# Development Guide

# Microsoft OEM Activation 3.0

## Shop Floor-FKI Web Services Interface

**Document Information**

| Project Name: | Microsoft OEM Activation 3.0 (OA30) | | |
|---|---|---|---|
| Prepared By: | Nancy Carmichael | Document Version No: | 1.08 |
| Title: | Development Guide | Document Version Date: | August 2, 2012 |

**Distribution List**

| To | Action* | Due Date |
|---|---|---|
| Chau Nguyen | Approve | 11/30/2011 |
| Gary Sham | Approve | 11/30/2011 |
| Lorenzo Hernandez | Approve | 11/30/2011 |
| Paul Pao | Approve | 11/30/2011 |
| James Young | Review | 11/30/2011 |
| Mark Greene | Review | 11/30/2011 |
| Dakota Nordgren | Review | 11/30/2011 |
| Mark Campise | Info | 11/30/2011 |
| Nilesh Kansara | Info | 11/30/2011 |

*\* Action Types: Approve, Review, Inform, File, Other (please specify)*

**Version History**

| Ver. No. | Ver. Date | Revised By | Description | Filename |
|---|---|---|---|---|
| 0.1 | 08/03/2011 | Andrew Ta | First draft | OS_SF_FKIWebServices_Interface.docx |
| 0.2 | 08/05/2011 | Andrew Ta | Modify after review with Chau | OS_SF_FKIWebServices_Interface.docx |
| 0.5 | 08/10/2011 | Andrew Ta | • Combined "Return Used Product Keys" and "Return RMA Used Product Keys" into one function "Return Used Product Keys"<br>• Take out blank fields in ImportKeys function.<br>• Add new Update HP Sort Order Part List. | OS_SF_FKIWebServices_Interface.docx |
| 0.6 | 08/11/2011 | Andrew Ta | • Change the function name to Build and Return Report from Consumption Usage.  Put some more note to clarify the response body.<br>• The report now only for Productkey with state=Returned since NotifiedReturned is support in function 3.1.14 BuildAndReturnReport. | OS_SF_FKIWebServices_Interface.docx |

| Ver. No. | Ver. Date | Revised By | Description | Filename |
|---|---|---|---|---|
| | | | • changed the ProductKeySateID to ProductKeyStateName, since showing to the user the state description is more meaningful than the state id. | |
| 0.7 | 08/14/2011 | Andrew Ta | Modified the state for Export Order from Submitted to RequestCompleted. | OS_SF_FKIWebServices_Interface.docx |
| 0.8 | 08/15/2011 | Andrew Ta | Modified after Lorenzo, Paul and James feed back | OS_SF_FKIWebServices_Interface.docx |
| 0.9 | 08/15/2011 | Andrew Ta Chau Nguyen | Changed file format and Reviewed | OS_SF_FKIWebServices_Interface.docx |
| 0.91 | 08/17/2011 | Andrew Ta Chau Nguyen | Enhanced 3.1.10 and 3.1.15 to limit 5000 keys per report | OS_SF_FKIWebServices_Interface.docx |
| 0.92 | 08/18/2011 | Andrew Ta Chau Nguyen | Added 'Get Order Status' function | OS_SF_FKIWebServices_Interface.docx |
| 0.93 | 08/19/2011 | Chau Nguyen | Removed Comments | OS_SF_FKIWebServices_Interface.docx |
| 0.94 | 08/21/2011 | Chau Nguyen | Correct HPPartList function as GET | OS_SF_FKIWebServices_Interface.docx |
| 0.95 | 10/6/2011 | Chau Nguyen | Changes resulted from Factory/ODM F2F Meeting | OS_SF_FKIWebServices_Interface.docx |
| 0.96 | 10/28/2011 | Hiep Nguyen AndrewTa | Modify to add several new function per Chau's request | OS_SF_FKIWebServices_Interface.docx |
| 0.97 | 12/14/2011 | Kari Walker | Formatting and grammar edits | OS_SF_FKIWebServices_Interface.docx |
| 0.98 | 1/12/12 | Gary Sham | Added SiteIdentifier Field to page 19, section 4.3.1, Order Process Status, OrderProcessRequest XML | OS_SF_FKIWebServices_Interface.docx |
| 1.01 | 1/22/12 | Gary Sham | Removed the "NA" states from the 3.1 Order state and 3.3 Product Key state tables, to alleviate confusion | OS_SF_FKIWebServices_Interface.docx |
| 1.02 | 2/14/12 | Chau Nguyen | Change 'SetMinimumThreshold' and 'GetMinimumThreshold' to 'SetMinMaxThreshold' and 'GetMinMaxThresholds' | OS_SF_FKIWebServices_Interface.docx |
| 1.03 | 4/4/12 | James Young (by Nancy Carmichael) | Updated XML for SiteIdentifier Field , section 4.3.1, Order Process Status, OrderProcessRequest XML | OS_SF_FKIWebServices_Interface.docx |
| 1.04 | 4/16/12 | James Young (by Nancy Carmichael) | Corrected root URL for functions | OS_SF_FKIWebServices_Interface.docx |
| 1.05 | 5/4/12 | Hiep Nguyen and James Young (by Nancy Carmichael) | Updated to reflect current status and additions.  Sections updated were:  1.2.2, 3.1, 3.4, 4.6.1, 4.6.2, 4.6.5,  and 4.6.8 through the end of section 4.  Updated corresponding sections in Appendices 1 and 2 | OS_SF_FKIWebServices_Interface.docx |

| Ver. No. | Ver. Date | Revised By | Description | Filename |
| --- | --- | --- | --- | --- |
| 1.06 | 6/13/12 | Hiep Nguyen (by Nancy Carmichael) | Updated to reflect changes to code and additions. Updated Sections 4.1.2, 4.4.3, 4.5.1, 4.5.2 4.6.4, 4.6.5, 4.6.11, 4.6.13. Added Sections 4.6.22 through 4.6.26. Updated corresponding sections of Appendices 1 and 2 | OS_SF_FKIWebServices_Interface.docx |
| 1.07 | 7/26/2012 | Hiep Nguyen (by Nancy Carmichael) | Added code for validation of HPSerialNumber by re-entry of the HPSerialNumber. Sections 4.2.3, 4.4.1, 4.4.3, 4.5.2, 4.6.6, Appendix 2 – Order History, Consumed Report, Build Report, Return Used Product Keys, Unit Re-Serialization, fixed minor typos | OS_SF_FKIWebServices_Interface.docx |
| 1.08 | 8/2/2012 | Hiep Nguyen (by Nancy Carmichael) | Updated XML for 4.6.7and corresponding XSD for Get Unit Status in Appendix 2 | OS_SF_FKIWebServices_Interface.docx |

Table of Contents

## Proprietary Notice

This documentation is the property of, and contains confidential information of, Hewlett-Packard Company or its affiliates.  Possession and use of this documentation are authorized only as specified in Exhibit SS5, HP Business Terms or HP Global Agreement or pursuant to the license accompanying this documentation.

# 1. Introduction

## 1.1. Purpose of this Document

This document describes the functions of the Factory Interface Web Services application between the Shop Floor (SF) system and the Factory Key Inventory (FKI) system. The Factory Interface Web Services provide programmable interfaces to data services for all functions related to Product Key operations in the manufacturing and refurbishing environment.

## 1.2. Application Overview

The Web Services use a Representational State Transfer (REST)-based architecture via the Windows Communication Foundation (WCF). The Services are designed to authenticate that the caller is authorized by providing the username and password of an FKI server local account that is authorized to access the services. All state-change operations will be logged to an audit log.

### 1.2.1. Requirements

- Individual Users need to be set up based on the user's role on the FKI server
- Microsoft (MS) Windows Server 2008R2 or later
- MS Windows SQL Server 2008R2 or later
- MS .NET 4.0 framework
- IIS server installed

### 1.2.2. Assumptions/Limitations

- The root url for all the web service functions hosted by the FKI server is
  https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/
  The specific operation is appended to this url. For example, rooturl+HPPartList will retrieve the active HP part numbers. For HP intranet servers, this would be the fully qualified DNS name. For external sites, this would just be the servername.
- External sites (Non-HP) will have to install SSL certificates in order to avoid warning messages when logging in from a new client. Client must enable Windows Authentication in the IE browser. For instructions, see the FKI GUI User Guide, Section 1.2.1.
- Windows authentication (NTLM) will be used to authenticate the users to the web service.
- If the Shop Floor/ERP system should be notified when orders are fulfilled, it will be necessary to create a web service to accept the OrderProcessStatusRequest function as documented in section 4.3.1 Order Process Status. The site will then provide the necessary URL to the ISM team.

# 2. Application Functionality

## 2.1. Use Case Diagram
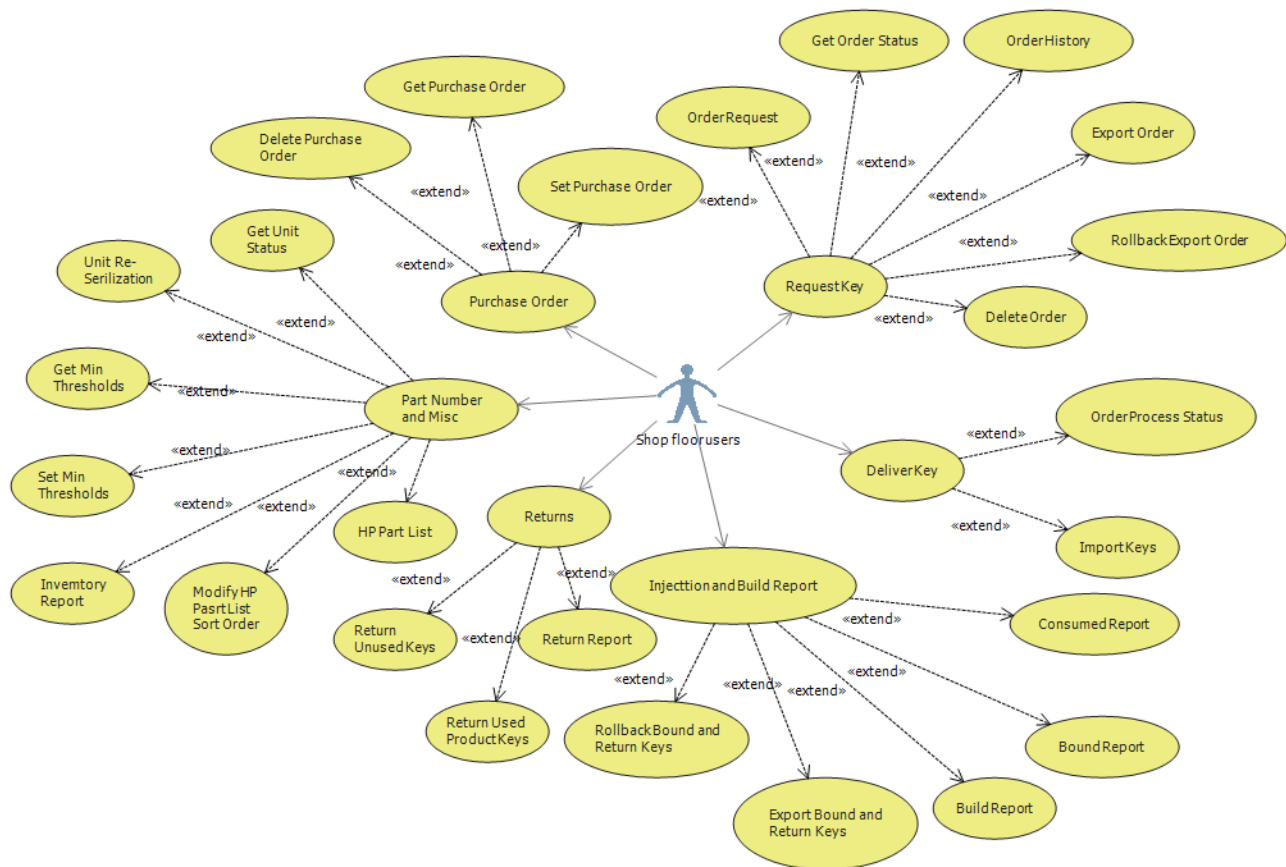


### 2.1.1. Actors

### 2.1.1.1. Shop Floor Users

This is a group of factory personnel who will request product keys, return product keys, and generate activity reports as necessary.

The shop floor users are divided into three different groups according to their role: Key Orders, Key Processing, and Report Generation.

### 2.1.1.2. FKI Database

This is a database located in the factory that retains the production keys and status of orders.

2.1.1.3.    Sample Calling Code

Below is sample code to use in client applications written in C# that will make authenticated calls to our WCF REST FKI web services:

```
string strURI = uri + "Order"; //uri points to actual FKI web services
using (var webClient = new HttpClient()) // HttpClient is Microsoft class
{
    webClient.DefaultHeaders.Add("Content-Type", "application/plain; charset=utf-8");
    webClient.TransportSettings.Credentials = CredentialCache.DefaultNetworkCredentials;
    webClient.TransportSettings.UseDefaultCredentials = true;

    string XMLInputData = "<?xml version='1.0' encoding='utf-8' ?>";
    XMLInputData += "<OrderRequest
xmlns='http://HP.ITTS.OA30/digitaldistribution/2011/08'>";
    XMLInputData += "<HPPartNumber>";
    XMLInputData += "HPWIN8Ult";
    XMLInputData += "</HPPartNumber>";
    XMLInputData += "<Quantity>";
    XMLInputData += "1000";
    XMLInputData += "</Quantity>";
    XMLInputData += "</OrderRequest>";

    try
    {
        HttpResponseMessage response = webClient.Send(HttpMethod.POST, strURI,
HttpContent.Create(XMLInputData, "application/xml"));
        string result = response.Content.ReadAsString();                      }
    catch (Exception ex)
    {
    }
}
```

# 3.  Order and Product Key

## 3.1.    Order State

| State on FKI | Description |
| --- | --- |
| Request | Site has requested key order on FKI |
| Cancelled | Order has been cancelled |
| PendingRequest | Pending Transfer of order to CKI/MKD |
| RequestComplete | Order request has been transferred to CKI/MKD |
| PendingSubmit | Pending transfer of order status back to FKI |
| xSubmit | Order status transfer almost completed on FKI |
| Submitted | Order submitted to Microsoft and FKI notified |
| PendingReject | Pending transfer of reject status to FKI |
| xReject | Order status rejected transfer almost completed on FKI |
| Rejected | Order processing by MSFT rejected and FKI notified |
| PendingProcessingFulfill | Pending transfer of ProcessingFulfill status from MKD |
| XProcessingFulfill | Order Status transfer almost completed on FKI |
| ProcessingFulfill | Processing transfers of keys to FKI, awaiting completion. |
| PendingFulfill | Pending transfer of fulfilled status back to FKI |
| xFulfill | Order status fulfilled transfer almost complete on FKI |
| Fulfilled | Order processed, keys have been receieved on FKI |

