

Cloud Printing BOF

December 8, 2010 Irvine, CA PWG F2F Meeting

Introduction



- Cloud-based applications and solutions are increasingly common
- Cloud-based printing is emerging in several different forms
- Adopting standard protocols or schemas now will help interoperability and speed adoption
- Also important to understand and address privacy, security, and legal issues/implications
- Currently not focused on doing any new specifications, but rather investigating how the PWG can support cloud printing

Resources



- Cloud printing mailing list:
 - cloud@pwg.org
 - https://www.pwg.org/mailman/listinfo/cloud
- Cloud printing wiki:
 - http://pwg-wiki.wikispaces.com/Cloud+Printing

Definitions



- Cloud; an on-demand shared computing resource available over a network, typically the public Internet or a company's private intranet
- Cloud Printing; any solution that connects a Client to a Printer through a shared Cloud Print Provider
- Cloud Print Provider; the software component that manages printing between Clients and Cloud Print Managers
- Cloud Print Manager; the software component that implements the interface between the Cloud Print Provider and Printer

Definitions (con't)



- Client; standard IPP definition
- Printer; standard IPP definition
- Registration; process by which a Client or Cloud Print Manager associates itself with the Cloud Print Provider
- Discovery; process by which a Client finds candidate Printers for a subsequent print job

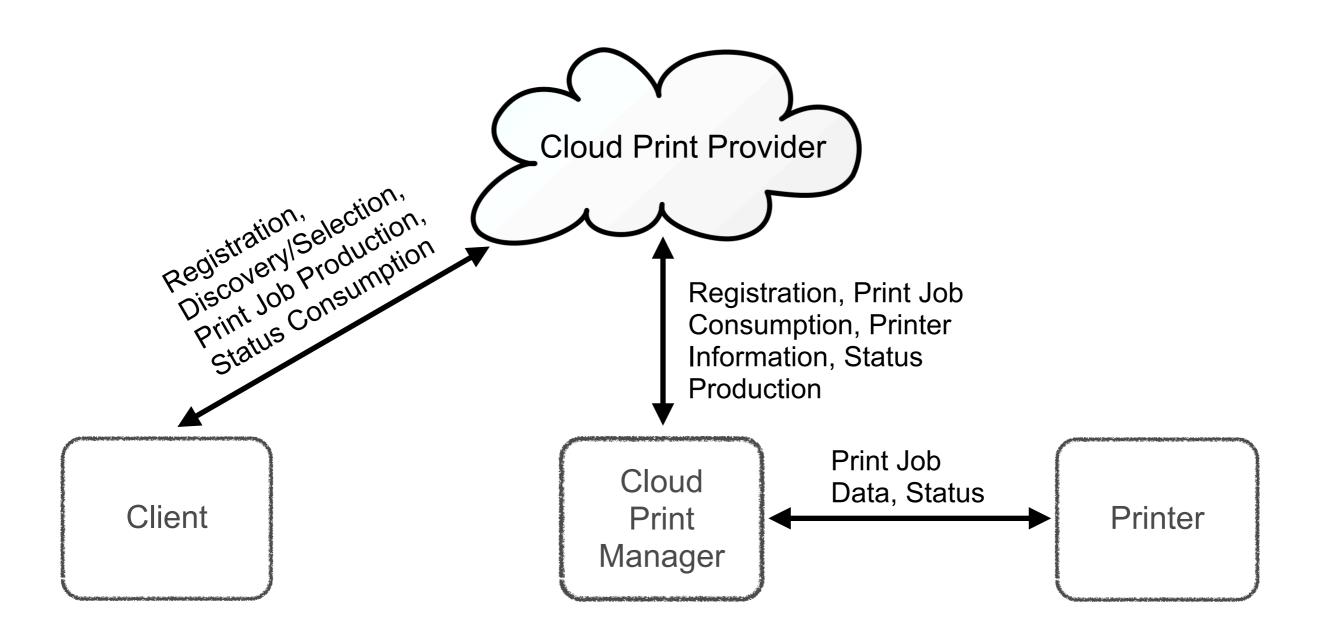
Common Issues



- Discovery and management of available printers/ services
- Transport of document/print data
- Management of job ticket information
- Document formats
- Interoperability
- Security
- Privacy
- Logging

