

PrintSmith™ Vision
E-Commerce Integration API Guide

Version 3.6

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EFI Productivity Suite | *PrintSmith Vision E-Commerce Integration API Guide*

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About this Guide

This guide describes the API provided by EFI to allow an external e-commerce application to communicate with PrintSmith™ Vision.

Communication occurs using Web Services via an HTTP or HTTPS (SSL) connection (depending how your PrintSmith Vision server is configured).

The messages are formatted in JSON (JavaScript Object Notation).

Contact Information

EFI Support

Web Site:	https://customer.efi.com/support
US Phone:	1.855.EFI.4HLP 480.538.5800
UK Phone:	+44 (0) 800.783.2737
EU Phone:	+49 (0) 2102.745.4500
E-Mail:	printsmith.support@efi.com

Regular US Service Desk hours are 7 A.M. to 5 P.M. Mountain Standard Time, Monday – Friday

Regular UK Service Desk hours are 8 A.M. to 5 P.M. Greenwich Mean Time, Monday – Friday

Regular EU Service Desk hours are 9 A.M to 6 P.M. Central European Time, Monday – Friday

Note For problems involving infrastructure (i.e., computers, networks, operating systems, backup software, printers, third-party software, etc.), contact the appropriate vendor. EFI cannot support these types of issues.

EFI Professional Services

US Phone:	651.365.5321
US Fax:	651.365.5334
US E-Mail:	ProfessionalServicesOperations@efi.com
Outside US E-Mail:	EMEAProfessionalServicesOperations@efi.com

EFI Professional Services can help you perform EFI software installations, upgrades, and updates. This group can also help you implement, customize, and optimize your EFI software, plus offers a range of training options.

Message Handling

Messages are processed in the order received.

Messages are routed through PrintSmith Vision's internal messaging service. This allows messages to optionally be persisted as message objects in the PrintSmith database. These message objects are also optionally purged by PrintSmith Vision at a configurable interval.

Incoming messages are logged via PrintSmith Vision's existing logging mechanism. The log file for the incoming messages is unique to the messaging service. The logging level for incoming messages is configurable, and the configuration for these logs is separate from PrintSmith's general logging configuration.

Responses to incoming messages are sent in a timely manner.

Transactions

The descriptions of transactions follow.

Note In some sample transactions you will see **gst**. This is equivalent to tax in the U.S.

Accounts

The Get transaction specifies an ID. This is the ID value (key) associated with the record in the database.

The response for Post returns an account ID and an account number.

Post

Post Request

```
/Account{API_TOKEN}
{
  "name": "Kwik Kopy Australia",
  "type": "[prospect|customer]",
  "addresses":
  [
    {
      "type": "statement",
      "address_1": "Level 1",
      "address_2": "115 Sailors Bay Rd",
      "suburb": "Northbridge",
      "state": "NSW",
      "postcode": "2063",
      "country": "Australia"
    },
    {
      "type": "invoice",
      "address_1": "Level 1",
      "address_2": "115 Sailors Bay Rd",
      "suburb": "Northbridge",
      "state": "NSW",
      "postcode": "2063",
      "country": "Australia"
    }
  ],
  "credit_control":
  {
    "type": "[Full Deposit, Cash Only, Cash/Check/Credit Card, Charge Account, Credit Card on File]",
    "credit_limit": 20000.00
  },
  "external_reference_number": "ZZZ",
  "sales_rep": "Joe Blogs",
  "account_status": "New, Current, Inactive, Overdue, Delinquent, Frozen",
  "automatic_discount":
  {
    "type": "percentage",
    "amount": 10.50
  },
  "master_account_id": 1111,
  "do_no_mail": true,
```

```
"contacts":
  [
    { type: "invoice", "default": true, "first_name": "Brett", "last_name": "Herford-Fell", "prefix": "Mr", "suffix": "",
    "phone": ""},
    { "type": "statement", "first_name": "Brett", "last_name": "Herford-Fell", "prefix": "", "suffix": "", "phone": ""}
  ]
}
```

Post Response

```
{
  "status": "OK",
  "account_id": 1234 (primary key)
  "account_account_id": "13940" (sequential account number)
}
```

Post (Update)

Post Request

If an ID is specified during an update then the account specified by the ID will be updated as opposed to created. The API_TOKEN for an account will be passed as well. It is the same form as that passed during a creation POST. It is omitted here for brevity.

