A decorative graphic on the left side of the slide, featuring overlapping blue, red, and yellow squares with a black crosshair.

Chinese Office Software Standards and Inter-operation of Office Software

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Office Software and Their Inter-operation

- **Lack of inter-operation ability is the key reason why domestic office software be unpopular**
- **Lack of inter-operation causes that software products from multi-vendors can not be worked well in a single application environment**
 - **It restricts the wide application of other office software product and monopolization came into being**
 - **Standard directed government purchase would become important for fair competition and eliminating monopolization**



Open Standard and Government Purchase

- **Defect of using private office document format**
 - Documents depends on particular software, out of users' control
 - Data conversion is costly and difficult, hard to predict
- **Superiority of using open office document format**
 - Ensure that documents can be processed and shared more easily
 - Encourage more vendors to adopt the standard and provide more products, thus the user's cost can be reduced
 - Open-source software implementation can be expected, which will result in better competition and software cost can be further reduced



Support From the Government

- **Recognition from the government**
 - **Standard Administration of China**
 - **Information Office of State Council**
 - **Ministry of Information Industry**
 - **Ministry of Science and Technology**
- **Government support Project**
 - **“Document Format Standard for Chinese Office Software” and “XML-based Electronic Document Format Standard” have been put on 2003’ national standard project plan**



UOF Project Introduction -1

- **UOF – Uniform Office Format**
 - **Working Group was founded in Jan. 2002**
 - **Members are from domestic office software vendors, application integration vendors, end users and research institutes**
 - **The project has been supported by the Hi-Tech Research and Development Program of China (863 Project) —”Chinese Linux and Office Software Related Standards”, “Chinese Information Processing Standards”**
 - **First draft submitted in Dec. 2005**



UOF Project Introduction -2

- **UOF – Uniform Office Format**
 - **Open group**
 - **Open-door meeting**
 - **Equitable vote by ballot**
 - **Working by common understanding, no authority exists**
 - **Free accessible standard document**

Covered scope

- **Fundamental standards of Chinese office software is composed of :**
 - **GUI Spec.-- defines the interface design style, eases the pain for users learning the software**
 - **Format Spec.-- defines the format for both presentation and storage, improves the ability for document interchange among different software products**
 - **API Spec.-- defines the API interface to facilitate document processing by application & integration vendors**
- **Three main applications covered:**
 - **Word processing**
 - **Spreadsheet processing**
 - **Presentation processing**



