

Collective2 Data Services API (C2DS)

Draft 1.0 – June 27, 2007

Overview

The goal of the C2 Data Services (C2DS) API is to allow individuals, service providers, independent software vendors (ISVs), and brokers to develop value-added services and functionality on top of the C2 trading system platform. Developers may use C2DS privately, or they may base commercial services upon it.

Ultimately, in later releases, C2DS will allow developers to access all C2 functionality via the API. This includes data retrieval, billing, and subscription management.

Currently – as of the this first, very early, beta release – C2DS allows developers to access almost the entire C2 database via API calls.

What C2DS is... and what it is *not*

C2DS is (currently) a data retrieval service. If you want to write software which analyzes the universe of C2 trading systems, or optimizes customers' portfolios, or calculates statistics about a particular trading system... then you will use C2DS. You will request data which can be processed by your own software, for whatever purposes you can imagine.

If you want to use automated software to **enter trading signals** into C2, you will not use C2DS. In that case, you use our Signal Entry API. More information about the Signal Entry API can be found here: www.collective2.com/api

If you want to build an AutoTrading client or service – that is, if you want to **pull trade signals out** of C2, in order to pipe them into a brokerage account – then you should use the C2 AutoTrading Interface (C2ATI). To receive C2ATI documentation, please send email to info@collective2.com, along with your C2 user login email, and simply request the C2ATI docs.

Technical Overview

C2DS is simple to use. Your software issues commands via the HTTP protocol's GET command. C2DS returns responses in pseudo-XML. In other words, using the C2DS is exactly like requesting a Web page from a server. That is: if you can write software which requests and parses a Web page, you can use C2DS.

While building and debugging C2DS software, you can use a Web browser. Just enter the commands in the browser's URL, and the C2DS answer will appear on the screen. We recommend using Firefox for this purpose because it displays the returned text properly formatted.

First Concepts: The sessionid

The first step when using C2DS is to request a sessionid. The sessionid is a random string of characters which identifies you and carries within it information about the rights you

have to view various data. After you receive your sessionid, you will include it within every request that you make of the C2DS server.

To request a sessionid, you issue a getsessionid command. Here is the content of the GET command. You might want to type this into the browser address line to see what is returned:

```
http://data.collective2.com/cgi-  
perl/xml.mpl?cmd=getsessionid&userlogin=youremail@email.com&pw=yourC2dataServicesPassword&clientid=softwareName
```

Notice that you need a C2 user account in order to begin a session with the C2DS server. Why is this? It is because C2 needs to know what kind of information we are allowed to show you. For example, if you are subscribed to a trading system, then when you request trade information about a particular system, we will show you open trade information. Non-subscribers will not see this data.

The tying of sessions to particular C2 user identities is a powerful concept. It means that you can create commercial (or non-commercial) service which allows multiple C2 users – not just yourself – to carry out C2 functions. Your software could manage multiple sessions, each with its own sessionid, on behalf of each of your customers.

Notice that, in the example above, we say you need to include your “C2 data Services password” ... and not your C2 password. Indeed, if you try to use your general purpose C2 password, you will receive an error. You must use your C2 Data Services password, instead.

What is the C2 Data Services Password? This is a password that each C2 user must set at the same time he gives permission for his account to be used with C2DS. In this way, C2 customers can feel comfortable giving a C2 password out to commercial 3rd-party services and vendors... while knowing that the password he is giving out gives no rights other than data retrieval. So, even if a malicious person discovers your C2DS password, the most he can do is request a list of systems to which you are subscribed. He cannot use the password to log in to C2, to enter trades, or to view personal and credit card information.

How to set your C2DS password

To set your C2DS password, log in to C2 and click the link on the left-side menu bar that says: “Edit My Account.” Alternately, this link will take you there directly:

```
http://www.collective2.com/cgi-perl/editaccount.mpl
```

On the screen, you will see an area where you can configure your C2DS password. You need to do two things: (1) explicitly allow C2DS access, and (2) select a password.

Here is a screenshot of the two areas you (or your customers) must fill out in order to use the C2DS:

C2 Data Services Access

New Collective2 works with other companies and service-providers. These partners may offer value-added services to make your C2 experience even better. For example, in the future, a company may analyze your subscriptions here on C2, and offers suggestions for how to improve your trading portfolio.

