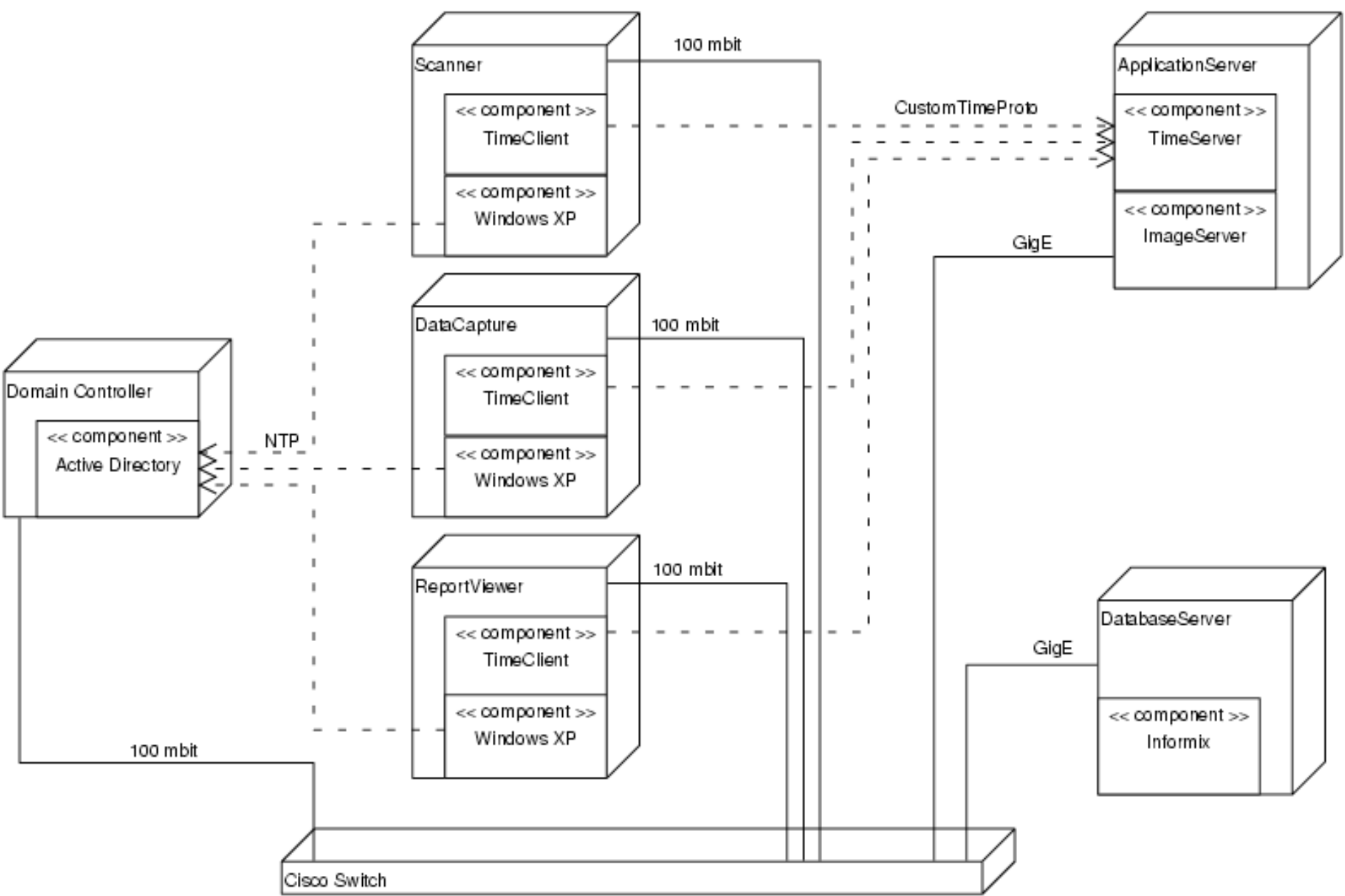


WebSys: Domain Models - Part Deux

Whatsa' Domain Model?

