Introduction

Cisco SocialMiner Release is a social-media customer-care system that provides capture, filtering, workflow, queuing, and reporting for social media engagement teams. Internet postings captured by SocialMiner are referred to as **Social Contacts**. SocialMiner stores the Social Contacts and groups them into user-defined **Campaigns**. SocialMiner presents the Social Contacts to social media customer care personnel who can categorize and/or respond to the postings. SocialMiner also produces reporting metrics on the handling of the Social Contacts. Cisco Unified Intelligence Center can be used to present these reporting metrics.

Technology and Packaging

SocialMiner is a server software application that is packaged as a software appliance. The appliance runs as one VMWare® virtual machine containing all of the following components:

- Cisco Unified Communications Operating System (Unified OS), a Redhat Linux based Operating System
- Informix® embedded database. This database contains the SocialMiner Configuration and the SocialMiner reporting data.
- Cassandra datastore. This datastore contains the Social Contacts
- Cisco SocialMiner runtime software

The setup and administration is done through a browser-based user interface that uses OpenSocial Gadgets for the UI. SocialMiner is installed with the Apache Shindig gadget container to render the gadgets; however the SocialMiner gadgets may also be rendered in other standard OpenSocial containers such as Cisco Quad or iGoogle. All system features and setup can also be performed via REST API's.

SocialMiner supports integration with most user-generated content sites using standard RSS. SocialMiner also supports direct integrations to Twitter® and Facebook®.

Contents

What's New in Release 8.5(2)

Cisco SocialMiner Release 8.5(2) provides the following new features and enhancements:

- Notifications - You can configure notification rules that proactively notify users that new social contacts have been tagged
  - XMPP Notifications - Notification via a XMPP Instant Messaging service such as Cisco Jabber or Google Chat
  - Email Notifications - Notifications via a SMTP mail server
  - Text Messaging - Notifications to mobile devices via a SMS gateway
- Feeds
  - Push Feed - A new feed type is that allows application developers to "push" Social Contacts (work items) into the system. A sample HTML form is provided to create and submit a Social Contact. This new feed type also allows developers to submit tags with the Social Contact. When used in combination with the notifications, this feature allows application developers to create enterprise workflow solutions.
- Filters
  - Author Filter - A new filter type that allows you to filter out social contacts by author. For example, you can filter out tweets made by your own social media accounts or accounts of employees so they do not appear in your campaigns. This improves the accuracy of the reporting by eliminating the impact of your own posts.
- Cisco Twitter Reply Template Enhancements
  - Display of user picture and profile
  - Display of Tweet conversation history
  - Retweet
- Servicability and Administration
  - Scheduled Backup - SocialMiner now supports the standard Cisco Unified OS Disaster Recovery System. System backups can be done manually or scheduled for automatic backup.
  - Social Contact Throughput Gage. System administration now provides a Social Contact throughput gage that indicates the total incoming rate for the system.
  - Runtime status for the new Email and XMPP Notification services.
- General User Interface Enhancements
  - Campaign selection can now be made from the Campaign Results UI (You no longer need to click on settings to change the campaign.)
  - Sorting and searching in the list views of all the configuration gadgets
  - Display of username - The user interface will show the username of currently logged in user at all times

Installation and Setup

Upgrading SocialMiner to Release 8.5(2)

SocialMiner Release 8.5(2) is an upgrade to release 8.5(1). Release 8.5(1) must be installed prior to upgrading to release 8.5(2).

Basic Upgrade Steps

1. Download the 8.5(2) Release from Cisco.com and place the file on an FTP or SFTP server or burn the ISO file to DVD.
2. SSH to your SocialMiner system and log in with the platform administration account.
3. Using the Command Line Interface (CLI), run the command `utils system upgrade initiate`
4. Follow the instructions provided by the `utils system upgrade initiate` command. An example of executing the command follows:

```
admin:utils system upgrade initiate

Warning: Do not close this window without first canceling the upgrade.

Source:

 1) Remote Filesystem via SFTP
 2) Remote Filesystem via FTP
 3) Local DVD/CD
 q) quit

 Please select an option (1 - 3 or "q" ): 2
Directory [q]: /FTP/PATH/TO/UPGRADE/IOS
Server [q]: FTP_HOSTNAME
User Name [q]: FTP_USERNAME
Password: ********
Checking for valid upgrades.  Please wait...

Available options and upgrades in "/FTP/PATH/TO/UPGRADE/IOS":

 1) UCSInstall_CCP_8_5_1_UCOS_8.5.2.10000-XX.sgn.iso
 q) quit

Please select an option (1 - 1 or "q" ): 1
Accessing the file.  Please wait...
Downloaded XXXX MB.
Checksumming the file...
Downloaded XXXX MB.
A system reboot is required when the upgrade process completes or is canceled.  This will ensure s

     Downloaded: UCSInstall_CCP_8_5_1_UCOS_8.5.2.10000-X.sgn.iso
   File version: 8.5.2.10000-X
  File checksum: CHECKSUM

Automatically switch versions if the upgrade is successful (yes/no): yes

Start installation (yes/no): yes
The upgrade log is install_log_2011-03-10.09.52.58.log
Upgrading the system.  Please wait...
03/10/2011 09:53:00 file_list.sh|Starting file_list.sh|<LVL::Info>
...
  [Many lines of upgrade scripts running]
...
```

```
03/10/2011 11:41:31 upgrade_install.sh|Upgrade Complete -- (0)|<LVL::Info>

Successfully installed UCSInstall_CCP_8_5_1_UCOS_8.5.2.10000-XX.sgn.iso

The system upgrade was successful.  A switch version request has been submitted.
This can take a long time depending on the platform and database size.
Please continue to monitor the switchover process from the Cisco Unified Communications OS Platfor
Please verify the system restarts and the correct version is active.
```

The system reboots after the upgrade is complete.

Using SocialMiner

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SocialMiner Sign In Form
SocialMiner is accessible by using a web browser to access to the root of the web server: (where <servername> is the Name or IP address of the server)

```
http://<servername>/
```

See SocialMiner Browsers for information on supported browsers.

A sign in page appears. The first time you sign in, you must sign in with the application username and password that you created during install. After you sign in, you are presented with the results page. At the top of the page are links for Configuration, Results, and Administration.

Configuration

Feeds

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Feed Configuration Gadget

A **Feed** is a configured source for capturing Social Contacts. SocialMiner supports the following types of Feeds:

- RSS and Authenticated RSS
- Facebook Fan Page
- Twitter Stream
- Twitter Account
- Push Feed

Each Feed type has unique settings. The following sections describe how to set up each Feed type in detail.

Note on de-duplication:

SocialMiner automatically removes duplicate social contacts using a process called de-duplication. For example, if a user configures several *overlapping* feeds that capture the same result, then SocialMiner does not capture the same social contact twice. The de-duplication functionality relies on the unique URL of the post. For example, each Tweet or blog has a unique URL. Before SocialMiner creates a new Social Contact in the datastore, it first verifies that the URL of that Social Contact is not already in the datastore.

Proxy Setup

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Proxy Settings

If your server is behind a firewall, then you may need to enable SocialMiner to use a proxy to reach the internet. Consult your Network Administrator for the proxy name and port. The same proxy is used across all feeds.

The link for proxy settings is available in the bottom-left of the feed gadget.

To configure the proxy, click the Proxy Configuration link, and edit the following field. Click **Save** when finished.

- **Enable Proxy** (checkbox) - when checked, the feeds are accessed through the provided proxy server.
- **Hostname** - The IP address or hostname of the proxy server.
- **Port** - The port for the proxy server.
- **Exclusion Patterns** - You can add and remove hostname or IP addresses for servers not requiring a proxy.
    - ♦ To add an exclusion, type the exclusion into the text box and click Add.
    - ♦ To remove an exclusion, click the red X to the right of the exclusion.
    - ♦ Wildcards are supported, for example *.cisco.com excludes all servers with a cisco.com hostname and 10.86.* excludes all IP addresses starting with 10.86
- Click Save to save the settings and return to the Feed gadget page.

