



Cisco SocialMiner User Guide Release 10.6(1)

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SocialMiner

Cisco SocialMiner is a customer-care system that provides the ability to capture, filter, queue, and report on social contacts for social media engagement teams and contact center teams.

In addition to providing proactive social media customer care, SocialMiner supports routing chat and email requests when integrated with Unified Contact Center Express. SocialMiner also forwards voice callback requests to the contact center to be routed to a contact center agent when integrated with Contact Center Enterprise (CCE) solutions.

Internet postings, voice callback requests, email messages, and 'click-to-chat' requests captured by SocialMiner are referred to as contacts. SocialMiner stores the contacts and groups them into user-defined campaigns. Each campaign obtains contacts from one or more feeds. SocialMiner presents chat, Twitter, Facebook and RSS contacts to customer-care personnel who can search, review, categorize, and respond to them. SocialMiner produces reporting metrics on the handling of all of the different contacts in a contact center regardless of channel.

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What's New in Release 10.6(1)

The following sections describe new features and enhancements for Cisco SocialMiner, Release 10.6(1).

Email Feed

An email feed is used to provide email functionality with Unified Contact Center Express (Unified CCX) and Cisco Finesse. You can view email feeds in the SocialMiner user interface. You cannot create or edit an email feed in SocialMiner.

For more information, see Email Feed, on page 45.

Email Reply Template

The Cisco Email reply template is used by agents to reply to email contacts when SocialMiner is integrated with Unified CCX and Cisco Finesse. You cannot use this reply template in a standalone SocialMiner environment.

This reply template is not supported with the campaign results that appear in the Home tab of the SocialMiner user interface. Attempts to reply to a contact associated with this reply template result in an error.

For more information, see Replying to Contacts, on page 16.

Browser Support Changes

SocialMiner Release 10.6(1) supports Internet Explorer 10.0 and 11.0. Internet Explorer 9.0 is no longer supported.



For Internet Explorer 11, ensure that the Emulation Document Mode is set to Edge (Default).

SocialMiner Release 10.6(1) also supports Firefox Extended Support Release (ESR) 31 and later ESRs.

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), an operating system based on Redhat Linux.
- Informix® embedded database. This database contains the SocialMiner configuration and reporting data.
- Cassandra data store. This data store contains the contacts.
- Solr indexer. This indexer contains contact search data.
- 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 (referred to as panels in SocialMiner documentation). SocialMiner gadgets can also be rendered in other standard OpenSocial containers (see Advanced UI Options, on page 81). All system features and setup can be performed using REST APIs.

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 a good working knowledge of those sites. For background information on these sites, review the following resources:

The Twitter Guide Book

The Facebook Guide Book



Install or Upgrade SocialMiner

SocialMiner is installed as an appliance using the Cisco Unified Communications Operating System (Unified OS). The operating system and the SocialMiner application are installed together using a similar installation process as other Unified OS products such as Cisco Unified Communications Manager and Cisco Unified Intelligence Center.

SocialMiner operates on a VMware Virtual Machine (VM) on hardware that is running a VMware Host Server. SocialMiner currently supports installation of only a single node (as opposed to a duplexed or redundant system).

Additional information to help plan for SocialMiner installation and deployment is available in Design Guidance, on page 81.



Cisco does not support changing the hostname or IP address on any server once they have been set.

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Install SocialMiner

You can install SocialMiner release 10.6(1) directly or you can upgrade to release 10.6(1) from release 9.0(1), 10.0(1), or 10.5(1).



Note

If you upgrade from release 9.0(1), you must ensure that the release 9.0(1) COP5 file is installed before you begin the upgrade.

Before performing any upgrade, you must perform a DRS backup (see System Backup and Restore, on page 72) to ensure that you can revert to the previous version if necessary.

Install SocialMiner

Perform the following steps to install SocialMiner Release 10.6(1):

Procedure

- **Step 1** Create a virtual machine using a VMware Open Virtual Format template.
- **Step 2** Use the OVA template **Cisco_SocialMiner_v10.6_VMv8.ova** for the fresh installation of SocialMiner Release 10.6(1).
 - a) Go to https://software.cisco.com/download/type.html?mdfid=283613136&flowid=73189 and download this template.
 - The Cisco SocialMiner 10.6(1) Virtual Server Template (OVA) defines a virtual machine configuration that is supported in the SocialMiner 10.6(1) release. This OVA contains all supported virtual machine configurations of this release.
- **Step 3** When deploying the template, select either a large or a small deployment from the drop-down list.
- **Step 4** Mount the SocialMiner DVD or ISO file to the virtual machine and set the virtual machine to boot from the SocialMiner DVD. The installation wizard opens. Use Tab to navigate between elements and then press the space bar or the Enter key to select the element and proceed.
- **Step 5** Perform the media check when prompted.
- **Step 6** Follow the instructions on the screen and select **Yes** or **Continue**.
- Step 7 Use the arrow keys to highlight the correct time zone and then use Tab to navigate to the **OK** button. Press **Enter** to proceed.
- **Step 8** Provide the network information for SocialMiner. You must provide valid hostname with matching IP address. The system confirms that the hostname matches the IP address later in the installation process.
- **Step 9** Select **Yes** to provide DNS Client Settings for SocialMiner. Provide DNS servers and the domain. Select **OK**.
- **Step 10** Provide an Administrator ID and password. This credentials is for platform (Unified OS) administration.
- **Step 11** Provide information about your organization. This information generates the security (SSL) certificates for this server.
- **Step 12** You must provide at least one NTP Server. Enter the NTP host address and select **OK**.
- **Step 13** Provide a security password.
- **Step 14** Provide a username and password for the SocialMiner administrator. You can import additional SocialMiner users from Active Directory after the SocialMiner installation is complete.
- **Step 15** The confirmation window opens. You can select **Back** to change settings or **OK** to complete the installation. Installation can take up to two hours. The server may reboot to complete the installation steps. If you install from an ISO file and see the virtual machine message to "Disconnect anyway (and override the lock)?", select **Yes**.
 - A sign-in prompt appears on the server console.
- **Step 16** After the installation is complete, perform the one-time setup tasks listed in Additional Configuration Options, on page 5.

Additional Configuration Options

Procedure

- **Step 1** If your system is installed behind a firewall, set up an HTTP proxy so that feeds can access sites on the Internet.
- **Step 2** Configure Active Directory so that additional users can sign in.
- **Step 3** If you want to use Cisco Unified Intelligence Center, set up the reporting user so that the reporting tool can access the reporting database.

Upgrade SocialMiner

Before you upgrade to Release 10.6(1), you must perform a DRS backup (see System Backup and Restore, on page 72) to ensure that you can revert to the previous version if necessary. The following upgrade paths are supported for release 10.6(1):

- From SocialMiner Release 9.0(1) COP5 to Release 10.6(1)
- From SocialMiner Release 10.0(1) to Release 10.6(1)
- From SocialMiner Release 10.5(1) to Release 10.6(1)

If you are running an earlier release, upgrade your software to release 9.0(1) COP5 before starting the upgrade to release 10.6(1).

You can upgrade SocialMiner using the Software upgrades tool in Unified OS Administration or by using the Command Line Interface (CLI).

The upgrade can run unattended and may take over an hour.

Upgrade SocialMiner Using Cisco Unified OS Administration

Procedure

- **Step 1** Open Unified OS Administration from the **Administration tab** > **Platform Administration** or access the URL **http://<servername>/cmplatform** where <servername> is the Hostname or IP address of your SocialMiner server.
- **Step 2** Select **Software Upgrade** > **Install/Upgrade**.
- **Step 3** If you burned the files to CD or DVD, on the Software Installation/Upgrade dialog box
 - a) Source—DVD or CD.
 - b) Directory—the directory for the DVD or CD including forward slash. For example, if the upgrade file is located on the root directory of a CD that is on Drive D, type "/D".
 - c) Server—leave blank.
 - d) User Name—leave blank.

- e) Password—leave blank.
- **Step 4** If the upgrade files are on a remote file server, on the Software Installation/Upgrade dialog box
 - a) Source—Remote Filesystem.
 - b) Directory—the path to the files. For example, "/SocialMiner/Installation".
 - c) Server—the IP address of the remote server.
 - d) User Name—the user name to access the remote server.
 - e) Password—the password to access the remote server.
- Step 5 Click Next.
- **Step 6** Choose the iso file from the Software Location field.
- Step 7 Click Next.
- Step 8 At the Software Installation/Upgrade screen, select Reboot to Upgraded Partition.
- Step 9 Click Next.

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

When the upgrade is complete, verify that the

- · system restarts
- · correct version is active
- server status on the System Administration tab shows green checkboxes.
- **Step 10** Turn off CSA (see Turn CSA Off, on page 8).

Upgrade Using the CLI

Procedure

- **Step 1** Download the appropriate SocialMiner release from Cisco.com and place the file on an FTP or SFTP server. You can also burn the ISO file to DVD.
- **Step 2** Use SSH to sign in to your SocialMiner system with the platform administration account.
- **Step 3** Use the CLI to run the command utils system upgrade initiate.
- **Step 4** Follow the instructions provided by the utils system upgrade initiate command. An example of executing the command follows. Note that file names change with each release.

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 8.5.4.10000-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 services affected by the upgrade process are functioning
properly.
Downloaded: UCSInstall CCP 8 5 1 UCOS 8.5.4.10000-X.sgn.iso
File version: 8.5.4.10000-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 8.5.4.10000-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. Continue to monitor the switch-over process from the Unified OS command line interface (CLI).

The system reboots after the upgrade.

Verify that the system restarts, the correct version is active, and the server status on the System Administration tab shows green checkboxes.

Step 5 Turn off CSA (see Turn CSA Off, on page 8).

Turn CSA Off

Procedure

- **Step 1** Access the CLI directly by signing in using the Administrator credentials.
- **Step 2** Enter the command: utils csa disable. A message informs you that the system needs to restart and you are prompted to enter Yes.
- **Step 3** Enter Yes to reboot.
- **Step 4** All users must clear their browser caches and cookies (clear the cache and cookies) before accessing the SocialMiner user interface.

Install Cisco Options Package (COP) files

The Cisco Options Package (COP) file provides a generic method to deploy Cisco software outside the normal upgrade process. Some examples of when you use a COP file are to install new language packs or to patch fixes and virtualization tools. You must first download and save the COP file before installing and applying it.

COP files can generally be installed on an active, running system in a shorter time frame than an upgrade file. Unlike upgrades, COP files cannot be removed or rolled back.

Use these instructions to install COP files:

- 1 Download the SocialMiner COP file from the Cisco Software site http://www.cisco.com/cisco/software/type.html?mdfid=283613136&catid=null to a local source or an SFTP server that can be accessed by the Cisco SocialMiner server.
- 2 Install the file using the procedure Upgrade Using the CLI, on page 6. (Remember to replace the upgrade filename with the COP filename).
- 3 Reboot the server.
- 4 When the upgrade is complete, clear the cache and cookies.



Note

If the ReadMe file for a specific COP file contradicts these general guidelines, follow the instructions provided with the file.



Launch and Use SocialMiner

To launch SocialMiner, use a web browser to access the root of the web server (for information on supported browsers, see SocialMiner Browsers).

Enter http://<servername> where <servername> is the name hostname or IP address of your SocialMiner server.

The browser opens at a sign-in page where you type your username and password.

SocialMiner has one default user—the SocialMiner Administrator. The SocialMiner Administrator is the application user who is configured during installation. The credentials for the SocialMiner Administrator allow initial access to SocialMiner.



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 by clicking

- Continue to Web Site in Internet Explorer or
- I understand the Risk in Mozilla Firefox or
- Advanced in Google Chrome.

You can allow the current connection to the server or save a security certificate for the server. For details about certificates, see Certificates, on page 67.

For some browsers, you can obtain and upload a CA-Signed certificate so that the security warnings do not persist.

A successful sign in presents the SocialMiner Home tab. All users see the Search and Configuration tabs.

If you sign in as the SocialMiner administrator, you also see the Administration tab. Certain SocialMiner functions are available only to the SocialMiner Administrator, such as access to the Active Directory on the Administration tab where the SocialMiner Administrator can set up other users.



SocialMiner does not automatically sign out inactive users. Be sure to sign out when your work on SocialMiner is complete.

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- Replying to Contacts, page 16
- Settings, page 23
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The SocialMiner Interface

Use the SocialMiner interface to view and respond to contacts.

Internet postings, voice callback requests, email messages, and click-to-chat requests captured by SocialMiner are referred to as contacts. There are different types of contacts including callback contacts, email contacts, chat contacts, and social contacts. Callback contacts are contacts created in SocialMiner when a customer requests a call from a contact center agent. These contacts are collected by SocialMiner and routed to Unified CCE for an agent to handle.

A Chat contact is created when a customer requests a chat session with an agent. Email contacts are created when a customer sends an email message to a contact center. SocialMiner retrieves these contacts and routes them to Unified CCX for agents to handle.

Social contacts are posts collected by SocialMiner. A social contact can be a Tweet, a Facebook wall post, a blog, or a Forum post. SocialMiner creates separate contacts for each post or interaction.

For example, separate social contacts are created when:

- A customer tweet matches the feed criteria of a SocialMiner campaign.
- An agent replies to a tweet.
- A customer replies to an agent's reply.

SocialMiner stores the following information about each contact:

- Author—the username of the person who posted.
- Creation date—the date the contact was first stored in SocialMiner.
- Title—the title of the post.
- Description—the nature of the contact text.
- Published date—the date the contact was published on the Internet. (Not all feeds have this.)
- Source type—the type of feed that collected the contact.

• Tags—the tags applied by SocialMiner users.

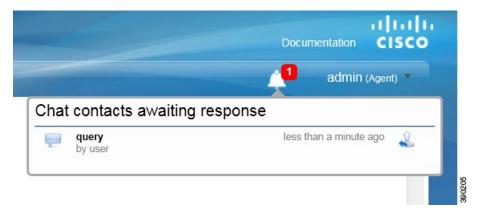
All contacts remain in the data store until they are purged.

SocialMiner documentation can be accessed by selecting the **Documentation** link in the title bar.

The navigation bar consists of up to four tabs (depending on whether the user currently signed in is an administrator), an alerts indicator, and a control that displays the user currently signed-in that also allows the user to sign out.



The bell icon near the top right corner of the interface is the alerts indicator and shows when there are outstanding alerts for the signed in user. The number of outstanding alerts is superimposed on the icon (with a count of up to 99, after which the display shows '99+' until the number of outstanding alerts falls below that threshold again). Since the alerts indicator is in the navigation bar, it is always available to users (regardless of which tab they are viewing).



Select the alerts indicator to see a drop-down showing details for all outstanding alerts (sorted by oldest alert first). Select the reply icon beside any alert to respond to that alert. Unanswered chats appear in the "Chat contacts awaiting response" section of the alerts drop-down. Selecting the reply option for a chat alert opens the chat reply template.

Home Tab

The SocialMiner Home tab is a dynamic "Inbox" for viewing and responding to contacts. It displays the most recent contacts captured for the selected campaign.

Contacts are arranged by campaign and appear on the Home tab only after:

- at least one feed (a stream of contacts coming from a single source) is configured.
- at least one campaign (contacts grouped for handling by the customer care team) is configured.
- the feed is added to the campaign.

• the campaign is selected from the **Please select a campaign...** drop-down menu.

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

A small lock icon appears at the bottom of the Home tab (and on the chat reply template) to indicate the status of the eventing and chat connection. The lock displays as locked if the connection is secure and as unlocked if the connection is not secure. The lock is grayed out if there is no connection.

Open the drop-down at the top left to select a campaign name and to see the contacts that have been returned for it. Contacts are sorted by time posted, with the newest at the top.

The information displayed for each contact includes:

- how old the contact is and the username of the author (4 days ago by harry99).
- a hyperlink (showing all or part of the tweet, post, blog, or other contact retrieved by SocialMiner).
- icons to change the state of the contact (for those contacts whose state can be changed manually).
- the name of the user responsible for the action that put the contact into its current state (Discarded:user 3).

