

Web-Based Document Review and Annotation

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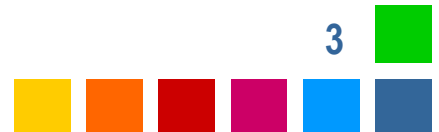
Why review?

- remove mistakes
- update with new material
- reach a group decision
- transfer knowledge
- incorporate the ideas of others
- stimulate discussion or motivate
- come up with new ideas



Advantages of electronic review

- not location limited
- not time limited
- can take time to respond
- equal opportunity
- permanent record
 - benefits new team members
- copy & paste



Problems with electronic review

- the workflow is serial
 - one task can't start until the previous task is finished
 - the alternative is duplication
- limited or no interaction
 - a second pass is often required to resolve issues
- difficult to manage context
 - content AND comments
 - multiple passes exacerbate the problem



Technology problems

■ Messaging *1 to 1*

- email (no context - inefficient)
- client applications (Word, PDF)
 - serial

■ Publishing *1 to many*

- web pages (broadcast, no interaction)

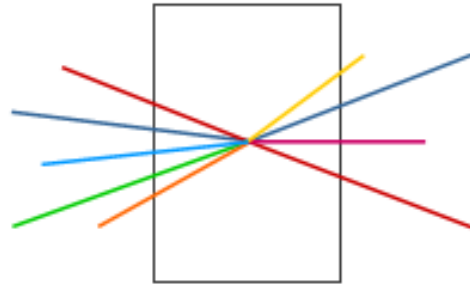
■ Collaboration *many to many*

- forums, newsgroups
 - (egroups - comment context but no content context)



