

Table of contents

- [About the Project](#)
 - [Project Status](#)
 - [CRM Road Map](#)
 - [People and Team Members](#)
 - [Competition and Standards](#)
 - [Current Issues](#)
 - [Database schema](#)
 - [Tables](#)
 - [Issues, Possibilities and Comment](#)
 - [Tiki Theme Control](#)
 - [Phone Dialer](#)
 - [Modules and Blocks](#)
 - [GUI and Views](#)
 - [Global /Navigation View](#)
 - [List View](#)
 - [People](#)
 - [Organization](#)
 - [Relationships](#)
 - [Activity](#)
 - [Properties View](#)
 - [People](#)
 - [Summary](#)
 - [Details](#)
 - [Events](#)
 - [Relations](#)
 - [Organization](#)
 - [Events](#)
 - [Relations](#)
 - [Discussion/Participation](#)
 - [Some random thoughts and comments:](#)
-

About the Project

Our Goals

The aim of this project is to create a set of CRM/ERP features for tiki, these will include a contact manager, relationship manager as well as various contact based activities such as Calls, Notes and Tasks.

Key Features

- Completely web-based, no need to install special client software.
- Manage your contacts and accounts from one integrated web interface. Sales professionals can organize and manage their customers and accounts with ease and powerful functionality.
- Records and tracks all your communications with your contacts, giving you a more precise history of each relationship, allowing you to extract more information and value from your database.
- Create custom fields based on relationships,
- Associate your contacts with various tiki categories.
- Create Folder in-order to segment you contacts, for example customers, suppliers etc.
- Easily associate a particular contact with an opportunity using point-and-click functionality.
- Organize and prioritize your short-term and long-term activities using the to-do and calendar, enter events or to-do items ahead of time and print out your daily to-do schedule and calendar whenever you require it.

The core CRM functions will be built on the contacts module and will leverage from existing tiki features, such as:

- Calendar module from mose will be used to schedule events for a specific contact or group of contacts.
- Trackers will be used to track user task and other user defined activities.
- We also plan to add projects, and products some time in the future.
- In the future we would also like to use the workflow feature to define the process for creating new contacts, relationship/opportunities etc.

How we plan meet our goals

At the heart of a CRM, ERP and many other groupware solutions are people and companies, therefore we plan to start by building a contacts system, similar in concept to outlook and then build on this with additional CRM functionality.

The Contacts Module

The contacts module will be based on relational entities, where an entity can be defined as a person, or organisation (company, school, family etc). The relationship between entities is M:M in that a single entity can have relationship with any other entity (for example eSTEVE-&rFather-&eAaron or eJoe-&rEmployee-&eSi3-LTD).

Contacts will provide the following key features

- People, provides basic address book functionality and will allow you to specify site (public), myContacts as well as group based contact groups. Each person can be assigned to a company using the primary company of the person entity.
- Organizations/Companies, provides the ability to define companies, departments as well as the roles (see relationships) people play within that department. The main idea is that a company could use this as the base to a HR module.
- Relationships, is used to map relationships between entities (originally department lookup table), these relationships can be Person-2-Person(father of), Company-2-Company (e.g. departments) as well as Company-2-Person or Person-2-Company. This is effectively a lookup table (idSource, idTarget, Cat(cust, supp, user),)
- Activity is used to centralize and record the activity of an individual person, company as well as those based on relationships (group of people/companies).

Important Note: Although the activity functionality is key to a CRM it is not deemed part of the contact module/application/feature, but should be implemented as a separate tiki feature. I will probably use trackers for this, although it would be nice to create some kind of shared scheme/table. This would allow me to list all the entries in the table base on my contacts id [Source (e.g. contacts) | Source Record id| Destination (e.g. trackers) | Content Id (tracker 21)]

Project Status

Good news finally we think we have a db structure to work with, any comments about the design would be appreciated as it is a bit of a compromise, in that we have broken third normal form (duplicate attributes) but for performance reasons. The design was intended to be flexible as possible in-order to allow ldap mappings, in that all entities (people, organizations) and their units (departments, holiday home) could be defined using attribute sets. However after some testing we came to the conclusion that the performance hit would be to great on large data sets, so we duplicated primary attributes in the entity table. It is also questionable whether or not we should have separate tables for attribute sets and relationships, the main difference being other entities can participate in relationships. Referee to db section for information on how to obtain the schema and software.

