

Documents Presentation at Meeting:

 Alan's agenda presentated: Filename = ps/agenda_110602.pdf

Dave Hall's presentation: Filename = Capabilities_vs_Attributes.ppt

Capabilities schema: Filename = "Not sure about this one yet"

Alan's mandatory attributes doc: Filename = ps/mandatory_attributes2.doc

Attendees:

IEEE ISTO PWG Print Service Interface Working Group

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		8/28/02	11/06/02	
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-- Introductions

Done

-- Identify Scribe

Done

-- Call For Intellectual Property

(See Slide from Alan's presentation)
Reviewed the different possible IP statements/positions From 8.3 of
the PWG process Document. Will issue call to reflector.

-- Review and Approve Minutes from August

Approved without modification.

-- Review Agenda

(See Slide from Alan's presentation)

-- Discovery Protocol Discussion:

See Slide from Alan's presentation. (pro's and con's of each)

Depending on protocol for each deployment environment, there is
additional work to be done for each to define the exact use of each
protocol. (example UDDI will have to have a T-Model defined.

Decided to provide a recommendation as to the discovery method for each
deployment environment, and the details of using each protocol.

Status: Ongoing

-- Semantic Models Naming Alignment in General

"Attributes" is overloaded in the XML space. Consider changing
to "elements" to better align with XML terminology. Coordinate with
Semantic model group.

Status: Pending

-- QueryEndpoints Interface/Discovery Examples and Alternatives Review

WSDL Return Example: (Alan's presentation)

Discussion of what information is/should be returned when the get from the HTTP Get from the initial PSI port.

(WSDL for QueryEndpointsIF or the URL of the QueryEndpointsIF ??)

Currently PSI specifies returning the WSDL document. This requires the client to be able to parse through the WSDL to obtain the URL of the QueryEndpointsIF. HP proposed to return the URL instead to relieve the client from having to parse the WSDL to get the URL.

Discussion:

Question? How does versioning of the QueryEndPointIF work with a URL return?

Question? Should a client be expected to dynamically parse WSDL at run time (e.g., handheld trying to use a Print Service), or will the interfaces be pre-compiled canned interfaces?

Current toolkits and deployed Web Services do not easily handle dynamic WSDL parsing however that is the idea behind WSDL and Web Services to begin with...

Resolution:

For initial QueryInterfaceEndPoint HTTP request, add a versioning mechanism in the URL.

Add new method: QueryInterfaceWSDL that returns the WSDL instead of theURL.

-- Requested Attributes

A general open question of how attributes are requested from a service and in what form was discussed. During a sub-group held the previous day a new proposal for dealing with this question was developed.

See Dave Hall's presentation for details of the proposal.

New Proposal Summary:

Pass in the attributes (with no-values) in a request and only those requested attributes with values are returned. If no attributes are included, all are returned.

Another issue that has come up that was addressed in the sub-group was: How (and in what form) can the capabilities of a Target Device(printer) or the Target device known by a Print Service, be discovered?? Currently no method in the ServiceCapabilitiesInterface exists that allows this.

See Dave Hall's presentation for details of the proposal.

New Proposal Summary:

Add a new method called: `GetTargetDeviceAttributes` which passes in the following: `(targetDevice, requestedAttributes)`.

-- General Service Capabilities Discussion and

Question: How to determine a Print Service's capabilities (given a particular Target Device)?

Currently a Print Service's capabilities are returned and parsed at the application layer with the underlying type being a generic string at the WSDL layer. This approach also makes applying constraints to the values difficult.

A new Proposal for a general capabilities schema was proposed and discussed briefly.

See Bob Taylor's "capabilities.xsd" for a general framework for describing capabilities in an XML schema format.

Action:

Need to align Bob's framework proposal with UPDF group.

Discussion:

There was concern by some that this alignment with the UPDF group might delay the release of PSI 1.0.

-- Strong Vs. Weak Parameter Typing - In RPC or Application Layer

Discussion:

Currently most parameters are defined as strings that are specified as an xml document conforming to a defined schema. However this results in the application layer having to enforce the typing of the parameters.

Question:

Should we enforce parameter typing at the WSDL layer by strongly typing the parameters in the WSDL ?

Requires a PWG Namespace. Some toolkits don't currently allow user defined simple type systems.

Decision:

PSI should use a strongly typed parameters.

Action Item:

Will change the PSI Spec. and schema's accordingly.

-- Document Type Strategy

Discussion:

The requested `TargetDeviceDataType` used to specify an output format from the Print Service.

Question: How do you relay specifics of a document type in a request or a response (i.e., versioning of pdl(s) etc.)

The current proposal is to extend the mime-type with keyword/value pairs that provide the required information.

How extensible is this? Will the string eventually become unmanageable for implementations?

Would a more structured schema be more appropriate?

Decision:

Decided to continue to use an extended MIME-Type.

(Scribe's Note):

New, Post meeting info' on registering keyword extensions to MIME would suggest that this decision should be revisited!!!

Mandatory/Optional Attribute Elements

For the umpteenth time when defining a print architecture, we filtered through the attributes list and decided which should be mandatory and which should be optional for this environment.

See Alan's "mandatory attributes doc" for current results of the discussion.

Action Items

See Alan's Agenda presentation.

Next Steps Plan for 0.95 Completion/ New Schedule

See Alan's Agenda presentation
