)	NVARCHAR (40)	
LGPBE	Storage Bin	NVARCHAR (10)	
QUANT	Quantity	INTEGAR	
NAME1	Vendor Name	NVARCHAR (30)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	
MEINS	Purchase Requisition Unit of Measurement	NVARCHAR (3)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PHYSICAL_INVENTORY_BIN",
    "LGORT": "0001",
    "LGPBE_start": "B-10",
    "LGPBE_end": "B-115"
  }
})
```

Sample Output:

[


```
{
  "WERKS": "0207",
  "MATNR": "954",
  "MFRPN": "HDW14",
  "MAKTX": "GLOVES: WELDING, LEATHER, 14 INCH LONG",
  "LGPBE": "B-10",
  "QUANT": 1,
  "NAME1": " ",
  "MFRNR": " ",
  "MEINS": "PAA"
}
]
```

PHYSICAL_INVENTORY_MATERIALS

GET (QUERY, LGORT)

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_MATERIALS

LGORT: <Storage Location>

QUERY:<Search Query>

Description:

Use this service to retrieve a list of materials to add to a physical inventory document.

OData Entity:

/dep/odata/Physical_Inventory_Materials

Output Fields:

Field Name	Description	Data Type	Restrictions
WERKS	Plant	NVARCHAR (4)	
MATNR	Material Number	NVARCHAR (40)	
MAKTX	Material Description (Short Text)	NVARCHAR (40)	
MTART	Material Type	NVARCHAR (4)	
PRDHA	Product hierarchy	NVARCHAR (18)	
EKGRP	Purchasing Group	NVARCHAR (3)	
SERNP	Serial Number Profile	NVARCHAR (4)	
MEINS	Base Unit of Measure	NVARCHAR (3)	
XCHPF	Batch management requirement indicator	NVARCHAR (1)	
MAABC	ABC Indicator	NVARCHAR (1)	
MABST	Maximum stock level	DECIMAL (13, 3)	
MINBE	Reorder Point	DECIMAL (13, 3)	
BSTMI	Minimum Lot Size	DECIMAL (13, 3)	
BSTMA	Maximum Lot Size	DECIMAL (13, 3)	
MMSTA	Plant-Specific Material Status	NVARCHAR (2)	

MFRPN	Manufacturer Part Number	NVARCHAR (40)	
MFRNR	Number of a Manufacturer	NVARCHAR (10)	
BESKZ	Procurement Type	NVARCHAR (1)	
LGPBE	Storage Bin	NVARCHAR (10)	
NAME1	Name	NVARCHAR (35)	
XCHAR	Batch management indicator (internal)	NVARCHAR (1)	
PNAME	Plant Name	NVARCHAR (40)	
LGORT	Storage Location	NVARCHAR (4)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PHYSICAL_INVENTORY_MATERIALS",
    "LGORT": "1234",
    "QUERY": "Search Term"
  }
})
```

Sample Output:

```
[
  {
    "WERKS": "0207",
    "MATNR": "10012",
    "MAKTX": "RELAY : THERMISTOR",
    "MTART": "ERSA",
    "PRDHA": " ",
    "EKGRP": " ",
    "SERNP": " ",
    "MEINS": "EA",
    "XCHPF": " ",
    "MAABC": "D",
    "MABST": 0,
    "MINBE": 0,
    "BSTMI": 0,
    "BSTMA": 3,
    "MMSTA": " ",
    "MFRPN": "NT5307",
```

```
        "MFRNR": " ",
        "BESKZ": "X",
        "LGPBE": "G-14-B",
        "NAME1": null,
        "XCHAR": "X",
        "PNAME": "Oil Rig 01",
        "LGORT": "0001"
    }
    , ...
]
```

STORAGE_LOCATION

GET

Header values:

REQUEST_OBJECT: STORAGE_LOCATION

Description:

Use this service to retrieve a list of internal storage locations.

Output Fields:

Field Name	Description	Data Type	Restrictions
LGORT	Storage Location	NVARCHAR (4)	

Sample Implementation:

```
jQuery.ajax({
    method: "GET",
    url: "/ws_restful_data_controller",
    headers: {
        "REQUEST_OBJECT": "STORAGE_LOCATION"
    }
})
```

Sample Output:

```
[
    {
        "LGORT": "0001"
    },
    '...'
]
```

PHYSICAL_INVENTORY_DIFFERENCE_REASONS

GET

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_DIFFERENCE_REASONS

Description:

Use this service to retrieve a list of movement reasons for physical inventory review.

Output Fields:

Field Name	Description	Data Type	Restrictions
SPRAS	Language Key	NVARCHAR (1)	
BWART	Movement Type (Inventory Management)	NVARCHAR (3)	
GRUND	Reason for Movement	NVARCHAR (4)	
GRTXT	Text: Reason for Goods Movement	NVARCHAR (20)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PHYSICAL_INVENTORY_DIFFERENCE_REASONS"
  }
})
```

Sample Output:

```
[
  {
    "SPRAS": "E",
    "BWART": "101",
    "GRUND": "0001",
    "GRTXT": "Poor quality"
  },
  {
    "SPRAS": "E",
    "BWART": "101",
    "GRUND": "0101",
    "GRTXT": "Not identifiable"
  }
]
```

] /...

PHYSICAL_INVENTORY_REVIEWS

GET (INV_NO_LOCAL, GJAHR)

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_REVIEWS

INV_NO_LOCAL: <Physical Inventory Local No>

GJAHR: <FiscalYear>

Description:

Use this service to display a list of items to be reviewed on a physical inventory document.

Output Fields:

Field Name	Description	Data Type	Restrictions
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)	
GJAHR	Fiscal Year	NVARCHAR (4)	
ZEILI	Line Number	NUMBER (3, 0)	
IBLNR	Physical Inventory Document	NVARCHAR (10)	
MATNR	Material Number	NVARCHAR (40)	
ERFMG	Quantity of unit of entry (new quantity)	DECIMAL (13, 3)	
ERFME	Unit of Entry	NVARCHAR (3)	
WAERS	Currency Key	NVARCHAR (5)	
LGORT	Storage Location	NVARCHAR (4)	
CHARG	Batch Number	NVARCHAR (10)	
XNULL	Zero Count indicator	NVARCHAR (1)	
XZael	Item has been counted indicator	NVARCHAR (1)	
MAKTX	Material Description	NVARCHAR (40)	
MEINS	Units of measure	NVARCHAR (3)	
XDIFF	Difference Posted indicator	NVARCHAR (1)	
MFRPN	Manufacturer Part number	NVARCHAR (40)	
MFRNR	Number of Manufacturer	NVARCHAR (10)	

NAME1	Name	NVARCHAR (30)	
LGPBE	Storage Bin	NVARCHAR (10)	
BQUAN	Book Quantity	DECIMAL (13, 3)	
DIFFCOUNT	Difference Count	DECIMAL (13, 3)	
REASON	Reason for inventory diff.	NVARCHAR (4)	
IS_CHANGED	CRUD flag	NVARCHAR (1)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "PHYSICAL_INVENTORY_REVIEWS",
    "INV_NO_LOCAL": "0010",
    "GJAHR": "2015"
  }
})
```

Sample Output:

```
[
  ...,
  {
    "INV_NO_LOCAL": "L201604040935101",
    "GJAHR": "2016",
    "ZEILI": 1,
    "IBLNR": "",
    "MATNR": "42893",
    "ERFMG": 1,
    "ERFME": "EA",
    "WAERS": "",
    "LGORT": "0001",
    "CHARG": "",
    "XNULL": "",
    "XZael": "X",
    "MAKTX": "HOSE: BARITE, 5 IN x 150FT, MALE FITTING",
    "MEINS": "EA",
    "XDIFF": "",
    "MFRPN": "4691",
    "MFRNR": "3000000297",
    "NAME1": "",
    "LGPBE": "DECK",
```

```
        "BQUAN":2,  
        "DIFFCOUNT":-1,  
        "REASON":"","  
        "IS_CHANGED":""  
    }  
    , ...  
]
```

PUT

Header values:

REQUEST_OBJECT: PHYSICAL_INVENTORY_REVIEWS

Description:

Use this service to post the difference for a physical inventory document and close it.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
INV_NO_LOCAL	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)		Y
IBLNR	Physical Inventory Document	NVARCHAR (10)		
INVNU	Physical inventory number	NVARCHAR (16)		
GJAHR	Fiscal Year	NVARCHAR (4)		Y
WERKS	Rig/Plant	NVARCHAR (4)		Y
LGORT	Storage Location	NVARCHAR (4)		Y
VGART	Transaction/Event Type	NVARCHAR (2)		
BLDAT	Document Date in Document	NVARCHAR (8)		Y
GIDAT	Planned date of inventory count	NVARCHAR (8)		
ZSTAT	Status of count	NVARCHAR (1)		
LSTAT	Status of delete flag	NVARCHAR (1)		
KEORD	Type of grouping criterion	NVARCHAR (2)		
USNAM	Username	NVARCHAR (12)		

PIDocItemArray	An array of physical inventory document items	LONG NVARCHAR	Data must be represented in JSON	Y
<i>INV_NO_LOCAL</i>	Mobile Plant: Physical Inventory Local No	NVARCHAR (16)		Y
<i>GJAHR</i>	Fiscal Year	NVARCHAR (4)		Y
<i>ZEILI</i>	Line Number	NVARCHAR (3)		Y
<i>IBLNR</i>	Physical Inventory Document	NVARCHAR (10)		
<i>MATNR</i>	Material Number	NVARCHAR (40)		Y
<i>ERFMG</i>	Quantity in unit of entry (physical inventory)	DECIMAL (13, 3)		Y
<i>ERFME</i>	Unit of entry (physical inventory)	NVARCHAR (3)		Y
<i>WAERS</i>	Currency Key	NVARCHAR (5)		
<i>LGORT</i>	Storage Location	NVARCHAR (4)		Y
<i>CHARG</i>	Batch Number	NVARCHAR (10)		
<i>XNULL</i>	Zero count	NVARCHAR (1)		
<i>XZAEL</i>	Item has been counted	NVARCHAR (1)		Y
<i>MAKTX</i>	Material Description (Short Text)	NVARCHAR (40)		Y
<i>MEINS</i>	Units of measure	NVARCHAR (3)		Y
<i>MFRPN</i>	Manufacturer Part Number	NVARCHAR (40)		Y
<i>MFRNR</i>	Number of a Manufacturer	NVARCHAR (10)		Y

<i>REASON</i>	Upcoming REASON for not matching	NVARCHAR (4)		
---------------	----------------------------------	--------------	--	--

Sample Implementation:

```

var inputData = [
    {
        "INV_NO_LOCAL": "L201604040911491",
        "IBLNR": "",
        "INVNU": "",
        "GJAHR": "2016",
        "WERKS": "0207",
        "LGORT": "0001",
        "VGART": "",
        "BLDAT": "20160404",
        "GIDAT": "",
        "ZSTAT": "",
        "LSTAT": "",
        "KEORD": "",
        "USNAM": "SAAP",
        "PIDocItemArray": [
            ...,
            {
                "INV_NO_LOCAL": "L201604040911491",
                "GJAHR": "2016",
                "ZEILI": 1,
                "IBLNR": "",
                "MATNR": "10013",
                "ERFMG": 1,
                "ERFME": "EA",
                "WAERS": "",
                "LGORT": "0001",
                "CHARG": "",
                "XNULL": "",
                "XZAEL": "X",
                "MAKTX": "FUSE: FAST ACTING, GLASS TUBE",
                "MEINS": "EA",
                "MFRPN": "GMA-250-R",
                "MFRNR": "3000000088",
                "REASON": ""
            }
        ],
        ...
    }
]

jQuery.ajax({
    url: "/ws_restful_data_controller",

```

```
method: "PUT",
data: inputData,
headers: {
  "REQUEST_OBJECT": "PHYSICAL_INVENTORY_REVIEWS"
}
})
```

WORKORDER_OPERATIONS

GET (AUFNR)

Header values:

REQUEST_OBJECT: WORKORDER_OPERATIONS

AUFNR: <Work Order Number >

Description:

Use this service to retrieve a list of work order operations for a work order

OData Entity:

/dep/odata/Workorder_Operations

Output Fields:

Field Name	Description	Data Type	Restrictions
AUFNR	Order Number	NVARCHAR (12)	
VORNR	Operation/Activity Number	NVARCHAR (4)	
LTXA1	Operation short text	NVARCHAR (40)	
ARBPL	Work center	NVARCHAR (8)	
STEUS	Control key	NVARCHAR (4)	
WERKS	Plant	NVARCHAR (4)	
ISMNW	Actual work	DECIMAL (10,3)	
ARBEI	Work involved in the activity	DECIMAL (10,1)	
DAUNO	Normal duration of the activity	DECIMAL (10,1)	
PREIS	Price	DECIMAL (10,2)	
WAERS	Currency Key	NVARCHAR (5)	
BANFN	Purchase requisition number	NVARCHAR (10)	
BNFPO	Item number of the purchase requisition in the order	NVARCHAR (5)	
EBELN	Purchasing Document Number	NVARCHAR (10)	
ANZZL	Number of workers	INTEGER	

AUART	Order Type	NVARCHAR (4)	
USER_STATUS	Field displaying user status	NVARCHAR (40)	<ul style="list-style-type: none"> • INPL (in planning) • WFRV (waiting for review) • CMPL (complete) • TECO (technically complete)
WO_OPNOTE_LTXT	work order history notes	LONG NVARCHAR	
INTEGRATION_STATUS	Status of integration	NVARCHAR (15)	
HAS_COMPONENTS	Has Components flag	INTEGER	1 or 0 flag

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_OPERATIONS",
    "AUFNR": "V20700000867"
  }
})

```

Sample Output:

```

[
  {
    "AUFNR": "V20700000867",
    "VORN": "0010",
    "LTXA1": "ABS Annual Survey",
    "ARBPL": "1STMATE",
    "STEUS": "ZINT",
    "WERKS": "0207",
    "ISMNW": 0,
    "ARBEI": 1,
    "DAUNO": 1,
    "PREIS": 0,
    "WAERS": " ",
    "BANFN": " ",
    "BNFPO": "00000",
    "EBELN": " ",
    "AUART": "ZM01",
    "USER_STATUS": "REDY",
    "WO_OPNOTE_LTXT": "",
    "INTEGRATION_STATUS": "5-NORMAL",
    "HAS_COMPONENTS": 1
  },

```



```
]
    ...
]
```

GET CONTROL KEY LIST

Header values:

REQUEST_OBJECT: WORKORDER_OPERATIONS

Description:

Use this service to retrieve a list of the control keys available to use for operations.

OData Entity:

/dep/odata/Control_Key_List

Output Fields:

Field Name	Description	Data Type	Restrictions
STEUS	Control key	NVARCHAR (4)	
LIEF	External processing	NVARCHAR (1)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "WORKORDER_OPERATIONS"
    }
})
```

Sample Output:

```
[
    {
        "STEUS": "EXT2",
        "LIEF": " "
    },
    {
        "STEUS": "ZINT",
        "LIEF": " "
    }
]
```

POST

Header values:

REQUEST_OBJECT: WORKORDER_OPERATIONS

Description:

Use this service to add a work order operation.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- WOAllowDupOperation

OData Entity:

/dep/odata/Workorder_Operations

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
AUFNR	Order Number	NVARCHAR (12)		Y
AUART	Order Type	NVARCHAR (4)		Y
WERKS	Plant	NVARCHAR (4)		Y
VORNR	Operation/Activity Number	NVARCHAR (4)		Y
LTXA1	Operation short text	NVARCHAR (40)		
ARBPL	Work center	NVARCHAR (8)		Y
STEUS	Control key	NVARCHAR (4)		Y
ISMNW	Actual work	DECIMAL (10,3)		Y
ARBEI	Work involved in the activity	DECIMAL (10,1)		Y
DAUNO	Normal duration of the activity	DECIMAL (10,1)		Y
PREIS	Price	DECIMAL (10,2)		Y
WAERS	Currency Key	NVARCHAR (5)		
EBELN	Purchasing Document Number	NVARCHAR (10)		
WO_OPNOTE_LTXT	Work order operation description	LONG NVARCHAR		

Sample Implementation:

```
var inputData = [
  {
    "AUFNR": "V02340000056",
    "AUART": "ZM01",
    "WERKS": "0111",
    "VORNR": "0010",
    "LTXA1": "adsfadsf",
    "ARBPL": "CHMECH",
    "STEUS": "EXT2",
    "ISMNW": 0,
    "ARBEI": 1,
    "DAUNO": 1,
    "PREIS": 0,
    "WAERS": "",
    "EBELN": "",
    "WO_OPNOTE_LTXT": ""
  }
]

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "POST",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "WORKORDER_OPERATIONS"
  }
})
```

PUT

Header values:

REQUEST_OBJECT: WORKORDER_OPERATIONS

Description:

Use this service to update a work order operation.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- WOAllowDupOperation

OData Entity:

/dep/odata/Workorder_Operations

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
AUFNR	Order Number	NVARCHAR (12)		Y
AUART	Order Type	NVARCHAR (4)		Y
WERKS	Plant	NVARCHAR (4)		Y
VORNR	Operation/Activity Number	NVARCHAR (4)		Y
LTXA1	Operation short text	NVARCHAR (40)		
ARBPL	Work center	NVARCHAR (8)		Y
STEUS	Control key	NVARCHAR (4)		Y
ISMNW	Actual work	DECIMAL (10,3)		Y
ARBEI	Work involved in the activity	DECIMAL (10,1)		Y
DAUNO	Normal duration of the activity	DECIMAL (10,1)		Y
PREIS	Price	DECIMAL (10,2)		Y
WAERS	Currency Key	NVARCHAR (5)		
EBELN	Purchasing Document Number	NVARCHAR (10)		
WO_OPNOTE_LTXT	Work order operation description	LONG NVARCHAR		

Sample Implementation:

```
var inputData =
    {
        "AUFNR":"V02340000056",
        "AUART":"ZM01",
        "WERKS":"0111",
        "VORNR":"0010",
        "LTXA1":"adsfadsf",
        "ARBPL":"CHMECH",
        "STEUS":"EXT2",
        "ISMNW":0,
        "ARBEI":1,
        "DAUNO":1,
        "PREIS":0,
        "WAERS":"","",
        "EBELN":"","",
        "WO_OPNOTE_LTXT":""
    }

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "WORKORDER_OPERATIONS",
    }
})
```

DELETE (AUFNR, VORNR)

Header values:

REQUEST_OBJECT: WORKORDER_OPERATIONS

AUFNR: < Order Number >

VORNR: < Operation/Activity Number >

Description:

Use this service to delete a work order operation.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- WOAllowNoOperation
- WOAllowOperationDelete
- AllowOperationDeletewithTimeConfirmed
- AllowOperationDeletewithGoodsIssued

OData Entity:

/dep/odata/Workorder_Operations

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "DELETE",
  headers: {
    "REQUEST_OBJECT": "WORKORDER_OPERATIONS",
    "AUFNR": "V20700000865",
    "VORNR": "0010"
  }
});
```

WORKORDER_OPERATION_DUPLICATE
POST

Header values:

REQUEST_OBJECT: WO_OPERATION_DUPLICATE

Description:

Use this service to check if there exists a duplicate for the work order operation. This functions as a “dry-run” and does not persist the operation provided.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
AUFNR	Order Number	NVARCHAR (12)		Y
AUART	Order Type	NVARCHAR (4)		Y
WERKS	Plant	NVARCHAR (4)		Y
VORNR	Operation/Activity Number	NVARCHAR (4)		Y
LTXA1	Operation short text	NVARCHAR (40)		
ARBPL	Work center	NVARCHAR (8)		Y
STEUS	Control key	NVARCHAR (4)		Y
ISMNW	Actual work	DECIMAL (10,3)		Y
ARBEI	Work involved in the activity	DECIMAL (10,1)		Y
DAUNO	Normal duration of the activity	DECIMAL (10,1)		Y
PREIS	Price	DECIMAL (10,2)		Y
WAERS	Currency Key	NVARCHAR (5)		
EBELN	Purchasing Document Number	NVARCHAR (10)		
WO_OPNOTE_LTXT	Work order operation description	LONG NVARCHAR		

Sample Implementation:

```
var inputData =
{
    "AUFNR": "V02340000056",
```

```
        "AUART":"ZM01",
        "WERKS":"0111",
        "VORNR":"0010",
        "LTXA1":"adsfadsf",
        "ARBPL":"CHMECH",
        "STEUS":"EXT2",
        "ISMNW":0,
        "ARBEI":1,
        "DAUNO":1,
        "PREIS":0,
        "WAERS":"","",
        "EBELN":"","",
        "WO_OPNOTE_LTXT":""
    }

$.ajax({
    url: "/ws_restful_data_controller/wo_operation_duplicate",
    method: "POST",
    data: JSON.stringify(inputData)
}).done(function (oResponseData, errorText, errorThrown) {
    var objkey = oResponseData[0].OBJKEY;
    // if objkey is NULL, then there is no conflict; if there is conflict, we send
back ""+AUFNR+ VORNR+""
    // (AUFNR is the work order number in which the conflicted work order operation
exists, VORNR is the
    // operation number of the conflicted operation. )
    if (objkey) {
        // there is conflict
    } else {
        // there is no conflict with an existing operation
    }
});
```


SERVICE_ENTRY_SHEETS

GET (PO_NUM)

Header values:

REQUEST_OBJECT: SERVICE_ENTRY_SHEETS

PO_NUM:<Purchase Order Number>

Description:

Use this service to display a list of purchase orders, based on the specified purchase order number EBELN.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Output Fields:

Field Name	Description	Data Type	Restrictions
SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)	
EXT_NUMBER	External entry sheet number	NVARCHAR(16)	
SHEET_NO	Entry Sheet Number	NVARCHAR(10)	
CURRENCY	Currency Key	NVARCHAR(5)	
SHORT_TEXT	Short Text of Service Entry Sheet	NVARCHAR(40)	
PO_NUMBER	Purchasing Document Number	NVARCHAR(10)	
PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)	
ACCEPTANCE	Acceptance indicator	NVARCHAR(1)	
EXT_NUMBER_LONG	External Entry Sheet Number (Dependencies: See Long Text)	NVARCHAR(35)	
DOC_DATE	Document Date in Document	NVARCHAR(8)	
POST_DATE	Posting Date in the Document	NVARCHAR(8)	

BEGDATE	Period	NVARCHAR(8)	
ENDDATE	End of period	NVARCHAR(8)	
BLOCK_IND	Block Release of Entry Sheet	NVARCHAR(12)	
DELETE_IND	Deletion indicator in entry sheet	NVARCHAR(1)	
REL_STATUS	Release status	NVARCHAR(8)	
WI_ID	Work item ID	NVARCHAR(12)	
IS_CHANGED	To indicate if sheet has changed (updated even when new item is inserted)		"" when items are fetched

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "SERVICE_ENTRY_SHEETS",
    "PO_NUM": 44038300
  }
})
```

Sample Output:

```
[
  ...,
  {
    "ACCEPTANCE": " "
    "BEGDATE": "20150401"
    "BLOCK_IND": "X"
    "CURRENCY": "USD"
    "DELETE_IND": " "
    "DOC_DATE": "20150527"
    "ENDDATE": "20150630"
    "EXT_NUMBER": "S020700000000004"
    "EXT_NUMBER_LONG": "S020700000000004"
    "IS_CHANGED": ""
    "POST_DATE": "20150527"
    "PO_ITEM": "00010"
```

```
    "PO_NUMBER": "44038299"  
    "REL_STATUS": ""  
    "SHEET_NO": "1000000882"  
    "SHEET_NO_LOCAL": "1000000882"  
    "SHORT_TEXT": "New service entry sheet"  
    "WI_ID": null  
  }  
  /...  
]
```

GET (SHEET_NO_LOCAL)

Header values:

REQUEST_OBJECT: SERVICE_ENTRY_SHEETS

SHEET_NO_LOCAL: <Service Entry Sheet Number>

Description:

Use this service to display the details of the items in a specific service entry sheet.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Output Fields:

Field Name	Description	Data Type	Restrictions	Required
SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)		SHEET_NO_LOCAL
EXT_LINE	External entry sheet number	NVARCHAR(10)		EXT_LINE
LINE_NO	Internal line number	NVARCHAR(10)		LINE_NO
SHEET_NO	Entry Sheet Number	NVARCHAR(10)		SHEET_NO
PO_NUMBER	Purchasing Document Number	NVARCHAR(10)		PO_NUMBER
PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)		PO_ITEM
UOM_ISO	ISO code for unit of measurement	NVARCHAR(3)		UOM_ISO
QUANTITY	Quantity with Sign	decimal(13)		QUANTITY
GR_PRICE	Gross price	decimal(23)		GR_PRICE

SHORT_TEXT_ITEM	Short Text of Service Entry Sheet item	NVARCHAR(40)		SHORT_TEXT_ITEM
REL_STATUS	Release status	NVARCHAR(8)		REL_STATUS
IS_CHANGED	To indicate if sheet item 1 has changed		"" when items are fetched	IS_CHANGED

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "SERVICE_ENTRY_SHEETS",
    "SHEET_NO_LOCAL": "1000000884",
  }
})
```

Sample Output:

```
[
  {
    "EXT_LINE": "0000000010"
    "GR_PRICE": 2500
    "IS_CHANGED": ""
    "LINE_NO": "0000000002"
    "PO_ITEM": "00010"
    "PO_NUMBER": "44038299"
    "QUANTITY": 1
    "REL_STATUS": ""
    "SHEET_NO": "1000000882"
    "SHEET_NO_LOCAL": "1000000882"
    "SHORT_TEXT_ITEM": "New service entry sheet test"
    "UOM_ISO": "AU"
  }
]
```

POST

Header values:

REQUEST_OBJECT: SERVICE_ENTRY_SHEETS

Description:

Use this service to add a new service entry in the given purchase order. SHEET_NO_LOCAL has been intentionally omitted from the payload, it is inserted in the data controller.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
ACCEPTANCE	Acceptance indicator	NVARCHAR(1)		
BEGDATE	Period	NVARCHAR(8)		
BLOCK_IND	Block Release of Entry Sheet	NVARCHAR(1)		
CURRENCY	Currency Key	NVARCHAR(5)		
DELETE_IND	Deletion indicator in entry sheet	NVARCHAR(1)		
DOC_DATE	Document Date in Document	NVARCHAR(8)		
ENDDATE	End of period	NVARCHAR(8)		
EXT_NUMBER	External entry sheet number	NVARCHAR(16)		
EXT_NUMBER_LONG	External Entry Sheet Number (Dependencies: See Long Text)	NVARCHAR(35)		
POST_DATE	Posting Date in the Document	NVARCHAR(8)		
PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)		

PO_NUMBER	Purchasing Document Number	NVARCHAR(10)		
SHEET_NO	Entry Sheet Number	NVARCHAR(10)		
SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)		
SHORT_TEXT	Short Text of Service Entry Sheet	NVARCHAR(40)		
WI_ID	Work item ID	NVARCHAR(12)		
IS_CHANGED	CUD flag	NVARCHAR(1)	CUD flag	
ServiceEntryItemArr				
SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)		
EXT_LINE	Line Number	NVARCHAR(10)		
LINE_NO	Internal line number	NVARCHAR(10)		
SHEET_NO	Entry Sheet Number	NVARCHAR(10)		
PO_NUMBER	Purchasing Document Number	NVARCHAR(10)		
PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)		
UOM_ISO	ISO code for unit of measurement	NVARCHAR(3)		
QUANTITY	Quantity with Sign	decimal(13)		
GR_PRICE	Gross price	decimal(23)		
SHORT_TEXT_ITEM	Description of service entry	NVARCHAR(40)		
IS_CHANGED	CRUD flag	NVARCHAR(1)	CRUD flag	

Sample Implementation:

```
var inputData = [
  {
    "ACCEPTANCE":"X",
    "BEGDATE":"20160101",
    "BLOCK_IND":"",
    "CURRENCY":"USD",
    "DELETE_IND":"",
    "DOC_DATE":"20160330",
    "ENDDATE":"20160331",
    "EXT_NUMBER":"",
    "EXT_NUMBER_LONG":"",
    "POST_DATE":"20160330",
    "PO_ITEM":"00001",
    "PO_NUMBER": 44038300,
    "SHEET_NO":"0000000000",
    "SHORT_TEXT":"Sample Sheet",
    "WI_ID":""
    "WI_ID":null,
    "ServiceEntryItemArr":[{
      "EXT_LINE":"00000000010",
      "LINE_NO":"00000000001",
      "SHEET_NO":"",
      "PO_NUMBER": 44038300,
      "PO_ITEM":"00001",
      "UOM_ISO":"AU",
      "QUANTITY":"2",
      "GR_PRICE":"33",
      "SHORT_TEXT_ITEM":"Sample Item"
    }],
  }
]

jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "POST",
  data: inputData,
  headers: {
    "REQUEST_OBJECT": "SERVICE_ENTRY_SHEETS",
  }
})
```


PUT

Header values:

REQUEST_OBJECT: SERVICE_ENTRY_SHEETS

Description:

Use this service to add more items to an existing service entry sheet.

Compatibility Note:

This functionality is not supported on systems with an S/4HANA backend.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)		Y
EXT_NUMBER	External entry sheet number	NVARCHAR(16)		
SHEET_NO	Entry Sheet Number	NVARCHAR(10)		
CURRENCY	Currency Key	NVARCHAR(5)		Y
SHORT_TEXT	Short Text of Service Entry Sheet	NVARCHAR(40)		Y
PO_NUMBER	Purchasing Document Number	NVARCHAR(10)		Y
PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)		Y
ACCEPTANCE	Acceptance indicator	NVARCHAR(1)	When service entry is updated, pass "X" (Please cross-check this field value, when new sheet is created it is empty else it is always passed with value "X")	
EXT_NUMBER_LONG	External Entry Sheet Number (Dependencies: See Long Text)	NVARCHAR(35)		

DOC_DATE	Document Date in Document	NVARCHAR(8)		
POST_DATE	Posting Date in the Document	NVARCHAR(8)		Y
BEGDATE	Period	NVARCHAR(8)		Y
ENDDATE	End of period	NVARCHAR(8)		Y
BLOCK_IND	Block Release of Entry Sheet	NVARCHAR(12)		
DELETE_IND	Deletion indicator in entry sheet	NVARCHAR(1)	"X" to indicate if deleted else ""	
REL_STATUS	Release status	NVARCHAR(8)		
WI_ID	Work item ID	NVARCHAR(12)		
IS_CHANGED	To indicate if sheet has changed (updated even when new item is inserted)		"I" to indicate if new sheet is created, "U" to indicate if sheet is updated or any sheet item created or updated	
ServiceEntryItemArr				
SHEET_NO_LOCAL	Syclo Local Entry Sheet Number	NVARCHAR(60)		Y
EXT_LINE	Line Number	NVARCHAR(10)		Y
LINE_NO	Internal line number	NVARCHAR(10)		Y
SHEET_NO	Entry Sheet Number	NVARCHAR(10)		
PO_NUMBER	Purchasing Document Number	NVARCHAR(10)		Y
PO_ITEM	Item Number of Purchasing Document	NVARCHAR(5)		Y
UOM_ISO	ISO code for unit of measurement	NVARCHAR(3)		Y
QUANTITY	Quantity with Sign	decimal(13)		Y
GR_PRICE	Gross price	decimal(23)		Y

<i>SHORT_TEXT_ITEM</i>	Short Text of Service Entry Sheet item	NVARCHAR(40)		Y
<i>REL_STATUS</i>	Release status	NVARCHAR(8)		
<i>IS_CHANGED</i>	To indicate if sheet item 1 has changed		"U" to indicate if sheet item changed, "I" to indicate if new sheet item inserted, else ""	

Sample Implementation:

```
var inputData = [
  {
    "ACCEPTANCE": "X"
    "BEGDATE": "20150401"
    "BLOCK_IND": "X"
    "CURRENCY": "USD"
    "DELETE_IND": ""
    "DOC_DATE": "20150527"
    "ENDDATE": "20150630"
    "EXT_NUMBER": "S0207000000000004"
    "EXT_NUMBER_LONG": "S0207000000000004"
    "IS_CHANGED": "U"
    "POST_DATE": "20150527"
    "PO_ITEM": "00010"
    "PO_NUMBER": "44038299"
    "REL_STATUS": ""
    "SHEET_NO": "1000000882"
    "SHEET_NO_LOCAL": "1000000882"
    "SHORT_TEXT": "New service entry sheet"
    "ServiceEntryItemArr": [{
      {
        "EXT_LINE": "0000000010"
        "GR_PRICE": 2500
        "IS_CHANGED": "I"
        "LINE_NO": "0000000002"
        "PO_ITEM": "00010"
        "PO_NUMBER": "44038299"
        "QUANTITY": 1
        "REL_STATUS": ""
        "SHEET_NO": "1000000882"
        "SHEET_NO_LOCAL": "1000000882"
        "SHORT_TEXT_ITEM": "New service entry sheet test"
        "UOM_ISO": "AU"
      },
    ]
  }
]
```

```
        "EXT_LINE": "00000000030"
        "GR_PRICE": 33
        "IS_CHANGED": ""
        "LINE_NO": "0000000003"
        "PO_ITEM": "00001"
        "PO_NUMBER": "44038299"
        "QUANTITY": 2
        "REL_STATUS": ""
        "SHEET_NO": "1000000882"
        "SHEET_NO_LOCAL": "1000000882"
        "SHORT_TEXT_ITEM": "Created Item"
        "UOM_ISO": "AU"
    },
    ...
]

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "SERVICE_ENTRY_SHEETS",
    }
})
```

MANIFEST_DETAILS

GET

Header values:

REQUEST_OBJECT: MANIFEST_DETAILS

Description:

Use this service to display a list of manifests.

Output Fields:

Field Name	Description	Data Type
MANIFEST_ID	Identifier for the manifest	NVARCHAR(40)
CONTAINER_ID	Identifier for the container the manifest items were loaded onto	NVARCHAR(40)
WERKS	Plant number	NVARCHAR(4)
CONTAINER_STATUS	Current container status key	NVARCHAR(10)
STATUS_DESC	Current container status description	NVARCHAR(40)
SOURCE_LOC	Source location of the container	NVARCHAR(40)
TARGET_LOC	Destination of the container	NVARCHAR(40)
COMMENTS	Comments	NVARCHAR(128)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/manifest_details");
```

Sample Output:

```
[
  ...,
  {
    "MANIFEST_ID": "M000000000002",
    "CONTAINER_ID": "C000000000003",
    "WERKS": "0207",
    "CONTAINER_STATUS": "1000000007",
```

```
    "STATUS_DESC": "UNLOADING",  
    "SOURCE_LOC": "CENTRAL",  
    "TARGET_LOC": "0207",  
    "COMMENTS": ""  
  }  
  , ...  
]
```

GET (MANIFEST_ID)

Header values:

REQUEST_OBJECT: MANIFEST_DETAILS

MANIFEST_ID: <manifest_id>

Description:

Use this service to display the details of a specific manifest matching MANIFEST_ID.