When the page is first loaded (or refreshed), you see the 50 newest contacts for the selected campaign. If there are more than 50 contacts, select **More Results** at the bottom of the page to append the next 50. If the **More Results** button does not appear, there are no more results to view for this campaign at this time.

The title of any chat social contact is an active link if a transcript has been saved. Select the link to open a window displaying the chat transcript. (The chat transcript only becomes available once a chat session is closed. If one party in the chat does not close their window, then the system cannot generate the transcript until the inactivity timeout expires.)

There are four ways to modify the display on the Home tab. You can:

- select a different campaign from the drop-down list at the top left.
- show social contacts in a given state by selecting a state from the drop-down at the top right.
- Select the settings icon to
 - · set your chat alias,
 - enable or disable the Accessibility feature on the agent chat interface,
 - · show or hide social contacts by tag
 - enable or disable training for a Bayesian filter.



Note

Settings are user-specific. Your changes to settings determine what you see, but do not affect what others see.

• Grefresh the list with the newest social contacts.

Working with Contacts

There are six possible states for a contact: Unread, Reserved, Draft, Handled, Discarded, and Queued. These states are options on the **Show** drop-down menu and are represented by icons that appear at the top of the list and to the right of each contact.

- Unread
- Reserved 🍛
- Draft
- Handled 🍛
- Discarded
- Queued 🗔

Show Contacts by State

You can control what contacts are displayed by selecting a 'Show' option from the drop-down at the top right of the title bar.

Show Unread—All contacts captured by SocialMiner are initially in the Unread state.

Show Reserved—These contacts have been reserved by an agent, but activity on these contacts is not yet complete (they are not yet discarded or handled).

Show Drafts—These Twitter and Facebook social contacts have had a draft reply saved, but the reply has not vet been sent.

Show Handled—These contacts have been handled by an agent.

Show Discarded—These contacts have been discarded either by an agent because they do not require a response or by the system (see System Changes to Contact States, on page 14). Discarded contacts remain in the system until the next purge. (Administrators can find the total number of system-discarded chat or callback contacts using the Serviceability API.)

Show Queued—These contacts have been routed for external handling and are not editable in the SocialMiner interface.

The list of contacts updates immediately when you change the state of a contact (but it can take up to four seconds for the change to update the database). The name of the last user to change a state appears next to the contact as soon as the change occurs.

When a user hovers over the contact state indicator, a tool tip opens to say why the contact is in that state (except for contacts in the Unread state).

State selection is retained by a cookie and saved in the browser. This means that when an agent selects to show contacts of a particular state and then closes the campaign or signs out, only contacts in that state appear the next time that agent opens the campaign in that browser. To see contacts that are in other states, select a different Show option.

System Changes to Contact States

SocialMiner sets contacts to Discarded when it is over capacity (for chat and callback contacts), when a callback social contact has been cancelled, and after it recovers from a system failure. After recovery, SocialMiner looks for these types of contacts that were in these states before the system failure and discards them:

- · Unread chat
- · Reserved chat
- · Queued callback

The tool tips displayed when a user hovers over these contact state indicators describe the situation that caused the system to put the social contacts into this state. For example, callback social contacts that were successfully cancelled will display the tool tip "Callback was successfully cancelled" when you hover over them.

SocialMiner sets email contacts to Discarded when

- The folder on the Exchange server that contains the customer email is deleted.
- The customer email is deleted from the Exchange server.
- The feed on which the reply came in is deleted.

Change Contact State

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

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

To change the state of a contact, click the button to select the state for your intended action.

• Reply—Select this to respond to a contact. For Twitter and Facebook social contacts, and for Chat contacts that come in on a feed that has the Cisco Chat reply template assigned, selecting this state opens the reply template. The contact transitions to the Draft (if Save Draft is selected) or Handled state and appears on the appropriate list.

For Chat contacts that come in on a feed that has the Cisco Multi-Session Chat reply template assigned, the reply template does not open.

- Draft—Select this to display the draft response, edit it, and send it.
- Handle—Select this to move the contact directly to the Show Handled list.
- Discard—Select this to move the contact directly to the Show Discarded list.



Note

The Show list updates immediately when you change the state of a contact.

Real-time synchronization: If one agent changes the state of a contact, other agents working in that campaign see the change within a few seconds.

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

For example, here is what you would do if you set a contact to Handled and then change your mind about handling it.

- Select Show Handled.
- Locate that contact.
- Click the Handle button. This removes the contact from the Show Handled list immediately. The contact is returned to the Show Unread list within a few seconds.

The state of a contact is universal across the SocialMiner system. For example, if one user handles a contact, the contact appears as handled in the browser interface for all other users. This also occurs if the contact appears in multiple campaigns.



When a chat session ends, the state change buttons for the social contact become inactive and are grayed out

Contacts in the Queued state are not editable in the SocialMiner interface, therefore the state change buttons for those contacts are grayed out too. Additionally, for Queued contacts, you do not have the option to add tags to them (although you can remove tags from them).



Tagging Contacts

Tags are labels that allow you to categorize contacts, to track workflow, and to set up notifications. 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. Use the Settings page to filter the list of contacts to show only those contacts with a particular tag.



Contacts in the queued state are not editable from the SocialMiner user interface. You cannot add tags to them, although you can remove tags from them in this state.

Adding Tags

The Tag text field, a **Tag** button, and suggested tags are visible when you hover the cursor over a contact.

To add a tag to a contact, enter text in the tag text field and press **Enter** or click **Tag**. You can add a maximum of twenty tags to a contact.

You can also use Automatic tagging on the Feeds panel to specify up to ten tags that are applied to new contacts as they are retrieved for a feed.

The most commonly used tags for the campaign appear as 'suggested tags' links to the right of the **Tag** button. These suggestions provide one-click tagging for commonly used tags. To add one or more suggested tags to

the contact, select the link for the suggested tag. The suggestions are specific to the campaign (not to the entire SocialMiner system) and are only updated on a refresh.

Click **Refresh** to see new suggested tags. If the contact is already tagged with a suggested tag, that tag does not appear on the list of suggested tags.

Real-time synchronization

If one agent adds or deletes a tag for a contact, other agents working in that campaign see the addition or deletion immediately.

Tips for tagging

- Tags are not case sensitive (Cisco and cisco are the same tag).
- Multiple tags must be separated by commas. For example, type the following into the tag text area--Cisco, TelePresence, Cisco TelePresence. Then click Tag to create these three tags:
 - · Cisco
 - · TelePresence
 - · Cisco TelePresence
- Do not use quotation marks around tags; use commas to separate them. If you type quotation marks, they become part of the tag.

Removing Tags

To remove a tag from a social contact, select the small, gray x at the right of the tag name.

Replying to Contacts

Reply to contacts by selecting the reply icon which that appears beside contacts shown on the Home tab, in the search results display, and in the alerts indicator drop-down list.

You reply to Twitter, Facebook, and chat contacts using reply templates (you do not reply directly to callback contacts or RSS social contacts). There are five system-defined templates: Cisco Twitter, Cisco Facebook, Cisco Chat, Cisco Multi-session Chat, and Cisco Email. The SocialMiner Administrator can add custom reply templates



The Cisco Multi-session Chat reply template is the default reply template for Unified Contact Center Express multi-session chat. You cannot use this reply template in a standalone SocialMiner environment.

The Cisco Email reply template is the reply template that agents use to reply to email contacts when SocialMiner is integrated with Unified Contact Center Express. You cannot use this reply template in a standalone SocialMiner environment.

Reply templates are configured on the **Add/Edit Feed** page for each feed type in a campaign. Certain feed types have default reply templates. A feed can have only one reply template.



Note

SocialMiner uses the support available in your browser to provide spellcheck functionality. Refer to the documentation about language dictionary support for your browser for information.

Replying to a Chat Social Contact

When a customer submits a chat form, a new social contact opens in the chat campaign and the customer waits for an agent. The agent who selects the Reply icon for that social contact launches the chat reply template and enters into a dialogue with the customer.

A small lock icon appears at the bottom of the Home tab (and on the chat reply template) to indicate the status of the eventing and chat connection. The lock displays as locked if the connection is secure and as unlocked if the connection is not secure. The lock is grayed out if there is no connection.



Note

For a chat to occur, there must be at least one SocialMiner chat feed configured and the feed must be added to a campaign.

The agent types in the text-entry area and presses Enter.

The customer sees the agent's message and enters a response.

To Reply to a Chat Using the Cisco Chat Reply Template

- 1 Select a chat social contact. Select the Reply icon. The chat interface opens to show the customer's name and any extension field data in the left panel.
- 2 Type a remark in the lower right panel and press **Enter** to begin the dialog.

Customer Chat

A chat session is initiated when a customer submits a chat form to a chat feed in a campaign. Agents can then respond to the chat contacts in SocialMiner. These chat contacts must belong to a campaign that is set up with a chat feed.

SocialMiner supports a maximum of 120 (in a small deployment) and 400 (in a large deployment) simultaneous chat sessions between a customer and an agent.

Chat Invitation

An agent can also invite a customer from existing Twitter or Facebook social contacts to a chat session by clicking on the Insert Chat Invitation button that appears in the reply template.

A <<chat invitation link>> placeholder is added to the reply template text area, which is replaced by the actual link when the message is sent.

For Twitter, the placeholder reduces the number of characters available to tweet by 22, and Twitter shortens the actual link text to 22 characters when the message is sent.

For Facebook, the total comment along with the generated chat invitation URL must not exceed 8000 characters.

The customer selects the chat URL in the message they receive to accept the invitation. This initiates the chat session.

For a chat to occur, there must be at least one SocialMiner chat feed, and the feed must be added to a campaign. Within each campaign, one chat feed must be designated as the Chat Invitation Feed for the Insert Chat Invitation button to appear in either the Twitter or Facebook reply template.

Chat Transcript

When the chat ends, the customer is presented with an option to download the chat transcript as a PDF file. The chat ends when the customer clicks the **End** button or presses **Ctrl-Shift-E**. The chat can also be ended if the agent ends the chat session. To download the transcript, the customer can click the **Yes** button or press **CTRL-Shift-X**. The customer can click the **No** button or press **CTRL-Shift-X** to cancel.

The chat ends and the customer does not receive the chat transcript download option in the following scenarios:

- The session times out due to inactivity
- Customer closes the browser window
- Customer navigates to another URL from the browser window
- Customer refreshes the browser window



- The chat transcript PDF supports all languages that SocialMiner supports except for the following:
 - · Chinese Simplified (zh CN)
 - · Chinese Traditional (zh TW)
 - Japanese (ja_JP)
 - ° Korean (ko_KR)

If a chat session is conducted using one of these languages, the option to download a PDF is not presented to the customer.

For more information about supported languages on SocialMiner, see the *Cisco SocialMiner Developer Guide* available here:

https://developer.cisco.com/site/socialminer/overview/

Chat Process

This is the flow of the chat process.

The SocialMiner Administrator:

- Creates and saves a chat feed in SocialMiner, using the Cisco chat reply template.
- Adds the chat feed to a campaign.
- Copies the chat feed sample code and pastes it in a text editor.
- · Makes changes to the code, if needed.

- Saves the code as HTML.
- Publishes the HTML to a website.

The customer:

- Selects a Click-to-Chat (or similar) link or button on the website to open the chat feed form; then completes and submits it.
- Or, selects the URL sent in a Twitter or Facebook message inviting the Twitter or Facebook user to chat with an agent.

The customer sees a welcome message asking them to wait while they are connected to a customer care representative.

If no agent responds before a defined timeout, the customer is sent a message indicating that they can continue to wait or try again later. If an error occurs during setup, the customer is sent a message indicating that chat is not available and to try again later.

SocialMiner:

- Sets up a chat session and creates a social contact in SocialMiner with the form data, the URL of the chat session, and the URL of the chat reply template that serves as the chat gadget interface.
- Generates a chat, which appears in the chat campaign.

The agent:

The agent selects the Reply icon for the social contact to enter the chat session and to display the Agent Chat Reply template (similar to the example shown here). The conversation between the agent and customer begins and the social contact state changes to Reserved. Information about the customer appears on the left side of the screen. The agent can use the font sizing buttons to increase or decrease the size of the font in the chat window. The agent can also press Ctrl-Shift-I to increase the font size or Ctrl-Shift-I to decrease it.

The agent can end the chat session and close the chat reply template by clicking the **End** button or by pressing **Ctrl-Shift-E**.

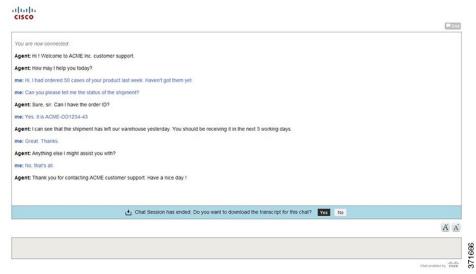


The customer:

A customer chat interface opens when an agent joins. The chat interface supports accessibility using the JAWS 'highlighted text' functionality. With JAWS configured to read highlighted text and Accessibility mode enabled,

incoming chat messages and other events are highlighted briefly so JAWS can announce them. Customers enable Accessibility mode by pressing **Ctrl-Shift-S**.

Customers can use the font sizing buttons to increase or decrease the size of the font. Customers can also press **Ctrl-Shift-**] to increase the font size or **Ctrl-Shift-**] to decrease it.



After the conversation is complete, the customer can click the **End** button or press **Ctrl-Shift-E**. This ends the chat from the customer side and removes the customer from the chat room.

Alternately, if the chat session is closed by the agent's desktop, the customer is left alone in the chat room and the option to download the chat transcript as PDF is presented to the customer.

For more information on chat transcript, see Chat Transcript, on page 18.

Chat Behavior

In the chat session interface:

- Each party types a message and presses **Enter**. The agent receives the customer's message immediately. The customer receives the agent's response within five seconds, based on the timing of the response in relation to the five-second polling interval.
- The agent sees a time marker next to each customer entry.
- URLs and email addresses are actionable links.
- When the agent ends the chat, the chat session is removed and the customer receives an end of conversation message. The social contact state changes to Handled.
- Once chat starts, there is no timeout for the agent but there is a user-defined customer inactivity timeout. By default, a customer who does not send a message for five minutes is removed from the chat session.
- Agents who navigate away from a chat (for example, to consult a web page) can reconnect by selecting
 Reply to change the social contact state back to Unread, then selecting Reply again to reserve the social
 contact and rejoin the chat.
- After a chat ends, agents can search for the chat session transcript using the interface on the Search tab.

Chat Errors

If the server goes down, or if cookies are cleared on the customer side, the customer sees a "Connecting..." message, followed by an "Error connecting to server" message.

The provisioning section outlines information on system limitations for chat that, if exceeded, may also cause chat errors.

Replying to a Twitter Social Contact

There are multiple ways to reply to a Twitter social contact.

- Direct-message the author of the tweet.
- Create an "@" reply that is viewable to everyone on Twitter.
- Retweet (repost or forward) the tweet.

To Reply to a Tweet Using the Cisco Twitter Reply Template



Either a Twitter account, search, or stream feed needs to be configured for the Twitter reply template to work properly.

- Select a Twitter social contact and select the Reply icon &. The Cisco Twitter template opens with the following elements:
 - A link to the tweet you are responding to.
 - A picture, the userid and handle, and a description of the tweet author.
 - A link to the Twitter page of the tweet author.
 - A display of the number of followers for the tweet author.
 - An Account drop-down menu. Select the Twitter account from which you are replying. All Twitter
 accounts configured on this system appear in the drop-down 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 the **Follow** button to begin following.
 - The conversation history of the social contact is listed and includes the handle of the tweet author, an indicator of the time elapsed since each tweet was posted, and the text of the tweet itself. You can reply, re-tweet, or send a direct message to any tweet in the conversation.
 - Reply icons. Click either **Reply**, **Retweet**, or **Direct Message**. A pop-up dialog 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 re-tweets are posted to the time line of the Twitter account. A direct message is sent directly to the author of the tweet.
 - Enter your reply in the text box of the pop-up dialog. Text input is limited to 140 characters. The current character count is listed at the upper right of the text box.