The project is really still in the design stage, so please feel free to contribute. We intend to get the core contacts working over the next few weeks, and will start implementing additional CRM features once the contacts module is stable. At this stage CRM functionality is not part of the tiki CVS, once the feature is functional it will be left to the core tiki developers as to whether they want to distribute CRM as part of tiki.

Everyone is welcome to help and make suggestions in whatever way they feel they can.

CRM Road Map

Version 1

- Ldap mappings for standard entities <http://ldap.akbkhome.com/> (not relationships)
Person=OrgPerson, Organization=Org and Department=OrgUnit.
- Each standard entity can be extended with any number of additional user defined fields;
- iCal output used to schedule a task by one person to be performed by another! A contact schema is normalized in the rfc2445 <http://www.ietf.org/rfc/rfc2445.txt> this definition will be supported by tiki calendar by mose.
- Import, VCARD, CSV, LDAP->LDIF, SQL
- Export, VCARD, CSV, LDAP->LDIF, SQL

Version 2

- Create user from contact!
- Delete/remove LDAP entry for this contact and/or its relationships
- Add additional contact-class-tables using phpMyEdit for db and phpMyForm for layout.
- Print, PDF Contacts list, BizCards
- WebMail->Contacts, could be replaced with this module.
- Member list->could be used as a to provide a list tiki site users, by adding the importing the user list and then assigning them to the site group.

Version 3

- Voice tags for each user, this allows the user to simple say "call???" followed by "contactname???" each user needs to configure these feature.
- Synching groupware features with Palm, PocketPC, Symbian, etc would be a "nice to have". Note: You can do this from version 1 by exporting your contacts from you PDA aware application (e.g. outlook) and importing them using CSV or VCARD.
- Single click publish this contact to ldap server, this can be done manually in version 1 using the export to ldap->ldif.

People and Team Members

Just me at the moment 🙄 but everyone is welcome!

I hope when we start providing some tangible code that some of the more talented tiki gurus will provide help, code etc.

I think mose will be involved at some point and also hope to enroll the expertise of Ben. who kindly left this note: FYI - We have created a fledgeling CRM module (more Sales Force Automation) and integrated it with Quickbooks. We track Customers, Sales Reps and Leads. [Ben Tallman](#)

Competition and Standards

There are many groupware and standalone php based solutions that offer some of the capabilities that will be present in tiki CRM, here is a short annotated list of some of the solutions I have played with.

Groupware

- <http://www.moregroupware.org/> Nice and simple GUI and has nice company relationships and partner modules, also has a really cool looking web mail app.
- <http://www.phpprojekt.com/> provides a wide range of functions, none of which really excel, although the calendar module looks pretty neat.
- <http://www.phpgroupware.org/> Latest release includes some theme and CMS support, generally this has a good contacts and project management capability we could add these to tiki
- <http://www.hilckmannagroep.com/sourceforge/> has a very nice and simple interface with pull-down menus, some nice design ideas but a little limited in functionality.
- <http://www.dotproject.net/> has a nice windows feel to it, but little substance
- <http://www.tutos.org/homepage/index.html> if you figure out how you are supposed to use this system please let me know, it took me few hours to figure out how to add a user! Just call me Dumbo J
- <http://dcl.sourceforge.net/> Double Choco Latte is more of a tracking tool for project/product not sure how this fits? Nice calendar popup. Appears to be a port of phpgroupware.
- <http://www.phpcollab.com/phpbb/index.php> is a project management tool, primarily aimed at software nice gant chart
- <http://www.relata.org/> (next version won't be GPL) simple GUI, but I would never pay for this so good luck on what ever they are going to do.
- <http://www.anteil.com/> This one looks pretty good.
- <http://www.customer-touch.com/> Demo - Ok but really a bug tracking system and nothing more, bugzilla and a number of other solutions are more practical
- <http://www.guanxicrm.com/> clone of moregroupware, which is unicode compliant? They are also building an xoops module for this which may be good! As xoops was my second choice after tiki as the foundation.
- <http://e-crm.sourceforge.net/> could not connect to demo!
- <http://crm-ctt.sourceforge.net/> nothing more than a tracker, but has a very clean interface and uses a lot of mouse over stuff! Need to install and play with it!
- <http://issue-tracker.sourceforge.net/> another tracker, but has escalation support and instant email notifications. Although no demo available, must install and play!
- <http://www.leads4web.de> INSTALL FIRST - could not read German, but screen shot looked interesting!

