

Creative Commons

Including a Usage Management Example in Ruby

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- 1 Creative Commons**
- 2 CC REL
- 3 Usage Management Example in Ruby

Overview

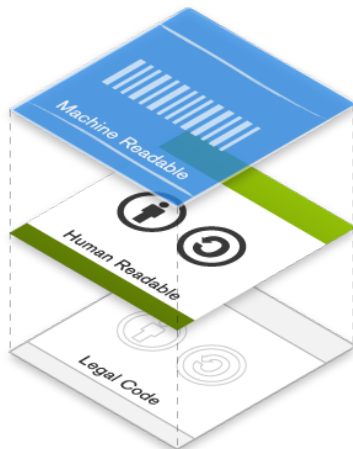
- A nonprofit organization that works to increase the amount of creativity available in “the commons”
- Provides free, easy-to-use legal tools that provide a simple, standardized way to pre-clear usage rights to creative work for copyright owners
- Lets copyright holders easily change from default of “all rights reserved” to “some rights reserved”
- Not an alternative to copyright
- Applies on top of copyright
- Guidelines for marking text, images, audio, and video
- Guidelines for publishing via a file sharing network or social networking site
- Some support for embedding license information as meta-data within digital files

Overview (cont.)

- Not changable or revocable
- I.e., once someone has received a copy, the work is perpetually licensed under the license it was received under
- View is always permissible under CC







Three Layers

- Machine Readable (CC Rights Expression Language - CC REL)
- Human Readable (Commons Deed)
- Legal Code (Lawyer Readable)



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- Non-exclusive licenses, yielding CC+:




<http://wiki.creativecommons.org/CCPlus>



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☐ Yes [?](#)

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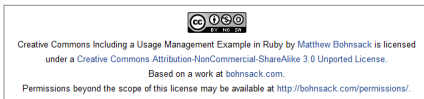
View License

Here is the license you've chosen

Choose which style of button you'd like on your webpage:



Here's a preview of how your license will appear on your site:



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```
<a rel="license" href="http://creativecommons.org/licenses/by-nc-sa/3.0/">
</a><br /><span
xmlns:dc="http://purl.org/dc/terms/" property="dc:title">Creative Commons
Including a Usage Management Example in Ruby</span> by <a
xmlns:cc="http://creativecommons.org/ns#" href="http://bohnsack.com/"
property="cc:attributionName" rel="cc:attributionURL">Matthew Bohnsack</a> is
licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-nc-sa/3.0/">Creative Commons
Attribution-NonCommercial-ShareAlike 3.0 Unported License</a>.
```

Select the contents of the box above and copy it. Or, have it [emailed to yourself](#). [Need more help? Read our tutorial.](#)

Terms for Derivative Works or Adaptation

Compatibility chart		Terms that can be used for a derivative work or adaptation						
		by	by-nc	by-nc-nd	by-nc-sa	by-nd	by-sa	pd
Status of original work	pd							
	by							
	by-nc							
	by-nc-nd							
	by-nc-sa							
	by-nd							
	by-sa							

Collecting CC Works Together

Original Work	Commercial Collected Work	NonCommercial Collected Work
pd		
by		
by-nc		
by-nc-nd		
by-nc-sa		
by-nd		
by-sa		

1 Creative Commons

2 CC REL

3 Usage Management Example in Ruby

CC REL

- The Creative Commons Rights Expression Language
- RDFa (Resource Description Framework in attributes) for HTML Web pages and resources referenced therein
- XMP (Extensible Metadata Platform) for stand-alone media
- `http://wiki.creativecommons.org/CC_REL`

Example: RDFa for HTML

```

<div about="" instanceof="cc:Work" xmlns:cc="http://creativecommons.org/ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/" align="center">

  <a rel="license" href="http://creativecommons.org/licenses/by/3.0/">
  </a>
  <br />

  <span property="dc:title">The Lessig Blog</span>,
  a
  <span rel="dc:type" href="http://purl.org/dc/dcmitype/Text">
  collection of texts
  </span>

  by <a property="cc:attributionName" rel="cc:attributionURL"
    href="http://lessig.org/"> Lawrence Lessig </a>,
  <br />

  is licensed under a
  <a rel="license" href="http://creativecommons.org/licenses/by/3.0/">
  Creative Commons Attribution License</a>.
  <br />

  There are
  <a rel="cc:morePermissions" href="http://lessig.org/blog/other-license">
  alternative licensing options</a>

