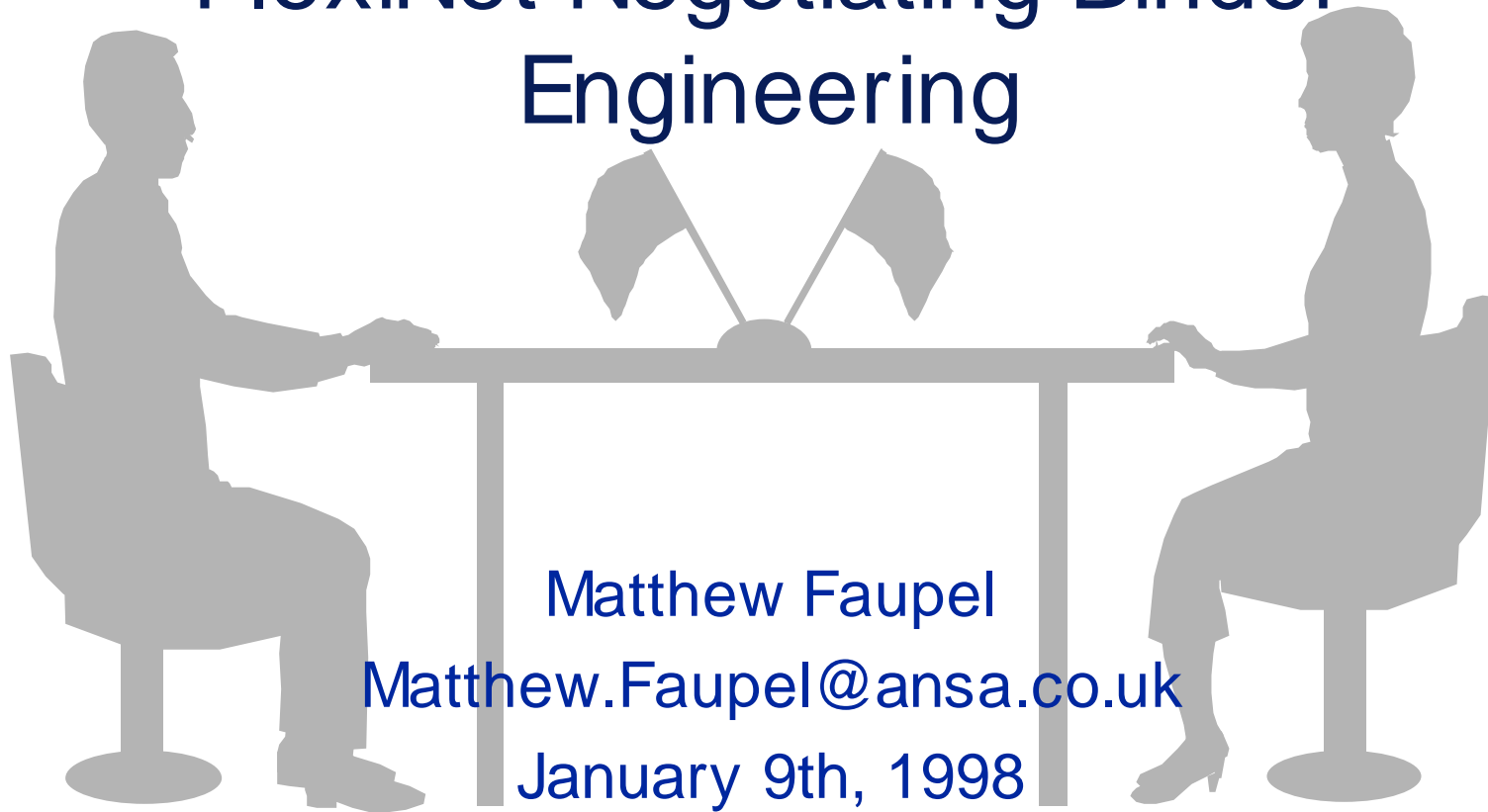


# FlexiNet Negotiating Binder Engineering



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# Goals

- Allow negotiation of a suitable protocol when connecting to a remote interface
- Make it easy to add new protocols to the set available for negotiation
- Allow experimentation with different negotiation schemes



# FlexiNet Binding Framework

- A Name is an arbitrary object representing an interface on a remotely accessible object
- Binders generate and resolve Names
- Binders can be chained together, each part generating or resolving part of the Name
- Resolving a name results in an object that supports the same interface as the originally named object..
- ...with the implication that this either is or somehow allows access to the original object