- <http://www.limerence.net/> An invoicing piece of software
- <http://openrcm.sourceforge.net/> last update was in May 2002, which means its fantastic or crap? Have not played with it.
- <http://assistant.sourceforge.net/> INSTALL - at 250k this has got to be worth installing!
- <http://sourceforge.net/projects/egs/>

LDAP Specific References

Please see [LDAP](#)

Current Issues

The addition of relationships make that database design more complex than originally anticipated, which in turn is going to makes csv, vcard and ldap import/export more complex.

How to exploit the functionality provided by the following tiki features from contacts?

- Watchers can be used on a object-by-object basis's in-order to allow the user to be notified of changes/updates to that object. Each object may have a number of different events that can be watched for. Events can be emailed to the user or added to their internal message list.

Watches (uid | event | object | hash | title | type | url | email)

- ActionLog is used to log the activity of a user

ActionLog (Create | Delete etc) ModifiedOn | PageName | User | IP | comment

- Programmed Content can be used by publishers/admin to schedule when a object will appear on the site as content.

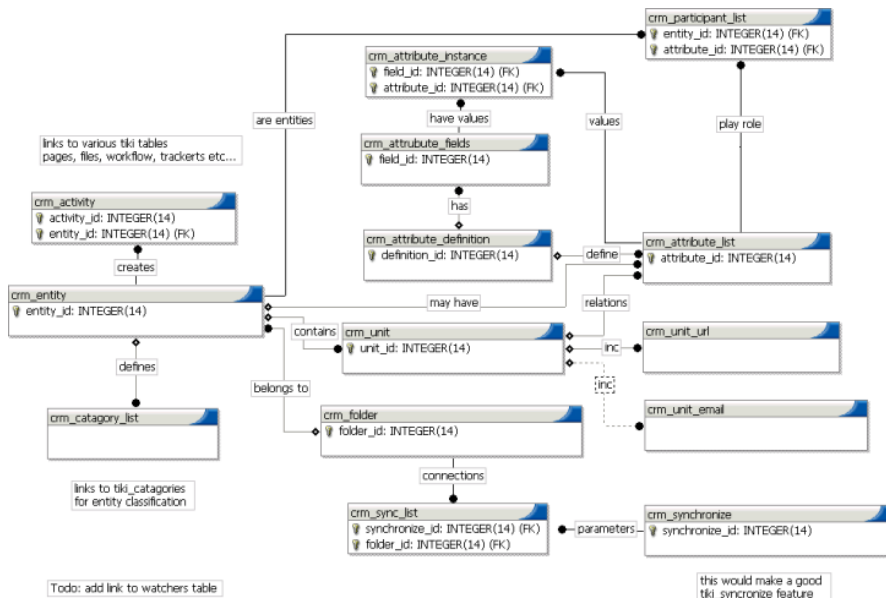
ProgCont (pid | contentId | publishdate | data)

- NotificationLib provides a means to send an email to a user when an action occurs

Database schema

This section describes the current database design for the CRM engine. The schema was created using DBDesigner4 which is available form <http://www.fabforce.net/products.php> the XML data file is available Contacts.xml (96.56 Kb) and can be used to directly create and modify the database tables.

The following ERM show the high level relationships between the tables.



Tables

The following section describes each of the entities show in the erm.

CRM Entity

The entity table is used to store the primary contact details for either a person (default when imported) or Organisation (e.g. company, school etc.).

Primary details include

- Entity definition (e.g. first, middle, last name etc)
- Primary unit (e.g. home) includes an address, telephone numbers, url list and email list.
- Primary attribute are currently retrieved from attributes table, but we include them here in future if performance becomes an issue.

Design Notes: The entity table was designed to for speed, in most cases all the properties that make up an entity can be defined in this table, with the exception of entity attributes which vary depending on primary purpose of the system. Additional units (address and phone numbers), email and url's can be defined at any time, however when creating these we must ensure that a primary unit exists (properties from this table) before creating a new one, if they do not we must create it before creating the new unit. This is required in-order to allow the primary (this table) properties to be substituted with new properties by setting the primary flag.

