Report on the Power Management Survey Responses

A "Birds of a Feather" meeting concerning the establishment of a project defining elements for the management/monitoring of Imaging System Power states was held at the February 2009 Printer Working Group Face-to-face. It was agreed that Power Management is of interest to our customers from the viewpoints of both environmental concern and simple economy, and that OS providers such as Microsoft are looking for some consistent way to include power management of imaging devices in their push toward a "greener" system. However, it was decided that, prior to initiating this project, we must ascertain whether there is sufficient support in the PWG membership to:

  1. Provide the resources to develop a meaningful and effective standard
  2. Ensure meaningful review and prototyping of such a standard
 3. Anticipate adoption and implementation of the standard by a significant portion of the industry

A survey was set up and announced over PWG and other mail lists. This report indicates and analyzes the response to that survey.

1   Responses:

Total Responses15;
Manufacturers or related: 11
Users or other: 4
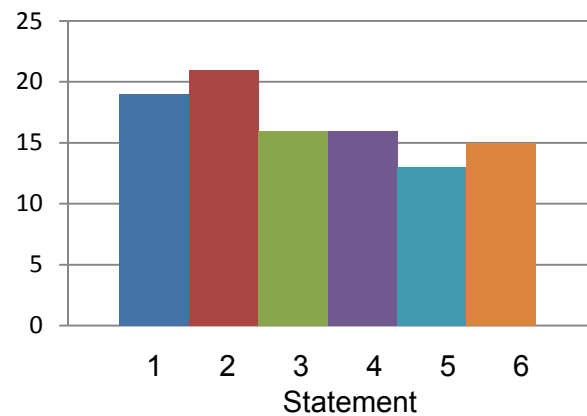Number of different Manufacturers: 9

2   Requirement and Standardization

The results of this question are plotted below (see the legend for the color code). There was 80% or better agreement with each statement.
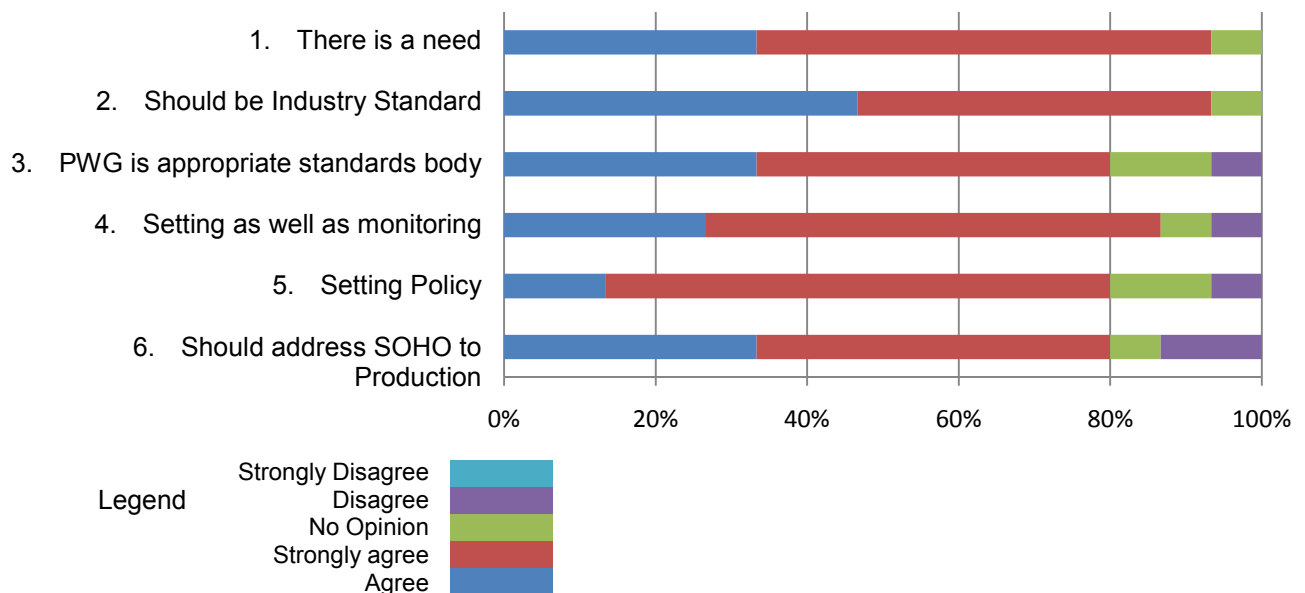
An alternate analysis gives a single weighted value, considering disagreement as negative. A score of 30 would correspond to complete strong agreement.

This analysis shows strongest agreement with statement 2, that any standard should be an industry standard

- Except for one "no opinion" (from a manufacturer), all agreed or strongly agreed that there was a significant need for control and/or monitoring of the various imaging equipment power states
- Except for one "no opinion" (from a different manufacturer), all agreed or strongly agreed that it was desirable to have industry standard definitions of and access to power state information.
- 80% agreed or strongly agreed that the PWG was the appropriate organization to set the imaging equipment power management element standards. There was one disagreed and two no opinions.
- 87% agreed or strongly agreed that standards should provide for optionally setting power states as them for monitoring. One disagreed and one no opinion.

There is significant agreement for all six points, although a little pushback on setting "power management policy".

3 Participation

3.1 Spec Generation

- Three Responders reported no participation because of lack of resources
- Four Responders indicated that they would make technical contributions.
- In addition to these four, eight indicated that they would review a draft and provide feedback.
- No Responder indicated co-ordination and editorial support.

