# PWG Semantic Model (PWG SM)

Work items of interest

# Logistics

- •Date/Time: -April 6 2006 -9am - 1pm eastern Dial-In -Tele-Con Number: •1-866-365-4406 -PassCode: •2635888 WebEx Meeting Details (http://www.mymeetings.com): -Meeting Number: 747275324 Meeting Passcode: PwgSm -Meeting Host: Peter Zehler -http://www.mymeetings.com/xerox/nc/j oin.php?i=747275324&p=PwgSm&t=c
  - Enter the required fields.
  - Indicate that you have read the Privacy Policy.
  - Click on Proceed.

•Agenda:

**-9:00 - 9:15:** 

Convene

**-9:15 - 9:30:** 

Intros

Agenda bashing

-9:30 - 10:30

 Presentation slides and discussion

-10:30 - 10:45

Break

-10:45 - 11:30

 JDF Office discussion

-11:30 - 1:00

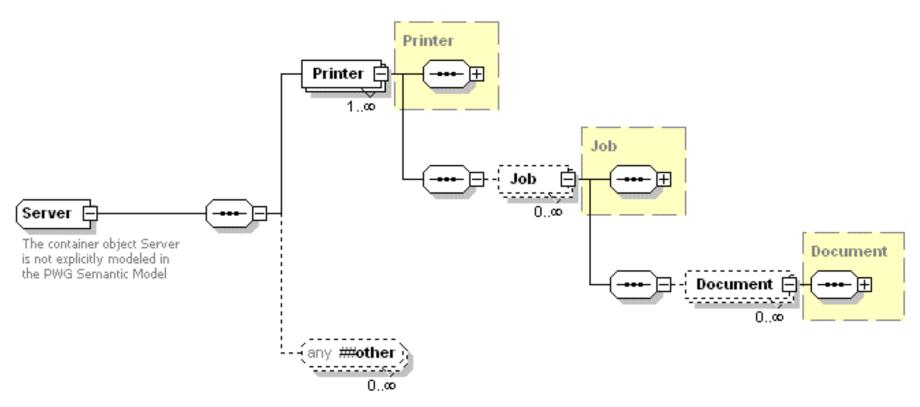
Decide on priority & dates

Detailed discussion?

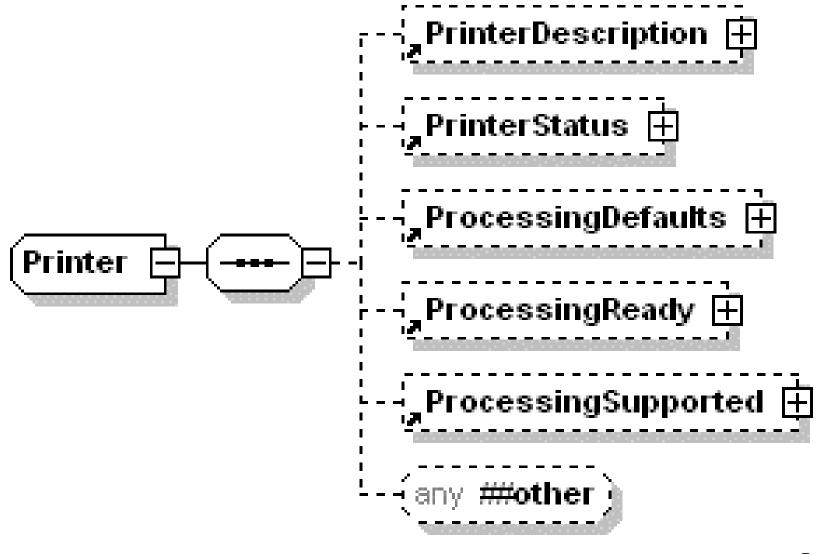
### **Current Status**

- The PWG SM Working Group has been on hiatus since the publishing of the PWG SM and associated Schema.
- There is work from other PWG work groups that could to be incorporated in an update to the PWG SM (e.g. WIMS, Counters).
- The PWG SM deals only with a data model and not with specific application use or a protocol mapping. However an XML schema is included.