Notes:

- Proxy changes may take up to 30 seconds to take effect.
- The exclusion list is limited to 255 total characters. There is an additional character per item in the list that acts as a separator.

RSS and Authenticated RSS Feed Types

There are many sites that support RSS and therefore this is one of the simplest and most widely available means for SocialMiner to capture Social Contacts.

SocialMiner Supports the following RSS Feed standards:

- RSS 1.0
- RSS 2.0

- ATOM 1.0

The Authenticated RSS feed type is similar to RSS however it supports <u>basic authentication</u>. This username and password are encrypted and stored in the SocialMiner configuration database.

Configuring an RSS or Authenticated RSS Feed

- View a <u>video</u> about adding RSS Feeds.
- View a <u>video</u> about adding Authenticated RSS Feeds.

To configure a feed, access the Feed gadget, click **Add**, select RSS or Authenticated RSS feed type, and enter the following fields. Click **Save** to save the feed.

- Name
- Description
- URL - this must be a valid RSS Feed
- Username - Username for the feed. Required for Authenticated RSS feed. Not Applicable to RSS Feed.
- Password - Password for the feed. Optional for the Authenticated RSS feed. Not Applicable to RSS Feed.
- Polling Interval - Number of minutes to wait between refreshing this feed.
- Minimum age - The number of hours old for a post before it is included as a result. This allows you to exclude recent posts.

Changing the Polling Interval

The polling interval controls how often the SocialMiner system requests the feed. A shorter polling interval provides more frequent updates but creates more load on the SocialMiner server and on the sites publishing the feed. Some sites may have recommendations or restrictions on frequent polling and could block an application that polls too frequently.

5 minutes is the default polling interval for feeds.

Minimum Age

The minimum age setting filters out recent posts. This feature was implemented for forum sites that publish feeds of "unanswered posts". You can configure the "unanswered posts" feed URL in SocialMiner and set a long Minimum Age, for example24 hours, and the system only capture posts that are both unanswered (based on the RSS feed) and older then 24 hours (based on the Minimum Age). This offers a simple way to implement the business strategy of light touch forum moderation.

Paging

SocialMiner does not support the reading of multiple "pages" from an RSS feed. SocialMiner captures the posts that are presented on the first, or main, page returned by a site. This limitation prevents the system from capturing posts prior to the current page of results, but allows SocialMiner to capture all results going forward as long as the site generates a page or less of results in each interval. Note: some sites allow the URL to specify the number of results on a page in the URL. This allows for some tuning of the polling by setting the number of results to return in the page along with the polling interval to optimize performance of the system and reduce load on the site while ensuring all posts are captured.

RSS and Authenticated RSS Feed Types   8

Facebook Fan Page Feed Type

The Facebook Fan Page Feed type captures the all of the wall posts and comments on wall posts that are posted to a Fan Page. You can configure a new Facebook Fan Page type Feed on SocialMiner by clicking "Add" on the Feed Configuration Gadget and choosing the Facebook Fan Page Feed type. Fan Pages are public and therefore no username or password is required to capture the postings on a Facebook Fan Page. This means it's possible to capture postings on Fan Pages operated by a company as well as Fan Pages set up by independent parties or even competitors.

Facebook wall posts and comments are captured by SocialMiner and rendered in a time-sorted stream. This rendering differs from the standard Fan Page layout; but the goal of this layout is to ensure that 100% of the wall posts and comments are noticed by the consumer of the results. Its more difficult to achieve this goal when viewing the wall posts and comments directly on Facebook as they are grouped by wall post instead of time-sorted.

When displayed in SocialMiner, Facebook wall posts and comments are differentiated by the format of the title:

- *Facebook post from [first name] [last name]*

- *Facebook comment from [first name] [last name] for "[post]"*

The link in the title provides a direct link to the wall post on Facebook. Note: Facebook doesn't anchor comments, therefore the link takes the browser to the wall posts to which the comment refers instead of directly to the comment.

Configuring a Facebook Fan Page Feed

SocialMiner requires a clean Fan Page "Vanity URL". You will notice that Facebook appends certain parameters to a URL depending on how you navigated to the URL. For example, when finding the Cisco Contact Center Fan Page through Facebook search, the following URL: http://www.facebook.com/#!/CiscoCC?ref=ts is displayed. However the direct URL for the fan page is http://www.facebook.com/CiscoCC. This base URL is what Facebook refers to as the "Vanity URL". This name "CiscoCC" was registered by the administrator of this page. Note: there may be some Fan Pages that have a number instead of a text name (this is not common). These are pages that have not yet registered a Vanity URL. In this case, the URL with the number satisfies the requirements of SocialMiner configuration.

View a [hhttp://www.youtube.com/watch?v=xHCjtcHbNws&hd=1 video] about configuring s Facebook Fan Page Feed.

To configure a Facebook Fan Page feed, access the Feed gadget, click **Add**, select Facebook Fan Page feed type, and enter the following fields. Click **Save** to save the feed.

- Name
- Description
- URL - this must be a valid Facebook Fan page Note: The URL must start with `http://www.facebook.com`
- Polling Interval - Number of minutes to wait between refreshing this feed.
- Minimum age - The number of hours old for a post before it is included as a result. This allows you to exclude recent posts. Not available for Twitter Stream.
- Reply template - The reply template to be used for replying to social contacts obtained from this feed.

Twitter Stream Feed Type

Important: Only one Twitter Stream per SocialMiner server is supported. Your server IP will be blacklisted by Twitter if you configure multiple Twitter Stream feeds. If your IP is blacklisted by Twitter, then you must delete all Twitter Stream feeds and wait approximately 2 hours to remove your IP from the Twitter blacklist. If you require multiple Twitter Streams then you must discuss this need with Twitter or deploy two SocialMiner systems. If you have more than one SocialMiner system going through a single proxy, or you are using some other software system that uses Twitter Streams through that same proxy, then your Proxy will be blacklisted by Twitter.

The Twitter Stream feed type uses the Twitter Stream API or what is sometimes referred to as the "firehose" interface on Twitter to provide realtime access to Tweets. This interface provides different capabilities than the Search API. A benefit of this Twitter Stream is the speed and efficiency of capturing greater tweet volume at faster speeds. There is no polling interval since the interface pushes the Tweets to the SocialMiner server. The Twitter Stream API also provides more meta-data associated with the tweets then the Search API. For example, the Twitter Stream API provides the indication that a Tweet is in-reply-too another Tweet (this is not available via RSS).

A downside of the Twitter stream API is that it provides less searching/filtering capability then the search API. The interface supports keyword searching but for example it doesn't support exclusion of keywords. This limited searching capability results in more on-board filtering by the SocialMiner server. Also, the Twitter Stream reply doesn't provide historical results and therefore downtime in the SocialMiner system could result in missed Tweets.

The Twitter Stream API requires authentication. A Twitter account username and password is required to configure this type of feed. **Note: Twitter only allows one Twitter Stream connection per account**. If there are unrelated Twitter keyword searches required then you must configure multiple Twitter accounts, since adding unrelated keywords to one stream makes SocialMiner Campaign and Filter configuration difficult.

When Tweets are captured by SocialMiner using the Twitter Stream, the heading in the Social Contact indicates the type of Tweet. For example, the heading indicates if the Social Contact is a "Tweet" or "ReTweet" or if it is "in-reply-too". This type of context is not available when capturing Tweets via RSS.

Configuring a Twitter Stream Feed Type

View a video about configuring a Twitter Stream Feed.

Access the Feed gadget, click **Add**, select the Twitter Stream feed type, and enter following fields. Click **Save** to save the feed.

