

WP2.1 Scalability

(size matters...)

- Outline the workpackage
- Link up with expertise of participants
- Indicate organisation

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**The Web is large
... 5 seconds later...
it's even larger**

we need scalable methods

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Ways to scalability

- **Approximation**
- **Modularisation**
- **Distribution**
- ...

- Requires adaptation of existing **methodologies**
- Requires **benchmarking** to measure success

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How to do approximation

- knowledge compilation
- language weakening
- approximate deduction
- anytime algorithms
- ...

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How to do modularisation

- principles of information hiding
- view definition/query formulation
 - link with **2.5**-language-extension
- mapping rules
 - link with **2.2**-heterogeneity
- inclusion mechanisms
 - link with **2.3** dynamics

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How to do distribution

- Distributed description logics
- C-OWL as language extension
 - Link with **2.5**
- Distributed decision procedures

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Workpackage partners

| EPFL | INRIA | ITI | L3S | UPM | UKARL | VUM | UniTn | VU | VUB | Total |
|------|-------|-----|-----|-----|-------|-----|-------|----|-----|-------|
| 5 | 1 | 1 | 2 | 3 | 4 | 3 | 1 | 8 | 2 | 30 |

Assuming no budget cuts

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Workpackage structure

- **month 6:**
report on state-of-the-art of scalability
(DEL 2.1.1)
- **month 12:**
report on approximate reasoning methods
(DEL 2.1.2)
- **month 12:**
report methodology, benchmarking tools
(DEL 2.1.4)
- **month 18:** report on modularisation
(DEL 2.1.3)

Assuming no budget cuts

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Proposed plan

- 2.1.1 (state of the art):
lead by VU
- 2.1.2 (scalable methods):
lead by VU
- 2.1.3 (modularisation):
lead by EPFL?
- 2.1.4 (benchmarking & methodology):
lead by UKARL & UPM

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Proposed organisation

- **mailing list**
 - inform VU on contact person for each partner
- **1st meeting** (A'dam, in week of March 1-4)
 - first progress for state-of-art review)
 - kick-off for other activities
- **2nd meeting** early September
 - progress meeting on approximate reasoning-methods
 - progress meeting on benchmarking/methodology
 - kick-off for modularisation
- **3rd meeting** early March'05
- **core participants** expected to participate (VU, VUM, EPFL, UPM, UKARL)
- **other members** can choose per meeting

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