Get

Get Request

/Account?id=1

Get Response

```
{
  "id": 1,
  "account_id": 4,
  "name": "Kwik Kopy Australia",
  "type": "[prospect|customer]",
  "addresses":
  [
    {
      "type": "statement"
      "address_1": "Level 1",
      "address_2": "115 Sailors Bay Rd",
      "suburb": "Northbridge",
      "state": "NSW",
      "postcode": "2063",
      "country": "Australia"
    },
    {
      "type": "invoice"
      "address_1": "Level 1",
      "address_2": "115 Sailors Bay Rd",
      "suburb": "Northbridge",
      "state": "NSW",
      "postcode": "2063",
      "country": "Australia"
    }
  ]
}
```



```

"credit control"
  {
    "type" : "[Full Deposit, Cash Only, Cash/Check/Credit Card, Charge Account, Credit Card on File]",
    "credit_limit" : 20000.00
  }
,
"external_reference_number" : "ZZZ",
"sales_rep" : "Joe Blogs",
"account_status" : "New, Current, Inactive, Overdue, Delinquent, Frozen",
"automatic_discount" :
  {
    "type" : "percentage",
    "amount" : 10.50
  }
,
"master_account_id" : 1111,
"do_no_mail" : true,
"contacts":
  [
    { "contact_id" : 80772, "type": "invoice", "default" : true, "first_name" : "Brett", "last_name": "Herford-Fell", "prefix":
"Mr", "suffix": "", "phone": ""},
    { "type": "statement", "first_name": "", "last_name": "", "prefix": "", "suffix": "", "phone": ""}
  ]
}

```

Get (All)

Get Request

/Account/

Get Response

If no ID is specified during a get then a list of all accounts will be returned. Each of the elements in the list will take the same form as that passed when an individual account is received. The description is omitted here for brevity.

Contacts

Post

Post Request

```

/Contact{API_TOKEN}
{
  "account_id" : 2222,
  "first_name" : "Brett",
  "last_name" : "Herford-Fell",
  "prefix" : "Mr",
  "date_of_birth" : "xx-xx-xxxx",
  "suffix" : "",
  "phone" : "",
  "mobile" : "",
  "fax" : "",
  "email" : "",
  { "addresses":
  [
    {
      "type" : "invoice"
      "address_1" : "Level 1",
      "address_2" : "115 Sailors Bay Rd",
      "city" : "Northbridge",
      "state" : "NSW",
      "postcode" : "2063",
      "country" : "Australia"
    },
    {
      "type" : "shipping"
      "address_1" : "Level 1",
      "address_2" : "115 Sailors Bay Rd",
      "city" : "Northbridge",
      "state" : "NSW",
      "postcode" : "2063",
      "country" : "Australia"
    }
  ]
},
  { "campaigns":
  [
    {
      "number" : "1"
      "number" : "2"
    }
  ]
}
}

```

Post Response

```

{
  "status" : "OK",
  "contact_id" : 1234
}

```

Post (Update)

Post Request

If an ID is specified during an update then the contact specified by the ID will be updated as opposed to created. The API_TOKEN for an contact will be passed as well. It is the same form as that passed during a creation POST. It is omitted here for brevity.

Get

Get Request

/Contact/?id=13912

Get Response

```
{
  "id" : 13912,
  "contact_id" : "688",
  "account_id" : 2222,
  "first_name" : "Brett",
  "last_name" : "Herford-Fell",
  "prefix" : "Mr",
  "date_of_birth" : "xx-xx-xxxx",
  "suffix" : "",
  "phone" : "",
  "mobile" : "",
  "fax" : "",
  "email" : "",
  { "addresses":
  [
    {
      "type" : "invoice"
      "address_1" : "Level 1",
      "address_2" : "115 Sailors Bay Rd",
      "city" : "Northbridge",
      "postcode" : "2063",
      "country" : "Australia"
    },
    {
      "type" : "shipping"
      "address_1" : "Level 1",
      "address_2" : "115 Sailors Bay Rd",
      "city" : "Northbridge",
      "postcode" : "2063",
      "country" : "Australia"
    }
  ]
  },
}
```

```
{ "campaigns":  
  [  
    {  
      "campaign_id" : "1",  
      "campaign_name" : "First"  
    },  
    {  
      "campaign_id" : "2",  
      "campaign_name" : "Second"  
    }  
  ]  
}
```

Get (All)

Get Request

/Contact/

Get Response

If no ID is specified during a get then a list of all contacts will be returned. Each of the elements in the list will take the same form as that passed when an individual contact is received. The description is omitted here for brevity.

Campaigns

Post

Post Request

```
/Campaign{API_TOKEN}  
{  
  "name" : "My Campaign",  
  "campaign_number" : 1  
}
```

Post Response

```
{  
  "status" : "OK",  
  "campaign_number" : 1  
}
```

Get

Get Request

/campaign?campaign_number=1



Get Response

```
{  
  "name" : "My Campaign",  
  "campaign_number" : 1  
}
```

Get (All)

Get Request

/Campaign/

Get Response

If no ID is specified during a Get then a list of all campaigns will be returned. Each of the elements in the list will take the same form as that passed when an individual campaign is received. The description is omitted here for brevity.