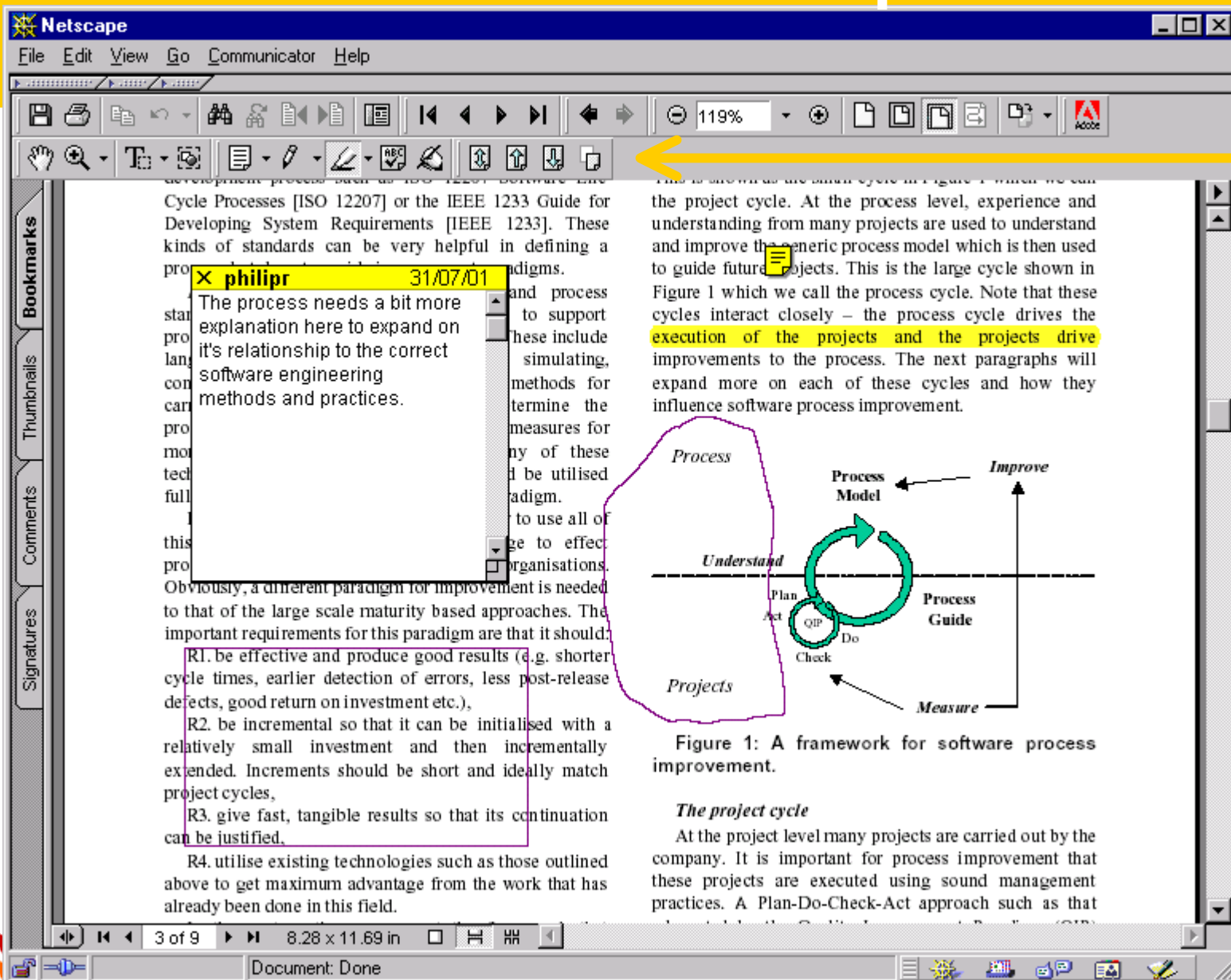
What is needed

- Web-Based Annotations *many to many in context*



All the benefits of collaboration plus both comment context and content context.

PDF example



upload
download
controls

This is shown as the small cycle in Figure 1 which we call the project cycle. At the process level, experience and understanding from many projects are used to understand and improve the generic process model which is then used to guide future projects. This is the large cycle shown in Figure 1 which we call the process cycle. Note that these cycles interact closely – the process cycle drives the execution of the projects and the projects drive improvements to the process. The next paragraphs will expand more on each of these cycles and how they influence software process improvement.