Output Fields:

Field Name	Description	Data Type
MANIFEST_ID	Identifier for the manifest	NVARCHAR(40)
CONTAINER_ID	Identifier for the container the manifest items were loaded onto	NVARCHAR(40)
WERKS	Plant number	NVARCHAR(4)
CONTAINER_STATUS	Current container status key	NVARCHAR(10)
STATUS_DESC	Current container status description	NVARCHAR(40)
SOURCE_LOC	Source location of the container	NVARCHAR(40)
TARGET_LOC	Destination of the container	NVARCHAR(40)
COMMENTS	Comments	NVARCHAR(128)
CONTAINER_TYPE	Container type	NVARCHAR(10)
CONTAINER_DESC	Container description	NVARCHAR(50)
EXT_CONTAINER_ID	Container external ID	NVARCHAR(40)
CONTAINER_SOURCE	Source of the container	NVARCHAR(10)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/manifest_details?MANIFEST_ID=M00000000002");
```

Sample Output:

```
[
  {
    "MANIFEST_ID": "M000000000002",
    "CONTAINER_ID": "C000000000003",
    "WERKS": "0207",
    "CONTAINER_STATUS": "10000000007",
    "STATUS_DESC": "UNLOADING",
    "SOURCE_LOC": "CENTRAL",
    "TARGET_LOC": "0207",
    "COMMENTS": "",
    "CONTAINER_TYPE": "",
    "CONTAINER_DESC": "Shipping Container 3",
    "EXT_CONTAINER_ID": "",
    "CONTAINER_SOURCE": ""
  }
]
```


PUT

Header values:

REQUEST_OBJECT: MANIFEST_DETAILS

Description:

Use this service to update the status and comment of a manifest.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
MANIFEST_ID	Identifier for the manifest	NVARCHAR(40)		Y
CONTAINER_ID	Identifier for the container the manifest items were loaded onto	NVARCHAR(40)		Y
CONTAINER_STATUS	Current container status key	NVARCHAR(10)		Y
COMMENTS	Comments	NVARCHAR(128)		

Sample Implementation:

```
var inputData = {
  "MANIFEST_ID": "M000000000002",
  "CONTAINER_ID": "C000000000003",
  "CONTAINER_STATUS": "1000000007",
  "COMMENTS": "updated comment"
};

$.ajax({
  url: "/ws_restful_data_controller/manifest_details",
  method: "PUT",
  data: inputData
});
```

MANIFEST_ITEMS

GET

Header values:

REQUEST_OBJECT: MANIFEST_ITEMS

MANIFEST_ID: <manifest_id>

Description:

Use this service to get the items associated with a manifest, grouped by their parent purchase orders.

Output Fields:

Field Name	Description	Data Type
MANIFEST_ID	Identifier for the manifest	NVARCHAR(40)
WERKS	Plant number	NVARCHAR(4)
EBELN	Purchasing Document Number	NVARCHAR(10)
BSART	Purchase Requisition Document Type	NVARCHAR(4)
BEDAT	Purchase Order Date	NVARCHAR(8)
LIFNR	Vendor Account Number	NVARCHAR(10)
WAERS	Currency Key	NVARCHAR(5)
FRGRL	Release Not Yet Completely Effected	NVARCHAR(1)
NAME1	Vendor name	NVARCHAR(40)
LTXT	Purchase order long description	LONG NVARCHAR
ITEMS	Properties below this line refer to each object in this array.	ARRAY
EBELN	Purchasing Document Number	NVARCHAR(10)

BACKORDER_QTY	Backorder Quantity	DECIMAL(13,3)
EBELP	Item Number of Purchasing Document	NVARCHAR(5)
TXZ01	Short Text	NVARCHAR(40)
MATNR	Material Number	NVARCHAR(40)
MENGE	Purchase Requisition Quantity	DECIMAL(13,3)
MEINS	Component Unit of Measure from MATPLANT	NVARCHAR(3)
BPRME	Order Price Unit	NVARCHAR(3)
PO_OPEN_QTY	Open quantity	DECIMAL(13,3)
NETPR	Net order value in PO currency	DECIMAL(11,2)
PEINH	Price unit	DECIMAL(5,0)
BWART	Movement Type	NVARCHAR(3)
LGORT	Storage Location	NVARCHAR(4)
WI_ID	Work Item ID	NVARCHAR(12)
SPERR	Posting block due to physical inventory	NVARCHAR(1)
BWTTY	Valuation category	NVARCHAR(1)
MULTI_LOC	Whether there are multiple bins for the material	NVARCHAR(1)
AUFNR	Order Number	NVARCHAR(12)

IS_CHANGED	Flag indicating if an items is changed	NVARCHAR(1)
LTXT	Long Text	LONG NVARCHAR
BRTWR	Gross Order Value in PO currency	DECIMAL(13, 2)
KNTTP	Account Assignment Category	NVARCHAR(1)
AVAIL_QTY_101	Available Quantity for movement type 101	DECIMAL(13,3)
AVAIL_QTY	Available Quantity	DECIMAL(13,3)
PSTYP	Item category in Purchasing Document	NVARCHAR(1)
PROCSTAT	Purchasing document processing state	NVARCHAR(2)
BACKEND_USERNAME	User Name in User Master Record	NVARCHAR(12)
WAERS	Currency Key	NVARCHAR(3)
WEPOS	Goods Receipt Indicator	NVARCHAR(1)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/manifest_items?MANIFEST_ID=M00000000002");
```

Sample Output:

```
[
  {
    "MANIFEST_ID": "M00000000002",
    "WERKS": "0207",
    "EBELN": "44037977",
    "BSART": "ZNB",
    "BEDAT": "20150409",
    "LIFNR": "2000000647",
    "WAERS": "USD",
    "FRGRL": " ",
    "NAME1": "Charter Supply Company",
```

```

"LTXT": "",
"ITEMS": [
  {
    "EBELN": "44037977",
    "BACKORDER_QTY": 6,
    "EBELP": "00001",
    "TXZ01": "GASKET: COMPRESSED FIBRE 1.5MM X750MM",
    "MATNR": "9435",
    "MENGE": 6,
    "MEINS": "EA",
    "BPRME": "EA",
    "PO_OPEN_QTY": 6,
    "NETPR": 38.9900000000000006,
    "PEINH": 1,
    "BWART": "343",
    "LGORT": "0001",
    "WI_ID": null,
    "SPERR": "",
    "BWTYP": " ",
    "MULTI_LOC": "0",
    "AUFNR": "",
    "IS_CHANGED": "",
    "LTXT": "",
    "BRTWR": 233.94,
    "KNTTP": " ",
    "AVAIL_QTY_101": 0,
    "AVAIL_QTY": 6,
    "PSTYP": "0",
    "PROCSTAT": "02",
    "BACKEND_USERNAME": null,
    "WAERS": "USD",
    "WEPOS": "X",
    "EDGE_ERRORS": ""
  },
  ...
]
}
]

```

MANIFEST_HISTORY

GET

Header values:

REQUEST_OBJECT: MANIFEST_HISTORY

MANIFEST_ID: <manifest_id>

Description:

Use this service to display a history of status changes for the manifest matching MANIFEST_ID.

Output Fields:

Field Name	Description	Data Type
MANIFEST_ID	Identifier for the manifest	NVARCHAR(40)
LINE_NO	Line number	NVARCHAR(6)
CONTAINER_STATUS	Container status ID	NVARCHAR(10)
STATUS_TEXT	Container status description	NVARCHAR(40)
WERKS	Plant number	NVARCHAR(4)
SOURCE_LOC	The source location of the manifest/container	NVARCHAR(40)
TARGET_LOC	The destination of the manifest/container	NVARCHAR(40)
CHANGE_DATE	Date of the changes	NVARCHAR(8)
CHANGE_TIME	Time of the changes	NVARCHAR(6)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/manifest_history?MANIFEST_ID=M00000000002");
```

Sample Output:

```
[
  ... ,
  {
```

```
    "MANIFEST_ID": "M000000000002",
    "LINE_NO": "000001",
    "CONTAINER_STATUS": "1000000007",
    "STATUS_TEXT": "UNLOADING",
    "WERKS": "0207",
    "SOURCE_LOC": "CENTRAL",
    "TARGET_LOC": "0207",
    "CHANGE_DATE": "20180730",
    "CHANGE_TIME": "111003"
  }
  , ...
]
```

CONTAINER

GET

Header values:

REQUEST_OBJECT: CONTAINER

CONTAINER_ID: <container id> (optional)

Description:

Use this service to get a list of containers or, optionally, a specific container matching CONTAINER_ID.

Output Fields:

Field Name	Description	Data Type
CONTAINER_ID	Container ID	NVARCHAR(40)
CONTAINER_TYPE	Container type	NVARCHAR(10)
CONTAINER_DESC	Container description	NVARCHAR(128)
EXT_CONTAINER_ID	External ID	NVARCHAR(40)
CONTAINER_SOURCE	Source of the container	NVARCHAR(10)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/container");
```

Sample Output:

```
[
  ...
  {
    "CONTAINER_ID": "C00000000001",
    "CONTAINER_TYPE": "",
    "CONTAINER_DESC": "Shipping Container 1",
    "EXT_CONTAINER_ID": "",
    "CONTAINER_SOURCE": ""
  }
  , ...
]
```


CONTAINER_DETAILS

GET (CONTAINER_ID)

Header values:

REQUEST_OBJECT: CONTAINER_DETAILS

CONTAINER_ID: <container id>

Description:

Use this service to get the expanded attributes for a container matching CONTAINER_ID.

Output Fields:

Field Name	Description	Data Type
CONTAINER_ID	Container ID	NVARCHAR(40)
CONTAINER_TYPE	Container type	NVARCHAR(10)
CONTAINER_DESC	Container description	NVARCHAR(128)
EXT_CONTAINER_ID	External ID	NVARCHAR(40)
CONTAINER_SOURCE	Source of the container	NVARCHAR(10)
ATTR_NAME	Attribute name	NVARCHAR(128)
ATTR_VALUE	Attribute value	NVARCHAR(128)
ATTR_UOM	Attribute value unit of measure	NVARCHAR(20)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/container_details?CONTAINER_ID=C000000000002");
```

Sample Output:

```
[
  ...,
  {
    "CONTAINER_ID": "C000000000002",
    "CONTAINER_TYPE": "",
    "CONTAINER_DESC": "Shipping Container 2",
```

```
    "EXT_CONTAINER_ID": "",  
    "CONTAINER_SOURCE": "",  
    "ATTR_NAME": "Capacity",  
    "ATTR_VALUE": "3835",  
    "ATTR_UOM": "FT3"  
  }  
  , ...  
]
```

CONTAINER_STATUS_LIST

GET

Header values:

REQUEST_OBJECT: CONTAINER_STATUS_LIST

Description:

Use this service to get a list of valid container/manifest statuses.

Output Fields:

Field Name	Description	Data Type
STATUS_ID	Status ID	NVARCHAR(10)
CONTAINER_STATUS	Status label	NVARCHAR(40)
STATUS_DESC	Status long description	NVARCHAR(128)

Sample Implementation:

```
$.ajax("/ws_restful_data_controller/container_status_list");
```

Sample Output:

```
[
  ...,
  {
    "STATUS_ID": "1000000001",
    "CONTAINER_STATUS": "EMPTY AT CENTRAL",
    "STATUS_DESC": "The container is at the central shipping location ready to
be used"
  }
  , ...
]
```

PR_PLAN_DOC

GET

Header values:

REQUEST_OBJECT: PR_PLAN_DOC

Description:

Retrieve a list of PR planning documents.

Output Fields:

Field Name	Description	Restrictions
MRP_NUMBER	ID for the original MRP run this document was created from	
PLANDOC_ID	Identifier for the planning document.	
DESCRIPTION	Description	
RUNDATE	Run date of the original MRP run	Format: yyyyymmdd
RUNTIME	Run time of the original MRP run	Format: hhmmss
CREATED_TS	Create timestamp of the planning document	
PR_NO_LOCAL	Identifier for the Purchase Requisition created from this planning document	
PR_CREATED_TS	Create timestamp for the associated purchase requisition	

Sample Output:

```
[
  {
    "MRP_NUMBER": "000000000001",
    "PLANDOC_ID": "1000000001",
    "DESCRIPTION": "",
    "RUNDATE": "20180215",
    "RUNTIME": "142332",
    "CREATED_TS": "2018-02-15 11:00:00.000000",
    "PR_NO_LOCAL": null,
    "PR_CREATED_TS": null
  },
  ...
]
```

GET (PLANDOC_ID)

Header values:

REQUEST_OBJECT: PR_PLAN_DOC

PLANDOC_ID: <plandoc_id>

Description:

Retrieve a specific planning document matching the PLANDOC_ID header and all associated line items.

Output Fields:

Field Name	Description	Restrictions
MRP_NUMBER	ID for the original MRP run this document was created from	
PLANDOC_ID	Identifier for the planning document.	
DESCRIPTION	Description	
RUNDATE	Run date of the original MRP run	Format: yyyyymmdd
RUNTIME	Run time of the original MRP run	Format: hhmmss
CREATED_TS	Create timestamp of the planning document	
PR_NO_LOCAL	Identifier for the Purchase Requisition created from this planning document	
PR_CREATED_TS	Create timestamp for the associated purchase requisition	
<i>Items</i>		
LINE_NUMBER	Line identifier for the material within the planning document	
MATNR	Material number	
MAKTX	Material description	
PRQTY	Quantity to requisition in the resulting PR	
REQQTY	Required total quantity	
LGORT	Storage Location	
LGPBE	Bin	
MAABC	Criticality	

MABST	Maximum onhand stock	
MEINS	Unit of measure	
MINBE	Reorder point (minimum onhand stock)	

Sample Output:

```
{
  "MRP_NUMBER": "0000000000001",
  "PLANDOC_ID": "10000000001",
  "DESCRIPTION": "",
  "RUNDATE": "20180215",
  "RUNTIME": "142332",
  "PR_NO_LOCAL": "",
  "PR_CREATED_TS": "",
  "items": [
    {
      "MRP_NUMBER": "0000000000001",
      "PLANDOC_ID": "10000000001",
      "DESCRIPTION": "",
      "LINE_NUMBER": 1,
      "MATNR": "10012",
      "MAKTX": "RELAY : THERMISTOR",
      "PRQTY": 2,
      "REQQTY": 3,
      "LGORT": "0001",
      "LGPBE": "G-14-B",
      "MAABC": "D",
      "MABST": 0,
      "MEINS": "EA",
      "MINBE": 0,
      "RUNDATE": "20180215",
      "RUNTIME": "142332",
      "CREATED_TS": "2018-02-15 11:00:00.000000",
      "PR_NO_LOCAL": null,
      "PR_CREATED_TS": null
    },
    ...
  ]
}
```

POST

Header values:

REQUEST_OBJECT: PR_PLAN_DOC

Description:

While initial planning documents are generated from MRP reports, new planning documents can be created on the edge. For example, a past planning document can be used as the basis for a new planning document and resulting PR.

Required total quantities (REQQTY in the above GET APIs) are fetched from the original MRP record matching MRP_NUMBER.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
MRP_NUMBER	ID for the original MRP	NVARCHAR(12)		Y
DESCRIPTION	Description	NVARCHAR(100)		
<i>items</i>		Array		
LINE_NUMBER	Line number for the item	INTEGER		Y
MATNR	Material number	NVARCHAR(40)		Y
PRQTY	Quantity to requisition	DECIMAL(13, 3)		

Sample Implementation:

```
var oInputData = {
  "MRP_NUMBER": "0000000000001",
  "DESCRIPTION": "Copy of 1000000001",
  "items": [
    {
      "LINE_NUMBER": 1,
      "MATNR": "10012",
      "PRQTY": 2
    }
  ]
};

$.ajax({
  url: "/ws_restful_data_controller/pr_plan_doc",
  method: "POST",
  data: JSON.stringify(oInputData),
});
```

PUT

Header values:

REQUEST_OBJECT: PR_PLAN_DOC

Description:

Update a planning document’s description and line items. Any line items added to the *items* array will be added, and any line items not present in the array will be removed. **All** line items must be included in the request body, not just the ones that have changed.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
PLANDOC_ID	ID of the planning document to be updated	NVARCHAR(10)		Y
DESCRIPTION	Description	NVARCHAR(100)		
<i>items</i>		Array		
LINE_NUMBER	Line number for the item	INTEGER		Y
MATNR	Material number	NVARCHAR(40)		Y
PRQTY	Quantity to requisition	DECIMAL(13, 3)		

Sample Implementation:

```
var oInputData = {
  "PLANDOC_ID": "00000000001",
  "DESCRIPTION": "Copy of 10000000001",
  "items": [
    {
      "LINE_NUMBER": 1,
      "MATNR": "10012",
      "PRQTY": 2
    },
    {
      "LINE_NUMBER": 2,
      "MATNR": "10013",
      "PRQTY": 0
    }
  ]
};