Vision

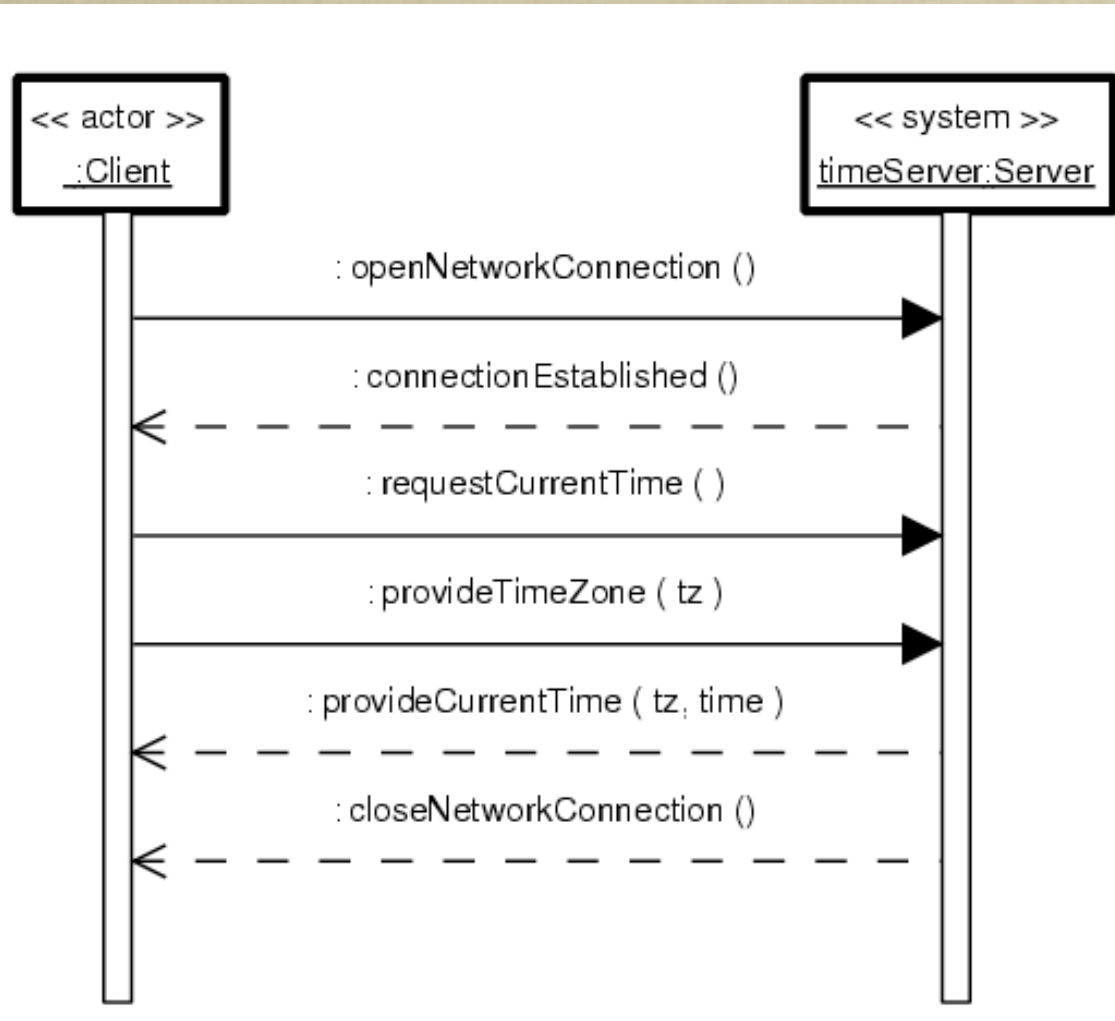
- *Network Time Server*
- *Major Features:*
 - *Gets current time for a given time zone.*
 - *Get all available time zones.*
 - *Support 600+ clients.*
 - *Single clock on a large network.*
 - *Clock isn't necessarily the same as the wall clock.*
- *This is a real business problem!*