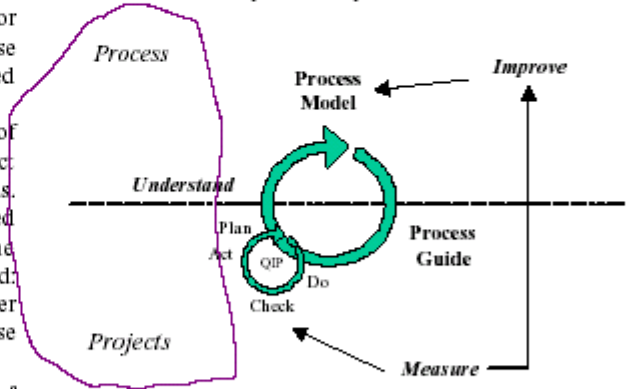


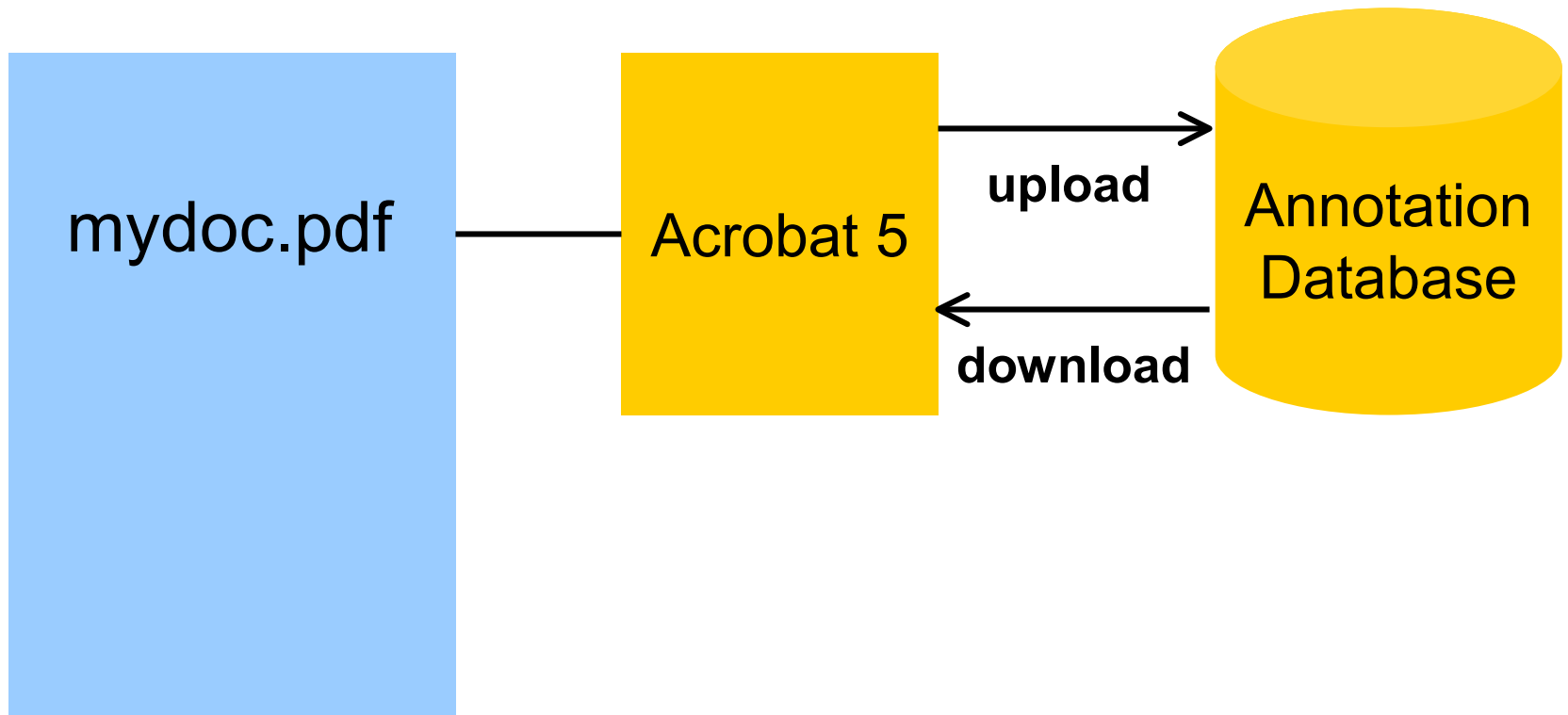
Figure 1: A framework for software process improvement.

The project cycle

At the project level many projects are carried out by the company. It is important for process improvement that these projects are executed using sound management practices. A Plan-Do-Check-Act approach such as that



PDF Processing



HTML example

The screenshot shows a Netscape browser window titled "PageSeeder Demo - Netscape". The address bar is empty. The page content is as follows:

- 747 Operations Manual** (left sidebar)
- Chapter LV Section 10**
- Chapter NP Section 20**
- Chapter PI Section 10**
- Chapter 5 Section 33**
- TAKEOFF**
Pushing this displays STATUS pages for takeoff request.
- CHECKS**
Pushing this displays STATUS pages for checks request.
- Emergency System Report**
The EMERGENCY SYSTEM REPORT provides all the relevant emergency downlink messages to alert an ATS facility to an air emergency and to the vertical and horizontal manoeuvres the pilot intends to execute.
 - [This is not clear](#) - Nick Carr - 7/6/01
 - ▶ - [This is not clear](#) - Philip Rutherford - 7/6/01
 - [Emergency Procedures](#) - Jerry Booker - 7/6/01
- Flowchart** (bottom section)

The browser's status bar at the bottom shows "Document: Done".

