

# Printer Working Group Plenary Session

May 24, 2011

Webster, NY

#### Plenary Agenda



- Administrivia
- Open Issues
- PWG Working Group Status [WG Chairs]
  - MFD (Semantic Model)
  - WIMS
  - IPP (IPPv2 Interop, IPP Everywhere)
  - IDS (Imaging Device Security)
  - Cloud Imaging
- Liaison Status
- Next Meeting Details

#### Administrivia



- Welcome and Introductions
- Confirm Minutes Taker
- Approve/Modify Agenda
- Approve Previous Plenary Minutes
- Review PWG Patent Policy
- Agenda for the Week
- Future PWG Meeting Schedule
- 2011 Membership
- PWG Officers

#### **PWG Patent Statement**



 PWG standards may include the known use of essential patents and patent applications provided the PWG Chair receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard. This assurance shall be provided without coercion.

#### **PWG Patent Statement**



- This assurance shall be either:
  - a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement either mandatory or optional portions of the proposed PWG standard against any person or entity complying with the standard; or
  - b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

#### **PWG Patent Statement**



 The PWG is not in a position to give authoritative or comprehensive information about evidence, validity or scope of patents or similar rights, but it is desirable that any available information should be disclosed. Therefore, all PWG members shall, from the outset, draw PWG's attention to any relevant patents either their own or of other organizations including their Affiliates that are known to the PWG members or any of their Affiliates, although PWG is unable to verify the validity of any such information.

# Inappropriate Topics for PWG WG Meetings



- Don't discuss the validity/essentiality of patents/ patent claims
- Don't discuss the cost of specific patent use
- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions, or market share
- Don't discuss ongoing litigation or threatened litigation
  - Don't be silent if inappropriate topics are discussed
  - ...do formally object.

## Agenda for the Week



Tuesday, May 24

• 9:00 - 11:00 WIMS

• 11:00 - 12:00 Plenary

• 12:00 - 1:00 Lunch

• 1:00 - 5:00 Use Case BOF for Cloud Imaging and

IPP Everywhere

Wednesday, May 25

• 9:00 - 12:00 Cloud Imaging

• 12:00 - 1:00 Lunch

• 1:00 - 5:00 IPP Everywhere

(Use Case Shoot-Out, PWG Raster)

## Agenda for the Week



Thursday, May 26

• 9:00 - 12:00 IDS

• 12:00 - 1:00 Lunch

• 1:00 - 5:00 IPP Everywhere (JPS3, PWG Media, IPP over USB, IPP Scan)

Friday, May 27

• 9:00 - 12:00 MFD

# 2011 PWG Meeting Schedule



August 1-4 Camas, WA (hosted by Sharp)

October 4-6 Cupertino, CA (hosted by Ricoh)

December 6-8 Austin, TX (hosted by Dell)

# 2012 PWG Meeting Schedule



- All Dates Tentative please contact the PWG chair if you wish to host
- February 7-9
- April 3-5
- June 5-7
- August 7-9
- October 2-4
- December 4-6

# 2011 Membership



#### 27 Members

Apple	Hewlett Packard	Northlake
Brother Industries	Ricoh	Oki Data
Canon	Konica Minolta	Samsung
Danny Brennan	Kyocera Mita	Sharp Labs
David Whitehead	Lexmark	Technical Interface Consulting
Dell	Microsoft	Toshiba America Business Solutions
Epson	MPI Tech	Tykodi Consulting Services LLC
Fuji Xerox	MWA Intelligence	Xerox
High North	NEC Display Solutions, Ltd	Zoran

#### **PWG Officers**



- PWG Chair
  - Michael Sweet, Apple
- PWG Vice-Chair
  - Nancy Chen, Oki Data
- PWG Secretary
  - Paul Tykodi, Tykodi Consulting Services LLC

• These positions are coming up for re-election in September 2011 - looking for candidates for secretary, the existing chair and vice-chair are available for another term.