$.ajax({
  url: "/ws_restful_data_controller/pr_plan_doc",
```



```

    method: "PUT",
    data: JSON.stringify(oInputData),
});

```

MEASURING_POINTS_THRESHOLDS

GET (POINT)

Header values:

REQUEST_OBJECT: MEASURING_POINTS_THRESHOLDS

POINT: <measuring point number> (optional)

Description:

Retrieve configured upper and lower thresholds for measuring point readings, as configured by the following configuration settings, detailed in the Edge Configuration Settings Guide:

- [Mpointnumber]_PointLowerThreshold
- [Mpointnumber]_CreateWOwhenUnderMin
- [Mpointnumber]_PointUpperThreshold
- [Mpointnumber]_CreateWOwhenOverMax

If POINT is provided, only data for the matching measuring point is retrieved.

Output Fields:

Field Name	Description	Restrictions
POINT	Measuring Point number	
UPPER	Upper threshold	
LOWER	Lower threshold	
CREATE_WO_ABOVE_UPPER	Indicates whether a measuring point reading above UPPER will result in an automatic work order creation	'Y' (yes) or 'N' (no)
CREATE_WO_BELOW_LOWER	Indicates whether a measuring point reading below LOWER will result in an automatic work order creation	'Y' (yes) or 'N' (no)

PUT(POINT)

Header values:

REQUEST_OBJECT: MEASURING_POINTS_THRESHOLDS

POINT: <measuring point number>

Description:

Use this service to update the thresholds of the specified measuring point.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
UPPER	Upper threshold	NVARCHAR(100)		Y
LOWER	Lower threshold	NVARCHAR(100)		Y
CREATE_WO_ABOVE_UPPER	Create a work order automatically when a reading exceeds UPPER	NVARCHAR(1)	'Y' for yes, all other values treated as no	Y
CREATE_WO_BELOW_LOWER	Create a work order automatically when a reading is below LOWER	NVARCHAR(1)	'Y' for yes, all other values treated as no	Y

Sample Implementation:

```
var inputData = {
    "UPPER": "100",
    "LOWER": "50",
    "CREATE_WO_ABOVE_UPPER": "Y",
    "CREATE_WO_BELOW_LOWER": ""
}

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "MEASURING_POINTS_THRESHOLDS",
        "POINT": 180
    }
})
```

POST(POINT)

Header values:

REQUEST_OBJECT: MEASURING_POINTS_THRESHOLDS
 POINT: <measuring point number>

Description:

Use this service to add thresholds for the specified measuring point.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
UPPER	Upper threshold	NVARCHAR(100)		Y
LOWER	Lower threshold	NVARCHAR(100)		Y
CREATE_WO_ABOVE_UPPER	Create a work order automatically when a reading exceeds UPPER	NVARCHAR(1)	'Y' for yes, all other values treated as no	Y
CREATE_WO_BELOW_LOWER	Create a work order automatically when a reading is below LOWER	NVARCHAR(1)	'Y' for yes, all other values treated as no	Y

Sample Implementation:

```

var inputData = {
    "UPPER": "100",
    "LOWER": "50",
    "CREATE_WO_ABOVE_UPPER": "Y",
    "CREATE_WO_BELOW_LOWER": ""
}

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "MEASURING_POINTS_THRESHOLDS",
        "POINT": 180
    }
})

```

DEFAULT_VALUES

GET

Header values:

REQUEST_OBJECT: DEFAULT VALUES

Description:

Use this service to retrieve a list of the objects that have default values available. The elements of the output array are valid options for the FOR_OBJECT header in the following RESTful action.

Output Fields:

Field Name	Description	Data Type	Restrictions
(array)	An array of strings representing REQUEST_OBJECTs that have default values available		

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "DEFAULT_VALUES"
  }
})
```

Sample Output:

```
[
  "workorder",
  ...
]
```

GET (FOR_OBJECT)

Header values:

REQUEST_OBJECT: DEFAULT VALUES

FOR_OBJECT: <other request object>

Description:

Get any available default values for the specified entity. The primary purpose of this action is to determine initial selections for dropdowns and other inputs on a UI form, or use the JSON object as a base for the model that will be provided to a RESTful POST.

Output Fields:

The response object schema varies. The object can be used as a base when creating a new object to be persisted.

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_data_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "DEFAULT_VALUES",
    "FOR_OBJECT": "WORKORDER"
  }
})
```

```
    }
  });
```

Sample Implementation (compact version):

```
$.ajax("/ws_restful_data_controller/default_values?for_object=workorder");
```

Sample Output:

```
{
  "USER_STATUS": "INPL",
  "AUART": "ZM01",
  "STEUS": "ZINT",
  "IS_EXTERNAL": 0,
  "VORNR": "0010",
  "ARBEI": "1.0",
  "ANLZU": "0"
}
```

LOCAL_USER

GET

Header values:

REQUEST_OBJECT: LOCAL_USER

Description:

Use this service to retrieve a list of local users.

OData Entity:

/dep/odata/Local_User

Output Fields:

Field Name	Description	Data Type	Restrictions
PLANTUSER	Local plant user	NVARCHAR(40)	
BACKEND_USERNAME	Backend user	NVARCHAR(128)	
WORK_CENTER	Work center	NVARCHAR(8)	

Sample Output:

```
[
  {
    "PLANTUSER": "MS 0207",
    "BACKEND_USERNAME": "MS.0207",
    "WORK_CENTER": "MAINTSUP"
  }
]
```

```
    },
    ...
  ]
```

ASSIGNMENT_TYPE

GET

Header values:

REQUEST_OBJECT: ASSIGNMENT_TYPE

Description:

Use this service to retrieve a list of assignment types.

OData Entity:

/dep/odata/Assignment_Type

Output Fields:

Field Name	Description	Data Type	Restrictions
TYPE	Type key	NVARCHAR(60)	
TEXT	Type description	NVARCHAR(256)	

Sample Output:

```
[
  {
    "TYPE": "WO",
    "TEXT": "Work Order"
  },
  ...
]
```

ASSIGNMENT_STATUS

GET

Header values:

REQUEST_OBJECT: ASSIGNMENT_STATUS

Description:

Use this service to retrieve a list of assignment statuses.

OData Entity:

/dep/odata/Assignment_Status

Output Fields:

Field Name	Description	Data Type	Restrictions
STATUS	Status key	NVARCHAR(60)	
TEXT	Status description	NVARCHAR(256)	

Sample Output:

```
[
  {
    "STATUS": "ACC",
    "TEXT": "Accepted"
  },
  ...
]
```

TASK_ASSIGNMENT

GET

Header values:

REQUEST_OBJECT: TASK_ASSIGNMENT
 PLANTUSER: <plant user> (optional)
 OBJTYPE: <object type> (optional)
 OBJKEY: <object key> (optional)
 OBJSUBKEY: <object sub key> (optional)

Description:

Use this service to retrieve a list of task assignments. The list can be filtered by user or object using the optional headers.

OData Entity:

/dep/odata/Task_Assignment

Output Fields:

Field Name	Description	Data Type	Restrictions
PLANTUSER	Local plant user assigned to object	NVARCHAR(40)	
OBJTYPE	Object type key	NVARCHAR(60)	
OBJTYPE_TEXT	Object type description	NVARCHAR(256)	

OBJKEY	Object key	NVARCHAR(128)	
OBJSUBKEY	Object sub key	NVARCHAR(128)	
STATUS	Assignment status key	NVARCHAR(60)	
STATUS_TEXT	Assignment status description	NVARCHAR(256)	

Sample Output:

```
[
  {
    "PLANTUSER": "SAAP",
    "OBJTYPE": "WO",
    "OBJTYPE_TEXT": "Work Order",
    "OBJKEY": "V20700000859",
    "OBJSUBKEY": "",
    "STATUS": "ACC",
    "STATUS_TEXT": "Accepted"
  },
  ...
]
```

POST

Header values:

REQUEST_OBJECT: TASK_ASSIGNMENT

Description:

Use this service to create a task assignment.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
PLANTUSER	Local plant user assigned to object	NVARCHAR(40)		Y
OBJTYPE	Object type key	NVARCHAR(60)		Y
OBJKEY	Object key	NVARCHAR(128)		Y
OBJSUBKEY	Object sub key	NVARCHAR(128)		Y
STATUS	Assignment status	NVARCHAR(60)		Y

Sample Implementation:


```

var inputData = {
    "PLANTUSER": "SAAP",
    "OBJTYPE": "WO",
    "OBJKEY": "V20700000859",
    "OBJSUBKEY": "",
    "STATUS": "ASN"
}

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "POST",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "TASK_ASSIGNMENT"
    }
})

```

PUT

Header values:

REQUEST_OBJECT: TASK_ASSIGNMENT

Description:

Use this service to update a task assignment.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
PLANTUSER	Local plant user assigned to object	NVARCHAR(40)		Y
OBJTYPE	Object type key	NVARCHAR(60)		Y
OBJKEY	Object key	NVARCHAR(128)		Y
OBJSUBKEY	Object sub key	NVARCHAR(128)		Y
STATUS	Assignment status	NVARCHAR(60)		Y

Sample Implementation:

```

var inputData = {
    "PLANTUSER": "SAAP",
    "OBJTYPE": "WO",
    "OBJKEY": "V20700000859",
    "OBJSUBKEY": "",
    "STATUS": "ACC"
}

```

```
}  
  
jQuery.ajax({  
  url: "/ws_restful_data_controller",  
  method: "PUT",  
  data: inputData,  
  headers: {  
    "REQUEST_OBJECT": "TASK_ASSIGNMENT"  
  }  
})
```

DELETE

Header values:

REQUEST_OBJECT: TASK_ASSIGNMENT

PLANTUSER: <plant user>

OBJTYPE: <object type>

OBJKEY: <object key>

OBJSUBKEY: <object sub key>

Description:

Use this service to delete a task assignment.

Sample Implementation:

```
jQuery.ajax({  
  url: "/ws_restful_data_controller",  
  method: "DELETE",  
  data: inputData,  
  headers: {  
    "REQUEST_OBJECT": "TASK_ASSIGNMENT",  
    "PLANTUSER": "SAAP",  
    "OBJTYPE": "WO",  
    "OBJKEY": "V20700000859",  
    "OBJSUBKEY": ""  
  }  
})
```

MY_TASK_ASSIGNMENT

GET

Header values:

REQUEST_OBJECT: MY_TASK_ASSIGNMENT

OBJTYPE: <object type> (optional)

OBJKEY: <object key> (optional)

OBJSUBKEY: <object sub key> (optional)

Description:

Use this service to retrieve a list of task assignments for the logged in user. The list can be filtered by object using the optional headers.

Output Fields:

Field Name	Description	Data Type	Restrictions
PLANTUSER	Local plant user assigned to object	NVARCHAR(40)	
OBJTYPE	Object type key	NVARCHAR(60)	
OBJTYPE_TEXT	Object type description	NVARCHAR(256)	
OBJKEY	Object key	NVARCHAR(128)	
OBJSUBKEY	Object sub key	NVARCHAR(128)	
STATUS	Assignment status key	NVARCHAR(60)	
STATUS_TEXT	Assignment status description	NVARCHAR(256)	

Sample Output:

```
[
  {
    "PLANTUSER": "SAAP",
    "OBJTYPE": "WO",
    "OBJTYPE_TEXT": "Work Order",
    "OBJKEY": "V20700000859",
    "OBJSUBKEY": "",
    "STATUS": "ACC",
    "STATUS_TEXT": "Accepted"
  },
  ...
]
```

PUT

Header values:

REQUEST_OBJECT: MY_TASK_ASSIGNMENT

Description:

Use this service to update a task assignment for the logged in user.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
PLANTUSER	Local plant user assigned to object	NVARCHAR(40)		Y
OBJTYPE	Object type key	NVARCHAR(60)		Y
OBJKEY	Object key	NVARCHAR(128)		Y
OBJSUBKEY	Object sub key	NVARCHAR(128)		Y
STATUS	Assignment status	NVARCHAR(60)		Y

Sample Implementation:

```

var inputData = {
    "PLANTUSER": "SAAP",
    "OBJTYPE": "WO",
    "OBJKEY": "V20700000859",
    "OBJSUBKEY": "",
    "STATUS": "ACC"
}

jQuery.ajax({
    url: "/ws_restful_data_controller",
    method: "PUT",
    data: inputData,
    headers: {
        "REQUEST_OBJECT": "TASK_ASSIGNMENT"
    }
})

```

OBJECT LOCKING

Object locking requests are made to /ws_restful_lock_controller/<OBJECT_TYPE> instead of the URLs for the previous RESTful objects. An OBJ_KEY header is used to identify the object to lock.

Valid values for the <OBJECT_TYPE> portion of the URL are as follows, along with the expected value of the OBJ_KEY header:

- WORKORDER
 - This encompasses an entire work order and its associated objects, such as operations and components
 - OBJ_KEY is the work order’s AUFNR value
- PINVENTORY
 - For locking physical inventory documents
 - OBJ_KEY is the inventory doc’s INV_NO_LOCAL value
- PURCHASEREQ
 - For locking purchase requisitions
 - OBJ_KEY is the purchase req’s PR_NO_LOCAL value
- MANIFESTDETAILS
 - For locking a manifest for container receiving
 - OBJ_KEY is the manifest’s MANIFEST_ID value

GET (OBJ_KEY)

Header values:

OBJ_KEY: Refer to the specific object type above.

Description:

Check the current lock status for a specified object type (in the URL) and object key (the OBJ_KEY header).

Output Fields:

Field Name	Description
LOCKED_BY_USER	The user with a lock on the object, or null if the object is not locked
LOCK_STATUS	‘EXCLUSIVE’, or null if the object is not locked

POST (OBJ_KEY)

Header values:

OBJ_KEY: Refer to the specific object type above.

Description:

Acquire an exclusive lock for a specified object. Other users will be unable to modify the object until the lock expires or is cleared.

Output Fields:

Field Name	Description
LOCKED_BY_USER	The user with a lock on the object, or null if the object is not locked
LOCK_MESSAGE	'OK' or an error message if a lock could not be acquired
LOCK_STATUS	'EXCLUSIVE', or null if the object is not locked

PUT (OBJ_KEY)

Header values:

OBJ_KEY: Refer to the specific object type above.

Description:

Override an existing exclusive lock for a specified object and claim the lock for the current user instead. Other users will be unable to modify the object until the lock expires or is cleared.

Careless use of this override can reintroduce concurrency problems that are meant to be solved by application locking. Override functionality should only be added to applications when necessary and not as a default behavior.

Output Fields:

Field Name	Description
LOCKED_BY_USER	The user with a lock on the object, or null if the object is not locked
LOCK_MESSAGE	'OK' or an error message if a lock could not be acquired
LOCK_STATUS	'EXCLUSIVE', or null if the object is not locked

DELETE (OBJ_KEY)

Header values:

OBJ_KEY: Optional. Refer to the specific object type above.

Description:

Clears locks where OBJ_KEY matches this header. If OBJ_KEY is not provided, clears all locks owned by the current user matching the object type in the URL. Does not affect locks for other users.

Output Fields:

Field Name	Description
LOCKED_BY_USER	The user with a lock on the object, should be null

LOCK_STATUS	The lock status, should be null
-------------	---------------------------------

INCIDENT REPORTING API (EDGE ONLY)

It is very important to note that the incident reporting APIs only persist data in the edge database. The records are not synchronized to the consolidated database nor is there any integration with SAP EHSM.

Incident reporting requests are made to /ws_restful_ehs_data_controller and /dep/ehs/odata/<request_object> instead of the URLs for the previous RESTful objects. OData support is limited to GET requests to assist with filtering and pagination. Any non-GET requests to an OData URL will either fail or be forwarded to the appropriate /ws_restful_data_controller path.

It is important to note that SQL Anywhere’s JSON parsing converts the JSON string into nested arrays and strongly-typed objects. This means an array of objects requires all elements to have the same structure. Objects in an array must have the same properties as one another and must be listed **in the same order** once serialized. In the case of a nested array, jagged arrays are invalid. Shorter arrays must be padded with null elements until they are the same length as the other nested arrays.

INCIDENT

GET (ID_LOCAL)

Header values:

REQUEST_OBJECT: INCIDENT

ID_LOCAL: <Incident Number >

Description:

Use this service to retrieve a reported incident or draft’s details

OData Entity:

/dep/ehs/odata/Reported_Incidents

Output Fields:

Field Name	Description	Data Type	Restrictions
ID_LOCAL	Local ID	NVARCHAR(20)	
ID	Backend Id	NVARCHAR(20)	
TITLE	Incident Title	NVARCHAR(60)	
ALTXT	Action Taken long text	LONG NVARCHAR	

ELTXT	Event description long text	LONG NVARCHAR	
START_DATE	Incident Date	NVARCHAR(10)	
START_TIME	Incident time	NVARCHAR(8)	
START_TIME_ZONE	Time zone	NVARCHAR(6)	
PLANT_LOC_CODE	Location of incident	NVARCHAR(10)	
PLANT_ID	Plant ID	NVARCHAR(4)	
USER_ID_CR	ID of incident creator	NVARCHAR(12)	
PRIORITY	Priority	NVARCHAR(10)	
PRIORITY_KEY	Priority key	NVARCHAR(1)	
DESCRIPTION	Incident short description	NVARCHAR(40)	
LOCATION_CLASS_ID	Location class	NVARCHAR(10)	
ORG_UNIT_ID	Organizational Unit	NVARCHAR(10)	
INVESTIGATION_REQUIRED	Investigation Required	NVARCHAR(1)	'Y' or 'N'
INVESTIGATION_STATUS_TYPE_ID	Status of investigation	NVARCHAR(1)	1, 2 or 3
INVESTIGATION_START_DATE	Start date of investigation	NVARCHAR(10)	
INVESTIGATION_END_DATE	End date of investigation	NVARCHAR(10)	
REPORT_STATUS	Status of report	NVARCHAR(1)	1, 2 or 3
REPORTED_DATE	Date incident was reported	NVARCHAR(10)	

IS_SUBMITTED	Submitted flag	NVARCHAR(1)	'X' or ''
--------------	----------------	-------------	-----------

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_ehs_data_controller/INCIDENT",
  method: "GET",
  headers: {
    "ID_LOCAL": "I04250000002"
  }
})
```