We did toy with the following concept, but decided that the performance hit would be too high, by replacing the entity definition (currently first last middle name) with a single description/name field and move the (first last middle name etc) into the attributes table. This would allow the system to be extended with any number of new entities for example projects etc. Although this type of definition is very flexible it is at this point deemed to abstract to be comprehend easily, even by the system developers.

CRM Unit

The unit table is used to holds an entities paper address and phone contact details as well as providing a link to one or more, email, and url entities. Each unit has a name that describes the unit (e.g. Home, Office, Beach House, Sales Dept, etc.) and should be viewed as a container-link for url, emal as well as to other entities (relationship and roles) which have defined attributes.

Note: in the future we may replace the unit definition with a single description/name field and move the

fields into the attributes table. This would allow the system to be extended with any type of unit definition. Although this type of definition is very flexible it is at this point deemed to abstract to be comprehend easily, even by the system developers.

CRM Unit Email

Provides a list of email address and associated parameters for each email address, such as usePlain Text, use public key etc. Email will display a dialogue to select the primary email address; it's setting as well as a list of other email addresses for this contact entity.

Note: could use tiki_user_email table for this.

CRM Unit URL

Provides one or more url details, including any login id and password required to access the url. The url will display a dialogue to select the primary url (e.g. website), it's account and password information, as well as a list of other website for this contact entity.

Note: This would be the ideal place to store net meeting and other real-time connection information. We could use directory Links (aka featured links) for this feature. Directory could be extended with comments, attachments and a picture to represent the category and or site. User_bookmarks is should be integrated with directory. Tiki_category_sites used by directory should be renamed directory_sites_category as it appears to be part of tiki categories. We could extend the directory with uid and password and use the directory instead. Although we may have an issue with updates as directory cats are assigned directory admin?

CRM Synchronization

The synchronization table holds the information required to connect to external systems in-order to exchange packets of information between distributed entities.

This table will also be use to hold the configuration information for the following:-

- LDAP Import allowed [] + LDAP server/login details []

Note: for additional comments please refer to comm servers and crm folders. We need a method to store and schedule ldap imports/exports/updates as well as any RSS/RDF feeds we wish to establish for crm-entities.

The crm_unit_url table also serves a very similar role. IMO the best thing is to create a similar solution to tiki-send-objects but with the addition of an interval setting and perhaps a name and description field. We also want to be able to select multiple servers for communications for each crm_folder.

Note: tiki currently provides similar functionality in the following features, it appears that many of these could be merged into a single comms lib.

tiki_dsn - requires login information

tiki_rss_modules -

tiki-send-objects - used for articles (received-article) and wiki pages(received pages)

tiki-send-blogs

tiki-rdf-xxx when it becomes available

tiki_admin_external_wiki

tiki_newsservers

CRM Sync List

Provides a means to allow each folder to be synchronized with one or MORE systems.

CRM Attribute List

Attributes are simply a set of user-defined fields that can be associated with an entity as well as each of

its units. Each attribute set can also be associated with one or more participants in-order to form links between entities; these relationships are described using attributes.

CRM Attribute Definition

The role definition table is based on the tracker table and is used to define a role and its attributes.

The role definition table is based on the tracker table and is used to define a role and its attributes. Definition allows you to add, remove and configure a relationships attribute set, for example.

Type: org/person

Entity (FN) Name:

Compartment/unit: N/A, ALL, Select

Role:

Attributes Field 1: value

Attributes Field 2: value

Attributes Field 3: value

Attributes Field 4: value

Attributes Field 5: value

Attributes Field 6: value

CRM Attribute Fields

The role field's table is based on the tracker field's table and is used to define each of the attributes associated with a role.

Note: need to extend the current table to include

Type: [checkbox](#), [option](#), [listbox](#), [multi-checkbox](#), [multit-option](#)

Data Source (if gathered from another module)

Select Query:

Update Query:

CRM Attribute Instance

The role instance table is based on tracker item table and is used to map the field values to a specific role.

Note: may add notes and attachments tables in future.