If I do the editorial and co-ordination effort, four contributors and eight reviewers would be sufficient support to create a draft.

3.2 Standard Voting and Implementation

- Two Responders indicated that they would prototype a draft specification.
- Eleven indicated that they would vote on a standard.
- Two indicated that they would participate in an interoperability test.
- Four indicated that they would probably implement a standard in their product.
- Three survey Responders did not answer this question; this was not fully correlated with non-manufacturers or with Responders indicating no resources.

This suggests sufficient interest to advance to a Candidate Standard vote, and perhaps further.

4 Compatibility

The following chart shows a weighted indication of preference. ACPI has a value of 53 and CIM 54.
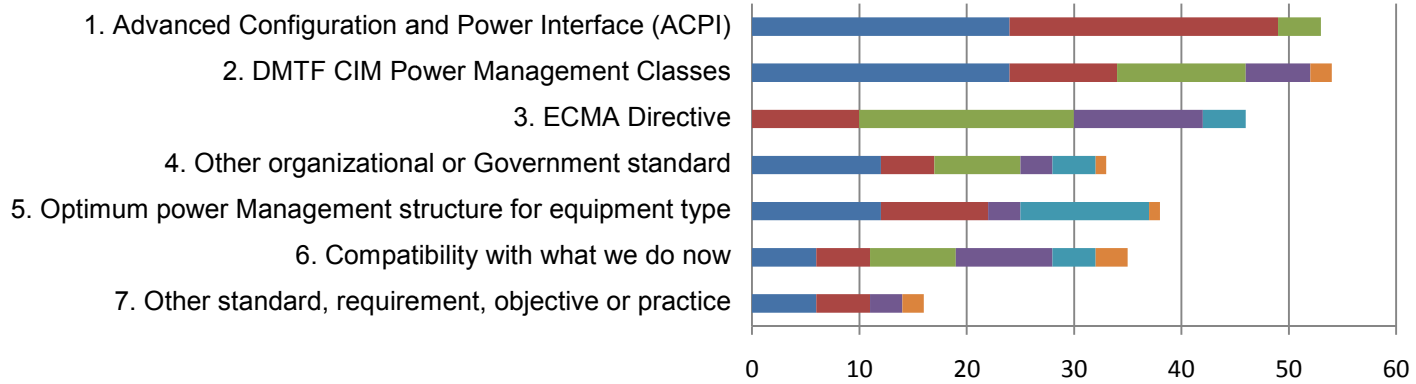
An alternate analysis assigned negative values to lower preferences.

By this analysis, ACPI is more strongly favored than CIM by some and more strongly disfavored by others.

At any rate, ACPI and CIM are the main contenders and are some resolution between these two standards would be necessary.
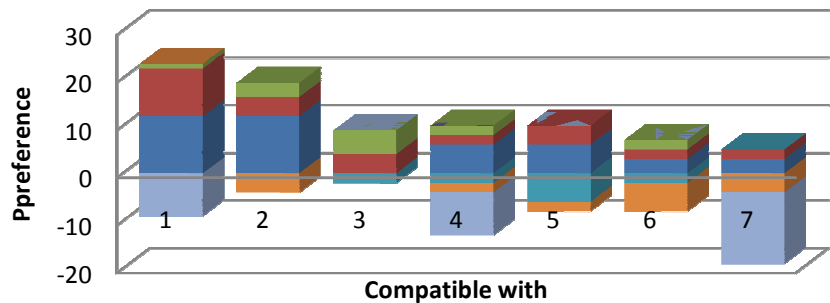
5 Binding

In considering the protocol to be used to verify the Power Management elements, Responders may have been thinking about many things ranging from ease of implementation to the most immediately useful binding. The following chart shows the response, with negative weighting given to low preferences and positive weighting given to the high preferences.
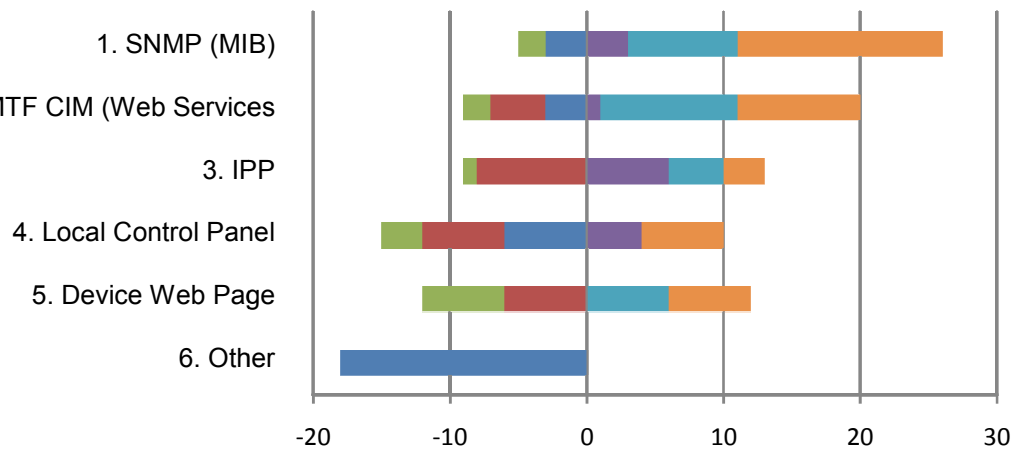
SNMP (MIB format) was the clear preference, although the other options all had some support.