Cloud Printing BOF

19 October 2010

Lexington, KY - 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:
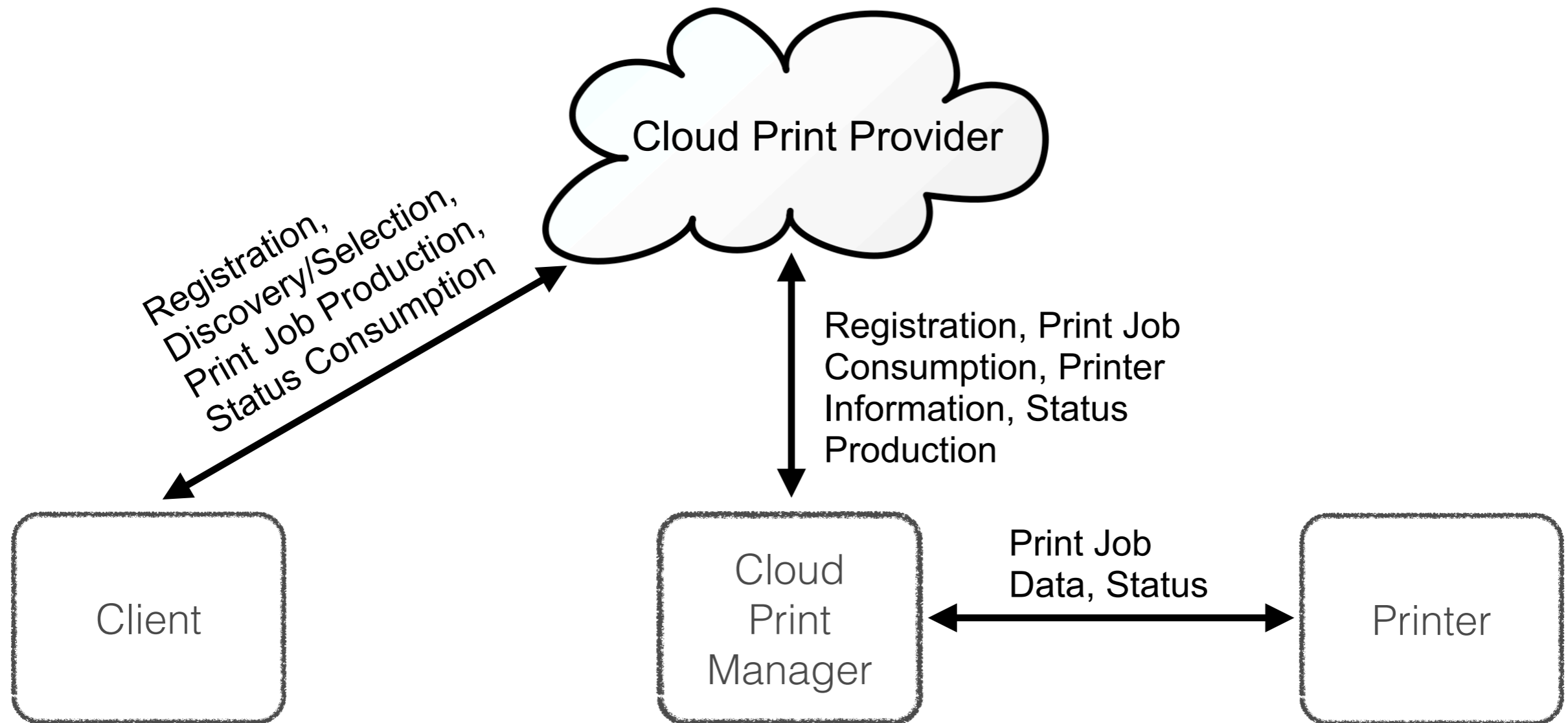 - http://pwg-wiki.wikispaces.com/Cloud+Printing

