

FollowMe

Progress Update
Will Harwood

14 October 1997



FollowMe - Vital Statistics

- Started 1st October 1997
 - Duration 18 months
 - Total Effort 23 person years
 - APM Effort 3.75 person years over 12 months
 - 50% Funding - supported through close coupling to ANSA
- Partners
 - APM
 - FAST - Project manager
 - INRIA
 - TCM
 - UWE



Goals

● ANSA

- Understand Agents
 - Negotiation
 - Location
 - Scalability
 - Security
- Understand Implications of Mobility and Autonomy for FlexiNet

● APM

- Cages as “Safe Houses”
 - Safe Service Environment
 - Safe Conversation Environment
 - Trust Model

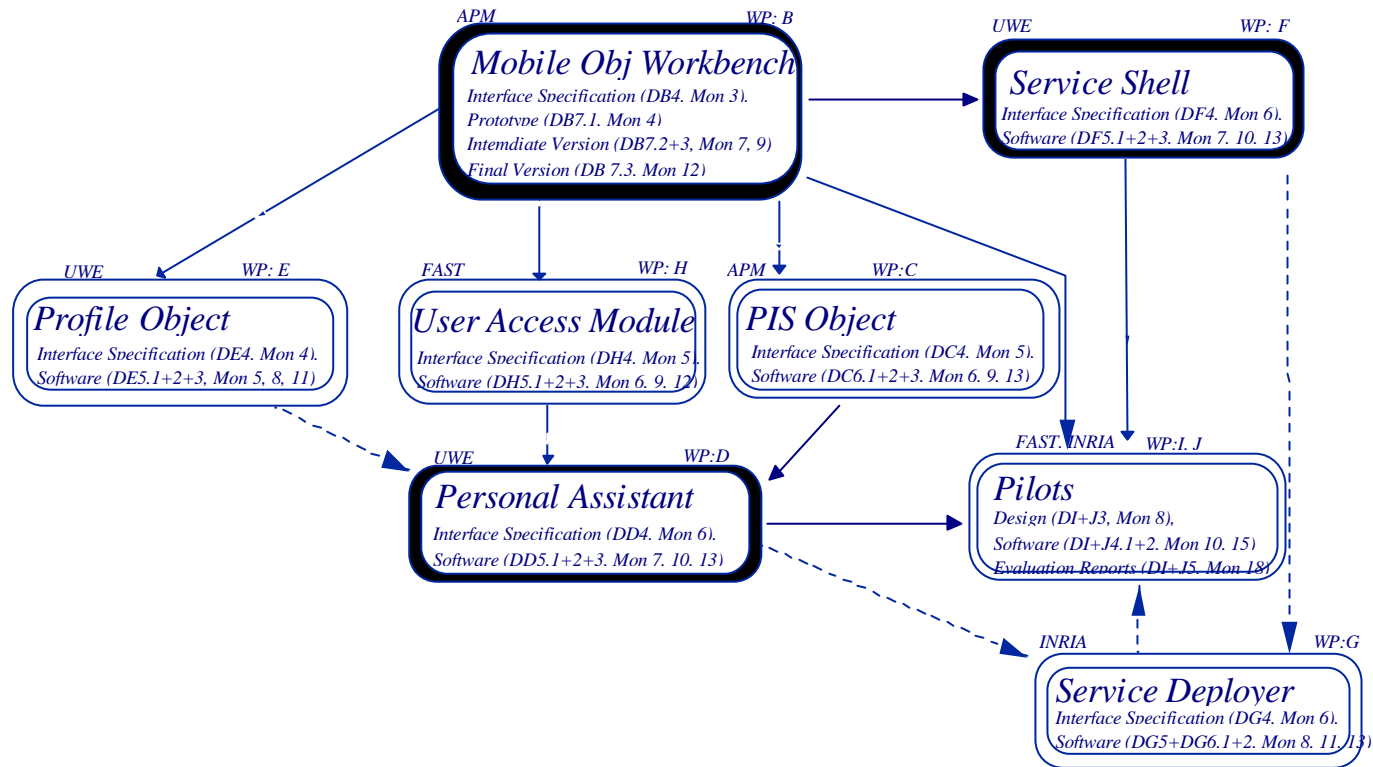


Work Packages

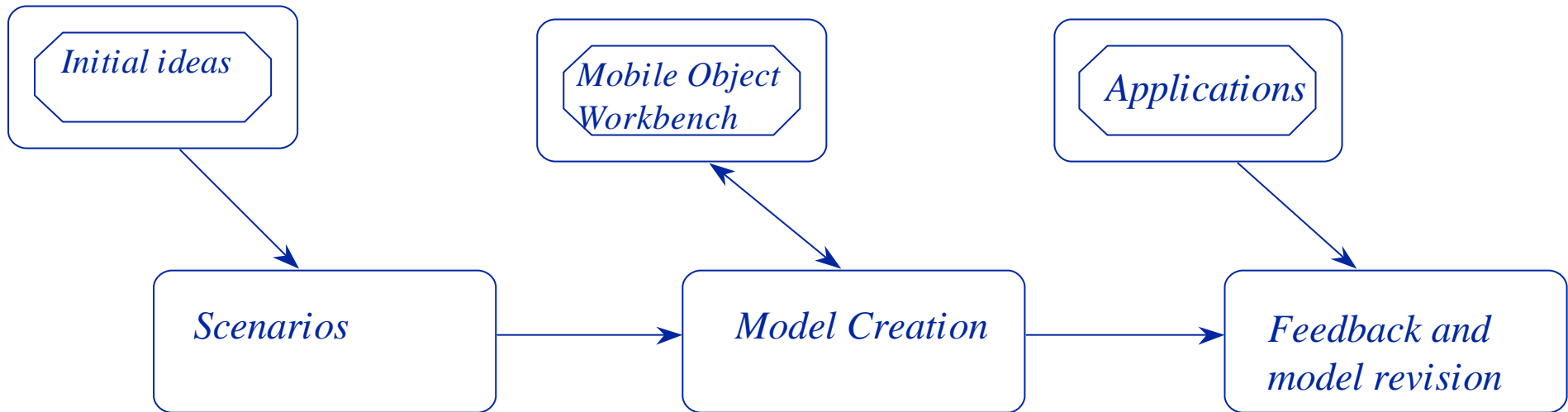
<i>WP</i>	<i>Title</i>	<i>Leader</i>	<i>Deliverable Description</i>	<i>Deliverable Name</i>
A	Architecture	APM	ODP models describing overall system	Architecture Report
B	Mobile Object Workbench	APM	(1) Mobile object infrastructure (2) Mobile object for general data storage	Mobile Object Workbench Mobile Data Object
C	Personal Information Space	APM	Access to, and maintenance of, users' personal data	PIS Object