Estimates

Notes

Account identification

An account can be identified in one of three ways: **account_id**, **account_account_id**, or **contact_id**.

- If you want to use **contact_id**, *either* provide just a **contact_id** (and not **account_account_id** or **account_id**) or put the **contact_id** before **account_account_id** and/or **account_id** in the file. The estimate is created for the account associated with the contact.
- If both **account_id** and **account_account_id** are provided (but not **contact_id**), the one that is first in the file is used.
- If **account_account_id** is either null or has an invalid value, an error message like this is displayed: {"status": "Failure", "message": "Account with number(account_account_id): 36356 was not found."}. In this case, either provide a valid value for **account_account_id** or remove it completely and provide only a **contact_id** or **account_id**.

Order number from source system

The **web_reference_number** is optional. This is the order number from the source system where the API call is made. The field is numeric; an order will be rejected if the field is non-numeric. PrintSmith Vision identifies the order as a web order if the field includes a numeric value. In addition, the **web_reference_number** must be unique per order, or you will get an error similar to this: {"status": "Failure", "message": "Web Order already exists with Web Reference number: 16"}.

Updates to fields in Account Info window

The following fields can be used to update/enter information in the Account Info window for a document:

- If a **doc_title** is included, the **Title** field is updated.
- If a **shipping_address** is included, the **Other Address** is updated:


```
"shipping_address": {
  "company": "XYZ",
  "street1": "1 Main Street",
  "street2": "Building 3",
  "city": "Hanover",
  "state": "NH",
  "zip": "03755",
  "country": "US"
}
```
- If a **delivery_date** is included, just the **Deliver on** field is updated. Likewise, if a **wanted_by_date** is included, just the **Wanted by** field is updated. If, however, an **estimate_required_by** date (or an **invoice_required_by** date is included), the **Deliver on** field automatically defaults to the value of the **Wanted by** field.
- If a **po_number** is included, the **PO #** field is updated.
- If a **resale_number** is included, the **Resale #** field is updated.
- If **ship_via** is included, the **Ship Via** field is updated.

Note By default, the values in the **PO #**, **Resale #**, and **Ship Via** fields in the Account Info window come from the account. They will only be overridden if an incoming order includes **po_number**, **resale_number**, or **ship_via** values.

- If a **hold_state** is included, the **Hold** field is updated.
- If **web_comments** are included, they are recorded in the **Customer Comment** field.

Special instructions

When an order comes in with special instructions that exceed 2,000 characters, the text is truncated and appended with **More...** to indicate the instructions were truncated.

Shipping prices

The `ship_price` field can be used to update the **Shipping** field in the Document Totals window.

Temporary contacts for documents

The `contact` field can be used to create a temporary contact for an estimate or invoice as follows:

```
"contact": {
  "first_name": "Jane",
  "last_name": "Smith",
  "prefix": "P",
  "suffix": "S",
  "job_title": "Buyer",
  "salutation": "Ms.",
  "cell": "9999999999",
  "phone": "9999999999",
  "fax": "9999999999",
  "email": "jane.smith@hercompany.com"
},
```

Job information

Use the `items` JSON array for each job in an order. Note how the following are used:

Job basics

- The `type` field identifies the type of job being produced, and corresponds to the **Title** of a pricing method, as defined in your Pricing Methods preferences in PrintSmith Vision. The **Title** can be anything you want as long as the **Estimator** type in the Pricing Methods preferences corresponds to the type of job you are producing, for example, **Press Definition** for printing jobs, **Copier Definition** for B&W or color jobs, or **Outside Services** for outsourced jobs.
- The `job_template` field identifies the job template for the web product. This job template includes specifications for producing and pricing the job.
- The `description` is the job description.
- The `quantity` is the ordered quantity.

Price of ordered item

A `web_price` is optional. When you use `web_price`, the price of the ordered item will override that in the job template, and the prices in the estimate or invoice will be locked and distributed among the job components (charges). In addition, the price adjustment (the difference between the price coming in from the API and the price in the template) will be available in the Web worksheet.

Comment field and check boxes in Job window

Fields can be used to set the **Brokered**, **Taxable**, and **Finished** check boxes at the top of the Job window, as well as to enter comments in the **Comment** field.

Note If any of the fields described below are included in the order, they will override whatever is in the job template.

The fields update the top of the Job window as follows:

- If a `comment` field is included, the **Comment** field is updated.
- If `brokered` is included (set to `true` or `false`), the **Brokered** check box is set accordingly.

- If **taxable** is included (set to **true** or **false**), the **Taxable** check box is set accordingly.
- If **finished** is included (set to **true** or **false**), the **Finished** check box is set accordingly.