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
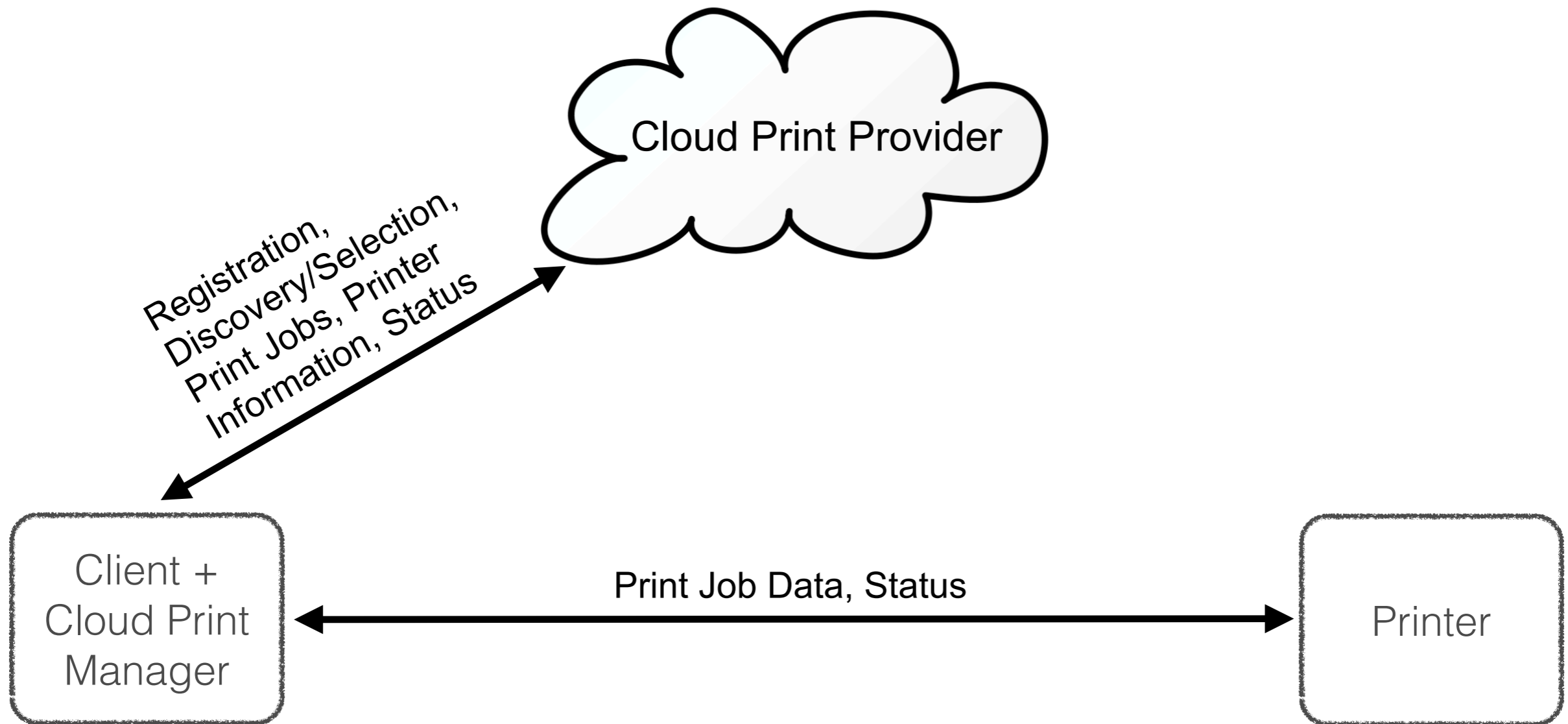
Definitions (con't)