If you check the box below, we will allow partner companies to access your subscription and AutoTrading records only. Regardless of what you enter, we will never allow any company to access any other personal information, such as your credit card or address.

To enable C2 Data Services Access, you need to specifically request it below. You also need to create a separate password which you can give to only those companies you choose to work with.

☒ Allow C2 Data Services Access (recommended)

Password for C2 Data Services Access

This must be different than your private password (which you already set, above). You will give this password to companies when you want to use their C2-Compatible services. They will not have access to private data.

Your email preferences

Once you allow C2DS access and select a password, you will not need to access this screen again.

Now you can begin to use the C2DS. As we mentioned above, the first step is to request a sessionid. So, using the password selected above, you would issue this command:

`http://data.collective2.com/cgi-perl/xml.mpl?cmd=getsessionid&userlogin=youremail@email.com&pw=bonzaiBaby&clientid=algorgasm`

Note that your software should have a clientid which identifies it to the server. Although you do not need to receive approval from C2 before choosing a clientid or before releasing software, we suggest you choose something that clearly identifies your software. It should be 12 characters or fewer.

Here is a typical response that you might receive when requesting a sessionid:

```
<c2xml>
  <login>
    <valid>1</valid>
  </login>
  <session>
    <id>uiufUH5NLn2qRVd23CWzHttv9rgaLjp</id>
    <c2userid>50034</c2userid>
    <firstname>Matthew</firstname>
    <lastname>Klein</lastname>
  </session>
  <subscriptions>
    <count>5</count>
    <systemlist>
      <system>
        <systemid>13202557</systemid>
        <systemname>extreme-os</systemname>
      </system>
      <system>
        <systemid>13889808</systemid>
        <systemname>Absolute Returns</systemname>
      </system>
      <system>
        <systemid>23905671</systemid>
        <systemname>VN Forex Club</systemname>
      </system>
      <system>
        <systemid>13202557</systemid>
        <systemname>extreme-os</systemname>
      </system>
    </systemlist>
  </subscriptions>
</c2xml>
```

The response to **getsessionid** contains three main pieces of information. First, it contains your unique sessionid. Note that your sessionid will of course be different than the one above (uiufUH5NLn2qRVHCWMzHttv9rgaLjp). You will need to use this sessionid in all subsequent requests to the C2DS server. Note that sessions id are good for as long as there is activity. However, if too much time passes between requests to the server (currently set at 60 minutes of inactivity) then the session expires and you need to request a new one.

Second, you learn the identity (first name and last name only) of the user whose C2DS password you used.

Finally, the response contains the list of systems to which the user is subscribed.

General XML format

You'll notice that the responses are in well-formed pseudo XML. The main node for every response is called <c2xml>. When naming XML fields (e.g. "systemname",

“subscriptions”, etc.) we always chose human sensibility over brevity, even though this costs our server (and yours) bandwidth and disk space. But bandwidth is cheap, and growing more abundant by the day, while your brain is dear, and inexorably shrinking, and so we believe our philosophy of long XML names over short in most cases will be appreciated by programmers.

Summary of All Valid Commands

As of this document draft, the following commands are valid. We assume that anyone who has read this document this far is a programmer by hobby, if not profession, and he will probably want to fire up a browser and simply try the commands to see the response format. For this reason – and also because this is a very early document draft – the documentation that follows is skimpy. We suggest you try a couple examples and figure it out. We’re always available to answer questions, however. We particularly suggest you use the C2 Developer Forum to post your queries, so that other C2 developers can learn from the question and response.

All commands begin with:

<http://data.collective2.com/cgi-perl/xml.mpl?>

And all commands, except for **getsessionid**, of course, must contain a valid **&session=xxx** parameter, where xxx is the session id that was given to you when you established your session.

The following commands are valid:

<http://data.collective2.com/cgi-perl/xml.mpl?cmd=getsystemroster&session=xxx>

Returns a list of all C2 systems.

