ANSA Road Map

What we propose to do in the next 12 months

14 Oct 97

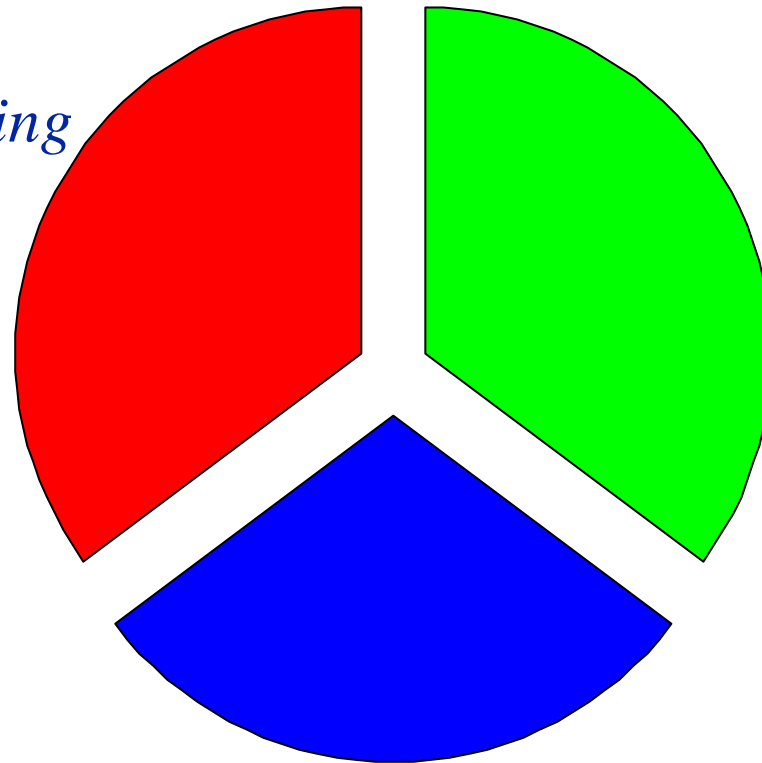*Richard Hayton*

APM.2079

Three Areas

FlexiNet
- Declarative Binding
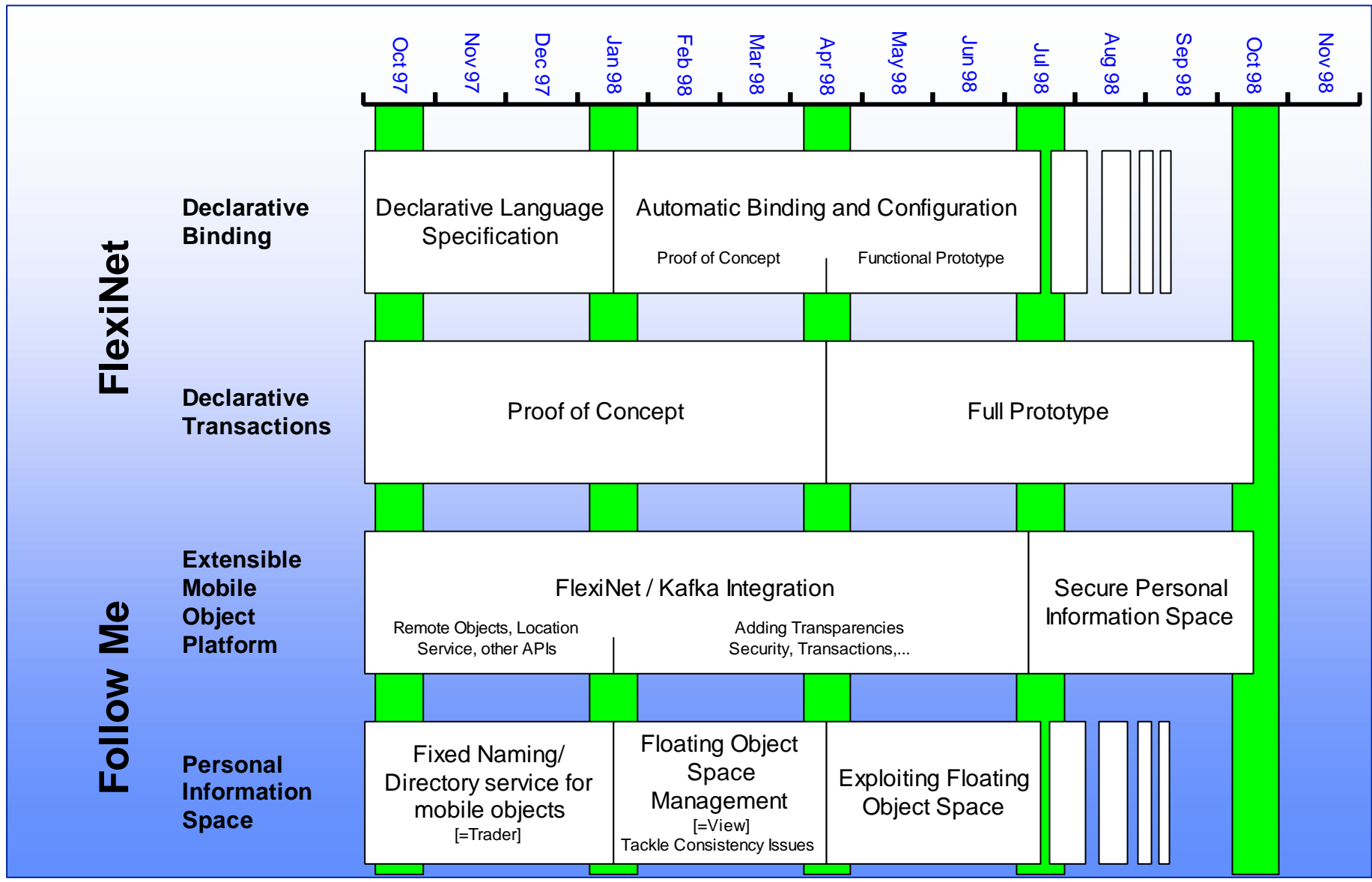- Transactions

