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Introduction

Cisco SocialMiner is a 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**. Each Campaign obtains social contacts from one or more **Feeds**. SocialMiner presents the social contacts to social media customer care personnel who can review, categorize, and/or respond to the postings. SocialMiner also produces reporting metrics on the handling of the social contacts.

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
- OpenFire server for XMPP BOSH eventing

Setup and administration are done through a browser-based interface that uses OpenSocial Gadgets. SocialMiner is installed with the Shindig gadget container to render the gadgets; however the SocialMiner gadgets can 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®. Setup and configuration of SocialMiner to monitor Twitter and Facebook requires good working knowledge of those sites. For background information on these sites, review the following Mashable resources:

The Twitter Guide Book

The Facebook Guide Book

What's New in Release 8.5(3)

Cisco SocialMiner Release 8.5(3) provides the following new features and enhancements:

Auto-tagging

There is now an Automatic Tags option on the Add/Edit page for all Feed Types. Create up to ten tags that will be automatically applied to all social contacts pulled in for that feed. See Automatic Tags for Feeds.

Hardware Support Policy

Cisco will support SocialMiner deployment on any hardware, provided:

- SocialMiner is installed within the Cisco provided VMWare OVF (this is verified by the new "Hardware" servers status on the system administration gadget).

- The hardware supports the documented IO speed requirements. The IO speed required for SocialMiner is 1400 IOPS (input output operations per second). See Virtualization for SocialMiner.

HTTP Notifications

There is a new HTTP Notification Type option on the Notifications gadget. This is a feature for application developers.

Localization

Language localization is now supported for the SocialMiner user interface and online help. Once a language pack is installed, an additional drop-down will appear on the sign-in page to select the language. Each signed in user will be able to choose language preference. Cisco will post localization files shortly after the release of SocialMiner 8.5(3). See <u>Downloading and Installing Language Packs</u>.

Reply Templates

- There is a new Cisco Facebook reply template. It is the default template option for <u>Facebook Fan Page feeds</u>. Use of the Cisco Facebook reply template requires authorization of an account to post on Facebook. You can authorize one Facebook account per Fan Page. Once the Authorization is allowed, any SocialMiner user can post to the Facebook Fan Page without having their own Facebook account.

- The Cisco Twitter reply template is now the default template option for Twitter Account and Twitter Stream feeds.

- <u>Twitter Permission level changes</u> require that existing SocialMiner users delete and reauthorize Twitter Account Feeds in order to continue receiving Direct Messages. Authorizations made on or after May 24, 2011 forward do not require re-authorization.

User Interface

- Navigation has changed in the User Interface. The "Results" tab is renamed "Home" and is in the first tab position on the navigation bar. The Home tab is now the default page you see when you sign in.

- The selection of which social contact states to display is now done with a dropdown list on the Home tab. This was formerly done by using checkboxes on the Settings page. The dropdown list options are: *Show Open*, *Show Handled*, or *Show Discarded*. *Open* social contacts are those that are Unread and those that are Reserved. See <u>The Home Tab</u>.

- When an agent changes the state of a social contact or add/removes a tag for that social contact, all other agents working in that campaign see the event in real time.

- The <u>System Administration gadget</u> now shows:
  ♦ the number of Logged in Users.
  ♦ the status of the Hardware (indicates if the SocialMiner system was installed on the Cisco provided VMWare template).
  ♦ the state of the external XMPP server used for sending Instant Message Notifications.
  ♦ a new checkbox for Mail Server configuration: the Use SSL | TLS checkbox, which defaults to unchecked. Check this if the mail server supports secure connection, for example, smtp.gmail.com. The mail server certificate is not validated.
  ♦ Proxy Settings (moved from Feeds gadget).

XMPP BOSH Eventing

SocialMiner sends asynchronous state change and tag update events to an XMPP client using the XMPP Publish-Subscribe protocol. Changes to the state of social contacts and the addition/deletion of tags update the interface of all agents who are working in a campaign. (No need to refresh.)

Three additional ports are now used by SocialMiner for XMPP BOSH eventing. See <u>Ports</u>.

If agents will be accessing SocialMiner 8.5(3) through a firewall, they will not see realtime updates if ports 7071 and 7443 are blocked. (They will need to click Refresh.) Open those two ports to allow agents working in the same campaign to see realtime social contact state changes and tagging updates.

Upgrading to SocialMiner Release 8.5(3)

Topics:

Upgrading using Cisco Unified Operating System Administration

Upgrading using the Command Line Interface

SocialMiner Release 8.5(3) is an upgrade to release 8.5(1). Upgrades are cumulative and must be installed over the base release. This means that:

- You must have installed the base release - SocialMiner Release 8.5(1). SocialMiner 8.5(1) installation is documented in the SocialMiner 8.5(1) User Guide.
- You can upgrade directly from Release 8.5(1) to Release 8.5(3). Release 8.5(3) includes all features and changes of Release 8.5(2). Features added in Release 8.5(2) are documented here: What's New in Release 8.5(2).
- If you are on Release 8.5(2), you can upgrade directly to Release 8.5(3).

You can upgrade using the Command Line Interface (CLI). You can also upgrade using the Software Upgrades tool in Cisco Unified Operating System Administration. The upgrade can run unattended and may take several hours to complete.

Upgrading using Cisco Unified Operating System Administration

Open Cisco Unified Operating System Administration from the Administration tab > Platform Administration. You can also use this URL

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

where *servername* is the Hostname or IP address of the server.