[xml.mpl?cmd=getsystemoverview&systemid=sss&session=xxx](http://data.collective2.com/cgi-perl/xml.mpl?cmd=getsystemoverview&systemid=sss&session=xxx)

Returns summary information about a particular system.

[xml.mpl?cmd=getsystemstats&systemid=sss&session=xxx](http://data.collective2.com/cgi-perl/xml.mpl?cmd=getsystemstats&systemid=sss&session=xxx)

Returns a list of all cached statistics and meta-statistics for a particular system.

xml.mpl?**cmd=getsuscriptions** &session=xxx

Returns a list of systems to which the user (whose C2DS password is being used) has subscribed.

xml.mpl?**cmd=getequityseries&systemid=sss&session=xxx**

Returns a list of system equity (both open and closed positions) over time.

xml.mpl?**cmd=getbenchmarkseries&benchmark=SP500&startdate=YYYYMMDD
&enddate=YYYYMMDD&session=xxx**

Returns a series of prices of a benchmark. Currently only SP500 index is supported.

xml.mpl?**cmd=gettradehistory&systemid=sss&session=xxx**

Returns a list of a system's trades. Includes drawdown data. "Trades" in C2 lingo are a unit of measure that may consist of many "signals." A trade starts when a new position is opened, and ends when that position finally becomes flat.

xml.mpl?**cmd=gesignalhistory&systemid=sss&session=xxx**

Returns a list of individual trade signals.

xml.mpl?**cmd=logout&session=xxx**

Ends a session, destroys the sessionid, and returns information about the time session was alive and the number of bytes transferred.

Detailed Response Examples

We recommend you try for yourself issuing the commands listed above, and exploring the responses. Because the data that is returned can sometimes be large, we necessarily need to excerpt it in the examples below.

cmd=getsystemroster

```
c2xml>
<systemroster>
  <system>
    <id>555</id>
    <name>Test System</name>
    <agedays>701.39</agedays>
    <numsigs>1</numsigs>
    <startcash>100000</startcash>
    <win>2770</win>
    <loss>0</loss>
    <c2userid>250</c2userid>
  </system>
  <system>
    <id>666</id>
    <name>AT Research Test</name>
    <agedays>719.44</agedays>
    <numsigs>5</numsigs>
    <startcash>100000</startcash>
    <win>18586.5</win>
    <loss>0</loss>
    <c2userid>250</c2userid>
  </system>
  <system>
    <id>97600</id>
    <name>The Cadbury System</name>
    <agedays>1401.56</agedays>
    <numsigs>25</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>97571</c2userid>
  </system>
  <system>
    <id>147249</id>
    <name>Fundamental Bond Futures</name>
    <agedays>1391.44</agedays>
    <numsigs>0</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>147154</c2userid>
  </system>
  <system>
    <id>167688</id>
    <name>The Four O'Clock Trade</name>
    <agedays>1388.56</agedays>
```

```

    <numsigs>2</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>167615</c2userid>
</system>
<system>
    <id>179985</id>
    <name>Intelligent Market Timing</name>
    <agedays>1387.15</agedays>
    <numsigs>8</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>179883</c2userid>
</system>
<system>
    <id>182188</id>
    <name>Leader in an accelerating group</name>
    <agedays>1387.00</agedays>
    <numsigs>3</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>182059</c2userid>
</system>
<system>
    <id>188582</id>
    <name>Random Zen Master</name>
    <agedays>1386.35</agedays>
    <numsigs>2</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>97571</c2userid>
</system>
<system>
    <id>190324</id>
    <name>OptionSniper</name>
    <agedays>1386.17</agedays>
    <numsigs>0</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>190277</c2userid>
</system>
<system>
    <id>192185</id>
    <name>The Option Game</name>
    <agedays>1386.07</agedays>
    <numsigs>0</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>192095</c2userid>
</system>
<system>