</div>

```

Example: XMP for Stand-Alone Media

■ \LaTeX package on CTAN (`xmptinc1`)

```

%PDF-1.4
%00000000
1 0 obj
<< /pgfprgb [/Pattern /DeviceRGB] >>
endobj
12 0 obj <<
/Type /Metadata /Subtype /XML
/Length 925.....
>>
stream
<?xpacket begin='' id='W5M0MpCehiHzreSzNTczkc9d'?>
<?xpacket begin='' id='?><:xmpmeta xmlns:x='adobe:meta/'>
<rdf:RDF xmlns:rdf='http://www.w3.org/1999/02/22-rdf-syntax-ns#'>
<rdf:Description rdf:about=''
xmlns:xapRights='http://ns.adobe.com/xap/1.0/rights/'>
<xapRights:MarkedTrue</xapRights:Marked> </rdf:Description>
<rdf:Description rdf:about=''
xmlns:dc='http://purl.org/dc/elements/1.1/'>
<dc:rights>
<rdf:Alt>
<rdf:li xml:lang='x-default' >This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by-nc-sa/3.0/">Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License</a>.</rdf:li>
</rdf:Alt>
</dc:rights>
</rdf:Description>
<rdf:Description rdf:about=''
xmlns:cc='http://creativecommons.org/ns#'>
<cc:license rdf:resource='http://creativecommons.org/licenses/by-nc-sa/3.0/'>
</rdf:Description>
</rdf:RDF>
</x:xmpmeta>
<?xpacket end='r'?>
endstream
endobj
13 0 obj
<< /S /GoTo /D (Outline0.1) >>
endobj
16 0 obj
(Creative Commons)
endobj
17 0 obj
<< /S /GoTo /D (Outline0.1.1.3) >>
endobj
20 0 obj
CreativeCommons.pdf
"CreativeCommons.pdf" [converted] 2987L, 357501C

```

1 Creative Commons

2 CC REL

3 Usage Management Example in Ruby

Book Class

```
require 'cc_licensed.rb'

class Book
  include CCLicensed
  attr_accessor :title, :author
  def initialize(title, author)
    @title = title
    @author = author
  end
end
```

CC Licensed Mix-in

```
module CCLicensed
  def self.included mod
    class << mod
      @@licenses = %w{PublicDomain Attribution Attribution-ShareAlike Attribution-NoDerivs
        Attribution-NonCommercial Attribution-NonCommercial-ShareAlike
        Attribution-NonCommercial-NoDerives}

      end
    end

    def set_lic(new_license)
      if !@@licenses.include? new_license
        raise "Unsupported Creative Commons License Type"
      end
      @license = new_license
    end

    def license
      @license
    end

    ...
  end
end
```

CC Licensed Mix-in (cont.)

```
module CCLicensed

  ...

  # Creative Commons share logic
  def share?(option = {})
    attribution = option[:attr] || false
    commercial  = option[:comm1] || false
    derivative  = option[:deriv] || false
    share_alike = option[:sa]    || false

    # Can't share CC-licensed works without attribution, unless Public Domain
    if (!attribution && !@license.eql?('PublicDomain'))
      return false
    end

    # Can't share CC-licensed works "remixed", if under and non-deriv license
    if (derivative &&
        %w{Attribution-NoDerivs Attribution-NonCommercial-NoDerivs}.include?(@license))
      return false
    end

    ...

  end

end
```


CC Licensed Mix-in (cont.)

```
module CCLicensed

  ...

  # Creative Commons share logic
  def share?(option = {})
    attribution = option[:attr] || false
    commercial  = option[:commml] || false
    derivative  = option[:deriv] || false
    share_alike = option[:sa]    || false

    ...

    # Can't share CC-licensed works commercially, if under comercial license
    if (commercial && %w{Attribution-NonCommercial Attribution-NonCommercial-ShareAlike
      Attribution-NonCommercial-NoDerives}.include?(@license))

      return false
    end

    # Can't share CC-licensed works remixed with a different license
    # (share_alike == false), if under a share-alike license
    if (derivative && !share_alike &&
      %w{Attribution-ShareAlike 'Attribution-NonCommercial-ShareAlike}.include?(@license))
      return false
    end

    # Fall through to true, if all the above passed
    return true
  end

end
```

Unit Tests

```
# Test Suite for Creative Commons Usage Management Example
# http://en.wikibooks.org/wiki/Ruby_Programming/Unit_testing

require 'test/unit'
require 'book'

class MyFirstTest < Test::Unit::TestCase
  def setup
    @b_pd = Book.new('Book0', 'Joe') ; @b_pd.set_lic('PublicDomain')

