

# Neo4j.rb Screencast Series

## Episode 5 ActiveRel

```
1 require './config/environment'
2
3 class Viewed
4   include Neo4j::ActiveRel
5
6   from_class :User
7   to_class :Asset
8
9   property :viewed_at
10  property :browser_string
11 end
12
```

```
1 require './config/environment'
2
3 class Viewed
4   include Neo4j::ActiveRel
5
6   from_class :User
7   to_class :any
8
9   property :viewed_at
10  property :browser_string
11 end
12
```

```
1 require './config/environment'
2
3 class View
4   include Neo4j::ActiveRel
5
6   from_class :User
7   to_class :any
8   type :VIEWED
9
10  property :viewed_at
11  property :browser_string
12 end
13
14 curren|
```

```
1 require './config/environment'
2
3 class View
4   include Neo4j::ActiveRel
5
6   from_class :User
7   to_class :any
8   type :VIEWED
9
10  property :viewed_at
11  property :browser_string
12 end
13
14 current_user = User.first
15 asset = Asset.first
16
17 View.create[from_node: current_user, to_node: asset] # => #<View (:User {email: "abanks10@bloombe
rg.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_string: nil, viewed_at:
nil>
18
19 # >> MATCH (n:`User`)
20 # >> RETURN n
21 # >> ORDER BY n.email
22 # >> LIMIT {limit_1}
23 # >>
24 # >> MATCH (n:`Asset`)
25 # >> RETURN n
26 # >> ORDER BY n.title
27 # >> LIMIT {limit_1}
28 # >>
29 # >> MATCH n1, n2
```

**NORMAL** > master > example.rb[+] 17 lines filtered

ruby < utf-8[unix] < 50% : 17: 52 < ! trailing 23





```
asset.rb user.rb category.rb development.rb example.rb
7   to_class :any
8   type :VIEWED
9   creates_unique
10
11  property :viewed_at
12  property :browser_string
13 end
14
15 current_user = User.last
16 asset = Asset.first
17
18 View.create(from_node: current_user, to_node: asset) # => #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_string: nil, viewed_at: nil>
19
20 # >> MATCH (n:`User`)
21 # >> RETURN n
22 # >> ORDER BY n.email DESC
23 # >> LIMIT {limit_1}
24 # >>
25 # >> MATCH (n:`Asset`)
26 # >> RETURN n
27 # >> ORDER BY n.title
28 # >> LIMIT {limit_1}
29 # >>
30 # >> MATCH n1, n2
31 # >> WHERE (ID(n1) = {n1_neo_id} AND ID(n2) = {n2_neo_id})
32 # >> CREATE UNIQUE n1-[r:`VIEWED`]->n2
33 # >> WITH r
34 # >> RETURN r
35 # >>
```