1. Select Software Upgrade > Install/Upgrade.
2. On the Software Installation /Upgrade dialog box:
    1. If you burned the files to CD/DVD:
        1. Source = DVD/CD.
        2. Directory = the directory for DVD/CD. Use forward slashes. For example, if the installation file is located on the root directory of a CD that is on Drive D, type /D.
        3. Server = leave blank.
        4. User Name = leave blank.
        5. Password = leave blank.
    2. If the files are on a remote file server:
        1. Source = Remote Filesystem.
        2. Directory = the path to the files. Use forward slashes. For example, /SocialMiner/Installation.
        3. Server = the IP address of the remote server.
        4. User Name = the user name to access the remote server.
        5. Password = the password to access the remote server.
3. Click Next.

4. Choose the iso file from the Software Location field.
5. Click Next.
6. At the Software Installation/Upgrade screen, select Reboot to Upgraded Partition.
7. Click Next.

You see a series of messages as the upgrade installation proceeds.

Upgrading using the Command Line Interface

1. Download the 8.5(3) Release from Cisco.com and place the file on an FTP or SFTP server. You can also 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_8.5.3.10000-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_8.5.3.10000-X.sgn.iso
   File version: 8.5.3.10000-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...
06/10/2011 09:53:00 file_list.sh|Starting file_list.sh|<LVL::Info>
...
  [Many lines of upgrade scripts running]
...
```

```
06/10/2011 11:41:31 upgrade_install.sh|Upgrade Complete -- (0)|<LVL::Info>

Successfully installed UCSInstall_CCP_8_5_1_UCOS_8.5.3.10000-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.

Signing In to SocialMiner

To launch SocialMiner, use a web browser to access the root of the web server. Enter

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

where *servername* is the name or IP address of the server.

See SocialMiner Browsers for information on supported browsers.

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Entering the URL opens a sign in page where you enter your username and password. The first time you sign in, you must sign in with the application username and password that you created during the installation.

If you have downloaded and installed language files, the sign in page also has a drop-down for selecting your language.

When you see a "trusted certificate" warning, acknowledge it - for example by clicking *Continue to Web Site* in Internet Explorer or *I understand the Risk* in Mozilla Firefox. This saves the certificate to the browser. For some browsers, you may want to obtain and upload a CA-Signed certificate so that the security warnings do not persist.

A successful sign in presents the SocialMiner interface to the Home tab. Most users see one other tab: the Configuration tab. Administrators also see an Administration tab.

The Home Tab

Topics:

Reviewing Social Contacts By State

Replying to Social Contacts

Tagging Social Contacts

Settings

Train Filters

.

The SocialMiner Home tab provides a dynamic "Inbox" for viewing and responding to social contacts. No social contacts will appear on this gadget until you:

1. Configure at least one Feed.
2. Configure at least one Campaign.
3. Add the Feed to the Campaign.
4. Select a Campaign from the drop-down menu on the upper-left.

You can show social contacts that are in specific states (Open, Handled, or Discarded) and by selecting Settings to show only those social contacts with specific tags or to enable filter training mode.

The SocialMiner Home tab is dynamic in these ways:

- A bar appears periodically at the top of the page indicating that there are one or more new social contacts in the campaign. You can click the bar to refresh the results, or click the refresh icon at the upper-right.
- State changes and new tags made by one agent are immediately visible to all other agents working in that campaign.

VIDEO: View a video about handling social contacts on the Home tab. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

What is a Social Contact?

The term Social Contact refers to a post collected by SocialMiner. A social contact can be a Tweet, a Facebook wall post, a Blog, or a Forum post.

For example:

1. When a customer tweets and the tweet matches the search criteria of SocialMiner, that tweet is captured by SocialMiner and stored in the datastore as a social contact.
2. An agent's reply to that tweet is captured as saved as another social contact.
3. The customer reply to the agent's reply is captured as a third social contact.

A social contact remains in the datastore until it is purged.

SocialMiner stores the following for each social contact:

- Author (the username of the person who posted)
- Creation Date (date stored in SocialMiner)
- Title
- Description
- Published Date (date it was published on the Internet) Not all feeds have this.
- Screen Pop URL (the URL that can be used to open/view that social contact with SocialMiner UI)
- Source type (the type of feed that collected the social contact)
- Tags (tags applied by SocialMiner users)

Reviewing Social Contacts By State

A social contact can be in one of four states: Unread, Reserved, Handled, and Discarded. Use the drop-down on the Home tab to show contacts of only that state:

Show Open - Open social contacts are those in the *Unread* or the *Reserved* state. They have not yet been acted on. All social contacts captured by SocialMiner are initially in the Unread state and appear when you Show Open.

Show Handled - These social contacts have been handled (replied to) by an agent.

Show Discarded - These social contacts have been discarded by an agent.

Working with Social Contacts

A social contact state can be changed by any user at any time by a click of a social contact state button. The name of the last user to change a state appears next to the social contact as soon as the change occurs: for example, *Discarded: User2*.

State changing can be done by different agents: Agent1 can reserve a social contact and Agent2 can handle it.

To undo a state change, show the list for that state, locate the social contact, and click the icon again to reverse the state.

For example, if you set a social contact to Handled and then change your mind about handling it:

1. Select Show Handled.
2. Locate that social contact.
3. Click the Handle icon. This toggles the state of that social contact back to Unread. It is removed from the Show Handled list immediately and returns to the Show Open list within a few seconds.