- Name
- Description
- Search Keywords - A comma separated listed of search words to search on. Up to 200 keywords can be defined for a total limit of 2000 bytes.
  - Each keyword must be between 1-60 bytes.
  - At least one keyword must be defined.
  - Commas in the keyword search stand for OR. Spaces in the keyword search stand for AND. You cannot search for exact strings. For example, if you enter "Cisco Telepresence" then the social contact returned contains Cisco and Telepresence in them, but not necessarily the phrase Cisco Telepresence.
  - Do Not Use a Space after a Comma. If you use a space after a comma then only the first keyword is matched against.

- Username - A valid Twitter username.
- Password - Password for the Twitter username.
- Reply template - The reply template to be used for replying to social contacts obtained from this feed.

Twitter Account Feed Type

The Twitter Account Feed Type uses the Twitter REST API. This Feed type captures all of the Mentions and Direct Messages for a Twitter account. Twitter Account Feeds include all of the tweets that include "@USERNAME" as well as all of the Direct Messages to the @USERNAME account. This Feed type also captures Tweet type, for example ReTweet, in-reply-too, etc.

The Twitter Account feed is configured using OAuth. During the feed configuration, SocialMiner redirects the user to Twitter to validate the Twitter account. This provides a security benefit since using OAuth avoids the storage of the user's Twitter account information on the SocialMiner server.

If the user is already logged into Twitter with the same username as specified in the feed configuration, then they are simply prompted to allow access to Twitter for the SocialMiner server. If the user is not logged in (or logged into a different account) then they must sign in to the same account specified in the feed configuration. Credentials are securely passed to Twitter directly instead of going through SocialMiner. Based on their authorization, Twitter provides SocialMiner with a key to enable access to their account. From this point forward, SocialMiner will be able to use/access the Twitter account.

Note: You cannot create more than one Twitter Account Feed with the same Twitter username on a single SocialMiner server. Only one Twitter Account Feed type per Twitter user per SocialMiner server is allowed.

Note: Twitter provides a list of applications (connections) that have been granted access to a Twitter account. A Twitter user can revoke access at any time. See http://twitter.com/settings/connections.

Twitter Account Feed Configuration

View a video about configuring a Twitter Account Feed.

Access the Feed Gadget, click **Add**, select the Twitter Account feed type, and enter or following fields, then click **Save** to save the feed.

- Name
- Description
- Username - A valid Twitter username.
- Password - Password for the Twitter username.
- Polling Interval - Number of minutes to wait between refreshing this feed.
- Reply template - The reply template to be used for replying to social contacts obtained from this feed.

Note: After clicking Save you are redirected to the twitter authentication service, which allows you to approve the use of this application with your Twitter account. Follow the directions on the screen to authorize this application to access the Twitter account.

Push Feed Type

The push feed type allows you to "push" social contacts directly to SocialMiner through HTTP GET requests.

Using the Feed gadget, create a new feed and select the **Push** feed type. Enter or edit the following fields, then click Save to save the feed.
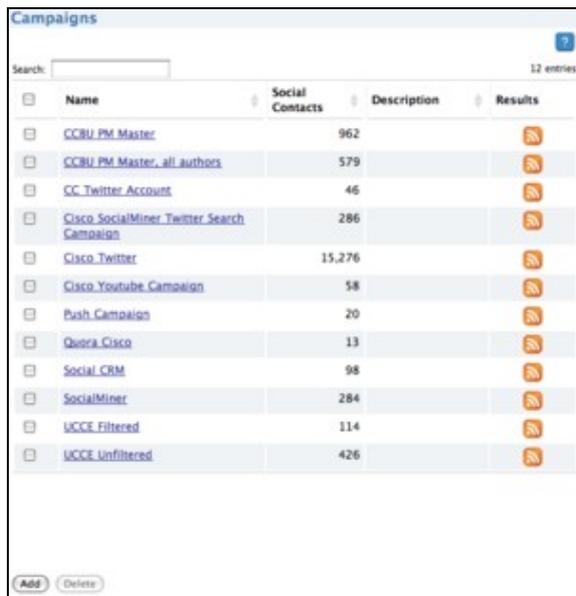
- Name
- Description
- Reply template - The reply template to be used for replying to social contacts obtained from this feed.

Sample code is provided only after you save the feed. To see the sample code save the Push feed and then click it from the Feed Gadget to edit it. The sample code is a working HTML code that displays the form fields you need to make the GET request to your feed. You could have multiple independent Push feeds on one SocialMiner system. Form submissions still require authentication against SocialMiner. A URL to the new social contact is returned after the form is submitted.

The template allows you to specify the Title, Author, and Description (body) of the Social Contact, as well as any SocialMiner tags that you want applied to that Social Contact. If the specified tags are associated with notification rules, the notifications will trigger immediately when the social contact is submitted. If the Push feed is to be automatically called by an application you should be careful not to overload SocialMiner and your notification networks (email and XMPP).

The Push Feed must be associated with a campaign in order to activate therefore you should create a test campaign prior to testing your Push Feed.

Campaigns

Campaign Configuration Gadget

The purpose of a **Campaign** is to group Social Contacts for handling by the social media customer care team. Social Contacts are included in a Campaign by configuring one or more feeds to be part of the Campaign. This is done through the Campaign Configuration gadget. When a feed is configured to be part of a Campaign, all social contacts in that feed are included in the Campaign. As new social contacts arrive on that feed, they are immediately added to the Campaign. Social Contacts cannot be removed from a Campaign, once included they remain in the campaign until they are purged or the Campaign is deleted.

Optionally, Campaigns may also have **Filters**. Filters are used to narrow the set of social contacts that are

added to the campaign. More information on Filters can be found in the Filter Configuration section of this guide.

View a <u>video</u> about Campaigns, Campaign usage, and Campaign configuration.

Campaign List

The Campaign Configuration Gadget defaults to a list of Campaigns. This list is empty for a system with no campaigns. The list shows the name of the campaign, the number of social contacts in the campaign, and description of the campaign, and a RSS feed icon which is a link to the RSS feed *from* SocialMiner. The RSS feed allows someone to capture all the social contacts in a campaign using a RSS reader.

This list updates in real time, for example if there are new campaigns added to the system (perhaps by another user) then the new campaigns appear in the list. If there are new social contacts added to a campaign then the Social Contact count increments.

Add Campaign

You can add campaign by clicking the "Add" button at the bottom of the Campaign Configuration gadget. The gadget displays a list of Feeds "Available" with arrows to move the Feeds into "selected" which includes them in the campaign. At least one Feed should be moved to selected prior to pressing "save" in order to add social contacts to a campaign. Note: once save is pressed, the Social Contacts for the configured feeds are added to the campaign. Once added, Social Contacts cannot be removed from the campaign except via a purge. If a Feed is removed from a campaign, new Social Contacts captured by that feed are no longer added to the campaign but the Social Contacts previously included are not removed. Social Contacts can only be removed from a campaign when they are purged from the system.

Note: if a Feed is accidentally added to a campaign, and the SC's MUST be immediately removed from that campaign then the only recourse is to delete the entire campaign and recreate it.

A Feed may be added to multiple campaigns but does not duplicate the Social Contacts in the datastore. The Social Contacts for that feed are simply counted in both campaigns.

The Campaign Configuration gadget also allows for assignment of filters to the campaign. Filter functionality is described in the Filters section of this guide.

Filters

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Filter Configuration Gadget

The purpose of a Filter is to narrow the set of Social Contacts that appear in a campaign, allowing the social media customer care team to focus on the most actionable Social Contacts. The filters exclude social contacts as the feeds attempt to put new Social Contacts into a Campaign.

Filters are are created with the Filter Configuration gadget and applied to Campaigns in the Campaign Configuration Gadget. You can apply Filters to a Campaign in the same way you add Feeds.

Note: Filters are only run against Social Contacts as they enter a campaign. Filters do not run retroactively against Social Contacts that are already in a campaign.

Multiple filters may be applied to one campaign creating opportunities to layer filtering strategies to fine tune results.

SocialMiner supports two types of filters:

- Bayesian - A trainable filter to omit social contacts from results based on how the filter is trained.
- Author - A filter that omits specified authors from results.