Sample Output:

```
{
  "ID_LOCAL": "I04250000002",
  "ID": "I04250000002",
  "TITLE": "Maintenance injured right leg while climbing stairs",
  "PLANT_LOC_CODE": "Kitchen",
  "PLANT_ID": "0425",
  "ELTXT": "",
  "ALTXT": "",
  "START_DATE": "20160226",
  "START_TIME": "780",
  "START_TIME_ZONE": "EST",
  "INVOLVED_PEOPLE_ARR": [
    {
      "LOCAL_PERSN_ID": "30000000001",
      "PERSON_ID": "30000000001",
      "FIRST_NAME": "Tom",
      "LAST_NAME": "Shore",
      "INVOLVE_TYPE_ID": "Manager",
      "ADDRESS": "120 King St, Waterloo, ON",
      "EMAIL": "tom.shore@gmail.com",
      "COMPANY": "SAP",
      "ORG": "ET Team",
      "PHONE": "226 777 8888",
      "IS_EXTERNAL": "",
      "CUD_IND": "C",
      "LINE_NUMBER": "0001",
      "IMAGE": "sap-icon://person-placeholder"
    }
  ],
  "INJURED_PEOPLE_ARR": [
    {
      "LOCAL_PERSN_ID": "30000000008",
```

```

    "PERSON_ID": "30000000008",
    "FIRST_NAME": "Marian",
    "LAST_NAME": "Chan",
    "ADDRESS": "123 King St, Waterloo, ON",
    "COMPANY": "SAP",
    "ORG": "ET Team",
    "EMAIL": "marian.chan@gmail.com",
    "PHONE": "226 233 8888",
    "WORK_RELATED_CAT": "Work",
    "INJURY_CLASS_ID": "Respiratory Condition",
    "INJURY_TYPE_ID": "Acute upper respiratory infections",
    "DESC_TXT": "Maintenance injured his right leg while climbing stairs",
    "INITIAL_TREATMENT": "",
    "BODYPART": "Leg",
    "BODYSIDE": "Right",
    "INFLUEN_FACTOR_ARR": [],
    "TREATMENT_BEYOND_FIRSTAID": "X",
    "UNCONSCIOUSNESS": "X",
    "IMMEDIATE_RESUSCITATION": "X",
    "FATALITY": "X",
    "IS_EXTERNAL": "",
    "CUD_IND": "C",
    "LINE_NUMBER": "0001",
    "IMAGE": "sap-icon://person-placeholder"
  }
],
"USER_ID_CR": "JONHAR001",
"PRIORITY": "Medium",
"PRIORITY_KEY": "2",
"DESCRIPTION": "Kitchen room",
"LOCATION_CLASS_ID": "Common",
"ORG_UNIT_ID": "Maint",
"INVESTIGATION_REQUIRED": "Y",
"INVESTIGATION_STATUS_TYPE_ID": "2",
"INVESTIGATION_START_DATE": "20160315",
"INVESTIGATION_END_DATE": "",
"REPORT_STATUS": "2",
"REPORTED_DATE": "20160215",
"IS_SUBMITTED": "X"
}

```

GET

Header values:

REQUEST_OBJECT: INCIDENT

Description:

Use this service to retrieve a list of incidents that have been submitted (not drafts).

OData Entity:

/dep/ehs/odata/Reported_Incidents

- The OData entity gets both submitted incidents and drafts. Filter on IS_SUBMITTED='X' to get only submitted incidents, or IS_SUBMITTED='' for only drafts.

Output Fields:

Field Name	Description	Data Type	Restrictions
STATUS	Report status	NVARCHAR(15)	
STATUS_KEY	Report status key	NVARCHAR(2)	1, 2 or 3
ID_LOCAL	Local ID	NVARCHAR(20)	
EVDESC	Event Description	NVARCHAR(60)	
ACLOC	Location	NVARCHAR(10)	
LOCAL_PERSN_ID	ID of incident creator	NVARCHAR(10)	
FIRST_NAME	First name of incident creator	NVARCHAR(60)	
LAST_NAME	Last name of incident creator	NVARCHAR(60)	
PRIORITY	Incident priority	NVARCHAR(10)	
PRIORITY_KEY	Incident priority key	NVARCHAR(2)	
INCIDENT_DATE	Incident date	NVARCHAR(32)	

Sample Implementation:

```
jQuery.ajax({
```

```
    url: "/ws_restful_ehs_data_controller/INCIDENT",
    method: "GET"
  })
```

Sample Output:

```
[{
  "STATUS": "In Process",
  "STATUS_KEY": "2",
  "ID_LOCAL": "I04250000002",
  "EVDESC": "Maintenance injured right leg while climbing stairs",
  "ACLOC": "Kitchen",
  "LOCAL_PERSN_ID": "30000000006",
  "FIRST_NAME": "Jonathan",
  "LAST_NAME": "Harris",
  "PRIORITY": "Medium",
  "PRIORITY_KEY": "2",
  "INCIDENT_DATE": "26.02.2016",
  "INVESTIGATION_STATUS": "2"
}]
```

POST

Header values:

REQUEST_OBJECT: INCIDENT

ID_LOCAL: <Incident Id>,

SUBMIT: <'Y' or 'N'>]

Description:

Use this service to create an incident draft, which may be immediately submitted or not depending on config or headers.

Configurability:

The behavior of this action may be affected by the following configuration settings as detailed in the Edge Configuration Settings Guide:

- SubmitIncidentDraftOnCreate
- EHSAllowDupIncident

A note on incident drafts:

Incident report drafts are considered “unsubmitted incidents.” Incidents that are not submitted will not be synced to the consolidated system. To be persisted and synced an incident draft must be submitted either immediately using the SUBMIT header on this action, or by using the SUBMIT_REPORT request object below.

Input Fields:

Field Name	Description	Data Type	Restrictions	Required
ID_LOCAL	Incident ID	NVARCHAR(20)		N (Will be generated if not provided)
TITLE	Title of Incident report	NVARCHAR(60)		
START_DATE	Incident Date	NVARCHAR(8)		
START_TIME	Incident time	NVARCHAR(4)		
START_TIME_ZONE	Time zone	NVARCHAR(6)		
PLANT_LOC_CODE	Location	NVARCHAR(10)		
USER_ID_CR	Creator’s user ID	NVARCHAR(12)		
PRIORITY	Priority Code	NVARCHAR(1)	1,2,3	

REPORTED_DATE	Date incident was reported	NVARCHAR(8)		
ELTXT	Event long text	LONG NVARCHAR		
ALTXT	Action taken long text	LONG NVARCHAR		

Sample Implementation:

```
var oData = [
    {
        "TITLE":"Incident Title",
        "START_DATE":"20170411",
        "START_TIME":"1330",
        "ELTXT":"Incident Description",
        "PLANT_LOC_CODE":"Kitchen",
        "PRIORITY":"1",
        "START_TIME_ZONE":"HAST",
        "USER_ID_CR":"BILL",
        "REPORTED_DATE":"00000000",
        "ALTXT":""
    }
]

jQuery.ajax({
    url: "/ws_restful_ehs_data_controller/INCIDENT",
    method: "POST",
    data: oData,
    headers: {
        "SUBMIT": "Y"
    }
})
```

MY INCIDENTS

GET

Header values:

REQUEST_OBJECT: MY_INCIDENTS

Description:

Gets a list of incidents (both submitted and draft) that were created by the current user.

Output Fields:

Field Name	Description	Data Type	Restrictions
STATUS	Report status text (Draft or Submitted)	NVARCHAR(15)	
STATUS_KEY	Report status key	NVARCHAR(2)	1 (draft) or 2 (submitted)
ID_LOCAL	Local ID	NVARCHAR(20)	
TITLE	Incident title	NVARCHAR(60)	
ACLOC	Location	NVARCHAR(10)	
PRIORITY	Incident priority	NVARCHAR(12)	
PRIORITY_KEY	Incident priority key	NVARCHAR(2)	
REPORTED_DATE	Date the report was created	NVARCHAR(12)	
START_DATE	Date the incident occurred	NVARCHAR(10)	

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/MY_INCIDENTS");
```

Sample Output:

```
[
  {
    "STATUS": "Draft",
    "STATUS_KEY": "1",
    "ID_LOCAL": "I02070000001",
    "TITLE": "test",
    "ACLOC": "Kitchen",
    "PRIORITY": "Low",
    "PRIORITY_KEY": "1",
    "REPORTED_DATE": "00.00.0000",
    "START_DATE": "20170426"
  },
  ...
]
```


SUBMIT_REPORT

POST

Header values:

REQUEST_OBJECT: SUBMIT_REPORT

IRID: <Incident Report Draft ID_LOCAL>

Description:

Submits an existing incident draft. **Until submitted a draft will not be synced to the consolidated system.**

```
jQuery.ajax({
    url: "/ws_restful_ehs_data_controller/SUBMIT_REPORT",
    method: "POST",
    headers: {
        "IRID": "I04250000002"
    }
})
```

PEOPLE

GET

Header values:

REQUEST_OBJECT: PEOPLE

Description:

Lookup for people.

Output Fields:

Field Name	Description	Data Type
LOCAL_PERSN_ID	ID	NVARCHAR(10)
FIRST_NAME	Given name	NVARCHAR(60)
LAST_NAME	Family name	NVARCHAR(60)
ADDRESS	Street address	NVARCHAR(60)
COMPANY	Company name	NVARCHAR(60)

EMAIL	Email address	NVARCHAR(60)
PHONE	Phone number	NVARCHAR(40)
ORG	Organizational Unit	NVARCHAR(40)
IS_EXTERNAL	Flag indicating if the person's record originated from the consolidated system	NVARCHAR(1)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/PEOPLE_LIST");
```

Sample Output:

```
[
  {
    "LOCAL_PERSN_ID": "3000000002",
    "PERSON_ID": "3000000002",
    "FIRST_NAME": "Jack",
    "LAST_NAME": "Ahmed",
    "ADDRESS": "123 King St, Waterloo, ON",
    "COMPANY": "SAP",
    "EMAIL": "jack.ahmed@example.com",
    "PHONE": "226 666 8888",
    "ORG": "Maint",
    "IS_EXTERNAL": ""
  },
  ...
]
```

ORGANIZATIONAL_UNIT

GET

Header values:

REQUEST_OBJECT: ORGANIZATIONAL_UNIT

Description:

Lookup for valid organizational units.

Output Fields:

Field Name	Description	Data Type
ORG_UNIT_ID	ID	NVARCHAR(10)
ORG_UNIT_DESCRIPTION	Description	NVARCHAR(40)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/ORGANIZATIONAL_UNIT");
```

Sample Output:

```
[
  {
    "ORG_UNIT_ID": "Maint",
    "ORG_UNIT_DESCRIPTION": "Maintenance"
  },
  ...
]
```

LOCATION

GET

Header values:

REQUEST_OBJECT: LOCATION

Description:

Lookup for valid locations that an incident may occur.

OData Entity:

/dep/ehs/odata/Location

Output Fields:

Field Name	Description	Data Type
LOCATION_CLASS_ID	ID	NVARCHAR(10)
DESCRIPTION	Description	NVARCHAR(40)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/LOCATION");
```

Sample Output:

```
[
  {
    "LOC_CODE": "Lower",
    "DESCRIPTION": "Lower deck",
    "LOCATION_CLASS_ID": "Danger",
    "ORG_UNIT_ID": "Maint"
  },
  ...
]
```

LOCATION_CLASSIFICATION

GET

Header values:

REQUEST_OBJECT: LOCATION_CLASS

Description:

Lookup for valid location classifications.

Output Fields:

Field Name	Description	Data Type
LOC_CODE	Location code	NVARCHAR(21)
DESCRIPTION	Description	NVARCHAR(40)
LOCATION_CLASS_ID	Location risk-of-incident classification	NVARCHAR(10)
ORG_UNIT_ID	Organizational unit for the location	NVARCHAR(10)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/LOCATION_CLASS");
```

Sample Output:

```
[
  {
    "DESCRIPTION": "Common area",
    "LOCATION_CLASS_ID": "Common"
  },
  ...
]
```

]

PRIORITY_TYPE

GET

Header values:

REQUEST_OBJECT: PRIORITY_TYPE

Description:

Lookup for valid priorities.

OData Entity:

/dep/ehs/odata/Priority_Type

Output Fields:

Field Name	Description	Data Type
PRIORITY_ID	Priority key	NVARCHAR(100)
PRIORITY_TYPE	Description	NVARCHAR(255)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/PRIORITY_TYPE");
```

Sample Output:

```
[
  {
    "PRIORITY_ID": "2",
    "PRIORITY_TYPE": "Medium"
  },
  ...
]
```

TIMEZONE

GET

Header values:

REQUEST_OBJECT: TIMEZONE

Description:

Lookup for valid time zones.

OData Entity:

/dep/ehs/odata/Timezone

Output Fields:

Field Name	Description	Data Type
START_TIME_ZONE	The time zone for the incident's start time	NVARCHAR(6)
TIMEZONE_DESCRIPTION	Description	NVARCHAR(60)
TIMEZONE_UTC_OFFSET	Time offset for this time zone relative to UTC/GMT (format +/-hh:mm)	NVARCHAR(6)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/TIMEZONE");
```

Sample Output:

```
[
  {
    "START_TIME_ZONE": "HAST",
    "TIMEZONE_DESCRIPTION": "Hawaiian Standard Time",
    "TIMEZONE_UTC_OFFSET": "-10:00"
  },
  ...
]
```

INJURY_CLASS

GET

Header values:

REQUEST_OBJECT: INJURY_CLASS

Description:

Lookup for valid injury classifications.

OData Entity:

/dep/ehs/odata/Injury_Class

Output Fields:

Field Name	Description	Data Type
INJURY_CLASS_ID	Injury Class key	NVARCHAR(30)
DESCRIPTION	Description	NVARCHAR(40)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/INJURY_CLASS");
```

Sample Output:

```
[
  {
    "INJURY_CLASS_ID": "Respiratory Condition",
    "DESCRIPTION": "Respiratory Condition injury class"
  },
  ...
]
```

INJURY_TYPE

GET

Header values:

REQUEST_OBJECT: INJURY_TYPE

Description:

Lookup for valid injury types.

OData Entity:

/dep/ehs/odata/Injury_Type

Output Fields:

Field Name	Description	Data Type
INJURY_TYPE_ID	Injury Type key	NVARCHAR(70)
INJURY_CLASS_ID	Injury Class (category)	NVARCHAR(30)
INJURY_DESCRIPTION	Description	NVARCHAR(90)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/INJURY_TYPE");
```

Sample Output:

```
[
  {
    "INJURY_TYPE_ID": "Acute upper respiratory infections",
    "INJURY_CLASS_ID": "Respiratory Condition",
    "INJURY_DESCRIPTION": "J00-J06: Acute upper respiratory infections"
  },
  ...
]
```

BODY_PART

GET

Header values:

REQUEST_OBJECT: BODY_PART

Description:

Lookup for valid body parts.

OData Entity:

/dep/ehs/odata/Body_Part

Output Fields:

Field Name	Description	Data Type
BODYPART	Body part id	NVARCHAR(21)
BODYPARTDESC	Description	NVARCHAR(60)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/BODY_PART");
```

Sample Output:

```
[
  {
    "BODYPART": "Head",
    "BODYPARTDESC": "Head"
  },
  ...
]
```


]

BODY_SIDE

GET

Header values:

REQUEST_OBJECT: BODY_SIDE

Description:

Lookup for valid body sides.

OData Entity:

/dep/ehs/odata/Body_Side

Output Fields:

Field Name	Description	Data Type
BODYSIDE	Body side id	NVARCHAR(21)
BODYSIDEDESC	Description	NVARCHAR(60)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/BODY_SIDE");
```

Sample Output:

```
[
  {
    "BODYSIDE": "Right",
    "BODYSIDEDESC": "Right"
  },
  ...
]
```

WORK_RELATED

GET

Header values:

REQUEST_OBJECT: WORK_RELATED

Description:

Lookup for values about whether an incident occurred as part of an involved/injured person’s work or not.

OData Entity:

/dep/ehs/odata/Work_Related

Output Fields:

Field Name	Description	Data Type
WORK_RELATED_CAT	Category	NVARCHAR(21)
WORK_RELATED_DESC	Description	NVARCHAR(40)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/WORK_RELATED");
```

Sample Output:

```
[
  {
    "WORK_RELATED_CAT": "In Transit",
    "WORK_RELATED_DESC": "Accident on way to/from work"
  },
  ...
]
```

INFLUENCING_FACTOR

GET

Header values:

REQUEST_OBJECT: INFLUENCING_FACTOR

INFLUEN_FACTOR_ID: <Factor ID> (optional for filtering)

INFLUEN_FACTOR_CAT_ID: <Factor Category ID> (optional for filtering)

Description:

Lookup for factors that may have affected the danger of an incident or otherwise influenced it occurring.