FollowMe
- Personal Information Space

FlexiNet + FollowMe
- Extensible Mobile Object Platform

FlexiNet

Follow Me

	Oct 97	Nov 97	Dec 97	Jan 98	Feb 98	Mar 98	Apr 98	May 98	Jun 98	Jul 98	Aug 98	Sep 98	Oct 98	Nov 98

Declarative Binding

Declarative Language Specification

Automatic Binding and Configuration

Proof of Concept   Functional Prototype

Declarative Transactions

Proof of Concept

Full Prototype

Extensible Mobile Object Platform

FlexiNet / Kafka Integration

Remote Objects, Location Service, other APIs

Adding Transparencies Security, Transactions,...

Secure Personal Information Space

Personal Information Space

Fixed Naming/ Directory service for mobile objects

[=Trader]

Floating Object Space Management

[=View]
Tackle Consistency Issues

Exploiting Floating Object Space

Declarative Binding

Specification of binding requirements

- security, auditing, access control, performance...
- automatic binding to meet requirements

Parties involved in binding are separately administered

- but have some degree of prior agreement

Continue current FlexiNet work

- negotiation by refinement
- late negotiation and binding

Design Language & Build Prototype Binder

Declarative Transactions

High Transparency Concurrency

- focus on middle-tier (business logic)

- declarative specification of concurrency semantics

- encapsulate components in transactional frames

- separate sequential behaviour from concurrency semantics

- leverage FlexiNet reflection

Design & Build Prototype System

Extensible Mobile Object Platform

Basic infrastructure for agent development

- location transparent communication

- explicit code movement

- emphasis on security policy

Kafka over FlexiNet

- FlexiNet provides communications infrastructure and reflection

- Kafka provides agent mobility

- use FlexiNet reflection to enforce security policy

SCOPE

APPROACH

Produce and Extend Mobile Distributed Object Platform

Personal Information Space

Manage information that follows its owner

- resources are mobile, not just agents
- resources may be unavailable due to location
- consistency control a major issue

Develop "floating object spaces"

- FlexiNet/Kafka can be tailored for experimentation
- trading to locate versions of database

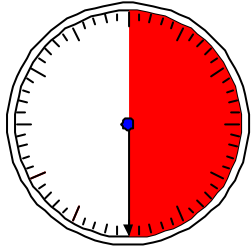Produce Fixed Object Space and

Extend to Floating Object Space
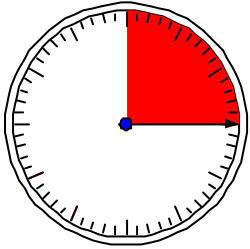
Next TC (Jan 98)

3 Months

- Declarative Binding

  - Language design and approach to engineering

- Declarative Transactions

  - Status report

- Mobile Object Platform

  - Kafka/FlexiNet basic integration   (Software)

- Personal Information Space

 - Naming service for mobile objects   (Software)

April 98 TC

6 Months

- Declarative Binding
  - Automatic binder   (Proof of Concept Software)

- Declarative Transactions
  - Framework   (Proof of Concept Software)

- Mobile Object Platform
  - Extended Kafka/FlexiNet integration
  - Some transparencies   (Software)

- Personal Information Space
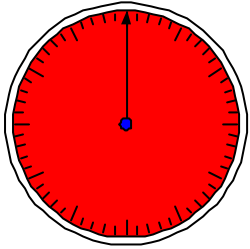 - Floating Object Space   (Proof of Concept Software)
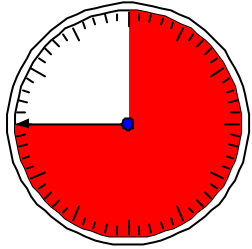
July 98 TC

9 Months

- ### Declarative Binding
  - Full prototype   (Software)

- ### Declarative Transactions
  - Status report

- ### Mobile Object Platform
  - Platform with security and transactions   (Software)

- ### Personal Information Space
  - Exploitation of Floating Object Space

12 Months

October 98 TC

- Includes:

  - Full Prototype of Transactions

  - Secure Personal Information Space
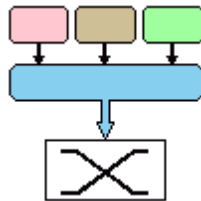
In Addition

● **Access to deliverables from**

■ **ReTINA**

■ **DCAN**

■ **Pegasus II**

■ **Follow Me**