Bayesian Filter

View a video about using Bayesian Filters.

The Bayesian filter is a trainable filtering technology based on a Bayesian statistical probability model. The? Bayesian filters are not pre-programed or "configured with business rules". They are trained by the users who process social contacts. When training a Bayesian Filter the user is given the option to "train in" or "train out" each social contact. After a sufficient amount of training, the filter begins to exclude unwanted Social Contacts from a campaign.

The Bayesian filters can be used to exclude Social Contacts for many different reasons. They can be used to take a broad keyword search and narrow the results down to the posts related to a specific brand. For example, a search for "Flip" could return posts about footwear and gymnastics while the purpose of the campaign may be to capture posts about Flip brand video recorders. A Bayesian Filter can be trained to exclude the Social Contacts about footwear or gymnastics. The training includes the complete text of the post, not just certain keywords and therefore offers much more sophisticated filtering capability then a

keyword exclusion approach to filtering. A Filter can be trained to look for Social Contacts with negative sentiment (or positive sentiment), focusing the work of a customer support or marketing team. Filters can also be trained to look for certain languages.
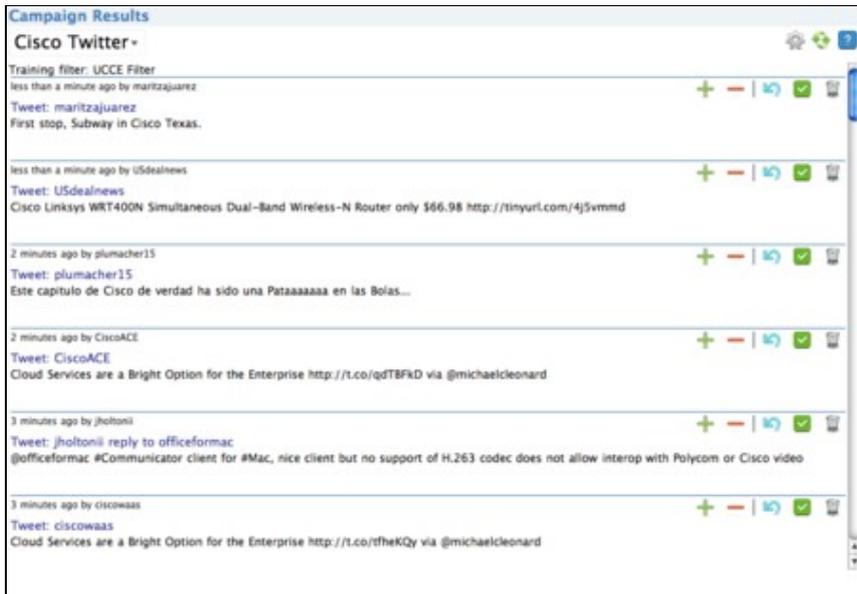
.
Campaign Results Gadget in Training Mode

In order to successfully use a Bayesian filter, you must train it. The Filter training is performed through the Campaign Results Gadget. You can train a filter using any campaign. The training does not impact the Campaign unless you configure the filter to apply to that Campaign. Choose a Campaign with some Social Contacts, and from the Campaign Results settings you can select the filter you want to train. When you click save you are in "training mode". The name of the filter you've selected at the top of the Gadget is displayed and a "+" and "-" for each Social Contact appears. By clicking the up arrow you "Train In" the Social Contact indicating that this is the type of contact you would like the Filter to keep in the Campaign. By clicking the down arrow you "Train Out" the Social Contact indicating that this is the type of contact you would like the filter to reject.

Author Filter

View a video about using Author Filters.

The Author filter allows you to exclude specific social contacts authors. Social contacts posted by an author identified in an Author filter do not enter a campaign. For example, you may want to filter out your own posts or posts from team members. Configuring an Author filter keeps your posts from showing up in your campaign and therefore reduces the number of posts you need to handle. Also, it improves the accuracy of the reporting metrics by excluding your posts.

To create a filter, use the Filter Configuration Gadget. Bayesian filters are created by selecting Bayesian as the type after you add a new filter and providing a name and description. You must train Bayesian filters. Author filters are created by selecting Author as the type and by providing a name, description, and one or more authors.

Campaign Results

.
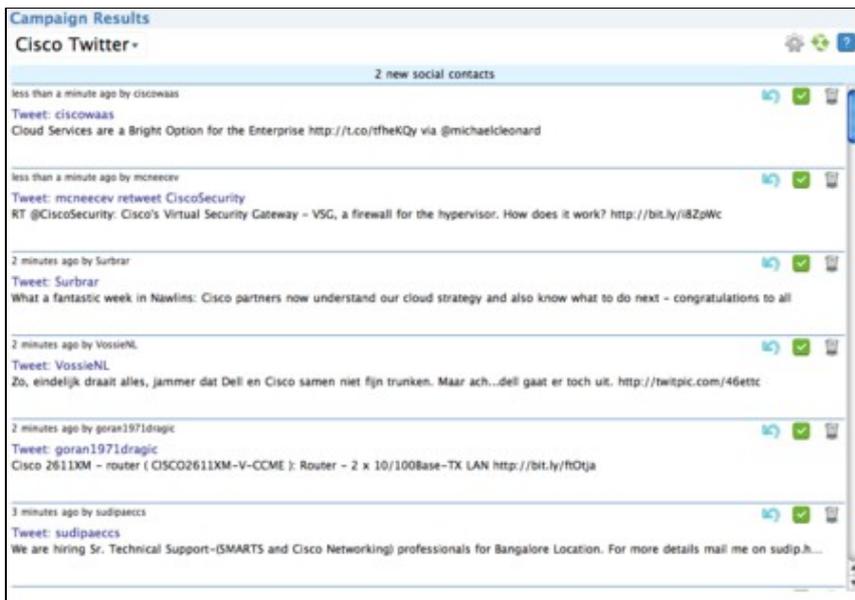
Campaign Results Gadget

The Campaign Results gadget provides a dynamic user interface for viewing and responding to Social Contacts. The first time the Campaign Results gadget is rendered, the gadget defaults to the settings page. You must select a Campaign and choose "OK". The settings for this gadget are stored in a browser cookie.

The Campaign Results gadget is dynamic and therefore you may occasionally see a bar appear at the top indicating that there is a one or more new social contacts in the campaign. You can click on this message to refresh the results, or click the refresh icon on the upper-right of the gadget.

You select which campaign results to view by selecting the campaign from the drop-down menu on the upper-left of the gadget. You can update the settings for the gadget, for example, which states or tags are displayed, by clicking on the settings icon on the upper-right of the gadget.

Handling Social Contacts

When Social Contacts are captured by SocialMiner, they are initially in the "unread" state. From the Campaign Results gadget, the user can change the state of the Social Contacts at any time by pressing the Social Contact state control buttons.

There are four Social Contact States in SocialMiner.

- Unread (initial state)
- Reserved
- Handled
- Discarded

A Social Contact state can be changed by any user at any time by pressing one of the Social Contact state buttons. The "Reply / Reserve" button changes the Social Contact to the Reserved state. The "Handle" button changes the Social Contact to the Handled state. The "Discard" button changes the Social Contact to the Discarded state. The current state of the Social Contact will appear at the top of the social contact along with the name of the user that set the state (unless the Social Contact is "unread", in which case it will be blank).
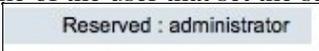
The Social Contact state is universal across the SocialMiner system. For example, if one user reserves a Social Contact, then the Social Contact appears as reserved in the UI of all other users. Note: this is the case even if the Social Contact appears in multiple campaigns.

Depending on the last refresh, it is possible that a user may try to alter the state of a Social Contact that has already been changed by another user. The SocialMiner system prevents this by alerting the user that they must refresh before attempting to change the state of the Social Contact.