### 3.2. Order Transition
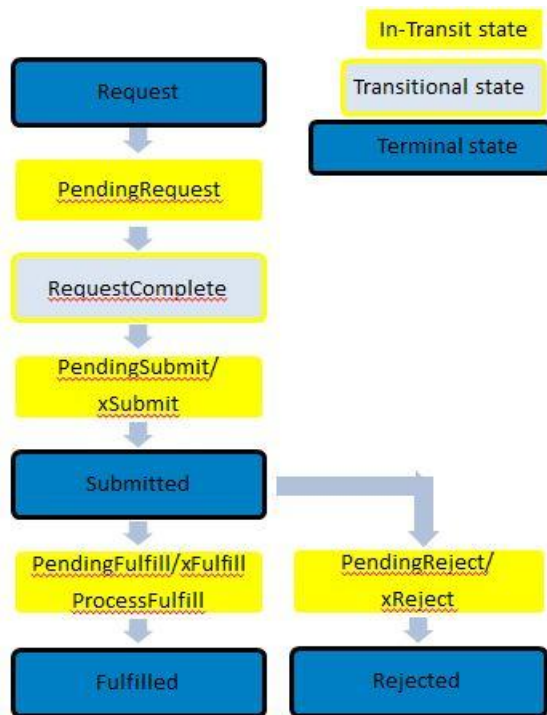
### 3.3.     Product Key State

| ProductKeyStateName | Description | Future Release |
|---|---|---|
| PendingTransferFKI | Transfer of key is in progress from CKI/MKD | |
| XTransferFKI | Key transfer almost complete from CKI/MKD | |
| Allocated | The product key was transferred from CKI/MKD to the FKI database and is available for injection to a UUT | |
| Consumed | The product key was sent to the Unit Under Test (UUT) for injection. | |
| Bound | Hardware (HW) hash is received from the UUT.  Transfer of the product key from FKI to MKD/CKI is initiated. | |
| PendingBound | The Bound product key with CBR info is being transferred from FKI to CKI/MKD | |
| NotifiedBound | Confirmation is received that the HW hash value was successfully reported to MKD. | |
| Returned | Request to Return key a key has been initiated on FKI. | |
| PendingReturn | The Returned product key is being transferred from FKI to CKI/MKD | |
| NotifiedReturned | Confirmation is received that the return request was successfully reported to MKD. | |
| PendingReportedBoundSuccess | Transfer of MS confirmation from the MKD is in progress. | X |
| XReportedBoundSuccess | Transfer of MS confirmation is almost complete from the MKD. | X |
| ReportedBoundSuccess | Confirmation has been received that the HW hash value was successfully reported to MS. | X |
| PendingReportedBoundFailure | Transfer of MS rejection from the MKD is in progress. | X |
| XReportedBoundFailure | Transfer of MS rejection is almost complete from the MKD. | X |
| ReportedBoundFailure | Confirmation that MS has reported that the key failed to be processed. | X |
| PendingNotifiedReturnedSuccess | Transfer of MS return confirmation from the MKD is in progress. | X |
| XNotifiedReturnedSuccess | Transfer of MS return confirmation is almost complete from the MKD. | X |
| NotifiedReturnedSuccess | Confirmation that MS has reported that the key has been successfully returned. | X |
| PendingNotifiedReturnedFailure | Transfer of MS return rejection from the MKD is in progress. | X |
| XNotifiedReturnedFailure | Transfer of MS return rejection is almost complete from the MKD. | X |
| NotifiedReturnedFailure | Confirmation that MS has reported the key return failed to be processed. | X |

### 3.4. Product Key Transition
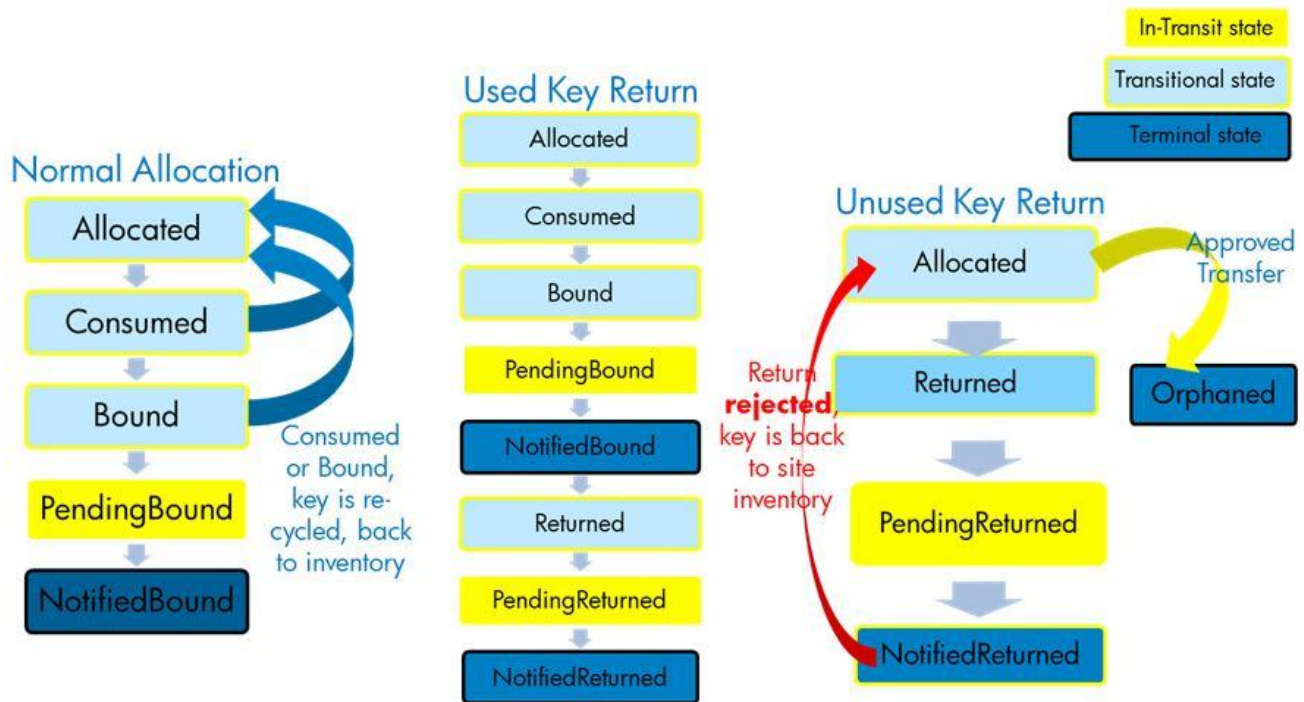


# 4. Domain Data Services

## 4.1. Purchase Order

### 4.1.1. Set Purchase Order

This function assigns the Purchase Order (PO) and Purchase Order Line Item for each HP Part Number (PN). There is one PO and one PO Line Item for each HP PN. For part numbers that have not been paired with a PO and PO Line Item, the PO and PO Line Item fields are blank.

The Web Services can take more than one PurchaseOrder/PurchaseOrderLineNumber/HPPartNumber per call. If a failure occurs in one of the requests, the operation will perform a rollback and will set all modified rows back to their initial states (nothing changed). The Web Services will return the list of invalid HP Part numbers; if there is no failure, the list is empty. The operator is responsible for correcting the error and re-submitting the request.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SetPurchaseOrder
**HTTP Method:** POST

**Request:** SetPurchaseOrderRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<SetPurchaseOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <PurchasePartNumbers>
    <PurchasePartNumber>
      <PurchaseOrder>PO1111</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem1111</PurchaseOrderLineItem>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </PurchasePartNumber>
    <PurchasePartNumber>
      <PurchaseOrder>PO2222</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem2222</PurchaseOrderLineItem>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
    </PurchasePartNumber>
  </PurchasePartNumbers>
</SetPurchaseOrderRequest>
```

**Response:** SetPurchaseOrderResponse
**Success Response:**
```xml
<?xml version="1.0" encoding="utf-8" ?>
<SetPurchaseOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <HPPartNumberErrorList>
  </HPPartNumberErrorList>
</SetPurchaseOrderResponse>
```

**Fail Response:**
```xml
<?xml version="1.0" encoding="utf-8" ?>
<SetPurchaseOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>608</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <HPPartNumberErrorList>
   <HPPartNumberError>
        <HPPartNumber>HPWIN8Invalid1</HPPartNumber>
   </HPPartNumberError>
   <HPPartNumberError>
        <HPPartNumber>HPWIN8Invalid2</HPPartNumber>
   </HPPartNumberError>
  </HPPartNumberErrorList>
</SetPurchaseOrderResponse>
```

4.1.2.  <u>Get Purchase Order</u>

This function retrieves the Purchase Order and Purchase Order Line Item that have been previously assigned for each HP Part Number.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetPurchaseOrder
**HTTP Method:** GET

**Request:** Empty

**Response:** GetPurchaseOrderResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<GetPurchaseOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <PurchasePartNumbers>
    <PurchasePartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <PurchaseOrder>PO1111</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem1111</PurchaseOrderLineItem>
      <CreatedDate>10/26/2011 8:07:53 PM</CreatedDate>
      <LastModifiedDate>10/26/2011 8:07:53 PM</LastModifiedDate>
    </PurchasePartNumber>
    <PurchasePartNumber>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
      <PurchaseOrder>PO2222</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem2222</PurchaseOrderLineItem>
      <CreatedDate>10/26/2011 8:08:37 PM</CreatedDate>
      <LastModifiedDate>10/26/2011 8:07:53 PM</LastModifiedDate>
    </PurchasePartNumber>
  </PurchasePartNumbers>
</GetPurchaseOrderResponse>
```

4.1.3.  <u>Delete Purchase Order</u>

This function deletes the previously assigned Purchase Order and Purchase Order Line Item for each HP Part Number.  The Web Services can take more than one Purchase Order/Purchase Order Line Item/HP Part Number per call.  If a failure occurs in one of the requests, the operation will perform a rollback and will set all modified rows back to their initial states (nothing changed).  The Web Services will return the list of invalid HP part numbers; otherwise, if no failure occurs, the list is empty.  The operator is responsible for correcting the error and re-submitting the request.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeletePurchaseOrder
**HTTP Method:** POST

**Request:** DeletePurchaseOrderRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeletePurchaseOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
```

```xml
  <PurchasePartNumbers>
    <PurchasePartNumber>
      <PurchaseOrder>PO1111</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem1111</PurchaseOrderLineItem>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </PurchasePartNumber>
    <PurchasePartNumber>
      <PurchaseOrder>PO2222</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem2222</PurchaseOrderLineItem>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
    </PurchasePartNumber>
  </PurchasePartNumbers>
</DeletePurchaseOrderRequest>
```

**Response:** DeletePurchaseOrderResponse
**Success Response:**
```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeletePurchaseOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <HPPartNumberErrorList>
  </HPPartNumberErrorList>
</DeletePurchaseOrderResponse>
```

**Fail Response:**
```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeletePurchaseOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>608</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <HPPartNumberErrorList>
      <HPPartNumberError>
            <HPPartNumber>HPWIN8Invalid1</HPPartNumber>
      </HPPartNumberError>
      <HPPartNumberError>
            <HPPartNumber>HPWIN8Invalid2</HPPartNumber>
      </HPPartNumberError>
  </HPPartNumberErrorList>
</DeletePurchaseOrderResponse>
```

### 4.2. OrderKey

4.2.1. Order Request

This creates a new order (status=Request) with the quantity of keys for each HP Part Number.   It provides the OrderID back to the caller.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/Order
**HTTP Method:** POST


**Request:** OrderRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<OrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
  <Quantity>500</Quantity>
</OrderRequest>
```

**Response:** OrderResponse
The <OrderNumber> node contains the unique order ID.  This will be used to track the order throughout the process.  The OrderNumber is blank when there is an error.


```xml
<?xml version="1.0" encoding="utf-8" ?>
<OrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</OrderResponse>
```

4.2.2.   Get Order Status

This function is used to retrieve the status of previously ordered requests, given the OrderNumber that was returned in the Order Request function – Order Request.  The KeyOrderStatus can be: Request, PendingRequest, RequestComplete, PendingSubmit, xSubmit, Submitted, PendingFulfill, xFulfill, Fulfilled, PendingReject, xReject, Rejected.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetOrderStatus
**HTTP Method:** POST

**Request:** GetOrderStatusRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<GetOrderStatusRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
</GetOrderStatusRequest>
```

**Response:** GetOrderStatusResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<GetOrderStatusResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
  <KeyOrderStateName>Request</KeyOrderStateName>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</GetOrderStatusResponse>
```

4.2.3.   Order History

This allows reporting of all the orders for product keys.  The report can be filtered by Submit Time, OrderNumber, State, or HP Part Number.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/OrderHistory
**HTTP Method:** POST

**Request:** OrderHistoryRequest
To filter using date/time range:
> User needs to specify the start date/time and end date/time in UTC time.  The date/time range cannot be more than 7 days.

```
<?xml version="1.0" encoding="utf-8" ?>
<OrderHistoryRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>StartDateTimeUTC=2011-10-24 14:05:00, EndDateTimeUTC=2011-10-26 08:00:00</Filter>
</OrderHistoryRequest>
```

To filter using OrderNumber:
```
<?xml version="1.0" encoding="utf-8" ?>
<OrderHistoryRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>OrderNumber=DEVFACTY#20000000027</Filter>
</OrderHistoryRequest>
```

To filter using State:
```
<?xml version="1.0" encoding="utf-8" ?>
<OrderHistoryRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>State=Request</Filter>
</OrderHistoryRequest>
```

To filter using HP Part Number:
```
<?xml version="1.0" encoding="utf-8" ?>
<OrderHistoryRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>HPPartNumber=HPWIN8Ult</Filter>
</OrderHistoryRequest>
```

**Response:** OrderHistoryResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<OrderHistoryResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <KeyOrders>
    <KeyOrder>
      <OrderNumber>DEVFACTY#20000000027</OrderNumber>
      <OrderStateName>Request</OrderStateName>
      <SiteIdentifier>DEVFACTY#2</SiteIdentifier>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <Quantity>500</Quantity>
      <StatusDate>10/24/2011 2:05:53 PM</StatusDate>
      <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
```

```
      <CreatedByMachine>HNGUYEN67</CreatedByMachine>
      <CreatedDate>10/24/2011 2:05:53 PM</CreatedDate>
      <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </KeyOrder>
  </KeyOrders>
</OrderHistoryResponse>
```

### 4.2.4.   Export Order

This function is used only when key order retrieval via network connection is failing and a manual process is needed to get the order from the ODM to HP.  This exports the specified order based on either unique order number or all outstanding orders in state=Request to an XML file and changes the state to RequestComplete.  This function generates an audit log entry.

The exported file information will be recorded for auditing/rollback purposes.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ExportOrder
**HTTP Method:** POST

**Request:** ExportOrderRequest
The <OrderID> nodes contain the order ID that will be transmitted to an XML file.  The user can specify a blank value to retrieve all open orders.  Open orders are the orders with state=Request.

For all open orders:
```
<?xml version="1.0" encoding="utf-8" ?>
<ExportOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
    <OrderNumber></OrderNumber>
</ExportOrderRequest>
```

For a specific order with a known OrderNumber:
```
<?xml version="1.0" encoding="utf-8" ?>
<ExportOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
</ExportOrderRequest>
```

**Response:** ExportOrderResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<ExportOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSpecific>
    <TransferID>8</TransferID>
    <Authenticator>96f9fe77-bd20-4d41-ae92-fe0b88dba5ff</Authenticator>
    <Quantity>1</Quantity>
    <ExportChecksum>0x00FFB4BE99EC777E78D693E645265B4301000000F4BC4AFF252A20688B48E1FCC6E6B87
    EEC52806994AD5378C42618F45C702669A5A149A80D9AEAD0F24ECB18E443D9678715CDB25C066EAF7348DCBB
    E1948506</ExportChecksum>
  </HPSpecific>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <KeyOrders>
```

```
    <KeyOrder>
      <KeyOrderID>27</KeyOrderID>
      <KeyOrderStateID>31</KeyOrderStateID>
      <FactoryID>2</FactoryID>
      <Authenticator>595f4ef7-8a0e-4606-8700-fba705b7f435</Authenticator>
      <HPPartNumberEncrypted>0x00FFB4BE99EC777E78D693E645265B4301000000FF47F482BEA5DCC5BC7A0B
      3105E21DC313E914A9CEBB7B84E75D7410E091B0824F3FF6FC390BED1AD46430A1F8556D21FAE84461438A4
      AAA5DE1D5FF2C51362C</HPPartNumberEncrypted>
      <QuantityEncrypted>0x00FFB4BE99EC777E78D693E645265B43010000001667419BB373ECA0F2FB6C4537
      91AC729A3B93C9EEB3EA767AC587C8E47778A85E82FA0157FB9523A977A286C5D1462547FED470E0B7B4217
      E1B38B5A158DA6C</QuantityEncrypted>
      <OrderHash>0x27646E0B79C49824661D5554AF0256097791042904F03945E29D9758</OrderHash>
      <OrderNumber>DEVFACTY#20000000027</OrderNumber>
      <StatusDate>2011-10-24 14:05:53.180</StatusDate>
      <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
      <CreatedByMachine>HNGUYEN67</CreatedByMachine>
      <CreatedDate>2011-10-24 14:05:53.180</CreatedDate>
    </KeyOrder>
  </KeyOrders>
</ExportOrderResponse>
```

### 4.2.5.  Rollback Export Order

This function rolls back to the states prior the export an XML file that was previously exported or attempted to be exported during a manual export process (see previous section).  This allows recovery of key order files that were not transferred to the HP server.  This will generate an audit log entry.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/RollbackExportOrder
**HTTP Method:** POST