Use Case UC1: GetCurrentTime

Use Case: GetCurrentTime	
Identifier:	UC1
Description:	<i>The GetCurrentTime use case models obtaining the current time from a central clock.</i>
Actors:	Client
Preconditions:	1. <i>Network time service is available on the network.</i>
Flow of events:	<ol style="list-style-type: none">1. <i>The use case starts when the Client opens a network connection to the Server.</i>2. <i>The Client indicates a need for the current time.</i>3. <i>The Client provides its current time zone, using the time zone name.</i>4. <i>The Server provides the Client with the current time in the requested time zone.</i>5. <i>The Server closes the network connection.</i>
Postconditions:	1. <i>The Client has the current time, and the network connection is closed.</i>

SSD: UC1



Use Case UC2: ListTimeZones

Use Case: ListTimeZones	
Identifier:	UC2
Description:	<i>The ListTimeZones use case models obtaining a description of all recognized time zones.</i>
Actors:	Client
Preconditions:	1. <i>Network time service is available on the network.</i>
Flow of events:	<ol style="list-style-type: none">1. <i>The use case starts when the Client opens a network connection to the Server.</i>2. <i>The Client indicates a need for the complete list of all time zones.</i>3. <i>For each recognized time zone:</i><ol style="list-style-type: none">1. <i>Server provides the time zone name.</i>2. <i>Server provides the time zone offset from UTC.</i>3. <i>Server provides a list of major cities which use the time zone.</i>4. <i>The Server closes the network connection.</i>
Postconditions:	1. <i>The Client has been given all recognized time zones, and the network connection is closed.</i>

How To Make A Domain Model

- *Identify Conceptual Classes*

Use Case UC1: GetCurrentTime

<i>Use Case: GetCurrentTime</i>	
Identifier:	<i>UC1</i>
Description:	<i>The GetCurrentTime use case models obtaining the current time from a central clock.</i>
Actors:	<i>Client</i>
Preconditions:	<i>1. Network time service is available on the network.</i>
Flow of events:	<i>1. The use case starts when the Client opens a network connection to the Server. 2. The Client indicates a need for the current time. 3. The Client provides its current time zone, using the time zone name. 4. The Server provides the Client with the current time in the requested time zone. 5. The Server closes the network connection.</i>
Postconditions:	<i>1. The Client has the current time, and the network connection is closed.</i>

