



# High performance Topic Map

The secret of Topic Map caching

# Posten Information System

- Intranet with 26 000 user-Ids, each with a personalized “My page”
- Information sharing/access and collaborative workspaces
- Based on
  - SharePoint Portal server 2003
  - TMCORE topic map engine
  - Captaris Workflow
  - Intellisearch search server
  - Meridio archive system

# Performance challenges

- Scaling
  - 250 000 topics, 500 000 associations, 1.2 Mill occurrences
  - 12 000 unique internet users
- Performance need:
  - 80 pages per second
  - 10 TopicMap queries on personal start page

= 800 TopicMap queries per second...

= 0.00125 second per query...

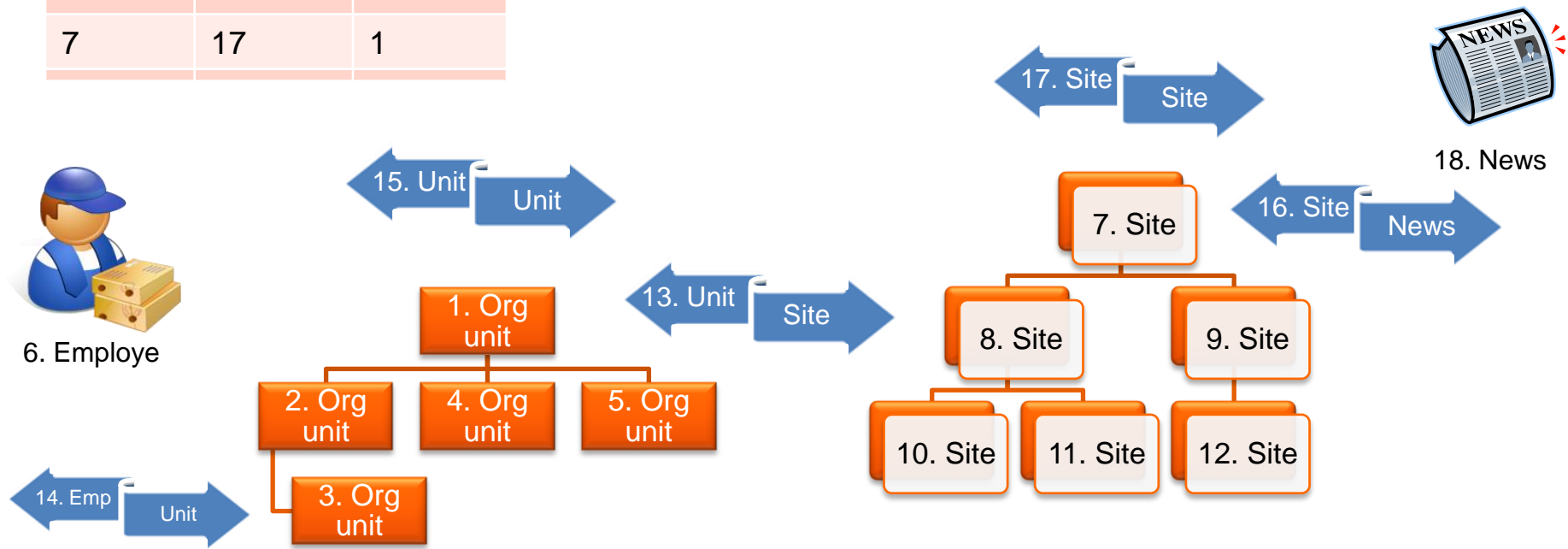
# Solution: Cache Qube

- Topic Maps gives the simple solution if you can hook into the update process
- Store a trail of every topic and association type iterated in a query
- Cache the result
- On update lookup in the trail and delete any affected query

# Cache Qube

TopicID	AssoType	QueryID
6	14	1
3	15	1
2	15	1
1	13	1
8	16	1
8	17	1
7	16	1
7	17	1

QueryID	Query
1	Select News related by Unit and Site to Employe 6



## Conclusion

- In a query repetitive environment where you need instant view of updates...

**Topic maps may just be the fastest data structure there is!**