```



```

    <id>204639</id>
    <name>The Taleb Factor</name>
    <agedays>1384.53</agedays>
    <numsigs>36</numsigs>
    <startcash>100000</startcash>
    <win>2367.36</win>
    <loss>47050</loss>
    <c2userid>204606</c2userid>
</system>

.....excerpted.....

<system>
    <id>26915699</id>
    <name>qntest</name>
    <agedays>0.20</agedays>
    <numsigs>0</numsigs>
    <startcash>10000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>26915670</c2userid>
</system>
<system>
    <id>26916009</id>
    <name>#1 Forex</name>
    <agedays>0.16</agedays>
    <numsigs>1</numsigs>
    <startcash>25000</startcash>
    <win>0</win>
    <loss>175.01</loss>
    <c2userid>26882267</c2userid>
</system>
<system>
    <id>26916492</id>
    <name>YM Mini-Dow</name>
    <agedays>0.10</agedays>
    <numsigs>0</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>26895464</c2userid>
</system>
<system>
    <id>26917301</id>
    <name>The Prophet Forcaster</name>
    <agedays>0.04</agedays>
    <numsigs>0</numsigs>
    <startcash>100000</startcash>
    <win>0</win>
    <loss>0</loss>
    <c2userid>26729849</c2userid>
</system>
</systemroster>
</c2xml>

```

cmd=getsystemoverview&systemid=sss

```
<system>
  <systemid>13889808</systemid>
  <systemname>Absolute Returns</systemname>
  <startedwhen>2007-06-13 18:56:49</startedwhen>
  <creator>
    <c2userid>50034</c2userid>
    <name>Matthew Klein</name>
    <org>Matthew Klein LLC, Inc.</org>
  </creator>
  <businessmodel>
    <modelnum>1</modelnum>
    <modelname>periodic</modelname>
    <periodname>quarter</periodName>
    <freetrial>0</freetrial>
    <charge>100</charge>
  </businessmodel>
  <tradestyle>
    <stockpcnt>0.008</stockpcnt>
    <optionpcnt>0.008</optionpcnt>
    <futurepcnt>0.934</futurepcnt>
    <forexpcnt>0.049</forexpcnt>
    <avgTradeMinute>70</avgTradeMinute>
  </tradestyle>
  <summarystats>
    <startcapital>75000</startcapital>
    <openpl>2090</openpl>
    <closedpl>278.25</closedpl>
    <marginused>29135</marginused>
    <equity>32890</equity>
    <cash>62834.9</cash>
    <trades>61</trades>
    <numloss>39</numloss>
    <dollarwin>4207.9</dollarwin>
    <dollarloss>1513</dollarloss>
  </summarystats>
  <charts>

  <small>http://www.collective2.com/images/charts/tiny/c13889808.png</small>

  <big>http://www.collective2.com/images/charts/equitychart13889808.png</big>
</charts>
  <descrip>
    <short></short>
    <long></long>
  </descrip>
</system>
```

cmd=getsystmstats&systemid=sss

```
<c2xml>
<systemid>13889808</systemid>
<systemname>Absolute Returns</systemname>
<stats>
  <stat>
    <name>anyshorts</name>
    <val>1</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgadversedd</name>
    <val>-0.13</val>
    <calced>2007-06-26 20:30:10</calced>
  </stat>
  <stat>
    <name>avgpips</name>
    <val></val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgptsfutures</name>
    <val>0.108</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgptsstocks</name>
    <val>2.39</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgpts_@ER2</name>
    <val></val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgpts_@ES</name>
    <val>0.108</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgpts_@SP</name>
    <val></val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgpts_@US</name>
    <val></val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>avgpts_@YM</name>
    <val></val>
```

```

    <calced>2007-06-26 19:52:41</calced>
</stat>
<stat>
  <name>avgtradepl</name>
  <val>5.39</val>
  <calced>2007-06-26 19:52:41</calced>
</stat>
<stat>
  <name>forexpercent</name>
  <val>0.049</val>
  <calced>2007-06-26 19:52:41</calced>
</stat>
<stat>
  <name>futurespercent</name>
  <val>0.934</val>
  <calced>2007-06-26 19:52:41</calced>
</stat>
<stat>
  <name>holdandhope</name>
  <val>0.437</val>
  <calced>2007-06-26 19:52:41</calced>
</stat>
<stat>
  <name>j1YrRisk95</name>
  <val></val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>j1YrRiskExpShort</name>
  <val></val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jAnnReturn</name>
  <val>0.178</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jCalmar</name>
  <val>317.852</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jDDQuartMean4</name>
  <val>0.001</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jRetnQuartMean1</name>
  <val>1</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jSharpe</name>
  <val>6.254</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>