Social contact state is universal across the SocialMiner system. For example, if one user handles a social contact, then the social contact appears as handled in the browser interface for all other users. This is the case even if the social contact appears in multiple campaigns.

Replying to Social Contacts from the Home Tab
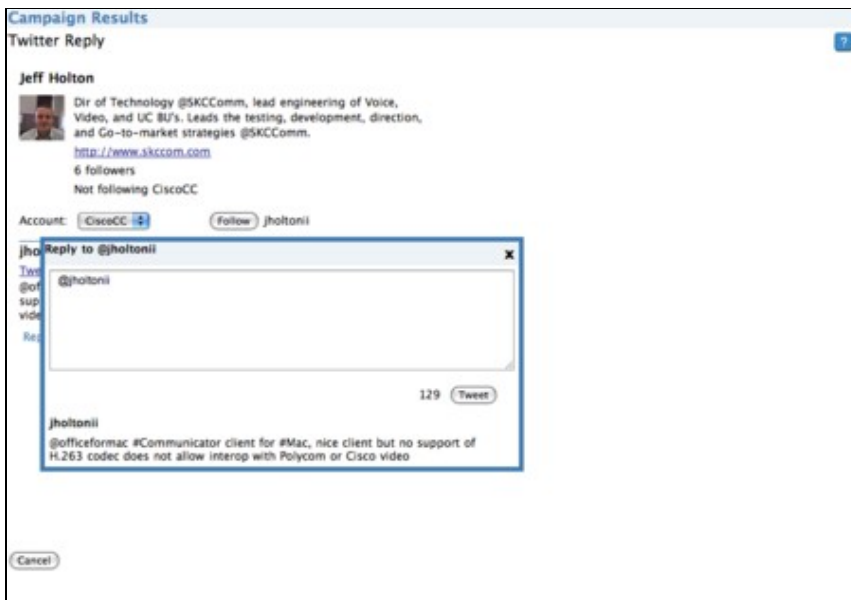
SocialMiner provides the ability to reply to social contacts using <u>Reply Templates</u>. There are two system-defined templates: Cisco Twitter and Cisco Facebook. Administrators can add custom reply templates.

You can select only one reply template per feed, and you do this on the Add/Edit Feed page for each Feed Type.

Replying to a Twitter Social Contact

Ways to reply are:

- direct-message the author of the Tweet.

- create an "@" reply that is viewable to everyone on Twitter.

- configure the feed to respond with the Cisco Twitter reply template, which allows you to follow the recipient of the message if you are not currently following them.

To reply to a tweet using the Cisco Twitter reply template:

1. Select a Twitter Account social contact and click Reply. The Cisco Twitter template opens and provides the following fields:

- Account: Select the Twitter Account from which you are replying. All Twitter Accounts configured on this system appear in the dropdown menu.
- Once the account is selected, the system checks the Follow status of the intended recipient. If the account is not already following the recipient, you can click Follow to begin following.
- For your convenience, the conversation history of the social contact is listed below the selected social contact. You can reply, retweet, or Direct Message to any tweet in the conversation. The social contact that was originally reserved is marked as handled even if you do not reply to the most recent tweet in the conversation. The status of the other social contacts (tweets) in the conversation does not change.
- 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. A

Direct Message is sent directly to the poster of the tweet.
- 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.

2. Click Send to send the reply. This marks the social contact as Handled.

Note that the reply template is customizable. The instructions above pertain to the default Cisco Twitter template. If your administrator has provided a custom reply template, the steps for replying may be different.

Replying to a Facebook Fan Page

Ways to reply are to:

- click the link on the social contact to open the post or comment and enter your comment comment.

- configure the feed to use the Cisco Facebook reply template and respond directly to the Fan Page from SocialMiner.

Facebook accepts content from a Facebook Reply Template only if the person who <u>added the Faceboook Fan Page feed</u> received authorization from Facebook by clicking **Get Post Authorization**.

1. Select a Facebook social contact. Click the Reply button.

The Cisco Facebook Reply form opens to show:

- the name of the person who posted or commented on the Facebook page.
- a text area for your comment.
- a Like indicator.

If you have never replied, or if you have previously replied with an Unlike, the template shows Like. If you have previously replied with Like, the template shows Unlike. You can reply without selecting Like or Unlike.

2. Click Send to send the reply. This marks the social contact as Handled.

Note that the reply template is customizable. The instructions above pertain to the default Cisco Facebook reply template. If your administrator has provided a custom reply template, then the steps for replying may be different.

Replying to an RSS Social Contact

You cannot reply directly to a social contact from an RSS feed. You can, however, tag the RSS contact and set notifications so that an agent receives an email or an Instant Message for the social contact.

Tagging Social Contacts

Tags are labels that allow you to categorize social contacts, to track workflow, and to set up <u>notifications</u>.

For example, all social contacts that mention billing concerns could be tagged with *Billing*. You could then set up notifications to email social contacts with that tag to Customer Service.

You can tag similar social contacts with the same tag, then use the Settings page to filter the list of social contacts to show only social contacts with a particular tag.

Adding Tags

When you hover over a social contact, you see a text box and a **Tag** button.

To enter a tag, click the text box and type the tag. (Separate multiple tags by commas.) Then press **Enter** or click **Tag**. The new tags are immediately visible to all users who view that social contact. You can add a maximum of twenty tags to a social contact.