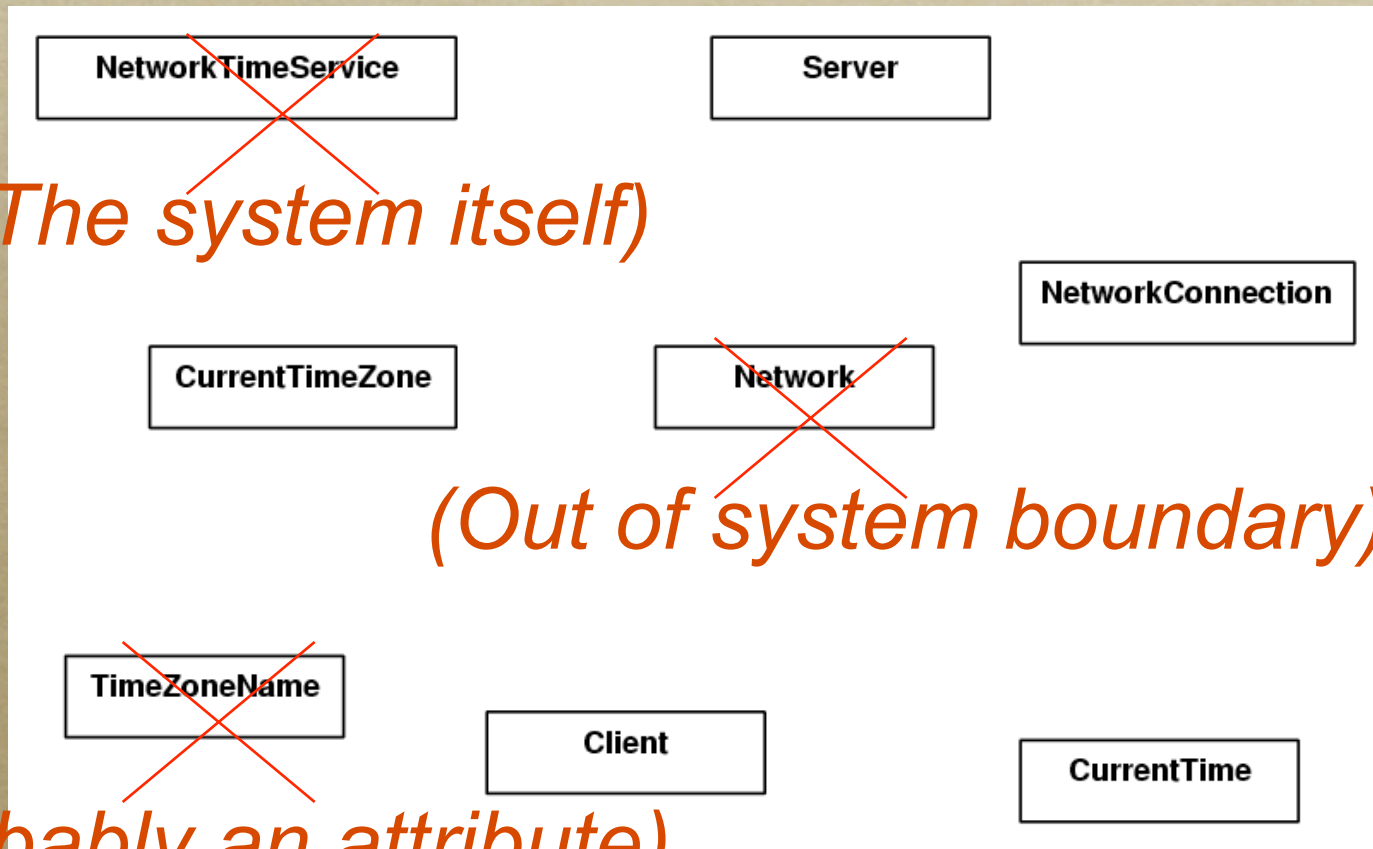
Use Case UC1: GetCurrentTime

Use Case: GetCurrentTime	
Identifier:	UC1
Description:	The GetCurrentTime use case models obtaining the current time from a central clock.
Actors:	Client
Preconditions:	1. Network time service is available on the network .
Flow of events:	<ol style="list-style-type: none">1. The use case starts when the Client opens a network connection to the Server.2. The Client indicates a need for the current time.3. The Client provides its current time zone, using the time zone name.4. The Server provides the Client with the current time in the requested time zone.5. The Server closes the network connection.
Postconditions:	1. The Client has the current time, and the network connection is closed.