- If a chat invitation feed has been defined for the campaign, an **Insert Chat Invitation** button appears in the bottom right corner of the reply template. An agent can click on this button to send a URL that the customer can select to initiate a chat with the agent.
- 2 Click Tweet, Retweet, or Send to send the response (depending on the type of reply selected). Or, for replies and direct messages, click Save Draft to save the response for review and then send it later. If you save a draft message, it is marked as Draft and can be found under the Show Drafts menu. Once the response has been sent, the social contact is marked as Handled.



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 differ.

Replying to a Facebook Social Contact

Configure the feed to use the Cisco Facebook reply template to respond directly to the fan page from SocialMiner.



If you reply to a Facebook comment, the reply appears in Facebook as a reply to the original post rather than as a reply to the comment. You can Reply, Like or Comment on a post only if you are the authorized administrator of the respective fan page.

To Reply to a Facebook Fan Page

1 Select a Facebook social contact. Select the Reply icon &.

The Cisco Facebook Reply form opens with the following elements:

- The link to the Facebook page.
- The Facebook picture of the person who posted or commented on the page.
- The Facebook name of the person who posted or commented on the page.
- The elapsed time since the post or comment was made.
- The text of the post or comment.
- A Like/Unlike 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.)
- A text area for your comment.
- Send and Save Draft buttons.
- If a chat invitation feed has been defined for the campaign, an **Insert Chat Invitation** button appears. An agent can click on this button to send a URL that the customer can select to initiate a chat social contact with the agent.
- A Cancel button.

2 Click Send to send the reply or click Save Draft to save the response for review and then send it later. If you save a draft message, it is marked as Draft and can be found under the Show Drafts menu. Once the response has been sent, the social contact is marked as Handled.



The instructions above pertain to the default Cisco Facebook reply template. If your SocialMiner Administrator has created and configured a custom reply template for Facebook, the steps for replying may differ.

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.

Replying to a Callback Contact

You cannot reply directly to callback contacts.

When a customer submits a request for a callback (for example, they click on a "Call me" button), a new social contact is created in SocialMiner and a notification is sent to Unified Contact Center Enterprise (Unified CCE) requesting that a return call be placed.

The reply to the contact is the return phone call initiated by Unified CCE.

Replying to an Email Contact

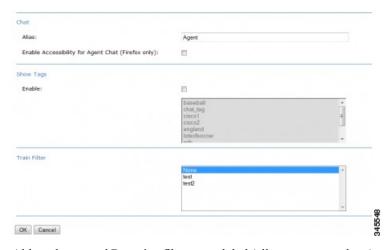
You cannot reply directly to an email contact from SocialMiner.

When a customer sends an email message, a social contact is created in SocialMiner and a notification is sent to Unified Contact Center Express (Unified CCX). The Finesse agent desktop in Unified CCX is used to reply to the email contact.

Settings

Use this page to set your chat / contact/ callback alias, to enable or disable the Accessibility feature on the agent interface, to show or hide social contacts by tag and to enable or disable training for a Bayesian filter.

Select the Settings icon at the top right of the Home tab to open the Settings page.



Although tags and Bayesian 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 effect what others see in the campaign.

You can customize the Home tab to show contacts with certain tags and to enable filter training for Bayesian filters. (You need to add tags and add Bayesian filters before these options appear in Settings.) You can also customize the appearance and function of the agent chat interface.

Chat Settings

The default chat alias value "Agent" can be changed to a string of up to 40 characters (stored in the browser as a cookie). Agents use this value to define how they will be identified to users.

When using a Firefox browser, the chat interface supports accessibility by using the JAWS 'highlighted text' functionality. With JAWS configured to read highlighted text and Accessibility mode enabled, incoming chat messages and other events are highlighted briefly so JAWS can announce them. Note that the "Enable Accessibility for Agent Chat (Firefox only):" checkbox only appears when you sign in using a Firefox browser.

Check or uncheck the checkbox to enable or disable the Accessibility feature in the agent chat interface.

Train Bayesian Filters

The Bayesian filter is a trainable filtering technology based on a Bayesian statistical probability model. Bayesian filters are not pre-programmed or configured with business rules. You must apply a Bayesian filter to a campaign and then train the filter to recognize the content of "good" contacts. When training a Bayesian filter, you have the option to "train in" or "train out" each contact in a campaign. After a sufficient amount of training, the filter begins to exclude unwanted contacts from a campaign. You must add a Bayesian filter before you can train it.

Bayesian filters can be trained for many different uses.

- 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 "Finesse" could return posts about hair products, Cisco software, and a move in the card game bridge. If the purpose of the campaign is to capture posts about the Cisco Finesse, a Bayesian filter can be trained to exclude the social contacts about hair care and playing bridge.
- A filter can be trained to look for social contacts with negative sentiment or positive sentiment.
- Filters can also be trained to include or exclude social contacts written in specific languages.

When training a filter, it includes the complete text of the post—not just certain keywords. Therefore it offers much more sophisticated filtering capability than a keyword exclusion approach to filtering.

You can train a Bayesian filter using any campaign. If you have added a Bayesian filter, you can select it on the Settings page to activate training mode (the default selection is None). To deactivate training, reselect None.

Selecting a Bayesian filter enables filter training and changes the campaign display on the Home tab to show the name of the filter at the top left and to show Plus (+) and Minus (-) training buttons for each social contact



- Click + 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 to 'train out' the social contact (indicating that this is the type of contact you would like the filter to reject).

Training settings are user-specific. Your changes do not impact what others see for the campaign.

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

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. It is important to do a significant amount of training before applying your filter to the production campaign.

Show Tags

By default, a campaign shows contacts with all tags. You can refine the list to show only those contacts with certain tags.

On the Settings page

- 1 Check Enable.
- 2 Select one or more tags.
- 3 Click OK.

For example, if you select Cisco and TelePresence from the tag list, only contacts with a Cisco tag or a TelePresence tag (or both), are displayed in the results.

To undo the tags and see all contacts again, return to the Settings page, uncheck Enable, and click OK.

Tab settings are user-specific. Your changes to Settings determine what you see on the Home tab but do not impact what others see for the campaign.

Search

The Search tab enables users to search for specific contacts on SocialMiner.

You can perform a default search or a field-specific search.

A default search is a freeform search. To perform a default search, enter the text that you want to search for in the Search field and then click **Search**. A default search searches the following fields:

- · sc.author
- sc.title
- sc.tags
- · sc.description
- sc.socialContactStatus
- sc.sourceType
- sc.isSoftLocked
- chat.agentName
- · chat.agentNickname
- chat.transcript

The sc.title, sc.description, and chat.transcript field searches are not case-sensitive. To search in all other fields, the search term you enter must be an exact (case-sensitive) match.



For SocialMiner standalone chat or Unified CCX single-session chat, the chat.agentName is always saved in the database in lower case text, no matter how an agent signs in. For example, if an agent signs in as JSmith, you must search for ismith to find the contact.

A field-specific search allows you to choose the field in which you want to search. Place your cursor in the Search field and press the spacebar to view a drop-down list of searchable fields. Select the specific field you want to search and enter a term (or more than one term enclosed in quotes) beside the field name. Wildcard-based searches using "?" (for a single character) and "*" (for multiple characters) are allowed.



When you start to type, the drop-down list of searchable fields is filtered based on what you type. For example, if you type chat, only the fields that contain chat appear.

Certain characters are special and cannot be included in the default search unless they are escaped—meaning either enclosing them in quotes or proceeding them with a backslash. For example, if you want to include the character + in your search, you need to enter \+ or "+". The same is true for the colon (:). To include it in your search, you must enter \: or ":" to have it recognized. (For a full list of all special characters, see the Solr wiki.)

You can perform a field-specific search on the following fields:

- sc.author: The person who created the social contact (chat request, email message, Tweet, Facebook post).
- sc.link: The link to the social contact.
- sc.publishedDate: The date the social contact was published.
- sc.createdDate: The date the social contact was created.
- sc.socialContactStatus: The status of the social contact (unread, reserved, handled, discarded, draft, or queued).
- sc.socialContactStatusDate: The date that the status of the social contact last changed.
- sc.tags: The tags applied to the social contact. Tags can be applied automatically by the system when the contact enters a feed or manually by a user.
- sc.sourceType: The feed type to which the social contact belongs.
- chat.agentNickname: Nickname for the agent in the chat room.
- chat.agentName: Login username for the agent in the chat room.
- de.id: The social contact ID. This ID is upper-case. The field is case-sensitive.

SocialMiner also allows for a combination of default and field-specific searches using AND and OR operators.

For example, to search for a contact that contains the phrase "This is a test contact" and is authored by John Smith, you can search using any of the following criteria:

- sc.author:John* (wildcard in field-based search) OR
- sc.author:"John Smith" AND test contact (a mix of field-based search and default search) OR
- test contact (just the default search)

Search results are displayed similarly to campaign results.





Note

You cannot insert a chat invitation link in Twitter or Facebook replies opened from the search results list.

The title of any chat social contact is an active link if a transcript has been saved. Select the link to open a window displaying the chat transcript. The chat transcript only becomes available once a chat session is closed. If one party in the chat does not close their window, then the system cannot generate the transcript until the inactivity timeout expires.



Email contacts appear in search results but the email messages cannot be viewed in SocialMiner. If you want to view an email message, you must locate the message in the appropriate folder on the Exchange server and view it from there.



SocialMiner Configuration

This section outlines the initial setup that must be performed when SocialMiner is first installed as well as the ongoing user-configurable options that can be used once the system is up and running.

The Feeds, Filters, and Campaigns panels are all found on the Configuration tab.

The Notifications and Reply Templates panels are found on the Administration tab.

You can sort and search the list appearing in any panel. Sort the list by selecting the heading or arrows at the top of the panel. After you select a heading, an arrow appears indicating the sort method (ascending or descending). To search a list, enter your search text in the Search text box above the list.

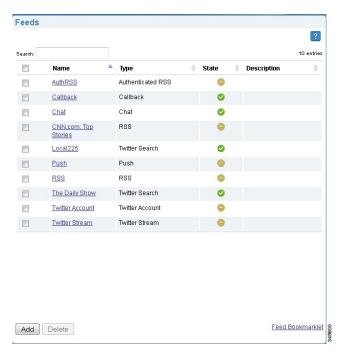
- Feeds, page 29
- Campaigns, page 46
- Reply Templates, page 47
- Filters, page 49
- Notifications, page 52

Feeds

The Manage Feeds panel lets you view, delete, add, and edit feeds.

A feed is a stream of contacts coming from a single source. Setting up feeds is a foundational step for your SocialMiner system. (You need to configure at least one feed and add it to a campaign before you can start seeing contacts on your home page.)

SocialMiner uses a process called de-duplication to automatically remove duplicate contacts. For example, if a user configures several overlapping feeds that capture the same result, then SocialMiner does not capture the same 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 contact in the data store, it verifies that the URL of that contact is not already in the data store.



Feed types are:

- RSS—A standard RSS 1.0, 2.0 or ATOM 1.0 feed. RSS feeds can be created manually or by the Bookmarklet feature (see Bookmarklet, on page 45).
- Authenticated RSS—An RSS 1.0, RSS 2.0 or ATOM 1.0 feed that requires a username and password.
- Facebook Fan Page—A fan page on Facebook.
- Push—Use this feed type to create social contacts. For example, by using an HTML form or to submit
 the social contacts directly into the feed. (Only the SocialMiner Administrator sees Push as an option
 on the feed Type drop-down.)
- Chat—Use this feed type to create social contacts for chat. (Only the SocialMiner Administrator sees Chat as an option on the feed Type drop-down.)
- Callback—This feed type receives incoming callback requests from the Callback API and, provided they are properly tagged, triggers Connection to CCE notifications to forward the callback contact to CCE for routing to a contact center agent. (Only the SocialMiner Administrator sees Callback as an option on the feed Type drop-down.)

Callback feeds are only used when SocialMiner is deployed with Unified CCE.

- Email—An IMAP email feed. You can view email feeds in the SocialMiner user interface. However, you cannot create a new email feed or modify an existing one. Email feeds are only used when SocialMiner is deployed with Unified CCX. In this integrated deployment, Unified CCX automatically creates email feeds as needed.
- Twitter Account—Sign in as a Twitter user. The time line of those you follow and direct messages (DM) are added as social contacts.
- There are two types of feeds that search tweets on Twitter:
 - Twitter Stream—Use this feed type if you need only one Twitter search criterion for all of your campaign needs and you want to fetch every tweet that matches that search criterion (this feed can

produce a high volume of search results). You can have only one Twitter Stream feed on a SocialMiner server.

° Twitter Search—Use this feed type if you need more than one Twitter search criterion for your all of your campaign needs or you'd prefer a more regulated and periodic flow of tweets into your campaign results. When using this feed type, significantly fewer tweet results may be returned on each fetch from Twitter.

Icons are used as visual indicators to display the state of each feed. Hover the cursor over the icon to display a tool tip that explains the state.

- The feed is operating normally.
- Scheduled. This is a brief interim state. Feeds are normally in this state for a very short time.
- An error occurred. Hover over the error icon to display a tool tip with the error text.
- The feed has been created, but is not assigned to any campaigns.
- 1 The status of the feed cannot be determined.
- The Twitter or callback rate limit was reached. When the rate limit is reached on a Twitter feed, you can hover your cursor over the icon to display when the Twitter feed will be available again.

Contacts retrieved by feeds are time-limited by the number of days defined in the Purge Social Contacts older than (days) setting of the Purge Settings tool on the Administration tab. The default is to retain social contacts for 30 days.

If you change a feed (for example, to rename it, change the URL, or change the polling interval), you do not need to re-add it to the campaign.

Adding and Editing Feeds

To create a feed, click **New** in the Manage Feeds panel. To edit the settings for a feed, select its name.

Select the feed type and complete the fields for the feed type. The fields vary by feed type, which are described below.

Adding Feeds Using the Feed Bookmarklet

The link at the bottom of the Manage Feeds panel, Feed Bookmarklet, initiates the process to create a bookmarklet in your browser that you can use to create feeds.

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).

Polling Interval for Feeds

The polling interval controls how often SocialMiner updates 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.

The default SocialMiner polling interval for feeds is five minutes.

Minimum Age for Feeds

Use the minimum age setting to filter out recent posts.

Automatic Tags for Feeds

All feeds support automatic tagging, which allows you to specify up to 20 tags that are applied to new contacts for a feed across all campaigns that include that feed.

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

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

Extension Fields in Push and Chat Feed Sample Code

Extension fields are a collection of custom name and value pairs that can be added to social contacts using the push feed and chat feed sample code. You can add social contact data to email and IM notifications by including extension fields as notification body variables.

You can add a maximum of 100 extension fields; up to one megabyte of information.

The following sections describe how to configure specific feed types. Fields marked with an asterisk (*) on the form are required. All other fields are optional.

RSS and Authenticated RSS Feeds

RSS is one of the simplest and most widely-available means for SocialMiner to capture social contacts because there are many forum and blog sites that support RSS. You can create an RSS feed as described below; you can also create a feed using the feed bookmarklet.

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 but requires basic authentication. The username and password are encrypted and stored in the SocialMiner configuration database.

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 (main) page returned by a site. This limitation prevents the system from capturing posts prior to the current page of results and 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. If you use this feature to set the number of results to return and you also regulate the polling interval, you can optimize system performance and reduce load on the site while ensuring all posts are captured.

Configure RSS and Authenticated RSS Feeds

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select RSS or Authenticated RSS as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - c URL—this must be a valid RSS Feed.
 - **d** Username—username for the feed. (Not applicable for RSS feeds, required for authenticated RSS feeds.)
 - e Password—password for the feed. (Not applicable for RSS feeds, optional for authenticated RSS feeds.)
 - f Polling Interval—number of minutes to wait between refreshing this feed.
 - **g** Minimum age—the number of hours old a post must be before it is included as a result. (This lets you exclude recent posts.)
 - **h** Automatic tags—provide automatic tags for the feed.
- 4 Click **Save** to save the feed.