Fields specific to outside services jobs

Certain fields can be set for outside services jobs as follows:

- If **notes** are included, the **Notes** field is updated.
- If a **vendor** (as defined in the *Vendor table*) is included, the **Vendor** field is updated.
- If a **unit_cost** is included, the **Unit Cost** field is updated.
- If a **total_cost** is included, the **Total Cost** field is updated.
- If a **markup** is included, the **Markup** field is updated.

Here is some sample JSON code to illustrate the check boxes mentioned above as well as the fields related out outside services jobs:

```
"items": [
  {
    "type": "outside services",
    "comment": "Satin Blazer Satin Cover 80# White 1",
    "taxable": true,
    "brokered": true,
    "finished": true,
    "description": "10005-BRO-Bed Brochures Bedford 1",
    "quantity": 500,
    "notes": "No replacements for requested paper",
    "vendor": "Express Brochures",
    "unit_cost": 1,
    "total_cost": 500,
    "markup": 1.5,
    "category": "",
    "web_price": 750.00
  }
]
```

Digital assets for jobs

You can use **digital_asset_url** to specify the URL of a digital asset (content file) for a job (one URL per job). This URL must be accessible by the PrintSmith Vision server so the file can be previewed and downloaded.

Note When an invoice is created through the API, and a multi-part job template is used, **digital_asset_URL** can be applied only to the main job, not the sub jobs.

Here is some sample JSON code to show how **digital_asset_url** is used:

```
"items": [
  {
    "type": "BW",
    "comment": "B&W",
    "job_template": "PS-SKU-2",
    "description": "BAG Brochures",
    "digital_asset_url": "http://mycompany.com/dsf/PreviewPdf.ashx?FileId=KRv57rKzPjc-
&SITEGUID=ec644b77-f617-4791-8ecc-d8057333d054&SITEGUID=ec644b77-f617-4791-8ecc-
d8057333d054&WMK=-1&ULR=False",
    "quantity": 5000,
    "category": "",
    "web_price": 1007.28
  }
]
```


Web worksheet entries

You can use **web_worksheets** to add entries (in the form of a text description) to the web worksheet for a job (enclosed in the **items** array).

Notes You cannot update **web_worksheet** entries.

When an invoice is created through the API, and a multi-part job template is used, **web_worksheet** can be applied only to the main job, not the sub jobs.

For example:

```
"items":
  [
    {
      "type": "print",
      "description": "Trade Show Materials",
      "job_template": "PS-SKU-23",
      "quantity": "100",
      "web_price": "100",
      "category": "", "web_worksheets": [
        {
          "description": "WebWorkSheet-1"
        },
        {
          "description": "WebWorkSheet-2"
        }
      ]
    }
  ]
```

Post

Post Request

```
/Estimate/{API_TOKEN}
{
  "account_id": 2222,1
  "web_reference_number": 123,
  "estimate_date": "24-12-2016",
  "estimate_required_by": "24-12-2016",
  "job_required_by": "24-12-2016",
  "creation_date": "24-12-2016",
  "wanted_by_date": "30-12-2016",
  "shipping_address": {
    "company": "XYZ",
    "street1": "1 Main Street",
    "street2": "Building 3",
    "city": "Hanover",
    "state": "NH",
    "zip": "03755",
    "country": "US"
  }
  "user": "David",
  "taken_by": "admin",
  "sales_rep": "Joe",
  "ship_via": "FedEx",
```

¹ Instead of account_id, you can use contact_id or account_account_id. For information, see “Account identification” on page 14.

```

"doc_title" : "Promotional Brochures",
"hold_state" : "Hold",
"special_instructions" : "Must be delivered by requested date",
"web_comments" : "Call with questions at 111-111-1111",
"resale_number" : "ZZZ 5436",
"expense_code" : "111",
"previous_invoice_reference_number" : "",
"previous_estimate_reference_number" : "",

"items":
[
  {
    "type" : "print",
    "description" : "Trade Show Materials",
    "job_template" : "PS-SKU-23",
    "quantity" : "100",
    "web_price" : "100",
    "category" : "",
    "taxable" : true,
    "brokered" : false,
    "finished" : true,
    "digital_asset_URL" : https://www.mycompany.com/XSLsample/pdf/Trade_show.pdf",
  }
],
[
  {
    "type" : "wide format",
    "description" : "Banners",
    "job_template" : "PS-SKU-12",
    "quantity" : 100,
    "web_price" : 60,
    "digital_asset_URL" : https://www.mycompany.com/XSLsample/pdf/Banner.pdf",
    "category" : "productkey"
  }
]
}

```

Post Response

```

{
  "status" : "OK",
  "estimate_id" : 1
  "estimate_number" : 1
}

```

Post (Update)

Post Request

If an ID is specified during an update then the estimate specified by the ID will be updated as opposed to created.

The API_TOKEN for an estimate will be passed as well. It is the same form as that passed during a creation POST. It is omitted here for brevity.