By changing the settings of the Campaign Results gadget you can show or hide Social Contacts by state. The default setup is to only show all Social Contacts. The selection of which states to show is controlled by Campaign Results gadget settings. These settings are all specific to the user, therefore changes to these settings do not change how others view the campaign.

Note: the hidden Social Contacts are only hidden in the Campaign Results gadget view, they are not deleted or removed from the campaign. If you accidentally Discarded a Social Contact (and it disappears from view) you can easily retrieve it by changing the gadget settings to show Discarded Social Contacts and clicking again on the Discarded button for that Social Contact to toggle it back to Unread.

If you want to review all of the Handled Social Contacts for a Campaign, you can easily do this by selecting a campaign and only the Handled state.

View a video about handling social contacts.

Replying to Social Contacts
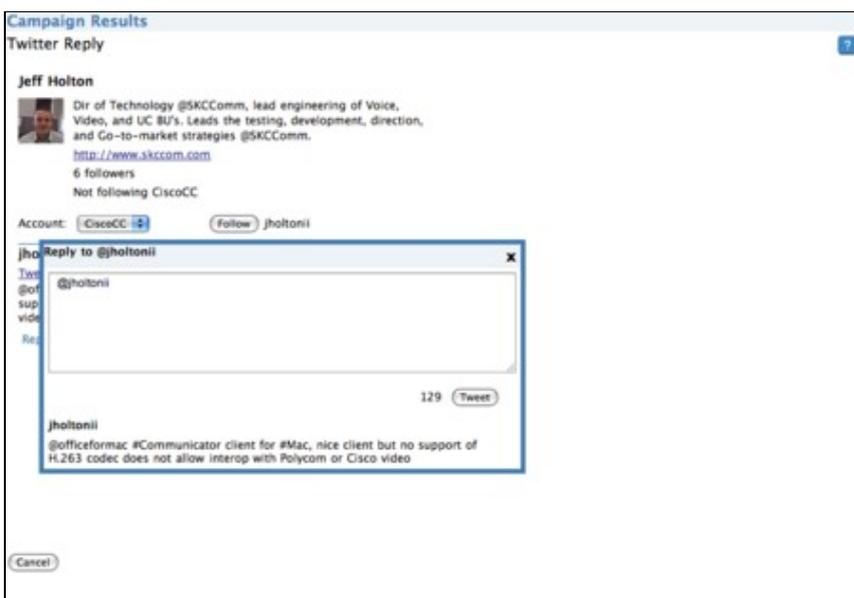
Cisco Twitter Reply Template
If a Reply Template is configured, and the social contact is from Twitter, then you can reply to the Tweet by clicking the "Reply / Reserve" button on the Social Contact.

SocialMiner provides the ability to reply to a Tweet. You can either direct message the author of the Tweet or create an "@" reply that is viewable to everyone on Twitter.

The default reply template also allows you to Follow the recipient of the message if you are not currently following them.

To reply to a tweet:

1. Select a Twitter Account Social Contact. Click the Reply/Reserve (Reserved Icon) button. The Twitter Account Reply form appears.
2. The reply form is customizable. The instructions below pertain to the default reply template. If your administrator has provided a custom reply template then the steps for replying may be different. The default reply template lists the Social Contact and provides the following fields to reply:
    1. Account: Select the Twitter Account from which you are replying. All Twitter Accounts configured on this system appear in the pull-down menu.
    2. Once the account is selected, the system checks the Follow status of the intended recipient. If the account is not already following the recipient, then you can click Follow to begin following.
    3. For your convenience, the conversation history of the social contact is listed below the selected social contact.
    4. Select the type of reply, either Direct Message, Retweet, or Reply. A pop-up text box appears where you can enter your message. Note: You can only direct message a twitter user if the intended recipient is following you. Replies and Retweets are posted to the timeline of the twitter account selected above. A direct message is sent directly to the poster of the tweet.
    5. Enter your reply in the pop-up text box. Text input is limited to 140 characters. The current character count is listed at the upper right of the text box.
3. Click Send to send the Tweet.

Tags

When you hover over a Social Contact a text box and a Tag button is displayed. To enter a tag, click the text box, type the tag and hit enter or click the **Tag** button. You can enter two tags at once by using a comma. The tags are displayed to all users who view that Social Contact.

Note: Social Contacts are not duplicated in SocialMiner even when they appear in multiple campaigns. If a user is viewing one campaign and tags a social contact, then the tag appears to users viewing that Social Contact from another Campaign.

SocialMiner also has a suggested tag feature where it suggests the five most common/recently used tags for the selected campaign. These suggestions provide one-click tagging for commonly used tags. The suggestions are specific to the campaign, not the entire SocialMiner system. The suggestions are only updated on a refresh. For example, if you are first viewing a new campaign in the Campaign Results gadget you do not see any suggestions. Enter a few tags, and then click the refresh button. Tags that you entered as suggestions for other social contacts appear, allowing you to tag those social contacts by clicking the suggested tags.

The SocialMiner Campaign Results can be viewed by tag so that the results only display a selected subset of Social Contacts, based on the selected tags. You can click on the gadget settings (as if selecting a different campaign), check the show tags button, and select which tags you would like to see in the results. Click OK and the Campaign Results are narrowed to only show the Social Contacts with the selected tags.

View a <u>video</u> about using tags.

Administration

The administration functions of SocialMiner are divided between two gadgets; System Administration and Reply Templates.

System Administration
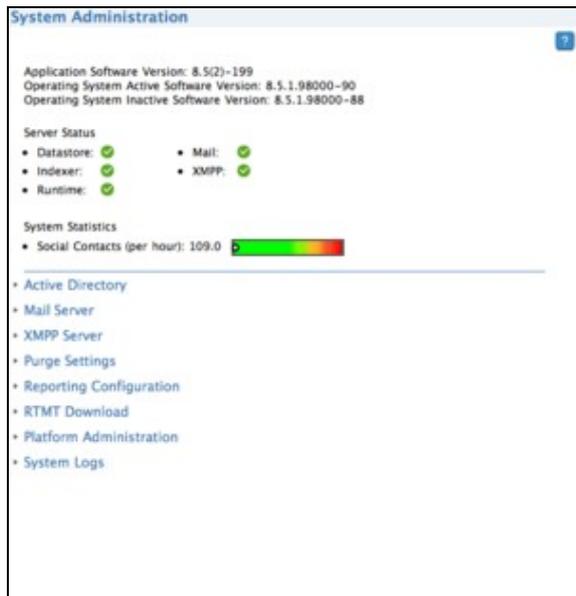
System Administration

The System Administration gadget provides the following system configuration and serviceability tools:

- Active Directory
- Mail Server
- XMPP Server
- Purge Settings
- Reporting Configuration
- RTMT Download Links
- Platform Administration
- System Logs

Also, the Application Software Version (version of SocialMiner) and Operating System Active Software Version (version of Cisco Unified OS) are listed at the top of the page.

Server status for the three main services; Datastore, Indexer, and Runtime are provided under version information. All statuses must be "Running" for proper operation of the system. Connection status of the Mail Server and XMPP Server are also displayed if these servers are configured and enabled.

Additionally, a System Statistics section provides a meter showing the number of incoming social contacts

per hour. This meter enables you to determine if the incoming rate of contacts is nearing the limit allowed by the server. If the incoming rate is approaching the limit then you should modify your feeds to reduce the amount of incoming social contacts.

Active Directory

SocialMiner uses Active Directory to manage and administrate user access to the system. All users, with the exception of the Administration and Reporting users, must be configured on a Microsoft Active Directory server to be able to access SocialMiner.

The Active Directory connection permits users configured on the AD to access SocialMiner. You can configure the connection to allow all users on the AD to access SocialMiner, or to allow only a group of users access. If there are multiple independent groups and they all require isolated security/permissions then they should each deploy their own SocialMiner system.

Note: If Twitter Account feeds are configured on the system, all users are able to see Direct Messages to the configured Twitter Accounts and all users can post from these accounts. SocialMiner tracks which users make which posts, but some companies may want to restrict who can make posts, and they can implement this approach by configuring SocialMiner to authenticate with a specific role. If SocialMiner is authenticated with a specific Active Directory role, then only those Active Directory users with that role can use SocialMiner.