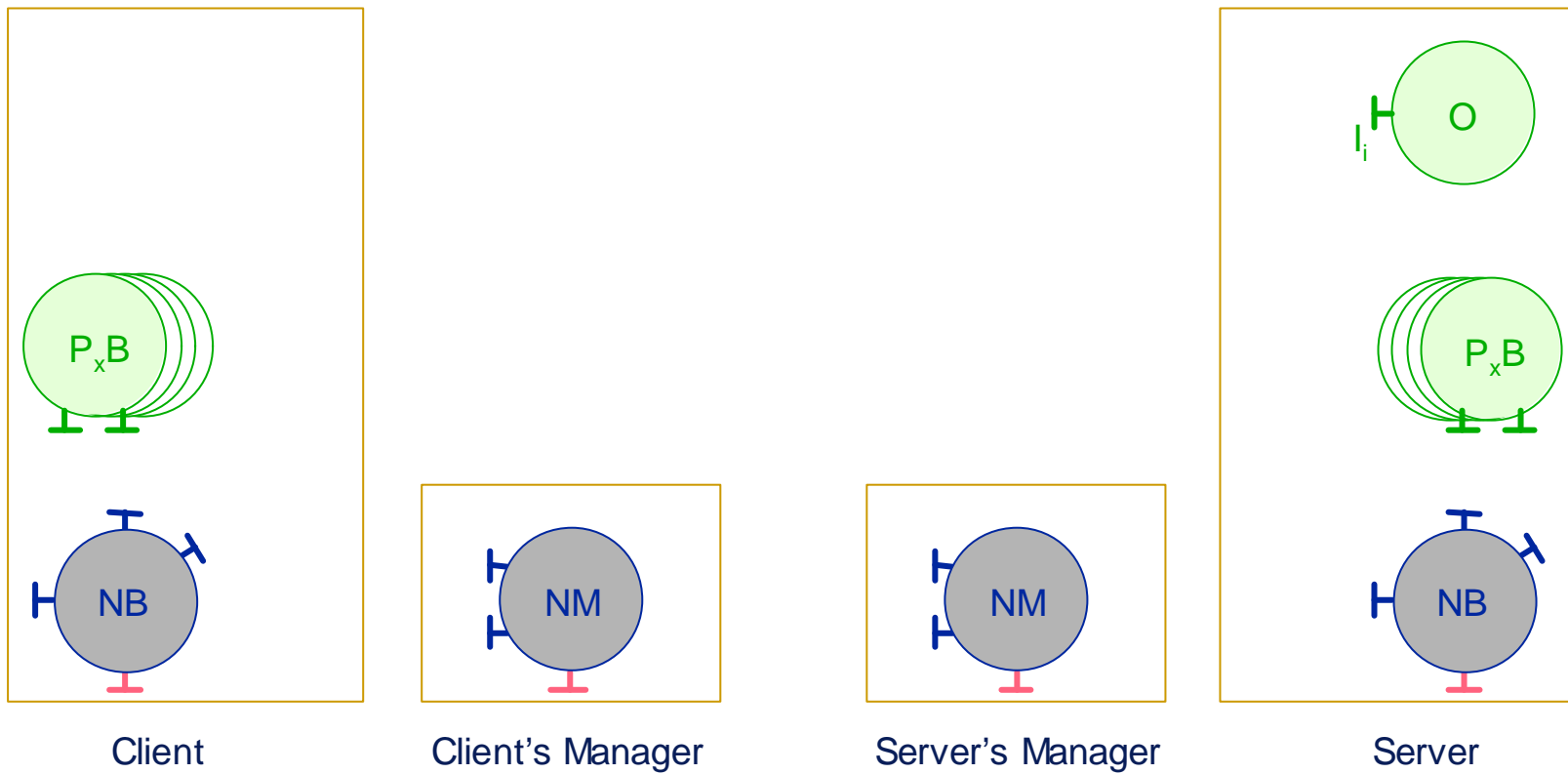


# Extensions for Negotiation

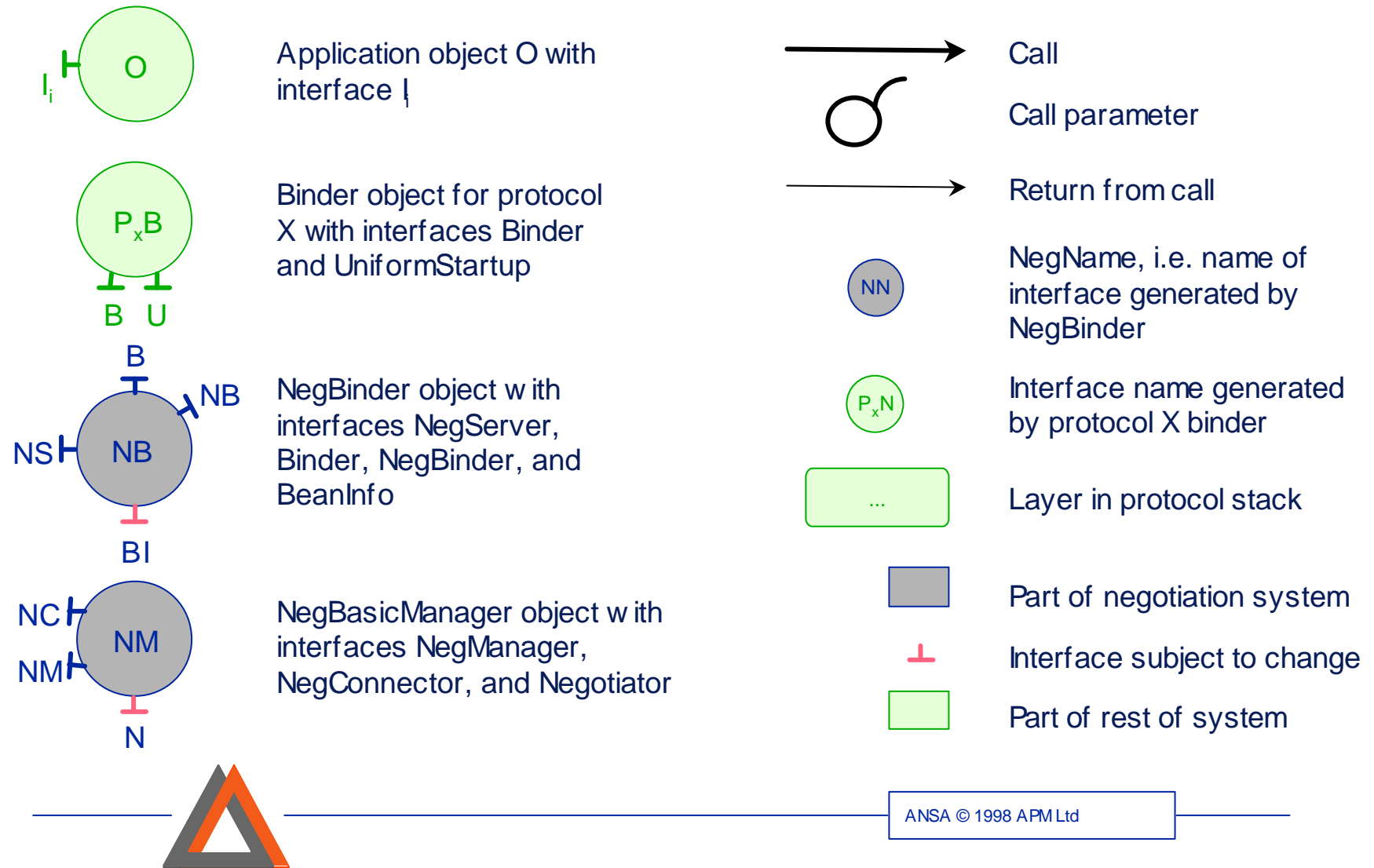
- Names representing interfaces requiring negotiation
- A Binder to generate and resolve these Names
- A system for conducting the negotiation