Social contacts are not duplicated even when they appear in multiple campaigns. When a user tags a social contact in one campaign, the tag appears to other users who are viewing that social contact from another campaign.

Suggested Tags:

A maximum of five common/recently used tags for the selected campaign appear as 'suggested tags' links to the right of the Tag button. To add one or more of these suggested tags to the social contact. click the link for the suggested tag. These suggestions provide one-click tagging for commonly used tags. The suggestions are specific to the campaign, not the entire SocialMiner system, and are only updated on a refresh.

Deleting Tags

To delete a tag from a social contact, click the small, grey x at the right of the tag name.

Automatic Tags You can also configure up to ten automatic tags for a feed. All social contacts pulled in for that feed have these auto-tags. See Automatic Tags for Feeds.

VIDEO: View a video about using tags. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

Settings

Click the Settings icon at the top right of the Home tab open the Settings page. Use this page to show or hide social contacts by tag and to enable training filters. Although tags and filters are global (all users can see them), settings are user-specific. Your changes to Settings determine what you see for the campaign but do not do not effect what others see in the campaign.

Train Bayesian Filters on the Home Tab

If you have added a Bayesian filter, you can select it on the Settings page to activate training mode.

None is the default on the Settings page. Selecting a Bayesian filter enables filter training and changes the campaign dispay on the Home tab to show Plus (+) and Minus (-) training buttons for each social contact.

- Click the Plus button to mark the social contact as being *in* this filter.(This tells SocialMiner: *Keep social contacts similer to this one. Do not filter out social contacts like this*.)

- Click the Minus button to mark this social contact as "out" of this filter. (This tells SocialMiner: *Filter out social contacts like this one*.)

To disable training mode, return to Settings page and select *None*.

Training settings are user-specific. Your changes to enable training mode do not effect what others see for the campaign.

Feeds

.
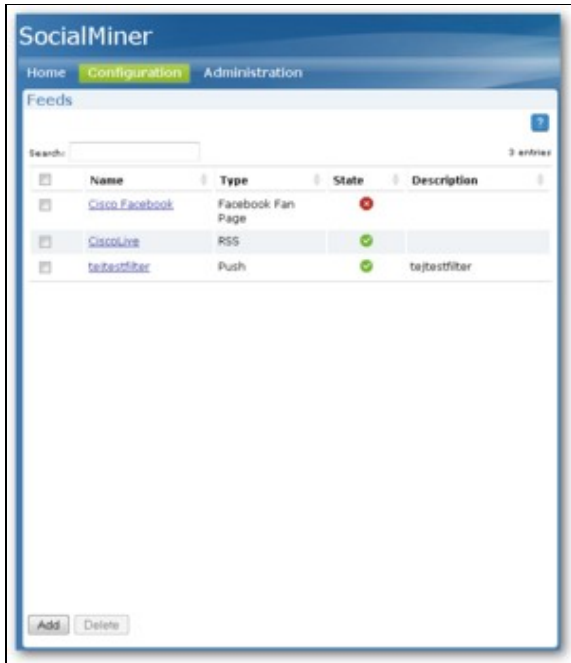
Topics:

- Adding and Editing Feeds
- Feed Types
    - ♦ RSS and Authenticated RSS Feed Types
    - ♦ Facebook Fan Page Feed Type
    - ♦ Push Feed Type
    - ♦ Twitter Account Feed Type
    - ♦ Twitter Stream Feed Type
- Polling Interval for Feeds
- Minimum Age for Feeds
- Automatic Tags for Feeds
- Deleting Feeds

The Feeds gadget is on the SocialMiner Configuration tab.

A **Feed** is a configured source for capturing social contacts - a view set of specific data you want to capture. Setting up feeds is a foundational step for your SocialMinder system. You see no social contacts on the Home tab until you configure at least one feed and add it to a campaign.

Note If your server is behind a firewall, the administrator may need to configure SocialMiner to use a proxy to reach the internet. See Proxy Settings.

Note also that: SocialMiner uses a process called de-duplication to automatically remove duplicate social contacts. 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.

Adding and Editing Feeds

To create a feed, click **Add** in the feed list view.

To edit the settings for a feed, click its name.

Select the feed type and complete the fields for the feed type. Note that the fields depend on the feed type you select.

Note: Social contacts retrieved by feeds are time-limited by the number of days defined in the Purge Social Contacts older than (days) setting of the <u>Purge Settings tool</u>. (This tool is on the Administration tab and is used by Administrators only.)

Note also that if you change a feed (rename it, change the URL and polling interval), you do not need to re-add it to the campaign.

Feed Types

SocialMiner supports the following types of Feeds. Each feed type has unique settings, which are descibed in the sections below:

- <u>RSS and Authenticated RS</u>
- <u>Facebook Fan Page</u>
- <u>Push Feed</u>
- <u>Twitter Account</u>
- <u>Twitter Stream</u>

RSS and Authenticated RSS Feed Types

RSS is one of the simplest and most widely-available means for SocialMiner to capture social contacts, as there are many forum and blog sites that support <u>RSS</u>.

SocialMiner Supports the following RSS Feed standards:

- <u>RSS 1.0</u>
- <u>RSS 2.0</u>
- <u>ATOM 1.0</u>

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

VIDEOS:

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

Although these videos were created for an earlier version of SocialMiner and show an older user interface, they present accurate information.