Get

Get Request

/estimate?number=27230

Get Response

```
{
  "id" :27230,
  "estimate_number" : "1"
  "account_id" : 2222, (primary key)
  "account_account_id" : 232,
  "status" : "Won",
  "estimate_date" : "24-12-2016",
  "estimate_required_by" : "24-12-2016",
  "job_required_by" : "24-12-2016",
  "creation_date" : "24-12-2016",
  "wanted_by_date" : "04-12-2016",
  "taken_by" : "MuhibS",
  "user" : "MuhibS",
  "special_instructions" : "",
  "resale_number" : "ZZZ",
  "expense_code" : "111",
  "previous_invoice_reference_number" : "1111",
  "previous_estimate_reference_number": "1111",
  "estimate_completed_by" : "PrintSmith User"

  "items" :
  [
    {
      "type" : "print",
      "description" : "Installation Guides",
      "quantity" : "166",
      "category" : ""
      "price_ex_gst" : 100.00,
      "price_gst" : 10.00,
      "price_inc_gst" : 110.00
    },
    {
      "type" : "wide format",
      "description" : "Posters",
      "quantity" : "166",
      "category" : ""
      "price_ex_gst" : 100.00,
      "price_gst" : 10.00,
      "price_inc_gst" : 110.00
    }
  ],

  "price_ex_gst": 200,
  "price_gst":20,
  "price_inc_gst":210.00,
  "discount_amt":0.00
}
```

Get (Range)

Get Request

/estimate/{?start_date,end_date,invoice_number_start,invoice_number_end,API_TOKEN}

Get Response

A subset of estimates in the system will be returned based on the passed criteria. A list of matching estimates will be returned. The estimates will take the same form as that returned by an individual Get request.



Invoices

The transactions as defined do not allow you to specify the charge definitions, press definitions, digital definitions, stock definitions, or the other data necessary for PrintSmith Vision to calculate pricing.

As a result, requests to add jobs, charges, invoices, or estimates will be treated as ad-hoc items. This means that PrintSmith Vision will not calculate any pricing, shipping, or taxes on these items.

Notes

All the information that applies to estimates also applies to invoices, but invoices can also include deposits and delivery tickets.

- For information about identifying accounts, see “Account identification” on page 14.
- For information about using **web_reference_number** for order numbers from the source system, see “Order number from source system” on page 14.
- For information about using **web_price** to override the price in the job template, see “Price of ordered item” on page 15.
- For information about how certain fields in the Account Info window are updated, see “Updates to fields in Account Info window” on page 14.
- Long **special_instructions** are handled as described on page 15.
- The **ship_price** field can be used to update the **Shipping** field in the Document Totals window.
- The **contact** field can be used to create a temporary contact for an invoice as described in “Temporary contacts for documents” on page 15.
- The **items** array is used to specify jobs as described in “Job information” on page 15.

Deposits for invoices

You can use the **deposits** array to record up to three deposits per invoice when updating or creating an invoice:

- Use **type** to specify the type of deposit with **1=cash**, **2=check**, and **3=credit card**.
- Use **reference** to provide a check number or credit card transaction number.
- Use **amount** to specify the amount of the deposit.
- Use **deposit_number** (required) to indicate which deposit field (**1**, **2**, or **3**) the deposit should be recorded in.

Note If you do not provide a **deposit_number** or provide an invalid number, or the field already includes a deposit, an error will occur.

For example:

```
"deposits": [
  {
    "type": 1,
    "reference": "",
    "amount": 100,
    "deposit_number": 1  },
  {
    "type": 2,
    "reference": "3232",
    "amount": 150,
    "deposit_number": 2
  }
]
```

You can also use **deposit_user** to identify the user making the deposit. If **deposit_user** is not used, the user is identified as **API**. (API is not a user who is listed in the User Definitions window in PrintSmith Vision.) The **deposit_user** field must be part of the account information for the invoice, as shown in this sample extract:

```
"account_id": 5868,  
"web_reference_number": 5,  
"invoice_date": "24-01-2017 11:46",  
"invoice_required_by": "31-01-2017 17:18",  
"user": "Sarah",  
"taken_by": "web_order",  
"deposit_user": "admin",  
"sales_rep": "Matteo",
```

Delivery tickets

You can create delivery tickets for jobs while creating an invoice through the API. You do this with the **delivery_tickets** JSON array.

Note You cannot update delivery ticket details through API (you must do so manually).