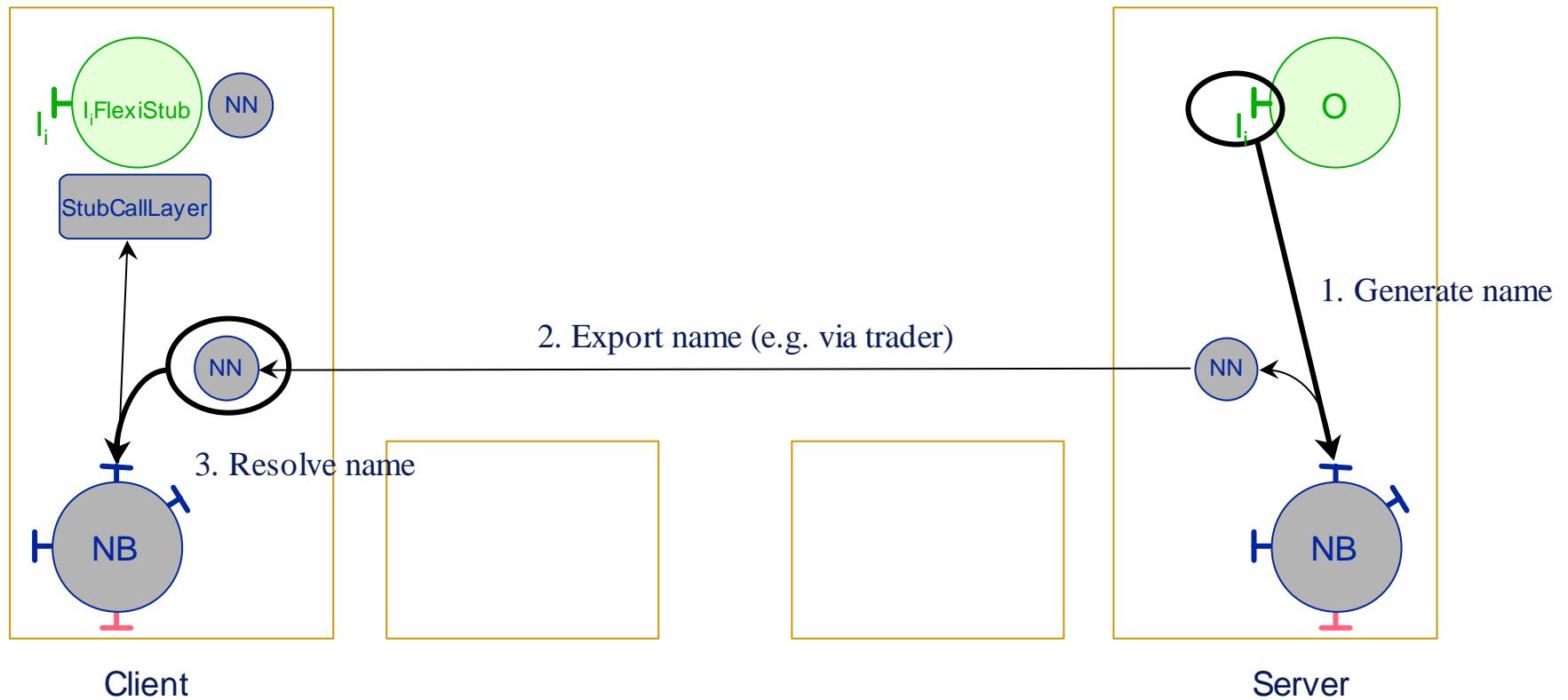
# Components



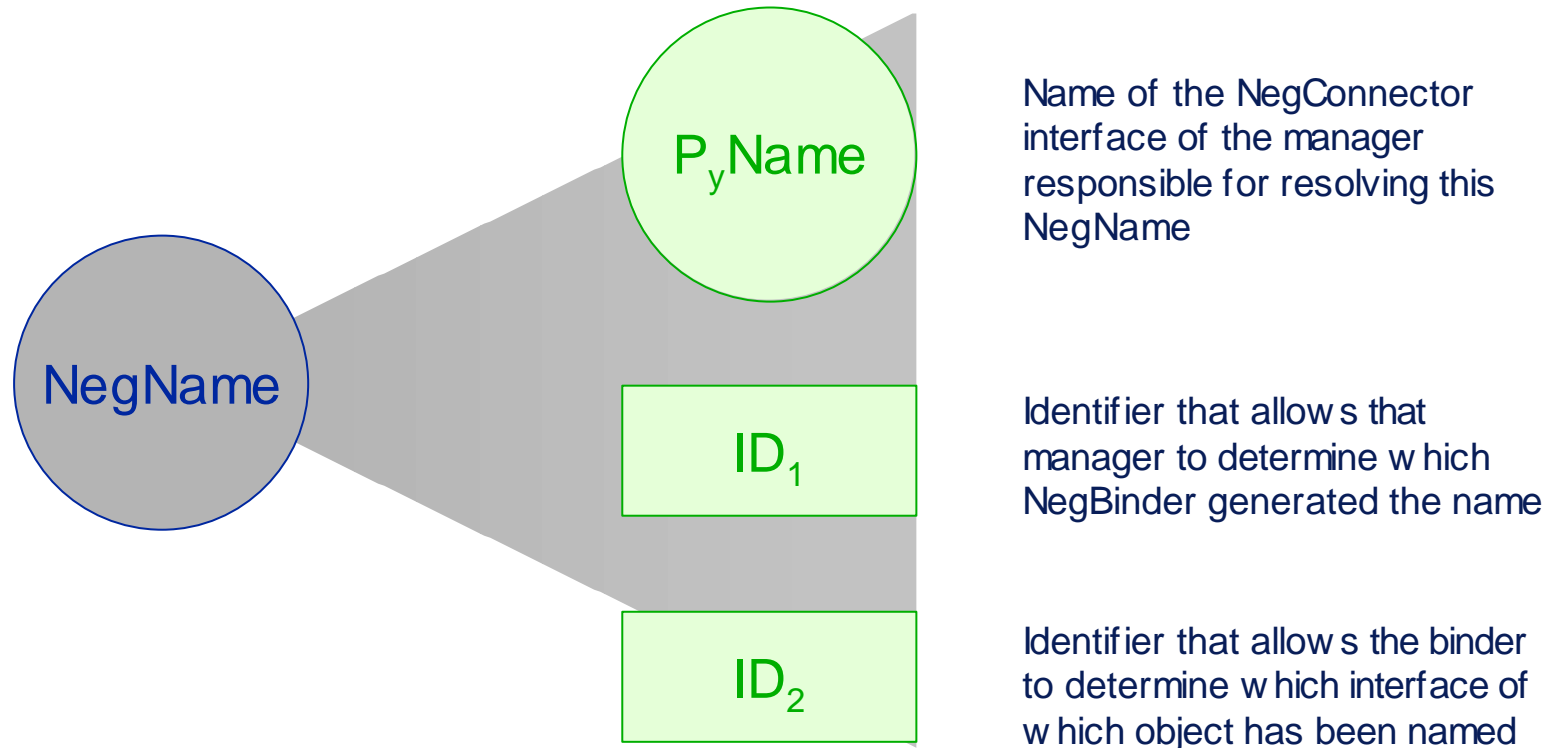
# Key



# Initial Naming and Resolution

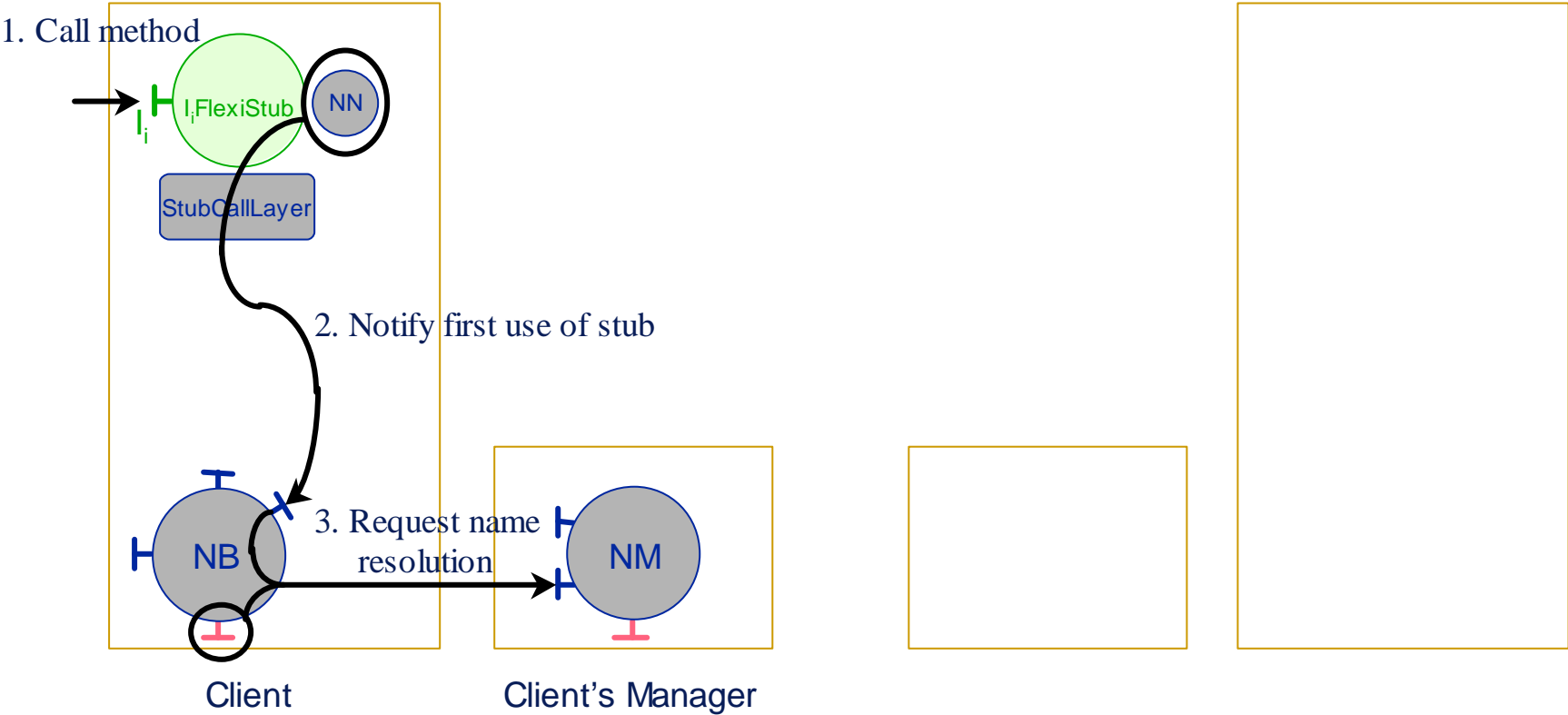


# What's in a Name?

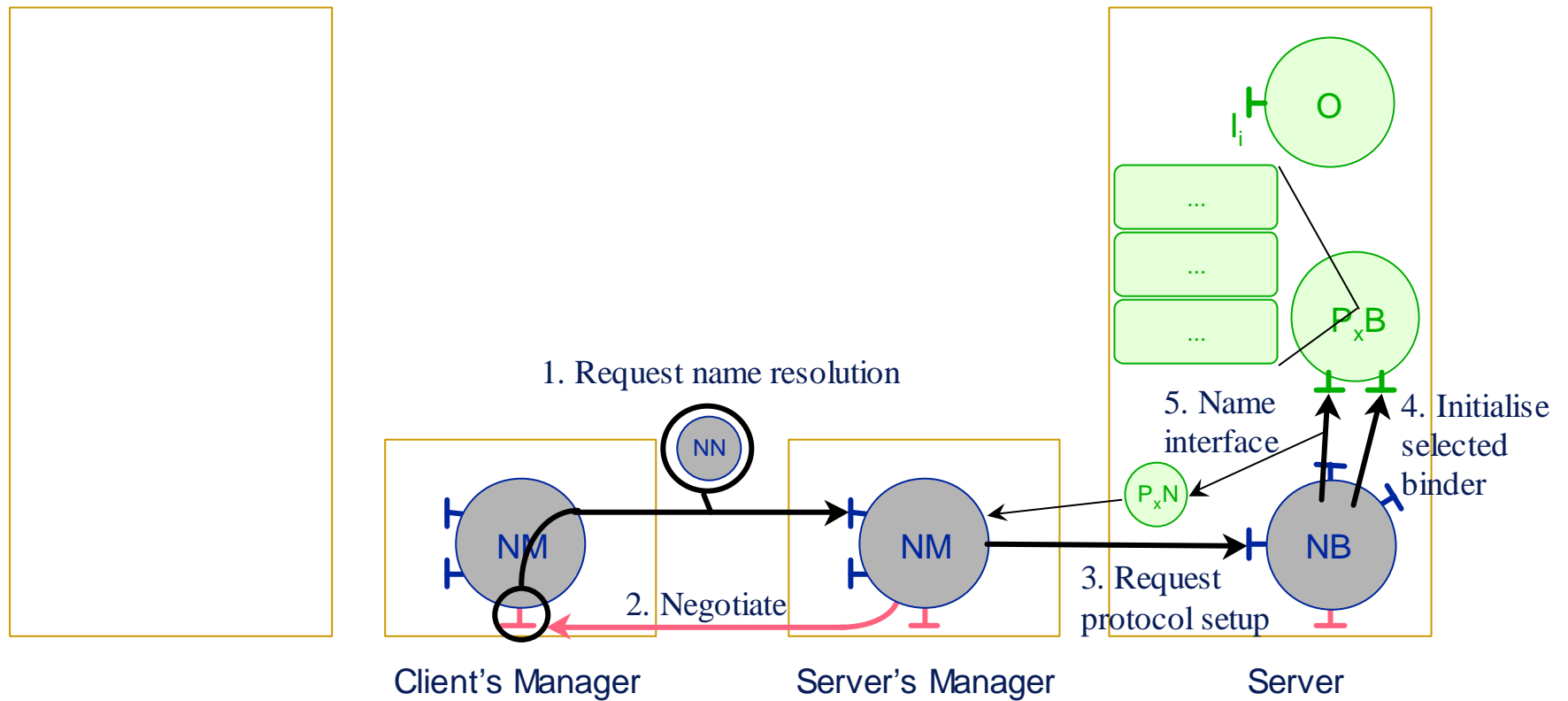