Push Feed

The push feed allows you to "push" social contacts directly to SocialMiner through HTTP GET or POST requests. A push feed is an interface for generating a social contact through a web form. For example, you might want to create a social contact to test the routing of email notifications. You might also want to create a social contact for a response to a feedback form on your website.

The SocialMiner Administrator can add, edit, and delete push feeds. Non-administrators can only see, use, and add push feeds to campaigns on the Configuration tab.

Configure a Push Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select **Push** as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - c Reply template—the reply template to be used for replying to social contacts obtained from this feed.
 - **d** Automatic tags—provide automatic tags for the feed.
- 4 Click Save to save the feed.
- 5 Select the saved push feed from the list of feeds to open it in edit mode. You see a **Sample Code** link which contains working HTML code containing the correct IP address and feed id values for the instance you are working on. It also displays the form fields you need to get from the user and some examples of optional fields you can include, such as tags and extension fields.

In the following example, we use extension field 'Remarks'.

6 Copy the code from the sample code link and save it as HTML. Edit the fields; then click **Submit** on the HTML form.

The social contact will appear in the campaign that includes the push feed.

If the tags in the push feed code are associated with notification rules, the notifications will trigger immediately when the social contact is submitted.

You can have multiple independent push feeds on one SocialMiner system.

The push feed must be associated with a campaign in order to activate. Create a test campaign prior to testing your push feed.



Facebook Fan Page Feed

The Facebook Fan Page feed captures all posts and comments published on configured Facebook fan pages.



The Facebook Fan Page feed does not capture replies to comments or private messages.

Facebook 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 posts and comments are noticed by the consumer of the results. It is more difficult to achieve this goal when viewing the posts and comments directly on Facebook, as they are grouped by post instead of time-sorted.

When displayed in SocialMiner, Facebook 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 post on Facebook. Note that Facebook does not anchor comments, therefore the link takes the browser to the posts to which the comment refers and not directly to the comment.

SocialMiner requires a clean fan page "Vanity URL". 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.

Some uncommon fan pages have a number instead of a text name (they have not yet registered a Vanity URL). In this case, the URL with the number satisfies the requirements of the SocialMiner configuration.



SocialMiner retrieves a maximum of 50 posts and 500 comments per post for each polling interval.

Configure a Facebook Fan Page Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select Facebook Fan Page as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - c URL—this must be a valid Facebook fan page (the URL must start with http://www.facebook.com).
 - **d** Polling interval—the number of minutes to wait before refreshing this feed.
 - e Minimum age—the number of hours old a post must be before it is included as a result. (This allows you to exclude recent posts.)
 - **f** Reply template—the reply template to be used for replying to social contacts obtained from this feed (defaults to the Cisco Facebook Reply Template).
 - **g** Automatic tags—provide automatic tags for the feed.
- 4 Click Save.
- 5 Save redirects you to request authorization from Facebook that allows SocialMiner to post to the fan page. This opens Facebook.
- 6 Sign in with your organization's Facebook username and password and then click **Allow** to allow the Cisco Facebook reply template to post to the Facebook fan page.

Successful authorization creates and saves the feed.

Edit a Facebook Feed

To edit the feed, simply select the feed name to open the feed, make the changes, and click Save.

When you edit a Facebook feed, there are three buttons: Cancel, Save, and Reauthorize and Save.

If the icon next to a Facebook feed is red and the hover text for that icon reports authorization issues, open the feed as if to edit it and click **Reauthorize and Save** to initiate the Facebook authorization process.

Posted replies will appear as being from the user who authenticated 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, the reply is from Harrison Dental and not from Dr. Lee's own Facebook account.

Chat Feed

A chat feed is a variation of a push feed that contains sample HTML code for the fields a customer sees in a click-to-chat request form. When the customer clicks on a chat button and submits the form, a social contact is created and added to the campaign for the chat feed. SocialMiner displays a welcome screen, sets up a chat session for that social contact, and logs the user represented by that social contact into the chat session.

The SocialMiner Administrator can add, edit, search, and delete chat feeds as well as set the values for the chat join and chat inactivity timeouts. These values are set on a feed-by-feed basis.

Users can see, use, and add chat feeds to campaigns on the Configuration tab.

You cannot configure a chat feed from the SocialMiner user interface. Unified CCX automatically creates chat feeds as required in an integrated deployment with SocialMiner and Finesse.



If you use SocialMiner with Unified Contact Center Express (Unified CCX) for single or multi-session chat, you configure chat feeds in Unified CCX, not SocialMiner. For more information, see the Unified CCX documentation.

Configure a Chat Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select **Chat** as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - c Chat join timeout—define how long the system waits for an agent to join the chat during the setup process before sending the customer the chatAgentJoinTimeout message (see below).
 - **d** Chat inactivity timeout—define how long the system waits before automatically closing the chat session if there is no customer activity.
 - e Reply template—select **Cisco Chat**. The **Cisco Multi-session chat** option is only used when SocialMiner is deployed with Unified CCX and Cisco Finesse for multisession chat.
 - **f** Automatic tags—provide automatic tags for the feed.
- 4 Click Save.
- 5 Select the saved chat feed from the list of feeds to open it in edit mode.
- 6 Select the **Sample Code** link to open sample code that contains working HTML with the form fields you need to make the POST request for the chat feed.
- 7 Save the code from the Sample Code link locally and modify it as needed.

For example:

Replace "./img/ciscoLogoColor.p ng" with the location of your own logo and replace the default extensionField_chatError and extensionField_chatWaiting text strings with the messages you want the customer to see for each circumstance.

- **8** Add the HTML to your website.
 - The HTML code from the Sample Code link includes the SocialMiner server IP address and feed ID (100045 in the following example). If you have multiple chat feeds, the Feed ID will be different for each one; be sure to copy the sample code from the correct chat feed.
 - The code also contains form fields: Title, Author, Description, Tags, and three extension fields.

- In general, extension fields are a collection of custom name/value pairs that can be added to social
 contacts and are subsequently displayed in the Agent Chat user interface. For example, a 'Remarks'
 extension field appears in the sample form below. The name of the field and the value entered by
 the customer are added to the social contact and are displayed to the agent.
- Four hidden extension fields are special extension fields used to customize the customer chat user interface they are not added to the social contact and therefore are not displayed in the agent chat user interface.
 - extensionField chatAgentJoinTimeOut
 - · extensionField chatError
 - · extensionField chatLogo
 - · extensionField chatWaiting

During the chat setup process, if no agent responds before the chat join timeout, the customer is sent a message (defined in extensionField chatAgentJoinTimeout) indicating that they can continue waiting or try again later.



Note

Users must localize the messages they insert in the sample form in order for it to appear appropriately in their customer chat interface. For localization into languages that use characters outside the ASCII set, the characters need to be encoded into HTML character references to avoid corruption.

The sample code also includes a **Submit** button.

Here is an example of the SocialMiner code for a chat feed. This example is for illustration purposes only do not copy and paste from this example as the server address and feed ID will not be appropriate for your instance. Always use the code from the Sample Code link.

```
<style type='text/css'>span { display: inline-block; width: 100px; }</style>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<form action='https://<SocialMinerServer>/ccp/chat/form/100045' method='post'>
  <span>Title:</span>
    -
<input type='text' name='title' /><br/>
 <span>Author:</span>
    <input type='text' name='author' /><br/>
  <span>Description:</span>
    <input type='text' name='description' /><br/>
  <span>Tags:</span>
   <input type='text' name='tags' /><br/>
  <span>Remarks:</span>
    <input type='text' name='extensionField remarks' value='sample value' /><br>
  <input type='submit' value='Submit'/>
 <input type="hidden" name="extensionField chatLogo" value="./img/ciscoLogoColor.png">
  <input type="hidden" name="extensionField chatWaiting" value=</pre>
   "Welcome, please wait while we connect yo with a customer care representative.">
  <input type="hidden" name="extensionField chatAgentJoinTimeOut" value=</pre>
   "All customer care representatives are busy assisting other clients.
    Please continue to wait or try again later.">
  <input type="hidden" name="extensionField chatError" value=</pre>
   "Sorry, the chat service is not available. Please try again later.">
</form>
```

Title:		
Author:		
Description:		
Γags:		
Remarks:	sample value	
Submit		

When a user completes and submits the form, a URL to the new social contact is returned. The user sees an interface with the welcome message.

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If no agent picks up the chat before the first timeout, the message changes to indicate no agent is available.

If the system reaches the second timeout before an agent picks up the chat, the user receives the chat error message.

Modify the Sample Code for a Chat Feed

You can modify the content within the span tags and add more extension fields. You cannot delete the title or author.

Example of a Modified Form

In this modified form, the label for "Title" was changed to "My Issue". The label for "Author" was changed to "My Name". "Description" was removed. The "Remarks" extension field was removed, and three extension fields were added: "My Preferred Language", "My Phone", and "My Email".

<style th="" type:<=""><th>='text/css'>span</th><th>{ display: inline-block; width: 100px; }</style>		
<meta http-<="" td=""/> <td>equiv="Content-Ty</td> <td>pe" content="text/html; charset=utf-8"></td>	equiv="Content-Ty	pe" content="text/html; charset=utf-8">
<form action<="" td=""><td>n='https://<serve:< td=""><td>rIP>:<port>/ccp/chat/form/100051' method='post'></port></td></serve:<></td></form>	n='https:// <serve:< td=""><td>rIP>:<port>/ccp/chat/form/100051' method='post'></port></td></serve:<>	rIP>: <port>/ccp/chat/form/100051' method='post'></port>
	Issue:	
	type='text' name=	='title' />
	Name:	
	type='text' name=	='author' />
-	gs:	
-	type='text' name=	
	Preferred Langua	
-	<pre>type='text' name: Phone:</pre>	='extensionField_language' value='enter language' />
<input< td=""><td>tvpe='text' name=</td><td>='extensionField phone' value='enter phone number' /></td></input<>	tvpe='text' name=	='extensionField phone' value='enter phone number' />
	Email:	
<input< td=""><td>tvpe='text'name=</td><td>'extensionField email' value='enter email address' /></td></input<>	tvpe='text'name=	'extensionField email' value='enter email address' />
	vpe='submit' value	
My Issue:		
My Name:		
Tags:		
My Preferred		
Language:	enter language	
My Phone:	enter phone number	
My Email:	enter email address	
Submit		
		4
		945546

Callback Feed

A callback feed allows callback applications to submit customer requests to CCE for a return phone call (a callback) from a contact center agent.

The SocialMiner Administrator can add, edit, and delete callback feeds. Non-administrators can see callback feeds on the Configuration tab and add them to campaigns.

Before creating an agent request with the Callback API, you must have a Callback feed assigned to a campaign and a 'Connection to CCE' notification set up with a tag that matches the tag defined in this feed.

Configure a Callback Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select Callback as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - c Automatic tags—Configure the feed to automatically tag all callback requests that come in on that feed. This tag must match the tag on the Connection to CCE notification in order to trigger the notification.

Reply template automatically defaults to "No reply template".

4 Click Save to save the feed.

Twitter Account Feed

This feed captures mentions (tweets that include "@USERNAME") and direct messages to the @USERNAME account. The feed also captures the tweet type, such as "retweet" or "in-reply-to". You can have only one Twitter account for each user on a SocialMiner system.

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

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.

Configure a Twitter Account Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select the **Twitter Account** as the feed type, then enter information in the following fields:
 - Name
 - Description
 - Username—a valid existing Twitter username. Note: Only one Twitter account feed per Twitter username on a SocialMiner server is allowed.
 - Polling Interval—the number of minutes to wait between refreshing this feed.

- Minimum age—the number of hours old a post must be 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).
- Automatic tags—provide automatic tags for the feed.

4 Click Save.

Save redirects you to the Twitter authentication service, which lets you approve using this application with your Twitter account. (You may need to authorize pop-ups in your browser.) Follow the directions to enter credentials to authorize access to the Twitter account.

If you are already signed in to Twitter (using the same account you entered during feed configuration), click **Allow.**

If you are not signed in to Twitter, you are prompted to enter the Twitter username and password for the account. If you are signed in to a different Twitter account, click **Sign Out**; then sign in with the account you want to authorize and click **Authorize app**. After you click **Authorize app**, the browser window closes and you return to the Feeds panel with your new feed successfully created.

You have now authorized SocialMiner to access all Twitter functionality for this account.

Twitter provides SocialMiner with a key to enable access to the account. If any issues arise, you can re-authorize the account in the edit mode (as described below).

Edit a Twitter Account Feed

When you open a Twitter account feed to edit it, there are two buttons: **Reauthorize and Save** and **Save**.

If the icon next to a Twitter account feed is red and the hover text for that icon reports 'authorization issues', edit the feed and click **Reauthorize and Save** to initiate the Twitter authorization process.

For all other changes to the feed, just edit the fields and click **Save**.

Twitter Rate Limit

Twitter accounts are rate-limited by Twitter. When the Twitter rate limit has been reached, the hover text for the feed warning icon shows text something like this:

"Rate limit reached. Feed will reactivate at 10:39 AM. Last successful fetch time was 2 minutes ago. Success rate is 50%."



Note

Polling rates have an impact on how quickly a feed reaches its limit. A good default polling rate is every 5 minutes.

Twitter Stream Feed

The Twitter stream feed allows you to monitor public Twitter time lines for one or more keywords. This feed delivers tweets in real time and it is the integration method recommended by Twitter for high-volume applications like SocialMiner.

The SocialMiner Administrator can add, edit, and delete Twitter stream feeds. Non-administrators can see Twitter stream feeds on the Configuration tab and add them to campaigns.

There are some disadvantages to the Twitter streaming API. It has limited search and filter capabilities and it does not support non-space delimited languages such as Chinese, Japanese, Korean, (CJK) and Arabic. For more information about Twitter streaming API limitations, see the track section for Streaming API request parameters on the Twitter Developers site.



Twitter allows only one streaming connection for each account, which SocialMiner enforces by only allowing you to create one Twitter stream feed for each account.

The Twitter stream feed is configured using OAuth. During 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.

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-to".

Configure a Twitter Stream Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select **Twitter Stream** as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - c Search criteria—a comma separated listed of words to search on. Up to 200 keywords can be defined for a total limit of 2000 bytes.
 - See the table below for examples of what results you will get when entering different parameters when searching using Twitter Streams.
 - 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.
 - **d** Username—a valid existing Twitter username.
 - **e** Reply template—the reply template to be used for replying to social contacts obtained from this feed (defaults to the Cisco Twitter reply template).
 - **f** Automatic tags—provide automatic tags for the feed.
- 4 Click Save to save the feed. When you click Save, the OAuth process starts similar to Twitter Account.

Edit a Twitter Stream Feed

Open a Twitter stream feed to edit it. In the edit window there are three buttons: **Reauthorize and Save**, **Save**, and **Cancel**.

If the icon next to a Twitter stream feed is red and the hover text for that icon reports 'authorization issues', edit the feed and click **Reauthorize and Save** to initiate the Twitter authorization process.

For all other changes to the feed, just edit the fields and click **Save**.

Twitter Stream Track Keyword Examples

The Twitter stream API accepts a comma-separated list of words or phrases (commas act as logical 'or' and spaces act as logical 'and' when searching).

This table show a few examples (provided by Twitter) of the results you get when you enter different parameters using Twitter stream. For the full table of examples, see the *track* section for Streaming API request parameters on the Twitter Developers site.

If you enter this	it will match	it will not match
twitter	TWITTER	TwitterTracker
	twitter	#newtwitter
	"Twitter"	
	twitter.	
	#twitter	
	@twitter	
	http://twitter.com	
Twitter's	I like Twitter's new design.	Someday I'd like to visit @Twitter's office.
twitter api, twitter streaming	The Twitter API is awesome.	I'm new to Twitter.
	The twitter streaming service is fast.	
	Twitter has a streaming API.	
example.com	Someday I will visit example.com	There is no example.com/foobarbaz
example.com/foobarbaz	example.com/foobarbaz	example.com
	www.example.com/foobarbaz	
www.example.com/foobarbaz		www.example.com/foobarbaz

If you enter this	it will match	it will not match
example com	example.com	
	www.example.com	
	foo.example.com	
	I hope my startup isn't merely another example of a dot com boom.	

