## Community Currencies (CC)

This feature has been introduced in Tiki6, and it allows to use community-defined currencies to support trading within Barter Networks using a community-trust based Payment system.

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In its current design it requires an external free software package called **CCLite** to handle the transactions out of tiki. This is intentional, since the goal is that not only Tiki-based sites but also other Content Management Systems (Elgg, Joomla, Drupal, ...) can use the same CCLite installation to support intertrading among communities and softwares.

Basic Terminology

• "Registry": Barter Network

# 1.1. Tiki/Cclite Installation Instructions

# 1.1.1. Known limitations

- Users must exist in both web sites with exactly the same username (case sensitive)
   As of July 2010, users must be registered in both sites. In the future we expect that Tiki is able to create users in the CCLite installation with the same or other name, and keep that
- information in a field of the Group tracker item for each registered user in the Tiki site.
  Registry names and their corresponding currencies must be defined in both sites with the
- same names (case sensitive)
- payments in community currency are allowed based on the budget of that user account in CClite.
- there is too little error reporting (so far) when something goes wrong. Some improvements to the cclite code need to be added to make it better.

# 1.1.2. Requirements

- Tiki6.x (6.1+) and CClite 0.7+.
- PHP CURL extension
  - See your PHP Info page and check for a "curl" section: e.g. "example.com/tikiphpinfo.php"
  - If it's not there:
    - See http://php.net/manual/en/curl.setup.php for general info
    - On Debian or Ubuntu do (usual warnings about sudo)

sudo apt-get install php5-curl sudo /etc/init.d/apache2 restart

# 1.1.3. Install Barter\_Market profile

- Go to tiki-admin.php?page=profiles (logged in as admin)
- Search for "barter" in the Profile box on the default repository
- Click the name "Barter\_Market" that should be the only result
- Fill in the options such as "Browser title", "Site subtitle" and "sitetitle" (leave the cclite and barter ones as they are to use c2c.ourproject.org)
- Once the profile has been applied:
  - $\circ$  Read the Instructions page (added by the profile)
  - $\circ\,$  Go to page Profile\_Barter\_Offer\_Template and approve the plugin
  - When it's written, do the same on Profile\_Barter\_Want\_Template
  - Clear smarty templates\_c on Admin -> Tiki Cache/Sys Admin

# 1.1.4. Install cclite

The installation of cclite is beyond the scope of this page. Check its own manual for the installation of you own cclite, if you need to. See:

http://www.hughbarnard.org/?q=node/3

For the time being, you can request to use the common installation some communities have at: http://c2c.ourproject.org

## 1.1.5. Connect your server to cclite

- Send an email to cclite@NOSPAM@intercanvis.net (or the contact email for any other cclite installation) containing the IP for your server and the Tiki server address
- You will be sent back the "merchant key" on return
- When you have the merchant key go to tiki-admin.php?page=payment and enter the merchant key and click "Change Settings"

### 1.1.6. Test a transaction

- Create another "normal" user in your Tiki (maybe we should have a default test user there)
- Go to http://c2c.ourproject.org and create a user with the same user name there
  - $\circ\,$  Validate that user (if relevant still?)
- Go back to your Tiki
  - $\circ\,$  Log in or switch user to your new non-admin user
  - Go to the Offers page,
    - pick one of the items and click "Buy now!",
    - and then "Trade with Cclite"
    - If it all works you should get a message saying
      - 66

Cclite payment initiated on 2011-01-26 17:25 Transaction Accepted Ref: \*\*\*\*\*\*\*\*\*

# 1.2. Basic configuration (Tiki side)

You have to select CCLite as the payment system (done by the "Barter\_Market" profile for you).

|                      | Payment  |        |
|----------------------|--|--------|
|                      | ✓ Payment <a>i</a>   |        |
|                      | Choose payment system You can only use one payment Paypal or Cclite Only PayPal is working at the moment. See PayPal.com Cclite: Community currency accounting for local exchange trading systems (LETS). See sourceforge.net              |        |
|                      | Payment System: Cclite<br>PayPal: see PayPal.com - Cclite: Community currency<br>Requires Payment (OK)<br>Currency: ECO  |        |
|                      | Default acceptable payment delay: 30 (1) days<br>Wiki page containing the instruction to send manual payment like check:<br>Requires Payment (OK)  |        |
| Then you have to pro | ovide the details for the CCLite installation, so that Tiki and CCLite can ta  | alk to |
|                      | See an example below:  |        |
|                      | Cclite   |        |
|                      | ka Experimental  |        |
|                      | Celle is for creating and managing alternative or complementary trading currencies and groups 1<br>6   |        |
|                      | Celite Registries: C2C1,c2C3 Registry names in Colite Requires Payment (OK) Celite Registry Currencies: ECO,HOUR   |        |
|                      | Each registry in Colife can have it's own currency. Must be one per registry. (case sensitive) Requires Payment (OK) Colife Server URL: http://c2c.ourproject.org https://colife.yourdomain.org/colife/ig/ Requires Colife Registries (OK) |        |
|                      | Collie Merchant User: manager<br>Requires Collie Registries (OK)<br>Collie Merchant Key: 1010101010<br>Requires Collie Registries (OK)   |        |
|                      | Collie Enable Payments: Test 💌 🚯<br>Requires Collie Registries (OK)<br>Hashing Algorithm: SHA1 👻 🚯<br>Requires Collie Registries (OK)  |        |
|                      | Collie Payment Notification<br>Requires Collie Registries (OK)   |        |

# 1.3. Basic configuration (CCLite side)

You have to provide some details for your basic cclite installation (See the CCLite manual).