- 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*

Functional Model
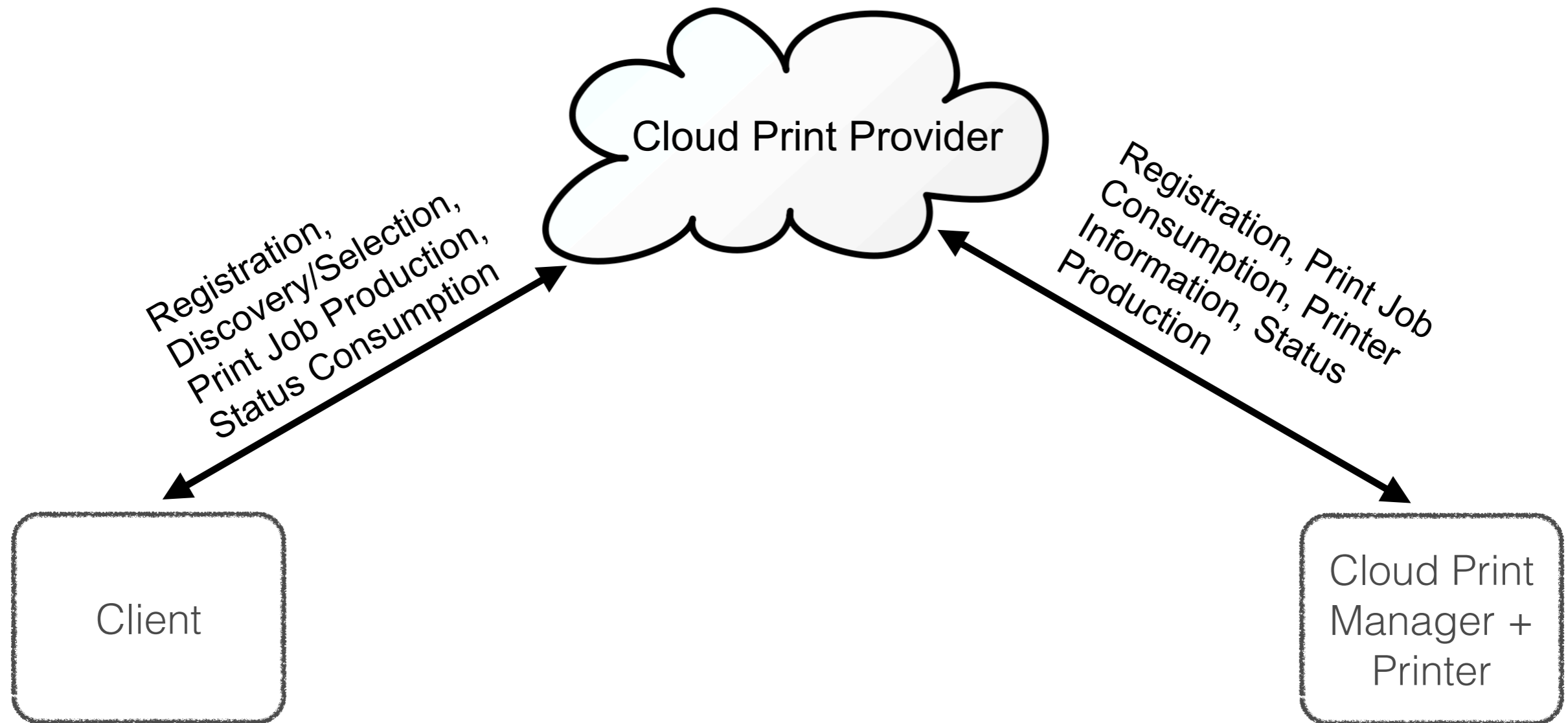

Cloud Print Provider

Registration, Discovery/Selection, Print Job Production, Status Consumption

Registration, Print Job Consumption, Printer Information, Status Production

Client

Cloud Print Manager

Print Job Data, Status

Printer

Use Cases/Scenarios

Client as Cloud Print Manager

Cloud Print Provider

Registration, Discovery/Selection, Print Jobs, Printer Information, Status