Twitter Search Feed

The Twitter search feed type allows you to monitor public Twitter time lines for one or more keywords.

SocialMiner users can add, edit, and delete Twitter search feeds and use them in campaigns.

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

Configure a Twitter Search Feed

- 1 Access the Manage Feeds panel.
- 2 Click New.
- 3 Select **Twitter Search** as the feed type, then enter information in the following fields:
 - a Name
 - **b** Description
 - **c** Search criteria—Up to 1000 characters are allowed by Twitter to form the search query (including operators). Twitter may additionally limit queries by complexity.
 - At least one keyword must be defined.
 - Spaces in the keyword search stand for AND. Use OR between words to search for phrases containing one word or the other. Use quotes to search for exact strings (for example, enter "Cisco Telepresence" to find the phrase Cisco Telepresence).
 - Note that Twitter search does NOT use commas to delineate search terms like Twitter stream does. See below for other examples of Twitter searches.
 - **d** Username—a valid existing Twitter username.
 - e Polling Interval—the number of minutes to wait between refreshing this feed.
 - **f** Reply template—the reply template to be used for replying to social contacts obtained from this feed (defaults to the Cisco Twitter Reply Template).
 - **g** Automatic tags—provide automatic tags for the feed.
- 4 Click Save to save the feed. When you click Save, the oAuth process starts similar to Twitter Account.

Editing a Twitter Search Feed

Open a Twitter search feed to edit it. In the edit window there are three buttons: **Reauthorize and Save**, **Save**, and **Cancel**.

If the icon next to a Twitter search feed is red and the hover text for that icon reports 'authorization issues', edit the feed and click **Reauthorize and Save** to initiate the Twitter authorization process.

For all other changes to the feed, just edit the fields and click **Save**.

Twitter Search Examples

Twitter search does not accept comma-separated lists like the Twitter streaming API does. The default operator for spaces is 'and', and all other operators (including 'or') must be specified.

Here are some examples (provided by Twitter) of how to find terms using the Twitter search feed. The full list of Twitter search operators is found in the "Operators" section of the Twitter search API site.

Enter this	to find Tweets
twitter search	containing both words "twitter" and "search". This is the default operator.
love OR hate	containing either "love" or "hate" (or both).
beer - root	containing "beer" but not "root".
#haiku	containing the hashtag "haiku".
from:	sent from person "alexiskold".
alexiskold	
to:	sent to person "techcrunch".
techcrunch	
@ mashable	referencing person "mashable".
superhero since: 2010-12-27	containing "superhero" and sent since date "2010-12-27" (year-month-day).
ftw until:2010-12-27	containing "ftw" and sent up to date "2010-12-27".
movie -scary:)	containing "movie", but not "scary", and with a positive attitude.
flight :(containing "flight" and with a negative attitude.
traffic ?	containing "traffic" and asking a question.
hilarious filter:links	containing "hilarious" and linking to URLs.
news source:twitterfeed	containing "news" and entered via TwitterFeed.

Email Feed

You cannot configure an email feed from the SocialMiner user interface. Unified CCX automatically creates email feeds as required in an integrated deployment with SocialMiner and Finesse.

Bookmarklet

SocialMiner supports the creation of RSS feeds using a bookmarklet.

Bookmarklets are "smart bookmarks" that include JavaScript. Creating a feed using the feed bookmarklet is a one-click method for adding feeds to SocialMiner and eliminates the need to complete fields on the New Feed form and avoids errors when copying and pasting the URL.

Get and Use the Feed Bookmarklet

Procedure

- **Step 1** From the Manage Feeds panel, drag the **Feed Bookmarklet** link at the bottom of the panel to the Bookmarks toolbar in your browser. (If you select the Feed BookMarklet link directly, you see a message instructing you to drag the link to the toolbar.) You may be prompted to confirm that you want to add the bookmarklet.
- **Step 2** Navigate to a website with RSS feeds.
- **Step 3** From that page, select the feed bookmarklet bookmark that you dragged to the Bookmarks toolbar. A message displays if the page has no feeds.
- **Step 4** If you are prompted to sign in, enter your SocialMiner credentials. (You must authenticate once per browser session.)
- **Step 5** SocialMiner captures all feeds on the page and filters them with icons indicating whether they are standard feeds or possible feeds.
 - A green checkmark displays for standard feeds. SocialMiner qualifies RSS feeds as "standard" when their URLs are indicated as such by the website.
 - 2 A blue question mark indicates that the feed is possibly an RSS feed, but may not be. SocialMiner qualifies RSS feeds as "possible" when their URLs simply contain "rss", "atom", or "feed".

Some URLs may be filtered out of the list even if they meet the above criteria. For example, URLs that include embedded scripting will not be captured and displayed.

- **Step 6** Select the link that you want to add as a feed. The SocialMiner window updates to indicate that the feed was saved, along with the name and URL of the feed. You see an error message if there was a problem saving the feed
- **Step 7** Close and re-open the feed bookmarklet for each URL in the list that you want to save. You see an error if you try to save a duplicate feed (a feed with the same name as one that is already saved).
- **Step 8** After saving the feed(s), navigate to the SocialMiner Configuration tab. The feeds are displayed in the Feeds panel. Feed names are truncated at 85 characters.
- **Step 9** Edit the name, description, polling interval, and minimum age of the feeds and add automatic tags. Feeds created using the bookmarklet default to "No reply template".
- **Step 10** Add the feeds to a campaign.

Campaigns

The Manage Campaigns panel on the Configuration tab lists campaigns and shows the name, the number of contacts that match this campaign, a description, and a link to an RSS feed for that campaign.

You must create at least one campaign and select at least one feed for that campaign before you see any contacts on the Home tab.

Campaigns group contacts for handling by the customer care team. Contacts are included in a campaign when one or more feeds are selected to be part of the campaign. When a feed becomes part of a campaign, new contacts that arrive on that feed are immediately added to the campaign and appear on the Home tab.

This list updates in real time (but depends on the configured polling interval of the campaign). For example, it updates when another user adds a new campaign to the system.

To view results for a campaign as an RSS feed, select the results icon to open an ATOM 1.0 formatted page.

Results are updated every 10 seconds. The results number is bold if additional results were recently obtained.

Campaigns can also have filters that are used to narrow or modify the contacts that are included in the campaign.

Contacts can be discarded, but they are not actually removed from a campaign until they are purged or the campaign is deleted.

Add Campaign

To add a campaign, click **New** in the Manage Campaigns panel.

Fill out the following fields, and then click **Save** to save the new campaign.

- Name (required)
- Description

Use the arrows in the Feeds and Filters panels to move one or several feeds and filters between the Available and Selected panels. You can save a campaign without adding a feed, but no contacts will be retrieved for that campaign. Adding a filter to a campaign is optional.



Note

Once you click **Save**, the contacts for the configured feeds are added to the campaign. Once added, contacts can be discarded but cannot be removed from the campaign except by a purge. If a feed is removed from a campaign, new contacts captured by that feed are no longer added to the campaign, but the contacts previously included are not removed until a purge.

If a feed is accidentally added to a campaign and the contacts must be removed immediately from that campaign, the only recourse is to delete the entire campaign and recreate it.

Adding a feed to multiple campaigns does not duplicate the contacts in the data store; the contacts for that feed are simply counted in both campaigns.

Add a Chat Invitation Feed to a Campaign

A drop-down menu allows a SocialMiner user to add a chat invitation feed to a campaign.

The drop-down lists all available chat feeds. Select an appropriate chat feed to add to the campaign as the chat invitation feed and click **Save**. When a chat feed is selected as the chat invitation feed for a campaign, that feed is moved to the selected feed list (to ensure that the chat contact created when the chat invitation is accepted by the customer comes back to the same campaign). If the chat feed designated as the chat invitation feed is manually removed from the selected feed list, the chats will go to any other campaign(s) that include that chat feed.

Once a chat invitation feed has been added to the campaign, an **Insert Chat Invitation** button appears in the Twitter and Facebook reply templates. The **Insert Chat Invitation** button lets the agent invite users into a chat session by sending a URL in the reply or direct message. The customer selects the URL to accept the invitation, which creates the new chat social contact and initiates the chat session.

Edit Campaign

To edit a campaign, select the name of the campaign in the campaign list view.

Fill out the following fields, and then click **Save** to save your changes.

- Name (required)
- Description

Use the arrows in the Feeds and Filters panels to move one or several feeds and filters between the Available and Selected panels.

Delete Campaign

To delete a campaign, check the checkbox to the left of one or more campaign names and click **Delete**. A confirmation dialog box appears. Click **OK** to confirm the deletion of the selected campaigns.

Reply Templates

The Manage Reply Templates panel in the Administration tab lists all available reply templates.

Only the Administrator (the application user created during installation) can access the Manage Reply Templates panel.

The panel lists the system-defined and the custom reply templates (the custom templates show both their name and URL).

There are five system-defined reply templates that cannot be edited or deleted.

- Cisco Chat is the default template for both standalone SocialMiner and Unified CCX single-session chat feeds. This template opens the chat session for the agent and displays a message to the user indicating that the agent has joined.
- Cisco Email is the default template for Unified CCX email. You cannot use this template in a standalone SocialMiner deployment.
- Cisco Facebook is the default template for Facebook fan page feeds. This template opens when you reply to a Facebook fan page on the Home tab.
- Cisco Multi-session Chat is the default template for Unified CCX multi-session chat. You cannot use this reply template in a standalone SocialMiner deployment.
- Cisco Twitter is the default template for Twitter feeds. This template opens when you reply to a tweet on the Home tab.

Custom templates

The SocialMiner Administrator can develop custom reply templates and use them for RSS, Twitter, Facebook, or Push feeds (but not for chat or email feeds). Until the Administrator creates a custom template, *No reply template* is the only reply template option for an RSS feed.

See below for information on adding custom reply templates.

Once added, selecting the reply template name allows you to edit the name and URL. Select the checkbox to the left of one or more custom template names and click **Delete** to delete the reply template.

Reply templates must conform to the OpenSocial standard. Some tips for converting existing HTML pages into OpenSocial standard 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 panel to provide a name for the reply template and its location.

Add Custom Reply Template

To add a custom reply template

- 1 Click the **New** button in the Manage Reply Templates panel.
- 2 Enter a name.
- 3 Enter the URL for the location of the custom template code.
- 4 Click Save.



Note

An example of code for a reply template is provided on the system at http://<servername>/templates/reply/custom_reply_sample.jsp (where <servername> is the name of your SocialMiner server).

The source code is commented and provides details on the SocialMiner javascript functions required. Additional training for developing custom reply templates is available at the SocialMiner Lab Wiki.

For more information about using custom reply templates, see the Cisco SocialMiner Developer Guide.

Filters

The Manage Filters panel on the Configuration tab shows the name, type, and a description for each filter you have created. An icon next to each filter shows its current status.

A filter modifies and takes action on contacts as they enter the system and before they appear on the Home tab, allowing the customer care team to focus on the most actionable contacts.

Filters are run against contacts as they enter a campaign; they do not run retroactively against contacts that are already in a campaign.

You create filters in the Manage Filters panel and then apply them to campaigns in the Edit Campaign panel by moving them between the Available and Selected panels (similar to adding and removing feeds). SocialMiner allows a total of 20 filters, with a maximum of 10 filters to a campaign. Applying multiple filters to a campaign creates opportunities to layer filtering strategies to fine-tune results.



Note

When multiple filters are applied to a campaign, they are processed simultaneously. For this reason, you might have unexpected results for contacts that have been processed by multiple filters.

Filter States

Icons are used as visual indicators to display the state of each filter. Hover the cursor over the icon to display a tool tip that explains the state.

- ✓ A green check mark means the filter is working properly.
- A red x means an error occurred in the uploaded script, or the script filter violates SocialMiner security restrictions. Hover over the error icon to display a tool tip with the error text.
- A blue question mark appears when the filter status cannot be determined (such as when the Runtime service is down) and during a brief interim state while SocialMiner checks the status of the filter (after which the icon changes to red or green).



Note

Cisco Support and the SocialMiner Forum on Cisco DevNet do not assist with Groovy script issues. Direct all troubleshooting requests to your script developer.

Deleting Filters

Select the checkbox 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).

Adding and Editing Filters

SocialMiner supports three types of filters that are described below, along with instructions about how to add and edit each type of filter.

Bayesian Filters

A Bayesian filter is a trainable filtering technology based on a Bayesian statistical probability model.

Add a Bayesian Filter

- 1 Access the Manage Filters panel on the Configuration tab.
- 2 Click New.
- 3 Select **Bayesian** as the filter type, then enter information in the following fields:

Name (must be unique) Description

4 Click Save.

Once a Bayesian filter is added, go to Settings on the Home tab (see Train Bayesian Filters, on page 24) to enable training for the filter.

Edit a Bayesian Filter

- 1 Select the filter's name.
- **2** Change the field values.
- 3 Click Save.

Author Filters

The author filter allows you to exclude social contacts created by specific authors from being included in a campaign. For example, you may want to filter out your own posts or posts from team members.

Adding an author filter to keep your posts from showing up in your campaign reduces the number of posts you need to handle. It also improves the accuracy of the reporting metrics by excluding your own posts.

Add an Author Filter

- 1 Access the Manage Filters panel on the Configuration tab.
- 2 Click New.
- 3 Select **Author** as the filter type, then enter information in the following fields:
 - Name (must be unique)

- Desciption
- Authors—enter the name of an author to exclude from the feed.
- Repeat steps 2 and 3 for each additional author to be excluded from the feed.
- 4 Click Save.

Edit an Author Filter

- 1 Select the filter's name.
- 2 Change the field values.
- 3 Click Save.

Script Filters

A script filter is custom code that system developers can create in the Groovy scripting language. A script filter can apply tags, change content, and integrate with external systems to leverage services such as performing translation or invoking a Klout score for a social contact retrieved from a Twitter account feed.

The SocialMiner Administrator can add, import, edit, and delete Script filters. Non-administrators can see script filters on the Configuration tab and add them to campaigns.

You can upload multiple Groovy scripts and attach each to a SocialMiner script filter. There are examples of script filters in the *SocialMiner Developer Guide* and on Cisco DevNet.

SocialMiner runs scripts in Groovy 1.8.



Note

During the upload, SocialMiner performs a basic syntactic validation but cannot validate that the script will work as expected. For this reason, test your scripts on a lab system before using them in production. SocialMiner also performs security checks on each script. For example, a script does not run if it shuts down the system, takes longer than 30 seconds to execute, or accesses the SocialMiner file system.

For more on script security, see the *SocialMiner Developer Guide*. You can also open the runtime error logs in the log directory to see the list of security breaches.

Under the filename "runtime/", open the Error-runtime log and search for SCRIPT FILTER EXCEPTION.

You can upload scripts that fail the security model and apply them to campaigns, but they have no effect on the contacts. The Filters panel shows a red (failure) icon for the insecure script. Hover over the red "failed state" icon for information about the error.

To add a Script filter:

- 1 Click **New** on the Manage Filters panel.
- 2 Select **Script** as the filter type, then enter information in the following fields:
 - Name (must be unique)
 - Description

- 3 Click the **Browse/Choose File** button (the button name varies by browser). Navigate to the groovy file on your local machine or network and select it.
- 4 Click Save.

To edit a Script filter:

- Select the name of the filter.
- Click the **Show Source** button to open the groovy script file in a separate window .

You can review and select/copy (but not edit) the source. You can also upload a new script file in Edit mode



Note

Errors can result if an editor such as Notepad is used to edit a script written in a language containing multi-byte characters. Eclipse and Notepad++ are the most reliable editors to use for editing scripts.

Notifications

The Manage Notifications panel on the Administration tab lets you view, delete, edit, and add notification rules. You set up notification rules to send messages in reference to tagged contacts.



Note

Only the SocialMiner Administrator, who is the application user created during install time, can use the tools in the Manage Notifications panel.

The Manage Notifications panel shows the following information for all defined notification rules:

- Name—the name of the notification.
- Type—the type of notification.
- State—the status of the notification.
- Tags—the tag or tags that trigger the notification.
- Campaign—the campaign associated with this notification.