#### Open Issues



- PWG web site
  - Update in progress, should be live by August F2F
- MFD WG secretary needed
- WIMS WG secretary needed



# **PWG Working Group Status**



# PWG Plenary Status Report MFD Working Group

May, 2011 Webster, NY PWG F2F Meeting

Peter Zehler (Xerox)

# Purpose of the effort



- The MFD working group is concerned with the modeling of imaging services and subunits that comprise a network connected Multifunction Device. The Objectives are:
  - Drive to a standard semantic definition for an MFD's Subunits, Services, Jobs and Documents.
    - Agreement on the semantics of their attributes, operations and parameters.
  - Services currently being addressed are Copy, FaxOut, FaxIn and SystemControl.
    - The Print, Scan, Resource Services have been completed.
    - The MFD Model and Common Semantics specification has been completed
  - The definition of a framework for the complete MFD model is the objective.

## Approved Documents:



## Print Service: Approved January 2004

- PWG5105.1
   PWG Semantic Model Specification Version 1.00
- <a href="ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm10-20040120-5105.1.pdf">ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm10-20040120-5105.1.pdf</a>

## Scan Service: Approved April 2009

- PWG5108.02-2009:
   Network Scan Service Semantic Model and Service Interface Version 1.0
- ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-scan10-20090410-5108.02.pdf

# Resource Service: Approved July 2009

- PWG5108.03-2009
  - Network Resource Service Semantic Model and Service Interface Version 1.0
  - ftp://ftp.pwq.org/pub/pwg/candidates/cs-sm20-resource10-20090703-5108.03.pdf

## Approved Documents:



#### MFD Common Semantics: Approved April 2011

- PWG5108.1
   MFD Model and Common Semantics Version 1.00
- ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-mfdmodel10-20110415-5108.1.pdf

# MFD Requirements: Approved September 2010

- Multifunction Device Service Model Requirements
- ftp://ftp.pwg.org/pub/pwg/informational/req-mfdreq10-20100901.pdf

## In Progress Documents:



Copy Service: (In PWG Formal Vote)

Copy Service Semantic Model and Service Interface – May 6, 2011 Stable Draft <a href="ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdcopymodel10-20110506.pdf">ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdcopymodel10-20110506.pdf</a>

# FaxOut Service: (In PWG Last Call)

FaxOut Service:

Semantic Model and Service Interface – May 3, 2011 Stable Draft

ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxoutmodel10-20110503.pdf

# In Progress Documents:



FaxIn Service: (Work in Progress)

FaxIn Service:

Semantic Model and Service Interface – July 28 Interim Draft <a href="mailto:cftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxinmodel10-20100728.pdf">ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxinmodel10-20100728.pdf</a>

# System Control Service: (Work in Progress)

MFD System Object and System Control Service Semantics – May 13, 2011 Interim Draft <a href="ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemcontrolservicemodel10-20110513.pdf">ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemcontrolservicemodel10-20110513.pdf</a>





#### Schema Status:

- Named version (v1.27) published for MFD Model and Common Semantics
- Latest (v1.129) Up to date with In Progress specifications (e.g., JPS3)

## Remaining Services



- Services planned to be addressed after the current Services are complete. (Subject to change based on group consensus)
  - Transform Service
  - EmailIn Service
  - EmailOut Service

## **Next Steps**



- Complete Formal Vote for the Copy Service specification.
- Complete Last Call of the FaxOut Service specification then proceed with Formal Vote
- Complete work on System Service and FaxIn specifications
- We need people to step up as editors of remaining service specifications. The MFD specification reduces the amount of work to produce a service specification. The current Copy specification and FaxOut specification can be used as templates.

# More Info/How to participate



- We welcome more participation from member companies
- The group maintains a Web Page for MFD That includes links to the latest documents, schema and a browsable version of the schema
  - http://www.pwg.org/mfd/index.html

# More Info/How to participate



- Information on subscribing to the MFD mailing list is available at
  - <a href="https://www.pwg.org/mailman/listinfo">https://www.pwg.org/mailman/listinfo</a>
- MFD holds periodic phone conferences, with dates, call numbers and agenda announced on the MFD mail list.