**Request:**
```
<?xml version="1.0" encoding="utf-8" ?>
<ExportOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSpecific>
    <TransferID>8</TransferID>
    <Authenticator>96f9fe77-bd20-4d41-ae92-fe0b88dba5ff</Authenticator>
    <Quantity>1</Quantity>
<ExportChecksum>0x00FFB4BE99EC777E78D693E645265B4301000000F4BC4AFF252A20688B48E1FCC6E6B87EEC52
806994AD5378C42618F45C702669A5A149A80D9AEAD0F24ECB18E443D9678715CDB25C066EAF7348DCBBE1948506
    </ExportChecksum>
  </HPSpecific>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <KeyOrders>
    <KeyOrder>
      <KeyOrderID>27</KeyOrderID>
      <KeyOrderStateID>31</KeyOrderStateID>
      <FactoryID>2</FactoryID>
      <Authenticator>595f4ef7-8a0e-4606-8700-fba705b7f435</Authenticator>
      <HPPartNumberEncrypted>0x00FFB4BE99EC777E78D693E645265B4301000000FF47F482BEA5DCC5BC7A0B
      3105E21DC313E914A9CEBB7B84E75D7410E091B0824F3FF6FC390BED1AD46430A1F8556D21FAE84461438A4
```

```
      AAA5DE1D5FF2C51362C</HPPartNumberEncrypted>
      <QuantityEncrypted>0x00FFB4BE99EC777E78D693E645265B43010000001667419BB373ECA0F2FB6C4537
      91AC729A3B93C9EEB3EA767AC587C8E47778A85E82FA0157FB9523A977A286C5D1462547FED470E0B7B4217
      E1B38B5A158DA6C</QuantityEncrypted>
      <OrderHash>0x27646E0B79C49824661D5554AF0256097791042904F03945E29D9758</OrderHash>
      <OrderNumber>DEVFACTY#20000000027</OrderNumber>
      <StatusDate>2011-10-24 14:05:53.180</StatusDate>
      <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
      <CreatedByMachine>HNGUYEN67</CreatedByMachine>
      <CreatedDate>2011-10-24 14:05:53.180</CreatedDate>
    </KeyOrder>
  </KeyOrders>
</ExportOrderResponse>
```

**Response:** RollbackExportOrderResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<RollbackExportOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</RollbackExportOrderResponse>
```

### 4.2.6.   Delete Order

This will delete the requested open order, based on the OrderNumber from the database, only if the order has not been retrieved by HP for order processing.  An open order is defined as an order with state=Request and TransferID=null.

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeleteOrder
**HTTP Method:** POST

**Request:** DeleteOrderRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<DeleteOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
</DeleteOrderRequest>
```

**Response:** DeleteOrderResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<DeleteOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</DeleteOrderResponse>
```

## 4.3. Deliver Key

### 4.3.1. Order Process Status

This function informs Fusion (or ERP system) when an order is fulfilled or rejected, if Web Services are installed at Fusion (or ERP) and are recognized by FKI.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://fusionserver/specificURL/providedByShopFloorsystem

**HTTP Method:** POST

**Request:** OrderProcessStatusRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<OrderProcessStatusRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <PurchaseOrder>POTest</PurchaseOrder>
  <PurchaseOrderLineItem>POLineItemtest</PurchaseOrderLineItem>
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
  <SiteIdentifier>DEVFACTY#2</SiteIdentifier>
  <KeyOrder>
    <HPPartNumber>HPWIN8Ult</HPPartNumber>
    <Quantity>500</Quantity>
    <CreatedDate>10/24/2011 2:07:43 PM</CreatedDate>
    <StateName>Fulfilled</StateName>
    <StatusDate>10/24/2011 2:07:43 PM</StatusDate>
  </KeyOrder>
</OrderProcessStatusRequest>
```

**Response:** OrderProcessStatusResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<OrderProcessStatusResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000027</OrderNumber>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</OrderProcessStatusResponse>
```

### 4.3.2. Import Keys

This function imports the XML file that was exported from HP as a manual workaround into the FKI database during a connectivity outage.  This manually imports the product keys in the same manner as the normal (automated) transfer process and sets them to Allocated.  For any orders that contain product keys, the state will be set to Fulfilled.  This will generate an audit log entry.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ImportKeys
**HTTP Method:** POST

**Request:** ImportKeysRequest
```xml
<?xml version="1.0" encoding="utf-8"?>
```

```
<ImportKeysRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSpecific>
    <TransferID>40</TransferID>
    <Authenticator>9ff53275-7e24-4ff9-8c18-919f1f1eced7</Authenticator>
    <Quantity>5001</Quantity>
    <ExportChecksum>0x00FFB4BE99EC777E78D693E645265B430100000083EEEE6710A32F0EC15B04F6388995E
    FC043726E186B609A3A10621DDF5F79EDCBEA84DC50AA99107697BBD92B0AC14A9335B52432A91FCAE5306D39
    B1BC8FD3077B43479464434B72046F95914C7676</ExportChecksum>
    <FactoryID>2</FactoryID>
  </HPSpecific>
  <KeyOrders>
    <KeyOrder>
      <KeyOrderID>1</KeyOrderID>
      <KeyOrderStateID>56</KeyOrderStateID>
      <OrderNumber>DEVFACTY#20000000001</OrderNumber>
      <StatusDate>2011-09-15 13:56:00.850</StatusDate>
    </KeyOrder>
  </KeyOrders>
  <ProductKeys>
    <ProductKey>
      <ProductKeyID>10002</ProductKeyID>
      <KeyOrderID>1</KeyOrderID>
      <ProductKeyStateID>52</ProductKeyStateID>
<EncryptedProductKey>0x004164E8123666D98E175C7411C03F2C01000000C54DD9C4B6DD78F9F1D97B899E2A8AB
A47ECED1E00FE504955F72A8CACF4A9226BDCFE5B10CF8B5BD69A6D827C854CDBC14A0D76AEFD6D53C52B610DCF366
FB8DEBCDA229AE629BD17073B4F97F6E27E
</EncryptedProductKey>
      <LicensablePartNumber>WN7-00612</LicensablePartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <StatusDate>2011-09-15 13:56:00.887</StatusDate>
      <CreatedDate>2011-09-15 08:56:00.887</CreatedDate>
    </ProductKey>
    <ProductKey>
      <ProductKeyID>10003</ProductKeyID>
      <KeyOrderID>1</KeyOrderID>
      <ProductKeyStateID>52</ProductKeyStateID>
      <EncryptedProductKey>0x004164E8123666D98E175C7411C03F2C010000004A6E2D2771F712E378380A32
      55E2DAB935BE089FAEEAC7F47B972FE8C8208ED20AAB0F55F629C989FA978014760D3CD1681F5CE41197ED7
      79F55D15F9F23D91C4CA89988105F6122679172AF86F56EA1</EncryptedProductKey>
      <LicensablePartNumber>WN7-00612</LicensablePartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <StatusDate>2011-09-15 13:56:00.893</StatusDate>
      <CreatedDate>2011-09-15 08:56:00.893</CreatedDate>
    </ProductKey>
  </ProductKeys>
</ImportKeysRequest>
```

**Response:** ImportKeysResponse

```
<?xml version="1.0" encoding="utf-8" ?>
<ImportKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</ImportKeysResponse>
```

### 4.4. Injection and Build Reports

4.4.1. Consumed Report

This function reports product keys that are in the Consumed state for a given start and end date/time.
StartDateTime and EndDateTime rules:
- StartDateTime: cannot be blank
- EndDateTime: if blank/empty, this field will be filled with the current UTC date/time
- The date/time range (StartDateTime – EndDateTime) must be greater than 0
- The date/time range cannot be more than 7 days

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ConsumedReport

**HTTP Method:** POST

**Request:** ConsumedReportRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<ConsumedReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2011-09-10 19:56:00</StartDateTime>
  <EndDateTime>2011-09-16 21:56:00</EndDateTime>
</ConsumedReportRequest>
```

**Response:** ConsumedReportResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<ConsumedReportResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ProductKeyStateName>Consumed</ProductKeyStateName>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber>hieptest71</HPSerialNumber>
      <ProductKeyID>10002</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </ProductKey>
  </ProductKeys>
</ConsumedReportResponse>
```

#### 4.4.2. Bound Report

This function reports product keys that are in the Bound state for a given start and end date/time. These keys have completed the injection process; the HW hash values are sent back to FKI, awaiting submittal of a Computer Build Report (CBR).

StartDateTime and EndDateTime rules:

- StartDateTime: cannot be blank
- EndDateTime: if blank/empty, this field will be filled with the current UTC date/time
- The date time range (StartDateTime – EndDateTime) must be greater than 0
- The date time range cannot be more than 7 days

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/BoundReport

**HTTP Method:** POST
**Request:** BoundReportRequest

```xml
<?xml version="1.0" encoding="utf-8" ?>
<BoundReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2011-09-10 19:56:00</StartDateTime>
  <EndDateTime>2011-09-16 21:56:00</EndDateTime>
</BoundReportRequest>
```

**Response:** BoundReportResponse

```xml
<?xml version="1.0" encoding="utf-8" ?>
<BoundReportResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ProductKeyStateName>Bound</ProductKeyStateName>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <ConsumedDate>9/17/2011 8:56:00 PM</ConsumedDate>
      <StatusDate>9/16/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber>hieptest71</HPSerialNumber>
      <ProductKeyID>10002</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
  </ProductKeys>
</BoundReportResponse>
```

4.4.3.  Build Report

This function reports product keys that have been reported to HP as Build Complete, and the CBR has been received by MS for a given start and end date/time.

StartDateTime and EndDateTime rules:
- StartDateTime: cannot be blank
- EndDateTime: if blank/empty, this field will be filled with the current UTC date/time
- The date time range (StartDateTime – EndDateTime) must be greater than 0
- The date/time range cannot be more than 7 days

To align with the 5000-key limit in the MS Build Report, this function also has a limit of 5000 keys per XML, with three defined fields (TotalBoundReturnedKeysReported, KeysReportedNow, and KeysRemaining).  Since the Web Services are a state-less operation, the user needs to set a starting point for the SQL query.
- User sends a blank LastProductKeyID, which will tell the query to get the result from the beginning and up to 5000 rows.
- Check the KeysRemaining: If the value is 0, then all the rows will be retrieved; otherwise, the Web Services must be called again to retrieve any remaining rows.  Before calling the Web Services again, the user needs to set the LastProductKeyID to the last PKID that was retrieved from the previous response.  This will set the Web Services to start the result set one row after the provided PKID.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/BuildReport

**HTTP Method:** POST
**Request:** BuildReportRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<BuildReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2011-09-16 19:56:00</StartDateTime>
  <EndDateTime>2011-09-17 21:56:00</EndDateTime>
  <LastProductKeyID></LastProductKeyID>
</BuildReportRequest>
```

**Response:** BuildReportResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<BuildReportResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <TotalBoundKeysReported>5000</TotalBoundKeysReported>
  <KeysReportedNow>5000</KeysReportedNow>
  <KeysRemaining>1500</KeysRemaining>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <ProductKeyStateName>Bound</ProductKeyStateName>
      <ConsumedDate />
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10003</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
```

```
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>NotifiedBound</ProductKeyStateName>
      <ConsumedDate />
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10004</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>NotifiedBound</ProductKeyStateName>
      <ConsumedDate />
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10005</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>NotifiedBound</ProductKeyStateName>
      <ConsumedDate />
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10006</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>NotifiedBound</ProductKeyStateName>
      <ConsumedDate />
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10007</ProductKeyID>
      <UnitPartNumber />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ChangeMachine>HNGUYEN67</ChangeMachine>
    </ProductKey>
  </ProductKeys>
</BuildReportResponse>
```

### 4.4.4. Export Bound and Returned Keys

This function provides a way for the user to get the Bound and Returned keys for manual delivery to HP in the event of lost connectivity. The bound keys are needed to submit the CBR to MS for activation. To align with the 5000-key limit in the MS Build Report, this function is also limited to 5000 keys per XML, with three defined fields (TotalBoundReturnedKeysReported, KeysReportedNow, and KeysRemaining):

```
<TotalBoundKeysReported></TotalBoundKeysReported>
<KeysReportedNow></KeysReportedNow>
<KeysRemaining></KeysRemaining>
```

*The following XML files are SAMPLES ONLY. Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ExportBoundReturnedKeys

**HTTP Method:** GET

**Request: Empty**

**Response:** ExportBoundReturnedKeysResponse

```xml
<?xml version="1.0" encoding="utf-8" ?>
<ExportBoundReturnedKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSpecific>
    <TransferID>10</TransferID>
    <Authenticator>cbc65718-6cdf-464a-934a-807a520e0398</Authenticator>
    <ExportChecksum>0x004164E8123666D98E175C7411C03F2C01000000E40DE46252F13CB89BBEF7BB4088C4F
    5DCD4C43FA5AD1016BD53665B6A4D6AD35E71F5062E3FBDFFB37AE5852F5C9D075AF498A8CDF78B916D679AB3
    24F67A85</ExportChecksum>
    <FactoryID>2</FactoryID>
    <TotalBoundReturnedKeysReported>2</TotalBoundReturnedKeysReported>
    <KeysReportedNow>2</KeysReportedNow>
    <KeysRemaining>0</KeysRemaining>
    <XMLFileName>ExpKeysDEVFACTY#225Oct2011200704.xml</XMLFileName>
  </HPSpecific>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <ProductKeyID>10002</ProductKeyID>
      <ProductKeyStateID>73</ProductKeyStateID>
      <OEMAdditionalInfo />
      <HardwareID />
      <ReturnReasonCode />
      <HPSerialNumber>hieptest71</HPSerialNumber>
      <StatusDate>2011-09-17 20:56:00.887</StatusDate>
      <ConsumedDate>2011-09-17 20:56:00.887</ConsumedDate>
      <UnitPartNumber />
    </ProductKey>
    <ProductKey>
      <ProductKeyID>10003</ProductKeyID>
      <ProductKeyStateID>74</ProductKeyStateID>
      <OEMAdditionalInfo />
      <HardwareID />
      <ReturnReasonCode />
      <HPSerialNumber />
      <StatusDate>2011-09-17 20:56:00.893</StatusDate>
      <ConsumedDate />
      <UnitPartNumber />
    </ProductKey>
  </ProductKeys>
</ExportBoundReturnedKeysResponse>
```

4.4.5.   Rollback Bound and Returned Keys

This function rolls back an XML file that was previously exported (see previous section, Export Bound and Returned Keys) to the states prior the export.  This allows recovery of Bound Key files that did not complete transfer to the HP server.  This will generate an audit log entry.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/RollbackBoundReturnedKeys

**HTTP Method:** POST

**Request:** ExportBoundReturnedKeysResponse
```
<?xml version="1.0" encoding="utf-8"?>
<ExportBoundReturnedKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSpecific>
    <TransferID>11</TransferID>
    <Authenticator>4b6d0b6f-5c95-425a-9d8f-bf4dfa90c25f</Authenticator>
    <ExportChecksum>0x004164E8123666D98E175C7411C03F2C01000000AF54B1E94EE7596A9B305EF6F6180FA
    67C6E7EBCF280D42B311953AB0EA3D18843DD239436AA2843DF5973F12A1D51DCF26C6431EF53F6DD5C024C7F
    2E85EFC1</ExportChecksum>
    <FactoryID>2</FactoryID>
    <TotalBoundReturnedKeysReported>2</TotalBoundReturnedKeysReported>
    <KeysReportedNow>2</KeysReportedNow>
    <KeysRemaining>0</KeysRemaining>
    <XMLFileName>ExpKeysDEVFACTY#225Oct2011201706.xml</XMLFileName>
  </HPSpecific>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage></ReturnMessage>
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <ProductKeyID>10002</ProductKeyID>
      <ProductKeyStateID>73</ProductKeyStateID>
      <OEMAdditionalInfo  />
      <HardwareID  />
      <ReturnReasonCode  />
      <HPSerialNumber>hieptest71</HPSerialNumber>
      <StatusDate>2011-09-17 20:56:00.887</StatusDate>
      <ConsumedDate>2011-09-17 20:56:00.887</ConsumedDate>
      <UnitPartNumber  />
    </ProductKey>
    <ProductKey>
      <ProductKeyID>10003</ProductKeyID>
      <ProductKeyStateID>74</ProductKeyStateID>
      <OEMAdditionalInfo  />
      <HardwareID  />
      <ReturnReasonCode  />
      <HPSerialNumber  />
      <StatusDate>2011-09-17 20:56:00.893</StatusDate>
      <ConsumedDate  />
      <UnitPartNumber  />
    </ProductKey>
  </ProductKeys>
```

```
</ExportBoundReturnedKeysResponse>
```

**Response:** RollbackBoundKeysResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<RollbackBoundReturnedKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</RollbackBoundReturnedKeysResponse>
```

### 4.5.    Returns

4.5.1.    Return Report

This report shows all records that have been reported to HP (key state=NOTIFIEDRETURN) or will be reported (key state=RETURN) for processing by MS.  The report will show ODM/CM Site Identifier, State, ConsumedDate, StatusDate, SerialNumber, PKID, UnitPartNumber, SKUID, ReturnReasonCode, and HPPartNumber.  The report shows product key records whose state is NotifiedReturned for the day specified between <StartDateTime> and <EndDateTime>.  The report returns all records starting from midnight of the specified day.