- Use **to_address** to define the delivery ticket “to” address:
 - **company** (company name of the to address)
 - **street1** (line one of the street address)
 - **street2** (line two of the street address)
 - **city**
 - **state**
 - **zip**
 - **country**
- Use **delivery_contact_id** to define the delivery contact. You can provide the contact number (contact ID) from the Contact window.
- Use **delivery_contact** to define the other delivery contact details:
 - **first_name**
 - **last_name**
 - **prefix**
 - **suffix**
 - **job_title**
 - **salutation**
 - **phone**
 - **fax**
 - **cell**
 - **email**
- Use **delivery_date** to specify the delivery date and time in the format *dd-MM-yyyy HH:mm*.
- Use **ship_via** to specify the shipping method as defined in the Ship Via table. Otherwise, this defaults to the value of the **Ship Via** field in the Account Info window.
- Use **description** to provide a description of the delivery ticket.
- Use **delivery_comments** to provide comments about the delivery.

- Use **po_number** to reference a purchase order number. (The default value comes from the Account Info window.)
- Use **reference** to enter a reference number.
- Use **jobs** to define the list of jobs associated with each delivery ticket:
 - **job_number** (number of the job from the **items** field)
 - **qty_shipped** (quantity ordered for the job)
 - **description**

Here is some sample JSON code to illustrate delivery ticket specifications:

```
"delivery_tickets": [
  {
    "to_address": {
      "company": "MyCompany",
      "street1": "1 Ivory Lane",
      "city": "My City",
      "state": "VT",
      "zip": "05055",
      "country": "USA"
    },
    "description": "Delivery Ticket 1",
    "delivery_date": "26-01-2017 15:00",
    "ship_via": "UPS",
    "delivery_comments": "Deliver to receptionist in lobby",
    "delivery_contact_id": "6",
    "delivery_contact": {
      "first_name": "Joe",
      "last_name": "Jones",
      "prefix": "P",
      "suffix": "S",
      "jobtitle": "Director",
      "salutation": "Mr.",
      "cell": "8888888888",
      "phone": "8888888888",
      "fax": "8888888888",
      "email": "JoeJones@MyCompany.com"
    },
    "jobs": [
      {
        "job_number": 1,
        "qty_shipped": 6,
        "description": "Marketing Job"
      },
      {
        "job_number": 4,
        "qty_shipped": 6
      }
    ]
  },
  {
    "jobs": [
      {
        "job_number": 1,
        "qty_shipped": 6
      }
    ]
  }
]
```

```

    {
      "job_number": 2,
      "qty_shipped": 6
    },
    {
      "job_number": 4,
      "qty_shipped": 6
    }
  ]
}
]

```

Post

Post Request

```

/Invoice/{API_TOKEN}
{
  "account_id" : 2222, 1
  "web_reference_number" : 111,
  "status" : "new_invoice",
  "job_required_by" : "24-12-2013",
  "invoice_date" : "24-12-2013",
  "invoice_required_by" : "30-12-2013",
  "wanted_by_date" : "30-12-2013",
  "shipping_address": {
    "company": "XYZ",
    "street1": "1 Main Street",
    "street2": "Building 3",
    "city": "Hanover",
    "state": "NH",
    "zip": "03755",
    "country": "US"
  }
  "user" : "Joe",
  "taken_by" : "admin",
  "deposit_user" : "admin",
  "sales_rep" : "Joan",
  "special_instructions" : "No deviations to paper specifications",
  "ship_price" : 100,
  "ship_via" : "UPS",
  "doc_title": "User Guides",
  "po_number" : "AZ23167",
  "hold_state" : "Hold",
  "web_comments" : "Please call me at 111-111-1111 if you have questions",
  "resale_number" : "ZZZ",
  "expense_code" : "111",
  "previous_invoice_reference_number" : "",
  "previous_estimate_reference_number" : ""
}