```

```

<stat>
  <name>jSharpeConfH</name>
  <val>17.439</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jSharpeConfL</name>
  <val>-4.271</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jSortino</name>
  <val>28.231</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>jVAR95</name>
  <val></val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>latesttradedaysago</name>
  <val>0.1</val>
  <calced>2007-06-26 19:52:41</calced>
</stat>
<stat>
  <name>lowEquityAmt</name>
  <val>74837</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>lowEquityDate</name>
  <val>20070614</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>maxadversedd</name>
  <val>-0.23</val>
  <calced>2007-06-26 20:30:10</calced>
</stat>
<stat>
  <name>maxdrawdown</name>
  <val>0</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>maxdrawdownend</name>
  <val>20070614</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>maxdrawdownPcnt</name>
  <val>0.22</val>
  <calced>2007-06-26 08:50:18</calced>
</stat>
<stat>
  <name>maxdrawdownstart</name>

```

```

    <val>20070613</val>
    <calced>2007-06-26 08:50:18</calced>
  </stat>
  <stat>
    <name>optionpercent</name>
    <val>0.008</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>stockpercent</name>
    <val>0.008</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
  <stat>
    <name>trades</name>
    <val>Mostly Futures; (some stocks, forex, options)</val>
    <calced>2007-06-26 19:52:41</calced>
  </stat>
</stats>
</c2xml>

```

cmd=getequityseries&systemid=sss

Here we do abbreviate XML nodes in order to save some bandwidth. The inscrutable abbreviations below mean:

E=equity point

T=timestamp that equity snapshot was taken (these are irregularly spaced throughout the day.

O=open position equity

C=Closed positions / cash

```

<c2xml>
<systemid>13889808</systemid>
<equityseries>
  <e>
    <t>2007-06-13 18:56:49</t>
    <o>0</o>
    <c>75000</c>
  </e>
  <e>
    <t>2007-06-14 01:08:57</t>
    <o>-12</o>
    <c>75000</c>
  </e>
  <e>
    <t>2007-06-14 09:22:47</t>
    <o>0</o>
    <c>74838</c>
  </e>
  <e>
    <t>2007-06-14 17:41:04</t>
    <o>0</o>
    <c>75237</c>
  </e>
</equityseries>
</c2xml>

```

```

</e>
<e>
  <t>2007-06-14 22:53:51</t>
  <o>0</o>
  <c>75237</c>
</e>
<e>
  <t>2007-06-15 07:04:03</t>
  <o>0</o>
  <c>75237</c>
</e>
<e>
  <t>2007-06-15 17:10:20</t>
  <o>0</o>
  <c>75112</c>
</e>
<e>
  <t>2007-06-15 21:31:25</t>
  <o>0</o>
  <c>75112</c>
</e>
<e>
  <t>2007-06-16 04:38:29</t>
  <o>0</o>
  <c>75112</c>
</e>
<e>
  <t>2007-06-16 13:25:29</t>
  <o>0</o>
  <c>75112</c>
</e>
.....excerpted.....
</equityseries>
</c2xml>

```

cmd=getbenchmarkseries&benchmark=SP500&startdate=20070501&enddate=20070507

B = benchmark data point

D = date

P = price

```

<c2xml>
<benchmark>SP500</benchmark>
<benchmarkseries>
  <b>
    <d>20070501</d>
    <p>1486.3</p>
  </b>
  <b>
    <d>20070502</d>
    <p>1495.92</p>
  </b>

```

```

</b>
<b>
  <d>20070503</d>
  <p>1502.39</p>
</b>
<b>
  <d>20070504</d>
  <p>1505.62</p>
</b>
<b>
  <d>20070505</d>
  <p>1505.62</p>
</b>
<b>
  <d>20070506</d>
  <p>1505.62</p>
</b>
<b>
  <d>20070507</d>
  <p>1509.48</p>
</b>
</benchmarkseries>
</c2xml>