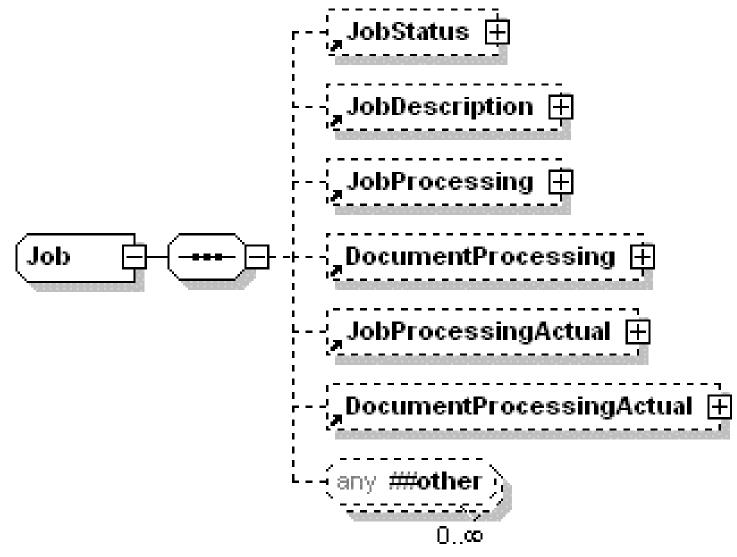
### **Current PWG SM**



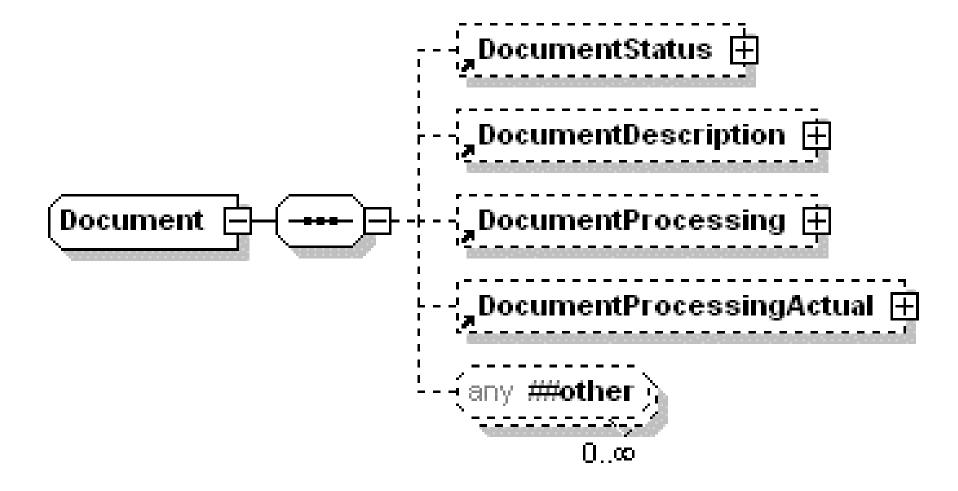
### Print Service Element



## Print Job Element



### Print Document Element



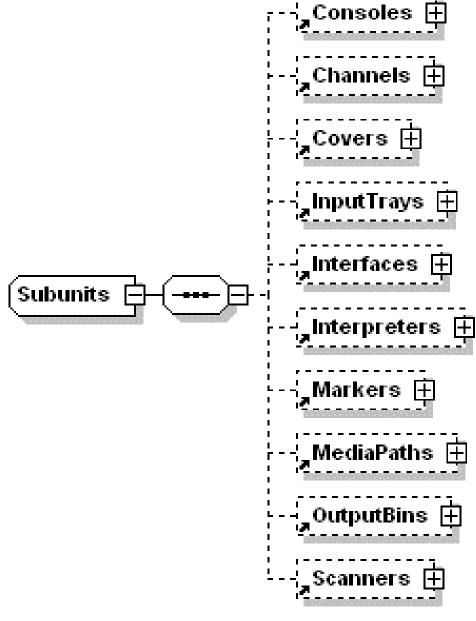
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### Inclusion of Subunit semantics

- There is currently no access to subunits of a print device since the SM describes a print service
- The PWG has modeled the subunits of a printer device in the Printer MIB.
- Should the PWG SM Model be extended to include the subunits?

