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FADS II: The Future of Astronomical Data-analysis Systems BoF Session

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Abstract. The discussion about the future of astronomical data analysis systems is essentially boring, but nevertheless essential. There is a large measure of agreement that the key word is "inter-operability," and that the future will look roughly like the Gaming Table of Figure 1. It is generally accepted that Distributed Objects will play a major role. But for inter-operability, "universal" binding mechanisms will be needed, along with agreed interfaces for things like images and tables. Despite the shining example of FITS, the astronomical community will probably not be able to generate and enforce those on its own. So, while waiting for standards like CORBA to emerge from industry over the next few years, projects like IRAF and AIPS++ are experimenting with the new concepts in various ways, and gathering experience. On the basis of this, they will be able to outline more detailed plans at FADS-III at ADASS VII.

1. Introduction

The series of yearly discussions about the Future of Astronomical Data analysis Software (FADS) was started in at ADASS V. A significant part of the success of FADS-I was due to a very lively e-mail discussion in the weeks before the conference. This caused participants to think about the issues beforehand, and arrive with well-formulated points of view. Unfortunately, the e-mail discussion before FADS-II was less lively, which had a clear impact on the actual BoF session. All e-mail messages can be perused on the FADS Web page.[1]

2. Summary of Discussions

The abstract basically says it all. Doug Tody (IRAF) and Brian Glendenning (AIPS++) gave short introductions, in which they professed to be in total agreement about the general structure of the future, and described how their respective projects were moving towards it. After this, the participants were invited to address the following list of issues: The four main elements of the Gaming Table (see Figure 1) with the emphasis on binding mechanisms, the role of Java (a language, not a binding mechanism), and likely scenarios of development.

[1] http://www.astro.umd.edu/~teuben/fads/

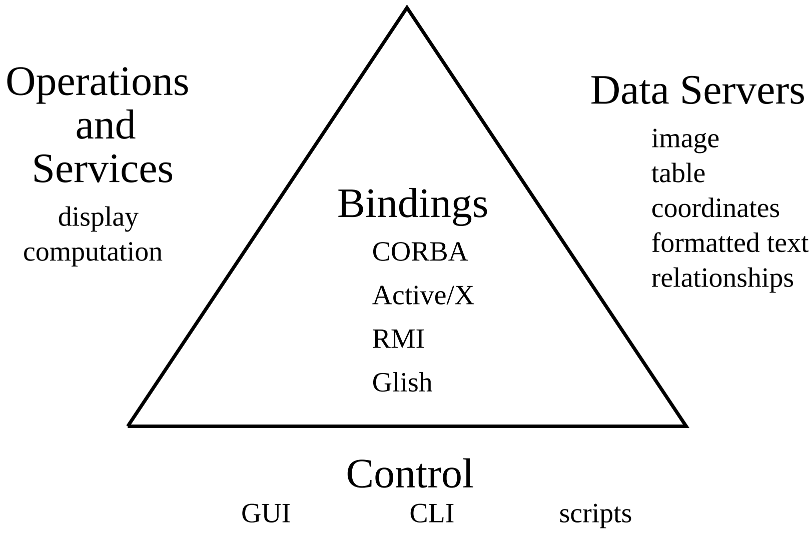

Figure 1. The Gaming Table.

There were frequent references to an earlier talk in the same conference by Don Wells about "Speculations on the future of FITS." This subject is all the more important for FADS since, even if a universal binding mechanism (CORBA?) emerges from industry, our community may still have to decide upon a common data interface (images, tables, etc.).

3. Conclusion

The FADS process will continue with FADS-III at ADASS VII. It is expected that the situation surrounding binding mechanisms and interfaces will have become a little more clear by then. We will try to incite a little more real debate by starting a few weeks earlier with the preliminary e-mail discussion, and by starting it off with a few stimulating propositions.

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References

Noordam, J. E., & Deich, W. T. 1996, in ASP Conf. Ser., Vol. 101, Astronomical Data Analysis Software and Systems V, ed. G. H. Jacoby & J. Barnes (San Francisco: ASP), 229

Wells, D. C. 1997, this volume, 257