



# ATG Press Research Kit

---

## Inside Document Management II: Document Presentation

March 2006

A research document from the  
Aria Technology Group Science & Technology Office

**Important Note:** The information, which is provided by this document, is devoted to the entire world for improving creativity, and therefore developing new job opportunities around the globe, in the field of information technology. So, no part of the proposed information is protected by any intellectual property right. However, the document itself, is copyrighted by Aria Technology Group and is a priced material. No part of this document could be published, in any form of media, without written permission of Aria Technology Group.

**Copyright © 2006 by Aria Technology Group**  
<http://www.ariatg.com/enterprise>



## OVERVIEW

The growing of the Internet in recent years has attracted many attentions to the concept of document. The reason is very clear: everyday millions of documents are updated or added to the net (the so-called information explosion) and the management of these activities would cost billions of dollars worldwide. In addition to this, new and complex technical issues should involve in this huge-scale management. As the term “document” is a very general concept, we believe any effort for giving a precise definition to it would come to an apparent limitation to the field, instead of opening a new way. Traditionally, document is a record of some activities. Technically, document is a package of information. Intuitively, document is the heart of information technology. In the current IT world, the most important issue regarding document is its manageability and other efforts such as document definition/standardization are just used as leverage in this issue. Addressing the issue, we attempt to show a new perspective to the critical problems in document management. To this end, we divide the document management domain into two main parts: document creation and document presentation. In this text, we focus on the second part and try to briefly describe the problems involve in the realm of document presentation including why, how, and by whom a document can be presented. Detailed solutions to the mentioned problems are expected to appear in a series of our future research kits, but in this research kit, we only introduce the concept behind of those solutions.

### 1. WHY TO PRESENT

At the first look, the question of why a document should be presented has no difference with the question of why a document should be created. In fact, we create documents to present them, and the intentions or motivations of their presentation should not be apart of their creation. However, it is not a true suggestion. Firstly, there is no reason that a document creator and its presenter are the same, and it is possible that the two different persons have two different motivations. Secondly, there could be a time gap between the document creation and presentation, and this gap would change some conditions.

Therefore, we should address the possible intentions of document presentation regardless of its creation intentions. As with the first part of this research kit, we use the top-down methodology in this problem. Applying this methodology to find the answer of why a document should be presented, would result the following basic categories:

1. Remembering to some persons some activities or events (in the past) that they have been aware of them before
2. Informing some persons about some activities or events (in the past, present, or future) that they have not been aware of them
3. Demonstrating some facts to some persons by remembering and informing

Although these categories show all of the outward intentions of document presentation, they have nothing to say about the inward intentions. However, it is not considered as a drawback because the inward intentions are some psychological and social issues and are void in a domain like document management.

### 2. HOW TO PRESENT

Regularly, every product is presented through a demand-supply process. For the documents as informative products, the situation is not different. So, the question of how a document should be presented has a tight relationship with the question of how a document can be requested. This relationship can help us to find different document presentation models, while using the top-down methodology.



The presentation model is the logical method(s) of presentation regardless of the presentation tools and devices. In other words, the presentation model entails the nature of relationships between the presenter and the presentee. The following basic categories show the possible document presentation models:

1. Interactive presentation: presenter provides a document in response to a specific request (lecturer, search engine)
2. Distributive presentation: presenter distribute a document widely in response to the different possible requests (Narrator, Web server)
3. Directive presentation: presenter provides a document in response to no request but a problem (advisor, programmer)

Unfortunately, there is a wrong belief around document presentation in the current IT world. This wrong supposition tells there will be no sensible difference between document creation and presentation, if the document logical format is enough extensive to be used in all sort of informative devices. The wrong thing with this supposition is the consideration of the extensibility as the presentability. In fact, the extensibility has nothing to do with the nature of relationships, and so, has nothing to do with the presentability.

### 3. WHO CAN PRESENT

In the IT world, machines (electronic devices) have a pivotal role in both of document creation and presentation. Therefore, one of the important issues in document management is the arrangement of works between human and machine. This arrangement needs a complete understanding of human's and machine's capabilities in document creation and presentation. The question of who can present a document wants to address this issue.

We introduced the concept of human-oriented and machine-oriented documents in the previous part of this research kit. As mentioned, this concept is about the usability of document by human or machine. What should be added here, is the fact that there is a meaningful difference between the usability and the presentability: the presentation is the management of usage, not the ability of usage. To this end, the following categories of document presenters would be resulted:

1. Human: document is provided to human or machine by human's direct management (Webmaster)
2. Machine: document is provided to human or machine by machine's direct management (search engine)
3. Hybrid: document is provided to human or machine by human's & machine's collaborative management (Semantic Web)

At the present time, the abilities of the first & second groups of presenters are adequately known for the IT insiders, but many things should be known about the potentials of the third group. The issues such as the Semantic Web or the Globe Client are to exploit these potentials in the near future. In fact, with the worldwide growth of documents, there will be no way but to use more abilities of machines for document presentation.

### 4. CONCLUSION

The classical management concept tells how we should allocate our *resources* to meet our *demands*. When our resource is the dispersed information and our demand is the knowledge, which is exactly the case of document management, this classical definition is hard to adopt. It is due to the intangible nature of both the information and knowledge. This fact shows why the bottom-up approach is a popular methodology in



document management. In this approach, we do not need to strictly determine our resources and demands, but the instinctive usages of documents are gradually modernized.

In this research kit, we tried to open the door to the usage of classical management models in document management. To this end, we used a tricky way to detect the resources and demands: instead of digging them out directly, we tried to scrutinize and categorize different behaviors in document creation and presentation. These behaviors (why, how, who) can apparently show the underlying resources and demands in document management.

Now, it is possible to employ different management models in document management and compare their efficiencies regardless of the issues such as document standards and models.

## BIBLIOGRAPHY

Berners-Lee, T., J. Hendler, and O. Lassila. 2001. "The Semantic Web," *Scientific American*, May 17.

Glushko, Robert J., Tim McGrath. 2005. *Document Engineering: Analyzing and Designing Documents for Business Informatics and Web Services*, MIT Press.

Laleh, Farnad. 2004. "[Globe Server](#)," *ATG Press Appetizer*, Vol. 1, pp. 7-12.

Laleh, Farnad. 2004. "[Globe Client](#)," *ATG Press Appetizer*, Vol. 1, pp. 13-17.

Lohr, Steve. 2006. "Push to Create Standards for Documents," *New York Times*, March 3.