To configure Active Directory, open the Administration gadget and click Edit. Enter or modify the following fields. Click Save when finished.

- **Enabled**: (checkbox) When checked, the Active Directory connection is active. If not checked, then only the administrator can log into SocialMiner.
- **Host**: Provide the Host name or IP address and Port of the Active Directory server.
- **Port**: Provide the port for Active Directory. The default Active Directory port is 3268. If using SSL the default port is 3269.
- **Use SSL**: (checkbox). Check to use SSL. Note you must also exchange security certificates with the AD server before SSL can work.
- **Manager Distinguished Name**: Enter the Manager Distinguished Name used to login to the Active Directory server, for example, on a default installation of Microsoft AD, the name is :*CN=Administrator, CN=users, DC=MYSERVER, DC=COM*. Replace MYSERVER and COM with your respective hostname.
- **Manager Password**: The password for the AD Manager account.
- **Role Name**: (optional) The Active Directory role or Active Directory group of users who are allowed to access SocialMiner. If this setting is blank or * then all users in Active Directory are allowed access to SocialMiner.

Exchanging Security Certificates with AD

To enable SSL for the Active Directory connection you must first exchange security certificates between the two servers. Enabling SSL is optional, but if you do not enable SSL then username and password information is not transmitted securely between SocialMiner and the Microsoft AD server.

To exchange security certificates:

On the Active Directory server:

1. Verify that the Active Directory has the Certificate Services service installed.

2. Select **All Programs > Administrative Tools > Certificate Authority**.
3. Expand the domain node and select Issued Certificates.
4. Double click the certificate to open it
5. Open the Details tab and click Copy to file.
6. An Export wizard appears. In the wizard select DER encoded binary.
7. Using the wizard to select a location to save the file.
8. Click Finish.

On the SocialMiner Server:

1. Open the Cisco Unified Operating System Administration page. The link is available from the gadget.
2. Select Security > Certificate Management.
3. Click Upload Certificate.
4. For the Certificate Name, select tomcat-trust.
5. In the Upload File field, select the file to upload by clicking Browse... Select the certificate file you saved from the Active Directory server.
6. Click Upload File.
7. Restart the Cisco Tomcat service. Using the CLI, run the command utils service restart Cisco Tomcat

Adding Users

The Administration user (configured at install) and Reporting user accounts are the only accounts explicitly configured on SocialMiner. The social media customer care representatives are configured in Microsoft Active Directory. As these users sign into SocialMiner, successfully authenticate against Active Directory, and begin to take actions on the system, their actions are associated with their Active Directory User ID.

Mail Server

Mail Server settings allow you to configure the SMTP information for a Mail Server. You must configure a mail server if you intend to use the email notification feature.

To configure the Mail Server, click Edit at the bottom of the Mail Server setting and edit the following:

- Enabled: Check to enable the Mail Server connection
- Mail Server Host: The IP address or Hostname of the Mail Server.
- Mail Server Port: The port for the mail server. This is set for port 25 by default.
- From Email Address: The email address from which emails are sent.
- Use Authentication: Check to user SMTP authentication to connect to this mail server. The following two fields are editable only when Use Authentication is checked.
- User Name: If User Authentication is checked, then this user name is used to sign in.
- Password: The password for the above User Name.

Click **Save** to save your changes.

XMPP Server

XMPP Server settings allow you to configure an XMPP Server so SocialMiner can utilize Instant Messaging (IM) notifications. You must configure an XMPP server if you intend to use the IM notification feature.

To configure the Mail Server, click Edit at the bottom of the XMPP Server setting and edit the following:

- Enabled: Check to enable the XMPP Server connection

- XMPP Service Lookup: Check to enable XMPP Service Lookup. When enabled, the User Name's domain is used to connect to the correct XMPP Server.
- XMPP Server Host: The IP address or Hostname of the XMPP Server. Not applicable is XMPP Service Lookup is checked.
- XMPP Server Port: The port for the mail server. This is set for port 5222 by default. Not applicable if XMPP Service Lookup is checked.
- User Name: The user name is used to sign in to the XMPP Server.
- Password: The password for the above User Name.

Click **Save** to save your changes.

Purge Settings

Datastore purges occur on a continuous basis (every hour) based on age of the social contacts and disk usage. Database purges are required to remove old data from the datastore so that the disk does not fill up.

Important! Purge settings take effect as soon as you click save. If any of the criteria are met, such as Emergency purge when disk usage exceeds (%), then the purge starts immediately.

To configure purge settings, click Edit at the bottom of the purge settings tool and edit the following:

DataStore Purge Settings:

- Purge Social Contacts older than (days): Social contacts older than this number of days are purged. Valid values are 1 - 30.
    Important!: SocialMiner will not retrieve Social Contacts older than this setting.
- Emergency purge when disk usage exceeds (%): Begin an emergency purge if disk usage exceeds this value. Valid values are 60 - 90. When an emergency purge executes, Social Contacts older than the days specified above are removed. If disk usage is still above the setting for this field then the purge continues removing social contacts (one day at a time) until the disk usage is below the threshold for emergency purge.

Reporting Purge Settings:

- Purge start time (HH:mm 24 hour format): The time, in 24 hour format (00:00 to 23:59), that the purge starts based on the local server time. By default this is set to 01:00 (1am) local server time.
- Purge Social Contacts older than (days): Reporting records for social contacts older than this number of days are purged when the reporting purge starts.

Click **Save** to save your changes.

Reporting Configuration

Reporting configuration allows you to set or change the informix password for the reporting user. You cannot change the reporting user's username. It is set to reportinguser.

The reporting user is used by CUIC and third-party applications to access the reporting database. Details on the tables in the reporting database are available in the SocialMiner Developer's Guide.

To set or change the password for the reporting user, enter a new password in each of the password fields and click Save.

This section also displays the Reporting Server and Database information. This information is required for third-party connection to the database. The details include:

- Reporting Host - The hostname to use when connecting to the reporting database.
- Reporting Port - The port for the reporting database server.
- Reporting Server - The Informix server name for the reporting database.
- Reporting Database - The informix database name for reporting.
- Database Type - the type of database (Informix).'
- Username - The reporting username is fixed at 'reportinguser' and cannot be changed.
- Password/Re-enter New Password - The password for the reporting user.

RTMT Download Links

Links are provided to download the Cisco Unified Real Time Monitoring Tool (RTMT). SocialMiner uses the same RTMT as the one used for Cisco Unified Communications Manager.

Details on Installing and Configuring RTMT can be found on the Cisco web site: Installing and Configuring Cisco Unified RTMT

Platform Administration

Platform Administration provides links to the following interfaces of Cisco Unified OS:

- *Cisco Unified Operating System Administration*
- *Cisco Unified Serviceability*
- *Disaster Recovery System*

SocialMiner uses the same platform administration tools as Cisco Unified Communications Manager. Detailed online help is available in the tools.

System Logs

The System Logs tool provides links to access the **Log Directory** of SocialMiner or to perform a **System Health Snapshot**.

Important! Do not click the System Health Snapshot link unless directed to by Cisco TAC. Accessing this link forces the system to dump all system parameters into a large XML file for download. System performance is impacted while the snapshot is occurring.

Notifications

View a video about configuring Instant Message Notifications. View a video about configuring Email Notifications.

The Notification gadget lets you view/delete, edit and add notifications. Notifications are email messages or IM's that are sent when a social contact is tagged with a defined tag. You can also send text message notifications to a mobile phone using an SMS Gateway service. Here is a list of SMS Gateways by carrier.

Note:

- You must configure a Mail Server in the System Administration gadget before Email notifications can be sent.

- You must configure an XMPP Server in the System Administration gadget before IM notifications can be sent.