CRM Participates List

Provides a list of entities for this relation id.

CRM Activity

The activities table is a link table that links items stored in other tiki tables, and is used to store all of the actives for this entity; the default view mode is chronological order. Activities can be assigned to other users and reminders sent to that user.

CRM Folders

CRM Folders provides a convenient way to group entities and can be mapped to tiki user groups. Preferences and permissions can be applied on a folder-by-folder basis.

Note: When importing records we need an option for automatically creating accounts base on the above. Also refer to Tiki User Groups and Permissions.

CRM Category List

Tiki categories will be used to classify instance objects (e.g. a specific crm entity), we should allow the user to assign an entity to one or more categories. This table provides a lookup list of the tiki categories that this contact has been assigned to and is used to assign a single contact to one or more tiki categories. Categories can be used in association with folders, for example you may wish to define a

folder for partners and add the contact information for each business partner, each partner can then be associated with one or more categories, for example life insurance, mortgages etc.

Note: we should be able to set permissions for categories for example who can view meeting, birthday, phone call, travel time, sick, on vacation, private, etc.

CRM Global Preferences

The global preferences table will hold configuration information that is global in nature, this table has yet to be refined.

- CRM: Use HOME contact method during hours, this is to allow the activity log call option to selected the correct contact method (email voice mobile etc)
- CRM: Use WORK contact method during hours this is to allow the activity log call option to selected the correct contact method (email voice mobile etc)
- CRM: Default View (Properties (sum, detail, events, relations)), List (tabs (people, company etc..))
- CRM: Default list view, Select which fields appear in the List View (A-Z) as well as their order.
- CRM: Default filter and category?
- CRM:USER:Use email application <mailto::> open windows default mail app or internal copy to field to tiki webmail
- CRM|USER: Select the first five country names that appear in the contacts country dropdown list, used as a kind of shortcut.
- COUNTRY ID: used to determine if a contact address is international or not? WE COULD USE TIKI-
>GENERAL(Displayed time zone:)
- Collapsible Activity list [No](#)
- TEL FORMAT, default telephone format e.g. +00 (00) 0000-0000
- Number of items per page (will be incorporated as part of the list view)

Issues, Possibilities and Comments

The following table are not show, but may be included later

1. Pick Lists table may be added, the purpose of which is to provide a list of acceptable values for each field, unlike a list box, a pick list allows you to select multiple items and have the item represented as a icon (e.g. hobbies list, or services used list etc.)
2. Spite address street field into sub-fields (e.g. Name, Street No and Street Name) in-order to allow for a more intelligent map referencing url.
3. We should really have some credentials tables for key management, but that's another feature altogether a KMS, maybe in the not to distant future.

Other tables of interest

Tiki_wiki_attachments

Tiki image

Tiki files

Tiki comments

Issues, Possibilities and Comment

The following table are not show, but may be included later

1. May need to add some tables to define how contact groups map to tiki user groups, possible not required?.
2. Map tiki categories to contact categories or use tiki categories
3. Pick Lists table may be added, the purpose of which is to provide a list of acceptable values for each field, unlike a list box, a pick list allows you to select multiple items and have the item represented as a icon (e.g. hobbies list, or services used list etc.)
4. Spite address street field into sub-fields (e.g. Name, Street No and Street Name) in-order to allow for a more intelligent map referencing url.

Tiki Theme Control

How do we add crm as a tiki section?

Phone Dialer

Determine telephone call location based on ip location, this presumes that all number are entered in the correct international format. We also need to add the following: Dialing prefix (e.g. Calling Card #)

Modules and Blocks

The following block/modules can be used to navigate contact entities and can be assigned in the same ways as tiki modules.

- Clipboard block - dual-purpose block 1] can be used as bookmark (e.g. tagged items are placed in the clipboard. 2] can be use too copy and PAST tagged items.
- Relationships (only visible from properties view of people and org) provide an hierarchical view of relationships for the select entity.
- Activity List for a specific entity, the idea is that you could use this block/module from other modules
- Calendar, provide a block using the calendar (being developed by mose) to display the contacts calendar.

Maybe?