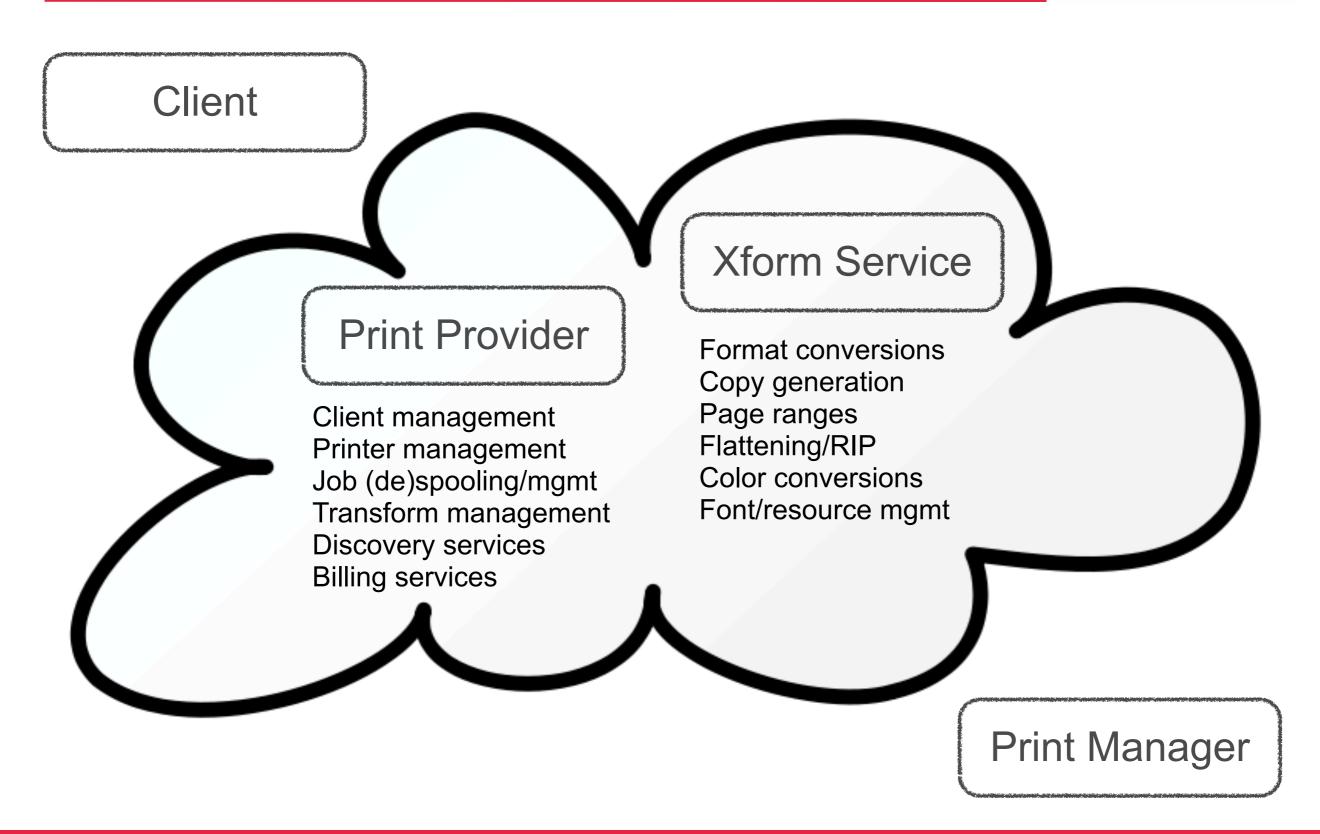
Functional Model





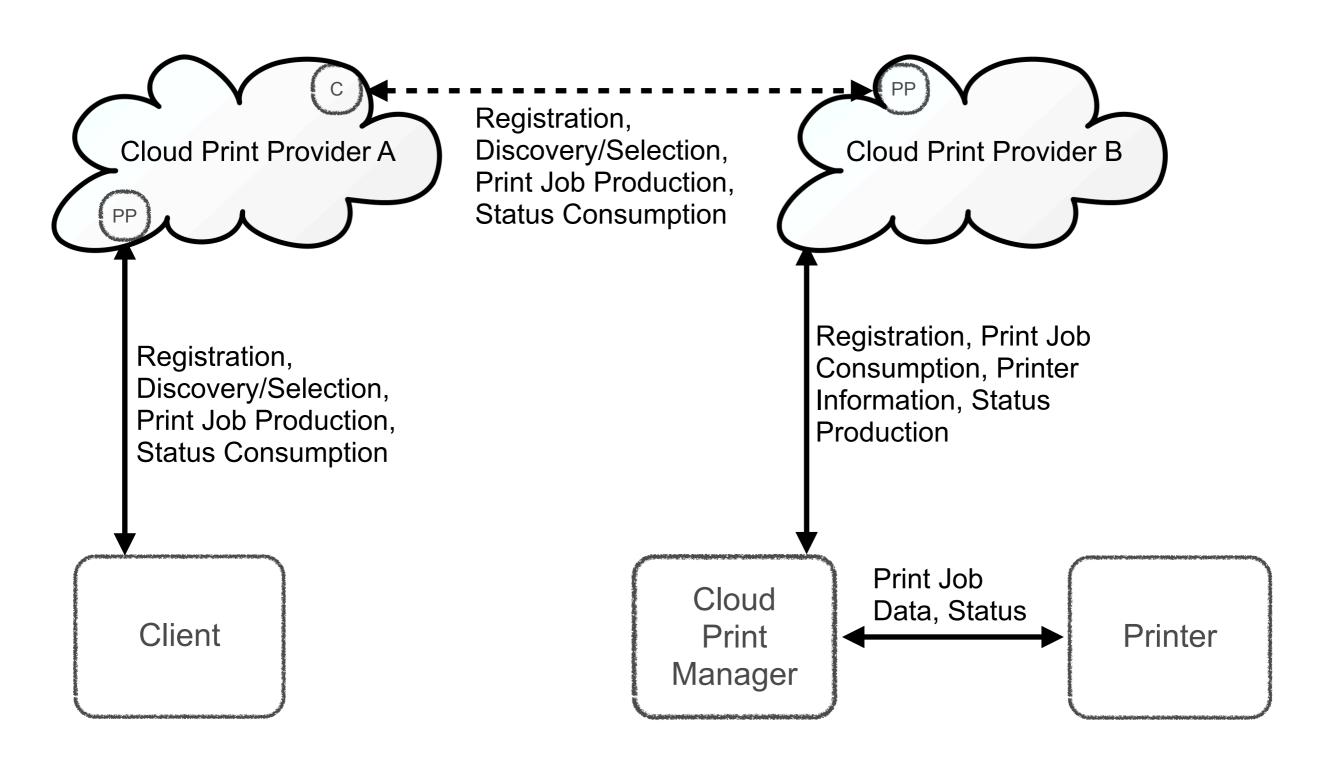
Functional Model - Cloud Printer





Functional Model - Multi-Cloud

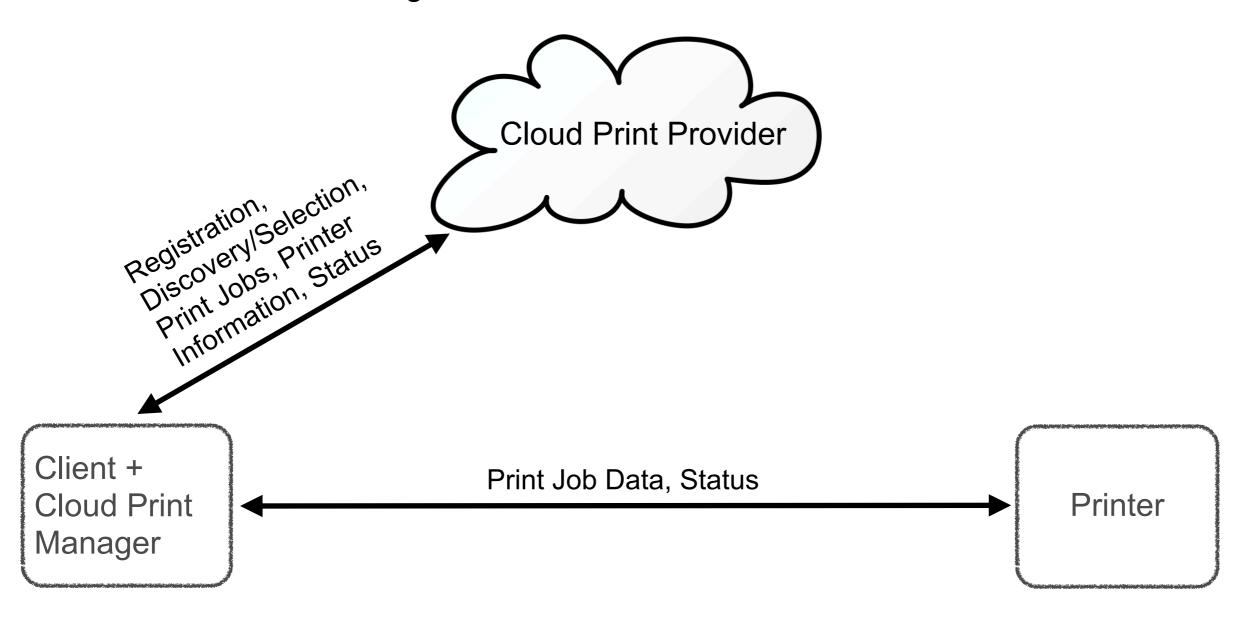