Anchor points

Comments listed by subject lines



PageSeeder Demo - Netscape

File Edit View Go Communicator Help

TAKEOFF

747 Opera
Manual

Chapter LV Sect
Chapter HP Sect
Chapter PI Sect
Chapter 5 Sect

Seed - Netscape

[Edit](#) | [Delete](#) | [Reply](#) | [New Comment](#)

▶ - **This is not clear** - Philip Rutherford, philipr@weborganic.com - 7/6/01 9:59 AM

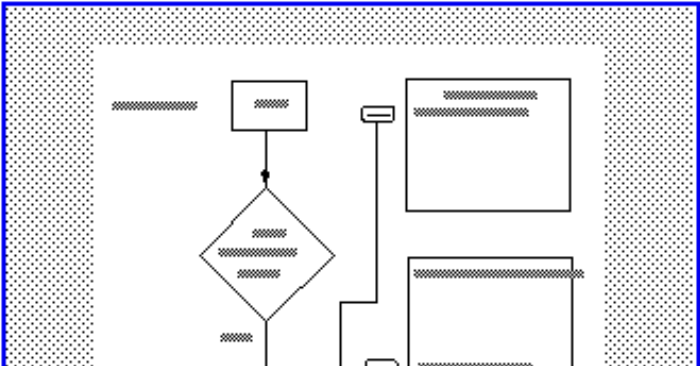
Yes, some labels on the diagram would be a good idea. There should be labels for MAYDAY, DIVERT TO, OFFSET, DESCEND TO, ERASE EMERGENCY, CANCEL EMERGENCY, INDEX, PAN, Souls On Board (SOB), FUEL REMAINING, VERIFY.