**NORMAL** > master example.rb[+] < ruby < utf-8[unix] < 42% : 15: 24 < ! trailing spaces

35 lines filtered



```
asset.rb  user.rb  category.rb  development.rb  example.rb
7  to_class :any
8  type :VIEWED
9  creates_unique
10
11  property :viewed_at
12  property :browser_string
13 end
14
15 class User
16   include Neo4j::ActiveNode
17   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
18   has_many :out, :viewed_users,   rel_class: :View, model_class: :User
19
20   has_many :in, :viewers, rel_class: :View, model_class: :User
21 end
22
23 class Asset
24   include Neo4j::ActiveNode
25   has_many :in, :viewers, rel_class: :View, model_class: :User
26 end
27
28
29 current_user = User.last
30 asset = Asset.first
31
32 View.create(from_node: current_user, to_node: asset) # => #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_string: nil, viewed_at: nil>
33
34 # >> MATCH (n:`User`)
35 # >> RETURN n
NORMAL > master example.rb[+] < ruby < utf-8[unix] < 57% : 28: 1 < ! trailing spaces
14 more lines
```



```
asset.rb user.rb category.rb development.rb example.rb
9   to_class :any
10  type :VIEWED
11  creates_unique
12
13  property :viewed_at
14  property :browser_string
15 end
16
17 class User
18   include Neo4j::ActiveNode
19   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
20   has_many :out, :viewed_users,   rel_class: :View, model_class: :User
21
22   has_many :in, :viewers, rel_class: :View, model_class: :User
23 end
24
25 class Asset
26   include Neo4j::ActiveNode
27   has_many :in, :viewers, rel_class: :View, model_class: :User
28 end
29
30
31 current_user = User.last
32
33 current_user.viewed_assets.each_rel.to_a # => [#<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Topological Graph Theory"}) browser_string: nil, viewed_at: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Exploring Graph Theory"}) browser_string: nil, viewed_at: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Computational graph theory"}) browser_string: nil, viewed_at: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_string: nil, viewed_at: nil>]
NORMAL > master example.rb[+] < ruby < utf-8[unix] < 43% : 33: 40 < ! trailing 22
33 lines filtered
```



```

28 end
29
30
31 current_user = User.last
32
33 current_user.viewed_assets.each_rel.to_a # => [#<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Topological Graph Theory"}) browser_string: nil, viewed_at: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Exploring Graph Theory"}) browser_string: nil, viewed_at: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Computational graph theory"}) browser_string: nil, viewed_at: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_string: nil, viewed_at: nil>]
34
35 # >> MATCH (n:`User`)
36 # >> RETURN n
37 # >> ORDER BY n.email DESC
38 # >> LIMIT {limit_1}
39 # >>
40 # >> MATCH user1414
41 # >> WHERE (ID(user1414) = {ID_user1414})
42 # >> MATCH user1414-[rel1:`VIEWED`]->(result_viewed_assets:`Asset`)
43 # >> RETURN rel1
44 # >>
45 # >> MATCH n
46 # >> WHERE (ID(n) = {ID_n})
47 # >> RETURN n
48 # >>
49 # >> MATCH n
50 # >> WHERE (ID(n) = {ID_n})
51 # >> RETURN n
52 # >>