Identified Conceptual Classes

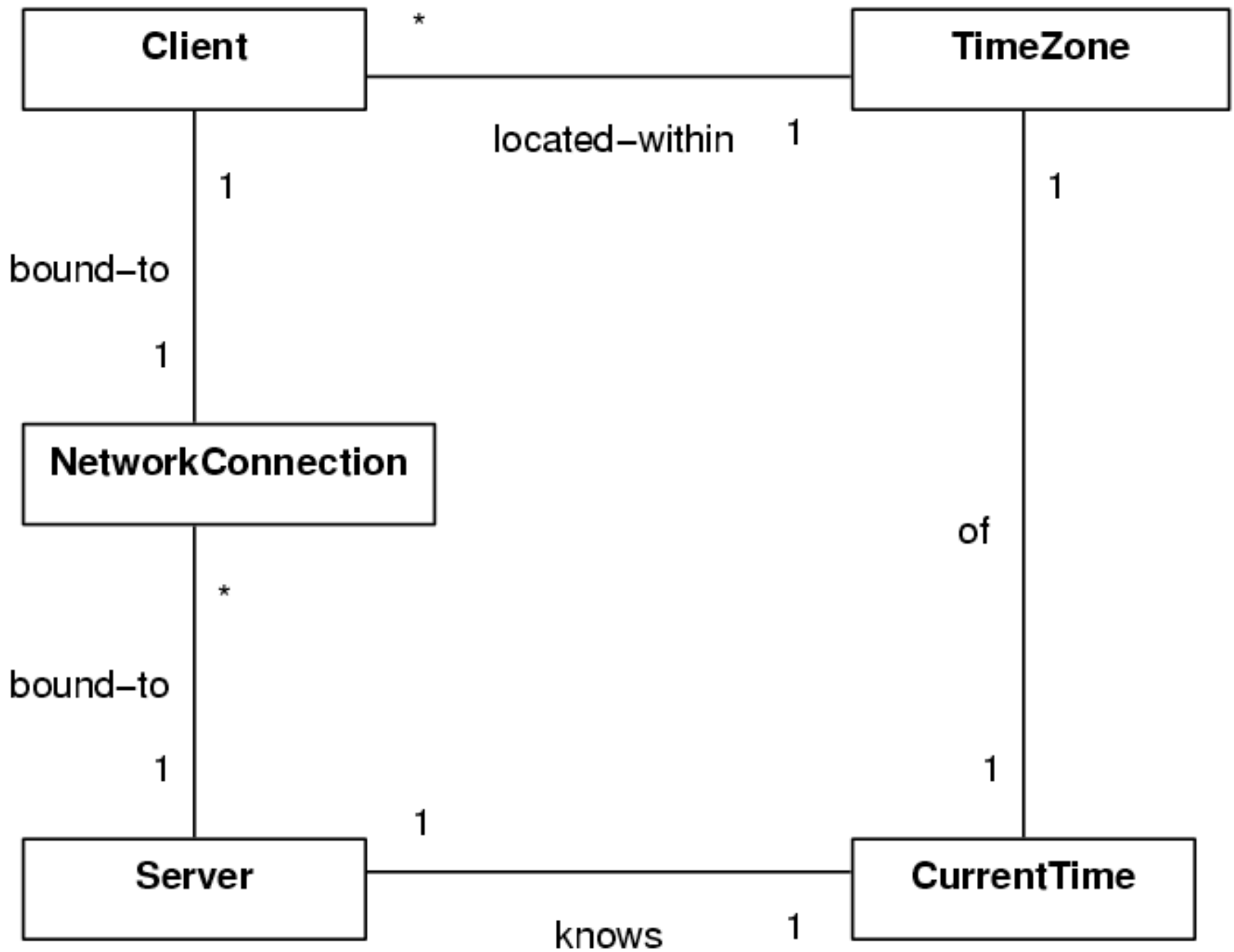
- *Network Time Service*
- *Network*
- *Client*
- *Network Connection*
- *Server*
- *Current Time*
- *Current Time Zone*
- *Time Zone Name*