Icons are used as visual indicators to display the state of each notification. Hover the cursor over the icon to display a tool tip that explains why the notification is in the current state and the last time the state changed.

- The notification is operating normally.
- The notification is in an unknown state.
- An error occurred. Mouse over the error icon to display a tool tip with the error text.
- The limit of 40 incoming callback contacts per minute was reached; any additional contacts are discarded.

Administrators can add, edit, or delete notifications. See the section below for adding or editing notifications.

To delete a notification, select the checkbox next to the notification name and click **Delete**; then click **OK** in the confirmation window.

IM and Email Notifications do not accept replies. The intent is to notify only; not to open a dialog.

If a reply template is associated with the social contact for which the notification is sent, selecting the link in the IM or email opens the reply template for that social contact.

Add and Edit Notifications

Add

To add a notification, click the **New** button in the Manage Notifications panel.

Enter or edit the following fields:

- **Type**—Notification types are:
 - ^o Email—The notification is sent over email. A mail notifications server must be configured on the System Administration tab to use this type.
 - ° IM—The notification is sent over IM. An XMPP notifications server must be configured on the System Administration tab to use this type.
 - ° HTTP—Allows for notifications over HTTP using REST to contact an external service.
 - ° Connection to CCE—Used by SocialMiner to route contacts to Unified CCE using the CCE configuration for multichannel routing.
- Name—The name of the notification.
- **Description**—A brief description of the notification (optional).
- Campaign—Select a campaign with which you are associating this notification.
- Tags—Define the tags for this notification. Notifications are sent when a social contact is tagged with one or more of these tags and exists in the selected campaign. Click **Add** after each tag you enter. Auto-tagging (or adding multiple tags in one operation) generates multiples of the same notifications to the same recipients list. To remove a tag, select the **x** at the right of the tag name.
- Addresses—Enter an email address for this notification. Click Add after each address you enter. Addresses are used only for Email and IM notifications. To delete an address, select the x at the right of the address.
- **Subject**—The email subject for this notification. This field is available only for Email notifications and is blank by default. Enter a subject for email notification.
- **Body**—The body for this notification. This field is used only for Email notifications. HTML tags are supported for Email notifications. The body of the message supports notification body variables. For more information, see Notification Body Variables, on page 54.
- Message—The message for this notification. This field is similar to the body field used only for IM notifications. IM notifications are sent using plain text. They also support notification body variables. For more information, see Notification Body Variables, on page 54.
- URL—The URL of a REST API that identifies where to send the notification. This field is used only for HTTP notifications.

- Verify SSL certificates?—If checked, SSL certificates will be verified as trusted for notifications sent over SSL. If unchecked, certificates will not be verified. This checkbox is used only for HTTP notifications and is checked by default.
- **Username**—If authentication is required for the URL to the REST API, enter the authorized username. This field is used only for HTTP notifications.
- **Password**—If authentication is required for the URL to the REST API, enter the password for the authorized username. This field is used only for HTTP notifications.
- **Dialed Number/Script Selector**—Select a dialed number/script selector (configured in CCE) for the Connection to CCE notification type.
- Media Routing Domain—The Cisco_Voice media routing domain enables voice callback requests to be routed to contact center agents.

Edit

Select the name of a notification rule to open a window where you can edit its fields.

Notification Body Variables

The notification body for emails and instant messages can contain keywords in the syntax **\${KEYWORD}**. These keywords are replaced with values from the contact that they are associated with.

By default, the body of the message contains a variable for the URL of the contact, which is \${SC SCREEN URL}.

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.



Note

Keywords are listed here as all upper-case, but they are not case sensitive.

- \${SC AUTHOR}—the author of the social contact (not available in all feeds).
- \${SC CREATED_DATE}—the date the social contact was created in the system.
- \${SC_DESCRIPTION}—the description of the social contact. Typically this is the tweet, RSS post, or Facebook fan page post.
- \${SC_PUBLISHED_DATE}—the published date of the social contact (not available in all feeds).
- \${SC_SCREEN_URL}—the URL to the social contact in the results gadget. Selecting this URL allows you to instantly reserve/reply to the social contact.
- \${SC_SOURCE_TYPE}—the feed type of the social contact (such as RSS, Twitter Stream, Twitter Account, or Facebook).
- \${SC TAGS}—the tags for this social contact.
- \${SC_TITLE}—the title of the social contact.

- \${SC_EXTENSION_FIELDS.<fieldname>}—adds a specific, named extension field for the social contact. You can add a maximum of 100 extension fields and up to one megabyte of information.
- \${SC_EXTENSION_FIELDS}—adds all extension fields that exist for the social contact. They appear in the body in alphabetical order by name in the format *Name: Value*. If no value was defined, you see *Name: (-)*. If there are no extension fields, the variable is removed from the message body.

For example, if the body an email notification includes the following:

- The author of this Social Contact is: \${SC_AUTHOR}.

- The message contents are as follows: \${SC_DESCRIPTION} .

- You can Reserve or Reply to the Social Contact here.

With \${SC_AUTHOR} set to Joe Somebody and \${SC_DESCRIPTION} set to This is a TWEET, the email notification that is sent appears as:

The author of this Social Contact is: Joe Somebody. The message contents are as follows: This is a TWEET. You can Reserve or Reply to the Social Contact $\underline{\text{here}}$.

Notification Body Variables



System Administration

Most of SocialMiner system administration is performed using the System Administration panel. This section describes the parts of the panel as well as other administrative procedures including backup and restore, managing certificates, and changing the administrator password.

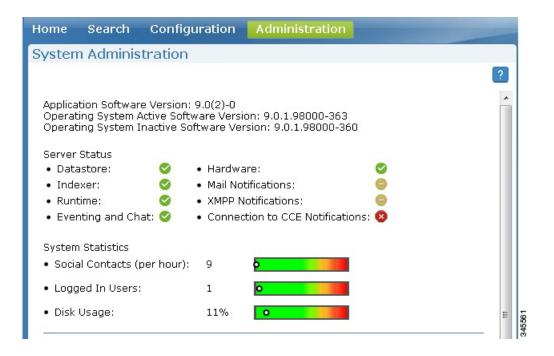
- System Administration Panel, page 57
- Language Pack, page 67
- Certificates, page 67
- Avoid Sign in Overlays if the Reply Template Container Loads in an IFRAME in IE, page 70
- Command Line Interface, page 70
- System Backup and Restore, page 72
- Change the SocialMiner Administrator Username and Password Using the CLI, page 75
- Change the DNS IP Address configuration in SocialMiner, page 75
- Reset the Unified OS Platform Administrator Password, page 75

System Administration Panel

Only the SocialMiner Administrator, who is the application user created during install time, can use the administration panel.

The administration panel on the administration tab provides access to system configuration and serviceability tools that must be set up for efficient system use. The top half of the display consists of software version information, server status and system statistic indicators.

Below the indicators are a series of drawers that contain tools for configuring different system aspects (as described below). Use the arrow buttons next to the headings to open the tool drawers.



System Status and Statistics

The top section of the System Administration panel has three types of system status and statistical information:

- · Software versions:
 - Application Software Version (the version of the Cisco Unified OS that SocialMiner is running on).
 - Operating System Active Software Version (The current, active SocialMiner version).
 - Operating System Inactive Software Version (the previous, inactive SocialMiner version if any).
- Server status for:
 - Data store
 - · Indexer
 - · Runtime
 - Eventing and Chat.
 - the Hardware profile (a tool tip shows when you hover over the hardware icon to indicate if the system is a small or large deployment).
 - the Mail Notifications Server (if configured).
 - the external XMPP Notifications Server (used for Instant Messaging notifications, if configured).
 - the Connection to CCE Notifications (used for sending notifications to CCE, if configured).
- Three graphical meters show:

- the incoming rate of all social contacts (per hour) for this server.
- the number of concurrent signed-in user sessions with SocialMiner, including administrators and other users via web interfaces and other connected applications.
- the percentage of the disk being used. (See Provisioning Considerations for SocialMiner Chat, on page 86 for more information on calculating a suitable amount of disk allocation.)

Hover the cursor over these graphs to see information about current statistics and system limits.

The meters help you determine if a server is nearing any limits. If a meter is completely red

- consider asking users to sign out.
- modify your feeds to reduce the number of incoming contacts.
- increase your disk allocation.

Active Directory

SocialMiner uses Active Directory (AD) to manage and administer 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 access SocialMiner.

The AD connection permits users configured in AD to access SocialMiner. You can configure the connection to allow access for all users in AD or for only a specific group of users. Multiple, independent groups that require isolated security and permissions should each deploy their own SocialMiner system.



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. Companies that want to restrict who can make posts need to configure SocialMiner to authenticate with a specific role. If SocialMiner is authenticated with a specific AD role, then only those AD users with that role can use SocialMiner.

To configure AD, open the Active Directory drawer on the System Administration panel and click **Edit**. Enter or modify these fields and then click **Save** when finished.

- **Enabled**: Checkbox. When checked, the AD connection is active. If not checked, then only the administrator can sign into SocialMiner.
- Host: Required if Enabled is checked. Provide the host name or IP address of the AD server.
- **Port**: Required if Enabled is checked. Provide the port for AD. The default AD port is 3269. If you are not using SSL, you must change the port to 3268.
- Use SSL: Checkbox. Checked by default. Uncheck if not using SSL. When checked, you must exchange security certificates with the AD server before SSL can work (see below).
- Manager Distinguished Name: Required if Enabled is checked. Enter the Manager Distinguished Name used to sign in to the AD 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 hostname.
- Manager Password: Required if Enabled is checked. The password for the AD Manager account.

• Role Name: Optional. The AD role or AD group of users who are allowed to access SocialMiner. If this setting is blank or set to "*", then all users in AD are allowed access to SocialMiner.

Exchanging security certificates with AD

To enable SSL for the AD 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 AD server:

- 1 Verify that the AD server 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 opens. In the wizard select **DER encoded binary**.
- 7 Use the wizard to select a location to save the file.
- 8 Click Finish.

On the SocialMiner Server:

- 1 Open the Platform Administration drawer on the System Administration panel and select the link to the Unified OS Administration page.
- 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 customer care representatives are configured in Microsoft AD.

When these users sign into SocialMiner, successfully authenticate against AD, and begin to take actions on the system; their actions are associated with their AD user ID.

Mail Notifications Server

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



Note

The mail notifications server sends an email notification to alert users when a contact comes in to SocialMiner that matches certain criteria. The mail notifications server is separate from the Exchange server used for multi-session email.

To configure the mail notifications server, open the Mail Notifications Server drawer on the System Administration panel and click **Edit**. Enter or modify these fields and then click **Save** when finished.

- **Enabled**: Check to enable the mail notifications server connection.
- Mail Notifications Server Host: Required if Enabled is checked. The IP address or host name of the mail notifications server. For Gmail, set this to smtp.gmail.com.
- Mail Notifications Server Port: Required if Enabled is checked. The port for the mail notifications server. Port 465 is the default for SSL/TLS connections (such as the Gmail SMTP server smtp.gmail.com). For non-SSL/TLS connections, the default port is 25. If you change the port for your mail notifications server from the default, use the new port number for this field.
- From Email Address: Required if Enabled is checked. The email address from which emails are sent.
- **Use Authentication**: Check if the user has SMTP authentication to connect to the mail notifications server. When Use Authentication is checked, these two fields become editable.
 - User Name: Required if Use Authentication is checked. The user name for signing in.
 - Password: Required if Use Authentication is checked. The password for the user name.
- Use SSL|TLS: Defaults to checked. Uncheck this if your mail notifications server does not support a secure connection. This must be checked if you are using the Gmail SMTP server (smtp.gmail.com).

Proxy Settings



Note

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

Enable Proxy:	Yes		
Hostname:	xyz.cisco.com		
Port:	80		
Exclusion Patterns:	Hostnames or IP addresses of servers not requiring a proxy. Examples: *.oisco.com, 10.86.*, localhost Add		
	localhost		
	ccp-functional		
	*.cisco.com		
	10.86.*		
	161.44.*		
	10.81.*		
	10.10.*		
	*.boston.com		
	192.168.1.*		

To configure the proxy, open the Proxy Settings drawer on the System Administration panel and click **Edit**. Enter or modify these fields and then click **Save** when finished.

- Enable Proxy: Checkbox. When checked, feeds are accessed through the proxy server.
- Hostname: Required when Enable Proxy is checked. The IP address or hostname of the proxy server.
- Port: Required when Enable Proxy is checked. The port for the proxy server.
- Exclusion Patterns: You can add and remove host names 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, select 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.



- 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 an http or 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.

Public URL Prefix for Chat Invitation

A public prefix can be added to the shortened URL of a chat invitation so that when a chat invitation is sent in a Tweet or a Facebook comment, the link refers to a URL that is accessible from the public network. In order for this to be successful, use a reverse proxy or the SocialMiner server needs to be hosted in a DMZ. Use this tool to configure that customer-accessible URL.



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Click the **Edit** button to enter a valid URL starting with http:// and click **Save**.

The defined prefix appears in the chat invitation link sent to the customer.



Note

Public URL Prefix for Chat Invitation does not apply to SocialMiner integration with CCX for multisession web chat feature.

CCE Configuration for Multichannel Routing

Use this drawer to configure the media routing peripheral gateway (MR PG) server and a port.

To configure the MR PG server, open the CCE Configuration for Multichannel Routing drawer and click **Edit**. Enter or modify these fields and then click **Save** when finished.

- Enabled: Checkbox. Check to enable the media routing server connection.
 - o If not enabled, the MR PG configuration will be ignored and no connections will be accepted.
 - If enabled but no hosts are set, then any connection will be accepted.
 - If enabled and at least one host is specified, then only connections matching the specified hosts are allowed.
- Host Side A and B: Enter the IP address or hostname of the side A and side B MR PG servers. Any identifier can be specified (for example, IPv4 or hostname), as long as it can be resolved to the actual IP address of the servers. The combined length of the host strings is limited to 254 characters.



Note

When entering an IP address as a host for either side, SocialMiner uses DNS to look up the hostname registered for that IP address. The hostname must match the hostname registered for the IP address of the server connected to SocialMiner.

If resolution does not occur in a timely fashion (within 1 second for each look up), connections may fail. Ensure that your network configuration is robust enough to ensure timely DNS response and appropriate error handling for DNS failures.

• **Port**: The MR PG server port that SocialMiner listens to. The port is set to 38001 by default. The valid range is 10000 - 65535.

XMPP Notifications Server

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

To configure the XMPP notifications server, open the XMPP Notifications Server drawer and click **Edit**. Enter or modify these fields and then click **Save** when finished.

- Enabled: Checkbox. Check to enable the XMPP notifications 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 Notifications Server.
- XMPP Notifications Server Host: The IP address or Hostname of the XMPP Notifications Server. This does not apply if XMPP Service Lookup is checked.
- XMPP Notifications Server Port: The port for the XMPP Notifications Server. This is set for port 5222 by default. This does not apply if XMPP Service Lookup is checked.

- User Name: The user name (in full JID format, such as user@domain.name), which is used to sign in to the XMPP Notifications Server.
- **Password**: The password for the above User Name. NOTE: If you change your XMPP password for any reason, change it here.

Purge Settings

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

The purge runs automatically 5 minutes after the runtime is started and then runs every 60 minutes. Each time the purge runs, the first 30,000 contacts that are older than the number of days specified in the 'Purge Social Contacts older than (days)' setting are deleted. If no contacts meet the criteria, no contacts are purged. If more than 30,000 contacts meet the criteria, only the first 30,000 are deleted. The next 30,000 are deleted at the next purge 60 minutes later.

Important! Purge settings take effect as soon as you click **Save**; therefore, if the 'Emergency purge when disk usage exceeds (%)' criterion is met, the purge starts immediately.

To configure purge settings, open the Purge Settings drawer and click **Edit**. Enter or modify these fields and then click **Save** when finished.