D	Autonomous Agents	UWE	(1) Personal agent for performing autonomous tasks (2) General framework for developing agents	Personal Assistant Task Agent Shell
E	Personal Profiles	UWE	Object based service for creating, maintaining and querying a user's profile	Profile Object
F	Service Interaction	UWE	Framework for creating and hosting services - to be accessed by agent software	Service Shell
G	Service Deployment	INRIA	Framework and mechanisms for dynamic service deployment	Service Deployer
H	User Access	FAST	Device independent user access	User Access
I	Pilot Application 1	FAST	Agent based access to internet services	Bavaria Online Pilot Application
J	Pilot Application 2	INRIA	Agent based access to newspapers	Etel++
K	Exploitation	FAST	Ensuring commercial success of project	Exploitation
L	Project Management	FAST	Timely running & delivery of project	Project Management



Overall Structure



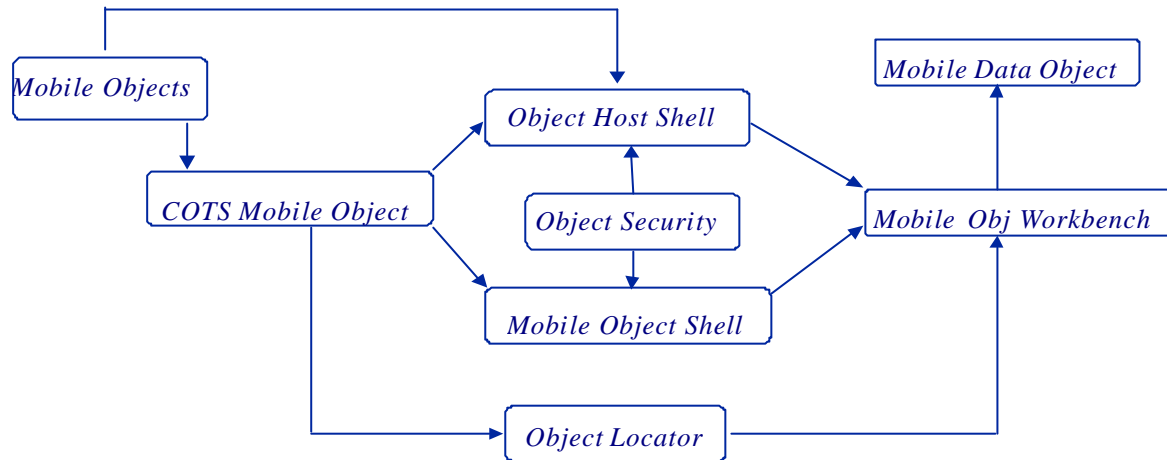
Architecture



		Month:																	
TASK	NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TA1	Scenarios																		
TA2	Model Creation		D				D						D						



