

1 Subj: Proposal for PAPI Profiles (and some PAPI V0.9 comments)
2 From: Tom Hastings and Ira McDonald
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5
6 Add a new section, probably after Section 9, which defines what it means to conform to
7 the PAPI specification, i.e., you have to claim conformance to either the Query Profile or
8 the Submission Profile.
9

10 **10 Conformance Profiles**

11 This section defines two Conformance Profiles. The Job Submission Profile is a superset
12 of the Query Profile. In order to claim conformance to this PAPI specification, any such
13 claim must declare whether the implementation conforms to the requirements of the
14 Query Profile or the Job Submission Profile. It is not sufficient to simply claim
15 conformance to the PAPI specification.
16

17 **10.1 Query Profile**

18 The Query Profile is defined to provide querying functionality. A PAPI implementation
19 conforming to the Query Profile must provide code for all functions defined in the PAPI
20 and must support all of the definitions in the “papi.h” C header file. For each function
21 defined in the PAPI specification, a conforming implementation must either perform the
22 requested function or return the PAPI_OPERATION_NOT_SUPPORTED status code
23 (see section 3.8). The PAPI_OPERATION_NOT_SUPPORTED status code indicates
24 either (1) that the PAPI implementation doesn’t provide any support for the function, i.e.,
25 the function is stubbed out”, or (2), the PAPI implementation does provide *code support*
26 for the function, but the Printer or Print system selected by the application does not
27 support the corresponding function.
28

29 Table 1 lists the functions and attributes that a PAPI implementation is REQUIRED to
30 provide *code support* in order to claim conformance to the Query Profile.
31

32 **10.2 Job Submission Profile**

33 The Job Submission Profile is defined to provide the job submission functionality and is a
34 superset of the Querying Profile. Table 1 lists the functions and attributes that a PAPI
35 implementation is REQUIRED to provide *code support* in order to claim conformance to
36 the Job Submission Profile.

37 **Table 1 - PAPI Conformance Profiles**

PAPI Functions and Attributes	Query Profile	Job Submission Profile
Section 3 Common Structures	all structures	all structures
Section 4 Service API	all functions REQUIRED	all functions REQUIRED
Section 5 Printer API:		

5.2 papiPrintersList	REQUIRED	REQUIRED
5.3 papiPrinterQuery	REQUIRED	REQUIRED
5.4 papiPrinterModify		REQUIRED
5.5 papiPrinterPause		REQUIRED
5.6 papiPrinterResume		REQUIRED
5.7 papiPrinterPurgeJobs		REQUIRED
5.8 papiPrinterListJobs	REQUIRED?? - ISSUE	REQUIRED
5.9 papiPrinterGetAttributeList	REQUIRED	REQUIRED
5.10 papiPrinterFree	REQUIRED	REQUIRED
5.11 papiPrinterListFree	REQUIRED	REQUIRED
Section 6 Attributes API		all functions REQUIRED
Section 7 Job API:		
7.1 papiJobSubmit		REQUIRED
7.2 papiJobSubmitByReference		REQUIRED
7.3 papiJobValidate		REQUIRED
7.4 papiJobStreamOpen		REQUIRED
7.5 papiJobStreamWrite		REQUIRED
7.6 papiJobStreamClose		REQUIRED
7.7 papiJobQuery		REQUIRED*
7.8 papiJobModify		REQUIRED*
7.9 papiJobCancel		REQUIRED*
7.10 papiJobHold		REQUIRED*
7.11 papiJobRelease		REQUIRED*
7.12 papiJobRestart		REQUIRED*
7.13 papiJobGetAttributeList		REQUIRED
7.14 papiJobGetPrinterName		REQUIRED
7.15 papiJobGetId		REQUIRED
7.16 papiJobGetJobTicket		REQUIRED
7.17 papiJobFree		REQUIRED
7.18 papiJobListFree		REQUIRED
Section 8 Miscellaneous API:		REQUIRED
8.1 papiStatusString	REQUIRED	REQUIRED
Section 9 Attributes:		
9.1.1 job-ticket-formats-supported	REQUIRED	REQUIRED
9.1.2 media-margins	REQUIRED	REQUIRED
9.2 Required Job Attributes	REQUIRED	REQUIRED
9.3 Required Printer Attributes	REQUIRED	REQUIRED
9.4 IPP Attribute Type Mapping	REQUIRED	REQUIRED

38 * a conforming PAPI implementation MUST provide the code support for these functions
39 and MUST NOT return the PAPI_OPERATION_NOT_SUPPORTED, unless the
40 corresponding is not supported by the Printer or Print system or has been administratively
41 disabled.
42

43 **11 Comments on PAPI V0.9 while developing the profile**

44 Ira and I have the following comments on PAPI V0.9 which we discovered while doing
45 the profile work:

46

- 47 1. Section 2.2.4 Document and Appendix B. Do you want to add a reference to the
48 IPP Document Object specification work in progress? Its available at
49 ftp://ftp.pwg.org/pub/pwg/ipp/new_DOC/
- 50 2. Section 2.4 Globalization. The passive voice is used, so it isn't clear whether the
51 section is talking about the application program that calls the PAPI or the PAPI
52 implementation itself.
- 53 3. Section 3.3 Attributes and Values needs a reference for the data type codes to
54 [RFC2911] section 4.1.
- 55 4. Section 3.8 (`papi_status_t`) needs a reference to [RFC2911] section 13 where the
56 corresponding IPP status codes are defined.
- 57 5. It would be good to add a blank line in front of each new enum value assignment.
- 58 6. The two new status codes defined by PAPI (`PAPI_BAD_REQUEST` and
59 `PAPI_JOB_TICKET_NOT_SUPPORTED`) need to be defined starting at a new
60 place, since IPP will assign values beyond the last IPP server error
61 (`PAPI_PRINTER_IS_DEACTIVATED`). So how about starting the PAPI
62 defined status codes at 0x0600. We'll indicate this usage in the IPP code
63 assignment table as well.
- 64 7. Section 4.5, uses the `papi_encryption_t` data type without a definition.
65 Presumably, it is defined in the `papi.h` header file. How many other types are
66 used in the spec without definition? Is this a problem?