- Data store purge settings:
 - Purge Social Contacts older than (days): Social contacts older than this number of days are purged. Values must be integers (no decimals) between 1 and 550.
 - Emergency purge when disk usage exceeds (%): Begin an emergency purge if disk usage exceeds this value. Valid values are 40–90. When an emergency purge executes, social contacts older than the number of days specified above are removed. If disk usage is still above the setting for this field, 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 purge starts. Values must be integers (no decimals) between
 1 and 550.

Reporting Configuration

The reporting configuration allows you to set or change the Informix password for the reporting user. You cannot change the reporting user name; it is always "reportinguser". This username does not display until you edit and enter a password.

The reporting user is used by Cisco Unified Intelligence Center (CUIC) and third-party applications to access the reporting database. Details on the tables in the reporting database are available in the *SocialMiner Developer Guide*.

To set or change the password for the reporting user, open the Reporting Configuration drawer and enter a new password in the password field, and then click **Save**. Password is the only field you can edit.

You will also see reporting server and database information in this drawer. 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 CUIC, this is the "Instance".
- Reporting Database: the Informix database name for reporting.
- Database Type: the type of database (Informix).

When configuring CUIC, you must select UTF-8 as the character set.

RTMT Download

Use the RTMT (Real-Time Monitoring Tool) to troubleshoot issues in SocialMiner by downloading and analyzing the service logs. You can download RTMT logs for the following services:

- SocialMiner Datastore Service
- · SocialMiner Indexer Service
- SocialMiner Migration
- SocialMiner ORM Service
- SocialMiner Public REST API
- SocialMiner REST API
- SocialMiner Runtime Service
- SocialMiner XMPP Server Service

For more information about using RTMT, see the *Cisco Unified Real-Time Monitoring Tool Administration Guide* available here:

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

RTMT Download Links

Links are provided in the RTMT Download drawer to download the Unified Real Time Monitoring Tool (RTMT).

For details on installing and configuring RTMT, see Cisco Unified Real-Time Monitoring Tool Administration Guide.

Audit Logs

SocialMiner 11.6 supports audit logging to keep track of changes made to configuration entities (e.g. Feeds/Campaigns, etc). It also identifies the id used to autheticate the request. The log file can be viewed via RTMT tool by selecting the SocialMiner rest API option. The file titled **ccp-audit.log** is located at: /var/log/active/mmca/logs/ccp-audit.log

An audit log entry will contain the following fields:

Field	Description
DATE TIME (e.g : 2016-10-27 18:44:55.405)	The date and time when the audit log entry was created .
METHOD	The HTTP request type of the request (e.g PUT/POST/DELETE/GET)
USER ID	The id used for authntication.
URL	The URL context used while requesting.
PAYLOAD	The request data sent as part of the request.
OPERATION	Textual description of the change e.g < CREATE MODIFY DELETE>

Log files can accomodate upto 100 MB of data, post which new files will get created. Old files earlier than 6 months will be archived. The audit log files can be viewed via RTMT tool by selecting the SocialMiner rest API option.

To retrieve the audit log file later, use the following CLI command from the admin prompt: **file get activelog mmca/logs/ccpapi/ccp-audit.log**

Platform Administration

The Platform Administration drawer 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—Only shows OS logs, SocialMiner logs are accessed from the System Logs drawer.



Note

Though configuration for SNMP alerts is available, SocialMiner does not support SNMP alerts.

• Disaster Recovery System—Use tools on this interface to perform back up and restore actions.

SocialMiner uses the same platform administration tools as Unified Communications Manager. Online help is available with the tools.

System Logs

The System Logs drawer provides a link to perform a system health snapshot.

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

Language Pack

Download and install the language pack only if you want to see the SocialMiner interface in a language other than English.

The language pack for SocialMiner is delivered as a single COP file, the same way that SocialMiner delivers COP files for patches. The file is available to download from Cisco.com at the following link:

http://software.cisco.com/download/type.html?mdfid=283613136&i=rm

The file contains a single installer for all language variants. The filename is of the format:

ccp-language-pack_17-11.0.1.10000-1.cop.sgn

where 11.0.1 is the release identifier.

To install the COP file for the language you want on your SocialMiner interface, see the "Apply COP File" section of the *Cisco SocialMiner Installation and Upgrade Guide*, located at http://www.cisco.com/c/en/us/support/customer-collaboration/socialminer/products-installation-guides-list.html.

Certificates

Certificates are used to ensure that browser communication is secure by authenticating clients and servers on the Web. Users can purchase certificates from a certificate authority (CA signed certificates) or they can use self-signed certificates.

Obtaining a CA-Signed Certificate

Each time you sign-in, the browser validates the certificate presented by the server. If the certificate is not signed by a trusted root Certificate Authority (CA), the browser will typically not allow the connection until the user explicitly allows it. In order to avoid this, you must obtain a root certificate signed by a CA and install it onto SocialMiner.

Use the Certificate Management utility from Unified OS Administration to do this.

Open Unified OS Administration from the Administration tab > Platform Administration.

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 the signed application certificate and the CA root certificate from the CA.

To Upload the Certificates

- 1 When you receive the certificates, open Unified OS 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.
 - a In the Upload dialog box, select **tomcat trust** from the drop-down.
 - **b** Browse to the file and click **Open**.
 - c Click Upload File.
- 5 Upload the application certificate.
 - a In the Upload dialog box, select tomcat from the drop-down.
 - **b** Enter the name of the CA root in the Root Certificate text box.
 - c Browse to the file and click **Open**.
 - d Click Upload File.

For more information about CA-signed certificates, see the Security topics in the Unified OS Administration online help.

After You Upload the Certificates

- 1 Sign out of SocialMiner.
- 2 Restart the XMPP Service. (SSH to SocialMiner and enter the command *admin:utils service restart SocialMiner XMPP Server*) in the command line interface.
- 3 Restart Tomcat. (SSH to SocialMiner and enter the command *admin:utils service restart Cisco Tomcat*) in the command line interface.
- 4 Sign in to SocialMiner.

Self-Signed Certificates

Self-signed certificates (as the name implies) are signed by the same entity whose identity they certify, as opposed to being signed by a certificate authority. Self-signed certificates are not considered to be as secure as CA certificates, but they are used by default in many applications (including SocialMiner).

Browsers handle self-signed certificates in different ways. The sections below describe how to handle self-signed certificates on the browsers supported for SocialMiner.

Internet Explorer and Self-Signed Certificates

When using an IE browser on a Windows machine, make sure your DNS server is properly configured and you can resolve the fully qualified SocialMiner hostname to the SocialMiner IP address. Use a signed certificate from a trusted certificate authority (like Verisign).

If you use a self-signed certificate (which is what is installed with SocialMiner), follow these steps to avoid getting certificate warnings each time you sign in.

- In your Start menu, right click on IE and select "Run as Administrator".
- Enter the URL for your SocialMiner server in the address bar.

- When prompted by the security warning, click on Continue to this website (not recommended).
- Your address bar turns red and you see a certificate error next to the address bar. Select the certificate error.
- Select View certificates at the bottom of the popup. This opens a certificate dialog.
- On the General tab, select Install Certificate....
- The certificate export wizard launches. Click Next.
- When prompted for where to store the certificates, select Place all certificates in the following store, then click Browse and select Trusted Root Certification Authorities.
- Click **Ok**, then click **Next** and **Finish** to complete the certificate import wizard.
- Click **Yes** when prompted about importing the certificate.
- Close and restart your browser to access SocialMiner.

Firefox and Self-Signed Certificates

Due to changes in the Firefox security model, there are additional self-signed certificates that must be accepted to use the SocialMiner web application on Firefox.

When accessing a SocialMiner server using a newly installed Firefox browser (any version), Firefox attempts to connect to the main port that SocialMiner uses first (port 443). If it cannot connect, it prompts the user to accept the self-signed certificate.



If pop ups are blocked, you are given instructions on how to manually launch the certificate page. Also, if the certificate window is closed before the certificate is accepted, the page will automatically re-launch.

- If prompted, click I Understand the Risks, then click Add Exception.
- Click Confirm Security Exception.

Next, Firefox attempts to connect to port 7443 (the secure XMPP port). With Firefox, a second self-signed certificate must now be accepted to use this port. SocialMiner displays a "Checking Connectivity..." screen during this process

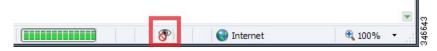
If the "Checking Connectivity..." screen persists after a few seconds, click **Continue** to proceed to the Firefox certificate acceptance screen (as above).

Click I Understand the Risks, then Add Exception, and Confirm Security Exception again.

Users need only go through this process the first time they use a new Firefox browser and self-signed certificates. After the certificates are in place, users may not see the "Checking Connectivity..." screen (or it will appear briefly and proceed to the SocialMiner sign on screen).

Avoid Sign in Overlays if the Reply Template Container Loads in an IFRAME in IE

When a SocialMiner reply template container loads in an IFRAME in Internet Explorer, a SocialMiner sign in overlay may appear even though SocialMiner successfully authenticated. If the page inside the IFRAME does not have a privacy policy, cookies are blocked (which is indicated by the red barred circle over the 'eye' icon in status bar).



To permit cookies for SocialMiner

- Select the eye icon. The Internet Explorer privacy settings dialog box appears and displays the blocked cookie from SocialMiner.
- Select the cookie and choose Always allow cookie from this website.

For more information on how to permit cookies, see the Microsoft Windows help site.

Command Line Interface

To access the command line interface (CLI) 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. Most CLI commands do not apply to or have not been certified for SocialMiner.

For more information, See Cisco Systems CLI documentation.

Supported Commands and User Interface Options

The following tables describe the VOS Command Line Interface (CLI) commands and the Cisco Unified OS Administration and Disaster Recovery System user interface options that SocialMiner supports.

Only the commands and options explicitly mentioned as supported below are supported by SocialMiner. Any commands or options not listed are not supported.

However, in select instances, users may be instructed to use commands that are not normally supported (such as in a field notice).



Note

Although this guide provides instructions for accessing SocialMiner CLI admin commands, most of the CLI commands do not apply to or have not been certified for use on SocialMiner.

Command Line Interface

This table specifies the VOS CLI commands that are supported, and indicates certain ones that are not.

Command	Supported?
delete	No
file	No
help	Yes
quit	Yes
run	No
set date	Yes
set timezone	Yes
set network dns primary <ip></ip>	Yes
All other set commands	No
show	Yes
unset	No
utils network ping	Yes
utils reset_application_ui_administrator_name	Yes
utils reset_application_ui_administrator_password	Yes
utils service list	Yes
utils service restart	Yes
utils service start	Yes
utils service stop	Yes
utils system restart	Yes
utils system shutdown	Yes
utils system switch-version	Yes
utils system upgrade	Yes
All other utils commands	No

Cisco Unified OS Administration User Interface

This table specifies the Administration user interface commands and options that are supported, and indicates certain ones that are not.

Command	Supported?
Show	Yes

Command	Supported?
Settings > NTP Servers	Yes
Settings > Time	Yes
All other Settings menu options	No
Security > Certificate Management	Yes
All other Security menu options	No
Software Upgrades > Install/Upgrade	Yes
All other Software Upgrades menu options	No
Services > Ping	Yes
All other Services menu options	No
Help	Yes

Disaster Recovery System User Interface

This table specifies the disaster recovery system commands and options that are supported, and indicates certain ones that are not.

Command	Supported?
Backup > Backup Device	Yes
Backup > Manual Backup	Yes
Backup > History	Yes
Backup > Current Status	Yes
Backup > Scheduler	Yes
Restore	Yes
Help	Yes

System Backup and Restore

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

SocialMiner uses the same platform administration tools as Unified Communications Manager. Online help is available with the tools.

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

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 the information required to create a manual backup. You must still schedule backups to run automatically.



The system is not usable and new 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.

Define Backup Device

Procedure

- **Step 1** Access the Disaster Recovery System. On the Administration panel, open the **Platform Administration** drawer and then select the **Cisco Disaster Recovery System** link.
- **Step 2** Sign in using the platform credentials you supplied when you installed SocialMiner.
- **Step 3** Select **Backup** > **Backup Device**.
- **Step 4** On the Backup Device List page, select **Add New**.
- **Step 5** Provide a **Device Name** for the backup device. SocialMiner only supports backing up to a network directory. Provide the network directory details for a server that supports SFTP.
- **Step 6** Provide the number of backups to store on the network directory. The default is two, so only the two latest backups are preserved.
- Step 7 Click Save. The system verifies the information you entered and saves the backup device.
 You do not need to repeat these steps the next time you back up the system unless you want to back up to a different device or change the backup device settings.

Backup the System to the Backup Device

Procedure

- **Step 1** Access the Disaster Recovery System. On the Administration panel, open the **Platform Administration** drawer and then select the **Cisco Disaster Recovery System** link.
- **Step 2** Sign in using the platform credentials you supplied when you installed SocialMiner.
- **Step 3** Select **Backup** > **Manual Backup**.
- **Step 4** Select the backup device you created earlier from the drop-down menu in **Select Backup Device**.
- **Step 5** In Selected Features, check SOCIALMINER.
- Step 6 Click Start Backup.
- **Step 7** A warning appears indicating that you may need to use the security password if you try to restore later. Click **OK**. The backup begins.
- **Step 8** 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.
- **Step 9** After the backup completes, wait a few minutes before using SocialMiner (so the SocialMiner system can restart subsystems that were shutdown during the backup).

Restore From a Backup File

Procedure

- **Step 1** Access the Disaster Recovery System. On the Administration panel, open the **Platform Administration** drawer and then select the **Cisco Disaster Recovery System** link.
- **Step 2** Sign in using the platform credentials you supplied when you installed SocialMiner.
- **Step 3** Select **Restore** > **Restore** Wizard.
- **Step 4** Select the backup device from the drop-down menu and select **Next**.
- **Step 5** Select the backup file you want to use from the *Tar file list* drop-down menu and select **Next**.
- **Step 6** In Selected Features check SOCIALMINER and click Next.
- **Step 7** On the warning on the page, select **File Integrity Check**, then select the Server to be restored (typically the host name of the backed up system). Click **Restore**.
- **Step 8** The restoration status page refreshes periodically. When the restoration is complete, restart SocialMiner.

Change the Social Miner Administrator Username and Password Using the CLI

Use the following procedure to change the SocialMiner Administrator username and password using the CLI.

Procedure

- **Step 1** Sign in using your current administrator credentials.
- **Step 2** To change the administrator username, run the command **utils reset_application_ui_administrator_name** and follow the prompts.
- **Step 3** To change the administrator password, run the command **utils reset_application_ui_administrator_password** and follow the prompts.

Change the DNS IP Address configuration in SocialMiner



Note

Cisco does not support changing the hostname or IP address on any server once they have been set.

Use the following procedure to change the SocialMiner DNS IP Address using the CLI.

Procedure

- **Step 1** To change the DNS IP Address configuration, run the command **set network dns primary <ip>** and follow the prompts.
- Step 2 To restart the SocialMiner VM, run the command utils system restart.

Reset the Unified OS Platform Administrator Password

Use the following procedure to reset the Unified OS Platform Administrator password.



Note

During this procedure, you must remove any CD or DVD from the disk drive (if any) and then insert a valid CD or DVD into the disk drive to prove that you have physical access to the system.

Before You Begin

You must have a keyboard and monitor connected to the server. You cannot reset a password when the system is connected through a secure shell session.

Procedure

- **Step 1** Sign in to the system using the following credentials:
 - a) Username: pwrecovery
 - b) Password: pwreset

The Welcome to platform password reset window appears.

- **Step 2** Press any key to continue.
- **Step 3** If you have a CD or DVD in the disk drive, remove it now.
- **Step 4** Press any key to continue.

The system tests to ensure that the disk drive is empty.

- **Step 5** Insert a valid CD or DVD into the disk drive. You must use a data CD, not a music CD. The system tests to ensure that you inserted the disk.
- **Step 6** After the system verifies that you inserted the disk, you are prompted to enter one of the following options to continue:
 - Enter **a** to reset the administrator password.
 - Enter s to reset the security password.
 - Enter q to quit.
- **Step 7** Enter a new password of the type that you chose.
- **Step 8** Reenter the new password.