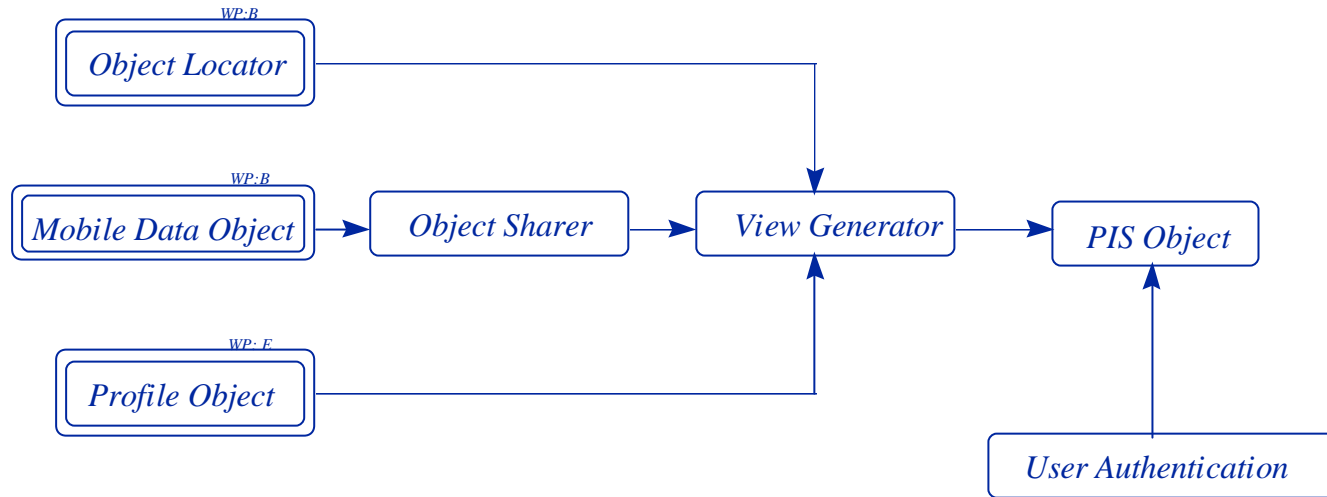
Mobile Object Workbench



TASK	NAME	Month:																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TB1	Survey	D																	
TB2	Requirements		D																
TB3	Design			D															
TB4	Interface Specification			D															
TB5	Implementation																		
TB6	Tests																		
TB7	Deployment				D	D		D		D			D						



Personal Information Space



Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NAME																	
Requirements			D														
Design				D													
Interface Specification					D												
Implementation																	
Tests																	
Deployment						D			D				D				



Mobile Object Workbench

A Way Forward



	<i>Aglets</i>	<i>Kafka</i>	<i>Voyager</i>	<i>Odyssey</i>
Can an agent migrate?	Yes	Yes	Yes	Yes
Can a host force an agent to migrate?	Yes	Yes	Yes	Yes
100% Java?	Yes	Yes	Yes	Yes
Security policies?	Yes	Yes	Yes	Yes
Security policies configurable?	Partly, through Tahiti	Yes	Yes	Yes
Security policies modifiable?	No	Yes	No	Yes
Status?	Alpha 5b	Beta 1.4	1.0	Beta 2.0
Documentation?	Good - growing	Poor	Very Good	Poor
Ease of use?	Very accessible	Low level programming	Very accessible	Quite accessible
Extensibility?	Medium	High	Medium	High
Other ORB support?	None explicit	Yes (HORB)	None explicit	None explicit
Transport layer protocol	ATTP	RMI or HORB		RMI / IIOP / DCOM
Can agents communicate with host?	Yes	Yes	Yes	Yes
Can agents communicate with each other?	Yes	Only via host	Yes	Only via host
Synchronous and Asynchronous messages?	Yes	Yes	Yes	Only synchronous
Can agents transport data?	Yes	Yes	Yes	Yes
Directory service?	No	Yes	Yes	No
Persistent Agent	No	No	Yes	No
Event service?, Event Delegation?	Yes	No	Yes	Yes
User acceptance?	High	not applicable	?	?
Source available?	Partially	Yes	No	Partially
Commercial license available?	No (no plans)	Not yet determined	Yes	Not yet determined
Lifespan tracking?	No	No	Yes	No
UID (Unique Identifier)	Yes	No	Yes	No
GUI provided?	Yes	Simple tool	No	No



A Way to Meet Our Needs

- Take Mobility from Kafka
- Take Interoperability and service model from FlexNet
- Add location services
- Add autonomous objects
- Add Security models
- The right functionality with minimum re-engineering
- Full source Access