Using the Notification Gadget you can:

- delete a notification, by checking the box next to the notification name and clicking Delete.
- edit a notification, by clicking the notification's name.
- add a notification, by clicking Add.

To configure a notification, provide or edit the following fields in the Notification gadget.

1. Type - The type of notification. Notifications can be:
   1. Email - Notification is sent over email - A Mail Server must be configured in the System Administration gadget to send Email notifications.
   2. IM - Notification is sent over IM - An XMPP server must be configured in the System Administration gadget to send IM notifications.
2. Name - The name of the notification.
3. Description - A brief description of the notification.
4. Campaign (select) - Select a campaign to which you are associating this notification.
5. Tag - Define the tag for this notification. Notifications are sent when a social contact is tagged with this tag and exists in the Campaign above.
6. Addresses - Enter an address and click Add to add an address to this notification. Repeat for multiple addresses. Addresses must be in the format `user@domain.com`.
7. Subject - The email subject for this notification. This field is only available for Email notifications.
8. Body - The body for this notification. HTML tags are supported for Email Notifications. IM notifications are sent using plain text. The body of the message supports variables so you can customize the information sent in the notification. See "Notification Body Variables" below.

Notification Body Variables

The notification body supports variables that allow you to customize the content.

Note: If you do not add any text to the body of the message, than just the URL to the social contact in the results gadget is sent. If you add any text to the body then you must specify the variables you want included in the body of the notification. The URL to the social content is not sent automatically if you add text to the body.

You can add the following variables to the body of the notification to include the value of the variable in the notification. For Email Notifications, you can also use HTML tags to stylize the notification. IM notifications are sent using plain text.

- ${SC_AUTHOR} - the Social Contact Author (not available in all feeds)
- ${SC_CREATED_DATE} - Date the Social Contact was created in the system.
- ${SC_DESCRIPTION} - The description of the social contact. Typically this is the tweet, RSS post, facebook fan page post, etc.
- ${SC_PUBLISHED_DATE} - The publish date of the social contact (not available in all feeds)
- ${SC_SCREEN_URL} - The URL to the social contact in the results gadget. Clicking this URL allows you to instantly reserve/reply to the social contact.
- ${SC_SOURCE_TYPE} - The feed type of the social contact, for example; RSS, Twitter Stream, Twitter Account, FaceBook
- ${SC_TAGS} - The tags for this social contact.
- ${SC_TITLE} - The title of the social contact.

For example, if the body an email notification is set to:

> The author of this Social Contact is: ${SC_AUTHOR}
> The message contents are as follows: ${SC_DESCRIPTION}
> You can Reserve/Reply to the Social Contact here.

Then the actual email notification sent would appear as:

```
The author of this Social Contact is: Joe Somebody
The message contents are as follows: This is a TWEET!
You can Reserve/Reply to the Social Contact here.
```

However, if the same notification were sent using an IM notification then the HTML tags would be visible in the IM.

Reply Templates

The Reply Templates gadget allows you to configure custom reply-templates to be used with the system. An example of the default reply template is provided on the system at

```
http://<servername>/templates/reply/twitter_reply_sample.jsp
```

The source code is commented and provides details on the SocialMiner javascript functions required.

Reply templates must conform to the OpenSocial gadget standard. Some tips for converting existing HTML pages into OpenSocial gadgets can be found here.

After you have created your Reply Template, host it on a webserver that is accessible by SocialMiner and use the Reply Template gadget to provide a name for the Reply Template and its location.

SocialMiner Reporting

SocialMiner maintains metrics on social contact volume and agent activities. These metrics are stored in a SQL database for up to 18 months. The reporting database can be accessed using any SQL reporting tool including Cisco Unified Intelligence Center. Access to this database requires configuration of a reporting user in the SocialMiner system administration.

There are two main categories of reports:

- Campaign Reports - These metrics provide an indication of the total posting volume by customers as well as the responsiveness to customers. These are what could be described as "customer facing" metrics.
- Agent Reports - These metrics provide an indication of the agent productivity. These metrics could be used to evaluate agent speed or they could be used to measure total workload as a basis for staffing forecasts.

The Cisco Unified Intelligence Center templates for SocialMiner are available for download here: http://www.cisco.com/cisco/software/release.html?mdfid=283613136&catid=278875240&softwareid=283733464

Note: For Cisco Unified Intelligence Center releases prior to 8.0(3), you must extract the templates from the zip file before importing them into Unified Intelligence Center. For release 8.0(3) and later, you can import the zip file directly and Unified Intelligence Center extracts all the templates it finds inside the zip file.

. The following screen captures are examples of the Cisco Unified Intelligence Center Reports daily reports:

- ASR - Average Speed of Reserved. For the Social Contacts that were Reserved, this is the average time between capture by SocialMiner and the time they are marked as reserved. This provides an indication of how much time passes before someone first views the customer's post.
- ASA - Average Speed of Answer. For the Social Contacts that were Handled, this is the average time between capture by SocialMiner and the time they are marked handled. This provides an indication of how of how much time passes before the customer gets a response.
- ASD - Average Speed of Discard. For the Social Contacts that were Discarded, this is the average time between capture by SocialMiner and the they are marked discarded. This provides an indication of how much time passes before someone chooses to discard the customer's post. Note: "Discard" doesn't necessarily mean the post is disregarded. The distinction between "Discard" and "Handled" depends on how the agents are using SocialMiner. For example, they might mark posts that are read as "discarded" and posts that are responded too as "handled". In this case, discarded means that they were "read".

The complete SocialMiner reporting database schema is documented in the SocialMiner Developer Guide

- AHT - Average Handle Time. For Social Contacts that were handled by this agent, this is the average time between Reserved and Handled. This provides and indication of how much time it takes this agent to respond to a social contact.
- ADT - Average Discarded Time. For Social Contacts that were discarded by this agent, this is the average time between Reserved and Discarded. This provides an indication of how much time it takes this agent to discard a social contact.
- ACT - Average Completed Time. For Social Contacts that were Handled or Discarded, this is the average time between capture by SocialMiner and the first time they were marked Handled or Discarded. This provides an indication of how of how much time it takes for this agent to complete work for a social contact.

Configuring the SQL Connection to the SocialMiner Reporting Database

Connection to the SocialMiner Informix reporting database can be made through JDBC using the following format:

```
jdbc:informix-sqli://<hostname>:<port>/<databasename>:INFORMIXSERVER=<informixserv
```

- The reporting database <port> is 1526.
- The <databasename> is "mmca_data".
- The <informixserver> name is based on the hostname of the server with _mmca append to the end of the hostname. Additional, any dashes ("-") in the hostname are replace by underscores ("_").
- The UTF-8 Charset is required to get Cisco Unified Intelligence Center (CUIC) able to connect.
- The content of INFORMIXSERVER is the instance name.

For example, if your server's hostname is my-server.mycompany.com, then the INFORMIXSERVER name is `my_server_mmca`. The complete JDBC URL would be:

```
jdbc:informix-sqli://my-server.mycompany.com:1526/mmca_data:INFORMIXSERVER=my_serv
```

Note that when authenticating, the informix username is always `reportinguser` and the informix password is the password you created in the Administration Gadget.

System Backup and Restoration

Cisco SocialMiner Release 8.5(2) supports the Cisco Unified OS *Disaster Recovery System* (DRS) to perform backup and restoration of the system. You access the Disaster Recovery System by going to the Administration Gadget, expanding the section on **Platform Administration**, then selecting the link for **Disaster Recovery System**.

Log in using the platform credentials you supplied when you installed SocialMiner.

SocialMiner uses the same platform administration tools as Cisco Unified Communications Manager. Detailed online help is available in the tools.

You can manually back up your system using DRS, or schedule DRS to perform automatic backups.

Complete details on using DRS are available in the DRS online help and in the following guide #link to guide.

Quick Manual Backup Instructions

These instructions provide quick instructions to create a manual backup. You can also schedule backups to run automatically. Note that the system is not usable during a backup, and that new social contacts are not collected during a backup. Schedule your backups accordingly.