How To Make A Domain Model



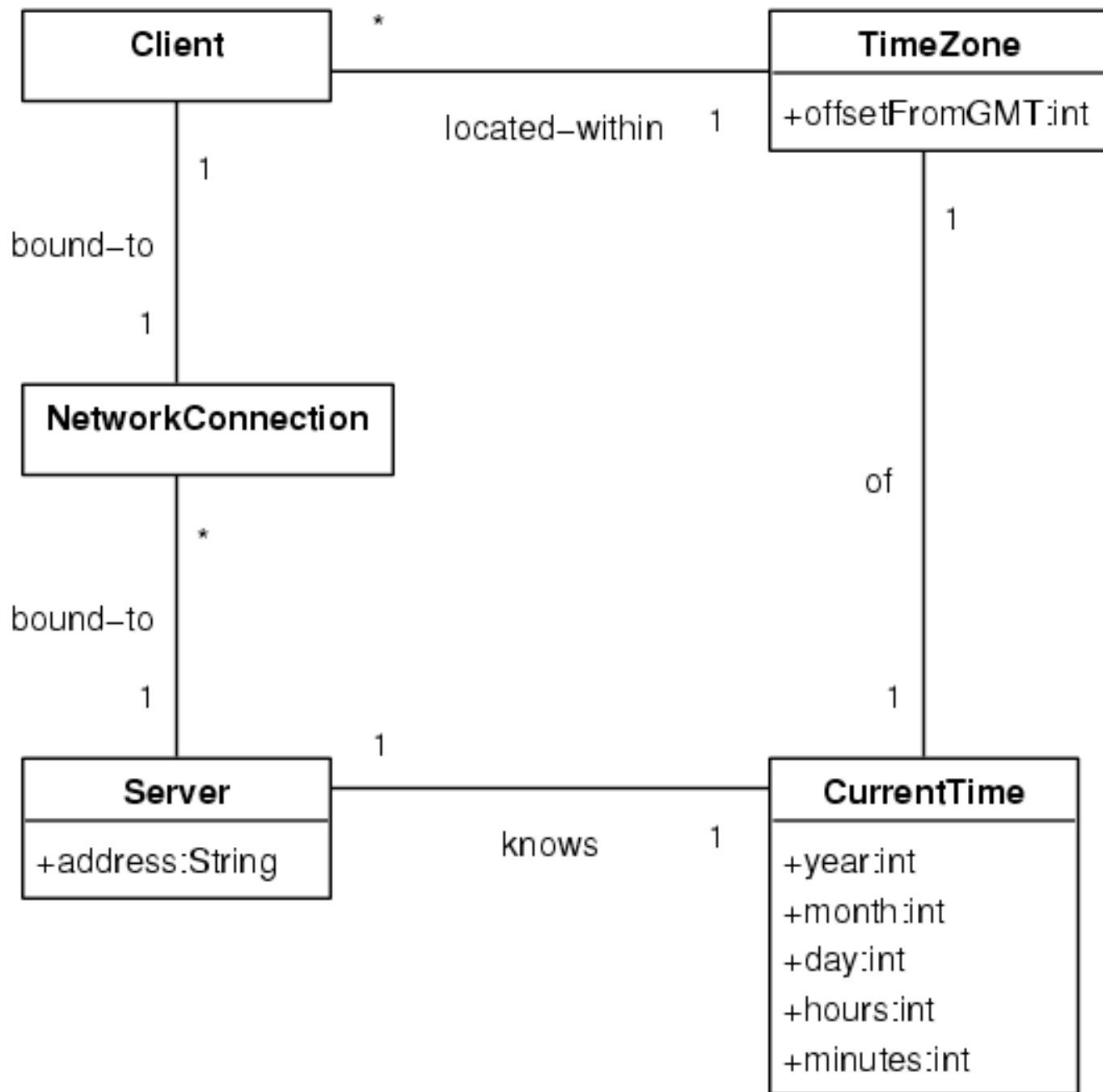
How To Make A Domain Model

- *Identify Conceptual Classes*
- *Put them onto a picture.*
- *Draw associations between them.*



How To Make A Domain Model

- *Identify Conceptual Classes*
- *Put them onto a picture.*
- *Draw associations between them.*
- *Add attributes to fill in details.*



Use Case UC2: ListTimeZones

Use Case: ListTimeZones	
Identifier:	UC2
Description:	<i>The ListTimeZones use case models obtaining a description of all recognized time zones.</i>
Actors:	Client
Preconditions:	1. <i>Network time service is available on the network.</i>
Flow of events:	<ol style="list-style-type: none">1. <i>The use case starts when the Client opens a network connection to the Server.</i>2. <i>The Client indicates a need for the complete list of all time zones.</i>3. <i>For each recognized time zone:</i><ol style="list-style-type: none">1. <i>Server provides the time zone name.</i>2. <i>Server provides the time zone offset from UTC.</i>3. <i>Server provides a list of major cities which use the time zone.</i>4. <i>The Server closes the network connection.</i>
Postconditions:	1. <i>The Client has been given all recognized time zones, and the network connection is closed.</i>

Use Case UC2: ListTimeZones

Use Case: ListTimeZones	
Identifier:	UC2
Description:	The ListTimeZones use case models obtaining a description of all recognized time zones.
Actors:	Client
Preconditions:	1. Network time service is available on the network .
Flow of events:	<ol style="list-style-type: none">1. The use case starts when the Client opens a network connection to the Server.2. The Client indicates a need for the complete list of all time zones.3. For each recognized time zone:<ol style="list-style-type: none">1. Server provides the time zone name.2. Server provides the time zone offset from UTC.3. Server provides a list of major cities which use the time zone.4. The Server closes the network connection.
Postconditions:	1. The Client has been given all recognized time zones , and the network connection is closed.