--Philip

- [This is not clear](#) - Nick Carr - 7/6/01

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Document: Done

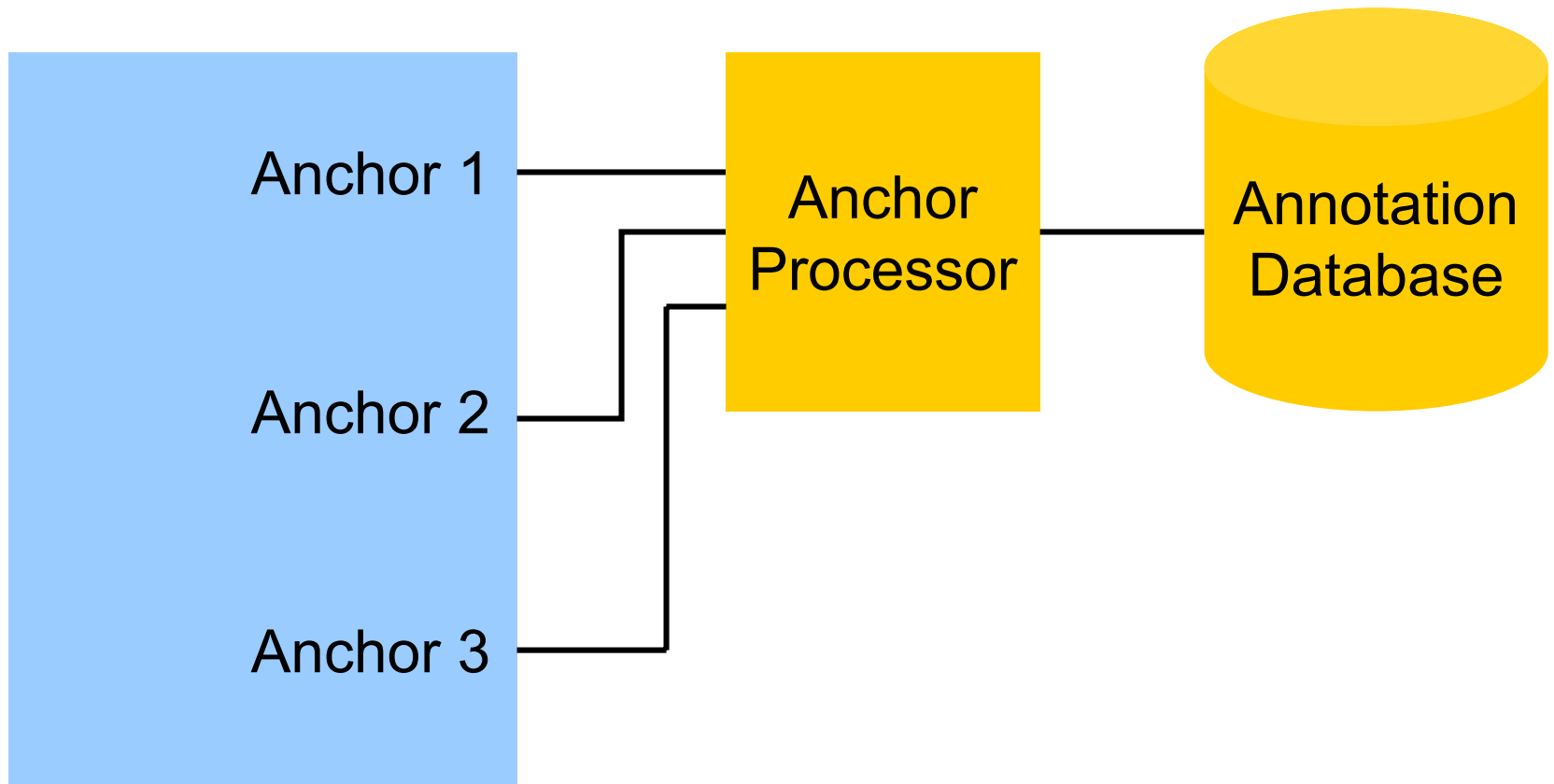
systems

Once a comment is open, all related comments are accessible through the same window.




HTML Processing

mydoc.html



Adding annotations

Insert Comment Form - Netscape

 **Insert Comment**

To insert your question or comment into this web page fill
NOTE: Your comment may be read by or emailed to other
To add a link to this web page click on [Insert Link](#).

Name: Philip Rutherford

Email: philipr@weborganic.com

Type:

Subject:

Contents:

Composition

File Edit View Insert Format Tools Communicator Help

Send Quote Address Attach Options Spelling Save

To: 1-41@ps.pageseeder.com

To:

Subject:

Normal 12

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Netscape

Comments can be sent using a form or by email

HTML v's PDF

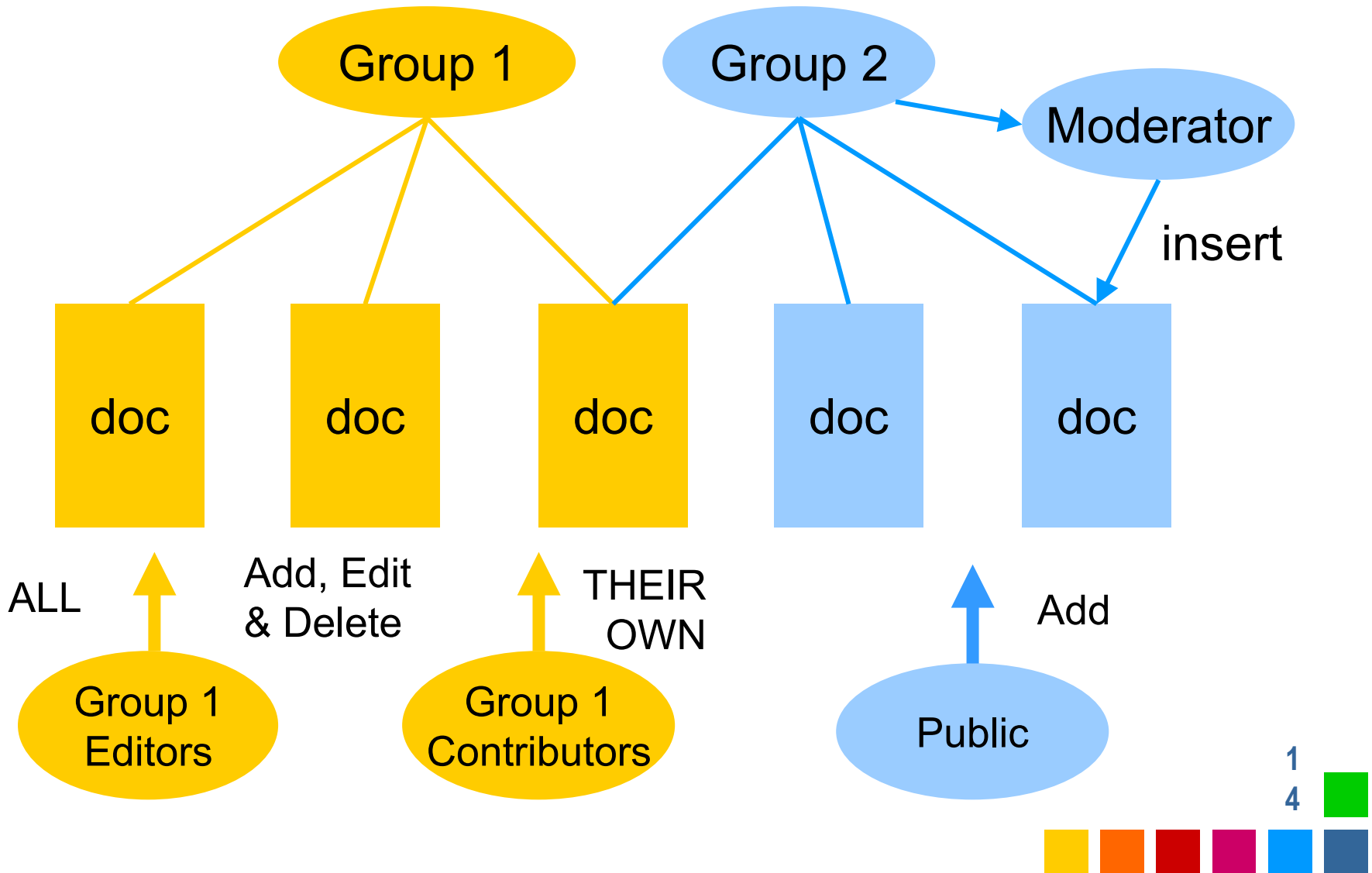
■ HTML

- no proprietary client
- faster and easier
- persistent position
- more collaborative / public