```

cmd=gettradehistory&systemid=sss

```

<c2xml>
<systemid>13889808</systemid>
<systemname>Absolute Returns</systemname>
<trades>
  <trade>
    <tradeid>26752257</tradeid>
    <type>future</type>
    <earliestopen>2007-06-13 19:58:17</earliestopen>
    <openaction>STO</openaction>
    <openquant>1</openquant>
    <opensymbol>@ESU7</opensymbol>
    <openprice>1530.0000</openprice>
    <lastclose>2007-06-13 20:03:12</lastclose>
    <closeaction>BTC</closeaction>
    <closequant>1</closequant>
    <closeprice>1529.7500</closeprice>
    <maxdrawdown>
    </maxdrawdown>
  </trade>
  <trade>
    <tradeid>26752302</tradeid>
    <type>future</type>
    <earliestopen>2007-06-13 20:03:23</earliestopen>
    <openaction>BTO</openaction>
    <openquant>1</openquant>
    <opensymbol>@ESU7</opensymbol>
    <openprice>1529.7500</openprice>

```



```

<lastclose>2007-06-13 20:28:33</lastclose>
<closeaction>STC</closeaction>
<closequant>1</closequant>
<closeprice>1529.5000</closeprice>
<maxdrawdown>
  <amt>-37.5</amt>
  <openquant>1</openquant>
  <entryprice>1529.75</entryprice>
  <worstprice>1529</worstprice>
  <maxddwhen>2007-06-13 20:21:00</maxddwhen>
  <calcedwhen>2007-06-20 18:22:21</calcedwhen>
</maxdrawdown>
</trade>
<trade>
  <tradeid>26752609</tradeid>
  <type>future</type>
  <earliestopen>2007-06-13 20:28:43</earliestopen>
  <openaction>STO</openaction>
  <openquant>1</openquant>
  <opensymbol>@ESU7</opensymbol>
  <openprice>1529.5000</openprice>
  <lastclose>2007-06-13 20:41:01</lastclose>
  <closeaction>BTC</closeaction>
  <closequant>1</closequant>
  <closeprice>1529.5000</closeprice>
  <maxdrawdown>
  </maxdrawdown>
</trade>
<trade>
  <tradeid>26752751</tradeid>
  <type>future</type>
  <earliestopen>2007-06-13 20:41:11</earliestopen>
  <openaction>BTO</openaction>
  <openquant>1</openquant>
  <opensymbol>@ESU7</opensymbol>
  <openprice>1529.5000</openprice>
  <lastclose>2007-06-13 22:34:29</lastclose>
  <closeaction>STC</closeaction>
  <closequant>1</closequant>
  <closeprice>1529.2500</closeprice>
  <maxdrawdown>
    <amt>-12.5</amt>
    <openquant>1</openquant>
    <entryprice>1529.5</entryprice>
    <worstprice>1529.25</worstprice>
    <maxddwhen>2007-06-13 22:01:00</maxddwhen>
    <calcedwhen>2007-06-20 18:22:18</calcedwhen>
  </maxdrawdown>
</trade>

```

.....excerpted.....

```

<trade>
  <tradeid>26913791</tradeid>
  <type>option</type>
  <earliestopen>2007-06-26 15:52:30</earliestopen>
  <openaction>STO</openaction>

```

```

    <openquant>10</openquant>
    <opensymbol>IOCGH</opensymbol>
    <openprice>1.2000</openprice>
    <lastclose></lastclose>
    <closeaction>BTC</closeaction>
    <closequant></closequant>
    <closeprice></closeprice>
    <maxdrawdown>
    </maxdrawdown>
</trade>
<trade>
    <tradeid>26913804</tradeid>
    <type>stock</type>
    <earliestopen>2007-06-26 15:53:17</earliestopen>
    <openaction>BTO</openaction>
    <openquant>1000</openquant>
    <opensymbol>IOC</opensymbol>
    <openprice>27.9400</openprice>
    <lastclose></lastclose>
    <closeaction>STC</closeaction>
    <closequant></closequant>
    <closeprice></closeprice>
    <maxdrawdown>
    </maxdrawdown>
</trade>
</trades>
</c2xml>

