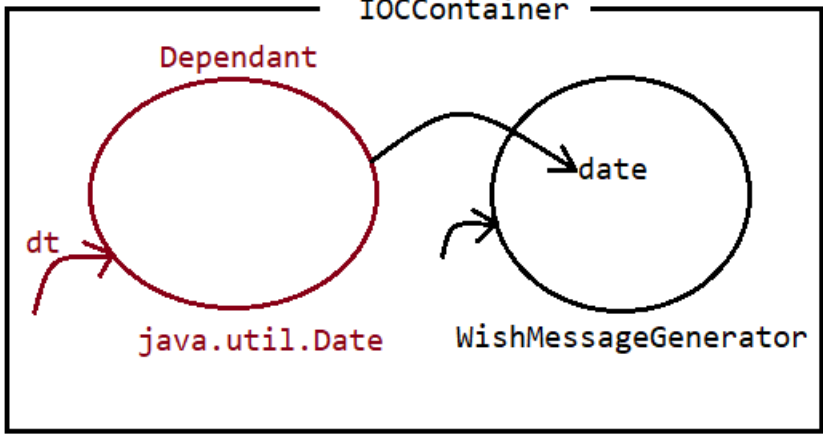


```
applicationContext.xml
<!-- Configuring DEPENDANT bean -->
<bean id="dt" class="java.util.Date" />
#2 #1

<!-- Configuring Target bean -->
#5 #3
<bean id="wmg" class="in.ineuron.bean.WishMessgeGenerator">
  <constructor-arg name="date" ref='dt' />
</bean>
#4

Performing constructor injection
```



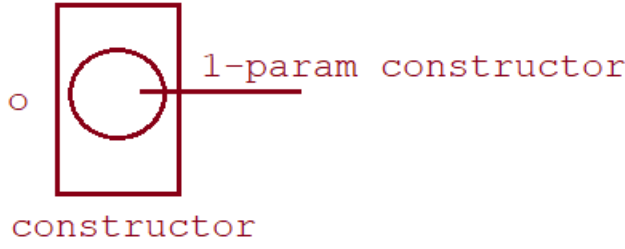
```
WishMessgeGenerator generator1 = factory.getBean("wmg", WishMessgeGenerator.class);
```

- 1. Container will search for an object associated with id "wmg" in cache,if it is not available It goes to inMemory data of cfg.xml file and searches for bean class cfg with the id "wmg". w.r.t the id "wmg", container will get the class name from "class" attribute.
- 2. since for the bean <constructor-arg> is configured,container internally will search for bean with the ref="dt" in the internal cache.
- 3. since it is not available in the cache, it will search in the inMemory data of cfg.xml file.
- 4. Correpsonding class name it will pick and it will load the class and it creates and object of the class. container will store this newly created object information in the internal cache.

```
Class c =Class.forName("java.util.Date");
Date dt=(Date)c.newInstance();
```

- 5.IOC container now will search for one param constructor of a target class and it performs constructor injection to create a Target class object(WishMessageGenerator.class) having dependant class object(Date) as the argument value of the constructor.

```
Class c =Class.forName("in.ineurn.bean.WishMessageGenerator");
Constructor[] constructor = c.getDeclaredConstructors();
WishMessageGenerator wmg=(WishMessageGenerator) constructor[0].newInstance(dt);
```



- 6. IOC container will keep both Target class and Dependant class object inside the internal cache

internal cache	
dt	java.util.Date ref
wmg	WishMessageGenerator ref

- 7. Now IOC container return WishMessageGenerator object to the Application.

Setter injection for Date Object(injecting primitive values)

```

Date
  setYear(int) : void
  setMonth(int) : void
  setDate(int) : void
  setHours(int) : void
  setMinutes(int) : void
  setSeconds(int) : void
```

```
<!-- Configuring DEPENDANT bean using Setter injection -->
<bean id="dt" class="java.util.Date">
  <property name="year" value='93' />
  <property name="month" value='0' />
  <property name="date" value='03' />
</bean>

<!-- Configuring DEPENDANT bean using Constructor injection -->
<bean id="dt1" class="java.util.Date" />

<!-- Configuring Target bean -->
<bean id="wmg" class="in.ineuron.bean.WishMessgeGenerator">
  <property name="date" ref='dt' />
  <constructor-arg name="date" ref='dt1' />
</bean>
```