# Workgroup for Imaging Management Solutions (WIMS/PMP)

May 24, 2011 Webster, New York

#### Introduction



#### What WIMS is Doing

- Supporting the existing IETF and PWG Printer and related MIB documents, including the advancement, extension and expansion of these specifications.
- Advancing a basic public management elements structure for Hardcopy Services and Devices that draws upon existing structures and that utilizes a set of management elements that is consistent over the various management interfaces.
- Considering Hardcopy (MFD)
   management aspects in the light of
   changing usage, operational and security
   environments.
- Coordinating Hardcopy Device and Service management aspects with the model, protocol and security efforts of other PWG Working Groups.
- Correlating Hardcopy management aspects with other Device and Service management standards.

#### What WIMS is NOT Doing

- Addressing the delivery of Hardcopy services.
- Defining a management service or protocol.
- Dealing with security issues other than observing the security requirements imposed on the management of Hardcopy Devices or Services by IDS, IEEE2600 or other applicable security group.

#### Officers & Editors



- Chair:
  - Bill Wagner (Technical Interface Consulting)
- Vice-Chair:
  - NONE
- Secretary:
  - NONE
- Document Editors:
  - Ira McDonald (High North/Samsung)

#### **Activities and Status**



#### DMTF/CIM Printer:

- Defining a set of CIM Printer Classes reflecting the printer principal management objects defined in the Printer MIB.
- The last remaining significant CRs were incorporated into CIM Schema v 2.29. This is available at http://dmtf.org/standards/cim

#### MFD Alerts:

- Extending Printer MIB alerts to MFD subunits and security alerts.
- Project Charter being reviewed prior to PWG vote.

#### • CMMI: Coherent MFD Management Interfaces

- Identifies MFD management interface element structures.
- Project Charter being reviewed prior to PWG vote.

#### • CIM Printer Profile:

- Identifies all CIM Classes and applicable element values necessary to manage a printer via CIM.
- Project Charter being reviewed prior to PWG vote.

#### **Activities and Status**



#### MPSA Interaction:

- Agreement approved for alliance.
- Continue to work on providing articles and surveys to Managed Print Services Association
- Work to be started on Data Security Article, pending resolution of the logistics for maintaining the surveys and posting results with the MPSA management company.

# Working Group Issues



- Three new projects have been identified, and although there has been some interest in pursuing them, they may not have the excitement of other PWG projects and may not get the attention that they require.
- For this reason, and in keeping with current PWG practice, Project Charters delineating the objectives and timeframe for the projects have been created.
- To encourage PWG-wide awareness and wider participation in these projects, we are also seeking formal PWG approval for each of the projects.
- Criticism of and comments on the charters are solicited.
- It is hoped that approval of a WIMS project charter indicates willingness to contribute to the effort, at least to the point of seriously reviewing the documents during development.

## **Project Charters**



- Last Calls have been announced for three Project Charters describing proposed WIMS projects. The charter drafts are posted at:
- MFD Alerts:
  - ftp://ftp.pwg.org/pub/pwg/wims/charter/wd-mfdalertscharter-20110515.pdf
- Coherent MFD Management Interfaces: (CMMI):
  - ftp://ftp.pwg.org/pub/pwg/wims/charter/wd-cmmi-charter-20110515.pdf
- DMTF/CIM Printer Profile:
  - ftp://ftp.pwg.org/pub/pwg/wims/charter/wd-cimprinterprofilecharter-20110515.pdf
- Last Calls nominally end on 8 June, pending response from at least 30% of the PWG membership.
- If Last Calls are satisfactorily completed, and there is evidence of adequate participation, charters will go up for vote.

# More Info/How to participate



- We welcome participation from PWG member companies and input from the user community
- The group maintains a Web Page and separate WIKI pages for WIMS and for CIM update
  - http://www.pwg.org/wims/index.html
  - http://pwg-wiki.wikispaces.com/WIMS
  - http://pwg-wiki.wikispaces.com/WIMS-CIM
- To subscribe to the WIMS mailing list, go to :
  - https://www.pwg.org/mailman/listinfo/wims