```

```
asset.rb user.rb category.rb development.rb example.rb
28 end
29
30
31 current_user = User.last
32
33 current_user.viewed_assets.each_with_rel.to_a # => [[#<Asset title: "Topological Graph Theory", c
reated_at: Fri, 07 Aug 2015 14:47:23 +0000, public: true, updated_at: Fri, 07 Aug 2015 14:47:23 +
0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title
: "Topological Graph Theory"}) browser_string: nil, viewed_at: nil>], [#<Asset title: "Exploring
Graph Theory", created_at: Fri, 07 Aug 2015 14:47:22 +0000, public: true, updated_at: Fri, 07 Aug
2015 14:47:22 +0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]
->(:Asset {title: "Exploring Graph Theory"}) browser_string: nil, viewed_at: nil>], [#<Asset titl
e: "Computational graph theory", created_at: Fri, 07 Aug 2015 14:47:22 +0000, public: true, updat
ed_at: Fri, 07 Aug 2015 14:47:22 +0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao12
3.com"})-[:VIEWED]->(:Asset {title: "Computational graph theory"}) browser_string: nil, viewed_at
: nil>], [#<Asset title: "Advances in Graph Theory", created_at: Fri, 07 Aug 2015 14:47:23 +0000,
public: true, updated_at: Fri, 07 Aug 2015 14:47:23 +0000, view_count: nil>, #<View (:User {emai
l: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_stri
ng: nil, viewed_at: nil>]]
34
35 # >> MATCH (n:`User`)
36 # >> RETURN n
37 # >> ORDER BY n.email DESC
38 # >> LIMIT {limit_1}
39 # >>
40 # >> MATCH user1414
41 # >> WHERE (ID(user1414) = {ID_user1414})
42 # >> MATCH user1414-[rel1:`VIEWED`]->(result_viewed_assets:`Asset`)
43 # >> RETURN
44 # >>   result_viewed_assets,
45 # >>   rel1
NORMAL > master example.rb[+] ruby utf-8[unix] 42% : 33: 37 < ! trailing spaces
76 lines filtered
```



```
28 end
29
30
31 current_user = User.last
32
33 current_user.viewed_assets(:asset, :rel).pluck(:asset, :rel) # => [[#<Asset title: "Topological Graph Theory", created_at: Fri, 07 Aug 2015 14:47:23 +0000, public: true, updated_at: Fri, 07 Aug 2015 14:47:23 +0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Topological Graph Theory"}) browser_string: nil, viewed_at: nil>], [#<Asset title: "Exploring Graph Theory", created_at: Fri, 07 Aug 2015 14:47:22 +0000, public: true, updated_at: Fri, 07 Aug 2015 14:47:22 +0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Exploring Graph Theory"}) browser_string: nil, viewed_at: nil>], [#<Asset title: "Computational graph theory", created_at: Fri, 07 Aug 2015 14:47:22 +0000, public: true, updated_at: Fri, 07 Aug 2015 14:47:22 +0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Computational graph theory"}) browser_string: nil, viewed_at: nil>], [#<Asset title: "Advances in Graph Theory", created_at: Fri, 07 Aug 2015 14:47:23 +0000, public: true, updated_at: Fri, 07 Aug 2015 14:47:23 +0000, view_count: nil>, #<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browser_string: nil, viewed_at: nil>]]
34
35 # >> MATCH (n:`User`)
36 # >> RETURN n
37 # >> ORDER BY n.email DESC
38 # >> LIMIT {limit_1}
39 # >>
40 # >> MATCH user1414
41 # >> WHERE (ID(user1414) = {ID_user1414})
42 # >> MATCH user1414-[rel:`VIEWED`]->(asset:`Asset`)
43 # >> RETURN
44 # >>   asset,
45 # >>   rel

NORMAL > master example.rb[+] < ruby < utf-8[unix] < 42% : 33: 60 < ! trailing 39
78 lines filtered
```



```
asset.rb user.rb category.rb development.rb example.rb
12
13   property :viewed_at
14   property :browser_string
15 end
16
17 class User
18   include Neo4j::ActiveNode
19   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
20   has_many :out, :viewed_users,   rel_class: :View, model_class: :User
21
22   has_many :in, :viewers, rel_class: :View, model_class: :User
23 end
24
25 class Asset
26   include Neo4j::ActiveNode
27   has_many :in, :viewers, rel_class: :View, model_class: :User
28 end
29
30
31 current_user = User.last
32
```

NORMAL > master example.rb[+] < ruby < utf-8[unix] < 15% : 12: 1 < ! trailing 39V









```
asset.rb user.rb category.rb development.rb example.rb
20 class User
21   include Neo4j::ActiveNode
22   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
23   has_many :out, :viewed_users, rel_class: :View, model_class: :User
24
25   has_many :in, :viewers, rel_class: :View, model_class: :User
26 end
27
28 class Asset
29   include Neo4j::ActiveNode
30   has_many :in, :viewers, rel_class: :View, model_class: :User
31 end
32
33
34 current_user = User.last
35 asset = Asset.first
36
37 View.create(from_node: current_user, to_node: asset).errors # => #<ActiveModel::Errors:0x007ff27c
  cb2250 @base=#<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances
  in Graph Theory"}) browser_string: nil, viewed_at: nil>, @messages=[:browser_string=>["can't be
  blank"]]>
38
39 # >> MATCH (n:`User`)
40 # >> RETURN n
41 # >> ORDER BY n.email DESC
42 # >> LIMIT {limit_1}
43 # >>
44 # >> MATCH (n:`Asset`)
45 # >> RETURN n
46 # >> ORDER BY n.title
47 # >> LIMIT {limit_1}
NORMAL > master example.rb[+] < ruby < utf-8[unix] < 77% : 37: 59 < ! trailing 43
37 lines filtered
```

```
asset.rb user.rb category.rb development.rb +example.rb
17 validates :ip_address, ip_address: true
18
19 before_create :set_viewed_at
20
21 def set_viewed_at
22   self.viewed_at ||= Time.now
23 end
24 end
25
26 class User
27   include Neo4j::ActiveNode
28   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
29   has_many :out, :viewed_users, rel_class: :View, model_class: :User
30
31   has_many :in, :viewers, rel_class: :View, model_class: :User
32 end
33
34 class Asset
35   include Neo4j::ActiveNode
36   has_many :in, :viewers, rel_class: :View, model_class: :User
37 end
38
39
40 current_user = User.last
41 asset = Asset.first
42
43 View.create([from_node: current_user, to_node: asset,]).errors # => #<ActiveModel::Errors:0x007ff27
ccb2250 @base=#<View (:User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advance
s in Graph Theory"}) browser_string: nil, viewed_at: nil>, @messages=[:browser_string=>["can't be
blank"]]>
44
```