About Paging from RSS Feeds

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.

Some sites allow the URL to specify the number of results on a page in the URL. Using this feature to set the number of results to return and regulating the polling interval optimizes system performance and reduces load on the site, while ensuring all posts are captured.

Configuring RSS and Authenticated RSS

To configure an RSS or Authenticated RSS feed:

1. Access the Feed gadget.
2. Click '*Add*.
3. Select RSS or Authenticated RSS feed type, and enter the following fields:

- 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.
- <u>Polling Interval</u> - Number of minutes to wait between refreshing this feed.
- <u>Minimum age</u> - The number of hours old for a post before it is included as a result. This allows you to exclude recent posts.

Click **Save** to save the feed.

Facebook Fan Page Feed Type

About Facebook Fan Page Feeds

The Facebook Fan Page Feed type captures all of the wall posts and comments on wall posts that are posted to a Fan Page.

Fan Pages are public, and no username or password is required to capture the postings on a Facebook Fan Page. This means it is 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. The goal of this layout is to ensure that 100% of the wall posts and comments are noticed by the consumer of the results. It is 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 that Facebook does not anchor comments, therefore the link takes the browser to the wall posts to which the comment refers and not directly to the comment.

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 you find the Cisco Contact Center Fan Page through Facebook search, you see this URL: http://www.facebook.com/#!/CiscoCC?ref=ts. 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". The name "CiscoCC" was registered by the administrator of this page.

Note that 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.

Configuring a Facebook Fan Page Feed

VIDEO: View a video about configuring a Facebook Fan Page Feed. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

To configure a Facebook Fan Page feed:

1. Access the Feed gadget.
2. Click '*Add*,
3. Select Facebook Fan Page feed type, and enter the following fields:

- 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.
- Reply template - The reply template to be used for replying to social contacts obtained from this feed. Defaults to the Cisco Facebook Reply Template.

4. When you complete the fields, you must **Authorizing the Feed**. To do this:

- Click **Get Post Authorization** to request authorization from Facebook that allows SocialMiner to post to the fan page.
- This opens Facebook.
- Sign in with your organization's Facebook username and password. Then click **Allow** to allow the Cisco Facebook Reply Template to post to the Facebook Fan Page.

Successful Authorization creates and saves the feed.

Posted replies will appear as being from the user who authenicated the posting. For example, if the posting was authorized by the Facebook account for Harrison Dental and employee Dr. Lee replies to a social contact, her reply is from Harrison Dental and not from her own Facebook 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.

1. Enter or edit the following fields.

- Name
- Description
- Reply template - The reply template to be used for replying to social contacts obtained from this feed.

2. Save the Push Feed.

3. Click the saved Push Feed from the list of Feeds to edit it. You see a Sample Code link.

The sample link contains working HTML code that displays the form fields you need to make the GET request to your feed.

These include Title, Author, and Description (body) of the social contact, as well as any SocialMiner tags that you want applied to that social contact.

Copy this code to your HTML page and edit the fields as needed. When submitted, it is authenticated against SocialMiner, and a URL to the new social contact is returned.

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, be careful not to overload SocialMiner and your notification networks (email and XMPP).

You can 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.

A URL to the new social contact is returned after the form is submitted.

The Push Feed must be associated with a campaign in order to activate. As a best practice, create a test campaign prior to testing your Push Feed.

Twitter Account Feed Type

About the Twitter Account Type Feed

VIDEO: View a <u>video</u> about configuring a Twitter Account Feed. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

The Twitter Account Feed Type uses the <u>Twitter REST API</u>. 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* or *in-reply-to*.

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

If the user is already logged in to Twitter with the same username as specified in the feed configuration, 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), 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: 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 <u>http://twitter.com/settings/connections</u>.

Configuring a Twitter Account Feed

1. Access the Feed Gadget.
2. Click '*Add*.
3. Select the Twitter Account feed type, and enter or following fields:.

- Name
- Description
- Username - A valid Twitter username.
- Password - Password for the Twitter username.
- <u>Polling Interval</u> - Number of minutes to wait between refreshing this feed.
- <u>Minimum age</u> - The number of hours old for a post before it is included as a result. This allows you to exclude recent posts.
- Reply template - The reply template to be used for replying to social contacts obtained from this feed. Defaults to the Cisco Twitter Reply Template.

4. Click **Save**.

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.

Twitter Stream Feed Type

About the Twitter Stream Feed

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, 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,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, 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-to 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 does not support exclusion of keywords. This limited searching capability results in more on-board filtering by the SocialMiner server. Also, the Twitter Stream reply does not provide historical results; 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

VIDEO: View a video about configuring a Twitter Stream Feed. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

1. Access the Feed gadget.
2. Click **Add**.
3. Select the Twitter Stream feed type, and enter following fields.

- 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. Defaults to the Cisco Twitter Reply Template.

4. Click **Save** to save the feed.

Polling Interval for Feeds

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.

Five minutes is the default SocialMiner polling interval for feeds.

Minimum Age for Feeds

The *minimum age setting* filters out recent posts.

This feature was implemented for forum sites that publish feeds of "unanswered posts". If you configure the "unanswered posts" feed URL in SocialMiner and set a long Minimum Age, for example 24 hours, the system only captures posts that are both unanswered (based on the RSS feed) and older than 24 hours (based on the Minimum Age). This offers a simple way to implement the business strategy of light touch forum moderation.