- Person List, the idea is that you could use this block/module from other modules such as a Projects module
- Org List, the idea is that you could use this block/module from other modules such as a invoice module

GUI and Views

Global /Navigation View

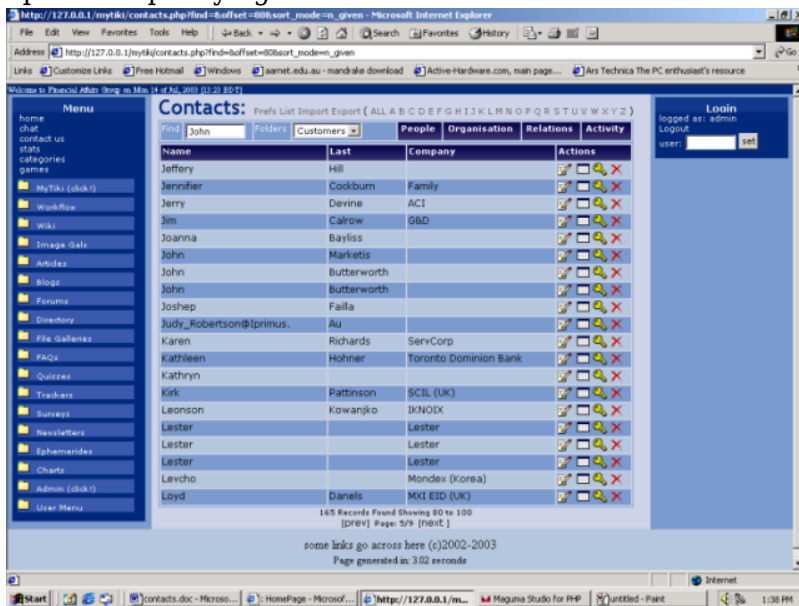
The global view is nothing more that a header with a number of command which are consistent across all views

Commands Global: The following commands are available from the list view

- New -> goes directly to properties view
- Add/Import all from vcard, cvs, outlook, ldap etc!!
- Save/Export all vcard, cvs, outlook, sql, ldap etc!!
- Print (all pdf, biz cards)

List View

The list view is used display, sort and find entities, there are currently four tabs one for each of the following lists [People | Organizations | Relationships | Activity]. The administrator should have the option of specifying which fields are included in the list view.



Each list will provide the functionality to select and manipulate multiple, entities can also be sorted using any of the fields defined. Some field values may have shortcut links, for example if the email field is shown you can click on the email address which will launch the email app as specified by the contact preference.

Each list page will have a footer which will display the current page, number of pages, page 1...n, first, last, next and previous as well as the number of records and the first and last record currently display on the screen. The record creation date and the record last modified by xxx on date. May add link to select all.

People

Organization

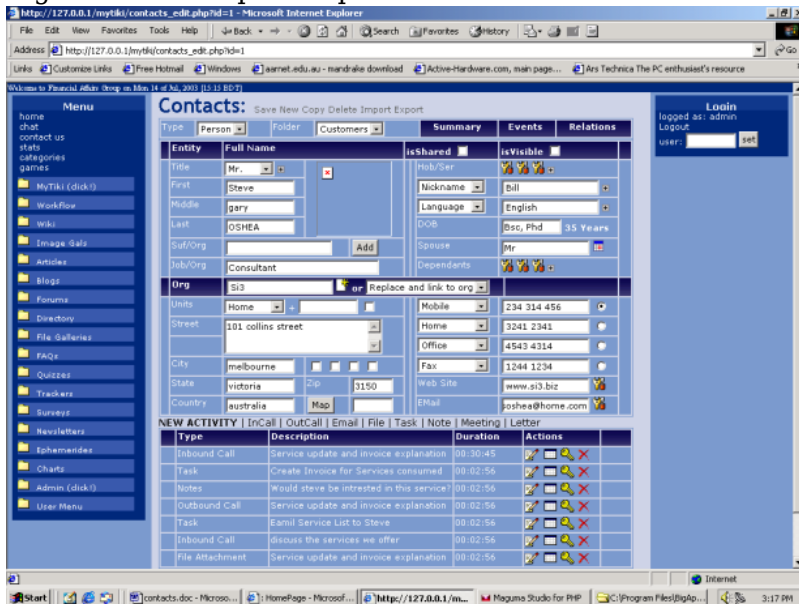
Relationships

Activity

Properties View

The properties view is used to navigate and edit an entity and its associated properties. This screen(s) is split into two regions (top and bottom) the top region is used to display the entities properties (details, events and relations) and the bottom region is used to display the entities activity in chronological order (notes, tasks, calls etc).

