

Inheritance and Lookup

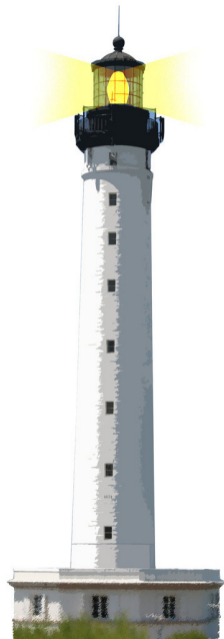
5: Lookup in metaclasses

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W4S05



<http://www.pharo.org>



Goal

1. in Pharo, everything is an object
2. objects can receive messages
3. classes are objects too

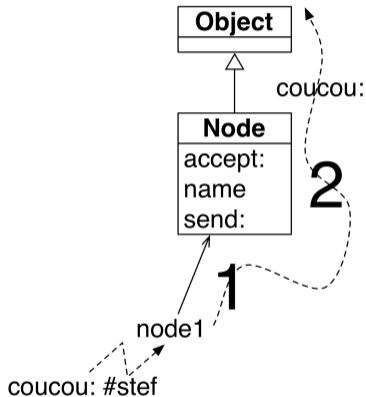
Classes can receive messages. The mechanism is **exactly** the same



Only One Lookup Rule

The lookup starts in the **class** of the **receiver** then:

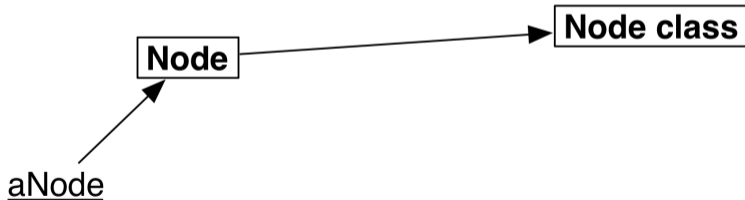
- if the method is defined in the class, it is returned
- otherwise the search continues in the superclass



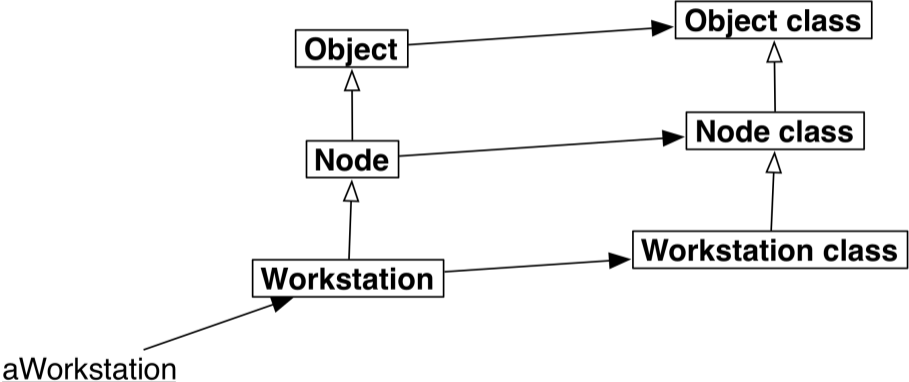
A Class is an Instance of Another Class

Class X is always the unique instance of the class X class:

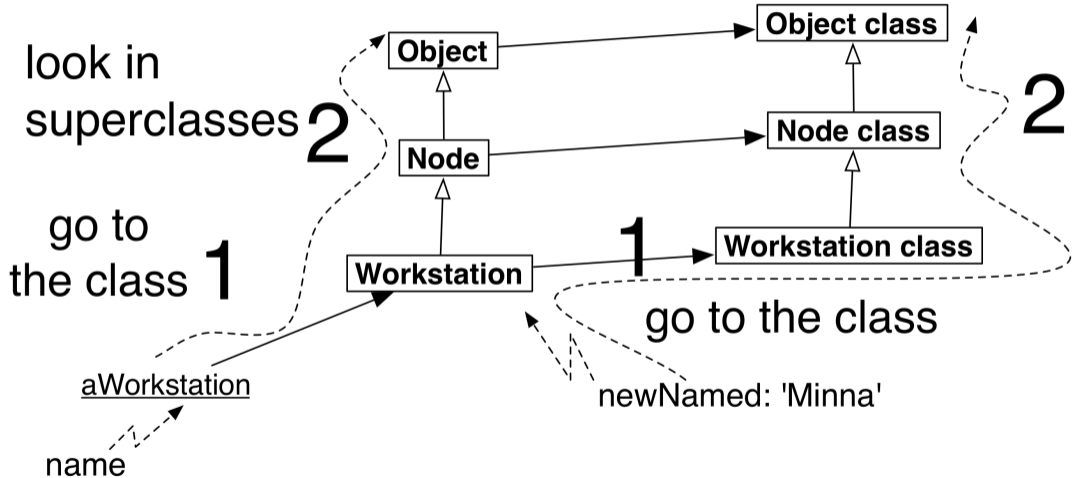
- Node is a class and an object
- each object is an instance of a class
- the class of Node is Node class
- the class Node class is automatically created



Superclass Chain



Lookup of Class Methods is No Different



What You Should Know

- A class is an object
- A class can receive messages
- Method lookup is exactly the same as for all objects:
 - go to the class of the receiver
 - follow inheritance chain
- More during the lecture *Understanding Metaclasses*



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