The online help for the Disaster Recovery System provides complete details on all features of DRS. However, using DRS with SocialMiner is greatly simplified because SocialMiner supports only a single node and only uses network backups.

To perform a manual backup:

Define Backup Device

1. Access the Disaster Recovery System by going to the Administration Gadget, expanding the section on **Platform Administration**, then selecting the link for **Disaster Recovery System**. Log in using the platform credentials you supplied when you installed SocialMiner.
2. Select **Backup > Backup Device**.
3. On the *Backup Device List* page, select **Add New**.
4. Provide a **Device Name** for the backup device.
5. SocialMiner only supports backing up to a Network Directory, provide the Network Directory details for a server that supports SFTP.
6. Provide the *Number of backups to store on the Network Directory*. The default is two, so only the two latest backups are preserved.
7. Click **Save**, the system verifies the information you entered and saves the backup device.

The backup device is now saved. You do not need to repeat these steps the next time you backup the system unless you want to back up to a different device or change backup device settings.

Backup the System to the Backup Device

1. Access the Disaster Recovery System by going to the Administration Gadget, expanding the section on **Platform Administration**, then selecting the link for **Disaster Recovery System**. Log in using the platform credentials you supplied when you installed SocialMiner.
2. Select **Backup > Manual Backup**.
3. Select the Backup Device you created earlier from the pull down menu in **Select Backup Device**.
4. In **Selected Features** check **SOCIALMINER**.
5. Click **Start Backup**.
6. A warning appears noting that you may need to use the security password to restore. Click **OK**. The backup begins.
7. The backup page refreshes periodically providing the status of the backup. The page also displays the name of the backup tar file that is being saved to the remote system.
8. After the backup completes, wait a few minutes before using SocialMiner so the SocialMiner system can start subsystems that may have been shutdown during the backup.

Restoring from a Backup File

1. Access the Disaster Recovery System by going to the Administration Gadget, expanding the section on **Platform Administration**, then selecting the link for **Disaster Recovery System**. Log in using the platform credentials you supplied when you installed SocialMiner.
2. Select **Restore > Restore Wizard**.
3. Select the backup device from the drop-down menu and select **Next**.
4. Select the backup file you want to restore for the *Tar file list* drop-down menu and select **Next**.
5. Check **SocialMiner** in the *Select Features* section and select **Next**.
6. Read the warning on the page. Optionally select **File Integrity Check**, then select the Server to be restored (typically the host name of the backed up system). Click **Restore**.
7. The restore page refreshes periodically providing the status of the restore.
8. After the restore completes, you must restart SocialMiner for the restoration to take effect.

Design Guidance

Hardware and Software Specifications

SocialMiner 8.5(1) requires one of the following UCS server models:

UCS Model	SKU
C210-M2	UCS-C210M2-VCD2
B200-M2	UCS-B200M2-VCS1

Note: the memory and hard disk configurations are fixed with these sku's

VMWare Open Virtual Format (OVF)

The SocialMiner system supports one standard <u>OVF</u> Appliance. The system requires ESXi version 4.0 Update 1.

Details on configuring VMWare and installing the OVF template are available in <u>Virtualization for Cisco SocialMiner</u>.

Deployment Models

Version 8.5 of SocialMiner has a single-server all-in-one deployment model. The server may be deployed inside our outside the corporate firewall in "intranet" and "Internet" deployment models.

The intranet deployment model provides the additional security of the corporate network firewalls to reduce risk of an external party accessing the system. This deployment model is required if SocialMiner must access internal sites, for example an internal forum site. The downside of the intranet deployment model is that SocialMiner system cannot be accessed by partners lacking VPN access. It is common for some PR functions to be externally managed by an agency and therefore offering easy access (no VPN) to the SocialMiner system may be very useful. Also, the intranet deployment model does not allow rendering of SocialMiner OpenSocial Gadgets in a public Internet containers such as iGoogle. The intranet deployment model may complicate proxy configuration, however it likely simplifies directory integration.

The Internet deployment model puts SocialMiner outside the corporate firewall. This deployment model relies on the built-in security capabilities of the SocialMiner appliance. This may be acceptable from a security perspective depending on the system use and corporate policies. For example, in some applications the SocialMiner system handles 100% public postings and therefore there is no disclosure risk associated with a compromised SocialMiner system. The Internet deployment model may complicate directory integration.

Ports

Port 443 is used for a secure connection between the SocialMiner user interface and your browser.

Port 80 is used by SocialMiner for communication with Twitter and Facebook APIs.

Your firewall configuration may need to be modified to open these ports for SocialMiner.

Sizing

The following table details the sizing limits for a single SocialMiner system.

Concurrent Admin Users Signed In	5
Concurrent Agents Signed In	30
Total Feeds	100
Total Campaigns	50
Incoming Rate of Social Contacts (total per hour)	10,000
Replies per Twitter Account per Hour	30 **Note:** This limit is for a default polling interval of 5 minutes. If the polling interval is set lower than 5 minutes, then the limit is reduced depending on usage patterns.

Users and Security

SocialMiner User Accounts and Security

SocialMiner is designed to minimize the storage of username/passwords to reduce the security risk of a compromised system. There is an administration account for the system setup, but all SocialMiner user access is controlled through Active Directory (AD) authentication. There are no SocialMiner user passwords stored on the SocialMiner System.

Users do not need to be manually set up on SocialMiner in order to access the system. Any user that is authenticated via the Active Directory set-up can use the system. If there is need to limit who can use system then an AD group can be set up in AD and the SocialMiner system can be configured to only allow access from that group.

AD authenticated users have access to all functions on the system, although gadgets access could be blocked by blocking certain URLs.

Twitter Accounts and Security

Access to Twitter for the Twitter Account feed type is done via OAuth. When a "Twitter Account" Feed is created the user is prompted to authenticate with Twitter. The authentication token is stored by SocialMiner granting access to secured information from Twitter such as Direct Messages. This authentication also enables sending and replying to Twitter Direct Messages (DMs) from the account by using the Reply feature of the Campaign Results gadget.

Note: All SocialMiner users are entitled to use Twitter accounts configured in the Twitter Account feed to read and respond to Direct Messages in that account. They are not required to enter the account password. This supports environments where the social-media care agents are not entitled to know the Twitter account password. Their ability to use SocialMiner is controlled via Active Directory and their ability to invoke post or perform actions on Twitter is controlled by SocialMiner. SocialMiner also tracks which SocialMiner User (AD account) makes each post; therefore it is possible for the enterprise to track which employee posted a tweet when sharing a Twitter account amongst a team.

Twitter Stream feed type passwords are encrypted when stored in the SocialMiner configuration database and are also encrypted when sent to Twitter.

Advanced UI options

The SocialMiner user interfaces are designed to be embedded in other web application user interfaces.

Quad

You can add a SocialMiner gadget to Quad using the "Add Application" button on Quad. You can find the specific URL of the SocialMiner gadget by using "view source" on your browser while looking at the gadgets on SocialMiner.

iGoogle

If the SocialMiner system is deployed in the Internet deployment model, you can add a SocialMiner gadget to iGoogle using the "Add Stuff" button on iGoogle.

You can find the specific URL of the SocialMiner gadget by using "view source" on your browser while looking at the gadgets on SocialMiner.

iframes

If your web site or application doesn't support OpenSocial, then you can add SocialMiner to a web page by using an iFrame. With this technique you can make a frame sized to show one of the SocialMiner web pages (most likely the campaign results gadget).

Developer Information

Developer information, including the SocialMiner API documentation and a discussion forum, is available on the Cisco developer site: http://developer.cisco.com/web/socialminer

Notes

- Twitter is a registered trademark of Twitter, Inc.
- Facebook is a registered trademark of Facebook, Inc.
- iGoogle is a trademark of Google, Inc.
- VMWare is a registered trademark of VMware, Inc.
- Informix is a registered trademark of International Business Machines Corp.

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