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## **Open Standards - Open Source**

**The Business, Legal, and Technical Challenges Ahead**

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# The Open-Source Desktop and the need for standards

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# My background

- 30+ years in industry, 2 years in academia
- First open-source project was in 1978, a DECUS Pascal compiler for RSX-11
- I work in a Microsoft-free environment, except that I must occasionally deal with .doc and .xls files.
- In my teaching, I use examples from the Linux kernel, libc, OpenORB, boa, and other open source systems.

# Open Source Landscape

- Network and Web infrastructure:
  - Open-source tools are robust, scalable, interoperable. No question.
- Operating Systems:
  - Linux and \*BSD are fully competent.
- Development tools:
  - Basic gnu programmer's tools are the gold standard.
  - Visual Studio has some nice productivity features.
- Desktop Applications:
  - Open Source isn't there yet. Why not?

# The Desktop problem

- Why is Microsoft Office the industry standard?
  - Not because of Windows.
  - Partly because of monopolistic practices.
  - Mostly because of usability and interoperability.
- Usability is a solvable problem, but it requires investment and understanding of importance.
- Interoperability is a tougher problem in the open source community.

# Interoperability and Standards

- Interoperability requires standards
  - That is why open source infrastructure software is so successful.
- Application-level interoperability has not been addressed by the open source community as a whole
  - There are many competing approaches
  - Both run-time and document-format standards are required
  - So far, open source efforts have invented their own APIs and document formats.

# Document Formats

- A few public entities have recognized the need for open document formats.
  - The demand is there and growing, where's the supply?
- There are many to choose from (see [myfileformats.com](http://myfileformats.com))
  - Are any of them competitive with .doc, .xsl?
  - If so, why can't we just adopt one and run with it?
  - If not, is the technology ready for standardization?
- Who is going to be the driving force? What will it take?