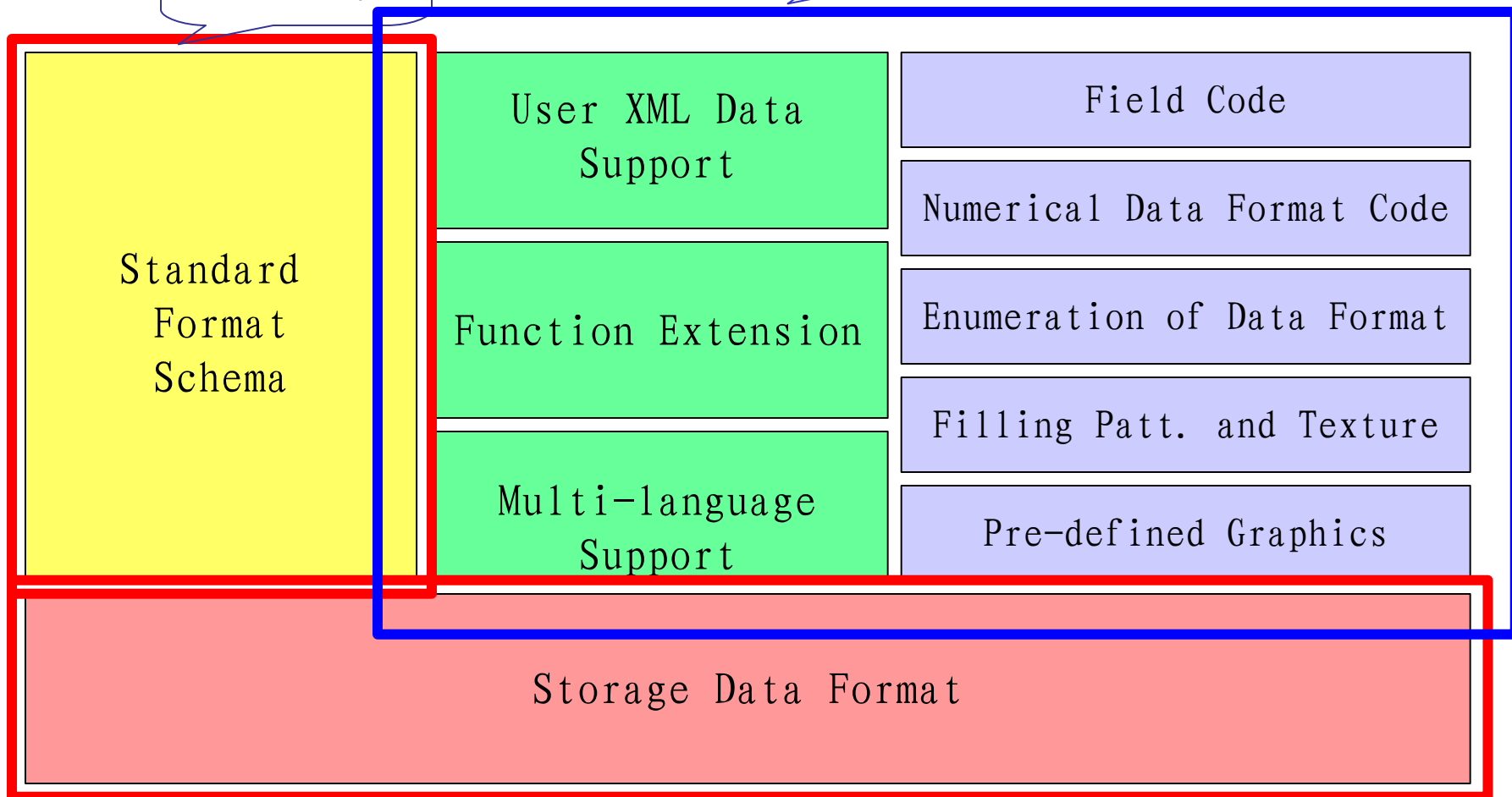
GUI Specification

- **Unify the basic functions, do not limit new functions and function combination**
- **Unify names only, no out looking**
- **Fully respect users custom, do not blockade any new usage**
- **Aim at an unified interface for the three major applications**
- **Beware of different platforms (e.g., Linux)**
- **Focus on top level interface including main menu, right click menu, tool bar, rulers, shortcuts, etc.**

