Internet Printing Protocol Workgroup Meeting Minutes
March 7, 2016

Meeting was called to order at approximately 4:00pm ET on March 7, 2016.

Attendees

Smith Kennedy (HP)
Emmet Lalish (3MF/Microsoft)
Ira McDonald (High North)
Mike Scrutton (Adobe Systems)
Phil Spreier (3D PDF Consortium)
Mike Sweet (Apple)
Paul Tykodi (TCS)
William Wagner (TIC)

Agenda Items

1. IP Policy and Minute Taker
    -   IP policy accepted, Mike taking minutes
2. Review previous minutes:
    -   http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20160222.pdf
    -   Approved as posted
3. Review of IPP 3D Printing Extensions
    -   http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp3d10-20160303-rev.pdf
    -   Table 1:
        -   Current SDL printers do not expose the trimmers or input trays
        -   Not clear what is required/optional
        -   Is this over complicated?
            -   No, but should expand on this with examples so that it is clear how generic it is.
        -   Trimmers - expand beyond SDL? Maybe "any" instead?
        -   Input Trays -> Include rolls
    -   Section 4.3:
        -   Add missing Figure reference.
        -   Figure 2: Make X, Y, Z dimensional (double arrows)
        -   How to specify location of object on build platform/in volume?
            -   Right now nothing for that, printer decides where to place object
        -   Critical to know build orientation/direction?
            -   Sometimes, yes.
            -   Different in just Z or in X and Y as well?
                -   Usually Z, sometimes X and Y as well
        -   Location within build volume can influence

- Can we log location information from prior prints?
  - Not currently defined, but if we have an attribute it can be logged in the job receipt (xxx-actual)
- Worth defining a coordinate system with origin
  - Z=0 is the first layer, increasing Z is later-in-time/further from build platform
  - X,Y=0 is the front left or the center?
    - Use front left bottom corner as origin (0,0,0)
- Discussion of rewriting ODL vs. applying external transforms
  - IPP for 2D printers supports overrides at the job, document, and page level
  - IPP for 3D printers can support overrides at the job, document, and object level
  - Support simple job ticket transforms: rotate and translate
- Bounding box of object
  - Need to process all vertices to determine bounding box
  - Want bounding box as attribute(s)?
    - Yes, both as supplied in job ticket and in receipt
    - Job, document, object levels?
    - Can the value be trusted?
      - Client-supplied is informational, printer-supplied is authoritative.
- Ended at Section 4.4

Next Steps / Open Actions

- Next IPP conference calls March 14, 2016 at 3pm ET and March 21, 2016 at 4pm ET (3D)
- Action: Mike to post updated WD template with boilerplate "operating system providers" fixed
- Action: Mike to post registration template for trimming-type='draw-line' (PENDING - will post before next regular WG concall)
- Action: Mike to fix *-k-octets in IANA IPP registry - should be Status attributes (PENDING - do this with the Job Password Repertoire registrations)