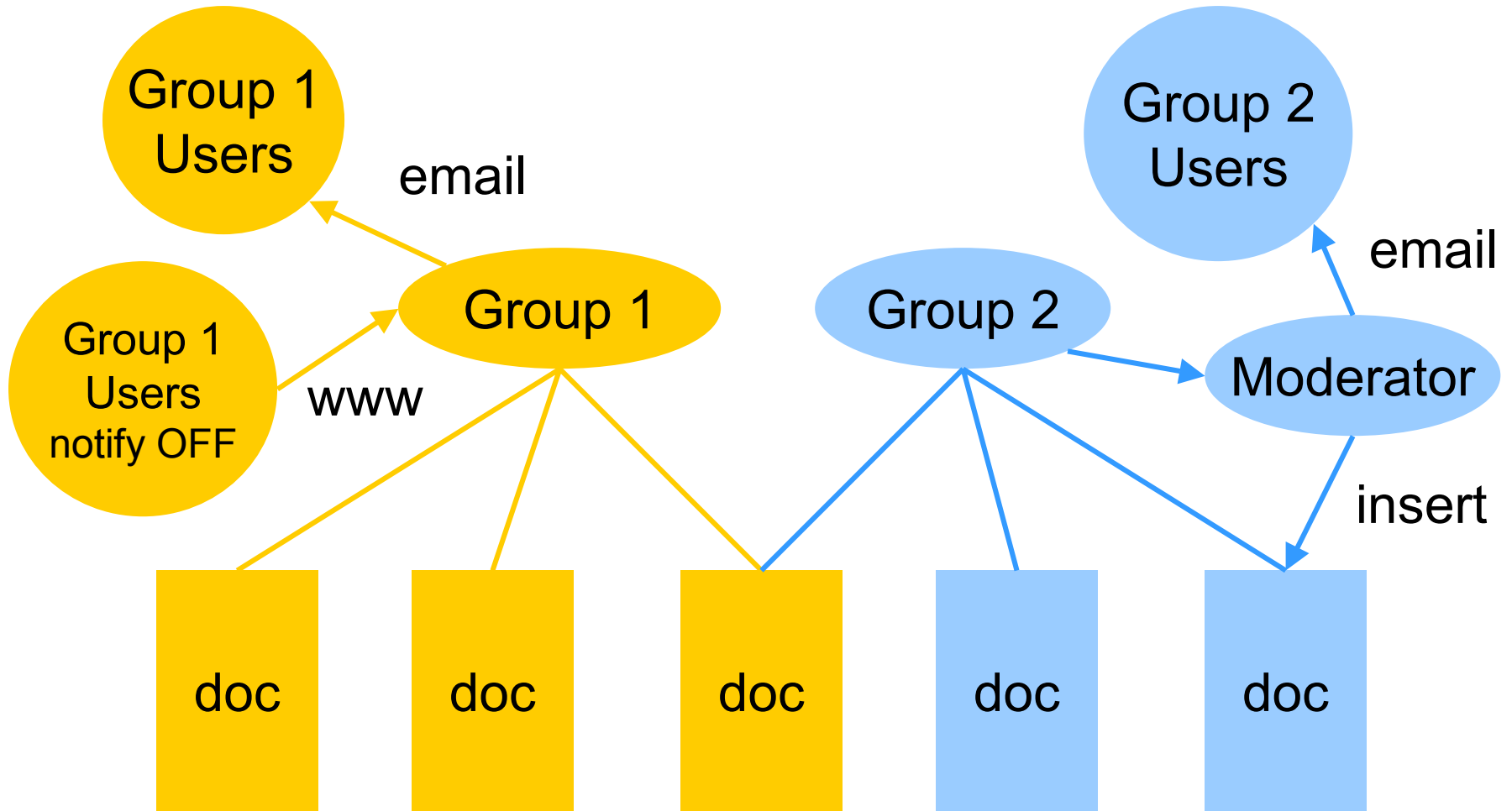
■ PDF

- full Acrobat 5
- highlighting and drawing
- fine grained positioning
- good for proofing / print

Write Privileges



Read & Notify Privileges



Different Views

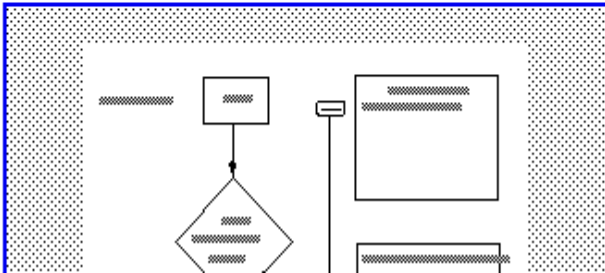
- What you see depends on which groups you belong to.
- A page can be shared by different groups. (eg pilots and reviewers)
- Each group sees different comments
- Don't need multiple versions of the source document.
- Provides a group context for comments

Different Views (cont..)

Emergency Report Page

The EMERGENCY REPORT pages provide the capability alert an ATS facility to an aircraft emergency and to the flight crew intend to execute.

- [Emergency Procedures](#) - Jerry Booker - 7/6/01



This view is seen by the pilots

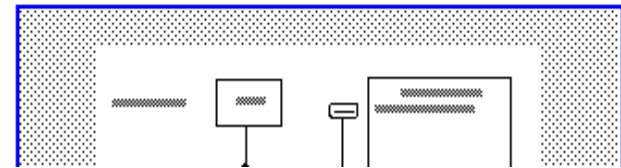
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This one is seen by the reviewers

Annotation management

- Security
 - account management
- Invitations
 - email welcome messages
- Encouragement
 - email notifications
 - facilitator
- Incorporating feedback
 - new version or continual update

Summary

- Parallel
 - multiple reviewers can work concurrently to prevent review bottlenecks
- Interactive
 - stimulate discussion, correct ambiguity or clarify ideas
 - properly document discussion and conclusions
- Contextual
 - across content, comments and groups

More information

<http://www.weborganic.com>

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