Output Fields:

Field Name	Description	Data Type
INFLUEN_FACTOR_ID	ID	NVARCHAR(30)

INFLUEN_FACTOR_DESC	Description	NVARCHAR(60)
INFLUEN_FACTOR_CAT_ID	Category ID	NVARCHAR(30)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/INFLUENCING_FACTOR");
```

Sample Output:

```
[
  {
    "INFLUEN_FACTOR_ID": "Bad_Visibility",
    "INFLUEN_FACTOR_DESC": "Poor visibility",
    "INFLUEN_FACTOR_CAT_ID": "External Influence"
  },
  ...
]
```

INFLUENCING_FACTOR_CATEGORY

GET

Header values:

REQUEST_OBJECT: INFLUENCING_FACTOR_CAT

Description:

Lookup for categories of factors that may influence an incident.

Output Fields:

Field Name	Description	Data Type
INFLUEN_FACTOR_CAT_ID	Category ID	NVARCHAR(30)

Sample Implementation:

```
jQuery.ajax("/ws_restful_ehs_data_controller/INFLUENCING_FACTOR_CAT");
```

Sample Output:

```
[
  {
    "INFLUEN_FACTOR_CAT_ID": "External Influence"
  },
  ...
]
```

ASSET CORE API

Several APIs are made available in the event that a customer has subscribed to the Asset Intelligence Network or other applications that utilize SAP Asset Core. These APIs do not apply in the absence of a subscription to the services mentioned, unless specifically mentioned below.

EQUIP_MODEL

GET

Header values:

REQUEST_OBJECT: EQUIP_MODEL

IS_SENSOR: <Is sensor bit> (optional for filtering)

IS_ROOT_MODEL: <Is root model bit> (optional for filtering)

Description:

Use this service to retrieve a list of root equipment models.

OData Entity:

/dep/asset_core/odata/Equipment_Model

Output Fields:

Field Name	Description	Data Type	Restrictions
MODEL_ID	Asset core model ID	NVARCHAR (128)	
MODEL_NAME	Name of the model	NVARCHAR (1024)	
DESCRIPTION	Description of the model	NVARCHAR (2000)	
MANUFACTURER	Name of the model manufacturer	NVARCHAR (1024)	
CLASS	Name of the class template	NVARCHAR (1024)	
SUBCLASS	Name of the subclass template	NVARCHAR (1024)	
IS_SENSOR	If the model is a sensor	BIT	
IS_ROOT_MODEL	If the model is a root model	BIT	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
```

```

        "REQUEST_OBJECT": "EQUIP_MODEL",
        "IS_SENSOR": 1
    }
})

```

Sample Output:

```

[
  ...,
  {
    "MODEL_ID": "2B606B0EA4294CD49D0C006F5AE0BDB9",
    "MODEL_NAME": "New Platform",
    "DESCRIPTION": "New Platform",
    "MANUFACTURER": "SAP Manufacturer Training",
    "CLASS": "Detecting element",
    "SUBCLASS": "Industrial sensor",
    "IS_SENSOR": true,
    "IS_ROOT_MODEL": false
  }
  , ...
]

```

GET(MODEL_ID)

Header values:

REQUEST_OBJECT: EQUIP_MODEL
 MODEL_ID: <Equipment model id>

Description:

Use this service to retrieve details for an equipment model with the specified MODEL_ID.

OData Entity:

/dep/asset_core/odata/Equipment_Model

Output Fields:

Field Name	Description	Data Type	Restrictions
MODEL_ID	Asset core model ID	NVARCHAR (128)	
MODEL_NAME	Name of the model	NVARCHAR (1024)	
DESCRIPTION	Description of the model	NVARCHAR (2000)	
MANUFACTURER	Name of the model manufacturer	NVARCHAR (1024)	
CLASS	Name of the class template	NVARCHAR (1024)	
SUBCLASS	Name of the subclass template	NVARCHAR (1024)	

IS_SENSOR	If the model is a sensor	BIT	
IS_ROOT_MODEL	If the model is a root model	BIT	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_asset_core_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIP_MODEL",
    "MODEL_ID": "E66732B18ACC4C33ADC85D40EA9997BA"
  }
})
```

Sample Output:

```
[
  {
    "MODEL_ID": "E66732B18ACC4C33ADC85D40EA9997BA",
    "MODEL_NAME": "QKD-Wind-GEN",
    "DESCRIPTION": "QKD-Wind-GEN",
    "MANUFACTURER": "SAP Manufacturer",
    "CLASS": "Electric generators",
    "SUBCLASS": "Power turbine driven",
    "IS_SENSOR": false,
    "IS_ROOT_MODEL": true
  }
]
```

EQUIP_MODEL_ATTRIBUTE

GET(MODEL_ID)

Header values:

REQUEST_OBJECT: EQUIP_MODEL_ATTRIBUTE
 MODEL_ID: <Equipment model id>

Description:

Use this service to retrieve a list of attributes for the equipment model with the specified MODEL_ID.

Output Fields:

Field Name	Description	Data Type	Restrictions
MODEL_ID	Asset core model ID	NVARCHAR (128)	

ATTRIBUTE_NAME	Name of the attribute	NVARCHAR (1024)	
DATA_TYPE	Data type of the attribute	NVARCHAR (10)	
ATTRIBUTE_VALUE1	First value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE2	Second value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE3	Third value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE4	Fourth value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE5	Fifth value of the attribute	NVARCHAR (4000)	
UOM	Unit of measure of the attribute	NVARCHAR (128)	
MIN_THRESHOLD	Minimum threshold of the attribute	NVARCHAR (4000)	
MAX_THRESHOLD	Maximum threshold of the attribute	NVARCHAR (4000)	

Sample Implementation:

```

jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_MODEL_ATTRIBUTE",
        "MODEL_ID": "E66732B18ACC4C33ADC85D40EA9997BA"
    }
})

```

Sample Output:

```
[
  ...,
  {
    "MODEL_ID": "E66732B18ACC4C33ADC85D40EA9997BA",
    "ATTRIBUTE_NAME": "Core diameter",
    "DATA_TYPE": "NUMERIC",
    "ATTRIBUTE_VALUE1": "111.0",
    "ATTRIBUTE_VALUE2": null,
    "ATTRIBUTE_VALUE3": null,
    "ATTRIBUTE_VALUE4": null,
    "ATTRIBUTE_VALUE5": null,
    "UOM": "CM",
    "MIN_THRESHOLD": null,
    "MAX_THRESHOLD": null
  }
  , ...
]
```

EQUIP_MODEL_HIERARCHY

GET

Header values:

REQUEST_OBJECT: EQUIP_MODEL_HIERARCHY

Description:

Use this service to retrieve the full hierarchy including spare parts for all equipment models.

Output Fields:

The output has a recursive structure where components can be nested (see sample output below). Each object has a “COMPONENTS” array containing:

Field Name	Description	Data Type	Restrictions
ID	Object ID	NVARCHAR (128)	
NAME	Name of the object or spare part based on the object type	NVARCHAR (1024)	
DESCRIPTION	Description of the object or spare part based on the object type	NVARCHAR (2000)	
MANUFACTURER	Manufacturer of the object or spare part based on the object type	NVARCHAR (1024)	
CLASS	Class of the object	NVARCHAR (1024)	

SUBCLASS	Subclass of the object or spare part based on the object type	NVARCHAR (1024)	
OBJECT_TYPE	Type of the object	NVARCHAR (3)	'MOD' or 'PRT'
ORDER	Order of the component	INTEGER	
MANDATORY	If the component is mandatory	BIT	
MIN_QUANTITY	Minimum quantity of the component	INTEGER	
MAX_QUANTITY	Maximum quantity of the component	INTEGER	
PART_ID	ID of the object spare part	NVARCHAR (128)	
ITEM_DESCRIPTIONS	Descriptions of the component items	Array of NVARCHAR(2000)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_MODEL_HIERARCHY"
    }
})
```

Sample Output:

```
{
    "COMPONENTS": [
        ...,
        {
            "ID": "B8A513A35EA14488866DB9CDD37462C3",
            "NAME": "CFA 712-32",
            "DESCRIPTION": "COMBIBLOC CFA 712-32",
            "MANUFACTURER": "SIG Combibloc Group",
            "CLASS": "PIPELINES",
            "SUBCLASS": "FLOWLINE",
            "OBJECT_TYPE": "MOD",
            "COMPONENTS": [
                ...,
                {
                    "ID": "764C28A264094EFA82FE8FF46BA7F31D",
                    "NAME": "Promag-D-400-5D4C",
                    "DESCRIPTION": "Compact wafer version with web server",
                    "MANUFACTURER": "Endress+Hauser",
                    "CLASS": "INPUT_DEVICES",
                    "SUBCLASS": "FLOW",
```

```

        "OBJECT_TYPE": "MOD",
        "ORDER": 3,
        "MANDATORY": 0,
        "MIN_QUANTITY": 1,
        "MAX_QUANTITY": 2,
        "PART_ID": "",
        "ITEM_DESCRIPTIONS": [
            "Channel 1",
            "Channel 2"
        ],
        "COMPONENTS": [
            ...
        ]
    }
    , ...
]
}
, ...
]
}

```

GET(MODEL_ID)

Header values:

REQUEST_OBJECT: EQUIP_MODEL_HIERARCHY

MODEL_ID: <Equipment model id>

Description:

Use this service to retrieve the full hierarchy including spare parts for the equipment model with the specified MODEL_ID.

Output Fields:

The output has a recursive structure where components can be nested (see sample output below). Each object has a "COMPONENTS" array containing:

Field Name	Description	Data Type	Restrictions
ID	Object ID	NVARCHAR (128)	
NAME	Name of the object model or spare part based on the object type	NVARCHAR (1024)	
DESCRIPTION	Description of the object model or spare part based on the object type	NVARCHAR (2000)	
MANUFACTURER	Manufacturer of the object model or spare part based on the object type	NVARCHAR (1024)	

CLASS	Class of the object	NVARCHAR (1024)	
SUBCLASS	Subclass of the object model or spare part based on the object type	NVARCHAR (1024)	
OBJECT_TYPE	Type of the object	NVARCHAR (3)	'MOD' or 'PRT'
ORDER	Order of the component	INTEGER	
MANDATORY	If the component is mandatory	BIT	
MIN_QUANTITY	Minimum quantity of the component	INTEGER	
MAX_QUANTITY	Maximum quantity of the component	INTEGER	
PART_ID	ID of the object spare part	NVARCHAR (128)	
ITEM_DESCRIPTIONS	Descriptions of the component items	Array of NVARCHAR(2000)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_MODEL_HIERARCHY",
        "MODEL_ID": "B8A513A35EA14488866DB9CDD37462C3"
    }
})
```

Sample Output:

```
{
    "COMPONENTS": [
        {
            "ID": "B8A513A35EA14488866DB9CDD37462C3",
            "NAME": "CFA 712-32",
            "DESCRIPTION": "COMBIBLOC CFA 712-32",
            "MANUFACTURER": "SIG Combibloc Group",
            "CLASS": "PIPELINES",
            "SUBCLASS": "FLOWLINE",
            "OBJECT_TYPE": "MOD",
            "COMPONENTS": [
                ...,
                {
                    "ID": "764C28A264094EFA82FE8FF46BA7F31D",
                    "NAME": "Promag-D-400-5D4C",
                    "DESCRIPTION": "Compact wafer version with web server",
                    "MANUFACTURER": "Endress+Hauser",
                }
            ]
        }
    ]
}
```

```

        "CLASS": "INPUT_DEVICES",
        "SUBCLASS": "FLOW",
        "OBJECT_TYPE": "MOD",
        "ORDER": 3,
        "MANDATORY": 0,
        "MIN_QUANTITY": 1,
        "MAX_QUANTITY": 2,
        "PART_ID": "",
        "ITEM_DESCRIPTIONS": [
            "Channel 1",
            "Channel 2"
        ],
        "COMPONENTS": [
            ...
        ]
    }
    , ...
]
}

```

EQUIP_MODEL_ROOT_PARENTS

GET(MODEL_ID)

Header values:

REQUEST_OBJECT: EQUIP_MODEL_ROOT_PARENTS

MODEL_ID: <Equipment model id>

Description:

Use this service to retrieve a list of root parents for the equipment model with the specified MODEL_ID.

Output Fields:

Field Name	Description	Data Type	Restrictions
MODEL_ID	Model ID	NVARCHAR (128)	
MODEL_NAME	Name of the model	NVARCHAR (1024)	
DESCRIPTION	Description of the model	NVARCHAR (2000)	
MANUFACTURER	Name of the model manufacturer	NVARCHAR (1024)	
CLASS	Name of the class template	NVARCHAR (1024)	
SUBCLASS	Name of the subclass template	NVARCHAR (1024)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_asset_core_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIP_MODEL_ROOT_PARENTS",
    "MODEL_ID": "1E1CFBC13A444539AB8BE9762D85F896"
  }
})
```

Sample Output:

```
[
  ...,
  {
    "MODEL_ID": "D5057A4D4EAF4EEDB1F7FF9CC6C436DD",
    "MODEL_NAME": "Oil Conditioning Pump Unit",
    "DESCRIPTION": "Oil Conditioning Pump Unit",
    "MANUFACTURER": "Transport for NSW",
    "CLASS": "PUMPS",
    "SUBCLASS": "ROTARY"
  },
  ...
]
```

EQUIP_MODEL_SENSORS

GET(MODEL_ID)

Header values:

REQUEST_OBJECT: EQUIP_MODEL_SENSORS

MODEL_ID: <Equipment model id>

Description:

Use this service to retrieve a list of sensors belonging to the equipment model with the specified MODEL_ID.

Output Fields:

Field Name	Description	Data Type	Restrictions
MODEL_ID	Model ID	NVARCHAR (128)	
MODEL_NAME	Name of the model	NVARCHAR (1024)	
DESCRIPTION	Description of the model	NVARCHAR (2000)	

MANUFACTURER	Name of the model manufacturer	NVARCHAR (1024)	
CLASS	Name of the class template	NVARCHAR (1024)	
SUBCLASS	Name of the subclass template	NVARCHAR (1024)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_MODEL_SENSORS",
        "MODEL_ID": "B8A513A35EA14488866DB9CDD37462C3"
    }
})
```

Sample Output:

```
[
    ...,
    {
        "MODEL_ID": "3735085044004098A91085723F650AD8",
        "MODEL_NAME": "test Model",
        "DESCRIPTION": "test Model",
        "MANUFACTURER": "Transport for NSW",
        "CLASS": "Detecting element",
        "SUBCLASS": "Industrial sensor"
    }
    , ...
]
```

EQUIP_ATTRIBUTE

GET(EQUNR)

Header values:

REQUEST_OBJECT: EQUIP_ATTRIBUTE

EQUNR: <Equipment number>

Description:

Use this service to retrieve a list of attributes for the equipment with the specified EQUNR. Includes attributes of the equipment and the equipment’s model.

Output Fields:

Field Name	Description	Data Type	Restrictions
EQUIP_ID	Asset core equipment ID	NVARCHAR (128)	
ATTRIBUTE_NAME	Name of the attribute	NVARCHAR (1024)	
DATA_TYPE	Data type of the attribute	NVARCHAR (10)	
ATTRIBUTE_VALUE1	First value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE2	Second value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE3	Third value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE4	Fourth value of the attribute	NVARCHAR (4000)	
ATTRIBUTE_VALUE5	Fifth value of the attribute	NVARCHAR (4000)	
UOM	Unit of measure of the attribute	NVARCHAR (128)	
MIN_THRESHOLD	Minimum threshold of the attribute	NVARCHAR (4000)	
MAX_THRESHOLD	Maximum threshold of the attribute	NVARCHAR (4000)	
DEFAULT_ATTRIBUTE_VALUE1	Initial first value of the attribute	NVARCHAR (4000)	
DEFAULT_ATTRIBUTE_VALUE2	Initial second value of the attribute	NVARCHAR (4000)	
DEFAULT_ATTRIBUTE_VALUE3	Initial third value of the attribute	NVARCHAR (4000)	
DEFAULT_ATTRIBUTE_VALUE4	Initial fourth value of the attribute	NVARCHAR (4000)	
DEFAULT_ATTRIBUTE_VALUE5	Initial fifth value of the attribute	NVARCHAR (4000)	
DEFAULT_UOM	Initial unit of measure of the attribute	NVARCHAR (128)	
DEFAULT_MIN_THRESHOLD	Initial minimum threshold of the attribute	NVARCHAR (4000)	
DEFAULT_MAX_THRESHOLD	Initial maximum threshold of the attribute	NVARCHAR (4000)	
SOURCE	Source of the attribute	NVARCHAR (10)	"EQUIP" or "MODEL"

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
```

```
headers: {
  "REQUEST_OBJECT": "EQUIP_ATTRIBUTE",
  "EQUNR": "300000000023567"
}
})
```

Sample Output:

```
[
  ...,
  {
    "EQUIP_ID": "2B425533E28E41A2A3033A6BBDC3313A",
    "ATTRIBUTE_NAME": "Temperature",
    "DATA_TYPE": "numeric",
    "ATTRIBUTE_VALUE1": "28.0",
    "ATTRIBUTE_VALUE2": null,
    "ATTRIBUTE_VALUE3": null,
    "ATTRIBUTE_VALUE4": null,
    "ATTRIBUTE_VALUE5": null,
    "UOM": "K",
    "MIN_THRESHOLD": "18.0",
    "MAX_THRESHOLD": "450.0",
    "DEFAULT_ATTRIBUTE_VALUE1": "28.0",
    "DEFAULT_ATTRIBUTE_VALUE2": null,
    "DEFAULT_ATTRIBUTE_VALUE3": null,
    "DEFAULT_ATTRIBUTE_VALUE4": null,
    "DEFAULT_ATTRIBUTE_VALUE5": null,
    "DEFAULT_UOM": "GC",
    "DEFAULT_MIN_THRESHOLD": "15.0",
    "DEFAULT_MAX_THRESHOLD": "30.0",
    "SOURCE": "EQUIP"
  }
  , ...
]
```

EQUIP_THRESHOLD**GET(EQUNR)****Header values:**

REQUEST_OBJECT: EQUIP_THRESHOLD

EQUNR: <Equipment number>

POINT: <Measuring point> (optional)

ATTRIBUTE_NAME: <Attribute name> (optional)

SOURCE: <Threshold source> (optional)

Description:

Use this service to retrieve a list of thresholds for the equipment with the specified EQUNR. This includes attribute thresholds from asset core and measuring point thresholds, configured at the edge (via PUT/POST MEASURING_POINTS_THRESHOLDS). Optional headers can be specified to filter the results.