StartDateTime and EndDateTime rules:
- StartDateTime: cannot be blank
- EndDateTime: if blank/empty, this field will be filled with the current UTC date/time
- The date/time range (StartDateTime – EndDateTime) must be greater than 0
- The date/time range cannot be more than 7 days

There are some fields in the response that are expected to have no value in RMA manufacturing:
- For a used key, the ProductKeyID, UnitPartNumber, and SKUID fields are blank.
- For an unused key, the HPSerialNumber, UnitPartNumber, and SKUID fields are blank.

To align with the 5000-key limit in the MS Build Report, this function is also limited to 5000 keys per XML, with three defined fields (TotalBoundReturnedKeysReported, KeysReportedNow, and KeysRemaining):
```
<TotalBoundKeysReported></TotalBoundKeysReported>
<KeysReportedNow></KeysReportedNow>
<KeysRemaining></KeysRemaining>
```

**NOTE:** This function provides 2 different kinds of Key Returned reports: "Unused Key Returned" report and "Used Key Returned" report.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnReport

**HTTP Method:** POST
**Request**: ReturnReportRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2011-09-16 19:56:00</StartDateTime>
  <EndDateTime>2011-09-17 21:56:00</EndDateTime>
  <LastProductKeyID />
```

```xml
    <KeyType>UnusedKey or UsedKey</KeyType>
</ReturnReportRequest>
```

**Response:** ReturnReportResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<ReturnReportResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <TotalReturnedKeysReported>5</TotalReturnedKeysReported>
  <KeysReportedNow>5</KeysReportedNow>
  <KeysRemaining>15</KeysRemaining>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
    <ReportTime>10/25/2011 9:57:54 PM</ReportTime>
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <ProductKeyStateName>Returned</ProductKeyStateName>
      <CreatedDate>9/17/2011 8:56:00 PM</ CreatedDate>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber>hieptest71</HPSerialNumber>
      <ProductKeyID>10002</ProductKeyID>
      <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
      <ReturnReasonCode />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>Returned</ProductKeyStateName>
      <CreatedDate>9/17/2011 8:56:00 PM</CreatedDate>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10003</ProductKeyID>
      <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
      <ReturnReasonCode />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>Returned</ProductKeyStateName>
      <CreatedDate>9/17/2011 8:56:00 PM</CreatedDate>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10004</ProductKeyID>
      <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
      <ReturnReasonCode />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
    <ProductKey>
      <ProductKeyStateName>Returned</ProductKeyStateName>
      <CreatedDate>9/17/2011 8:56:00 PM</CreatedDate>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10005</ProductKeyID>
      <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
      <ReturnReasonCode />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
    <ProductKey>
```

```
      <ProductKeyStateName>Returned</ProductKeyStateName>
      <CreatedDate>9/17/2011 8:56:00 PM</CreatedDate>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPSerialNumber />
      <ProductKeyID>10006</ProductKeyID>
      <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
      <ReturnReasonCode />
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
  </ProductKeys>
</ReturnReportResponse>
```

4.5.2.  Return Used Product Keys

This function is used to return a product key consumed in the manufacturing process back to Microsoft for credit.  This first finds the product key record based on the HP serial number search criteria and updates the state for that serial number to Returned.  If the serial number cannot be found, such as in the case of the unit not being built in that location – for example RMA – a new record will be added into the SerialNumberReturns table.

Before calling this Web Service method, the Shop Floor system will need to retrieve the valid value to be used in the Request.  The Web Service method "ReturnReasonCodeList" should be called to retrieve this value and the returned value should be used for xml tag <ReturnCode" in the Request xml data below. (Refer to Section 4.6.9 for more details)

**NOTE:** ReturnDate is optional. If provided, ReturnDate must be UTC Date/Time in valid format

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUsedKey
**HTTP Method:** POST

**Request:** ReturnUsedKeysRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUsedKeysRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <SNs>
    <SN>
      <HPSerialNumber>HPSN1111</HPSerialNumber>
      <ConfirmHPSerialNumber>HPSN1111</ConfirmHPSerialNumber>
      <ReturnCode>3</ReturnCode>
      <ReturnDate>2011-10-24 14:05:00</ReturnDate>
    </SN>
    <SN>
      <HPSerialNumber>HPSN2222</HPSerialNumber>
      <ConfirmHPSerialNumber>HPSN2222</ConfirmHPSerialNumber>
      <ReturnCode>3/ReturnCode>
      <ReturnDate>2011-10-24 14:05:00</ReturnDate>
    </SN>
  </SNs>
</ReturnUsedKeysRequest>
```

**Response:** ReturnUsedKeysResponse
**Success Response:**
```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<ReturnUsedKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</ReturnUsedKeysResponse>
```

**Fail Response:**
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUsedKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>601</ReturnCode>
    <ReturnMessage> Error - There are 1 Serial numbers that cannot be returned, since they
have already been returned.</ReturnMessage>
  </ExecutionResult>
  <SNs>
   <SN>
      <HPSerialNumber>hpsn001</HPSerialNumber>
      <ProductKeyStateName>Returned</ProductKeyStateName>
   </SN>
  </SNs>
</ReturnUsedKeysResponse>
```

### 4.5.3.  Return Unused Keys

This function allows the site to return excess unused keys back to Microsoft for credit.  This marks the state of the specified quantity of keys Returned and specifies the reason as "Excess."  This generates an audit log entry.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUnusedKey
**HTTP Method:** POST

**Request:** ReturnUnusedKeysRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUnusedKeysRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
  <Quantity>10</Quantity>
</ReturnUnusedKeysRequest>
```

**Response:** ReturnUnusedKeysResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUnusedKeysResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</ReturnUnusedKeysResponse>
```

## 4.6.    Part Number and Miscellaneous

4.6.1.   HP Part List

This function allows the factory to retrieve a list of all active HP part numbers (code=1) and their descriptions. This information is obtained from the ProductTranslation table.

Only products with code=1 will be displayed, which are the only products the sites can order.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/HPPartList

**HTTP Method:** GET

**Response:** HPPartListResponse

```
<?xml version="1.0" encoding="utf-8" ?>
<HPPartListResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <PartNumbers>
    <PartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ProductName>Windows Developer Preview NEXT PreBeta OEM OLC OA3 PreRelease
      </ProductName>
      <SortOrder>1</SortOrder>
      <MaxSiteInventory>10000</MaxSiteInventory>
    </PartNumber>
  </PartNumbers>
</HPPartListResponse>
```

4.6.2.   Modify HP Part List Sort Order

This function allows the user to change the sort order of frequently used HP part numbers.  The user can make a request to update active part numbers' sort order for a whole list or a partial list.  For a partial part number list, these part numbers will be put at the top of the current order list.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SortOrderHPPartList
**HTTP Method:** POST

**Request:** SortOrderHPPartListRequest

```
<?xml version="1.0" encoding="utf-8" ?>
<SortOrderHPPartListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <PartNumbers>
    <PartNumber>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
      <ProductName>Windows Developer Preview NEXT PreBeta OEM OLC OA3 PreRelease
Professional</ProductName>
      <SortOrder>1</SortOrder>
    </PartNumber>
    <PartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
```

```
      <ProductName>Windows Developer Preview NEXT PreBeta OEM OLC OA3 PreRelease
Ultimate</ProductName>
      <SortOrder>2</SortOrder>
    </PartNumber>
  </PartNumbers>
</SortOrderHPPartListRequest>
```

**Response:** SortOrderHPPartListResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<SortOrderHPPartListResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</SortOrderHPPartListResponse>
```

4.6.3.    Inventory Report

This function returns the counts of the current product keys by type and state.  This allows the sites to manage their inventory based on the current information.  The report can be filtered by the key state: Allocated, Consumed, Bound or Return.  The default filter (which is a blank filter value) will include all four states.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/InventoryReport
**HTTP Method:** POST

**Request:** InventoryReportRequest
Using default (filter is blank/empty)
```
<?xml version="1.0" encoding="utf-8" ?>
<InventoryReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter></Filter>
</InventoryReportRequest>
```

Filter by state=Allocated
```
<?xml version="1.0" encoding="utf-8" ?>
<InventoryReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>Allocated</Filter>
</InventoryReportRequest>
```

Filter by state=Consumed
```
<?xml version="1.0" encoding="utf-8" ?>
<InventoryReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>Consumed</Filter>
</InventoryReportRequest>
```

Filter by state=Bound
```
<?xml version="1.0" encoding="utf-8" ?>
<InventoryReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>Bound</Filter>
</InventoryReportRequest>
```

Filter by state=Returned

```xml
<?xml version="1.0" encoding="utf-8" ?>
<InventoryReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>Returned</Filter>
</InventoryReportRequest>
```

**Response:** InventoryReportResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<InventoryReportResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <Quantity>1</Quantity>
      <ProductKeyStateName>Returned</ProductKeyStateName>
    </ProductKey>
    <ProductKey>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <Quantity>1</Quantity>
      <ProductKeyStateName>Bound</ProductKeyStateName>
    </ProductKey>
    <ProductKey>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <Quantity>1</Quantity>
      <ProductKeyStateName>Consumed</ProductKeyStateName>
    </ProductKey>
    <ProductKey>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <Quantity>1</Quantity>
      <ProductKeyStateName>Allocated</ProductKeyStateName>
    </ProductKey>
  </ProductKeys>
</InventoryReportResponse>
```

### 4.6.4.  Set Min Thresholds for Email Alert

This function allows the site to specify minimum inventory threshold levels per HP part number.  When the inventory of the HP part number reaches the minimum threshold, the Web Services will send out a notification, if valid email addresses are included,.  The AlertEmail field can contain multiple email addresses, separated by semicolons up to a limit of 128 characters including the semicolons.

***The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.***

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SetMinThresholds
**HTTP Method:** POST

**Request:** Set MinThresholdsRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<SetMinThresholdsRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Thresholds>
    <Threshold>
      <MinInventoryLevel>1000</MinInventoryLevel>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
```

```
    <AlertEmail>support1@hp.com;support2@hp.com</AlertEmail>
  </Threshold>
  <Threshold>
    <MinInventoryLevel>2000</MinInventoryLevel>
    <HPPartNumber>HPWIN8Pro</HPPartNumber>
    <AlertEmail>support2@hp.com;support1@hp.com</AlertEmail>
  </Threshold>
  </Thresholds>
</SetMinThresholdsRequest>
```

**Response:** SetMinThresholdsResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<SetMinThresholdsResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</SetMinThresholdsResponse>
```

### 4.6.5.  Get Min Thresholds for Email Alert

This function allows the site to retrieve the current set of minimum threshold levels by HP part number.  The AlertEmail field can contain multiple email addresses, separated by semicolons up to a limit of 128 characters including the semicolons.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetMinThresholds

**HTTP Method:** GET
**Response:** GetMinThresholdsResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<GetMinThresholdsResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <PartNumbers>
    <PartNumber>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
      <ProductName>Windows Developer Preview NEXT PreBeta OEM OLC OA3 PreRelease
      Pro</ProductName>
      <MinInventoryLevel>2000</MinInventoryLevel>
      <AlertEmail>support1@hp.com;support2@hp.com</AlertEmail>
      <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
      <CreatedDate>10/26/2011 4:25:10 PM</CreatedDate>
      <CreatedByMachine>HNGUYEN67</CreatedByMachine>
      <ModifiedBy>AMERICAS\nguyhiep</ModifiedBy>
      <ModifiedDate>10/27/2011 4:25:10 PM</ModifiedDate>
```

```
    </PartNumber>
    <PartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <ProductName>Windows Developer Preview NEXT PreBeta OEM OLC OA3 PreRelease
Ult</ProductName>
      <MinInventoryLevel>1000</MinInventoryLevel>
      <AlertEmail>support1@hp.com;support2@hp.com</AlertEmail>
      <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
      <CreatedDate>10/26/2011 4:25:10 PM</CreatedDate>
      <CreatedByMachine>HNGUYEN67</CreatedByMachine>
      <ModifiedBy>AMERICAS\nguyhiep</ModifiedBy>
      <ModifiedDate>10/27/2011 4:25:10 PM</ModifiedDate>
    </PartNumber>
  </PartNumbers>
</GetMinThresholdsResponse>
```

### 4.6.6.  Unit Re-Serialization

This function allows changing a Unit Serial Number from the current Serial Number to a new one.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnitReSerialization
**HTTP Method:** POST

**Request:** UnitReSerializationRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<UnitReSerializationRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSerialNumber>HPSNOld</HPSerialNumber>
  <ConfirmHPSerialNumber>HPSNOld</ConfirmHPSerialNumber>
  <NewHPSerialNumber>HPSNNew</NewHPSerialNumber>
</UnitReSerializationRequest>
```

**Response:** UnitReSerializationResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<UnitReSerializationResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSerialNumber>HPSNOld</HPSerialNumber>
  <NewHPSerialNumber>HPSNNew</NewHPSerialNumber>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</UnitReSerializationResponse>
```

### 4.6.7.  Get Unit Status

This function allows reporting of the digital COA status of a UUT based on its serial number.  The request will take a required <HPSerialNumber> and an optional <ProductKeyID> (empty value).  When the user provides both field values, the Web Services use both for the query comparasion; otherwise, only the provided serial number is used.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnitStatus
**HTTP Method:** POST


**Request:** UnitStatusRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<UnitStatusRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPSerialNumber>HPSN1234</HPSerialNumber>
  <ProductKeyID>10002</ProductKeyID>
</UnitStatusRequest>
```

**Response:** UnitStatusResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<UnitStatusResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
        <ProductKey>
          <ProductKeyID>10002</ProductKeyID>
          <ProductKeyStateName>Allocated</ProductKeyStateName>
          <HPPartNumber>HPWIN8Ult</HPPartNumber>
          <HPSerialNumber>HPSN1234</HPSerialNumber>
          <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
          <ConsumedDate>9/17/2011 8:56:00 PM</ConsumedDate>
          <CreatedDate>9/15/2011 8:56:00 AM</CreatedDate>
          <UnitPartNumber />
          <ChangeRequestor>AMERICAS\nguyhiep</ChangeRequestor>
        </ProductKey>
  </ProductKeys>
</UnitStatusResponse>
```


### 4.6.8.   Get Key Order State List

This function allows retrieval of the list of these key order states: Submitted, Fulfilled, Rejected, Cancelled, Request.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*


**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/KeyOrderStateList
**HTTP Method:** GET

**Response:** KeyOrderStateListResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<KeyOrderStateListResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <KeyOrderStates>
        <KeyOrderState>
                <KeyOrderStateID>21</KeyOrderStateID>
                <KeyOrderStateName>Submitted</KeyOrderStateName>
        </KeyOrderState>
```

```
        <KeyOrderState>
                <KeyOrderStateID>22</KeyOrderStateID>
                <KeyOrderStateName>Fulfilled</KeyOrderStateName>
        </KeyOrderState>
        <KeyOrderState>
                <KeyOrderStateID>23</KeyOrderStateID>
                <KeyOrderStateName>Rejected</KeyOrderStateName>
        </KeyOrderState>
        <KeyOrderState>
                <KeyOrderStateID>24</KeyOrderStateID>
                <KeyOrderStateName>Cancelled</KeyOrderStateName>
        </KeyOrderState>
        <KeyOrderState>
                <KeyOrderStateID>30</KeyOrderStateID>
                <KeyOrderStateName>Request</KeyOrderStateName>
        </KeyOrderState>
  </KeyOrderStates>
</KeyOrderStateListResponse>
```

### 4.6.9. Get Return Reason Code List

This function allows retrieval of the list of Return Reason Codes that will be used to return used Product Keys

*The following XML files are SAMPLES ONLY. Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnReasonCodeList

**HTTP Method:** GET

**Response:** ReturnReasonCodeListResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnReasonCodeListResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ReturnReasonCodes>
        <ReturnReasonCode>
                <ReasonCode>3</ReasonCode>
                <Description>Manufacturing Damage</Description>
        </ReturnReasonCode>
  </ReturnReasonCodes>
</ReturnReasonCodeListResponse>
```

### 4.6.10. Get list of HP Part Numbers which have at least 1 Allocated product key

This function allows retrieval of the list of HP Part Numbers that have at least one Allocated product key based on a specific Date range in UTC

*The following XML files are SAMPLES ONLY. Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnusedHPPartNumberList

**HTTP Method:** POST

**Request:** UnusedHPPartNumberListRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<UnusedHPPartNumberListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2012-4-1 5:0:1</StartDateTime>
  <EndDateTime>2012-5-1 4:59:59</EndDateTime>
</UnusedHPPartNumberListRequest>
```

**Response:** UnusedHPPartNumberListResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<UnusedHPPartNumberListResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <UnusedHPPartNumbers>
    <UnusedHPPartNumber>
          <HPPartNumber>HPWIN8Ult</HPPartNumber>
          <HPProductName>Windows Developer Preview NEXT PreBeta OEM OLC OA3 PreRelease
          </HPProductName>
          <Quantity>1</Quantity>
          <MaxSiteInventory>10000</MaxSiteInventory>
    </UnusedHPPartNumber>
  </UnusedHPPartNumbers>
</UnusedHPPartNumberListResponse>
```

### 4.6.11. Get list of all key orders

This function allows retrieval of all key orders with details in the FKI database based on FilterName, FilterValue, and SiteType.

- If FilterName is OrderNumber,
    - then it returns all key orders if FilterValue is empty and
    - it returns a specific key order if FilterValue is not empty.
- If FilterName is HPPartNumber,
    - then it returns all key orders if FilterValue is empty and
    - it returns key orders for a specific HP Part Number if FilterValue is not empty.
- SiteType value is always "Factory" for Factory sites

*Note:*
*OrderNumber is from 11 to 20 characters.*
*HPPartNumber can be up to 18 characters.*

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ListAllOrders

**HTTP Method:** POST

**Request:** ListAllOrdersRequest

```xml
<?xml version="1.0" encoding="utf-8" ?>
<ListAllOrdersRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <FilterName>OrderNumber</FilterName>
  <FilterValue>DEVFACTY#20000000043</FilterValue>
  <SiteType>Factory</SiteType>
</ListAllOrdersRequest>


<?xml version="1.0" encoding="utf-8" ?>
<ListAllOrdersRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <FilterName>HPPartNumber</FilterName>
  <FilterValue>HPWIN8Ult</FilterValue>
  <SiteType>Factory</SiteType>
</ListAllOrdersRequest>
```

**Response:** ListAllOrdersResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<ListAllOrdersResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeyOrders>
        <ProductKeyOrder>
                <OrderNumber>DEVFACTY#20000000047</OrderNumber>
                <Quantity>4</Quantity>
                <Allocated>0</Allocated>
                <Consumed>0</Consumed>
                <Bound>0</Bound>
                <NotifiedBound>0</NotifiedBound>
                <Returned>0</Returned>
                <KeyOrderStateName>Request</KeyOrderStateName>
                <HPPartNumber>HPWIN8Ult2</HPPartNumber>
                <FulfilledDate />
                <PurchaseOrder>PO1111</PurchaseOrder>
                <OrderCreatedDate>10/26/2011 8:07:53 PM</OrderCreatedDate>
                <OrderedBy>AMERICAS\nguyhiep</OrderedBy>
        </ProductKeyOrder>
        <ProductKeyOrder>
                <OrderNumber>DEVFACTY#20000000046</OrderNumber>
                <Quantity>2</Quantity>
                <Allocated>0</Allocated>
                <Consumed>0</Consumed>
                <Bound>0</Bound>
                <NotifiedBound>0</NotifiedBound>
                <Returned>0</Returned>
                <KeyOrderStateName>RequestComplete</KeyOrderStateName>
                <HPPartNumber>HPWIN8Ult2</HPPartNumber>
                <FulfilledDate />
                <PurchaseOrder>PO1111</PurchaseOrder>
                <OrderCreatedDate>10/26/2011 8:07:53 PM</OrderCreatedDate>
                <OrderedBy>AMERICAS\nguyhiep</OrderedBy>
        </ProductKeyOrder>
  </ProductKeyOrders>
</ListAllOrdersResponse>
```

4.6.12.   <u>Get list of Purchase Orders based on a specific HP Part Number</u>

This function retrieves the list of Purchase Orders and Purchase Order Line Items based on a specific HP Part Number.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetPOByHPPartNumber

**HTTP Method:** POST

**Request:** GetPurchaseOrderRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<GetPurchaseOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
</GetPurchaseOrderRequest>
```

**Response:** GetPurchaseOrderResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<GetPurchaseOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <PurchasePartNumbers>
    <PurchasePartNumber>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <PurchaseOrder>PO1111</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem1111</PurchaseOrderLineItem>
      <CreatedDate>10/26/2011 8:07:53 PM</CreatedDate>
      <LastModifiedDate>11/26/2011 8:07:53 PM</LastModifiedDate>
    </PurchasePartNumber>
    <PurchasePartNumber>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
      <PurchaseOrder>PO2222</PurchaseOrder>
      <PurchaseOrderLineItem>POLineItem2222</PurchaseOrderLineItem>
      <CreatedDate>10/26/2011 8:08:37 PM</CreatedDate>
      <LastModifiedDate>11/26/2011 8:07:53 PM</LastModifiedDate>
    </PurchasePartNumber>
  </PurchasePartNumbers>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</GetPurchaseOrderResponse>
```

4.6.13.   <u>Get list of all HP Part Numbers with Product Key details, min thresholds, max thresholds, alert emails</u>

This function allows retrieval of HP Part Numbers and includes Product Key details, min thresholds, and alert emails. It takes HP Part Number as input. If HP Part Number is empty, it returns information for all HP Part Numbers. If HP Part Number is not empty, it returns information only for that specific HP Part Number.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ListPKsByHPPN

**HTTP Method:** POST

**Request:** ListPKsByHPPNRequest

```xml
<?xml version="1.0" encoding="utf-8" ?>
<ListPKsByHPPNRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber></HPPartNumber>
</ListPKsByHPPNRequest>
```

**Response:** ListPKsByHPPNResponse

```xml
<?xml version="1.0" encoding="utf-8" ?>
<ListPKsByHPPNResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <HPPartNumberPKs>
        <HPPartNumberPK>
                <HPPartNumber>HPWIN8Pro</HPPartNumber>
                <Allocated>0</Allocated>
                <Consumed>1</Consumed>
                <Bound>0</Bound>
                <NotifiedBound>0</NotifiedBound>
                <Returned>0</Returned>
                <MinimumInventory>15000</MinimumInventory>
                <MaximumInventory>50000</MaximumInventory>
                <AlertEmail>g@f2.com;r@g2.com</AlertEmail>
                <Total>1</Total>
                <EndEffectiveDate>11/1/2012 12:00:00 AM</EndEffectiveDate>
                <MaxSiteInventory>80000</MaxSiteInventory>
                <AutoOrderEnabled>True</AutoOrderEnabled>
        </HPPartNumberPK>
        <HPPartNumberPK>
                <HPPartNumber>HPWIN8Ult</HPPartNumber>
                <Allocated>1</Allocated>
                <Consumed>12997</Consumed>
                <Bound>0</Bound>
                <NotifiedBound>0</NotifiedBound>
                <Returned>1</Returned>
                <MinimumInventory>4</MinimumInventory>
                <MaximumInventory>50</MaximumInventory>
                <AlertEmail>hiep@hp.com</AlertEmail>
                <Total>12999</Total>
                <EndEffectiveDate>11/1/2012 12:00:00 AM</EndEffectiveDate>
                <MaxSiteInventory>800</MaxSiteInventory>
                <AutoOrderEnabled>False</AutoOrderEnabled>
        </HPPartNumberPK>
  </HPPartNumberPKs>
</ListPKsByHPPNResponse>
```

### 4.6.14. Allocated Report

This report shows all Product Key records that have an Allocated status.  The report will show StatusDate, PKID, and HPPartNumber.  The report shows product key records whose state is Allocated for the day

specified between <StartDateTime> and <EndDateTime>.  The report returns all records starting from midnight of the specified day.

StartDateTime and EndDateTime rules:
- StartDateTime: cannot be blank
- EndDateTime: if blank/empty, this field will be filled with the current UTC date/time
- The date/time range (StartDateTime – EndDateTime) must be greater than 0
- The date/time range cannot be more than 7 days

To align with the 5000-key limit in the MS Build Report, this function is also limited to 5000 keys per XML, with three defined fields (TotalAllocatedKeysReported, KeysReportedNow, and KeysRemaining):

```
<TotalAllocatedKeysReported></TotalAllocatedKeysReported>
<KeysReportedNow></KeysReportedNow>
<KeysRemaining></KeysRemaining>
```

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/AllocatedReport

**HTTP Method:** POST
**Request**: AllocatedReportRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<AllocatedReportRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2011-09-16 19:56:00</StartDateTime>
  <EndDateTime>2011-09-17 21:56:00</EndDateTime>
  <LastProductKeyID />
</AllocatedReportRequest>
```

**Response:** AllocatedReportResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<AllocatedReportResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ProductKeyStateName>Allocated</ProductKeyStateName>
  <TotalAllocatedKeysReported>2</TotalAllocatedKeysReported>
  <KeysReportedNow>2</KeysReportedNow>
  <KeysRemaining>0</KeysRemaining>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <ProductKeys>
    <ProductKey>
      <ProductKeyID>10002</ProductKeyID>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
    <ProductKey>
      <ProductKeyID>10006</ProductKeyID>
      <StatusDate>9/17/2011 8:56:00 PM</StatusDate>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
    </ProductKey>
  </ProductKeys>
</AllocatedReportResponse>
```

4.6.15.  Get the Current Maximum Key Quantity That Can Be Ordered

This function allows retrieval of the current maximum number of keys that can be ordered for a specific HP Part Number.  The quantity returned is based on the number of keys that have been ordered for the specific HP Part Number and the current limit specified for the maximum inventory quantity.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/NewKeyOrderMaxQuantity

**HTTP Method:** POST

**Request:** NewKeyOrderMaxQuantityRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<NewKeyOrderMaxQuantityRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
</NewKeyOrderMaxQuantityRequest>
```

**Response:** NewKeyOrderMaxQuantityResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<NewKeyOrderMaxQuantityResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <NewKeyOrderMaxQuantity>19989</NewKeyOrderMaxQuantity>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</NewKeyOrderMaxQuantityResponse>
```

4.6.16.  Get the Total Number of Allocated Product Keys

This function allows retrieval of the total number of Allocated product keys for the current calendar month for a specific HP Part Number.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:**
https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnusedPKReturnMaxQuantity

**HTTP Method:** POST

**Request:** MaxAllocatedQuantityRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<MaxAllocatedQuantityRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
</MaxAllocatedQuantityRequest>
```

**Response:** MaxAllocatedQuantityResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<MaxAllocatedQuantityResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <MaxAllocatedQuantity>3</MaxAllocatedQuantity>
  <ExecutionResult>
```

```
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</MaxAllocatedQuantityResponse >
```

4.6.17.  Return Unused Allocated Product Keys for Incorrect Orders

This function allows shop floor users to return unused, Allocated product keys for incorrect key orders. These unused product keys can only returned within 20 days following the date of fulfillment.  This action requires HP approval.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:**https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUnusedKeysWrongOrder

**HTTP Method:** POST

**Request:** ReturnUnusedKeysWrongOrderRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUnusedKeysWrongOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <OrderNumber>DEVFACTY#20000000038</OrderNumber>
  <Quantity>3</Quantity>
</ReturnUnusedKeysWrongOrderRequest>
```

**Response:** ReturnUnusedKeysWrongOrderResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUnusedKeysWrongOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</ReturnUnusedKeysWrongOrderResponse>
```

4.6.18.  Return Unused Product Keys for End of Life HP Part Numbers

This function allows shop floor users to return unused product keys for End of Life HP Part Numbers.  The HP Part Number must
- have passed "End Effective Date" and
- have non-zero Allocated key quantity

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUnusedKeysEOL

**HTTP Method:** POST

**Request:** ReturnUnusedKeysEOLRequest
```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<ReturnUnusedKeysEOLRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
  <Quantity>3</Quantity>
</ReturnUnusedKeysEOLRequest>
```

**Response:** ReturnUnusedKeysEOLResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<ReturnUnusedKeysEOLResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</ReturnUnusedKeysEOLResponse>
```

4.6.19.  Pending Order List

This allows shop floor users to view a list of pending key orders.  Pending orders do not have a status of Fulfilled, Rejected, or Cancelled.  The pending order list can be filtered by Submit Date/Time, OrderNumber, Quantity, or HP Part Number.

*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/PendingKeyOrderList

**HTTP Method:** POST

**Request:** PendingKeyOrderListRequest

No filter:
```
<?xml version="1.0" encoding="utf-8" ?>
<PendingKeyOrderListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter></Filter>
</PendingKeyOrderListRequest>
```

To filter using date/time range:
> User needs to specify the start date/time and end date/time in UTC time.  The date/time range cannot be more than 7 days.

```
<?xml version="1.0" encoding="utf-8" ?>
<PendingKeyOrderListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>StartDateTimeUTC=2011-10-24 14:05:00, EndDateTimeUTC=2011-10-26 08:00:00</Filter>
</PendingKeyOrderListRequest>
```

To filter using OrderNumber:
```
<?xml version="1.0" encoding="utf-8" ?>
<PendingKeyOrderListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>OrderNumber=DEVFACTY#20000000027</Filter>
</PendingKeyOrderListRequest>
```

To filter using Quantity:
```
<?xml version="1.0" encoding="utf-8" ?>
<PendingKeyOrderListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
```

```
  <Filter>Quantity=1000</Filter>
</PendingKeyOrderListRequest>
```

To filter using HP Part Number:
```
<?xml version="1.0" encoding="utf-8" ?>
<PendingKeyOrderListRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <Filter>HPPartNumber=HPWIN8Ult</Filter>
</PendingKeyOrderListRequest>
```

**Response:** PendingKeyOrderListResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<PendingKeyOrderListResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <PendingKeyOrderList>
    <PendingKeyOrder>
        <OrderNumber>DEVFACTY#20000000045</OrderNumber>
        <CreatedDate>4/16/2012 4:23:48 PM</CreatedDate>
        <HPPartNumber>HPWIN8Ult2</HPPartNumber>
        <Quantity>1</Quantity>
        <StateName>RequestComplete</StateName>
    </PendingKeyOrder>
    <PendingKeyOrder>
        <OrderNumber>DEVFACTY#20000000046</OrderNumber>
        <CreatedDate>4/17/2012 1:26:12 PM</CreatedDate>
        <HPPartNumber>HPWIN8Ult2</HPPartNumber>
        <Quantity>2</Quantity>
        <StateName>RequestComplete</StateName>
    </PendingKeyOrder>
    <PendingKeyOrder>
        <OrderNumber>DEVFACTY#20000000047</OrderNumber>
        <CreatedDate>4/18/2012 1:03:49 PM</CreatedDate>
        <HPPartNumber>HPWIN8Ult2</HPPartNumber>
        <Quantity>4</Quantity>
        <StateName>Request</StateName>
    </PendingKeyOrder>
  </PendingKeyOrderList>
</PendingKeyOrderListResponse>
```

4.6.20.  Get Dashboard Information

This function allows retrieval the dashboard information such as FKI primary/mirror/witness server metrics, etc.