Figure 1 - Mockup Example Screen



People

Person's properties are split over four tabs, primarily to allow space for the activity log to be shown.

- Summary Tab (not shown), allows the admin to specify which of the details, events, relations and activity items to be shown.
- Details, is a fixed form, which describes the entity contact details?
- Events, display all the events for this entity
- Relations, display a list of relationships for this entity, custom fields are assigned to relationship roles.

Note: Where are we going to put the entity notes (a single notes field) and digital ids (public key). Notes are specific to this contact and are not linked to activity, the main reason they are included is so information is not lost when importing contacts. However this field may be useful if you want to add notes about this contact e.g. take station road train to Bakersfield and wait for Fred. Alternatively we could create a note item in the activity list for this contact and mark it as the primary/sticky note!!

Summary

The summary view provides a read only view of the person. The view is a combination of user-selected data from the other tabs, details, events, relationships and other.

Upcoming Events		Other Dependants	
	Birthday: Anniversary: Dependants:		
Person Details		Other Custom fields	
	Name: Mailing: Address: Home Phone: Office Mobile: Job Title: Department: Company: Web Site: Pager: Fax: Email:		
Most Active Relations		Other Services/products	

Details

Provides the details for this person

Events

Events are simply a convenient way of adding and viewing calendar events for a specific contact and will use the existing tiki group calendar, and can be used to define activities such as:

- Birthday [date, who do I remind](#)
- Anniversary
- Pay Review
- Customer Service Review

Other Calendar Options

Meeting/Appointment [Request/Schedule](#)

- Subject
- Location [] online meeting [x netmeeting](#) | [netshare event](#), event address []
- Start Date [] Time
- End Date [] Time
- Recurring event [dialogue see outlook](#)
- Reminder [1 hour before](#) | show as [busy | tentative| out of office | free]
- Invite Attendees bTo [email.addresses](#)
- Send attachments:
- Attendees Availability: [dialog see plan a meeting outlook](#)

Forward as iCal *.ics (add attach .ics)

Relations

Used to view and define relationships for this contact, relationship can be defined as

- People-2-People (steve->father->aaron)
- People-2-org (steve->directory->si3)
- org-2-org (si3->subsidur/division/departement->asdell)
- Group base relationships 1:M can also be defined for things such as sales opportunities.

Creating new relations involves specifying the following instance information

- Relationship Name []
- Description []
- Which People are involved in this relationship []
- Which organizations are involved in this relationship []
- When does this start date []
- When does this end (if any) []
- Values for each of the user defined fields for this relationship type

The Relationship definition screen allows you to define the relationship role along with the attributes for this role. Attributes are based on tracker fields are there is no limit to the number of attributes allowed to describe a relationship.

- Type: org/person
- Entity (FN) Name:
- Compartment/unit: N/A, ALL, Select
- Role Name:
- Unlimited user defined Attributes

Example Sale opportunity could be defined using the following attributes

- Close date
- Sale stage
- Potenta revenue: 1 zillion
- Profilt margin 10% I
- Description

Organization

Organization screen layout follows the same conventions as found in the person properties.

Organization properties are used to define the various attributes that describe the organization, such as department's etc. People may be linked/mapped to each department or roles but the details of that person are store in the person.

Events

The events property view will follow the same conventions as those found under both people and organizational events.

Relations

The relation's property view will follow the same conventions as those found under both people and organizational relations.

Discussion/Participation

Please feel free to add you comments and suggestions here!

CRM & email: I'm no expert on CRM, but I've used a CRM program for a few years. It automatically files incoming emails along with the corresponding contact records (ie whichever record has the sender's email address). It's very convenient to view all the email correspondence with a particular individual.

With that in mind, the CRM module should be able to do something like this:

1. Incoming emails automatically become tiki-pages
2. A separate page exists for each Contact which includes links to each email-tiki-page.
3. A special page lists links to each unread email
4. New emails which arrive from unknown addresses are automatically linked to an automatically created contact record.

