1. Sample Flows

The following examples illustrate typical flows using the IPP protocol. In these examples, the IPP Printer object named “printer-1” is located at the node identified by the DNS name “some.domain.com”. A job Template has been defined for Printer-1 which establishes the print defaults.

For brevity in the following flows, none of the HTTP headers are shown. IPP headers are shown in bold type. CRLF sequences are not shown.

1.1.1 Querying the printer

Client   some.domain.com

--→

Post http://some.domain.com/printer-1   http/1.0
GetAttributes IPP/1.0
   Printer-state :
   Sides-supported :
   Media-supported :
   Document-formats-supported :

←---

http/1.0 201 “Created” (a response)
   IPP/1.0 xxx “attribute list returned”
   Printer-state : running
   Sides-supported : 1-sided
   Media-supported : iso-a4-white, iso-b4-white
   Document-formats-supported : Postscript/2.0

1.1.2 Print Operation - with print data included

Client   some.domain.com

--→

Post http://some.domain.com/printer-1 http/1.0
   Print IPP/1.0
   Print-Job-Object Header
      Job-name : My Job
      Medium : iso-a4-white
      Notification-events : Job-completion
      Notification-address : joe@pc.domain.com
   Document Header
      Document-name : Letter to Mom
   Document-Content Header (content type = Postscript/2.0)
      Document in Postscript level 2 format

```
←------------------------------------------------------------

http/1.0  200 "accepted"
   IPP/1.0 xxx "print job accepted and queued"
      Job-Identifier : some.domain.com/printer-1/0037
      Current-job-state : pending
      Printer-state : running
```

1.1.3 Print Operation - with no data included

```
Client                                             some.domain.com

-----------------------------------------------------------→

Post http://some.domain.com/printer-1  http/1.0
   Print IPP/1.0
   Print-Job-Object Header
      Job-name : My Job
      Medium : iso-a4-white
      Notification-events : Job-completion
      Notification-address : joe@some.domain.com
   Document Header
      Document-name : Letter to Mom
      Document-URL : joe@pc.domain.com/Docs/To-mom.ps

←------------------------------------------------------------

http/1.0  200 "accepted"
   IPP/1.0 xxx "print job accepted and queued"
      Job-Identifier : some.domain.com/printer-1/0037
      Current-job-state : pending
      Printer-state : running
```

1.1.4 Querying the state of the job - no attributes specified, so all job attributes are returned

```
Client                                             some.domain.com

-----------------------------------------------------------→

Post http://some.domain.com/printer-1/0037  http/10,
   GetAttributes  IPP/1.0

←-----------------------------------------------------------

http/1.0 201 "Created" (a response)
   IPP/1.0  xxx "atribute list returned"
   Job-Name : My Job
   Job-Originator : Joe@some.domain.com
   Job-originating-host : pc.domain.com
   Notification-address : joe@pc.domain.com
   Job-locale : xx:xx:xx
   Current-job-status : printing
   Printer-assigned : printer-1
   Submission-time : 1214
   Media-sheets-completed : 2
```

1.1.5 Canceling a Job

```
   Client                                              some.domain.com

   --------------------------------------------------------→

   Post: http://some.domain.com/printer-1/0037
      CancelJob  IPP/1.0

   ←---------------------------------------------------------

   http/1.0  200 “okay”
   Current-job-state : terminating
```

1.1.6 Listing jobs on printer-1, only return job sizes. Jobs are returned in the order they are scheduled for printing. A Job-identifier attribute preceeds the attributes returned for each job to delimit job boundaries.

```
   Client                                                some.domain.com

   ----------------------------------------------------------→
   Post http/1.0 some.domain.com/printer-1
      GetJobs  IPP/1.0
         total-job-octets :

   ←-----------------------------------------------------------

   http/1.0  201 “Created” (a response)
      IPP/1.0 xxx “created an attribute list”
      Job-identifier : 0033
      total-job-octets : 4567
      Job-identifier : 0034
      total-job-octets : 12345
      Job-identifier : 0035
      total-job-octets : 12356
```