Minimum Age is not configurable for Push Feeds or Twitter Stream Feeds.

Automatic Tags for Feeds

All feeds support the Automatic tags feature, which allows you to specify up to ten tags that are applied to new social contacts for a feed across all campaigns that include that feed.

To add an automatic tag to the feed, enter one or more tags into the Automatic Tags text box (separated by commas), then click Add.

To remove an automatic tag from the feed, click the small x next to the tag name.

Deleting Feeds

Select the checkbox to the left of one or more Feed Names and click Delete. A confirmation dialog box appears. Click OK to confirm deletion of the selected feed(s).

Campaigns

Topics:

Campaign List

Add and Editing Campaigns

Deleting Campaigns

The Campaigns gadget is on the SocialMiner Configuration tab.

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 when one or more <u>feeds</u> are configured and are selected to be part of the campaign. When a feed becomes part of a 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 <u>Filters</u>, which are used to narrow the set of social contacts that are added to the campaign.

VIDEO: View a <u>video</u> about Campaigns, Campaign usage, and Campaign configuration. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

Campaign List

The Campaign Gadget on the Configuration tab 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
- a description of the campaign, and
- an RSS feed icon that 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, new campaigns added to the system (perhaps by another user) appear in the list. When new social contacts are added to a campaign, the social contact count increments.

Add and Editing Campaigns

To add a campaign, click Add in the campaign list view. Fill out the following fields, then click Save to save the new campaign.

- Name
- Description (optional)
- Use the arrows in the Feeds and Filters panels to move one or several feeds and filters between the Available and Selected panes. You can save a Campaign without adding a feed, but no social contacts will be retrieved for that Campaign. Filters are optional.

The gadget displays a list of Feeds "Available" with arrows to move the Feeds into "selected" and thereby include them in the campaign. At least one Feed must 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 Configuration tab also allows you to add <u>filters</u> to the campaign.

Deleting Campaigns

To delete a campaign, select the checkbox to the left of one or more Campaign Names and click Delete. A confirmation dialog box appears. Click OK to confirm deletion of the selected campaign(s).

Filters

Topics:

- <u>Adding and Editing Filters</u>
- <u>Types of Filters</u>
- <u>Deleting Filters</u>

Filters are are created with the Filter gadget on the Configuration tab and are applied to campaigns in the Campaign Gadget, similar to adding and removing feeds.

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 from the feeds so that "filtered-out" social contacts do not display in the campaign and "filtered-in" social contacts do.

A basic use of the filters feature is to filter out "spam" and pass relevant social contacts to the intended Campaign topic, but filters can be trained for any purpose including sentiment analysis. Multiple filters may be applied to one campaign, creating opportunities to layer filtering strategies to fine tune results.

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.

Adding and Editing Filters

To add a filter, click Add.

To edit a filter, click the filter's name.

You can add/edit the following, and then click Save to save your changes:

- Type - Select the type (Bayesian or Author) from the drop-down.

- Name - A name for this filter. It must be unique.

- Description - Some text to describe this filter.

- Authors - Applies to Author filters only. One or more authors to exclude from the feed. Enter the author name and click Add.

As a best practice, create a test campaign that mirrors an existing "in production" campaign. Add several feeds to the test campaign - some that you know will have relevant posts and some with irrelevant posts. Create the filter and set the test campaign to training mode. The more you train the filter, the better the filter will perform, so it is important to do a significant amount of training before applying your filter to the "production" campaign.

Types of Filters

SocialMiner supports two types of filters:

- Bayesian - A trainable filter to omit social contacts from results based on how the filter is trained. See Train Bayesian Filters on the Home Tab.

- Author - A filter that omits specified authors from results.

Bayesian Filters

VIDEO: View a video about using Bayesian Filters. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

The Bayesian filter is a trainable filtering technology based on a Bayesian statistical probability model. Bayesian filters are not pre-programed or configured with business rules. They are trained by 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 in a campaign. After a sufficient amount of training, the filter begins to exclude unwanted social contacts from a campaign.

The Bayesian filters can be used to for many reasons.

- A filter can 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. If the purpose of the campaign is to capture posts about Flip brand video recorders, the Bayesian Filter can be trained to exclude the social contacts about footwear or gymnastics.

- 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 include or exclude social contacts written in specific languages.

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.

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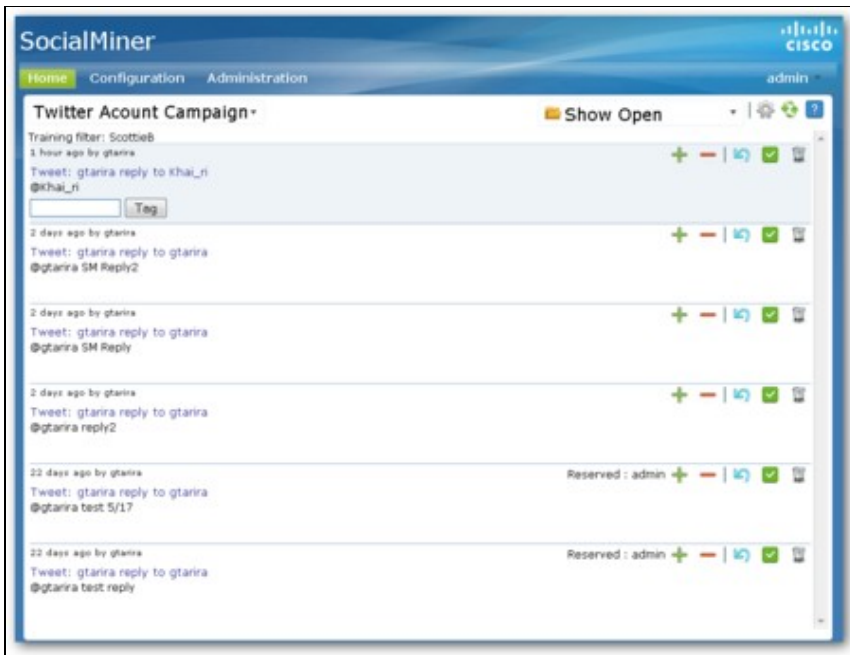
To successfully use a Bayesian filter, you must train it. Filter training is enable on the Settings page and performed on the Home tab.