# IPP Working Group Status

May 24, 2011 Webster, NY PWG F2F Meeting

#### **IPP WG Officers**



- IPP WG Co-Chairs:
  - Paul Tykodi (TCS)
  - Ira McDonald (High North)
- IPP WG Secretary:
  - Michael Sweet (Apple)
- IPP WG Document Editors:
  - Ira McDonald (High North) IPP Everywhere, IPP JPS3, IPP Scan, IPP over HTTPS Transport Binding and "ipps" URI Scheme, LDAP Schema for Printer Services
  - Michael Sweet (Apple) IPP Everywhere, IPP JPS3, PWG Raster, IPP over HTTPS Transport Binding and "ipps" URI Scheme, LDAP Schema for Printer Services

### **IPP WG Status**



- Several IPP Everywhere specs in development:
  - IPP Everywhere First Edition (EVEPRT)
  - IPP: Job and Printer Extensions Set 3 (JPS3)
  - IPP over HTTPS Transport Binding and "ipps" URI Scheme
  - PWG Raster
  - IPP Scan
- Up-to-date pending IANA registrations now online:
  - http://www.pwg.org/ipp/ipp-registrations.html (+ .txt)
  - Will maintain this in parallel due to IANA processing time

## IPP WG Next Steps



- IPP 2.0/2.1/2.2 Interoperability Testing
  - Interoperability event in Q2/Q3 2011
- IPP Everywhere First Edition
  - Initial working draft of updated LDAP Schema for Printer Services in Q2/Q3 2011
  - Prototype draft specifications in Q3/Q4 2011
  - Interoperability event for IPP Everywhere First Edition in Q2 2012
- IPP Everywhere Second Edition
  - Interim working draft of IPP Scan in Q3 2011

## IPP WG Info / Participation



- We welcome participation from all interested parties
- IPP Working Group web page
  - http://www.pwg.org/ipp/index.html
- IPP Working Group wiki
  - http://pwg-wiki.wikispaces.com/IPP
- Subscribe to the IPP mailing list
  - http://www.pwg.org/mailhelp.html
- IPP WG holds bi-weekly phone conferences announced on the IPP mailing list
  - Next conference call is June 13, 2011 at 1pm (EST)



# PWG Plenary Status Report IDS Working Group

May 25, 2011 Webster, NY PWG F2F Meeting

Joe Murdock (Sharp)
Brian Smithson (Ricoh)

## Purpose of the effort



- Hardcopy device have security and access considerations that are not addressed within current hardcopy standards. These considerations should be addressed in a manner common to all hardcopy devices:
  - Hardcopy Devices are currently allowed unfettered access to and storage of secure and controlled documents. There is no standard for controlling document access and defining usage behavior for protecting secure documents.
  - Hardcopy Devices are providing services to mobile devices running different operating system
    with different methods to consume Hardcopy service. Hardcopy Devices are extending their
    services as "cloud" resources, and consuming resources from the "cloud". There is no
    standard or recommended methodology for authenticating and securing the mobile and
    hardcopy device, their services or the users consuming those services.
  - Hardcopy Devices are providing and consuming services outside of the traditional concept of a local user on a physical device. There are currently no standards or recommendation for controlling or validating access to these services.
  - The industry is moving beyond basic authentication for access to corporate networks to a
    more detailed assessment of the "health" of devices before allowing them to access the
    network. Hardcopy Devices attach to networks, but there's no standard set of metrics that is
    used to assess an HCD. As a result, HCDs are treated as an exception and are allowed to
    attach to the network based solely on a MAC address.
- Our goal is to provide the metrics and mechanisms that allow HCDs to fully participate in assessment-protected networks and provide secure, controlled access to documents and hardcopy services regardless of location or consumer.

### Work Items for the WG



#### What We're Doing

- We are defining a standard set of metrics that can be measured or assessed in Hardcopy Devices to gauge if they should be granted access to a network.
- We are providing recommendations for identifying and authenticating Hard Copy and mobile devices, services and users in a global workspace.
- We are defining standard attributes and values for authorizing Hard Copy Devices, their services and users in a global workspace
- We are defining a set of standard security attributes to be associated with mobile and remote imaging jobs, users, services and devices
- We are defining common log formats and values to facilitate automated log analysis.

#### What We're NOT Doing

- We are NOT defining any new assessment protocols, nor assessment extensions to existing authentication protocols.
- We are NOT endorsing any of the competing network assessment protocols (TNC, NAC, NAP, NEA). Our goal is to enable Hardcopy Devices to participate in any/all of them.
- We are NOT defining any new security protocols.