***The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.***

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DashboardInfo

**HTTP Method:** GET

**Response:** DashboardInfoResponse
```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<DashboardInfoResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <LastHPConnectionDateTime>4/9/2012 9:34:18 AM</LastHPConnectionDateTime>
  <PrimaryIPAddress>1.0.0.0</PrimaryIPAddress>
  <PrimaryHostname>Primary</PrimaryHostname>
  <PrimaryStorageUsage>Total:26954(MB)/Free:26954(MB)</PrimaryStorageUsage>
  <PrimaryDuration></PrimaryDuration>
  <MirrorIPAddress>2.0.0.0</MirrorIPAddress>
  <MirrorHostname>Mirror</MirrorHostname>
  <MirrorStorageUsage>Total:26954(MB)/Free:26954(MB)</MirrorStorageUsage>
  <MirrorPrimaryDuration></MirrorPrimaryDuration>
  <WitnessIPAddress>3.0.0.0</WitnessIPAddress>
  <WitnessHostname>Witness</WitnessHostname>
  <HasMirror>Yes</HasMirror>
  <PrimaryStatus>Up</PrimaryStatus>
  <MirrorStatus>Up</MirrorStatus>
  <WitnessStatus>Up</WitnessStatus>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</DashboardInfoResponse>
```

### 4.6.21. <u>Get Order/Key Metric Data</u>

This function allows shop floor users to retrieve order/key metric data based on metric type. The available metric values are Order, KeyConsumption, CBR, and Returns. The metric data can be filtered on date range in UTC.

***The following XML files are SAMPLES ONLY. Refer to Appendix 2 for complete XSDs.***

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/KeyMetricData

**HTTP Method:** POST

**Request:** KeyMetricDataRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<KeyMetricDataRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <StartDateTime>2011-10-24 14:05:00</StartDateTime>
  <EndDateTime>2011-10-29 14:05:00</EndDateTime>
  <MetricType>Order</MetricType>
</KeyMetricDataRequest>
```

**Response:** KeyMetricDataResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<KeyMetricDataResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <KeyMetricInfo>
    <MinElapsedTime>10</MinElapsedTime>
    <MaxElapsedTime>20</MaxElapsedTime>
    <AvgElapsedTime>15</AvgElapsedTime>
  </KeyMetricInfo>
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
```

```
    </ExecutionResult>
</KeyMetricDataResponse>
```

### 4.6.22.  Delete Min Thresholds for Email Alert

This function allows the site to delete the current set of minimum threshold levels by HP part number
*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:** https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeleteMinThresholds

**HTTP Method:** POST
**Request:** DeleteMinThresholdsRequest
```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeleteMinThresholdsRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult5</HPPartNumber>
</DeleteMinThresholdsRequest>
```

**Response:** DeleteMinThresholdsResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeleteMinThresholdsResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</DeleteMinThresholdsResponse>
```

### 4.6.23.  Get Min/Max Thresholds for Auto Order

This function allows the site to get the current set of minimum/maximum threshold levels by HP part number
for Auto Order
*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:**
https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetMinMaxAutoOrderThresholds

**HTTP Method:** GET
**Response:** GetMinMaxAutoOrderResponse
```xml
<?xml version="1.0" encoding="utf-8" ?>
<GetMinMaxAutoOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
  <PartNumbers>
    <PartNumber>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
      <MinInventoryLevel>2000</MinInventoryLevel>
      <MaxInventoryLevel>7500</MaxInventoryLevel>
      <AutoOrderEnabled>True</AutoOrderEnabled>
      <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
      <CreatedDate>10/26/2011 4:25:10 PM</CreatedDate>
      <ModifiedBy>AMERICAS\nguyhiep</ModifiedBy>
```

```
        <ModifiedDate>10/27/2011 4:25:10 PM</ModifiedDate>
      </PartNumber>
      <PartNumber>
        <HPPartNumber>HPWIN8Ult</HPPartNumber>
        <MinInventoryLevel>1000</MinInventoryLevel>
        <MaxInventoryLevel>5000</MaxInventoryLevel>
        <AutoOrderEnabled>True</AutoOrderEnabled>
        <CreatedBy>AMERICAS\nguyhiep</CreatedBy>
        <CreatedDate>10/26/2011 4:25:10 PM</CreatedDate>
        <ModifiedBy>AMERICAS\nguyhiep</ModifiedBy>
        <ModifiedDate>10/27/2011 4:25:10 PM</ModifiedDate>
      </PartNumber>
    </PartNumbers>
</GetMinMaxAutoOrderResponse>
```

4.6.24.  <u>Set Min/Max Thresholds for Auto Order</u>

This function allows the site to set the current set of minimum/maximum threshold levels by HP part number for Auto Order
*The following XML files are SAMPLES ONLY.  Refer to Appendix 2 for complete XSDs.*

**URI:**
https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SetMinMaxAutoOrderThresholds

**HTTP Method:** POST

**Request:** SetMinMaxAutoOrderRequest
```
<?xml version="1.0" encoding="utf-8" ?>
<SetMinMaxAutoOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <AutoOrderThresholds>
    <AutoOrderThreshold>
      <HPPartNumber>HPWIN8Ult</HPPartNumber>
      <MinThreshold>100</MinThreshold>
      <MaxThreshold>200</MaxThreshold>
      <AutoOrderEnabled>True</AutoOrderEnabled>
    </AutoOrderThreshold>
    <AutoOrderThreshold>
      <HPPartNumber>HPWIN8Pro</HPPartNumber>
      <MinThreshold>2000</MinThreshold>
      <MaxThreshold>7500</MaxThreshold>
      <AutoOrderEnabled>False</AutoOrderEnabled>
    </AutoOrderThreshold>
  </AutoOrderThresholds>
</SetMinMaxAutoOrderRequest>
```

**Response:** SetMinMaxAutoOrderResponse
```
<?xml version="1.0" encoding="utf-8" ?>
<SetMinMaxAutoOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</SetMinMaxAutoOrderResponse>
```

4.6.25. Delete Min/Max Thresholds for Auto Order

This function allows the site to delete the current set of minimum/maximum threshold levels by HP part number for Auto Order

*The following XML files are SAMPLES ONLY. Refer to Appendix 2 for complete XSDs.*

**URI:**
https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeleteMinMaxAutoOrderThresholds

**HTTP Method:** POST
**Request:** DeleteMinMaxAutoOrderRequest

```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeleteMinMaxAutoOrderRequest xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <HPPartNumber>HPWIN8Ult</HPPartNumber>
</DeleteMinMaxAutoOrderRequest>
```

**Response:** DeleteMinMaxAutoOrderResponse

```xml
<?xml version="1.0" encoding="utf-8" ?>
<DeleteMinMaxAutoOrderResponse xmlns="http://HP.ITTS.OA30/digitaldistribution/2011/08">
  <ExecutionResult>
    <ReturnCode>000</ReturnCode>
    <ReturnMessage />
  </ExecutionResult>
</DeleteMinMaxAutoOrderResponse >
```

# 5. Web Services

## 5.1. Response Codes

| Response Code | Description |
|---|---|
| **200** | **Success**<br>The request was received and processed successfully. A response was sent, as documented in the individual Web Services response format specification. |
| **400** | **Bad Request**<br>The request was not properly formatted according to the format documented in the individual Web Services request format specification, or there was a validation error on the data provided with the request. |
| **401** | **Unauthorized**<br>User authentication has failed. |
| **404** | **Endpoint Not Found**<br>The requested resource is not found. Typically, this occurs when the request URI does not correctly address a resource by name or format. |
| **405** | **Method Not Allowed**<br>The HTTP method used is unsupported by the Web Services. |
| **500** | **Internal Server Error**<br>An error occurred while processing the request. |

**5.2.    Return Codes**

| Return Code | Description |
|---|---|
| **000** | Success |
| **600** | One or both registry keys are missing for encryption |
| **601** | Database operations failed. Error message will be displayed to indicate why it failed |
| **602** | Maximum quantity per order has been exceeded |
| **603** | Maximum total inventory quantity has been exceeded |
| **604** | Order ID does not exist in database |
| **605** | Current order state is not valid for deletion |
| **606** | One or more Serial Numbers do not exist in database |
| **607** | Current product key state is not valid for return |
| **608** | One or more HP Part Numbers do not exist in database/ are not valid |
| **609** | Key quantity for return exceeds key quantity on hand for an HP Part Number |
| **610** | XML file for key order/product key import has been tampered with or changed |
| **611** | Invalid input parameters |
| **612** | HP Serial Number already exists in RMA table in database |
| **613** | XML Schema for input data is not correct/expected |
| **614** | HP Serial Number and/or PKID does not exist in database |
| **615** | Not allowed to call Web Services |
| **616** | No records found / Records have been moved/exported to HP MKD system |

# Appendix 1– Summary of Key Activity

| Key Activity | Function | URI |
|---|---|---|
| **Purchase Order** | Set Purchase Order | POST –<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SetPurchaseOrder |
| | Get Purchase Order | GET –<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetPurchaseOrder |
| | Delete Purchase Order | POST –<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeletePurchaseOrder |
| **Request Key** | Order Request | POST –<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/Order |
| | Get Order Status | POST -<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetOrderStatus |
| | Export Order | POST –<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ExportOrder |
| | Rollback Export Order | POST –<br>https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/RollbackExportOrder |

| Key Activity | Function | URI |
|---|---|---|
| | Delete Order | POST – https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeleteOrder |
| | Order History | POST – https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/OrderHistory |
| **Deliver Key** | Order Process Status | POST - https://sapxii.sapnet.hp.com:8000/sap/xi/adapter_plain?service=com_hp_OA3_FKI_FAPJ&amp;namespace=urn%3Ahp-com%3Aglobal%3AOA3%3AFKI-FAPJ&amp;interface=SI_OrderProcessStatusRequest&amp;qos=EO |
| | Import Keys | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ImportKeys |
| **Injection and Build Report** | Consumed Report | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ConsumedReport |
| | Bound Report | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/BoundReport |
| | Export Bound-Returned Keys | GET - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ExportBoundReturnedKeys |
| | Rollback Bound-Returned Keys | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/RollbackBoundReturnedKeys |
| | Build Report | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/BuildReport |
| | Return Report | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnReport |
| **Returns** | Return Unused Product Keys | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUnusedKey |
| | Return Used Product Keys | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUsedKey |
| **Report and Misc** | HP Part List | GET- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/HPPartList |
| | Modify HP Part List Sort Order | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SortOrderHPPartList |

| Key Activity | Function | URI |
|---|---|---|
| | Set Minimum Thresholds for Email Alerting | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SetMinThresholds |
| | Get Minimum Thresholds for Email Alerting | GET - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetMinThesholds |
| | Inventory Report | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/InventoryReport |
| | Get Unit Status | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnitStatus |
| | Unit Re-Serialization | POST - https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnitReSerialization |
| | Get Key Order State List | GET- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/KeyOrderStateList |
| | Get Return Reason Code List | GET- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnReasonCodeList |
| | Get list of HP Part Numbers which have at least 1 Allocated product key | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnusedHPPartNumberList |
| | Get list of all key orders | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ListAllOrders |
| | Get list of Purchase Orders based on a specific HP Part Number | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetPOByHPPartNumber |
| | Get list of all HP Part Numbers with Product Key details, min thresholds , max thresholds , alert emails | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ListPKsByHPPN |
| | Allocated Report | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/AllocatedReport |
| | Get the Current Maximum Key Quantity That Can Be Ordered | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/NewKeyOrderMaxQuantity |
| | Get the Total Number of Allocated Product Keys | POST- https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/UnusedPKReturnMaxQuantity |
| | Return Unused Allocated Product Keys for wrong | POST- https://FKIServerName/WebService/FKIWebService/Rest |

| Key Activity | Function | URI |
|---|---|---|
| | orders | ServiceImpl.svc/ReturnUnusedKeysWrongOrder |
| | Return Unused Product Keys for End of Life HP Part Numbers | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/ReturnUnusedKeysEOL |
| | Pending Order List | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/PendingKeyOrderList |
| | Get Dashboard Information | GET-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DashboardInfo |
| | Get Order/Key Metric Data | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/KeyMetricData |
| | Delete Minimum Thresholds for Email Alerting | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeleteMinThresholds |
| | Get Minimum/Maximum Thresholds for Auto Order | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/GetMinMaxAutoOrderThresholds |
| | Set Minimum/Maximum Thresholds for Auto Order | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/SetMinMaxAutoOrderThresholds |
| | Delete Minimum/Maximum Thresholds for Auto Order | POST-https://FKIServerName/WebService/FKIWebService/RestServiceImpl.svc/DeleteMinMaxAutoOrderThresholds |

## Appendix 2 – XSDs

| Set Purchase Order | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="SetPurchaseOrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="PurchasePartNumbers">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="PurchasePartNumber">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="PurchaseOrder" type="xs:string" />
                    <xs:element name="PurchaseOrderLineItem" type="xs:string" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="SetPurchaseOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedShort" />
              <xs:element name="ReturnMessage" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="HPPartNumberErrorList">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="HPPartNumberError">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

| **Get Purchase Order** | |
|---|---|
| Request | NA |
| Response | (see code below) |

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="GetPurchaseOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="PurchasePartNumbers">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="PurchasePartNumber">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="PurchaseOrder" type="xs:string" />
                    <xs:element name="PurchaseOrderLineItem" type="xs:string" />
                    <xs:element name="CreatedDate" type="xs:string" />
                    <xs:element name="LastModifiedDate" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Delete Purchase Order**

| | |
| --- | --- |
| Request | ```xml
?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="DeletePurchaseOrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="PurchasePartNumbers">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="PurchasePartNumber">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="PurchaseOrder" type="xs:string" />
                    <xs:element name="PurchaseOrderLineItem" type="xs:string" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="DeletePurchaseOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedShort" />
              <xs:element name="ReturnMessage" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="HPPartNumberErrorList">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="HPPartNumberError">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Order Request**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="OrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" type="xs:string" />
        <xs:element name="Quantity" type="xs:unsignedShort" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
|---|---|
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="OrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="OrderNumber" type="xs:string" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |


**Get Order Status**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="GetOrderStatusRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="OrderNumber" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
|---|---|
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="GetOrderStatusResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="OrderNumber" type="xs:string" />
        <xs:element name="KeyOrderStateName" type="xs:string" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
``` |

```
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:schema>
```

**Order History**

| | |
| --- | --- |
| Request | ```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="OrderHistoryRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="Filter" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="OrderHistoryResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="KeyOrders">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="KeyOrder">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="OrderNumber" type="xs:string" />
                    <xs:element name="OrderStateName" type="xs:string" />
                    <xs:element name="SiteIdentifier" type="xs:string" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="Quantity" type="xs:unsignedShort" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="CreatedBy" type="xs:string" />
                    <xs:element name="CreatedByMachine" type="xs:string" />
                    <xs:element name="CreatedDate" type="xs:string" />
                    <xs:element name="ChangeRequestor" type="xs:string" />
                    <xs:element name="ChangeMachine" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Export Order**

| | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ExportOrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="OrderNumber" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ExportOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPSpecific">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="TransferID" type="xs:unsignedByte" />
              <xs:element name="Authenticator" type="xs:string" />
              <xs:element name="Quantity" type="xs:unsignedByte" />
              <xs:element name="ExportChecksum" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="KeyOrders">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="KeyOrder">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="KeyOrderID" type="xs:unsignedByte" />
                    <xs:element name="KeyOrderStateID" type="xs:unsignedByte" />
                    <xs:element name="FactoryID" type="xs:unsignedByte" />
                    <xs:element name="Authenticator" type="xs:string" />
                    <xs:element name="HPPartNumberEncrypted" type="xs:string" />
                    <xs:element name="QuantityEncrypted" type="xs:string" />
                    <xs:element name="OrderHash" type="xs:string" />
                    <xs:element name="OrderNumber" type="xs:string" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="CreatedBy" type="xs:string" />
                    <xs:element name="CreatedByMachine" type="xs:string" />
                    <xs:element name="CreatedDate" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Rollback Export Order**

| | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ExportOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPSpecific">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="TransferID" type="xs:unsignedByte" />
              <xs:element name="Authenticator" type="xs:string" />
              <xs:element name="Quantity" type="xs:unsignedByte" />
              <xs:element name="ExportChecksum" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="KeyOrders">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="KeyOrder">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="KeyOrderID" type="xs:unsignedByte" />
                    <xs:element name="KeyOrderStateID" type="xs:unsignedByte" />
                    <xs:element name="FactoryID" type="xs:unsignedByte" />
                    <xs:element name="Authenticator" type="xs:string" />
                    <xs:element name="HPPartNumberEncrypted" type="xs:string" />
                    <xs:element name="QuantityEncrypted" type="xs:string" />
                    <xs:element name="OrderHash" type="xs:string" />
                    <xs:element name="OrderNumber" type="xs:string" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="CreatedBy" type="xs:string" />
                    <xs:element name="CreatedByMachine" type="xs:string" />
                    <xs:element name="CreatedDate" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="RollbackExportOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
``` |