Client + Cloud Print Manager

Print Job Data, Status

Printer

Use Cases/Scenarios

Printer as Cloud Print Manager

Cloud Print Provider

Registration,
Discovery/Selection,
Print Job Production,
Status Consumption

Registration, Print Job
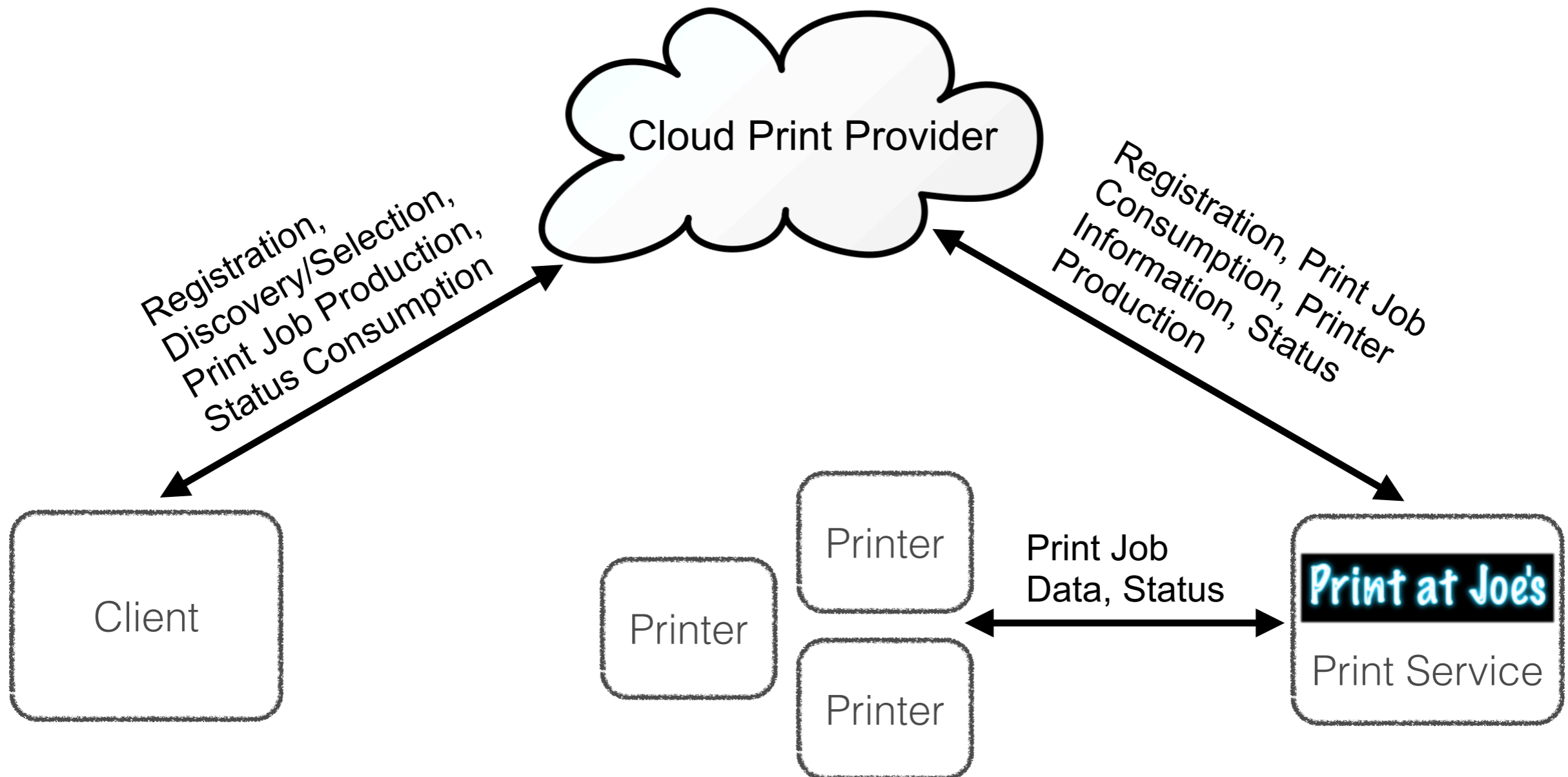Consumption, Printer
Information, Status
Production

Client

Cloud Print
Manager +
Printer

Use Cases/Scenarios

Pay-for-Print Service as Cloud Print Manager

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

Discussion