Some random thoughts and comments:

[-]

(1) Great document and great start.

thanks for your input, this is the kind of stuff that will make it CRM/ERP work! I am currently working on a revised page, which will incorp you comments!!

(2) Here is a start to a list of closed-souce competitors:

- Goldmine--<http://www.frontrange.com>
- OnContact--<http://crm.oncontact.com>
- Microsoft (Great Plains)--<http://www.greatplains.com>
- Oracle CRM/ERP--<http://www.oracle.com/applications/>
- SAP CRM/ERP--<http://www.sap.com/solutions/>
- PeopleSoft--<http://www.peoplesoft.com/corp/en/products/line/index.jsp>

(3) There are fairly large differences between the top three and the bottom three in the above list. The top three focus on small-to-medium businesses and the bottom three focus on medium-to large businesses. I think Tiki CRM/ERP should be focused to target one set or the other.

We still need to do some work on defining the boundaries between CRM and ERP as there is an ERP group. However I belive Tiki CRM will traget the first three, at least for now. I firmly belive tiki will mature into a solution which can compete with the bottom three over time (probably the next 12-18 mths), and hopefully we drag expand CRM functionality as tiki grows. 😊

(4) I think integration with other CRM/ERP/groupware applications needs to be thought through, particularly for small businesses who use standard off-the-shelf packages (i.e. Quickbooks) to manage their businesses. Tiki CRM/ERP should be able to share information with the likes of Quickbooks, MS Money, etc.

I agree, and I know [Ben Tallman](#) has created a CRM module (more Sales Force Automation) and integrated it with Quickbooks. However I do not think his code is GPL.

Saying that I think Quickbooks intergration should be part of the ERP tiki group, and this project should focus on CRM features. I am in the process of updating this page to reflect this.

(5) Another great feature is the ability for Tiki to tie itself into voicemail systems so that we could "see" our voicemails and access them through Tiki. Tiki could link itself into our cell phone or landline accounts. Some functions could be:

- calls could be logged,
- caller details could be written to the database with a 'submit' button,
- if we click on a call, our phone would ring and play the voicemail for us (eliminating the need to listen through our list of voicemails serially),
- we should be able to write comments or notes about each voicemail,
- indicate whether a voicemail was returned or not,
- assign certain voicemails (depending on caller) to an assistant if the call needs to be addressed with urgency,
- more?

I like these ideas and would like to include them as CRM functions! I think the i think you can nav a voice mail system with dftm tons, but have no idea on how to download/record voice messages from a

browser, it would be easy to save a binary blobs and add comments and notes etc!

lets think any ideas?

CRM and EMAIL perfect.

With a little rewiring of what is already in Tiki a basic CRM is attainable immediately.

These are my thoughts:

1. Streamline Database Integration for these modules in this order:

- a. user/group/category
- b. bookmarks
- c. contact information
- d. marketing production info/notes
- e. email correspondance/folder

Reason:

DB integration in to one DB table/template for bookmark/user/contact/marketing/email info will allow you to streamline data in ONE SQL entry per user/contact/company editable by MANY forms. Why have a separte DB for Bookmark and Contact? If the Bookmark will end up being the Contacts Web URL?

Every time you enter a Bookmark or Add USER....

a form is delivered that will allow you to enter:

Bookmark (company URL)

Category

Group

User (customer)

Contact Info (phone, addy, email, custom fields, "web url" is BOOKMARK)

Market/Prod (Galaxia Integration, File Gal, notes, Consultant, Newsletter)

Email (All Email related to this User/contact in it's own specefic folder)

CRM TEMPLATE:

Conglomerate above mentioned modules in to ONE FORM browsable with little tabs leading to contact info, marketing info and emails.

As follows:

Category-~~Group~~-~~User~~-Contact_Info-~~Market/Prod~~-Emails

NAVIGATION:

1. CATEGORIES : Click on one category "California"
2. GROUP : Click on a specific group "Film Studios"
3. USER : Click on specefic user/company in group : "Industrial Light and Magic"
4. CRM TEMPLATE : displays above mentioned CRM template viewing all "category,group,user", contact info, marketing info and emails related.

INSTANT BASIC TIKI CRM:

combine and refine already existing tiki modules:

1. user/group/category - preferences
2. bookmarks
3. contacts
4. webmail