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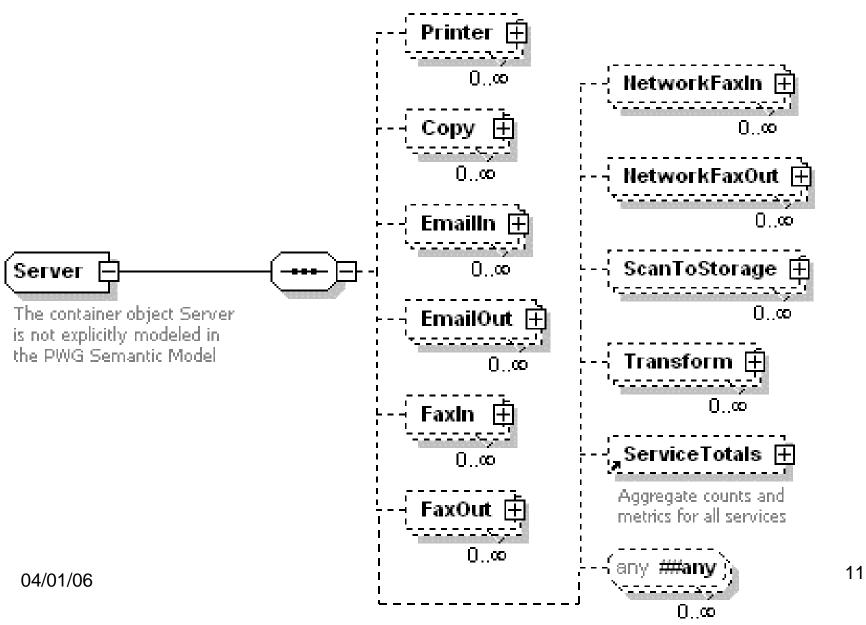
# Top level Subunits



### Extension to MultiFunction Devices

- The PWG SM currently only covers a printer service.
- We would like to incorporate other services that are available in a MultiFunction Device in the SM
- The WIMS Working Group has modeled a Multifunction Device
- Should we extend the PWG SM for MultiFunction Devices?

### MultiFunction Device Services



# Inclusion of Usage Counters

 The PWG SM currently only covers a printer service. We would like to incorporate other services that are available in a MultiFunction Device in the SM



ServiceTotals

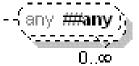
### Maintenance

system wide metrics while in maintenance mode

counts of media used per specific media.

erros, warnings, traffic, and job counts Also identifies instance, configuration change and persistence of data:

timers covering utilization



### counts of media.

DocumentData

impressions, images, KOctets etc that are part of the user's document

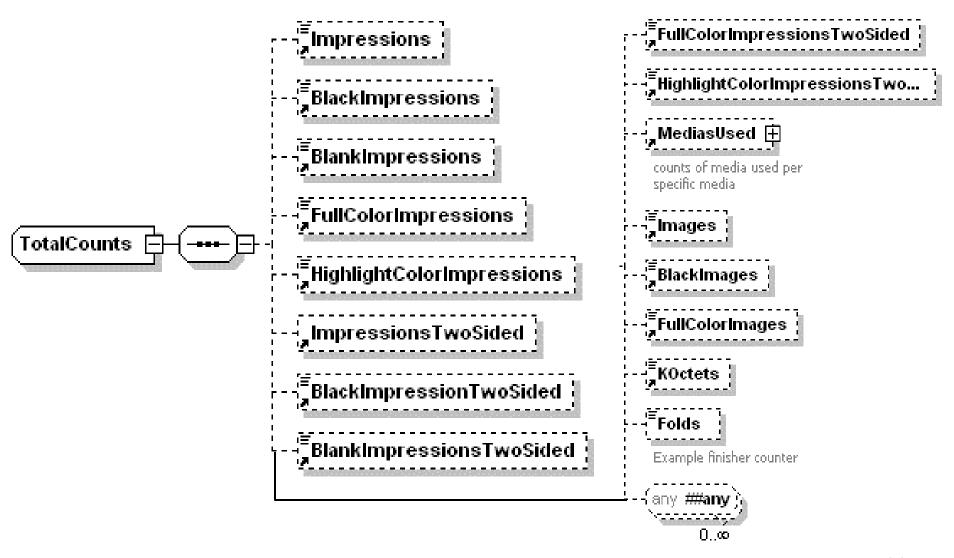
### Auxiliary 🗐

system wide counts for items not part of the user's document e.g. administration pages, error sheets, banner sheets, job. reports, confirmation sheets

