



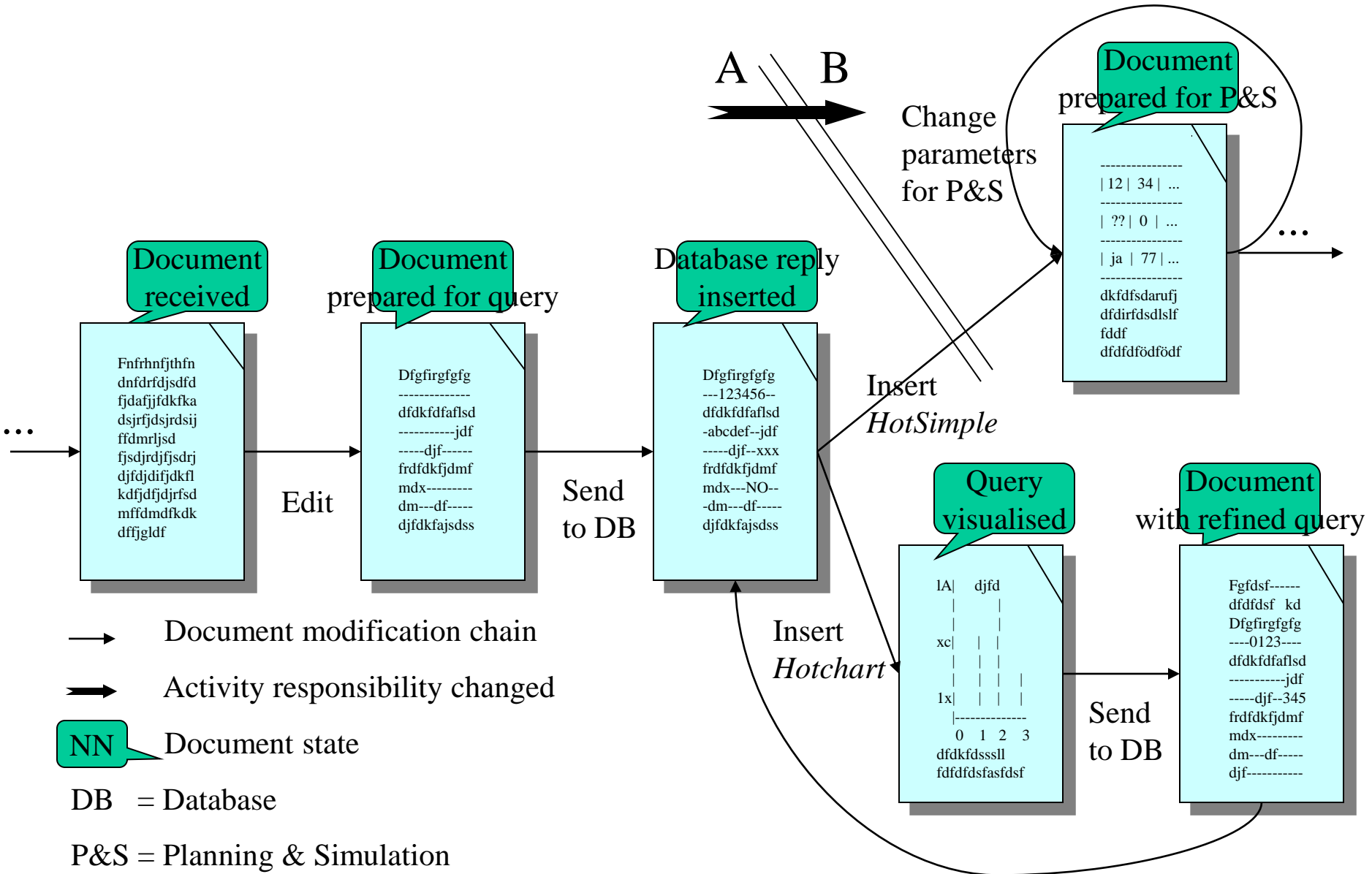
***MALL2000* project**

Document workflow under pattern control

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Steps in document processing (*HotDoc* technology)



**Workflow aspects for document processing
in Electronic Commerce Applications**
„Programming“ the document modification chain

Traditional approach:

- ad hoc, non repeatable
- Fixed business processing guidelines and rules
- One person in charge of one treatment

Forget it!

Challenge for improvement:

- Interactive, pre-planned, Web-based, pattern-controlled
- Flexible, individually configurable/ designable
- Groupwork-oriented
- Design methodology and design tool required

Application of Pattern Technology

Typical examples:

- Document state modification (specialized from *State* [GHJV 95])
- Database query (using, e.g., *Facade/Proxy/Client-Dispatcher-Server* [GHJV 95]/[BMRSS 96])
- *Dependency/Observer/Broadcast*
- *Time association* [COAD 92]

and many more

[GHJV 95] Gamma et al., Design patterns
[BMRSS 96] Buschmann et al., Pattern-oriented
software architecture
[PLoP] Pattern languages of program design

• Workflow composition, some ideas & examples:

- *Essay based web site* [PLoP 96]
- Conditional chain of activities
- Pattern-based integration architectures [PLoP 95]
- Plan patterns [COAD 97]
- Lifecycle and refactoring patterns [PLoP 95]
- *Chain of responsibility* [GHJV 95]
- *Master-Slave* [BMRSS 96]

Summary

Document workflow under pattern control, a project proposal

- Participation sought in an EU 5th framework R&D project
- OO modelling and specification of workflow patterns
- Starting from available document composition framework *HotDoc* [BUCHNER 98] -- regrettable not yet „*patternized*“ --
- Architecture and specification of a „*visually-supported workflow design tool*“ for workflow composition based on appropriate patterns
- No implementation (prototypical implementation in the scope of the *MALL2000* project)
- Time frame 1999 - 2000



***MALL2000* project**

Document workflow under pattern control

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