#### Administration



- IDS WG Chairs
  - Joe Murdock (Sharp)
  - Brian Smithson (Ricoh)
- IDS WG Secretary:
  - Brian Smithson (Ricoh)
- IDS WG Document Editors:
  - HCD-ATR: Jerry Thrasher (Lexmark)
  - HCD-NAP: Joe Murdock (Sharp), Brian Smithson (Ricoh)
  - HCD-TNC: Ira McDonald (Samsung), Jerry Thrasher (Lexmark), Brian Smithson (Ricoh)
  - HCD NAC Business Case: Joe Murdock (Sharp)
  - IDS-Model: Joe Murdock (Sharp), Ira McDonald (Samsung), Ron Nevo (Samsung)
  - HCD-HR: Joe Murdock (Sharp)
  - HCD-NAP-SCCM: Joe Murdock (Sharp)
  - IDS-Log: Mike Sweet (Apple)
  - IDS-IAA: Joe Murdock (Sharp)

#### **Current Status**



- IDS-Model Common Requirements specification
  - Target completion date Q3, 2011
- HCD-TNC Binding Document is under development.
  - Target completion date of Q3, 2011.
- HCD-HR (Health Remediation) Specification is under development
  - Target completion date of Q3, 2011.
- IDS-Log Common Log Specification is under development
  - Target completion date of Q3, 2011.
- IDS-IAA specification is under development
  - Target completion date of Q3, 2011.
- IDS Working Group Charter update
  - Approved May, 2011
- IEEE 2600.1 Supporting Documents charter
  - On hold pending discussions with NIAP

#### **Current Activities**



- HCD-TNC Binding Specification (Q4 2011)
  - Interaction with TCG Hardcopy Workgroup
  - IDS-Model specification (Q3 2011)
- HCD-HR (Health Remediation) specification (Q4 2011)
- IDS-Log (Q3 2011)
- IDS-IAA (Q4 2011)
- PWG Security Ticket (Q3 2011)
- IEEE 2600.1 supporting documents (TBD)

## More Info/How to participate



- We welcome participation from PWG member companies and input from the user community
- The group maintains a Web Page and separate WIKI pages for IDS update
  - http://www.pwg.org/ids/index.html
  - http://pwg-wiki.wikispaces.com/Imaging+Device+Security +WG
- To subscribe to the IDS mailing list, go to :
  - https://www.pwg.org/mailman/listinfo/ids
- The group hold bi-weekly conference calls on Thursdays at 10:00AM PST/1:00PM EST.



# Cloud Imaging Working Group Status Report

May 24, 2011 Webster, NY PWG F2F

#### Introduction



- The Cloud Imaging WG focus is around providing a set of specifications to support Cloud-based printing, scanning, and facsimile (collectively called "Cloud Imaging").
- The Cloud BOF's provided us with a basic functional model, including Client, Cloud Imaging Provider, Cloud Imaging Manager, and Device.
- The Cloud WG will be providing multifunction bindings for both IPP and SOAP.

#### Officers



- Chair:
  - Ron Nevo (Samsung)
- Vice-Chair (or new Co-Chair):
  - Accepting volunteers
- Secretary:
  - Michael Sweet (Apple)
- Document Editors:
  - Ira McDonald (High North): documents tbd
  - Joe Murdock (Sharp): documents tbd
  - Peter Zehler (Xerox): documents tbd
  - Ron Nevo (Samsung): documents tbd
  - Michael Sweet (Apple): Cloud Imaging and Semantics

### **Status**



- Cloud Working Group Charter passed formal vote.
- Conference calls since last F2F have focused around use cases.