```

¹ Instead of **account_id**, you can use **contact_id** or **account_account_id**. For information, see “Account identification” on page 14.


```
"items" :
[
{
  "type": "print",
  "job_template" : "PS-SKU-1",
  "comment": "Satin Blazer Satin Cover 80# White 1",
  "taxable": true,
  "brokered": false,
  "finished": true,
  "description" : "User Guides for Trade Show",
  "digital_asset_URL": "https://mycompany.com/guides/pdf/ug_for_show.pdf",
  "quantity" : 5000,
  "category" : ""
  "web_price": 2203.41,
  "web_worksheets": [
    {
      "description": "WebWorkSheet-1"
    },
    {
      "description": "WebWorkSheet-2"
    }
  ]
},
{
  "type": "BW",
  "job_template" : "PS-SKU-55",
  "description" : "Business Cards",
  "digital_asset_URL": "https://mycompany.com/guides/pdf/bus_cards.pdf",
  "quantity" : 5000,
  "web_price" : 1007.28,
  "category" : ""
}
],
"deposits": [
{
  "type": 1,
  "reference": "",
  "amount": 100,
  "deposit_number": 1
},
{
  "type": 2,
  "reference": "3232",
  "amount": 150,
  "deposit_number": 2
}
],
"delivery_tickets": [
{
  "to_address": {
    "company": "MyCompany",
    "street1": "1 Ivory Lane",
    "city": "My City",
    "state": "VT",
    "zip": "05055",
    "country": "USA"
  },
  "description": "Delivery Ticket 1",
  "delivery_date": "26-01-2017 15:00",
  "ship_via": "UPS",
  "delivery_comments": "Deliver to receptionist in lobby",
}
```

```
"delivery_contact_id": "6",
"delivery_contact": {
  "first_name": "Joe",
  "last_name": "Jones",
  "jobtitle": "Director",
  "salutation": "Mr.",
  "cell": "8888888888",
  "phone": "8888888888",
  "fax": "8888888888",
  "email": "JoeJones@MyCompany.com"
},

"jobs": [
  {
    "job_number": 1,
    "qty_shipped": 500,
    "description": "User Guides"
  }
],
{
  "to_address": {
    "company": "MyCompany",
    "street1": "100 Washington Square",
    "city": "My City",
    "state": "MA",
    "zip": "02139",
    "country": "USA"
  },
  "description": "Delivery Ticket 2",
  "delivery_date": "26-01-2017 15:00",
  "ship_via": "UPS",
  "delivery_comments": "Use delivery entrance in back of building",
  "delivery_contact_id": "5",
  "delivery_contact": {
    "first_name": "Michelle",
    "last_name": "Windsor",
    "jobtitle": "VP",
    "salutation": "Ms.",
    "cell": "8888888888",
    "phone": "8888888888",
    "fax": "8888888888",
    "email": "MichelleWindsor@MyCompany.com"
  },
  "jobs": [
    {
      "job_number": 2,
      "qty_shipped": 500,
      "description": "Business Cards"
    }
  ]
}
}
```

Post Response

```
{
  "status": "OK",
  "invoice_id": 1,
  "invoice_number": 1
}
```

Post (Update)

Post Request

If an ID is specified in an update, the invoice specified by the ID is updated versus created. The API_TOKEN for an invoice is also passed. It is the same form as is passed during a creation post, and is omitted here for brevity.

Get

Get Request

```
/Invoice/{id}
```

Get Response

```
{
  "id": 27277,
  "invoice_number": "1",
  "account_id": 2222,
  "account_account_id": 232,
  "invoice_date": "24-12-2013",
  "invoice_required_by": "24-12-2013",
  "job_required_by": "24-12-2013",
  "creation_date": "24-12-2013",
  "wanted_by_date": "04-12-2015",
  "taken_by": "MuhibS",
  "user": "",
  "special_instructions": "",
  "resale_number": "ZZZ",
  "expense_code": "111",
  "previous_invoice_reference_number": "1111",
  "previous_estimate_reference_number": "1111",
  "estimate_completed_by": "PrintSmith User",
  "items":
  [
    {
      "type": "print",
      "description": "description",
      "quantity": "11",
      "category": "",
      "price_ex_gst": 100.00,
      "price_gst": 10.00,
      "price_inc_gst": 110.00
    },
    {
      "type": "wide format",
      "description": "description",
      "quantity": "11",
      "category": "",
      "price_ex_gst": 100.00,
      "price_gst": 10.00,

```

```
    "price_inc_gst" : 110.00
  }
],
  "price_ex_gst": 200,
  "price_gst":20,
  "price_inc_gst":210.00,
  "discount_amt":0.00
}
```

Get (Range)

Get Request

/invoice/{?start_date,end_date,invoice_number_start,invoice_number_end,API_TOKEN}

Get Response

A subset of invoices in the system will be returned based on the passed criteria. A list of matching invoices will be returned. The invoices will take the same form as that returned by an individual Get request.

Daily Sales

Get (Range)

Get Request

```
/daily_sales/{?start_date,end_date,API_TOKEN}
```

Get Response

```
{
  {
    "sales_categories":
      [
        {
          "name" : "Postage at Cost",
          "amount" :41.29
        },
        {
          "name" : "Outside Work - Offset",
          "amount" :944.11
        }
      ]
    "post_date"
    "pos_cash"
    "pos_check"
    "pos_card"
    "ar_cash"
    "ar_check"
    "ar_card"
    "apply_deposits"
    "new_deposits"
    "return_deposits"
    "total_cash_and_deposits"
    "total_ar"
    "on_account"
    "ar_balance"
    "total_receipts"
    "bank_deposit"
    "total_memos"
    "discounts"
    "wip_total"
    "inv_wip"
    "total_est"
    "non_taxable_sales" :12.50
    "taxable_sales"

    "tax_on_sales"
    "grand_total"
  }
}
```

Product Category

Get

Get Request

/ProductCategory

Get Response

```
{
  "items":
    [
      {
        "code" : "03",
        "name" : "Brochure"
      },
      {
        "code" : "01",
        "name" : "Banners"
      },
      {
        "code" : "02",
        "name" : "Booklets"
      }
    ]
}
```