Output Fields:

Field Name	Description	Data Type	Restrictions
POINT	Measuring point	NVARCHAR (12)	
PTTXT	Measuring point description	NVARCHAR (40)	
ATTRIBUTE_NAME	Asset core attribute name	NVARCHAR (128)	
MIN_THRESHOLD	Minimum threshold	DOUBLE	
MAX_THRESHOLD	Maximum threshold	DOUBLE	
UOM	Unit of measure	NVARCHAR (128)	
SOURCE	Source of the threshold	NVARCHAR (10)	"EDGE" or "AIN-EQUIP" or "AIN-MODEL"

Sample Implementation:

```

jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_THRESHOLD",
        "EQUNR": "300000000023567"
    }
})

```

Sample Output:

```
[
  ...,
  {
    "POINT": null,
    "PTTXT": null,
    "ATTRIBUTE_NAME": "Motor Temperature",
    "MIN_THRESHOLD": 90,
    "MAX_THRESHOLD": 115,
    "UOM": "GC",
    "SOURCE": "AIN-MODEL"
  }
  , ...
]
```

GET(EQUNR, POINT|ATTRIBUTE_NAME, SOURCE, TYPE)

Header values:

REQUEST_OBJECT: EQUIP_THRESHOLD
 EQUNR: <Equipment number>
 POINT: <Measuring point> (optional)
 ATTRIBUTE_NAME: <Attribute name> (optional)
 SOURCE: <Threshold source> ("EDGE" or "AIN-EQUIP" or "AIN-MODEL")
 TYPE: <Threshold type> ("MIN" or "MAX")

Description:

Use this service to retrieve a single threshold value for the specified equipment measuring point or attribute. One of POINT or ATTRIBUTE_NAME must be provided.

Output Fields:

Field Name	Description	Data Type	Restrictions
thresholdingValue	Value of the threshold	DOUBLE	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_asset_core_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIP_THRESHOLD",
    "EQUNR": "300000000023567",
    "ATTRIBUTE_NAME": "Motor Temperature",
    "SOURCE": "AIN-MODEL",
    "TYPE": "MAX"
  }
})
```

Sample Output:

```
{
  "thresholdingValue": 115
}
```

EQUIP_HIERARCHY

GET

Header values:

REQUEST_OBJECT: EQUIP_HIERARCHY

Description:

Use this service to retrieve the full hierarchy including the spare parts for all equipment.

Output Fields:

The output has a recursive structure where components can be nested (see sample output below). Each object has a “COMPONENTS” array containing:

Field Name	Description	Data Type	Restrictions
ID	Object ID	NVARCHAR (18)	
DESCRIPTION	Description of object	NVARCHAR(40)	
EQART	Type of Technical Object	NVARCHAR (10)	
HERST	Manufacturer of asset	NVARCHAR (30)	
TPLNR	Functional Location	NVARCHAR (30)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
IWERK	Maintenance Planning Plant	NVARCHAR (4)	
ABCKZ	Function Criticality	NVARCHAR (1)	
KOSTL	Cost Center	NVARCHAR (10)	
PLTXT	Description of functional location	NVARCHAR (40)	
SUBMT	Construction type material of the object	NVARCHAR (18)	
HEQUI	Superordinate Equipment	NVARCHAR (18)	
MODEL_ID	ID of the object model	NVARCHAR (128)	

MODEL_NAME	Name of the object model or spare part based on the object type	NVARCHAR(1024)	
MODEL_DESC	Description of the object model	NVARCHAR(2000)	
PART_ID	ID of the object spare part	NVARCHAR (128)	
MANUFACTURER	Manufacturer of the object model or spare part based on the object type	NVARCHAR(1024)	
CLASS	Class of the object model	NVARCHAR(1024)	
SUBCLASS	Subclass of the object model or spare part based on the object type	NVARCHAR(1024)	
OBJECT_TYPE	Type of the object	NVARCHAR(3)	'EQU' or 'PRT'

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_HIERARCHY"
    }
})
```

Sample Output:

```
{
    "COMPONENTS": [
        ...
        {
            "ID": "HPWSAM001003",
            "DESCRIPTION": "HP Washdown pump unit",
            "EQART": "HPW",
            "HERST": "SAMKUN",
            "TPLNR": "0207-444-002-001",
            "TPLNR_EXT": "0207-444-002-001",
            "IWERK": "0207",
            "ABCKZ": "B",
            "KOSTL": "207151066",
            "PLTXT": "HIGH PRESSURE WASHDOWN PUMP UNIT 69L/MIN",
            "SUBMT": " ",
            "HEQUI": " ",
            "MODEL_ID": "D4238004FBBC43EA8B941F0C6FB1C309",
            "MODEL_NAME": "Washdown pump unit",
            "MODEL_DESC": "Washdown pump unit",
            "MANUFACTURER": "Rohde & Schwarz",
        }
    ]
}
```

```

"CLASS": "Demo class",
"SUBCLASS": "Demo subclass",
"OBJECT_TYPE": "EQU",
"COMPONENTS": [
    ...,
    {
        "ID": "HSGDER001003",
        "DESCRIPTION": "Flow divider",
        "EQART": "HSG",
        "HERST": " ",
        "TPLNR": "0207-326-008-001",
        "TPLNR_EXT": "0207-326-008-001",
        "IWERK": "0207",
        "ABCKZ": "D",
        "KOSTL": "207151066",
        "PLTXT": "FLOW DIVIDER, 8-WAY",
        "SUBMT": " ",
        "HEQUI": " ",
        "MODEL_ID": "D4238004FBBC43EA8B941F0C6FB1C309",
        "MODEL_NAME": "Flow divider",
        "MODEL_DESC": "Flow divider",
        "MANUFACTURER": "Rohde & Schwarz",
        "CLASS": "Demo class",
        "SUBCLASS": "Demo subclass",
        "OBJECT_TYPE": "EQU",
        "ORDER": 1,
        "COMPONENTS": [
            ...
        ]
    },
    {
        "ID": "CONN - GSB 420/1600/0,3 - CB/v1.8",
        "DESCRIPTION": "Connection GSB 420/1600/0,3 Bushing",
        "EQART": "",
        "HERST": "",
        "TPLNR": "",
        "TPLNR_EXT": "",
        "IWERK": "",
        "ABCKZ": "",
        "KOSTL": "",
        "PLTXT": "",
        "SUBMT": "",
        "HEQUI": "",
        "MODEL_ID": "",
        "MODEL_NAME": "1ZSC999005-AAB",
        "MODEL_DESC": "",
        "PART_ID": "3CD595113C214ECD91FCB4CEA14C1005",
    }

```

```

        "MANUFACTURER": "SAP Manufacturer",
        "CLASS": "",
        "SUBCLASS": "",
        "OBJECT_TYPE": "PRT",
        "ORDER": 1,
        "COMPONENTS": [
            ...
        ]
    },
    ...
]
}

```

GET(EQUNR)

Header values:

REQUEST_OBJECT: EQUIP_HIERARCHY

EQUNR: <Equipment number>

Description:

Use this service to retrieve the full hierarchy including spare parts for the equipment with the specified EQUNR.

Output Fields:

The output has a recursive structure where components can be nested (see sample output below). Each object has a "COMPONENTS" array containing:

Field Name	Description	Data Type	Restrictions
ID	Object ID	NVARCHAR (18)	
DESCRIPTION	Description of object	NVARCHAR(40)	
EQART	Type of Technical Object	NVARCHAR (10)	
HERST	Manufacturer of asset	NVARCHAR (30)	
TPLNR	Functional Location	NVARCHAR (30)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
IWERK	Maintenance Planning Plant	NVARCHAR (4)	
ABCKZ	Function Criticality	NVARCHAR (1)	
KOSTL	Cost Center	NVARCHAR (10)	

PLTXT	Description of functional location	NVARCHAR (40)	
SUBMT	Construction type material of the object	NVARCHAR (18)	
HEQUI	Superordinate Equipment	NVARCHAR (18)	
MODEL_ID	ID of the object model	NVARCHAR (128)	
MODEL_NAME	Name of the object model or spare part based on object type	NVARCHAR(1024)	
MODEL_DESC	Description of the object model	NVARCHAR(2000)	
PART_ID	ID of the object spare part	NVARCHAR (128)	
MANUFACTURER	Manufacturer of the object model or spare part based on the object type	NVARCHAR(1024)	
CLASS	Class of the object model	NVARCHAR(1024)	
SUBCLASS	Subclass of the object model or spare part based on the object type	NVARCHAR(1024)	
OBJECT_TYPE	Type of the object	NVARCHAR(3)	'EQU' or 'PRT'

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "EQUIP_HIERARCHY",
        "EQUNR": "HPWSAM001003"
    }
})
```

Sample Output:

```
{
    "COMPONENTS": [
        {
            "ID": "HPWSAM001003",
            "DESCRIPTION": "HP Washdown pump unit",
            "EQART": "HPW",
            "HERST": "SAMKUN",
            "TPLNR": "0207-444-002-001",
            "TPLNR_EXT": "0207-444-002-001",
            "IWERK": "0207",
            "ABCKZ": "B",
            "KOSTL": "207151066",
        }
    ]
}
```

```

"PLTXT": "HIGH PRESSURE WASHDOWN PUMP UNIT 69L/MIN",
"SUBMT": " ",
"HEQUI": " ",
"MODEL_ID": "D4238004FBBC43EA8B941F0C6FB1C309",
"MODEL_NAME": "Washdown pump unit",
"MODEL_DESC": "Washdown pump unit",
"MANUFACTURER": "Rohde & Schwarz",
"CLASS": "Demo class",
"SUBCLASS": "Demo subclass",
"OBJECT_TYPE": "EQU",
"COMPONENTS": [
  ...,
  {
    "ID": "HSGDER001003",
    "DESCRIPTION": "Flow divider",
    "EQART": "HSG",
    "HERST": " ",
    "TPLNR": "0207-326-008-001",
    "TPLNR_EXT": "0207-326-008-001",
    "IWERK": "0207",
    "ABCKZ": "D",
    "KOSTL": "207151066",
    "PLTXT": "FLOW DIVIDER, 8-WAY",
    "SUBMT": " ",
    "HEQUI": " ",
    "MODEL_ID": "D4238004FBBC43EA8B941F0C6FB1C309",
    "MODEL_NAME": "Flow divider",
    "MODEL_DESC": "Flow divider",
    "MANUFACTURER": "Rohde & Schwarz",
    "CLASS": "Demo class",
    "SUBCLASS": "Demo subclass",
    "OBJECT_TYPE": "EQU",
    "ORDER": 1,
    "COMPONENTS": [
      ...
    ]
  },
  {
    "ID": "CONN - GSB 420/1600/0,3 - CB/v1.8",
    "DESCRIPTION": "Connection GSB 420/1600/0,3 Bushing",
    "EQART": "",
    "HERST": "",
    "TPLNR": "",
    "TPLNR_EXT": "",
    "IWERK": "",
    "ABCKZ": "",
    "KOSTL": "",

```



```

        "PLTXT": "",
        "SUBMT": "",
        "HEQUI": "",
        "MODEL_ID": "",
        "MODEL_NAME": "1ZSC999005-AAB",
        "MODEL_DESC": "",
        "PART_ID": "3CD595113C214ECD91FCB4CEA14C1005",
        "MANUFACTURER": "SAP Manufacturer",
        "CLASS": "",
        "SUBCLASS": "",
        "OBJECT_TYPE": "PRT",
        "ORDER": 1,
        "COMPONENTS": [
            ...
        ]
    } , ...
}
    ]
}
}

```

EQUIP_SENSORS

GET(EQUNR)

Header values:
 REQUEST_OBJECT: EQUIP_SENSORS
 EQUNR: <Equipment number>

Description:
 Use this service to retrieve a list of sensors belonging to the equipment with the specified EQUNR.

Output Fields:

Field Name	Description	Data Type	Restrictions
EQUNR	Equipment Number	NVARCHAR (18)	
EQART	Type of Technical Object	NVARCHAR (10)	
HERST	Manufacturer of asset	NVARCHAR (30)	
EQKTX	Description of technical object	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	

TPLNR_EXT	Function location - external format	NVARCHAR (40)	
IWERK	Maintenance Planning Plant	NVARCHAR (4)	
ABCKZ	Function Criticality	NVARCHAR (1)	
KOSTL	Cost Center	NVARCHAR (10)	
PLTXT	Description of functional location	NVARCHAR (40)	
SUBMT	Construction type material of the object	NVARCHAR (18)	
HEQUI	Superordinate Equipment	NVARCHAR (18)	
MODEL_ID	ID of the equipment model	NVARCHAR (128)	
MODEL_NAME	Name of the equipment model	NVARCHAR(1024)	
MODEL_DESC	Description of the equipment model	NVARCHAR(2000)	
MANUFACTURER	Manufacturer of the equipment model	NVARCHAR(1024)	
CLASS	Class of the equipment model	NVARCHAR(1024)	
SUBCLASS	Subclass of the equipment model	NVARCHAR(1024)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_asset_core_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIP_SENSORS",
    "EQUNR": "ACCSAT001003"
  }
})
```

Sample Output:

```
[
  ...,
  {
    "EQUNR": "ACCSAT001003",
    "EQART": "ACC",
    "HERST": "VARIOUS",
    "EQKTX": "Temperature sensor",
    "TPLNR": "0207-546-030-001",
    "TPLNR_EXT": "0207-546-030-001",
    "IWERK": "0207",
    "ABCKZ": "D",
```

```

        "KOSTL": "207151066",
        "PLTXT": "SATELLITE SYSTEMS FOR CREW",
        "SUBMT": " ",
        "HEQUI": " ",
        "MODEL_ID": "2B606B0EA4294CD49D0C006F5AE0BDB9",
        "MODEL_NAME": "Temperature sensor",
        "MODEL_DESC": "Temperature sensor",
        "MANUFACTURER": "SAP Manufacturer Training",
        "CLASS": "Detecting element",
        "SUBCLASS": "Industrial sensor"
    }
    , ...
]

```

EQUIP_ROOT_PARENT

GET(EQUNR)

Header values:

REQUEST_OBJECT: EQUIP_ROOT_PARENT

EQUNR: <Equipment number>

Description:

Use this service to retrieve the root parent of the equipment with the specified EQUNR.