# First Use

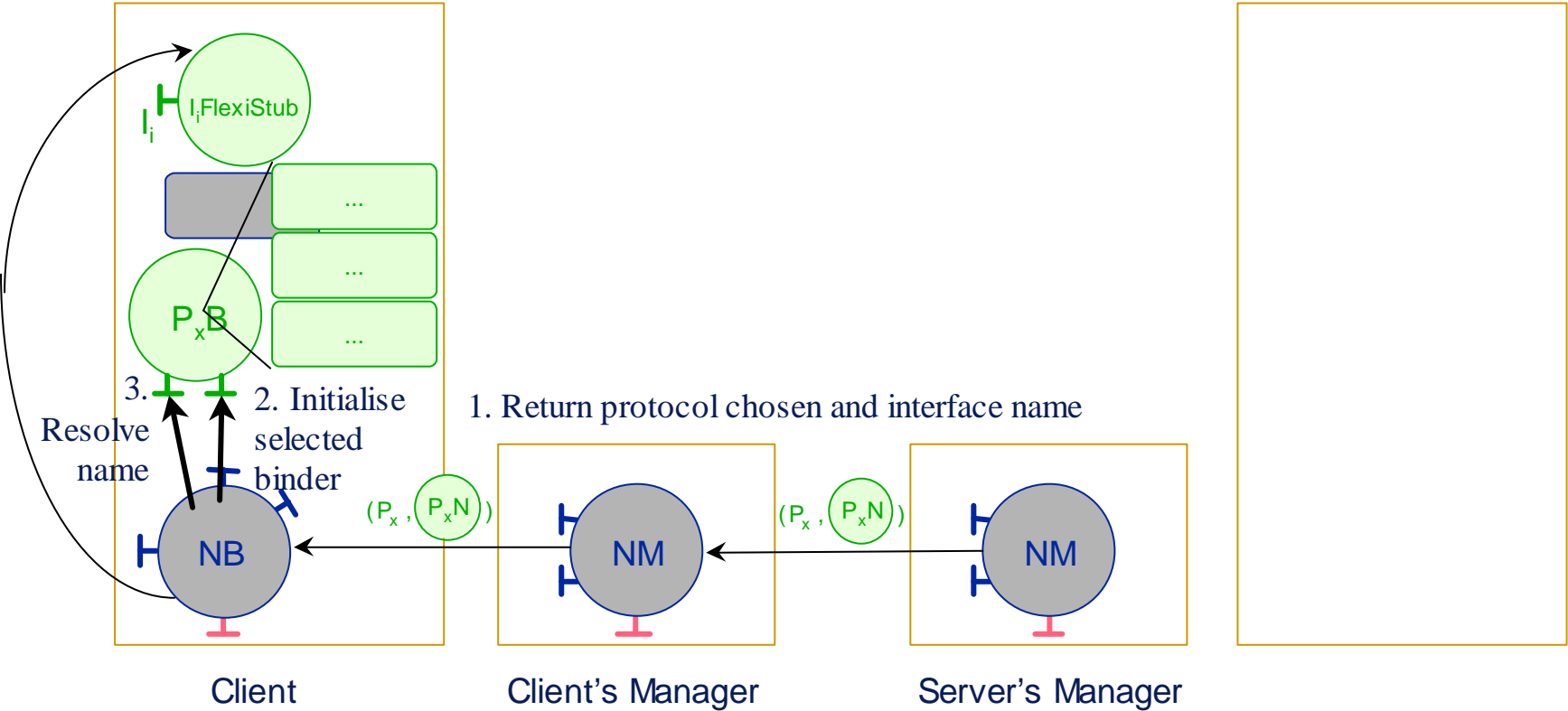


# Negotiation and Server Setup

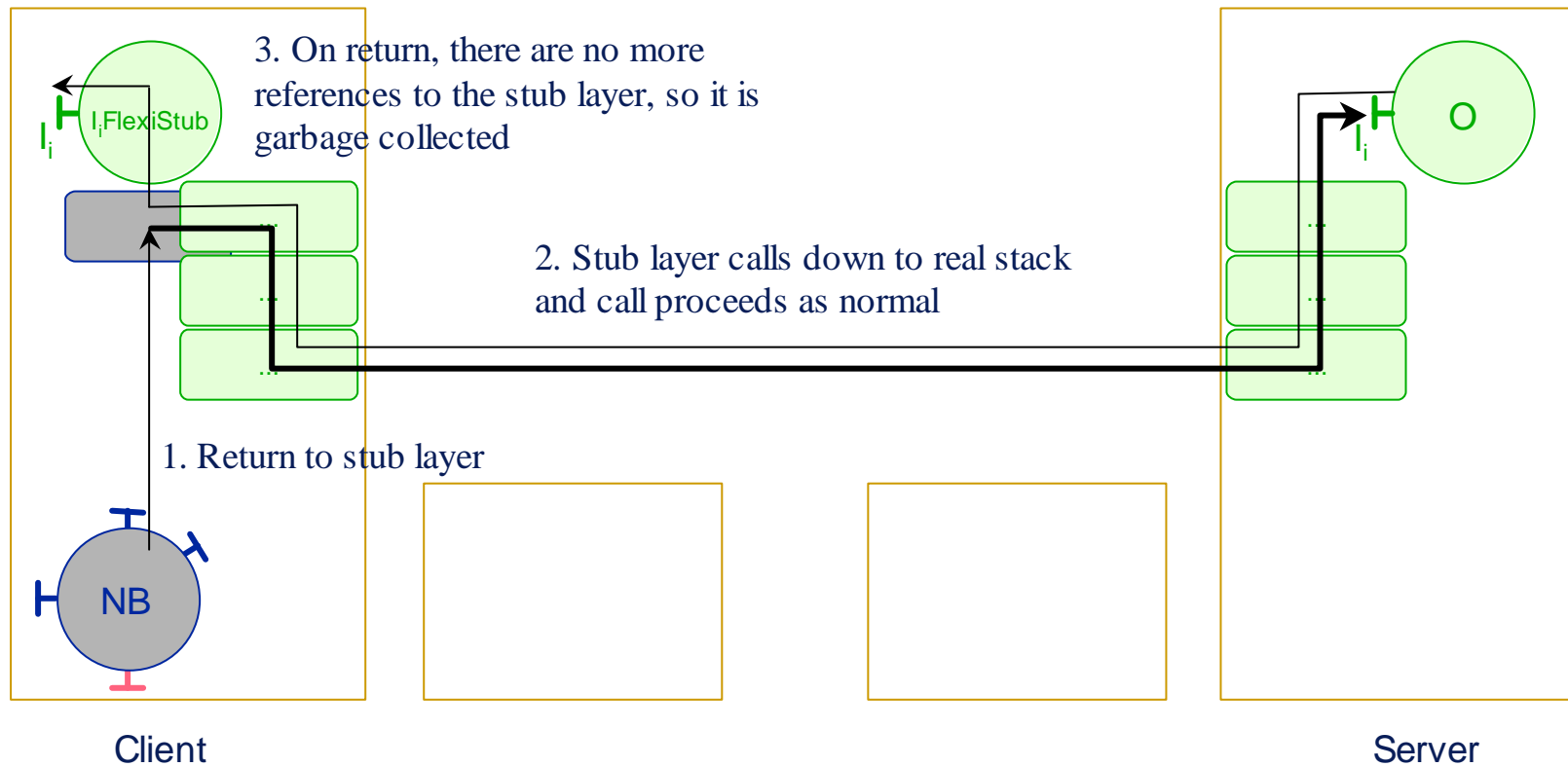


# Client Setup

4. Set new protocol details in stub



# Call to Server



# Plugging in Negotiation

- Negotiation encapsulated by interface *Negotiation*
  - easy to plug in different negotiation strategies
- Management encapsulated by negotiation manager
  - including talking to negotiation support systems
- Protocol specifier includes set of arbitrary properties
  - for passing options, QoS, constraints etc.
- NegBinder can be queried via BeanInfo interface
  - for local information relevant to the negotiation



# Status

- Code delivered
  - package UK.co.ansa.flexinet.negotiation
- UniformGreen demonstration binder
- Trivial negotiation protocol in place
- NegBinder can be made default binder through system property
  - this can be set from the command line:  
*`-Dflexinet.topbinder=NegBinder`*