The password must contain at least six characters. The system checks the new password for strength. If the password does not pass the strength check, you are prompted to enter a new password.

Step 9 After the system verifies the strength of the new password, the password is reset, and you are prompted to press any key to exit the password reset utility.



Reporting

SocialMiner maintains metrics on social and callback contact volume and agent activities. These metrics are stored in an SQL database for up to 550 days. The reporting database can be accessed using any SQL reporting tool including Cisco Unified Intelligence Center (CUIC). Access to this database requires that you configure a reporting user in the SocialMiner system administration.



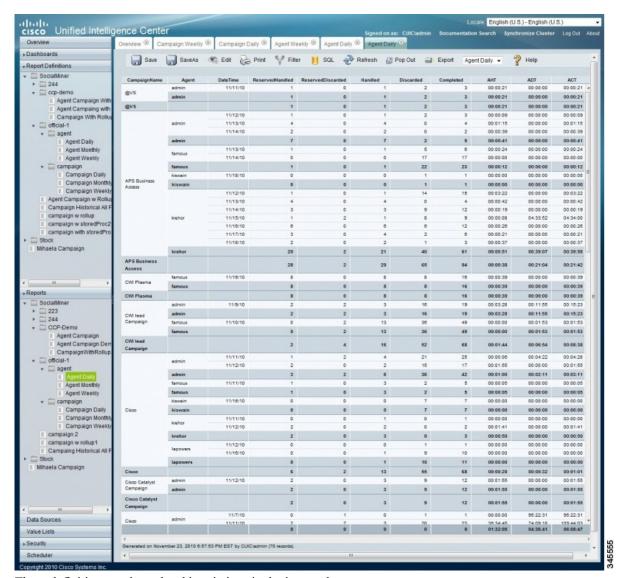
To access SocialMiner as a third-party DSN, use a standalone CUIC server with a premium license.

There are two main categories of reports:

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

The CUIC templates for SocialMiner are available for download here: https://software.cisco.com/download/release.html?mdfid=282163829&flowid=73207&softwareid=284697222&release=10.0.1&relind=AVAILABLE&rellifecycle=&reltype=latest. Choose your release from the menu on the left side of the page.

The following screen captures are examples of CUIC daily reports, each with different fields selected. The complete SocialMiner reporting database schema is documented in the *SocialMiner Developer Guide*.

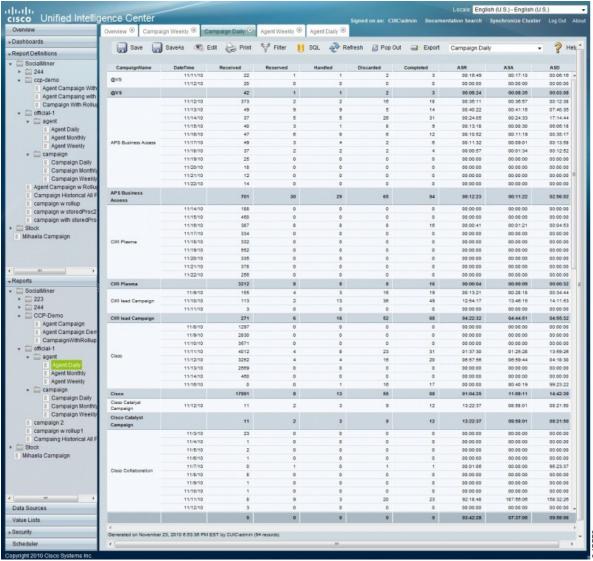


These definitions apply to the abbreviations in the image above:

- ASR—Average Speed of Reserved. For 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 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 contacts that were Discarded, this is the average time between
 capture by SocialMiner and the time 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

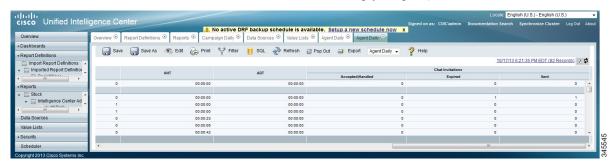




These definitions apply to the abbreviations in the image above:

- AHT—Average Handle Time. For 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 contact.
- ADT—Average Discarded Time. For 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 contact.
- ACT—Average Completed Time. For 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 contact.

This final example shows the fields related to the use of the chat invitation feature (when, for example, agents invite a customer to chat with them from a Twitter or Facebook reply template).



• Configuring the SQL Connection to the SocialMiner Reporting Database, page 80

Configuring the SQL Connection to the SocialMiner Reporting Database

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

jdbc:informix-sqli://<hostname>:<port>/ <databasename>:INFORMIXSERVER =<informixserver>;user=<informixuser>; password=<informixpassword>;

- 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. Also, replace any dashes ("-") in the hostname with underscores ("_").
- The content of INFORMIXSERVER is the instance name. It must be lowercase.
- The database host can be "socialminer" (all lowercase) and the instances must also be all lowercase.



Note

The UTF-8 character set must be used for CUIC to connect.

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

jdbc:informix-sqli://my-server.mycompany.com:1526/

mmca_data:INFORMIXSERVER=my_server_mmca;user=reportinguser;password=<informixpassword>;

When authenticating, the informix username is always "reportinguser" and the informix password is the password you created in the Administration panel.



Design Guidance

This section contains information intended to help plan for SocialMiner installation and deployment.

- Advanced UI Options, page 81
- Deployment Models, page 81
- Hardware and Software Specifications, page 82
- Ports, page 82
- Provisioning, page 85
- Provisioning Considerations for SocialMiner Chat, page 86
- SocialMiner User Accounts and Security, page 87
- Twitter Accounts and Security, page 87
- VMware Open Virtual Format (OVF), page 87
- Developer Information, page 88

Advanced UI Options

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

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

Deployment Models

SocialMiner has a single-server, all-in-one, small or large deployment model. You cannot use a load-balancing, split data-center deployment. There is no replication. The solution is not redundant. The best availability solution for SocialMiner is to back it up at a second location using a scheduled backup. In the event of a site loss, you then restore into a new VM.

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 corporate network firewalls to reduce the risk of an external party accessing the system. This deployment model is required if SocialMiner must access internal sites, such as an internal forum site. The disadvantage of the Intranet deployment model is that the SocialMiner system cannot be accessed by partners lacking VPN access. It is common for some public relations functions to be externally managed by an agency and offering easy access to the SocialMiner system is very useful. Also, the Intranet deployment model does not allow rendering of SocialMiner OpenSocial Gadgets in public Internet containers such as iGoogle. The Intranet deployment model complicates proxy configuration, however it simplifies directory integration.
- The Internet deployment model puts SocialMiner outside of a 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 system use and corporate policies. For example, in some applications the SocialMiner system handles 100 percent public postings and there is no disclosure risk associated with a compromised SocialMiner system. The Internet deployment model may complicate directory integration.

SocialMiner can be deployed where some users access the server through a firewall or proxy. For the customer chat interface, the SocialMiner server can be deployed behind a proxy server or firewall to prevent it from being abused or for limiting access by those outside the firewall.

Hardware and Software Specifications

Cisco supports SocialMiner deployment on any hardware provided that SocialMiner is installed with the Cisco provided VMWare OVF.

For the complete list of possible server options, see http://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization-virtualization-cisco-socialminer.html.

Ports

The following ports are used by SocialMiner. Your firewall configuration may need to be modified to open these ports for SocialMiner.

Port	Used for	Direction	Comments
Port 25	Email notifications	Outward. From SocialMiner to the configured email server.	SocialMiner communicates with the configured email server (that can be in the corporate intranet or on the internet) to send email notifications.

Port	Used for	Direction	Comments
Port 80	НТТР	Bidirectional	Used for unsecure (HTTP) traffic:
			• From the SocialMiner user interface (browser) or APIs to the SocialMiner server.
			• From the SocialMiner server to the internet. SocialMiner communicates outward to the internet to fetch social contact information (such as Facebook posts and tweets) over HTTP.
			• From the internet or corporate website to the SocialMiner server. SocialMiner receives incoming chat and callback requests from the internet or corporate website over HTTP.
Port 443	HTTPS	Bidirectional	The port used for the client browser to access any of the Administration interfaces or User Options interface. It is used for secure (HTTPS) traffic:
			• From the SocialMiner user interface (browser) or APIs to the SocialMiner server.
			• From the SocialMiner server to the UCCX server.
			• From the SocialMiner server to the internet. SocialMiner communicates outward to the internet to fetch social contact information (such as Facebook posts and tweets) over HTTPS.
			• From the internet or corporate website to the SocialMiner server. SocialMiner receives incoming chat and callback requests from the internet or corporate website over HTTPS.
Port 465 (configurable)	Email notifications SSL/TLS	Outward From SocialMiner to the configured email server.	SocialMiner communicates with the configured email server (that can be in the corporate intranet or on the internet) to send email notifications.
Port 587	Email (SMTP)	Outward. From	Used by the Email Reply API to send email.
(configurable in Unified CCX Administration)		SocialMiner to the Exchange Server.	The Email Reply API uses SMTP to send a response to a customer email message.
Port 993	Email (secure	Outward. From	Used by email feeds to retrieve email.
(configurable in Unified CCX Administration)	IMAP/IMAPS)	SocialMiner to the Exchange Server.	IMAPS allows email feeds to fetch email from Exchange Servers and allows the Email Reply API to retrieve email and save draft email messages.

Port	Used for	Direction	Comments
Port 1526	Reporting	Inward. From Unified Intelligence Center to the SocialMiner server.	Unified Intelligence Center communicates with SocialMiner to gather reporting information.
Port 3268 (configurable)	Active Directory	Outward. From SocialMiner to the configured Active Directory host	SocialMiner communicates outward to the configured Active Directory host for unsecure Active Directory connections.
Port 3269 (configurable)	Active Directory SSL	Outward. From SocialMiner communicates outward to the configured Active Directory host SocialMiner communicates outward to the configured connections.	
Port 5222 (configurable)	XMPP (IM) notifications using an external XMPP server	Outward. From SocialMiner to the configured XMPP Notifications server.	SocialMiner communicates with the configured XMPP Notifications server (that can be in the corporate intranet or on the internet) to send XMPP (IM) notifications.
Port 5222	Notification Service (XMPP eventing over TCP sockets)	Inward. From Unified CCX to the SocialMiner server.	SocialMiner listens for incoming TCP socket connections to register and receive XMPP events. Unified CCX uses this port to receive social contact events.
Port 7071	Eventing and chat (BOSH)	Bidirectional	The unsecure BOSH connection supports eventing and chat communication between the SocialMiner user interface and the SocialMiner server.
Port 7443 is used for secure BOSH connections to the XMPP eventing server.	Eventing and chat (secure BOSH)	Bidirectional	The secure BOSH connection supports eventing and chat communication between the SocialMiner user interface and the SocialMiner server.
Port 8080	Non-SSL HTTP/1.1 Connector	Bidirectional	The unsecure port used for the client browser to access any of the Administration interfaces or User Options interface.

Port	Used for	Direction	Comments
Port 8443	SSL HTTP/1.1 Connector	Bidirectional	The secure port used for the client browser to access any of the Administration interfaces or User Options interface.
Port 38001 (configurable)	Media routing (in Unified CCE deployments)	Inward. From the Unified CCE MR PG to the SocialMiner server.	The CCE Media Routing Peripheral Gateway (MR PG) communicates over a socket connection to SocialMiner to support the media routing connection.

Provisioning

The following table shows the sizing limits for small and large deployments of a single SocialMiner system.

	Large deployment	Small deployment
Concurrent admin users signed in	5	5
Configured feeds	200	100
Configured campaigns	100	50
Simultaneous chat sessions	400	120
Simultaneous social media users	60	30
Days chat transcript storage	30	30
Tags per social contact	20	20
Callback contacts per minute	40	40
Filters per system	30 (20 max for Bayesian + author combined, 10 max for script filters) Note: Each filter type has its own performance implications and performance depends almost entirely on what is in the script filter implementation.	20 (15 max for Bayesian + author combined, 5 max for script filters) With the same note as for the large deployment.
Filters per campaign	10 (5 max for script filters)	10 (5 max for script filters)
Incoming rate of contacts (total per hour)	10,000	10,000

Replies per Twitter account per hour	30 Note:	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.	If the polling interval is set

Provisioning Considerations for SocialMiner Chat

Retaining Saved Chat Transcripts

A meter on the System Administration panel of the Administration tab shows the current overall SocialMiner disk usage. The meter shows percent usage and hovering over the meter shows the actual number of bytes in use (the same data can be retrieved using the serviceability API).

The Purge Settings section of the panel displays the maximum age a contact can be before it is automatically purged by the system (default is 30 days).

As chat transcripts comprise the majority of disk usage, users can decide how long they wish to retain contacts by using the formula below to calculate the amount of disk space required to retain chat transcripts for one month (assuming the default purge setting of 30 days is kept). Once the average disk space requirement for a month's worth of chat transcripts is calculated, users can determine if they wish to retain contacts for the full 30 days and allocate the appropriate disk space accordingly; or they can choose to purge contacts more frequently.

Note: If SocialMiner starts to run out of disk space, it will purge contacts based on age (the oldest ones being purged first).

Formula to calculate the number of chats per month:

NUMBER_CHATS_MONTH = ACTIVE_CHAT_TIME_MONTH_IN_MIN / DURATION_CHAT_MIN where:

ACTIVE_CHAT_TIME_MONTH_IN_MIN is the average number of minutes per month that agents spend on chat activities. Assuming that agent activity occurs for 8 hours a day, 7 days a week, 4 weeks a month; the value is 13440 minutes (8*7*4*60).

DURATION CHAT MIN is the average duration of a chat in minutes.

Formula to calculate the amount of disk space required per month for chat transcripts:

DISK_SPACE_MONTH = (TR_SIZE + SC_SIZE) * NUMBER_SIMULTANEOUS_CHATS * NUMBER_CHATS_MONTH

where:

TR SIZE is the average transcript size in Kbytes.

SC SIZE is the average size of the metadata for a contact in Kbytes (which is normally 3 Kbytes).

NUMBER SIMULTANEOUS CHATS is the number of simultaneous chats sessions allowed.

NUMBER CHATS MONTH is the value calculated above.

Maximum Network Latency for Chat

The maximum network latency permitted for chat is 250 ms.

Network Bandwidth for Chat

Allocate network bandwidth required for chat based on this formula:

CHAT_NETWORK_BANDWIDTH (in Kbps) = CHAT_SESSIONS_SENDING_MSG_PER_SECOND * AVG_MSG_SIZE

For example, If all 400 sessions are active and 10% of chat sessions are sending messages every second, then 400 * 10/100 = 40 chat sessions are sending message each second.

If the average message size is 1 Kb, then the chat network bandwidth is 40 Kbps.

SocialMiner User Accounts and Security

SocialMiner minimizes the storage of usernames and 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 to access the system. Any user that is authenticated by the Active Directory setup can use the system. If limits on who can use system are required, set up an AD group and configure SocialMiner to only allow access for that group.

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

Twitter Accounts and Security

Access to Twitter is achieved using OAuth. When any kind of Twitter feed is created (Twitter search, Twitter stream or Twitter account), the user is prompted to authenticate with Twitter. The authentication token is stored by SocialMiner and grants access to secure information from Twitter (such as direct messages).

Note: The Twitter accounts used for oAuth in all Twitter feed types can be used to Reply/Direct Message to Twitters by all users in SocialMiner without entering the account password (so social media care agents do not need to know the Twitter account password). The capability to use SocialMiner is controlled by Active Directory. The capability to 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.

VMware Open Virtual Format (OVF)

The SocialMiner system supports one standard OVF Appliance. SocialMiner can only be deployed on servers using VMware ESXi.

See Virtualization for Cisco SocialMiner for more information.

Developer Information

For developer information, including the SocialMiner API documentation and a discussion forum, see Cisco DevNet at https://developer.cisco.com/site/socialminer/overview/. Access to Cisco DevNet requires Cisco account.

You can find training labs at http://docwiki.cisco.com/wiki/SocialMiner_Labs.