Format Specification

Main body

Appendixes



Advantages using XML as the format description language

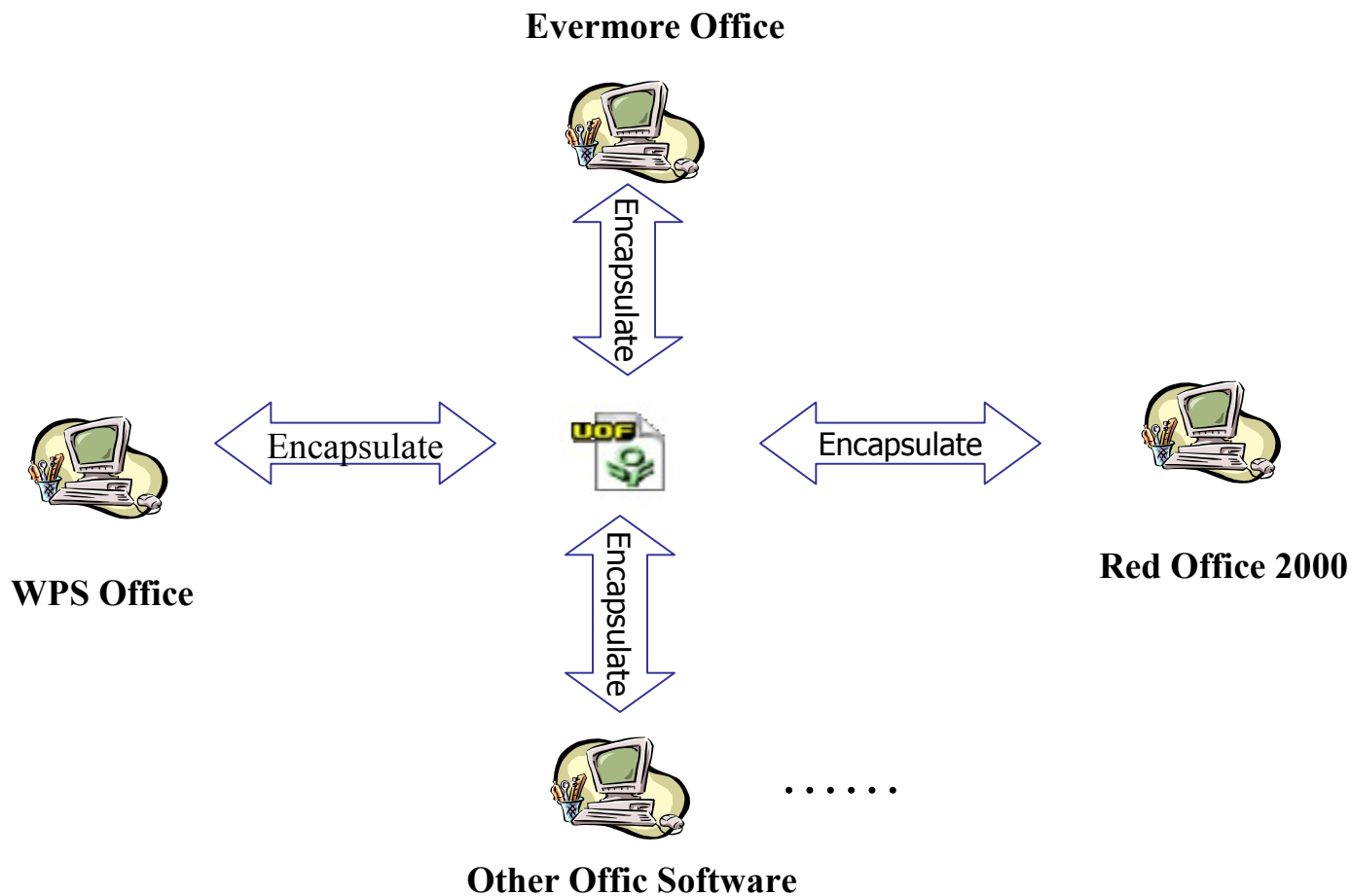
- **Cross-platform, cross-application**
- **Simple**
- **Extensible**
- **Inter-operatable**
- **Application oriented**
- **Technically mature**
- **Schema language available**
- **The industry trend, e.g., OASIS ODF , ECMA OpenXML**



Principles

- **Develop an XML-based document format for Chinese office software in order to facilitate document interchange and information sharing**
- **Realize better capability of office document processing and system integration**
- **Satisfy the requirements from Chinese office software market**
- **Take advantage of former efforts, e.g., OpenOffice and MS Office etc.**
- **Follow the national standards and refer the relevant international standards**
- **Facilitate conversion approaches between different standards**
- **The incoming format should be open**

Application of UOF



API Specification

- **Support UOF**
- **Based on OMG CORBA 3.0 Interface Definition Language, Support multi-platforms (Windows, Unix / Linux...) , multi-languages (Basic, Java, C...)**
- **Do not specify SDK and development environment. Product independent**
- **Support GUI extension, off-line document processing and integration with other applications (DB, workflow, web...)**
- **Most important interfaces are firstly specified**

Options for IPR Licensing Mode in Standards

- **RAND (Reasonable and non-discriminatory)**
 - licensing granted can involve fees, but they must be reasonable and the same for anyone who wants them
- **RF on RAND (Royalty Free on RAND)**
 - licensing is granted without payment of royalties or fees, but portions of the licensed product that are not required to satisfy the normative portions of the specification can be licensed using RAND
- **RF on Limited Terms**
 - licensing is granted without payment of royalties or fees, but may include charges relating to the maintenance or operation of the license.
- **Both RAND and RF have advantages and disadvantages**

Licensing Mode of Related “standard” approsals

- **RF is popularly adopted by related “standards” of abroad**
 - **OASIS Open Document Format**
 - public non-assertion declaration—an irrevocable covenant not to enforce any of its enforceable U.S. or foreign patents against any implementation of the OASIS OpenDocument specification; however, this commitment is not necessarily applicable to any individual, corporation, or other entity that asserts, threatens, or seeks to enforce any patents or patent rights against any OpenDocument Implementation.
 - Suitable for subsequent versions
 - ODF is controlled by OASIS (5000 members from 100 countries on behalf of 600 organizations and individuals)
 - **Microsoft Office Open XML Format**
 - Only assures the current version and updates are RF
 - Microsoft grants royalty-free license under Microsoft's Necessary Claims to make, use, sell, offer to sell, import, and otherwise distribute Licensed Implementations solely for the purpose of reading and writing files that comply with the Microsoft specifications for the Office Schemas. ——One is not licensed to sublicense or transfer rights