```
                    <xs:element name="ReturnCode" type="xs:unsignedByte" />
                    <xs:element name="ReturnMessage" />
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:schema>
```

| **Delete Order** | |
|---|---|
| Request | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="DeleteOrderRequest"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="OrderNumber" type="xs:string" /><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |
| Response | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="DeleteOrderResponse"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="ExecutionResult"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="ReturnCode" type="xs:unsignedByte" /><br>              <xs:element name="ReturnMessage" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |

**Order Process Status**

| | |
|---|---|
| Request | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="OrderProcessStatusRequest"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="PurchaseOrder" type="xs:string" /><br>        <xs:element name="PurchaseOrderLineItem" type="xs:string" /><br>        <xs:element name="OrderNumber" type="xs:string" /><br>        <xs:element name="SiteIdentifier" type="xs:string" /><br>        <xs:element name="KeyOrder"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="HPPartNumber" type="xs:string" /><br>              <xs:element name="Quantity" type="xs:unsignedShort" /><br>              <xs:element name="CreatedDate" type="xs:string" /><br>              <xs:element name="StateName" type="xs:string" /><br>              <xs:element name="StatusDate" type="xs:string" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |
| Response | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="OrderProcessStatusResponse"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="OrderNumber" type="xs:string" /><br>        <xs:element name="ExecutionResult"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="ReturnCode" type="xs:unsignedByte" /><br>              <xs:element name="ReturnMessage" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |

**Import Keys**

| | |
|---|---|
| Request | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="ImportKeysRequest"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="HPSpecific"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="TransferID" type="xs:unsignedByte" /><br>              <xs:element name="Authenticator" type="xs:string" /><br>              <xs:element name="Quantity" type="xs:unsignedShort" /><br>              <xs:element name="ExportChecksum" type="xs:string" /><br>              <xs:element name="FactoryID" type="xs:unsignedByte" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>        <xs:element name="KeyOrders"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="KeyOrder"><br>                <xs:complexType><br>                  <xs:sequence><br>                    <xs:element name="KeyOrderID" type="xs:unsignedByte" /><br>                    <xs:element name="KeyOrderStateID" type="xs:unsignedByte" /><br>                    <xs:element name="OrderNumber" type="xs:string" /><br>                    <xs:element name="StatusDate" type="xs:string" /><br>                  </xs:sequence><br>                </xs:complexType><br>              </xs:element><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>        <xs:element name="ProductKeys"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element maxOccurs="unbounded" name="ProductKey"><br>                <xs:complexType><br>                  <xs:sequence><br>                    <xs:element name="ProductKeyID" type="xs:unsignedShort" /><br>                    <xs:element name="KeyOrderID" type="xs:unsignedByte" /><br>                    <xs:element name="ProductKeyStateID" type="xs:unsignedByte" /><br>                    <xs:element name="EncryptedProductKey" type="xs:string" /><br>                    <xs:element name="LicensablePartNumber" type="xs:string" /><br>                    <xs:element name="HPPartNumber" type="xs:string" /><br>                    <xs:element name="StatusDate" type="xs:string" /><br>                    <xs:element name="CreatedDate" type="xs:string" /><br>                  </xs:sequence><br>                </xs:complexType><br>              </xs:element><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |
| Response | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="ImportKeysResponse"><br>    <xs:complexType><br>      <xs:sequence><br>``` |

```
                    <xs:element name="ExecutionResult">
                      <xs:complexType>
                        <xs:sequence>
                          <xs:element name="ReturnCode" type="xs:unsignedByte" />
                          <xs:element name="ReturnMessage" />
                        </xs:sequence>
                      </xs:complexType>
                    </xs:element>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:schema>
```

**Consumed Report**

| Request | |
| --- | --- |

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ConsumedReportRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="StartDateTime" type="xs:string" />
        <xs:element name="EndDateTime" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

| Response | |
| --- | --- |

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ConsumedReportResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ProductKeyStateName" type="xs:string" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeys">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ProductKey">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="HPSerialNumber" type="xs:string" />
                    <xs:element name="ProductKeyID" type="xs:unsignedShort" />
                    <xs:element name="UnitPartNumber" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="ChangeMachine" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Bound Report**

| | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="BoundReportRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="StartDateTime" type="xs:string" />
        <xs:element name="EndDateTime" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="BoundReportResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ProductKeyStateName" type="xs:string" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeys">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ProductKey">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="ConsumedDate" type="xs:string" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="HPSerialNumber" type="xs:string" />
                    <xs:element name="ProductKeyID" type="xs:unsignedShort" />
                    <xs:element name="UnitPartNumber" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Build Report**

| | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="BuildReportRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="StartDateTime" type="xs:string" />
        <xs:element name="EndDateTime" type="xs:string" />
        <xs:element name="LastProductKeyID" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="BuildReportResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="TotalBoundKeysReported" type="xs:unsignedByte" />
        <xs:element name="KeysReportedNow" type="xs:unsignedByte" />
        <xs:element name="KeysRemaining" type="xs:unsignedByte" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeys">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="ProductKey">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="ProductKeyStateName" type="xs:string" />
                    <xs:element name="ConsumedDate" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="HPSerialNumber" />
                    <xs:element name="ProductKeyID" type="xs:unsignedShort" />
                    <xs:element name="UnitPartNumber" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="ChangeMachine" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Export Bound and Returned Keys**

| | |
|---|---|
| Request | NA |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
``` |

```
<xs:element name="ExportBoundReturnedKeysResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="HPSpecific">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="TransferID" type="xs:unsignedByte" />
            <xs:element name="Authenticator" type="xs:string" />
            <xs:element name="ExportChecksum" type="xs:string" />
            <xs:element name="FactoryID" type="xs:unsignedByte" />
            <xs:element name="TotalBoundReturnedKeysReported" type="xs:unsignedByte" />
            <xs:element name="KeysReportedNow" type="xs:unsignedByte" />
            <xs:element name="KeysRemaining" type="xs:unsignedByte" />
            <xs:element name="XMLFileName" type="xs:string" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="ExecutionResult">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="ReturnCode" type="xs:unsignedByte" />
            <xs:element name="ReturnMessage" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="ProductKeys">
        <xs:complexType>
          <xs:sequence>
            <xs:element maxOccurs="unbounded" name="ProductKey">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="ProductKeyID" type="xs:unsignedShort" />
                  <xs:element name="ProductKeyStateID" type="xs:unsignedByte" />
                  <xs:element name="OEMAdditionalInfo" />
                  <xs:element name="HardwareID" />
                  <xs:element name="ReturnReasonCode" />
                  <xs:element name="HPSerialNumber" type="xs:string" />
                  <xs:element name="StatusDate" type="xs:string" />
                  <xs:element name="ConsumedDate" type="xs:string" />
                  <xs:element name="UnitPartNumber" />
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:schema>
```

**Rollback Bound and Returned Keys**

| | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ExportBoundReturnedKeysResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPSpecific">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="TransferID" type="xs:unsignedByte" />
              <xs:element name="Authenticator" type="xs:string" />
              <xs:element name="ExportChecksum" type="xs:string" />
              <xs:element name="FactoryID" type="xs:unsignedByte" />
              <xs:element name="TotalBoundReturnedKeysReported" type="xs:unsignedByte" />
              <xs:element name="KeysReportedNow" type="xs:unsignedByte" />
              <xs:element name="KeysRemaining" type="xs:unsignedByte" />
              <xs:element name="XMLFileName" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeys">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="ProductKey">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="ProductKeyID" type="xs:unsignedShort" />
                    <xs:element name="ProductKeyStateID" type="xs:unsignedByte" />
                    <xs:element name="OEMAdditionalInfo" />
                    <xs:element name="HardwareID" />
                    <xs:element name="ReturnReasonCode" />
                    <xs:element name="HPSerialNumber" type="xs:string" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="ConsumedDate" type="xs:string" />
                    <xs:element name="UnitPartNumber" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="RollbackBoundReturnedKeysResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
``` |

```
            <xs:element name="ReturnMessage" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:schema>
```

| Return Report | |
|---|---|
| Request | ```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnReportRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="StartDateTime" type="xs:string" />
        <xs:element name="EndDateTime" type="xs:string" />
        <xs:element name="LastProductKeyID" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnReportResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="TotalReturnedKeysReported" type="xs:unsignedByte" />
        <xs:element name="KeysReportedNow" type="xs:unsignedByte" />
        <xs:element name="KeysRemaining" type="xs:unsignedByte" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
              <xs:element name="ReportTime" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeys">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="ProductKey">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="ProductKeyStateName" type="xs:string" />
                    <xs:element name="CreatedDate" type="xs:string" />
                    <xs:element name="StatusDate" type="xs:string" />
                    <xs:element name="HPSerialNumber" type="xs:string" />
                    <xs:element name="ProductKeyID" type="xs:unsignedShort" />
                    <xs:element name="ChangeRequestor" type="xs:string" />
                    <xs:element name="UnitPartNumber" />
                    <xs:element name="ReturnReasonCode" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
``` |

```
        </xs:complexType>
      </xs:element>
    </xs:schema>
```

## Return Used Product Keys

**Request**

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUsedKeysRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="SNs">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="SN">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPSerialNumber">
                      <xs:simpleType>
                        <xs:restriction base="xs:string">
                          <xs:minLength value="1"/>
                          <xs:maxLength value="12"/>
                        </xs:restriction>
                      </xs:simpleType>
                    </xs:element>
                    <xs:element name="ConfirmHPSerialNumber">
                      <xs:simpleType>
                        <xs:restriction base="xs:string">
                          <xs:minLength value="1"/>
                          <xs:maxLength value="12"/>
                        </xs:restriction>
                      </xs:simpleType>
                    </xs:element>
                    <xs:element name="ReturnCode" type="xs:integer" />
                    <xs:element name="ReturnDate" type="xs:string" minOccurs="0" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Response**

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUsedKeysResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="SNs" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
```

```
                                                                    </xs:schema>
```

**Return Unused Keys**

| Request | ```<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUnusedKeysRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" type="xs:string" />
        <xs:element name="Quantity" type="xs:unsignedByte" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>``` |
| --- | --- |
| Response | ```<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUnusedKeysResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>``` |

**HP Part List**

| Request | NA |
| --- | --- |
| Response | ```<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="HPPartListResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="PartNumbers">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="PartNumber">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="ProductName" type="xs:string" />
                    <xs:element name="SortOrder" type="xs:unsignedByte" />
                    <xs:element name="MaxSiteInventory" type="xs:unsignedByte" />``` |

```
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

| Modify HP Part List Sort Order | |
|---|---|
| Request | `<?xml version="1.0" encoding="utf-8"?>`<br>`<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"`<br>`targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"`<br>`xmlns:xs="http://www.w3.org/2001/XMLSchema">`<br>`  <xs:element name="SortOrderHPPartListRequest">`<br>`    <xs:complexType>`<br>`      <xs:sequence>`<br>`        <xs:element name="PartNumbers">`<br>`          <xs:complexType>`<br>`            <xs:sequence>`<br>`              <xs:element maxOccurs="unbounded" name="PartNumber">`<br>`                <xs:complexType>`<br>`                  <xs:sequence>`<br>`                    <xs:element name="HPPartNumber" type="xs:string" />`<br>`                    <xs:element name="ProductName" type="xs:string" />`<br>`                    <xs:element name="SortOrder" type="xs:unsignedByte" />`<br>`                  </xs:sequence>`<br>`                </xs:complexType>`<br>`              </xs:element>`<br>`            </xs:sequence>`<br>`          </xs:complexType>`<br>`        </xs:element>`<br>`      </xs:sequence>`<br>`    </xs:complexType>`<br>`  </xs:element>`<br>`</xs:schema>` |
| Response | `<?xml version="1.0" encoding="utf-8"?>`<br>`<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"`<br>`targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"`<br>`xmlns:xs="http://www.w3.org/2001/XMLSchema">`<br>`  <xs:element name="SortOrderHPPartListResponse">`<br>`    <xs:complexType>`<br>`      <xs:sequence>`<br>`        <xs:element name="ExecutionResult">`<br>`          <xs:complexType>`<br>`            <xs:sequence>`<br>`              <xs:element name="ReturnCode" type="xs:unsignedByte" />`<br>`              <xs:element name="ReturnMessage" />`<br>`            </xs:sequence>`<br>`          </xs:complexType>`<br>`        </xs:element>`<br>`      </xs:sequence>`<br>`    </xs:complexType>`<br>`  </xs:element>`<br>`</xs:schema>` |

**Inventory Report**

| | |
| --- | --- |
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="InventoryReportRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="Filter" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="InventoryReportResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeys">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="ProductKey">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="Quantity" type="xs:unsignedByte" />
                    <xs:element name="ProductKeyStateName" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Set MinThresholds**

| | |
|---|---|
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="SetMinThresholdsRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="Thresholds">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="Threshold">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="MinInventoryLevel" type="xs:unsignedShort" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="AlertEmail" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="SetMinThresholdsResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Get Min Thresholds**

| | |
|---|---|
| Request | NA |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="GetMinThresholdsResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
``` |

```
                        <xs:element name="PartNumbers">
                          <xs:complexType>
                            <xs:sequence>
                              <xs:element maxOccurs="unbounded" name="PartNumber">
                                <xs:complexType>
                                  <xs:sequence>
                                    <xs:element name="HPPartNumber" type="xs:string" />
                                    <xs:element name="ProductName" type="xs:string" />
                                    <xs:element name="MinInventoryLevel" type="xs:unsignedShort" />
                                    <xs:element name="AlertEmail" type="xs:string" />
                                    <xs:element name="CreatedBy" type="xs:string" />
                                    <xs:element name="CreatedDate" type="xs:string" />
                                    <xs:element name="CreatedByMachine" type="xs:string" />
                                    <xs:element name="ModifiedBy" type="xs:string" />
                                    <xs:element name="ModifiedDate" type="xs:string" />
                                  </xs:sequence>
                                </xs:complexType>
                              </xs:element>
                            </xs:sequence>
                          </xs:complexType>
                        </xs:element>
                      </xs:sequence>
                    </xs:complexType>
                  </xs:element>
                </xs:schema>
```

| Unit Re-Serialization | |
|---|---|
| Request | ```<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="UnitReSerializationRequest"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="HPSerialNumber" type="xs:string" /><br>        <xs:element name="ConfirmHPSerialNumber" type="xs:string" /><br>        <xs:element name="NewHPSerialNumber" type="xs:string" /><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |
| Response | ```<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="UnitReSerializationResponse"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="HPSerialNumber" type="xs:string" /><br>        <xs:element name="NewHPSerialNumber" type="xs:string" /><br>        <xs:element name="ExecutionResult"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="ReturnCode" type="xs:unsignedByte" /><br>              <xs:element name="ReturnMessage" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |

**Get Unit Status**

| Request | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="UnitStatusRequest"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="HPSerialNumber" type="xs:string" /><br>        <xs:element name="ProductKeyID" /><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |
|---|---|
| Response | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="UnitStatusResponse"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="ExecutionResult"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="ReturnCode" type="xs:unsignedByte" /><br>              <xs:element name="ReturnMessage" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>        <xs:element name="ProductKeys"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element maxOccurs="unbounded" name="ProductKey"><br>                <xs:complexType><br>                  <xs:sequence><br>                    <xs:element name="ProductKeyID" type="xs:unsignedShort" /><br>                    <xs:element name="ProductKeyStateName" type="xs:string" /><br>                    <xs:element name="HPPartNumber" type="xs:string" /><br>                    <xs:element name="HPSerialNumber" type="xs:string" /><br>                    <xs:element name="StatusDate" type="xs:string" /><br>                    <xs:element name="ConsumedDate" type="xs:string" /><br>                    <xs:element name="CreatedDate" type="xs:string" /><br>                    <xs:element name="UnitPartNumber" type="xs:string" /><br>                    <xs:element name="ChangeRequestor" type="xs:string" /><br>                  </xs:sequence><br>                </xs:complexType><br>              </xs:element><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |

**Get Key Order State List**

| Request | N/A |
|---|---|
| Response | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="KeyOrderStateListResponse"><br>    <xs:complexType><br>      <xs:sequence><br>``` |