```

xml.mpl?cmd=gesignalhistory&systemid=sss&session=xxx

```

<c2xml>
<systemid>13889808</systemid>
<systemname>Absolute Returns</systemname>
<signals>
    <signal>
        <sigid>26752247</sigid>
        <posted>2007-06-13 19:57:06</posted>
        <traded>2007-06-13 19:58:17</traded>
        <action>STO</action>
        <quant>1</quant>
        <symbol>@ESU7</symbol>
        <type>future</type>
        <market>0</market>
        <limit>0</limit>
        <stop>1529</stop>
        <tif>DAY</tif>
        <tradeprice>1530</tradeprice>
        <comment></comment>
    </signal>
    <signal>
        <sigid>26752274</sigid>
        <posted>2007-06-13 20:00:09</posted>
        <traded>2007-06-13 20:03:12</traded>
    </signal>
</signals>

```

```

    <action>BTC</action>
    <quant>1</quant>
    <symbol>@ESU7</symbol>
    <type>future</type>
    <market>0</market>
    <limit>0</limit>
    <stop>1529.75</stop>
    <tif>DAY</tif>
    <tradeprice>1529.75</tradeprice>
    <comment></comment>
</signal>
<signal>
    <sigid>26752269</sigid>
    <posted>2007-06-13 20:00:09</posted>
    <traded>2007-06-13 20:03:23</traded>
    <action>BTO</action>
    <quant>1</quant>
    <symbol>@ESU7</symbol>
    <type>future</type>
    <market>0</market>
    <limit>0</limit>
    <stop>1529.75</stop>
    <tif>DAY</tif>
    <tradeprice>1529.75</tradeprice>
    <comment></comment>
</signal>
<signal>
    <sigid>26752593</sigid>
    <posted>2007-06-13 20:28:05</posted>
    <traded>2007-06-13 20:28:33</traded>
    <action>STC</action>
    <quant>1</quant>
    <symbol>@ESU7</symbol>
    <type>future</type>
    <market>0</market>
    <limit>0</limit>
    <stop>1529.5</stop>
    <tif>DAY</tif>
    <tradeprice>1529.5</tradeprice>
    <comment></comment>
</signal>
<signal>
    <sigid>26752590</sigid>
    <posted>2007-06-13 20:28:05</posted>
    <traded>2007-06-13 20:28:43</traded>
    <action>STO</action>
    <quant>1</quant>
    <symbol>@ESU7</symbol>
    <type>future</type>
    <market>0</market>
    <limit>0</limit>
    <stop>1529.5</stop>
    <tif>DAY</tif>
    <tradeprice>1529.5</tradeprice>
    <comment></comment>
</signal>

```

.....excerpted.....

```
<signal>
  <sigid>26914865</sigid>
  <posted>2007-06-26 17:36:05</posted>
  <traded>2007-06-26 17:36:05</traded>
  <action>STC</action>
  <quant>3</quant>
  <symbol>EURUSD</symbol>
  <type>forex</type>
  <market>1</market>
  <limit>0</limit>
  <stop>0</stop>
  <tif>DAY</tif>
  <tradeprice>1.3455</tradeprice>
  <comment></comment>
</signal>
</signals>
</c2xml>
```

xml.mpl?cmd=logout&session=xxx

```
<c2xml>
  <logout>
    <minutes>82.8</minutes>
    <bytes>1145766</bytes>
  </logout>
</c2xml>
```

Error examples:

Unhandled command:

```
<c2xml>
  <error>1</error>
  <message>Unhandled cmd (getoogaboogadata)</message>
</c2xml>
```

Unknown system:

```
<c2xml>
  <error>1</error>
  <message>Unknown systemid (2221111)</message>
</c2xml>
```

Conclusion

We hope that software developers will be pleased with this first iteration of the C2DS. Shortly we will be rolling out additional functionality, including retrieval of autotrade and slippage data, subscription (and subscription resale) billing, and subscriber management.

Please share your feedback with us, and feel free to ask questions. We want to help you build great C2-Compatible software! Although we prefer public posts in the Collective2 C2 Software Development forum, we are also available privately via email at info@collective2.com.