You can train a filter using any campaign. Choose a campaign with some social contacts and open the Settings page to select the filter you want to train. Then Save and close the Setting page. This puts you in training mode.

The name of the filter you've selected is at the top left of the Home tab, and you see a "+" and "-" button for each social contact. Click the "+" to "Train In" the social contact indicating that this is the type of contact you would like the Filter to keep in the Campaign. Click the "-" to "Train Out" the social contact, indicating that this is the type of contact you would like the filter to reject.

The training does not impact the campaign until you edit the campaign and move the filter from Available to Selected.

Author Filters

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.

Deleting Filters

Select the check box to the left of one or more Filter Names and click Delete to delete the filter. A confirmation dialog box appears. Click OK to confirm deletion of the selected filter(s).

System Administration

Only the Application User, created during install time, can see the Administration Tab and the three gadgets on it.

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

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

System Status and Statistics

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 shows status for the main services - Datastore, Indexer, Runtime, and Eventing - and for the Hardware profile. It also shows the status of the Mail Server and the external XMPP Server used for Instant Messaging notifications.

Additionally, the System Statistics section provides two graphical meters showing the number of incoming social contacts per hour and the number of logged-in users. These meters help you determine if the incoming rate of contacts or the number of users are nearing the limits allowed by the server. If a meter is completely red, consider asking users to log out or modifying 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. The mail server may open port 465 instead for SSL/TLS connections. For example, the Gmail SMTP server (smtp.gmail.com) uses port 465.
- 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.
- Use SSL|TLS : Defaults to unchecked. Check this if a secure connection is preferred and is supported

by the mail server. The mail server certificate is not validated for this release. You must check this if you are using the Gmail SMTP server (smtp.gmail.com).

Click **Save** to save your changes.

Proxy Settings

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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 Administration 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.
- SocialMiner should only need to access a proxy server if it sits behind a corporate network firewall and has to use a http/https proxy server for accessing an outside network. You should not need to give SocialMiner a private NAT address, and doing so is not currently supported.

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 XMPP 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. When configuring Cisco Unified Intelligence Center, this is the *Instance*.
- 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.

When configuring Cisco Unified Intelligence Center, you must select UTF-8 as the character set.

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* - Use tools on this interface to upgrade software and to import certificates.
- *Cisco Unified Serviceability*
- *Disaster Recovery System* - Use tools on this interface to back up and restore.

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

Only the Application User, created during install time, can use this gadget on the Administration Tab.

VIDEO: View a <u>video</u> about configuring Instant Message Notifications. View a <u>video</u> about configuring Email Notifications. Although this video was created for an earlier version of SocialMiner and shows an older user interface, it presents accurate information.

The Notification gadget on the Administration Tab lets you view/delete, edit and add notifications. Notifications are email messages or IMs that are sent when a social contact is <u>tagged on the Home tab</u> or is configured with an <u>automatic tag</u>. You can also send notifications to a mobile phone using an SMS Gateway service. Here is a list of <u>SMS Gateways by carrier</u>.

Note:

- You must <u>configure a Mail Server</u> in the System Administration gadget before Email notifications can be sent.
- You must <u>configure an XMPP Server</u> 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.
    3. HTTP - Reserved for developer applications that deliver social contact data to an external application.
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

Only the Application User, created during install time, can use this gadget on the Administration Tab.

The SocialMiner Reply Templates gadget on the Administration Tab lists all available Reply Templates. By default, the gadget displays the two system templates -- Cisco Twitter and Cisco Facebook -- and allows you to configure custom reply-templates to be used with the system.

System Templates: The two system-defined templates cannot be edited or deleted. They are:

- Cisco Twitter Reply Template (used for Twitter Account and Twitter Stream feeds only, for which it is the default option)

- Cisco Facebook Reply Template (used for <u>Facebook Fan Page feeds</u> only, for which it is the default option)

Custom Templates: An example of a 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.

See also <u>the Custom Reply training lab</u>.

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

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 <u>SQL</u> 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: <u>http://www.cisco.com/cisco/software/release.html?mdfid=283613136&catid=278875240&softwareid=283733464</u>

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. Must be lowercase.
- The databasehost can be socialminer with all lowercase and the instances should also be with lowercase.

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.

Downloading and Installing Language Packs

Do this only if you require the SocialMiner interface in a language other than English.

A downloadable zip file of internationalized SocialMiner user interface and online help files will be available on www.cisco.com shortly after the English-language version of SocialMiner 8.5(3) is released.

The filename is SocialMiner-languagePack-8.5.3.zip.

Downloading and unzipping the file gives you 18 language packs with the file extension of *##.cop.sgn*.