Use Cases/Scenarios



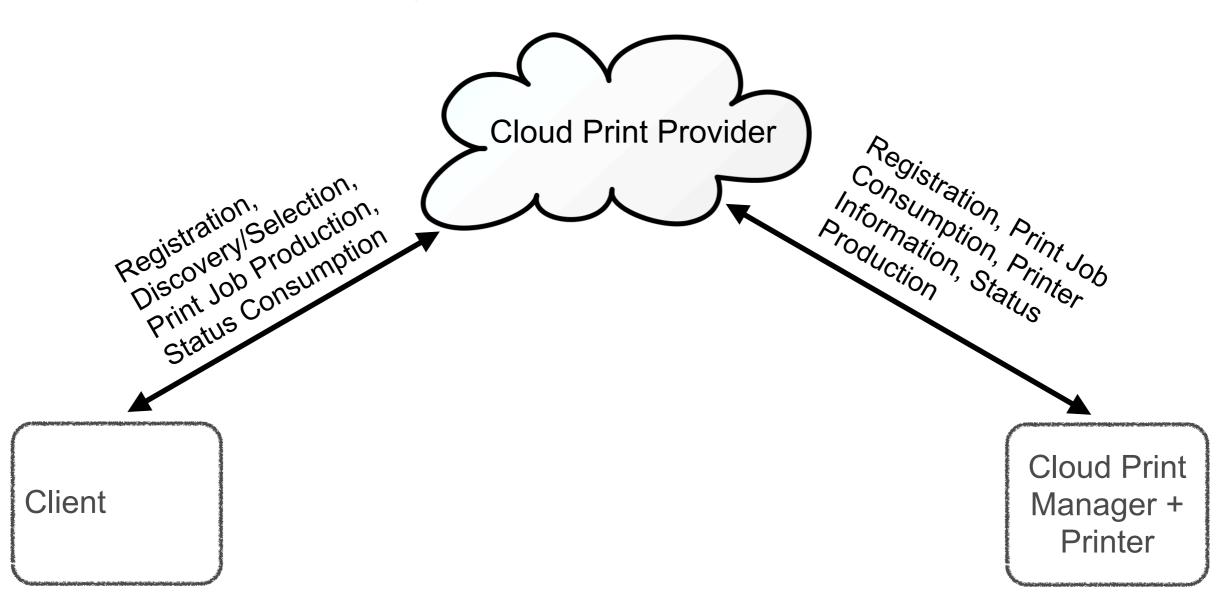
Client as Cloud Print Manager



Use Cases/Scenarios



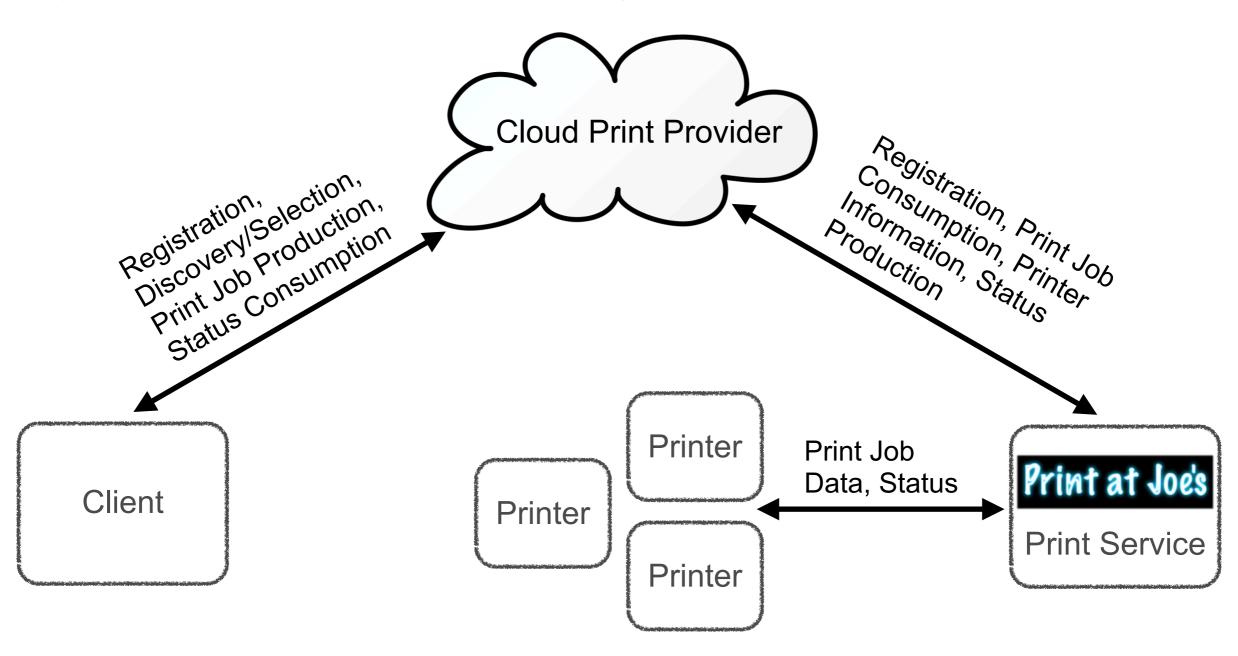
Printer as Cloud Print Manager



Use Cases/Scenarios



Pay-for-Print Service as Cloud Print Manager



IPP Everywhere Questions



Client:

- How do registration and discovery work?
- Do print job creation and status monitoring use IPP with the Cloud Print Provider?

• Printer:

- How do registration and discovery work?
- How are jobs transferred from Cloud Print Provider to Printer?
- How is status relayed from Printer to Cloud Print Provider?



Open Discussion