

# **International Imaging Industry Association**

## **CPXe Version 2**

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## **What is CPXe?**

- " ... Common Picture eXchange environment allowing imaging devices to seamlessly exchange digital images, order and commerce information among any networked imaging application and service, regardless of manufacturer, service provider or geography."

## What are the CPXe Components?

- An industry initiative of I3A to provide:
  - A **Network Architecture**
  - A set of **specifications**
  - Standard **APIs**
- Vendor companies to provide:
  - **Services** that plug-in
    - Retail Printing & Composite Products Services
    - Storage Services
  - **Applications** that use the services on the network from *any* device that can access the network

## CPXe

- First released in 2003 by
  - Agfa, Gretag, Silverwire, Fujifilm, HP, Kodak, Konica Minolta, Noritsu, Olympus, Open Graphics, Pixology, Shutterfly
- Web Services based
  - Uses common standards widely adopted throughout internet
- Interoperability
  - Language, platform, OS independent

## Web Services Employed

- UDDI Version 2.0
  - Directory Service
- XML
  - Document format
- WSDL 1.1
  - To define interaction methods
- SOAP 1.1
  - Messaging standard
- HTTP
  - Transport protocol

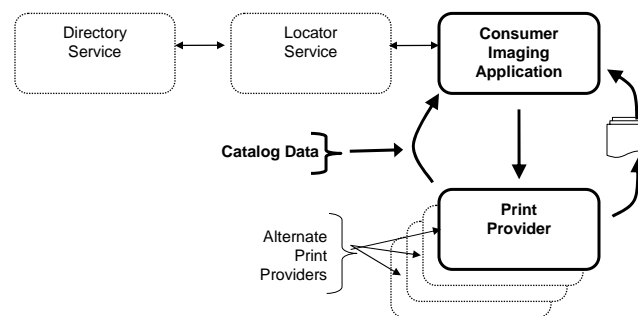
## Web Services Organizations

- The World Wide Web Consortium (W3C)
  - <http://www.w3c.org/>
- The Web Services Interoperability Organization (WS-I)
  - <http://www.ws-i.org/>
- Organization for the Advancement of Structured Information Standards (OASIS)
  - <http://www.oasis-open.org/>
- XML.org
  - <http://www.xml.org/>

## Current Features

- FAS - fulfillment access services
  - Catalogs
    - *Descriptions of the businesses that own the services*
    - *Descriptions of the supported service and interface type*
    - *Information on where to find the service on the Internet*
  - Orders
- SLS - locator services - like search engine
  - Applications (via Locators) query UDDI directory listings to find, and then connect to a specific service
  - Apply business rules, consumer selection criteria, and service properties (catalog data) to filter the list of available services
  - Especially relevant to mobile applications

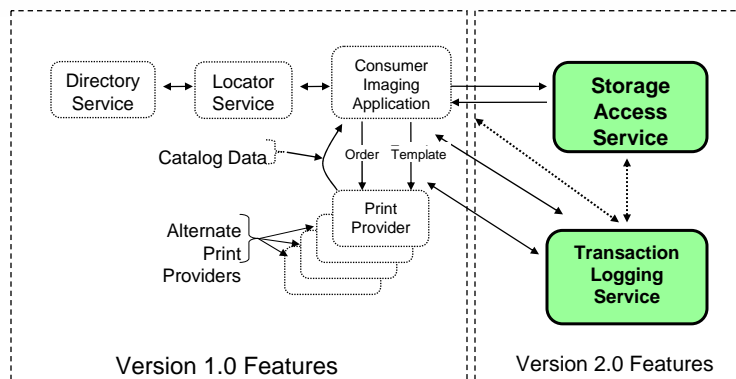
## Current Flow



## New 2.0 Features

- Transaction Logging
  - Referral fee
  - Convenience or Service Fee
- Storage Access Service
  - Add to an existing account
  - Access images to print/share
- Support for P3S Templates

## New Functionality



## **Transaction Log**

- Double entry
  - Simple reconciliation
  - Data services only
  - Not a credit or settlement guarantor
- Flexible reporting
  - Any time period
  - Any partners

## **Transaction Types**

- Referral Fee
  - Paid to a requestor that creates and sends print orders to a Fulfillment Access Service (FAS)
- Service Fee
  - Collected from the consumer as an additional charge for convenient access to their online images. Usually this fee is passed on to the access point operator, similar to ATM fee.

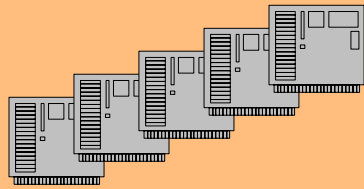
## Storage

- Asset types
  - Images
  - Images with sound files
  - Audio
  - Video
  - Albums

## Storage

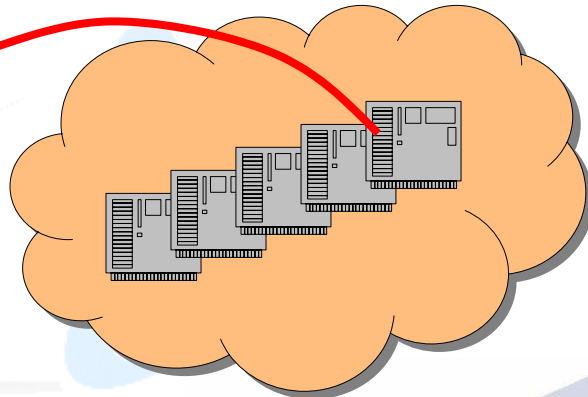
- Upload assets
  - Push images etc. from a variety of locations up to your online storage provider
- Download
  - Access stored images etc. from print and specialty output providers anywhere in the world

## Add to *any* Online Account



Load account  
from any web  
enabled device

## Access Online Account for Viewing Anywhere



Access account  
from any web  
enabled device

## Access Online Account From Anywhere



Access services from any web enabled device



Print in store



Pick up prints

## P3S

- Personalized Photo Products Specification
- Standardized template format for composite image products
  - photo album pages
  - calendars
  - greeting cards
- Ensure order information from user is understood by fulfillment service - currently no standardized way to describe these kinds of products

## Summary

- Expanded features serve more consumers, in more ways and in more places than ever before, ideal for mobile imaging environment
- Greatly enhanced opportunity for revenue sharing, incentive
- Rewards developers of creative consumer offerings
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