

# Saphir Gem

# Developer's Manual



# Tables of contents

<b>Introduction</b>	<b>3</b>
<b>License</b>	<b>3</b>
<b>Basic Network Communication</b>	<b>4</b>

# Introduction

I developed Saphir (German for Sapphire) in order to make the introduction to the Ruby language easier. Ruby is a very powerful and intuitive programming language, but it is NOT easy to learn.

Saphir is a collection of useful functions and methods that young developers can implement so that they get faster programming result. This sense of achievement shall encourage them to keep learning Ruby.

Please keep in mind that Saphir is currently in an very early alpha stage and under active development. So if you have any suggestions for function implementation feel free to send me a email to [mail@sapphirus.cf](mailto:mail@sapphirus.cf).

## License

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# Basic Network Communication

The Basic Network Communication enables you to simply create a Ruby server and client application that can send strings, files, etc to each other.

These socket communications are encrypted using OpenSSL by default and default certificates are provided within the Ruby Gem.

## The Server

The following options are available:

Option	Default Value
password	nopassword
port	7789
useSSL	TRUE
enableLog	TRUE

### Available methods

- initialize(server, password = "nopassword", port=7789, useSSL=true, enableLog=true)
- setSSLCertificate(certFile)
- setSSLKey(keyFile)
- start

A default configured server can be created like this:

```
require "Saphir/BNCServer"

server = Saphir::BNCServer.new()
server.start do |request|
  response = ""
  case request[0..-2]
  when "Hello"
    response = "Hi"
  else
    response = "How can I help you?"
  end
  response
end
```

Or if you prefer a more advanced approach do it e.g. like this:

```
require "Saphir/BNCServer"

puts "SERVER: Loading..."

server = Saphir::BNCServer.new("secrue", 5677, true, false)
thread = Thread.start do
  server.start do |request|
    response = ""
    case request[0..-2]
    when hello
      response = "Hi"
    else
      response = "How can I hep you?"
    end
    response
  end
end

puts "SERVER: Done loading!"

begin thread.join end
```

## The Client

The following options are available:

Option	Default Value
server	<i>is always required</i>
port	7789
useSSL	TRUE

### Available methods

- initialize(server, password = "nopassword", port=7789, useSSL=true)
- setSSLCertificate(certFile)
- sendMessage(msg)
- start
- close

A default configured client can be created like this:

```
require "Saphir/BNCClient"

c = Saphir::BNCClient.new("localhost", "secre")
c.start()
puts "Response received: #{c.sendMessage("HELLO")}"
c.close()
```

*Very simple. Isn't it?*