    @b_by = Book.new('Book1', 'Tom') ; @b_by.set_lic('Attribution')

    @b_by_sa = Book.new('Book2', 'Jon')
    @b_by_sa.set_lic('Attribution-ShareAlike')

    @b_by_nd = Book.new('Book3', 'Joe')
    @b_by_nd.set_lic('Attribution-NoDerivs')

    @b_by_nc = Book.new('Book4', 'Tom')
    @b_by_nc.set_lic('Attribution-NonCommercial')

    @b_by_nc_sa = Book.new('Book5', 'Jon')
    @b_by_nc_sa.set_lic('Attribution-NonCommercial-ShareAlike')

    @b_by_nc_nd = Book.new('Book6', 'Joe')
    @b_by_nc_nd.set_lic('Attribution-NonCommercial-NoDerivs')
  end

  ...
end
```

Unit Tests

```
class MyFirstTest < Test::Unit::TestCase

  ...

  def test_pd_domain_book
    assert @b_pd.share?(attr => true, :comm => true, :deriv => true, :sa => true)
    assert @b_pd.share?(attr => true, :comm => true, :deriv => true, :sa => false)
    assert @b_pd.share?(attr => true, :comm => true, :deriv => false, :sa => true)
    assert @b_pd.share?(attr => true, :comm => true, :deriv => false, :sa => false)
    assert @b_pd.share?(attr => true, :comm => false, :deriv => true, :sa => true)
    assert @b_pd.share?(attr => true, :comm => false, :deriv => true, :sa => false)
    assert @b_pd.share?(attr => true, :comm => false, :deriv => false, :sa => true)
    assert @b_pd.share?(attr => true, :comm => false, :deriv => false, :sa => false)
    assert @b_pd.share?(attr => false, :comm => true, :deriv => true, :sa => true)
    assert @b_pd.share?(attr => false, :comm => true, :deriv => true, :sa => false)
    assert @b_pd.share?(attr => false, :comm => true, :deriv => false, :sa => true)
    assert @b_pd.share?(attr => false, :comm => false, :deriv => true, :sa => true)
    assert @b_pd.share?(attr => false, :comm => false, :deriv => true, :sa => false)
    assert @b_pd.share?(attr => false, :comm => false, :deriv => false, :sa => true)
    assert @b_pd.share?(attr => false, :comm => false, :deriv => false, :sa => false)
  end

  ...
end
```

Unit Tests

```
class MyFirstTest < Test::Unit::TestCase

  ...

  def test_by_book
    assert @b_by.share?(attr => true, :comm => true, :deriv => true, :sa => true)
    assert @b_by.share?(attr => true, :comm => true, :deriv => true, :sa => false)
    assert @b_by.share?(attr => true, :comm => true, :deriv => false, :sa => true)
    assert @b_by.share?(attr => true, :comm => true, :deriv => false, :sa => false)
    assert @b_by.share?(attr => true, :comm => false, :deriv => true, :sa => true)
    assert @b_by.share?(attr => true, :comm => false, :deriv => true, :sa => false)
    assert @b_by.share?(attr => true, :comm => false, :deriv => false, :sa => true)
    assert @b_by.share?(attr => true, :comm => false, :deriv => false, :sa => false)
    assert !@b_by.share?(attr => false, :comm => true, :deriv => true, :sa => true)
    assert !@b_by.share?(attr => false, :comm => true, :deriv => true, :sa => false)
    assert !@b_by.share?(attr => false, :comm => true, :deriv => false, :sa => true)
    assert !@b_by.share?(attr => false, :comm => true, :deriv => false, :sa => false)
    assert !@b_by.share?(attr => false, :comm => false, :deriv => true, :sa => true)
    assert !@b_by.share?(attr => false, :comm => false, :deriv => true, :sa => false)
    assert !@b_by.share?(attr => false, :comm => false, :deriv => false, :sa => true)
    assert !@b_by.share?(attr => false, :comm => false, :deriv => false, :sa => false)
  end

  ...

end
```

Test Output

```
$ rake
/usr/bin/ruby1.8 test/ts_cc.rb
Loaded suite test/ts_cc
Started
...
Finished in 0.002232 seconds.

3 tests, 39 assertions, 0 failures, 0 errors
```