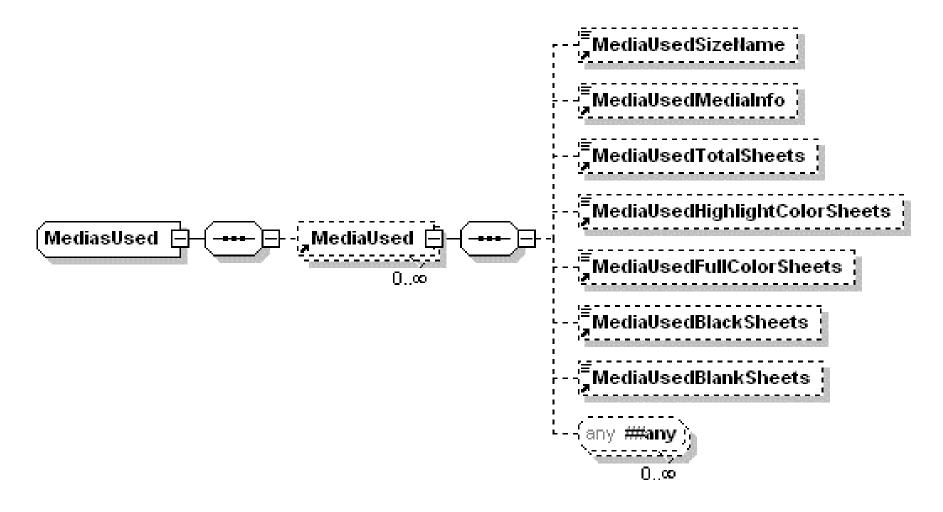
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system wide counts for items not part of the user's Job or Document e.g. Purge d, Jammed, Clean-up

## Counter classes



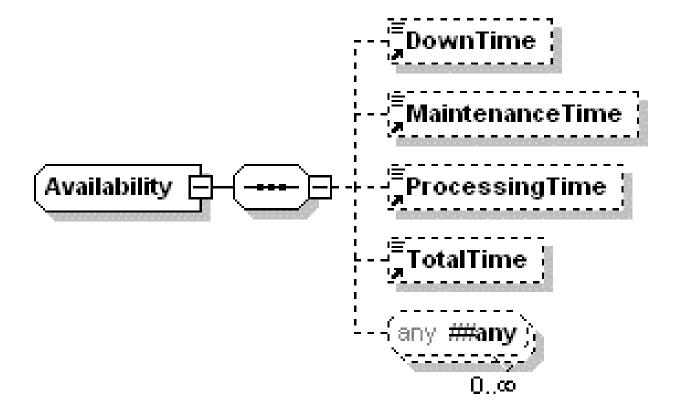
# Media used



# Monitoring



# Availability



### **Abstract Job Definition**

- The PWG SM definition of a Job is Print Service Specific
- The PWG SM may be extended to MultiFunction Devices
- Should a superclass of the print job be defined?
- Should subclasses of the abstract job be defined for each service?

# PWG SM and Management Using Web Services (MUWS) (e.g. WSDM, WS-Management)

- Currently the PWG is working with the DMTF to align CIM and the PWG MIBs and PWG SM.
- Will a PWG defined "Dialect" be able to be directly used in a MUWS environment?
- Should we be working directly with WSDM/WS-Management/W3C to adapt the PWG SM to those environments?

# RDF Schema for PWG SM vocabulary

- In a MultiFunction Device there is no way to describe the relationships/dependencies between the services and subunits or between individual services.
- RDF provides a simple way to make statements about resources (Subject, Predicate, Object)
- Web Ontology Language (OWL) provides a way to provide richer semantics of resources (e.g. cardinality, keys, unions, intersection, instance equality)
- Should we be looking at an RDF/OWL mapping of the PWG SM?

# JDF Office alignment

- JDF Office Printing is a subgroup of JDF Digital Print
  - JDF Digital Print focused on the needs of Print on Demand and borrowed from the PWG SM (IPP)
  - Digital Print has a work item for an Application Note for a mapping of IPP to JDF
- Office Printing is targeted at black and white and limited color digital networked printing systems typically used within an office environment.
- JDF job tickets sent from the applications to the device are complete and do not require further processing before execution – and do not require an intermediate controller
- Covers messaging format an subset of Digital Print, and IPP, that covers submission and simple finishings (e.g. staple collate)

# **Priority Discussion**

- Subunits
- MultiFunction Device
- Usage Counters
- Abstract Job
- PWG SM and MUWS
- PWG SM and RDF/OWL
- JDF Office