```
                <xs:element name="ExecutionResult">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="ReturnCode" type="xs:unsignedByte" />
                      <xs:element name="ReturnMessage" />
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
                <xs:element name="KeyOrderStates">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element maxOccurs="unbounded" name="KeyOrderState">
                        <xs:complexType>
                          <xs:sequence>
                            <xs:element name="KeyOrderStateID" type="xs:unsignedByte" />
                            <xs:element name="KeyOrderStateName" type="xs:string" />
                          </xs:sequence>
                        </xs:complexType>
                      </xs:element>
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:schema>
```

**Get Return Reason Code List**

| Request | N/A |
|---|---|
| Response | (see below) |

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnReasonCodeListResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ReturnReasonCodes">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnReasonCode">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="ReasonCode" type="xs:unsignedByte" />
                    <xs:element name="Description" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Get list of HP Part Numbers which have at least 1 Allocated product key based on UTC date range**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="UnusedHPPartNumberListRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="StartDateTime" type="xs:string" />
        <xs:element name="EndDateTime" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
|---|---|
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="UnusedHPPartNumberListResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="UnusedHPPartNumbers">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="UnusedHPPartNumber">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="HPProductName" type="xs:string" />
                    <xs:element name="Quantity" type="xs:unsignedByte" />
                    <xs:element name="MaxSiteInventory" type="xs:unsignedShort" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Get list of all key orders**

| | |
| --- | --- |
| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ListAllOrdersRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="FilterName" type="xs:string" />
        <xs:element name="FilterValue" type="xs:string" />
        <xs:element name="SiteType" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ListAllOrdersResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ProductKeyOrders">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="ProductKeyOrder">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="OrderNumber" type="xs:string" />
                    <xs:element name="Quantity" type="xs:unsignedByte" />
                    <xs:element name="Allocated" type="xs:unsignedByte" />
                    <xs:element name="Consumed" type="xs:unsignedByte" />
                    <xs:element name="Bound" type="xs:unsignedByte" />
                    <xs:element name="NotifiedBound" type="xs:unsignedByte" />
                    <xs:element name="Returned" type="xs:unsignedByte" />
                    <xs:element name="KeyOrderStateName" type="xs:string" />
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="FulfilledDate" type="xs:string" />
                    <xs:element name="PurchaseOrder" type="xs:string" />
                    <xs:element name="OrderCreatedDate" type="xs:string" />
                    <xs:element name="OrderedBy" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Get list of Purchase Orders based on a specific HP Part Number**

| Request | |
|---|---|

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="GetPurchaseOrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" >
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:minLength value="1"/>
              <xs:maxLength value="18"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Response**

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="GetPurchaseOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="PurchasePartNumbers">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="PurchasePartNumber">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="PurchaseOrder" type="xs:string" />
                    <xs:element name="PurchaseOrderLineItem" type="xs:string" />
                    <xs:element name="CreatedDate" type="xs:string" />
                    <xs:element name="LastModifiedDate" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Get list of all HP Part Numbers with product key details, min thresholds, max thresholds, alert emails**

| Request | |
| --- | --- |

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ListPKsByHPPNRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" >
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:minLength value="0"/>
              <xs:maxLength value="18"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

| Response | |
| --- | --- |

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ListPKsByHPPNResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="HPPartNumberPKs">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="HPPartNumberPK">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="HPPartNumber" type="xs:string" />
                    <xs:element name="Allocated" type="xs:unsignedByte" />
                    <xs:element name="Consumed" type="xs:unsignedShort" />
                    <xs:element name="Bound" type="xs:unsignedByte" />
                    <xs:element name="NotifiedBound" type="xs:unsignedByte" />
                    <xs:element name="Returned" type="xs:unsignedByte" />
                    <xs:element name="MinimumInventory" type="xs:unsignedShort" />
                    <xs:element name="MaximumInventory" type="xs:unsignedShort" />
                    <xs:element name="AlertEmail" type="xs:string" />
                    <xs:element name="Total" type="xs:unsignedShort" />
                    <xs:element name="EndEffectiveDate" type="xs:string" />
                    <xs:element name="MaxSiteInventory" type="xs:string" />
                    <xs:element name="AutoOrderEnabled" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Allocated Report**

| | |
|---|---|
| Request | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="AllocatedReportRequest"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="StartDateTime" type="xs:string" /><br>        <xs:element name="EndDateTime" type="xs:string" /><br>        <xs:element name="LastProductKeyID" /><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |
| Response | ```xml<br><?xml version="1.0" encoding="utf-8"?><br><xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"><br>  <xs:element name="AllocatedReportResponse"><br>    <xs:complexType><br>      <xs:sequence><br>        <xs:element name="ProductKeyStateName" type="xs:string" /><br>        <xs:element name="TotalAllocatedKeysReported" type="xs:unsignedByte" /><br>        <xs:element name="KeysReportedNow" type="xs:unsignedByte" /><br>        <xs:element name="KeysRemaining" type="xs:unsignedByte" /><br>        <xs:element name="ExecutionResult"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element name="ReturnCode" type="xs:unsignedByte" /><br>              <xs:element name="ReturnMessage" /><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>        <xs:element name="ProductKeys"><br>          <xs:complexType><br>            <xs:sequence><br>              <xs:element maxOccurs="unbounded" name="ProductKey"><br>                <xs:complexType><br>                  <xs:sequence><br>                    <xs:element name="ProductKeyID" type="xs:unsignedShort" /><br>                    <xs:element name="StatusDate" type="xs:string" /><br>                    <xs:element name="HPPartNumber" type="xs:string" /><br>                  </xs:sequence><br>                </xs:complexType><br>              </xs:element><br>            </xs:sequence><br>          </xs:complexType><br>        </xs:element><br>      </xs:sequence><br>    </xs:complexType><br>  </xs:element><br></xs:schema><br>``` |

**Get current maximum key quantity left that can be speficic for a speficic HP Part Number**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="NewKeyOrderMaxQuantityRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" >
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:minLength value="1"/>
              <xs:maxLength value="18"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| --- | --- |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="NewKeyOrderMaxQuantityResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="NewKeyOrderMaxQuantity" type="xs:unsignedShort" />
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Get total Allocated product keys in current calendar month for a specific HP Part Number**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="MaxAllocatedQuantityRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" >
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:minLength value="1"/>
              <xs:maxLength value="18"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| --- | --- |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
``` |

```
        <xs:element name="MaxAllocatedQuantityResponse">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="MaxAllocatedQuantity" type="xs:unsignedByte" />
              <xs:element name="ExecutionResult">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="ReturnCode" type="xs:unsignedByte" />
                    <xs:element name="ReturnMessage" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:schema>
```

**Return unused (Allocated) product keys for wrong order**

| Request | |
|---|---|

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUnusedKeysWrongOrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="OrderNumber">
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:minLength value="1"/>
              <xs:maxLength value="20"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
        <xs:element name="Quantity" type="xs:integer" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

| Response | |
|---|---|

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUnusedKeysWrongOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

**Return unused (Allocated) product keys for End of Life HP Part Number**

| Request | |
|---|---|
| | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUnusedKeysEOLRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber">
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:minLength value="1"/>
              <xs:maxLength value="18"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
        <xs:element name="Quantity" type="xs:integer" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

| Response | |
|---|---|
| | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ReturnUnusedKeysEOLResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

**Get list of pending key orders**

| Request | |
|---|---|
| | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="PendingKeyOrderListRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="Filter" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |

| Response | |
|---|---|
| | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="PendingKeyOrderListResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
``` |

```
                            <xs:element name="ReturnMessage" />
                        </xs:sequence>
                    </xs:complexType>
                </xs:element>
                <xs:element name="PendingKeyOrderList">
                    <xs:complexType>
                        <xs:sequence>
                            <xs:element maxOccurs="unbounded" name="PendingKeyOrder">
                                <xs:complexType>
                                    <xs:sequence>
                                        <xs:element name="OrderNumber" type="xs:string" />
                                        <xs:element name="CreatedDate" type="xs:string" />
                                        <xs:element name="HPPartNumber" type="xs:string" />
                                        <xs:element name="Quantity" type="xs:unsignedByte" />
                                        <xs:element name="StateName" type="xs:string" />
                                    </xs:sequence>
                                </xs:complexType>
                            </xs:element>
                        </xs:sequence>
                    </xs:complexType>
                </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
</xs:schema>
```

**Get Dashboard information**

| Request | N/A |
| --- | --- |
| Response | (see below) |

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="DashboardInfoResponse">
        <xs:complexType>
            <xs:sequence>
                <xs:element name="LastHPConnectionDateTime" type="xs:string" />
                <xs:element name="PrimaryIPAddress" type="xs:string" />
                <xs:element name="PrimaryHostname" type="xs:string" />
                <xs:element name="PrimaryStorageUsage" type="xs:string" />
                <xs:element name="PrimaryDuration" />
                <xs:element name="MirrorIPAddress" type="xs:string" />
                <xs:element name="MirrorHostname" type="xs:string" />
                <xs:element name="MirrorStorageUsage" type="xs:string" />
                <xs:element name="MirrorPrimaryDuration" />
                <xs:element name="WitnessIPAddress" type="xs:string" />
                <xs:element name="WitnessHostname" type="xs:string" />
                <xs:element name="HasMirror" type="xs:string" />
                <xs:element name="PrimaryStatus" type="xs:string" />
                <xs:element name="MirrorStatus" type="xs:string" />
                <xs:element name="WitnessStatus" type="xs:string" />
                <xs:element name="ExecutionResult">
                    <xs:complexType>
                        <xs:sequence>
                            <xs:element name="ReturnCode" type="xs:unsignedByte" />
                            <xs:element name="ReturnMessage" />
                        </xs:sequence>
                    </xs:complexType>
                </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
</xs:schema>
```

**Get order/key metric data**

| Request | <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt;<br>&lt;xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"&gt;<br>  &lt;xs:element name="KeyMetricDataRequest"&gt;<br>    &lt;xs:complexType&gt;<br>      &lt;xs:sequence&gt;<br>        &lt;xs:element name="StartDateTime" type="xs:string" /&gt;<br>        &lt;xs:element name="EndDateTime" type="xs:string" /&gt;<br>        &lt;xs:element name="MetricType" type="xs:string" /&gt;<br>      &lt;/xs:sequence&gt;<br>    &lt;/xs:complexType&gt;<br>  &lt;/xs:element&gt;<br>&lt;/xs:schema&gt;</pre> |
|---|---|
| Response | <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt;<br>&lt;xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"&gt;<br>  &lt;xs:element name="KeyMetricDataResponse"&gt;<br>    &lt;xs:complexType&gt;<br>      &lt;xs:sequence&gt;<br>        &lt;xs:element name="KeyMetricInfo"&gt;<br>          &lt;xs:complexType&gt;<br>            &lt;xs:sequence&gt;<br>              &lt;xs:element name="MinElapsedTime" type="xs:unsignedByte" /&gt;<br>              &lt;xs:element name="MaxElapsedTime" type="xs:unsignedByte" /&gt;<br>              &lt;xs:element name="AvgElapsedTime" type="xs:unsignedByte" /&gt;<br>            &lt;/xs:sequence&gt;<br>          &lt;/xs:complexType&gt;<br>        &lt;/xs:element&gt;<br>        &lt;xs:element name="ExecutionResult"&gt;<br>          &lt;xs:complexType&gt;<br>            &lt;xs:sequence&gt;<br>              &lt;xs:element name="ReturnCode" type="xs:unsignedByte" /&gt;<br>              &lt;xs:element name="ReturnMessage" /&gt;<br>            &lt;/xs:sequence&gt;<br>          &lt;/xs:complexType&gt;<br>        &lt;/xs:element&gt;<br>      &lt;/xs:sequence&gt;<br>    &lt;/xs:complexType&gt;<br>  &lt;/xs:element&gt;<br>&lt;/xs:schema&gt;</pre> |

**Delete Minimum Thresholds for Email Alert**

| Request | <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt;<br>&lt;xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"<br>targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"&gt;<br>  &lt;xs:element name="DeleteMinThresholdsRequest"&gt;<br>    &lt;xs:complexType&gt;<br>      &lt;xs:sequence&gt;<br>        &lt;xs:element name="HPPartNumber" type="xs:string" /&gt;<br>      &lt;/xs:sequence&gt;<br>    &lt;/xs:complexType&gt;<br>  &lt;/xs:element&gt;<br>&lt;/xs:schema&gt;</pre> |
|---|---|
| Response | <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt;<br>&lt;xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"<br>elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"&gt;<br>  &lt;xs:element name="DeleteMinThresholdsResponse"&gt;<br>    &lt;xs:complexType mixed="true"&gt;<br>      &lt;xs:sequence&gt;<br>        &lt;xs:element name="ExecutionResult"&gt;</pre> |

```
                          <xs:complexType>
                            <xs:sequence>
                              <xs:element name="ReturnCode" type="xs:unsignedByte" />
                              <xs:element name="ReturnMessage" />
                            </xs:sequence>
                          </xs:complexType>
                        </xs:element>
                      </xs:sequence>
                    </xs:complexType>
                  </xs:element>
                </xs:schema>
```

| Get Minimum/Maximum Thresholds for Auto Order | |
| --- | --- |
| Request | NA |
| Response | <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt;<br>&lt;xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"<br>elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"<br>xmlns:xs="http://www.w3.org/2001/XMLSchema"&gt;<br>  &lt;xs:element name="GetMinMaxAutoOrderResponse"&gt;<br>    &lt;xs:complexType&gt;<br>      &lt;xs:sequence&gt;<br>        &lt;xs:element name="ExecutionResult"&gt;<br>          &lt;xs:complexType&gt;<br>            &lt;xs:sequence&gt;<br>              &lt;xs:element name="ReturnCode" type="xs:unsignedByte" /&gt;<br>              &lt;xs:element name="ReturnMessage" /&gt;<br>            &lt;/xs:sequence&gt;<br>          &lt;/xs:complexType&gt;<br>        &lt;/xs:element&gt;<br>        &lt;xs:element name="PartNumbers"&gt;<br>          &lt;xs:complexType&gt;<br>            &lt;xs:sequence&gt;<br>              &lt;xs:element maxOccurs="unbounded" name="PartNumber"&gt;<br>                &lt;xs:complexType&gt;<br>                  &lt;xs:sequence&gt;<br>                    &lt;xs:element name="HPPartNumber" type="xs:string" /&gt;<br>                    &lt;xs:element name="MinInventoryLevel" type="xs:unsignedByte" /&gt;<br>                    &lt;xs:element name="MaxInventoryLevel" type="xs:unsignedByte" /&gt;<br>                    &lt;xs:element name="AutoOrderEnabled" type="xs:string" /&gt;<br>                    &lt;xs:element name="CreatedBy" type="xs:string" /&gt;<br>                    &lt;xs:element name="CreatedDate" type="xs:string" /&gt;<br>                    &lt;xs:element name="ModifiedBy" type="xs:string" /&gt;<br>                    &lt;xs:element name="ModifiedDate" type="xs:string" /&gt;<br>                  &lt;/xs:sequence&gt;<br>                &lt;/xs:complexType&gt;<br>              &lt;/xs:element&gt;<br>            &lt;/xs:sequence&gt;<br>          &lt;/xs:complexType&gt;<br>        &lt;/xs:element&gt;<br>      &lt;/xs:sequence&gt;<br>    &lt;/xs:complexType&gt;<br>  &lt;/xs:element&gt;<br>&lt;/xs:schema&gt;</pre> |

**Set Minimum/Maximum Thresholds for Auto Order**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="SetMinMaxAutoOrderRequest">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="AutoOrderThresholds">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="AutoOrderThreshold">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="HPPartNumber">
                        <xs:simpleType>
                          <xs:restriction base="xs:string">
                            <xs:minLength value="1"/>
                            <xs:maxLength value="18"/>
                          </xs:restriction>
                        </xs:simpleType>
                      </xs:element>
                      <xs:element name="MinThreshold" type="xs:integer" />
                      <xs:element name="MaxThreshold" type="xs:string" />
                      <xs:element name="AutoOrderEnabled" type="xs:string" />
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
</xs:schema>
``` |
|---|---|
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="SetMinMaxAutoOrderResponse">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="ExecutionResult">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="ReturnCode" type="xs:unsignedByte" />
                <xs:element name="ReturnMessage" />
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
</xs:schema>
``` |

**Delete Minimum/Maximum Thresholds for Auto Order**

| Request | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="DeleteMinMaxAutoOrderRequest">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HPPartNumber" type="xs:string" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |
| Response | ```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:i="http://www.w3.org/2001/XMLSchema-instance" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://HP.ITTS.OA30/digitaldistribution/2011/08"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="DeleteMinMaxAutoOrderResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="ExecutionResult">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ReturnCode" type="xs:unsignedByte" />
              <xs:element name="ReturnMessage" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
``` |