## Cloud WG Participation



- We welcome participation from all interested parties
- Cloud Working Group Web page
  - http://www.pwg.org/cloud/index.html
- Cloud Working Group Wiki
  - http://pwg-wiki.wikispaces.com/Cloud+Imaging
- Subscribe to the Cloud mailing list
  - https://www.pwg.org/mailman/listinfo/cloud
  - cloud@pwg.org
- Cloud WG holds bi-weekly phone conferences announced on the Cloud mailing list
  - Next conference call is June 6th, 2011 at 1 pm (EDT)
  - Conferences on opposite weeks of IPP WG calls



## **Liaison Status**

#### **AFP Consortium**



- The AFP Consortium develops the Advanced Function Presentation architecture used primarily with mainframe computing:
  - http://www.afpcinc.org/
- Still in the very early stages, but want to align the AFP and PWG models

#### **MPSA**



- The Managed Print Services Association (MPSA) is an independent non-profit international organization that seeks to develop Managed Print Services (MPS) within the industry through Communications, Collaboration, Education and Best Practices.
  - http://yourmpsa.org/
- The PWG has agreed to provide a series of articles on our activities and concerns for the MPSA to make available to its membership. Each article will have an associated survey to solicit information on what information is of interest to MPS members and on specific issues of importance in PWG activities.
- Three articles have been supplied and posted to the MPSA membership, and the survey results have been discussed in previous face-to-face meetings.

## MPSA – PWG Relationship



- The MPSA underwent a Management restructuring late in 2010 and the new president, Joe Barganier, suggested that a written plan of the intended interaction be agreed to "so that things do not fall through the cracks moving forward"
- Bill Wagner developed a formal statement of the liaison agreement between the PWG and MPSA, and that statement has been approved by both the PWG and MPSA steering committees
- We are currently working with the MPSA to publish more articles

## OpenICC - freedesktop.org



- OpenICC has two main goals. The first goal is to work out a common set of settings for color savvy applications to share profiles and settings. The second goal is to bring together those developers in areas like printing, display and desktop applications to work together to make color management end to end work for open source applications.
- The group is now tackling color managed printing.
- Discussions on the openicc mailing list are influencing use cases and JPS3 extensions
  - Change in focus for printer-icc-profiles
  - New relative-bpc keyword value for print-rendering-intent
  - May add some recommendations for PDF color handling

#### TCG Overview



- TCG Website
  - http://www.trustedcomputinggroup.org/
- TCG Developer Resources
  - http://www.trustedcomputinggroup.org/developers
- TCG Description
  - The Trusted Computing Group (TCG) is a not-for-profit organization formed to develop, define and promote open, vendor-neutral, industry standards for trusted computing building blocks and software interfaces across multiple platforms
- TCG Membership Levels
  - TCG Promoter (\$55,000/year) voting
  - TCG Contributor (\$16,500/year) voting
  - TCG Adopter (\$8,250/year) non-voting
  - TCG Adopter (\$1,000/year) non-voting small company

## TCG Workgroups



- Authentication
- Embedded Systems NEW
- Hardcopy
- Infrastructure
- Mobile Phone
- PC Client
- Server Specific
- Storage
- Trusted Multi-Tenant Infrastructure (TMI)
- Trusted Network Connect (TNC)
- Trusted Platform Module (TPM)
- TCG Software Stack (TSS)
- Virtualized Platform

## TCG Embedded Systems WG



- Embedded Systems (EmSys) WG chartered in May 2011
  - Develop open and vendor neutral architecture, interfaces, and standards framework for embedded systems
- Embedded Systems (EmSys) WG scope of activities
  - Driven by solution level architecture expertise
  - Develop use cases that include vertical market requirements
  - Identify and document specification requirements
  - Develop necessary extensions to TCG specs per requirements
  - Align requirements to existing or future TCG WG activities
  - Develop architectural framework using TCG standards
  - Develop architectural components, rules, and specs
  - Cooperate with related external standards groups
- Embedded Systems (EmSys) WG meeting in June 2011
  - During TCG Members Meeting in Munich, Germany

## TCG Hardcopy WG



- Current work
  - Use Cases (e.g., trusted startup, trusted services)
  - Threats (e.g., disclosure, modification)
  - Requirements (e.g., secure data-at-rest)
- Next steps
  - Hardcopy devices are in scope for Embedded Systems WG
  - Relationship with Embedded Systems WG to be discussed in June 2011 during TCG Members Meeting in Munich, Germany







## Next PWG Meeting



August 1-4 in Camas, WA (hosted by Sharp)



• Thank you Xerox for hosting this meeting!