INSERT > master > example.rb[+] < ruby < utf-8[unix] < 79% : 43: 53 < ! trailing spaces



```

17 validates :ip_address, ip_address: true
18
19 before_create :set_viewed_at
20
21 def set_viewed_at
22   self.viewed_at ||= Time.now
23 end
24 end
25
26 class User
27   include Neo4j::ActiveNode
28   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
29   has_many :out, :viewed_users,   rel_class: :View, model_class: :User
30
31   has_many :in, :viewers, rel_class: :View, model_class: :User
32 end
33
34 class Asset
35   include Neo4j::ActiveNode
36   has_many :in, :viewers, rel_class: :View, model_class: :User
37 end
38
39
40 current_user = User.last
41 asset = Asset.first
42
43 View.create(from_node: current_user, to_node: asset, browser_string: 'Chrome') # => #<View (:User
    {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) browse
    r_string: "Chrome", viewed_at: "2015-08-11T12:58:22.211-03:00">
44
45 # >> MATCH (n:`User`)

```

**NORMAL** > master example.rb[+] < ruby < utf-8[unix] < 69% : 43: 79 < ! trailing 49



```

17 validates :ip_address, ip_address: true
18
19 before_create :set_viewed_at
20
21 def set_viewed_at
22   self.viewed_at ||= Time.now
23 end
24
25 after_create :increment_destination_view_count
26
27 def increment_destination_view_count
28   to_node.view_count ||= 0
29   to_node.view_count += 1
30   to_node.save
31 end
32 end
33
34 class User
35   include Neo4j::ActiveNode
36   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
37   has_many :out, :viewed_users, rel_class: :View, model_class: :User
38
39   has_many :in, :viewers, rel_class: :View, model_class: :User
40 end
41
42 class Asset
43   include Neo4j::ActiveNode
44   has_many :in, :viewers, rel_class: :View, model_class: :User
45 end
46
47

```

```

INSERT > master > example.rb[+] < ruby < utf-8[unix] < 44% : 31: 6 < ! trailing spaces
-- INSERT --

```

```

25 after_create :increment_destination_view_count
26
27 def increment_destination_view_count
28   to_node.view_count ||= 0
29   to_node.view_count += 1
30   to_node.save
31 end
32 end
33
34 class User
35   include Neo4j::ActiveNode
36   has_many :out, :viewed_assets, rel_class: :View, model_class: :Asset
37   has_many :out, :viewed_users,   rel_class: :View, model_class: :User
38
39   has_many :in, :viewers, rel_class: :View, model_class: :User
40 end
41
42 class Asset
43   include Neo4j::ActiveNode
44   has_many :in, :viewers, rel_class: :View, model_class: :User
45 end
46
47
48 current_user = User.last
49 asset = Asset.first
50
51 v = View.create(from_node: current_user, to_node: asset, browser_string: 'Chrome') # => #<View (:
User {email: "wwatkins7b@hao123.com"})-[:VIEWED]->(:Asset {title: "Advances in Graph Theory"}) br
owser_string: "Chrome", viewed_at: "2015-08-11T12:58:22.211-03:00">
52
53 # >> MATCH (n:`User`)

```

```

INSERT > master > example.rb[+] < ruby < utf-8[unix] < 72% : 51: 5 < ! trailing
-- INSERT --

```