Problems and Countermeasures

- **How to reach agreement on licensing mode in the standard?**
- **What is the proper limits for action?**
- **What kind of Patent Pool we need?**
- **How to distinguish necessary patents?**
- **Shall we join the international standard war, and how?**



Advantages to Include PR in standards

- Encourage innovation, promote knowledge production
- Help to become an advanced standard
- Ensure the profit of participants
- Gain support of technical key players
- Be good for continuous improvement of the standard
- Be good for arguing against other IPR blockade



Disadvantages to Include PR in standards

- **Get trapped into IPR slush**
- **Strengthen industry monopolization**
 - **More technology get patented, more patents get standardized, more standards get monopolized and licensed**
- **Fire up IPR war**
- **No good for gaining widely support of new standard**



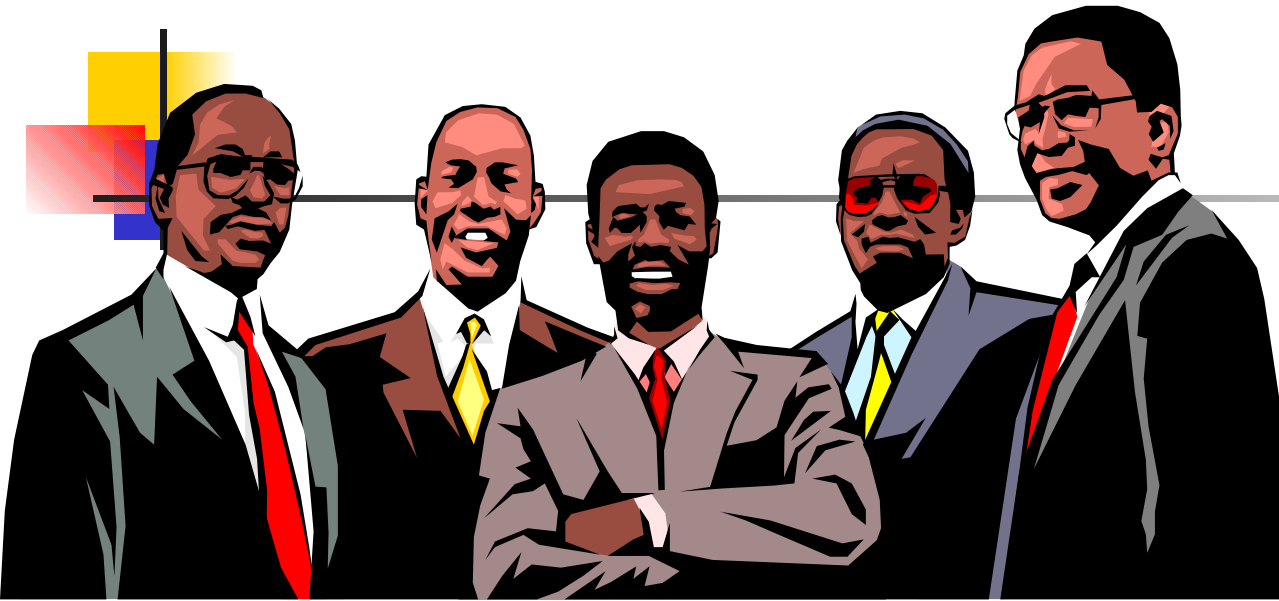
Key issue

- **Seek for balance**
 - **Under the condition that IPR holders can have the reasonable monopoly right and commercial reward, the public can largely share human knowledge achievements, and meanwhile we can keep an open and fair competition environment**
 - **From the point of innovation view, overprotection or underprotection for IPR would hurt innovation**
 - **Standard can be considered the profit compromise of IPR holders and the public**
- **Censor the license to prevent monopolization**
 - **Regulate the disclosure of IPR information and ensure the openness, fairness and balance during the standard setting process**
 - **Use “RAND” rules to implement the standards**



Summary

- **An open document format standard is basic to improve inter-operation of office software technically**
- **Choosing open standards to develop IT industry is the main stream. UOF is one of the open standards, it meets the requirements of Chinese office software development**
- **Applying UOF would gain the chance to promote Chinese office software industry**



Thank you