IMPORTANT: Do not change the name of the files.

Language	LanguagePack
Chinese (Simplified)	ccp-language-zh_CN-8.5.3.1000-1.cop.sgn
Chinese (Traditional)	ccp-language-zh_TW-8.5.3.1000-1.cop.sgn
Danish	ccp-language-da_DK-8.5.3.1000-1.cop.sgn
Dutch	ccp-language-nl_NL-8.5.3.1000-1.cop.sgn
Finnish (France)	ccp-language-fi_FI-8.5.3.1000-1.cop.sgn
French (France)	ccp-language-fr_FR-8.5.3.1000-1.cop.sgn
French (Canadian)	ccp-language-frCAFR-8.5.3.1000-1.cop.sgn

German	ccp-language-de_DE-8.5.3.1000-1.cop.sgn
Italian	ccp-language-it_IT-8.5.3.1000-1.cop.sgn
Japanese	ccp-language-ja_JP-8.5.3.1000-1.cop.sgn
Korean	ccp-language-ko_KR-8.5.3.1000-1.cop.sgn
Norwegian	ccp-language-nb_NO-8.5.3.1000-1.cop.sgn
Polish	ccp-language-pl_PL-8.5.3.1000-1.cop.sgn
Portuguese (Brazil)	ccp-language-pt_BR-8.5.3.1000-1.cop.sgn
Russian	ccp-language-ru_RU-8.5.3.1000-1.cop.sgn
Spanish	ccp-language-es_ES-8.5.3.1000-1.cop.sgn
Swedish	ccp-language-sv_SE-8.5.3.1000-1.cop.sgn
Turkish	ccp-language-tr_TR-8.5.3.1000-1.cop.sgn

System Backup and Restoration

Cisco SocialMiner Release 8.5(3) 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**.

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 this guide: http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/drs/8_0_1/drsag801.html.

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 **Cisco Disaster Recovery System**.
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.

Obtaining a CA-Signed Certificate

To eliminate browser security warnings each time you sign-in you must obtain an application and root certificate signed by a Certificate Authority (CA).

To do this, use the Certificate Management utility from Cisco Unified Operating System Administration.

Open Cisco Unified Operating System Administration from the Administration tab > Platform Administration. You can also use the URL

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

where *servername* is the Name or IP address of the server. Sign in with your Administrator credentials.

To obtain the certificates:

1. Select Security > Certificate Management > Generate CSR.
2. After the successful generation, click Download CSR.
3. Use the CSR to obtain both the signed application certificate and the CA root certificate from the CA.

To upload the certificates:

1. When you receive the certificates, again open Cisco Unified Operating System Administration from the Administration tab > Platform Administration.
2. Select Security > Certificate Management > Upload Certificate.
3. Select the certificate name from the Certificate Name list.
4. Upload the root certificate.
    1. In the Upload dialog box, select TomCat Trust from the dropdown.
    2. Browse to the file and click Open.
    3. Click Upload File.
5. Upload the application certificate.
    1. In the Upload dialog box, select TomCat from the dropdown.
    2. Enter the name of the CA root in the Root Certificate text box.
    3. Browse to the file and click Open.
    4. Click Upload File.

You can find detailed explanations in the Security topics of Cisco Unified CM Operating System Administration Online Help.

After you upload the certificates:

1. Sign out of SocialMiner.
2. Restart the XMPP Service. (SSH to SocialMiner and use this CLI: *admin:utils service restart SocialMiner XMPP Server*).
3. Restart Tomcat. (SSH to SocialMiner and use this CLI: *admin:utils service restart Cisco Tomcat).*
4. Sign in to SocialMiner.

Design Guidance

Topics:

- Advanced UI Options
- Command Line Interface
- Deployment Models
- Hardware and Software Specifications
- Ports
- Sizing
- Twitter Accounts and Security
- SocialMiner User Accounts and Security
- VMWare Open Virtual Format (OVF)

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 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).

Command Line Interface

To access the Command Line Interface for SocialMiner:

- SSH to the address for your SocialMiner server.
- Sign in with your administrator credentials.
- Type a ? at the admin: prompt to see the list of commands.

Refer to the Cisco Systems CLI documentation.

Note that most CLI commands do not apply to, or have not been certified for, SocialMiner.

Deployment Models

Version 8.5 of SocialMiner has a single-server all-in-one deployment model. The server may be deployed inside or 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.

Hardware and Software Specifications

Cisco will support SocialMiner deployment on any hardware provided SocialMiner is installed within the Cisco provided VMWare OVF.

Possible server options include Cisco UCS servers such as:

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

Ports

Port 25 is the default port for Email.

Port 465 is used by the mail server for SSL/TLS connections.

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

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

Port 5222 is used for pure XMPP to the XMPP/Eventing server.

Port 7071 is used for unsecure BOSH connections to the XMPP/Eventing server.

Port 7443 is used for secure BOSH connections to the XMPP/Eventing server.

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	10,000

Contacts (total per hour)	
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.

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 on the Home tab.

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.

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.

VMWare Open Virtual Format (OVF)

The SocialMiner system supports one standard OVF Appliance. The system requires ESXi 4.0 or ESXi 4.1.

For details on configuring VMWare and installing the OVF template, refer to Virtualization for Cisco SocialMiner.

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.

Training labs are at http://docwiki.cisco.com/wiki/SocialMiner_Labs.

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