Get (Range)

Get Request

/ProductCategory /{number }

Get Response

```
{
  "items":
    [
      {
        "code" : "03",
        "name" : "Brochure"
      },
      {
        "code" : "01",
        "name" : "Banners"
      },
      {
        "code" : "02",
        "name" : "Booklets"
      }
    ]
}
```

Post

Post Request

/ProductCategory/{API_TOKEN}

```
{
  "code" : "02",
  "name" : "Booklets"
}
```

Post Response

```
{
  "status" : "OK",
  "code" : 1
}
```

Post (Update)

Post Request

If an ID is specified during an update then the Product specified by the ID is updated versus created. The API _TOKEN for a Product is also passed. It is the same form as is passed during a creation post, and is omitted here for brevity.

Sample Account List Data in JSON Format

The URL to obtain a list of accounts is **http://IP_address:9191/PrintSmith/Commerce/Account**

where *IP_address* is the IP address of your PrintSmith Vision server, e.g., 10.90.41.80.

Note If you are using HTTPS (SSL), start the URL with **https** instead of **http**.

Here is some sample account list data in JSON format.

```
{
  "accounts":
  [
    {
      "id": "11697", "account_id": "1", "name": " <<< WALK-IN >>> ",
      "type": "Customer", "addresses": [
        {
          "type": "statement", "address_1": "", "address_2": "", "suburb": "", "postcode": "",
          "country": ""
        },
        {
          "type": "invoice", "address_1": "", "address_2": "", "suburb": "", "postcode": "",
          "country": ""
        }
      ],
      "credit_control": {
        "type": "Cash/Check/Credit Card",
        "credit_limit": 800.00,
        "external_reference_number": null,
        "sales_rep": "House",
        "account_status": "Current",
        "automatic_discount": {
          "type": "percentage",
          "amount": 0.0
        },
        "master_account_id": -1,
        "do_not_mail": false,
        "contacts": []
      },
      "id": "27309", "account_id": "4305", "name": "1-800-Radiator",
      "type": "Customer", "addresses": [
        {
          "type": "statement", "address_1": "1936 South Lynhurst Suite G",
          "address_2": "", "suburb": "Indianapolis", "postcode": "46241", "country": ""
        },
        {
          "type": "invoice", "address_1": "1936 South Lynhurst Suite G",
          "address_2": "", "suburb": "Indianapolis", "postcode": "46241", "country": ""
        }
      ],
      "credit_control": {
        "type": "Cash/Check/Credit Card",
        "credit_limit": 0.00,
        "external_reference_number": null,
        "sales_rep": "House",
        "account_status": "Inactive",
        "automatic_discount": {
          "type": "percentage",
          "amount": 0.0
        },
        "master_account_id": -1,
        "do_not_mail": false,
        "contacts": [
          {
            "type": "statement", "contact_id": "27303", "first_name": "Michael",
            "last_name": "Hunt", "prefix": "", "suffix": "", "phone": "999-999-Phone"
          },
          {
            "type": "invoice", "contact_id": "27303", "first_name": "Michael", "last_name": "Hunt",
            "prefix": "", "suffix": "", "phone": "999-999-Phone"
          }
        ]
      },
      "id": "26487", "account_id": "4198", "name": "28th Street School",
      "type": "Customer", "addresses": [
        {
          "type": "statement", "address_1": "28th Street", "address_2": "", "suburb": "Indianapolis", "postcode": "46208", "country": ""
        },
        {
          "type": "invoice", "address_1": "630 W 28th Street", "address_2": "", "suburb": "Indianapolis", "postcode": "46208", "country": ""
        }
      ],
      "credit_control": {
        "type": "Charge Account",
        "credit_limit": 0.00,
        "external_reference_number": null,
        "sales_rep": "House",
        "account_status": "Current",
        "automatic_discount": {
          "type": "percentage",
          "amount": 0.0
        },
        "master_account_id": -1,
        "do_not_mail": false,
        "contacts": [
          {
            "type": "statement", "contact_id": "26480", "first_name": "Bessie", "last_name": "Harrison",
            "prefix": "", "suffix": "", "phone": "999-999-Phone"
          },
          {
            "type": "invoice", "contact_id": "26480", "first_name": "Bessie", "last_name": "Harrison",
            "prefix": "", "suffix": "", "phone": "999-999-Phone"
          }
        ]
      }
    ]
  }
}
```


Appendix: Account Post and Get Responses

The tables below explain how certain account identification fields are used during post and get responses.

Account Post response	Key Value
"account_id":22808475	Primary key
account_account_id:"13946"	Sequential account number

Account Get Response (Specific)	
"id":22808475	Primary key

Account Get Response (All)	
"id":305305	Primary key
"account_id":13317	Sequential account number
"contact_id":289624	Primary key