Output Fields:

Field Name	Description	Data Type	Restrictions
EQUNR	Equipment Number	NVARCHAR (18)	
EQART	Type of Technical Object	NVARCHAR (10)	
HERST	Manufacturer of asset	NVARCHAR (30)	
EQKTX	Description of technical object	NVARCHAR (40)	
TPLNR	Functional Location	NVARCHAR (30)	
TPLNR_EXT	Function location - external format	NVARCHAR (40)	
IWERK	Maintenance Planning Plant	NVARCHAR (4)	
ABCKZ	Function Criticality	NVARCHAR (1)	
KOSTL	Cost Center	NVARCHAR (10)	
PLTXT	Description of functional location	NVARCHAR (40)	

SUBMT	Construction type material of the object	NVARCHAR (18)	
HEQUI	Superordinate Equipment	NVARCHAR (18)	
MODEL_ID	ID of the equipment model	NVARCHAR (128)	
MODEL_NAME	Name of the equipment model	NVARCHAR(1024)	
MODEL_DESC	Description of the equipment model	NVARCHAR(2000)	
MANUFACTURER	Manufacturer of the equipment model	NVARCHAR(1024)	
CLASS	Class of the equipment model	NVARCHAR(1024)	
SUBCLASS	Subclass of the equipment model	NVARCHAR(1024)	

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_restful_asset_core_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "EQUIP_ROOT_PARENT",
    "EQUNR": "AGTAKE001041"
  }
})

```

Sample Output:

```

[
  {
    "EQUNR": "AGTAKE001040",
    "EQART": "AGT",
    "HERST": "AKER",
    "EQKTX": "Agitator",
    "TPLNR": "0207-324-002-004",
    "TPLNR_EXT": "0207-324-002-004",
    "IWERK": "0207",
    "ABCKZ": "D",
    "KOSTL": "207151066",
    "PLTXT": "MUD AGITATOR #B MUD STORAGE TANK #2",
    "SUBMT": " ",
    "HEQUI": " ",
    "MODEL_ID": "D4238004FBBC43EA8B941F0C6FB1C309",
    "MODEL_NAME": "Agitator",
    "MODEL_DESC": "Agitator",
    "MANUFACTURER": "Rohde & Schwarz",
    "CLASS": "Demo class",
    "SUBCLASS": "Demo subclass"
  }
]

```

]

SPARE_PARTS

GET

Header values:

REQUEST_OBJECT: SPARE_PART

Description:

Use this service to retrieve a list of spare parts.

OData Entity:

/dep/asset_core/odata/Spare_Part

Output Fields:

Field Name	Description	Data Type	Restrictions
PART_ID	Asset core spare part id	NVARCHAR (128)	
INTERNAL_ID	Internal id of the spare part	NVARCHAR (1024)	
DESCRIPTION	Description of the spare part	NVARCHAR (2000)	
SUBCLASS	Name of the subclass template	NVARCHAR (1024)	
SOURCE	Source of the spare part	NVARCHAR (1024)	
MANUFACTURER	Name of the spare part manufacturer	NVARCHAR (1024)	
MFR_PART_NUMBER	Manufacturer part number	NVARCHAR (1024)	
EAN_NUMBER	EAN Number of the spare part	NVARCHAR (1024)	
UOM	Unit of measurement	NVARCHAR (128)	
SIZE_DIMENSIONS	Dimensions of the spare part in size	NVARCHAR (1024)	
GROSS_WEIGHT	Gross weight of the spare part	Double	
NET_WEIGHT	Net weight of the spare part	Double	
WEIGHT_UOM	Unit to measure weight of the spare part	NVARCHAR (128)	
LENGTH	Length of the spare part	Double	
WIDTH	Width of the spare part	Double	

HEIGHT	Height of the spare part	Double	
LWH_UOM	Unit to measure length, width and height of the spare part	NVARCHAR (128)	
VOLUME	Volume of the spare part	Double	
VOLUME_UOM	Unit to measure volume of the spare part	NVARCHAR (128)	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_restful_asset_core_controller",
    method: "GET",
    headers: {
        "REQUEST_OBJECT": "SPARE_PART"
    }
})
```

Sample Output:

```
[
    ...,
    {
        "PART_ID": "0090592D54CA40F5957CB4AD9ED36444",
        "INTERNAL_ID": "08045984001",
        "DESCRIPTION": "P2-P6 PLUNGER ASSEMBLY PKG"D",
        "SUBCLASS": null,
        "SOURCE": "SAP Manufacturer",
        "MANUFACTURER": "Roche Diagnostics",
        "MFR_PART_NUMBER": "08045984001",
        "EAN_NUMBER": null,
        "UOM": "PC",
        "SIZE_DIMENSIONS": "",
        "GROSS_WEIGHT": "0.0",
        "NET_WEIGHT": "0.0",
        "WEIGHT_UOM": null,
        "LENGTH": "0.0",
        "WIDTH": "0.0",
        "HEIGHT": "0.0",
        "LWH_UOM": null,
        "VOLUME": "0.0",
        "VOLUME_UOM": null
    }
    , ...
]
```

GET(PART_ID)

Header values:

REQUEST_OBJECT: SPARE_PART

PART_ID: <Spare part id>

Description:

Use this service to retrieve details for a spare part with the specified PART_ID.

OData Entity:

/dep/asset_core/odata/Spare_Part

Output Fields:

Field Name	Description	Data Type	Restrictions
PART_ID	Asset core spare part id	NVARCHAR (128)	
INTERNAL_ID	Internal id of the spare part	NVARCHAR (1024)	
DESCRIPTION	Description of the spare part	NVARCHAR (2000)	
SUBCLASS	Name of the subclass template	NVARCHAR (1024)	
SOURCE	Source of the spare part	NVARCHAR (1024)	
MANUFACTURER	Name of the spare part manufacturer	NVARCHAR (1024)	
MFR_PART_NUMBER	Manufacturer part number	NVARCHAR (1024)	
EAN_NUMBER	EAN Number of the spare part	NVARCHAR (1024)	
UOM	Unit of measurement	NVARCHAR (128)	
SIZE_DIMENSIONS	Dimensions of the spare part in size	NVARCHAR (1024)	
GROSS_WEIGHT	Gross weight of the spare part	Double	
NET_WEIGHT	Net weight of the spare part	Double	
WEIGHT_UOM	Unit to measure weight of the spare part	NVARCHAR (128)	
LENGTH	Length of the spare part	Double	
WIDTH	Width of the spare part	Double	
HEIGHT	Height of the spare part	Double	
LWH_UOM	Unit to measure length, width and height of the spare part	NVARCHAR (128)	
VOLUME	Volume of the spare part	Double	
VOLUME_UOM	Unit to measure volume of the spare part	NVARCHAR (128)	

Sample Implementation:

```
jQuery.ajax({
  url: "/ws_restful_asset_core_controller",
  method: "GET",
  headers: {
    "REQUEST_OBJECT": "SPARE_PART",
    "PART_ID": "00EFFFAE2CD104643AECED3E322514996"
  }
})
```

Sample Output:

```
[
  {
    "PART_ID": "00EFFFAE2CD104643AECED3E322514996",
    "INTERNAL_ID": "987654321",
    "DESCRIPTION": "Akku-Ladegerät M1218FC",
    "SUBCLASS": "Demo subclass",
    "SOURCE": "SAP Manufacturer",
    "MANUFACTURER": "Hoffmann Group",
    "MFR_PART_NUMBER": "073840 M1218FC",
    "EAN_NUMBER": "",
    "UOM": "PCE",
    "SIZE_DIMENSIONS": "",
    "GROSS_WEIGHT": 0,
    "NET_WEIGHT": 0,
    "WEIGHT_UOM": "",
    "LENGTH": 0,
    "WIDTH": 0,
    "HEIGHT": 0,
    "LWH_UOM": "",
    "VOLUME": 0,
    "VOLUME_UOM": ""
  }
]
```


EDGE CLOUD EXTENDER API

Edge Cloud Extender requests are made to /ws_req_fwd_restful/<request_object> and /ws_req_fwd_odata/<request_object> instead of the URLs for the previous RESTful APIs. OData support is limited to GET requests to assist with filtering and pagination.

STATS

GET

Header values:

REQUEST_OBJECT: STATS

Description:

Gets the statistics for each URI. An “access” refers to each time a user requests a resource from the edge. A “fetch” refers to each time the cloud was contacted to retrieve that resource.

OData Entity:

/ws_req_fwd_odata/Stats

Output Fields:

Field Name	Description	Data Type	Restrictions
DATA_PROVIDER	The signature of the server this data is fetched from	NVARCHAR(60)	
SIGNATURE	The signature of the service this URI is associated with	NVARCHAR(60)	
URI	The resource path	LONG NVARCHAR	
ACCESS_COUNT	The number of times a user has accessed this data on the edge	INTEGER	
LAST_ACCESS	Timestamp of the latest time this data was accessed on the edge	TIMESTAMP	
FETCH_COUNT	The number of times this data has been fetched from the data provider (cloud)	INTEGER	
LAST_FETCH	Timestamp of the latest time this data was fetched from the data provider	TIMESTAMP	
CHANGE_COUNT	The number of times a fetch has returned different data from the previous fetch	INTEGER	

REFRESH_FREQ_MINS	The number of minutes after LAST_FETCH that the data will be considered expired	INTEGER	
-------------------	---	---------	--

Sample Implementation:

```
jQuery.ajax({  
  url: "/ws_req_fwd_restful/stats",  
  method: "GET"  
});
```

CONFIG

GET

Header values:

REQUEST_OBJECT: CONFIG
 DATA_PROVIDER: <data_provider_id> (optional)
 SIGNATURE: <signature> (optional)
 URI: <uri> (optional)

Description:

Gets the list of configuration records. A configuration can be for a single URI, or a group of URIs starting with a specific string, if URI_IS_PREFIX is true. The best matching configuration takes priority, and if two records have the same resource path, the one where URI_IS_PREFIX = 0 (false) is considered higher priority, since it only applies to an exact match rather than a group of resources.

If a configuration (IS_SHARED, HAS_PERSONAL_DATA, OVERRIDE_FREQ) is present in a matching record, the value is used. If not, the next most specific config record is checked, and so on, until either all three values are set or no matching config records remain and the global defaults are used.

The optional headers can be provided to filter the results.

OData Entity:

/ws_req_fwd_odata/Config

Output Fields:

Field Name	Description	Data Type	Restrictions
DATA_PROVIDER	The signature of the server this data is fetched from	NVARCHAR(60)	
SIGNATURE	The signature of the service this URI is associated with	NVARCHAR(60)	
URI	The resource path	LONG NVARCHAR	
URI_IS_PREFIX	If true, the configuration applies to all URIs starting with this record's URI, unless a more specific matching configuration is present	BIT	
IS_SHARED	If true, the data for matching URIs is shared across multiple users	NVARCHAR(1)	"Y" = yes, "N" = no, a blank value causes this config to be skipped, and the next match to be used (or the global default if no matches remain)

HAS_PERSONAL_DATA	If true, the data for matching URIs will be cleared should it reach the GDPR/DPP retention date without being accessed	NVARCHAR(1)	“Y” = yes, “N” = no, a blank value causes this config to be skipped, and the next match to be used (or the global default if no matches remain)
OVERRIDE_FREQ	The number of minutes before a matching URI’s data should be refreshed (overrides any calculated refresh frequency)	INTEGER	An integer A negative value will never be cached A 0 (zero) value will always be refreshed and recached. A NULL value causes this config to be skipped, and the next match to be used (or the calculated frequency for the URI if no matches remain)

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_req_fwd_restful/config",
    method: "GET"
});
```

POST / PUT

Header values:

REQUEST_OBJECT: CONFIG

Description:

Create or update a configuration record.

Note: Once a record exists SIGNATURE, URI, and URI_IS_PREFIX cannot be changed. DELETE the record (below) and POST a new one with the correct values for those columns.

Input Fields:

Field Name	Description	Data Type	Restrictions
SIGNATURE	The signature of the service this URI is associated with	NVARCHAR(60)	

URI	The resource path	LONG NVARCHAR	
URI_IS_PREFIX	If true, the configuration applies to all URIs starting with this record's URI, unless a more specific matching configuration is present	BIT	Integer 1 or 0 in JavaScript
IS_SHARED	If true, the data for matching URIs is shared across multiple users	NVARCHAR(1)	"Y" = yes, "N" = no, a blank value causes this config to be skipped, and the next match to be used (or the global default if no matches remain)
HAS_PERSONAL_DATA	If true, the data for matching URIs will be cleared should it reach the GDPR/DPP retention date without being accessed	NVARCHAR(1)	"Y" = yes, "N" = no, a blank value causes this config to be skipped, and the next match to be used (or the global default if no matches remain)
OVERWRITE_FREQ	The number of minutes before a matching URI's data should be refreshed (overrides any calculated refresh frequency)	INTEGER	An integer A negative value will never be cached A 0 (zero) value will always be refreshed and recached. A NULL value causes this config to be skipped, and the next match to be used (or the calculated frequency for the URI if no matches remain)

Sample Implementation:

```

jQuery.ajax({
  url: "/ws_req_fwd_restful/config",
  method: "POST",
  data: JSON.stringify({
    "SIGNATURE": "AIN_REST",
    "URI": "$metadata",
    "URI_IS_PREFIX": 0,
    "IS_SHARED": "Y",
    "HAS_PERSONAL_DATA": "N",
    "OVERWRITE_FREQ": "10080" // Metadata rarely changes, refresh once a week
  })
});

```

DELETE

Header values:

REQUEST_OBJECT: CONFIG

SIGNATURE: <signature>

URI: <uri>

URI_IS_PREFIX: <0 or 1>

Description:

Delete a configuration record matching the provided headers.

Note: Headers can also be provided as query string variables, such as in the example below.

Sample Implementation:

```
jQuery.ajax({  
    url: "  
    /ws_req_fwd_restful/config?SIGNATURE=AIN_REST&URI=$metadata&URI_IS_PREFIX=0",  
    method: "DELETE"  
});
```

DATA_PROVIDER

GET

Header values:

REQUEST_OBJECT: DATAPROVIDER

ID: <data_provider_id> (optional)

Description:

Gets the list of data providers.

The optional header can be provided to only get the data provider matching the ID header.

OData Entity:

/ws_req_fwd_odata/DataProvider

Output Fields:

Field Name	Description	Data Type	Restrictions
ID	The unique identifier for this data provider	NVARCHAR(60)	
DOMAIN_URL	The base URL for the domain	LONG NVARCHAR	
HTTP_PROXY	The proxy URL necessary to contact the domain	LONG NVARCHAR	
CERTIFICATE	The name of the certificate in the edge database to be used when connecting to this domain	LONG NVARCHAR	See more about the CREATE CERTIFICATE statement in the SQL Anywhere 17 documentation

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_req_fwd_restful/dataprovider",
    method: "GET"
});
```

POST / PUT

Header values:

REQUEST_OBJECT: DATAPROVIDER

Description:

Create or update a data provider.

Note: Once a data provider has been created, the ID cannot be changed with a PUT request.

Output Fields:

Field Name	Description	Data Type	Restrictions
ID	The unique identifier for this data provider	NVARCHAR(60)	
DOMAIN_URL	The base URL for the domain	LONG NVARCHAR	
HTTP_PROXY	The proxy URL necessary to contact the domain	LONG NVARCHAR	
CERTIFICATE	The name of the certificate in the edge database to be used when connecting to this domain	LONG NVARCHAR	See more about the <i>CREATE CERTIFICATE</i> statement in the SQL Anywhere 17 documentation

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_req_fwd_restful/dataprovider",
    method: "POST",
    data: JSON.stringify({
        "ID": "SAP",
        "DOMAIN_URL": "https://10.0.1.100",
        "HTTP_PROXY": "http://proxy:8080/",
        "CERTIFICATE": "cloud_cert"
    })
});
```

DELETE

Header values:

REQUEST_OBJECT: DATAPROVIDER

ID: <data_provider_id>

Description:

Delete the data provider matching the ID header.

Note: Headers can also be provided as query string variables, such as in the example below.

Sample Implementation:

```
jQuery.ajax({
```



```
url: "/ws_req_fwd_restful/dataprovider?ID=SAP",  
method: "DELETE"  
});
```

DATA_SERVICE

GET

Header values:

REQUEST_OBJECT: DATASERVICE
 DATA_PROVIDER: <data_provider_id> (optional)
 SIGNATURE: <service_signature> (optional)

Description:

Gets the list of data services.

The optional headers can be provided to filter results.

Note: The SIGNATURE of a service is how local URLs are associated with services in the cloud. For example, the AIN_ODATA service maps the appropriate local web service in SQL Anywhere to the OData service URL on the AIN cloud server.

OData Entity:

/ws_req_fwd_odata/DataService

Output Fields:

Field Name	Description	Data Type	Restrictions
DATA_PROVIDER	The unique identifier for the associated data provider	NVARCHAR(60)	
SIGNATURE	The unique identifier for this service	NVARHCAR(60)	
SERVICE_URL	The URL for this service	LONG NVARCHAR	

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_req_fwd_restful/dataservice",
    method: "GET"
});
```

POST / PUT

Header values:

REQUEST_OBJECT: DATASERVICE

Description:

Create or update a data service.

Note: Once a service has been created, the DATA_PROVIDER and SIGNATURE cannot be changed with a PUT request.

Output Fields:

Field Name	Description	Data Type	Restrictions
DATA_PROVIDER	The unique identifier for this data provider	NVARCHAR(60)	
SIGNATURE	The unique identifier for this service	NVARCHAR(60)	
SERVICE_URL	The base URL for the domain	LONG NVARCHAR	
HTTP_PROXY	The proxy URL necessary to contact the domain	LONG NVARCHAR	
CERTIFICATE	The name of the certificate in the edge database to be used when connecting to this domain	LONG NVARCHAR	See more about the <i>CREATE CERTIFICATE statement</i> in the SQL Anywhere 17 documentation

Sample Implementation:

```
jQuery.ajax({
    url: "/ws_req_fwd_restful/dataprovider",
    method: "POST",
    data: JSON.stringify({
        "DATA_PROVIDER": "SAP",
        "SIGNATURE": "SAP_ODATA",
        "SERVICE_URL": "/odata/"
    })
});
```

DELETE

Header values:

REQUEST_OBJECT: DATASERVICE
SIGNATURE: <service_signature>

Description:

Delete the data provider matching the SIGNATURE header.

Note: Headers can also be provided as query string variables, such as in the example below.

Sample Implementation:

```
jQuery.ajax({
```

```
url: "/ws_req_fwd_restful/dataprovider?SIGNATURE=SAP_ODATA",  
method: "DELETE"  
});
```

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