

# Internet Printing Protocol Workgroup Meeting Minutes

## September 26, 2016

Meeting was called to order at approximately 4pm ET on September 26, 2016.

### Attendees

Pete Basilere (Gartner)  
Smith Kennedy (HP)  
Emmett Lalish (3MF/Microsoft)  
Daniel Manchala (Xerox)  
Ira McDonald (High North)  
Matthew Morikawa (Kyocera Document Solutions)  
Mike Scrutton (Adobe)  
Paul Tykodi (TCS)  
Bill Wagner (TIC)

### Agenda Items

1. IP Policy and Minute Taker
  - IP policy accepted, Smith taking minutes
2. Approve previous minutes
  - <http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20160919.pdf>
  - Approved as posted
3. Presentation by Pete Basiliere (Gartner)
  - We seem to have moved beyond the "hype" phase and the "disillusionment" phase and are now down in the solid value delivery phase.
  - Primary inhibitor in the industry / market: absence of workflow solutions
    - Pricing, retaining QA data, archiving information, interoperability with different manufacturers, ERP systems
    - Educational institutions have a variety of devices accessible via many students and they need systems to manage access, etc.
    - Pete's background in 2D print in enterprise / large educational environments
  - Recently published a report on 3D print workflow
    - goal here was to share the key findings and recommendations
    - Key Findings
      - workflow software is critical for growth yet is still terribly incomplete when compared with 2D print management software
      - Most tools are very focused on installations where there are only 3D printers (in many cases focused on particular 3D printing technologies) or conventional manufacturing

- management systems that are being extended to include coverage of 3D printers as manufacturing devices
- Fewer than 10 3D print workflow software solutions in the market, many very focused on particular technologies
  - many are focused on particular technologies
  - many installations just have to do their own software
  - number of systems is expected to double in 5 years
- Gartner has identified 34 key capabilities that 3D print workflow software must incorporate in order to grow properly
- Does IPP 3D pursue low level extrusion based additive manufacturing or does it work based on a more abstract model
- 34 key capabilities
  - wasn't able to share them but they should be quite obvious to us
- Ira pointed out that we have been doing IPP 3D with a goal of remaining as abstract to the underlying mechanism technology as possible, and that the workflow elements of IPP (Shared Infrastructure, cloud, etc.) would be common across 2D and 3D print
- Recommendations that officers reach out to other entities that could contribute requirements or content to IPP 3D (e.g. UPS etc.)
- Value of doing the legwork FIRST so that it is ready when you need it
- PWG is now authoring its own software

## **Next Steps / Open Actions**

- Next IPP conference calls October 5 and October 19, 2016 at 1pm ET
- Review IPP Finishings 2.1 feedback (Figure 3 coordinate system and MaxCapacity)
- Action: Mike to submit "ipp-features-supported" value registration (DONE)
- Action: Mike to create an IPP Resource state diagram (ONGOING)
- Action: Mike to fix registration of job-constraints-supported and job-resolvers-supported to include "resolver-name (name(MAX))" member attribute (PENDING - waiting on RFC publication)