And then, each registry that you create, needs to have some basic details also, which comprise a registry name, description, email, among others (*to be continued*):

|                          | User Menu Partners Create Curr   | ency Show Currencies Create Ad Ca     |
|--------------------------|--|---------------------------------------|
| Clite                    |  |                                       |
| Show Registry Balances   | Registry Name  | c2c1                                  |
| Create Rule/Credit Limit | Registry Description   | Barter Network for 'Cornellà de Dalt' |
| Create Registry Partner  | Manager Email  | cclite@yourdomain.com                 |
| Upload Batch Files       | Manager Email Password   | •••••                                 |
| Apply Service Charge     | Email for Batch Transactions   | cclite@yourdomain.com                 |
| Open Office Directory    | Batch Email Password   | ••••••                                |
| Create Batch Dirs        | Global Commitment Limit  | 100                                   |
| Modify c2c1              | Merchant Key<br>Allow Merchant from IP addresses<br>(space separated list) | 1212121212                            |
| search users             | (space separated list)   | 127.0.0.1 11.222.3.44                 |
|                          | Update Latest News   |                                       |
| search ads               | Note the registry must declared  | as an ODBC driver under Windows.      |
| search trades            | Go Cancel  |                                       |

### 1.4. Usage

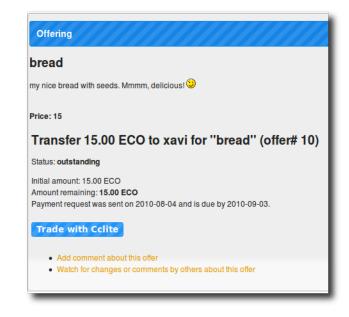
The usage is pretty intuitive, once the profile "Barter Market" is applied to your Tiki installation.

You have a list of items offered or wanted shown in a page, and you select one of them. Then you have the option to:

- give the amount (in the community currency specified in the item) to person offering it, in order to close the transaction
- get in contact with that user first, to agree on details or state of that item offered or requested.



Once you click on the button "**Buy now**", you, you initiate a payment request, which you can pay with CCLite or by other means such as plain barter in exchange of some other good or service, etc. If you want to trade with CCLite-based community currency, you can click on the button "**Trade with CClite**".



This will initiate the payment, provided that you have enough amount in that currency in you CClite account. In such case, you'll see a message saying "Transaction accepted" followed by some code ("Ref: XXXX...."):

| Transfer 15.00 ECO to xavi for "bread" (offer# 10)  |
|---|
| Status: outstanding   |
| Initial amount: 15.00 ECO<br>Amount remaining: <b>15.00 ECO</b><br>Payment request was sent on 2010-08-04 and is due by 2010-09-03. |
| Refresh page  |
| ① Payment info  |
| Colite payment initiated on 2010-08-04 [20:39]  |
| Transaction Accepted<br>Ref: RFXJolhXMNveBleXITvNsWybJBw  |
|   |
| Add comment about this offer  |
| Watch for changes or comments by others about this offer  |
| • Watch for changes of comments by others about this offer  |

If the user is not registered in the CCLite site, a some message will be shown indicating it (for user "test" in this example below):



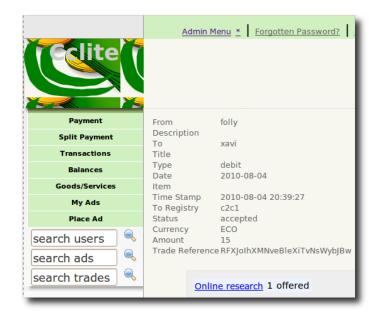
The previous successful transaction will be recorded also in the CCLite side, at the "**Transactions**" sections, once loged as manager or user with enough rights:

| Colito r                              |                           |     |          |     |      |      |                  |        |       |       |       |        |     |      |        | You an | e ma |
|---------------------------------------|---------------------------|-----|----------|-----|------|------|------------------|--------|-------|-------|-------|--------|-----|------|--------|--------|------|
|                                       |                           |     |          |     |      |      |                  |        |       |       |       |        |     |      |        |        |      |
|                                       |                           |     |          |     |      |      |                  |        |       |       |       |        |     |      |        |        | . 1  |
| · · · · · · · · · · · · · · · · · · · |                           |     |          |     |      |      |                  |        |       |       |       |        |     |      |        |        |      |
| Payment                               | Pages 1                   | 2 3 | 4 5      | 6   | ze   | 9    | 10               | 11     | 12    | 13    | 14    | 15     | 16  | 17   |        |        |      |
| Split Payment                         | Found 254<br>display ok n |     |          | Det | ~    |      | Source           |        | Dest  | inati | 10    | Mirror | Cum | NOCU | Type   | Amount |      |
| Transactions                          | Show                      |     | accepter | _   | -    |      | ar set at the se | folly  |       |       |       | c2c1   |     | -    | debit  |        |      |
| Balances                              | Show                      | 253 | accepter | 201 | 0-08 | 8-04 |                  | folly  |       |       | kavi  | c2c1   |     | ECD  | credit | 15     |      |
| Goods/Services                        | Show                      | 252 | accepter | 201 | 0-07 | -28  | xa               | vitest | jonny | ybra  | tley  | c2c1   |     | ECD  | debit  | 51     |      |
| My Ads                                | Show                      | 251 | accepter | 201 | 0-07 | -28  | xa               | vitest | jonn  | ybra  | dley  | c2c1   |     | ECD  | credit | 51     |      |
| Place Ad                              | Show                      | 250 | accepted | 201 | 0-07 | -28  | xa               | vitest |       |       | ravi  | c2c1   |     | ECD  | debit  | 100    |      |
| search users 🔍 🔍                      | Show                      | 249 | accepted | 201 | 0-07 | -28  | Xa               | vitest | t     |       | kavi  | c2c1   |     | ECD  | credit | 100    |      |
| search ads                            | Show                      | 248 | accepted | 201 | 0-07 | -28  | jonnyte          | sting  |       |       | folly | c2c1   |     | ECO  | debit  | 2      |      |
| searchaus                             | Show                      | 247 | accepted | 201 | 0-07 | -28  | jonnyte          | esting |       |       | folly | c2c1   |     | ECD  | credit | 2      |      |
| search trades 📃 🏊                     | Show                      | 246 | accepted | 201 | 0-07 | -23  |                  | dmin   |       |       | folly | c2c1   |     | ECO  | debit  | 2      |      |
|                                       | Show                      | 245 | accepter | 201 | 0-07 | -23  | -                | dmin   |       |       | folly | c2c1   |     | ECD  | credit | 2      |      |
|                                       |                           |     |          |     | 0-07 |      |                  |        |       |       |       | c2c1   |     |      | debit  | 1      |      |

As seen in this detailed image, the last rows correspond to the recent transaction that we have seen in the previous images from the linked Tiki site:

| Pages 1 2     |     |      |      | <u>6</u> 7 | <u>8</u> | <u>9</u> | <u>10</u> | <u>11</u> | <u>12</u> | <u>13</u> | <u>14</u> | <u>15</u> | <u>16</u> | <u>17</u> |        |        |
|---------------|-----|------|------|------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------|
| Found 254 a   |     |      |      |            |          |          |           |           |           |           |           |           |           |           |        |        |
| display ok no | Id  | Stat | us   | Date       | 2        | S        | ource     | 9         | Des       |           |           |           |           | -         |        | Amount |
| Show          | 254 | acce | pted | 201        | 0-08-0   | 4        |           | folly     | y         |           | xavi      | c2c1      | L         | ECO       | debit  | 15     |
| Show          | 253 | acce | pted | 201        | 0-08-0   | )4       |           | foll      | y         |           | xavi      | c2c1      | L         | ECO       | credit | 15     |

If we click in the "Show" button in CCLite, we will see the full details of that transaction, as stored in the CClite server:



For more information for the time being, you can see it in action at http://c2c.ourproject.org/tiki

## 1.5. Add a new barter node to the network

The process to have a new node added to the network is:

- 1. Install Tiki (if not done already), and apply the Barter profile
- 2. Request the Merchant ID to the CClite admin, and update your Tiki payment configuration
- 3. Send to the CClite admin the ip of the server where your Tiki is sintalled, in order to have it added to the cclite configuration.
- 4. Create users with the same username in the CClite installation as they have in the Tiki site (in the future, this will be more flexible)
- 5. Let the users create their offers and wants in the tiki site.
- 6. Let them trade through cclite

Todo:

- 1. Show the list of transactions and status of the budget for users in their userpages
- 2. Show the list of items offered and wanted (as open, pending, closed) in their user pages.

# 1.6. Links

Profile to easily customize your Tiki6 site to work supporting Barter Networks:

http://profiles.tiki.org/Barter\_Market

Related pages and sites:

• http://intercanvis.net

#### Development sites:

- http://c2c.ourproject.org
- http://dev.tiki.org/cc

#### CCLite:

- Sourceforge page: http://sf.net/projects/cclite
- Author's page: http://www.hughbarnard.org/?q=node/3
- Email list: http://groups.google.co.uk/group/cclite

Former implementation of CC in Tiki:

- Mod cc
- http://cc.tiki.org

Aliases CC | CommunityCurrencies | CommunityCurrency | Community Currency | CCLite